European Commission

JRC SCIENTIFIC AND POLICY REPORTS

The 2016 Annual Economic Report on the EU Fishing Fleet

(STECF 16-11)

Scientific, Technical and Economic Committee for Fisheries (STECF)

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This report was reviewed by the STECF during its 52nd plenary, 4-8 July 2016

Joint Research Centre

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JRC Science Hub

https://ec.europa.eu/jrc

JRC103591

PDF ISBN 978-92-79-64633-1 ISSN 1977-6578 doi:10.2788/842673

Luxembourg: Publications Office of the European Union, 2016

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How to cite: Scientific, Technical and Economic Committee for Fisheries (STECF) – The 2016 Annual Economic Report on the EU Fishing Fleet (STECF 16-11); Publications Office of the European Union, Luxembourg; ; ISBN 978-92-79-64633-1; doi:10.2788/842673

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Abstract

In 2014, the EU fishing fleet numbered 81 500 vessels with a combined gross tonnage (GT) of 1.6 million tonnes and engine power of 6.4 million kilowatts (kW). EU fleet capacity has continued to decrease steadily, at an average annual rate of 2% in terms of vessel numbers and engine power (kW) and 3% in terms of gross tonnage (GT). Based on data submitted by Member States under the Data Collection Framework (DCF), there were 63 642 active vessels and 17 860 inactive vessels in 2014. Of the active vessels, 74% were classed as small-scale, 26% large-scale and remaining less than 1%, distant-water vessels. Direct employment generated by the fleet amounted to just under 150 000 fishers, corresponding to 111 140 FTEs. The revenue (income from landings plus other income) earned by the EU fishing fleet in 2014 (excl. Greece) was estimated at €7.25 billion. As in previous years, the major cost items were labour and energy, representing 34% and 22% of total operating costs, respectively. The amount of Gross Value Added (GVA) and gross profit (all excl. subsidies) generated by the EU fishing fleet (excl. Greece) in 2014 was €3.7 billion and €1.6 billion, respectively. GVA as a proportion of total revenue was estimated at 51.5% and gross profit margin at 21.9%. With a total net profit of €770 million for the EU fleet in 2014, 10.6% of the revenue was retained as net profit, up from 7.3% in 2013. This publication includes: 1) An structural and economic overview of the EU fishing fleet in 2014, with projections for 2015-2016, and trend analyses for the years 2008-2014; 2) A regional analysis of the EU fishing fleet by major sea basin: Baltic Sea, North Sea, North East Atlantic, Mediterranean & Black Sea, as well as fleets operating in Other Fishing Regions, including the Northwest Atlantic, Eastern Arctic, Outermost regions and Other regions; 3) A detailed structural and economic overview of each EU Member State fishing fleet, including qualitative economic performance assessments for 2014 and projections for 2015 and 2016 for MS fleets operating in the NE Atlantic, based on the Bio-Economic Model of European Fleets (BEMEF).

1 INTRODUCTION

The 2016 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides a comprehensive overview of the latest information available on the structure and economic performance of EU Member States (MS) fishing fleets.

This report covers an eight year time period of the Data Collection Framework (DCF) and contains information on the EU fleet's fishing capacity, effort and landings, employment, income and costs for the years 2008 to 2014 (including some preliminary data for 2015) and projected values for 2015 and forecast estimates for 2016, where possible. All monetary values have been adjusted for inflation, to 2015 constant prices. The economic performance of the EU fishing fleet is also reported in terms of gross value added, profits, profit margins and productivity (labour and capital).

This publication includes:

1) An structural and economic overview of the EU fishing fleet for the reference year 2014, with trend analyses for the period 2008 to 2014, including projection estimates for 2015 and 2016;
2) A regional analysis of the EU fishing fleet by major sea basin: Baltic Sea, North Sea, North East Atlantic, Mediterranean & Black Sea, as well as fleets operating in Other Fishing Regions, including the Northwest Atlantic, Eastern Arctic, Outermost regions and Other fishing regions;
3) A detailed structural and economic overview of each EU Member State fishing fleet, including qualitative economic performance assessments for the years 2008-2014 and projections for 2015 and 2016 forecasts for the fleets operating predominately in the NE Atlantic.

1.1 Terms of Reference for STECF EWG-16-03 & 16-07

Background and general objectives

- The AER has become one of the main sources of economic and social data for scientific advice on the economic performance of the EU fleets. It is also increasingly used by scientific bodies, national administrations and international institutions.
- Given the increasing number of scientific uses of the AER and its growing complexity, there is a need to streamline the content and methodologies for this year's exercise. This will be mainly achieved through the production of more concise national chapters, supplemented by the JRC online data dissemination tool.
- Previous editions of the AER have been fundamentally descriptive and have focused more on presentation of data. This year's exercise should continue with the efforts taken in recent years to provide more analytical outcomes, notably on drivers of profitability and trends at the EU and regional levels.
- The trimming down of the 2016 AER is intended to achieve a more balanced effort/product exercise, concentrating on the core tasks of the AER on the one hand while freeing up some time and resources on the other so that EWG experts can focus on more applied economic analyses. Frequently asked questions following the publication of the AER include for example why a particular fleet segment has shown greater or more profitability, what are the (possible/probable) underlining factors causing the increase or decrease in economic performance, etc.?
- In view of the above, the 2016 AER will attempt to provide a more in-depth look at the different factors driving the economic performance of the EU fleets with a special focus on those operating under long term management plans as well as exploring topics such as the economic benefits of MSY, recovery of stocks, implementation of conservation measures, changes in first sale prices and operational costs, ITQ systems, structural and marketing measures. The analysis will be done at EU level, sea basin (North Sea, Baltic Sea, etc.) and MS level.
- A section on the EU small scale coastal fleets will be added. Latest results suggest that the economic performance of these fleets follows a deteriorating trend. This section will investigate the factors behind this trend and whether there are regional differences.
- The 2016 AER will also include an overview of the employment, profitability and salaries for the EU long distant water fleets and EU fleets in outermost regions.
- Links between economic growth and resource use. This section will examine key drivers and indicators, such as landings per unit of effort, gross value added by the different fleets, first sale prices, labour and capital productivity. It will examine for example trends in resource efficiency, i.e. how much fish caught per fishing day, improvements in energy efficiency, etc.
- It is important to note that time should not be allocated to fixing specific MS data issues during the first AER meeting (EWG 16-03). This implies that the data submitted should be final before the start of the EWG and any outstanding data issues encountered during the course of the meeting will be addressed according to the Data-handling procedure for STECF Expert Working Groups. Time saved as a result of not having to carry out specific quality checks on MS DCF data resubmissions will enable experts to focus more on the qualitative interpretation of the economic data analysed in the report.

Specific objectives

The specific objectives for the two working groups are:

EWG 16-03: the first AER STECF meeting should lead to a data endorsement by the attending experts and the writing of concise national chapters. An economic forecast estimating performance for 2016 and beyond (if possible) should be attempted.

EWG 16-07: the second AER EWG meeting, with a smaller number of experts, will focus on developing applied economic analysis based on the submitted data. In particular, experts will produce a synthesis on the trends and economic results of the EU fishing fleet by Sea-basin region and aggregated by EU level. This synthesis will identify the main factors behind these trends.

Outline of the AER

STECF is requested to provide the Annual Economic Report on EU fishing fleets for 2016 including, the following sections:

- STECF OBSERVATIONS
- EXPERT WORKING GROUP REPORT
- EU FLEET OVERVIEW
  - EU fleet structure
  - EU fleet fishing activity and output
  - EU fleet employment and average salaries
  - EU fleet economic performance
  - Main drivers and trends

-Section on EU small-scale coastal fleet segments (key socio-economic indicators)

-Section on EU distant water fleets (key socio-economic indicators)

-Assessment of the economic performance for 2015 and 2016

- REGIONAL ANALYSIS
  - Baltic Sea
  - Mediterranean and Black Sea
  - North Atlantic
  - North Sea and Eastern Arctic area
  - Other Fishing Regions
- NATIONAL CHAPTERS
  - Including a brief section on small-scale coastal fleet segments (key socio-economic indicators) where relevant
  - Including a brief section on EU long distant water fleets (key socio-economic indicators) where relevant

ANNEX (METHODOLOGIES, GLOSSARY, ETC)

Annex

Relevant documents

- The Economic Performance of the EU Fishing Fleet (AER)
- Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities
- Member States Annual Report on the National Data Collection Programmes http://datacollection.jrc.ec.europa.eu/ars/
- Data-handling procedure for STECF Expert Working Groups
- http://datacollection.jrc.ec.europa.eu/index.html

1.2 Abbreviations

European Member States

BEL	Belgium	HRV	Croatia
BGR	Bulgaria	IRL	Ireland
CYP	Cyprus	ITA	Italy
DEU	Germany	LTU	Lithuania
DNK	Denmark	LVA	Latvia
ESP	Spain	MLT	Malta
EST	Estonia	NLD	Netherlands
EU	European Union	POL	Poland
FIN	Finland	PRT	Portugal
FRA	France	ROU	Romania
GBR	United Kingdom	SVN	Slovenia
GRC	Greece	SWE	Sweden

Fishing Technologies – DCF categories

DFN	Drift and/or fixed netters
DRB	Dredgers
DTS	Demersal trawlers and/or demersal seiners
FPO	Vessels using pots and/or traps
HOK	Vessels using hooks
MGO	Vessel using other active gears
MGP	Vessels using polyvalent active gears only
PG	Vessels using passive gears only for vessels < 12m
PGO	Vessels using other passive gears
PGP	Vessels using polyvalent passive gears only
PMP	Vessels using active and passive gears
PS	Purse seiners
TM	Pelagic trawlers
TBB	Beam trawlers

Fishing activity – scale of fishing vessel / activity

SSF	Small-scale fleet
LSF	Large-scale fleet
DWF	Distant-water fleet

Fishing regions

BS	Baltic Sea
MBS	Mediterranean & Black Sea
NA	North Atlantic
NS	North Sea
OFR	Other fishing regions

1.3 Data source and coverage

The data used to compile all the various analyses contained within the report were collected under the data collection framework (DCF), cf. Council regulation (European Commission (EC) No 199/2008 of 25th February 2008).

The 2016 call requested data for the years 2008 to 2015. Capacity data was requested up to and including 2015, while employment and economic parameters were requested up to and including 2014. Most effort and all landings data were requested up to and including 2015, as well as, income from landings (non-mandatory) to allow for economic performance projections to be estimated at fleet segment and national level for 2015.

This report includes data reported by national totals and by fleet segments (a combination of the main fishing technology used and vessel length group operating predominately in one supra-region). The data analysed covers transversal (capacity, landings and effort) and economic data (income, costs, employment, enterprises, capital value and investment).

For a full list of variables and reference years requested under the 2016 DCF call for economic data on the EU fishing fleet see Table 6.1 in the Section 6 – AER Report Methodology.

In terms of the completeness of the Member States data submissions, most countries submitted the majority of parameters requested under the call. In many cases missing data relates to fleet segments with low vessel numbers for which data can be hard to obtain (logbooks are compulsory for vessels over 10 meters only). In terms of data quality, inevitably some 'abnormal' estimates for various parameters were detected by JRC or the experts and in many cases rectified by the Member States. However, some coverage and quality issues remain outstanding:

- Again this year, Greece provided economic data but only for the years 2014, and with substantial amount of missing data, in particular on effort, landings and income as well as questionable (for example employment);
- This year's submissions from France and Spain improved but continue to be incomplete, in particular for the years 2008-2010, and some issues remain for the Irish under 10m vessels;
- Furthermore, due to the reduced number of vessels and/or enterprises, several MS, including Germany and the Baltic States, do not deliver sensitive data on their distant-water fleets, making coverage at the EU and regional levels incomplete.

As a new Member State, Croatia is only required to provide data from 2012 onwards.

Incomplete time series data due to either the non-submission of data, questionable data and/or new MS additions, make trend analysis over the entire period 2008-2014/2015 at the EU and regional levels impossible without excluding the MS fleets that are incomplete.

See Section 7 – DCF Data Coverage and Quality and Annex 3, for more information on outstanding issues.

2 EWGs AND LIST OF PARTICIPANTS

The report has been produced by two working groups of economic experts (EWG 16-03 and 16-07) convened under the Scientific, Technical and Economic Committee for Fisheries (STECF), which took place from the 25 to 29 of April in Ispra, Italy and from the 6 to 10 June 2016 in Dublin, Ireland.

The groups consisted of independent experts from within the EU and experts from the European Commission's Research Centre (JRC).

The full list of participants at EWG 16-03 and 16-07 is presented in section 8.

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THE 2016 ANNUAL ECONOMIC REPORT ON THE EU FISHING FLEET (STECF 16-11)

THIS REPORT WAS REVIEWED BY THE STECF PLENARY (PLEN-16-02), 4-8 JULY 2016

Request to the STECF

STECF is requested to review the report of the STECF Expert Working Group meetings, evaluate the findings and make any appropriate comments and recommendations.

Background

Following the 2016 DCF call for economic data on the EU fishing fleet, EWG 16-03 & 16-07 was requested to analyse the data and comment on the economic performance of the EU and Member State fishing fleets between 2008 and 2015.

STECF OBSERVATIONS

STECF reviewed the 2016 Annual Economic Report on the EU Fishing fleet and notes that the EWG adequately addressed all the ToRs. STECF acknowledges the extensive work undertaken by all personnel involved in the preparation of the 2016 AER, which represents the most comprehensive overview of the structure and economic performance of EU Member States' fishing fleets prepared to date.

Although the data presented in this report have been produced after extensive data validation procedures by JRC and assessment by the two EWG's there is no guarantee made by STECF regarding the quality and completeness of the datasets, as this is under the responsibility of the MS.

STECF acknowledges that a significant amount of effort is required to quality check and correct the initial data uploaded by MS, before and during the first EWG. Data errors observed during the EWG can be corrected by the MS up to two weeks after the EWG. This process improves the quality of the data but may delay the completion of other tasks that are dependent of the database.

STECF notes that although there are still some shortfalls in the data submitted by Member States, data delivery requirements in response to the 2016 call for economic data on the EU fishing fleet improved significantly and were more complete than those submitted under previous economic data calls. For the first time under the DCF, Spain provided effort data for the entire period 2011-2014. However, only 'fishing days' were provided by this MS (days at sea and other requested variables continue missing).

Furthermore, STECF notes that the data submitted by France, Greece, Ireland (for the under 10 m vessels only) and Spain were identified by the EWG as incomplete and could not be taken into account in all the EU and/or regional trend analyses presented in the 2016 AER. In addition, the exclusion of all or some Member States' data from the EU and regional overviews has varied between AERs. This means that time trends shown in previously published AERs may now appear different to those presented in the 2016 report. The absence of some data from some MS can change the direction of key trends for the overall EU fleet.

STECF observes that the figures showing trends in monetary values presented in the report have been adjusted for inflation and are shown in equivalent 2015 EURO values. STECF notes that the EWG discussed and agreed that the Consumer Price Index (CPI) is an appropriate index to use when adjustment for inflation is done. Since this was also done in last year's report and then raised by STECF as an issue for next year's EWG to evaluate, STECF still sees this as a pending issue for an evaluation (see STECF PLEN 16-02, ToR 6.2).

The 2016 AER presents the results of economic projections for fleets in the NE Atlantic for the years 2015 and 2016 based on the BEMEF model. The basis of the projections for 2016 include the agreed TACs for those years and take into account 2015 and 2016 average fuel and first-sale prices.

STECF observed that the approach of using "days at sea" to split fleet segment data by region has some drawbacks. It is based on the assumption that the cost structure, and/or costs per day at sea, are the same for all regions. If this is not the case, then the procedure may provide inappropriate results. Additionally, disaggregation to the regional level using days at sea cannot distinguish between days actually fishing and days spent travelling to or from fishing areas (steaming) and hence, high possibility of over or under-estimating costs and/or revenue to the region.

The EWG further considered several deviations in the methodologies for calculating some economic indicators and the use and estimation of capital costs that are applied in the AER compared to the report on the Balance between fleet capacity and fishing opportunities. These include Net profit, Return of Investment (RoI), Return on Fixed Tangible Assets (RoFTA), and the use of different reference points, i.e. long-term interest rate, nominal, real or 5 year average. This was addressed by the EWG and a short outline of the main issues is provided in Annex 1 of the 2016 AER.

In particular STECF observes that the use of real interest rate can lead to negative rates hence for some countries resulting in positive opportunity cost of capital which gives estimates with higher net than the gross profits.

STECF observes that the 2016 AER contains a special chapter on investments (Annex 2) and a detailed account of the data transmission issues detected during the EWG 16-03 (Annex 3).

STECF CONCLUSIONS

The 2016 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides the most comprehensive overview of the structure and economic performance of EU Member States' fishing fleets prepared up to date. STECF concludes that the report represents a large step forward and that the report will be of great help for managers, policy-makers, as well as others.

However, because data from a number of Member States, for example, France, Greece and Spain, i.e. some of the EU's biggest fishing nations, were excluded from the regional and EU overview trends reported in those overview sections may not represent true trends.

STECF concludes that the way the economic projections are done in the AER needs to be further analysed. This year and to some extent last year the projections were done with the BEMEF model, which cannot yet be considered a standard methodology by STECF. The BEMEF model must be evaluated in a benchmark meeting on assessment of economic methods for future economic requests before being applied again. Before this is done, STECF cannot fully endorse the results from this model that are currently presented in the report.

STECF concludes that the AER / EWG for next year should follow the same structure as this year.

STECF concludes that different data types are often collected at different spatial-temporal scales, which are also not necessarily the same scale as the ones needed to answer the various requests. This is a recurrent and common issue, and STECF endorses that the best expert decisions are made at the time when data must be aggregated or disaggregated.

STECF notes that progresses are ongoing to improve the merging procedures between economic, transversal and biological data (cf. ToR 6.4), and until these are fully operational, STECF concludes that the current methodology should be used.

STECF concludes that work needs to be done to harmonise methodologies for calculating economic indicators and economic costs between AER and the report on the Balance between fleet capacity and fishing opportunities. STECF notes that the report on the Balance between fleet capacity and fishing opportunities is based on indicators calculated in line with the 2014 Balance Indicator Guidelines[1]. STECF acknowledges that there are no immediate plans by the Commission to revise the current suite of indicators or the Guidelines. Nevertheless, recognising that there may be a need to undertake such a revision, STECF considers a dedicated Expert Working Group should be held to address outstanding issues with Balance indicators. The need for harmonisation with economic indicators used in the AER process could be addressed at the same time

STECF concludes that the AER should maintain consistency and continue to apply the real interest rate when calculating the opportunity cost of capital, even when this implies negative values due to high inflation rates observed in some MS, as a result of the economic crises and instability. In cases of negative values on opportunity cost of capital occurs STECF concludes this should be clearly commented in text by the EWG to clarify the results found (done in previous years AER).

[1] Communication from the Commission to the European Parliament and the Council – Guidelines for the analysis of the balance between fishing capacity and fishing opportunities according to Art 22 of Regulation (EU) No 1380/2013 of the European Parliament and the Council on the Common Fisheries Policy COM (2014) 545 final.

EXECUTIVE SUMMARY

The 2016 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides a comprehensive overview of the latest information available on the structure and economic performance of EU Member States fishing fleets. The results indicate that the profitability of the EU fishing fleet again increased in 2014 compared to 2013 and is expected to have continued in 2015 and into 2016 mainly as a result of increased landings and low fuel prices.

The amount of Gross Value Added (GVA) and gross profit (all excl. subsidies) generated by the EU fishing fleet (excl. Greece) in 2014 was €3.7 billion and €1.6 billion, respectively. GVA as a proportion of revenue was estimated at 51.5%, up from 49% in 2013 and gross profit margin at 22%, up from 20% in 2013. With a total net profit of around €770 million, 10.6% (up from 7.8% in 2013) of the revenue generated by the EU fleet in 2014 was retained as net profit. While overall the EU fleet was profitable, nine out of the 22 MS fleets (excl. Greece) generated net losses in 2014.

Projection results based on the Bio-economic Model for European Fleets (BEMEF) suggest that all 15 MS analysed, with the exclusion of Finland and Lithuania, generated net profits in 2015. In 2016, all 15 MS covered are projected to have positive gross and net profits. Projections were made based on fleet segment level data and then aggregated to the MS level.

In 2015, the highest gross profit margins are projected for Denmark (43%), Spain (36%) and Portugal (33%) and the highest net profit margins are projected for Spain (31%), the United Kingdom (22%), and Denmark (20%).

In 2016 the highest gross profit margins are forecasted for Denmark (45%), Sweden (42%) and Latvia (36%). The highest net profit margins are for the same three member states (25%, 28% and 31%, respectively)

In 2014, the EU fishing fleet numbered 81 500 vessels with a combined gross tonnage (GT) of 1.6 million tonnes and engine power of 6.4 million kilowatts (kW) (or 66 748 vessels, 1.5 million GT and 6.0 million kW when excluding Greece). EU fleet capacity has continued to decrease steadily at an average rate of 2% p.a. in terms of vessel numbers and kW and 3% in GT.

Based on DCF data, there were 63 642 active vessels (50 042 when excluding Greece) and 17 860 inactive vessels (16 706 when excluding Greece) in 2014. Of the active vessels, 74% were small-scale, 26% were large-scale and less than 1% distant-water vessels.

Direct employment generated by the fleet amounted to just over 150 thousand fishers, corresponding to 111 thousand FTEs (126 478 employed and 90 361 FTEs when excluding Greece).

Average annual wage per FTE (excl. Greece) was estimated at €23.8 thousand, ranging from €99.5 thousand for Belgian fishers to €1.3 thousand for Cypriot fishers.

The EU fleet spent almost 6.9 million days at sea and consumed 2.3 billion litres of fuel (or 4.9 million days and 2.2 billion litres of fuel when excluding Greece).

According to the DCF data, the EU fleet (excl. Greece and the German pelagic fleet) landed 4.9 million tonnes of seafood in 2014 with a reported landed value of €7.1 billion.

In 2014, the EU fleet (excl. Greece) had an estimated, depreciated, replacement value (tangible asset value) of €5.3 billion and in-year investments amounted to €469 million.

This publication includes: 1) An structural and economic overview of the EU fishing fleet in 2014, with projections for 2015/2016, and trend analyses for the years 2008-2014; 2) A regional analysis of the EU fishing fleet by major sea basin: Baltic Sea, North Sea, North East Atlantic, Mediterranean & Black Sea, as well as fleets operating in Other Fishing Regions, including the Northwest Atlantic, Eastern Arctic, Outermost regions and Other regions; 3) A detailed structural and economic overview of each EU Member State fishing fleet, including qualitative economic performance assessments for 2014 and projections for 2015 and forecasts for 2016.

The data used to compile all the various analyses contained within the report were collected under the framework of the data collection framework (DCF), cf. Council regulation (European Commission (EC) No 199/2008 of 25th February 2008).

The 2016 AER supersedes all previous AERs. Comparisons across AER reports should not be made. This is mainly due to the inclusion of more MS fleets and greater coverage of the data this year: only Greece was excluded from the 2014 economic performance estimates in the current report whereas in last year's AER, several other MS fleets had to be excluded. Moreover, MS may have provided revised data submitted in previous calls, which is expected to have increased the coverage and quality of the data reported under the 2016 DCF.

EU Member State Fleet Summary Reports

The main issues affecting the economic performance of each EU Member States' national fleet in 2014 and 2015 are summarised below:

Belgium

The Belgian national fleet capacity continued to decline with a total of 79 vessels in 2015 (6 of which were inactive), a combined gross tonnage (GT) of 14.6 thousand tonnes and a total engine power of 47.6 thousand kilowatts (kW). Compared to 2014, one vessel ceased its fishing activities and two more were inactive in 2015. No new vessels were introduced. The main fleet segments are mainly composed of beam trawlers and demersal trawlers and seiners. In Belgium, the fishing fleet is divided into a large-fleet segment with an engine power of >221 kW (47% of the vessels in 2015) and a small-fleet segment with an engine power of ≤221 kW (53% of the vessels in 2015).

In 2014, Belgium had no vessels under 12 metres using passive gears, and thus no *small-scale fleet*. Under the national classification system, however, the *small-fleet segment* includes all vessels ≤ 221 kW and < 70GT. These vessels make short trips up to 24-48 hours and mainly fish within the 3 nm zone in the Belgian North Sea, in which they have exclusive fishing rights. Though representing 22% of the active Belgian fleet, their share only represents 5% of total landings (in weight).

The landings increased compared to 2013, both in terms of weight and value to 26.2 thousand tonnes for 81.5 million euro. This was significant as the value of landings was just 74 million euro in 2013. As a result, revenue increased by 10% to €85.4 million. The top five species in terms of value of landings were common sole (€32.6 million; 3.6 thousand tonnes), European plaice (€10.8 million; 8.8 thousand tonnes), lemon sole (€4.9 million; 1.2 thousand tonnes), turbot (€4.4 million; 0.4 thousand tonnes) and common shrimp (€4.1 million; 1.2 thousand tonnes).

Employment was estimated at 345 jobs, corresponding to 293 FTEs in 2014. An estimated 16.3 thousand days were spent at sea, only a slight increase compared to 2013, while the amount of energy consumed increased by 4% to 39.8 million litres. In general, the high fuel consumption in the Belgian fishery is linked to fishing activity targeting primarily demersal species. The fishing grounds are spread out and relatively far away. In 2014 energy costs as a proportion of overall costs decreased to 27% (€23.5 million). The wages and salaries of the crew represented about 33% of the value of landings, or €27 million.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €36.6 million, €7.4 million and -€2.9 million, respectively. GVA increased by 27%, gross profit and net profit increased by 220% and by 60%, respectively. These results indicate a still weak, yet significantly improved economic situation compared to previous years. Although the Belgian national fleet remained in a net loss making position in 2014, its economic performance compared to previous years improved and this trend is expected to have continued into 2015.

Belgium

					2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	totves	(#)	MS_ms		102	102	91	90	88	83	80		*-4%*	*-14%*
			MS_fa	LSF	98	94	88	86	81	76	76		*0%*	*-13%*
Vessel tonnage	totgt	(thousand GT)	MS_ms		19.3	19.5	16.1	15.8	15.8	15.1	14.6		*-3%*	*-13%*
			MS_fa	LSF	18.8	18.3	15.7	15.0	14.9	14.4	14.2		*-2%*	*-13%*
Engine power	totkw	(thousand kW)	MS_ms		62.2	63.1	52.3	51.3	51.1	47.6	46.5		*-2%*	*-15%*
			MS_fa	LSF	60.6	59.0	51.0	48.7	47.1	45.6	44.8		*-2%*	*-14%*
Total employed	totjob	(person)	MS_ms		472	421	394	382	376	345	345		*0%*	*-13%*
			MS_fa	LSF	472	421	394	382	376	345	345		*0%*	*-13%*
FTE	fte	(#)	MS_ms		353	305	317	312	312	230	293		*28%*	*-4%*
			MS_fa	LSF	351	305	317	312	312	230	293		*28%*	*-4%*
Days at sea	totseada	(thousand day)	MS_ms		19.5	19.3	18.2	17.4	16.8	16.3	16.3		*0%*	*-9%*
			MS_fa	LSF	19.5	19.3	18.2	17.4	16.8	16.3	16.3		*0%*	*-9%*
Live weight of landings	totwghtl	(thousand tonne)	MS_ms		21.8	19.4	21.7	22.2	24.2	25.2	26.2		*4%*	*17%*
			MS_fa	LSF	21.8	19.4	21.7	22.2	24.2	25.2	26.2		*4%*	*17%*
Value of landings	totvallan	(million €)	MS_ms		84.3	71.8	82.8	83.3	78.0	74.0	81.5		*10%*	*3%*
			MS_fa	LSF	84.3	71.8	82.8	83.3	78.0	74.0	81.5		*10%*	*3%*
Revenue	REV	(million €)	MS_ms		87.0	76.6	86.3	87.1	82.4	77.7	85.4		*10%*	*3%*
			MS_fa	LSF	87.0	76.6	86.3	87.1	82.4	77.7	85.4		*10%*	*3%*
Gross Value Added	GVA	(million €)	MS_ms		23.6	29.9	37.5	37.8	30.4	28.7	36.6		*27%*	*17%*
			MS_fa	LSF	23.6	29.9	37.5	37.8	30.4	28.7	36.6		*27%*	*17%*
GVA to revenue	GVAm	(%)	MS_ms		27.1	39.1	43.5	43.4	36.9	37.0	42.8		*16%*	*13%*
			MS_fa	LSF	27.1	39.1	43.5	43.4	36.9	37.0	42.8		*16%*	*13%*
Gross profit	GRP	(million €)	MS_ms		- 7.8	1.9	7.3	9.1	2.6	2.3	7.4		*220%*	*186%*
			MS_fa	LSF	- 7.8	1.9	7.3	9.1	2.6	2.3	7.4		220%	186%
Gross profit margin	GRPm	(%)	MS_ms		- 8.9	2.5	8.5	10.4	3.2	3.0	8.7		192%	179%
			MS_fa	LSF	- 8.9	2.5	8.5	10.4	3.2	3.0	8.7		192%	179%
Net profit margin					-43.5	-28.6	- 7.2	- 1.1	-17.4	- 18.8	- 6.9		63%	65%
Net profit	NPL	(million €)	MS_ms		-18.9	-11.0	- 3.1	- 0.5	- 7.2	- 7.3	- 2.9		60%	63%
			MS_fa	LSF	-18.9	-11.0	- 3.1	- 0.5	- 7.2	- 7.3	- 2.9		60%	63%
GVA per FTE	GVA_fte	(thousand €)	MS_ms		66.9	98.1	118.1	121.3	97.4	125.1	124.9		0%	19%
			MS_fa	LSF	67.2	98.1	118.1	121.3	97.4	125.1	124.9		0%	19%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Bulgaria

In 2015, the Bulgarian fishing fleet consisted of 1 979 registered vessels, of which 1 204 were active and the remaining 775 vessels were inactive. The active fleet had a combined gross tonnage (GT) of 5 thousand tonnes, engine power of 39.6 thousand kilowatts (kW) and an average age of 23 years.

The Bulgarian fishing fleet is divided into a small-scale segment (89.7% in 2015) with an engine power of 22.8 kW and a large-fleet segment (10.3% in 2015) with an engine power of 16.9 kW.

Total employment in 2014 was estimated at 1 517 jobs, corresponding to 532 FTEs with an average of 0.5 FTE per active vessel. The level of employment decreased between 2008 and 2014, with total employed decreasing by 48%, between 2013 to 2014 total employed increasing with 16% and the number of FTEs increasing by around 9% over the period.

The Bulgarian fleet spent over 21 thousand days at sea in 2014, a 95% increase compared to 2008 but a slow decrease since 2013. While the days at sea remained steady in the period, preliminary data for 2015 indicate a slight increase by 8% compared to 2014.

The total landed weight by the Bulgarian fleet in 2015 was 8.3 thousand tonnes of seafood, with a landed value of €3.8 million. The total volume and value of landings increased by 2% and 9% respectively over the period analysed (2008-2014). Regarding the top species in terms of value, the average first sale price for 2015 for sea snails, red mullet, and European anchovy remained stable compared to the average first sale price for the period 2008-2014. Turbot achieved the highest average price per kilo in 2014 (€5.6 per kg) but decreased by 7% in 2015 (€5.2 per kg). The price of turbot and Mediterranean horse mackerel for 2015 increased by 11% and 42% respectively over the period 2008-2014. The average first sale price of 'piked' dogfish (€1.3 per kg) decreased by 32% compared to the period 2008-2014.

The amount of income from landings generated by the Bulgaria national fleet in 2014 was €4.0 million while the non-fishing income was €1.5 million and total income €5.5 million. Landings income decreased 3% from 2013 while the non-fishing income decreased by 41%.

Costs decreased between 2013 and 2014 by 14%, except 'wages and salaries of crew costs' and 'annual depreciation costs'. The operating costs in 2014 amounted to €5.5 million. Crew and energy costs were the two major cost items (€2.7 million and €1.5 million respectively). However, €0.5 million of the crew costs were estimated as 'unpaid labour' which remained in the hands of the fishers as working capital. Between 2013 and 2014, operating costs decreased by 28%. When capital costs are included total costs were €6.3 million, which exceeded total revenue and resulted in a net loss of €0.8 million.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €2.7 million, -€0.1 million and -€1.5 million, respectively. Although the economic performance improved in 2012 and 2013 the economic situation deteriorated again in 2014.

Small-scale fleet: In 2014 the majority of vessels were less than 12 meters LOA (999 from 1 110 active vessels), used only passive gears and carried out, mainly, small-scale coastal, seasonal fishing. Gillnets (anchored) were the preferred fishing gear while free diving was used for the Rapana fishery.

The total number employed was 1 196, which is 5% more than the number employed in 2013. For the majority of people involved in this type of fishing, it is a seasonal activity closer to a hobby than a business. Most of the small-scale fishers consume their catches privately. The live weight of landings in 2014 was 2.1 thousand tonnes, a 4% decrease on 2013 and a 12% decrease from the period 2008-2013.

The value of the landings increased 1% in 2014 and 31% from the average of the period 2008-2013. Net profit and net profit margin while increasing 45% and 74%, respectively, remained negative.

Large-scale: The Bulgarian large-scale fleet consisted of 111 vessels in 2014. Of these 33 were less than 12 metres LOA, but used active gears. 189 FTEs (represented 321 total employed) were employed in the LS fleet segment.

The LSF landed a total of 5.81 thousand tonnes, or 74% of the landings of the whole fleet. These were valued at €3.1 million, representing 72% of the total value of all landings.

The income from landings decreased 11% while the other income decreased 87%. Wages and salaries of crew increased 11% compared to 2013. Costs generally decreased, except the other non-variable costs, which remained stable.

Bulgaria

					2008	2009	2010	2011	2012	2013	2014	2015	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessel	totves	(#)	MS_ms		2,680	2,421	2,692	2,343	2,387	2,043	2,005	*1,979*		*-2%*	*-17%*
			MS_fa	SSF	747	973	1,176	926	1,098	1,100	999	*1,080*		*-9%*	*0%*
				LSF	107	145	207	82	94	104	111	*124*		*7%*	*-10%*
Vessel tonnage	totgt	(thousand GT)	MS_ms		9.5	10.9	10.2	7.5	7.4	6.6	6.4	*6.4*		*-3%*	*-26%*
			MS_fa	SSF	1.5	2.3	2.2	1.8	2.0	2.0	1.7	*1.8*		*-14%*	*-14%*
				LSF	4.0	5.7	5.2	3.2	3.2	3.0	3.1	*3.2*		*1%*	*-24%*
Engine power	totkw	(thousand kW)	MS_ms		73.0	81.5	77.7	62.0	62.9	57.4	56.4	*56.0*		*-2%*	*-18%*
			MS_fa	SSF	16.1	24.7	24.9	19.9	23.2	24.0	20.8	*22.8*		*-13%*	*-6%*
				LSF	16.9	26.1	23.5	13.7	14.3	14.8	15.6	*16.9*		*5%*	*-15%*
Total employed	totjob	(person)	MS_ms		1,507	1,732	3,933	3,276	5,638	1,312	1,517	*1,497*		*16%*	*-48%*
			MS_fa	SSF	1,293	1,372	3,555	2,823	4,870	1,140	1,196	*1,291*		*5%*	*-52%*
				LSF	214	360	378	453	768	172	321	*333*		*87%*	*-18%*
FTE	fte	(#)	MS_ms		1,433	1,430	2,889	1,668	2,872	488	532	*573*		*9%*	*-70%*
			MS_fa	SSF	1,096	1,151	2,604	1,423	2,451	366	343	*347*		*-6%*	*-77%*
				LSF	337	279	285	245	421	122	189	*210*		*56%*	*-33%*
Days at sea	totseada	(thousand day)	MS_ms		10.8	12.8	16.0	18.6	25.1	21.6	21.1	*22.7*		*-2%*	*21%*
			MS_fa	SSF	7.7	8.9	11.4	12.7	16.5	14.3	13.3	*13.8*		*-7%*	*12%*
				LSF	3.1	4.0	4.6	5.9	8.6	7.3	8.0	*8.9*		*9%*	*43%*
Live weight of landings	totwghtl	(thousand tonne)	MS_ms		7.5	7.1	9.3	7.6	8.1	9.2	7.9	*8.3*		*-14%*	*-3%*
			MS_fa	SSF	2.7	1.8	3.0	2.3	2.3	2.2	2.1	*1.8*		*-4%*	*-12%*
				LSF	4.8	5.3	6.3	5.3	5.7	7.0	5.8	*6.5*		*-17%*	*1%*
Value of landings	totvallan	(million €)	MS_ms		3.2	3.0	2.3	2.7	4.3	4.4	4.3	*3.8*		*-2%*	*30%*
			MS_fa	SSF	1.1	0.7	0.7	0.5	1.3	1.2	1.2	*0.7*		*1%*	*31%*
				LSF	2.1	2.1	1.6	2.1	3.0	3.2	3.1	*3.1*		*-3%*	*32%*
Revenue	REV	(million €)	MS_ms		4.8	3.3	7.1	2.5	4.0	6.7	5.5	*5.3*		*-18%*	*16%*
			MS_fa	SSF	1.3	1.0	4.7	0.6	1.3	3.0	2.8	*2.3*		*-5%*	*43%*
				LSF	3.4	2.3	2.4	1.9	2.7	3.7	2.7	*3.2*		*-28%*	*-3%*
Gross Value Added	GVA	(million €)	MS_ms		1.9	-0.2	1.3	-1.7	0.8	2.0	2.7	*2.6*		*37%*	*300%*
			MS_fa	SSF	0.7	-0.5	1.6	-0.8	0.5	1.7	1.9	*1.4*		*8%*	*251%*
				LSF	0.6	-0.2	-0.3	-2.4	0.3	0.2	0.8	*1.4*		*250%*	*369%*
Gross profit	GRP	(million €)	MS_ms		1.0	-1.8	-1.2	-3.4	-0.7	-1.0	-0.0	*0.2*		*95%*	*96%*
			MS_fa	SSF	0.4	-1.6	0.1	-1.5	-0.2	-0.5	0.0	*-0.0*		*108%*	*107%*
				LSF	-0.1	-0.7	-1.4	-2.8	-0.4	-0.5	-0.1	*0.2*		*82%*	*91%*
Gross profit margin	GRPm	(%)	MS_ms		20.1	-53.4	-17.5	-136.8	-16.3	-14.8	-0.9	*4.6*		*94%*	*98%*
			MS_fa	SSF	29.6	-160.3	2.9	-1,009.2	-16.7	-16.7	1.4	*-0.1*		*108%*	*101%*
				LSF	-4.9	-36.8	-59.9	-3,599.7	-16.2	-13.2	-3.3	*6.3*		*75%*	*99%*
GVA to revenue	GVAm	(%)	MS_ms		40.9	-6.9	18.7	-70.4	18.8	29.5	49.0	*49.5*		*66%*	*856%*
			MS_fa	SSF	49.7	-47.4	34.4	-515.7	34.2	58.4	66.3	*63.4*		*14%*	*203%*
				LSF	21.5	-12.9	-14.3	-3,019.7	11.3	6.3	30.6	*43.6*		*385%*	*106%*
Net profit	NPL	(million €)	MS_ms		1.0	-2.7	-2.8	-3.8	-1.2	-1.6	-1.5	*-1.0*		*3%*	*15%*
			MS_fa	SSF	0.4	-1.8	-0.6	-1.7	-0.3	-0.9	-0.5	*-0.5*		*45%*	*42%*
				LSF	-0.4	-1.2	-2.2	-2.9	-0.7	-0.3	-1.1	*-0.7*		*-216%*	*17%*
Net profit margin	NPLm	(%)	MS_ms		21.8	-80.0	-39.3	-153.5	-29.2	-23.7	-28.1	*-19.6*		*-18%*	*44%*
			MS_fa	SSF	28.4	-184.5	-13.0	-1,084	-28.4	-64.8	-16.7	*-20.6*		*74%*	*93%*
				LSF	-29.2	-66.4	-89.5	-3,755	-27.4	-74.3	-40.2	*-22.1*		*46%*	*94%*
GVA per FTE	GVA_fte	(thousand €)	MS_ms		1.4	-0.2	0.5	-1.0	0.3	4.0	5.0	*4.6*		*25%*	*517%*
			MS_fa	SSF	0.6	-0.4	0.6	-0.8	0.2	4.7	5.5	*4.1*		*15%*	*565%*
				LSF	2.2	-1.2	-1.7	-14.3	0.7	1.9	4.3	*6.7*		*124%*	*309%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Croatia

The national fleet consisted of 28 (DCF) fleet segments with total of 4 358 vessels in 2014. In 2015, the fleet has increased to 7 849 vessels of which 2 795 were active. These had a combined capacity of 53.8 thousand gross tonnes (GT) and 429.8 thousand kilowatts (kW). Pursuant to the accession negotiations, 3 500 small-scale vessels were transferred into the commercial small-scale fleet in 2015. The total number of employees in 2014 was 4 842, equivalent to 2 151 FTE. These were a 2% (employees) and 12% (FTE) decline from 2013.

The total number of days at sea in 2014 was broadly unchanged at 241.2 thousand days. Total landings amounted to 79.4 thousand tonnes; an increase of 6% on 2013. Landed value was €60.8 million, an increase of 2% on 2013. Total revenue in 2014 was €76.5 million representing an increase of 6%, while GVA increase 22% to €36.6 million.

Landings in 2015 included 110 species with a combined weight of 72.9 thousand tonnes. Quantities landed have been stable over time, with the share of small pelagic species targeted in purse seine fisheries, sardine and anchovy, by far dominating the overall structure (around 88% of total landing weight in 2015). Small pelagic species also constituted the most important species in terms of value, accounting for over 50% of total landing value. On the other hand, species targeted by demersal trawling, Norway lobster and hake, account for less than 0.4% and 1% respectively in terms of quantity, but over 5% and 4% respectively in terms of value.

The number of vessels in the small scale fleet has been relatively stable up to 2015; this has also been the case for capacity (-2%) and engine power (-2%). The small-scale fleet, with 1 665 active vessels, accounted for 37% of all active vessels in 2014 but less than 2% of landings. In 2014, the total value of these landings was €7 million, equal to 13% of the total. Most are sold in local markets, and income is often used to supplement the home budget.

In 2015, the most important fleet segment was the purse seine (PS) segment. These vessels accounted for over 90% of total landings. The largest number of active vessels was in the drift and fixed net segment (DFN, fixed nets: gill nets and trammel nets). With 1 033 active vessels these represent 38% of the total fleet but account for less than 1% of landings (by volume).

With 43% of the total DTS landings, DTS 12-18 were the most important segment. For the purse seiners, the most important segments were PS 24-40 (60% of total PS landings) and PS 18-24 (24% of total PS landings).

Croatia			2012	2013	2014	2015	Trend	Δ 2014 to 2013	Δ 2014 to avg. 12-13
Total number of vessels	(#)		4,211	4,358	4,385	7,849		1%	2%
		SSF	1,707	1,726	1,665	1,768		-4%	-3%
		LSF	1,101	1,081	1,051	1,053		-3%	-4%
Vessel tonnage	(thousand GT)		45.2	46.0	46.1	53.8		0%	1%
		SSF	5.0	5.1	5.0	4.9		-2%	-1%
		LSF	28.1	27.3	27.2	27.8		0%	-2%
Engine power	(thousand kW)		329.7	346.2	347.9	429.7		0%	3%
		SSF	90.3	95.7	94.2	93.8		-2%	1%
		LSF	152.1	150.8	149.7	152.2		-1%	-1%
Total employed	(person)		4,897	4,946	4,842	8,667		-2%	-2%
		SSF	2,170	2,156	2,076	2,089		-4%	-4%
		LSF	2,727	2,790	2,766	2,424		-1%	0%
FTE	(#)		2,467	2,448	2,151	2,128		-12%	-12%
		SSF	778.8	701.4	536.6	508.3		-23%	-27%
		LSF	1,688	1,747	1,614	1,297		-8%	-6%
Days at sea	(thousand day)		235.5	240.4	241.2	238.7		0%	1%
		SSF	270.5	271.4	269.8	266.8		-1%	0%
		LSF	200.5	209.3	212.6	210.6		2%	4%
Live weight of landings	(thousand tonne)		63.1	74.9	79.4	72.9		6%	15%
		SSF	1.2	1.2	1.3	1.3		6%	9%
		LSF	62.0	73.7	78.1	71.5		6%	15%
Value of landings	(million €)		48.6	59.9	60.8	60.9		2%	12%
		SSF	6.1	7.1	7.0	7.9		-1%	6%
		LSF	42.5	52.8	53.8	53.0		2%	13%
Revenue	(million €)		54.1	72.3	76.5	88.9		6%	21%
		SSF	8.3	12.0	15.6	16.3		30%	54%
		LSF	45.8	60.3	60.9	57.3		1%	15%
Gross Value Added	(million €)		11.7	30.1	36.6	47.7		22%	75%
		SSF	0.4	5.0	10.0	11.0		100%	271%
		LSF	11.3	25.1	26.6	26.4		6%	46%
Gross profit	(million €)		- 7.3	9.6	13.7	26.9		43%	1099%
		SSF	- 3.4	0.6	4.9	6.8		740%	451%
		LSF	- 3.9	9.0	8.9	12.5		-2%	248%
Gross profit margin	(%)		- 13.6	13.3	17.9	30.3		35%	14325%
		SSF	- 41.2	4.9	31.6	42.5		547%	274%
		LSF	- 8.6	15.0	14.6	24.4		-3%	355%
GVA to revenue	(%)		21.6	41.6	47.9	53.7		15%	51%
		SSF	4.7	41.7	64.2	68.7		54%	177%
		LSF	24.7	41.6	43.6	51.7		5%	32%
Net profit	(million €)		- 31.6	- 11.6	- 15.6	- 25.3		-34%	28%
		SSF	- 6.5	- 2.3	1.2	3.2		150%	126%
		LSF	- 22.4	- 6.9	- 12.1	- 5.9		-76%	17%
GVA per FTE (labour produ	(thousand €)		4.7	12.3	17.0	22.4		38%	100%
		SSF	0.5	7.1	18.7	21.7		161%	389%
		LSF	6.7	14.4	16.5	20.4		15%	56%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Cyprus

Capacity of the Cypriot national fleet, which operates solely in the Mediterranean Sea, continued the declining trend, totalling 840 vessels in 2015, with a combined gross tonnage of 3.4 thousand GT and engine power of 38.2 thousand kW. In 2015, 14 vessels ceased fishing activities, corresponding to 7% of the total fleet. However, GT and KW increased due to the increase in the number of large scale vessels. Employment, estimated at 1 219 jobs in 2014, corresponding to 729 FTEs or an average of 1.43 fishers per vessel.

Effort in days at sea increased 19% compared to 2013, while energy consumed increased only 1% and energy costs decreased 4% as a result of low fuel prices.

Landings increased 18% to 1.3 thousand tonnes, with a value of €7.5 million in 2014, a 5% increase on 2013.

Although the Cypriot national fleet remained in a net loss making position in 2014, its economic performance improved compared to previous years and this trend is expected to have continued into 2015, as fuel prices remained lower than in previous years.

Revenue, estimated at €7.5 million, increased 5% due to an increase in income from landings. Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €0.8 million, -€0.1 million and -€6.1 million, respectively, showing an improvement in the economic performance compared to previous years.

It is worth mentioning that during 2015, 66 vessels of A' and B' category of small scale fleet segment were scrapped with public aid within the framework of the Scheme of Permanent Cessation, co-funded by the European Maritime and Fisheries Fund 2014-2020.

Lower overall operational costs together with a reduction in the number of vessels after decommissioning schemes were the main driving forces behind the overall improvement of the economic performance of the Cyprus fleet. However, important economic indicators such as the Gross profit margin and the Net profit margin were still negative.

The fleet is mainly managed through effort limitations and technical measures. A limited number of licenses are provided for each segment annually. Furthermore, closed seasons, restriction measures on the use of gears and minimum landing sizes are employed, in accordance to national and European regulations. It is noted that for the trawlers fishing in territorial waters an extended closed season (from 1 June to 7 November) is used.

Small-scale fleet: vessels using *Polyvalent passive gears with length 0-< 6m and 6-< 12m* compose the small scale inshore fleet, targeting demersal species, and represent the large majority of the fishing vessels in the Register (96%).

Overall, operating costs decreased in 2014 compared to previous years mainly due to the reduction in repair & maintenance which was reduced by 24% compared to 2013.

The economic performance of the SSF increased significantly compared to the previous year, but 2013 was a particularly bad year for this fleet segment. GVA and gross profit increased 86% and 72%, respectively. Despite the improved economic performance compared to 2013, the indicators are much lower than those registered in the period 2008-2013 characterised by decreasing number of vessels, employed fishers and production, both in terms of value and weight of landings.

Cyprus			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		534	911	909	957	907	920	854		*-7%*	*0%*
		SSF	500	880	882	931	880	894	827		*-7%*	*0%*
		LSF	34	31	27	26	27	26	27		*4%*	*-5%*
Vessel tonnage	(thousand GT)		3.4	3.8	3.8	3.5	3.3	3.2	3.1		-0.0535	-0.12456
		SSF	1.6	2.2	2.2	2.2	2.1	2.1	1.9		*-10%*	*-7%*
		LSF	1.8	1.6	1.7	1.2	1.2	1.1	1.1		*4%*	*-21%*
Engine power	(thousand kW)		27.6	40.2	40.4	40.8	38.5	38.4	36.8		*-4%*	*-2%*
		SSF	19.6	33.6	34.0	35.5	33.2	33.8	31.9		*-5%*	*1%*
		LSF	8.0	6.6	6.3	5.3	5.3	4.7	4.8		*3%*	*-20%*
Total employed	(person)		1,085	909	1,329	1,344	1,301	1,334	1,219		*-9%*	*0%*
		SSF	895	761	1,181	1,245	1,192	1,233	1,106		*-10%*	*2%*
		LSF	190	148	148	99	109	101	113		*12%*	*-15%*
FTE	(#)		875	777	871	839	810	824	729		*-12%*	*-12%*
		SSF	697.0	628.5	722.8	739.7	700.6	723.2	615.7		*-15%*	*-12%*
		LSF	178	148	148	99	109	101	113		*12%*	*-13%*
Days at sea	(thousand day)		100.2	81.3	75.6	59.1	85.1	80.7	65.6		*-19%*	*-18%*
		SSF	193.5	78.6	145.8	113.2	165.6	155.7	126.4		*-19%*	*-11%*
		LSF	7.0	4.6	4.6	4.3	2.7	5.3	4.8		*-8%*	*2%*
Live weight of landings	(thousand tonne)		2.0	1.4	1.4	1.1	1.0	1.1	1.3		*18%*	*-2%*
		SSF	1.1	0.8	0.9	0.7	0.5	0.5	0.6		*18%*	*-24%*
		LSF	0.8	0.6	0.5	0.4	0.5	0.6	0.7		*18%*	*27%*
Value of landings	(million €)		13.7	9.8	10.7	8.1	6.6	7.2	7.5		*5%*	*-20%*
		SSF	9.3	6.8	7.4	6.2	4.3	3.9	4.4		*12%*	*-31%*
		LSF	4.5	2.9	3.3	1.9	2.3	3.3	3.1		*-4%*	*4%*
Revenue	(million €)		13.7	9.8	10.7	8.1	6.6	7.2	7.5		*5%*	*-20%*
		SSF	9.3	6.8	7.4	6.2	4.3	3.9	4.4		*12%*	*-31%*
		LSF	4.5	2.9	3.3	1.9	2.3	3.3	3.1		*-4%*	*3%*
Gross Value Added	(million €)		4.7	-0.7	-4.3	-0.5	-2.6	-0.1	0.8		*1230%*	*241%*
		SSF	4.3	-0.1	2.1	0.7	-0.5	-1.1	0.2		*86%*	*-178%*
		LSF	0.5	-0.5	-0.5	0.4	0.1	1.0	1.2		*18%*	*11889%*
Gross profit	(million €)		3.2	-1.9	-5.6	-1.4	-3.5	-1.0	-0.1		*88%*	*93%*
		SSF	3.8	-0.5	-2.5	0.4	-0.8	-1.4	-0.4		*69%*	*-191%*
		LSF	-0.7	-1.4	-1.5	-0.9	-0.4	0.4	0.6		*39%*	*183%*
Gross profit margin	(%)		23.1	-19.4	-52.6	-17.1	-53.4	-13.3	-1.5		*89%*	*93%*
		SSF	41.4	-7.0	-33.4	6.1	-17.7	-35.8	-9.9		*72%*	*-28%*
		LSF	-15.0	-48.2	-44.7	-46.8	-18.3	13.6	19.7		*45%*	*174%*
GVA to revenue	(%)		34.4	-6.8	-39.7	-6.8	-38.9	-1.0	10.7		*1180%*	*209%*
		SSF	46.0	-2.0	-28.8	-11.5	-10.6	-27.3	-3.5		*87%*	*-88%*
		LSF	10.3	-18.0	-15.8	-21.2	2.9	30.5	37.4		*22%*	*2093%*
Net profit	(million €)		-1.5	-8.5	-10.4	-7.7	-12.5	-6.4	-6.1		*4%*	*22%*
		SSF	1.8	-4.2	-4.6	-2.0	-4.5	-5.0	-5		*6%*	*-52%*
		LSF	-3.3	-4.3	-4.2	-3.5	-4.7	-1.4	-1.1		*21%*	*68%*
GVA per FTE (labour productivity)	(thousand €)		5.4	-0.9	-4.9	-0.7	-3.2	-0.1	1.1		*1378%*	*254%*
		SSF	6.1	-0.2	-3.3	-1.1	-0.7	-1.5	-0.2		*83%*	*-200%*
		LSF	2.6	-3.6	-3.6	-4.1	0.6	9.8	10.4		*5%*	*3318%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Denmark

In 2014, the Danish fishing fleet consisted of 1 956 registered vessels, with a combined gross tonnage of 68 thousand GT, engine power of 211 thousand kW and an average age of 32 years. The number of registered fishing vessels decreased 4% between 2013 and 2014 whereas a small increase was seen in terms of the vessel tonnage (5%) while vessel power decreased slightly (-2%). This comes after a period with a significant decrease in fleet capacity between 2008 and 2012, partly due to a cleaning up of inactive vessels on the register.

The total weight landed by the Danish fleet was 742 thousand tonnes of seafood, with a landed value of €380 million. The landed weight increased 12% compared to 2013 while the landed value decreased 4%, reflecting price decreases for many species. The amount of income generated by the Danish fleet in 2014 was €402 million, a decrease of 6% compared to 2013. Total operating costs incurred by the fleet equated to €254 million, amounting to 63% of total income.

In terms of economic performance, the total Gross Value Added (GVA), gross profit and net profit generated in 2014 was €238 million, €131 million and €37 million, respectively. Gross Value Added (GVA), gross profit, and net profit decreased by 6%, 8%, and 20% between 2013 and 2014.

The national fleet consisted of 19 DCF fleet segments in 2014, with 1 438 active vessels. Ten of the active fleets made losses while 9 made an overall profit. The most important segments (in terms of total landed value) are larger and medium sized vessels that target pelagic or demersal species. Both the gross and the net profit show a significant trend towards larger profits if evaluated for the period 2008-2014. The gain is driven by the large scale fleet.

Large-scale fleet: The large-scale fleet (vessels above 12 meters) consisted of 434 registered vessels targeting a wide range of species including codfish, flatfish, Norway lobster, Atlantic herring and mackerel, European sprat, and sandeel in the Baltic Sea, the Sounds, Kattegat, Skagerrak, North Sea, and Norwegian Sea. The total capacity of this fleet was 63 thousand gross tonnes (GT), with an engine power of 157 thousand kW. The number of vessels decreased by 5% between 2013 and 2014 while vessel tonnage (GT) and vessel power (kW) increased by 8% and 1% respectively.

The revenue generated by the large-scale fleet was €363 million, making up 94% of the national fisheries revenue. This was a decrease of 4% compared to 2013. The large scale fleet had a gross profit of €134 million and net profit of €44 million in 2014, a decrease of 7% and 15% compared to 2013, mainly due to lower landing prices.

Small-scale fleet: The small-scale fleet (vessels less than 12 meters LOA using static gears) operate mostly in the Baltic Sea, the Sounds, and Kattegat. In 2014 it consisted of 1 004 registered vessels, with a total capacity of 3.8 thousand GT and 40.9 thousand kW. The size of the small scale fleet decreased between 2013 and 2014. The number of vessels, vessel tonnage (GT), and vessel power (kW) decreased by 2%, 1%, and 1% respectively.

The revenue generated by the small scale fleet amounted to €23 million in 2014, which is 6% of the national revenue for fisheries. The landings value generated by the Danish small scale fleet decreased 7% from 2013-2014. The small scale fleet made a loss in 2014 with a gross profit and a net profit of -€2.4 million and -€7.2 million, respectively. The gross profit decreased 104% from 2013 to 2014, while the net profit decreased 23%. The increased loss was mainly due to lower income from landings. However, comparing 2014 to the average of 2008-2013, gross profit remained stable while net profit increased 8%.

Denmark			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		2,813	2,786	2,682	2,663	2,052	2,048	1,956		*-4%*	*-22%*
		SSF	1,228	1,203	1,118	1,102	1,075	1,025	1,004		*-2%*	*-11%*
		LSF	582	566	521	501	462	456	434		*-5%*	*-16%*
Vessel tonnage	(thousand GT)		78.8	74.4	68.0	67.5	62.2	64.6	68.2		*5%*	*-2%*
		SSF	4.4	4.3	4.2	4.2	4.1	3.9	3.8		*-1%*	*-8%*
		LSF	59.4	59.9	58.8	59.1	56.2	58.1	62.7		*8%*	*7%*
Engine power	(thousand kW)		282.9	269.2	247.4	238.8	212.6	215.2	211.0		*-2%*	*-14%*
		SSF	44.9	44.1	44.0	43.7	42.9	41.2	40.9		*-1%*	*-6%*
		LSF	181.2	178.2	171.1	167.0	154.1	156.1	156.9		*1%*	*-7%*
Total employed	(person)		1,801	1,694	1,528	1,460	1,472	1,489	1,405		*-6%*	*-11%*
		SSF	420	378	333	342	345	362	307		*-15%*	*-16%*
		LSF	1,380	1,317	1,195	1,119	1,127	1,127	1,099		*-2%*	*-9%*
FTE	(#)		2,061	1,854	1,804	1,661	1,558	1,652	1,619		*-2%*	*-8%*
		SSF	378.6	318.9	280.9	276.2	251.5	238.7	225.0		*-6%*	*-23%*
		LSF	1,682	1,535	1,523	1,385	1,307	1,413	1,394		*-1%*	*-5%*
Days at sea	(thousand day)		129.2	127.5	119.4	116.0	109.4	106.2	103.8		*-2%*	*-12%*
		SSF	116.1	107.0	98.6	101.3	91.3	87.1	85.2		*-2%*	*-15%*
		LSF	145.9	148.0	140.2	130.6	127.6	125.2	122.4		*-2%*	*-10%*
Live weight of landings	(thousand tonne)		690.5	773.0	822.3	711.0	499.3	665.0	741.9		*12%*	*7%*
		SSF	12.9	11.8	11.2	12.3	11.8	11.2	11.1		*-1%*	*-7%*
		LSF	677.5	761.2	811.1	698.7	487.5	653.8	730.8		*12%*	*7%*
Value of landings	(million €)		366.8	310.3	408.3	427.4	382.8	395.3	380.0		*-4%*	*0%*
		SSF	32.0	24.8	24.6	26.9	24.9	23.3	21.6		*-7%*	*-17%*
		LSF	334.7	285.5	383.7	400.3	358.0	372.0	358.3		*-4%*	*1%*
Revenue	(million €)		376.5	317.8	430.0	408.4	390.0	402.3	385.6		*-4%*	*-1%*
		SSF	32.8	25.1	26.3	25.8	27.2	26.0	23.1		*-11%*	*-15%*
		LSF	343.7	292.7	403.7	382.7	362.8	376.3	362.5		*-4%*	*1%*
Gross Value Added	(million €)		219.8	187.4	283.8	257.5	245.2	252.3	238.4		*-6%*	*-1%*
		SSF	16.6	12.3	14.0	12.8	13.1	12.7	10.9		*-14%*	*-20%*
		LSF	203.2	175.1	269.7	244.7	232.1	239.6	227.4		*-5%*	*0%*
GVA to revenue	(%)		58.4	59.0	66.0	63.0	62.9	62.7	61.8		*-1%*	*0%*
		SSF	50.8	49.1	53.4	49.6	48.0	48.8	47.4		*-3%*	*-5%*
		LSF	59.1	59.8	66.8	63.9	64.0	63.7	62.7		*-1%*	*0%*
Gross profit	(million €)		86.5	70.9	156.7	138.8	138.5	142.1	131.3		*-8%*	*7%*
		SSF	- 4.1	- 5.0	- 1.4	- 1.9	- 0.9	- 1.2	- 2.4		*-104%*	*0%*
		LSF	90.6	75.9	158.2	140.7	139.4	143.3	133.7		*-7%*	*7%*
Gross profit margin	(%)		23.0	22.3	36.4	34.0	35.5	35.3	34.0		*-4%*	*9%*
		SSF	- 12.5	- 19.8	- 5.5	- 7.3	- 3.3	- 4.5	- 10.4		*-130%*	*-18%*
		LSF	26.4	25.9	39.2	36.8	38.4	38.1	36.9		*-3%*	*8%*
Net profit	(million €)		- 13.9	- 30.1	62.6	47.0	50.9	46.1	37.1		*-20%*	*37%*
		SSF	- 11.4	- 11.6	- 6.3	- 6.2	- 5.2	- 5.8	- 7.2		*-23%*	*8%*
		LSF	- 2.5	- 18.5	68.9	53.2	56.1	52.0	44.3		*-15%*	*27%*
GVA per FTE (labour productivity)	(thousand €)		106.7	101.1	157.3	155.0	157.4	152.8	147.3		*-4%*	*6%*
		SSF	44.0	38.7	50.0	46.3	51.9	53.1	48.6		*-9%*	*3%*
		LSF	120.8	114.1	177.1	176.6	177.7	169.6	163.2		*-4%*	*5%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Estonia

In 2015, the Estonian, Baltic Sea fishing fleet consisted of 1 534 registered vessels, with a combined gross tonnage of 5.9 thousand GT and engine power of 31.8 thousand kW. While the number of vessels in the fleet increased compared to previous years the GT and kW decreased slightly. This reflects different trends in the large and small-scale fleets, with the number of open sea trawlers down by 4 vessels, while the number of small-scale vessels increased by 23 boats.

The Estonian Baltic Sea fishing fleet is nationally divided into a large-scale fleet (2% of total vessels in 2015) and a small-scale fleet (98% in 2015). The large-scale fleet operates outside the coastal zone using mainly pelagic trawls. It is divided into two size groups (12-18m and 24-40m). The small-scale fleet operates inside Estonian coastal waters using mainly passive gears. It is also divided into two size groups (0-10m and 10-12m).

In 2014 employment was estimated at 2 070 jobs, corresponding to 497 FTEs. While the total number of employed increased over the period, the equivalent FTE declined reflecting an increased reliance on part-time workers for whom fishing is not the only source of income. The average age of those employed in the sector was around 50 years.

The live weight landed by the Estonian Baltic Sea fleet in 2014 was 54.8 thousand tonnes of seafood, with a landed value of €14.5 million. Although the total weight of landings remained rather stable in 2014 the total value of landings decreased 6%. The reason for this was a fall in the first-sale price of some key species (European sprat, Atlantic herring, and European perch). In 2014, European sprat generated the highest value (€6 million) landed by the Estonian Baltic Sea fleet, followed by Atlantic herring (€4.7 million) and European perch (€2.2 million). In terms of landings weight, European sprat landings were 28.5 thousand tonnes, Atlantic herring 23.1 thousand tonnes and European perch 1.7 thousand tonnes.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €9.3 million, €3.9 million and €1.7 million, respectively. GVA increased 1%, but gross profit and net profit decreased 6% and 26%, respectively. These results indicate deterioration in the economic situation compared to 2013. Further, a significant improvement in economic performance is not expected in 2015. Although the price of fuel remains low, the first sale price of the top two species (European sprat and Atlantic herring) declined further. This reflects ongoing difficulties selling fish caused in part by the Russian embargo on EU food products.

Estonia			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		954	955	939	928	917	1,343	1,514		*13%*	*50%*
		SSF	880	884	881	876	872	1,300	1,475		*13%*	*55%*
		LSF	64	53	48	42	36	36	38		*6%*	*-18%*
Vessel tonnage	(thousand GT)		7.6	7.6	7.0	6.4	6.0	6.1	6.0		*-2%*	*-11%*
		SSF	1.8	1.8	1.8	1.7	1.7	2.0	2.2		*10%*	*22%*
		LSF	5.6	5.4	5.0	4.4	4.0	4.0	3.8		*-4%*	*-19%*
Engine power	(thousand kW)		30.3	30.4	28.7	26.9	26.1	30.6	32.1		*5%*	*11%*
		SSF	14.6	14.6	14.5	14.4	14.6	19.6	22.2		*13%*	*44%*
		LSF	15.0	13.7	12.9	11.2	10.3	10.1	9.8		*-3%*	*-20%*
Total employed	(person)		3,002	1,899	1,948	1,993	2,046	2,046	2,070		*1%*	*-4%*
		SSF	2,727	1,646	1,721	1,777	1,858	1,865	1,895		*2%*	*-2%*
		LSF	275	253	227	216	188	181	175		*-3%*	*-22%*
FTE	(#)		699	541	521	524	540	514	497		*-3%*	*-11%*
		SSF	444	301	309	320	362	339	333		*-2%*	*-4%*
		LSF	255	240	212	204	178	175	164		*-6%*	*-22%*
Days at sea	(thousand day)		116.2	123.4	108.3	97.7	95.2	138.0	151.0		*9%*	*33%*
		SSF	108.9	117.3	103.2	93.0	91.1	134.7	147.7		*10%*	*37%*
		LSF	7.3	6.1	5.2	4.7	4.2	3.3	3.4		*1%*	*-34%*
Live weight of landings	(thousand tonne)		83.5	83.5	79.6	63.4	53.3	54.6	54.8		*0%*	*-21%*
		SSF	12.6	14.0	11.2	10.4	8.7	9.6	10.4		*8%*	*-6%*
		LSF	70.9	69.5	68.3	53.0	44.5	44.9	44.4		*-1%*	*-24%*
Value of landings	(million €)		18.4	16.9	14.7	15.1	14.6	15.5	14.5		*-6%*	*-8%*
		SSF	4.1	4.1	3.9	4.2	4.8	5.6	5.1		*-10%*	*14%*
		LSF	14.3	12.8	10.8	10.9	9.7	9.8	9.5		*-3%*	*-17%*
Revenue	(million €)		18.4	16.9	14.8	15.2	14.5	15.6	14.7		*-6%*	*-7%*
		SSF	4.1	4.2	3.9	4.3	4.9	5.8	5.2		*-10%*	*15%*
		LSF	14.3	12.7	10.9	11.0	9.5	9.8	9.5		*-3%*	*-17%*
Gross Value Added	(million €)		11.3	10.5	8.3	8.3	7.9	9.2	9.3		*1%*	*0%*
		SSF	2.4	2.5	2.1	2.4	3.1	3.4	2.8		*-17%*	*5%*
		LSF	9.0	8.0	6.2	5.8	4.8	5.8	6.5		*12%*	*-1%*
Gross profit	(million €)		5.1	4.9	3.0	3.3	2.7	4.2	3.9		*-5%*	*1%*
		SSF	0.8	1.2	0.9	1.2	1.7	1.8	1.1		*-36%*	*-10%*
		LSF	4.3	3.6	2.1	2.2	1.1	2.4	2.8		*18%*	*7%*
Gross profit margin	(%)		27.9	28.8	20.4	21.9	19.0	26.6	26.7		*0%*	*11%*
		SSF	20.2	29.6	23.9	27.2	34.2	31.0	21.9		*-29%*	*-21%*
		LSF	30.1	28.5	19.2	19.8	11.1	24.0	29.3		*22%*	*33%*
GVA to revenue	(%)		61.4	62.1	56.0	54.5	54.9	58.9	63.2		*7%*	*9%*
		SSF	57.7	60.3	54.3	57.2	63.2	58.0	53.4		*-8%*	*-9%*
		LSF	62.5	62.7	56.6	53.4	50.6	59.4	68.6		*15%*	*19%*
Net profit	(million €)		4.1	1.5	0.5	1.6	1.3	2.2	1.6		*-26%*	*-12%*
		SSF	0.6	0.2	0.3	0.8	1.3	1.3	0.5		*-60%*	*-31%*
		LSF	3.4	1.4	0.2	0.9	0.1	1.0	1.1		*19%*	*0%*
Net profit margin	(%)		22.0	9.0	3.1	10.7	9.2	14.3	11.2		*-22%*	*-2%*
		SSF	15.4	5.3	7.7	17.7	25.7	22.2	9.8		*-56%*	*-38%*
		LSF	23.9	10.6	1.5	7.9	0.6	9.7	12.0		*23%*	*32%*
GVA per FTE	(thousand €)		16.2	19.4	15.9	15.8	14.7	17.9	18.7		*5%*	*12%*
		SSF	5.3	8.3	6.9	7.6	8.6	9.9	8.4		*-15%*	*8%*
		LSF	35.2	33.3	29.0	28.7	27.1	33.4	39.7		*19%*	*28%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Finland

In 2014 the Finnish fishing fleet consisted of 3 144 registered vessels of which 1 380 were inactive. The 1 764 active vessels had a combined capacity of 14.5 thousand GT and 110 thousand kW. The number of active vessels increased by 25 whiles the total number registered declined by 97 indicating a decrease in latent capacity.

Total employment in 2014 was estimated at 1 847 jobs. The majority of these jobs are in the seasonal, small-scale, fleet where employment is usually part-time. Full time equivalent (FTE) employment in the fleet was 355.

The Finnish fleet operates exclusively in the Baltic Sea and is based on two main fisheries: pelagic trawlers and the small scale fleet.

Small-scale fleet: The Finnish fleet is dominated by small scale vessels with 1 699 (96%) of the 1 784 active vessels in the small scale fleet in 2014. These are diversified vessels targeting mainly freshwater fish species including European whitefish, pike-perch and perch.

The segment accounts for 92% of the total number of fishers and 71% in terms of FTE; the segment is really important from a social point of view.

In 2014 the weight of fish landed by the segment decreased by 20%, however revenue decreased by only 1% (to €11.5 million). While the segment generated €6.6m in gross value added, given the capital value of a large number of low activity vessels the segment as a whole generated a net loss.

Large-scale fleet: Pelagic trawlers are divided into three length group segments, with those 24-40 metres being the most important economically. These vessels targets Baltic herring and sprat and in 2014 accounted for 77% of the total value landed by the Finnish fleet. While the landed weight increased 11% to a record high of 134 thousand tonnes in 2014, the equivalent landed value decreased by 16% to €28.8 million due to the Russian embargo on EU food stuffs. Profitability too decreased as a result of the lower prices and while the fleet generated €8.9 million of gross value added this was 22% lower than the previous year. Gross profit margin decreased to 15% and the fleet net profit turned negative.

Outlook: Pelagic stocks in the Baltic Sea are strong and at the MSY level for the most important stocks targeted by the Finnish pelagic fleet. Catches of herring have increased and in 2014 were at a record high. The market situation has also been favourable with high demand in the fishmeal industry. Thus while the economic performance of the pelagic trawlers was improving, the Russian market is very important and the current embargo on EU food stuffs has reduced the positive trend in the sector.

Increased seal populations have strongly influenced the Finnish coastal fishery for several years and many fishers have had to stop fishing in traditional grounds. There has been an EFF funded scheme to help small scale coastal fishers continue fishing.

Finland			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		3,240	3,240	3,270	3,365	3,359	3,241	3,144		-3%	-4%
		SSF	1,486	1,465	1,559	1,589	1,890	1,674	1,699		1%	5%
		LSF	67	66	60	60	62	59	65		10%	4%
Vessel tonnage	(thousand GT)		16.4	16.9	16.7	18.1	17.0	16.5	16.8		2%	-1%
		SSF	4.1	3.8	4.1	4.2	4.0	3.9	5.5		40%	37%
		LSF	7.1	7.5	7.6	9.2	8.6	8.3	9.0		8%	12%
Engine power	(thousand kW)		173.4	174.8	175.4	181.6	178.2	172.6	173.0		0%	-2%
		SSF	71.9	68.8	74.9	75.8	76.5	75.6	77.9		3%	5%
		LSF	27.2	27.6	27.1	31.3	30.3	28.8	32.1		12%	12%
Total employed	(person)		1,613	1,606	1,699	1,722	2,035	1,822	1,847		1%	6%
		SSF	1,486	1,465	1,559	1,589	1,895	1,674	1,699		1%	5%
		LSF	127	141	140	133	140	148	148		0%	7%
FTE	(#)		263	229	274	337	354	378	355		-6%	16%
		SSF	177.0	135.0	181.0	229.0	246.0	275.0	251.0		-9%	21%
		LSF	86	94	93	108	108	103	104		1%	5%
Days at sea	(thousand day)		129.5	143.0	149.7	148.2	137.6	137.8	126.4		-8%	-10%
		SSF	124.0	138.0	145.1	142.8	131.6	131.8	120.1		-9%	-11%
		LSF	5.6	5.0	4.6	5.4	6.0	6.1	6.3		4%	16%
Live weight of landings	(thousand tonne)		111.6	117.5	122.1	119.7	132.9	138.4	148.2		7%	20%
		SSF	8.4	9.4	10.2	10.1	13.1	17.9	14.3		-20%	24%
		LSF	103.1	108.1	111.9	109.6	119.8	120.5	134.0		11%	19%
Value of landings	(million €)		26.3	26.7	29.3	34.8	36.8	47.1	40.4		-14%	21%
		SSF	8.4	9.2	9.9	11.4	10.8	12.5	11.5		-8%	11%
		LSF	17.9	17.5	19.4	23.4	26.1	34.5	28.8		-16%	25%
Revenue	(million €)		29.7	31.0	32.4	38.7	44.7	44.1	39.3		-11%	7%
		SSF	12.1	13.1	12.9	13.7	15.2	13.2	13.1		-1%	-2%
		LSF	17.6	17.9	19.5	25.0	29.5	30.9	26.2		-15%	12%
Gross Value Added	(million €)		12.3	14.3	13.6	15.0	19.8	18.3	15.5		-15%	0%
		SSF	5.9	8.0	6.4	6.7	8.1	6.9	6.6		-5%	-6%
		LSF	6.4	6.3	7.1	8.2	11.7	11.4	8.9		-22%	5%
Gross profit	(million €)		5.5	7.4	5.8	6.0	9.5	8.0	7.2		-10%	2%
		SSF	2.6	4.6	2.2	2.7	2.9	2.2	3.3		53%	17%
		LSF	2.8	2.9	3.6	3.3	6.5	5.8	3.9		-34%	-7%
Gross profit margin	(%)		18.3	24.0	17.8	15.5	21.2	18.1	18.3		1%	-4%
		SSF	21.6	35.0	16.7	19.4	19.2	16.5	25.4		54%	19%
		LSF	16.1	15.9	18.6	13.3	22.2	18.8	14.7		-22%	-16%
GVA to revenue	(%)		41.5	46.1	41.9	38.6	44.3	41.5	39.4		-5%	-7%
		SSF	48.6	61.1	49.9	48.8	53.2	52.0	50.0		-4%	-4%
		LSF	36.6	35.1	36.6	33.0	39.7	37.0	34.1		-8%	-6%
Net profit	(million €)		- 7.2	- 8.5	- 11.0	- 9.4	- 2.4	- 4.7	- 8.4		-78%	-16%
		SSF	- 4.9	- 2.8	- 6.1	- 4.4	- 3.5	- 4.9	- 4.7		3%	-6%
		LSF	- 2.2	- 5.1	- 4.5	- 5.1	0.8	0.1	- 3.6		-4086%	-35%
Net profit margin	(%)		- 24.1	- 27.4	- 33.9	- 24.3	- 5.5	- 10.7	- 21.3		-100%	-1%
		SSF	- 40.0	- 21.3	- 47.4	- 32.0	- 23.1	- 36.8	- 35.9		2%	-7%
		LSF	- 12.6	- 28.4	- 23.0	- 20.4	2.7	0.3	- 13.8		-4804%	-1%
GVA per FTE	(thousand €)		46.9	62.5	49.5	44.4	55.9	48.4	43.6		-10%	-15%
		SSF	33.3	59.2	35.6	29.3	33.0	25.0	26.1		5%	-27%
		LSF	75.0	67.1	76.7	76.4	108.3	110.8	85.9		-22%	0%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

France

In 2015, as in previous years, the French fishing fleet continued to decline. In 2015 it consisted of 6 969 vessels (100 fewer than the previous year) of which about 5 650 were active. The number of inactive vessels increases every year, especially in the French West Indies. Conversely, capacity has stabilised with 174 thousand GTs and 1.01 thousand kW in 2015. This is a slight increased since 2014, due to the introduction of 5 large purse seiners based in Mayotte Island.

The French active fleet included 97 segments in 2014, of which 51 were aggregated to form 22 clusters. It consisted of 5 758 vessels: 2 743 based in North East Atlantic and North Sea, 1 229 in the Mediterranean Sea and 1 786 in the French overseas territories.

The small-scale fleet (SSF) included 33 segments in 2014 with 4 192 vessels (73% of total active vessels) based in all regions, 9% of total GT and 41% of total kW of the whole fleet.

The large-scale fleet (LSF) included 62 segments with 1 543 vessels (27% of total active vessels). Most of these vessels are based in the NE Atlantic and North Sea and the majority are demersal trawlers and dredgers. They represent 60% of total GT and 38% of total kW.

The distant-water fleet (DWF) included 2 segments and 23 vessels of which 22 are purse seiners catching tuna in South Atlantic and Indian Ocean. They represent 26% of total GT and 7% of total kW.

Employment in the sector was estimated at 10 056 jobs in 2014 (38% in the SSF, 56% in the LSF, 6% in the DWF) and about 7 500 FTE. This number does not include the majority of vessels in overseas territories (economic data are available for 3 segments only); if these latter are included the total could be approximately 13 000 jobs. Despite 165 jobs resulting from the 5 new Mayotte Island based purse seiners, total employed decreased once again.

The live weight landed by the French fleet increased by 2% in 2014 (527 thousand tonnes against 514 thousand tonnes in 2013). This increase is due to the 5 Mayotte Island based purse seiners without which production would have decreased (-2%). More than 25 Mt were landed for five species: yellowfin tuna (55 Mt), European hake (41 Mt), skipjack tuna (37 Mt), Atlantic herring (31 Mt), sardine (26 Mt).

The landed value, €1.101 billion, remained stable in 2014. Without the 5 additional seiners, it would have decreased by 3.4%, because of the reduction of first-sale prices of top species like yellowfin tuna, European hake, common sole, and skipjack tuna. The landed value was greater than €50 million for each of six species: yellowfin tuna (€101 million), European hake (€95 million), monkfish (€94 million), common sole (€79 million), great Atlantic scallop (€61 million) and European seabass (€51 million). The landed weight and the landed value decreased for the SSF and LSF.

The total revenue of the French fleet slightly increased in 2014 (+2%). But the operating costs increased too (+8% for crew wages, +12% for repair and maintenance costs, +7% for variable costs). Energy costs continued to decrease (-2%) and depreciation costs decreased too (-7%). Consequently, the gross value added (GVA) was stable (€580 million). The situation was better for the LSF: the GVA increased by 4% due to higher incomes and lower energy costs. The DWF was penalised by lower tuna prices: the GVA decreased by 15%.

The French national fleet remained in a net profit making position in 2014. Although its economic performance compared to 2013 worsened in 2014, it remained globally in the average of the previous years (at least in terms of gross value added and gross profit) and is expected to improve in 2015, as fuel prices remained low.

Despite January 2014 marked by inclement weather on the Atlantic coast, 2014 was a relatively stable year compared to 2013 in terms of landings volumes and values, even if economic performance differs significantly between fleet segments and supra regions.

In the Atlantic area, situations differ between ports, fishing gear and target species. Weight of landings was generally correct in 2014, and proper season was observed for species such as monkfish, hake, goatfish or anchovy. On the other side, lack of sardine negatively impacted some specialised ports on the Atlantic coast. Atlantic cod, Haddock or Common cuttlefish showed the same trend over the period.

The economic situation in the Mediterranean Sea remains fragile due to the lack of abundance of pelagic species (anchovy, pilchard). On the other hand, due to a good level of fish stocks, tuna seiners in the Mediterranean meanwhile had a good year in 2014, with quotas being reached in just a few days by most of the vessels.

In 2014, fuel costs decreased slightly and are expected to continue in 2015, especially for demersal and pelagic trawlers and dredgers. However, and at the same time, average age of vessels in the fleet grows every year, and maintenance and repair costs attained high levels 2014, which had a negative impact on vessel profitability.

France			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		7,919	7,290	7,234	7,211	7,144	7,125	7,069		-1%	-3%
		SSF	4,589	4,629	4,371	4,480	4,382	4,332	4,198		-3%	-6%
		LSF	2,011	1,826	1,889	1,687	1,612	1,559	1,538		-1%	-13%
		DWF	5	20	21	17	18	17	22		0.29412	
Vessel tonnage	(thousand GT)		197.2	185.3	174.2	171.0	168.3	164.2	175.6		7%	-1%
		SSF	16.1	16.2	15.4	16.2	16.0	15.7	15.6		-1%	-2%
		LSF	168.9	126.5	118.9	113.5	109.5	108.0	105.7		-2%	-15%
		DWF	3.2	33.6	30.6	28.1	32.7	32.4	45.0		39%	
Engine power	(thousand kW)		1,076.0	1,007.7	994.9	1,001.5	999.3	999.9	1,016.6		2%	0%
		SSF	405.8	418.0	410.4	432.8	428.8	427.6	419.9		-2%	0%
		LSF	547.9	453.6	440.4	410.8	398.6	393.8	386.4		-2%	-12%
		DWF	4.6	57.8	53.0	49.5	55.4	54.4	73.8		36%	
Total employed	(person)		11,140	11,960	11,056	10,945	9,998	10,265	10,056		-2%	-8%
		SSF	4,307	4,270	3,857	4,220	3,913	3,887	3,805		-2%	-7%
		LSF	6,833	7,201	6,783	6,287	5,672	5,965	5,647		-5%	-13%
		DWF		488.0	415.0	438.0	413.0	413.0	578.0		40%	
FTE	(#)		7,793	9,058	8,403	8,056	7,374	7,190	7,545		5%	-5%
		SSF	2,931	3,015	2,743	2,789	2,421	2,298	2,481		8%	-8%
		LSF	4,862	5,555	5,245	4,829	4,540	4,479	4,486		0%	-9%
		DWF		488.0	415.0	438.0	413.0	413.0	578.0		40%	
Days at sea	(thousand day)						494.8	470.6	465.3		-1%	-4%
		SSF			434.8	445.8	447.3	444.0	442.3		0%	0%
		LSF			565.7	538.1	531.0	485.7	487.6		0%	-8%
		DWF			9.7		0.1		0.7			
Live weight of landings	(thousand tonne)		433.9	431.4	447.4	463.7	505.7	514.1	526.9		2%	13%
		SSF			50.8	65.3	73.5	83.5	77.7		-7%	14%
		LSF			311.2	316.4	353.4	351.2	349.3		-1%	5%
		DWF			85.4	82.0	78.5	79.3	100.0		26%	
Value of landings	(million €)		978.8	948.0	982.8	1,092.2	1,088.8	1,112.3	1,101.1		-1%	7%
		SSF			166.0	201.3	187.7	186.2	184.4		-1%	-1%
		LSF			715.1	772.5	740.7	787.9	772.8		-2%	2%
		DWF			101.6	118.4	150.6	138.1	143.9		4%	
Revenue	(million €)		1,099.6	1,109.7	1,104.2	1,197.0	1,098.8	1,150.1	1,171.7		2%	4%
		SSF	255.6	259.5	254.3	270.6	216.4	221.3	222.5		1%	-10%
		LSF	780.1	759.8	754.7	799.8	729.8	788.6	805.8		2%	5%
		DWF		90.4	95.2	126.6	152.5	140.2	143.4		2%	18%
Gross Value Added	(million €)		587.5	538.7	560.3	603.2	541.7	577.7	579.7		0%	2%
		SSF	164.8	172.7	165.7	175.4	136.1	139.2	137.0		-2%	-14%
		LSF	358.8	364.6	356.7	369.6	333.4	373.1	386.2		4%	7%
		DWF		1.4	36.6	58.2	72.2	65.4	56.4		-14%	21%
Gross profit	(million €)		185.5	102.6	149.7	177.1	157.5	178.6	150.2		-16%	-5%
		SSF	38.4	51.6	52.5	56.9	40.0	42.5	37.2		-13%	-21%
		LSF	83.1	79.1	88.7	99.1	86.9	111.1	100.2		-10%	10%
		DWF	-	28.1	7.3	21.1	30.7	25.0	12.8		-49%	14%
Gross profit margin	(%)		16.9	9.2	13.6	14.8	14.3	15.5	12.8		-17%	-9%
		SSF	15.0	19.9	20.6	21.0	18.5	19.2	16.7		-13%	-12%
		LSF	10.6	10.4	11.8	12.4	11.9	14.1	12.4		-12%	5%
		DWF	-	31.1	7.6	16.7	20.1	17.8	8.9		-50%	43%
GVA to revenue	(%)		53.4	48.5	50.7	50.4	49.3	50.2	49.5		-2%	-2%
		SSF	64.5	66.6	65.2	64.8	62.9	62.9	61.6		-2%	-4%
		LSF	46.0	48.0	47.4	46.2	45.7	47.3	47.9		1%	3%
		DWF		1.6	38.4	46.0	47.3	46.7	39.4		-16%	9%
Net profit	(million €)					81.4	59.6	76.7	55.6		-27%	-23%
		SSF				33.6	19.4	22.2	18		-17%	-26%
		LSF				20.7	- 0.3	20.4	12.7		-38%	-6%
GVA per FTE (labour productivity)	(thousand €)		75.4	59.5	66.7	74.9	73.5	80.4	76.8		-4%	7%
		SSF	56.2	57.3	60.4	62.9	56.2	60.6	55.2		-9%	-6%
		LSF	74.5	65.1	67.2	76.5	73.4	83.3	86.1		3%	17%
		DWF		3.0	88.1	132.9	174.8	158.4	97.6		-38%	-12%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Germany

The German fishing fleet comprised 1 478 vessels in 2015, a decline of 44 compared to the previous year. The gross tonnage declined 5% to 57 thousand tonnes. Since 2008, the number of vessels declined 20%. The 12 and 18 metre length class showed the highest decline (28%). 407 vessels reported no landings and are thus considered to be inactive.

In 2015 the German large scale fishing fleet (>12 metres LOA) consisted of 282 vessels (19%), with the remaining 1 196 vessels (81%) classified as small (<12 metres LOA) scale. Eight large scale vessels are assigned to the high seas fleet.

German small scale vessels operate almost exclusively in the Baltic Sea, whereas cutters (<500 GT) above 12 meters fish in the North Sea and in the Baltic Sea. German high seas trawlers operate mainly in the North Atlantic and Eastern Arctic area, but to some extent also in African and Southern Pacific waters.

The German pelagic trawler fleet was excluded from the current analysis except for capacity and weight of landings data as practically the entire segment is owned by one parent company. For confidentiality reasons the data cannot be published. Vessels which target blue mussels are not included in the analysis because they are defined as operating in the aquaculture sector.

Landings (by weight) have increased slightly since 2012 and consisted of 238 thousand tonnes in 2015. The main species are herring, cod, common shrimp, saithe, and Greenland halibut. By weight, herring is by far the dominant species, whereas the highest revenue is generated through brown shrimp.

About 105 thousand days were spent at sea in 2015, a slight decrease of 5% from 2014 (110 thousand days). The energy consumed in 2014 amounted to an estimated 38.1 million litres and was thus slightly higher (3%) than in 2013. Due to lower fuel prices the energy costs decreased from about €24.7 million in 2013 to €23.2 million in 2014.

Employment in the non-pelagic fleet was estimated at 1 605 jobs in 2014, corresponding to 1 253 FTEs. The figures are almost equally assigned to the small scale and the large scale fleet. The number of people employed in fisheries has varied over time, but shows a slightly declining trend.

Economic performance indicators for the non-pelagic fleet show a stable or increasing trend, particularly for recent years. This applies to both the small scale and large-scale fleet.

Germany			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		1,849	1,810	1,745	1,654	1,556	1,530	1,508		*-1%*	*-11%*
		SSF	961	939	903	883	852	832	817		*-2%*	*-9%*
		LSF	387	365	357	344	301	310	302		*-3%*	*-12%*
		DWF		7.0								
Vessel tonnage	(thousand GT)		38.1	39.8	36.9	36.6	34.6	33.6	30.7		*-9%*	*-16%*
		SSF	2.6	2.6	2.5	2.4	2.3	2.2	2.2		*-1%*	*-10%*
		LSF	61.2	32.9	60.1	59.6	56.8	54.2	54.4		*0%*	*0%*
		DWF		28.1								
Engine power	(thousand kW)		131.6	158.3	127.5	125.8	117.5	114.8	110.7		*-4%*	*-14%*
		SSF	23.8	23.9	23.4	22.6	22.7	22.2	22.4		*1%*	*-3%*
		LSF	118.8	95.3	117.9	114.8	105.5	103.0	103.8		*1%*	*-5%*
		DWF		24.2								
Total employed	(person)		2,068	1,529	1,744	1,639	1,752	1,647	1,605		*-3%*	*-7%*
		SSF	1,031	559	847	869	876	777	798		*3%*	*-3%*
		LSF	1,037	970	897	770	876	870	807		*-7%*	*-11%*
FTE	(#)		1,615	1,238	1,365	1,258	1,372	1,281	1,253		*-2%*	*-8%*
		SSF	790.0	464.0	654.0	664.0	668.0	597.0	608.0		*2%*	*-5%*
		LSF	825	774	711	594	704	684	645		*-6%*	*-10%*
Days at sea	(thousand day)		138.3	128.1	115.0	109.3	118.6	107.2	109.9		*3%*	*-8%*
		SSF	88.6	79.1	70.4	73.3	75.6	66.5	69.8		*5%*	*-8%*
		LSF	49.6	48.8	44.6	35.9	42.7	40.6	40.2		*-1%*	*-8%*
		DWF										
Live weight of landings	(thousand tonne)		110.2	113.6	87.3	78.1	77.9	79.3	71.7		*-10%*	*-21%*
		SSF	12.2	9.6	7.9	6.5	8.0	8.1	7.2		*-12%*	*-18%*
		LSF	245.8	104.0	212.8	201.5	175.5	210.9	219.6		*4%*	*15%*
		DWF		114.8								
Value of landings	(million €)		167.4	134.0	147.0	131.4	149.7	140.8	130.9		*-7%*	*-10%*
		SSF	11.8	8.4	8.3	7.8	9.0	8.8	8.1		*-8%*	*-10%*
		LSF	155.6	125.6	138.7	123.6	144.6	136.5	122.5		*-10%*	*-11%*
Revenue	(million €)		165.8	136.4	150.3	135.7	154.6	147.1	134.6		*-9%*	*-9%*
		SSF	12.1	9.0	9.1	9.0	9.9	9.1	8.6		*-6%*	*-12%*
		LSF	153.7	127.4	141.2	126.7	144.7	138.0	126.0		*-9%*	*-9%*
Gross Value Added	(million €)		66.2	65.1	79.5	60.5	75.7	81.3	71.0		*-13%*	*-1%*
		SSF	4.9	2.5	3.9	3.1	3.5	2.8	3.8		*33%*	*10%*
		LSF	61.3	62.6	75.7	57.4	72.2	78.4	67.0		*-15%*	*-1%*
GVA to revenue	(%)		39.9	47.7	52.9	44.6	49.0	55.2	52.8		*-4%*	*9%*
		SSF	40.7	27.3	42.5	34.0	35.5	31.2	44.1		*41%*	*25%*
		LSF	39.9	49.2	53.6	45.3	49.9	56.8	53.1		*-6%*	*8%*
Gross profit	(million €)		20.6	16.6	30.7	15.5	25.3	34.4	23.7		*-31%*	*0%*
		SSF	1.7	-1.1	1.5	0.3	0.5	-0.3	1.4		*533%*	*243%*
		LSF	18.9	17.7	29.3	15.2	24.7	34.7	22.0		*-36%*	*-6%*
Gross profit margin	(%)		12.4	12.2	20.5	11.4	16.3	23.4	17.6		*-24%*	*10%*
		SSF	14.1	-12.3	16.0	3.0	5.5	-3.7	16.9		*562%*	*348%*
		LSF	12.3	13.9	20.7	12.0	17.1	25.1	17.5		*-30%*	*4%*
Net profit	(million €)		-8.2	-12.4	4.6	-6.7	6.2	13.3	6.4		*-52%*	*1287%*
		SSF	-0.2	-3.1	-0.6	-1.5	-1.0	-1.8	-0		*100%*	*100%*
		LSF	-8.0	-8.9	5.3	-5.2	7.1	15.1	6.2		*-59%*	*581%*
GVA per FTE	(thousand €)		41.0	52.6	58.3	48.1	55.2	63.4	56.7		*-11%*	*7%*
		SSF	6.2	5.3	5.9	4.6	5.3	4.8	6.2		*30%*	*16%*
		LSF	74.3	80.9	106.4	96.7	102.6	114.6	103.8		*-9%*	*8%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Greece

In 2014, the Greek fishing fleet consisted of 14 755 registered vessels of which, 13 600 are active. These had a combined capacity of 72 thousand GT and 431 thousand kW. The average age of the vessels is 28 years. The number of vessel, gross tonnage and total power of the Greek fishing fleet continues to decline steadily.

The majority of vessels 12 762 (94%) are small-scale with a combined capacity of 25 thousand GT and 238 thousand kW. There are 838 large scale vessels with a combined capacity of 44 thousand and 158 thousand kW.

Total employment in the sector is estimated at 23 232 jobs corresponding to 20 780 FTEs in 2014. The average wage per FTE and employed is very low (€6.8 and €6.1 thousand respectively). The small-scale fleet employs a total of 15 782 FTEs, thus contributing 76% of the total national employment in the sector.

The small-scale fleet mainly exploits the extensive Greek coastline, using polyvalent passive gears (mainly nets, longlines, pots, and traps). The vessels in this segment are mainly family-owned and are characterized by low invested capital. On the other hand, the large-scale fleet comprises both bottom trawlers and purse seiners. The bottom trawl segment includes around 2% of the Greek fishing fleet (283 vessels) and employs 7.8% of the total, national, FTEs. The purse seiner segment comprises 254 vessels equal to 2% of the Greek fishing fleet and employs 12.5% of the total, national, FTEs.

The Greek fishing fleet spent an estimated 1.9 million days at sea in 2014; an average of 141 days per vessel. The small scale fleet contributed 1.83 million days (an average of 143 days per vessel), while the large scale fleet contributed 93 thousand days (an average of 111 days per vessel). The Greek fishing fleet consumed approximately 107 million litres of fuel.

The main costs items are energy costs and wages as well as the imputed value of unpaid labour. Small scale vessels have higher energy costs in comparison with large-scale vessels. Moreover, small-scale vessels do not have the opportunity to benefit from the reduced price of fuel due to cash flow limitations that prevent them from buying fuel in advance.

Estimation of the Greek fishing fleet's economic performance is limited for this year because landings referred to a nine-month period.

The income from landings (which covers all expenses except the imputed value of unpaid labour) indicates a positive income for fishers. It is important to emphasise, however that this figure is estimated as the opportunity cost of labour using the average daily wage per fishers.

For the small scale segment, landings are generally sold at high prices and are mainly directed to the market through very short supply-chains. Despite the fact that these vessels are small, they are crucial to local economies and usually offer income and employment in poor and isolated areas with very few alternative economic activities. In many cases the opportunity cost of labour is low or even zero. This is due to poor local labour demand made more intense by the ongoing financial recession in Greece. Therefore the sector contributes significantly to the maintenance of the social and economic sustainability of the coastal communities.

Ireland

National Fleet: In 2014 the Irish fleet as a whole made a net profit, maintaining a positive trend in profitability evident since 2012 when the position changed from net loss to net profit. Revenue, estimated at €319.7 million in 2014, increased by 14%.

The total value of landings from vessels over 10 metres was €279.1 million; an increase from €249.5 million in 2013. The majority of this increase is explained by the increase in Atlantic mackerel quota in 2014 and its resultant increase in value (€59 million). An estimated income from landings value of €32 million was imputed for passive and active fleets less than 10 metres.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €167.3 million, €85.6 million and €48.6 million, respectively. GVA increased 25%, gross profit 24%, while net profit increased 45% from 2013. The gross profit margin in 2014 was 26.8%, indicating a low operating efficiency of the sector. Net profit margin was estimated at 15.2%; a 27% increase on 2013.

The Rate of Return on Fixed Tangible Assets (RoFTA) improved in comparison to previous years but remained low at 11%.

Employment in 2014 was estimated at 3 154 jobs, corresponding to 2 395 FTEs or an average of 3.67 and 0.85 FTE per vessel for large scale and small scale fisheries respectively.

Small-scale fleet: In 2014, there were an estimated 898 active vessel in the small scale fleet (vessels under 12 metres using passive gears); an increase of 4%. These vessels employed a total of 1 140 persons equal to 763 full time equivalents.

The estimate of active vessels in the small scale fleet declined between 2008 and 2011; it increased between 2011 and 2013 and thereafter remained stable. Overall there was a 5% increase in vessel numbers between 2008 and 2013.

Data from EU logbooks provides landed weight for vessels between 10-12 metres and there are also data available from Sales Notes for the years 2013-2015. An estimated income from landings of €16.4 million was imputed for fleets less than 10 metre bringing the total income from landings for the small scale fleet to €27.7 million.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the small scale fleet in 2014 were €19 million, €12.9 million and €10.4 million respectively.

Large Scale Fleet: In 2014, there were an estimated 445 active vessel belonging to the large scale fleet employing a total of 2.014 persons or 1 632 full time equivalents. Active vessels numbers in the large scale fleet have remained relatively stable since 2008 and overall have increased by 5% from 2018 to 2013.

Value of landings was €276.8 million in 2014; an increase of 13% from 2013. This increase is largely explained by the increase in Atlantic mackerel quota in 2014.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the large scale fleet in 2014 were €148 million, €72.5 million and €30 million respectively; all demonstrating increases since 2013.

Outlook: Total weight and value of landings, for vessels over 10 metres, decreased in 2015 to 226 thousand tonnes with a value of €216 million. The majority of the reduction resulted from the reduced Atlantic mackerel quota which reduced by 14 thousand tonnes and €54 million between 2014 and 2015.

Economic projections for 2015 suggest reduction in net profit. However, the preliminary figure for total landing value does not include an estimate of the under 10 metre fleet. This coupled, with the reduction in Mackerel value, indicates that total revenue could fall by some €95 million in in 2015.

The reduction in net profit is augmented by higher estimates of operational costs especially crew wage with the projection for 2015 increase by as much as €20 million. All economic indicators demonstrate similar negative trends. The results provided for 2015 should be used with caution; the uncertainties are large and many.

Ireland			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		1,939	1,977	2,038	2,074	2,106	2,140	2,095		*-2%*	*2%*
		SSF	1,030	806	750	786	879	862	898		*4%*	*5%*
		LSF	400	450	393	429	430	438	445		*2%*	*5%*
Vessel tonnage	(thousand GT)		73.8	66.9	66.0	67.2	60.3	60.3	59.5		*-1%*	*-9%*
		SSF	3.8	3.2	2.4	2.5	2.7	2.6	2.7		*6%*	*-5%*
		LSF	63.1	56.0	55.4	50.3	50.4	51.0	51.1		*0%*	*-6%*
Engine power	(thousand kW)		205.2	186.0	184.1	189.2	184.2	183.9	181.6		*-1%*	*-4%*
		SSF	31.1	25.5	22.6	23.3	24.9	24.0	24.9		*4%*	*-1%*
		LSF	140.8	122.9	120.5	120.2	124.1	125.2	126.5		*1%*	*1%*
Total employed	(person)		4,485	4,889	4,423	3,243	3,121	3,087	3,154		*2%*	*-19%*
		SSF	2,425	2,705	2,460	1,372	1,278	1,282	1,140		*-11%*	*-41%*
		LSF	2,060	2,184	1,962	1,872	1,844	1,805	2,014		*12%*	*3%*
FTE	(#)		3,404	3,692	3,479	2,688	2,709	2,717	2,395		*-12%*	*-23%*
		SSF	1,667	1,958	1,859	1,067	1,077	1,142	763		*-33%*	*-48%*
		LSF	1,738	1,734	1,621	1,622	1,632	1,575	1,632		*4%*	*-1%*
Days at sea	(thousand day)		48.8	48.5	52.9	48.8	53.6	53.6	54.4		*1%*	*7%*
		SSF	6.9	8.0	8.6	7.6	8.4	7.5	7.3		*-3%*	*-7%*
		LSF	41.8	40.6	44.2	41.2	45.2	45.9	46.9		*2%*	*9%*
Live weight of landings	(thousand tonne)		195.5	250.5	274.3	199.4	262.2	244.2	276.4		*13%*	*16%*
		SSF	3.1	4.1	4.8	4.6	5.1	10.6	10.5		*-1%*	*94%*
		LSF	192.4	246.3	269.5	194.8	257.1	233.6	265.9		*14%*	*14%*
Value of landings	(million €)		222.8	159.4	168.6	209.5	243.2	258.9	293.1		*13%*	*39%*
		SSF	7.2	5.9	7.0	6.9	5.8	13.4	16.4		*22%*	*113%*
		LSF	215.6	153.5	161.7	202.5	237.4	245.5	276.8		*13%*	*37%*
Revenue	(million €)		241.4	173.1	191.3	239.7	275.1	279.8	320.6		*15%*	*37%*
		SSF	12.9	15.0	23.7	29.6	26.2	31.7	29.3		*-8%*	*26%*
		LSF	228.5	158.1	167.6	210.2	248.9	248.1	291.3		*17%*	*39%*
Gross Value Added	(million €)		128.7	60.7	65.0	105.1	142.6	134.7	168.1		*25%*	*58%*
		SSF	9.1	8.9	17.7	11.6	16.4	20.8	19.0		*-8%*	*35%*
		LSF	118.7	48.1	47.1	90.4	117.7	107.6	148.2		*38%*	*68%*
GVA to revenue	(%)		53.3	35.1	34.0	43.9	51.8	48.1	52.4		*9%*	*18%*
		SSF	70.9	60.0	75.3	39.4	62.4	65.4	65.1		*0%*	*5%*
		LSF	52.1	31.1	28.1	43.7	49.0	44.5	51.0		*15%*	*23%*
Gross profit	(million €)		89.0	14.6	7.8	41.9	50.1	69.3	86.5		*25%*	*90%*
		SSF	4.1	5.5	17.1	13.4	4.2	16.5	12.9		*-22%*	*27%*
		LSF	79.5	2.0	-9.6	31.4	34.7	45.6	72.5		*59%*	*137%*
Gross profit margin	(%)		36.9	8.4	4.1	17.5	18.2	24.7	27.0		*9%*	*47%*
		SSF	56.1	61.2	72.8	46.6	18.1	54.3	44.1		*-19%*	*-14%*
		LSF	35.1	1.3	-5.8	15.2	14.4	18.8	25.0		*33%*	*89%*
Net profit	(million €)		48.7	-58.4	-63.3	-35.1	0.6	33.8	49.4		*46%*	*502%*
		SSF	3.8			2.3	-3.2	13.1	10.4		*-20%*	*162%*
		LSF	40.5	-66.0	-72.8	-35.6	-16.7	11.6	30.0		*158%*	*229%*
Net profit margin	(%)		20.2	-33.7	-33.1	-14.6	0.2	12.1	15.4		*28%*	*289%*
		SSF	51.4			33.2	-53.7	52.1	43.3		*-17%*	*109%*
		LSF	17.9	-42.9	-44.2	-17.5	-7.1	4.8	11.0		*127%*	*174%*
GVA per FTE	(thousand €)		37.8	16.4	18.7	39.1	52.6	49.6	70.2		*42%*	*97%*
		SSF	6.2	5.2	9.7	10.9	15.2	18.2	25.2		*39%*	*131%*
		LSF	73.5	30.2	30.0	57.1	76.7	70.1	91.8		*31%*	*63%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Italy

In 2015, the Italian fleet consisted of 12 426 vessels, with a combined capacity of 164 thousand tonnes gross tonnes (GT) and engine power of 1 013 thousand kilowatts (kW). The proportion of inactive vessels continues to decline with 7% fewer than in 2014. The national fleet capacity continued to decline with a reduction of 2% on 2014 in terms of vessel number.

In 2014, Employment was estimated at 26 932 jobs, corresponding to 20 694 FTEs or an average of 1.6 FTE per vessel. After a long period of decline, employment in 2014 showed a small increase in number of employees (1%) equivalent to a 5% increase full time equivalents.

In 2014, production increased 2% to 176 778 thousand tonnes, with a landed value of €813 million, a 2% decrease on 2013. The fleet mainly targets pelagic species, with anchovy once again being the dominant species and generating the highest landed value (€52 million), equal to 6% of the total by value and 18% by weight.

Seven species account for approximately 60% of the total landing volume: European pilchards, striped venus, hake, deep water rose shrimp, red mullet, cuttlefish and spot-tail squilla mantis. Hake is the species with the highest landing value (€64 million), followed by European anchovy, Deep-water rose shrimp, common cuttlefish and giant red shrimp.

In 2014, revenue, estimated at €824 million, decreased 2% confirming a downward trend started in 2010. This reduction is mainly a consequence of lower income from landings. The GVA and gross profit increased 6% and 15%, respectively. Net profit was €55.6 million; an increase of 102% on 2013, but still at very low levels compared to previous years. Net profit has fallen 53% over the period 2008-2013.

Reduced landings, both in volume and value, are the main driving forces behind the overall deterioration in the economic performance of the Italian fleet. Between 2008 and 2014, the landed weight of important species including European anchovy and Striped Venus fell by 30% and 40% respectively and by 39% and 48% in value. Other target species also reported reduced landings by weight; Deep water rose shrimp fell by 7% and Norway lobster by 56%. An exception to this trend was a 26% increase in landings of giant red shrimp.

Small-scale fleet: Italy's small scale fleet play a significant social and economic role: they constitute more than 65% of the fishing fleet employ at least 50% of those workers directly engaged in fishing activity and account for approximately 25% of the total landing value from capture fisheries 2014.

In 2014, landed weight and landed value increased slightly (+2%) compared to 2013. Production, however, remained below the levels recorded between 2008 and 2013: -15% by weight and -27% by value. Lower production was not offset by an increase in prices, as the latter remained stable over the period and vessel productivity (landing value per vessel) remained low around €27 thousands, 25% lower than those registered in the period 2008-2013.

Operational costs decreased 5% in 2014. This was mainly due to a decrease in energy costs (43% of total operational costs) which decreased 53% between 2013 and 2014. Between 2013 and 2014 fuel price continued to decline with a reduction from 0.75 €/l to 0.70€/l. Landings in weight per unit of effort increased despite the decrease in effort (days at sea).

The economic performance of the small-scale fleet increased compared to previous year. The total amount of GVA and gross profit increased 41% and 77%, respectively. Although economic indicators improved during 2014, the economic performance indicators are still lower than those registered in the period 2008-2013, highlighting a timid resumption of this sector, characterised by decreasing trends in number of vessels, vessel productivity (landing value per vessel), number of employees and salaries.

Large-scale fleet: Italian large-scale fleet is mainly composed of demersal trawlers 12-18m and 18-24m, which accounted for 33% and 17% of vessels number over 12m. 34% of larger vessels is concentrated in GSA 17 (Northern Adriatic Sea), followed by GSA 16 (12% of LSF fleet) and GSA 18 (13%).

In 2014, weight of landings increased 2% but with a 4% decrease in value. The economic performance of this fleet was positive with values similar to those registered in the previous year. Gross profit and net profit are stable from 2013 to 2014, while GVA shows a reduction of 5%.

However, in the period 2008-2014 the fleet shows a negative economic trend. Gross profit and net profit in 2014 are lower than the average values of the period by 25 and 44%, respectively. This is only partially due to the decreasing trend in the number of vessels and the reduced days at sea, while the main factor is the negative trend in the average price of target species. In 2014, landings in weight and value are below the average value of the period by 15 and 26% respectively. The difference is due to the strong reduction in landings price, which has decreased by 17% from 2008 to 2014.

Italy			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		13,518	13,359	13,348	13,285	12,942	12,746	12,689		*0%*	*-4%*
		SSF	7,885	7,846	7,837	7,866	7,689	7,638	7,611		*0%*	*-2%*
		LSF	4,452	4,386	4,351	4,286	4,099	3,894	3,944		*1%*	*-7%*
		DWF	18.0	18.0	7.0	7.0	5.0					
Vessel tonnage	(thousand GT)		197.5	193.0	191.8	179.2	171.2	164.6	163.9		*0%*	*-10%*
		SSF	14.9	14.8	14.9	15.3	14.8	14.7	14.7		*0%*	*-1%*
		LSF	164.4	161.1	155.2	149.4	142.2	135.0	135.5		*0%*	*-10%*
		DWF	10.5	10.5	3.6	3.6	2.7					
Engine power	(thousand kW)		1,147.3	1,122.9	1,121.2	1,088.1	1,047.4	1,023.9	1,023.8		*0%*	*-6%*
		SSF	219.9	220.1	223.2	228.3	221.1	219.6	219.6		*0%*	*-1%*
		LSF	848.1	831.7	807.6	790.5	753.2	723.2	731.8		*1%*	*-8%*
		DWF	21.8	21.8	7.4	7.4	5.3					
Total employed	(person)		29,604	29,222	29,222	28,964	28,292	26,758	26,932		*1%*	*-6%*
		SSF	13,722	13,698	14,094	14,050	13,856	13,275	13,114		*-1%*	*-5%*
		LSF	15,627	15,269	14,888	14,675	14,361	13,483	13,819		*2%*	*-6%*
		DWF	255.0	255.0	240.0	240.0	75.0					
FTE	(#)		21,456	21,414	21,169	20,740	20,693	19,749	20,694		*5%*	*-1%*
		SSF	9,384.5	9,757.2	9,864.8	10,036.4	9,778.6	9,706.0	9,378.9		*-3%*	*-4%*
		LSF	11,923	11,559	11,242	10,638	10,890	10,043	11,315		*13%*	*2%*
		DWF	148.4	97.1	62.6	65.6	24.8					
Days at sea	(thousand day)		1,590.8	1,782.9	1,668.7	1,749.3	1,556.3	1,493.7	1,432.6		*-4%*	*-13%*
		SSF	988.8	1,151.7	1,070.0	1,177.9	1,033.0	985.9	930.5		*-6%*	*-13%*
		LSF	599.7	629.9	597.8	570.5	523.0	507.8	502.1		*-1%*	*-12%*
		DWF	2.3	15.7	0.8	0.9	0.4					
Live weight of landings	(thousand tonne)		227.0	242.4	224.8	212.4	196.8	172.6	176.8		*2%*	*-17%*
		SSF	32.8	38.6	33.7	36.7	31.1	27.2	28.2		*4%*	*-15%*
		LSF	183.7	195.5	189.3	173.6	164.7	145.4	148.6		*2%*	*-15%*
		DWF	10.4	8.4	1.8	2.0	0.9					
Value of landings	(million €)		1,223.1	1,319.4	1,204.0	1,155.3	944.6	834.1	813.3		*-2%*	*-27%*
		SSF	285.9	333.4	298.6	311.9	246.0	196.1	203.3		*4%*	*-27%*
		LSF	911.3	960.7	892.3	832.2	694.1	637.9	610.0		*-4%*	*-26%*
		DWF	25.9	25.3	13.1	11.2	4.5					
Revenue	(million €)		1,235.4	1,329.8	1,213.1	1,164.0	953.5	841.6	824.2		*-2%*	*-27%*
		SSF	290.2	338.5	303.4	317.0	250.2	199.8	203.6		*2%*	*-28%*
		LSF	919.3	966.0	896.6	835.8	698.8	641.8	620.6		*-3%*	*-25%*
		DWF	25.9	25.3	13.1	11.2	4.5					
Gross Value Added	(million €)		653.6	847.9	714.2	619.2	486.3	435.7	461.0		*6%*	*-26%*
		SSF	188.2	242.6	206.5	199.7	153.4	101.2	142.3		*41%*	*-22%*
		LSF	447.2	584.2	497.6	411.7	329.7	334.4	318.7		*-5%*	*-27%*
		DWF	8.9	16.1	10.1	7.8	3.2					
GVA to revenue	(%)		52.9	63.8	58.9	53.2	51.0	51.8	55.9		*8%*	*1%*
		SSF	64.8	71.7	68.1	63.0	61.3	50.7	69.9		*38%*	*10%*
		LSF	48.6	60.5	55.5	49.3	47.2	52.1	51.3		*-1%*	*-2%*
		DWF	53.4	79.2	77.2	69.3	70.6					
Gross profit	(million €)		359.6	452.0	371.4	325.7	254.5	197.0	226.0		*15%*	*-31%*
		SSF	105.2	133.2	112.7	111.8	88.1	34.8	61.8		*77%*	*-37%*
		LSF	238.1	299.1	249.5	207.0	163.9	162.2	164.2		*1%*	*-25%*
		DWF	7.1	14.7	9.2	6.9	2.9					
Gross profit margin	(%)		29.1	34.0	30.6	28.0	26.7	23.4	27.4		*17%*	*-4%*
		SSF	36.2	39.4	37.1	35.3	35.3	17.4	30.3		*74%*	*-9%*
		LSF	25.9	31.0	27.8	24.8	23.4	25.3	26.5		*5%*	*0%*
		DWF	42.6	72.5	70.3	61.1	63.2					
Net profit	(million €)		148.9	211.4	144.9	105.1	67.6	27.5	55.6		*102%*	*-53%*
		SSF	68.5	92.0	67.3	66.2	47.2	- 3.3	25		*843%*	*-56%*
		LSF	69.9	108.3	77.2	38.2	21.7	33.1	32.6		*-1%*	*-44%*
		DWF	1.9	8.0	3.3	2.0	0.3					
GVA per FTE	(thousand €)		30.5	39.6	33.7	29.9	23.5	22.1	22.3		*1%*	*-25%*
		SSF	20.1	24.9	20.9	19.9	15.7	10.4	15.2		*45%*	*-19%*
		LSF	37.5	50.5	44.3	38.7	30.3	33.3	28.2		*-15%*	*-28%*
		DWF	59.8	165.2	161.2	118.7	128.5					

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Latvia

In 2014, the Latvian Baltic Sea fishing fleet consisted of 365 registered vessels including 87 inactive vessels, with a combined gross tonnage of 7.0 thousand tonnes, a total engine power of 19.8 thousand kilowatts and an average age of 28 years (distant-water fleet excluded from the represented values). The size of the Latvian fleet followed a decreasing trend between 2013 and 2014. The gross tonnage declined by 10% whiles the total engine power of the fleet declined by 7% during the same period. The reason for the changes during the analysed periods from 2008 to 2014 is connected to vessel scrapping which according to the multi-annual management plan aims to achieve a better balance between fishing capacity and the available resources.

Latvian fleet separated into several segments by the length, gears and different operational areas: the Baltic Sea fleet (segment trawlers VL2440 metres), fleet operated predominantly in the Gulf of Riga (segment trawlers VL1218 metres), the small scale fleet operated in the coastal zone (segment with polyvalent fishing gears VL0010 metres) and a distance-water fleet (segment trawlers VL40XX metres) operated in the Atlantic NEAFC and CECAF areas.

The changes for the large-scale fleet connected to vessels scrapping. The unbalance between the fishing fleet's capacity and the fish resources allocated to Latvia had been revealed for the fleet segment netters VL2440 metres. It was recommended to eliminate the whole segment netters VL2440 metres totally as this segment as it is targeting only cod which stock is in a bad stage and is unable to switch to other fish stocks due to the financial and technical reasons. According to the Action plan for 2015-2017 four vessels is going to be scrapped. The exit of netters VL2440 metres is planned to be accomplished till 31 December 2017.

The distant-water fleet had significant changes between 2013 and 2015. Three vessels were sold and excluded from the Fleet Register between 2013 and 2015 in the same time eight vessels with the average length around 60 metres were included in the Fleet register. The main reason for the changes was an unlimited fishery in NEAFC area and high stock for crabs in the Barents Sea. The 10 vessels were active from the 12 vessels registered in the Fleet Register for the fleet segment VL40XX in 2015.

In terms of landings composition in 2014 sprat was the most common species landed in terms of weight 30.7 thousand tonnes, followed by herring 23.3 thousand tonnes and cod around 1.5 thousand tonnes. In 2014 sprat achieved the highest landed value €10.2 million for the national fleet, followed by Atlantic herring €6.3 million and then cod €1.6 million. The sprat, herring and cod, accounted for 52%, 32% and 8% respectively of the total landings value in 2014 and contributed to 52%, 39% and 2%, to total landed weight. Total landing value and weight declined by 13% and 16% respectively between 2008 and 2014

Employments were around 607 jobs, corresponding 362 FTEs in 2014. The total employments and FTE decreased by 10% and 13%, respectively between 2013 and 2014 while the average wage per FTE decreased during the same period by 17%.

The amount of revenue generated by the Latvian national fleet in 2014 was €20.3 million including €19.5 million in income from fish sales and €0.8 million in non-fishing income. Despite of the decreased by 15% for revenue between 2013 and 2014 the Baltic Sea fleet remained in a net profit making position in 2014. The expenditure for the Latvian fleet in 2014 was €17.8 million and amounting to 88% of revenue.

In terms of profitability the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Latvian national fleet in 2014 was €7.2, €4.1 and €2.4 million respectively. The gross profit margin in 2014 was 20% indicating a high operating efficiency of the sector. Net profit margin was estimated at 12% in 2014. The labour productivity (GVA/FTE) had decline by 31% between 2013 and 2014. The Rate on Fixed Tangible Assets (RoFTA) significant decreased in comparison to previous years but remained positive at 1%.

The Latvian fishing fleet economic effectiveness is largely dependent on the quota received for the main species. The sprat fishing quota reduced by 11% (1 558 tonnes) between 2014 and 2015 and was 29 548 tonnes. The quota for the Baltic herring in the Gulf of Riga and in the central region of the Baltic Sea as compared to 2014 increased by 12% (3 089 tonnes). The Baltic herring fishing quota in the Gulf of Riga and in the central region of the Baltic Sea were 4 532 and 20 872 tonnes respectively in 2015. The fishing quota for salmon in the Baltic Sea reduced by 10% and was 12 644. The cod fishing quotas in the western part of the Baltic Sea are reduced by 7%, whereas the reduction in the eastern part was 22%. Cod quotas in the western and eastern part are 574 and 4 393 tonnes respectively. The salmon fishing quota is used on a very small scale. However, the remaining share is used in the international quota exchange for sprat. Latvia fulfils the sprat and Baltic herring fishing quotas assigned thereto almost completely.

Preliminary results for 2015 suggest a 4% increase in landed weight, matched by a 7% increase in value. The fishery sector in Latvia may be affected by the geopolitical situation. That factor will continue influence on the dynamics of the demand and the general level of prices in the Latvian economy.

Latvia			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		858	814	771	407	356	351	365		*4%*	*-38%*
		SSF	736	708	687	245	207	202	221		*9%*	*-52%*
		LSF	122	106	84	74	72	65	57		*-12%*	*-35%*
Vessel tonnage	(thousand GT)		12.9	12.4	9.8	10.1	8.4	7.8	7.0		*-10%*	*-32%*
		SSF	1.2	1.1	1.0	0.5	0.4	0.3	0.4		*22%*	*-44%*
		LSF	11.6	11.3	8.7	8.0	8.0	7.3	6.5		*-12%*	*-29%*
Engine power	(thousand kW)		34.2	32.7	26.7	26.7	22.8	21.3	19.8		*-7%*	*-28%*
		SSF	7.2	6.5	5.9	2.8	2.2	2.2	2.6		*22%*	*-41%*
		LSF	27.0	26.2	20.8	19.5	19.8	18.5	16.6		*-10%*	*-24%*
Total employed	(person)		1,621	1,666	1,619	712	643	678	607		*-10%*	*-48%*
		SSF	992	1,110	1,175	321	258	325	301		*-7%*	*-57%*
		LSF	629	556	444	391	385	353	306		*-13%*	*-33%*
FTE	(#)		664	548	521	378	353	414	362		*-13%*	*-25%*
		SSF	373.0	329.0	329.0	202.0	154.0	228.0	214.0		*-6%*	*-20%*
		LSF	291	219	192	176	199	186	148		*-20%*	*-30%*
Days at sea	(thousand day)		44.2	48.0	43.6	19.6	19.5	19.4	19.2		*-1%*	*-41%*
		SSF	30.4	37.3	34.2	10.8	10.9	11.3	12.8		*13%*	*-43%*
		LSF	13.8	10.7	9.4	8.8	8.6	8.0	6.4		*-20%*	*-35%*
Live weight of landings	(thousand tonne)		86.5	78.5	74.0	63.1	57.5	60.9	59.2		*-3%*	*-16%*
		SSF	2.8	2.7	2.6	3.3	2.8	3.6	4.5		*26%*	*51%*
		LSF	83.6	75.8	71.5	59.8	54.6	57.3	54.7		*-5%*	*-19%*
Value of landings	(million €)		25.4	18.9	22.8	22.3	23.6	22.3	19.5		*-12%*	*-13%*
		SSF	0.9	0.8	1.3	1.3	1.5	1.3	1.7		*31%*	*47%*
		LSF	24.5	18.1	21.4	21.1	22.1	20.9	17.8		*-15%*	*-17%*
Revenue	(million €)		26.9	21.8	23.7	23.2	25.0	23.9	20.3		*-15%*	*-16%*
		SSF	0.9	0.9	1.4	1.3	1.5	1.3	1.7		*30%*	*44%*
		LSF	26.0	20.9	22.3	21.9	23.5	22.6	18.6		*-18%*	*-19%*
Gross Value Added	(million €)		15.6	12.0	12.3	10.9	8.5	8.2	7.2		*-12%*	*-36%*
		SSF	0.7	0.7	1.2	1.2	1.3	1.3	1.7		*30%*	*56%*
		LSF	14.9	11.3	11.1	9.7	7.2	6.9	5.5		*-20%*	*-46%*
GVA to revenue	(%)		57.8	55.2	52.0	46.9	34.1	34.1	35.5		*4%*	*-24%*
		SSF	76.7	87.1	87.1	92.0	89.2	96.0	96.1		*0%*	*9%*
		LSF	57.2	53.9	49.9	44.3	30.7	30.4	29.8		*-2%*	*-33%*
Gross profit	(million €)		11.0	8.5	8.8	7.5	4.6	3.9	4.1		*5%*	*-45%*
		SSF	0.5	0.6	1.1	1.1	1.2	1.2	1.6		*27%*	*65%*
		LSF	10.5	7.9	7.7	6.4	3.4	2.7	2.5		*-5%*	*-61%*
Gross profit margin	(%)		40.8	39.0	37.2	32.2	18.6	16.3	20.2		*24%*	*-34%*
		SSF	55.2	67.9	78.9	84.8	82.6	91.6	89.9		*-2%*	*17%*
		LSF	40.3	37.8	34.7	29.1	14.6	11.8	13.6		*15%*	*-51%*
Net profit	(million €)		14.7	2.0	1.6	6.3	3.0	1.7	2.4		*36%*	*-52%*
		SSF	1.4	-0.6	-0.4	1.1	1.2	1.2	1.5		*28%*	*137%*
		LSF	13.2	2.6	2.0	5.2	1.9	0.5	0.8		*55%*	*-81%*
GVA per FTE (labour pro	(thousand €)		23.4	21.9	23.6	28.8	24.1	19.7	19.9		*1%*	*-16%*
		SSF	1.9	2.3	3.6	6.0	8.5	5.6	7.8		*39%*	*69%*
		LSF	51.1	51.5	57.9	55.0	36.3	36.9	37.3		*1%*	*-22%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Lithuania

In 2014 Lithuanian fishing fleet consisted from 143 registered vessels and compare to 2013 it declined 6%, but in 2015 recovered to 149 from which 105 were active. The fleet had a combined gross tonnage of 49.2 thousand GT with 12% increase from 2013 and engine power of 50.7 thousand kW, corresponding to 3% annual decline. In 2015 capacity in terms of GT and kW increased significantly, 26% and 28% respectively. In 2015 capacity alterations were observed in long distance fleet segment. In 2014 volume of landings improved by 63% compare to 2013, but then declined to same level during 2015 and reached 82.3 thousand tones, with corresponding value of €62.4 million.

Employment figures for 2014 shows that number of persons, employed by fishing fleet, decreased 1.7%, compare to 2013 and total employment in 2014 was estimated at 750 jobs, corresponding to 573 FTEs. Taking into account number of persons employed at national level, tendency was mostly stable, but at fleet segment level, changes were quite significant - long distance water fleet employment increased 15% in comparison with 2013, this segment covers 55% of total employment.

Small-scale fleet: Small scale fleet consists of 64 vessels and compare to 2013 remained almost unchanged. Effort, expressed in days at sea slightly increasing, but decline in average price per landed species resulted in reduction of revenues. Income from landings for the small scale fleet decreased 12%. In 2014, GVA for the small scale fleet declined 30% and most likely due to the significant increase in repair and maintenance costs. Compare to 2008-2013 average, GVA for small scale fisheries declined also by 30%. GVA as part of revenue was increasing from 2008 indicating a growth in economic efficiency as more value is added from generated revenues. In 2014 net profit margin was 13% and showed a decline from record high in 2013; however it was relatively high compare to large scale fleet. Total number of employees remained almost stable between 2013 and 2014, whereas FTE increased 17%.

Distant-water fleet: In 2014, Lithuanian long distance fleet segment was significantly extended, 3 modernised vessels started to operate and replaced old, depreciated ones. Despite the problematic circumstances regarding bilateral agreement with Mauritania and Morocco for the quota in CECAF area, 2014 volume and value of landings were the record high since 2008, corresponding to 132.6 thousand tones and €91.1 million. Such increase in fishing performance was resulted from the purchase of quotas from third countries, as suspended bilateral agreement could not provide opportunities for fishing in CECAF. Agreement was signed in 2015. Economic performance for this fleet showed a decreasing annual economic trend. In 2014 annual decline of GVA was 13%. Fleet generated €0.9 million net loss whereas gross profit for 2014 was €5.8 million. Significant decline in net profit was driven by increase in annual depreciation costs (215% annual growth) and opportunity costs of capital (193% annual growth) as a result after restructure and increase in size of capital. Labour productivity in terms of GVA per FTE was €34 thousand and compare to 2013 decreased by 37%, however, in comparison with long term 2008-2013 average it dropped only by 4%. Decrease in labour productivity is related to lack of qualified young workers and more frequent rotation.

Lithuania			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		250	219	193	171	151	152	143		-6%	-24%
		SSF	89	91	74	69	69	65	64		-2%	-16%
		LSF	24	22	22	24	25	25	24		-4%	1%
		DWF	12	11	8	10	10	7	9		29%	-7%
Vessel tonnage	(thousand GT)		61.0	50.5	49.3	46.0	45.0	44.0	49.2		12%	0%
		SSF	0.5	0.5	0.4	0.4	0.2	0.2	0.2		1%	-48%
		LSF	3.5	3.3	3.2	3.4	3.5	3.8	3.7		-3%	6%
		DWF	39.5	38.7	36.5	39.7	38.8	30.9	42.9		39%	15%
Engine power	(thousand kW)		68.9	59.8	56.4	54.4	54.2	52.4	50.7		-3%	-12%
		SSF	2.6	2.7	2.2	2.0	1.7	1.7	1.8		7%	-16%
		LSF	7.5	7.0	6.5	6.9	7.1	7.6	7.4		-3%	4%
		DWF	40.6	39.0	35.2	40.0	40.3	31.3	37.3		19%	-1%
Total employed	(person)		1,046	712	706	768	732	763	750		-2%	-5%
		SSF	370	158	152	154	149	140	142		1%	-24%
		LSF	132	240	228	231	228	265	195		-26%	-12%
		DWF	544.0	314.0	326.0	383.0	355.0	358.0	413.0		15%	9%
FTE	(#)		617	544	512	574	566	491	573		17%	4%
		SSF	208	55	49	37	49	39	46		17%	-37%
		LSF	87	175	155	169	162	156	114		-26%	-24%
		DWF	322	314	308	368	356	296	413		39%	26%
Days at sea	(thousand day)		12.0	10.2	9.0	10.0	11.0	8.9	8.7		-3%	-15%
		SSF	4.7	4.9	4.8	4.3	5.6	5.7	5.9		5%	18%
		LSF	1.9	1.8	2.5	2.7	3.0	2.8	1.7		-39%	-29%
		DWF	3.2	3.0	1.7	3.0	2.4	1.3	0.8		-42%	-69%
Live weight of landings	(thousand tonne)		180.8	209.1	108.1	114.5	58.0	89.7	146.4		63%	16%
		SSF	0.6	0.8	0.7	0.6	0.6	0.6	0.5		-13%	-17%
		LSF	27.8	28.4	15.4	17.7	16.3	16.4	13.3		-19%	-35%
		DWF	152.5	180.0	92.0	96.2	41.2	72.7	132.6		82%	25%
Value of landings	(million €)		96.1	156.8	77.0	76.7	40.6	64.3	95.3		48%	12%
		SSF	0.8	0.8	0.8	0.6	0.6	0.6	0.5		-20%	-32%
		LSF	7.0	6.7	5.9	6.2	6.6	6.6	3.7		-43%	-43%
		DWF	88.4	149.3	70.2	69.8	33.5	57.2	91.1		59%	17%
Revenue	(million €)		92.2	61.2	46.0	48.8	43.7	66.4	100.3		51%	68%
		SSF	0.8	0.9	0.8	0.6	0.7	0.6	0.5		-8%	-27%
		LSF	7.1	7.6	7.0	7.7	6.9	6.7	4.0		-41%	-44%
		DWF	84.3	52.8	38.2	40.5	36.2	59.1	95.8		62%	85%
Gross Value Added	(million €)		19.4	14.7	5.1	13.4	13.0	18.0	14.4		-20%	4%
		SSF	0.3	0.5	0.4	0.3	0.4	0.4	0.3		-30%	-30%
		LSF	1.8	2.5	2.0	2.7	2.7	1.7	0.3		-83%	-87%
		DWF	17.3	11.7	2.8	10.4	10.0	15.9	13.9		-13%	22%
GVA to revenue	(%)		21.0	24.0	11.1	27.4	29.7	27.1	14.4		-47%	-38%
		SSF	39.9	57.1	44.2	48.6	54.9	64.5	48.8		-24%	-5%
		LSF	24.7	32.4	28.0	35.4	38.5	24.9	7.2		-71%	-76%
		DWF	20.5	22.3	7.3	25.6	27.6	26.9	14.5		-46%	-33%
Gross profit	(million €)		10.1	8.8	0.3	7.8	8.6	12.1	5.2		-57%	-35%
		SSF	0.1	0.4	0.2	0.1	0.2	0.2	0.1		-52%	-47%
		LSF	0.2	1.3	0.9	1.6	1.6	0.4	-0.7		-268%	-171%
		DWF	9.8	7.1	-0.8	6.1	6.8	11.5	5.8		-50%	-14%
Gross profit margin	(%)		10.9	14.4	0.6	15.9	19.6	18.3	5.2		-72%	-61%
		SSF	7.6	41.0	24.2	9.8	26.4	34.4	17.7		-48%	-26%
		LSF	3.3	17.1	12.7	20.7	23.0	6.3	-18.0		-384%	-230%
		DWF	11.6	13.5	-2.1	15.1	18.8	19.5	6.0		-69%	-53%
Net profit	(million €)		11.1	1.5	-4.5	4.8	5.5	9.3	-2.0		-121%	-142%
		SSF	0.1	0.3	0.1	0.0	0.1	0.2	0.1		-59%	-47%
		LSF	0.2	0.4	0.4	1.2	1.2	-0.1	-1.0		-1201%	-285%
		DWF	9.9	1.8	-4.8	3.6	4.2	9.3	-0.9		-110%	-123%
GVA per FTE	(thousand €)		31.4	27.1	10.0	23.3	23.0	36.6	25.2		-31%	0%
		SSF	1.6	9.4	7.4	8.0	7.5	9.5	5.7		-40%	-22%
		LSF	20.2	14.0	12.6	16.0	16.4	10.8	2.5		-77%	-83%
		DWF	53.7	37.4	9.0	28.2	28.1	53.8	33.6		-37%	-4%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Malta

The majority of the Maltese fishing fleet consists of small scale fishing vessels. The number of vessels continued to fall steadily from 1 316 in 2008 to 1 040 in 2015, but total gross tonnage remained the same. The level of employment increased between 2008 and 2014 from 1 009 jobs to 1 418 jobs. The latter corresponds to 1 116 FTEs or an average of 1.6 FTE per vessel. 77% of the total jobs were employed with the small-scale fishing vessels. Days at sea and fishing days have decreased by 45% and 50% respectively between 2008 and 2015. The value of landings showed an increase of 32% between 2008 and 2015; the main exploited species include swordfish, dolphin fish, blue fin tuna, and a number of additional species, some of which although caught in smaller quantities have a high commercial value such as red shrimps.

Although the Maltese national fleet remained in a net loss making position in 2014, its economic performance has improved when compared to 2010 but has deteriorated when compared to 2012 and 2013. The trend is expected to improve in 2015, as fuel prices decreased and total value of landings has increased.

In 2014, The Maltese fishing fleet consisted of 20 active (DCF) fleet segments and 5 inactive fleet segments consisting of 336 vessels. 4 of the active fleet segments made a net profit in 2014 while 16 made an overall loss.

Small-scale fleet

The small-scale fleet (defined as vessels below 12 meters using non-towed gears), represented more than 92% of the total active fleet. 41% of the small-scale fishing vessels work on a full time basis in the fishing industry whilst 59% fish on a part time basis. The small-scale fishing sector has an overall increasing trend in jobs for the period analysed.

The amount of income generated by the small-scale fleet accounted for €3.68 million in 2014. The economic performance increased in 2013 but decreased in 2014. The landings value of the small scale fishery has decreased by 3% from 2013 to 2014 but increased again by 4% in 2015 when compared to 2013. In terms of profitability, in 2014, the economic performance of the small scale fishery has deteriorated since it registered a gross loss of €2.7 million in 2014 from a gross profit of €2 million in 2013. Same trend was followed for the net profit as it registered a net loss of €3.9 million in 2014 from a net profit of €0.4 million in 2013.

Large-scale fleet

The large scale fishing vessels which were active during 2015 represents 8% of the active Maltese fishing vessels. All large-scale fishing vessels work on a full time basis in the fishing industry. In 2014, 23% of the total jobs (320 employees) in the Maltese fishing industry worked with the large-scale fishing vessels. This corresponds to 312 FTEs. In 2014, there was an increase of 10% in the total jobs of the large-scale fishing vessels. The large-scale fishing sector has an overall increasing trend in jobs since 2008. In 2014, results show that efforts made by the large scale vessels were less than previous year. Days at sea and fishing days were reduced by 19% and 36% respectively. This led to lower energy cost, energy consumption and operating costs. The value of landing has also decreased by 22%. Although in 2014, this fishing activity has generated a net loss of €0.8 million, the economic performance of the large-scale fishery has improved such that the net loss for 2014 was the lowest since 2008.

Malta			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		1,316	1,111	1,112	1,087	1,060	1,040	1,045		*0%*	*-7%*
		SSF	621	679	759	532	707	707	648		*-8%*	*-3%*
		LSF	82	100	89	102	77	67	61		*-9%*	*-29%*
Vessel tonnage	(thousand GT)		7.5	8.3	12.3	12.1	8.0	7.8	7.7		*-1%*	*-18%*
		SSF	1.6	1.7	1.8	1.4	1.7	1.7	1.5		*-13%*	*-9%*
		LSF	3.5	4.3	4.8	5.1	4.4	4.5	3.6		*-20%*	*-18%*
Engine power	(thousand kW)		87.5	82.2	85.5	83.4	77.9	76.1	75.5		*-1%*	*-8%*
		SSF	35.9	38.3	43.3	30.5	40.4	41.3	36.2		*-12%*	*-5%*
		LSF	18.8	21.5	22.3	24.6	20.4	18.8	16.7		*-11%*	*-21%*
Total employed	(person)		1,009	1,141	1,225	933	1,236	1,201	1,418		*18%*	*26%*
		SSF	849	863	918	668	951	911	1,098		*21%*	*28%*
		LSF	160	278	307	265	285	290	320		*10%*	*21%*
FTE	(#)		824	880	896	734	416	784	1,116		*42%*	*48%*
		SSF	695.1	712.8	763.7	592.1	288.3	648.2	804.3		*24%*	*30%*
		LSF	129	167	132	141	128	135	312		*130%*	*125%*
Days at sea	(thousand day)		47.0	48.3	63.5	41.2	33.7	28.4	31.3		*10%*	*-28%*
		SSF	86.2	87.2	119.8	71.8	56.5	45.3	53.3		*18%*	*-32%*
		LSF	7.8	9.5	7.1	10.7	10.8	11.5	9.3		*-19%*	*-2%*
Live weight of landings	(thousand tonne)		1.3	1.6	1.8	1.9	2.2	2.4	2.4		*2%*	*29%*
		SSF	0.4	0.3	0.8	0.8	0.7	0.7	0.6		*-12%*	*-4%*
		LSF	0.9	1.2	1.1	1.1	1.5	1.7	1.8		*8%*	*46%*
Value of landings	(million €)		8.8	9.3	10.5	12.1	13.0	12.5	10.5		*-16%*	*-5%*
		SSF	2.8	2.2	4.4	4.6	4.5	3.8	3.7		*-3%*	*-1%*
		LSF	6.0	7.1	6.0	7.5	8.6	8.7	6.8		*-22%*	*-7%*
Revenue	(million €)		9.1	9.9	10.5	12.1	13.5	15.0	11.7		*-22%*	*0%*
		SSF	2.8	2.2	4.4	4.6	4.6	5.2	3.7		*-29%*	*-7%*
		LSF	6.3	7.7	6.0	7.5	8.9	9.8	8.0		*-18%*	*4%*
Gross Value Added	(million €)		1.9	3.7	2.1	6.5	5.7	7.7	5.3		*-32%*	*14%*
		SSF	-0.1	-0.9	1.1	2.2	1.3	2.9	1.2		*-58%*	*14%*
		LSF	1.4	3.5	1.2	1.7	4.4	4.5	4.0		*-10%*	*45%*
GVA to revenue	(%)		21.1	37.7	20.4	53.8	42.1	51.7	45.0		*-13%*	*19%*
		SSF	-4.6	-39.6	24.0	47.2	28.2	55.5	33.0		*-41%*	*79%*
		LSF	27.8	53.8	20.4	34.7	49.3	48.0	50.5		*5%*	*30%*
Gross profit	(million €)		-1.9	-7.8	-8.9	-1.6	1.5	5.0	-0.8		*-117%*	*63%*
		SSF	-2.4	-8.5	-5.6	-3.3	-0.6	2.0	-2.7		*-237%*	*12%*
		LSF	0.0	-0.4	-2.9	-0.8	2.2	2.6	1.8		*-30%*	*1361%*
Gross profit margin	(%)		-20.8	-79.4	-84.6	-13.0	11.0	33.1	-7.3		*-122%*	*72%*
		SSF	-84.3	-382.8	-126.0	-72.2	-13.1	37.7	-73.0		*-294%*	*32%*
		LSF	0.5	-5.9	-47.7	-16.7	24.3	28.3	23.1		*-18%*	*909%*
Net profit	(million €)		-5.4	-14.7	-16.4	-8.8	-4.1	-0.7	-5.1		*-604%*	*39%*
		SSF	-3.6	-10.3	-7.6	-4.6	-2.1	0.4	-3.9		*-1057%*	*16%*
		LSF	-1.8	-3.6	-8.0	-3.7	-1.5	-0.9	-0.8		*18%*	*76%*
GVA per FTE (labour produ	(thousand €)		2.3	4.2	2.4	8.9	13.7	9.9	4.7		*-52%*	*-32%*
		SSF	-0.2	-1.2	1.4	3.7	4.6	4.5	1.5		*-66%*	*-29%*
		LSF	11.4	25.6	10.1	13.5	36.7	33.9	13.0		*-62%*	*-41%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Netherlands

In 2015, the Dutch fishing fleet consisted of 718 registered vessels, 203 of which were inactive, with a combined gross tonnage of 126 thousand GT, a total power of 266 thousand kW and an average age of 31 years. Within the last 8 years the size of the fishing fleet fluctuated between 713-739 vessels. In 2015, the number of fishing enterprises totalled 571, with the vast majority (84%), owning a single vessel. According to the EU standards the Dutch fishing fleet can be divided into a small scale coastal fleet (33% of the vessels in 2015) and a large scale fleet (67% of the vessels in 2015). Nationally, the fishing fleet is divided into an active cutter fleet (active vessels with a minimum vessel length of 12m and an income of 50.000 euro or more), a trawler fleet (targeting pelagic fish species) and the other small scale fisheries fleet (fisheries that do not fit in above mentioned fleets).

Total employment in 2015 was estimated around 2.000 jobs, corresponding to around 1 700 FTEs. 20-25% of the jobs come from the small scale coastal fleet, where the rest comes from the large scale fleet. The Dutch fleet spent a total of 49 thousand days at sea, a slim increase from 2014. Fuel consumption is estimated around 151.9 million litres, a decrease of 27% compared with the 2008-2013 average.

The total landings weight and value decreased by 14% and 1% respectively. The decrease in weight is mainly caused by the decreased landings weight of pelagic fish species. The total landings of pelagic fish fluctuate from year to year. Due to increased fish prices for the most important demersal fish species there was only a slight decrease in landings value.

The economic performance of the Dutch national fleet improved in 2014 and it is expected to continue in 2015 and 2016. Total income amounted to €384.7 million, where total costs were €371 million. Labour and energy costs, the two major fishing expenses, amounted to €98 and €79 million, respectively in 2014. Saving fuel is one of the most important goals of the Dutch fleet. Energy costs decreased 19% between 2013 and 2014 (37% since 2008). Energy costs are likely to decrease further in 2015 and 2016, due to decreasing fuel prices and increased investments in fuel saving gears.

Gross Value Added (GVA), gross profit and net profit generated by the Dutch national fleet in 2014 were estimated at €178 million, €71 million and €27 million, respectively. GVA increased 18%, gross profit and net profit increased 45% and 655%. These results indicate a highly improved economic situation compared to previous years. All indicators are expected to further increase in 2015 and 2016. The major factors causing the improvement in economic performance include higher landings of more valuable species, higher fish prices and lower costs mainly because of decreasing fuel prices and fuel saving (e.g. pulse) techniques in the flatfish fleet.

Netherlands			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		727	713	725	737	735	739	735		*-1%*	*1%*
		SSF	155	174	175	163	176	184	178		*-3%*	*4%*
		LSF	391	387	395	382	369	347	357		*3%*	*-6%*
Vessel tonnage	(thousand GT)		155.4	138.8	137.2	130.5	135.5	128.7	134.1		*4%*	*-3%*
		SSF	0.4	0.5	0.5	0.5	0.5	0.5	0.5		*-10%*	*-4%*
		LSF	143.7	131.2	130.5	123.3	128.7	119.4	124.7		*4%*	*-4%*
Engine power	(thousand kW)		338.4	296.0	294.0	288.8	287.9	276.2	280.1		*1%*	*-6%*
		SSF	8.6	12.2	12.7	13.5	16.3	17.5	16.9		*-3%*	*25%*
		LSF	291.6	260.7	260.0	250.0	247.7	225.8	231.2		*2%*	*-10%*
Total employed	(person)		2,211	2,089	2,097	2,054	2,034	2,098	2,024		*-4%*	*-3%*
		SSF	350	301	324	301	333	384	362		*-6%*	*9%*
		LSF	1,861	1,788	1,773	1,753	1,701	1,714	1,662		*-3%*	*-6%*
FTE	(#)		1,883	1,752	1,792	1,705	1,720	1,742	1,680		*-4%*	*-5%*
		SSF	131.9	93.8	125.0	72.6	105.5	104.9	99.1		*-6%*	*-6%*
		LSF	1,751	1,658	1,667	1,633	1,615	1,637	1,581		*-3%*	*-5%*
Days at sea	(thousand day)		50.9	53.9	51.3	47.1	51.8	50.7	48.7		*-4%*	*-5%*
		SSF	2.5	2.6	2.7	2.5	2.9	2.8	2.9		*4%*	*9%*
		LSF	48.4	51.3	48.6	44.6	48.9	47.9	45.7		*-5%*	*-5%*
Live weight of landings	(thousand tonne)		416.0	355.8	386.7	353.2	343.7	345.1	382.4		*11%*	*4%*
		SSF	0.5	0.5	0.5	0.4	0.5	0.5	0.4		*-16%*	*-16%*
		LSF	415.5	355.3	386.2	352.8	343.2	344.6	381.9		*11%*	*4%*
Value of landings	(million €)		421.2	365.5	378.8	360.3	364.4	368.7	372.0		*1%*	*-1%*
		SSF	3.3	3.1	3.5	3.6	3.9	3.3	2.6		*-23%*	*-26%*
		LSF	418.0	362.3	375.3	356.7	360.5	365.3	369.5		*1%*	*-1%*
Revenue	(million €)		432.0	371.3	384.5	367.6	371.5	372.0	380.9		*2%*	*-1%*
		SSF	8.9	5.5	4.8	4.5	5.4	5.1	4.9		*-4%*	*-14%*
		LSF	423.1	365.8	379.7	363.1	366.1	366.9	376.0		*2%*	*0%*
Gross Value Added	(million €)		164.1	152.2	149.6	114.8	131.3	151.3	178.4		*18%*	*24%*
		SSF	5.6	3.7	2.2	2.9	3.6	2.7	2.6		*-3%*	*-24%*
		LSF	158.5	148.5	147.4	111.9	127.8	148.6	175.8		*18%*	*25%*
GVA to revenue	(%)		38.0	41.0	38.9	31.2	35.3	40.7	46.8		*15%*	*25%*
		SSF	62.8	66.7	45.8	64.8	65.4	52.6	52.9		*1%*	*-11%*
		LSF	37.5	40.6	38.8	30.8	34.9	40.5	46.8		*15%*	*26%*
Gross profit	(million €)		54.6	50.8	51.0	21.6	32.7	48.7	70.6		*45%*	*63%*
		SSF	3.1	2.3	1.3	2.1	2.1	1.4	1.4		*-2%*	*-33%*
		LSF	51.5	48.5	49.7	19.6	30.6	47.3	69.3		*46%*	*68%*
Gross profit margin	(%)		12.6	13.7	13.3	5.9	8.8	13.1	18.5		*42%*	*65%*
		SSF	34.8	41.0	26.9	45.7	38.1	27.3	27.8		*2%*	*-22%*
		LSF	12.2	13.3	13.1	5.4	8.4	12.9	18.4		*43%*	*70%*
Net profit	(million €)		- 8.5	- 7.1	- 7.2	- 34.2	- 10.4	- 4.9	27.2		*656%*	*326%*
		SSF	1.0	1.0	- 0.4	1.1	1.2	0.6	0.4		*-31%*	*-46%*
		LSF	- 9.4	- 7.3	- 6.1	- 35.1	- 11.8	- 5.6	26.9		*584%*	*315%*
GVA per FTE	(thousand €)		87.2	86.9	83.5	67.3	76.3	86.9	106.2		*22%*	*31%*
		SSF	42.4	39.2	17.6	40.1	33.7	25.6	26.2		*2%*	*-21%*
		LSF	90.5	89.6	88.4	68.5	79.1	90.8	111.2		*22%*	*32%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Poland

In 2015, the Polish fleet consisted of 873 vessels, having a combined gross tonnage (GT) of 34 thousand tonnes and engine power of 81.5 thousand kilowatts (kW). The proportion of inactive vessels increased from 5% (2014) to 8% in 2015.

The national fleet consisted of 7 fleet segments operating in 2014 in Baltic Sea and a distant water fleet operating in the North Atlantic (1 vessel) and African waters (2 vessels). Four of the active fleet segments made losses in 2014.

In 2015, the national fleet capacity continued to rise with an increase of 4% on 2014 in terms of vessel number. Over the same period, Gross Tonnage and Engine power remained stable showing increase of around 0.3% compared to the previous year.

The number of days at sea reduced 4% and fuel consumption decreased 4% as well.

In 2014, employment was estimated at 2.7 thousand jobs, corresponding to 2.5 thousand national FTEs. After a long period of decreasing trend, in 2014 employment showed an increase of 8% in terms of number of employees and of 7% in terms of national full time equivalent.

The total amount of Polish fleet landings was 187.9 thousand tonnes in 2015 a 10% increase compared to 2014. The Baltic fleet landings (7 segments) amounted to 135.6 thousand tonnes with a landed value of €48.7 million in 2015. The total landings weight and value of the Baltic Sea fleet increased 14% and 1% respectively between 2015 and 2014. In 2015, Atlantic cod generated the highest landed value in Baltic fisheries, followed by European sprat, Atlantic herring and then European flounder. The major factor causing the growth in 2015 weight was pelagic (mainly herring) catches that despite lower prices remain highly profitable for the fleet, substituting the less gainful cod catches.

The total amount of income generated by the Polish Baltic fleet in 2014 was €54.7 million (with subsidies), a 25% drop compared to 2013 caused by significantly lower subsidies available. The total amount of Gross Value Added (GVA) and gross profit decreased 13% and 33%, respectively. Net loss was €0.9 million, a significant deterioration compared to 2013 (net profit €2.3 million).

Lower values of landings (drop of cod and sprat prices) can be considered the main driving forces behind the overall deterioration of the economic performance of the Polish fleet. Between 2014 and 2011, landing's value of most economically species like mentioned sprat and cod decreased 37% and 10%, respectively. Over the same period, the volume of landings decreased 27% and 6%.

Small-scale fleet

Small-scale fleet (vessels under 12m using passive gears) in Poland play a significant mostly social role. They constitute more than 69% of the fishing fleet employ at least 56% of those workers directly engaged in fishing activity. The contribution of the sector to the fisheries economy is however less significant. They accounted for approximately 23% of the total landing value from capture fisheries 2014.

Weight and value of landings of the small-fleet has not changed significantly over the past years and varied between 10-13 thousand tonnes or €10-12 million. The effort however has increased remarkably between 2010 and 2014 by 30% in number of fishing days, sea day or fishing trips. According to preliminary data in 2015 the trend will be discontinued and effort as well as landings will be lower than in 2014. This is mainly due to poor condition of Baltic cod stocks to be especially evident in the shallow coastal areas. The sector suffered negative gross and net profits of €0.3 and 1.6 million respectively.

Large-scale fleet

Polish large-scale fleet is mainly composed by demersal trawlers 12-18 m and pelagic trawlers 18-24 m., which accounted for 37% and 22% of fleet vessel's number. These vessels mainly operated in the Baltic Sea, while one large trawler fished in the North Atlantic. The Baltic vessels targeting mainly sprats, herring, cod and flounder.

After two very good years (2012-2013) the value of landings of the large scale fleet decreased in 2014 by 17% and come back to the value generated in 2011 (€36 million). The weight of landings showed an increasing trend since 2010 until 2013. In 2014 the fleet landed 113.3 thousand tonnes of fish, 11% decrease. In 2015 the landings volume beat the record value (129.3 thousand tonnes) however value of fish landed was lower than in 2012 or 2013. The fleet generated GVA €40.3 million, produced €6.4 million gross and €0.8 million net profit. Unfortunately all economic parameters deteriorated remarkably, GVA by 29%, gross profit by 36% and net profit by 82%.

Poland		2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels (#)		864	832	806	793	790	798	838		5%	3%
	SSF	563	509	517	518	545	553	595		8%	11%
	LSF	259	211	187	188	205	200	199		-1%	-4%
	DWF	1.0	3.0	3.0	3.0	2.0	2.0	2.0		0%	-14%
Vessel tonnage (thousand GT)		30.0	41.0	38.2	37.3	33.4	33.4	33.9		1%	-5%
	SSF	2.7	2.3	2.3	2.4	2.6	2.6	2.7		4%	9%
	LSF	22.8	16.5	14.1	13.8	14.6	14.8	15.4		4%	-5%
	DWF	3.9	19.4	19.5	19.5	15.6	15.6	15.4		-1%	-1%
Engine power (thousand kW)		96.6	99.0	90.7	86.9	82.9	81.9	81.4		-1%	-9%
	SSF	23.8	20.3	19.8	19.7	21.1	20.9	21.3		2%	2%
	LSF	67.0	53.7	46.5	44.7	47.5	46.6	46.8		0%	-8%
	DWF	3.2	14.4	15.0	15.0	11.8	11.8	11.2		-5%	-6%
Total employed (person)		3,026	2,699	2,590	2,548	2,601	2,515	2,703		7%	1%
	SSF	1,379	1,313	1,264	1,301	1,372	1,389	1,519		9%	14%
	LSF	1,377	1,116	1,056	977	1,049	946	1,003		6%	-8%
	DWF	270.0	270.0	270.0	270.0	180.0	180.0	180.0		0%	-25%
FTE (#)		2,822	2,552	2,433	2,400	2,487	2,361	2,550		8%	2%
	SSF	1,201	1,202	1,121	1,163	1,271	1,290	1,420		10%	18%
	LSF	1,351	1,093	1,043	966	1,036	934	990		6%	-8%
	DWF	270	258	270	270	180	137	140		2%	-39%
Days at sea (thousand day)		66.4	62.1	58.1	58.7	67.2	71.3	74.6		5%	17%
	SSF	45.6	42.8	39.5	40.0	43.5	48.1	51.2		6%	18%
	LSF	20.3	18.4	17.8	17.9	23.3	22.7	22.8		1%	14%
	DWF	0.5	0.9	0.9	0.8	0.5	0.5	0.5		2%	-22%
Live weight of landings (thousand tonne)		126.2	212.1	170.8	179.5	179.2	195.0	171.3		-12%	-3%
	SSF	9.9	11.5	11.0	11.4	12.6	13.0	12.8		-2%	10%
	LSF	90.2	124.1	104.5	104.2	112.8	127.9	113.3		-11%	2%
	DWF	26.1	76.5	55.4	63.9	53.8	54.1	45.3		-16%	-18%
Value of landings (million €)		40.0	41.3	43.1	47.4	55.4	56.5	47.9		-15%	1%
	SSF	10.4	10.7	10.4	11.3	12.0	12.0	11.1		-7%	0%
	LSF	29.6	30.6	32.7	36.1	43.4	44.6	36.8		-17%	2%
	DWF										
Revenue (million €)		40.9	41.8	43.3	47.8	55.6	56.6	48.1		-15%	1%
	SSF	10.7	10.8	10.5	11.4	12.0	12.0	11.2		-7%	-1%
	LSF	30.2	30.9	32.8	36.4	43.6	44.6	36.9		-17%	1%
Gross Value Added (million €)		15.1	23.8	24.0	23.0	27.3	28.3	21.7		-23%	-8%
	SSF	6.4	7.6	7.3	7.5	7.8	7.3	6.9		-6%	-6%
	LSF	8.7	16.2	16.7	15.5	19.6	21.0	14.9		-29%	-9%
Gross profit (million €)		3.9	13.6	11.8	8.4	9.6	9.2	6.1		-33%	-35%
	SSF	0.5	5.1	3.7	1.1	0.7	-0.8	-0.3		68%	-115%
	LSF	-1.5	8.5	8.1	7.2	8.9	10.0	6.4		-36%	-7%
Gross profit margin (%)		9.6	32.5	27.1	17.6	17.2	16.2	12.7		-22%	-37%
	SSF	18.2	47.0	35.3	10.0	5.5	-6.5	-2.2		65%	-112%
	LSF	-5.1	27.4	24.6	19.9	20.4	22.3	17.3		-23%	-5%
GVA to revenue (%)		36.9	57.0	55.5	48.2	49.1	50.0	45.2		-10%	-9%
	SSF	60.1	69.9	69.7	66.3	64.5	60.9	61.5		1%	-6%
	LSF	28.7	52.4	50.9	42.6	44.9	47.1	40.3		-14%	-9%
Net profit (million €)		-0.05	9.05	6.75	4.29	4.93	2.28	-0.89		-139%	-120%
	SSF	0.2	4.1	2.5	0.3	0.0	-2.1	-1.6		24%	-282%
	LSF	-4.7	5.4	4.7	4.2	5.0	4.4	0.8		-82%	-75%
GVA per FTE (thousand €)		5.4	9.3	9.9	9.6	11.0	12.0	8.5		-29%	-10%
	SSF	5.4	6.3	6.5	6.5	6.1	5.7	4.8		-15%	-21%
	LSF	6.8	15.4	16.7	16.7	19.6	23.4	15.6		-33%	-5%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Portugal

The national fleet consisted of 54 fleet segments totalling 3 945 fishing vessels and 6 inactive segments totalling 4 311 vessels. The total revenue generated in 2014 was estimated at €369 million, which remained at 2013 levels but representing higher prices of fish, due to the reduction in total catches. Total costs, including capital costs, incurred by the fleet in 2014 reached €325 million. Crew costs and energy costs, the two main costs, decreased in 2014, the first by 11%, the second by 27%. Overall, the cost structure has remained relatively constant over the years. Employment was estimated at 16 991 jobs, corresponding to 8 514 FTE, an average of 2.2 FTE per vessel, and an increase from 1.9 in 2008.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €235.6 million, €99.5 million and €39.9 million, respectively. Economic indicators improved in 2014 due to better fish prices and decreasing costs, result of an improved efficiency.

While overall the fleet was profitable, variations are observed in different fleet segments, with some experienced some difficulties, namely the 24-40 m longliner fleet on Azores and Madeira, the small scale dredgers and some demersal trawlers 24-40 operating on national waters. 2015 provisional catch data shows an improvement of the landed value of catches, a trend which is expected to continue in 2016.

Small-scale fleet

In 2014, the small scale fleet was composed by 3 097 active vessels corresponding to 79% of the total active fleet. The total amount of Gross Value Added (GVA), gross profit and net profit generated by the SSF in 2014 were €65.3 million, €29.4 million and €17.9 million, respectively. The performance of the fleet improved consistently since 2012. Furthermore, this part of the national fleet contributes significantly to the economic and social sustainability of local fishing communities. Projections for 2015 and 2016, suggest that small scale fleet continued to decrease in capacity (number, GT and kW) but in terms of economic performance, a further improvement is expected. The cost structure of the fleet remained stable over the period 2008-14 with Wages and salaries of the crew being the major cost and highly linked to the income from landings.

Large-scale fleet

The large scale fleet comprised 822 vessels and it represents 27% of the active Portuguese fleet. The majority of large scale fleet use mobile gears (purse seine, demersal trawl and dredges) and in 2014 generated 5 199 jobs, representing 61% of total fleet employment. In 2014, the activity of this fleet decreased but income and the majority of the costs remained stable. The economic performance achieved remained approximately the same of the previous year, with Gross Value Added (GVA), gross profit and net profit increasing due to the amount of subsidies received, the low fuel costs and a slight reduction on crew costs. Net profit margin increased to 9%. Investments are increasing over the years showing a will for the sector to remain in business.

Distant-water fleet

The distant water fleet comprised 26 vessels in 2014, including 12 demersal trawlers and 15 surface longliners. In 2014 the fleet generated 381 jobs. Comparing 2014 to 2013, there was a decrease in fleet activity, but with higher landings and jobs. In terms of economic performance, the fleet showed improvements in 2014 with an estimated Gross Value Added (GVA), gross profit and net profit of €12.4 million, €7.4 million and €2.8 million, respectively.

Portugal			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		8,770	8,731	8,655	8,507	8,399	8,311	8,256		-1%	-4%
		DWF	40.0	38.0	39.0	35.0	34.0	27.0	26.0		-4%	-27%
		SSF	3,792	3,665	3,540	3,338	3,230	3,185	3,097		-3%	-10%
		LSF	922	923	898	874	819	812	822		1%	-6%
Vessel tonnage	(thousand GT)		107.2	107.7	104.4	102.2	101.1	100.1	100.4		0%	-3%
		DWF	13.5	12.0	12.7	11.5	11.1	9.1	8.9		-3%	-24%
		SSF	7.9	7.8	7.7	7.5	7.5	7.4	7.4		0%	-3%
		LSF	63.8	65.6	63.2	63.0	60.9	61.7	61.3		-1%	-3%
Engine power	(thousand kW)		389.2	393.2	383.6	374.9	371.2	368.0	368.1		0%	-3%
		DWF	26.5	24.4	25.0	22.5	21.8	18.0	17.2		-5%	-25%
		SSF	107.9	108.1	107.2	103.7	102.9	101.0	99.9		-1%	-5%
		LSF	177.8	179.4	171.6	169.7	164.1	166.1	165.5		0%	-3%
Total employed	(person)		17,239	17,860	16,583	18,258	16,754	17,867	16,992		-5%	-2%
		DWF	411.0	415.0	410.0	433.0	416.0	345.0	381.0		10%	-6%
		SSF	9,397	9,321	8,523	10,075	8,862	9,857	8,957		-9%	-4%
		LSF	7,431	8,124	7,651	7,751	7,478	7,668	7,653		0%	0%
FTE	(#)		9,155	9,260	9,155	9,614	9,241	9,748	8,515		-13%	-9%
		DWF	371.0	362.0	381.0	410.0	396.0	301.0	348.0		16%	-6%
		SSF	3,246.0	3,063.0	2,827.0	3,370.0	3,022.0	3,413.0	2,967.0		-13%	-6%
		LSF	5,537	5,835	5,949	5,835	5,825	6,037	5,199		-14%	-11%
Days at sea	(thousand day)		441.1	425.0	402.3	390.9	385.4	368.8	335.6		-9%	-17%
		DWF	18.9	17.2	20.3	18.0	13.7	11.4	10.9		-4%	-34%
		SSF	570.3	544.0	507.3	491.6	497.1	472.8	427.7		-10%	-17%
		LSF	293.4	289.5	277.9	273.4	261.4	254.4	233.8		-8%	-15%
Live weight of landings	(thousand tonne)		193.9	171.6	194.7	197.7	189.1	196.0	163.4		-17%	-14%
		DWF	9.5	9.5	12.4	11.6	11.5	7.5	8.7		16%	-16%
		SSF	22.0	19.4	21.9	17.8	20.5	22.1	20.2		-8%	-2%
		LSF	162.5	142.7	160.4	168.3	155.7	166.3	134.5		-19%	-16%
Value of landings	(million €)		400.8	361.0	399.2	408.9	386.8	367.7	353.4		-4%	-9%
		DWF	27.5	30.9	41.3	36.9	30.5	25.8	21.9		-15%	-32%
		SSF	95.8	76.6	79.6	76.6	76.7	76.1	82.3		8%	3%
		LSF	277.5	253.5	278.3	295.4	273.7	265.4	249.2		-6%	-9%
Revenue	(million €)		404.2	368.1	406.0	416.5	386.0	364.7	364.9		0%	-7%
		DWF	27.5	32.7	43.7	39.2	29.0	29.4	25.5		-13%	-24%
		SSF	97.6	79.2	80.6	76.9	76.9	75.8	83.0		10%	2%
		LSF	279.0	256.2	281.7	300.3	280.1	259.6	256.4		-1%	-7%
Gross Value Added	(million €)		252.1	232.6	253.8	263.6	233.2	223.5	235.5		5%	-3%
		DWF	6.1	14.6	18.4	17.3	10.5	12.6	12.4		-2%	-7%
		SSF	77.3	61.1	61.6	58.5	58.3	57.7	65.3		13%	5%
		LSF	168.7	156.9	173.8	187.8	164.4	153.2	157.9		3%	-6%
GVA to revenue	(%)		62.4	63.2	62.5	63.3	60.4	61.3	64.5		5%	4%
		DWF	22.2	44.7	42.1	44.2	36.4	42.8	48.5		13%	25%
		SSF	79.2	77.2	76.4	76.0	75.8	76.0	78.6		3%	2%
		LSF	60.4	61.2	61.7	62.5	58.7	59.0	61.6		4%	2%
Gross profit	(million €)		94.7	91.8	103.0	105.7	79.8	87.6	99.5		14%	6%
		DWF	0.9	9.8	11.4	10.5	5.7	7.1	7.4		4%	-2%
		SSF	35.5	26.1	26.9	24.2	20.3	24.5	29.4		20%	12%
		LSF	58.3	55.8	64.8	71.0	53.9	55.9	62.7		12%	5%
Gross profit margin	(%)		23.4	24.9	25.4	25.4	20.7	24.0	27.3		14%	14%
		DWF	3.4	30.1	26.1	26.7	19.6	24.2	29.0		20%	34%
		SSF	36.3	33.0	33.3	31.5	26.3	32.4	35.4		9%	10%
		LSF	20.9	21.8	23.0	23.6	19.2	21.6	24.5		14%	13%
Net profit	(million €)		40.5	11.8	32.2	28.3	- 2.0	19.0	39.9		110%	85%
		DWF	- 5.4	2.1	3.8	2.3	- 2.3	0.9	2.7		196%	1076%
		SSF	25.5	12.3	14.2	10.5	5.6	11.3	17.9		59%	35%
		LSF	22.5	3.8	18.9	22.7	3.1	13.3	23.9		80%	70%
GVA per FTE (labour produ	(thousand €)		27.5	25.1	27.7	27.4	25.2	22.9	27.7		21%	6%
		DWF	16.5	40.4	48.3	42.3	26.6	41.7	35.5		-15%	-1%
		SSF	23.8	20.0	21.8	17.3	19.3	16.9	22.0		30%	11%
		LSF	30.5	26.9	29.2	32.2	28.2	25.4	30.4		20%	6%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Romania

In 2015, the Romanian fishing fleet consisted of 151 registered vessels, with a combined gross tonnage of 0.9 thousand GT, a total power of 6.0 thousand kW and an average age of 18 years. The size of the Romania fishing fleet decreased between 2008 and 2015, with the number of vessels falling by 58% and GT and kW by 41% and 11% respectively.

In 2014, the number of fishing enterprises in the Romanian fleet totalled 77. Total employment in 2014 was estimated at 330 jobs, corresponding to 38 FTEs (note, these values are explained by the accentuated seasonality and the low qualification of fishers). The level of employment decreased between 2008 and 2015, with total employed decreasing 30% while the number of FTEs increased around 5% over the period.

The Romania fleet spent a total of around 2.8 thousand days at sea in 2014. The total number of days at sea decreased 21% between 2008 and 2014, with a similar evolution observed for fishing days.

The total weight landed by the Romanian fleet in 2014 was 2.2 thousand tonnes of seafood, with a landed value of €2.5 million. The total weight and value of landings increased overall during the period 2008 to 2014. Thomas' rapa whelk generated the highest landed value by the national fleet around €1.8 thousand, followed by turbot around €340 thousand. In terms of landings weight, in 2014 Thomas' rapa whelk was 1950 tonnes, European sprat 80 tonnes, European anchovy 60 tonnes, the main important species landed.

The amount of income generated by the Romanian national fleet from landings in 2014 was €2.5 million. No information is available on non-fishing income, due to the unreported data by fishers. Total income increased 70% between 2013 and 2014. Total operating costs incurred by the national fleet equated to €2.37 million, amounting to 95% of total income. Crew cost and fuel costs, the two major fishing expenses, were €0.80 and €0.55 million respectively. Between 2008 and 2014, total operating costs increased 144%.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the fleet in 2014 were €1.5 million, €0.4 million and €0.1 million respectively. Gross Value Added (GVA), gross profit and net profit increased 77%, 57% and 30% respectively between 2013 and 2014.

Small-scale fleet

The small-scale fleet represents the principal part of the national fleet. In 2014, there were 158 active vessels of which around 111 (70% of all active vessels) are classified as small-scale (a decrease of 46% from 2008).

The amount of income generated by the small-scale fleet in 2014 was €1.2 million. Landings income increased 47% between 2008 and 2014.

In terms of economic performance, the amount of Gross Value Added (GVA), gross profit and net profit generated by the small-scale fleet in 2014 were €0.7 million, €0.2 million and €0.1 million, respectively. Between 2008 and 2014, GVA and gross profit increased 44%, 29% respectively, while net profit decrease for 5% in the same period.

Romainia			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		441	440	429	488	261	196	158		*-19%*	*-58%*
		SSF	395	153	205	197	179	106	111		*5%*	*-46%*
		LSF	10	7	1	3	4	6	12		*100%*	*132%*
Vessel tonnage	(thousand GT)		2.3	2.3	1.0	1.0	0.7	0.6	0.8		*30%*	*-41%*
		SSF	0.4	0.2	0.2	0.2	0.3	0.2	0.2		*12%*	*-23%*
		LSF	0.8	0.5	0.1	0.4	0.3	0.4	0.5		*55%*	*38%*
Engine power	(thousand kW)		8.7	8.2	5.4	7.0	5.9	6.2	6.1		*-1%*	*-11%*
		SSF	3.1	1.2	1.7	3.4	3.5	3.2	2.4		*-26%*	*-12%*
		LSF	2.4	1.6	0.3	1.1	1.2	2.1	3.2		*54%*	*118%*
Total employed	(person)		875	289	444	454	471	304	330		*9%*	*-30%*
		SSF	790	242	436	434	445	278	279		*0%*	*-36%*
		LSF	85	47	8	20	26	26	51		*96%*	*44%*
FTE	(#)		42	31	38	28	39	37	38		*2%*	*5%*
		SSF	30.7	27.7	38.2	26.0	34.9	27.1	23.8		*-12%*	*-23%*
		LSF	11	4	0	3	4	10	14		*39%*	*172%*
Days at sea	(thousand day)		3.7	4.1	4.3	2.6	3.4	2.8	2.8		*-2%*	*-21%*
		SSF	6.9	7.9	8.6	5.1	6.6	4.9	4.4		*-11%*	*-34%*
		LSF	0.6	0.2	0.0	0.1	0.2	0.7	1.1		*57%*	*259%*
Live weight of landings	(thousand tonne)		0.4	0.3	0.2	0.5	0.8	1.6	2.2		*36%*	*236%*
		SSF	0.1	0.2	0.2	0.4	0.7	1.0	1.0		*-5%*	*116%*
		LSF	0.3	0.1	0.0	0.1	0.1	0.6	1.2		*110%*	*522%*
Value of landings	(million €)		0.9	0.7	0.6	1.5	1.0	1.5	2.5		*69%*	*140%*
		SSF	0.4	0.6	0.6	1.4	0.9	1.0	1.2		*18%*	*46%*
		LSF	0.5	0.1	0.0	0.1	0.1	0.5	1.3		*180%*	*482%*
Revenue	(million €)		0.9	0.7	0.6	1.5	1.0	1.5	2.5		*69%*	*140%*
		SSF	0.4	0.6	0.6	1.4	0.9	1.0	1.2		*18%*	*46%*
		LSF	0.5	0.1	0.0	0.1	0.1	0.5	1.3		*180%*	*482%*
Gross Value Added	(million €)		0.6	0.6	0.2	0.9	0.6	0.8	1.5		*77%*	*139%*
		SSF	0.3	0.5	0.2	0.9	0.6	0.6	0.7		*24%*	*44%*
		LSF	0.3	0.1	-0.0	0.0	0.0	0.3	0.8		*199%*	*532%*
GVA to revenue	(%)		64.3	79.4	44.2	58.7	60.6	57.7	60.4		*5%*	*-1%*
		SSF	70.1	84.8	44.2	60.2	62.6	58.7	61.4		*5%*	*-3%*
		LSF	60.2	51.7	-24.8	40.3	42.1	55.7	59.5		*7%*	*59%*
Gross profit	(million €)		0.0	0.3	0.0	0.4	0.3	0.3	0.4		*62%*	*113%*
		SSF	-0.1	0.3	0.0	0.4	0.3	0.2	0.2		*10%*	*29%*
		LSF	0.1	0.0	-0.0	0.0	0.0	0.1	0.2		*181%*	*435%*
Gross profit margin	(%)		0.8	43.5	1.6	26.3	26.9	19.0	18.1		*-5%*	*-7%*
		SSF	-38.4	48.8	1.6	27.8	28.7	19.4	18.1		*-7%*	*23%*
		LSF	26.4	16.2	-56.9	7.3	9.2	18.0	18.1		*0%*	*437%*
Net profit	(million €)		-0.1	-0.0	-0.1	0.2	0.1	0.1	0.1		*36%*	*204%*
		SSF	-0.1	0.3	-0.0	0.3	0.2	0.1	0.1		*-3%*	*-7%*
		LSF	-0.1	-0.1	-0.0	-0.0	0.0	0.0	0.0		*340%*	*486%*
GVA per FTE (labour produ	(thousand €)		14.2	18.1	6.4	31.6	15.4	22.5	39.2		*74%*	*117%*
		SSF	8.9	18.2	6.4	32.8	15.8	21.5	30.3		*41%*	*76%*
		LSF	28.7	17.1	-1.3	18.5	11.1	25.2	54.1		*115%*	*227%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Slovenia

In 2015, the Slovenian fishing fleet consisted of 169 registered vessels, with a combined gross tonnage of 596.95 GT, a total power of 8.5 thousand kW and an average age of 37.6 years. The size of the fleet decreased between 2008 and 2015; 6% in number and 34% and 18% in GT and kW, respectively. The major factors causing the fleet to decrease include the scrapping of vessels, including two of the largest vessels.

The fishing fleet is divided into a small-fleet segment (86% of all active vessels in 2015) with an engine power of 4.3 thousand kW and a large-fleet segment (14% of all active vessels in 2015) with an engine power of 1.9 thousand kW. The number small-scale vessels increased 19% from 2008-2015, while the number of large scale vessels decreased 36%. Scrapping is the major factor for decreased large-scale fleet. On the other hand, those fishers who lost their jobs because of scrapping, starts to fish on their own, which results in a higher number of small scale vessels.

Total employment in 2014 was estimated at 126 jobs, corresponding to 80 FTEs. The level of employment increased between 2008 and 2014, with total employed increasing 13%, while the number of FTEs increased 6%.

The total weight of seafood landed in 2014 was around 250 tonnes, with a landed value of €1.28 million, 58% and 34%, respectively, over the period analysed. The major factor causing the decrease in landed weight and value, especially for European anchovy and sardine, include scrapping of fishing vessels. In the 2011, the two largest vessels were scrapped (pelagic trawlers 24-40m); which targeted mainly sardine and anchovy and represented around 50% of the landed weight.

The amount of income generated in 2014 was €2.83 million. This consisted of €1.29 million in landings value, €1.48 million in non-fishing income and €0.06 in subsidies. The fleet's landings income decreased 34% between 2008 and 2014, while other income increased 37% during the same period. Due to reduced landings, fishers are looking for opportunities to generate earnings in other industries, such as tourism, aquaculture etc.

In terms of economic performance, the amount of GVA, gross profit and net profit generated in 2014 were €2.26 million, €1.34 million and €1.01 million, respectively. Between 2008 and 2014, GVA, gross profit and net profit increased 16%, 52% and 58% respectively. The major factors causing the improvement in economic performance in 2014 included lower expenditure in fuel and labour costs and increases in income from other sources. Regardless of the increase in economic performance, the fleet was in a poor economic condition because of old and poorly equipped fleet and reduced catches.

Small-scale fleet

In 2014, there were 88 active vessels of which around 76 (86% of all active vessels) are classified as small-scale (an increase of 28% from 2008). Total employment was estimated at 89 jobs, corresponding to 60 FTEs. The level of employment increased between 2008 and 2014, with total employed increasing 32%, while the number of FTEs increased 30%. The amount of income generated by the SSF was €1.46 million. Landings income increased 56% between 2008 and 2014, while other income increased more than 300% during the same period. In terms of economic performance, the amount of GVA, gross profit and net profit were €1.21 million, €0.73 million and €0.49 million, respectively. Between 2008 and 2014, GVA, gross profit and net profit increased 64%, 142% and 135% respectively. The major factors causing the improvement in economic performance in 2014 included increases in landing income and income from other sources while, on the other hand, operation costs remain relative stabile during the period analysed.

Large-scale fleet: 12 vessels (14% of all active vessels) represents Slovenian large-scale sector in 2014. The majority of these vessels operate in the coastal waters of Slovenia. Total employment was estimated at 37 jobs, corresponding to 20 FTEs. The level of employment decreased between 2008 and 2014, with total employed decreasing by 17%, whiles the number of FTEs decreased by 32%.

The amount of income generated by the large-scale fleet in 2014 was €1.35 million. This consisted of €0.67 million in landings value, €0.07 million in direct subsidies and €0.61million in non-fishing income. Landings income decreased 65% between 2008 and 2014, while other income increased for 17% during the same period. The major factor for decreased value of landing income is scrapping of some vessels.

In terms of economic performance, the amount of GVA, gross profit and net profit generated by the large-scale fleet in 2014 were €1.05 million, €0.61 million and €0.52 million, respectively. Between 2008 and 2014, gross profit and net profit increased 5% and 20% respectively, while the GVA decreased for 14% in the same period. The major factor causing decreasing GVA is lover income from landings. In 2014, the large-scale fleet had an estimated (depreciated) replacement value of €1.28 million. Investments by the fleet amounted to €0.05 million in 2014.

Slovenia			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		181	185	185	186	181	171	170		*-1%*	*-6%*
		SSF	60	62	67	62	67	69	77		*12%*	*19%*
		LSF	25	25	24	22	22	14	14		*0%*	*-36%*
Vessel tonnage	(thousand GT)		1.0	1.0	1.0	1.0	0.8	0.6	0.6		*0%*	*-34%*
		SSF	0.2	0.1	0.2	0.2	0.2	0.2	0.2		*11%*	*27%*
		LSF	0.6	0.6	0.6	0.6	0.5	0.2	0.2		*0%*	*-62%*
Engine power	(thousand kW)		10.7	11.0	11.0	10.9	10.1	8.5	8.5		*1%*	*-18%*
		SSF	2.5	2.5	3.0	2.5	2.7	4.0	4.3		*8%*	*51%*
		LSF	4.6	4.4	4.4	4.1	3.6	1.9	1.9		*1%*	*-49%*
Total employed	(person)		109	117	116	114	107	107	126		*18%*	*13%*
		SSF	67	64	72	62	68	71	89		*25%*	*32%*
		LSF	42	53	44	52	39	36	37		*3%*	*-17%*
FTE	(#)		77	82	81	77	63	75	80		*7%*	*6%*
		SSF	47.7	45.0	48.8	41.6	43.9	50.4	60.0		*19%*	*30%*
		LSF	29	37	32	35	19	25	20		*-18%*	*-32%*
Days at sea	(thousand day)		6.8	6.9	7.7	7.7	7.6	7.6	8.6		*12%*	*16%*
		SSF	9.6	9.3	10.7	11.4	12.5	12.8	14.9		*16%*	*35%*
		LSF	3.9	4.4	4.8	3.9	2.8	2.5	2.3		*-7%*	*-38%*
Live weight of landings	(thousand tonne)		0.7	0.9	0.8	0.7	0.3	0.2	0.3		*7%*	*-58%*
		SSF	0.1	0.1	0.1	0.1	0.1	0.1	0.1		*19%*	*18%*
		LSF	0.6	0.8	0.7	0.7	0.3	0.2	0.2		*3%*	*-65%*
Value of landings	(million €)		2.3	2.4	2.1	2.1	1.5	1.2	1.3		*9%*	*-34%*
		SSF	0.4	0.5	0.5	0.5	0.5	0.5	0.6		*20%*	*27%*
		LSF	1.9	1.9	1.6	1.6	1.0	0.7	0.7		*0%*	*-54%*
Revenue	(million €)		3.0	2.9	3.5	3.6	2.4	2.6	2.7		*5%*	*-9%*
		SSF	0.6	0.7	1.3	1.4	0.9	1.2	1.5		*17%*	*40%*
		LSF	2.5	2.1	2.1	2.2	1.5	1.4	1.3		*-5%*	*-35%*
Gross Value Added	(million €)		1.7	1.7	1.9	2.6	1.8	2.0	2.3		*14%*	*16%*
		SSF	0.2	0.4	0.9	1.2	0.6	1.0	1.2		*26%*	*65%*
		LSF	1.5	1.3	1.0	1.4	1.2	1.0	1.0		*3%*	*-14%*
GVA to revenue	(%)		57.8	58.8	54.5	72.5	73.1	76.1	82.5		*8%*	*26%*
		SSF	42.8	59.0	69.5	82.9	69.9	77.7	83.2		*7%*	*24%*
		LSF	61.3	58.7	45.0	65.7	75.0	74.6	81.7		*10%*	*29%*
Gross profit	(million €)		0.8	0.5	0.7	1.4	0.8	1.1	1.3		*25%*	*52%*
		SSF	- 0.1	0.1	0.5	0.8	0.2	0.4	0.7		*95%*	*140%*
		LSF	0.9	0.4	0.2	0.6	0.7	0.7	0.6		*-12%*	*6%*
Gross profit margin	(%)		25.4	17.7	20.3	38.4	34.1	41.2	49.0		*19%*	*66%*
		SSF	-18.8	14.2	38.5	52.5	19.3	30.0	50.0		*67%*	*121%*
		LSF	35.7	18.9	8.8	29.2	42.6	51.5	47.8		*-7%*	*54%*
Net profit	(million €)		0.7	0.1	0.4	1.1	0.6	0.7	1.0		*39%*	*63%*
		SSF	- 0.1	0.0	0.4	0.7	0.1	0.2	0.5		*206%*	*136%*
		LSF	0.8	0.2	0.0	0.5	0.5	0.6	0.5		*-14%*	*20%*
GVA per FTE (labour produ	(thousand €)		22.7	20.4	23.3	34.3	28.5	26.4	28.2		*7%*	*9%*
		SSF	5.1	9.6	19.2	28.8	14.3	19.2	20.2		*5%*	*26%*
		LSF	51.4	33.5	29.6	40.8	61.9	41.0	51.6		*26%*	*20%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Spain

The total number of vessels in the Spanish fleet continued to decline and in 2015 fleet consisted of 9 686 vessels of which 8 501 were active. The small-scale fleet segment (SSF) comprised 4 129 vessels, the large scale fleet (LSF) 4 150 and the distance water fleet (DWF) 222.

It is noteworthy that while the number of both active and inactive vessels declined, the reduction in the number of inactive vessels is greater and, consequently, the relative number of active vessels has increased. There has also been a change in the quantity of fuel used by the Spanish fleet and overall the fleet has become more efficient. With fuel representing the highest variable cost of the fleet, reduced fuel consumption overall, together with more fishing trips and landings, means the net profit of the fleet has increased.

In terms of capacity, the Spanish fleet consists of 367 thousand GT of which 11.5 thousand GT are in the SSF, 172.5 thousand GT are in the LSF and 161.7 thousand GT are in the DWF. Overall capacity has declined, a trend also reflected in the engine power of the fleet. Currently there are a total of 842 thousand kW in the fleet; 111 thousand kW in the SSF, 453 thousand kW in the large scale Fleet, and 225 thousand kW in Distance Water fleet. This represents a decline of 10%.

In terms of employment, the estimated total number of people employed during 2015 was 33 121, almost the same as 2013. The small decrease in full-time employment is explained by Spanish reform of active employment policies introduced in 2014, resulting in more people employed on part time contracts. Currently there are 8 251 persons in the small scale fleet, 19 809 in the large scale fleet, and 5 061 in the Distance Water Fleet.

The number of full time equivalent (FTE) employees in the total Spanish fleet amounted to 28 629 in 2014, a decrease from the previous year. This downward trend will continue, with the main decline expected in the small scale fleet (a 24% decrease). Conversely, the large scale fleet increased by 7% while the long distance fleet increased by 10%.

In terms of landings, live weight and value, the main species caught by the Spanish fleet are highly migratory stocks (skipjack tuna, yellowfin tuna, big eye tuna landed by 33 freezer purse seiners of the distant water fleet) and small pelagic species (European pilchard and European anchovy that are mainly fished by purse seiners in Spanish fishing grounds in the North Atlantic and Mediterranean).

Of the demersal species taken, the main ones are Patagonian grenadier and Patagonian squid taken by the distance water fleet (trawlers and seiners), followed by the LSF Trawlers and seiners fishing in EU waters mainly for Hake.

It is noteworthy that of the total landed weight 50% is taken by the distant water fleet. This fleet represents 1% of the total number of vessels in the Spanish fleet.

The value the Patagonian squid fishery increased from €56.2 thousand in 2013 to €109.9 thousand in 2014. This reflects increased abundance of the species, a phenomenon that occurs from time to time and leads to an increase in the fleet target the species with commensurate increases in catches.

In terms of economic performance total revenue reached €2 020 million representing a 7% increase from the previous year. This was mainly due to an 11% increase in the Distance Water Fleet, which has increased the weight of shellfish landed and also experienced good market prices. The total revenue of the Large Scale Fleet amounted to €941 million, 7% increase on 2013. Only the Small Scale Fleet saw revenue decline in this case by 21%.

The total amount of Gross Value Added generated by the Spanish fleet was €1.06 billion in 2014. Of this €86.7 million comes from the small scale fleet, €526 million from the large scale fleet, and €446 million from the distance water fleet.

Spain			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		13,115	11,501	11,209	10,900	10,544	10,167	9,921		-2%	-12%
		SSF	6,420	6,315	7,102	4,214	4,188	4,215	4,156		-1%	-23%
		LSF	3,089	3,101	2,956	4,622	4,486	4,340	4,307		-1%	14%
		DWF	294.0	267.0	297.0	280.0	264.0	240.0	230.0		-4%	-16%
Vessel tonnage	(thousand GT)		470.1	459.5	439.7	415.4	400.1	384.9	379.4		-1%	-11%
		SSF	14.4	14.1	15.1	13.1	11.6	11.5	11.5		0%	-14%
		LSF	268.0	262.8	237.2	202.9	189.7	185.3	178.0		-4%	-21%
		DWF	176.6	173.4	179.4	169.3	174.0	162.7	163.6		1%	-5%
Engine power	(thousand kW)		1,067.9	1,027.3	983.2	937.7	903.6	873.9	867.0		-1%	-10%
		SSF	139.0	135.5	146.9	115.2	109.0	109.8	110.5		1%	-12%
		LSF	624.5	609.6	556.7	513.4	487.7	472.3	465.2		-2%	-14%
		DWF	252.4	245.9	255.3	237.6	240.5	225.5	228.8		1%	-6%
Total employed	(person)		36,672	38,045	39,281	35,808	34,399	33,129	33,121		0%	-9%
		SSF	11,785	11,797	12,697	8,803	8,601	9,484	8,251		-13%	-22%
		LSF	19,982	20,714	19,524	21,545	21,085	18,991	19,809		4%	-2%
		DWF	4,904.8	5,533.7	7,060.1	5,460.5	4,713.5	4,653.6	5,061.2		9%	-6%
FTE	(#)		34,921	35,844	33,678	33,210	30,302	28,782	28,629		-1%	-13%
		SSF	7,059.0	7,260.9	8,222.1	6,695.2	5,378.1	7,317.4	5,545.7		-24%	-21%
		LSF	21,266	21,266	17,140	19,802	19,033	16,110	17,179		7%	-10%
		DWF	6,595.7	7,317.3	8,316.0	6,712.5	5,890.8	5,354.8	5,904.9		10%	-12%
Days at sea	(thousand day)		1,105.0	1,122.3	1,208.9	1,150.7	1,149.1	1,096.9	1,117.7		2%	-2%
		SSF	515.1	532.2	624.3	393.1	392.2	391.1	406.7		4%	-14%
		LSF	514.0	516.5	504.8	680.0	684.9	640.5	647.3		1%	10%
		DWF	75.9	73.7	79.8	77.6	72.0	65.3	63.7		-2%	-14%
Live weight of landings	(thousand tonne)		775.9	798.9	873.4	861.0	871.1	898.1	932.7		4%	10%
		SSF	25.9	25.3	28.1	25.5	28.5	26.0	29.6		14%	11%
		LSF	431.5	477.6	442.3	400.3	394.7	390.0	409.5		5%	-3%
		DWF	318.5	296.0	403.0	435.0	447.8	482.2	493.6		2%	24%
Value of landings	(million €)		1,864.4	1,907.0	1,885.0	1,861.6	1,942.4	1,970.0	2,074.8		5%	9%
		SSF	129.9	128.2	137.9	112.2	100.9	94.7	104.4		10%	-11%
		LSF	1,075.8	1,158.8	1,048.4	947.2	895.6	855.1	869.4		2%	-13%
		DWF	658.7	620.1	698.7	799.4	945.9	1,020.2	1,100.9		8%	39%
Revenue	(million €)		1,526.3	1,988.2	1,884.9	2,081.5	1,921.0	1,897.5	2,020.9		7%	7%
		SSF	121.1	195.6	199.9	130.1	113.2	158.9	126.2		-21%	-18%
		LSF	915.0	1,200.8	930.0	1,089.6	980.2	883.1	941.5		7%	-6%
		DWF	490.3	591.7	754.9	861.8	827.6	855.4	953.3		11%	31%
Gross Value Added	(million €)		585.8	884.4	849.9	910.7	891.2	879.0	1,059.6		21%	27%
		SSF	75.7	128.1	123.5	81.4	72.7	99.9	86.7		-13%	-10%
		LSF	375.1	599.6	476.4	508.8	516.6	434.1	526.6		21%	9%
		DWF	135.0	156.7	250.0	320.5	301.8	345.0	446.3		29%	77%
GVA to revenue	(%)		38.4	44.5	45.1	43.8	46.4	46.3	52.4		13%	19%
		SSF	62.5	65.5	61.8	62.6	64.3	62.9	68.7		9%	9%
		LSF	41.0	49.9	51.2	46.7	52.7	49.2	55.9		14%	15%
		DWF	27.5	26.5	33.1	37.2	36.5	40.3	46.8		16%	40%
Gross profit	(million €)		35.9	86.0	178.2	259.4	310.1	285.7	444.8		56%	131%
		SSF	- 7.5	- 14.0	1.2	- 21.2	1.9	- 14.9	- 4.4		70%	51%
		LSF	9.1	74.9	89.7	111.9	142.7	89.2	125.0		40%	45%
		DWF	34.3	25.1	90.0	168.0	165.5	208.6	321.5		54%	179%
Gross profit margin	(%)		2.4	4.3	9.5	12.5	16.1	15.1	22.0		46%	121%
		SSF	- 6.2	- 7.1	0.6	- 16.3	1.6	- 9.7	- 3.6		63%	41%
		LSF	1.0	6.2	9.6	10.3	14.6	10.1	13.3		31%	54%
		DWF	7.0	4.2	11.9	19.5	20.0	24.4	33.7		38%	133%
Net profit	(million €)					112.4	165.8	166.5	332.6		100%	124%
		SSF				- 29.9	1.0	- 20.7	- 12		41%	26%
		LSF				22.2	50.1	30.5	63.9		109%	86%
		DWF				119.9	114.2	154.3	276.3		79%	113%
GVA per FTE (labour producti	(thousand €)		16.8	24.7	25.2	27.4	29.4	30.5	37.0		21%	44%
		SSF	10.7	17.6	15.0	12.2	13.5	13.7	15.6		15%	13%
		LSF	17.6	28.2	27.8	25.7	27.1	26.9	30.7		14%	20%
		DWF	20.5	21.4	30.1	47.7	51.2	64.4	75.6		17%	93%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Sweden

The national fleet consisted of 1 257 vessels, including 284 inactive vessels in 2015.

An estimated 77.8 thousand days were spent at sea during 2014, a slight decrease compared to 2013, while the amount of energy consumed decreased 15%. The quantity of fuel consumed in 2014 totalled around 41.1 million litres, a decrease of around 34% from 2009, driven by fewer vessels, days at sea and increased fuel efficiency. The total weight landed in 2014 was 166 thousand tonnes of seafood (202 thousand tonnes in 2015), with a landed value of €107 million (€115 million in 2015). In 2012, the catch was exceptionally low due to low quotas. The fleet targets both pelagic and demersal species, with herring remaining the dominant species, generating the highest landed value with €30 million and representing about 28% of the total landings value in 2014.

The Swedish fleet went from a net profit to a net loss making position in 2014, due to lower quotas combined with lower landing prices. The economic performance could have looked worse if costs had not decreased, especially the effect of low fuel prices. This trend is not expected to have continued into 2015, since landings and fish prices increased, and as fuel prices remained low. The Swedish fleet's income is dominated by trawlers, both pelagic and demersal trawlers. As trawling is typically fuel intensive, fluctuations in fuel prices are therefore a key driver of the fleet's profitability. Together with decreased landings, the low average price of several important species, such as Norwegian lobster, herring, and cod led to a decrease in income and had a negative impact on profitability in 2014. Preliminary results for 2015 suggest a 22% increase in landed weight, matched by an 8% increase in value. Projections suggest that decreases in effort and fuel consumption translated in part to a decrease in operating costs, together with a reduction in capital costs, will make 2015 to a better year than 2014: GVA (+29%), gross profit (+86%) and net profit (+2419%). Increased landings will turn negative performance to positive.

Small-scale fleet: The number of small-scale vessels decreased from 819 in 2008 to 732 in 2015, a decrease of 11%. Close to half of this decrease in number of vessel between 2008-2015 stems from vessels with main income from fishing European eel. The Swedish authorities, through different management actions, such as permits, have tried to diminish effort in the threatened European eel fishery.

The numbers employed in the small-scale fisheries follows the same decreasing trend as the fleet in general over the period 2008-2015, with FTE decreasing more rapidly, indicating a larger portion of part-time fishers of the remaining. Vessel tonnage has decreased slightly but power has remained stable over the period. These figures indicate that the new vessels entering, despite lower numbers, have more engine power perhaps going for higher speed.

Overall, the small-scale fleet is not profitable, generating a negative net profit margin of 50%. Gross value added is positive but relatively low per FTE at €21 thousand. As tangible assets are, in most cases, probably paid off, these vessels can afford to continue to fish. Low GVA estimates signal that there are other reasons for fishing than just profit, such as part-time employment or a way of life. Additionally, increased seal populations along the Swedish coastline are heavily affecting both income, by taking and eating fish directly from the gears, and costs, by destroying gears as well as creating extra work.

Large-scale fleet: For the large-scale fleet, the number of vessels decreased from 329 in 2008 to 241 in 2015, a decrease of nearly 27%. More than half of this decrease stems from vessels with main income from the Norwegian lobster fishery. The Swedish authorities have promoted fishing lobster with passive gears and as cod populations are in bad conditions, mixed fisheries with cod and lobster are no longer a profitable option. Vessels fishing for cod as main source of income have also decreased. Some of these vessels also fished pelagic species and after the introduction of fishing-rights in the pelagic fishery they sold their rights and left the fishery.

The numbers employed in the large-scale fisheries follows the same decreasing trend as the fleet in general, but with FTE decreasing less the numbers employed, indicating a decreasing portion of part-time fishers, meaning more pure fishers doing just fishing. Vessel tonnage and power has decreased heavily but seems to have stabilised the last two years in the period.

The weight and value of landings for the large-scale vessels from 2008 to 2015 is more dependent on the quotas than the same measure for the small-scale. The landings weight has decreased substantially over the period due to reduced quotas. The landing values follows but with more variation due to changes in fish prices. Despite, the large-scale fleet seems to perform fairly well but the variation is large. Vessels fishing pelagic species and those that fish in the north Baltic for vendance roe are performing very well while those fishing for cod, northern prawn and Norwegian lobster are performing poorly. The large-scale fleet has decreased their operational costs and capital costs, especially energy (lower fuel prices). However, the decrease in landing incomes together with decrease in other incomes exceeds the gains from lower costs resulting in lower net profits in 2014 compared to 2013. But, higher net profits can be expected for 2015 since landing values has increased.

Sweden			2008	2009	2010	2011	2012	2013	2014	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		1,507	1,471	1,415	1,359	1,322	1,299	1,266		*-3%*	*-9%*
		SSF	819	818	776	754	754	729	731		*0%*	*-6%*
		LSF	329	314	288	277	265	255	247		*-3%*	*-14%*
Vessel tonnage	(thousand GT)		43.0	41.7	38.6	32.9	29.5	30.5	29.0		*-5%*	*-19%*
		SSF	3.8	3.8	3.6	3.5	3.6	3.5	3.3		*-3%*	*-7%*
		LSF	33.7	32.4	29.5	26.6	24.8	25.4	23.6		*-7%*	*-18%*
Engine power	(thousand kW)		211.8	207.9	196.4	178.1	169.1	170.7	163.9		*-4%*	*-13%*
		SSF	53.7	53.9	51.8	51.6	53.3	52.7	51.8		*-2%*	*-2%*
		LSF	128.9	125.1	113.0	104.6	98.5	98.0	92.5		*-6%*	*-17%*
Total employed	(person)		1,980	1,758	1,765	1,679	1,663	1,577	1,568		*-1%*	*-10%*
		SSF	1,073	929	951	925	920	902	914		*1%*	*-4%*
		LSF	907	829	813	754	743	675	655		*-3%*	*-17%*
FTE	(#)		1,133	1,019	990	974	942	886	845		*-5%*	*-15%*
		SSF	470.1	382.6	383.7	367.3	340.1	320.9	331.7		*3%*	*-12%*
		LSF	663	636	606	606	602	565	513		*-9%*	*-16%*
Days at sea	(thousand day)		102.7	96.6	85.1	83.7	78.9	77.7	77.7		*0%*	*-11%*
		SSF	66.5	63.4	56.2	53.6	49.3	48.1	50.4		*5%*	*-10%*
		LSF	36.3	33.2	28.9	30.1	29.6	29.6	27.3		*-8%*	*-13%*
Live weight of landings	(thousand tonne)		213.2	199.3	204.4	173.3	136.5	177.6	166.1		*-6%*	*-10%*
		SSF	6.6	6.6	5.4	5.1	5.2	4.5	4.7		*5%*	*-16%*
		LSF	206.6	192.7	199.0	168.2	131.3	173.1	161.4		*-7%*	*-10%*
Value of landings	(million €)		120.4	101.7	113.0	125.6	122.4	126.4	106.7		*-16%*	*-10%*
		SSF	17.2	14.2	14.0	14.7	16.0	14.9	14.3		*-4%*	*-5%*
		LSF	103.2	87.5	99.0	110.9	106.4	111.6	92.3		*-17%*	*-10%*
Revenue	(million €)		125.7	119.7	152.1	134.4	128.1	143.9	112.0		*-22%*	*-16%*
		SSF	21.2	16.8	17.0	20.7	19.0	17.6	16.2		*-7%*	*-13%*
		LSF	104.5	102.9	135.2	113.7	109.1	126.3	95.8		*-24%*	*-17%*
Gross Value Added	(million €)		61.3	51.8	79.9	62.1	53.8	71.5	53.9		*-25%*	*-15%*
		SSF	12.1	8.3	7.9	9.4	8.5	7.7	7.0		*-10%*	*-22%*
		LSF	49.2	43.4	72.0	52.7	45.3	63.8	46.9		*-26%*	*-14%*
GVA to revenue	(%)		48.8	43.2	52.5	46.2	42.0	49.7	48.1		*-3%*	*2%*
		SSF	57.2	49.5	46.5	45.5	44.6	44.0	43.0		*-2%*	*-10%*
		LSF	47.1	42.2	53.3	46.3	41.6	50.5	49.0		*-3%*	*5%*
Gross profit	(million €)		31.1	25.6	50.9	32.8	23.1	38.0	21.4		*-44%*	*-36%*
		SSF	1.3	-0.3	-1.8	-0.6	-1.3	-2.2	-4.0		*-82%*	*-385%*
		LSF	29.8	25.8	52.8	33.3	24.4	40.2	25.4		*-37%*	*-26%*
Gross profit margin	(%)		24.7	21.3	33.5	24.4	18.0	26.4	19.1		*-28%*	*-23%*
		SSF	6.1	-1.8	-10.9	-2.7	-6.9	-12.5	-24.6		*-96%*	*-413%*
		LSF	28.5	25.1	39.0	29.3	22.4	31.8	26.5		*-17%*	*-10%*
Net profit	(million €)		-5.9	-8.4	20.7	1.5	-0.2	10.3	-0.8		*-108%*	*-128%*
		SSF	-7.5	-8.6	-7.3	-5.8	-4.9	-6.4	-8.0		*-26%*	*-19%*
		LSF	1.6	0.4	28.0	7.4	4.7	16.8	7.3		*-57%*	*-26%*
GVA per FTE	(thousand €)		54.1	50.8	80.8	63.8	57.1	80.7	63.8		*-21%*	*-1%*
		SSF	25.8	21.8	20.6	25.7	25.0	24.1	21.1		*-13%*	*-12%*
		LSF	74.1	68.2	118.9	86.8	75.3	112.9	91.4		*-19%*	*2%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

United Kingdom

The number of vessels continues to fall steadily from 6 976 in 2008 to 6 552 in 2014, for active vessels there was a fall of 7% between these years. The fall in FTEs from 9 535 in 2009 – there was a decommissioning scheme in 2008 which distorts the impression for that year - to 7 909 in 2014 suggests that the cost of labour is continuing to cause substitution of capital for labour but the magnitude of the trend is not unduly strong. Total engine power and gross tonnage of the UK fleet was static with minimal changes in the overall make-up of the fleet.

When adjusted for inflation, the value of landings of the UK fleet has increased by 15% from 2008 to 2014. This is largely due to a large increase in mackerel landings as a result of increased quota and is in spite of a small decrease in average landed price for the species. For all four of the other top five species by value, total value of landings has increased since 2013 with all of these species achieving a higher average landed price. Preliminary data for 2015 indicate that the price for pelagic species continued to decrease (-20% for Atlantic mackerel between 2014 and 2015) even as volume of landings decreased whilst price for important demersal and shellfish species rose (Great Atlantic scallop +18%, haddock +8%).

While overall the fleet is profitable, with 18% of income being retained as net profit, there are considerable variations within the fleet segments. The large pelagic trawlers (Pelagic trawl > 40m) have generated most of this profit in 2014 once again partly due to a large increase in mackerel quota. Gross value added (GVA) increased by 30% up to €535 million although GVA as a percentage of revenue did not increased as dramatically (44% in 2013 to 48% in 2014) as both other income and income from leasing fishing rights fell by 6% and 49% respectively.

Based on impact assessments conducted, it seems likely that the upcoming landing obligation (ban on discarding) will have a significant impact on the economic performance of several sectors within the UK fishing fleet. A recent report commissioned by Seafish suggests that accessing additional quota will be required to enable some fleet segments to continue in business. Estimates indicate that quota-leasing costs have been increasing in recent years, and if this trend continues, it will reduce profitability for vessel businesses. There is no certainty that, once the landing obligation is implemented, quota leasing markets and international swap agreements will operate in the same manner as they have in recent years.

Small-scale fleet: In 2014, there were 3 138 active vessels belonging to the 'small-scale coastal fleet'. Estimates suggest the fleet remained profitable in 2014 with an increase in net profit of 33%. This is largely down to an increase in the average price achieved for a number of key species as value of landings increased by 20% even as the total volume landed was static.

The national fleet's slight increase in total FTE jobs from 2013 to 2014 was completely driven by a 9% increase in FTE jobs in the small-scale fleet.

Large-scale fleet: In 2014, there were 1 427 vessels belonging to the 'large-scale fleet'. This fleet was chiefly responsible for driving the large increase in profitability achieved by the UK fleet as a whole with weight and value of landings increasing by 22% even as effort (in terms of days at sea, fishing days, trips) remained static.

Wages and salaries of crew also increased but not by the same margin as revenue: this is indicative of the fact many of the crew working in this fleet are contractors rather than working for a crew share.

GBR			2008	2009	2010	2011	2012	2013	2014	2015	Trend	Δ 2014 to 2013	Δ 2014 to avg. 08-13
Total number of vessels	(#)		6,976	6,783	6,717	6,609	6,580	6,570	6,552	*6,553*		*0%*	*-2%*
		SSF	3,256	3,243	3,266	3,325	3,307	3,195	3,138	*3,119*		*-2%*	*-4%*
		LSF	1,643	1,595	1,508	1,473	1,455	1,435	1,427	*1,417*		*-1%*	*-6%*
Vessel tonnage	(thousand GT)		220.9	213.4	221.4	209.2	204.2	204.5	203.9	*203.0*		*0%*	*-4%*
		SSF	12.6	12.6	12.6	12.7	12.4	12.3	12.9	*13.7*		*4%*	*2%*
		LSF	186.0	180.6	192.1	177.7	178.1	173.1	170.9	*170.5*		*-1%*	*-6%*
Engine power	(thousand kW)		892.0	861.0	867.0	837.2	819.9	821.7	820.5	*812.0*		*0%*	*-3%*
		SSF	192.2	192.6	191.9	197.5	195.3	195.5	194.0	*191.6*		*-1%*	*0%*
		LSF	557.6	535.6	549.9	518.9	515.9	507.1	501.8	*495.5*		*-1%*	*-5%*
Total employed	(person)		12,614	12,212	12,703	12,405	12,445	12,235	11,845	*11,847*		*-3%*	*-5%*
		SSF	5,292	5,503	5,862	5,979	5,633	5,837	5,625	*5,569*		*-4%*	*-1%*
		LSF	7,322	6,709	6,841	6,426	6,812	6,398	6,220	*6,131*		*-3%*	*-8%*
FTE	(#)		8,698	9,535	9,244	8,978	8,593	7,800	7,909	*7,860*		*1%*	*-10%*
		SSF	1,744.7	1,954.0	1,993.2	2,065.7	1,784.9	1,788.2	1,953.9	*1,961.6*		*9%*	*3%*
		LSF	6,954	7,581	7,251	6,913	6,808	6,012	5,955	*5,782*		*-1%*	*-14%*
Days at sea	(thousand day)		456.2	433.4	429.2	420.0	411.6	401.3	428.0	*425.4*		*7%*	*1%*
		SSF	237.4	219.3	223.1	226.4	219.4	213.8	237.0	*240.1*		*11%*	*6%*
		LSF	218.7	214.1	206.1	193.5	192.2	187.5	191.1	*185.3*		*2%*	*-5%*
Live weight of landings	(thousand tonne)		575.0	582.8	608.4	603.7	634.4	628.5	758.9	*705.7*		*21%*	*25%*
		SSF	38.6	37.6	41.3	42.0	45.2	47.0	46.6	*42.7*		*-1%*	*11%*
		LSF	536.4	545.2	567.1	561.7	589.2	581.5	712.3	*663.0*		*22%*	*26%*
Value of landings	(million €)		932.8	880.3	938.7	1,026.8	1,010.6	887.9	1,068.8	*1,008.3*		*20%*	*13%*
		SSF	128.4	105.6	114.3	117.7	122.4	111.6	123.5	*128.6*		*11%*	*6%*
		LSF	804.3	774.7	824.4	909.1	888.3	776.3	945.3	*879.7*		*22%*	*14%*
Revenue	(million €)		961.4	903.0	959.1	1,055.7	1,064.9	937.1	1,118.0	*1,049.6*		*19%*	*14%*
		SSF	133.8	108.7	118.6	123.2	129.3	118.1	131.7	*135.5*		*12%*	*8%*
		LSF	827.6	794.3	840.5	932.5	935.6	819.1	986.3	*913.2*		*20%*	*15%*
Gross Value Added	(million €)		414.9	435.0	416.4	467.1	481.0	411.5	535.4	*506.3*		*30%*	*22%*
		SSF	73.6	61.1	62.2	58.0	61.5	56.7	65.8	*73.8*		*16%*	*6%*
		LSF	341.3	373.9	354.2	409.1	419.6	354.8	469.6	*445.4*		*32%*	*25%*
Gross profit	(million €)		160.3	197.6	190.7	225.0	227.8	197.6	281.7	*259.2*		*43%*	*41%*
		SSF	19.5	19.4	18.4	16.4	16.9	15.8	19.4	*26.9*		*23%*	*9%*
		LSF	140.8	178.3	172.3	208.6	210.9	181.8	262.3	*253.9*		*44%*	*44%*
Gross profit margin	(%)		16.7	21.9	19.9	21.3	21.4	21.1	25.2	*24.7*		*19%*	*24%*
		SSF	14.6	17.8	15.5	13.3	13.1	13.4	14.7	*19.9*		*10%*	*1%*
		LSF	17.0	22.4	20.5	22.4	22.5	22.2	26.6	*27.8*		*20%*	*26%*
GVA to revenue	(%)		43.2	48.2	43.4	44.3	45.2	43.9	47.9	*48.2*		*9%*	*7%*
		SSF	55.0	56.2	52.5	47.1	47.6	48.0	50.0	*54.5*		*4%*	*-2%*
		LSF	41.2	47.1	42.1	43.9	44.8	43.3	47.6	*48.8*		*10%*	*9%*
Net profit	(million €)		82.1	121.5	122.6	161.8	164.1	133.2	204.7	*175.2*		*54%*	*56%*
		SSF	7.9	8.6	10.5	9.3	7.2	5.9	7.8	*14.6*		*33%*	*-6%*
		LSF	74.8	113.5	112.1	151.7	156.4	127.2	197.2	*185.7*		*55%*	*61%*
GVA per FTE	(thousand €)		47.7	45.6	45.1	52.0	56.0	52.8	67.7	*64.4*		*28%*	*36%*
		SSF	42.2	31.3	31.2	28.1	34.4	31.7	33.7	*37.6*		*6%*	*2%*
		LSF	49.1	49.3	48.9	59.2	61.6	59.0	78.9	*77.0*		*34%*	*45%*

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

REPORT TO THE STECF

EXPERT WORKING GROUP OF THE 2016 ANNUAL ECONOMIC REPORT ON THE EU FISHING FLEET

EWG-16-03 & 16-07

ISPRA, ITALY, 25-29 APRIL & DUBLIN, IRELAND, 6-10 JUNE 2016

This report does not necessarily reflect the view of the STECF and the European Commission and in no way anticipates the Commission's future policy in this area.

3 EU FLEET OVERVIEW

Fleet Capacity

- In 2014, the EU fishing fleet numbered around 81 500 vessels with a combined gross tonnage (GT) of 1.6 million tonnes and engine power of 6.4 million kilowatts (kW).
- Based on DCF data, there were around 17 860 inactive vessels, bringing the total number of active vessels in 2014 to over 63 642.
- Of the active vessels, 73.8% were small-scale, 25.8% large-scale and 0.5% distant-water vessels.
- EU fleet capacity has continued to decrease steadily, with an average annual decrease of 2% in terms of vessel numbers and kW and 3% in terms of GT.

*Employment and wages** *figures exclude several EU MS high-sea fleets due to confidentiality*

- The EU fleet employed circa 150 thousand fishers (direct employment), corresponding to 111 000 FTEs.
- Average annual wage (including crew wages and unpaid labour) per FTE was estimated at €23.8 thousand, ranging from €99.5 thousand for Belgian fishers to €1.3 thousand for Cypriot fishers.

*Effort and landings** *figures exclude several EU MS high-sea fleets due to confidentiality*

- The EU fleet spent almost 6.9 million days at sea and consumed 2.3 billion litres of fuel.
- According to the DCF data, the EU fleet landed 4.9 million tonnes of seafood in 2014, amounting to a reported value of just under €7.4 billion.

*Revenue and Costs** economic indicators exclude Greece

- Total revenue (income from landings + other income) earned by the EU fleet in 2014 was estimated at €7.25 billion.
- As in previous years, the major cost items were labour and energy, estimated at 34% and 21% of the total operating costs, respectively.
- In 2014, the fleet had an estimated replacement value of almost €5.3 billion and in-year investments amounted to €469 million.

*Economic performance** economic indicators exclude Greece

- The amount of GVA, gross profit and net profit (all excl. subsidies and fishing rights) generated by the fleet in 2014 was just over €3.7 billion, €1.6 billion and €770 million, respectively.
- GVA to revenue was estimated at 51.5%; gross profit margin at 21.9%, and 10.6% of the revenue was retained as net profit.
- While overall the EU was profitable, nine out of the 22 MS evaluated generated net losses in 2014.

*EU Small-scale fleet (SSF)** economic indicators exclude Greece

- Comprised 46 971 vessels and covered 8% of the gross tonnage and 31% of the engine power.
- Employed 91 116 fishers or 60 565 FTEs (53% and 46% of the EU total, respectively), with an average annual wage per FTE of €14 500.
- Contributed 6% of the weight landed and produced 11% of the landed value.
- Generated €573 million in GVA, €161 million in gross profit and €41 million in net profit.
- In relative terms, this amounted to 63% GVA to revenue, 18% gross profit margin and 5% net profit margin.

*EU Large-scale fleet (LSF)** economic indicators exclude Greece

- Comprised 16 396 vessels and covered 74% of the gross tonnage and 62% of the engine power.
- Employed 75 488 fishers or 64 269 FTEs (44% and 49% of the total, respectively), with an average annual wage per FTE of €28 800.
- Contributed 79% to landings in weight and 69% to landings in value.
- Generated €2.6 billion in GVA, €1.1 billion in gross profit and €426 million in net profit
- In relative terms, this amounted to 51% GVA to revenue, 21% gross profit margin and 9% net profit margin.

*EU Distant-water fleet (DWF)**economic indicators exclude Greece

- Comprised 289 vessels and covered 18% of the total gross tonnage and 7% of the engine power.
- Employed 6 613 fishers or 7 384 FTEs (4% and 6%% of the total, respectively), with an average annual wage per FTE of €25 000
- Contributed 15% to landings in weight and 19% to landings in value.
- Generated €529 million in GVA, €348 million in gross profit and €278 million in net profit.
- In relative terms, this amounted to 43% GVA to revenue, 29% gross profit margin and 26% net profit margin.

Background

The EU overview chapter provides a summary of the structure and economic performance of the EU fishing fleet in 2014 and highlights some key trends over the period 2008-2015, based on data submitted by MS under the 2016 DCF fleet economic data call. All monetary values have been adjusted for inflation to 2015 constant prices and therefore data prior to 2015 may not necessarily equate to the data submitted by MS.

Due to incomplete data submissions from several MS, it was not possible to produce a complete trend analysis of the economic performance for the EU fleet over the period 2008-2014.

Croatia officially joined the EU in 2013 and so was only able to provide DCF data from the year 2012 onwards. Greece provided landings, effort and economic data only for 2014. More details on data availability are included in the chapter on quality and checking procedures (Section 7 and annex 3).

For analyses at the EU and MS levels, national level datasets were used, whereas fleet segment level data were used to compile results by main type of fishing activity (i.e. small-scale, large scale and distant-water fleets). Results for 2014 at the EU and fishing activity levels include all MS fleets unless otherwise stated.

Normalised trends in indicator values at the EU level for the period 2008-2014/15 are presented relative to 2008 (based on 2008=100) and unless otherwise stated, exclude Greece and Croatia and should not be considered as a complete EU overview. Furthermore, trends by main fishing activity are provided for selected MSs only.

While in theory, both the national and fleet segment datasets submitted by each MS should be internally consistent, this is not always the case. Discrepancies can arise for several reasons including missing or incomplete datasets at the fleet segment level. In some cases, such discrepancies occur due to commercial confidentiality issues. To avoid issues of commercial confidentiality, MS may combine such fleet segments into "clusters" and provide data at a more aggregated level. In other cases, commercially-sensitive data are not provided at the fleet segment level, but are included at the MS level, resulting in inconsistencies between the two datasets.

To provide the most reliable, complete and up-to-date information as possible, this chapter includes:

- A snapshot of the EU fishing fleet in 2014, by Member State and main type of fishing activity, i.e. small scale, large scale and distant water fleets (also see data summary tables);
- A section with projected figures for 2015 and forecast results for 2016 on the economic performance of MS fleets where possible (based on fleet segment level data and using the BEMEF model);
- A short description of the main drivers and trends that may have contributed to the economic performance of the EU fleet over recent years;
- Summary data tables by MS and main fishing activity with percentage change relative to 2013

The three main types of fishing activity used in the AER are defined as:

- ***Small-scale coastal fleet (SSF)*** - includes all vessels under 12m using static gears. According to the DCF gear definitions these include: 'drift and/or fixed netters', 'pots and/or traps', 'hooks', 'passive gears only', 'other passive gears', 'polyvalent passive gears only', 'active and passive gears'.

- ***Large-scale fleet (LSF)*** - segment includes all vessels over 12 meters using static gears and all vessels using towed gears. According to the DCF gear definitions these include: 'dredgers', 'demersal trawlers and/or demersal seiners', 'other active gears', 'polyvalent active gears only', 'purse seiners', 'beam trawlers', 'pelagic trawlers'.

- ***Distant-water fleet (DWF)*** - includes EU registered vessels over 24 metres operating in 'other fishing regions' including EU outermost regions.

3.1 Overview of the EU Fishing Fleet in 2014

Fleet Capacity and structure

According to DCF data, the EU fleet in 2014 comprised 81 503 vessels: 63 642 active and 17 861 inactive vessels (22% of the EU fleet), with a combined gross tonnage (GT) of 1.6 million tonnes and engine power of 6.4 million kilowatts (kW) (Figure 3.1, Table 3.1 and Table 3.4).

Greece possessed the largest active fleet in number (14 755 vessels), accounting for 18% of the entire EU fleet, followed by Italy with 12 689 vessels (16%), Spain with 9 921 vessels (12%) and Portugal with 8 256 vessels (10%) (Table 3.1).

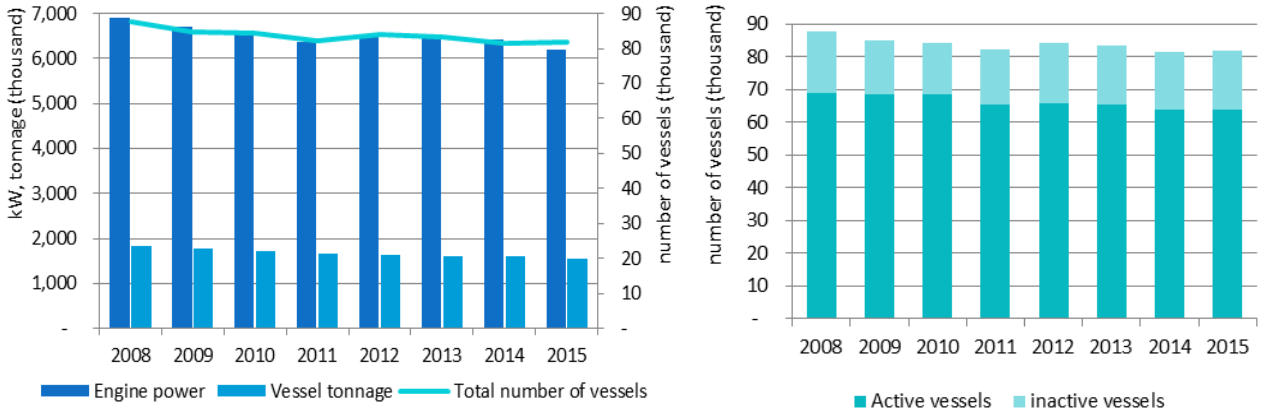
The Spanish fishing fleet was the largest in terms of tonnage (24% of the EU total), followed by the UK (13%), French (11%) and Italian (10%) fleets (Table 3.1).

In terms of engine power, the Italian fleet covered 16% of the total EU fleet kW, followed by France (16%) and Spain (13.5%) (Table 3.1).

Belgium, with 80 vessels, four of which were inactive in 2014, possessed the smallest fleet in number. Slovenia, with 170 registered vessels, possessed the lowest gross tonnage and Romania, with 158 vessels, the lowest engine power (Table 3.1).

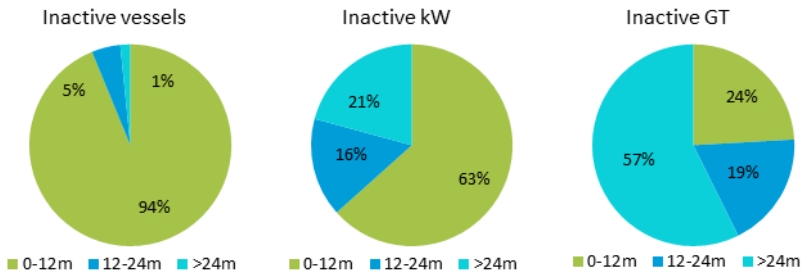
Inactive vessels represented almost 22% of the total fleet in number, 9% of the gross tonnage and 13% of the engine power, indicating that most of the inactive capacity is small-scale in nature (Table 3.4). In fact, 94% of the inactive vessels were under 12m in length while vessels between 12 and 24m accounted for 5% and vessels over 24m less than 1% of the inactive fleet (Figure 3.2).

With 4 311 inactive vessels, Portugal possessed the largest latent capacity (24% of the EU inactive fleet and more than half of the Portuguese fleet in number), followed by the UK with 1 987 vessels (11% of the EU inactive fleet in number). In terms of gross tonnage, the Spanish fleet possessed the largest inactive GT (19% of the EU inactive fleet) while the French fleet held the most inactive engine power (16% of the inactive kW) (Table 3.4).



Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

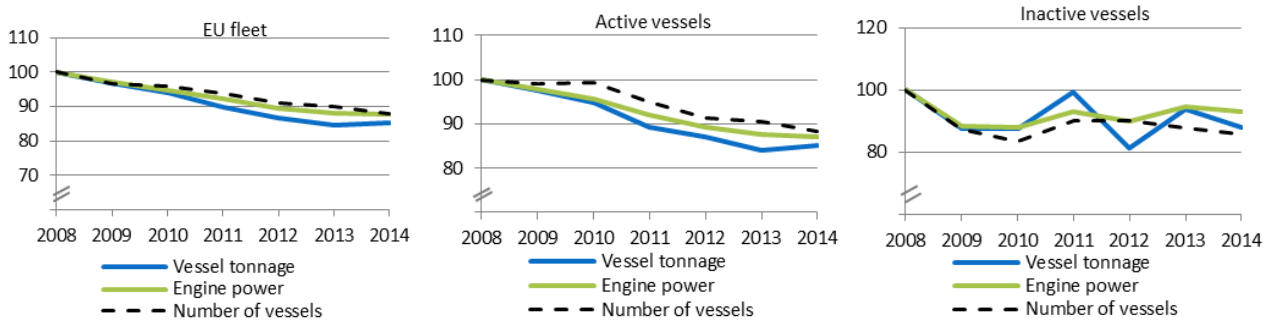
Figure 3.1 Left: EU total fleet capacity in number, engine power (kW) and gross tonnage; Right: Fleet capacity in number by active and inactive vessels (2008-2014).



Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.2 EU inactive fleet capacity by vessel length groups, 2014

Overall, the capacity of the EU fleet (excluding Croatia) decreased steadily between 2008 and 2014; on average 2% in number and engine power (kW) and 3% in tonnage (GT) p.a. Since 2008, the EU fleet declined 12% in number and kW and 15% in GT. On average, the number of inactive vessels also decreased 2% p.a. and 1% in kW and GT (Figure 3.3).



Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.3 Variations in fleet capacity for the EU fleet, active fleet and inactive vessels (based on 2008 = 100)

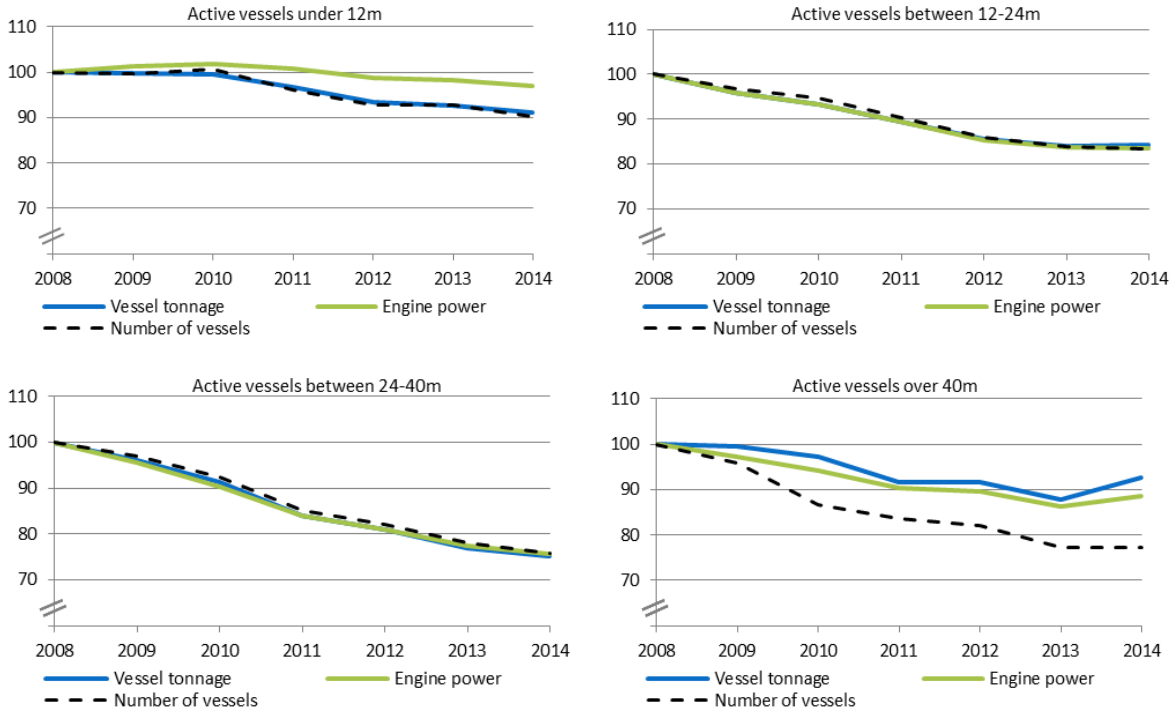
Figure 3.4 provides variation in capacity over the period 2008 and 2014 for the active fleet (excluding Croatia) by vessel length groups.

Active vessels under 12m decreased on average 1.7% p.a. in number, 0.5% in kW and 1.5% in GT (or 9.8%, 3% and 8.8%, respectively since 2008).

The decrease for active vessels between 12-24m was on average 3% p.a. in number and GT and 2.8% in kW (or 17% and 16%, respectively since 2008).

Active vessels between 24-40m decreased the most, on average 4.5% p.a. in number and kW and 4.7% in GT (or 24% and 25%, respectively since 2008).

For active vessels over 40m, the decreased was on average 4.1% p.a. in number, 1.9% in kW and 1.2% in GT (or 23%, 11.4% and 7.4%, respectively since 2008).



Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

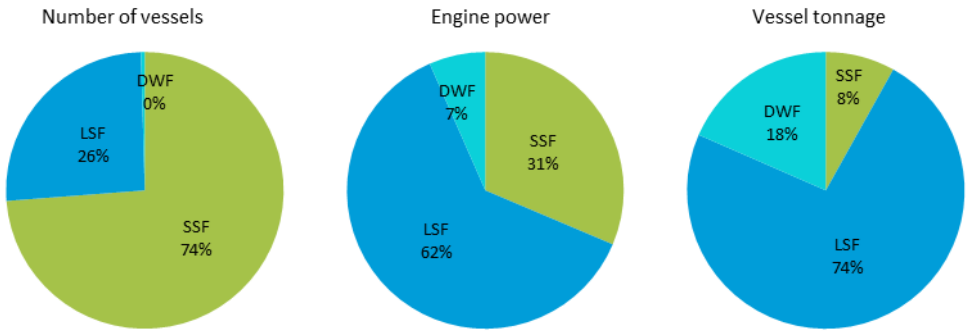
Figure 3.4 Variation in fleet capacity for active vessels by length groups (based on 2008 = 100)

Capacity and structure by scale of fishing activity

A comparison of the active fleet by main fishing activity indicates that the small-scale fleet (SSF) comprised 46 971 vessels, 74% of the total EU fleet in number, 8% in gross tonnage (121 thousand GT) and 31% in engine power (1.76 million kW) (Table 3.6, Figure 3.5).

The distant-water fleet (DWF), although comprising less than 1% of the total number of vessels (n=289), represented 18% of the total gross tonnage (276 thousand GT) and 7% of the engine power (368 thousand kW) (Table 3.7, Figure 3.5).

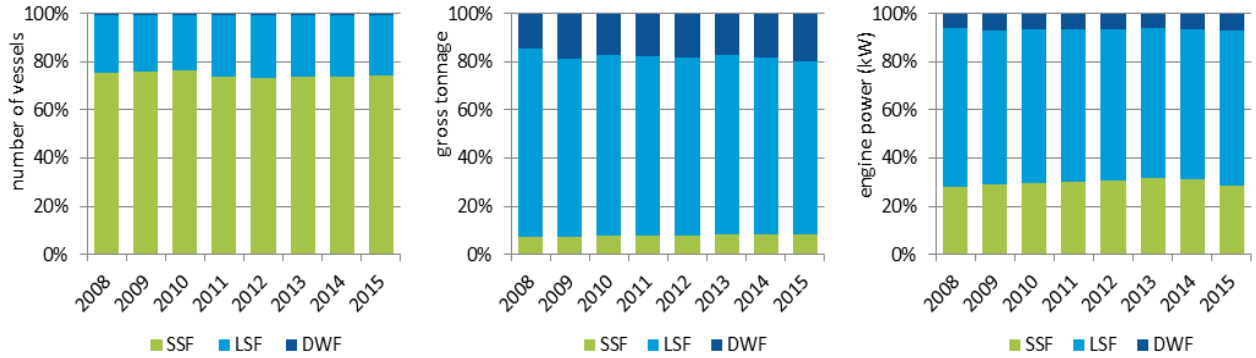
The large-scale fleet (LSF) represented the remaining almost 26% of the fleet in number (16 396), 74% of the gross tonnage (1.1 million GT) and 62% of the engine power (3.5 million kW) (Table 3.4, Figure 3.5).



Data source: EU Fleet register and Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.5 EU fleet capacity by main type of fishing activity, as a percentage of the EU fleet: 2014.

Composition of the EU fleet by main fishing activity has remained rather stable over the period 2008-2014 (Figure 3.6). On average, the SSF decreased 1.6% p.a. in number, 1% in GT and increased slightly (0.4%) in kW; the LSF decreased 0.1% p.a.in number, 2.6% in kW and 3.2% in GT; the DWF decreased 3.9% p.a. in number and increased 1.5% in kW and 2.6% in GT (Figure 3.6).



Data source: EU Fleet register and Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.6 Trends on the EU fishing fleet capacity by main type of fishing activity: 2008-2015.

Employment and average wage

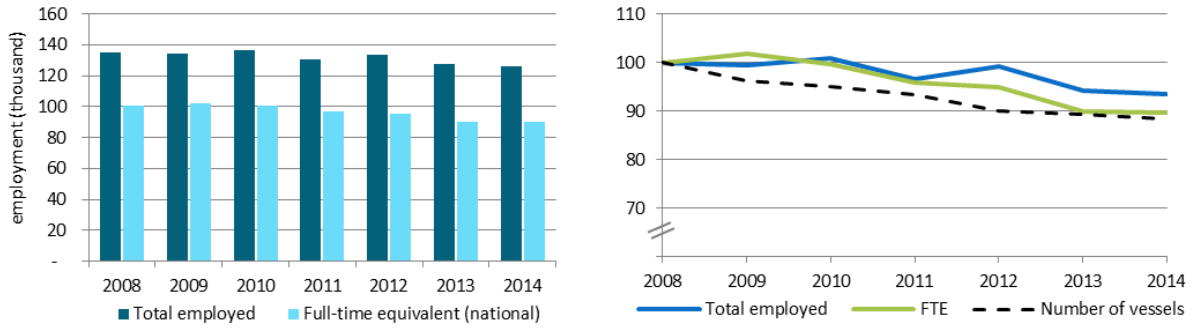
In 2014, 149 710 fishers were directly employed in the EU fishing fleet, corresponding to 111 141 FTEs (including Greece,). Five MS fleets employed 75% of the EU total, with the Spanish fleet employing 22% of the total, followed by the Italian (18%), Greek (15.5%), Portuguese (11%) and UK (8%) fleets.

In terms of FTEs, the same five MS fleets employed 78% of the EU total, with the Greek fleet just surpassing the Italian fleet, indicating more part-time fishers in Italy (Table 3.3, Figure 3.7).

Total employed and employment in FTE (excluding Greece and Croatia) decreased on average 1% and 1.8% p.a. (or overall since 2008 by 6% and 10%, respectively).

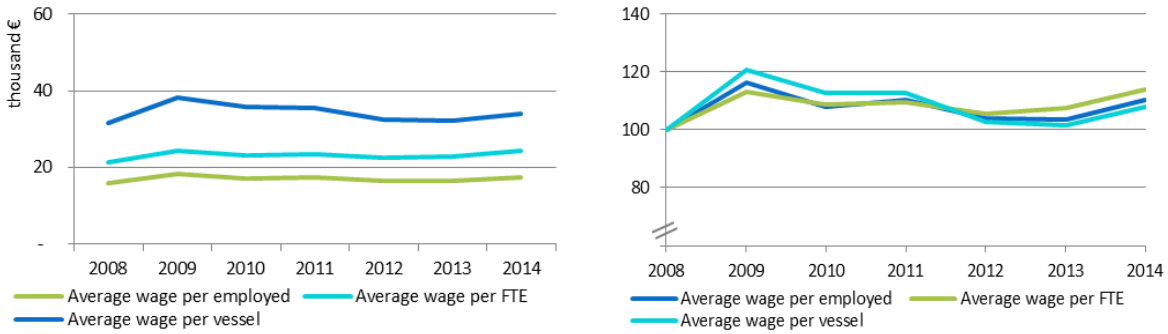
On the other hand, average wage per FTE, estimated at €23.8 thousand in 2014, increased on average 2.4% p.a. representing an overall increase of 14% since 2008. Average wage per employed increased almost 2% p.a. on average (or 10% since 2008) and average wage per vessel increased 1.7% on average (or 8% relative to 2008) (Figures 3.7 and 3.8).

At €99.5 thousand, Belgian (FTE) fishers earned the highest wages on average, followed by the Danish fishers (€66.2 thousand) and then the Dutch fishers (€64.1 thousand). On the other hand, the Cypriot fishers received the lowest average wage at €1.3 thousand, followed by the Bulgarian (€5.1 thousand), Maltese (€5.5 thousand) and Polish (€6.1 thousand), fishers (Table 3.3).



Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.7 Left: EU fleet employment (in total employed and FTE) and right: variation in employment, 2008-2014 (based on 2008=100) (excluding Greece)



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.8 Left: average wage in the EU fleet and Right: variation in average wage 2008-2014.

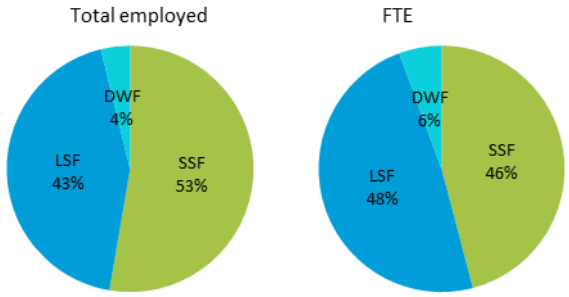
Employment and average age by scale of fishing activity

Including Greece, the small-scale fleet employed 91 116 fishers, equating to 53% of the number of employed and corresponding to 60 565 FTEs (46% of total) in 2014 (Table 3.6). The large-scale fleet employed 75 488 fishers (43%), corresponding to 64 269 FTEs (48%) (Table 3.9), while the distant-water fleet employed 6 613 fishers (4%), corresponding to 7 384 FTEs (or 6% of the total) (Table 3.12, Figure 3.9).

Average wage per FTE (excluding Greece) in 2014 for the small-scale fleet was estimated at €14 500 (Table 3.8). The same indicator for fishers operating in the large-scale fleet was €28 800 (Table 3.11) and €25 000 for fishers in the distant-water fleet (Table 3.14).

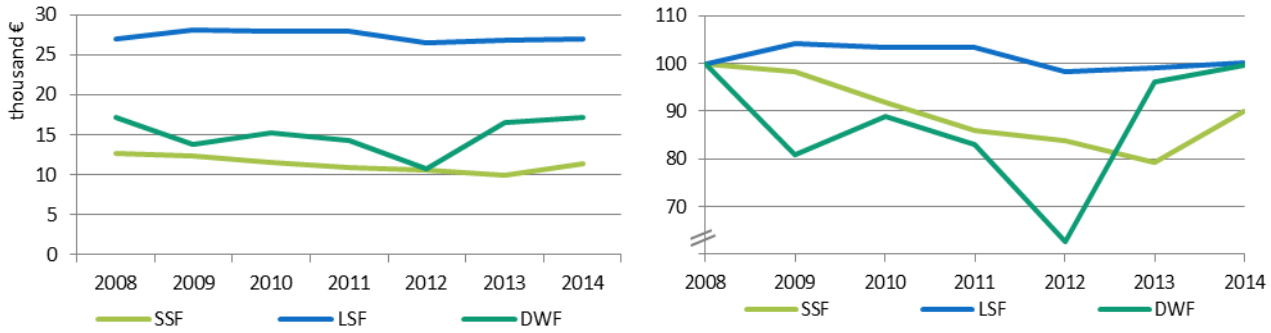
According to the data, crew engaged in the French distant-water fleet received by far the highest salary in the segment, earning on average €75 500 (Table 3.14). Among those engaged in the large-scale fleet, Belgian fishers received on average the highest salary (€99 530) followed by German fishers (€69 670) (Table 3.11). The highest earners engaged in the small-scale were the Danish (€59 200) and French (€40 200) fishers (Table 3.8).

Average wage per FTE in the SSF decreased on average 1.5% p.a. (or 10% compared to 2008) while in the LSF and DWF average wage per FTE increased on average 0.1% and 3% p.a. (Figure 3.10).



Data source: EU Fleet register and Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.9 Employment by fishing activity as a percentage of the EU fleet: 2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.10 Left: average wage per FTE by main fishing activity and Right: variation in average wage per FTE, 2008-2014 (based on 2008=100)

Fishing effort and fuel consumption

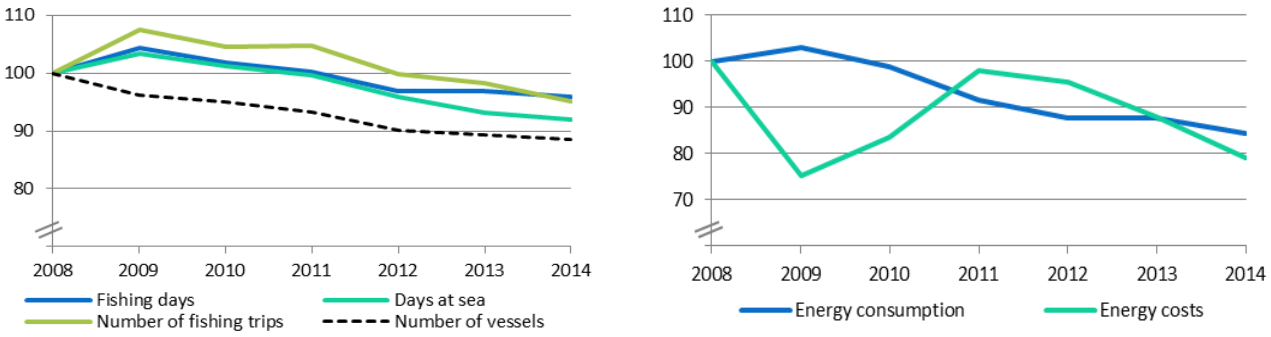
Effort in days at sea reported for the EU fleet (including Greece) reached almost 6.9 million days in 2014 (just over 4.9 million days when excluding Greece). Energy consumed by the EU fleet in 2014 was reported at 2.3 billion litres, a decreased of 3% compared to 2013 (Table 3.1).

In 2014, Greece reported by far the highest number of sea days, amounting to 1.9 million days (28% of the total), followed by Italy (1.4 million), Spain (1.1 million), and then France (465 thousand days). Together, these four MS accounted for 72% of the total registered days at sea in 2014 (Table 3.1).

According to the data available, the Spanish fleet consumed the most (641 million litres), accounting for almost 28% of total fleet fuel consumption, followed by the French (323 million litres) and Italian (304 million litres) fleets (Table 3.1).

Data on the number of days at sea revealed a declining trend although with some variation (-1.3% p.a. on average over the period; -8% compared to 2008) (Figure 3.11).

Energy consumption decreased almost continuously since 2009 (-3% on average or -16% compared to 2008). Energy costs decreased in 2009, increasing again between 2010 and 2011-2012, steadily declining since. On average, energy costs declined 3% p.a., or 20.9% compared to 2008 (Figure 3.11).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.11 Variation in effort and fuel consumption and costs for the period 2008-2014 (based on 2008=100)

The map in Figure 3.12 shows the distribution of effort (in days at sea) deployed by the EU fleet in the main fishing areas around Europe, highlighting that most of the effort is concentrated in the Mediterranean Sea, and in particular around Greece and in the Adriatic. A significant amount of effort is also deployed along the coast of Portugal. MS fishing fleets in these areas are dominated by small-scale vessels.

Lower levels are seen in the Baltic Sea, Black Sea and further offshores areas in the North Atlantic.

Note, that effort for the Baltic Sea and Mediterranean & Black Sea regions are provided at the FAO fishing area level 4 and GFCM GSA, respectively, whereas in the Atlantic region, effort is provided at a more aggregated level (FAO fishing area level 3).

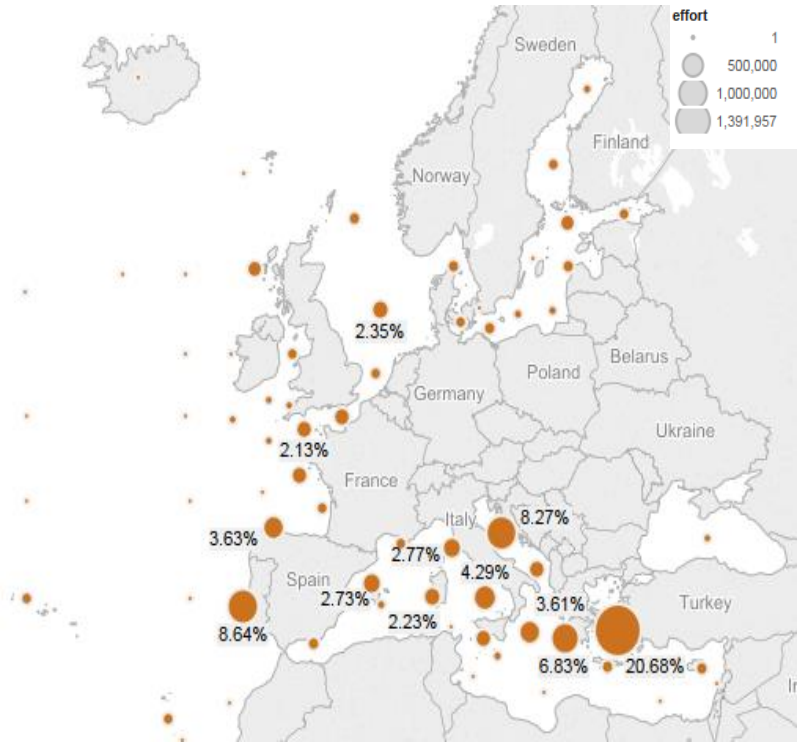
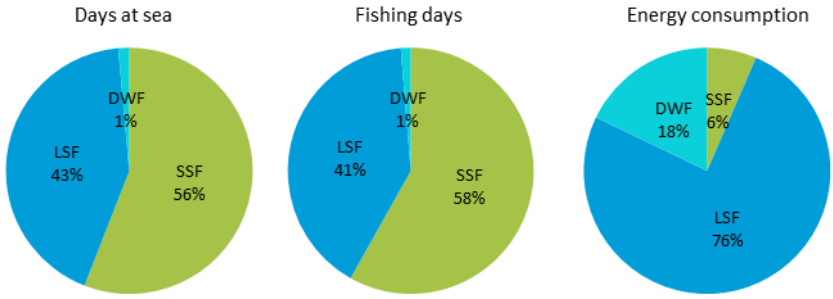


Figure 3.12 Effort in days at sea (or fishing days if DAS are missing) by FAO fishing division (sub-region), highlighting areas contributing more than 2% to the total effort in 2014.
Data source: data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)

Fishing effort and fuel consumption by scale of fishing activity

The small-scale fleet deployed more than half of the total fishing effort of the EU fleet in days at sea (56%) in 2014 but consumed 6% of the fuel.

Conversely, the distant-water fleet deployed 1% of the total effort but consumed 18% of the energy. The large-scale fleet consumed 76% of the fuel for 43% of the effort in sea days (Figure 3.13).



Data source: EU Fleet register and Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.13 Effort by fishing activity as a percentage of the EU fleet: 2014.

The maps in figure 3.14, show the distribution of effort (in days at sea) deployed by main type of fishing activity. Again, effort is concentrated in the Mediterranean Sea, in particular for the small-scale fleet and to a lesser extent, the large-scale fleet. Significant amount of effort by the large-scale fleet is also deployed in the North Sea, Channel area and Western waters.

The distant-water fleet generally operates in areas of the Indian and Atlantic Oceans, following the migratory routes of the tuna-like species. The DWF deploys most of the effort in the Central and South Atlantic, along the east coast of Africa and eastern coast of South America.

The EU has currently 15 active sustainable fisheries partnership agreements in force with third countries. In the Central and South Atlantic with Cape Verde, Ivory Coast, Gabon, Liberia, Sao Tomé and Principe, Senegal Guinea-Bissau, Mauritania, and Morocco. A significant amount of fishing effort is also deployed in the Indian Ocean, mainly by large Spanish and French tropical purse seiners targeting tunas, as well as some activity around the French outermost regions of Mayotte and Reunion islands. In the Indian Ocean, the EU has fishing agreements with Comoros, Madagascar, Mauritius and Seychelles.

In the Pacific Ocean, Spanish purse seiners over 40 m and Portuguese longliners over 40 m target swordfish and blue shark.

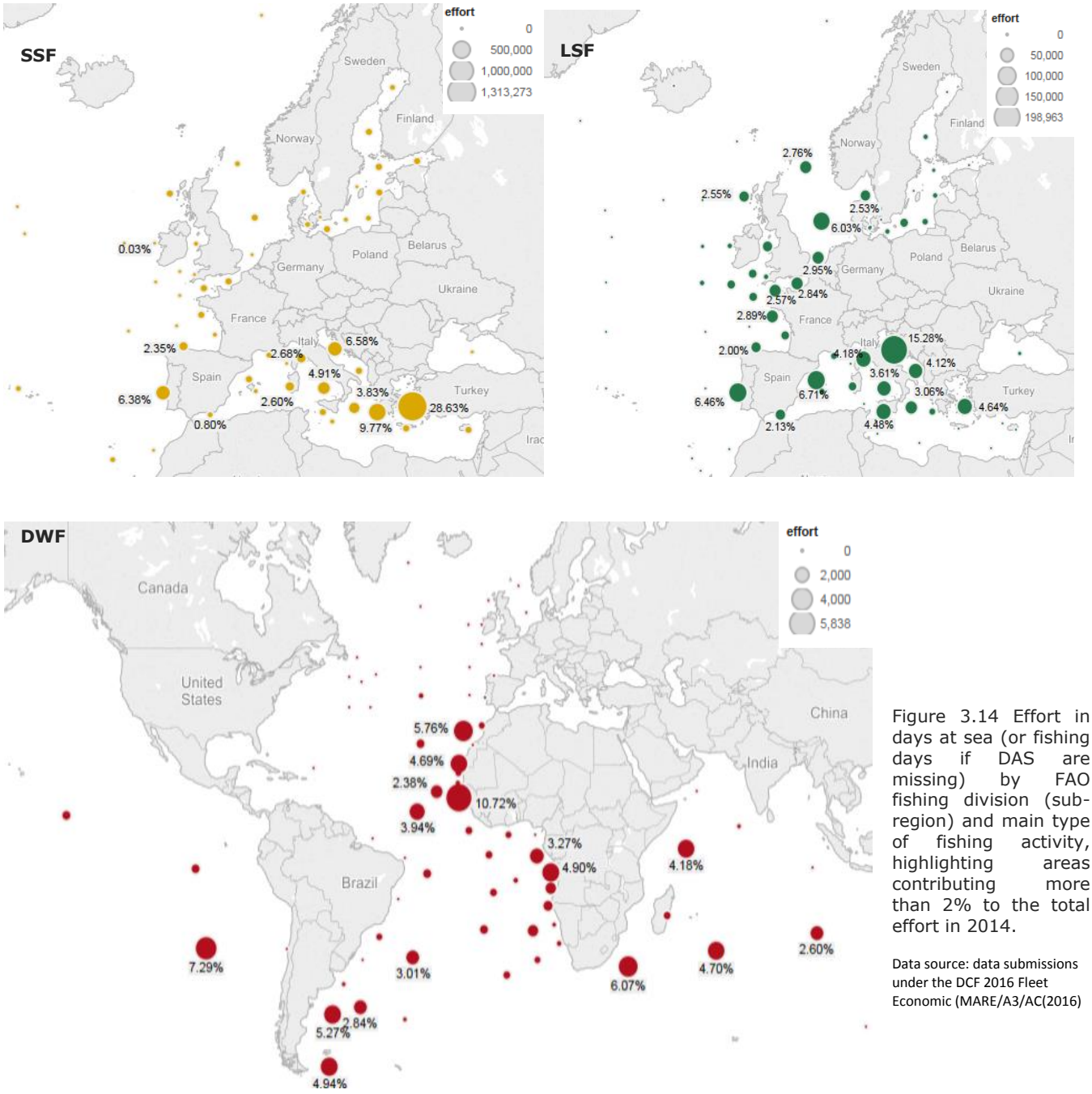


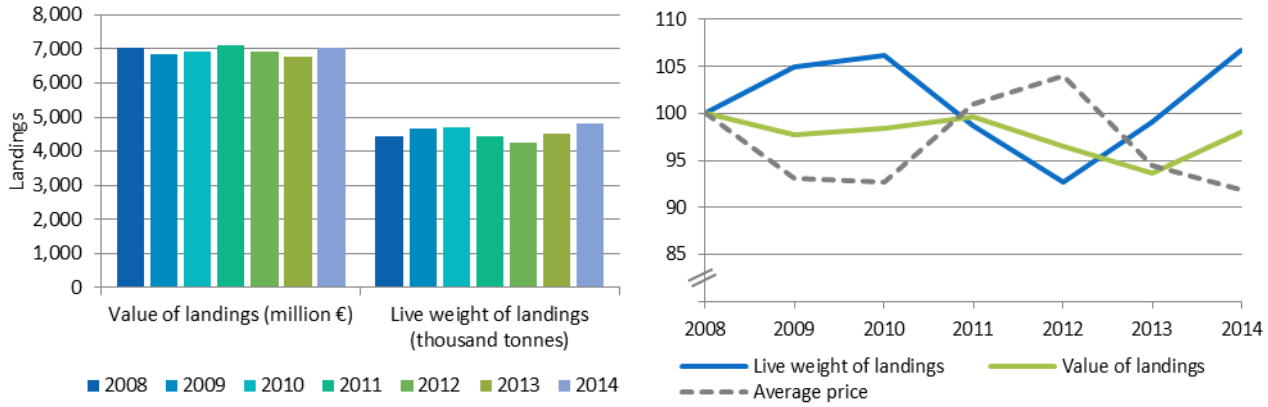
Figure 3.14 Effort in days at sea (or fishing days if DAS are missing) by FAO fishing division (sub-region) and main type of fishing activity, highlighting areas contributing more than 2% to the total effort in 2014.

Data source: data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)

Landings

According to DCF data and including Greece, the EU fleet landed 4.94 million tonnes of seafood in 2014, while the amount of landed value reported corresponded to over €7.36 billion (Table 3.1, Figure 3.15).

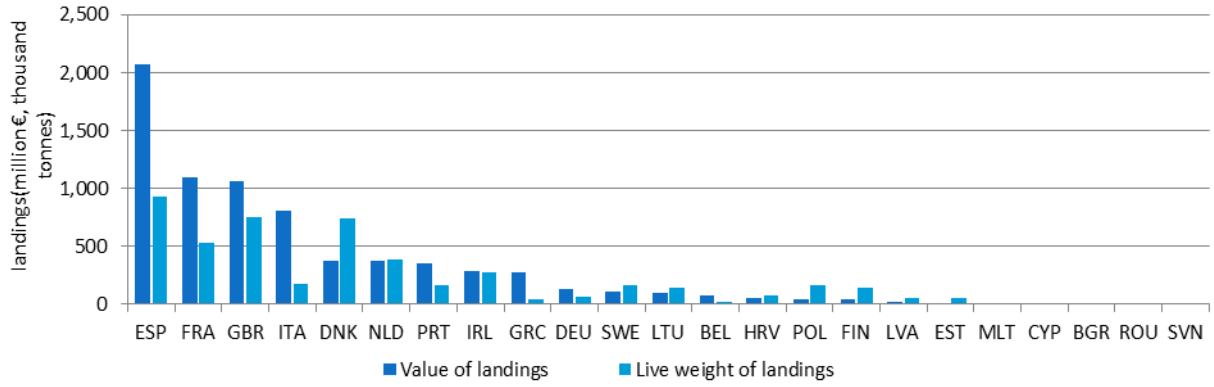
Value of landings increased by 7.8% compared to 2013, reaching 2008 reported figures. Weight of landings increased 8% compared to 2013, or 11% compared to 2008. Real fish prices have oscillated over the period, but in 2014 were 11% lower than prices reported in 2008 (Figure 3.16).



Data source: data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.15 Left: Trends in landings in weight and value by the EU fleet and Right: variation in landings and average price for the period 2008-2014 (based on 2008=100)

The Spanish fleet landed the most in weight, amounting to 19% of the total landings reported, followed by the UK (15.3%), Danish (15%), and French (11%) fleets. In terms of landed value, the Spanish fleet also landed the most (28% of the total), followed by France (15%), the UK (14.5%), Italy (11.1%) and Denmark (5%) (Table 3.1, Figure 3.16).



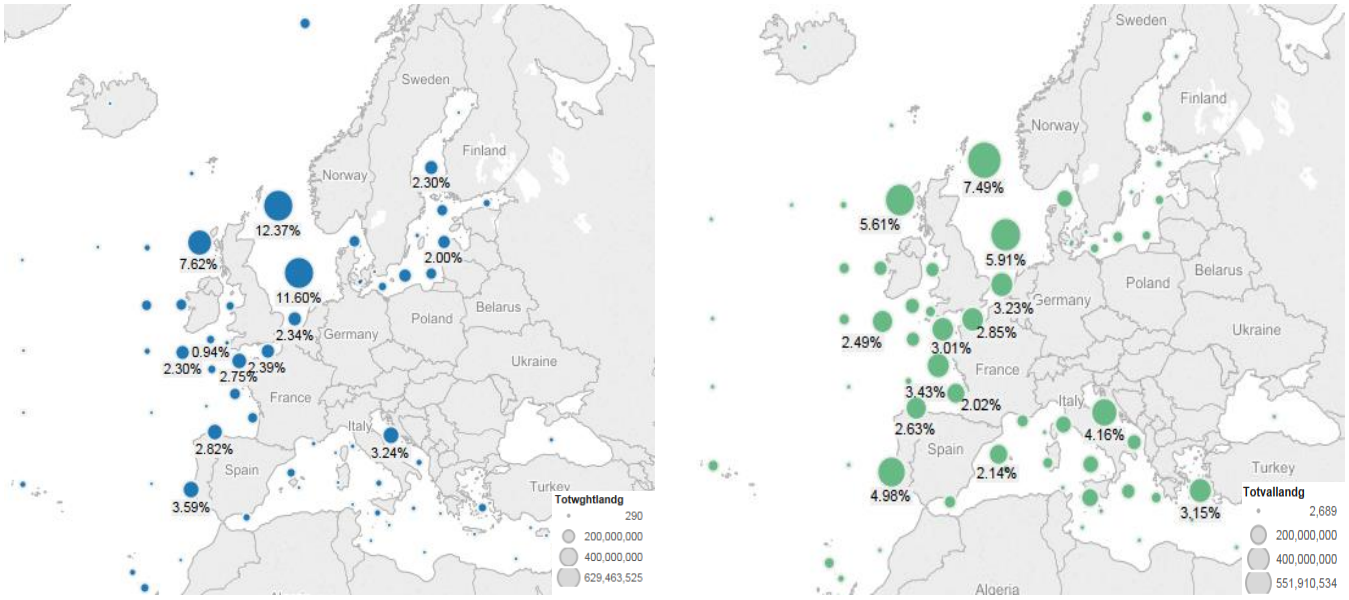
Data source: data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.16 Landings in weight and value by MS: 2008-2014

The maps in figure 3.17 show the distribution of landings in weight and value. Most of the landings in weight come from the North Atlantic, in particular from the North Sea, followed by the North of the Irish Sea, Western waters, Channel area and Baltic Sea. Only the Adriatic Sea area can be highlighted for the Mediterranean Sea.

On the other hand, when focusing on the value of landings, differences are less evident. The value of landings is still higher in the North Sea, North of the Irish Sea and Western waters; but the Adriatic Sea, Balearic Sea and Aegean Sea in the Mediterranean Sea follow them quite close.

This can be explained by the higher fish prices obtained in the Mediterranean Sea.

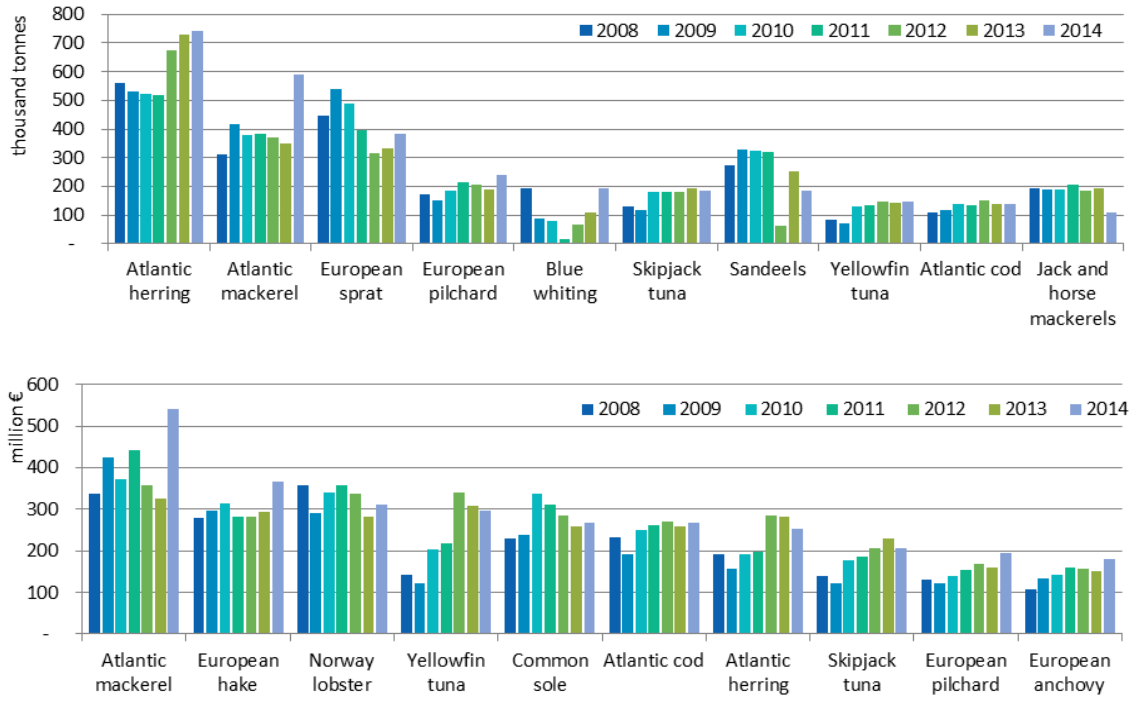


Data source: data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)

Figure 3.17 Landings by the EU fleet by FAO fishing division (sub-region), highlighting areas contributing more than 2% to the total landings in weight (left) and value (right), in 2014

Top species and average prices

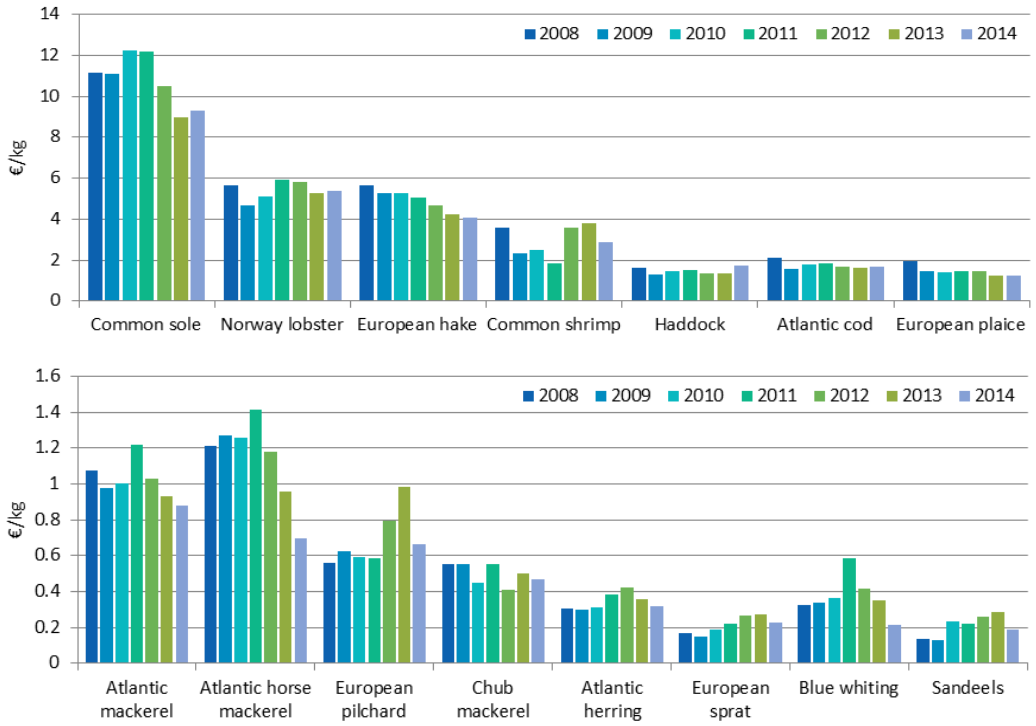
At 741 thousand tonnes, herring was the most important species in terms of weight landed in 2014, followed by Atlantic mackerel (591 thousand tonnes) and then European sprat (383 thousand tonnes). At €542 million, landings of Atlantic mackerel generated the most landed value, followed by European hake (€366 million), Norway lobster (€310 million) and then yellowfin tuna (€297 million) (Figure 3.18).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.18 Trends of top ten species landed by the EU fleet in weight (top) and in value (bottom) in 2014.

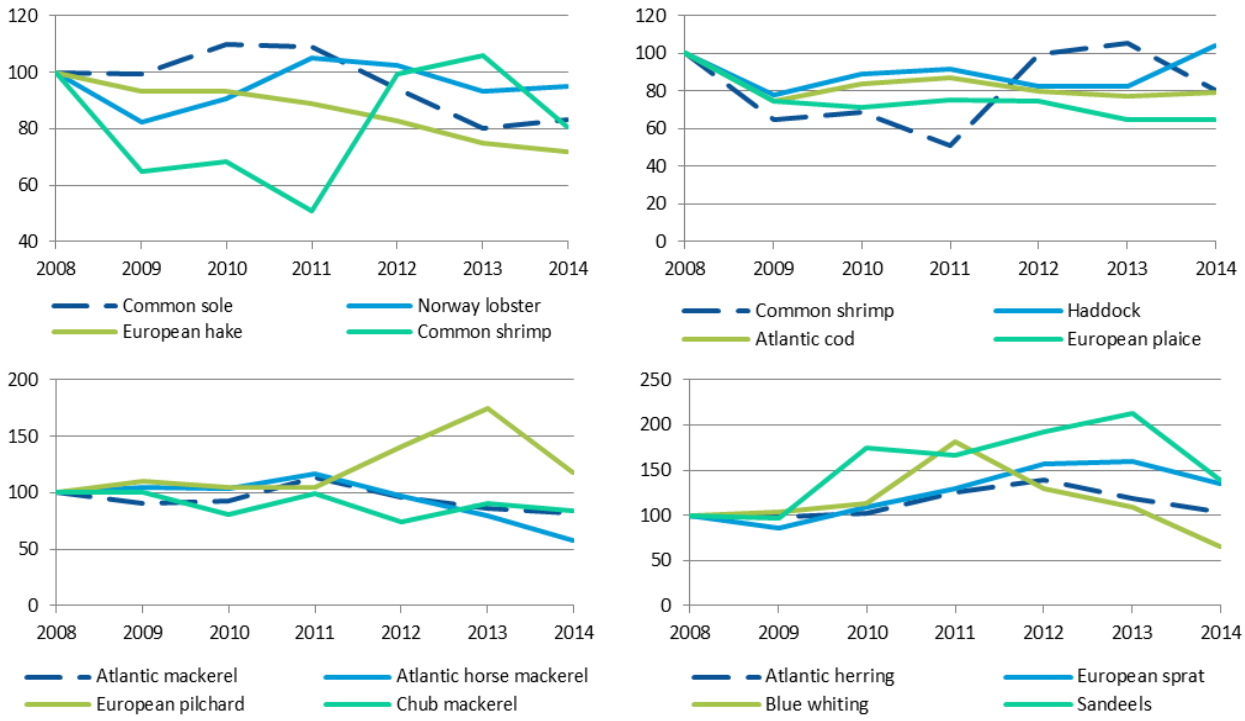
At €9.3 per kg, common sole achieved by far the highest average first-sale price of the top ten species in 2014, followed by Norway lobster at €5.4 per kg, European hake €4.1 per kg, common shrimp at €2.9 per kg and haddock at €1.7 per kg (Figure 3.19).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.19 Average real price of the top species landed in terms of weight and/or value in 2014.

The average landed price obtained for several key species targeted by the EU fleet decreased between 2011 and 2014, for example, Atlantic mackerel and horse mackerel, European hake, Atlantic herring and blue whiting. Conversely, the average landed price for common sole and Norway lobster increased 3% and 2%, respectively, compared to 2013, while the highest proportional increase was for haddock (26%). Prices for blue whiting and sandeel decreased 39% and 35%, respectively compared to 2013 (Figure 3.20).

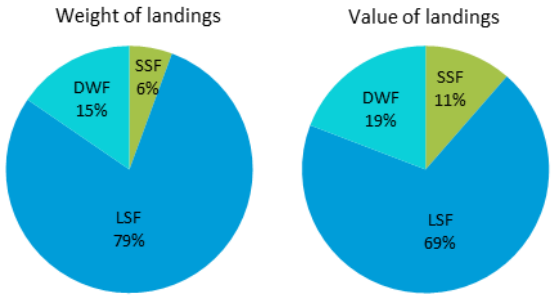


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.20 Variation in average price of the top species landed in terms of weight and/or value, 2008-2014 (based on 2008=100).

Landings by scale of fishing activity

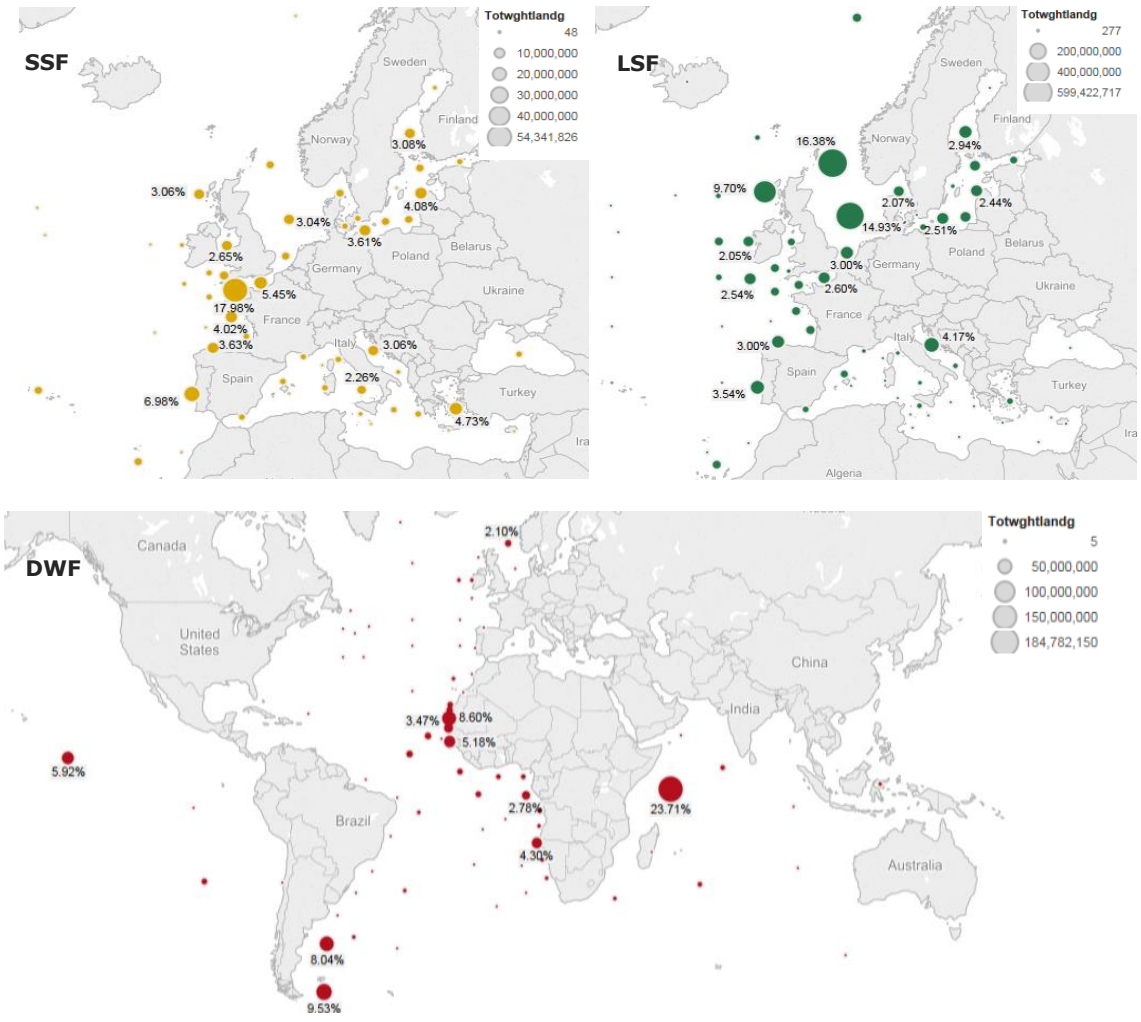
The large-scale fleet contributed 79% to landings in weight and 69% to landings in value. The small-scale fleet (excl. Greece) landed 6% of the weight and produced 11% of the landed value, indicating that when compared to its larger counterparts, the small-scale fleet on average obtains higher first sale prices (Figure 3.21).



Data source: EU Fleet register and Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

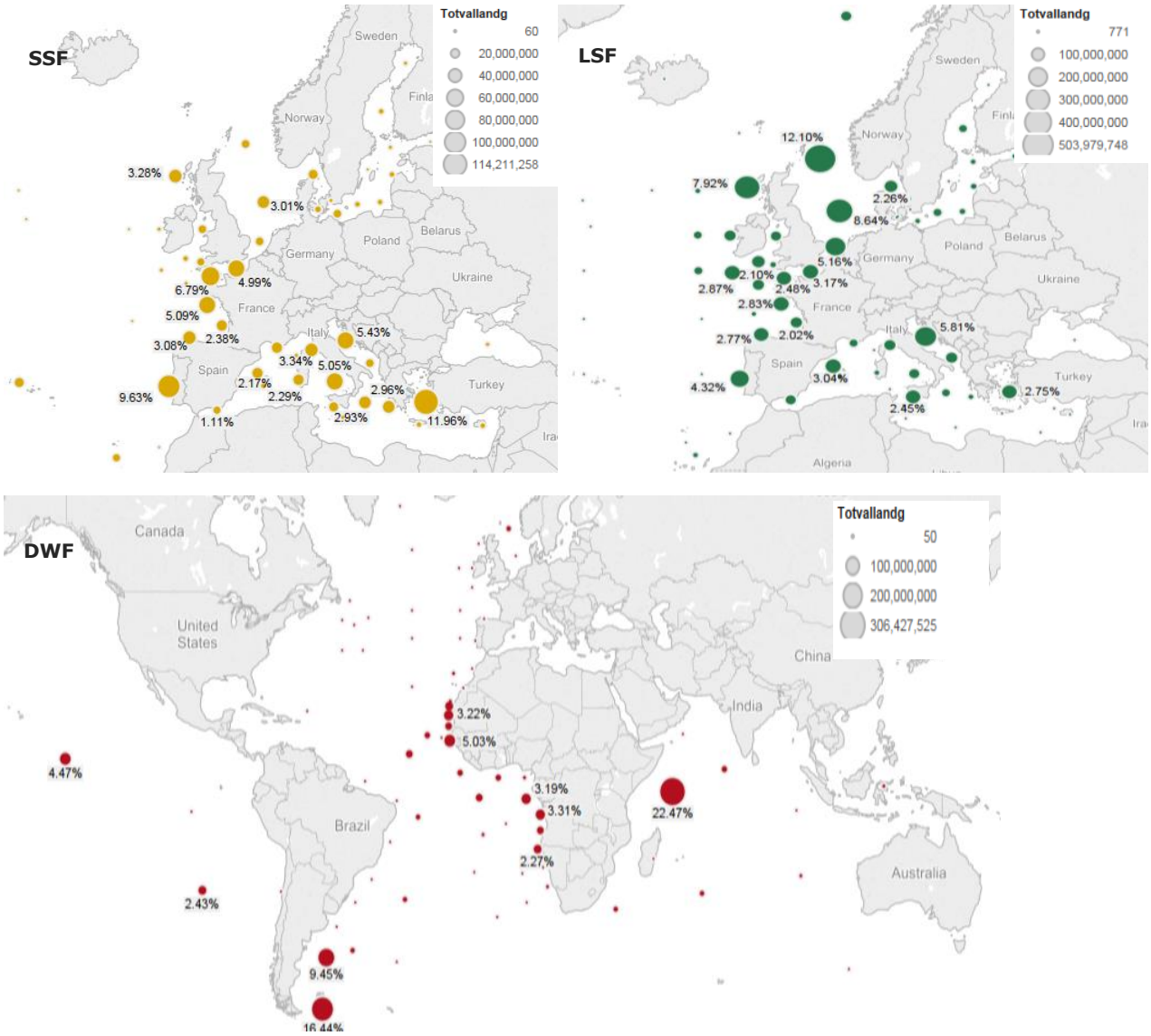
Figure 3.21 Landings by fishing activity as a percentage of the EU fleet: 2014.

The maps in Figures 3.22 and 3.23, show that in general, vessels less than 12 metres in length catch lower quantities and mainly in EU coastal and island regions. Higher SSF landings in value are obtained in the Mediterranean Sea and along the coasts of France and Portugal, while lower landings in weight and value occur in the Baltic and North Seas. Larger vessel landings in weight are taken mainly from the Baltic and North Sea, with the North Sea being more important in terms of landed value.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.22 Landings in weight by FAO fishing division (sub-region) and fishing activity, highlighting areas contributing more than 2% to the total landings in weight in 2014



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

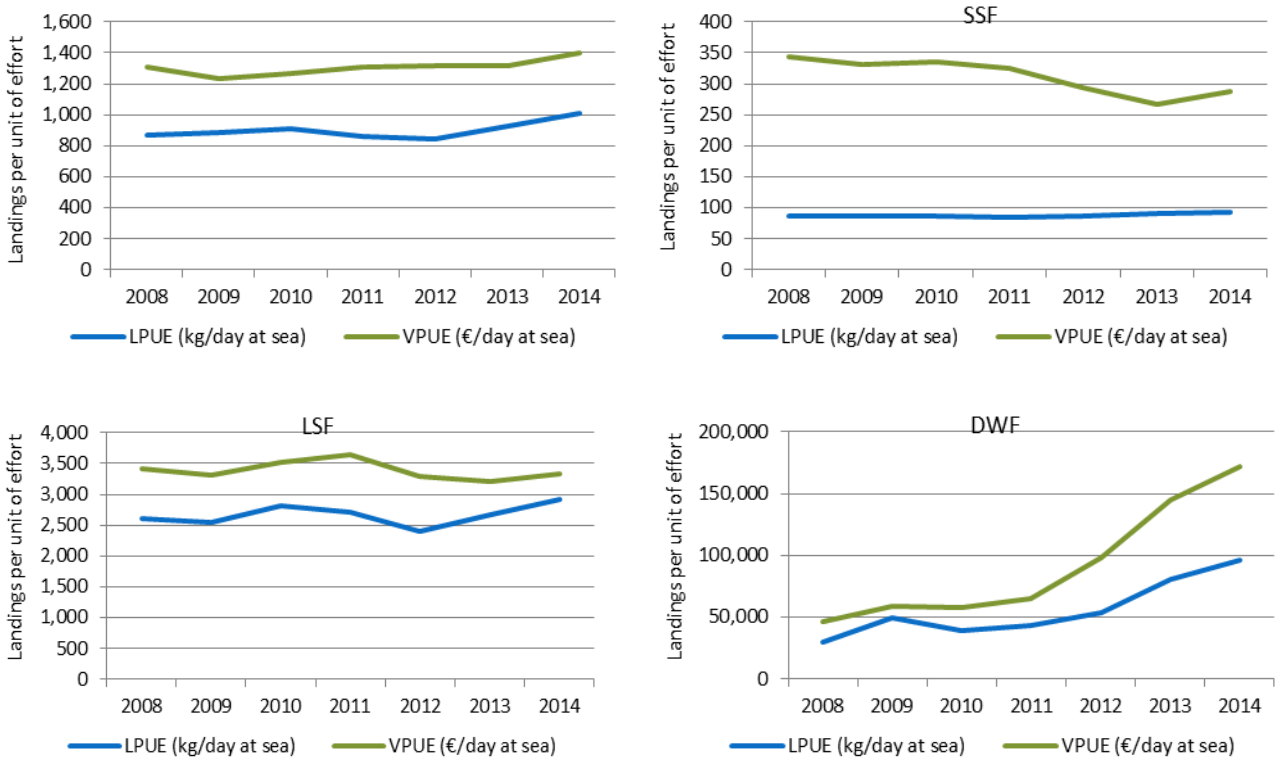
Figure 3.23 Landings in value by FAO fishing division (sub-region) and fishing activity, highlighting areas contributing more than 2% to the total landings in value (right), in 2014

Landings per unit of effort

Landing per day at sea, for the EU fleet as a whole, was estimated at 1 013 kg per day at sea or €1 397 per day at sea in 2014. For the EU fleet as a whole, landed weight per sea day (LPUE) increased on average 3% while landed value per sea day (VPUE) 1% p.a. (Figure 3.24). After a decrease in 2009, average LPUE followed an increasing trend, while the positive trend for VPUE occurred after 2012. Compared to 2008, average LPUE in 2014 increased 16% and VPUE 7%.

Landing per day at sea, for the EU SSF, was estimated at 92 kg per day or €288 per day in 2014. For the LSF, LPUE was estimated at 2.9 tonnes per day and VPUE at €3.3 thousand per day while for the DWF, LPUE was estimated at 96 tonnes and VPUE at €172 thousand (Figure 3.24).

For the SSF, landed weight per sea day increased on average 1% p.a., while landed value decreased 3%. For the LSF, LPUE increased on average 2% p.a. while VPUE showed no significant trend over the period. LPUE in the DWF increased on average 25% p.a. and VPUE 26%, between 2008 and 2014 (Figure 3.24).

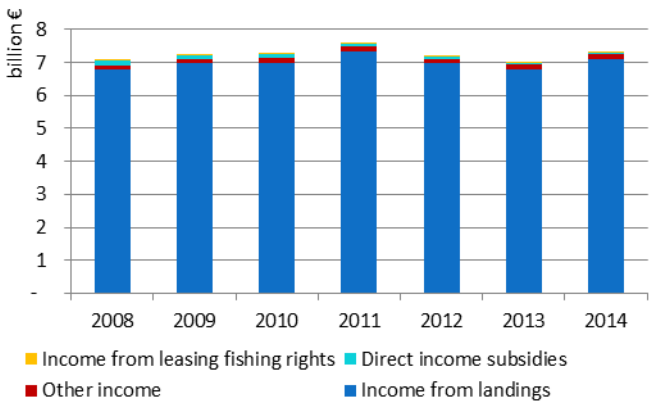


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.24 Trends in landings per unit of effort in weight (LPUE) and value (VPUE) for the EU fleet and by main fishing operation: 2008-2014

Income and Costs

The available data reports the amount of revenue[2] generated by the EU fishing fleet (excluding Greece) in 2014 at €7.25 billion (Table 3.6.2), comprised by €7.1 billion in fish sales and €147 million in non-fishing income (Figure 3.25).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

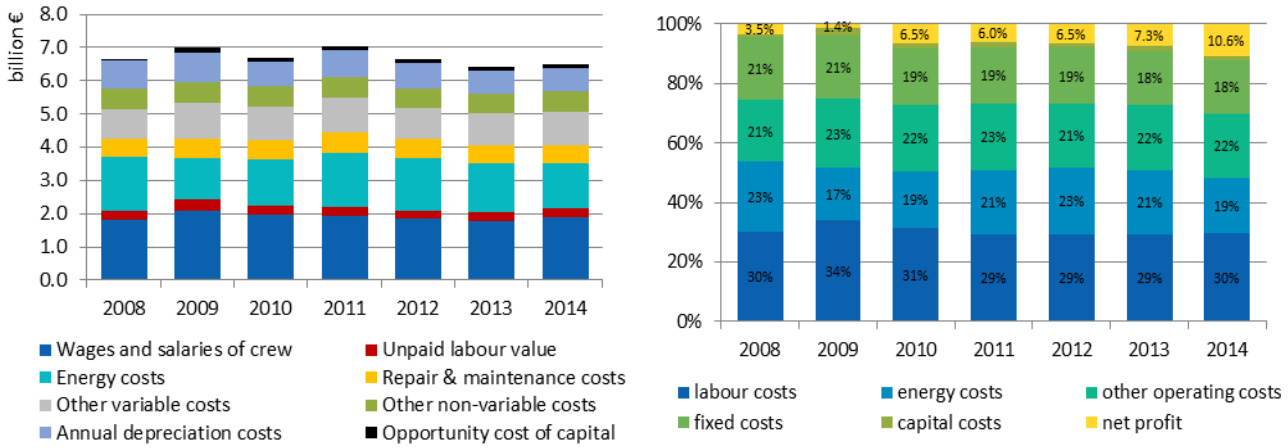
Figure 3.25 Trends in income (revenue = income from landings + other income) generated for the EU fleet (excluding Greece): 2008 – 2014

After increasing until 2011, revenue generated by the fleet decreased in 2012 and 2013, to rise again in 2014. Total costs[3] followed a similar pattern, peaking in 2011 and steadily decreasing thereafter. Total costs to revenue for the EU fleet fell from almost 99% in 2009 to 89% in 2014 (Figure 3.26 and 3.27).

[2] Direct income subsidies and income from leasing out fishing rights excluded from the economic analyses.
[3] Total costs include crew wage costs, unpaid labour, energy costs, repair costs, other variable costs, other non-variable costs, annual depreciation and opportunity cost of capital (capital costs).

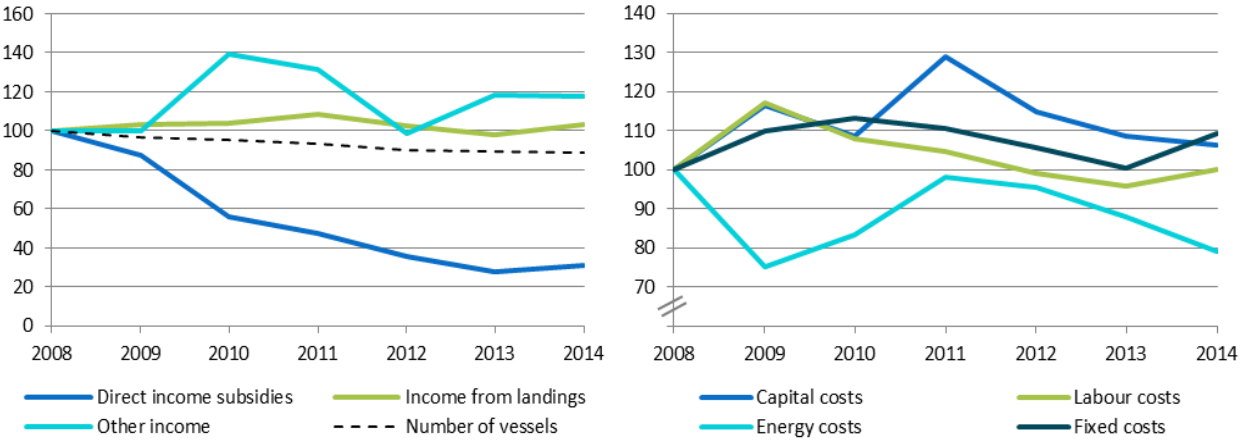
With the exclusion of Greece, costs incurred by the EU fishing fleet in 2014 amounted to 6.4 billion[4], 13% of which consisted of capital costs (€703 million in annual depreciation and €101 million in opportunity costs of capital) and 87% of operating costs[5]. The latter mainly consisted of labour costs (38% of total operating costs: €1.9 billion in crew wages and €260 million in unpaid labour) and fuel costs (€1.3 billion, 24% of total operating costs). Other costs linked to production amounted to €987 million; while other non-variable (or fixed) costs and repair costs amounted to €600 million and €577 million, respectively. Total costs represented 89.4% of the revenue generated by the fleet in 2014 (Table 3.2, Figure 3.26).

Spain, France, the UK and Italy, accounted for over 71% of the total revenue generated by the EU fleet in 2014 and 71% of both labour and energy costs (Table 3.2).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.26 Cost structure for the EU fleet (excluding Greece) in absolute terms (left) and as a % of revenue (right): 2008 - 2014

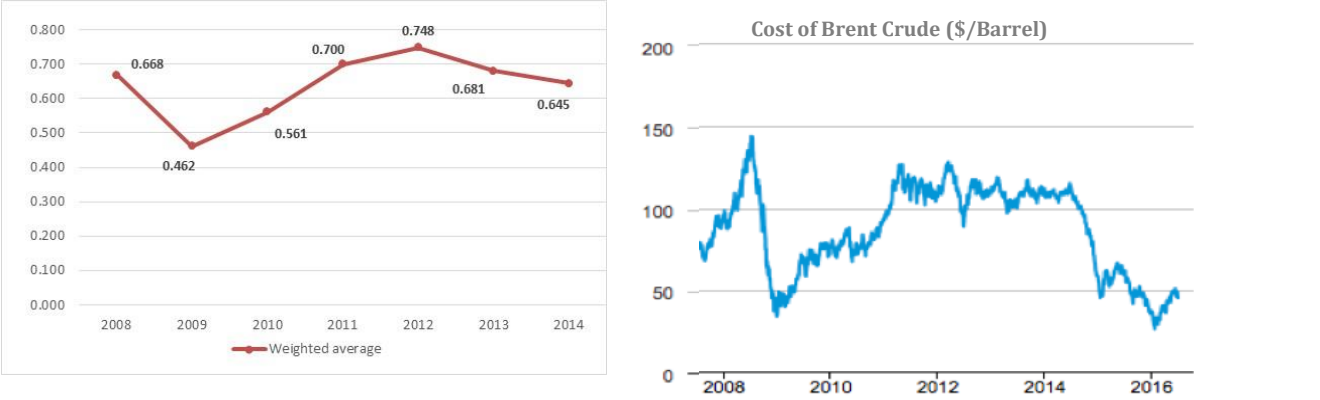


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.27 Trends in income (left) and costs (right): 2008-2014

Figure 3.28 provides average fisheries fuel prices for 2008-2014 as reported by MS (Table 3.5); the trend of which closely follows that of the average cost of Brent Crude (Figure 3.28). While average fisheries fuel prices remained relatively low during 2009 and early 2010, they increased steadily throughout 2010 and 2011, peaking in 2012. These fluctuations in fuel prices have a significant impact on the performance of the fleet. The data suggest that as fuel prices eased in 2009, energy costs of the 21 MS fleet fell significantly, both in absolute terms and in relation to revenue. Compared to 2008, energy costs of the selected fleets in 2014 were 16% lower, and further reductions are expected for 2015 and 2016.

[4] Fishing rights costs excluded for methodological reasons.
[5] Total operating costs include: crew wage costs, unpaid labour, energy costs, other variable costs, repair costs, other non-variable costs



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.28 Average (weighted) fuel prices (€/litre): 2008-2014

Income and costs by scale of fishing activity

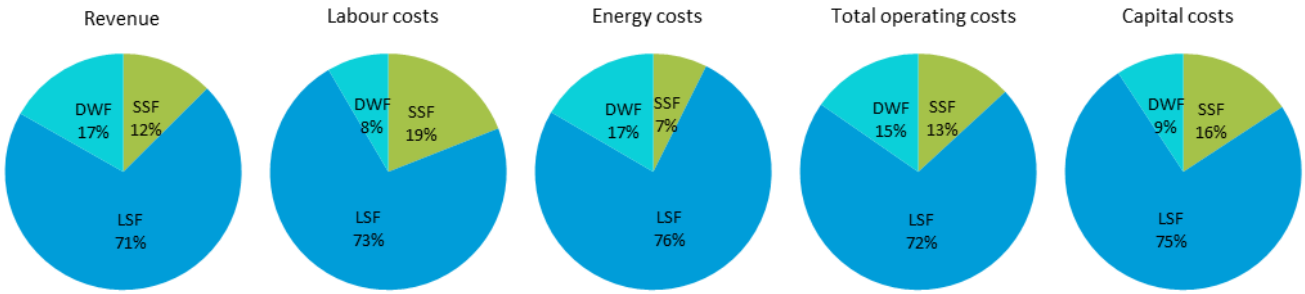
Revenue and costs by fishing activity are shown in Figures 3.29 as proportions of the EU totals in 2014 and trends in Figure 3.30.

The large-scale fleet generated 71% of the total EU fleet revenue and accounted for 73% of the labour costs and 76% of the energy costs whereas the small-scale fleet generated 12% of the revenue and accounted for 19% of the labour costs and 7% of the energy costs. The distant-water fleet generated the remaining 17% of the revenue and contributed 8% to labour and 17% to energy costs.

Over the period 2008-2014, the revenue generated by the SSF shows a negative trend with an average annual decrease of about 2%. The 2014 revenue is 17% lower than the maximum revenue generated in 2009. Total costs to revenue ranged from 88% in 2010 to 98% in 2013.

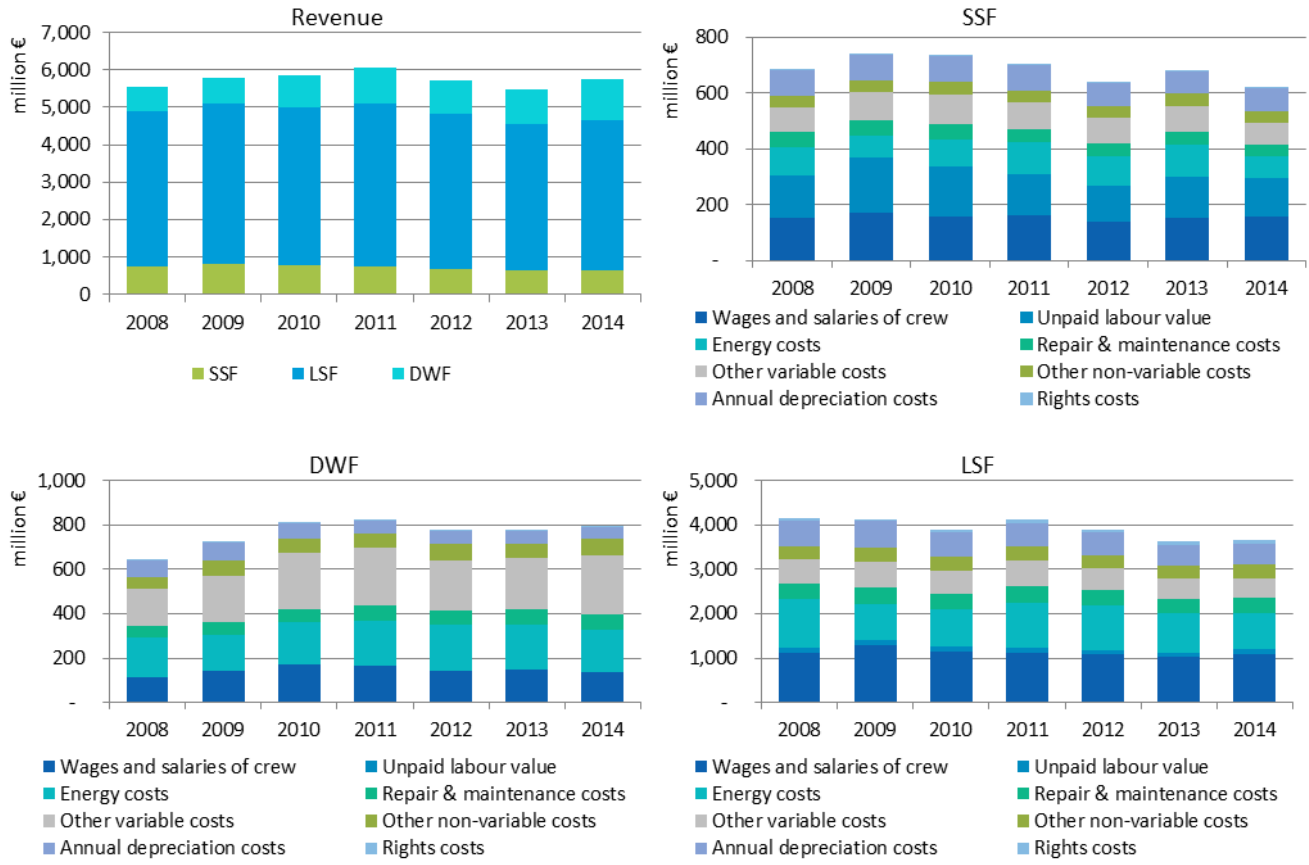
For the LSF, annual revenue has varied without trend while total costs decreased on average by 1.2% p.a., over the period 2008-2014. Total costs to revenue generally decreased over the period, ranging from 98% in 2009 to 91% in 2014 indicating improving performance.

For the DWF, revenue increased 12% from 2013 to 2014 but at the same time, total costs increased by 4%. Total costs to revenue have fluctuated over the years, from 107% in 2009 to 76% in 2014.



Data source: EU Fleet register and Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.29 Cost items by fishing activity as a percentage of the EU fleet: 2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.30 Trends in revenue and cost structure by main type of fishing activity: 2008 – 2014

3.2 Economic Performance indicators

Situation in 2014

Economic performance indicators are listed by MS and for the EU fleet as a whole in Tables 3.2 and 3.3.

The amount of Gross Value Added (GVA), Gross profit and net profit (all excluding subsidies) generated by the EU fishing fleet (excluding Greece) in 2014 was €3.7 billion, €1.6 billion and €770 million, respectively (Table 3.2, Figure 3.31).

In relative terms, GVA to revenue was estimated at 51.5%, while 21.9% of revenue was retained as gross profit and after deducting for capital costs, 10.6% of revenue was retained as net profit in 2014 (all excluding Greece) (Table 3.3, Figure 3.31).

Analysis of economic performance in 2014 by Member State revealed a mixed picture. The data suggest that three out of the 22 MS fleets (Greece excluded) suffered gross losses and that only 13 MS generated net profits. The Member States that generated net losses in 2014 were Belgium, Bulgaria, Cyprus, Croatia, Finland, Lithuania, Malta, Poland and Sweden.

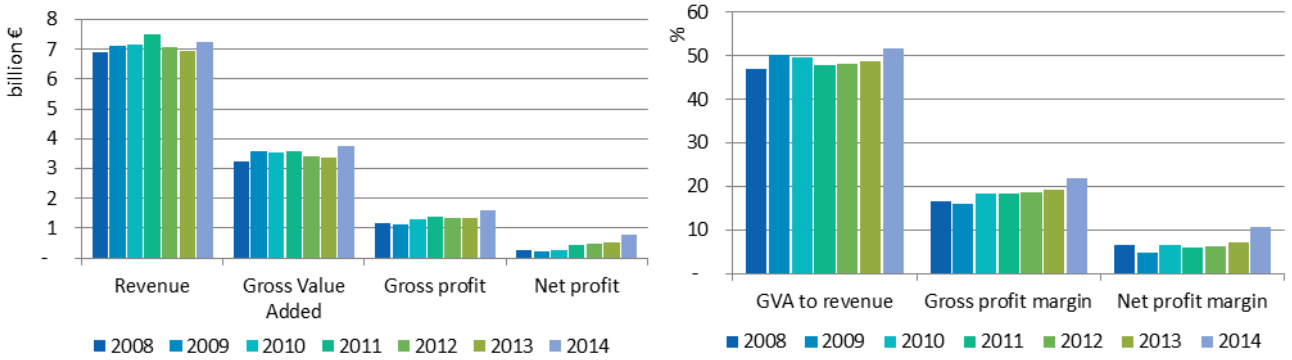
Results indicate that the Spanish fleet generated by far the highest revenue (€2 billion), GVA (€1 billion) and profit; a gross profit of €445 and net profit of €333 million.

The French fleet generated almost €1.2 billion in revenue and €580 in GVA, followed by the UK fleet, with €1.1 billion in revenue and €535 million in GVA. The UK fleet was more efficient in converting revenue into profit, generating €282 million in gross profit and €205 million in net profit compared to €150 in gross profit and €56 million in net profit.

In relative terms, the Slovenian fleet generated the highest level of GVA relative to revenue (83%), followed by the Portuguese (65%), Estonian (63%) and Danish (62%) fleets.

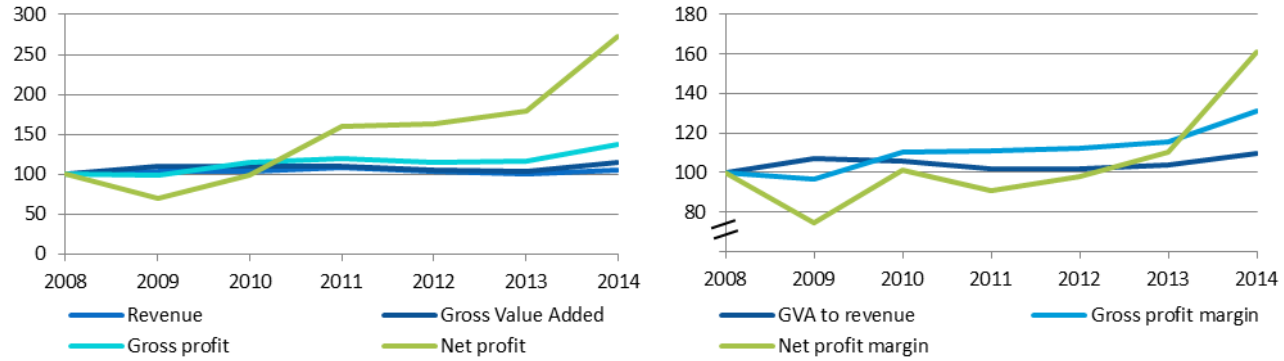
The Slovenian fleet generated the highest gross profit margin (49%), followed by the Danish (34%), Italian (27%) and Portuguese (27%) fleets.

Again, the Slovenian fleet generated the highest net profit margin (36%), followed by the UK fleet with 18% of revenue retained and then the Spanish fleet at almost 17%.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.31 Trends in EU fleet economic performance indicators: 2008-2014



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

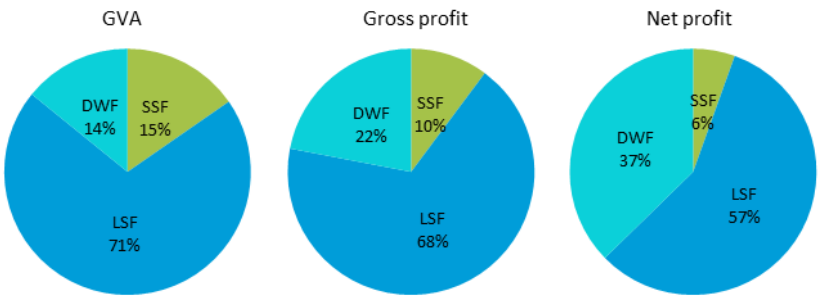
Figure 3.32 Variations in EU fleet economic performance indicators (based on 2008=100, excludes Greece): 2008-2014

Economic performance by scale of fishing activity

The data indicate that in 2014, the small-scale fleet (excluding Greece) generated net profits of €40.8 million, a significant improvement on 2013. This fleet component generated net losses in nine MS in 2014 (Table 3.7)

The EU large-scale fleet (excluding Greece) accounted for 71% of the total GVA generated by the entire EU fleet, 68% of the gross profits and 57% of net profits (Table 3.10, Figure 3.33). The large-scale fleet generated net profits in 15 out of 22 MS, net losses in Belgium, Bulgaria, Cyprus, Croatia, Finland, Lithuania and Malta (Table 3.10). Overall, net profit generated by this part of the fleet amounted to €426 million in 2014, 40% more than in 2013.

The distant-water fleet contributed 14% to GVA, 22% to gross profit and 37% to net profit, generating an overall net profit of €278 million, a 69% increase on 2013 results (Table 3.13).



Data source: EU Fleet register and Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 3.33 Economic performance by fishing activity as a proportion of the EU fleet: 2014.

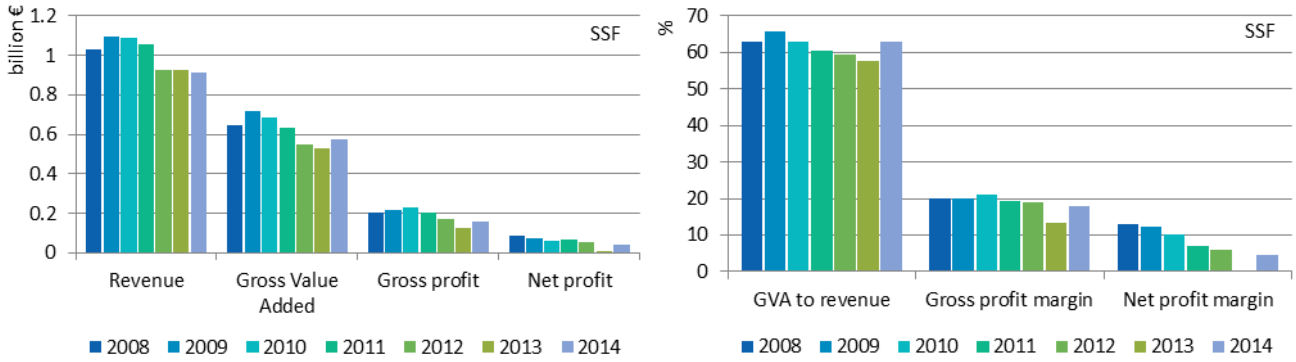
In relative terms, the small-scale fleet generated the highest GVA as a percentage of revenue (63%), while the distant-water fleet generated the highest gross profit margin (28.5%) (Tables 3.8, 3.11 and 3.14).

Trends in the main economic performance indicators for the SSF, LSF and DWF are shown in Figures 3.34 to 3.36, respectively.

For the EU small-scale fleet, all indicators show a decline in performance over the period 2008-2013, but with some improvement in 2014. The proportional change in indicator values between 2013 and 2014, suggests that GVA increased 8% and gross profit 31%. Net profit also in 2014, increased compared to 2013 but remained below the long-term average.

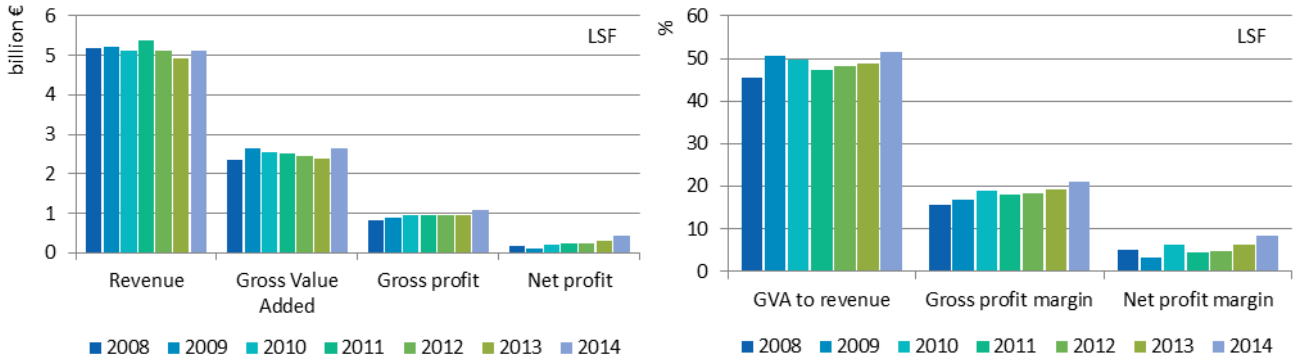
For both the large-scale and distant-water fleets all indicator values show a progressive improvement over the period 2008-2014. Regarding the LSF between 2013 and 2014 GVA increased almost 10%, gross profit 13% and net profit 40%. The GVA generated by the LSF on average increased 2% p.a., gross profit 5% p.a. and net profit 23% p.a. This demonstrates the rationalisation of the fleet and is a sign of improved economic efficiency (declining economic inputs and increasing profit margins).

For the DWF the increases in GVA, gross profit and net profit from 2013 to 2014 were 20%, 38% and 69%. The GVA generated by the DWF on average increased 23% p.a., gross profit 67% p.a. and net profit 962% p.a.



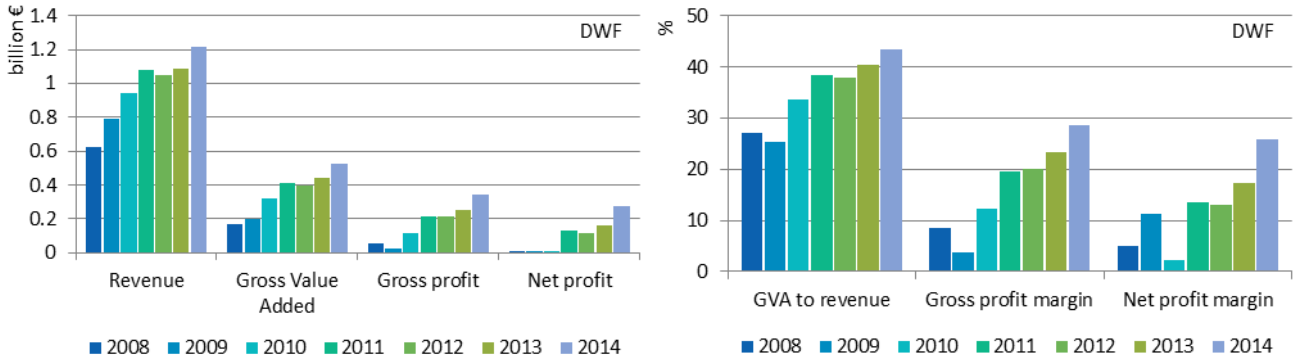
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.34 Trends in fleet economic performance indicators for the EU SSF: 2008-2014



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.35 Trends in fleet economic performance indicators for the EU LSF: 2008-2014



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.36 Trends in fleet economic performance indicators for the EU DWF: 2008-2014

Capital value and investments

In 2014, the EU fleet (excluding Greece) had an estimated (depreciated) replacement value of €5.3 billion and in-year investments amounted to €469 million. The Italian fleet was estimated to have the highest depreciated replacement value of €698 million, followed by the UK fleet (€632 million) and then the Danish fleet (€577 million).

In terms of investment, the UK fleet invested €106 million in 2014, followed by the Danish fleet (€73.5 million) and then the French fleet (€64.4 million) (Table 3.3).

Capital value and investment by scale of fishing activity

The small-scale fleet had a depreciated replacement value of €666 million in 2014 (13.7% of the EU fleet), with the Italian fleet accounting for 17.1% of the total EU SSF, followed by the French fleet with 14.3% of the SSF total. Also, excluding the Greek fleet, in-year investment in the small-scale segment amounted to €86.2 million (18% of the EU total).

The highest depreciated replacement value and in-year investments corresponded to the large-scale fleet (80% and 77.5% of the total, respectively) (Tables 3.7 and 3.11).

Depreciated replacement value of the EU distant-water fleet covered amounted to €309 million but this figure is under-valued as it excludes several MS high sea vessels due to lack of data for confidentiality reasons as well as missing data for the French and Polish fleets. Similarly, the amount of in-year investment (under)-reported for this part of the EU fleet was €21 million in 2014 (Table 3.14).

Labour and Capital Productivity

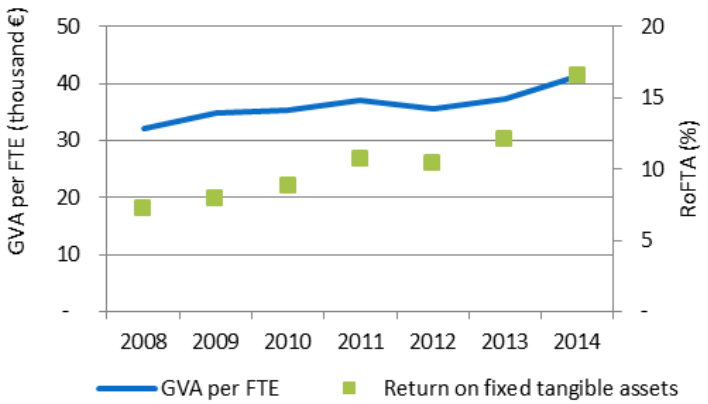
Labour productivity, defined as gross value added per FTE (GVA/FTE), gives an indication of the economic growth in the sector. Apart from a small decline between 2011 and 2012, labour and capital productivity in the fishing fleet has generally increased since 2008 (Figure 3.37).

Labour productivity (GVA/FTE) in the EU fleet was estimated at €41.3 thousand in 2014 an increase from the 2013 figure of €39 000. The highest level of GVA to employment (FTE) was achieved by Denmark (€147 thousand), followed by Belgium (€125 thousand) and the Netherlands (€106 thousand) (Table 3.3).

In terms of capital productivity, i.e. profits in relation to capital invested, the EU fleet generated a 16.7% return on fixed tangible assets (RoFTA) in 2014, a 36.6% improvement on 2013. The Spanish fleet obtained the highest rate of return in 2014 (71%), followed by the UK (33%) and Latvian (28%) fleets (Table 3.3).

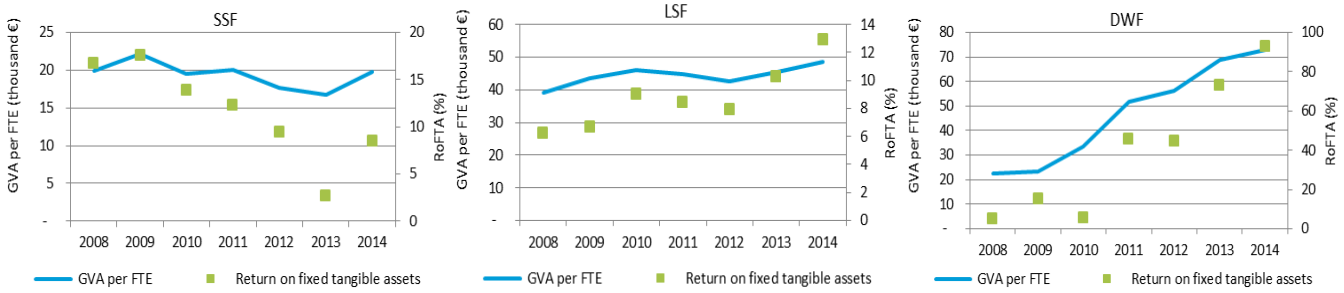
Labour and capital productivity by scale of fishing activity

Figure 3.38 shows that labour productivity (GVA/FTE) is lowest in the SSF and decreased steadily between 2008 and 2013 before rebounding to the 2008 level in 2014. Capital productivity in the SSF followed a similar trend. Labour and capital productivity for the LSF and DWF show generally increasing trends over the entire period, with that for the DWF being the most pronounced.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.37 Trends in labour (GVA per FTE) and capital productivity (RoFTA) for the EU fleet: 2008 – 2014



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.38 Trends in labour (GVA per FTE) and capital productivity (RoFTA) for the EU fleet by fishing activity: 2008 – 2014

Energy use – fuel efficiency and fuel intensity

Fuel use is influenced by a number of factors, such as type of fishing operation, fishing gear, fish targeted and CPUE (Catch Per Unit of Effort).

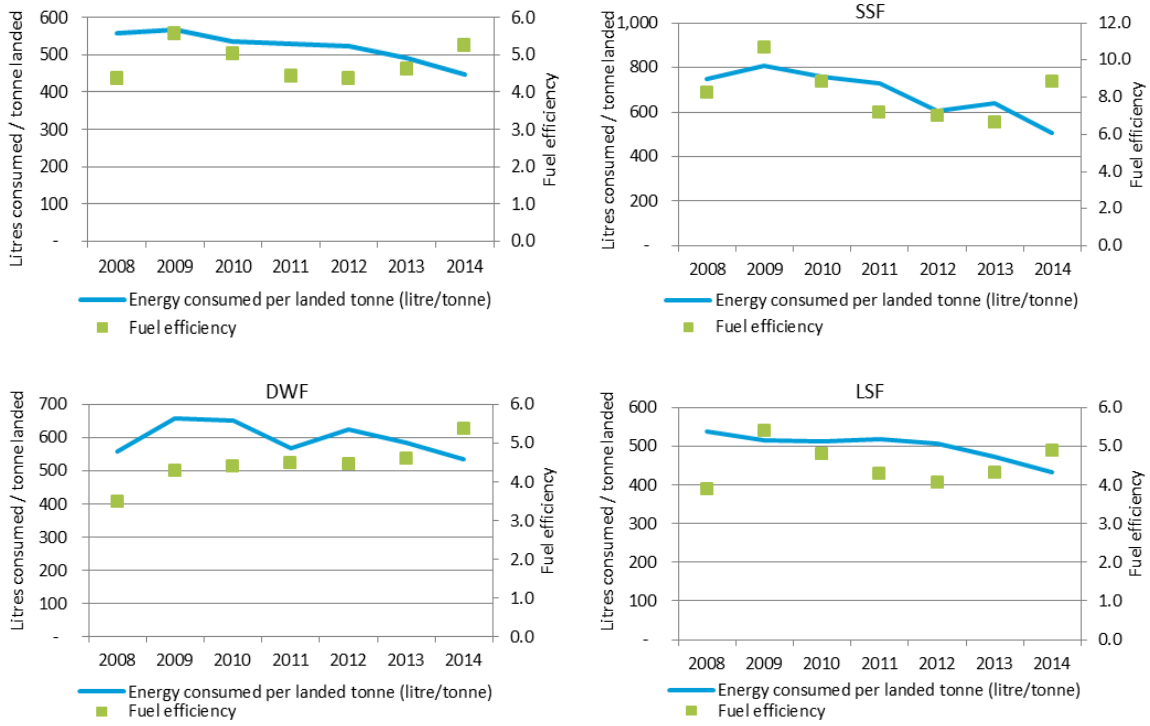
Fuel use in the EU fleet was measured in terms of fuel efficiency, expressed as income from landings / fuel costs (€/litre) and in terms of fuel intensity, measured as the amount of fuel consumed per tonne landed (litre/kg).

Based on the data submitted by MS, the results indicate that fuel efficiency generally increased over the period 2008-2014, while conversely, fuel intensity decreased; that is, overall, an indication that the fleet has become more fuel efficient (Figure 3.9).

Fuel use and efficiency by scale of fishing activity

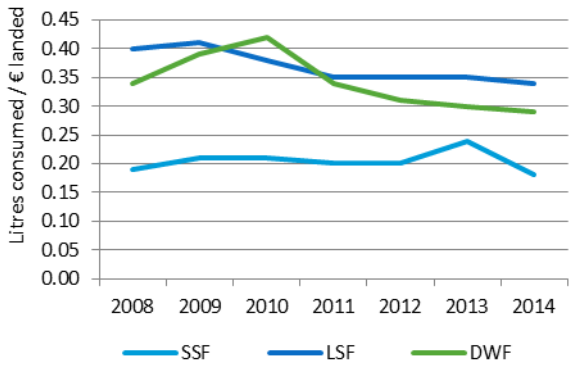
By fishing activity, results show that small-scale vessels are less fuel efficient, consuming more fuel per landed tonne while the distant-water fleet is more fuel efficient (Figure 3.39). The observed annual variations in fuel efficiency largely (to a higher degree in the SSF and LSF than in the DWF), reflect the changes in annual average fuel prices.

A different picture emerges when fuel consumption is analysed by landed value. Here results indicate that the SSF is the least 'fuel-intensive' and that the ratio between energy consumed and value of landings has remained rather stable, albeit a 0.5 jump in 2013. The LSF shows a decreasing trend after 2009, stabilising in 2011 while the DWF shows a steady decreasing trend after a steep rise between 2008 and 2010, again reaching lower levels from 2011 onwards when compared to the LSF (figure 3.40).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.39 Trends in fuel use, measured as income from landings per fuel cost (fuel efficiency) and litres of fuel consumed per tonne landed (fuel intensity) for the EU fleet and by main fishing activity 2008-2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 3.40 Trends in fuel use measured as litres of fuel consumed per € landed by main fishing activity 2008-2014.

3.3 Assessment for 2015 and 2016

The 2016 call for economic data on the EU fishing fleet requested transversal data (effort, landings and capacity) from MS for 2015, as well as income from landings, to be used for projecting fleet economic performance indicators in 2015. As 2015 data are only preliminary, results should be considered with caution.

Economic performance projections were made for 2015 and 2016 that cover the 15 EU member states with fishing activity in the Northeast Atlantic. This selection of member states was due to greater data on performance drivers. Projections were made based on fleet segment level data and then aggregated to the MS level.

Projected results for 2015 suggest that all MS analysed generated gross profits and with the exception of Finland and Lithuania, all MS analysed generated net profits as well. In 2016 all MS are projected to have positive gross and net profits.

In 2015 the highest gross profit margins are projected for Denmark (42.5%), Spain (36.3%) and Portugal (32.5%) and the highest net profit margins are projected for Spain (30.6%), the United Kingdom (22%), and Denmark (20.4%). In 2016 the highest gross profit margins are in Denmark (44.9%), Sweden (41.5%) and Latvia (36.0%). The highest net profit margins are for the same three member states (24.9%, 28.0% and 30.9% respectively).

3.4 Main drivers and trends affecting the economic performance of the EU fleet

Compared to 2013, the economic performance of the EU fleet improved in 2014 and is expected to continue to improve in 2015 and 2016.

The observed improvement in economic performance is largely a result of increases in landings and lower costs which are mainly a result of decreasing fuel prices.

Overall, in 2014 there was an increase in the total weight (7%) and value (4%) of seafood landed by the EU fleet (excluding Greece). Overall, revenue increased by 4.7% compared to 2013, while at the same time, costs increased by less than 1%.

Economic performance in 2014 by Member State revealed a mixed picture. The data indicate that three of the 22 MS fleets (Greece excluded) suffered gross losses, and that only 13 Member States generated net profits.

Economic performance of the large-scale and distant water fleets has steadily improved over the period 2008-2014 and while the economic performance of the small-scale fleet gradually declined between 2008 and 2013, it improved in 2014.

Factors that may have contributed to improved economic performance include, but are not limited to the following (in no specific order):

- Fuel price reductions in 2013 continued in 2014 and 2015.
- Increased landings from some stocks especially Atlantic herring and mackerel.
- Recovery of some stocks, such as the Baltic herring and North Sea plaice, leading to increased TAC and quotas.
- Capacity reduction (decommissioning with or without public support)
- Implementation of certification schemes and the growing demand for certified products
- More fuel efficient fishing techniques and fishing behaviour
- Research and innovation projects (more selective fishing gears) funded by the European Fishing Fund and national support.

Factors that may have contributed to poor economic performance include, but are not limited to the following (in no specific order):

- Lower average first sale prices for many commercially important species, e.g. cod in Baltic, plaice in The Netherlands, important stocks in the UK
- The effects of the global economic crisis that continues to affect internal and international markets for some species and limits access to credit
- Russian embargo on EU seafood exports has been noted for multiple MS, particularly impacting the pelagic sector
- Reduced TACs and quotas for several key stocks, such as European sprat and Atlantic herring
- Market saturation (e.g. Baltic cod) and poor marketing to place products on new markets
- Low abundance and/or low quality of some species and severe weather conditions and for a few number of fleets (e.g. Baltic and Celtic seas) damage caused by marine mammals (e.g. seals)
- Shortage of local crews as young people in fishing communities are less and less attracted to fishing as a career choice leading to increased crew costs due to supply shortages
- Increase in areas that prohibit or limit specific fishing access/activity due to established restrictions for energy production or temporary closures of areas for stock recovery and nature conservation.

3.5 Summary data tables by MS and fishing activity (scale of operation): 2008-2014

Table 3.1 Main capacity, employment, effort and landings variables by Member State, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

	Total no. of vessels (#)	as % of EU Total	No. of Inactive vessels (#)	as % of EU Total	% of inactive vessels MS fleet	Vessel tonnage (thousand GT)	as % of EU Total	Engine power (thousand kW)	as % of EU Total	Total employed (person)	as % of EU Total	FTE (#)	as % of EU Total	Days at sea (thousand day)	as % of EU Total	Fishing days (thousand day)	as % of EU Total	Energy consumed (million litre)	as % of EU Total	Landed weight (thousand tonne)	as % of EU Total	Landed value (million €)	as % of EU Total
BEL	80	0.1%	4	0.0%	5%	14.6	0.9%	46.5	0.7%	345	0.2%	293	0.3%	16.3	0.2%	16.9	0.3%	39.8	1.7%	26.2	0.5%	81.5	1%
BGR	2,005	2.5%	901	5.0%	45%	6.4	0.4%	56.4	0.9%	1,517	1.0%	532	0.5%	21.1	0.3%	21.1	0.4%	2.2	0.1%	7.9	0.2%	4.3	0%
CYP	854	1.0%				3.1	0.2%	36.8	0.6%	1,219	0.8%	729	0.7%	65.6	1.0%	65.6	1.4%	2.7	0.1%	1.3	0.0%	7.5	0%
DEU	1,508	1.9%	397	2.2%	26%	30.7	1.9%	110.7	1.7%	1,605	1.1%	1,253	1.1%	109.9	1.6%	114.6	2.4%	38.1	1.7%	71.7	1.5%	130.9	2%
DNK	1,956	2.4%	518	2.9%	26%	68.2	4.2%	211.0	3.3%	1,405	0.9%	1,619	1.5%	103.8	1.5%	99.2	2.1%	91.7	4.0%	741.9	15.0%	380.0	5%
ESP	9,921	12.2%	1,228	6.9%	12%	379.4	23.6%	867.0	13.5%	33,121	22.1%	28,629	25.8%	1,117.7	16.3%	1,073.4	22.2%	641.1	27.8%	932.7	18.9%	2,074.8	28%
EST	1,514	1.9%	1	0.0%	0%	6.0	0.4%	32.1	0.5%	2,070	1.4%	497	0.4%	151.0	2.2%	195.5	4.1%	2.8	0.1%	54.8	1.1%	14.5	0%
FIN	3,144	3.9%	1,380	7.7%	44%	16.8	1.0%	173.0	2.7%	1,847	1.2%	355	0.3%	126.4	1.8%	125.8	2.6%	15.8	0.7%	148.2	3.0%	40.4	1%
FRA	7,069	8.7%	1,311	7.3%	19%	175.6	10.9%	1,016.6	15.9%	10,056	6.7%	7,545	6.8%	465.3	6.8%	431.8	8.9%	322.7	14.0%	526.9	10.7%	1,101.1	15%
GBR	6,552	8.0%	1,987	11.1%	30%	203.9	12.7%	820.5	12.8%	11,845	7.9%	7,909	7.1%	428.0	6.2%	325.0	6.7%	281.4	12.2%	758.8	15.3%	1,068.8	15%
GRC	14,755	18.1%	1,155	6.5%	8%	72.8	4.5%	431.2	6.7%	23,232	15.5%	20,780	18.7%	1,921.8	28.0%			107.3	4.7%	47.7	1.0%	278.8	4%
HRV	4,385	5.4%	1,669	9.3%	38%	46.1	2.9%	347.9	5.4%	4,842	3.2%	2,151	1.9%	241.2	3.5%	206.1	4.3%	24.2	1.1%	79.4	1.6%	60.8	1%
IRL	2,095	2.6%	752	4.2%	36%	59.5	3.7%	181.6	2.8%	3,154	2.1%	2,395	2.2%	54.4	0.8%	43.5	0.9%	67.7	2.9%	276.4	5.6%	293.1	4%
ITA	12,689	15.6%	1,134	6.3%	9%	163.9	10.2%	1,023.8	16.0%	26,932	18.0%	20,694	18.6%	1,432.6	20.9%	1,530.4	31.7%	304.4	13.2%	176.8	3.6%	813.3	11%
LTU	143	0.2%	46	0.3%	32%	49.2	3.1%	50.7	0.8%	750	0.5%	573	0.5%	8.7	0.1%	7.9	0.2%	59.5	2.6%	146.4	3.0%	95.3	1%
LVA	365	0.4%	87	0.5%	24%	7.0	0.4%	19.8	0.3%	607	0.4%	362	0.3%	19.2	0.3%	17.1	0.4%	5.3	0.2%	59.2	1.2%	19.5	0%
MLT	1,045	1.3%	336	1.9%	32%	7.7	0.5%	75.5	1.2%	1,418	0.9%	1,116	1.0%	31.3	0.5%	28.6	0.6%	3.7	0.2%	2.4	0.0%	10.5	0%
NLD	735	0.9%	200	1.1%	27%	134.1	8.3%	280.1	4.4%	2,024	1.4%	1,680	1.5%	48.7	0.7%	42.9	0.9%	150.9	6.5%	382.4	7.7%	372.0	5%
POL	838	1.0%	42	0.2%	5%	33.9	2.1%	81.4	1.3%	2,703	1.8%	2,550	2.3%	74.6	1.1%	71.2	1.5%	18.4	0.8%	171.3	3.5%	47.9	1%
PRT	8,256	10.1%	4,311	24.1%	52%	100.4	6.2%	368.1	5.7%	16,992	11.3%	8,515	7.7%	335.6	4.9%	321.5	6.7%	82.9	3.6%	163.4	3.3%	353.4	5%
ROU	158	0.2%	35	0.2%	22%	0.8	0.0%	6.1	0.1%	330	0.2%	38	0.0%	2.8	0.0%	2.7	0.1%	0.5	0.0%	2.2	0.0%	2.5	0%
SVN	170	0.2%	79	0.4%	46%	0.6	0.0%	8.5	0.1%	126	0.1%	80	0.1%	8.6	0.1%	8.6	0.2%	0.2	0.0%	0.3	0.0%	1.3	0%
SWE	1,266	1.6%	288	1.6%	23%	29.0	1.8%	163.9	2.6%	1,568	1.0%	845	0.8%	77.7	1.1%	77.7	1.6%	41.1	1.8%	166.1	3.4%	106.7	1%
EU total	**81,503**		**17,861**			**1,610**		**6,409**		**149,710**		**111,141**		**6,862**		**4,827**		**2,304**		**4,944**		**7,359**	
% Δ to 2013	-2.2%		-1.4%			0.6%		-0.5%		-1.5%		-1.8%		37.2%		-0.8%		-2.7%		8.1%		7.8%	
EU excl. GRC	**66,748**		**16,706**			**1,537**		**5,978**		**126,478**		**90,361**		**4,940**		**4,827**		**2,197**		**4,897**		**7,080**	
% Δ to 2013	-0.9%		-1.2%			0.9%		-0.2%		-0.8%		-0.3%		-1.2%		-0.8%		-2.5%		7.1%		3.7%	

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.2 Main economic variables by Member State, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

	Revenue (million €)	as % of EU Total	Wages and salaries of crew (million €)	as % of EU Total	Unpaid labour value (million €)	as % of EU Total	Energy costs (million €)	as % of EU Total	Repair costs (million €)	as % of EU Total	Other variable costs (million €)	as % of EU Total	Other non-variable costs (million €)	as % of EU Total	Annual depreciation costs (million €)	as % of EU Total	Gross Value Added (million €)	as % of EU Total	Gross profit (million €)	as % of EU Total	Net profit (million €)	as % of EU Total	Tangible asset value (million €)	as % of EU Total	Invest-ments (million €)	as % of EU Total
BEL	85.4	1.1%	27.1	1.4%	2.1	0.6%	23.5	1.6%	5.9	1.0%	11.3	1.1%	8.0	1.3%	9.7	1.3%	36.6	1.0%	7.4	0.49%	- 2.9	-0.4%	58.0	1.1%	4.9	1.0%
BGR	5.5	0.1%	2.2	0.1%	0.5	0.2%	1.5	0.1%	0.6	0.1%	0.5	0.0%	0.2	0.0%	0.7	0.1%	2.7	0.1%	- 0.0	0.00%	- 1.5	-0.2%	15.3	0.3%	3.9	0.8%
CYP	7.5	0.1%	0.6	0.03%	0.3	0.1%	2.3	0.2%	1.0	0.2%	3.3	0.3%	0.1	0.0%	2.8	0.4%	0.8	0.0%	- 0.1	-0.01%	- 6.1	-0.9%	50.3	0.9%	0.2	0.0%
DEU	134.6	1.8%	37.5	1.9%	9.7	2.9%	23.2	1.6%	15.1	2.5%	10.7	1.0%	14.6	2.4%	17.0	2.3%	71.0	1.9%	23.7	1.6%	6.4	1.0%	83.2	1.5%	24.3	4.9%
DNK	385.6	5.1%	71.3	3.6%	35.8	10.7%	56.4	3.9%	39.5	6.5%	30.9	2.9%	20.4	3.4%	88.2	12.1%	238.4	6.3%	131.3	8.7%	37.1	5.6%	577.2	10.6%	73.5	14.9%
ESP	2,020.9	26.9%	514.0	26.3%	100.8	30.2%	345.7	24.0%	121.0	19.8%	367.6	34.7%	126.9	20.9%	97.8	13.4%	1,059.6	27.9%	444.8	29.5%	332.6	50.5%	490.6	9.0%	33.6	6.8%
EST	14.7	0.2%	4.4	0.2%	1.0	0.3%	1.9	0.1%	1.4	0.2%	1.3	0.1%	0.7	0.1%	1.9	0.3%	9.3	0.2%	3.9	0.3%	1.6	0.3%	19.2	0.4%	1.6	0.3%
FIN	39.3	0.5%	4.9	0.3%	3.4	1.0%	10.7	0.7%	4.7	0.8%	3.1	0.3%	5.2	0.9%	15.4	2.1%	15.5	0.4%	7.2	0.5%	- 8.4	-1.3%	65.9	1.2%	17.9	3.6%
FRA	1,171.7	15.6%	429.5	21.9%			209.1	14.5%	102.0	16.7%	145.2	13.7%	135.7	22.4%	88.8	12.2%	579.7	15.3%	150.2	10.0%	55.6	8.4%	546.9	10.1%	64.4	13.1%
GBR	1,118.0	14.9%	242.1	12.4%	11.6	3.5%	175.9	12.2%	90.8	14.9%	179.1	16.9%	136.8	22.5%	73.0	10.0%	535.4	14.1%	281.7	18.7%	204.7	31.1%	632.2	11.6%	106.1	21.5%
GRC	271.0	3.6%	66.5	3.4%	74.2	22.2%	91.4	6.3%	33.9	5.6%	73.2	6.9%	7.1	1.2%	26.5	3.6%	65.3	1.7%	- 75.4	-5.0%	- 111.5	-16.9%	112.7	2.1%	24.1	4.9%
HRV	76.5	1.0%	20.6	1.1%	2.3	0.7%	19.2	1.3%	6.5	1.1%	7.2	0.7%	7.0	1.2%	14.2	1.9%	36.6	1.0%	13.7	0.9%	- 15.6	-2.4%	393.4	7.2%	7.4	1.5%
IRL	320.6	4.3%	80.3	4.1%	1.4	0.4%	49.4	3.4%	36.0	5.9%	42.2	4.0%	24.9	4.1%	26.4	3.6%	168.1	4.4%	86.5	5.7%	49.4	7.5%	517.3	9.5%	17.6	3.6%
ITA	824.2	11.0%	184.7	9.4%	50.2	15.1%	221.7	15.4%	38.0	6.2%	69.3	6.5%	34.1	5.6%	151.7	20.8%	461.0	12.1%	226.0	15.0%	55.6	8.4%	698.3	12.8%	22.0	4.5%
LTU	100.3	1.3%	9.3	0.5%	0.0	0.0%	28.6	2.0%	14.2	2.3%	29.2	2.8%	13.9	2.3%	4.7	0.6%	14.4	0.4%	5.2	0.3%	- 2.0	-0.3%	95.0	1.7%	5.8	1.2%
LVA	20.3	0.3%	3.1	0.2%	0.0	0.0%	3.4	0.2%	1.0	0.2%	3.4	0.3%	5.2	0.9%	1.6	0.2%	7.2	0.2%	4.1	0.3%	2.4	0.4%	9.0	0.2%	0.8	0.2%
MLT	11.7	0.2%	1.9	0.1%	4.2	1.3%	2.7	0.2%	1.8	0.3%	1.6	0.2%	0.3	0.1%	2.9	0.4%	5.3	0.1%	- 0.8	-0.06%	- 5.1	-0.8%	72.0	1.3%	1.2	0.2%
NLD	380.9	5.1%	97.9	5.0%	9.9	3.0%	79.3	5.5%	51.3	8.4%	34.2	3.2%	37.8	6.2%	39.8	5.5%	178.4	4.7%	70.6	4.7%	27.2	4.1%	316.5	5.8%	45.1	9.2%
POL	48.1	0.6%	10.7	0.5%	4.9	1.5%	11.1	0.8%	4.6	0.7%	3.9	0.4%	6.8	1.1%	3.6	0.5%	21.7	0.6%	6.1	0.4%	- 0.9	-0.1%	99.3	1.8%	2.5	0.5%
PRT	364.9	4.9%	130.4	6.7%	5.6	1.7%	57.7	4.0%	24.8	4.1%	34.2	3.2%	12.8	2.1%	41.5	5.7%	235.5	6.2%	99.5	6.6%	39.9	6.1%	457.2	8.4%	17.9	3.6%
ROU	2.5	0.0%	0.8	0.0%	0.2	0.1%	0.6	0.0%	0.1	0.0%	0.2	0.0%	0.1	0.0%	0.2	0.0%	1.5	0.0%	0.4	0.03%	0.1	0.0%	3.2	0.1%	0.2	0.0%
SVN	2.7	0.0%	0.7	0.0%	0.2	0.1%	0.2	0.0%	0.2	0.0%	0.1	0.0%	0.0	0.0%	0.3	0.0%	2.3	0.1%	1.3	0.09%	1.0	0.1%	3.9	0.1%	0.2	0.0%
SWE	112.0	1.5%	17.3	0.9%	15.2	4.6%	24.5	1.7%	16.5	2.7%	8.8	0.8%	8.4	1.4%	20.4	2.8%	53.9	1.4%	21.4	1.4%	- 0.8	-0.1%	119.7	2.2%	17.7	3.6%
EU total	**7,519**		**1,958**		**334**		**1,440**		**611.1**		**1,061**		**607.0**		**729.1**		**3,800**		**1,509**		**658.9**		**5,436**		**493**	
% Δ to 2013	7.5%		3.8%		0.0%		-9.2%		3.5%		1.7%		7.7%		-5.9%		18.5%		52.8%		753.1%		2.4%		-9.2%	
EU excl. GRC	**7,248**		**1,891**		**260**		**1,348**		**577.2**		**987**		**600.0**		**702.6**		**3,735**		**1,584**		**770.4**		**5,324**		**469**	
% Δ to 2013	4.7%		6.0%		1.4%		-9.0%		5.2%		2.1%		7.7%		-2.1%		10.8%		18.9%		52.4%		5.0%		-9.8%	

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.3 Main socio-economic performance indicators by Member State, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

	GVA to revenue (%)	Gross profit margin (%)	Net profit margin (%)	GVA per FTE (thousand €)	Net Value Added per FTE (thousand €)	Return on fixed tangible assets (%)	Energy consumed per landed tonne (litre/tonne)	Fuel efficiency (landings income/ fuel costs)	Average wage per FTE (thousand €)
BEL	42.8	8.7	-3.4	124.9	89.5	-3.9	1,519.4	28.8	99.5
BGR	49.0	-0.9	-28.1	5.0	2.2	-5.0	281.8	38.2	5.1
CYP	10.7	-1.5	-82.1	1.1	-7.2	-5.9	2,050.0	30.8	1.3
DEU	52.8	17.6	4.8	56.7	42.8	8.1	531.7	17.6	37.7
DNK	61.8	34.0	9.6	147.3	89.1	7.5	123.6	14.8	66.2
ESP	52.4	22.0	16.5	37.0	33.1	70.7	687.3	17.3	21.5
EST	63.2	26.7	11.2	18.7	14.1	10.8	51.0	13.4	10.8
FIN	39.4	18.3	-21.3	43.6	-0.2	-12.4	106.6	28.8	23.4
FRA	49.5	12.8	4.7	76.8	64.3	11.2	612.5	18.1	56.9
GBR	47.9	25.2	18.3	67.7	58.0	33.0	370.8	16.3	32.1
GRC	24.1	-27.8	-41.2	3.1	1.4	-90.5	2,251.8	33.7	6.8
HRV	47.9	17.9	-20.3	17.0	3.4	-0.1	304.7	31.5	10.6
IRL	52.4	27.0	15.4	70.2	54.7	11.6	244.9	15.8	34.1
ITA	55.9	27.4	6.7	22.3	14.0	10.6	1,722.1	27.3	11.4
LTU	14.4	5.2	-1.9	25.2	12.8	0.5	406.6	28.6	16.2
LVA	35.5	20.2	11.7	19.9	15.1	28.2	89.7	17.5	8.6
MLT	45.0	-7.3	-43.5	4.7	0.9	-5.3	1,531.1	25.9	5.5
NLD	46.8	18.5	7.1	106.2	80.3	9.7	394.7	20.9	64.1
POL	45.2	12.7	-1.8	8.5	5.8	2.5	107.2	23.1	6.1
PRT	64.5	27.3	10.9	27.7	20.7	12.7	507.1	15.9	16.0
ROU	60.4	18.1	5.4	39.2	31.0	7.3	247.9	22.5	27.5
SVN	82.5	49.0	35.7	28.2	23.6	27.6	869.4	18.2	11.4
SWE	48.1	19.1	-0.7	63.8	37.5	0.8	247.3	22.9	38.5
EU excl. GRC	**51.5**	**21.9**	**10.6**	**41.3**	**32.3**	**16.6**	**448.7**	**309.4**	**23.8**
% Δ to 2013	5.8%	13.6%	45.6%	11.0%	15.1%	36.6%	-9.0%	-7.0%	5.7%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.4 Inactive fleet capacity (number of vessels, kW and GT) by Member State, 2014.

	Inactive vessels			As a % of MS fleet			As a % of EU fleet		
	N	kW	GT	N	kW	GT	N	kW	GT
BEL	4	1,686	492	5.0	3.4	3.6	0.0	0.2	0.3
BGR	901	20,238	1,694	44.8	26.3	35.8	5.0	2.4	1.2
DEU	397	9,228	1,609	26.2	2.8	6.8	2.2	1.1	1.1
DNK	518	13,242	1,608	26.5	2.4	6.3	2.9	1.6	1.1
ESP	1,228	62,584	26,327	12.4	6.9	7.2	6.9	7.4	18.6
EST	1	74	11	0.1	0.2	0.2	0.0	0.0	0.0
FIN	1,380	61,757	3,651	43.9	20.1	36.0	7.7	7.3	2.6
FRA	1,311	136,592	9,332	18.5	5.3	13.4	7.3	16.3	6.6
GBR	1,987	124,735	20,170	30.3	9.9	15.2	11.1	14.8	14.2
GRC	1,155	34,390	3,938	7.8	5.4	8.0	6.5	4.1	2.8
HRV	1,669	103,967	13,842	38.1	30.0	29.9	9.3	12.4	9.8
IRL	752	30,142	5,640	35.9	9.5	16.6	4.2	3.6	4.0
ITA	1,134	72,469	13,613	8.9	8.3	7.1	6.3	8.6	9.6
LTU	46	4,207	2,466	32.2	5.0	8.3	0.3	0.5	1.7
LVA	87	529	99	23.8	1.4	2.7	0.5	0.1	0.1
MLT	336	22,592	2,569	32.2	33.5	29.9	1.9	2.7	1.8
NLD	200	32,047	8,955	27.2	6.7	11.4	1.1	3.8	6.3
POL	42	2,097	344	5.0	1.0	2.6	0.2	0.2	0.2
PRT	4,311	85,562	22,879	52.2	22.8	23.3	24.1	10.2	16.2
ROU	35	523	56	22.2	7.1	8.6	0.2	0.1	0.0
SVN	79	2,246	182	46.5	30.4	26.4	0.4	0.3	0.1
SWE	288	19,550	2,084	22.8	7.2	11.9	1.6	2.3	1.5
EU total	**17,861**	**840,457**	**141,560**	**21.9%**	**13.1%**	**8.6%**			

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.5 Fuel prices (€ per litre) by Member State.

year	BEL	BGR	CYP	DEU	DNK	EST	ESP	FIN	FRA	GRC	HRV	IRL	ITA	LTU	LVA	MLT	NLD	POL	PRT	ROU	SWE	SVN	GBR	Weighted average
2008	0.625	1.308	0.830	0.593	0.603	0.694	0.609	0.715	0.660			0.560	0.773	0.683	0.578	0.547	0.499	0.724	0.690	1.546	0.680	0.937	0.671	0.668
2009	0.395	0.591	0.561	0.458	0.389	0.500	0.504	0.474	0.436			0.421	0.512	0.400	0.560	0.534	0.355	0.580	0.547	1.352	0.421	0.684	0.458	0.462
2010	0.507	1.164	0.684	0.523	0.506	0.640	0.526	0.614	0.535			0.545	0.639	0.573	0.566	0.727	0.465	0.491	0.578	1.260	0.541	0.829	0.528	0.561
2011	0.647	0.751	0.833	0.655	0.626	0.827	0.686	0.773	0.653			0.765	0.776	0.484	0.662	0.901	0.588	0.606	0.711	1.077	0.700	0.969	0.676	0.700
2012	0.706	0.610	0.916	0.686	0.704	0.875	0.634	0.808	0.736	0.916	0.833	0.755	0.816	0.668	0.747	1.380	0.649	0.701	0.760	1.042	0.721	1.086	0.725	0.748
2013	0.652	0.885	0.894	0.664	0.665	0.786	0.589	0.751	0.708	0.928	0.807	0.731	0.752	0.546	0.826	0.536	0.600	0.663	0.670	1.010	0.665	1.080	0.660	0.681
2014	0.591	0.678	0.852	0.607	0.614	0.695	0.539	0.675	0.648	0.852	0.793	0.729	0.728	0.481	0.641	0.735	0.525	0.602	0.696	1.015	0.596	1.050	0.625	0.645
2015	0.454	0.544	0.660	0.471	0.491	0.529	0.423	0.520	0.491	0.695	0.630	0.549	0.557	0.374	0.493	0.645	0.409	0.477	0.567	0.795	0.494	0.791	0.495	0.466
2016	0.339	0.403	0.522	0.360	0.389	0.442	0.325	0.405	0.375	0.548	0.483	0.411	0.409	0.278	0.368	0.545	0.310	0.353	0.439	0.640	0.376	0.572	0.357	0.358

Data shaded in grey are estimated.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.6 Main capacity, effort and landings variables for the EU small-scale fleet by MS, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

Small Scale Fleet (SSF)	Number of vessels (#)	as % of EU SSF	Vessel tonnage (thousand GT)	as % of EU SSF	Engine power (thousand kW)	as % of EU SSF	Total employed (person)	as % of EU SSF	FTE (#)	as % of EU SSF	Days at sea (thousand day)	as % of EU SSF	Fishing days (thousand day)	as % of EU SSF	Energy consumed (million litre)	as % of EU SSF	Live weight of landings (thousand tonne)	as % of EU SSF	Value of landings (million €)	as % of EU SSF
BGR	999	2.1%	1.7	1.4%	20.8	1.2%	1,196	1.3%	343	0.6%	13.3	0.3%	13.3	0.5%	0.4	0.2%	2.1	0.7%	1.2	0.1%
CYP	827	1.8%	1.9	1.6%	31.9	1.8%	1,106	1.2%	616	1.0%	63.2	1.4%	63.2	2.2%	1.7	0.9%	0.6	0.2%	4.4	0.5%
DEU	817	1.7%	2.2	1.8%	22.4	1.3%	798	0.9%	608	1.0%	69.8	1.5%	74.4	2.6%	0.9	0.5%	7.2	2.4%	8.1	0.8%
DNK	1,004	2.1%	3.8	3.2%	40.9	2.3%	307	0.3%	225	0.4%	42.5	0.9%	42.4	1.5%	2.9	1.5%	11.1	3.7%	21.6	2.3%
ESP	4,156	8.8%	11.5	9.5%	110.5	6.3%	8,251	9.1%	5,546	9.2%	406.7	8.8%	406.5	14.5%	22.8	12.1%	29.6	9.8%	104.4	10.9%
EST	1,475	3.1%	2.2	1.8%	22.2	1.3%	1,895	2.1%	333	0.5%	147.7	3.2%	192.3	6.8%	0.5	0.3%	10.4	3.4%	5.1	0.5%
FIN	1,699	3.6%	5.5	4.5%	77.9	4.4%	1,699	1.9%	251	0.4%	120.1	2.6%	119.8	4.3%	1.7	0.9%	14.3	4.7%	11.5	1.2%
FRA	4,198	8.9%	15.6	12.9%	419.9	23.9%	3,805	4.2%	2,481	4.1%	221.1	4.8%	219.3	7.8%	26.8	14.2%	77.7	25.7%	184.4	19.3%
GBR	3,138	6.7%	12.8	10.6%	194.0	11.1%	5,625	6.2%	1,954	3.2%	237.0	5.2%	162.1	5.8%	29.5	15.6%	46.6	15.4%	123.5	12.9%
GRC	12,762	27.2%	24.8	20.5%	238.3	13.6%	36,444	40.0%	31,564	52.1%	1,828.1	39.8%			45.8	24.2%	18.2	6.0%	145.0	15.2%
HRV	1,665	3.5%	5.0	4.2%	94.2	5.4%	2,076	2.3%	537	0.9%	134.9	2.9%	115.0	4.1%	2.6	1.4%	1.3	0.4%	7.0	0.7%
IRL	898	1.9%	2.7	2.3%	24.9	1.4%	1,140	1.3%	763	1.3%	7.3	0.2%	6.7	0.2%	4.4	2.3%	10.5	3.5%	16.4	1.7%
ITA	7,611	16.2%	14.7	12.2%	219.6	12.5%	13,114	14.4%	9,379	15.5%	930.5	20.2%	1,028.5	36.6%	32.6	17.3%	28.2	9.3%	203.3	21.3%
LTU	64	0.1%	0.2	0.2%	1.8	0.1%	142	0.2%	46	0.1%	5.9	0.1%	4.7	0.2%	0.1	0.1%	0.5	0.2%	0.5	0.0%
LVA	221	0.5%	0.4	0.3%	2.6	0.2%	301	0.3%	214	0.4%	12.8	0.3%	10.9	0.4%	0.0	0.0%	4.5	1.5%	1.7	0.2%
MLT	648	1.4%	1.5	1.2%	36.2	2.1%	1,098	1.2%	804	1.3%	26.6	0.6%	26.1	0.9%	1.2	0.6%	0.6	0.2%	3.7	0.4%
NLD	178	0.4%	0.5	0.4%	16.9	1.0%	362	0.4%	99	0.2%	2.9	0.1%	2.7	0.1%	0.8	0.4%	0.4	0.1%	2.6	0.3%
POL	595	1.3%	2.7	2.2%	21.3	1.2%	1,519	1.7%	1,420	2.3%	51.2	1.1%	50.5	1.8%	2.2	1.2%	12.8	4.2%	11.1	1.2%
PRT	3,097	6.6%	7.4	6.1%	99.9	5.7%	8,957	9.8%	2,967	4.9%	213.8	4.7%	212.1	7.5%	7.7	4.1%	20.2	6.7%	82.3	8.6%
ROU	111	0.2%	0.2	0.2%	2.4	0.1%	279	0.3%	24	0.0%	2.2	0.0%	2.2	0.1%	0.2	0.1%	1.0	0.3%	1.2	0.1%
SVN	77	0.2%	0.2	0.2%	4.3	0.2%	89	0.1%	60	0.1%	7.4	0.2%	7.4	0.3%	0.1	0.0%	0.1	0.0%	0.6	0.1%
SWE	731	1.6%	3.3	2.8%	51.8	3.0%	914	1.0%	332	0.5%	50.4	1.1%	50.4	1.8%	4.0	2.1%	4.7	1.5%	14.3	1.5%
EU SSF	**46,971**		**120.9**		**1,755**		**91,116**		**60,565**		**4,595**		**2,810**		**189**		**302**		**954**	
Δ to 2013	-2.7%		-0.3%		-1.7%															
EU SSF excl. GRC	**34,209**		**96.2**		**1,516**		**54,672**		**29,001**		**2,767**		**2,810**		**143**		**284**		**809**	
Δ to 2013	-1.1%		1.5%		-1.1%		-4.5%		-8.3%		-1.6%		-1.3%		-23.1%		-2.4%		4.0%	
As % of EU total	73.8%		8.1%		31.4%		52.6%		45.8%		66.9%		58.1%		8.2%		5.9%		12.9%	
As % of EU excl. GRC	68.3%		6.7%		29.2%		43.1%		32.0%		55.9%		58.1%		6.5%		5.6%		11.4%	

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.7 Main economic variables and indicators for the EU small-scale fleet by MS, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

Small Scale Fleet (SSF)	Revenue (million €)	as % of EU SSF	Wages and salaries of (million €)	as % of EU SSF	Unpaid labour value (million €)	as % of EU SSF	Energy costs (million €)	as % of EU SSF	Repair costs (million €)	as % of EU SSF	Other variable costs (million €)	as % of EU SSF	Other non-variable costs (million €)	as % of EU SSF	Annual depreciation costs (million €)	as % of EU SSF	Opportunity cost of capital (million €)	as % of EU SSF	Gross Value Added (million €)	Gross profit (million €)	Net profit (million €)
BGR	2.8	0.3%	1.5	0.5%	0.34217	0.1%	0.4	0.2%	0.2	0.2%	0.21	0.12%	0.14	0.2%	0.3	0.2%	0.24	1.0%	1.9	0.04	- 0.5
CYP	4.4	0.4%	-	0.0%	0.27852	0.1%	1.4	0.7%	0.7	0.6%	2.42	1.46%	0.02	0.0%	2.0	1.6%	2.24	9.3%	- 0.2	- 0.43	- 4.7
DEU	8.6	0.8%	1.3	0.4%	1.08208	0.3%	0.8	0.4%	1.3	1.3%	0.87	0.52%	1.88	2.3%	1.4	1.1%	0.02	0.1%	3.8	1.45	- 0.0
DNK	23.1	2.2%	2.6	0.8%	10.7791	3.3%	1.9	1.0%	3.7	3.6%	4.02	2.43%	2.52	3.1%	4.3	3.4%	0.41	1.7%	10.9	- 2.40	- 7.2
ESP	126.2	11.9%	41.4	12.9%	47.0707	14.6%	12.6	6.2%	6.1	6.0%	16.36	9.88%	4.39	5.3%	5.3	4.1%	0.95	3.9%	86.7	- 4.42	- 12.2
EST	5.2	0.5%	0.7	0.2%	0.95159	0.3%	0.6	0.3%	1.0	1.0%	0.78	0.47%	0.10	0.1%	0.5	0.4%	0.15	0.6%	2.8	1.14	0.5
FIN	13.1	1.2%	0.7	0.2%	2.49002	0.8%	1.4	0.7%	1.8	1.8%	1.31	0.79%	2.02	2.5%	8.0	6.3%	0.06	0.3%	6.6	3.34	- 4.7
FRA	222.5	21.0%	99.8	31.0%			18.1	8.9%	12.3	12.2%	24.04	14.52%	31.01	37.7%	17.6	13.8%	1.16	4.9%	137.0	37.21	18.4
GBR	131.7	12.4%	36.1	11.2%	10.3086	3.2%	18.4	9.0%	8.2	8.1%	27.69	16.73%	11.58	14.1%	11.1	8.7%	0.53	2.2%	65.8	19.41	7.8
GRC	148.1		58.4	18.2%	136.969	42.6%	104.0	51.0%	44.3	43.6%	60.12	36.33%	8.27	10.1%	25.9	20.4%	8.59	35.8%	- 68.6	- 263.99	- 298.5
HRV	15.6	1.5%	3.9	1.2%	1.15278	0.4%	1.9	0.9%	1.3	1.3%	1.03	0.62%	1.35	1.6%	2.1	1.7%	1.65		10.0	4.94	1.2
IRL	29.3	2.8%	5.6	1.8%	0.48974	0.2%	3.2	1.6%	2.0	2.0%	3.50	2.12%	1.46	1.8%	0.3	0.2%	0.07	0.3%	19.0	12.87	10.4
ITA	203.6	19.2%	31.9	9.9%	48.6798	15.1%	25.5	12.5%	9.9	9.7%	13.68	8.27%	12.19	14.8%	33.5	26.3%	3.53	14.7%	142.3	61.75	24.8
LTU	0.5	0.1%	0.2	0.0%	0.00658	0.0%	0.1	0.0%	0.1	0.1%	0.06	0.04%	0.06	0.1%	0.0	0.0%	0.01	0.0%	0.3	0.09	0.1
LVA	1.7	0.2%	0.1	0.0%	0.04628	0.0%	0.0	0.0%	0.0	0.0%	0.03	0.02%	0.01	0.0%	0.0	0.0%	0.00	0.0%	1.7	1.56	1.5
MLT	3.7	0.3%	0.4	0.1%	3.53216	1.1%	1.1	0.5%	0.7	0.7%	0.58	0.35%	0.09	0.1%	0.9	0.7%	0.25	1.0%	1.2	- 2.70	- 3.9
NLD	4.9	0.5%	0.5	0.2%	0.6966	0.2%	0.6	0.3%	1.0	1.0%	0.32	0.19%	0.37	0.4%	0.8	0.7%	0.12	0.5%	2.6	1.37	0.4
POL	11.2	1.1%	3.9	1.2%	3.2453	1.0%	1.4	0.7%	0.7	0.7%	1.46	0.88%	0.73	0.9%	0.3	0.3%	0.97	4.0%	6.9	- 0.25	- 1.6
PRT	83.0	7.8%	30.9	9.6%	4.92921	1.5%	7.2	3.6%	3.2	3.1%	5.55	3.35%	1.81	2.2%	8.8	6.9%	2.70	11.2%	65.3	29.41	17.9
ROU	1.2	0.1%	0.4	0.1%	0.12399	0.0%	0.2	0.1%	0.1	0.1%	0.10	0.06%	0.04	0.0%	0.1	0.1%	0.01	0.0%	0.7	0.21	0.1
SVN	1.5	0.1%	0.3	0.1%	0.15366	0.0%	0.1	0.0%	0.1	0.1%	0.05	0.03%	0.00	0.00%	0.2	0.15%	0.04	0.2%	1.2	0.73	0.5
SWE	16.2	1.5%	1.3	0.4%	9.67203	3.0%	2.7	1.3%	2.9	2.9%	1.34	0.81%	2.25	2.73%	3.7	2.92%	0.29	1.2%	7.0	- 3.99	- 8.0
EU SSF	**1,058**		**321.8**		**283.0**		**203.8**		**101.5**		**165.5**		**82.3**		**127.3**		**24.0**				
EU SSF excl. GRC	**909.9**		**263.4**		**146.0**		**99.8**		**57.2**		**105.4**		**74.0**		**101.3**		**15.4**		**573.4**	**161.3**	**40.8**
Δ to 2013	-1.4%		3.5%		-2.4%		-25.5%		-6.5%		-15.4%		2.4%		0.1%		0.6%		8.1%	31.4%	1180%
As % of EU total	14.0%		15.9%		69.3%		13.3%		15.7%		14.6%		13.4%		16.8%		20.8%				
As % of EU excl. GRC	12.5%		13.9%		56.2%		7.4%		9.9%		10.7%		12.3%		14.4%		15.8%		15.3%	10.2%	5.5%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.8 Main economic performance indicators for the EU small-scale fleet by MS, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

Small Scale Fleet (SSF)	Tangible asset value (million €)	as % of EU SSF	Invest-ments (million €)	as % of EU SSF	GVA to revenue (%)	Gross profit margin (%)	Net profit margin (%)	GVA per FTE (labour productivi (thousand €)	Net Value Added per FTE (thousand €)	Return on fixed tangible (%)	Energy consumed per landed (litre/tonne)	Fuel efficiency	Average wage per FTE (thousand €)
BGR	4.9	0.6%	2.3	1.8%	66.3377	1.4	-16.7	5.45	3.97	-4.7	177.8	266.6	5.4
CYP	35.5	4.6%	0.02	0.0%	-3.51246	-9.9	-106.9	-0.25	-7.10	-6.8	2,888.4	382.8	
DEU	6.6	0.9%	2.8	2.2%	44.119	16.9	-0.0	6.22	3.83	0.3	120.8	109.4	3.8
DNK	39.6	5.2%	0.8	0.6%	47.3528	-10.4	-31.0	48.56	27.44	-17.0	259.3	130.9	59.2
ESP	32.3	4.2%	3.3	2.6%	68.7456	-3.6	-10.7	15.64	14.52	-38.3	772.6	181.0	16.2
EST	7.2	0.9%	1.0	0.8%	53.4181	21.9	9.8	8.38	6.48	9.2	50.0	103.1	5.0
FIN	24.9	3.2%	8.3	6.5%	49.9809	25.4	-35.9	26.12	-5.92	-18.6	116.2	146.5	12.8
FRA	109.9	14.3%	17.0	13.3%	61.5827	16.7	8.3	55.23	48.24	17.8	347.8	121.6	40.2
GBR	84.9	11.1%	22.6	17.7%	49.9636	14.7	5.9	33.66	27.70	9.8	632.6	236.3	23.7
GRC	101.6	13.2%	41.2	32.3%	-46.3116	-178.3	-201.6	-2.17	-3.27	-285.3	2,520.5	309.0	6.2
HRV	42.9	5.6%	2.6	2.1%	64.2374	31.6	7.4	18.68	11.64	6.5	2,013.8	373.9	9.5
IRL	3.3	0.4%	2.0	1.6%	65.114	44.1	43.3	25.17	26.36	315.9	425.8	161.0	8.1
ITA	131.6	17.1%	8.4	6.6%	69.9031	30.3	12.2	15.17	11.23	21.5	1,155.6	160.2	8.6
LTU	0.3	0.0%	0.0	0.0%	48.8353	17.7	13.4	5.67	5.16	25.3	262.3	277.5	3.6
LVA	0.1	0.0%	0.0	0.0%	96.1135	89.9	88.8	7.81	7.71	2,320.1	7.4	19.0	0.5
MLT	13.7	1.8%	0.7	0.6%	33.0357	-73.0	-105.3	1.52	0.03	-26.5	2,014.3	330.7	4.8
NLD	10.6	1.4%	10.6	8.3%	52.9481	27.8	8.1	26.25	16.46	4.9	1,916.6	161.9	12.4
POL	28.4	3.7%	0.7	0.6%	61.4658	-2.2	-14.0	4.83	3.90	-2.1	170.4	196.0	5.0
PRT	68.1	8.9%	1.6	1.2%	78.5842	35.4	21.5	22.00	18.11	30.2	382.1	93.0	12.1
ROU	0.3	0.0%	0.1	0.1%	61.3834	18.1	8.2	30.33	25.47	37.7	248.1	210.4	21.4
SVN	1.5	0.2%	0.2	0.1%	83.1639	50.0	33.8	20.24	16.29	35.8	950.2	102.3	8.1
SWE	19.4	2.5%	1.2	1.0%	43.0	-24.6	-49.2	21.06	8.97	-39.7	845.7	275.9	33.1
EU SSF	**767.6**		**127.4**										
SSF as % of EU total	15.2%		24.1%										
EU SSF excl. GRC	**666.0**		**86.2**		**63.0**	**17.8**	**4.6**	**19.8**	**15.7**	**8.5**	**504.7**	**162.1**	**14.5**
Δ to 2013	-3.0%		-5.2%		9.6%	32.9%	1196.5%	17.8%	20.2%	214.5%	-21.1%	-22.2%	8.9%
SSF as % of EU excl. GRC	13.7%		18.1%										

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.9 Main capacity, effort and landings variables for the EU large-scale fleet by MS, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

Large Scale Fleet (LSF)	Total no. of vessels (#)	as % of EU LSF	Vessel tonnage (thousand GT)	as % of EU LSF	Engine power (thousand kW)	as % of EU LSF	Total employed (person)	as % of EU LSF	FTE (#)	as % of EU LSF	Days at sea (thousand day)	as % of EU LSF	Fishing days (thousand day)	as % of EU LSF	Energy consumed (million litre)	as % of EU LSF	Live weight of landings (thousand tonne)	as % of EU LSF	Value of landings (million €)	as % of EU LSF
BEL	76	0.5%	14.2	1.3%	44.821	1.3%	345	0.5%	293	0.5%	16.3	0.7%	16.9	0.9%	39.8	2.3%	26.2	0.6%	81.5	1.6%
BGR	111	0.7%	3.1	0.3%	15.571	0.4%	321	0.4%	189	0.3%	8.0	0.4%	8.0	0.4%	1.9	0.1%	5.8	0.1%	3.1	0.1%
CYP	27	0.2%	1.1	0.1%	4.8378	0.1%	113	0.1%	113	0.2%	2.4	0.1%	2.4	0.1%	1.0	0.1%	0.7	0.0%	3.1	0.1%
DEU	302	1.8%	54.4	4.9%	103.804	3.0%	807	1.1%	645	1.0%	40.2	1.8%	40.2	2.1%	37.3	2.2%	219.6	5.4%	122.5	2.4%
DNK	434	2.6%	62.7	5.7%	156.8939	4.5%	1,099	1.5%	1,394	2.2%	61.2	2.8%	56.8	2.9%	88.8	5.1%	730.8	18.1%	358.3	7.1%
ESP	4,307	26.3%	178.0	16.2%	465.1595	13.4%	19,809	26.2%	17,179	26.7%	647.3	29.4%	610.7	31.1%	350.0	20.3%	409.5	10.1%	869.4	17.2%
EST	38	0.2%	3.8	0.3%	9.81324	0.3%	175	0.2%	164	0.3%	3.4	0.2%	3.2	0.2%	2.3	0.1%	44.4	1.1%	9.5	0.2%
FIN	65	0.4%	9.0	0.8%	32.08	0.9%	148	0.2%	104	0.2%	6.3	0.3%	6.0	0.3%	14.2	0.8%	134.0	3.3%	28.8	0.6%
FRA	1,538	9.4%	105.7	9.6%	386.397	11.1%	5,647	7.5%	4,486	7.0%	243.8	11.1%	212.3	10.8%	237.5	13.8%	349.3	8.7%	772.8	15.3%
GBR	1,427	8.7%	170.9	15.5%	501.7519	14.5%	6,220	8.2%	5,955	9.3%	191.0	8.7%	162.9	8.3%	251.9	14.6%	712.3	17.7%	945.3	18.7%
GRC	838	5.1%	44.1	4.0%	158.4911	4.6%	10,021	13.3%	9,996	15.6%	93.4	4.2%			61.6	3.6%	29.5	0.7%	133.6	2.6%
HRV	1,051	6.4%	27.2	2.5%	149.7222	4.3%	2,766	3.7%	1,614	2.5%	106.3	4.8%	91.1	4.6%	21.6	1.2%	78.1	1.9%	53.8	1.1%
IRL	445	2.7%	51.1	4.6%	126.4918	3.6%	2,014	2.7%	1,632	2.5%	46.9	2.1%	36.7	1.9%	63.3	3.7%	265.9	6.6%	276.8	5.5%
ITA	3,944	24.1%	135.5	12.3%	731.7772	21.1%	13,819	18.3%	11,315	17.6%	502.1	22.8%	501.9	25.6%	271.9	15.7%	148.6	3.7%	610.0	12.1%
LTU	24	0.1%	3.7	0.3%	7.351	0.2%	195	0.3%	114	0.2%	1.7	0.1%	1.5	0.1%	2.6	0.1%	13.3	0.3%	3.7	0.1%
LVA	57	0.3%	6.5	0.6%	16.623	0.5%	306	0.4%	148	0.2%	6.4	0.3%	6.3	0.3%	5.3	0.3%	54.7	1.4%	17.8	0.4%
MLT	61	0.4%	3.6	0.3%	16.68529	0.5%	320	0.4%	312	0.5%	4.7	0.2%	2.4	0.1%	2.5	0.1%	1.8	0.0%	6.8	0.1%
NLD	357	2.2%	124.7	11.3%	231.2217	6.7%	1,662	2.2%	1,581	2.5%	45.7	2.1%	40.1	2.0%	150.1	8.7%	381.9	9.5%	369.5	7.3%
POL	199	1.2%	15.4	1.4%	46.79822	1.3%	1,307	1.7%	1,287	2.0%	31.8	1.4%	28.1	1.4%	20.9	1.2%	131.2	3.3%	45.5	0.9%
PRT	822	5.0%	61.3	5.6%	165.4866	4.8%	7,653	10.1%	5,199	8.1%	116.4	5.3%	104.5	5.3%	65.1	3.8%	134.5	3.3%	249.2	4.9%
ROU	12	0.1%	0.5	0.05%	3.2066	0.1%	51	0.1%	14	0.02%	0.6	0.03%	0.6	0.03%	0.3	0.02%	1.2	0.03%	1.3	0.03%
SVN	14	0.1%	0.2	0.02%	1.94011	0.1%	37	0.05%	20	0.03%	1.2	0.1%	1.2	0.1%	0.2	0.01%	0.2	0.00%	0.7	0.01%
SWE	247	1.5%	23.6	2.1%	92.49324	2.7%	655	0.9%	513	0.8%	27.3	1.2%	27.3	1.4%	37.1	2.1%	161.4	4.0%	92.3	1.8%
EU LSF	**16,396**		**1,100**		**3,469**		**75,488**		**64,269**		**2,204**		**1,961**		**1,727**		**4,035**		**5,055**	
Δ to 2013	-1.7%		-0.5%		-0.8%															
EU LSF excl. GRC	**15,558**		**1,056**		**3,311**		**65,467**		**54,272**		**2,111**		**1,961**		**1,665**		**4,005**		**4,922**	
Δ to 2013	-0.3%		-0.4%		-0.3%		1.3%		2.8%		-0.6%		-0.1%		-1.9%		7.0%		2.1%	
As % of EU total	25.8%		73.5%		62.0%		43.6%		48.6%		32.1%		40.6%		74.8%		78.3%		68.6%	
As % of EU excl. GRC	31.1%		74.0%		63.7%		51.6%		59.9%		42.7%		40.6%		75.6%		79.0%		69.4%	

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.10 Main economic variables and indicators for the EU large-scale fleet by MS, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

Large Scale Fleet (LSF)	Revenue (million €)	as % of EU LSF	Wages and salaries of (million €)	as % of EU LSF	Unpaid labour value (million €)	as % of EU LSF	Energy costs (million €)	as % of EU LSF	Repair & maintenance costs (million €)	as % of EU LSF	Other variable costs (million €)	as % of EU LSF	Other non-variable costs (million €)	as % of EU LSF	Annual depreciation costs (million €)	as % of EU LSF	Opportunity cost of capital (million €)	as % of EU LSF	Gross Value Added (million €)	Gross profit (million €)	Net profit (million €)
BEL	85.4	1.6%	27.1	1.8%	2.11165	1.7%	23.5	2.1%	5.9	1.3%	11.32	1.63%	8.02	1.8%	9.7	1.7%	0.70	0.8%	36.6	7.4	- 2.9
BGR	2.7	0.1%	0.7	0.0%	0.19803	0.2%	1.1	0.1%	0.3	0.1%	0.29	0.04%	0.11	0.0%	0.5	0.1%	0.53	0.6%	0.8	- 0.1	- 1.1
CYP	3.1	0.1%	0.6	0.0%	0	0.0%	0.8	0.1%	0.3	0.1%	0.73	0.11%	0.08	0.0%	0.8	0.1%	0.94	1.1%	1.2	0.6	- 1.1
DEU	126.0	2.4%	36.3	2.4%	8.65148	6.9%	22.4	2.0%	14.1	3.1%	9.87	1.42%	12.69	2.9%	15.6	2.7%	0.26	0.3%	67.0	22.0	6.2
DNK	362.5	6.9%	68.8	4.5%	25.0214	20.0%	54.4	4.9%	35.8	7.9%	26.91	3.87%	17.90	4.1%	83.9	14.4%	5.54	6.7%	227.4	133.7	44.3
ESP	941.5	17.9%	348.3	22.9%	53.3423	42.7%	176.9	16.0%	62.9	14.0%	115.23	16.59%	59.87	13.7%	53.0	9.1%	6.84	8.3%	526.6	125.0	63.9
EST	9.5	0.2%	3.7	0.2%	0.00718	0.0%	1.4	0.1%	0.5	0.1%	0.54	0.08%	0.62	0.1%	1.4	0.2%	0.26	0.3%	6.5	2.8	1.1
FIN	26.2	0.5%	4.2	0.3%	0.908	0.7%	9.3	0.8%	2.9	0.6%	1.83	0.26%	3.22	0.7%	7.4	1.3%	0.05	0.1%	8.9	3.9	- 3.6
FRA	805.8	15.3%	286.0	18.8%			156.3	14.1%	63.8	14.1%	114.96	16.55%	84.52	19.4%	71.2	12.2%	4.63	5.6%	386.2	100.2	12.7
GBR	986.3	18.7%	206.0	13.5%	1.33556	1.1%	157.5	14.2%	82.6	18.3%	151.38	21.79%	125.25	28.7%	61.9	10.6%	3.17	3.8%	469.6	262.3	197.2
GRC	134.5		74.6	4.9%	11.5087	9.2%	78.9	7.1%	23.6	5.2%	86.32	12.43%	5.85	1.3%	27.2	4.7%	9.07	11.0%	- 60.2	- 146.3	- 182.6
HRV	60.9	1.2%	16.7	1.1%	1.04462	0.8%	17.3	1.6%	5.1	1.1%	6.20	0.89%	5.67	1.3%	12.0	2.1%	8.93	10.8%	26.6	8.9	- 12.1
IRL	291.3	5.5%	74.6	4.9%	0.90044	0.7%	46.1	4.2%	34.1	7.6%	38.69	5.57%	23.39	5.4%	26.1	4.5%	9.84	11.9%	148.2	72.5	30.0
ITA	620.6	11.8%	152.8	10.0%	1.56416	1.3%	196.2	17.7%	28.1	6.2%	55.65	8.01%	21.95	5.0%	118.2	20.3%	13.38	16.2%	318.7	164.2	32.6
LTU	4.0	0.1%	1.0	0.1%	0	0.0%	1.6	0.1%	0.4	0.1%	1.05	0.15%	0.69	0.2%	0.2	0.0%	0.13	0.2%	0.3	- 0.7	- 1.0
LVA	18.6	0.4%	3.0	0.2%	0	0.0%	3.4	0.3%	1.0	0.2%	3.39	0.49%	5.22	1.2%	1.5	0.3%	0.16	0.2%	5.5	2.5	0.8
MLT	8.0	0.2%	1.5	0.1%	0.64028	0.5%	1.6	0.1%	1.1	0.2%	1.04	0.15%	0.21	0.0%	2.0	0.3%	0.61	0.7%	4.0	1.8	- 0.8
NLD	376.0	7.1%	97.3	6.4%	9.18655	7.3%	78.7	7.1%	50.3	11.2%	33.83	4.87%	37.40	8.6%	39.0	6.7%	3.36	4.1%	175.8	69.3	26.9
POL	45.6	0.9%	8.4	0.6%	2.23789	1.8%	12.5	1.1%	4.7	1.0%	3.12	0.45%	6.81	1.6%	3.6	0.6%	2.81	3.4%	18.6	7.9	1.4
PRT	256.4	4.9%	94.5	6.2%	0.62886	0.5%	44.2	4.0%	19.5	4.3%	24.81	3.57%	10.05	2.3%	29.2	5.0%	9.68	11.7%	157.9	62.7	23.9
ROU	1.3	0.0%	0.4	0.0%	0.11207	0.1%	0.3	0.0%	0.1	0.0%	0.10	0.01%	0.05	0.0%	0.1	0.0%	0.09	0.1%	0.8	0.2	0.0
SVN	1.3	0.0%	0.3	0.0%	0.08645	0.1%	0.1	0.0%	0.1	0.0%	0.02	0.00%	0.00	0.0%	0.1	0.0%	0.04	0.0%	1.0	0.6	0.5
SWE	95.8	1.8%	16.0	1.0%	5.57383	4.5%	21.7	2.0%	13.5	3.0%	7.46	1.07%	6.12	1.4%	16.7	2.9%	1.42	1.7%	46.9	25.4	7.3
EU LSF	5,263.0		1,522.8		125.1		1,106.1		450.8		694.7		435.7		581.1		82.4		2,574.9	926.9	243.7
EU LSF excl. GRC	**5,128.6**		**1,448.2**		**113.6**		**1,027.2**		**427.2**		**608.4**		**429.8**		**554.0**		**73.3**		**2,635.1**	**1,073.2**	**426.2**
Δ to 2013	4.1%		7.7%		7.0%		-7.9%		7.2%		0.3%		7.0%		-1.5%		1.7%		9.8%	13.1%	40.0%
As % of EU total	69.8%		75.2%		30.6%		72.1%		69.8%		61.2%		70.9%		76.9%		71.4%		71.4%	79.1%	92.3%
As % of EU excl. GRC	70.7%		76.5%		43.7%		76.0%		73.9%		61.6%		71.5%		78.8%		75.0%		70.5%	67.8%	57.2%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.11 Main economic performance indicators for the EU large-scale fleet by MS, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

Large Scale Fleet (LSF)	Tangible asset value (million €)	as % of EU LSF	Invest-ments (million €)	as % of EU LSF	GVA to revenue (%)	Gross profit margin (%)	Net profit margin (%)	GVA per FTE (labour productivi (thousand €)	Net Value Added per FTE (thousand €)	Return on fixed tangible (%)	Energy consumed per landed (litre/tonne)	Fuel efficiency	Average wage per FTE (thousand €)
BEL	58.0	1.5%	4.9	1.3%	42.8	8.7	- 3.4	124.9	89.5	- 3.9	1,519.4	487.1	99.53
BGR	10.5	0.3%	1.6	0.4%	30.6	- 3.3	- 40.2	4.3	- 0.9	- 5.2	319.2	724.2	4.78
CYP	14.8	0.4%	0.1	0.0%	37.4	19.7	- 36.1	10.4	- 5.1	- 1.3	1,399.9	332.5	4.89
DEU	72.2	1.8%	21.5	5.7%	53.1	17.5	4.9	103.8	79.2	8.9	578.0	301.7	69.67
DNK	537.5	13.5%	93.9	24.7%	62.7	36.9	12.2	163.2	99.1	9.3	121.6	248.1	67.29
ESP	233.4	5.9%	15.6	4.1%	55.9	13.3	6.9	30.7	27.2	31.0	854.7	375.0	23.38
EST	11.9	0.3%	0.6	0.2%	68.6	29.3	12.0	39.7	29.7	11.7	51.3	239.6	22.75
FIN	20.7	0.5%	9.6	2.5%	34.1	14.7	- 13.8	85.9	14.2	- 17.2	105.6	550.6	48.84
FRA	437.0	11.0%	47.4	12.5%	47.9	12.4	1.7	86.1	66.5	4.0	679.0	299.7	63.76
GBR	503.5	12.7%	83.5	22.0%	47.6	26.6	20.0	78.9	67.9	39.8	353.6	264.6	34.82
GRC	107.4	2.7%	10.5	2.8%	-44.7	- 108.8	- 135.8	- 6.0	- 9.6	- 161.6	2,087.8	457.9	8.62
HRV	232.5	5.8%	4.8	1.3%	43.6	14.6	- 19.9	16.5	3.5	- 1.4	276.2	400.8	10.96
IRL	477.5	12.0%	15.6	4.1%	51.0	25.0	11.0	91.8	74.8	8.3	238.4	223.2	47.00
ITA	499.1	12.5%	13.6	3.6%	51.3	26.5	5.3	28.2	16.5	9.2	1,829.6	445.7	13.65
LTU	5.1	0.1%	0.3	0.1%	7.2	- 18.0	- 25.9	2.5	- 0.2	- 17.7	193.2	648.8	8.77
LVA	8.9	0.2%	0.8	0.2%	29.8	13.6	4.4	37.3	25.8	11.1	96.4	296.9	20.23
MLT	34.2	0.9%	0.5	0.1%	50.5	23.1	- 9.6	13.0	4.6	- 0.4	1,369.0	363.0	7.03
NLD	291.9	7.3%	20.5	5.4%	46.8	18.4	7.2	111.2	84.4	10.4	393.0	400.6	67.37
POL	82.1	2.1%	2.2	0.6%	40.7	17.3	3.2	14.8	9.7	5.2	168.4	460.7	8.54
PRT	244.5	6.1%	15.5	4.1%	61.6	24.5	9.3	30.4	22.9	13.7	483.9	254.8	18.30
ROU	2.8	0.1%	0.1	0.0%	59.5	18.1	3.0	54.1	40.4	4.4	247.6	232.3	37.69
SVN	1.3	0.0%	0.1	0.0%	81.7	47.8	40.4	51.6	47.0	43.3	841.3	237.2	21.43
SWE	93.7	2.4%	16.5	4.3%	49.0	26.5	7.6	91.4	56.1	9.3	229.9	402.0	41.92
EU LSF	**3,980.4**		**379.8**										
Δ to 2013	8.3%		-9.2%										
EU LSF excl. GRC	**3,873.1**		**369.3**		**51.4**	**20.9**	**8.5**	**48.6**	**36.6**	**12.9**	**433.2**	**331.3**	**28.8**
Δ to 2013	5.3%		-11.7%		5.41%	8.6%	35.1%	6.8%	10.0%	25.8%	-8.3%	-6.1%	4.6%
As % of EU total	78.7%		71.9%										
As % of EU excl GRC	79.9%		77.5%										

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.12 Main Capacity, effort and landings variables for the EU distant-water fleet by MS, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

Distant water Fleet (DWF)	Total number of vessels (#)	as % of EU DWF	Vessel tonnage (thousand GT)	as % of EU DWF	Engine power (thousand kW)	as % of EU DWF	Total employed (person)	as % of EU DWF	Full-time equivalent (national) (#)	as % of EU DWF	Days at sea (thousand day)	as % of EU DWF	Fishing days (thousand day)	as % of EU DWF	Energy consumed (million litre)	as % of EU DWF	Live weight of landings (thousand tonne)	as % of EU DWF	Value of landings (million €)	as % of EU DWF
ESP	230	79.6%	163.6	59.3%	228.7725	62.1%	5,061	76.5%	5,905	80.0%	63.7	90.1%	56.1	90.1%	268.2	68.2%	493.6	63.3%	1,100.9	81.1%
FRA	22	7.6%	45.0	16.3%	73.75	20.0%	578	8.7%	578	7.8%	0.4	0.5%	0.2	0.3%	58.4	14.8%	100.0	12.8%	143.9	10.6%
LTU	9	3.1%	42.9	15.6%	37.319	10.1%	413	6.2%	413	5.6%	0.8	1.1%	0.7	1.1%	56.8	14.4%	132.6	17.0%	91.1	6.7%
POL	2	0.7%	15.4	5.6%	11.216	3.0%	180	2.7%	140	1.9%	0.5	0.7%	0.4	0.7%			45.3	5.8%		
PRT	26	9.0%	8.9	3.2%	17.1644	4.7%	381	5.8%	348	4.7%	5.4	7.6%	4.9	7.9%	10.1	2.6%	8.7	1.1%	21.9	1.6%
EU DWF	**289**		**275.8**		**368.2**		**6,613**		**7,384**		**70.7**		**62.3**		**394**		**780**		**1,358**	
Δ to 2013	-1.4%		10.0%		8.0%		11.2%		13.6%		-2.8%		-2.6%		5.0%		12.1%		9.4%	
As % of EU total	0.5%		18.4%		6.6%		3.8%		5.6%		1.0%		1.3%		17.0%		15.2%		18.4%	
As % of EU total excl. GRC	0.6%		19.3%		7.1%		5.2%		8.1%		1.4%		1.3%		17.9%		15.4%		19.2%	

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.13 Main economic variables and indicators for the EU distant-water fleet by MS, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

Distant water Fleet (DWF)	Revenue (million €)	as % of EU DWF	Wages and salaries of (million €)	as % of EU DWF	Unpaid labour value (million €)	as % of EU DWF	Energy costs (million €)	as % of EU DWF	Repair & maintenance costs (million €)	as % of EU DWF	Other variable costs (million €)	as % of EU DWF	Other non-variable costs (million €)	as % of EU DWF	Annual depreciation costs (million €)	as % of EU DWF	Opportunity cost of capital (million €)	as % of EU DWF	Gross Value Added (million €)	Gross profit (million €)	Net profit (million €)
ESP	953.3	78.3%	124.3	68.7%	0.419	100.0%	156	69.7%	52	55.5%	236.0	86.1%	62.7	64.7%	39.6	83.2%	5.7	62.8%	446.3	321.5	276.3
FRA	143.4	11.8%	43.6	24.1%			34.7	15.5%	25.9	27.6%	6.16	2.2%	20.2	20.8%					56.4	12.8	
LTU	95.8	7.9%	8.1	4.5%		0.0%	27.0	12.0%	13.7	14.6%	28.12	10.3%	13.1	13.6%	4.5	9.4%	2.2	24.6%	13.9	5.8	- 0.9
POL																					
PRT	25.5	2.1%	5.0	2.7%		0.0%	6.3	2.8%	2.1	2.3%	3.84	1.4%	0.9	1.0%	3.5	7.4%	1.1	12.6%	12.4	7.4	2.7
EU DWF	**1,217.9**		**181.0**		**0**		**224**		**94**		**274.2**		**96.9**		**47.6**		**9.05**		**529.0**	**347.5**	**278.1**
Δ to 2013	12.3%		-2.7%		-41.3%		-4.5%		4.5%		15.8%		15.4%		-13.0%		13.5%		20.5%	37.8%	69%
As % of EU total excl. GRC	16.8%		9.6%		0.2%		16.6%		16.2%		27.8%		16.1%		6.8%		9.3%		14.2%	22.0%	37.3%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 3.14 Main economic performance indicators for the EU distant-water fleet by MS, 2014 (all monetary values have been adjusted for inflation; constant prices, 2015).

Distant water Fleet (DWF)	Tangible asset value (million €)	as % of EU DWF	Invest-ments (million €)	as % of EU DWF	GVA to revenue (%)	Gross profit margin (%)	Net profit margin (%)	GVA per FTE (labour productivity) (thousand €)	Net Value Added per FTE (thousand €)	Return on fixed tangible (%)	Energy consumed per landed (litre/tonne)	Fuel efficiency	Average wage per FTE (thousand €)
ESP	193.9	62.7%	14.7	70.0%	46.8	33.7	29.0	75.6	67.91	145.4	543.3	285.9	21.1
FRA					39.4	8.9		97.6			584.6	407.5	75.5
LTU	86.3	27.9%	5.5	26.1%	14.5	6.0	- 0.9	33.6	17.41	1.5	428.6	595.4	19.6
POL													
PRT	28.9	9.3%	0.8	3.9%	48.5	29.0	10.8	35.5	22.16	13.5	1,158.2	398.2	14.3
EU DWF	**309.1**		**21.0**		**43.4**	**28.5**	**25.9**	**73.0**	**62.4**	**92.9**	**535.5**	**327.3**	**25.0**
Δ to 2013	30.9%		54.7%		7.3%	22.7%	48.5%	5.9%	19.5%	27.1%	-8.3%	-5.9%	-14.6%
As % of EU total	6.4%		4.4%										

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

4 EU FLEET REGIONAL ANALYSIS

KEY FINDINGS

NORTH SEA REGION

- Eleven Member State fleets operated in the region in 2014; with high dependency on the region for The Netherlands (84%), Denmark (78%), Belgium (75%), Germany (63%) and Sweden (57%).
- The fleet landed 1 500 thousand tonnes of seafood for a value of €1.56 billion in 2014.
- Most important species in value: Atlantic mackerel, common sole, Atlantic herring and common shrimp
- Most important pelagic species in weight: Atlantic herring, sandeel and Atlantic mackerel
- Most important demersal species in weight: European plaice and common shrimp
- Overall MS fleets operating in the region saw declines in capacity and effort deployed over 2009-2014; employment increased over the last two years, landed value increased steadily from 2009 onwards while landed weight fluctuated over the same period.
- Revenue generated was estimated at around €1.6 billion, GVA at €844 million. The fleet made €404 million in gross profit.
- The UK fleet was the most important in terms of active vessel (2 097), also accounting for the most employment, effort deployed and landed value (€516 million). The Danish, Dutch and French fleets were further important fleets.
- In terms of gross profit, all MS fleets were profitable, while several fleet segments showed negative gross profits.
- Pelagic fisheries made highest profits per day at sea (around €19 000).
- The UK and French SSF had the highest revenue, GVA and gross profit. Only the German SSF suffered gross losses.
- All MS LSF generated gross profits in 2014 and all except for the French and Swedish LSF generated a positive net profit.
- The most important fleets in terms of weight of landings were the UK and Danish pelagic trawlers over 40m and the Dutch beam trawlers over 40m.
- Demersal fisheries became more fuel efficient, reducing fuel consumption per tonne of landed weight due to the use of more fuel efficient fishing gears and improved stock status of important target species.
- In 2015 fuel price decreased and most fish prices remained stable or increased compared to 2014 (including European plaice and common shrimp). Therefore, it is expected that economic performance will further improve as revenues are likely to increase and costs to decrease.

BALTIC SEA REGION

- Eight Member State fleets operated in the region in 2014; the Finnish fleet is the most important in terms of active vessel number and effort deployed.
- Overall, the fleet saw declines in landed weight over the period 2009-2012, with a slight increase in 2013, while landed value increased steadily since 2009 but suffered a significant drop in 2014. Herring, sprat and cod remain the most important species.
- The LSF pelagic fisheries dominate the Baltic Sea fisheries, accounting for 60% of landed weight and 40% of the landing value.
- Revenue generated by the Baltic Sea fleet was estimated at around €267.5 million, with the Swedish and Polish fleets together contributing 43%. While overall the Baltic fleet was profitable (positive gross profit), two MS fleets, Denmark and Germany, reported gross losses in 2013. The profitability of the fleet deteriorated with the decline in revenue.
- GVA was estimated at €95 million in 2014, down 22% from the year before. After accounting for operating costs, the fleet made an estimated €23 million in gross profit, also a marked decrease (41%) compared to 2013.
- While overall the Baltic fleet made gross profits, Danish, German and Lithuanian fleets suffered gross losses.
- The Estonian fleet was the most profitable with a 27% gross profit margin, followed by Latvia (20%) and Sweden (19%) fleets.
- Only Estonian and Latvian gross profit were high enough to cover the estimated capital costs, resulting in net profits; these were the only fleets that manage to generate resource rent in the Baltic Sea at MS level in 2014.
- Both pelagic and demersal fleets made gross profits; pelagic fisheries generated €14 million with a gross profit margin of 16.5% and respectively for demersal fisheries €12 million with 16% margin.
- Despite the overall poor performance, high variation in SSF between MS is clear. Latvian Finnish, Estonian, German and Lithuanian SSF made reasonable gross profits while the rest suffered gross losses. After counting for capital costs, Latvian, Lithuanian, Estonian and German fleets were still making net profits.

NORTHEAST ATLANTIC REGION

- Ten Member State fleets operated in the region in 2014; the most important in terms of active vessel number was the Spanish fleet.
- In terms of production, the UK, French, Spanish, Portuguese and Irish fleets were the most important, collectively responsible for 79% of the landed weight and 84% of the value landed in 2014. The weight and value of landings generated by the NE Atlantic fleet amounted to approximately 1.5 million tonnes and €2.4 billion, respectively.
- Overall, capacity remained stable with reduced effort and landed weight over the period 2010-2013, while landed value increased steadily between 2009 and 2012, decreasing in 2014.
- Based on the value of landings the French (46%), Spanish (38%) and UK (35%) fisheries have the highest level of landings in the Northeast Atlantic. However Ireland and Portugal have the highest percentage of national landed value from the North Atlantic at 83% and 74% respectively, indicating their high dependency in value in this area.
- The main species included the small pelagics Atlantic mackerel, jack and horse mackerels, blue whiting and European pilchard (sardine) and the demersal species European hake and Norway lobster.
- Revenue generated by the NE Atlantic fleet was estimated at €2.5 billion; 86% distributed amongst four MS fleets: France (€603 million), Spain (€722 million), UK (€534 million) and Ireland (€272 million).
- GVA was estimated at €1.3 billion and after accounting for operating costs, the fleet made €424 million in gross profit.
- The small-scale fleet generated €249 million in GVA and €76 million in gross profits. The large-scale fleet generated over €1 billion in GVA and €350 million in gross profit.
- Overall the NE Atlantic region fleet generated gross profits; only the Belgium fleet suffered gross losses in 2014.
- Factors that may have contributed to improved economic performance in the region include an increase for TAC and quotas for several important species and higher average prices. Low fuel prices resulting in lower energy costs, especially for pelagic fisheries also contributed to the improved economic performance.
- Factors that may have hampered economic performance in the region include reduced TACs and quotas for common sole and lower average prices for common sole and anglerfish.

MEDITERRANEAN & BLACK SEA REGION

- Eleven Member State fleets were involved in Mediterranean & Black Sea fisheries in 2014: Nine in the Mediterranean and two in the Black Sea, with all except for Spain and France, totally dependent on the region for their fishery primary production in 2014.
- The regional fleet consisted of 34 438 active vessels when including the Greek fleet. The SFF covered 79% of these and Greece comprised the largest fleet in number (13 600 vessels, 41% of the total).
- The fleet spent more than an estimated 4 million days at sea in 2014, with the Greek fleet accounting for 47% of the total number of days.
- Trends in capacity have remained relatively stable albeit a slight downward trend while effort (in days at sea) deployed has followed a decreasing trend over the period analysed, mainly due to reductions in the Italian fleet.
- The landed weight and value in 2014 amounted to approximately 408 717 tonnes and €1.48 billion, respectively, when including Greek fleet.
- The main species for in terms of weight was European pilchard (=sardine) (105 292 tonnes), followed by European anchovy (70 790 tonnes) and European hake (16 003 tonnes). Around 84% of European pilchards are mainly landed in the Adriatic Sea by the Croatian (59%) and Italian (25%) fleets.
- The most landed species in value was European anchovy (€127 million), followed by European hake (€114 million).
- Excluding Greece, revenue generated in 2014 was an estimated €1.357 billion, 61% of which was generated by the Italian fleet (€824 million).
- Gross Value Added (GVA) was estimated at €748 million, gross profit at €286 million and net profit amounted to €42 million in 2014.
- Five MS fleets reported a loss in 2014; the largest lost was reported by Croatia (-€11 million).
- Italy (€57 million), Spain (€13 million), Slovenia (€1 million), and Romania (€135 thousand) reported net profits in 2014.
- Revenue and GVA generated by the regional fleet also followed a decreasing trend although figures for 2014 show some improvement.
- Overall, both SSF and LSF segments were profitable, with gross profit margins estimated at 22.3% for the SSF and 20.4% for the LSF. Net profit margins were estimated at 5.5% for the SSF and 2.5% for the LSF in 2014(all excluding Greece).
- At fleet segment level, the Italian demersal trawls and seines 12-18m segment generated the most revenue (€162 million), followed by the Italian polyvalent passive gear 06-12m segment (€159 million) and Italian demersal trawls and seines 18-24m segment (€156 million).

OTHER FISHING REGIONS

- Although the main fishing grounds for the EU fishing fleet are located in the EU waters in Area 27 (NE Atlantic), part of the EU fleet operate in fishing areas much further afield.
- This analysis concentrates on all the other fishing regions where EU fleets operate and are collectively termed "Other Fishing Regions" (or OFR).
- The main sub-regions within OFR are: (1) Other Regions, which cover the South and Central Atlantic, Indian Ocean, Pacific Ocean and Antarctica, where the large distant water fleets exploit tuna among a number of other species; (2) Eastern Arctic, where cod, queen crab, mackerel and herring fisheries are exploited; (3) Northwest Atlantic, where redfish, halibut, cod and other demersal species are exploited and (4) Outermost Regions, which refers to territories belonging to EU MS outside Area 27 and include the seven French territories, the Canaries (Spain), and Madeira (Portugal) but the Azores as it is located in the NE Atlantic (Area27).
- According to DCF data, there were 12 EU MS fleets operating in OFR in 2014: Spain, France, Lithuania, Portugal, Poland, UK, Germany, Netherlands, Denmark, Cyprus, Malta and Ireland.
- The Italian distant-water fleet has not operated since 2013.
- No DCF data available for the Estonian and Latvian high sea fleets (according to FAO data, these fleets together compose around 5% of total landings).
- The majority of the production in OFR is the result of MS high seas fleets.
- Several EU MS (France, Spain and Portugal) also have a substantial fleet, consisting mainly of small to large-scale coastal vessels, operating in the various EU Outermost Regions.
- In 2014, landings in weight amounted to around 980 thousand tonnes, the majority (83%) from Other Regions, and the remaining from Eastern Arctic (11%), Northwest Atlantic (4%), Outermost regions (2%), and less than 1% for non-EU Mediterranean waters.
- In terms of landed weight, Spain (551 thousand tonnes), France (115 thousand tonnes) and Lithuania (103 thousand tonnes) were the leading distant water fleets, together accounting for 85% of the total.
- Compared to 2013, landed weight increased for all of the major MS fleets, with the Dutch fleet recovering from dramatic falls in landings in 2012 and 2013.
- In terms of landed value, the Spanish fleets dominate with almost €1.3 billion; followed by France (€183 million), Portugal (€92 million) and Lithuania (€71 million) (no data available for Poland).
- Based on the data available, in 2014 skipjack tuna (184 thousand tonnes) was the most landed species in OFR, followed by yellowfin tuna (146 thousand tonnes) and Atlantic cod (55 thousand tonnes).
- In terms of value, the 5 most important species were: yellowfin tuna (€298 million) followed by skipjack tuna (€205 million), Atlantic cod (€126 million), Patagonian squid (€114 million) and bigeye tuna (€97 million).
- The most important distant-water fleet segments were the Spanish purse seiners over 40m (€419 million) and demersal trawlers over 40m (€398 million), accounting for 25% and 23% of the total OFR revenue generated, respectively.

4.2 Background

This chapter provides an overview of the MS fleets operating in each fishing region. For each region, data on fleet capacity, employment, fishing effort, landings and economic performance indicators are summarised by Member State, fishing activity and fleet segment in the relevant regional tables.

DCF economic data (employment, income, costs, etc.) are reported by fleet segment at the supra region level (area 27, area 37 or OFR) while transversal data (capacity, effort and landings) are reported by sub-region (FAO level 3 or level 4 for the Baltic and Mediterranean seas). For fleet segments that operate in more than one fishing region, economic data must be estimated for each region (delineated by a set of sub-regions). This is done by apportioning the FTEs, revenue and costs provided by supra-region according to the proportions of effort or landings reported for each fleet segment at the sub-regional level

For example, a Danish trawl segment that spends half of its time in the Baltic Sea and half of its time in the North Sea will only have economic performance data available at the supra region level FAO Area 27, which includes the Baltic Sea, the North Sea and fishing regions in the North Atlantic. Therefore, to estimate the performance of the Danish North Sea fleet, economic data provided for the fleet segments at the supra-region (FAO area 27) are derived for the region (North Sea) by assuming several correlations with transversal data.

Estimates of the transversal and economic data by fleet segment are derived for each region accordingly, as follows:

- Value of landings to derive *income from landings*;
- Effort (in days at sea) to derive *energy costs*, *repair & maintenance costs*, *annual depreciation*, *other variable and other non-variable costs*; capacity (GT, kW) and employment (FTE) indicators;
- Number of vessels to derive *other income* and *total employed*

There are several limitations to this approach, which should be considered exploratory rather than a source of factual statements that are considered robust enough to be a basis for policy decisions.

One example of data/methodology limitation is when a fleet segment that is based in the Baltic Sea but operates predominately in the North Sea will have Effort (sea days) in the Baltic region (as a result of steaming to and from fishing grounds) with little or no corresponding revenue (landings). This can introduce errors that will negatively affect the performance of the "Baltic fleet" while conversely "improve" the performance of the "North Sea fleet" by underestimating costs (since days spent steaming to get to the North Sea fishing areas will be attributed to the Baltic Sea).

Therefore, regional estimates for fleet segments with less than 30% of effort and/or landings value/weight in a region should be considered with caution.

Regional estimates for all fleet segments and Member States cannot be derived when data sets submitted by MS are incomplete and/or not provided at the correct aggregations levels. Regional estimates for fleet segments that fished in more than one region and for which effort or landings in value were not reported separately by sub-region could not be derived and may have had to be excluded from the regional estimates. On the other hand, for fleet segments for which only landings value or effort were reported for a single region, it was assumed that all fishing activity by such segments occurred in that region. In such cases the fleet segments concerned were included in the analysis.

Due to incomplete data, economic estimates for the Greek fleet are not included in the regional analysis the available information is presented only at the MS level.

See Methodology section for more details on the methods used to derive segment-specific estimates for economic variables at the regional level.

4.3 General Overview

Table 4.1 provides an overview the EU fleet by main fishing region. Numbers and figures refer to 2014 and do not include the entire EU fleet due to insufficient data on all active fleet segments. Results for the Greek fleet are provided for the MS fleet but excluded entirely at aggregated analyses. Results for 2013 are provided in Table 4.2.

The Mediterranean & Black Sea (excluding Greece) and Northeast Atlantic fleets accounted for 38% and 34% of the vessels in number and collectively accounted for 75% of total employed. The Greek fleet numbered 13 600 vessels in 2014 and employed almost 46.5 thousand fishers. However, due to limited data coverage and some questionable data quality, the Greek fleet was not included in the overall regional analyses.

Fleets operating in the Mediterranean & Black Sea region (excluding Greece) exerted roughly 45% of the total effort deployed in days at sea to generate less than 8% of the landed weight but 17% of the value. Conversely, the North Sea fleet, deploying 10% of the effort, accounted for 30% of the landed weight but 21% of the value. Overall, the fleet operating in the NE Atlantic was more consistent: 32% of the effort for 31% of the landed weight and 34% of the value generated.

The Mediterranean & Black Sea fleet (excluding Greece) accounted for almost 19% of the revenue (€1.4 billion), 20% of the GVA (€748 million) and 18% of the gross profit (€286 million). GVA to revenue was estimated at 55%, 21% gross profit margin and a 3% net profit margin; a marked improvement (120% increase) on 2013 results.

Italy is the major player in the region, generating 49% of the landed weight and 67% of the value (excluding Greece), followed Croatia, generating 22% in weight but only 5% of the value, while Spain generated 21% of the weight and value landed, indicating that the Croatian fleet targets low value species, such as small pelagics (anchovy).

The NE Atlantic fleet reported the highest revenue (€2.5 billion, or 35% of the total) and contributed with 36% of the GVA (€1.3 billion). Overall, with an estimated gross profit of over €424 million and a net profit of €166 million, this regional fleet posted a 17% gross profit margin and 7% net margin.

The North Sea fleet, covering around 9% of the EU fleet in number and 10% of the effort deployed, landed 30% of the catch in weight but generated only 21% of the landed value, contributing 21% to GVA (€792 million), 23% to the overall gross profit (€360 million). Gross profit margin was estimated at 23% and net margin at 12.5%.

The Baltic Sea fleet, which comprised around 12% of the fleet in number, also contributed 12% to the landed weight but only 3% to the value, contributing 3% (€95 million) to the total GVA and less than 2% (€23 million) to gross profit. Gross profit margin was estimated at 10%, a decrease on 2013 results. Overall, this regional fleet suffered net losses, estimated at -€33.8 million; a further deterioration on -€18 million loss posted in 2013.

Vessels operating in Other Fishing Regions, including the Eastern Arctic, NW Atlantic and outermost regions, contributed to 20% of the landings in weight and 24% in value. While displaying high variations within each region, collectively this fleet generated around 21% of the revenue (€1.5 billion), 20% of the GVA (€727 million) and 30% of the gross profit (€462 million); significant improvements relative to 2013. The main fishing nations in the OFR as a whole, include Spain, France, Lithuania, Poland, Portugal, and to a lesser extent, Germany.

The most important region in OFR in terms of production is *Other regions*, accounting for 17% of the landed weight and 19% of the landings value by the EU fleet in 2014. Fleets operating in this region generated €1.2 billion in revenue and as a whole was highly profitable; obtaining a 29% gross profit margin and 26% net profit margin.

Most MS bordering the Mediterranean & Black Sea were highly or fully dependent (i.e. 100% fishing activity and production) on the region for their fishing activities, with the exception of France and Spain. Contrary to the Mediterranean & Black Sea region, there was some exchange between fleets operating the North Atlantic and the North Sea and between the North Sea and the Baltic, in particular for Sweden, Lithuania, Germany, Denmark, the Netherlands, the UK, France and Belgium.

According to the data provided, other MS fleets, such as Estonia, Finland and Latvia, depend entirely on the Baltic Sea[6]. However, while this may be the case for Finland, it is not for the remaining MS fleets. Estonia and Latvia only provided data on their Baltic Sea fleets in their DCF submissions. Hence, parts of these national fleets (distant-water fleets) are missing entirely from the analyses.

The regional analyses is not complete but covered on average 96% of the effort (in days at sea), and 98% of the reported landings in weight and value in 2014.

[6] Data not provided on the Estonian and Latvian distant water fleets

Table 4.1 Estimates of main capacity, effort, landings and performance indicators for the EU fleet by region, 2014

Region		Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	GVA	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA per vessel	GVA per FTE
		(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
BS	Baltic Sea	6,491	11.9%	9,453	5,076	525,138	11%	566,384	12%	570,969	12%	217,941	3%	223,837	71,692	47,090	94,890	42.4	23,197	10.4	- 33,768	- 15.1	14.6	18.7
MBS	Mediterranean Sea and Black Sea	20,838	38.3%	46,791	33,419	2,158,872	45%	2,217,939	47%	361,075	8%	1,205,045	17%	1,357,798	459,493	330,791	748,353	54.8	286,202	21.0	32,551	3.2	35.2	21.9
NEA	Northeast Atlantic	18,323	33.7%	48,338	32,750	1,503,486	31%	1,399,391	30%	1,470,701	31%	2,386,736	34%	2,511,446	907,556	419,109	1,331,976	53.1	424,253	16.9	166,493	6.9	72.8	40.7
NS	North Sea	5,087	9.3%	11,274	8,676	483,397	10%	424,002	9%	1,427,628	30%	1,496,520	21%	1,549,530	432,350	275,956	792,345	51.1	359,995	23.2	191,251	12.5	155.9	91.3
OFR	Other regions	806	1.5%	6,334	6,970	51,418	1.1%	50,564	1.1%	800,191	17%	1,344,451	19%	1,201,959	183,262	216,677	533,448	44.4	350,525	29.2	279,584	26.4	664.9	78.4
	Outermost regions	2,574	4.7%	2,736	2,080	73,581	1.5%	69,069	1.5%	33,829	0.7%	70,816	1.0%	80,106	35,663	13,504	37,601	47.3	1,939	2.4	- 4,541	- 5.8	41.5	18.1
	Northwest Atlantic	168	0.3%	716	659	5,996	0.1%	5,898	0.1%	42,147	0.9%	104,192	1.5%	93,347	26,686	16,267	47,977	51.4	21,291	22.8	10,735	11.5	286.9	73.4
	Eastern Artic	31	0.1%	321	311	3,030	0.1%	2,592	0.1%	101,073	2.1%	172,974	2.5%	146,451	18,731	13,568	105,605	72.1	86,875	59.3	66,010	53.0	3,362.1	340.0
	non EU Med	12	0.02%	52	52	1,247	0.03%	1,241	0.03%	247.5	0.01%	2,527	0.04%	3,342	596.6	571.4	2,110	63.1	1,514	45.3	787	23.6	181.8	40.9
EU regional total		54,348		126,167	90,009	4,806,165		4,737,080		4,807,861		7,001,202		7,188,513	2,145,293	1,334,152	3,710,402		1,562,622		699,502		5,763	1,683

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.2 Estimates of main capacity, effort, landings and performance indicators for the EU fleet by region, 2013

Region		Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	GVA	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA per vessel	GVA per FTE
		(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
BS	Baltic Sea	6,255	11.3%	9,378	5,049	519,729	11%	555,471	12%	585,938	13%	256,807	4%	267,855	80,274	55,487	121,925	45.5	41,651	15.6	- 18,039	- 6.7	19.5	24.1
MBS	Mediterranean Sea and Black Sea	21,221	37.6%	45,647	31,597	2,218,658	46%	2,265,889	48%	358,886	8%	1,227,546	18%	1,321,338	409,020	354,321	652,805	49.9	241,038	18.5	11,379	1.4	31.3	20.7
NEA	Northeast Atlantic	17,940	32.3%	50,382	35,494	1,521,694	31%	1,406,400	30%	1,362,727	30%	2,291,289	34%	2,390,257	849,405	476,676	1,191,087	50.0	340,810	14.3	87,365	3.7	66.5	33.6
NS	North Sea	5,114	9.2%	11,927	8,706	469,116	10%	422,007	9%	1,376,025	30%	1,494,688	22%	1,542,165	411,551	310,868	764,479	49.6	352,927	22.9	173,052	11.4	149.6	87.8
OFR	Other regions	2,066	3.7%	5,606	6,167	47,730	1.0%	47,018	1.0%	676,851	15%	1,198,311	18%	1,041,031	178,293	192,065	374,089	41.1	233,517	25.6	169,696	18.6	403.0	68.2
	Outermost regions	1,995	3.6%	2,977	2,768	56,410	1.2%	54,703	1.1%	44,710	1.0%	88,736	1.3%	108,404	46,910	16,609	44,646	48.8	2,649	2.9	- 2,929	- 3.3	52.3	19.7
	Northwest Atlantic	251	0.5%	941	732	6,593	0.1%	6,352	0.1%	42,579	0.9%	93,910	1.4%	81,675	25,117	19,467	36,409	44.6	11,292	13.8	- 405	- 0.5	145.1	49.7
	Eastern Artic	37	0.1%	344	311	3,005	0.1%	2,491	0.1%	90,534	2.0%	140,931	2.1%	123,506	17,364	14,176	84,944	68.8	67,580	54.7	47,850	46.6	2,277.3	272.8
	non EU Med	28	0.05%	225	41	1,022	0.02%	1,003	0.02%	1,417.0	0.03%	14,579	0.21%	24,038	3,887.4	610.1	19,072	79.3	15,185	63.2	12,000	50.8	669.7	469.4
EU regional total		55,252		127,769	90,931	4,843,956		4,761,333		4,539,666		6,806,796		6,900,341	2,021,833	1,440,404	3,288,963		1,306,143		472,723		3,813	1,039

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

4.4 EU Fleet activity in the North Sea region

The North Sea area, as defined for this report, comprises ICES areas IIIa, IV, and VIId.

The analysis includes reported landings from nine MS fleets: Belgium, Denmark, Germany, France, Ireland, Lithuania, The Netherlands, Sweden and the UK (Figure 4.1).

Spain (activity<1%) and Poland were excluded from further analysis.

French data were incomplete with respect to time series and thus are only included in the analysis from 2010 to 2014. In addition, for confidentiality reasons, the only data available on the German pelagic trawler segment were capacity and landings in weight.

Trends and absolute regional figures should therefore be interpreted and considered with care.

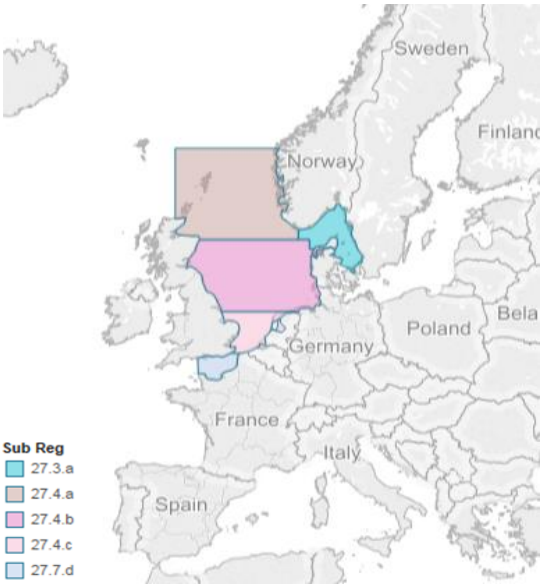


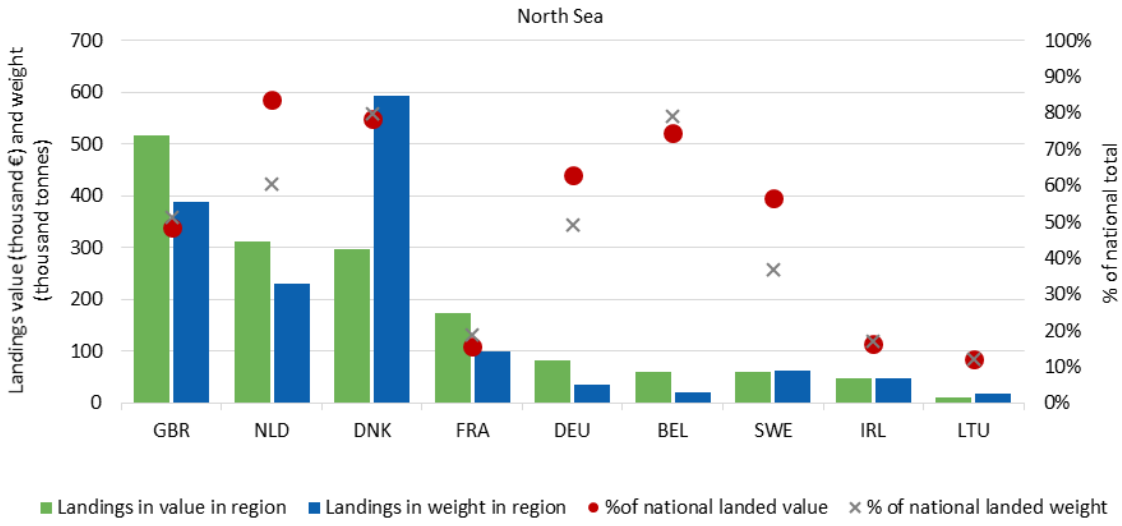
Figure 4.1 Regional map, highlighting the North Sea MS fleets and FAO fishing areas.

MS fleet dependency on fisheries in the region

Based on the value of landings, The Netherlands (84%), Denmark (78%), Belgium (75%), Germany (63%) and Sweden (57%) are considerably dependent on the North Sea region (see red dots in Figure 4.2).

These MS fleets target high value species such as common sole (Netherlands, Belgium and Germany), common shrimp (Netherlands, Germany, Denmark and Belgium) and Norway lobster (Denmark, Netherlands, Germany and to some extent Belgium).

In terms of landed weight, Denmark caught 80% of their landings in the North Sea, followed by Belgium (79%) and the Netherlands (60%). The pelagic fisheries influence these ratios. The Netherlands target a significant part of their small pelagic species outside the North Sea, which lowers the percentage of landed weight from the North Sea compared to the proportion of effort (days at sea). Denmark on the other hand targets sandeel and herring mainly in the North Sea area, thus Denmark is second after The Netherlands in terms of landed weight.



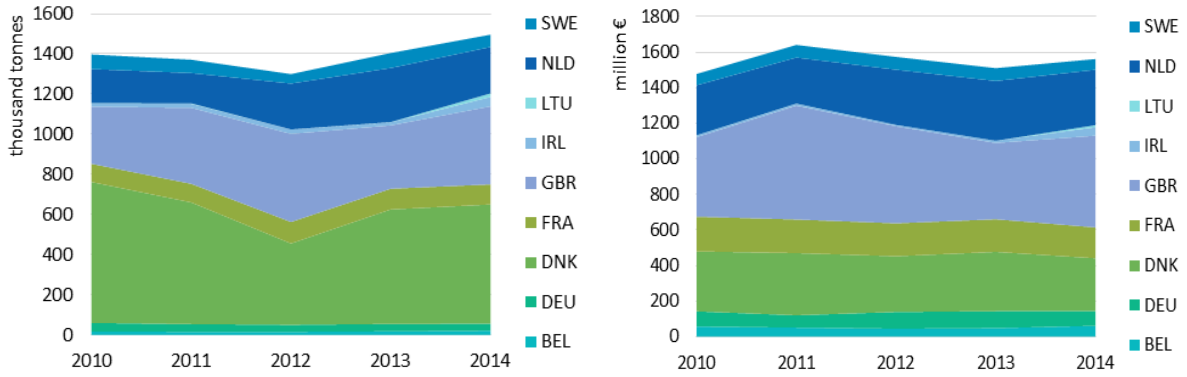
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.2 Value of landings, landings in weight and MS fleet dependency of the North Sea, 2014.

Recent development trends

Overall the number of vessels of the North Sea fleet shows a decreasing trend between 2011 and 2014. The employment, measured in terms of Full Time Equivalents (FTE) showed a decreasing trend as well between 2010 and 2013, but remained stable in 2014 (+1%).

Landings in weight and value remained at a relatively stable level throughout the period 2010-2014, although with some significant variation at the MS level. Compared to 2013, landings weight and value increased in 2014 (Figure 4.3).

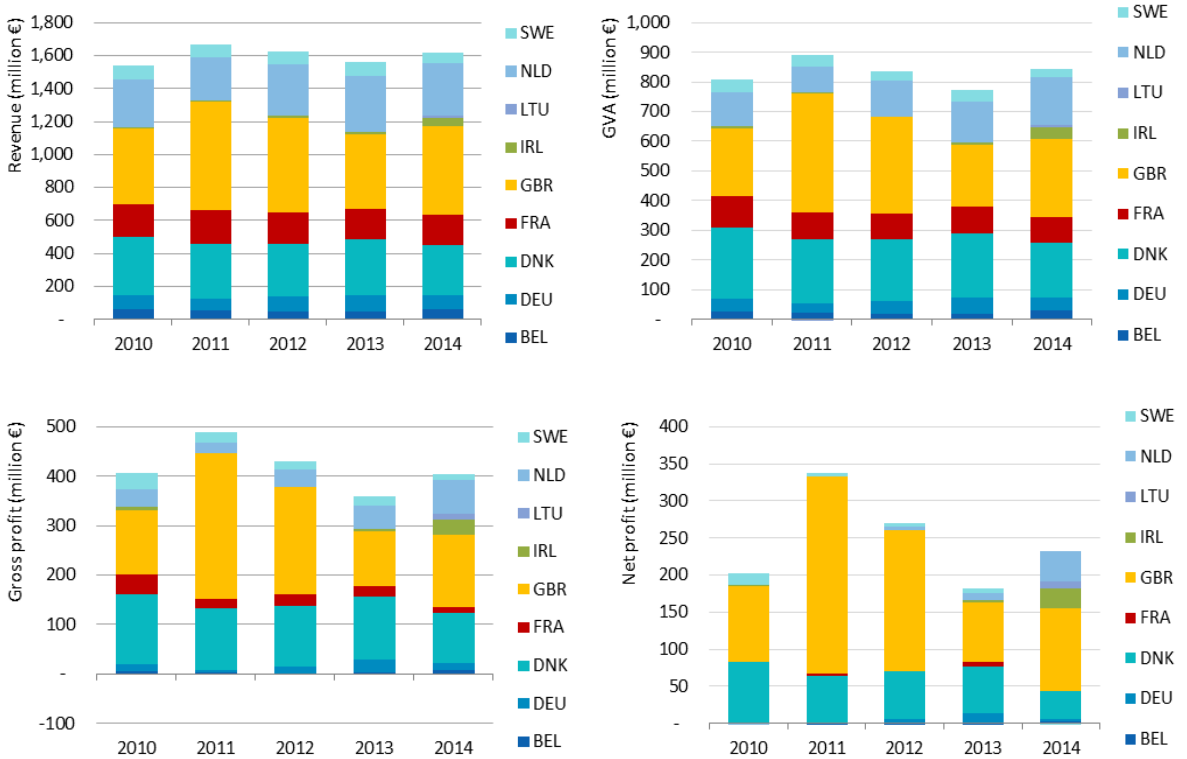


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.3 Landings in weight and value for MS fleets operating in the North Sea region for the period 2010-2014.

Note: Excludes Spain (activity < 1%).

Revenue, GVA, gross and net profit generated by the fleet also remained at relatively stable level, apart from deteriorations in all indicators in 2012-2013. Figures for 2014 show some improvement. The most profitable year over the period analysed was 2011, in particular for the UK fleet. The UK, Danish and Dutch fleets are the main contributors to the trends of gross and net profit (Figure 4.4).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.4 Trends in Revenue (landings income and other income) and GVA by MS fleets operating in the North Sea fleet 2010-2014.

Note: Excludes Spain (activity < 1%).

The overall changes have been mostly driven by the large-scale fleets, whereas the trends for the small-scale fleet in the North Sea are less clear and points towards the status quo.

Factors that may have contributed to improved economic performance in the region include:

- Higher average prices for some of the main species, such as common sole and *Nephrops*
- Decreasing fuel prices resulting in lower energy costs
- Higher total landings in part due to increased TACs and quotas following recovery of some stocks, such as European plaice, cod and Atlantic mackerel.
- Capacity reduction (with or without public support) and thus decreasing fixed costs

Factors that may have hampered economic performance in the region include:

- Lower average prices and total catch for commercially important species, such as: European plaice, common shrimp, Atlantic herring and Atlantic mackerel
- Reduced TACs and quotas for several key stocks, such as sandeel, Atlantic herring and Norway lobster.

In 2015, fuel price decreased and most fish prices remained stable or increased compared to 2014 (including European plaice and common shrimp). Therefore, it is expected that economic performance will further improve as revenues are likely to increase and costs to decrease.

Fisheries management in the region

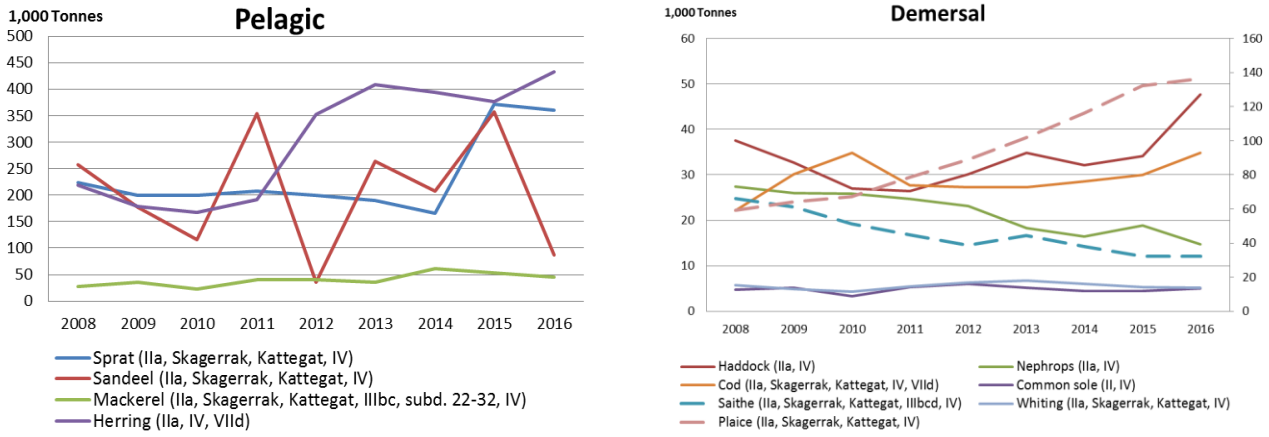
The management plans in force in 2014 that impacted on the North Sea included:

- Long-term plan for cod stocks and the fisheries exploiting those stocks (Council Regulation (EC) No 1342/2008).
- Multiannual plan for fisheries exploiting stocks of European plaice and common sole in the North Sea (Council Regulation (EC) No 676/2007).
- Recovery plan for the Northern hake stock covering the areas Kattegat, Skagerrak, North Sea, the Channel, West of Scotland, all around Ireland and Bay of Biscay (Council Regulation (EC) No 811/2004).
- Fishing opportunities available in EU waters and, to EU vessels, in certain non- EU waters (Council Regulation (EU) No 40/2013 of Jan 21, 2013), including European Union and Norway bilateral fisheries arrangements.
- Other management measures that may affect economic performance of the fleets operating in the North Sea include marine protected areas and other national legislation.

TAC development of main species

Figure 4.5 displays EU TACs for 2008 to 2016 for some pelagic and demersal species. It should be noted that in some cases the TAC areas are not delimited to the North Sea and include adjacent waters (mainly ICES area IIa). On average, quotas have remained stable or increased over time except for sandeel, *Nephrops* and saithe.

The bilateral agreements between the EU and Norway were delayed due to the dispute over Atlantic mackerel with Iceland and the Faroe Islands. An agreement was reached in March 2014. Some fisheries had to close temporarily and by the time they were re-opened the season was over. Furthermore, the MSC certificate on Atlantic mackerel was not approved in 2014 due to this dispute. This had a negative impact on prices.



Source: Calculated based on 2016 TAC Council Regulations and BEMEF modelling

Figure 4.5 TACs for major pelagic species (left) and demersal species (right, dotted line -> secondary axis) in the North Sea.

Status of important stocks

Haddock, hake, European plaice, saithe, Atlantic herring and sprat (IV) are managed at F_{MSY} levels, while desired levels have not yet been reached for cod and common sole.

Common sole: The spawning-stock biomass for common sole in VIId and IV was estimated to be above MSY $B_{trigger}$ in 2015. Fishing mortality has always been above F_{MSY} in VIId and increased in 2013 and 2014. Recruitment in 2012 and 2013 were among the lowest of the time series. In IV, fishing mortality has steadily declined since 1997, but was estimated to be above F_{MSY} in 2014.

Plaice: The plaice stock has developed favourably under the current management plan. For the stock in VIId, fishing mortality has declined over time and is presently among the lowest in the time-series and spawning–stock biomass has increased since 2008. A similar situation was observed for the plaice stock in subarea IV and division IIIa. The only consequence of the management plan for the fishing activity was the limitation of quota increase to an annual 15%. The LTMP has not yet limited the fishing activities while the stocks are in favourable state.

In 2014, for the first time ever, the price temporarily dropped below the intervention price on Dutch auctions due, to some extent, to increased landings. If demand is limited, increased landings as a consequence of quota increases can be detrimental to market prices. As a result, TAC for plaice were not always fully utilised in recent years, (see NS plaice and sole Long term management plan- LTMP- evaluation 2014). The price in 2015 however, increased gradually.

Cod: In spite of the cod management plan being effective for several years, the spawning stock biomass is still below MSY $B_{trigger}$ and the stock has not yet recovered to MSY level. Fishing mortality declined since 2000, but is still estimated to be above F_{MSY} (North Sea, Eastern English Channel, and Skagerrak). TACs on cod have grossly exceeded the scientific advice for most of the years between 2001 and 2010, when the advice set TACs to zero. However, the TACs in the region have increased in recent years in accordance with the advice.

Fisheries on North Sea cod are often mixed fisheries. Thus the long term management plan for cod can impact on the exploitation of other stocks within the target assemblage. Days at sea limits have been observed to become more constraining in this context.

Whiting: Spawning-stock biomass and fishing mortality for whiting have been relatively stable since 2003, while recruitment has been low. However, recruitment in 2015 was above the average of the recent years.

Brown shrimp: Another economically important species is brown shrimp (*Crangon crangon*). This species is currently not under a TAC regime. However, there have been initiatives from the fishing industry to move towards implementing harvest control rules. In 2016, measures were taken to regulate the weekly fishing effort. This was one of the requirements to qualify for an MSC certificate.

MS Fleet dependency on main stocks subject to TACs

Table 4.3 shows the dependency, as the % of value of landings, of MS fleets on some of the important stocks in the North Sea region over the period 2008-2014. The Danish fleet is highly dependent on several stocks of Atlantic herring, reaching up to 17% on individual stocks in 2012. While the Dutch and Belgian fleets are dependent on stocks of common sole, in particular the Dutch fleet which showed a dependency of almost 23% on the common sole stock in areas 27.4a-c. The UK and Irish fleets have high dependency on mackerel stocks and the Swedish fleet on *Nephrops.*

Table 4.3 MS fleet dependency on stocks in the North Sea (only dependency values > 10% are shown)

			Dependency (%)						
Country	Region	Stock	2008	2009	2010	2011	2012	2013	2014
BEL	North Sea	PLE/2A3AX4	8,06	6,30	6,29	8,01	8,59	10,62	10,95
		SOL/07D.	16,78	19,34	16,80	15,32	11,58	11,17	15,64
		SOL/24-C.	15,30	17,50	16,48	11,08	7,26	7,30	10,87
DNK	North Sea	HER/2A47DX	5,42	5,57	4,51	7,37	17,69	14,15	12,98
		HER/4AB.	5,36	5,52	4,41	7,32	17,62	14,03	12,88
		HER/*04-C.	4,40	4,63	3,62	5,96	14,57	10,75	10,09
GBR	North Sea	MAC/2A34.	6,77	7,42	6,99	11,93	7,01	9,04	11,09
		MAC/*4A-EN	6,74	7,39	6,95	11,87	6,96	8,97	11,04
IRL	North Sea	MAC/*4A-EN	4,83	7,51	5,57	4,19	2,65	3,97	15,39
NLD	North Sea	SOL/24-C.	22,92	27,25	26,97	24,72	23,52	22,41	22,61
SWE	North Sea	NEP/3A/BCD	12,16	11,41	11,58	10,47	12,94	11,51	14,07
		PRA/03A.	10,40	12,46	11,65	12,34	11,75	9,74	10,48

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

North Sea fishing fleet, effort and landings: situation in 2014

Fleet capacity

Member State fleets operating in the North Sea region in 2014 numbered 5 099 vessels (excluding Poland but including 3 Spanish vessels). The UK North Sea fleet comprised the largest fleet in number (2 097 vessels), accounting for 41% of the total reported (Figure 4.6).

Fishing effort

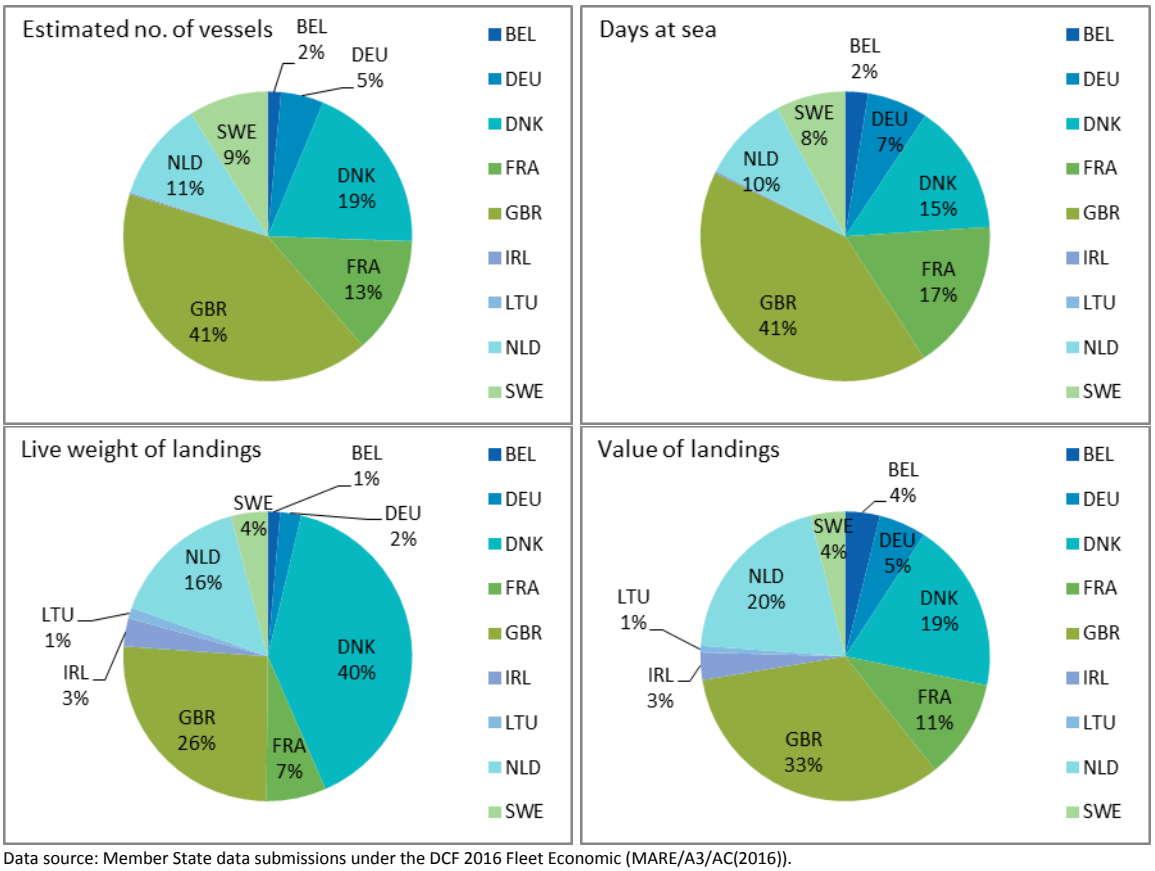
The pie charts presented in Figure 4.6 also indicate the proportion of days at sea, landings weight and value attributable to each MS fleet in 2014. Denmark, France and UK together accounted for around 73% of the total days at sea (mostly generated by large-scale fisheries).

The latest official DCF data suggests that the EU North Sea fleet spent over 480 thousand days at sea in 2014. The North Sea fishery is dominated by large-scale vessels (as defined by the European Commission). Around 40% of the days at sea were allocated to the small scale fleet using passive gears. Large scale fisheries (LSF) accounted for 60% of the days at sea, of which most were performed by the demersal fleet (Figure 4.7).

Figure 4.8 highlights the effort deployed by the six most important segments, based on landed value, operating in the North Sea. These include the pelagic fisheries, targeting mainly small pelagics (TM_vl40XX), and demersal fisheries targeting roundfish species (cod, haddock, whiting, saithe), crustaceans (*Nephrops*, shrimp) and flatfish (sole and plaice).

Landings

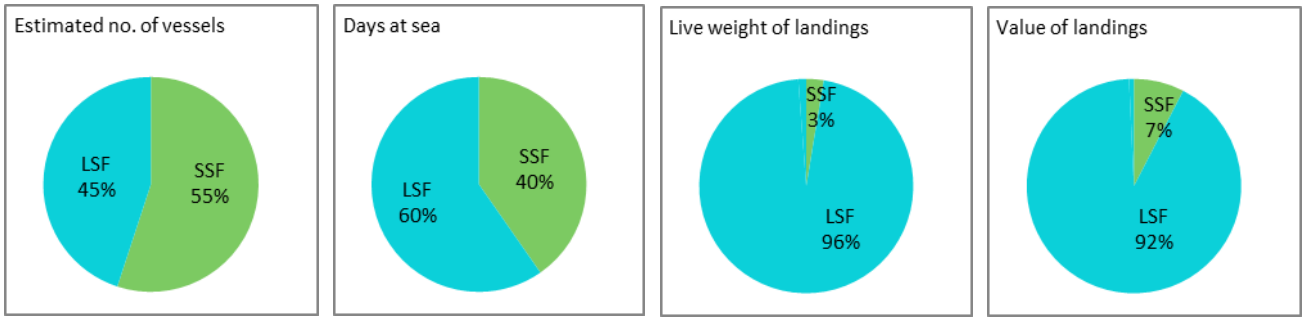
The weight and value of landings generated by the fleet amounted to approximately 1.5 million tonne and €1.5 billion, respectively. The North Sea LSF landed 96% of the total weight and 92% of the total value (Figures 4.7).



Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

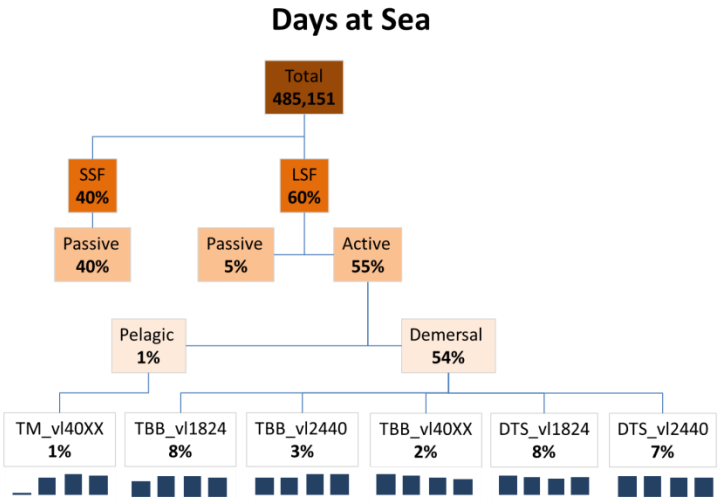
Figure 4.6 North Sea fleet capacity, effort and landings by MS: 2014.

Note: MS fleets with less than 1% share are not shown



Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.7 North Sea fleet capacity, effort and landings by main type of fishing activity: 2014.



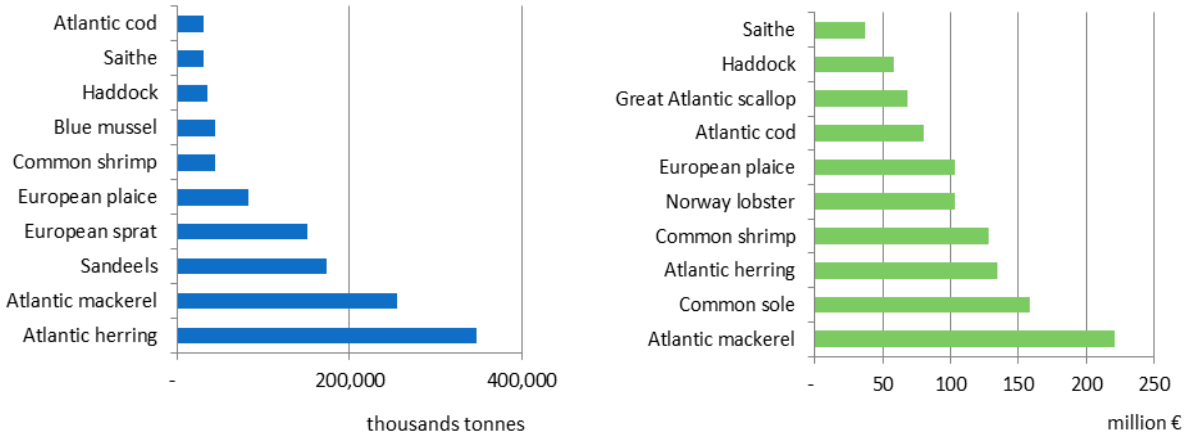
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016))

Figure 4.8 Schematic representation of the share of effort (in days at sea, %) deployed by the various MS fleet components operating in the North Sea region, including six of the most important segments (based on landed value from the North Sea) and 4-year trend.

Top species

In 2014, Atlantic herring (346 780 tonnes) was the most important species in terms of weight. Landings of Atlantic mackerel (255 500 tonnes) and sandeel (172 850 tonnes) were the next most important species in terms of weight. The landings of the latter decreased in 2012 and 2014 due to significant cuts in the TAC. Considering demersal species, plaice (82 200 tonnes) and common shrimp (44 000 tonnes) were the most prevalent in terms of weight landed (Figure 4.9).

In terms of value, the five most important species in 2014 were: Atlantic mackerel (€221 million) followed by common sole (€158 million), Atlantic herring (€134 million), common shrimp (€128 million), Norway lobster (€103 million) and European plaice (€103 million) (Figure 4.9).

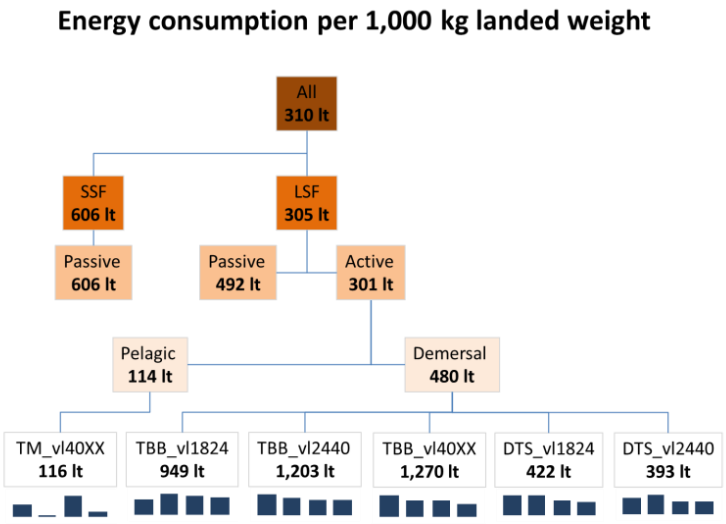


Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.9 List of the top 10 species in terms of value of MS fleets operating in the North Sea in 2014.

Productivity

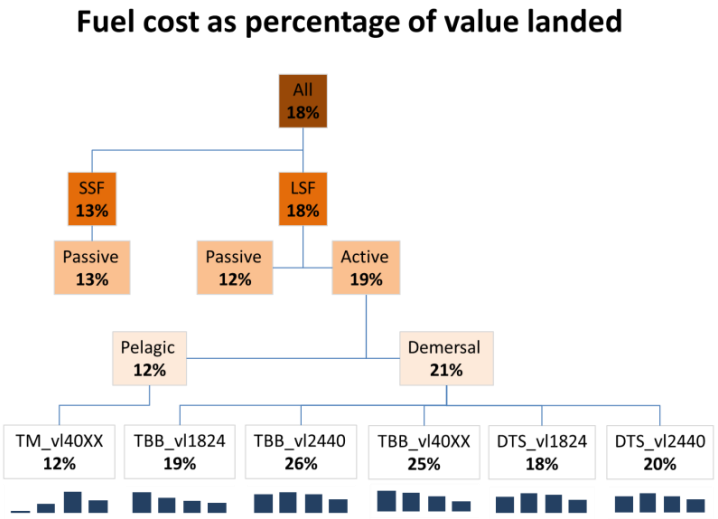
On average, 310 litres of fuel per tonne of landed fish was used in North Sea fisheries in 2014 (Figure 4.10). However, significant differences between fisheries are observed. From the six most important segments pelagic fisheries were the most fuel efficient, consuming 114 litres of fuel per landed tonne. The flatfish fisheries using large beam trawl vessels consumed the most fuel per landed catch (1 270 litres/tonne for TBB_40XX). The most important segments show downward trends in fuel use. Especially the flatfish fleet which has become more fuel efficient (-39% fuel compared to 2011). With help of national and EU funds innovations in more efficient fishing gears were supported. Examples of new fishing gears are SumWing, Twinrig, Pulse gear and the Ecoroll.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016))

Figure 4.10 Schematic representation of the amount of fuel consumed per landed weight (litre/tonne) by the various MS fleet components operating in the North Sea, including six most important segments (based on landed value from the North Sea) and 4-year trend.

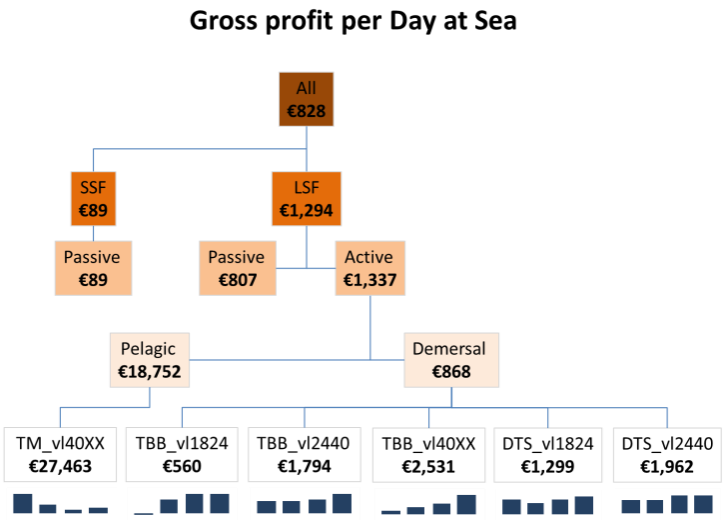
Around 18% of the landed value in the North Sea went to fuel costs in 2014. In total around €280 million were spent on fuel to catch 1.5 million tonnes of fish. In particular, the demersal segments spent high amounts of their landed value on fuel. As trawling is typically fuel intensive, fluctuations in fuel consumption and fuel prices are therefore key drivers of the profitability of the fleets. The innovations in new and lighter fishing gears (to reduce consumption) together with the decreased fuel prices and higher fish prices for the most important target species of these segments helped to reduce the ratio of fuel cost versus revenue for the most important segments in the last years (Figure 4.11).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.11 Schematic representation of the ratio fuel costs to landed value (%) for the various MS fleet components operating in the North Sea, including six most important segments (based on landed value from the North Sea) and 4-year trend.

On average, MS fleets operating in the North Sea generated around €828 in gross profit per day at sea, with the LSF producing significantly higher profits than the small-scale fleet. Large scale fisheries' gross profits were almost 15 times higher. Within the large-scale segment, active gears were also more productive, of which the pelagic fisheries outperformed, generating approx. €18.8 thousand in gross profit per day at sea. From the six most important segments for the North Sea, pelagic trawlers over 40 m made an average almost €27 500 gross profit per day at sea (Figure 4.12).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.12 Schematic representation of the amount of gross profit generated per day at sea (€/day) by the various MS fleet components operating in the North Sea, including six most important segments (based on landed value from the North Sea) and 4-year trend.

Socio-Economic performance

Table 4.7 to Table 4.10 contain a summary of the economic performance of the North Sea fleet by Member State, main type of fishing activity and fleet segment.

Performance by Member State

The revenue (income from landings and other income) generated by the North Sea fleet in 2014 was estimated at €1.6 billion, 83% of which was provided by four Member States - UK (€540 million), The Netherlands (€320 million), Denmark (€301 million) and France (€183 million).

Revenue increased 4% compared to 2013. The Belgian, UK, Lithuanian and Irish fleets saw increases of more than 20%. The German and the Danish fleets suffered decreases in revenue of about 10%, while for Sweden, revenue decreased by more than 20%. The TAC for sandeel, an important species for the Danish fleet, decreased considerably compared to 2013.

GVA produced by the North Sea fleet covered in the analysis was estimated at over €800 million in 2014. This represented an overall increase by 9% compared to the GVA in 2013, as the GVA of the UK (+27%) and the Netherlands (+14%) in the region increased considerably. Denmark on the other hand saw its GVA drop by 15%. After accounting for operating costs, the fleet made almost €400 million in gross profit, an increase of 12% compared to 2013.

Performance by fishing activity

By fishing activity, the North Sea small-scale fleet generated €130 million in revenue, a 6% decrease on 2013 results, while the large-scale fleet generated €1.5 billion in revenue, a 3% increase compared to 2013.

There were small-scale fleets of six MS operating in the North Sea region. Of the small-scale fleets, the UK fleet, consisting of 1 450 vessels and employing 977 FTEs (indicating high part-time activity), generated the highest revenue (€62.5 million). The French small-scale fleet, with 288 vessels generated revenue of €41 million and had the highest net profit. Overall the SSF segment was profitable in 2014; four out of the six MS small-scale fleets made profits, totalling €70 million in GVA and €17.5 million in gross profit. Only two SSF suffered net losses.

The UK North Sea large-scale fleet, consisting of 647 vessels, generated the highest revenue (€478 million) in the segment, followed by the Dutch (€315 million) and Danish (€287 million) large-scale fleets. All North Sea MS large-scale fleets generated gross profits in 2014. All except for the French and Swedish large-scale fleets generated a positive net profit.

Performance by fleet segment

Table 4.10 provides results for the top 35 MS fleet segments in terms of revenue operating in the North Sea in 2014. These 35 MS fleet segments represented 70% of the FTE, 59% of the effort (288 thousand days at sea), 87% of the landed weight (1.5 million tonnes) and 82% of the landed value (€1.3 billion) in 2014.

Collectively these fleets generated almost €700 million in GVA and €360 million in gross profit, representing 82% and 88% respectively of the total estimates for the NS fleet. Net profit for these fleets was estimated at around €220 million.

At fleet segment level, the UK pelagic trawlers over 40m (€145 million) generated the highest landed value in 2014, followed by Dutch beam trawlers over 40m segment (€106 million), the UK demersal trawlers 24-40m (€98 million), the UK demersal trawlers 18-24m (€81.5 million) and the Danish pelagic trawlers over 40m (€78 million).

The most important fleets in terms of GVA were again the UK pelagic trawlers over 40m, followed by Danish pelagic trawlers over 40m and the UK demersal trawlers 24-40m.

Description of relevant fisheries in the region

Pelagic fishery

Table 4.4 provides dependency in terms of value of landings of the main MS fleet segments targeting pelagic stocks in the North Sea region for the period 2008-2014.

Table 4.4 Fleet segment dependency on pelagic stocks in the North Sea (only dependency values > 10% are shown), 2008-2014

				Dependency (%)				
Country	Fleet segment	Region	Stock	2010	2011	2012	2013	2014
DNK	DNK A27 DTS40XX NGI*	North Sea	HER/2A47DX	9,40	15,01	35,75	30,04	28,32
			HER/4AB.	9,18	14,89	35,71	29,95	28,30
			HER/*04-C.	7,47	12,10	29,84	22,63	21,80
			SAN/2A3A4.	24,86	23,97	9,89	32,72	27,03
			SAN/234_1	10,70	10,35	4,26	14,15	11,63
			SAN/234_2	9,56	9,27	3,80	12,70	10,39
			SPR/2AC4-C	13,19	9,82	16,15	7,34	16,70
	DNK A27 TM40XX NGI	North Sea	HER/2A47DX			40,49	29,99	29,02
			HER/4AB.			40,29	29,67	28,71
			HER/*04-C.			33,11	22,71	22,39
			MAC/2A34.			24,24	23,96	14,06
			MAC/*4A-EN			24,20	23,89	14,01
	DNK A27 TM1218 NGI	North Sea	SPR/2AC4-C			20,66	3,86	30,31
FRA	FRA A27 TM40XX	North Sea	HER/2A47DX	59,51	25,20	55,49	24,47	23,88
			HER/4AB.	43,50	14,91	39,24	18,47	19,00
			MAC/2A34.	0,00	23,93	0,08	9,99	11,46
			MAC/*4A-EN	0,00	23,93	0,00	9,99	11,46
GBR	GBR A27 TM40XX NGI*	North Sea	MAC/2A34.	27,81	40,25	25,81	35,58	35,87
			MAC/*4A-EN	27,73	40,18	25,76	35,49	35,82
IRL	IRL A27 TM40XX	North Sea	MAC/*4A-EN	18,56	14,12	6,36	9,89	32,95
	IRL A27 TM2440	North Sea	MAC/*4A-EN	5,47	3,77	2,25	5,03	18,02
NLD	NLD A27 TM40XX NGI*	North Sea	HER/2A47DX	7,51	10,47	26,00	28,18	21,79
			HER/4AB.	4,44	7,12	9,39	13,90	17,42
			MAC/2A34.	0,41	4,90	6,33	7,27	13,10
			MAC/*4A-EN	0,41	4,88	0,03	0,18	13,04
SWE	SWE A27 DTS2440 NGI*	North Sea	HER/2A47DX	4,81	10,90	16,92	13,54	12,81
			HER/4AB.	4,81	10,90	16,74	13,54	12,81
			HER/*04-C.	3,47	8,12	13,51	10,20	10,15

Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

The UK pelagic fishery is mainly performed by vessels using pelagic trawls, targeting Atlantic herring and mackerel in the northern North Sea (4a). Moreover some fishery on sandeel and Norway pout is performed. These fisheries are executed mostly by Scottish large pelagic trawlers (>50m).

The Danish pelagic fishery in the North Sea mainly targets Atlantic mackerel and herring, in addition to sandeel and sprat. Moreover, the major part of Norway pout is caught by the Danish fleet. The latter three species are used for industrial purposes (fishmeal, fish oil). All these species are under an ITQ regime. The fishery is executed mainly by large pelagic trawlers, but also by vessels from the demersal segment, which switch gears seasonally.

The Dutch pelagic fleet in the North Sea consists of 11 large trawlers (from 60 to over 100m). These vessels target herring, jack and horse mackerel, Atlantic mackerel and blue whiting. There is no fishery directed for industrial purposes.

The Swedish pelagic fishery is performed by vessels which seasonally switch to demersal fisheries. About 10% of the sandeel quota is fished as well as some Norway pout and sprat. All industrial catches are landed in Denmark. Major amounts of herring and mackerel are also fished. Mackerel is landed in the UK.

The German pelagic fishery is performed by four large freezer trawlers targeting Atlantic herring and mackerel as well as some jack and horse mackerel. Two pelagic trawlers of about 30m perform seasonal fishery on sandeel.

There is only comparatively little French pelagic fishery in the North Sea and almost none by Belgian vessels.

Demersal roundfish and Nephrops fishery

Table 4.5 provides dependency in terms of value of landings of the main MS fleet segments targeting demersal and *Nephrops* stocks in the North Sea region for the period 2008-2014.

The UK fishery is the most important demersal fishery on roundfish in the North Sea. UK vessels (over 40m) took the bulk of the quota of haddock which is caught in the northwest and central North Sea and landed almost entirely in the UK. The same vessels exploit a major part of saithe, mainly in the northern North Sea. A great deal of saithe is landed fresh in Denmark as the market in the UK is limited. UK vessels catch more than half of the *Nephrops* total and almost half the Atlantic cod total in the North Sea.

The Danish demersal roundfish fishery targets considerable amounts of cod, haddock and saithe. A broad range of vessels are involved in that fishery. Moreover, the Danish fleet is second in the *Nephrops* fishery in the North Sea.

The main species for German demersal trawlers in the North Sea is saithe in 4a, taking up about 25% of the quota. Five vessels are involved, ranging between 30-40m long. These vessels also catch some cod and minor amounts of haddock. The fish is landed in Denmark or Germany and is destined for the fresh market but also to processing. *Nephrops* fishery has gained importance for some vessels, though it is minor in the overall context.

The French fleet also participates in the saithe fishery in 4a as well as some amount of cod. The Dutch demersal roundfish fishery targets cod and *Nephrops*, but these fisheries are of minor importance in the national context. Swedish vessels catch some major amount of *Nephrops*, moreover cod, saithe and haddock. Overall, these fisheries are not of major importance. Belgium has very small demersal fishery on roundfish and *Nephrops*.

Table 4.5 Fleet segment dependency on demersal and *Nephrop* stocks stocks in the North Sea (only dependency values > 10% are shown), 2008-2014

				Dependency (%)				
Country	Fleet segment	Region	Stock	2010	2011	2012	2013	2014
BEL	BEL A27 DTS2440 NGI°	North Sea	NEP/2AC4-C	1,01	7,48	12,89	17,74	20,59
DEU	DEU A27 DFN1218	North Sea	COD/2A3AX4	27,96	27,17	21,95	16,23	19,51
	DEU A27 DTS40XX	North Sea	POK/2A34.	13,22	13,71	11,06	12,30	12,99
	DEU A27 DTS1824	North Sea	NEP/2AC4-C	14,68	21,53	13,20	16,30	14,97
	DEU A27 DTS2440	North Sea	COD/2A3AX4	33,64	29,22	36,84	30,35	30,40
			POK/2A34.	34,71	37,09	31,80	35,94	32,45
DNK	DNK A27 DTS0010 NGI	North Sea	COD/03AN.	1,36	1,12	8,19	15,27	21,70
			NEP/3A/BCD	36,97	39,57	26,68	29,95	28,87
	DNK A27 DTS1012 NGI°	North Sea	NEP/3A/BCD	25,30		3,87	20,52	25,62
	DNK A27 DTS1218 NGI°	North Sea	NEP/3A/BCD	33,92	35,62	39,94	37,80	40,51
	DNK A27 DTS1824 NGI°	North Sea	NEP/3A/BCD	20,85	21,14	16,91	14,96	14,98
	DNK A27 DTS2440 NGI°	North Sea	COD/2A3AX4	8,59	9,27	11,65	10,32	11,14
	DNK A27 PGP1218 NGI	North Sea	COD/2A3AX4	23,38	20,20	22,32	17,81	19,01
	DNK A27 PMP0010 NGI	North Sea	NEP/3A/BCD			8,47	20,52	20,23
	DNK A27 PMP1218 NGI	North Sea	NEP/3A/BCD	16,92	18,90	17,32	19,85	22,32
	DNK A27 PMP1824 NGI°	North Sea	COD/2A3AX4	28,49	29,59	24,68	19,83	23,34
FRA	FRA A27 DTS40XX	North Sea	POK/2A34.	19,71	29,74	32,17	17,56	17,39
GBR	GBR A27 DTS0010 NGI	North Sea	NEP/2AC4-C	18,67	21,21	21,53	21,82	26,15
	GBR A27 DTS1012 NGI	North Sea	NEP/2AC4-C	17,24	20,97	18,96	18,80	19,98
	GBR A27 DTS1218 NGI°	North Sea	NEP/2AC4-C	14,54	16,35	14,43	12,69	16,16
	GBR A27 DTS1824 NGI	North Sea	HAD/2AC4.	9,67	8,07	9,49	14,52	14,74
			NEP/2AC4-C	23,38	23,94	21,27	15,34	19,06
	GBR A27 DTS2440 NGI	North Sea	COD/2A3AX4	14,57	14,42	13,74	15,01	14,11
			HAD/2AC4.	16,82	17,13	17,89	22,10	23,03
	GBR A27 HOK2440 NGI°	North Sea	HKE/2AC4-C	14,98	11,07	11,31	10,22	13,85
NLD	NLD A27 DTS1824 NGI°	North Sea	NEP/2AC4-C	23,83	38,11	31,66	36,54	39,78
	NLD A27 DTS2440 NGI°	North Sea	NEP/2AC4-C	7,77	10,37	7,12	7,32	10,03
SWE	SWE A27 DFN0010 NGI°	North Sea	NEP/3A/BCD	19,14	18,87	25,51	22,99	24,78
	SWE A27 DFN1012 NGI°	North Sea	NEP/3A/BCD	28,39	24,96	36,69	41,53	45,03
	SWE A27 DTS1012 NGI°	North Sea	NEP/3A/BCD	45,38	43,63	47,98	41,97	46,80
	SWE A27 DTS1218 NGI°	North Sea	NEP/3A/BCD	36,16	33,90	31,94	29,36	32,13
	SWE A27 DTS1824 NGI°	North Sea	NEP/3A/BCD	13,67	10,73	11,96	14,11	17,58

Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Flatfish fishery (plaice and sole)

Table 4.6 provides dependency in terms of landed value of the main MS fleet segments targeting flatfish stocks in the North Sea region for the period 2008-2014.

The Netherlands exert by far the most activity in flatfish fishery. It is performed mainly by large beam trawlers in the southern North Sea (4c). In 2015, almost all EU allowances for pulse technique were in effect in the Netherlands, resulting in considerable fuel savings. As a result this fishery is profitable. Plaice stock is at an all-time high but the fishery only partly profited as prices decreased until 2014. As a result, the quota was not fully exploited. In 2015 plaice prices went up and fuel prices dropped further which made the plaice fisheries more attractive. It is expected that more effort in plaice fisheries will take place, leading to higher quota uptake (and profitability) in coming years. Common sole is very important due to high prices.

UK beam trawlers targeting flatfish are owned by Dutch fishers, performing a fishery which is comparable with the Dutch fishery. The catch is mainly landed in the Netherlands (Urk). Moreover, shares of the quota are being swapped. Flatfish is of relatively minor importance for the UK market as a whole but remains of local importance, particularly in the east and south of England.

The Danish fleet targets flatfish mainly by otter trawls in both 3a and 4. The ratio of sole catches versus plaice catches is rather low compared with the situation in other MS. Plaice is a target species in some fisheries but constitutes a bycatch in the cod and *Nephrops* fisheries.

Flatfish is a major species for the Belgian fishery. It is performed by beam trawlers in the southern North Sea. As opposed to the Dutch vessels, the Belgian beam trawlers are still considered as using more traditional gear, although they have made a number of technical adjustments in order to reduce fuel consumption. Even so, beam trawlers impose a high towing resistance and this, in combination with dispersed fishing grounds, results in high fuel consumption. Therefore, the fuel crisis in 2008 had a large impact on the profitability of the Belgian fleet.

The German flatfish fishery is performed by a few beam trawlers which are all Dutch owned. These vessels fish in a manner very similar to the Dutch fleet.

French vessels target European plaice and common sole in the Channel area. Common sole catches are considerably higher than plaice catches.

Sweden has only negligible flatfish fisheries in the North Sea.

Table 4.6 Fleet segment dependency on flatfish stocks in the North Sea (only dependency values >10% are shown), 2008-2014

				Dependency (%)				
Country	Fleet segment	Region	Stock	2010	2011	2012	2013	2014
BEL	BEL A27 DTS2440 NGI*	North Sea	PLE/2A3AX4	3,83	9,40	10,75	11,38	13,38
	BEL A27 PMP1824 NGI*	North Sea	SOL/07D.	9,61	21,33	25,13	22,15	17,14
			SOL/24-C.	28,85	24,40	18,28	22,09	10,02
	BEL A27 TBB1824 NGI*	North Sea	SOL/07D.	28,39	29,22	17,93	15,06	22,87
			SOL/24-C.	20,56	18,47	15,31	14,48	17,45
	BEL A27 TBB2440 NGI	North Sea	PLE/2A3AX4	7,93	8,84	9,35	12,06	12,25
			SOL/07D.	13,49	12,27	10,57	11,26	15,96
			SOL/24-C.	14,19	8,29	4,89	5,88	10,34
DEU	DEU A27 DFN1218	North Sea	SOL/24-C.	40,19	38,88	43,64	41,12	39,05
	DEU A27 DTS1824	North Sea	PLE/2A3AX4	21,83	17,71	26,19	31,10	30,60
	DEU A27 TBB2440 *	North Sea	PLE/2A3AX4	22,22	35,01	29,96	22,67	20,16
			SOL/24-C.	43,17	31,22	34,96	35,56	48,33
DNK	DNK A27 PGP1218 NGI	North Sea	PLE/2A3AX4	13,41	12,57	15,67	19,39	25,44
	DNK A27 PMP1012 NGI	North Sea	PLE/2A3AX4	1,58		7,51	12,62	11,57
	DNK A27 PMP1824 NGI*	North Sea	PLE/2A3AX4	13,40	16,80	19,22	20,21	15,46
FRA	FRA A27 DFN1012	North Sea	SOL/07D.	24,04	23,29	23,08	25,27	22,59
	FRA A27 TBB1218	North Sea	SOL/07D.	27,25	23,24	28,28	22,67	24,22
GBR	GBR A27 DFN0010 NGI	North Sea	SOL/07D.	23,64	23,28	19,95	17,59	19,21
	GBR A27 DFN1218 NGI	North Sea	PLE/2A3AX4	0,03	0,28	0,11	0,01	14,36
	GBR A27 DTS40XX NGI*	North Sea	PLE/2A3AX4	9,32	10,64	14,53	15,64	12,63
	GBR A27 MGP0010 NGI*	North Sea	SOL/07D.	7,85	12,11	5,44	7,24	12,64
	GBR A27 TBB0010 NGI*	North Sea	SOL/07D.	22,77	20,77	11,83	15,94	25,67
	GBR A27 TBB1218 NGI	North Sea	SOL/07D.	15,41	20,88	12,65	11,77	12,81
	GBR A27 TBB2440 NGI*	North Sea	PLE/2A3AX4	30,44	30,99	39,30	33,82	32,06
			SOL/24-C.	14,21	9,17	5,24	11,46	13,54
NLD	NLD A27 DFN1218 NGI*	North Sea	SOL/24-C.	68,68	69,25	75,53	68,87	84,66
	NLD A27 DFN1824 NGI*	North Sea	SOL/24-C.	51,16	49,71	66,88	27,02	31,61
	NLD A27 DTS0010 NGI*	North Sea	SOL/24-C.	0,95	16,95	13,09	0,36	40,07
	NLD A27 DTS1824 NGI*	North Sea	PLE/2A3AX4	21,37	23,97	32,04	36,94	30,47
	NLD A27 DTS2440 NGI*	North Sea	PLE/2A3AX4	13,39	11,07	16,15	13,40	13,06
	NLD A27 PG0010 NGI*	North Sea	SOL/24-C.	15,01	13,30	17,46	16,66	19,11
	NLD A27 PG1012 NGI*	North Sea	SOL/24-C.	80,98	82,40	80,25	76,15	71,28
	NLD A27 TBB40XX NGI*	North Sea	PLE/2A3AX4	18,82	22,78	26,04	25,66	20,76
			SOL/24-C.	57,85	52,73	51,20	52,78	57,69
	NLD A27 TBB1824 NGI*	North Sea	SOL/24-C.	14,96	23,45	20,10	14,35	13,71
	NLD A27 TBB2440 NGI*	North Sea	PLE/2A3AX4	18,90	23,62	25,87	25,78	19,72
			SOL/24-C.	47,22	48,23	39,08	36,24	40,20

Data source: Member State data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Brown Shrimp Fishery

Brown shrimp fishery has no quota. Considerable catches are being made in coastal areas of the southern North Sea. This fishery is performed by smaller beam trawlers (mainly below 24m). Dutch and German catches account for about 90% of the total catch. The Danish and the Belgian fleets also contribute to the total while France and the UK report only negligible amounts.

Dutch and German shrimp beam trawlers are comparable in size and performance. Some German vessels operate under Dutch ownership. Some Dutch vessels switch between flatfish and shrimp fishery.

Brown shrimp is a high value species. The market has been dominated by two wholesalers. One had to file bankruptcy after being fined €27 million for its involvement in a price fixing cartel. Prices dropped considerably in 2011 but recovered in 2012 and 2013, thus resulting in considerable increases in profitability of the fishery.

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Table 4.7 Structure and economic performance estimates by MS fleets operating in the North Sea region, 2014

	Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
BEL	76	66.1%	225	217	12,441	76%	13,513	80%	20,848	79%	60,837	75%	63,210	21,084	16,545	29,172	46.2	8,088	12.8	1,857	2.9	383.8	134.3
DEU	244	21.5%	557	457	32,888	30%	33,166	29%	35,117	49%	82,348	63%	84,808	30,547	15,360	45,028	53.1	14,481	17.1	4,063	4.8	184.7	98.6
DNK	981	61.9%	1,002	1,289	70,972	68%	67,316	68%	594,037	80%	297,517	78%	301,264	84,499	46,149	184,850	61.4	100,351	33.3	37,838	12.6	188.4	143.5
ESP	3	0.0%	5	43	9	0%	9	0%	12	0%	44	0%	54	21									
FRA	664	10.3%	1,577	1,300	81,768	18%	74,589	17%	100,126	19%	173,644	16%	183,232	72,627	35,767	83,845	45.8	11,218	6.1	336	0.2	127.1	64.5
GBR	2,097	45.9%	5,438	3,527	200,728	47%	156,268	48%	388,545	51%	515,967	48%	540,089	117,863	83,302	264,795	49.0	146,933	27.2	110,326	20.4	126.3	75.1
IRL	9.5	0.01	67	61	1,171	2%	657	2%	46,969	17%	47,773	16%	48,980	6,177	2,755	37,919	77.4	31,742	64.8	27,875	56.9	4,012.6	624.2
LTU		0.2%	11	11	27	0.3%	6	0.1%	17,911	12.3%	11,578	12.2%	12,143	212	705	10,002	82.4	9,790	80.6	9,615	79.2	41,674.4	927.0
NLD	571	95.6%	1,776	1,457	47,435	97%	41,875	98%	230,940	60%	311,909	84%	320,158	88,944	64,660	159,505	49.8	70,561	22.0	39,976	12.5	279.5	109.5
SWE	454	43.7%	714	461	37,738	49%	37,738	49%	61,722	37%	60,301	57%	62,929	18,168	14,696	29,089	46.2	10,921	17.4	- 641	- 1.0	64.1	63.2

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.8 Structure and economic performance estimates by main type of fishing activity for MS fleets operating in the North Sea region, 2014

	Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
SSF	2,807	8.1%	3,960	1,703	195,584	7%	162,092	6%	39,173	14%	118,583	15%	131,617	53,651	15,306	71,101	54.0	17,450	13.3	3,861	2.9	25.3	41.8
LSF	2,292	13.2%	7,402	7,108	289,566	15%	263,038	14%	1,439,143	38%	1,431,756	29%	1,473,108	386,279	263,927	763,103	51.8	376,845	25.6	217,768	15.0	334.0	108.0
DWF		0.1%	11	11	27	0.05%	6	0.01%	17,911	2%	11,578	1%	12,143	212	705	10,002	82.4	9,790	80.6	9,615	79.2	41,674.4	927.0

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.9 Structure and economic performance estimates by MS and main type of fishing activity operating in the North Sea region, 2014

		Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
		(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
SSF	DEU	10	1.2%	9	4	454	1%	393	1%	18	0%	28	0%	44	49	10	- 63	- 143.1	- 112	-254.1	- 151	- 341.6	- 6.3	- 17.2
SSF	DNK	579	55.3%	165	102	19,679	46%	19,497	46%	6,222	56%	12,547	58%	13,337	6,058	902	7,579	56.8	1,521	11.4	- 1,070	- 8.0	13.1	74.6
SSF	FRA	288	6.5%	493	393	32,418	15%	32,234	15%	9,875	13%	35,556	19%	40,784	18,500	3,304	25,279	62.0	6,779	16.6	3,791	9.3	87.8	64.4
SSF	GBR	1,450	46.2%	2,574	977	120,700	51%	87,820	54%	21,026	45%	58,661	48%	62,582	23,552	9,407	29,383	47.0	5,831	9.3	344	0.6	20.3	30.1
SSF	NLD	187	100%	362	99	2,929	100%	2,743	100%	406	100%	2,566	100%	4,912	1,233	595	2,601	53.0	1,368	27.8	398	8.1	13.9	26.2
SSF	SWE	293	39.2%	356	129	19,404	39%	19,404	39%	1,626	35%	9,224	64%	9,958	4,259	1,088	6,322	63.5	2,063	20.7	549	5.5	21.6	49.1
LSF	BEL	76.0	0.7	225	217	12,441	76%	13,513	80%	20,848	79%	60,837	75%	63,210	21,084	16,545	29,172	46.2	8,088	12.8	1,857	2.9	383.8	134.3
LSF	DEU	234	74.4%	548	453	32,434	81%	32,773	81%	35,098	54%	82,320	67%	84,764	30,498	15,350	45,091	53.2	14,593	17.2	4,214	5.0	192.9	99.6
LSF	DNK	402	74.6%	837	1,187	51,293	84%	47,819	84%	587,815	80%	284,970	80%	287,928	78,442	45,247	177,271	61.6	98,830	34.3	38,908	13.5	440.6	149.4
LSF	ESP	3	0.1%	5	43	9	0%	9	0%	12	0%	44	0%	54	21									
LSF	FRA	376	19.3%	1,084	907	49,350	20%	42,355	20%	90,251	26%	138,087	18%	142,448	54,128	32,463	58,567	41.1	4,439	3.1	- 3,455	- 2.8	157.5	64.6
LSF	GBR	647	45.2%	2,864	2,551	80,028	42%	68,448	42%	367,520	52%	457,306	48%	477,506	94,310	73,895	235,412	49.3	141,102	29.6	109,981	23.0	363.8	92.3
LSF	IRL	9	2.1%	67	61	1,171	3%	657	2%	46,969	18%	47,773	17%	48,980	6,177	2,755	37,919	77.4	31,742	64.8	27,875	56.9	4,012.6	624.2
LSF	NLD	384	93.6%	1,414	1,358	44,506	97%	39,131	98%	230,534	60%	309,343	84%	315,246	87,711	64,064	156,904	49.8	69,193	22.0	39,578	12.6	409.0	115.6
LSF	SWE	161	55.5%	358	332	18,334	68%	18,334	68%	60,096	37%	51,077	55%	52,971	13,908	13,608	22,767	43.0	8,859	16.7	- 1,190	- 2.3	141.6	68.6
DWF	LTU		2.2%	11	11	27	3%	6	1%	17,911	14%	11,578	13%	12,143	212	705	10,002	82.4	9,790	80.6	9,615	79.2	41,674.4	927.0

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.10 Structure and economic performance estimates for the top 35 MS fleets operating in the North Sea region, 2014

	Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
GBR A27 TM40XX NGI°	15	48.3%	177	45	1,078	51%	640	54%	220,161	52%	145,091	44%	147,313	30,131	14,907	75,888	51.5	45,757	31.1	34,157	23.2	5,065.9	1,669.3
NLD A27 TBB40XX NGI°	53	100.0%	343	343	10,128	100%	8,609	100%	31,387	100%	105,867	100%	108,276	27,289	26,182	53,150	49.1	25,860	23.9	19,723	18.2	1,003.0	154.9
GBR A27 DTS2440 NGI	64	75.8%	547	571	10,575	64%	8,980	65%	49,631	73%	97,856	67%	105,729	21,545	16,684	53,665	50.8	32,120	30.4	26,180	24.8	832.8	94.0
GBR A27 DTS1824 NGI	101	56.4%	630	624	17,123	57%	14,237	57%	34,408	74%	81,497	72%	85,191	14,640	13,456	46,777	54.9	32,138	37.7	27,448	32.2	463.1	74.9
DNK A27 TM40XX NGI	15	52.8%	68	137	1,834	68%	1,192	74%	217,418	67%	77,638	60%	78,557	14,721	11,140	55,406	70.5	40,684	51.8	17,140	21.8	3,616.6	403.7
NLD A27 TBB1824 NGI°	167	97.1%	424	434	20,319	100%	18,287	100%	23,895	100%	70,927	100%	73,824	25,698	12,232	40,622	55.0	14,923	20.2	8,725	11.8	243.3	93.6
NLD A27 TM40XX NGI°	14	48.7%	199	185	1,004	45%	803	45%	144,519	49%	63,307	51%	63,894	15,619	12,126	29,432	46.1	13,813	21.6	2,373	3.7	2,157.8	158.8
DNK A27 DTS2440 NGI°	33	82.5%	105	225	7,169	94%	6,169	94%	70,402	92%	49,241	94%	49,493	13,513	10,469	27,624	55.8	14,111	28.5	5,597	11.3	837.1	122.6
FRA A27 DRB1218 °	90	77.6%	319	256	13,531	84%	10,543	83%	11,747	76%	29,933	86%	42,448	15,696	7,193	22,073	52.0	6,377	15.0	2,498	5.9	245.3	86.2
DNK A27 DTS1824 NGI°	51	70.8%	120	214	8,536	88%	7,688	88%	58,826	93%	38,919	92%	39,616	12,469	5,576	23,991	60.6	11,522	29.1	5,709	14.4	470.4	112.3
IRL A27 TM40XX	4	14.0%	36	36	347	17%	87	11%	38,876	22%	38,814	33%	39,455	4,854	2,172	30,290	76.8	25,435	64.5	22,086	56.0	8,629.5	839.7
BEL A27 TBB2440 NGI	29	51.8%	91	103	5,121	61%	4,759	63%	13,195	74%	37,465	67%	38,961	11,199	9,935	20,014	51.4	8,815	22.6	5,113	13.1	690.1	194.0
GBR A27 FPO0010 NGI	854	48.7%	1,440	571	82,318	52%	54,040	58%	13,015	48%	35,842	49%	38,360	14,769	6,382	17,348	45.2	2,579	6.7	- 934	- 2.4	20.3	30.4
DNK A27 DTS40XX NGI°	15	88.2%	61	93	2,161	98%	1,594	99%	126,812	98%	32,333	94%	32,594	8,246	6,136	18,662	57.3	10,416	32.0	3,302	10.1	1,244.1	201.8
SWE A27 DTS2440 NGI°	36	55.1%	137	124	3,929	60%	3,929	60%	55,138	40%	28,096	51%	29,475	5,855	7,569	13,439	45.6	7,584	25.7	1,060	3.6	375.2	108.2
NLD A27 TBB2440 NGI°	31	100.0%	139	138	4,409	100%	3,847	100%	9,636	100%	28,042	100%	28,129	7,596	6,399	13,250	47.1	5,654	20.1	3,335	11.9	427.6	95.7
DNK A27 DTS1218 NGI°	104	68.0%	150	155	12,039	76%	11,934	76%	18,678	70%	24,797	80%	25,126	8,722	3,873	13,823	55.0	5,102	20.3	1,274	5.1	132.9	89.3
DEU A27 TBB1218	117	99.2%	172	144	15,568	100%	16,165	100%	8,379	100%	23,318	100%	24,556	8,988	3,341	15,351	62.5	6,362	25.9	4,150	16.9	131.2	106.8
NLD A27 DTS2440 NGI°	22	81.5%	95	115	4,160	100%	3,576	100%	11,878	100%	23,794	100%	24,044	6,573	4,608	11,059	46.0	4,485	18.7	2,592	10.8	502.7	95.9
FRA A27 DTS1824 °	37	18.2%	121	134	6,823	20%	5,502	20%	14,357	29%	24,889	19%	23,607	7,356	6,915	8,476	35.9	1,120	4.7	- 1,464	- 6.2	229.1	63.3
GBR A27 TBB2440 NGI°	11	35.5%	86	140	2,551	38%	2,093	37%	11,063	68%	21,921	57%	22,417	2,744	6,291	11,037	49.2	8,293	37.0	7,258	32.4	1,003.3	79.0
FRA A27 DFN1012	75	31.0%	194	212	12,424	43%	12,410	43%	3,771	34%	18,898	39%	20,048	10,444	1,810	12,301	61.4	1,857	9.3	579	2.9	164.0	58.1
DEU A27 TBB1824	63	96.9%	135	115	9,154	100%	9,605	100%	6,642	100%	19,181	100%	19,548	6,641	3,466	11,245	57.5	4,604	23.6	2,151	11.0	178.5	98.1
DNK A27 PMP1824 NGI°	16	100.0%	63	103	3,358	100%	2,912	100%	7,402	100%	18,288	100%	18,566	6,398	2,545	10,935	58.9	4,537	24.4	1,353	7.3	683.4	105.8
GBR A27 DTS1218 NGI°	61	28.6%	231	196	7,983	25%	7,098	26%	5,458	29%	16,117	30%	17,056	3,321	2,907	8,752	51.3	5,430	31.8	4,065	23.8	143.5	44.6
GBR A27 DRB2440 NGI°	18	52.9%	115	138	3,575	57%	3,245	59%	6,673	56%	16,211	66%	16,296	3,462	3,021	8,108	49.8	4,646	28.5	4,183	25.7	450.4	58.9
DEU A27 DTS2440	9.0	0.6	36	37	1,726	73%	1,495	72%	8,776	75%	15,459	91%	15,957	4,284	2,365	9,732	61.0	5,447	34.1	4,235	26.5	1,083.7	260.3
GBR A27 FPO1218 NGI	37	46.2%	145	172	5,854	44%	4,864	43%	6,710	42%	13,304	43%	14,036	4,026	2,145	6,343	45.2	2,317	16.5	1,426	10.2	171.5	36.9
GBR A27 DTS40XX NGI°	5	55.5%	74	81	1,160	54%	972	56%	7,276	25%	11,737	28%	13,398	1,747	5,681	- 3,932	- 29.4	- 5,679	- 42.4	- 7,697	- 57.5	- 734.9	- 48.6
BEL A27 TBB1824 NGI°	27	87.1%	72	66	4,506	98%	6,150	99%	3,702	99%	12,163	98%	12,534	5,108	3,211	5,218	41.6	110	0.9	- 1,197	- 9.6	193.3	78.8
LTU OFR TM40XX °	0	2.2%	11	11	27	3%	6	1%	17,911	14%	11,578	13%	12,143	212	705	10,002	82.4	9,790	80.6	9,615	79.2	41,674.4	927.0
GBR A27 DRB1218 NGI	30	27.3%	101	53	2,827	21%	2,501	21%	8,271	45%	11,368	38%	11,469	1,586	1,231	7,812	68.1	6,226	54.3	5,718	49.9	260.4	146.2
GBR A27 DFN0010 NGI	335	53.0%	534	135	18,271	64%	18,269	64%	2,575	51%	9,566	63%	10,476	3,830	1,053	5,420	51.7	1,590	15.2	887	8.5	16.2	40.1
SWE A27 DTS1824 NGI°	24	48.0%	60	75	3,845	59%	3,845	59%	3,263	23%	10,362	62%	10,362	2,636	2,539	4,590	44.3	1,954	18.9	882	8.5	191.3	61.6
FRA A27 DTS40XX	6	33.8%	62	79	1,096	43%	888	42%	9,402	33%	12,048	23%	10,235	5,845	4,324	- 616	- 6.0	- 6,460	- 63.1			- 107.1	- 7.8

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

4.5 EU Fleet activity in the Baltic Sea

The Baltic Sea covers ICES areas IIIb, IIIc and IIId and is bounded by the Swedish part of the Scandinavian Peninsula, mainland Europe and the Danish islands. The central part of the Baltic Sea is bordered on its northern edge by the Gulf of Bothnia, in the north-east by the Gulf of Finland, and in the east by the Gulf of Riga.

Eight EU Member States were involved in Baltic Sea fisheries in 2014: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden (Figure 4.13).

Socio-economic results exclude the German pelagic trawl segment due to confidentiality issues.

For simplicity, hereafter the EU vessels operating in the aforementioned ICES areas are referred to as the EU Baltic Sea fleet.

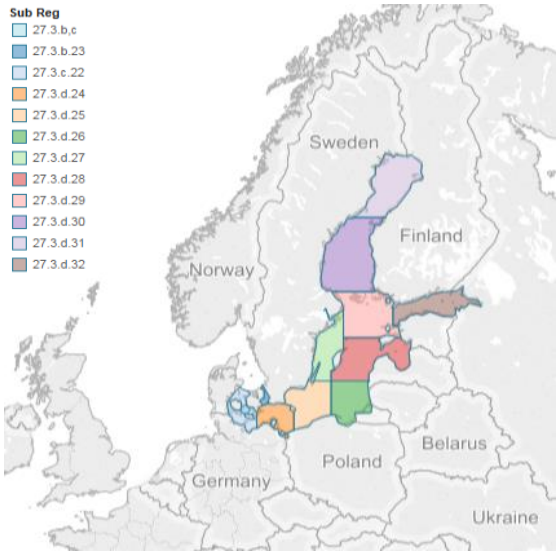
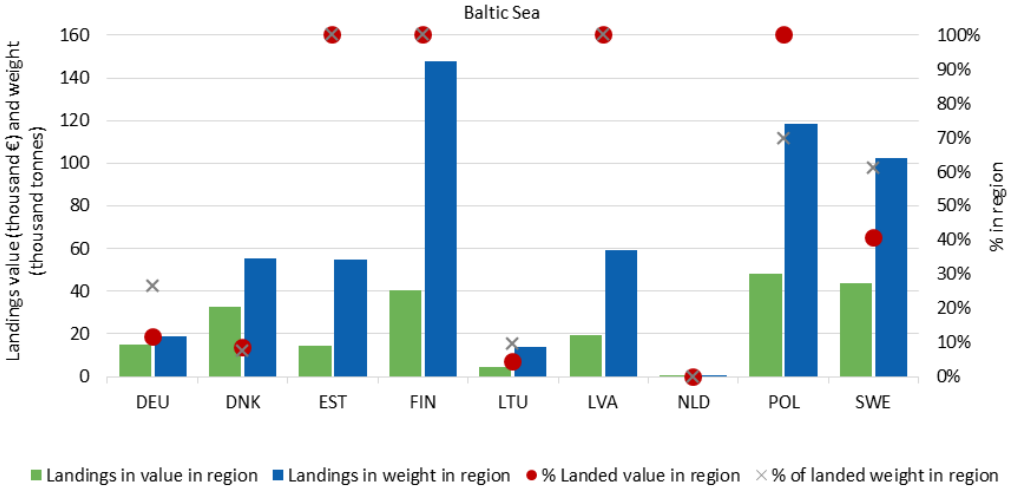


Figure 4.13 Regional map, highlighting the FAO fishing areas in the Baltic Sea.

MS fleet dependency on fisheries in the region

In terms of landings, Estonian, Finnish and Latvian fisheries are fully dependent on the Baltic Sea region. However, it should be noted that Estonian and Latvian vessels operating in the High Seas (distant-water fleets) are not included in the analysis due to confidentiality reasons. On the other hand, the Lithuanian and Polish low dependency rates are due to the distance-water fleet operating in other areas. Most German, Danish and Swedish vessels operate in both the Baltic and North Sea fishing regions.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.14 Value of landings, landings in weight and MS fleet dependency on the Baltic Sea, 2014.

Recent development trends

The number of vessels operating in the Baltic Sea during the period 2008-2014 decreased around 8%, while vessel tonnage and engine power saw a reduction of 23% and 16%, respectively. The highest capacity reduction took place in the Latvian (-44%) and Polish (-33%) fleets.

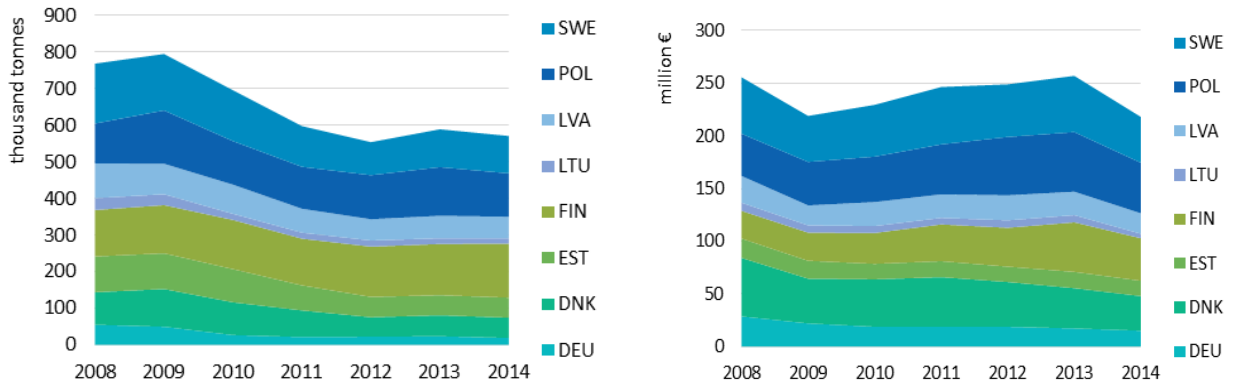
Reduction in capacity was mainly caused by a decommissioning programmes implemented in Latvia (after EU accession) and Poland as well as by an ITQ system introduced in Swedish pelagic fisheries in 2009 and entry restrictions on the Swedish Eel fishery. Effort deployed more or less followed the fleet capacity reduction. In 2014 total number of days at sea

deployed by Baltic Sea fleets was 9% less compared to 2008. The highest effort reduction again took place in Latvian and Swedish Baltic Sea fleet (-55% and -24%).

Overall, the Baltic fleet saw declines in landed weight over the period 2009-2012, with a slight increase in 2013. On the other hand, landings in value increased steadily since 2009, suffering a significant drop in 2014 (Figure 4.15).

Sprat landings, in weight and value, decreased 11% and 25%, respectively, from 2013 to 2014. The total landed weight of Baltic herring increased 6% between 2013 and 2014, while value decreased 25% over the same period. Cod landings decreased in both weight and value (9% and 15%, respectively) between 2013 and 2014. Since the TAC decreased by 15% during the same period, the deterioration can be a result of poor physical condition (skinny fish) of Baltic cod, negatively influencing the market value.

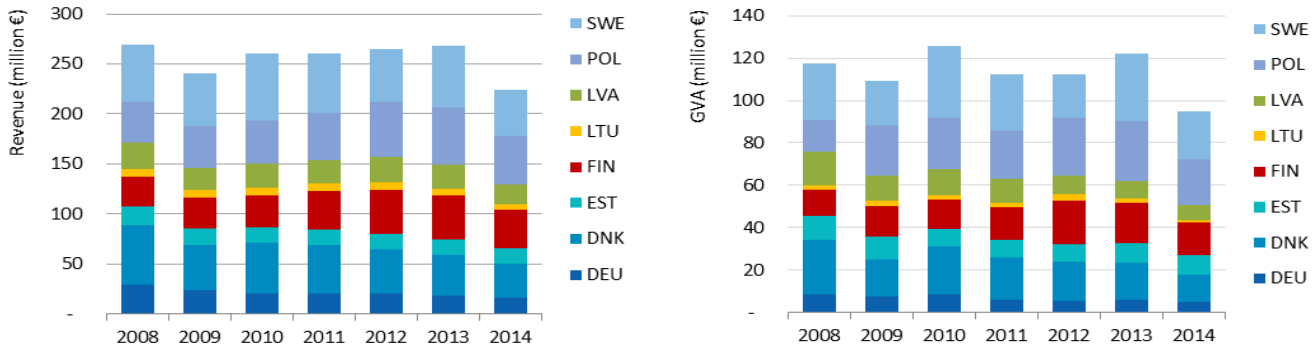
The SSF showed a high variety of targeted species and species/stocks under quota management in the Baltic Sea, such as cod, herring and salmon. Other targeted species included perch, eel (also under the management plan), pike-perch, flounder and whitefish.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.15 Landings, in weight and value, by Baltic Sea MS fleet over the period 2008-2014.

The profitability of the fleet deteriorated with the decline in revenue. GVA produced by the Baltic Sea fleet decreased with revenue and was estimated at €95 million in 2014, down 22% from the year before. After accounting for operating costs, the fleet made an estimated €23 million in gross profit (Figure 4.16), a marked decrease of 41% from the previous year. While overall the Baltic fleet was making gross profits, Danish, German and Lithuanian fleets suffered gross losses in 2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.16 Trends in Revenue (landings income and other income) and GVA by MS fleets operating in the Baltic Sea region over the period 2008-2014.

Fisheries management in the region

To incorporate ecosystem approach in the fisheries management, multiannual management plan for the Baltic Sea fisheries was developed by the Commission, and submitted to the EU co-legislators: the Council and the European Parliament. In March 2016 representatives of the Council, Parliament and Commission reached the provisional agreement on the plan.

The European eel Recovery plan also affects several Baltic States. Within this plan, MS through national eel management plans need take measures that allow 40% of adult eels to escape from inland waters to the sea, where they can spawn. EU

regulations also comprise specific fishery technical regulatory measures, such as mesh sizes, minimum landing sizes, by-catch limitations as well as periods and areas closed for fishing. Ban on driftnet fisheries was set after a three-year transitional period in 2008. The Baltic Sea coastal and inland fisheries are mainly regulated by each MS in the region through their national legislation.

The proposal for a regulation on salmon management plan was adopted by the Commission in August 2011 (COM(2011) 470 final). The regulation proposes harvest control rule expressed as fishing mortality rate at sea and delegates to the MS to establish annual fishing limits in rivers at MSY level. It establishes targets for salmon management in rivers: 75% of smolt (juvenile salmon) production to be reached in 5 or 10 years, depending on the status of rivers at present. However the Council and the European Parliament have not yet reached the agreement on the Commission's proposal.

The landings obligation has been in force since 1 January 2015 for pelagic and demersal fisheries in the Baltic Sea.

TAC development of main species

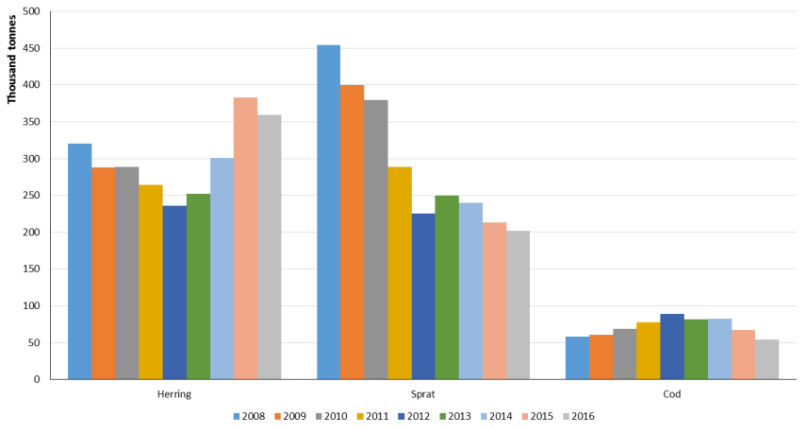
The European Commission (EC) prepares proposals for measures and instruments for resource conservation including fishing quotas and fishing effort limitations[7] after a certain consultative process. TACs (Total Allowable Catches) and quotas are annually defined for commercially important fish stocks. Currently, there are five species under TAC management in the Baltic Sea: (1) cod; (2) herring; (3) sprat; (4) Atlantic salmon and (5) plaice; the most important being the first three. Each year, ICES provides separate advice for two stocks of cod, four stocks of herring and one stock of sprat (Table 4.11).

Figure 4.17 provides the development of TACs for the main 3 species in the Baltic Sea. TACs are defined based on the status of stock, assessed by ICES, and the cod management plan.

Table 4.11 TAC for species in the Baltic Sea, 2012-2016

Species	Area	2012	2013	2014	2015	2016	2016/12	2016/14
Atlantic cod	Sub Divisions 22 to 24	21,300	20,043	17,037	15,900	12,720	-40%	-25%
	Sub Divisions 25-32	74,200	68,700	73,400	55,840	45,113	-39%	-39%
Atlantic cod Total		95,500	88,743	90,437	71,740	57,833	-39%	-36%
European sprat	IIIb),c),d)	255,100	278,000	267,900	240,200	225,804	-11%	-16%
European sprat Total		255,100	278,000	267,900	240,200	225,804	-11%	-16%
Herring	Sub Divisions 25-27, 28.2, 29 and 32	90,971	104,617	130,771	186,351	205,922	126%	57%
	Sub Divisions 22 to 24	20,900	25,900	19,754	22,220	26,274	26%	33%
	Sub-divisions 30 and 31	106,000	106,000	137,800	158,470	120,872	14%	-12%
	Golf of Riga	30,576	30,576	30,720	38,780	34,915	14%	14%
Herring Total		248,447	267,093	319,045	405,821	387,983	56%	22%

Source: Calculated based on 2016 TAC Council Regulations and BEMEF modelling



Source: Calculated based on 2016 TAC Council Regulations and BEMEF modelling

Figure 4.17 TACs for the three most important species in the Baltic Sea region, 2012-2014.

[7] Fishing effort limitations were abolished starting from 2016.

The landings obligation has been in force since 1 January 2015 for pelagic and demersal fisheries in the Baltic Sea. The exploitation of the available TACs by MS, provided in the Table 4.12 suggests that in several cases, e.g. Finland, the available sprat quota could be a limiting factor (so called choke specie) in the mixed pelagic fishery. On the other hand, due to the low weight of cod, also suggested by ICES assessment, the available cod fishing opportunities were not fully utilised by most MSs in the Baltic Sea.

Table 4.12 TAC use for most important Baltic species in 2012-2015

		Germany	Denmark	Estonia	Finland	Lithuania	Latvia	Poland	Sweden
Atlantic cod	2012	63%	78%	54%	90%	53%	59%	68%	61%
	2013	37%	52%	15%	32%	40%	38%	60%	36%
	2014	45%	55%	10%	24%	24%	31%	55%	30%
	2015	60%	82%	12%	36%	46%	55%	75%	43%
Atlantic herring	2012	89%	65%	90%	90%	71%	89%	98%	88%
	2013	92%	101%	89%	96%	68%	87%	79%	88%
	2014	92%	94%	85%	87%	57%	92%	78%	79%
	2015	98%	46%	87%	74%	85%	98%	87%	70%
European sprat	2012	100%	98%	99%	83%	100%	100%	95%	99%
	2013	100%	91%	100%	97%	100%	100%	106%	100%
	2014	92%	88%	95%	93%	92%	94%	94%	97%
	2015	98%	95%	89%	100%	96%	97%	97%	100%
Atlantic salmon	2012	48%	80%	40%	85%	7%	55%	75%	100%
	2013	86%	93%	45%	73%	7%	18%	104%	92%
	2014	44%	95%	41%	83%	9%	13%	48%	95%
	2015	99%	78%	46%	87%	8%	22%	62%	100%

Source: Calculated based on 2016 TAC Council Regulations and BEMEF modelling

MS Fleet dependency on main stocks subject to TACs

Table 4.13 shows the dependency, as the % of value of landings, of MS fleets on some of the important stocks in the Baltic Sea region over the period 2008-2014. The Estonian, Latvian, Polish and Swedish fleets are highly dependent on sprat stocks, reaching up to 52% for Latvia in 2014. The same fleets, as well as, the Finnish fleet are also very dependent on herring stocks, while the Polish fleet also has a high dependency on the cod stock in areas 27.3.d. 25-32.

Table 4.13 MS fleet dependency on stocks subject to TACs in the Baltic Sea (only dependency values > 10% are shown)

			Dependency (%)				
Country	Region	Stock	2010	2011	2012	2013	2014
EST	Baltic Sea	HER/3D-R30	21,37	20,58	23,89	22,17	25,14
		SPR/3BCD-C	48,17	42,53	40,35	42,66	41,18
FIN	Baltic Sea	HER/3D-R30	11,21	10,08	9,09	9,41	13,87
		HER/30/31.	38,75	45,82	55,71	63,62	54,19
LVA	Baltic Sea	HER/3D-R30	14,63	13,64	16,89	13,42	17,09
		HER/03D.RG	12,33	11,78	14,92	11,87	15,20
		SPR/3BCD-C	34,64	32,46	42,97	54,27	52,15
POL	Baltic Sea	COD/3DX32.	32,03	30,08	30,18	24,06	25,01
		HER/3D-R30	6,08	21,96	19,69	12,88	19,61
		SPR/3BCD-C	18,78	24,35	26,27	38,64	28,83
SWE	Baltic Sea	SPR/3BCD-C	12,95	10,38	8,67	13,05	10,54

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Status of important stocks

Pelagic stocks, herring and sprat, are all at the MSY level. Cod is the only fish species for which a multi-annual plan exists (Council Regulation (EC) No 1098/2007). The plan defines targets for stock recovery (in terms of cod mortality for Eastern and Western cod stocks) and also maximum fishing effort and licensing system for vessels fishing cod in the Baltic. Until 2012, the Eastern cod stock status was considered sustainably exploited and the Eastern cod TAC (68-81% cod TAC in the Baltic between 2008 and 2016) was increasing. However after good recruitment years and increase in the stock population in 2012-2013 the mean weight of larger cod in the Eastern Baltic declined and ICES changed Eastern cod stock status in 2014 from sustainably exploited to unknown. The Western cod status was above Fmsy and below MSY Btrigger over the period analysed. The sprat TAC deteriorated by 50% between 2008 and 2016 but the stock was assessed to be at the MSY level in 2016.

Baltic Sea fishing fleet, effort and landings: situation in 2014

Capacity

According to the DCF data submitted by region, the Member State fleets operating in the Baltic Sea collectively numbered around 6 500 active vessels in 2014. The Finnish fleet comprised the largest fleet in number (1 764 vessels) and engine power (109 934 kW) while the Polish Baltic fleet was the largest in gross tonnage (16 291 GT) (Figure 4.18).

Fishing effort

The latest official DCF data suggests that the EU Baltic Sea fleets spent over 525 thousand days at sea in 2014, 29% of which were Estonian fishing days. Collectively, vessels from Estonia and Finland together accounted for around 53% of the total days at sea deployed (Figure 4.19) (mostly generated by small scale vessels).

In terms of effort, the small scale fleet dominate, accounting for 88% of effort, while large scale fleets deployed 12% of the effort. Within the large-scale fleet, most of the effort was deployed by active, demersal gears (Figure 4.20).

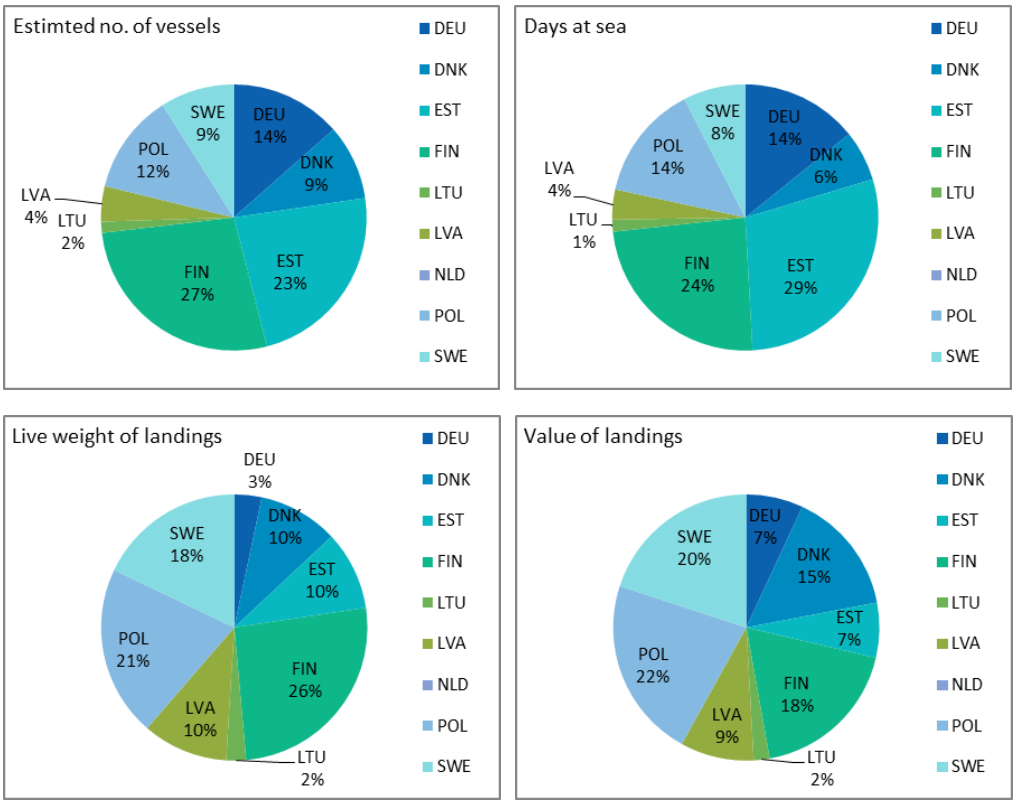
Landings

The weight and value of landings generated by the fleet amounted to approximately 571 thousand tonnes and €218 million, respectively.

In terms of landed weight, Finland (148 thousand tonnes), Poland (119 thousand tonnes) and Sweden (101 thousand tonnes) were the leading MS. Poland (€48 million), Sweden (€43.5 million), Finland (€40 million) and Denmark (€33 million), collectively accounted for around 76% of the total value of landings in the Baltic Sea in 2014 (Figure 4.18).

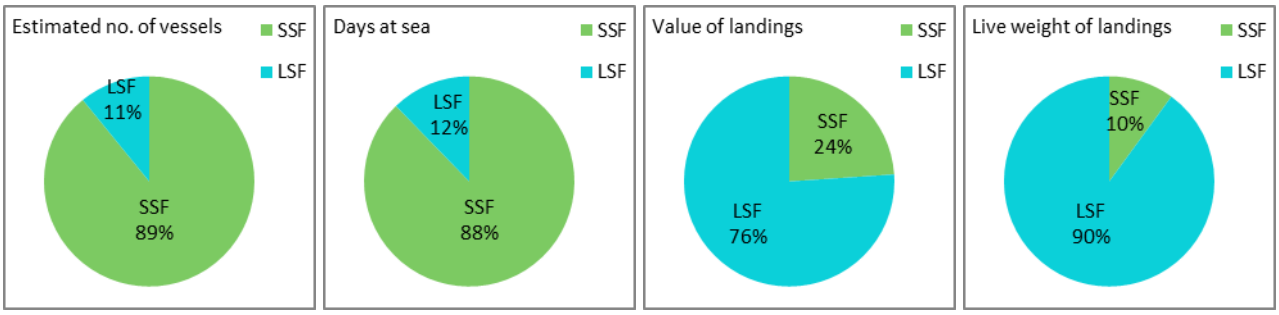
The small-scale fleets (SSF) accounted for 88% of the days at sea, while large-scale vessels (LSF) generated by far the highest landed weight, with 90% of the total. The difference between the two fishing activities was slightly less for landed value, with LSF accounting for 76% of the total and SSF vessels 24%, reflecting the lower value of pelagic species that are mainly targeted by the LSF (Figure 4.19).

While SSF covered 89% of the number of vessels, employment estimated for this group amounted to 3 200 FTE in 2014, representing around 63% of the total FTEs in the Baltic Sea fisheries, indicating the predominate part-time nature of this fleet segment.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.18 Share of capacity, effort and landings by main MS fleets operating in the Baltic Sea region, 2014.

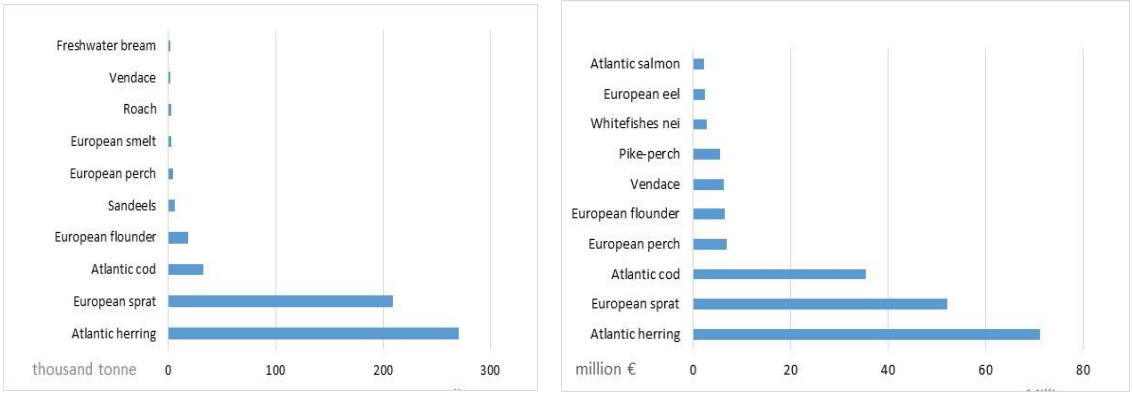


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.19 Share of capacity, effort and landings by main type of fishing activity for MS fleets operating in the Baltic Sea region, 2014.

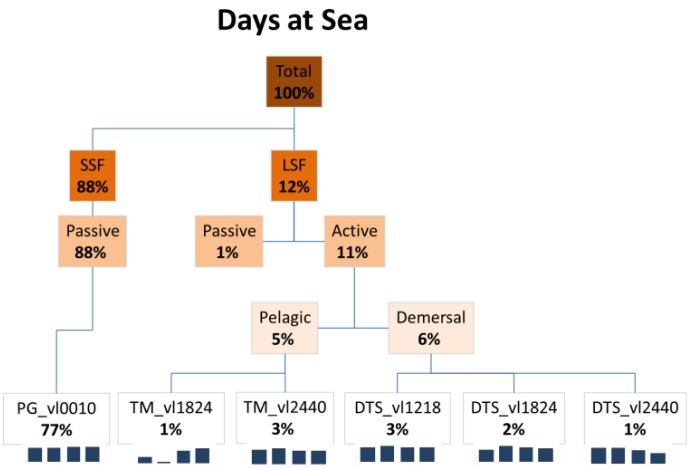
Top species

In 2014, the most important species landed in weight included herring (270 thousand tonnes, representing 51% of the landed weight) and sprat (209 thousand tonnes, 38% of the landed weight), followed by cod (32.6 thousand tonnes) and then flounder (18 thousand tonnes). Atlantic herring generated the highest value in 2014 (€71 million, representing 36% of the landed value), followed by European sprat (€52 million, 26% of the landed value) and then cod (€35 million, 16% of landed value) (Figure 4.21).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.20 Top 10 species in terms of weight and value landed for MS fleets operating in the Baltic Sea, 2014

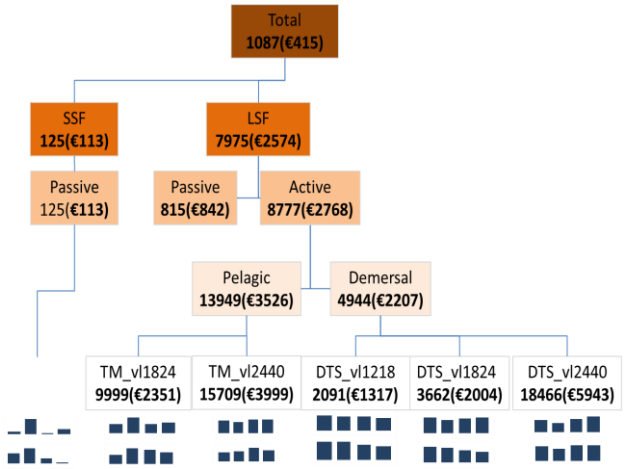


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.21 Schematic representation of the share of effort (in days at sea, %) deployed by the various MS fleet components operating in the Baltic Sea, including six of the most important segments (based on landed value from the Baltic Sea) and 4-year trend.

Productivity

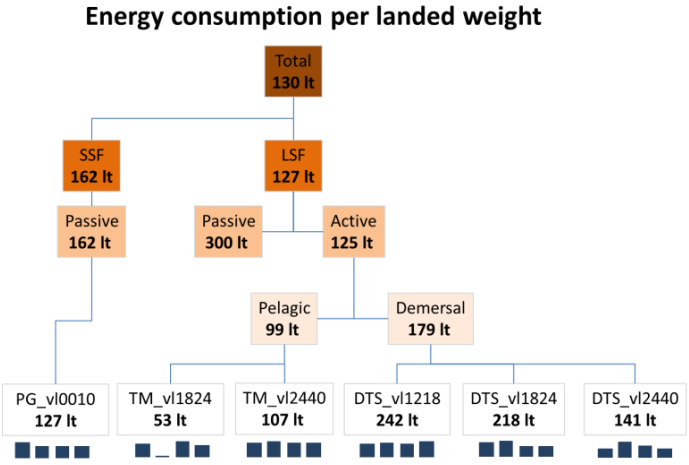
In 2014, average landings-per-unit-of-effort (LPUE) was estimated at just over one tonne per day at sea, or €415 per day at sea. Fleets mainly employing active gears generated almost 64 times more weight and value per unit of effort than vessels using passive gears. The most weight and value per unit of effort was generated by pelagic fisheries. However due to the clustering and mixture of pelagic and demersal trawling activities during the year, the segment - Demersal trawlers/seiners between 24 and 40m - was the most productive in terms of weight and value generated per day at sea in 2014 (Figure 4.22).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.22 Schematic representation of landings weight (and value) per unit of effort in the Baltic Sea including six most important segments (based on landed value from the Baltic Sea) and the 4-year trend.

On average, 130 litres of fuel were consumed per landed tonne by vessels operating in the Baltic Sea region, a significantly lower value than the average 310 litres consumed by vessels operating in the North Sea fisheries. However, differences between fisheries/fleets are observed (Figure 4.23).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.23 Schematic representation of the amount of fuel consumed per landed weight (tonnes/litre) by the various MS fleet components operating in the Baltic Sea, including six most important segments (based on landed value from the Baltic Sea) and 4-year trend.

Socio-economic performance

Table 4.14 to Table 4.18 contain a summary of the economic performance of the Baltic Sea fleet by Member State, main type of fishing activity and fleet segment.

The revenue (income from landings and other income) generated in 2014 was estimated at €224 million, a drop of 16% from the year before. Four Member States accounted for 75% of all revenues: Poland (€48 million), Sweden (€46 million), Finland (€39 million) and Denmark (€34 million) (Table 4.15), each having a marked decrease from previous year.

Estonian fleet was the most profitable in terms of gross profit with 27% gross profit margin followed by Latvian (20%), Swedish (19%), Finnish (18%) and Polish (13%) fleets. However only Estonian and Latvian gross profit was high enough to

cover the estimated capital costs having positive net profits; these were the only fleets that manage to generate resource rent in the Baltic Sea at MS level.

Description of relevant fisheries in the region

Large-scale fishery

Revenue generated by large-scale fleets (LSF) in 2014 was estimated at €168 million, with a marked drop of 19% from the year before (Table 4.16 and 4.17). LSF generated €69 million in GVA, or 41% of revenue. Overall, the Baltic LSF segment was profitable in 2014, generating €26 million in gross profit, however a marked drop from €45 million from year before.

In LSF pelagic fisheries dominate the Baltic Sea fisheries. It accounted for 60% of landed weight and 40% of the landing value in the region in 2014. Demersal fisheries accounted for 29% of landed weight and 34% in value. Both pelagic and demersal made gross profits; pelagic fisheries generated €14 million with a gross profit margin of 16.5% and respectively for demersal fisheries €12 million with 16% margin.

Pelagic vessels had higher economic size on average compared to demersal vessels: average vessel revenue €345 thousand and €197 thousand respectively. These also generated higher GVA on average, €136 thousand, compared to €85 thousand in demersal fisheries. Furthermore, labour productivity in terms of GVA per FTE was higher in pelagic fisheries compared to demersal: €41 thousand and €37 thousand, respectively.

Small-scale fishery

Small scale fishery (SSF) in the Baltic Sea is very important from the socio economic point of view. It dominates the Baltic Sea fishing in terms of vessels (89%) and employment (75% of total employed and 63% of FTE). However it only accounts for 10% of landed weight but 24% of the revenue. Revenue generated by the Baltic SSF in 2014 was estimated at €56.3 million, with a drop of 8% from the year before (Table 4.16).

In 2014, SSF generated €26 million in GVA, 46% of revenue. The profitability of the SSF also deteriorated, from gross losses of €1 million in 2013 to losses of €2.5 million in 2014. The overall poor economic performance can be explained by the small economic size on average. Average vessel revenue was only €9 700 in revenue and €4 500 in GVA. Labour productivity in terms of GVA per FTE was only €8 100.

Despite the overall poor performance there is a high variation in SSF between MS. Latvian Finnish, Estonian, German and Lithuanian SSF made reasonable gross profits while the rest were making gross losses. After counting for estimated capital costs, Latvian, Lithuanian, Estonian and German fleets were still making positive net profits and generating resource rent in their fisheries (Table 4.17).

Performance by fleet segment

Table 4.18 displays the basic capacity, effort and socio-economic indicators estimated for the top 35 MS fleet segments (out of 53), based on the value of revenue in the region. These 35 segments represented 96% of the landed weight (570 000 tonnes) and 95% of the revenue (€224 million) generated by the Baltic Sea fleet in 2014.

At fleet segment level, the Swedish demersal trawl and seine 24-40m segment generated the highest revenue in 2014 (€25 million), followed by the Finnish pelagic trawl 24-40m segment (€20 million) and the Polish pelagic trawl 24-40m segment (€18 million). The most important fleets in terms of GVA were the Swedish demersal trawlers 24-40m and the Polish and Estonian pelagic trawlers 24-40m.

In relative terms, the Latvian passive gear segment under 10m generated the highest gross profit margins, followed by the Danish Pelagic trawler segment over 40m and the Swedish demersal trawlers segments 10-12m and 12-18m. However, these Danish and Swedish fleets were mostly fishing in the North Sea.

Of these 35 fleet segments, 27 made positive gross profits. 15 out of 20 fleets that were operating solely in or highly dependent (over 95%) on Baltic Sea fishing were making positive gross profits. Of the 15 fleet segments showing low dependency (less 50%) on Baltic Sea fishing, 12 made positive gross profits in 2014.

Nine fleet segments highly dependent on Baltic Sea fishing were also making net profits while 8 fleet segments with low dependency were profitable after deducting capital costs. This indicates that the good pelagic stock situation in the Baltic Sea together with implementation of ITQ in Denmark and Sweden have had some positive impact on profitability.

One important reason for the negative gross profit of the smaller vessel is the estimated opportunity cost for the unpaid labour. For the fleet segments below 12 meters, and to a certain extent also the group of vessels in the length group 12-18m, the estimated opportunity cost for labour may be high in proportion to the catch value, making the gross profit negative. This indicates that many vessel owners earn lower income than that used as an opportunity cost. Hence, the estimated negative gross profits do not lead to insolvency even though income at the fleet level does not provide a high livelihood for fishers on average.

Energy costs are a major cost item especially in the Baltic Sea LSF. The drop of fuel prices in 2015 is expected to have improved the economic performance of the fleet especially in the fuel intensive LSF

Table 4.14 EU Baltic Sea fleet structure and economic performance of main Baltic Sea fishing segment in 2014

		Estimated no. vessles in region	Total N of vessels	Estimated % of vessels in region	Avg. GT/vessel	Avg. engine power, kW/vessel	Total employment dependent on the region	Full-time equivalent (national) in the region	Days at sea in the region	Estimated % of effort in the region	Fishing days	Fishing days per vessel	Avg. energy consumption	Live weight of landings	% of weigth of landings in the region	Value of landings	% of value of landings in the region	% of total value landings in the region	Avg. revenue per vessel in the region	Share of labour costs	Share of energy costs	Avg. energy costs	Gross Value Added margin	Gross profit margin	Net profit margin
		(#)	(#)	(%)	(#)	(GT)	(kW)	(person)	(day)	(%)	(day)	(day)	(litres/day at sea)	(thousand litres)	(%)	(thousand €)	(%)	(%)	(thousand €)	as % of revenue	as % of revenue	(Eur/day at sea)	%	%	%
SSF	FIN A27 PG0010	1,625	1,625	100%	2	42	1,625	246	118,699	100%	118,699	73	13	10,416	100%	10,311	100%	5%	7.3	26%	11%	11	49%	24%	-31%
	POL A27 PG0010 °	489	489	100%	3	29	1,152	1,064	41,998	100%	41,943	86	27	8,547	100%	7,830	100%	4%	16.1	69%	10%	18	68%	-1%	-11%
	DEU A27 PG0010	746	750	99%	2	22	742	563	63,267	99%	66,204	89	10	4,574	100%	5,948	100%	3%	8.3	21%	9%	9	51%	30%	14%
	DNK A27 PGP0010 NGI	372	808	46%	6	70	90	76	15,530	53%	15,539	42	44	2,523	51%	5,388	46%	2%	16.1	66%	7%	31	50%	-15%	-33%
	EST A27 PG0010 NGI	1,392	1,392	100%	1	13	1,563	209	146,192	100%	190,802	137	2	3,283	100%	3,676	100%	2%	2.7	26%	10%	3	47%	20%	9%
	SWE A27 DFN0010 NGI°	360	595	61%	5	91	424	160	25,617	63%	25,617	71	56	1,640	67%	3,295	37%	2%	11.4	82%	16%	41	42%	-40%	-64%
	POL A27 PG1012	106	106	100%	11	65	367	356	9,198	100%	8,598	81	114	4,127	100%	3,263	100%	1%	31.1	50%	19%	68	45%	-5%	-22%
	DNK A27 PGP1012 NGI	34	53	64%	17	152	30	30	3,864	67%	3,843	113	100	1,180	51%	2,222	47%	1%	66.7	51%	8%	67	48%	-3%	-21%
	DEU A27 PG1012	62	67	93%	12	94	47	41	5,553	96%	7,269	117	44	2,570	99%	2,122	99%	1%	37.9	44%	8%	32	26%	-18%	-36%
	SWE A27 DFN1012 NGI°	95	136	70%	16	201	134	43	5,333	57%	5,333	56	177	1,446	64%	1,820	33%	1%	22.9	42%	18%	112	45%	2%	-23%
	LVA A27 PGP0010 NGI	221	221	100%	2	12	301	214	12,768	100%	10,851	49	3	4,494	100%	1,739	100%	1%	7.9	6%	1%	2	96%	90%	89%
LSF	SWE A27 DTS2440 NGI°	29	42	69%	514	1,510	111	84	2,654	39%	2,654	92	3,463	80,422	58%	24,022	44%	11%	866.8	17%	22%	1,927	53%	36%	15%
	FIN A27 TM2440 °	22	22	100%	319	925	99	68	3,696	103%	3,296	150	3,547	97,794	100%	21,060	100%	10%	904.6	16%	43%	2,323	26%	10%	-15%
	POL A27 TM2440 °	43	43	100%	167	405	255	254	4,529	100%	3,907	91	1,591	60,430	100%	17,534	100%	8%	408.0	24%	25%	957	43%	18%	-2%
	LVA A27 TM2440 NGI	45	45	100%	136	320	270	125	4,695	100%	4,559	101	820	46,115	100%	15,346	100%	7%	358.7	14%	15%	526	37%	23%	14%
	EST A27 TM2440 NGI°	28	28	100%	130	312	160	160	3,078	100%	2,971	106	729	43,556	100%	9,317	100%	4%	333.1	39%	14%	438	69%	30%	13%
	POL A27 DTS1218 °	73	71	103%	29	130	304	297	8,963	100%	7,767	106	530	17,778	100%	8,657	100%	4%	119.3	25%	32%	313	42%	17%	8%
	SWE A27 DTS1824 NGI°	26	41	63%	188	616	65	52	2,656	41%	2,656	102	1,014	11,204	77%	6,367	38%	3%	244.9	27%	26%	660	40%	13%	0%
	DNK A27 DTS1218 NGI°	49	119	41%	84	462	71	50	3,896	24%	3,749	77	513	8,035	30%	6,038	20%	3%	125.6	37%	16%	322	51%	15%	-3%
	POL A27 DTS1824 °	33	35	94%	60	231	178	174	3,747	100%	3,493	106	599	13,442	100%	5,643	100%	3%	171.2	16%	23%	354	30%	14%	3%
	FIN A27 TM1824	15	15	100%	85	405	24	21	1,372	103%	1,328	89	433	25,929	100%	5,361	100%	2%	270.2	36%	10%	283	70%	34%	-8%
	SWE A27 DTS1218 NGI°	27	69	39%	91	633	47	21	1,471	19%	1,471	54	654	5,317	82%	5,108	37%	2%	198.0	30%	21%	400	49%	19%	4%
	DNK A27 TM40XX NGI	4	16	25%	6,304	11,164	18	15	196	7%	121	30	9,858	16,343	5%	3,899	3%	2%	1,034.6	17%	13%	6,074	73%	57%	23%
	POL A27 TM1824	21	21	100%	73	269	100	99	2,518	100%	2,339	111	590	12,836	100%	3,750	100%	2%	178.8	11%	24%	356	43%	32%	23%
	DNK A27 DTS1824 NGI°	21	55	38%	281	801	50	28	1,123	12%	1,037	49	1,057	4,191	7%	3,424	8%	2%	175.2	33%	15%	653	58%	26%	7%
	DNK A27 TM1218 NGI	14	18	78%	65	240	18	15	742	39%	679	48	974	11,253	28%	3,227	33%	1%	224.7	28%	12%	653	61%	33%	18%
	DNK A27 DTS2440 NGI°	7	33	21%	1,329	2,879	22	14	447	6%	379	54	2,401	5,844	8%	2,994	6%	1%	438.4	27%	21%	1,460	55%	28%	8%
	DNK A27 PMP1218 NGI	16	34	47%	67	339	20	17	1,340	32%	1,297	81	518	2,690	36%	2,544	32%	1%	156.7	36%	18%	332	47%	11%	-7%
	DEU A27 DTS1218	29	29	100%	35	187	25	22	2,629	98%	2,648	91	335	4,262	100%	2,528	96%	1%	102.3	41%	17%	200	49%	8%	-6%
	LVA A27 TM1218 NGI	12	12	100%	30	185	36	23	1,734	100%	1,722	144	820	8,679	100%	2,412	100%	1%	201.0	30%	38%	526	-18%	-48%	-62%
	FIN A27 TM1218 °	28	28	100%	26	202	25	15	1,389	100%	1,385	49	322	10,031	100%	2,411	100%	1%	78.8	22%	13%	211	46%	24%	-15%
	LTU A27 TM2440 °	5	5	100%	290	643	36	20	413	89%	238	48	2,790	9,382	100%	2,245	100%	1%	469.2	17%	28%	1,580	31%	14%	10%
	SWE A27 DTS1012 NGI°	33	79	42%	28	390	46	9	824	16%	824	25	375	1,709	78%	2,217	38%	1%	68.2	36%	21%	244	46%	11%	-19%
	DEU A27 DTS1824	11	17	65%	168	337	27	18	1,228	44%	1,188	108	857	3,213	50%	2,120	24%	1%	203.3	30%	17%	528	57%	26%	18%
	LTU A27 DTS2440 °	19	19	100%	117	218	159	92	1,278	100%	1,240	65	1,001	3,828	100%	1,489	100%	1%	86.0	34%	51%	645	-17%	-51%	-64%

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.15 Structure and economic performance estimates by MS fleets operating in the Baltic Sea region, 2014

	Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
DEU	877	77%	896	673	74,799	68%	79,551	70%	18,939	26%	15,096	12%	16,673	6,935	2,912	5,139	30.8	- 1,796	- 10.8	- 5,214	- 31.3	5.9	7.6
DNK	594	37%	357	280	32,108	31%	31,599	32%	55,339	7%	32,824	9%	34,067	17,195	6,107	12,640	37.1	- 4,555	- 13.4	-20,838	- 61.2	21.3	45.2
EST	1,513	100%	2,070	497	151,024	100%	195,520	100%	54,767	100%	14,544	100%	14,729	5,379	1,943	9,308	63.2	3,929	26.7	1,651	11.2	6.2	18.7
FIN	1,764	100%	1,847	355	126,927	100%	126,091	100%	148,224	100%	40,359	100%	39,278	8,299	10,675	15,488	39.4	7,189	18.3	- 8,305	- 21.1	8.8	43.6
LTU	88	91%	337	158	7,610	92%	6,160	90%	13,825	12%	4,208	6%	4,515	1,121	1,571	722	16.0	- 399	- 8.8	- 738	- 16.3	8.2	4.6
LVA	278	100%	607	362	19,197	100%	17,132	100%	59,163	100%	19,496	100%	20,290	3,101	3,402	7,196	35.5	4,095	20.2	2,367	11.7	25.9	19.9
POL	793	100%	2,485	2,373	73,756	99%	70,614	99%	119,253	72%	47,898	100%	48,060	15,617	11,067	21,734	45.2	6,117	12.7	- 780	- 1.6	27.4	9.2
SWE	584	56%	854	378	39,717	51%	39,717	51%	101,459	61%	43,515	41%	46,225	14,044	9,413	22,662	49.0	8,618	18.6	- 1,910	- 4.1	38.8	59.9

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.16 Structure and economic performance estimates by main type of fishing activity for MS fleets operating in the Baltic Sea region, 2014

	Total number of vessels	as % of vessels by fishing activity	Total employed	FTE	Days at sea	as a % of DAS by fishing activity	Fishing days	as a % of FD by fishing activity	Live weight of landings	as % of landed weight by fishing activity	Value of landings	as % of landed value by fishing activity	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
SSF	5,785	16.7%	7,045	3,195	460,754	17%	505,847	18%	57,506	20%	52,163	6%	56,325	28,524	6,949	25,992	46.2	- 2,533	- 4.5	- 18,636	- 33.1	4.5	8.1
LSF	706	3.7%	2,409	1,881	64,384	3%	60,537	3%	513,463	14%	165,778	3%	167,512	43,168	40,141	68,898	41.1	25,730	15.4	- 15,132	- 9.0	97.6	36.6

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.17 Structure and economic performance estimates by MS and main type of fishing activity operating in the Baltic Sea region, 2014

		Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
		(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
SSF	DEU	808	98.8%	789	604	68,820	99%	73,473	99%	7,136	100%	8,070	100%	8,526	2,284	759	3,844	45.1	1,561	18.3	147	1.7	4.8	6.4
SSF	DNK	468	44.7%	141	123	22,969	54%	22,950	54%	4,875	44%	9,094	42%	9,740	7,273	1,045	3,348	34.4	- 3,925	- 40.3	- 6,087	- 62.5	7.2	27.1
SSF	EST	1,475	100.0%	1,895	333	147,662	100%	192,318	100%	10,403	100%	5,050	100%	5,225	1,649	573	2,791	53.4	1,142	21.9	510	9.8	1.9	8.4
SSF	FIN	1,699	100.0%	1,699	251	120,470	100%	120,082	100%	14,256	100%	11,527	100%	13,120	3,220	1,406	6,557	50.0	3,337	25.4	- 4,705	- 35.9	3.9	26.1
SSF	LTU	64	100.0%	142	46	5,919	100%	4,682	100%	525	100%	474	100%	536	167	93	262	48.8	95	17.7	72	13.4	4.1	5.7
SSF	LVA	221	100.0%	301	214	12,768	100%	10,851	100%	4,484	100%	1,739	100%	1,739	108	21	1,671	96.1	1,564	89.9	1,543	88.8	7.6	7.8
SSF	POL	595	100.0%	1,519	1,420	51,196	100%	50,541	100%	12,763	100%	11,093	100%	11,153	7,105	1,401	6,855	61.5	- 250	- 2.2	- 1,565	- 14.0	11.5	4.8
SSF	SWE	455	60.8%	558	203	30,950	61%	30,950	61%	3,064	65%	5,115	36%	6,288	6,719	1,650	663	10.5	- 6,056	- 96.3	- 8,550	- 136.0	1.5	3.3
LSF	DEU	69	22.0%	107	69	5,979	15%	6,078	15%	11,803	18%	7,026	6%	8,146	4,652	2,153	1,295	15.9	- 3,357	- 41.2	- 5,360	- 65.8	18.8	18.9
LSF	DNK	126	23.4%	216	156	9,139	15%	8,649	15%	50,464	7%	23,730	7%	24,327	9,921	5,062	9,292	38.2	- 630	- 2.6	-14,751	- 60.6	73.7	59.5
LSF	EST	38	100.0%	175	164	3,362	100%	3,202	100%	44,365	100%	9,494	100%	9,504	3,730	1,370	6,517	68.6	2,787	29.3	1,141	12.0	171.5	39.7
LSF	FIN	65	100.0%	148	104	6,457	100%	6,009	100%	133,968	100%	28,832	100%	26,159	5,079	9,268	8,931	34.1	3,852	14.7	- 3,600	- 13.8	137.4	85.9
LSF	LTU	24	100.0%	195	112	1,691	100%	1,478	100%	13,299	100%	3,734	100%	3,979	955	1,477	461	11.6	- 494	- 12.4	- 809	- 20.3	19.2	4.1
LSF	LVA	57	100.0%	306	148	6,429	100%	6,281	100%	54,678	100%	17,758	100%	18,552	2,994	3,381	5,525	29.8	2,531	13.7	823	4.4	96.9	37.3
LSF	POL	198	99.5%	966	953	22,560	100%	20,073	100%	106,490	100%	36,805	100%	36,908	8,512	9,666	14,879	40.3	6,367	17.3	785	2.1	75.1	15.6
LSF	SWE	129	44.5%	296	175	8,767	32%	8,767	32%	98,395	61%	38,400	42%	39,937	7,325	7,763	21,999	55.1	14,674	36.7	6,640	16.6	170.5	125.6

* German pelagic trawlers excluded, Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.18 Structure and economic performance estimates for the top 35 MS fleets operating in the Baltic Sea region, 2014

	Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
SWE A27 DTS2440 °	29	44.6%	111	84	2,654	40%	2,654	40%	79,859	58%	24,022	44%	25,138	3,955	5,113	14,095	56.1	10,140	40.3	4,858	19.3	486.0	168.1
FIN A27 TM2440 °	22	100.0%	99	68	3,696	100%	3,296	100%	97,951	100%	21,060	100%	19,900	3,134	8,586	5,075	25.5	1,940	9.8	- 2,951	- 14.8	230.7	74.6
POL A27 TM2440 °	43	100.0%	255	254	4,529	100%	3,907	100%	60,853	100%	17,534	100%	17,543	4,246	4,335	7,457	42.5	3,211	18.3	- 296	- 1.7	173.4	29.4
LVA A27 TM2440	45	100.0%	270	125	4,695	100%	4,559	100%	46,018	100%	15,346	100%	16,140	2,282	2,469	5,968	37.0	3,686	22.8	2,313	14.3	132.6	47.7
FIN A27 PG0010	1,625	100.0%	1,625	246	118,699	100%	118,699	100%	10,433	100%	10,311	100%	11,866	3,036	1,269	5,852	49.3	2,817	23.7	- 3,620	- 30.5	3.6	23.8
EST A27 TM2440 °	28	100.0%	160	160	3,078	100%	2,971	100%	43,525	100%	9,317	100%	9,326	3,633	1,349	6,457	69.2	2,824	30.3	1,198	12.9	230.6	40.4
POL A27 DTS1218 °	73	100.0%	304	297	8,963	100%	7,767	100%	17,903	100%	8,657	100%	8,712	2,159	2,805	3,683	42.3	1,524	17.5	658	7.6	50.5	12.4
POL A27 PG0010 °	489	100.0%	1,152	1,064	41,998	100%	41,943	100%	8,607	100%	7,830	100%	7,858	5,455	776	5,365	68.3	- 90	- 1.2	- 830	- 10.6	11.0	5.0
SWE A27 DTS1824 °	26	52.0%	65	52	2,656	41%	2,656	41%	11,126	77%	6,367	38%	6,367	1,821	1,754	2,111	33.2	290	4.6	- 871	- 13.7	81.2	41.0
DEU A27 PG0010	746	99.3%	742	563	63,267	100%	66,204	100%	4,569	100%	5,948	100%	6,176	1,280	581	3,167	51.3	1,887	30.6	867	14.0	4.2	5.6
DNK A27 DTS1218 °	49	32.0%	71	50	3,896	24%	3,749	24%	8,019	30%	6,038	20%	6,156	2,822	1,253	2,259	36.7	- 563	- 9.2	- 2,367	- 38.4	46.1	45.1
DNK A27 PGP0010	372	45.0%	90	76	15,530	53%	15,539	53%	2,518	51%	5,388	46%	5,974	4,536	477	2,655	44.5	- 1,881	- 31.5	- 2,918	- 48.8	7.1	35.1
POL A27 DTS1824 °	33	100.0%	178	174	3,747	100%	3,493	100%	13,536	100%	5,643	100%	5,649	884	1,326	1,690	29.9	806	14.3	177	3.1	51.2	9.7
SWE A27 DTS1218 °	27	35.5%	47	21	1,471	19%	1,471	19%	5,279	82%	5,108	37%	5,346	862	589	3,713	69.5	2,851	53.3	2,107	39.4	137.5	179.7
DNK A27 TM40XX	4	13.8%	18	15	196	7%	121	7%	16,311	5%	3,899	3%	4,138	1,573	1,190	1,235	29.9	- 338	- 8.2	- 6,485	- 156.7	308.8	84.2
SWE A27 DFN0010 °	360	59.4%	424	160	25,617	63%	25,617	63%	1,628	67%	3,295	37%	4,111	5,287	1,052	431	10.5	- 4,856	- 118.1	- 6,340	- 154.2	1.2	2.7
FIN A27 TM1824	15	100.0%	24	21	1,372	100%	1,328	100%	25,970	100%	5,361	100%	4,053	1,465	389	2,852	70.4	1,386	34.2	- 322	- 7.9	190.1	135.8
EST A27 PG0010	1,392	100.0%	1,563	209	146,192	100%	190,802	100%	3,281	100%	3,676	100%	3,817	1,002	388	1,780	46.6	778	20.4	339	8.9	1.3	8.5
POL A27 TM1824	21	100.0%	100	99	2,518	100%	2,339	100%	12,926	100%	3,750	100%	3,756	420	896	1,633	43.5	1,214	32.3	857	22.8	77.8	16.5
DNK A27 DTS1824 °	21	29.2%	50	28	1,123	12%	1,037	12%	4,183	7%	3,424	8%	3,680	1,640	733	1,225	33.3	- 415	- 11.3	- 2,808	- 76.3	58.3	43.6
POL A27 PG1012	106	100.0%	367	356	9,198	100%	8,598	100%	4,156	100%	3,263	100%	3,295	1,650	625	1,490	45.2	- 160	- 4.9	- 735	- 22.3	14.1	4.2
DNK A27 TM1218	14	43.8%	18	15	742	42%	679	42%	11,231	28%	3,227	33%	3,146	1,121	485	1,588	50.5	467	14.9	- 157	- 5.0	113.5	105.7
DNK A27 DTS2440 °	7	17.5%	22	14	447	6%	379	6%	5,832	8%	2,994	6%	3,069	843	653	1,454	47.4	611	19.9	- 1,195	- 38.9	207.7	103.5
DEU A27 DTS1218	29	93.5%	25	22	2,629	98%	2,648	98%	4,258	100%	2,528	96%	2,966	1,250	526	1,434	48.4	185	6.2	- 201	- 6.8	49.5	66.5
DNK A27 PMP1218	16	34.8%	20	17	1,340	32%	1,297	32%	2,684	36%	2,544	32%	2,508	908	444	1,163	46.4	256	10.2	- 232	- 9.2	72.7	69.3
LVA A27 TM1218	12	100.0%	36	23	1,734	100%	1,722	100%	8,660	100%	2,412	100%	2,412	712	912	- 442	- 18.3	- 1,154	- 47.9	- 1,489	- 61.8	- 36.9	- 19.2
DEU A27 PG1012	62	92.5%	47	41	5,553	96%	7,269	97%	2,567	99%	2,122	99%	2,350	1,004	178	677	28.8	- 326	- 13.9	- 720	- 30.6	10.9	16.5
LTU A27 TM2440 °	5	100.0%	36	20	413	100%	238	100%	9,446	100%	2,245	100%	2,346	404	653	735	31.3	331	14.1	233	9.9	147.0	37.4
DNK A27 PGP1012	34	56.7%	30	30	3,864	67%	3,843	68%	1,178	51%	2,222	47%	2,266	1,641	260	641	28.3	- 1,001	- 44.2	- 1,486	- 65.6	18.8	21.4
SWE A27 DTS1012 °	33	40.2%	46	9	824	16%	824	16%	1,697	78%	2,217	38%	2,250	344	201	1,606	71.4	1,261	56.1	535	23.8	48.7	181.6
DEU A27 DTS1824	11	52.4%	27	18	1,228	44%	1,188	46%	3,210	50%	2,120	24%	2,236	1,192	648	487	21.8	- 705	- 31.6	- 1,098	- 49.1	44.3	26.4
FIN A27 TM1218 °	28	100.0%	25	15	1,389	100%	1,385	100%	10,047	100%	2,411	100%	2,205	479	293	1,004	45.6	525	23.8	- 327	- 14.8	35.9	67.0
SWE A27 DFN1012 °	95	66.9%	134	43	5,333	57%	5,333	57%	1,436	64%	1,820	33%	2,178	1,431	598	232	10.7	- 1,199	- 55.1	- 2,210	- 101.5	2.4	5.4
LVA A27 PGP0010	221	100.0%	301	214	12,768	100%	10,851	100%	4,484	100%	1,739	100%	1,739	108	21	1,671	96.1	1,564	89.9	1,543	88.8	7.6	7.8
LTU A27 DTS2440 °	19	100.0%	159	92	1,278	100%	1,240	100%	3,854	100%	1,489	100%	1,633	551	825	- 274	- 16.8	- 825	- 50.5	- 1,043	- 63.8	- 14.4	- 3.0

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

4.6 EU Fleet activity in the Northeast Atlantic region

The Northeast Atlantic region covers ICES Subdivisions V, VI, VII (except VIId) and VIII, IX, X, XII (Figure 4.24).

Ten MS fleets operated in the region in 2014; Belgium, Denmark, France, Germany, Ireland, Lithuania, The Netherlands, Portugal, Spain and the United Kingdom.

Estimates provided for the Danish, Dutch, German and Lithuanian fleets should be considered with caution due to the limited fishing activity in the region (effort and landings shares in the region were less than 30%). Therefore, according to the available data, the main fleets operating in the region were the Spanish, French, UK, Portuguese and Irish fleets.

Data are missing for France for 2008 and 2009. Some data are not available for 2008, 2009, 2010 for Spain (effort and net profit) and for 2010 for France (net profit).

For simplicity from this point on we will refer to the EU vessels operating in the aforementioned ICES areas as the EU Northeast (NE) Atlantic Sea fleet

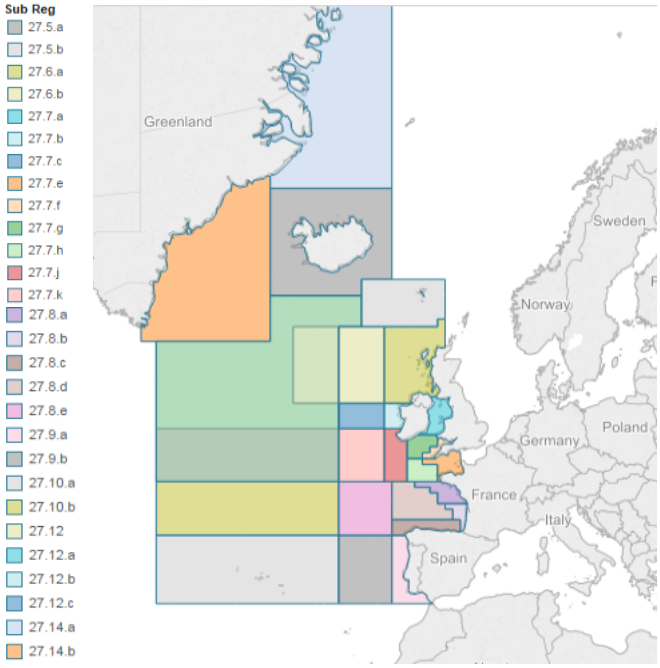
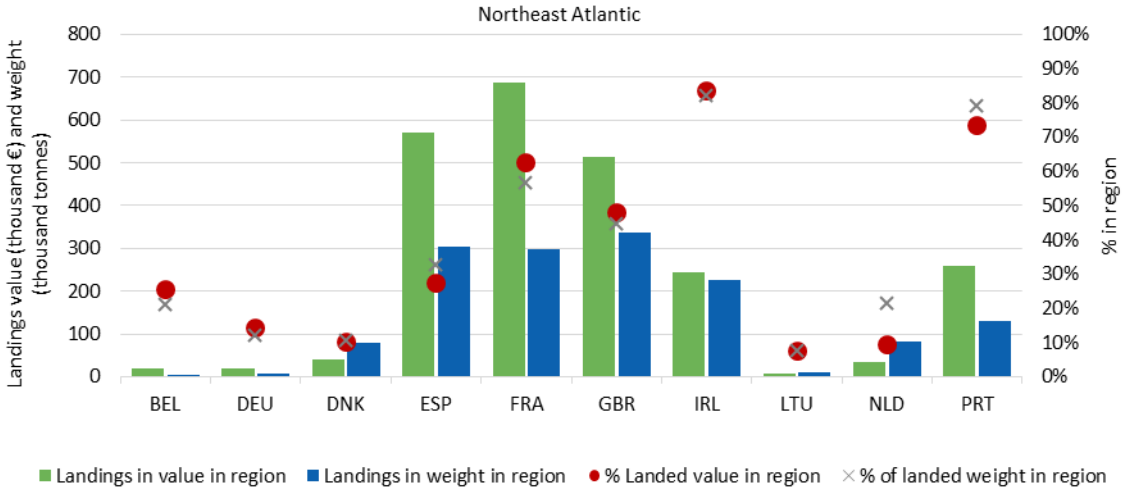


Figure 4.24 Regional map, highlighting the FAO fishing areas in the Northeast Atlantic region.

MS fleet dependency on fisheries in the region

Based on the value of landings, the French (46%), Spanish (38%) and UK (35%) fisheries have the highest level of landings in the Northeast Atlantic. However, Ireland and Portugal have the highest percentage of national landed value from the region at 83% and 74% respectively, indicating their high dependency in value to this area (Figure 4.25).

The high difference between value and weight of landings for France, Spain, Portugal and Belgium compared to Ireland, Denmark or Netherlands reflects the higher value of demersal species more represented in those four MS fleet's landings.



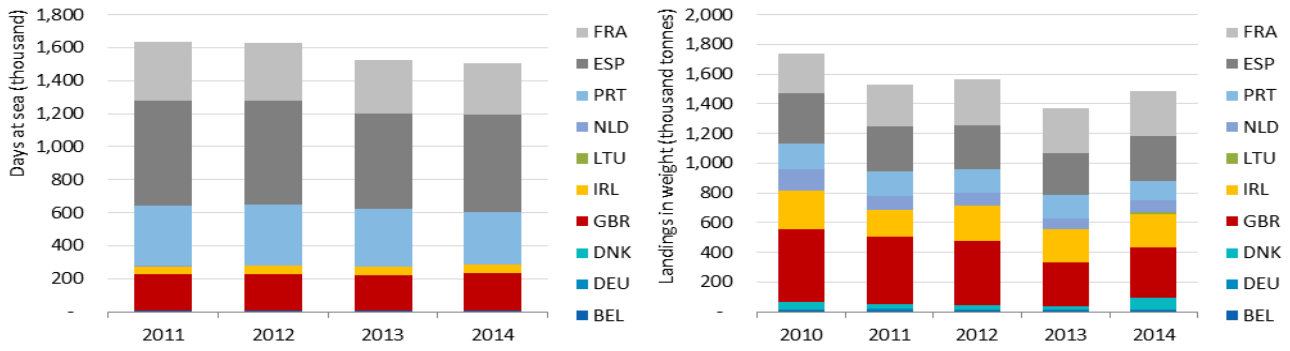
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.25 Importance of the Northeast Atlantic region for Member States' fisheries in terms of landings in weight and value, 2014.

Recent development trends

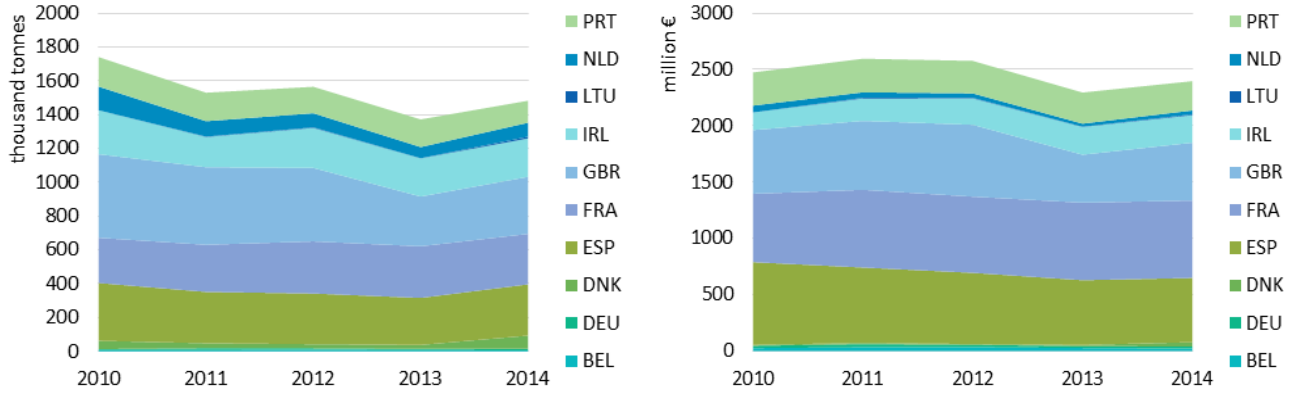
Trends in fleet capacity, employment and effort (in days at sea) of the MS fleets operating in the region has remained relatively stable over the period analysed, apart from some decrease in vessel tonnage and engine power.

The weight and value of landings generated by the EU NE Atlantic fleet in 2014 amounted to over 1.48 million tonnes and €2.4 billion, both increasing from 2013 by 8% and 5% respectively. Data is present for all MS in the region for the time series presented. Poland excluded due to missing data on the value of landings for all years.



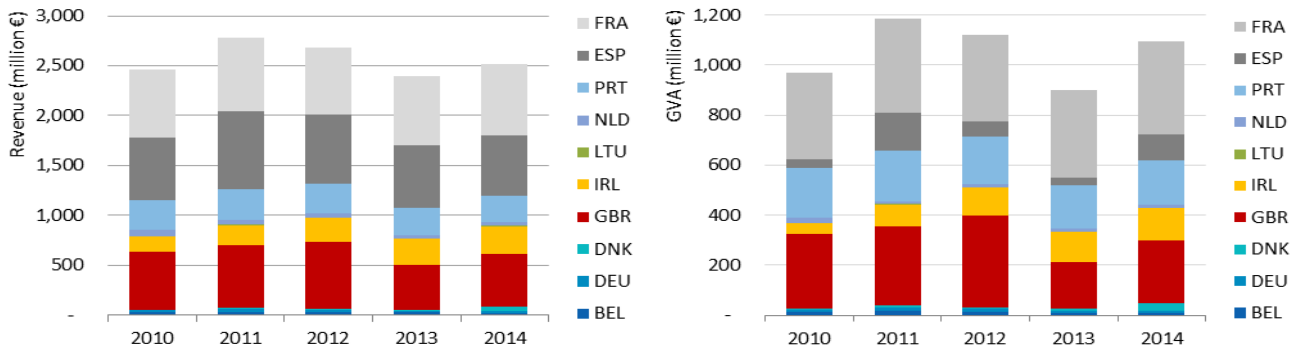
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.26 Atlantic region over the period 2008-2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.27 Landings, in weight and value, by MS fleets operating in the NE Atlantic fishing region over the period 2010-2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.28 Trends in revenue (income from landings and other income) and GVA for MS fleets operating in the Northeast Atlantic region over the period 2010-2014.

Fisheries management in the region

The management plans that impact on Northeast Atlantic region fleets include:

- Long-term plan for cod stocks and the fisheries exploiting those stocks (Council Regulation (EC) No 1342/2008)

The long term plan for cod has an impact on the North-eastern Member States. The French, Belgian, German, UK, Irish, Dutch, Spanish and Portuguese fleets all have quota for cod and thus interact with the cod fisheries. As days at sea

restrictions are becoming more constraining, it may have an effect on the economic performance of the fleets. In 2014, the weight landed in France represented 32% of the total landings in weight for the Northeast Atlantic (95% of these landings came from the French demersal trawler fleet), followed by Germany with 31.7%, Ireland with 20% of the landings. Together, the weight landed by France, Germany, UK and Ireland reached 98%.

- Council Regulation (EC) No 388/2006 established a multiannual plan for the sustainable exploitation of the stock of sole in the Bay of Biscay covering ICES areas VIIIa and VIIIb

Of the sole catches in the Bay of Biscay, the French fleet landed 92% of the weight respectively. The Belgium share reached 8% of the total landings. The French DFN segments are the most important fleets in term of sole landings in weight in the Northeast Atlantic with 26 000 tonnes (61%).

- Council Regulation (EC) No 509/2007 established a multi-annual plan for the sustainable exploitation of the stock of sole in the Western Channel (ICES VIIe)

The UK landed 58% in weight of sole catches in the Bay of Biscay (area VIIe), followed by France with 40% of the total landings. The Belgian fleet only had a minor impact (3%) on the resource in 2014.

- Council Regulation (EC) No 2166/2005 established measures for the recovery of the Southern hake and Norway lobster stocks in the Cantabrian Sea and Western Iberian Peninsula and amending Regulation (EC) No 850/98 for the conservation of fishery resources through technical measures for the protection of juveniles of marine organisms.

In 2014, Portuguese and Spanish fleets mainly shared the Norway lobster catches in the Cantabrian Sea and Western Iberian Peninsula, with respectively 89% and 11% of total landings in weight.

- Council Regulation (EC) No 1300/2008 established a multi-annual plan for the herring stock distributed to the west of Scotland and the fisheries exploiting that stock in international and EU waters in ICES zones Vb and VIb, and the northern part of ICES zone VIa excluding the Clyde.

In 2014, the UK and Irish fleets were the most important fleet segment for this fishery, with respectively 63% and 21% of total landings in weight.

- Council Regulation (EU) No 713/2013 establishing the fishing opportunities for anchovy in the Bay of Biscay for the 2013/14 fishing season

This management plan concerns mainly Spanish and French fleets.

- Measures for the recovery of eel - Area covered includes EU estuaries and rivers that flow into seas in ICES areas III, IV, VI, VII, VIII, IX and the Mediterranean (Council Regulation (EC) No 1100/2007 of 18 September 2007).

In the region, this management plan applies mainly to France.

- Council Regulation (EC) No 302/2009- 500/2012 Measures concerning a multiannual recovery plan for Bluefin tuna in the eastern Atlantic and Mediterranean

According to STECF data, in 2014, three national fleets operated in this fishery with the French fleet representing 92% of the total of landings in weight in the Northeast Atlantic (58% by pelagic trawlers and purse seiners), followed by the Irish fleet (8%) and Portugal (<1%).

- Council Regulation (EC) No 811/2004 to increase the quantities of mature fish in the Northern hake stock to at least 140 000 tonnes.

This management plan concerns Spanish, French, Portuguese, Irish, UK, Dutch and Belgian fleets.

Other management measures that may affect economic performance of the fleets operating in the North Atlantic East include marine protected areas and other legislation that has a multispecies impact.

In 2016, the landings obligation for demersal fisheries in the North Sea and the Atlantic European Union (EU) waters comes into force, bringing an important part of the EU fleet in the Northeast Atlantic under the obligation to bring and retain on board, and to land all catches. Fishing opportunities for stocks falling under the landing obligation are to be fixed taking into account catches rather than landings, based on biological advice and in the understanding that this should not jeopardise the MSY objective or increase the fishing mortality.

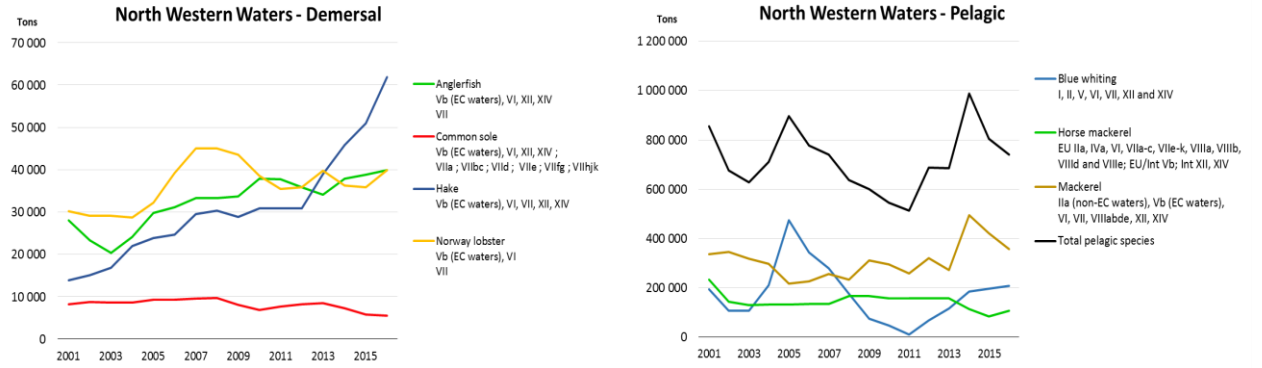
TAC development of main species

In 2014, there were quotas for 27 fish species defined for the region, 16 of them were demersal species, 7 pelagic species and 4 deep-sea species.

Between 2001 and 2016, total TACs (total allowable catches) have been increasing for demersal species in North Western Waters (NWW) by 40% and in South Western Waters (SWW) by 31%, amounting more than 228 000 tonnes and more than 121 000 tonnes respectively in 2014 (Figure 4.29 and 4.30). It is mainly due to the increase of hake stocks TAC that are still overfished but managed under technical measures for the conservation of fishery resources.

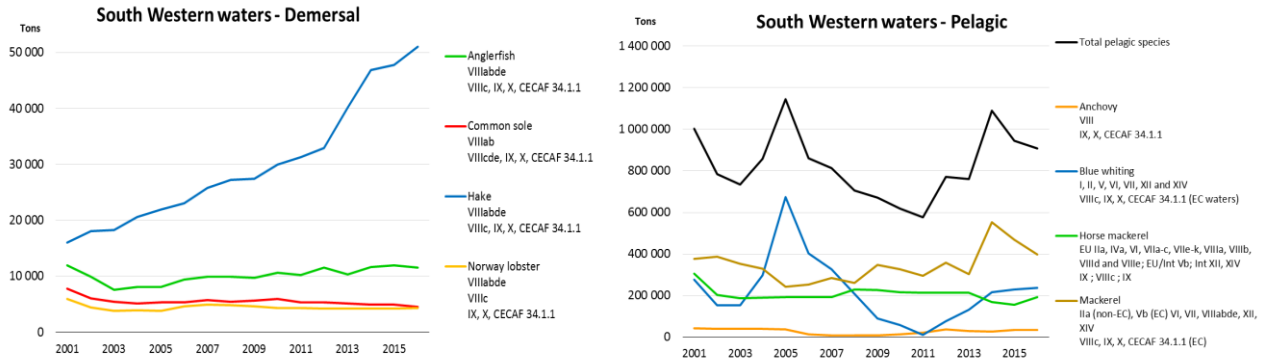
In NWW, TAC of anglerfish has also increased by 40% over the period while TAC of common sole slightly decreased on the recent years. One of the main stocks of Norway lobster (Vb (EC), VI) is sustainably exploited and we could expect the TAC to increase in the next years. In SWW TAC of common sole and Norway lobster have been stable while TAC of anglerfish has been slightly increasing on the recent years.

TACs for pelagic species in Northeast Atlantic region have varied since 2001 especially blue whiting and mackerel with very high values in 2005 and in 2014 and quite high values in the recent years.



Source: Calculated based on 2016 TAC Council Regulations and BEMEF modelling

Figure 4.29 TAC trends for major demersal (left) and pelagic (right) stocks in the North-western waters, 2001-2015.



Source: Calculated based on 2016 TAC Council Regulations and BEMEF modelling

Figure 4.30 TAC trends for major demersal (left) and pelagic (right) stocks in the South-western waters, 2001-2015.

Table 4.19 TAC use for most important North Western waters (Northeast Atlantic) species, 2012-2015

NWW	Year	BEL	DEU	DNK	ESP	FRA	GBR	IRL	LTU	NLD	PRT
Altantic mackerel	2012	1%	94%	100%	73%	90%	91%	99%		97%	
	2013	10%	95%	100%	94%	92%	104%	99%		90%	
	2014	14%	100%	98%	100%	73%	102%	98%	98%	100%	
	2015	77%	93%	100%	100%	87%	102%	97%	100%	98%	
Blue whiting	2012	1%	96%	31%	36%	94%	78%	99%		96%	1%
	2013	10%	90%	64%	5%	86%	90%	90%		90%	4%
	2014	14%	90%	90%	0%	61%	98%	90%	100%	90%	0%
	2015	77%	92%	100%	35%	94%	93%	90%		101%	0%
Hake	2012	42%			103%	90%	94%	99%		197%.	
	2013	12%	0%		96%	90%	81%	90%		33%	
	2014	7%		97%	95%	89%	97%	90%		70%	
	2015	9%	91%		90%	88%	96%	90%		92%	
Anglerfish	2012	90%	84%		81%	69%	81%	96%		1%	
	2013	74%	83%		95%	85%	94%	90%		1%	
	2014	27%	96%		91%	75%	98%	90%		0%	
	2015	37%	89%		85%	74%	92%	91%		57%	
Norway lobster	2012	9%			35%	11%	92%	98%		0%	
	2013	84%			14%	11%	78%	88%		0%	
	2014	78%			10%	10%	79%	89%		0%	
	2015	81%			6%	7%	81%	88%		0%	
Common sole	2012	71%				78%	68%	58%		0%	
	2013	66%				82%	67%	64%		0%	
	2014	92%				82%	92%	58%		0%	
	2015	91%				79%	90%	58%		0%	

Source: Calculated based on 2016 TAC Council Regulations and BEMEF modelling

Table 4.20 TAC use for most important South Western waters (Northeast Atlantic) species, 2012-2015

SWW	Year	BEL	DEU	DNK	ESP	FRA	GBR	IRL	LTU	NLD	PRT
Altantic mackerel	2012	1%	94%	100%	86%	90%	91%	99%		97%	100%
	2013	10%	95%	100%	89%	91%	104%	99%		90%	101%
	2014	14%	100%	98%	87%	71%	102%	98%	98%	100%	96%
	2015	77%	93%	100%	94%	86%	102%	97%	100%	98%	97%
Blue whiting	2012		96%	31%	53%	94%	78%	99%		96%	93%
	2013		90%	64%	63%	86%	90%	90%		90%	82%
	2014		90%	90%	62%	61%	98%	90%	100%	90%	31%
	2015		92%	100%	57%	94%	93%	90%		101%	38%
Hake	2012	26%			85%	86%				42%	65%
	2013	58%			83%	71%				27%	65%
	2014	38%			77%	84%				15%	48%
	2015	42%			81%	79%				28%	45%
Anglerfish	2012	63%			75%	71%					87%
	2013	92%			89%	83%					104%
	2014	77%			89%	81%					102%
	2015	100%			73%	78%					98%
Norway lobster	2012	23%			86%	56%					87%
	2013	7%			23%	58%					87%
	2014	1%			29%	65%					90%
	2015	4%			27%	86%					94%
Common sole	2012	100%			62%	91%					64%
	2013	94%			69%	94%					75%
	2014	100%			65%	100%					78%
	2015	98%			66%	99%					76%

Source: Calculated based on 2016 TAC Council Regulations and BEMEF modelling

Status of important stocks

Fishing has generally progressed towards MSY (fishing at or below MSY) in all areas of the Northeast Atlantic, since 2006.

Important stocks in the North western waters: many stocks, such as hake, mackerel and horse mackerel are still overfished (but inside safe biological limits or managed under LTMP). Blue whiting, common sole (in VIIe) and Norway lobster (Vb and VI) are exploited at a rate that is consistent with MSY. Common sole stock in VIIa is outside safe biological limits.

Important stocks in the South western waters: hake, mackerel, common sole and Norway lobster are still overfished (but inside safe biological limits or managed under LTMP). All blue whiting stocks, one of the main horse mackerel stocks, most herring stocks (North Sea, west of Scotland, Irish Sea and Celtic Sea) and the main anchovy stocks are fished in correspondence with MSY. Only one horse mackerel stock is still outside safe biological limits. TAC for pelagic species can be expected to increase in the coming years.

MS Fleet dependency on main stocks subject to TACs

Table 4.23 shows the dependency, as the % of value of landings, of MS fleets on some of the important stocks in the Northeast Atlantic region over the period 2010-2014. The UK and Irish fleets are somewhat dependent on the mackerel stock in area 27.7, reaching almost 15% and 20% of landings, respectively in 2014. The Irish fleet is also quite dependent on the *Nephrops* stocks in areas 27.7.

At the fleet segment level, dependency levels at the individual stock level reach significantly high values (see Table 4.24).

Table 4.20 MS fleet dependency on stocks subject to TACs in the Northeast Atlantic region (only dependency values > 5% are shown)

			Dependency (%)				
Country	Region	Stock	2010	2011	2012	2013	2014
BEL	Northeast Atlantic	SOL/7FG.	8,52	10,99	11,94	10,74	8,08
DNK	Northeast Atlantic	MAC/2CX14-	0,18	0,88	0,00	0,24	5,71
GBR	Northeast Atlantic	MAC/2CX14-	12,25	12,65	13,05	10,66	14,93
		NEP/5BC6.	5,41	5,27	6,59	5,87	5,23
IRL	Northeast Atlantic	HER/7G-K.	1,34	2,53	2,81	5,99	6,62
		JAX/2A-14	6,14	7,70	8,95	8,24	6,84
		MAC/2CX14-	16,43	19,01	16,03	13,19	19,68
		NEP/07.	15,51	15,84	17,83	15,93	15,69

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Northeast Atlantic region fishing fleet, effort and landings: situation in 2014

Table 4.24 to Table 4.25 contain a summary of the structure, activity and economic performance of the Northeast Atlantic region fleet by Member State, main type of fishing activity and fleet segment.

Fleet capacity

According to the figures estimated at the regional level, the ten Member State fleets operating in the NE Atlantic region collectively numbered over 18 000 active vessels in 2014 that made NE Atlantic region reaching the second place after the Mediterranean and Black Sea region (20 000 vessels). The Spanish fleet comprised the largest fleet in number (around 7 900 vessels –42%) (Figure 4.31).

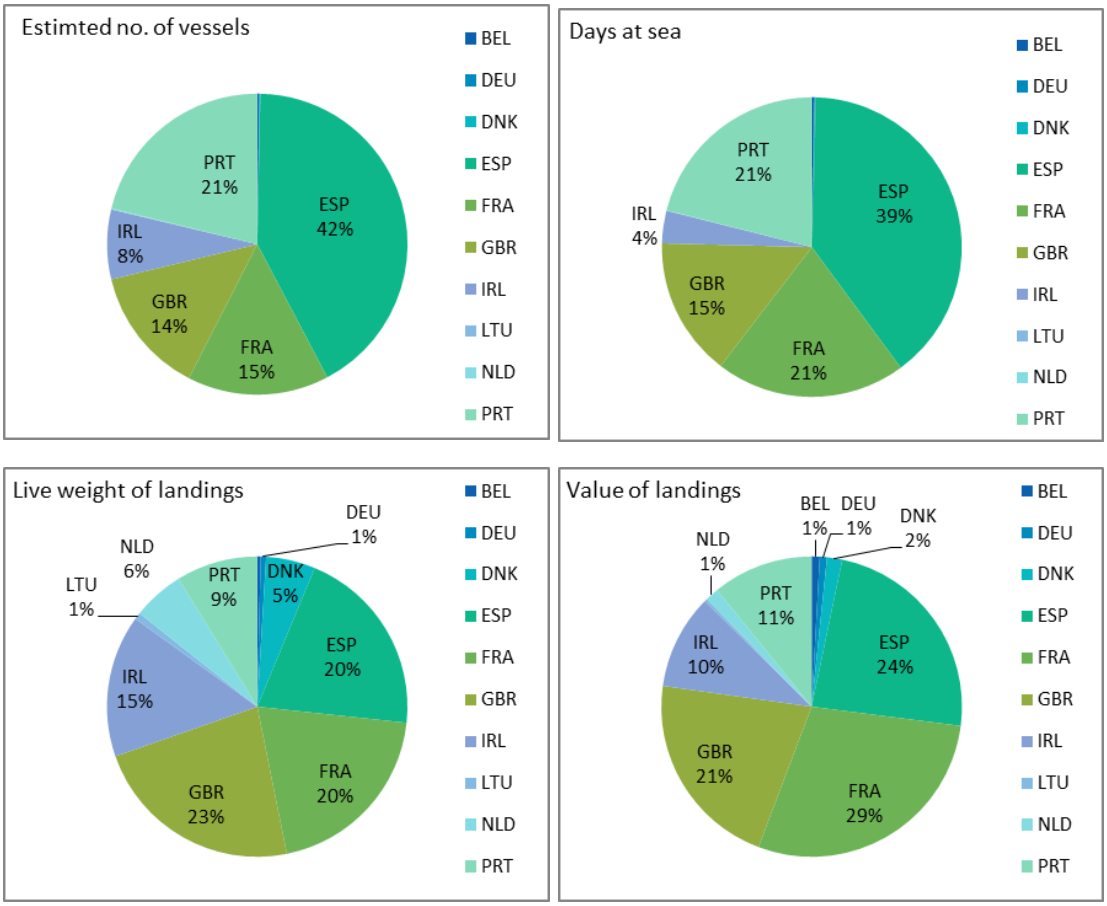
The small-scale fleet (SSF) accounted for 53% of the number of vessels and 42% of the days at sea, while large-scale vessels (LSF) generated by far the highest landed weight, with 90% of the total. The difference between the two fishing activities was slightly less for landed value, with LSF accounting for 84% of the total and SSF vessels 15%, reflecting the higher value of demersal species that are mainly targeted by the SSF (Figure 4.32).

While small-scale fleet covered 53% of the number of vessels, employment estimated for this group amounted to almost 20 000 jobs and around 9 400 FTE in 2014, representing respectively around 42% of the total jobs and 21% of the total FTEs in the Northeast Atlantic Sea fisheries and indicating the predominate part-time nature of this fishing fleet activity.

Fishing effort

The latest official DCF data suggests that the EU Northeast Atlantic Sea fleet spent over 1.5 million days at sea in 2014, 39% of which were Spanish days at sea. Collectively, vessels from Portugal, France, United Kingdom and Ireland together accounted for around 60% of the total days at sea deployed. It must be noted that Ireland has only partial data for effort for vessel less than 10m in length and only for the years 2013-2015.

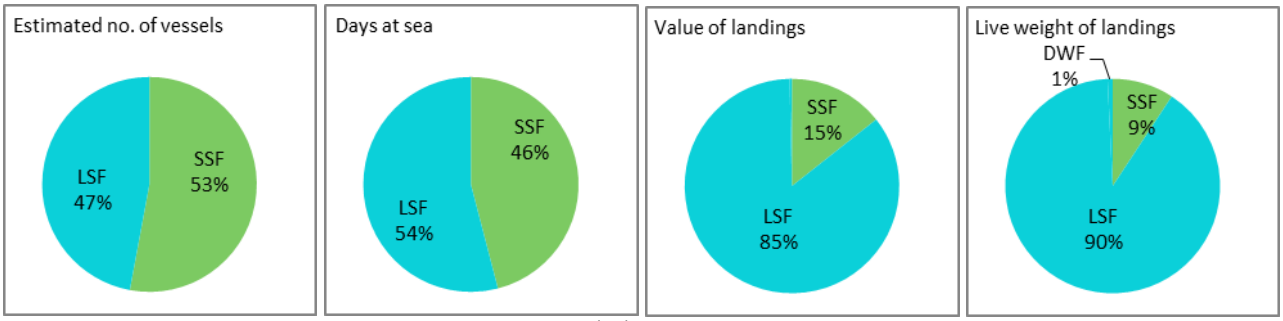
SSF vessels accounted for 46% of the total number of days at sea in the Northeast Atlantic area but only 9.3% of the landed weight and 15.4% of the landed value share (Figure 4.32).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.31 Share of capacity, effort and landings by MS fleets operating in the NE Atlantic region, 2014

Note: MS fleets with less than 1% are not shown



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.32 Share of capacity, effort and landings for MS fleets by main type of fishing activity operating in the NE Atlantic region, 2014

Landings

The weight and value of landings generated by the NE Atlantic fleet amounted to approximately 1.5 million tonnes and €2.4 billion, respectively. If the North Sea fleet generated the same amount for weight of landings as NE Atlantic fleet representing 30% of the total amounts at European level in 2014, the difference between the two fleets was clearly higher for landed value, with NE Atlantic fleet accounting for 35% and North Sea fleet for 22% of the total, reflecting the higher value of demersal species more represented in NE Atlantic fleet's landings.

In terms of landed weight, the French (300 thousand tonnes), UK (337 thousand tonnes), Spanish (305 thousand tonnes), Irish (227 thousand tonnes) and Portuguese (129 thousand tonnes) were the leading national fleets, together accounting for over 80% of the total weight landed.

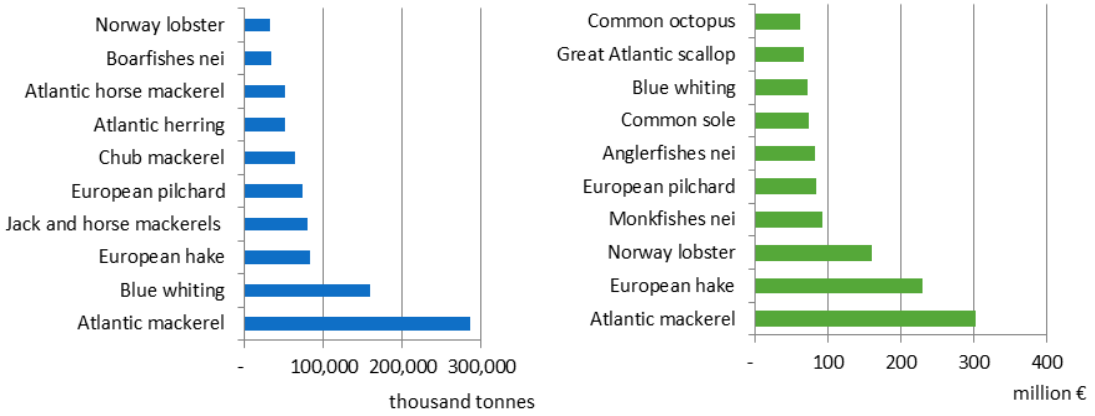
The French (€688 million), Spanish (€570 million), UK (€512 million), Portuguese (€260 million) and Irish (€245 million) fleets together accounted for around 90% of the total value of landings in 2014.

Top species

In 2014, the main species landed by the NE Atlantic fleet in terms of weight were small pelagic species, including Atlantic mackerel (286 thousand tonnes), blue whiting (160 thousand tonnes), European hake (82.5 thousand tonnes) and horse mackerel (80 thousand tonnes) (Figure 4.33).

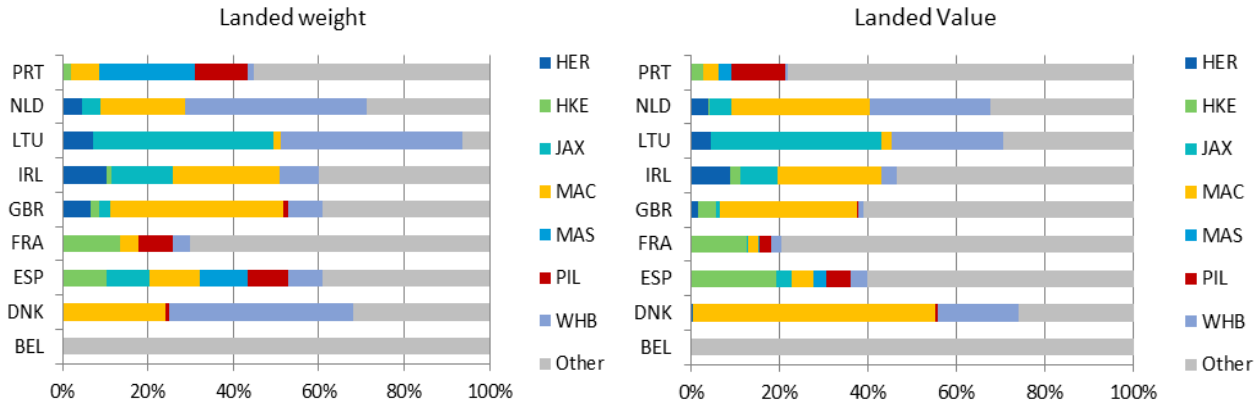
In terms of value, Atlantic mackerel was the most important species in 2014 (€302 million), followed by hake (€230 million) and Norway lobster (€161 million) (or if, monkfish and anglerfish are grouped, produce a combined value of €173 million) (Figure 4.33).

Figure 4.34 provides the share of each of the top seven species in the landings composition of each MS fleet in terms of weight and value. Belgian landings are mainly composed of common sole, anglerfish and European scallops, all of which do not make it in the top 7.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.33 Top 10 species in terms of weight and value landed for MS fleets operating in the NE Atlantic region, 2014

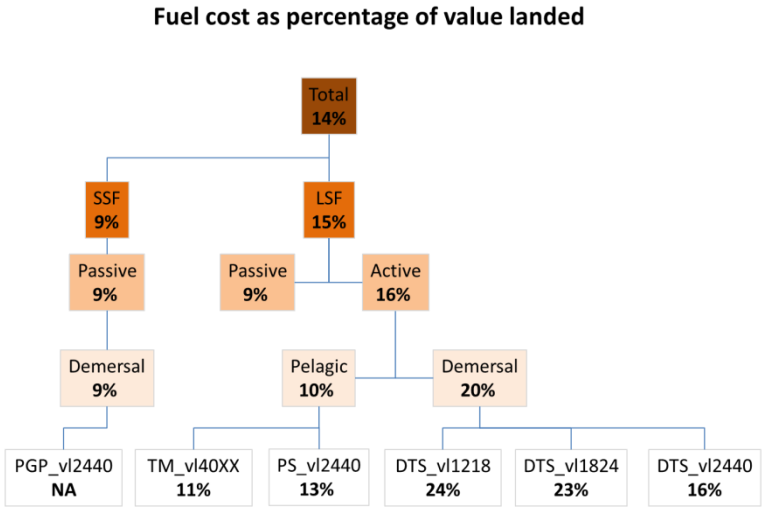


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.34 Top species landed in terms value as a proportion of the total landings in the region by MS fleets operating in the NE Atlantic, 2014

Productivity

An estimated 14% of the value of landed fish in the Northeast Atlantic went to fuel costs in 2014, a lower value than in the North Sea (18%) due to a higher value of landings that offset the higher value of fuel cost (Figure 4.35). In total around €336 million were spent on fuel to catch 1.48 million tonnes of fish with a landings value of €2.4 billion. The demersal segments especially spent high amounts of their landed value on fuel. Those segments benefited from the decrease in fuel prices, which has been key driver for trawler profitability in recent times.



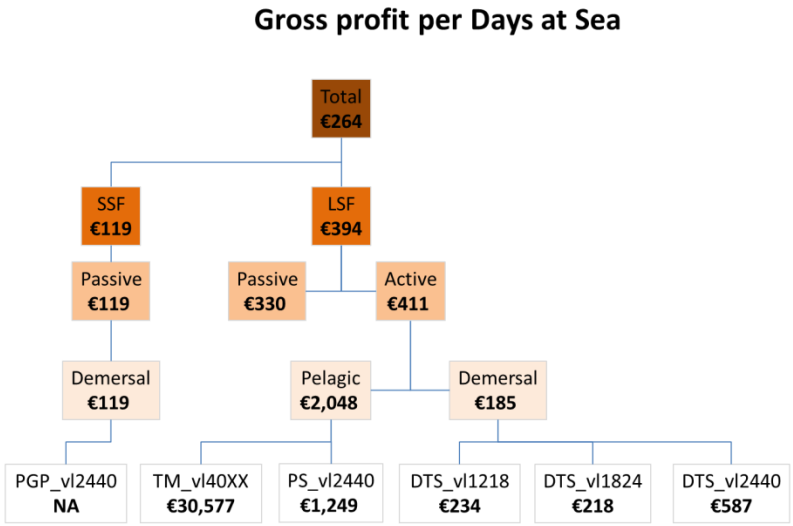
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.35 Schematic representation of the ratio fuel costs to landed value (%) for the various MS fleet components operating in the Northeast Atlantic region, including six most important segments (based on landed value from the NE Atlantic) and 4-year trend.

In 2014 the gross profit per day at sea was around €264 for Northeast Atlantic fleets altogether which is 3 times less than the North Sea fisheries (€828) due to the more diversity of fishing segments and strategies in the Northeast Atlantic (Figure 4.36).

On average small scale fleets demonstrate a positive gross profit per day at sea of €119, which is similar to the large scale active demersal fisheries (€185 on average). On the contrary, the pelagic fisheries were highly profitable, 11 times higher than the demersal ones.

From the six most important segments for the Northeast Atlantic, Pelagic vessels over 40m made on average €30 577 gross profit per day at sea, slightly higher than the value for the same segments in North Sea, while the value for demersal fleets were 4.5 times lower in Northeast Atlantic than in North Sea in 2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.36 Schematic representation of the amount of gross profit generated per day at sea (€/day) by the various MS fleet components operating in the Northeast Atlantic region, including six most important segments (based on landed value from the NE Atlantic) and 4-year trend.

Socio-Economic performance

Table 4.22 to Table 4.25 contain a summary of the economic performance of the Northeast Atlantic region fleet by Member State, main type of fishing activity and fleet segment.

Performance by Member State

The revenue (income from landings and other income) generated by the EU Northeast Atlantic fleet covered in the analysis in 2014 was estimated at €2.5 billion, 95% of which was shared between five Member States: France (€722 million); Spain (€603 million), UK (€534 million), Ireland (€272 million) and Portugal (€266 million).

Revenue increased by 5% compared to 2013. Seven member state fleets saw increases of less than 5% while the UK, Dutch and German fleets saw increases of 20%. The Belgium, Spanish and Portuguese fleets suffered a decrease in revenue of 21%, 5% and 2% respectively.

GVA produced by the NE Atlantic fleet covered in the analysis was estimated at €1.3 billion in 2014. This represented an overall increase of 21% compared to the previous year, due to an increase in revenue by 5% that offset the 8% increase in labour costs. The GVA for the UK fleet in the region increased considerably (+33%). Belgium on the other hand saw its GVA drop by 23%.

After accounting for operating costs, the fleet made €424 million in gross profit, an increase of 25% compared to 2013. All MS fleets operating in the NE Atlantic region, apart from Belgium generated gross profits.

The variation in revenue is directly linked to the changes in TACs and quotas or resources availability by stocks and price by species. On the whole, in Northeast Atlantic, the value of landings increased in 2014 compared to 2013 for Atlantic mackerel (81%) and European hake (27%) due to increasing TAC and, to a lesser extent, improved prices. Value of landings for blue whiting also slightly increased in 2014 due to a rise in TAC which offset a price decrease. On the contrary, the value of landings for common sole, Great Atlantic scallop and European pilchard slightly decreased between 2013 and 2014 due to TAC and price reduction for common sole and Great Atlantic scallop, and a decrease in landings weight for European pilchard.

The impact of those changes in TAC and prices at MS level varies as their species composition and species dependency are different. Northeast Atlantic is a wide region with various pelagic and demersal stocks. Among the 10 member states fishing in the Northeast Atlantic, all are active in the North Western waters (VI, VII except VIId) with the exception of Portugal, and only Spain, France, Portugal and Belgium have fishing activities in the South Western waters (VIII, IX, X).

All of the important species are under TAC except for European pilchard. The common sole is the only main species whose total TAC has followed a decreasing trend since 2007, with most stocks not exploited in correspondence with MSY. In the Northeast Atlantic, the Belgium fleet is mainly dependent on stocks of sole that are still not fished at MSY levels. The French fleet also targets common sole in this region but is less dependent on them due to a high diversity of targeted species.

The increase in the value of landings for European hake, Atlantic mackerel and blue whiting in 2014 did not offset the decrease in value of cephalopods (Northern shortfin squid, common octopus and common cuttlefish) in Spain while it counterbalanced the decrease of value for common sole in France.

In Belgium, the value of landings of sole has decreased since 2011 (12% compared to 2013) while the value of landings of anglerfish decreased 50% in 2014 mainly due to decrease in volume (TAC for sole). Sole and anglerfish are key species for Belgium as 98% to 100% of the quotas in South Western Waters were consumed in 2014.

In Portugal, the 82% increase in landed value for Atlantic mackerel but did not offset the 20% decrease of European pilchard. Atlantic mackerel is a key species for Portugal as 97% of the quota was consumed in 2014.

UK and Irish fleets saw increases in value for landings for mackerel. 100% of the quota for this species was taken in 2014 in those countries. Atlantic mackerel and blue whiting are two key species for The Netherlands as landings equal to quotas. In 2014, the value of landings for Atlantic mackerel doubled. Denmark and Lithuania also benefited from the increase in TACs for pelagic species.

Performance by fishing activity

By fishing activity, the NE Atlantic small-scale fleet generated almost €389 million in revenue in 2014 (4% increase compared to 2013), while the large-scale fleet generated around €2.1 billion in revenue (7% increase in 2014).

Large-scale fleet

MS can be classed into different categories according to their species dependency which is representative of their large-scale fleet landings composition in Northeast Atlantic:

- High dependency on one or two main species accounting for at least 50% of total value of landings: demersal species for Belgium (common sole) and pelagic species for The Netherlands and Denmark (Atlantic mackerel and blue whiting);
- Moderate dependency on four species representing 50% of total value of landings: pelagic and demersal species for the UK and Ireland (Atlantic mackerel, blue whiting, Norway lobster and anglerfish);
- Low dependency due to a greater diversity of species with demersal species playing a dominate role in terms of landed value for Spain and France (European hake) and pelagic species for Portugal (European pilchard).

The French NE Atlantic large-scale fleet, consisting of over 1 300 vessels generated the highest revenue (€573 million), followed by Spain (€541 million), the UK (€466 million) and Irish (€242 million) large-scale fleets. All NE Atlantic MS large-scale fleets except for Belgium generated gross profits in 2014. All MS LSF made a positive net profit except for the Belgian, Spanish and Dutch. Additionally, two distant water fleets (Lithuanian and Spanish fleets) were also active in the region in 2014 (Table 4.24). Note: Data on the EU distant-water fleets operating in the region is limited and no economic indicators were calculated.

Small-scale fleet

There were small-scale fleets from five member states operating in the Northeast Atlantic. While 100% of Irish and Portuguese SSF fished in the NE Atlantic in 2014, it represented only part of the SSF fishing activity for Spain, France and UK as they were also active in the Mediterranean Sea and/or in the North Sea.

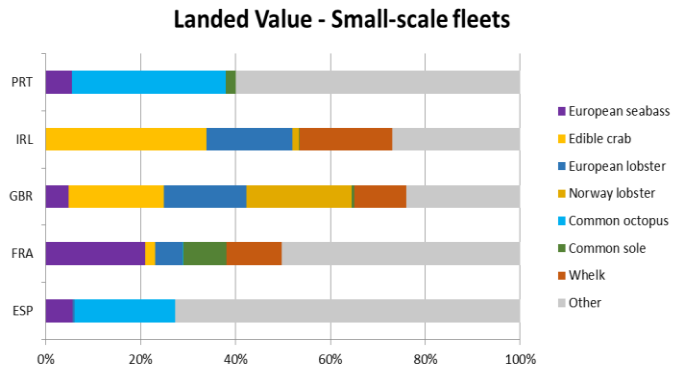
Once again, we can place MS into different categories according to their species dependency which is different than for the large-scale fleets:

- Octopus accounted for 20% to 35% of the total value of landings for Spain and Portugal which were also targeting seabass, mackerel and hake for Spain, seabass and sole for Portugal in the South Western waters ;
- Edible crab targeted by the UK and Irish SSF in the North Western waters accounted respectively for 20% and 35% of their total value of landings in 2014. Those fleets also targeted whelk, European lobster and Norway lobster (UK fleet). Those four species accounted for more than 70% of the total value of landings for those member states;
- Seabass, Whelk, common sole and European lobster accounted for 45% of the French SSF value of landings;

Among the top seven species in value of landings for SSF active in NE Atlantic (Figure 4.37), at least 3 stocks were overexploited or in bad status in 2014: seabass (IVbc,VIIa,VIId-h) due to bad recruitments in recent years, whelk (VIIe) and common sole (VIIIabd) which were main stocks for the French (3 stocks) and the UK (Whelk) SSF.

Despite this situation, total revenues increased in 2014 compared to 2013 for SSF in NE Atlantic, due to increase value of landings for common octopus, European lobster and edible crab due to a price rise and for European sea bass due to a landing weight increase.

Overall the SSF was profitable in 2014, totalling €217 million in GVA and €82 million in gross profit. The most profitable in terms of gross and net profit margins was the Irish SSF with 44% and 40% respectively, although the Irish data is not complete for all of its SSF segments and caution must be taken with the results. Only the Spanish fleet SSF suffered net losses but to a lesser extent compared to the previous years. In terms of productivity, the Gross Value Added per FTE varied from 19% (Spain) to 64% (France), as the French fleet (€149 million) accounted for 38% of the total SSF revenue in that region while the Spanish fleet accounted for 37% of the FTEs (3 523 FTEs).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.37 Top 7 species landed in terms of value as a proportion of the total landings in the region by MS small-scale fleets operating in the NE Atlantic, 2014

Description of relevant fisheries in the region

Performance by fleet segment

Table 4.28 provides results for the top 35 MS fleet segments in terms of landed value operating in the NE Atlantic region in 2014. These 34 MS fleet segments, out of the 181 fleet segments identified in the region, represented over 56% of the vessels (10 200 vessels), 74% of the landed weight (1 084 tonnes) and 69% of the landed value (€1.66 billion) generated by the NE Atlantic fleet in 2014.

At fleet segment level, the UK pelagic trawlers over 40m generated the most revenue in 2014 (€178 million), followed by the Spanish demersal trawler/seiner between 24 and 40m (€152 million) (Table 4.25).

The UK pelagic trawler over 40m segment also generated one of the highest GVA per FTE, estimated at €2.7 million. This fleet segment posted an estimated net profit of €71.3 million.

Table 4.21 Dependency on stocks subject to TACs in the Northeast Atlantic region by MS fleet segment (only dependency values > 10% are shown)

				Dependency (%)						
Country	Fleet segment	Region	Stock	2008	2009	2010	2011	2012	2013	2014
IRL	IRL A27 DFN1012	Northeast Atlantic	HKE/571214	0,80	2,78	1,86	1,46	6,86	8,85	14,34
			POK/7/3411	0,07	0,97	1,68	0,46	2,58	6,63	12,03
			POL/07.	5,65	29,33	21,01	17,61	13,91	27,92	17,32
	IRL A27 DFN1824 °	Northeast Atlantic	HKE/571214	11,04	44,51	29,44	28,55	23,75	20,75	40,89
			POK/7/3411	0,70	4,28	6,05	6,08	14,93	22,97	19,31
			POL/07.	5,46	19,56	23,27	18,30	21,19	19,68	11,17
	IRL A27 DTS1012	Northeast Atlantic	ANF/07.	27,56	6,65	6,12	4,97	7,59	7,41	11,92
			NEP/07.	29,34	40,85	43,05	47,57	42,76	48,99	42,24
	IRL A27 DTS1218	Northeast Atlantic	NEP/07.	23,58	33,31	34,49	42,28	40,44	38,14	41,74
	IRL A27 DTS1824	Northeast Atlantic	NEP/07.	33,51	30,75	41,30	44,71	45,06	39,84	43,11
	IRL A27 DTS2440	Northeast Atlantic	NEP/07.	27,65	28,08	24,84	28,02	37,06	40,55	41,02
	IRL A27 HOK1012 °	Northeast Atlantic	MAC/2CX14-	0,75	43,11	43,70	61,05	63,46	61,69	24,55
			POK/7/3411	0,11	0,07	0,00	0,00	0,00	0,00	13,84
			POL/07.	11,65	4,43	0,09	0,19	0,00	0,00	22,17
	IRL A27 PMP1218 °	Northeast Atlantic	HER/07A/MM	0,00	2,59	0,00	13,38	0,86	65,20	15,95
			NEP/07.	15,55	0,79	4,26	5,19	0,10	0,00	16,94
			POL/56-14	0,01	0,00	0,00	0,00	0,00	1,28	15,39
	IRL A27 TBB2440 °	Northeast Atlantic	ANF/07.	21,61	30,59	25,28	26,22	22,64	26,02	27,83
			LEZ/07.	17,87	22,93	21,68	25,77	32,19	27,09	25,06
	IRL A27 TM40XX	Northeast Atlantic	JAX/2A-14	14,06	15,89	14,66	20,96	19,04	19,55	13,67
			MAC/2CX14-	30,65	50,93	44,31	50,16	33,44	31,92	39,77
	IRL A27 TM0010 °	Northeast Atlantic	HER/07A/MM	0,00				44,32	2,37	15,21
			NEP/07.	30,56				0,00	9,70	11,03
	IRL A27 TM1218 °	Northeast Atlantic	ALB/AN05N	3,73	23,31		0,00	1,81	2,35	18,99
			JAX/2A-14	0,54	14,77		0,00	4,81	3,04	10,36
			MAC/2CX14-	5,11	12,66		9,45	7,66	2,93	15,53
			WHG/7X7A-C	0,25	4,69		0,00	2,86	0,10	10,40
	IRL A27 TM2440	Northeast Atlantic	ALB/AN05N	14,18	32,94	14,03	24,69	23,63	12,45	10,11
			HER/7G-K.	6,58	2,20	6,92	9,19	12,59	24,15	24,25
			JAX/2A-14	10,13	15,89	21,11	18,14	17,17	15,87	13,44
			MAC/2CX14-	22,16	32,02	30,82	35,59	26,95	16,32	29,29
PRT	PRT A27 DFN1218 NGI	Northeast Atlantic	HKE/8C3411	9,20	7,02	7,11	8,12	9,55	9,58	10,12
	PRT A27 DFN1824 NGI	Northeast Atlantic	HKE/8C3411	23,88	27,67	25,98	28,00	25,60	25,47	26,63
	PRT A27 DTS1824 NGI	Northeast Atlantic	NEP/9/3411	13,85	11,18	13,54	16,80	19,66	19,23	23,49
	PRT A27 DTS2440 NGI	Northeast Atlantic	MAC/8C3411	2,33	3,95	7,66	11,61	13,05	9,52	20,35
	PRT A27 HOK0010 P3	Northeast Atlantic	SBR/10-	29,68	34,32	25,19	24,48	24,20	27,88	30,09
	PRT A27 HOK1012 NGI	Northeast Atlantic	HKE/8C3411	3,66	9,38	9,37	7,35	6,21	10,26	12,90
	PRT A27 HOK1012 P3	Northeast Atlantic	SBR/10-	33,71	35,97	23,70	21,22	20,67	23,66	24,09
	PRT A27 HOK1218 NGI	Northeast Atlantic	BSF/8910-	57,23	51,47	44,16	41,34	44,99	44,99	54,40
	PRT A27 HOK1218 P3	Northeast Atlantic	SBR/10-	43,74	44,30	29,27	22,11	12,64	12,37	15,45
	PRT A27 HOK1824 NGI	Northeast Atlantic	BSF/8910-	25,30	20,19	25,55	25,21	25,43	19,68	24,58
			SWO/*AN05N	4,70	5,95	6,54	6,46	7,33	15,66	22,40
			SWO/AN05N	4,70	5,95	6,54	6,46	7,33	15,66	22,40
	PRT A27 HOK2440 NGI	Northeast Atlantic	SWO/*AN05N	8,78	9,18	9,14	8,88	9,14	20,23	25,84
			SWO/AN05N	8,78	9,18	9,14	8,88	9,14	20,23	25,84
	PRT A27 HOK2440 P3*	Northeast Atlantic	ALB/AN05N	6,99	0,79	0,34	8,52	8,74	4,29	24,94
	PRT OFR HOK1824 P2	Northeast Atlantic	ALB/AN05N	4,05	1,23	1,51	2,29	0,00	3,20	20,94
	PRT OFR HOK2440 P2	Northeast Atlantic	ALB/AN05N	4,24	0,00	1,66	4,51	0,83	3,19	33,39

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Country	Fleet segment	Region	Stock	Dependency (%)						
				2008	2009	2010	2011	2012	2013	2014
FRA	FRA A27 DFN1012	Northeast Atlantic	SOL/8AB.			15,31	16,35	16,68	15,12	14,62
	FRA A27 DFN1218 *	Northeast Atlantic	SOL/8AB.				37,48	34,33	34,44	27,94
	FRA A27 DFN1824	Northeast Atlantic	HKE/8ABDE.			17,71	16,04	20,69	23,72	23,48
			HKE/*8ABDE			17,71	16,04	20,69	23,72	23,48
			SOL/8AB.			36,60	38,85	32,57	31,89	25,83
	FRA A27 DFN2440	Northeast Atlantic	HKE/8ABDE.			36,92				29,88
			HKE/571214			39,26				59,32
			HKE/*8ABDE			36,92				29,88
			HKE/*57-14			39,26				59,32
	FRA A27 DTS0010 *	Northeast Atlantic	SOL/8AB.				13,19	17,20	15,81	12,87
	FRA A27 DTS1218	Northeast Atlantic	NEP/8ABDE.			31,82	30,77	25,53	22,26	30,30
	FRA A27 HOK2440 *	Northeast Atlantic	HKE/8ABDE.			18,88	17,83	21,77	13,92	10,32
			HKE/571214			47,69	27,73	52,08	66,86	76,66
			HKE/*8ABDE			18,88	17,83	21,77	13,92	10,32
			HKE/*57-14			47,69	27,73	52,08	66,86	76,66
	FRA A27 MGP0010	Northeast Atlantic	SOL/8AB.			1,94	1,40	4,16	8,05	12,28
	FRA A27 TBB1218	Northeast Atlantic	SOL/07E.			16,45	21,01	16,20	20,72	17,61
	FRA A27 TM40XX	Northeast Atlantic	MAC/2CX14-			13,05	9,71	0,68	18,31	24,63
			MAC/*8ABD.			7,96	1,51	0,00	7,73	12,57
			WHB/1X14			2,49	33,19	42,61	30,97	33,15
	FRA A27 TM1218	Northeast Atlantic	ALB/AN05N			2,05	13,66	11,90	14,00	14,40
	FRA A27 TM1824 *	Northeast Atlantic	ALB/AN05N				19,12	20,02	21,40	20,66
			ANE/08.				7,45	14,68	4,79	11,12
			HKE/8ABDE.				3,02	4,98	4,82	13,59
			HKE/*8ABDE				3,02	4,98	4,82	13,59
GBR	GBR A27 DFN1012 NGI	Northeast Atlantic	POL/07.	10,82	15,50	9,70	12,70	8,80	10,83	13,02
	GBR A27 DFN1218 NGI	Northeast Atlantic	HKE/571214	15,39	13,04	9,02	9,46	14,74	29,73	24,61
			POL/07.	35,89	35,57	37,52	35,76	31,69	24,72	19,63
	GBR A27 DFN2440 NGI*	Northeast Atlantic	ANF/07.	31,22	29,65	29,77	27,42	26,43	25,09	28,19
			ANF/56-14	8,83	12,74	8,48	11,56	14,45	12,52	12,61
			ANF/*56-14	8,83	12,74	8,48	11,56	14,45	12,52	12,61
	GBR A27 DTS0010 NGI	Northeast Atlantic	NEP/5BC6.	23,33	18,73	18,61	16,45	19,64	21,96	21,79
	GBR A27 DTS1012 NGI	Northeast Atlantic	NEP/5BC6.	33,42	25,07	21,68	22,42	25,02	22,49	20,38
	GBR A27 DTS1218 NGI*	Northeast Atlantic	NEP/5BC6.	39,30	35,85	35,16	37,91	44,59	43,84	41,04
	GBR A27 DTS1824 NGI	Northeast Atlantic	NEP/5BC6.	7,18	4,88	4,44	6,79	11,97	8,45	10,08
	GBR A27 FPO0010 NGI	Northeast Atlantic	NEP/5BC6.	17,54	20,99	20,99	16,87	14,94	15,24	13,72
	GBR A27 FPO1012 NGI*	Northeast Atlantic	NEP/5BC6.	25,50	26,79	24,67	22,04	20,06	20,00	18,39
	GBR A27 HOK0010 NGI	Northeast Atlantic	MAC/2CX14-	13,75	15,62	14,98	18,92	12,82	11,57	10,31
	GBR A27 HOK2440 NGI*	Northeast Atlantic	HKE/571214	34,00	35,86	34,97	47,19	55,14	63,86	61,03
	GBR A27 MGP0010 NGI*	Northeast Atlantic	NEP/5BC6.	0,00	9,99	7,77	6,72	23,40	0,00	23,26
	GBR A27 MGP1218 NGI*	Northeast Atlantic	SPR/7DE.	42,11	24,78	20,45	10,76	19,11	26,51	19,64
	GBR A27 TBB1824 NGI	Northeast Atlantic	ANF/07.	11,04	13,41	15,06	16,95	16,60	18,38	17,45
			SOL/07E.	19,96	19,69	17,06	19,12	19,37	19,30	18,49
	GBR A27 TBB2440 NGI*	Northeast Atlantic	ANF/07.	13,15	13,54	12,67	13,84	12,05	12,20	11,92
	GBR A27 TM40XX NGI*	Northeast Atlantic	MAC/2CX14-	42,02	54,79	48,59	42,47	48,15	41,85	48,14

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Country	Fleet segment	Region	Stock	Dependency (%)						
				2008	2009	2010	2011	2012	2013	2014
BEL	BEL A27 TBB2440 NGI	Northeast Atlantic	SOL/7FG.	7,61	8,38	11,19	13,70	14,97	13,99	10,74
DEU	DEU A27 DFN2440 °	Northeast Atlantic	ANF/56-14	9,73	13,76	9,52	15,24	12,19	12,97	13,74
			ANF/*56-14	9,73	13,76	9,52	15,24	12,19	12,97	13,74
DNK	DNK A27 TM40XX NGI	Northeast Atlantic	MAC/2CX14-					0,00	0,08	15,34
			MAC/*2A6.					0,00	0,06	12,32
ESP	ESP A27 DFN1012 °	Northeast Atlantic	MAC/8C3411				10,80	15,99	5,13	15,39
	ESP A27 DFN1218	Northeast Atlantic	ANF/8C3411	20,91	20,84		10,43	9,90	14,36	15,54
			HKE/8C3411	33,23	37,27		11,73	10,52	17,70	17,57
			MAC/8C3411	12,71	13,53		8,84	11,45	6,44	10,74
	ESP A27 DFN1824 °	Northeast Atlantic	ALB/AN05N				13,86		22,18	19,20
			ANF/8C3411				11,12		13,35	10,18
			HKE/8C3411				16,72		28,54	22,75
	ESP A27 DTS2440	Northeast Atlantic	WHB/8C3411	12,68	15,05	10,38	1,93	3,59	7,08	15,39
	ESP A27 HOK1012 °	Northeast Atlantic	HKE/8C3411				6,59		14,84	21,46
			MAC/8C3411				16,16		9,67	25,54
	ESP A27 HOK1218	Northeast Atlantic	ALB/AN05N	22,57	13,77	25,74	13,55	22,29	19,06	13,11
			HKE/8C3411	21,28	17,01	12,62	9,17	12,16	16,89	30,26
			MAC/8C3411	22,06	40,13	25,95	18,00	17,67	8,31	16,11
	ESP A27 HOK1824	Northeast Atlantic	ALB/AN05N	22,12	19,91	28,34	17,95	31,33	21,24	50,35
			HKE/8C3411	9,28	12,22	10,82	6,40	6,37	9,04	12,94
			MAC/8C3411	14,76	20,06	8,29	3,93	6,40	1,32	15,70
	ESP A27 HOK2440	Northeast Atlantic	ALB/AN05N	8,34	9,16	14,95	18,07	12,52	9,11	58,60
			MAC/8C3411	2,09	1,80	1,72	1,92	1,64	0,08	16,46
	ESP A27 PGO1824 °	Northeast Atlantic	SWO/*AN05N							32,64
			SWO/AN05N							32,64
	ESP A27 PGO2440	Northeast Atlantic	SWO/*AN05N							41,96
			SWO/AN05N							41,96
	ESP A27 PGP2440 °	Northeast Atlantic	HKE/8ABDE.			4,74				21,67
			HKE/571214			37,77				61,80
			HKE/*8ABDE			4,74				21,67
			HKE/*57-14			37,77				61,80
	ESP A27 PMP1012	Northeast Atlantic	MAC/8C3411	4,67	3,25	1,31			4,19	13,45
	ESP A27 PMP1218 °	Northeast Atlantic	ALB/AN05N		1,24	1,95			28,54	22,21
			ANF/8C3411		1,09	1,94			0,15	11,77
			MAC/8C3411		5,07	2,78			3,20	15,67
	ESP A27 PS1012 °	Northeast Atlantic	ANE/9/3411	1,56		1,74	6,51	5,42	4,45	12,03
			JAX/*09.	0,00		0,41	22,08	26,29	19,29	16,42
	ESP A27 PS1218	Northeast Atlantic	ANE/9/3411	14,41	12,91	13,36	23,05	23,74	22,39	21,96
	ESP A27 PS1824	Northeast Atlantic	ANE/9/3411	7,67	6,87	9,74	15,94	11,52	12,80	14,44
	ESP A27 PS2440	Northeast Atlantic	ALB/AN05N	34,63	22,45	32,88	18,92	25,84	20,00	15,22
	ESP A37 PGO1824 °	Northeast Atlantic	SWO/*AN05N							16,77
			SWO/AN05N							16,77
	ESP OFR HOK1012 °	Northeast Atlantic	ALB/AN05N				1,24	23,60		21,05
	ESP OFR HOK1218	Northeast Atlantic	ALB/AN05N		4,45	14,87	2,75	39,90	11,14	23,49
	ESP OFR PMP1012	Northeast Atlantic	ALB/AN05N	25,31	0,00	28,19				10,98
	ESP OFR PMP1218	Northeast Atlantic	ALB/AN05N	36,49		24,52				47,95
	ESP OFR PMP2440 °	Northeast Atlantic	ALB/AN05N	5,72		6,06				33,53
	ESP OFR PS1218 °	Northeast Atlantic	ALB/AN05N		3,10	1,29	7,56	2,80	12,19	13,03

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.22 Structure and economic performance estimates by MS fleets operating in the NE Atlantic region, 2014

	Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
BEL	39	34%	120	76	3,858	24%	3,348	20%	5,497	21%	20,628	25%	22,180	8,082	6,988	7,416	33.4	- 666	- 3.0	- 4,801	- 21.7	190.1	97.8
DEU	8	1%	102	87	1,333	1%	1,041	1%	8,623	12%	18,623	14%	18,467	6,471	3,047	10,719	58.1	4,249	23.0	2,210	12.0	1,291.5	123.0
DNK	10	1%	44	45	600	1%	267	0%	78,482	11%	39,001	10%	39,558	4,767	3,607	31,224	78.9	26,458	66.9	12,152	30.7	3,122.4	701.4
ESP	7,898	66%	17,371	13,990	594,161	60%	594,161	60%	305,087	33%	569,774	27%	602,678	299,163	108,840	339,577	56.3	40,367	6.7	2,509	0.4	43.0	24.3
FRA	2,739	43%	6,015	4,555	308,471	66%	284,904	66%	297,890	57%	687,981	62%	722,143	267,420	118,159	372,477	51.6	105,056	14.6	33,254	4.8	136.1	81.8
GBR	2,464	54%	6,336	4,240	225,202	53%	167,139	52%	336,710	45%	511,903	48%	533,633	129,116	85,709	249,068	46.7	119,951	22.5	82,146	15.4	101.1	58.7
IRL	1,343	100%	3,154	2,319	52,805	100%	42,615	100%	226,954	100%	244,522	100%	271,955	73,678	45,913	130,242	48.1	56,442	20.8	10,786	4.4	98.9	56.8
NLD	20	3%	156	123	686	1%	550	1%	82,057	21%	34,550	9%	34,938	10,377	8,051	11,359	32.5	982	2.8	- 6,359	- 18.2	568.0	92.1
PRT	3,803	95%	15,041	7,316	316,370	94%	305,367	95%	129,401	79%	259,754	74%	265,893	108,482	38,796	179,895	67.7	71,413	26.9	34,597	13.0	47.3	24.6

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.23 Structure and economic performance estimates by main type of fishing activity for MS fleets operating in the NE Atlantic region, 2014

	Total number of vessels	as % of vessels by fishing activity	Total employed	FTE	Days at sea	as a % of DAS by fishing activity	Fishing days	as a % of FD by fishing activity	Live weight of landings	as % of landed weight by fishing activity	Value of landings	as % of landed value by fishing activity	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
SSF	9,511	27.4%	19,874	9,367	691,110	25%	646,422	23%	137,220	48%	344,003	43%	388,919	172,607	38,669	248,591	63.9	75,938	19.5	38,571	10.2	26.2	26.6
LSF	8,793	46.6%	28,382	23,357	812,010	41%	752,603	40%	1,332,795	35%	2,041,739	42%	2,121,483	734,578	379,977	1,084,153	51.1	349,453	16.5	129,323	6.3	123.6	46.5
DWF	19	2.3%	82	27	366	1%	366	1%	686	0%	994	0%	1,044	371	463	- 768	- 73.6	- 1,138	- 109.1	- 1,401	- 134.2	- 39.7	- 28.8

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.24 Structure and economic performance estimates by MS and main type of fishing activity operating in the NE Atlantic region, 2014

		Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
		(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
SSF	ESP	2,517	57.7%	4,792	3,343	224,597	56%	224,597	56%	17,355	59%	58,445	56%	59,624	43,193	7,508	39,276	65.9	- 3,963	- 6.7	- 7,648	- 14.6	15.6	11.7
SSF	FRA	1,380	31.0%	2,139	1,396	132,330	60%	131,423	60%	64,126	83%	123,488	67%	148,983	65,067	11,870	89,368	60.0	24,301	16.3	11,256	7.6	64.8	64.0
SSF	GBR	1,688	53.8%	3,050	977	116,241	49%	74,254	46%	25,548	55%	64,813	52%	69,070	22,818	9,014	36,397	52.7	13,579	19.7	7,416	10.7	21.6	37.3
SSF	IRL	898	100.0%	1,140	763	7,257	100%	6,668	100%	10,491	100%	16,364	100%	29,295	6,127	3,230	18,996	65.1	12,869	44.1	9,767	40.6	21.3	25.2
SSF	PRT	3,028	98.3%	8,753	2,888	210,685	99%	209,480	99%	19,699	98%	80,893	98%	81,947	35,401	7,048	64,554	78.8	29,153	35.6	17,779	21.7	21.3	22.4
LSF	BEL	39	33.9%	120	76	3,858	24%	3,348	20%	5,497	21%	20,628	25%	22,180	8,082	6,988	7,416	33.4	- 666	- 3.0	- 4,801	- 21.7	190.1	97.8
LSF	DEU	8	2.6%	102	87	1,333	3%	1,041	3%	8,623	13%	18,623	15%	18,467	6,471	3,047	10,719	58.1	4,249	23.0	2,210	12.0	1,291.5	123.0
LSF	DNK	10	1.9%	44	45	600	1%	267	0%	78,482	11%	39,001	11%	39,558	4,767	3,607	31,224	78.9	26,458	66.9	12,152	30.7	3,122.4	701.4
LSF	ESP	5,361	77.8%	12,497	10,620	369,198	68%	369,198	68%	287,046	70%	510,335	59%	542,011	255,599	100,869	301,068	55.6	45,469	8.4	11,558	2.2	56.2	28.3
LSF	FRA	1,359	69.8%	3,877	3,159	176,141	72%	153,481	72%	233,763	67%	564,493	73%	573,160	202,354	106,289	283,109	49.4	80,756	14.1	21,998	4.1	208.8	89.6
LSF	GBR	776	54.3%	3,285	3,263	108,962	57%	92,885	57%	311,162	44%	447,090	48%	464,563	106,298	76,695	212,670	45.8	106,372	22.9	74,730	16.1	274.1	65.2
LSF	IRL	445	100.0%	2,014	1,556	45,548	100%	35,947	100%	216,463	100%	228,158	100%	242,660	67,551	42,683	111,246	46.0	43,572	18.0	1,018	0.5	261.1	72.3
LSF	NLD	20	4.9%	156	123	686	2%	550	1%	82,057	21%	34,550	9%	34,938	10,377	8,051	11,359	32.5	982	2.8	- 6,359	- 18.2	568.0	92.1
LSF	PRT	775	88.2%	6,289	4,428	105,685	91%	95,887	92%	109,702	82%	178,861	72%	183,946	73,080	31,748	115,341	62.7	42,261	23.0	16,818	9.1	148.9	26.0
DWF	ESP	19	2.5%	82	27	366	1%	366	1%	686	0%	994	0%	1,044	371	463	- 768	- 73.6	- 1,138	-109.1	- 1,401	- 134.2	- 39.7	- 28.8

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.25 Structure and economic performance estimates for the top 35 MS fleets operating in the NE Atlantic region, 2014

	Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
GBR A27 TM40XX °	15	48%	177	41	977	46%	507	43%	194,687	46%	176,090	54%	178,321	27,300	13,506	110,220	61.8	82,920	46.5	71,305	40.0	7,348.0	2,675.9
ESP A27 DTS2440	322	99%	1,580	1,592	27,669	100%	27,669	100%	74,843	100%	132,622	99%	151,670	47,502	40,955	65,219	43.0	17,717	11.7	8,165	5.4	202.5	41.0
ESP A27 PGP2440 °	513	98%	1,141	1,146	11,040	99%	11,040	99%	25,654	99%	85,520	99%	101,447	41,553	11,141	63,233	62.3	21,680	21.4	13,593	13.4	123.3	55.2
FRA A27 DTS1824 °	166	82%	544	531	27,069	80%	22,112	80%	35,791	71%	104,915	81%	99,633	29,183	27,433	38,728	38.9	9,545	9.6	- 2,047	- 2.1	233.3	72.9
IRL A27 TM40XX	21	100%	216	173	1,668	100%	685	100%	131,551	100%	78,124	100%	81,961	23,335	10,440	35,854	43.8	12,519	15.3	- 7,537	- 9.2	1,707.4	206.8
FRA A37 DTS2440 °	77	62%	354	323	14,525	62%	12,221	59%	31,440	70%	83,424	73%	78,955	19,219	19,899	35,260	44.7	16,041	20.3	5,614	7.1	457.9	109.3
FRA A27 DTS1218	167	87%	447	417	32,943	90%	28,344	91%	17,977	87%	74,673	92%	76,039	27,362	17,462	37,222	49.0	9,860	13.0	2,548	3.4	222.9	89.3
ESP A27 PS2440	400	100%	1,315	1,496	8,993	100%	8,993	100%	51,823	100%	60,085	100%	72,281	37,820	8,501	50,193	69.4	12,373	17.1	10,279	14.2	125.5	33.6
IRL A27 DTS1824	65	100%	366	343	14,448	100%	11,360	100%	20,867	100%	51,046	100%	51,879	12,920	11,167	23,478	45.3	10,558	20.4	5,708	11.0	361.2	68.5
GBR A27 DTS2440	20	24%	170	312	5,786	35%	4,781	35%	17,874	26%	46,621	32%	49,112	11,787	9,128	22,061	44.9	10,274	20.9	8,431	17.2	1,103.1	70.6
PRT A27 DTS2440	61	100%	473	457	13,103	100%	12,427	100%	28,962	100%	42,290	100%	44,788	12,486	14,780	19,774	44.2	7,289	16.3	776	1.7	324.2	43.3
IRL A27 DTS2440	37	100%	523	315	8,913	100%	7,052	100%	18,169	100%	43,821	100%	44,594	9,222	10,605	18,468	41.4	9,246	20.7	4,959	11.1	499.1	58.7
ESP A27 PMP0010	2,091	99%	3,720	2,722	181,265	100%	181,265	100%	9,254	100%	39,734	100%	42,450	33,686	5,346	28,600	67.4	- 5,086	- 12.0	- 6,483	- 15.3	13.7	10.5
FRA A27 DFN1824	38	95%	259	235	7,321	95%	5,660	94%	7,588	98%	29,437	97%	42,068	18,207	4,387	20,184	48.0	1,976	4.7	- 738	- 1.8	533.0	85.9
FRA A27 DFN2440	36	100%	215	215	4,657	100%	3,381	100%	16,476	100%	36,307	100%	40,551	21,307	3,055	27,028	66.7	5,720	14.1	3,954	9.8	750.8	125.5
GBR A27 FPO0010	899	51%	1,516	525	75,728	48%	38,509	42%	14,320	52%	37,759	51%	40,410	13,587	5,871	20,639	51.1	7,052	17.5	3,354	8.3	23.0	39.3
GBR A27 DTS1218 °	152	71%	575	576	23,461	75%	20,630	74%	13,282	71%	37,782	70%	40,112	9,762	8,543	16,347	40.8	6,585	16.4	3,182	7.9	107.5	28.4
FRA A27 HOK2440 °	23	96%	154	159	3,455	99%	2,651	99%	8,774	98%	20,115	98%	37,780	14,716	3,025	22,695	60.1	7,979	21.1	6,809	18.0	986.7	142.6
DNK A27 TM40XX	9	31%	40	44	589	22%	265	16%	76,865	24%	37,135	29%	37,675	4,725	3,575	29,503	78.3	24,778	65.8	10,947	29.1	3,278.1	669.8
PRT A27 PGP0010	1,701	100%	4,668	1,423	123,472	100%	123,472	100%	9,411	100%	37,359	100%	37,364	17,319	3,617	29,062	77.8	11,743	31.4	6,443	17.2	17.1	20.4
NLD A27 TM40XX °	8	29%	117	123	665	30%	532	30%	82,007	28%	34,462	28%	34,781	10,346	8,033	12,287	35.3	1,941	5.6	- 4,769	- 13.7	1,535.9	100.1
GBR A27 DTS1824	78	44%	486	471	12,906	43%	10,807	43%	11,896	26%	31,745	28%	34,579	11,034	10,142	5,528	16.0	- 5,506	- 15.9	- 9,127	- 26.4	70.9	11.7
FRA A27 DTS1012 °	193	81%	336	247	23,030	81%	22,551	81%	8,372	77%	31,812	80%	33,196	11,870	6,795	15,979	48.1	4,109	12.4	344	1.0	82.8	64.8
FRA A27 DFN1012	167	69%	433	284	16,671	57%	16,178	57%	7,182	66%	29,906	61%	31,786	14,013	2,429	19,283	60.7	5,270	16.6	2,425	7.6	115.5	67.9
FRA A27 DFN1218 °	73	88%	290	235	13,369	88%	11,794	87%	7,668	90%	36,402	90%	31,677	13,313	2,302	18,855	59.5	5,541	17.5	2,462	7.8	258.3	80.1
ESP A27 PS1824	226	99%	895	840	10,454	100%	10,454	100%	42,459	100%	41,546	100%	29,340	17,461	3,322	19,403	66.1	1,942	6.6	- 853	- 2.9	85.9	23.1
ESP A27 DRB0010	1,908	100%	2,974	1,604	198,946	100%	198,946	100%	3,043	100%	23,150	100%	27,494	28,540	4,412	20,013	72.8	- 8,527	- 31.0	- 9,428	- 34.3	10.5	12.5
ESP A27 PS1218	152	99%	836	658	13,377	100%	13,377	100%	27,809	100%	27,760	100%	26,251	16,760	3,006	18,793	71.6	2,033	7.8	1,457	5.6	123.6	28.6
PRT A27 PS1824	51	100%	871	532	7,266	100%	4,906	100%	26,919	100%	23,611	100%	24,173	13,119	2,552	17,619	72.9	4,500	18.6	1,516	6.3	345.5	33.1
FRA A27 TM1824 °	58	70%	124	128	7,090	86%	4,591	84%	14,995	74%	29,183	85%	22,403	7,192	6,919	8,344	37.2	1,152	5.1	- 1,126	- 5.0	143.9	65.2
ESP A27 DTS1824	93	100%	425	377	13,296	100%	13,296	100%	8,021	100%	21,198	100%	21,872	8,000	8,213	9,434	43.1	1,435	6.6	49	0.2	101.5	25.0
FRA A27 FPO1012	82	83%	149	143	9,439	85%	9,412	85%	6,281	85%	12,189	83%	21,249	8,878	1,959	11,931	56.2	3,054	14.4	1,699	8.0	145.5	83.7
IRL A27 TM2440	12	100%	108	76	1,050	100%	422	100%	24,515	100%	19,713	100%	21,002	8,234	2,474	9,424	44.9	1,190	5.7	- 4,368	- 20.8	785.3	123.5
FRA A27 HOK0010	255	87%	275	154	22,683	87%	22,660	87%	2,910	95%	20,302	93%	20,826	8,073	1,670	12,792	61.4	4,719	22.7	3,122	15.0	50.2	83.1
BEL A27 TBB2440	27	48%	84	66	3,261	39%	2,819	37%	4,663	26%	18,327	33%	19,627	7,131	6,326	6,869	35.0	- 262	- 1.3	- 3,709	- 18.9	254.4	104.6

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

4.7 EU Fleet activity in the Mediterranean & Black Sea region

The Mediterranean & Black Sea region covers FAO fishing areas 37.1, 37.2, 37.3 and 37.4. The EU waters are covered by the GFCM GSA areas listed in Figure 4.38. Nine EU Member States were involved in Mediterranean fisheries in 2014: Croatia, Cyprus, France, Greece, Italy, Malta, Portugal, Slovenia and Spain and two MS operate in the Black Sea: Bulgaria and Romania (Figure 4.38).

A fully comprehensive and realistic economic analysis, including all 11 coastal MS fishing fleets operating in the Mediterranean & Black Sea region, was not possible. Data on the structure, activity and production of the fleets are presented for all MS involved. However, economic performance results have been excluded for Greece due to incomplete and/or unreliable datasets. A trend analysis is provided only for the period 2011-2014 because consistent datasets for the entire period 2008-2013 were not available for all MS fleets.

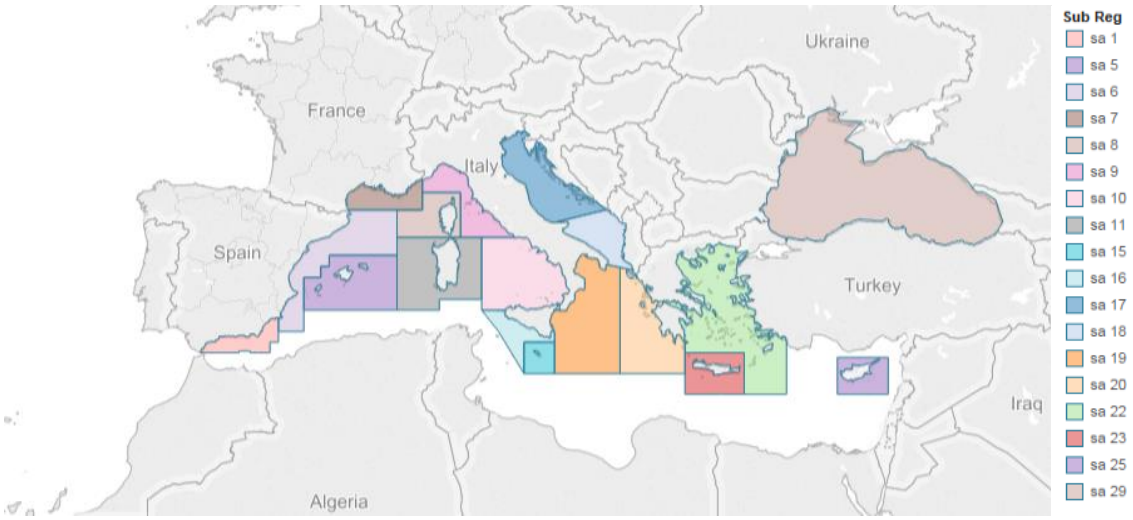
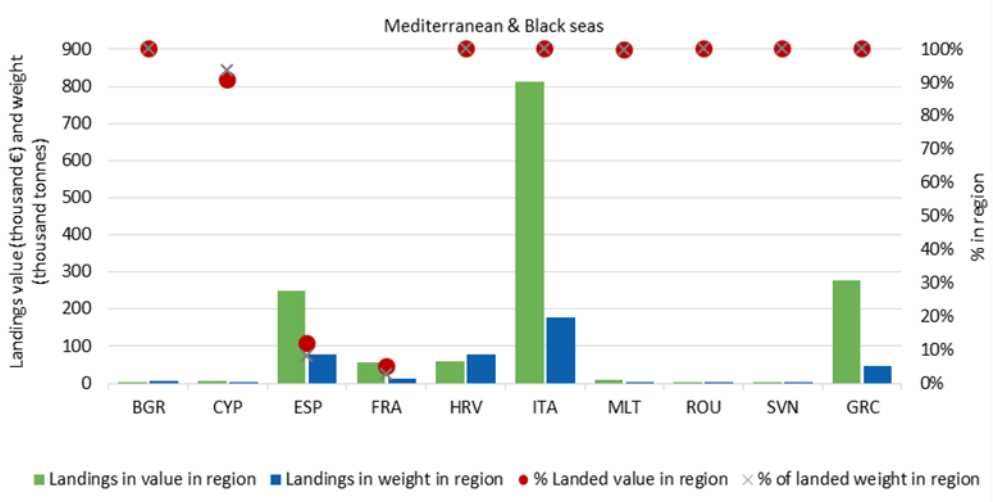


Figure 4.38 Regional map, highlighting fishing areas by GSA in the Mediterranean & Black Sea.

MS fleet dependency on fisheries in the region

Based on data submitted, most MS fleets were totally dependent on the Mediterranean basin for their fishery primary production in 2014. All landings by the Bulgarian, Croatian, Italian, Maltese, Romanian, Slovenian and Greek fleets originated from the Mediterranean or Black seas. On the other hand, this percentage decreases to 94% for the Cypriot fleet, as some activity also occurs in other non-EU Mediterranean waters. For Spain and France, the percentage is marginal, with only 8% and 3% respectively, of the total landed weight of these two MS fleets originating from EU-Med waters. Only two Portuguese vessels partially operate in the EU Mediterranean waters (Figure 4.39).

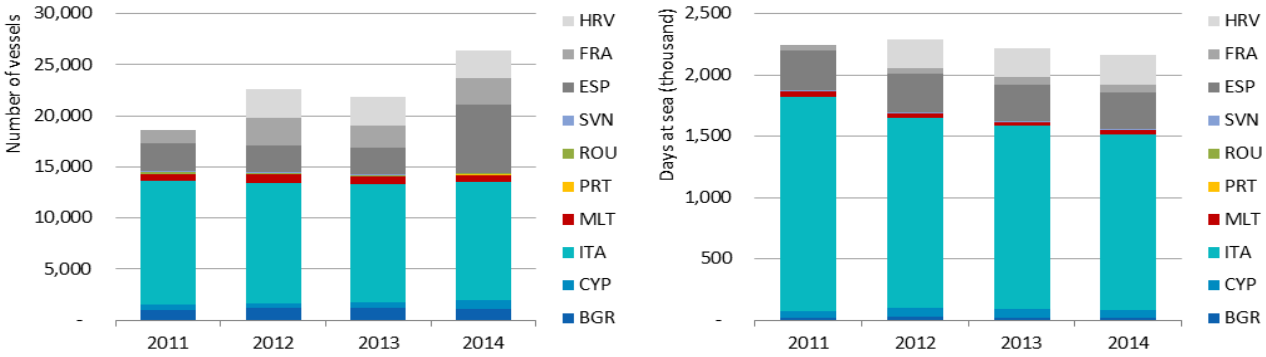


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.39 Regional map, highlighting MS fleets operating in the Mediterranean & Black Sea

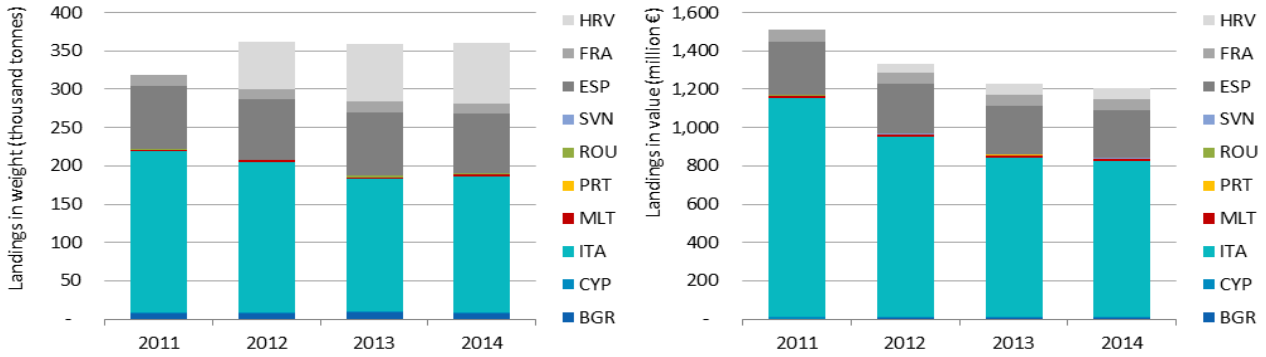
Recent development trends

Trends in the number of vessels have remained relatively stable, increasing in 2011 due to the entry of the Croatian fleet. Conversely, effort (in days at sea) deployed by MS fleets operating in the region has followed a decreasing trend over the period analysed, mainly due to reductions seen for the Italian fleet (Figure 4.40).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

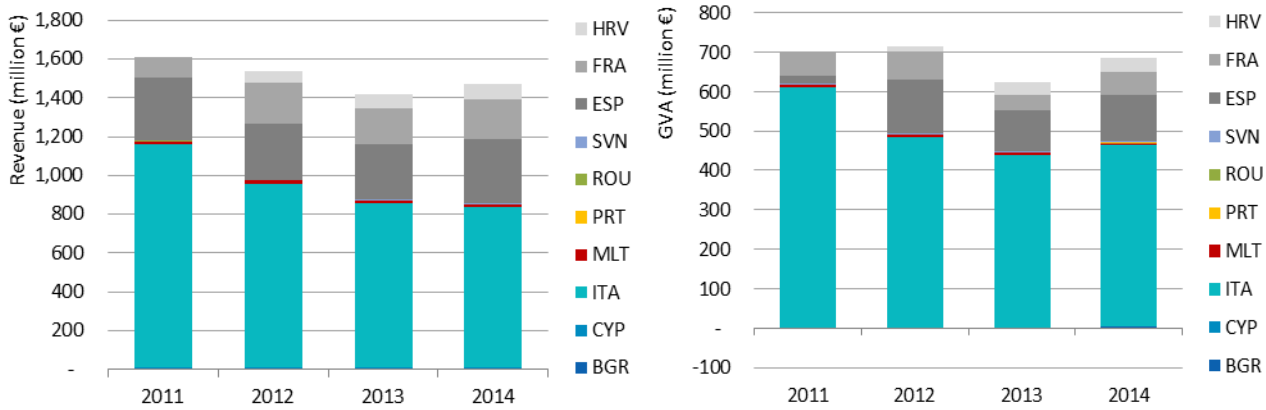
Figure 4.40 Trends in effort (days at sea) and landings (in weight) for the main MS fleets operating in the in the Mediterranean & Black Sea region



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.41 Landings, in weight and value, by MS fleets operating in the Mediterranean and Black seas over the period 2010-2014.

Revenue and GVA generated by the fleet also followed a decreasing trend. Figures for 2014 show some improvement. The most profitable year over the period analysed was 2011, in particular for the Italian fleet, the main contributor to trends in the region (Figure 4.42).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.42Trends in Revenue (landings income and other income) and GVA by MS fleets operating in the in the Mediterranean & Black Sea region over the period 2010-2014

Fisheries Management in the Region

The Mediterranean & Black Sea fisheries are regulated by the EU and by the General Fisheries Commission for the Mediterranean (GFCM) through its recommendations.

Fisheries management in the region is primarily based on effort control, minimum conservation reference sizes, closed areas (to protect sensitive habitats) or closed seasons (to protect juveniles or spawning stocks) and restrictions on gear construction (mesh size, gear dimensions, etc.).

The landing obligation included under Article 15 of Regulation (EU) No 1380/2013 stipulates the progressive elimination of discards. The time-frame for implementation of the landing obligation in the Mediterranean has been set on a phased basis: (i) as from 1 January 2015 for pelagic species; (ii) as from 1 January 2017 for species which define the demersal fisheries; and (iii) as from 1 January 2019 for all other species subject to minimum sizes.

Management plans

In addition, coastal fisheries are mainly regulated by each MS in the region through their national legislation and national management plans. So far MS have adopted 34 national management plans in the Mediterranean under Article 19 of the MEDREG, for fisheries conducted with trawl nets, purse seiners, shore seines, boat seines and dredges within their territorial waters.

The Commission has also carried out a review of national management plans to assess if they adequately reflect the MSY objective. Approximately half of the national plans are based on a (proxy) MSY objective – mainly those adopted in 2013 and 2014. Plans without MSY parameter were mainly adopted on the basis of the precautionary approach. Article 18 of the MEDREG allows for EU management plans for specific fisheries, in areas totally or partially beyond the territorial waters of Member States.

During the last two years, the EU accelerated the development and introduction of multiannual plans under the CFP.

In 2014, at the initiative of the EU, the GFCM adopted a recommendation for a multiannual management plan for fisheries on small pelagic stocks in the Northern Adriatic Sea (Recommendation GFCM 37/2013/1). The recommendation also foresees transitional conservation measures for fisheries on small pelagic stocks in the Southern Adriatic Sea. The GFCM multiannual plan mainly applies to EU fisheries since both small pelagic species are primarily exploited by EU fishing vessels.

In 2015, Commission proposed a multiannual plan for the fisheries exploiting demersal stocks in the Western Mediterranean Sea, the consultation process of which was still ongoing at the time of writing.

For stocks that are shared with third countries, EU proposed to GFCM the multiannual management plan for the fisheries exploiting hake and deep-water rose shrimp in the Strait of Sicily (GSAs 12-16); the plan was adopted during the 40th Annual Session of the GFCM in June 2016.

TAC development of main species

In the Mediterranean, a TAC is defined only for Bluefin tuna. The Bluefin tuna fishery is regulated by the International Commission for the Conservation of Atlantic Tunas (ICCAT) to which the EU is a contracting party. Eight EU member states are involved in the Bluefin Tuna fishery (Cyprus, France, Greece, Croatia, Italy, Malta, Portugal and Spain). In 2010, 2012 and 2014 substantial measures have been introduced to enforce the sustainable management of the stock. In November, in 2014, its annual meeting, ICCAT endorsed a 20% annual increase of the Bluefin tuna (BFT) Total allowable catch (TAC) over the next three years. As a result, the EU quota increased from 7 938.65 tonnes in 2014 to 9 372.92 in 2015 (20%).

There are 2 species under TAC management in the Black Sea: turbot and sprat. The EU quota for turbot is divided evenly between Bulgaria and Romania. For sprat, Bulgaria and Romania's national quotas are set at 70 and 30% of the total EU quota, respectively.

Spatial-based management

In the Mediterranean Sea, the use of the spatial-based approach to the management of fishing effort is constantly increasing as it is considered the best way to promote resource conservation. Indeed, aware of the potential role of MPAs as a tool for fisheries management, the GFCM has been promoting the establishment of fisheries restrictions within limited areas with the goal of preserving fisheries resources, as well as of minimizing the impact of fishing on specific habitats of high ecological value[8]. The spatial management is based on the establishment of fisheries restricted areas (FRAs), where, fishing activities with towed dredges and bottom trawl nets are substantially prohibited. This allows minimizing the impact of fishing activities on areas where juveniles of commercial species are concentrated and protect the habitats that play key roles for recruitment and spawning processes.

8 FAO. 2016. The State of Mediterranean and Black Sea Fisheries. General Fisheries Commission for the Mediterranean. Rome, Italy.

Mediterranean & Black Sea fishing fleet, effort and landings

Table 4.26 to Table 4.29 contain a summary of the economic performance of the Mediterranean & Black Sea fleet by Member State, main type of fishing activity and fleet segment.

Fleet capacity

The EU fleet fishing in the Mediterranean & Black Sea consisted of 34 438 active vessels when including the Greek fleet. The SFF covered 27 051 vessels, or 79% of the regional fleet. Greece comprised the largest fleet in number (13 600 vessels, 41% of the total).

Total employment in 2014 was estimated at 93 256 jobs, corresponding to 74 858 FTEs (including Greece). In terms of FTEs, Greece (41 438), Italy (20 694) and Spain (7 116) were the leading countries, together accounting for 93% of the total FTEs by the EU Mediterranean & Black Sea fleet.

Fishing effort

The Mediterranean & Black Sea fleet spent more than an estimated 4 million days at sea in 2014 (including Greece). The Greek fleet accounted for 47% of the total number of days, followed by Italy (35%) and Spain (7%). The SSF accounted for 63% of the days at sea (Figure 4.43 and 4.44).

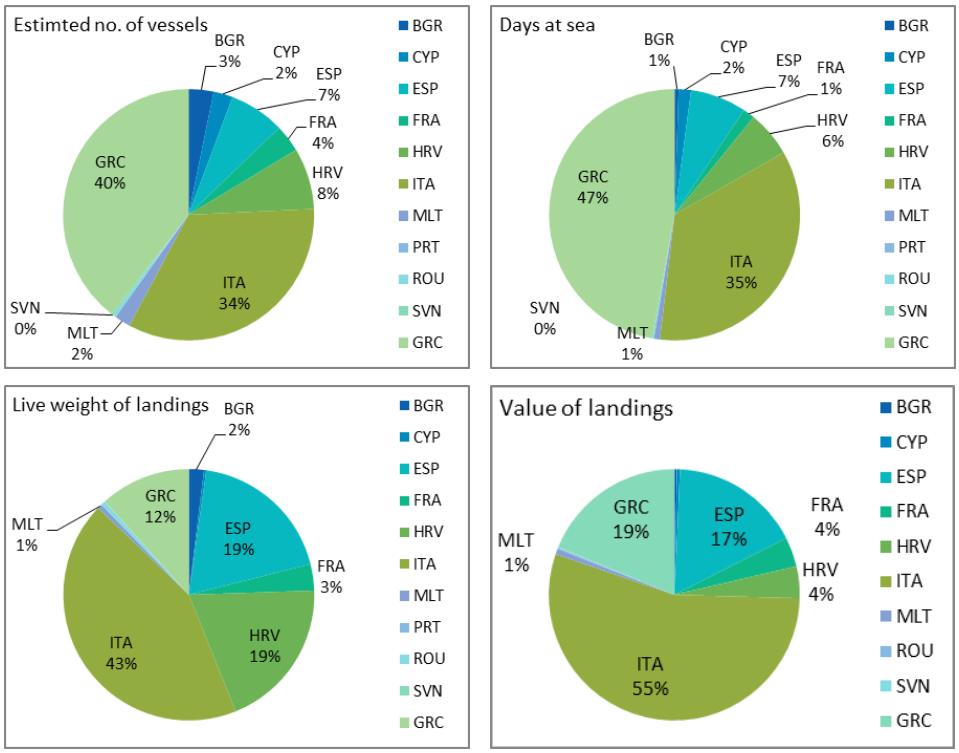
Figure 4.45 highlights the effort deployed by the six most important segments, based on landed value, operating in the Mediterranean and Black seas. These include the polyvalent small-scale passive gear segment, mid to large demersal trawlers and purse seiners.

Landings

The weight and value of landings generated by the regional fleet in 2014 amounted to approximately 408 717 tonnes and €1.48 billion, respectively, when including Greek fleet.

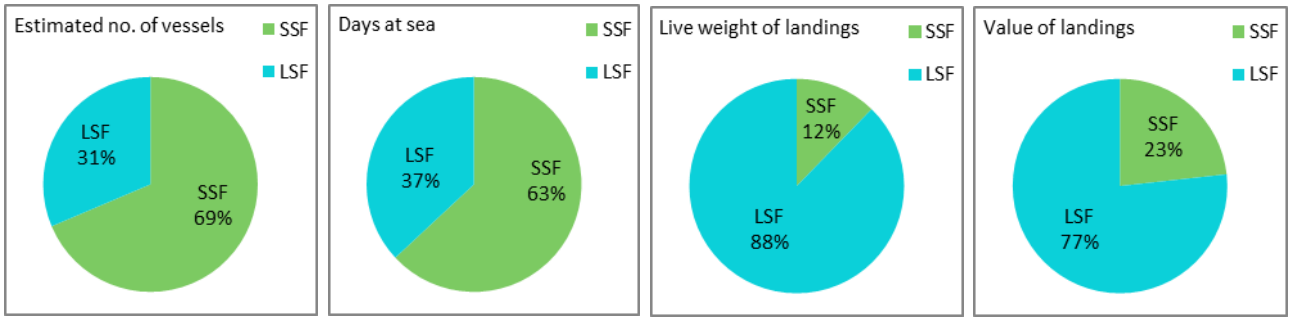
In terms of landed weight, Italy (176 778 tonnes), Croatia (79 408 tonnes) and Spain (77 063 tonnes) were again the leading countries, together accounting for 82% of the total weight of landings by the EU Mediterranean & Black Sea fleet (Figure 4.43).

In 2014 large-scale vessels generated by far the highest landed weight with 88% of the total estimated landed weight. Large-scale fleet generated around 77% of the value landed. Although over 63% of the effort was deployed by the small-scale fleet, these vessels landed only 12% of weight and 23% of the value in the region (Figure 4.44). This fleet segment is more important from a social point of view as it represents almost 61% of the FTE employment in the Mediterranean & Black Sea fleet (including Greece).



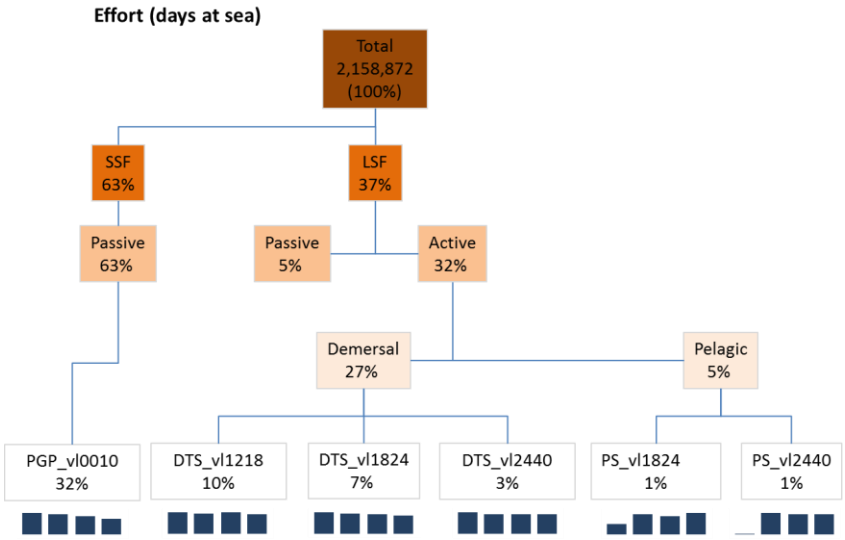
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.43 Importance of the Mediterranean & Black seas for Member States' fisheries in terms of landings in weight and value, 2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.44 Share of capacity, effort and landings by main MS fleets operating in the in the Mediterranean & Black Sea region, 2014



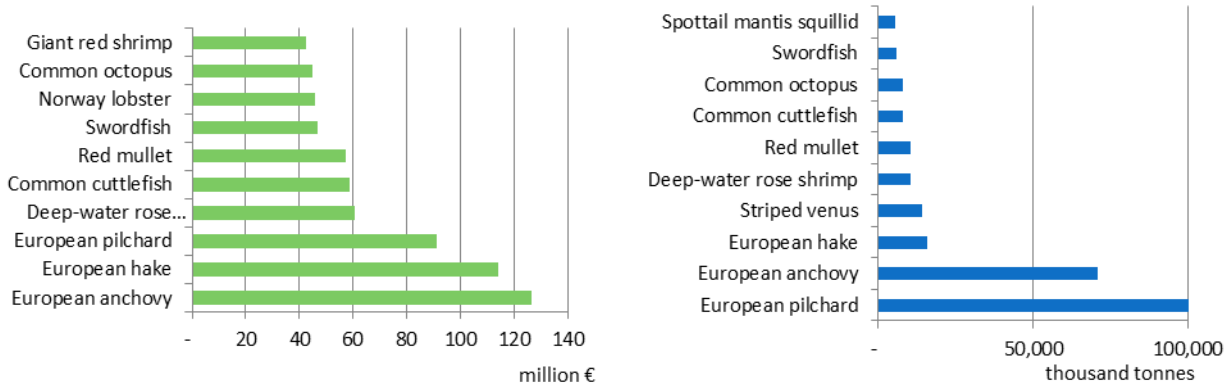
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.45 Schematic representation of the share of effort (in days at sea, %) deployed by the various MS fleet components operating in the Mediterranean and Black seas, including six of the most important segments (based on landed value from the region) and 4-year trend (excludes Greece due to lack of complete time series for this MS).

Top species

The main species for the EU Mediterranean fleet (including Greece) in 2014, in terms of weight was European pilchard (=sardine) (105 292 tonnes), followed by European anchovy (70 790 tonnes), European hake (16 003 tonnes) and then striped Venus (14 152 tonnes) (Figure 4.46). Around 84% of European pilchards are mainly landed in the Adriatic Sea by Croatian (59%) and Italian (25%) fleets.

The most landed species in value was European anchovy (€127 million), followed by European hake (€114 million) (including Greece) (Figure 4.46).

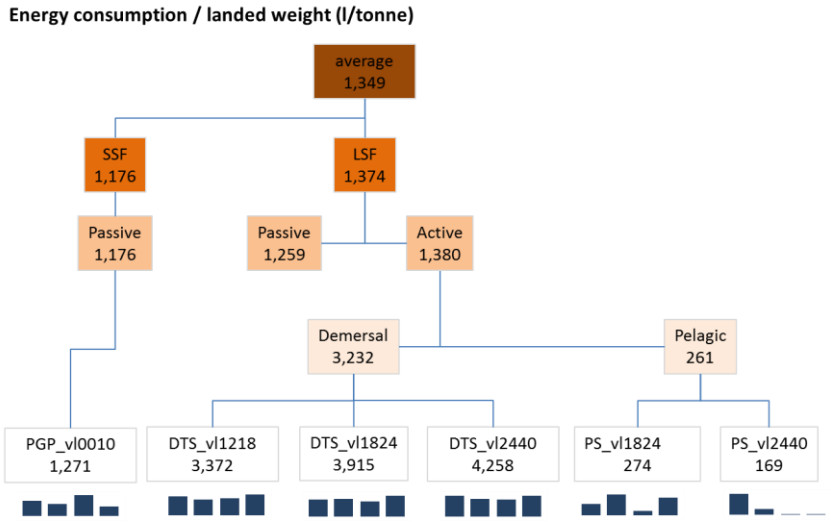


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.46 List of the top 10 species in terms of weight and value landed for MS fleets operating in the Mediterranean & Black Sea, 2014

Productivity

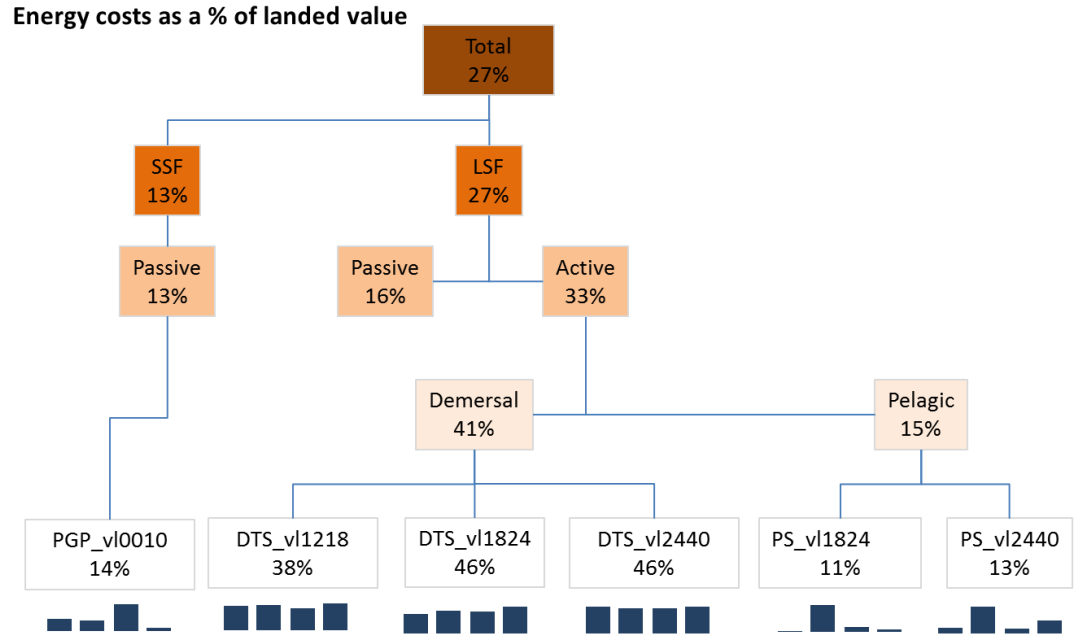
On average 1 349 litres of fuel per tonne of landed fish was used in Mediterranean and Black Sea fisheries in 2014. However, significant differences between fisheries are observed. From the six most important segments, large-scale pelagic fisheries were the most fuel efficient, consuming on average 261 litres of fuel per landed tonne. The demersal trawl fisheries consumed the most fuel per landed catch (4 258 litres/tonne for DTS between 24 and 40m) (Figure 4.47).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.47 Schematic representation of the amount of fuel consumed per landed weight (litres/tonne) by the various MS fleet components operating in the Mediterranean and Black seas, including six most important segments (based on landed value from the region) and 4-year trend (excludes Greece due to lack of complete time series for this MS).

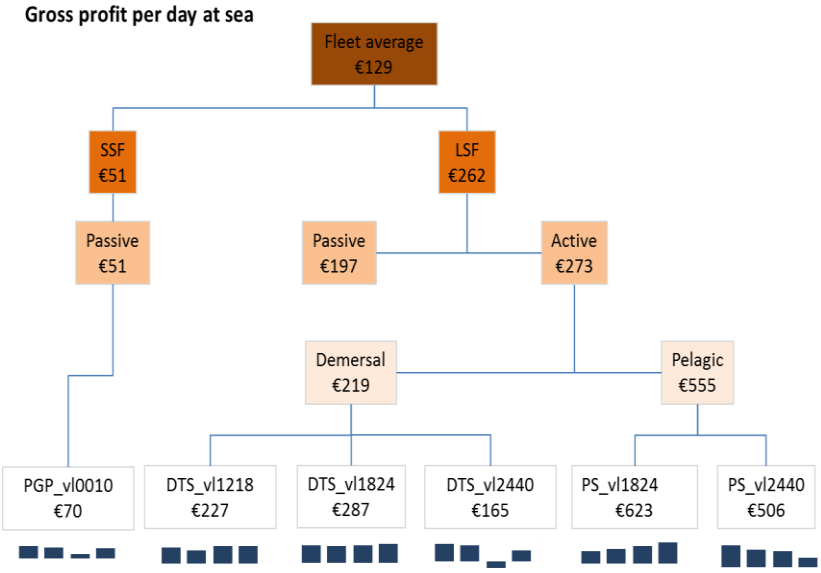
Around 27% of the landed value in the Mediterranean and Black Sea went to fuel costs in 2014. In total around €331 million were spent on fuel to catch 409 thousand tonnes of fish, with a landings value of €1.48 billion. In particular, the large-scale demersal segments spent high amounts (41%) of their landed value on fuel. As trawling is typically fuel intensive, fluctuations in fuel consumption and fuel prices are therefore key drivers of the profitability of the fleets (Figure 4.48).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.48 Schematic representation of the ratio fuel costs to landed value (%) for the various MS fleet components operating in the Mediterranean and Black seas, including six most important segments (based on landed value from the region) and 4-year trend (excludes Greece due to lack of complete time series for this MS).

In 2014, the average gross profit per day at sea was estimated at around €129 for Mediterranean and Black Sea fisheries. On average small scale fisheries showed a low positive gross profit. The pelagic fisheries were the most profitable, earning on average €555 in gross profit per day at sea. From the six most important segments, purse seiners between 18 and 24m, made an average €623 gross profit per day at sea and has increased steadily (Figure 4.49).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.49 Schematic representation of the amount of gross profit generated per day at sea (€/day) by the various MS fleet components operating in the Mediterranean and Black seas, including six most important segments (based on landed value from the region) and 4-year trend (excludes Greece due to lack of complete time series for this MS).

Socio-economic performance

Tables 4.26 to 4.30 contain a summary of economic performance of the Mediterranean & Black Sea fleet by Member State, fishing activity and fleet segment, respectively. Due to data quality issues, data on the Greek fleet at aggregated levels have not been included.

Performance by Member State

Excluding Greece, revenue (income from landings and other income) generated by the Mediterranean & Black Sea fleet in 2014 was an estimated €1.357 billion, 61% of which was generated by the Italian fleet (€824 million). In terms of economic performance, the amount of Gross Value Added (GVA), generated by EU Mediterranean & Black Sea fleet was €748 million. Italy (€461 million), Spain (€189 million), France (€49 million) and Croatia (€37 million) were the leading countries regarding GVA in 2014.

Gross profit was estimated at €286 million. The Italian fleet generated the largest gross profit in 2014 amounting to €226 million, followed by Spain (€37 million), Croatia (€14 million) and France (€8 million), together accounting for 97% of Gross profit (Table 4.12). Net profit amounted to €42 million in 2014.

Five EU Mediterranean & Black Sea countries (excluding Greece) reported a loss in 2014. The largest lost was reported by Croatia (-€11 million). Italy (€57 million), Spain (€13 million), Slovenia (€1 million), and Romania (€135 thousand) reported net profits in 2014.

Among operating costs, the two major fishing expenses were crew and energy costs, accounting for €459 and €331 million, respectively. In terms of crew costs, Italy (€235 million), Spain (€150 million) and France (€40 million) were the leading countries, together accounting for 93% of the total crew costs. Regarding energy costs, Italy (€222 million), Spain (€66 million) and Croatia (€19 million) were the leading countries, together accounting for 93% of the total energy cost (Table 4.26).

Performance by fishing activity

By fishing activity, and according to the available data, the Mediterranean & Black Sea fleet appears somewhat unevenly distributed between the two main types of fishing activity. The SSF possessed 69% of the fleet in number (14 289 vessels) and accounted for 63% of the effort (1.4 million days). In terms of production, the SSF landed only 12% in weight (44 300 tonnes) and 23% in value of landings (€280 million). Overall, both fleet segments were profitable, with gross profit margins estimated at 22.3% for the SSF and 20.4% for the LSF. Net profit margins were estimated at 5.5% for the SSF and 2.5% for the LSF in 2014(all excluding Greece) (Table 4.28).

According to the available data (Greece excluded), three of the MS small-scale fleets (Cyprus, Spain and Malta) generated gross losses while in the large-scale fleets only Bulgaria generated gross losses in 2014. Slightly different picture emerges regarding net profit, where four MS SSF (Bulgaria, Cyprus, Spain and Malta) reported losses in 2014, while among the LSF, five MS reported losses (Bulgaria, Cyprus, Croatia, France and Malta) (Table 4.29).

Performance by fleet segment

Table 4.30 provides results for the top 35 MS fleet segments (out of 126 active fleet segment recorded, Greek fleet is excluded) in terms of value of landings operating in the region in 2014. These fleets represented 72% of the population, covering 84% of the effort deployed (1.8 million days) and generating 91% of the revenue (€1.2 billion), 91% of the GVA (€667 million) and 94.5% of the gross profit (€264 million).

At fleet segment level, the Italian demersal trawls and seines 12-18m segment generated the most revenue from the Mediterranean & Black Sea region in 2014 (€162 million), followed by the Italian polyvalent passive gear 06-12m segment (€159 million) and Italian demersal trawls and seines 18-24m segment (€156 million). The same fleet segments also generated the highest GVA and gross profit in 2014 (Table 4.30).

Description of relevant fisheries in the region

The relevant fisheries considered for this section were selected taking into account the multiannual management plans approved or under evaluation in the region.

Small pelagic fisheries in the Adriatic Sea

In 2014, the multiannual plan for small pelagic fisheries in the Adriatic Sea was adopted by GFCM with the Recommendation GFCM 37/2013/1. The plan establishes management measures and harvest control rules for fisheries targeting sardine *Sardina pilchardus* and anchovy *Engraulis encrasicolus* in the Northern Adriatic Sea (GSA 17) and transitional conservation measures for small pelagic fisheries in the southern Adriatic Sea (GSA 18).

The plan seeks to maximise the long-term yield of small pelagic fisheries and guarantee a low risk of stock collapse, while maintaining sustainable and relatively stable fisheries. Three specific objectives were adopted: i) maintain the exploitation rate below a precautionary generic reference point; ii) maintain mid-year spawning stock biomass (SSB) above a precautionary level (initially set at 109 200 tonnes for sardine and 250 600 tonnes for anchovy) and ensure with a set of predefined harvest control rules that SSB does not fall below a biomass level limit (179 thousand tonnes for anchovy or 78 thousand tonnes for sardine) and iii) Ensure that the fishing fleet capacity and fishing effort do not exceed the effort exerted in 2011[9].

Fleet involved in small pelagic fisheries in the Adriatic Sea consisted of 381 vessels with combined gross tonnage (GT) of 29 142 tonnes and engine power of 127 389 kW. Three EU Member States were involved in Adriatic small pelagic fisheries: Croatia, Italy and Slovenia.

Croatia comprised the largest fleet (260 vessels and 16 091 GT), followed by Adriatic Italian fleet (171 vessels and 13 013 GT)[10] and Slovenia with only 4 vessels.

Two kind of fishing gears are currently used to catch the small pelagic species in the Adriatic Sea: purse seiners and mid-water pelagic trawl

In Croatia and Slovenia, small pelagic are fished by purse seiners; the most used by the Italian fleet is the "volante" a mid-water pelagic trawl net towed by two vessels, mostly operated in the northern and central area, accounting for 78% of total pelagic fleet (134 vessels). The Italian purse seine vessels are, in 2014, 37 and they operate mainly in the central Adriatic.

Employment in 2014 was estimated at 2 543 jobs, corresponding to 1 978 FTEs.

Small pelagic fishes are the main fisheries resources of the Adriatic Sea, accounting for a large share of the total catches. Anchovy and sardine represents approximately 59% of the total landings of the Adriatic in 2014.

The main specie of small pelagic fish in the Adriatic Sea is sardine (76.8 thousand tonnes while total landings of anchovies amounted to 31.7 thousand tonnes in 2014).

In terms of value, the importance of anchovy's increases due to the higher average price; value of landings reaches €38.5 million for anchovies and €34.8 million for sardine.

Pelagic fishing fleet activity on the eastern part of the Adriatic has been directed mostly at sardines and the Croatian catches represent the main part of the total catches (74%). Anchovies are mainly landed by Italian pelagic fleet (71% of the total).

9 FAO. 2016. The State of Mediterranean and Black Sea Fisheries. General Fisheries Commission for the Mediterranean. Rome, Italy.
10 Italian data on small pelagic fisheries refers to fleet operating in GSA 17 and GSA 18 (source: Italian National Programme on Data Collection)

Prices of sardines and anchovies show a high variability between countries; in Croatia the average price is 0.39 €/kg for sardine and 0.77 €/kg for anchovies; in Italy the average price is respectively 0.64€/kg and 1.39€/kg.

Such price differences are partly due to the market destination of the landings; in Croatia, small pelagic are used for processing, salting and marinating industry, as well as fish feed for tuna farms; in Italy the landings are sold fresh for local consumption and in minor quantity exported for processing (mainly in Spain).

In addition, the adoption of initiatives aimed at improving product quality and a better control of the supply have been developed in recent years in Italy. These initiatives concern, in particular, the Adriatic midwater pair trawlers; local fishers agreed upon a reduction of fishing days and catch levels depending on market demands.

The revenue (income from landings and other income) generated by the Adriatic pelagic fleet in 2014 was estimated at €87.6 million, 61% of which was generated by the Italian fleet operating in Adriatic Sea (€52.5 million). Gross profit was estimated at €19.6 million.

Demersal fisheries in the Western Mediterranean Sea[11]

The proposal of an EU MAP for the fisheries exploiting demersal stocks in the Western Mediterranean Sea (now under consultation) replies, to the need to complement the existing national management plans[12] by covering the objectives of the revised CFP which have not been taken into consideration (the plans have been enforced before the new CFP). In addition, the MAP would set-up harmonised biological objectives across the Western Mediterranean sea basin for the demersal species which define the fisheries. Indeed, by now and under the current national management plans the objectives are set unilaterally by each MS without considering the management measures taken by the other MSs exploiting the same marine resources. In addition, the MAP would address transboundary fish stocks and mixed fisheries.

Currently the main species caught by demersal fisheries in the Western Mediterranean are: hake, red mullet, blue whiting, monkfishes, deep-water rose shrimp, giant red shrimp, blue and red shrimp and Norway lobster. The determination of the species which define the Western Mediterranean demersal fisheries for the MAP has been made on the basis of: (i) the most caught species in the different areas and; (ii) the most overexploited species as assessed by the scientific bodies the GFCM-SAC and the STECF. This resulted in the selection of European hake, red mullet and deep water rose shrimp as the species defining the demersal fisheries in the Western Mediterranean Sea. The fleets affected by the MAP will be the French, Italian and Spanish ones. The fishing gears concerned are: demersal trawlers, long-liners, gillnets, trammel nets and traps.

According to data submitted by MS, the fleet potentially targeting demersal fisheries covered by the MAP for the Western Med included around 9 000[13] vessels in 2014, with a combined gross tonnage of 56 331 GT and engine power of 473 615 kW. Days at sea amounted to 932 798, with an average of 103 days per vessel.

According to the current DCF data, demersal trawlers represent 17% of the total fleet operating in the area (West Med), long-liners 2%, gillnets 9%, trammel nets and traps 59% and there is another 14% represented by polyvalent vessels. About 61% of the vessels are Italian, 25% are Spanish and 14% are French vessels. Demersal trawlers (around 1 500) are almost Italian and Spanish, more or less equally distributed. As far as long-liners (around 200 vessels), more than a half are Spanish (51%), followed by the French (37%) and Italian (12%). As far as gillnets, according to the data, they are predominant in the French fleet (around 634 vessels) while vessels equipped with passive gears are predominant in Italy (more than 4 700 vessels).

Demersal fisheries are very important for the Western Mediterranean fleets: the production of French, Italian and Spanish vessels equipped with demersal trawlers, long-liners, gillnets, trammel nets and traps fishing in the waters covered by the MAP represents, approximately, 31% and 53% of the overall production in the area, in volume and value terms, respectively.

In 2014, the volume of landings of European hake, red mullet and deep water rose shrimp, the species which define the Western Mediterranean demersal fisheries for the MAP, amounted to 10 000 tonnes and about €69 million (around 25% of the overall demersal production).

The first species, both in volume and value (64%) is hake, followed by red mullet (25% in volume and 21% in value). Deep water rose shrimp represents 11% in volume terms and 14% in value terms, having the higher average price (8.65 €/kg).

According to 2014 data on landings, the great bulk of deep water rose shrimp (94%) is caught by Italian trawlers. Hake is principally targeted by Italian vessels: 23% trawlers and 19% passive gears; another 29% of hake landings are to be attributed to Spanish trawlers and a 21% to French trawlers. As far as red mullet, it is targeted only by Italian (74%) and Spanish vessels (26%).

In most of GSAs vessels belonging to different countries are not competing among them. Only in GSA 7 both French and Spanish vessels target hake and deep water rose shrimp.

[11] According to FAO GFCM subdivisions, the Western Mediterranean Sea is composed by the Balearic (Division 37.1.1), the Gulf of Lions (Division 37.1.2) and Sardinia (Division 37.1.3). In terms of Geographical Sub-Areas, the Western Med covers GSAs from 1 to 12.

[12] France: 1 national management plan for trawlers adopted in 20137; Italy: 4 national management plans for demersal trawlers in the FAO geographical statistical areas 9 (Ligurian and North Tyrrhenian Sea), 10 (South and Central Tyrrhenian Sea), 11 (Sardinia) and 16 (Sicily) adopted in 2011; Spain: 1 national management plan for towed fishing gear and trawlers, surrounding nets, bottom-set gillnets, static gears, traps, bottom and surface longlines and other fish hook sets adopted in 2013.

[13] Italian data on demersal fisheries in the Western Med refers to fleets operating in GSA 9, GSA 10 and GSA 11 (source: Italian National Programme on Data Collection)

While the average price of the red mullet landed by Italian and Spanish vessels is almost the same (on average 5.92 €/kg), the prices of hake and deep water rose shrimp show a high variability between countries. In 2014, an average price of 16.15 €/kg in Spain and around 8.00 €/kg in France and Italy is registered for deep water rose shrimp. For hake the higher price (8.45 €/kg) is registered for the Italian vessels, to be attributed to the high share of production belonging to passive gears (about a half), whose landings are generally characterized by a higher quality and a higher commercial value. Hake landed by Spanish vessels was sold at an average price of 6.68 €/kg while hake landings from French vessels show the lowest average price (4.50 €/kg).

As far as the employment level, in 2014 the estimated value generated by the demersal fisheries has been equal to 14 119 jobs, corresponding to 10 717 FTEs.

The preliminary evaluations carried out by the STECF[14] suggest that an important reduction of the catches may be required during the first years of the MAP, as a consequence of the implementation of stricter measures to attain levels of fishing mortality which can produce the MSY. It is likely that fishers would therefore be affected with a reduction of their overall income in the short term. However, the simulations also indicate a great potential for recovery of the fish stocks, particularly for hake and this will have, of course, beneficial consequences for the sector. As far as the socio-economic impacts, it is likely that the management measures applied to the demersal fisheries would results in a reduction of employment if the number of vessels will be reduced as a measure to regulate overcapacity of the fishing fleet[15]. Nonetheless, measures such as temporal closures (where subsidies could be requested) or reduction of the number of fishing days at sea are considered to be more beneficial from the social viewpoint because employment is not (or very little) affected.

14 Scientific, Technical and Economic Committee for Fisheries (STECF) – Western Mediterranean Multi-annual Plan (STECF-15-09). 2015. Publications Office of the European Union, Luxembourg, 97 pp.
15 Macher C., Jadaud A., Merzéréaud M., Le Grand C., Le Corre G., Guyader O., Frangoudes K. Example of bio-economic impact assessment of scenarios: the case of the hake fishery in the Gulf of Lions. Scientific Advisory Committee (SAC) of the General Fisheries Commission for the Mediterranean (GFCM) – Fifteenth session of the Subcommittee on Economic and Social Sciences (SCESS), 2015.

Table 4.26 Structure and economic performance estimates by MS fleets operating in the Mediterranean & Black Sea region, 2014

		Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
		(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Mediterranean Sea and Black Sea	BGR	1,110	100%	1,517	532	21,265	100%	21,265	100%	7,897	100%	4,334	100%	5,488	2,736	1,508	2,687	49.0	- 48	- 0.9	- 1,543	- 28.1	2.4	5.0
	CYP	849	99%	1,192	702	65,078	99%	65,078	99%	1,237	94%	6,819	91%	6,812	668	1,927	937	13.8	269	4.0	- 5,090	- 74.7	1.1	1.3
	ESP	2,456	20%	8,689	7,116	294,435	30%	294,435	30%	77,063	8%	249,400	12%	334,044	149,799	66,119	189,481	56.7	37,025	11.2	13,203	4.0	77.1	26.6
	FRA	1,229	19%	1,745	991	61,611	13%	60,796	14%	13,837	3%	56,142	5%	93,945	40,479	16,844	48,696	44.5	8,217	1.9	- 7,371	- 10.2	26.9	33.5
	HRV	2,716	100%	4,842	2,151	241,236	100%	206,059	100%	79,408	100%	60,841	100%	76,479	22,785	19,194	36,596	47.9	13,811	18.1	- 10,934	- 14.3	13.5	17.0
	ITA	11,555	100%	26,932	20,694	1,432,584	100%	1,530,390	100%	176,778	100%	813,320	100%	824,161	234,964	221,711	460,958	55.9	225,994	27.4	57,391	7.0	39.9	22.3
	MLT	709	100%	1,418	1,115	31,293	100%	28,586	100%	2,401	100%	10,453	100%	11,670	6,103	2,702	5,251	45.0	- 852	- 7.3	- 4,651	- 39.9	7.4	4.7
	ROU	123	100%	330	38	2,774	100%	2,735	100%	2,200	100%	2,458	100%	2,458	1,041	554	1,485	60.4	445	18.1	135	5.5	12.1	39.2
	SVN	91	100%	126	80	8,595	100%	8,595	100%	254	100%	1,277	100%	2,741	918	232	2,261	82.5	1,343	49.0	1,012	36.9	24.8	28.2
	GRC	13,600	100%	46,465	41,438	1,920,719	100%	-		47,642	100%	278,651	100%					44.8		- 144.1		169.2		

* Incomplete and questionable data for Greece. Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.27 Structure and economic performance estimates* by main gear type for MS fleets operating in the Mediterranean & Black Sea region, 2014

	Total number of vessels	Estimated % of vessels by gear type	Total employed	FTE	Days at sea	as a % of DAS by gear type	Fishing days	as a % of FD by gear type	Live weight of landings	as a % of landed weight by gear type	Value of landings	as a % of landed value by gear type	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Pelagic	883	32.2%	6,508	4,936	110,355	48%	104,811	51%	186,563	7%	234,472	12%	238,813	91,849	34,577	153,094	64.1	61,245	25.7	22,485	9.4	173	31.0
Demersal	4,323	37.4%	13,659	11,741	550,180	39%	539,855	40%	112,015	7%	597,707	17%	686,489	182,358	244,022	307,948	44.9	125,589	18.3	221	0.0	71	26.2
Other	15,615	38.9%	26,471	16,726	1,498,337	47%	1,573,274	49%	62,497	10%	372,866	23%	411,800	176,022	51,574	271,216	65.9	92,537	22.7	19,445	4.8	17	16.2

* Excludes Greece, Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.28 Structure and economic performance estimates* by main type fishing activity (SSF and LSF) in the Mediterranean & Black Sea region, 2014

	Total number of vessels	as % of vessels by fishing activity	Total employed	FTE	Days at sea	as a % of DAS by fishing activity	Fishing days	as a % of FD by fishing activity	Live weight of landings	as % of landed weight by fishing activity	Value of landings	as % of landed value by fishing activity	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
SSF	14,289	41.2%	22,418	13,924	1,361,483	49%	1,438,608	51%	44,309	16%	280,187	35%	313,406	141,278	37,249	214,022	68.3	70,086	22.6	17,028	5.5	15.0	15.4
LSF	6,549	34.6%	24,373	19,495	797,389	40%	779,331	41%	316,766	8%	924,858	19%	1,044,392	318,215	293,542	534,331	50.6	216,116	20.4	15,522	2.5	79.3	26.6

* Excludes Greece, Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.29 Structure and economic performance estimates by MS and main type of fishing activity operating in the Mediterranean & Black Sea region, 2014

		Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
		(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
SSF	BGR	999	100.0%	1,196	343	13,311	100%	13,311	100%	2,086	100%	1,222	100%	2,820	1,831	390	1,870	66.3	39	1.4	-471	-16.7	1.9	5.5
SSF	CYP	827	100.0%	1,106	616	63,210	100%	63,210	100%	577	100%	4,352	100%	4,352	279	1,419	-153	-3.5	-431	-9.9	-4,652	-106.9	-0.2	-0.2
SSF	ESP	1,267	29.0%	2,288	1,471	135,152	34%	135,152	34%	7,514	25%	36,515	35%	48,083	32,412	3,695	34,520	71.8	-549	-1.2	-3,787	-8.5	27.2	23.5
SSF	FRA	1,084	24.3%	1,172	691	48,090	22%	47,685	22%	2,983	4%	22,336	12%	32,646	16,210	2,914	22,302	68.3	6,092	18.7	3,322	10.4	20.6	32.3
SSF	HRV	1,665	100.0%	2,076	537	134,913	100%	114,986	100%	1,303	100%	7,019	100%	15,609	5,089	1,866	10,027	64.2	4,938	31.6	1,157	7.4	6.0	18.7
SSF	ITA	7,611	100.0%	13,114	9,379	930,530	100%	1,028,503	100%	28,180	100%	203,281	100%	203,570	80,551	25,522	142,302	69.9	61,751	30.3	24,758	12.2	18.7	15.2
SSF	MLT	648	100.0%	1,098	804	26,635	100%	26,142	100%	604	100%	3,677	100%	3,691	3,915	1,107	1,219	33.0	-2,695	-73.0	-3,888	-105.3	1.9	1.5
SSF	ROU	111	100.0%	279	24	2,205	100%	2,182	100%	997	100%	1,176	100%	1,176	509	250	722	61.4	213	18.1	97	8.2	6.5	30.3
SSF	SVN	77	100.0%	89	60	7,437	100%	7,437	100%	66	100%	608	100%	1,459	483	85	1,214	83.2	730	50.0	493	33.8	15.8	20.2
SSF	GRC	12,762	100.0%	36,444	31,564	1,828,137	100%	-		18,152	100%	145,011	100%					-46.3		-178.3		-201.6		
LSF	BGR	111	100.0%	321	189	7,954	100%	7,954	100%	5,810	100%	3,112		2,668	905	1,118	817	30.6	-88	-3.3	-1,072	-40.2	7.4	4.3
LSF	CYP	22	82.1%	86	86	1,868	77%	1,868	77%	660	89%	2,467	78%	2,459	389	508	1,090	44.3	700	28.5	-438	-17.8	49.2	12.7
LSF	ESP	1,189	17.3%	6,401	5,645	159,283	29%	159,283	29%	69,549	17%	212,885	24%	285,960	117,387	62,424	154,961	54.2	37,574	13.1	16,990	6.0	130.3	27.5
LSF	FRA	144.99	6.6%	573	300	13,522	6%	13,111	6%	10,854	3%	33,806	4%	61,299	24,269	13,930	26,394	25.4	2,125	-11.6	-20,294	-26.4	80.5	36.4
LSF	HRV	1,051	100.0%	2,766	1,614	106,323	100%	91,073	100%	78,105	100%	53,822	100%	60,870	17,696	17,328	26,569	43.7	8,873	14.6	-12,090	-19.9	25.3	16.5
LSF	ITA	3,944	100.0%	13,819	11,315	502,054	100%	501,887	100%	148,599	100%	610,038	100%	620,591	154,414	196,189	318,657	51.4	164,243	26.5	32,633	5.3	80.8	28.2
LSF	MLT	61	99.9%	320	311	4,658	100%	2,444	100%	1,798	100%	6,776	100%	7,979	2,188	1,595	4,032	50.5	1,844	23.1	-763	-9.6	66.2	13.0
LSF	ROU	12	100.0%	51	14	569	100%	553	100%	1,202	100%	1,282	100%	1,282	531	304	763	59.5	232	18.1	39	3.0	63.6	54.1
LSF	SVN	14	100.0%	37	20	1,158	100%	1,158	100%	189	100%	669	100%	1,282	435	147	1,048	81.7	613	47.8	518	40.4	74.8	51.6
LSF	GRC	838	100.0%	10,021	9,875	92,582	100%	-		29,490	100%	133,640	100%					-43.2		-106.5		-134.5		

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.30 Structure and economic performance estimates for the top 35 MS fleets operating in the Mediterranean & Black Sea region, 2014

	Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
	(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
ITA A37 DTS1218	1,254	100%	3,460	3,211	170,652	100%	166,676	100%	23,758	100%	158,081	100%	161,592	36,582	55,532	80,654	49.9	44,073	27.3	24,432	15.1	64.3	25.1
ITA A37 PGP0612	5,297	100%	9,734	7,172	666,877	100%	744,446	100%	22,231	100%	158,633	100%	158,922	63,271	21,140	110,108	69.3	46,837	29.5	14,391	9.1	20.8	15.4
ITA A37 DTS1824	632	100%	2,560	2,423	100,577	100%	100,797	100%	25,754	100%	152,480	100%	156,127	31,197	64,081	67,612	43.3	36,415	23.3	201	0.1	107.0	27.9
ESP A37 DTS1824	338	99%	1,474	1,530	48,452	99%	48,452	99%	7,904	100%	41,352	99%	83,686	28,438	25,577	36,297	43.4	7,859	9.4	2,007	2.4	107.3	23.7
ITA A37 DTS2440	195	100%	1,172	1,142	32,990	100%	31,689	100%	9,076	100%	77,450	100%	78,927	17,218	34,422	31,124	39.4	13,906	17.6	-13,248	-16.8	159.4	27.3
ESP A37 DTS2440	157	100%	735	793	24,902	100%	24,902	100%	5,354	100%	35,081	100%	50,795	16,464	18,168	21,925	43.2	5,462	10.8	980	1.9	139.9	27.6
ESP A37 PS1824	93	99%	1,017	978	13,019	100%	13,019	100%	22,543	100%	41,885	100%	46,106	25,061	3,734	35,003	75.9	9,942	21.6	7,546	16.4	376.5	35.8
ITA A37 PGP0006	2,300	100%	3,340	2,180	262,501	100%	282,684	100%	5,794	100%	43,598	100%	43,598	16,837	4,278	31,332	71.9	14,495	33.3	10,041	23.0	13.6	14.4
ITA A37 DRB1218 °	706	100%	1,541	485	54,805	100%	54,385	100%	15,614	100%	39,679	100%	39,831	15,324	4,825	28,975	72.8	13,651	34.3	3,194	8.0	41.0	59.8
ESP A37 PMP0612	995	97%	1,690	1,142	107,679	99%	107,679	99%	6,028	99%	29,265	99%	32,026	22,106	2,290	23,673	73.9	1,567	4.9	-1,217	-3.8	23.8	20.7
ITA A37 PGP1218 °	369	100%	1,099	895	49,099	100%	53,920	100%	3,786	100%	29,020	100%	29,038	9,743	4,556	18,868	65.0	9,124	31.4	1,979	6.8	51.1	21.1
ESP A37 PS1218	93	99%	876	713	11,125	100%	11,125	100%	18,252	100%	30,569	100%	28,907	14,967	1,923	20,607	71.3	5,640	19.5	5,026	17.4	221.6	28.9
ESP A37 DTS1218	160	99%	648	733	23,980	100%	23,980	100%	3,203	100%	12,370	100%	28,526	11,300	8,036	13,539	47.5	2,239	7.9	1,224	4.3	84.6	18.5
ITA A37 TM2440	67	100%	496	489	9,794	100%	9,789	100%	21,603	100%	22,480	100%	23,020	4,743	9,196	9,304	40.4	4,561	19.8	-1,218	-5.3	138.9	19.0
FRA A37 DTS2440 °	33	27%	152	148	6,676	29%	6,545	32%	7,563	17%	21,653	19%	20,867	8,833	9,145	1,015	4.9	-7,818	-37.5	-12,287	-58.9	30.8	6.8
HRV A37 PS2440 °	70	100%	651	456	13,298	100%	11,289	100%	43,887	100%	18,810	100%	20,160	7,056	4,169	9,546	47.4	2,491	12.4	-5,736	-28.5	136.4	20.9
ITA A37 HOK1218 °	122	100%	464	383	16,692	100%	16,790	100%	2,738	100%	18,669	100%	18,669	6,064	2,471	11,549	61.9	5,485	29.4	3,102	16.6	94.3	30.2
ESP A37 PS2440 °	27	100%	316	177	2,838	100%	2,838	100%	5,906	100%	23,552	100%	17,606	8,250	987	11,418	64.9	3,168	18.0	1,103	6.3	422.9	64.6
FRA A37 DFN0612	509	100%	513	323	22,633	100%	22,503	100%	952	100%	6,837	100%	15,354	7,594	1,434	10,763	70.1	3,169	20.6	1,593	10.4	21.1	33.3
ITA A37 PS40XX	10	100%	150	27	98	100%	98	100%	1,319	100%	15,185	100%	15,185	3,874	288	13,887	91.5	10,013	65.9	6,379	42.0	1,388.7	513.6
ITA A37 PS1824	43	100%	433	290	4,882	100%	4,383	100%	6,348	100%	15,090	100%	15,090	4,773	2,036	9,650	64.0	4,877	32.3	2,548	16.9	225.8	33.3
ITA A37 PS1218	93	100%	638	435	12,326	100%	12,257	100%	4,769	100%	13,331	100%	13,342	5,199	1,985	8,905	66.7	3,705	27.8	1,620	12.1	95.9	20.5
ITA A37 PS2440	37	100%	364	338	3,688	100%	3,665	100%	6,868	100%	11,546	100%	11,654	3,544	2,008	7,516	64.5	3,972	34.1	2	0.0	204.4	22.2
ITA A37 TM1218 °	39	100%	167	167	6,218	100%	6,320	100%	9,709	100%	10,698	100%	10,884	3,568	1,635	7,653	70.3	4,085	37.5	3,606	33.1	196.2	45.8
HRV A37 PS1824	53	100%	404	311	9,876	100%	8,526	100%	21,416	100%	9,540	100%	10,527	3,241	1,845	5,694	54.1	2,453	23.3	-665	-6.3	107.4	18.3
ITA A37 TM1824	38	100%	199	172	5,636	100%	5,625	100%	10,707	100%	10,039	100%	10,518	2,400	2,584	4,858	46.2	2,458	23.4	527	5.0	127.8	28.3
FRA A37 DTS1824 °	30	100%	75	49	4,156	100%	4,111	100%	2,414	100%	9,256	100%	10,148	3,100	3,419	4,167	41.1	1,067	10.5	245	2.4	138.9	84.2
ESP A37 DFN0612	84	99%	249	171	12,604	100%	12,604	100%	725	100%	3,437	100%	9,767	8,262	917	6,527	66.8	-1,735	-17.8	-2,117	-21.7	77.7	38.1
HRV A37 DTS1218	200	100%	358	227	18,726	100%	16,847	100%	2,162	100%	6,801	100%	9,578	2,062	3,687	3,987	41.6	1,924	20.1	-833	-8.7	19.9	17.6
ITA A37 DTS0612	183	100%	364	241	17,792	100%	18,386	100%	1,495	100%	9,481	100%	9,555	3,162	2,244	5,355	56.0	2,193	23.0	860	9.0	29.3	22.3
ITA A37 TBB1824	29	100%	138	138	3,804	100%	3,804	100%	1,312	100%	8,656	100%	8,935	1,562	3,657	3,023	33.8	1,461	16.4	-374	-4.2	102.8	22.0
ITA A37 HOK1824 °	42	100%	258	217	6,035	100%	6,026	100%	907	100%	6,749	100%	6,749	2,430	1,042	4,167	61.8	1,738	25.7	-1,324	-19.6	99.2	19.2
HRV A37 DFN0612	692	100%	952	302	65,520	100%	51,250	100%	575	100%	3,394	100%	6,677	2,094	953	3,841	57.5	1,747	26.2	-118	-1.8	5.6	12.7
ESP A37 PGO1218 ‘	43	95%	217	153	3,594	99%	3,594	99%	1,146	99%	6,049	99%	6,272	2,340	649	3,133	50.0	793	12.7	438	7.0	73.2	20.4
ITA A37 TBB2440	17	100%	107	94	2,360	100%	2,329	100%	1,618	100%	5,724	100%	5,779	1,214	2,499	2,149	37.2	935	16.2	-632	-10.9	126.4	22.8

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

4.8 EU Fleet activity in Other Fishing Regions: EU Distant-Water Fleet and EU Outermost Region Fleet

Although the main fishing grounds for the EU fishing fleet are located in the Baltic Sea, North Sea, Northeast Atlantic, Mediterranean and Black seas, part of the EU fleet operate in fishing areas much further afield (Figure 4.50).

This analysis is concentrated on all the other fishing regions where the EU fleets are present and operational.

These regions, collectively termed "Other Fishing Regions" (or OFR) encompass all non-EU waters within the Northeast Atlantic (FAO Area 27), such as the Eastern Arctic, and in Mediterranean & Black Sea (FAO Area 37), and all fishing areas outside these areas (Northwest Atlantic - FAO Area 21; Southwest Atlantic – FAO Area 41; Southeast Atlantic – FAO Area 47; Indian Ocean – FAO Areas 51 and 57; etc.), including all EU-waters in outermost regions (excluding the Portuguese outermost region of the Azores).

The main sub-regions within this are:

- '**Other Regions**', which cover the South and Central Atlantic, Indian Ocean, Pacific Ocean and Antarctica, where the large distant water fleets exploit tuna among a number of other species;
- '**Eastern Arctic**', where mainly cod, queen crab, mackerel and herring fisheries are exploited;
- '**Northwest Atlantic'**, where redfish, halibut, cod and other demersal species are exploited and;
- **'Outermost Regions'**, which refers to territories belonging to EU MS outside Area 27 and include the seven French territories of Guadeloupe, French Guyana, Martinique, Mayotte, Réunion, Saint Martin and Saint-Barthélemy, the Canaries (autonomous community belonging to Spain), and Madeira (autonomous region of Portugal). For this analysis, the Portuguese Outermost region of the Azores is not included as it is located in the Northeast Atlantic (FAO Area 27).

  Their respective geographical locations (Atlantic, Caribbean and Indian oceans) enable the EU to have the world's largest maritime territory with an exclusive economic zone covering 25 million km².

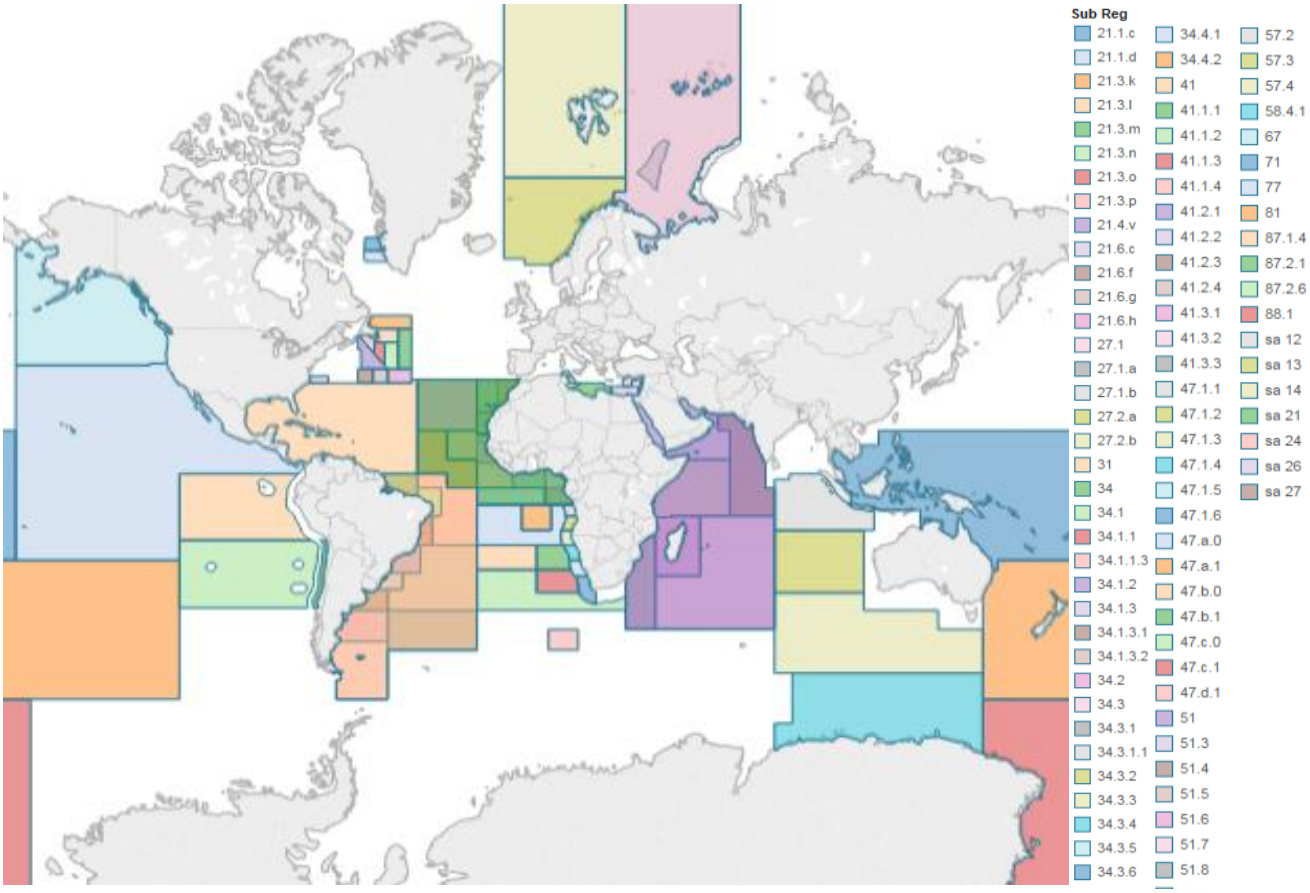
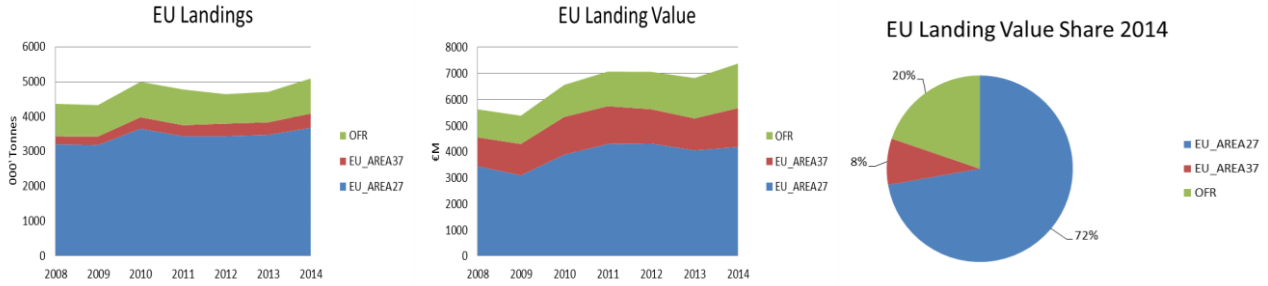


Figure 4.50 Map, highlighting FAO fishing areas in *Other Fishing Regions* (OFR) exploited by EU fishing fleets in 2014.

MS fleet dependency on fisheries in the region

According to the available data, around 20% of all EU fleet production (in landed value) originated from these *Other Fishing Regions* in 2014 (Figure 4.51).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.51 Evolution of landing weight, landing value and 2014 value share by supra region: Area 27, Area 37 and OFR

Fishing activity in the *Other Fishing Regions* is carried out by MS distant-water (or high-sea) fleets or their Outermost region fleets.

EU high seas or distant-water fleet According to the definition applied in the AER, the EU distant-water fleet is defined as vessels over 24m operating predominately in *Other Fishing Regions*. The EU distant-water fleet operates in international waters (high seas) and through bilateral agreements with countries outside the EU. These include fishing areas in the North, South and Central Atlantic, Indian, Pacific and Antarctic (or Southern) oceans.

The EU has 2 types of fishing agreements with non-EU countries: (1) sustainable fisheries partnership agreements (SFPA) – the EU gives financial and technical support in exchange for fishing rights, generally with southern partner countries and (2) the "northern agreements" – these are excluded from the Other Fishing Regions analysis and instead included, by definition, in either the North Atlantic or the North Sea regions.

The EU has currently 15 active SFPAs protocols in force with third countries:11 tuna agreements: Cape Verde, Ivory Coast, Gabon, Liberia, Sao Tomé and Principe, Senegal, Comoros, Madagascar, Mauritius, Seychelles, and Cook islands and 4 mixed agreements: Guinea-Bissau, Mauritania, Morocco, and Greenland.

Figure 4.52 shows the cost of EU SFPAs by fishing region for the period 2013-2018. The reduction in costs in later years is due to the expiry of agreements and not necessarily reduction in costs of agreements.

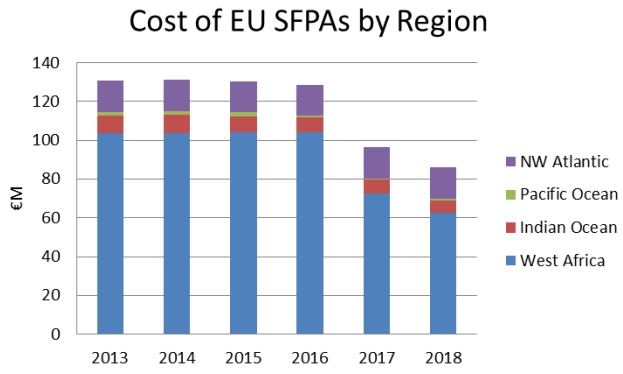


Figure 4.52 estimated cost of SFPAs annually.

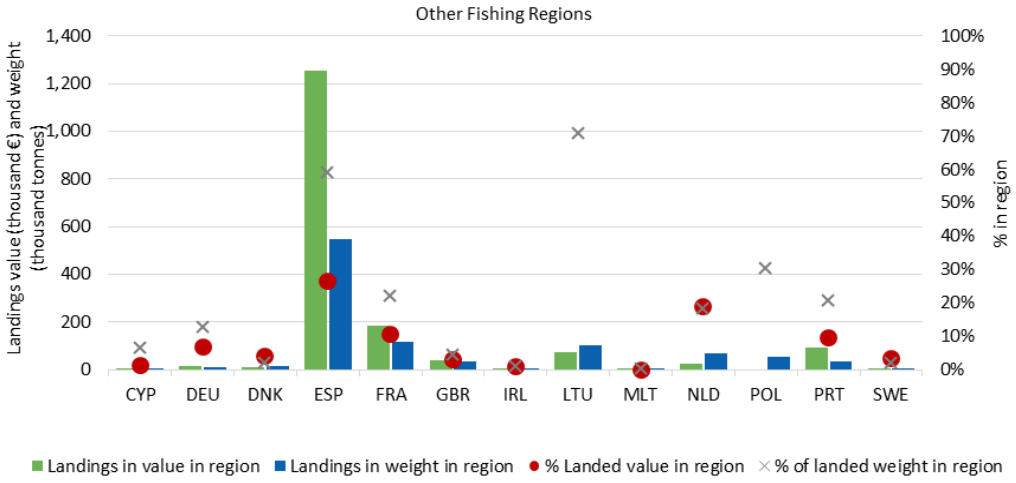
Source: own calculation using data from **http://ec.europa.eu/fisheries/cfp/international/agreements/index_en.htm**.

Note: costs reduce in later years due to the expiry of agreements and not necessarily reduction in costs of agreements.

EU Outermost Region fleets While the majority of the production in *Other Fishing Regions* is the result of Member States high seas fleets (usually over 40m), several MS (France, Spain and Portugal) also have a substantial fleet, consisting mainly of small to large-scale coastal vessels, operating in the various EU outermost regions.

According to DCF data, there were 13 EU MS distant water or outermost region fleets operating in *Other Fishing Regions* (OFR) in 2014: Spain, France, Lithuania, Portugal, Poland, UK, Germany, Netherlands, Denmark, Cyprus, Malta, Sweden and Ireland. Fishing activity for the Italian distant-water fleet has been suspended since 2013. Estonian and Latvian fleets did not provide DCF data in 2014; however FAO data shows activity in OFR. Malta and Sweden are generally excluded

from any further analyses due to the low activity levels observed (e.g. the Swedish fleet activity in OFR accounted for less than 20 days at sea in the Eastern Arctic region; only 8 days at sea were reported for the Maltese fleet in non-EU waters in 2014) (Figure 4.52).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.53 Importance of the *Other Fishing Regions* for Member States' fisheries in terms of landings in weight and value (2014).

All 13 MS submitted landings weight and only one, Poland, did not submit value of landings. Due to confidentiality issues, Poland and Germany did not report economic data for their distant water fleets while Estonia and Latvia did not provide any data on their OFR fleets.

Due to missing or incomplete data submitted for some Member State fleets operating in *Other Fishing Regions*, the results presented do not convey the full extent of the EU fisheries in the region. Nevertheless, the provision of DCF data for the OFR for 2014 by EU MS shows a marked improvement on 2013 where only 9 MS of 13 provided data. For 2014, 11 MS from 13 provided economic data, at least in part.

To mitigate some of the data gaps for several EU fleet segments operating in *Other Fishing Regions*, this analysis is complemented with FAO statistics where possible.

The landings of the Estonian and Latvian fleets together compose around 5% of total landings therefore landings presented here represent around 95% of the total. Poland does not provide landings value (landing weight provided by Poland amounts to ~4% of total landings) therefore the landing value presented here represents around 91% of the total.

Fisheries management in the region

Regional Fisheries Management Organisations (RMFOs)

Fishing in international waters outside the EEZ is regulated by RFMOs and their member countries. These members include bordering states as well as countries that are heavily involved in fishing in a given marine region. EU Member States are represented in numerous RFMOs through the European Commission. Annual negotiations are held to determine which countries are allowed to catch how much of a species. Almost all commercially relevant fish species are covered by the RFMOs. There are specific RFMOs for the management of certain fish species, for example, tuna, salmon and pollock.

RFMOs that manage fish stocks by region include: North Atlantic Salmon Conservation Organization (NASCO); South East Atlantic Fisheries Organisation (SEAFO); South Indian Ocean Fisheries Agreement (SIOFA); South Pacific Regional Fisheries Management Organisation (SPRFMO); Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), etc.

RFMOs that manage highly migratory fish species, mainly tuna include: International Commission for the Conservation of Atlantic Tunas (ICCAT); Indian Ocean Tuna Commission (IOTC); Western and Central Pacific Fisheries Commission (WCPFC); Inter-American Tropical Tuna Commission (IATTC); Commission for the Conservation of Southern Bluefin Tuna (CCSBT), etc.

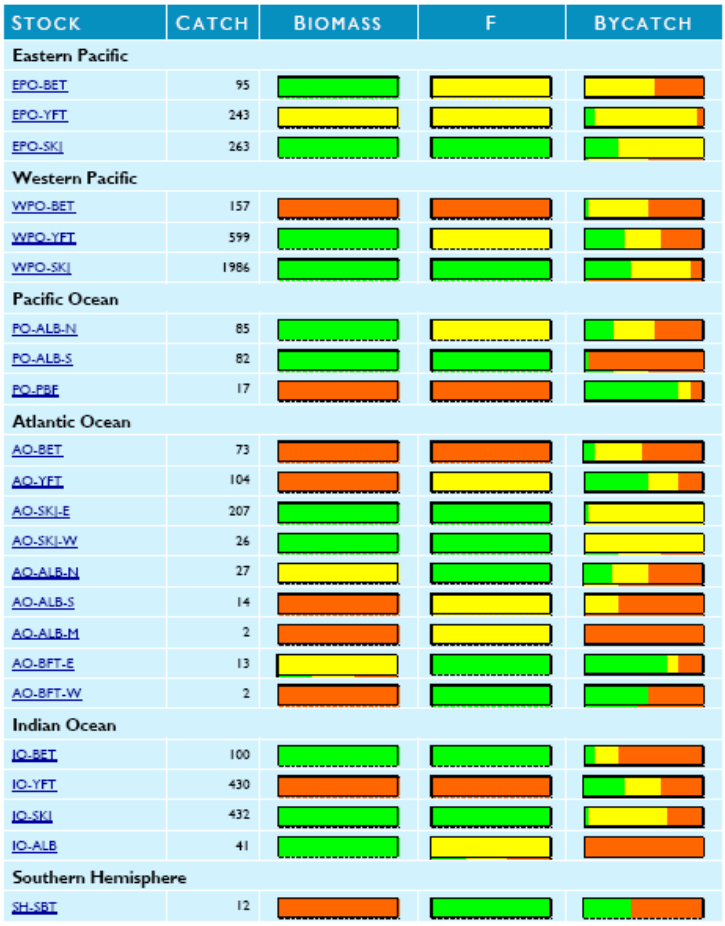
Outermost regions/national regional fisheries regulations

Apart from TACs for all main species/stocks, EU regulations comprise specific fishery technical regulatory measures, such as mesh sizes, minimum landing sizes, by-catch limitations as well as periods and areas closed for fishing. Coastal and offshore fisheries are mainly regulated by each MS country through their national legislation (France, Spain and Portugal).

Status of important stocks

Some of the most important stocks in the OFR region include tuna species, such as skipjack tuna, yellowfin tuna and bigeye tuna. Figure 4.54 shows the latest advice for 23 commercially important tuna stocks, sorted by ocean or ocean region and catch is for 2014 in thousands of tonnes.

The most important stocks for EU distant-water fleets, in particular Spain and France, include yellow fin and skipjack in the Atlantic Ocean as well as in the Eastern and Western Pacific and Indian oceans. Albacore in the Atlantic is also important. Of these, stocks of skipjack are all assessed within safe biomass levels with fishing mortality at MSY, while yellow fin stocks are mostly fished above MYS and low biomass levels.



Source/from: ISSF. 2016. ISSF Tuna Stock Status Update, 2016: Status of the world fisheries for tuna. ISSF Technical Report 2016-05. International Seafood Sustainability Foundation, Washington,D.C., USA.

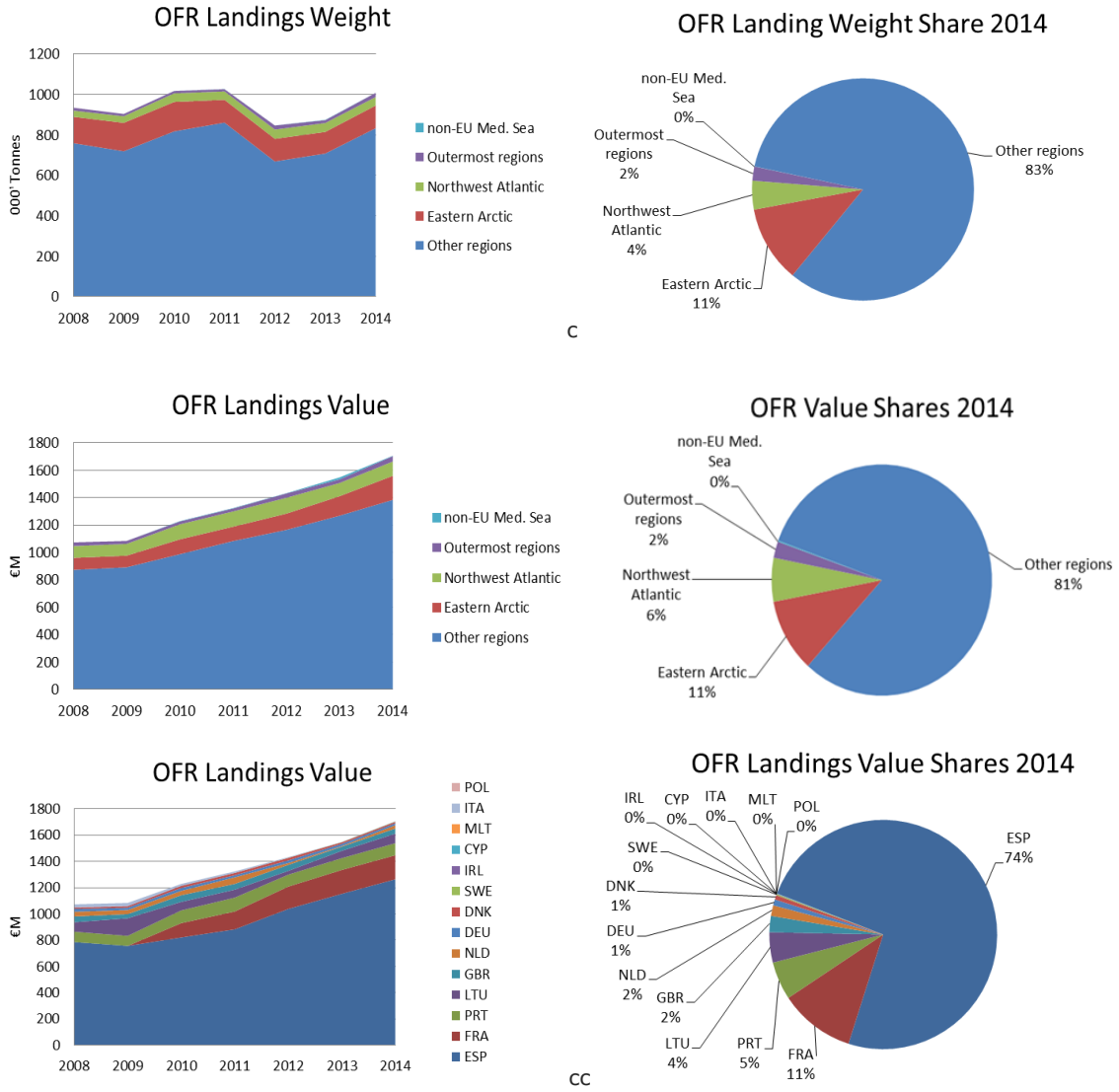
Figure 4.54 Biomass, Fishing Mortality (F) and Environmental Impact ratings for 23 tuna stocks

Landings: situation in 2014 and recent developments

In 2014, landings in weight generated by the EU distant-water fleet covered (excludes Estonia and Latvia) was around 984 thousand tonnes with the majority (83%) coming from *Other Regions*, and the remaining part caught from Eastern Arctic (11%), Northwest Atlantic (4%), Outermost regions (2%), and less than 1% for non-EU Mediterranean waters.

In terms of landed weight, Spain (around 550 thousand tonnes; +3% on 2013), France (over 100 thousand tonnes; +23% on 2013), Lithuania (103 thousand tonnes; +45% on 2013), and the Netherlands (70 thousand tonnes; +476% on 2013) were the leading distant water fleets, together accounting for 85% of the total weight landed. Compared to 2013, landed weight increased for all of the major MS fleets, with the Dutch fleet recovering from dramatic falls in landings in 2012 and 2013.

In terms of landed value, the Spanish fleets dominate the fishing activity in the OFR with €1.26 billion (+10% on 2013); followed by France (€183 million; -5% on 2013), Portugal (€92 million; +7% on 2013) and Lithuania (€91 million; +32% on 2013).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.55 Landings weight and value by the EU distant water fleet by region (top and middle) in Other Fishing Regions and landing value by Member State (bottom), 2014

Note: excludes Estonia and Latvia for landings and landings value and Poland for landings value; according to FAO data, the Estonia fleet would contribute to 0.3% of the landed weight and the Latvian fleet a further 5%.

The two most important distant water fleet segments in terms of landing value were the Spanish purse seiners over 40m (€417 million; -12% on 2013) and demersal trawlers over 40m (€396 million; +51% on 2013), accounting for 25% and 23% of the total OFR revenue generated, respectively. The French purse seiners over 40m were the third most important fleet segment generating €143 million, an increase of 5% on the previous year. The Spanish demersal trawlers 24-40m, generated €142 million in revenue (+31% on 2013).

Landings by sub-regions in OFR

The landed weight, value of landings and share of value by each MS fleet operating in OFR by region is presented in Figure 4.56.

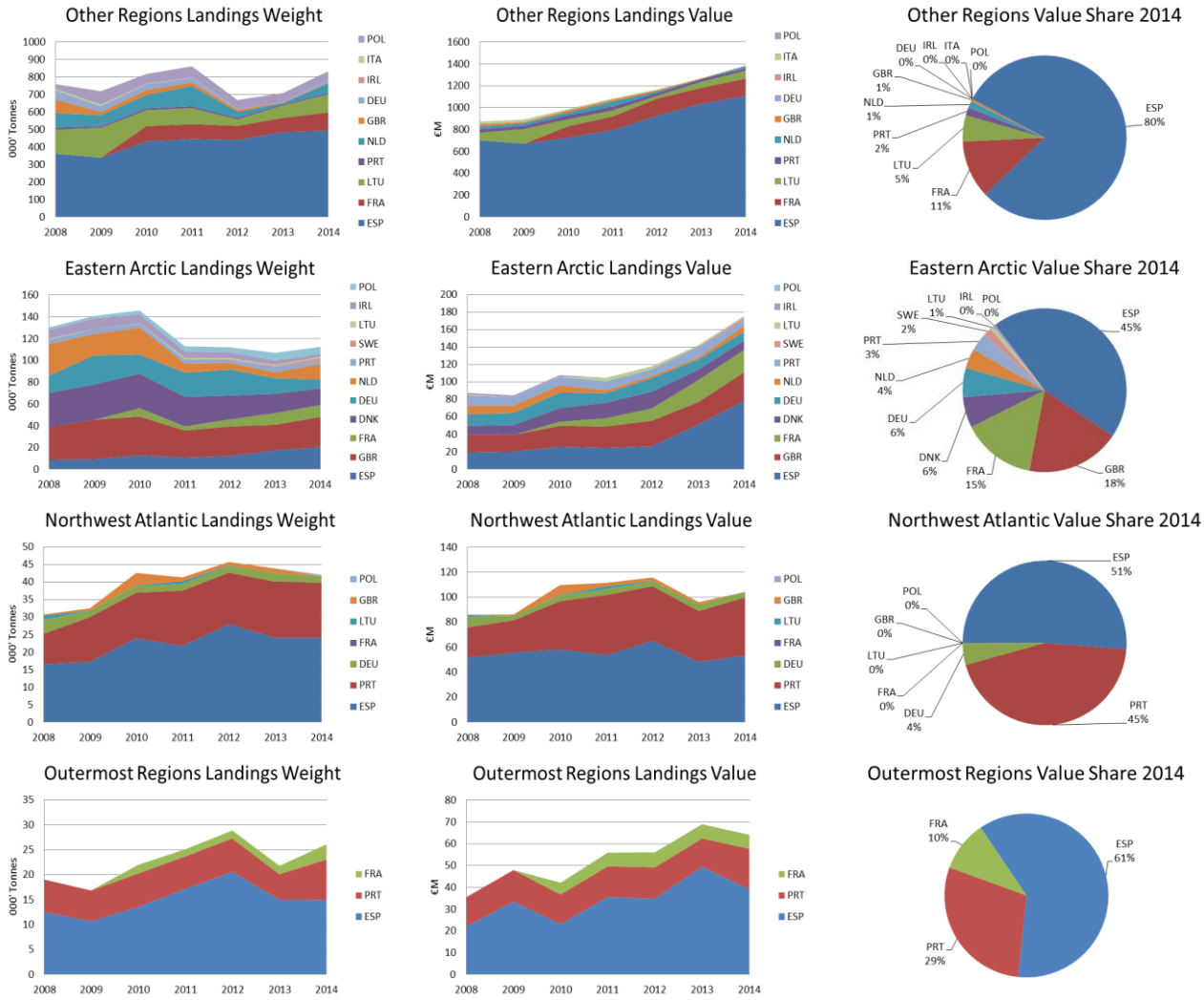
In *Other Regions*, the Spanish fleet dominates total landings (484 thousand tonnes; +2% on 2013) and value of landings (€1.08 billion; +27% on 2013) with 69% and 80% of the totals respectively of this region. The Lithuanian fleet accounted for 15% of the landing weight here (102 thousand tonnes; +45% on 2013) however the income from these landings surpassed €74 million, representing only 7% of total value. The French fleet landed 101 thousand tonnes in 2014 (+29% on 2013) and generated €144 million (-21% on 2013), accounting for 7% and 6% of the regional total landings and value.

The most important fleet segment active here is the Spanish purse seiners over 40m (registered in OFR) accruing a landing value of €419 million (-12% on 2013), followed by the Spanish demersal trawlers over 40m (€399 million; +51% on 2013). The French purse seiners over 40m generated €144 million in 2014 (+5%). The Spanish demersal trawlers 24-40m also generated €144 million (+31% on 2013).

In the Eastern Arctic sub-region, the UK fleets have the highest landings however the Spanish fleets generate the highest income from landings of €52 million (+45% on 2013). The UK fleet generated €35 million (+33% on 2013), followed by the French fleet (€22 million; +5%). The most important fleet in terms of revenue was again the Spanish demersal trawler over 40m segment (registered in Area27) at €52 million (+45% on 2013), followed by the UK demersal trawlers over 40m (€27 million; +35% on 2013) and the French demersal trawlers over 40m (€22 million; +5% on 2013).

In the Northwest Atlantic region the Portuguese and Spanish fleets account for over 95% of total landing weight and value with the rest being exploited by the German fleet. The Portuguese demersal trawler over 40m segment generated the most revenue in this region (€48 million; +23% on 2013), followed by the Spanish demersal trawler over 40m homologous segment (€26 million; +4% on 2013). The German demersal trawl segment over 40m generated over €4 million in this sub-region (-15% on 2013).

For the Outermost Regions the Spanish fleets account for 72% of the total income from landings, Portugal accounts for 16% and France 12%. The Spanish under 10m segment using passive and active gears generated €15 million in this region (-23% on 2013), followed by the French hook and line segment 12-18m (€6 million; +13%), the Portuguese hook and line segment 12-18m (€6 million) and the Portuguese hook and line segment 24-40m (€6m; +9% on 2013).



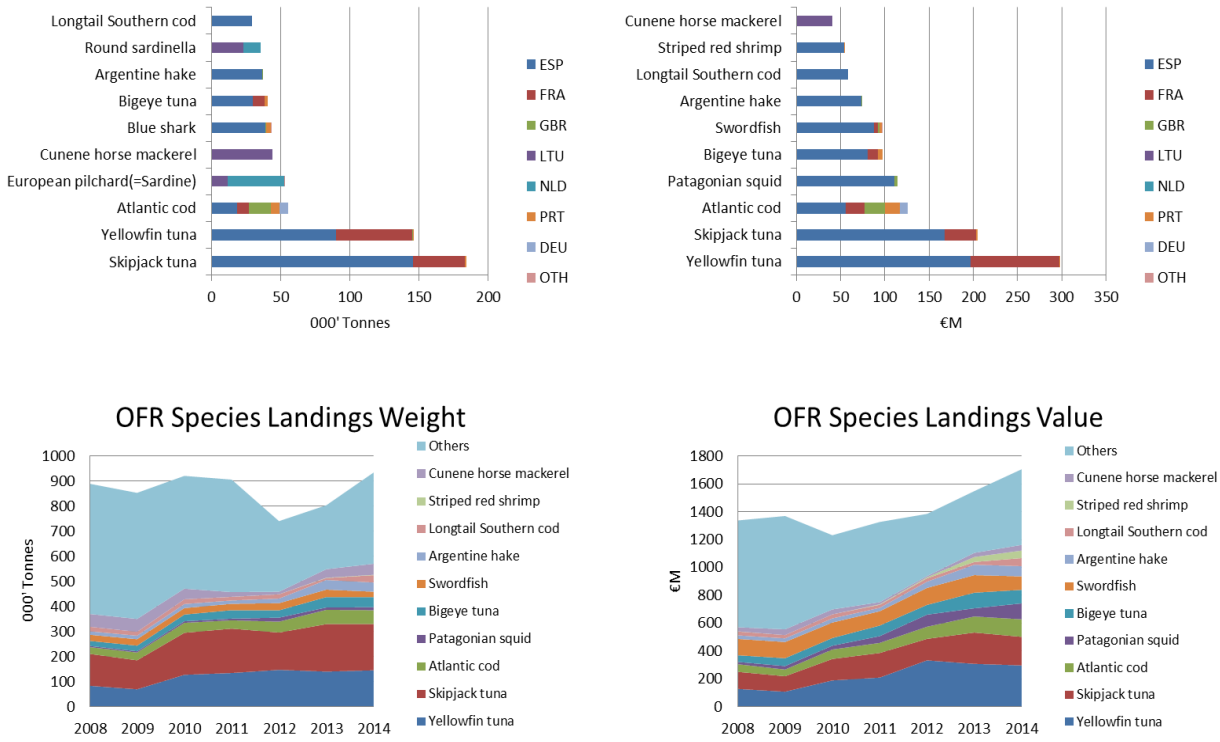
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.56 Landing weight, landings value and share of value in 2014 by MS for each sub-region of OFR

Top species landed

Based on the data available, in 2014 skipjack tuna (184 thousand tonnes) was the most landed species by MS fleets operating in OFR, followed by yellowfin tuna (146 thousand tonnes) and Atlantic cod (55 thousand tonnes) (Figure 4.57).

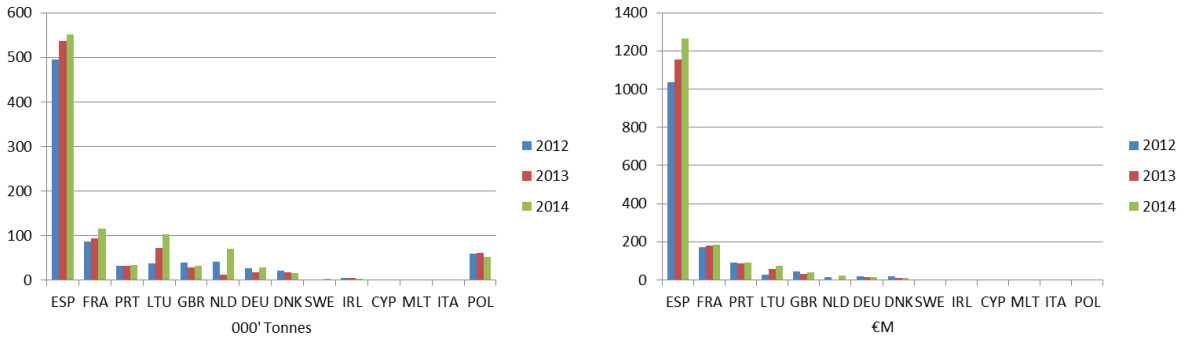
In terms of value, the 5 most important species in 2014 were: yellowfin tuna (€298 million) followed by skipjack tuna (€205 million), Atlantic cod (€126 million), Patagonian squid (€114 million) and bigeye tuna (€97 million).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.57 List of the top 10 species in terms of weight and value of MS fleets operating in the OFR in 2014 with evolution of species landing weight and value from 2008-2014.

Figure 4.58 provides the landing in weight and value by MS fleets operating in the OFR for the period 2012-2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

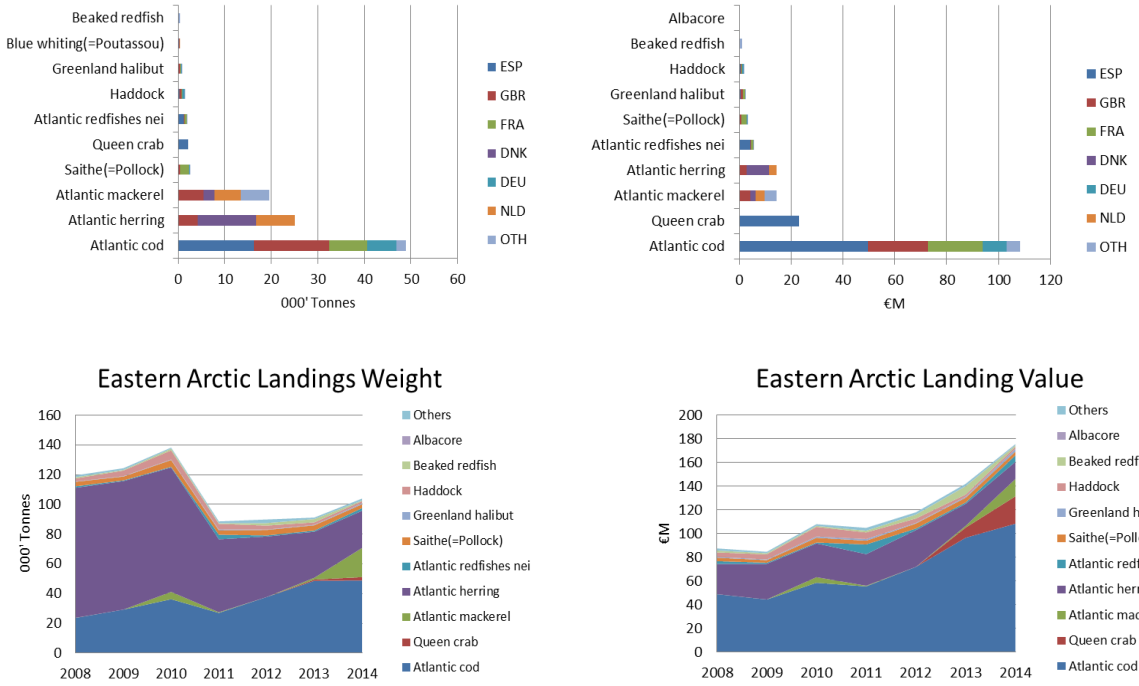
Figure 4.58 Value (million €) and weight of landings (thousand tonnes) by MS, generated by distant water fleet in OFR in 2012-2014

Top species by region

Eastern Arctic

Based on the data available, in 2014 Atlantic cod (49 thousand tonnes) was the most landed species, followed by Atlantic herring (25 thousand tonnes) and Atlantic mackerel (20 thousand tonnes) (Figure 4.59).

In terms of value, the 5 most important species in 2013 were: Atlantic cod (€108 million) followed by queen crab (€23 million), Atlantic mackerel (€15 million), Atlantic herring (€14 million), and Atlantic redfish (€5 million) (Figure 4.59).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

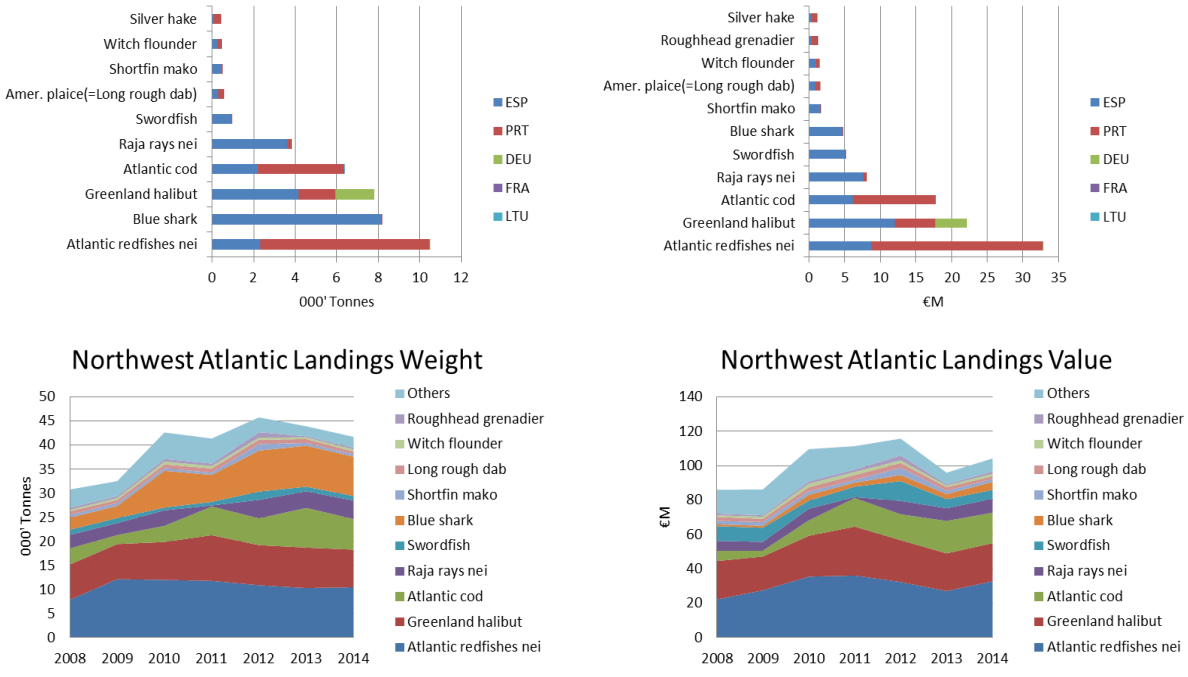
Figure 4.59 List of the top 10 species in terms of weight and value by MS fleets operating in the Eastern Arctic region in 2014 and evolution of species landings and value.

Note: value of landings missing for Poland

NW Atlantic

Based on the data available, in 2014 Atlantic redfish (10 thousand tonnes) was the most landed species, followed by blue shark (8 thousand tonnes) and Greenland halibut (8 thousand tonnes) (Figure 4.60).

In terms of value, the 5 most important species in 2014 were: Atlantic redfish (€33 million), followed by Greenland halibut (€22 million), Atlantic cod (€18 million), raja rays (€8 million) and swordfish (€5 million) (Figure 4.60).



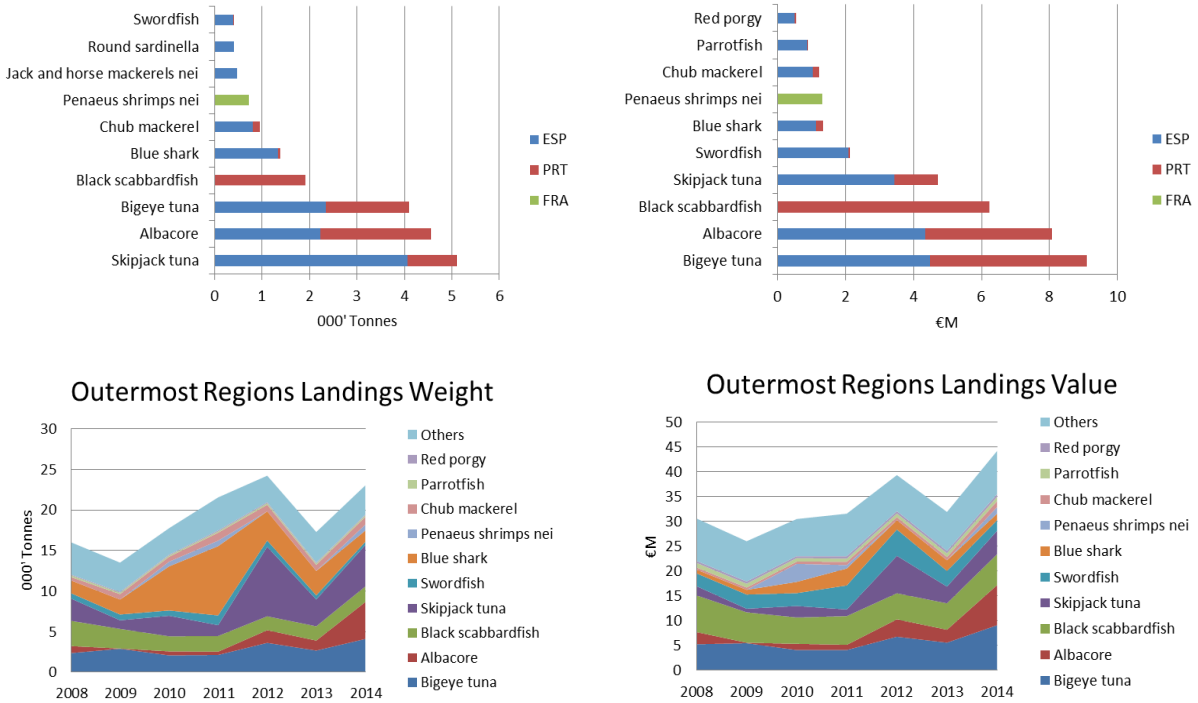
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.60 List of the top 10 species in terms of weight and value by MS fleets operating in the NW Atlantic region in 2014 and evolution of species landings and value.

Outermost regions

Based on the data available, in 2014 skipjack tuna (5 thousand tonnes) was the most landed species, followed by albacore (5 thousand tonnes) and bigeye tuna (4 thousand tonnes) (Figure 4.61).

In terms of value, the 5 most important species in 2014 were: bigeye tuna (€9 million), followed by albacore (€8 million), black scabbard fish (€6 million), skipjack tuna (€5 million) and swordfish (€2 million) (Figure 4.61).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.61 List of the top 10 species in terms of weight and value by MS fleets operating in the EU outermost regions in 2014 and evolution of species landings and value.

Note: total landings weight and landings value for outermost regions by species is a subset of the totals

'Other regions'

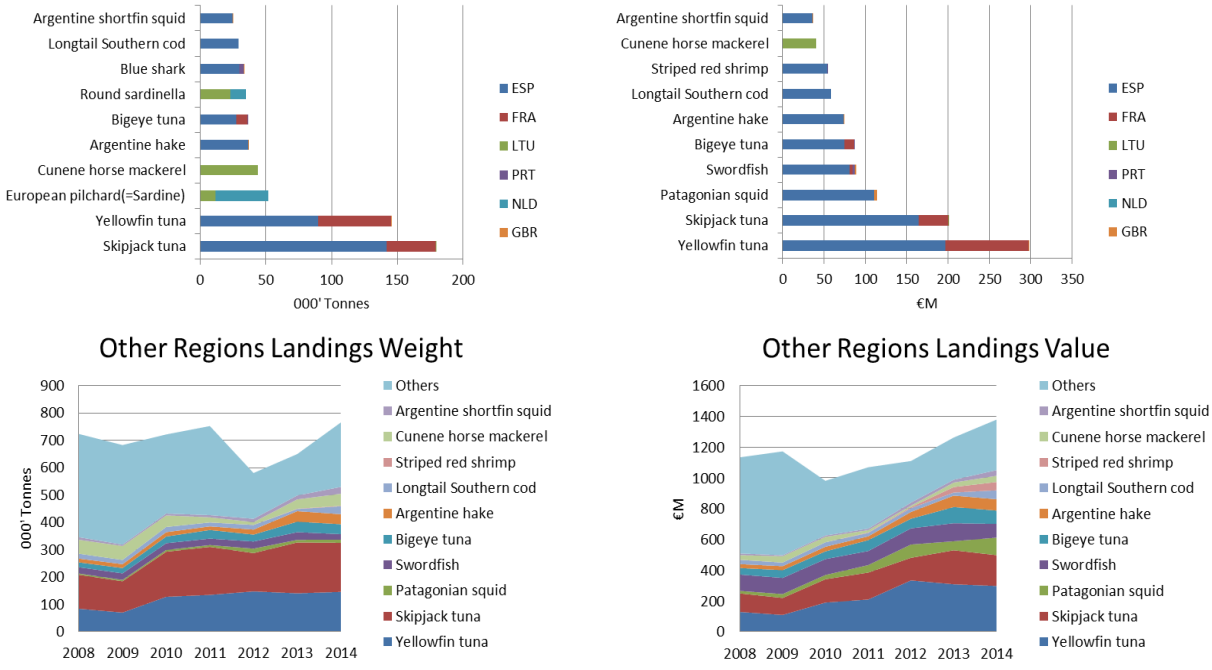
Within this chapter of OFR (*Other Fishing Regions*) of the EU there is one "sub-region" termed "Other Regions" which spans the Atlantic, Indian, and Pacific among other oceans. The 'Other Regions' account for 81% of the total value generated in 2014 within the OFR.

In this section the 'Other Regions' will be analysed by its constituent sub-regions in more detail than before.

Based on the data available for the entire 'Other Regions', in 2014 skipjack tuna (179 thousand tonnes) was the most landed species, followed by yellowfin tuna (146 thousand tonnes) and Cunene Horse Mackerel (52 thousand tonnes) (Figure 4.62).

In terms of value, the 5 most important species in 2014 were: yellowfin tuna (€297 million), followed by skipjack tuna (€200 million), Patagonian squid (€114 million), swordfish (€89 million) and Bigeye tuna (€87 million) (Figure 4.62).

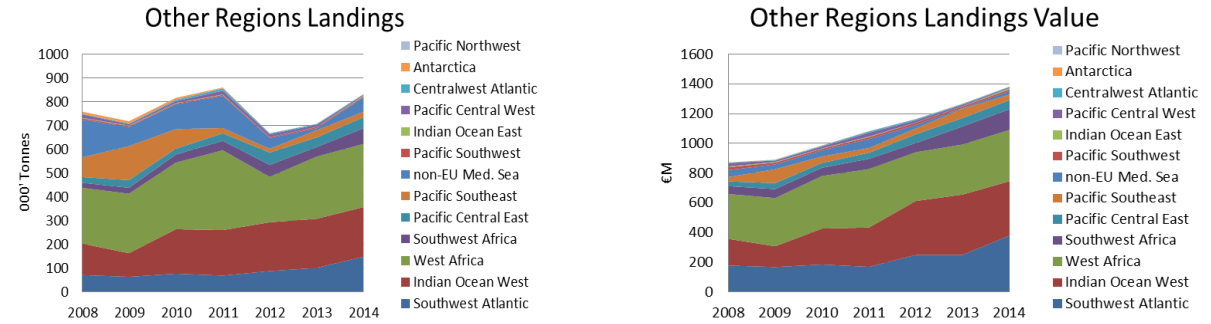
In the figures below the total landings and value generated in the 'Other Regions' is shown by sub-region (Figure 4.63). In 2014 the value generated from the southwest Atlantic grew 52% to €380 million, making this sub-region the most valuable within the OFR. Landings value fell in the Indian Ocean West sub-region by 10% to €367 million, falling into second place in OFR. Value generated in the West Africa sub-region remained relatively stable (+2%) at €345m. Landings value from the southwest Africa sub-region grew by 15% in 2014 to €139 million. These four sub-regions form circa 90% of total OFR landings value.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.62 Proportion of the top 4 species in terms of weight and value landed by MS fleets operating in the Other regions, 2013

Note: Landings value listed by species in early years may not add to the total figures by MS

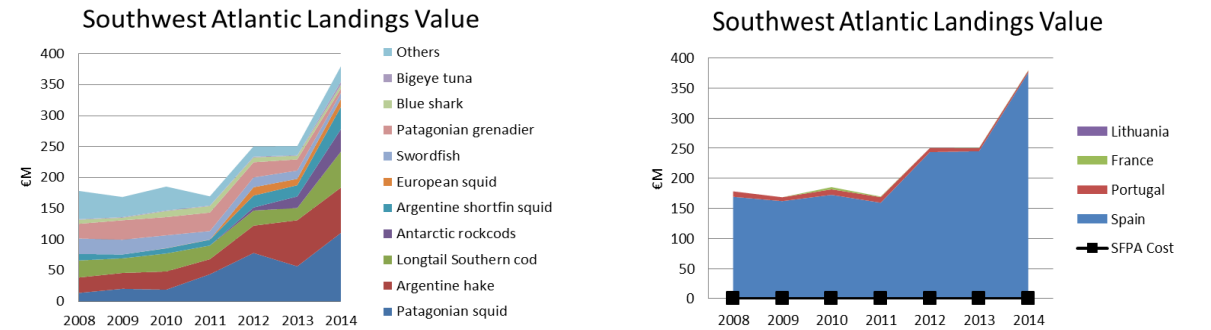


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.63 Breakdown of Other Regions landings weight and value by sub-region 2008-2014

When 'Other Regions' is disaggregated a clearer picture can be seen on the relevant fisheries being exploited by EU fleets along with the main MS active in each sub-region (Figure 4.64).

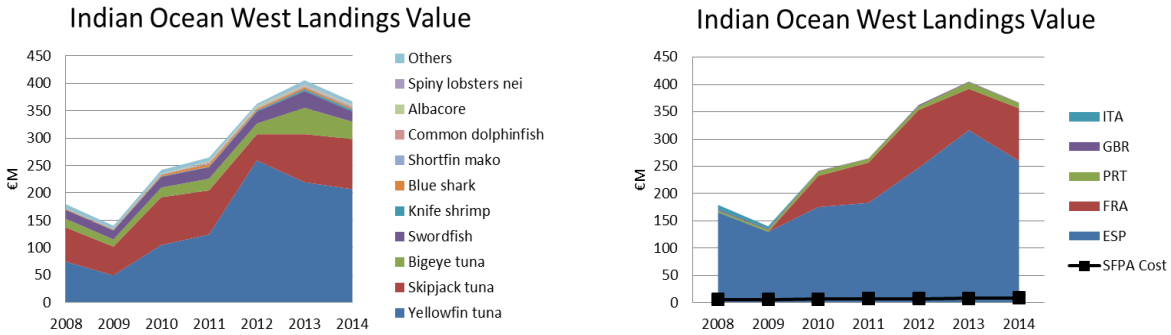
In the Southwest Atlantic the prominence of various squid species has increased over time to form 42% of total value generated in the sub-region in 2014. Landings of longtail cod and rockcod grew significantly in 2014. The value of Argentine hake remained high after the strong growth of previous years. The Spanish fleets account for virtually all value generated in this region. No costs are involved via bilateral agreements of SFPAs for this region.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.64 Landings value by species and MS for Southwest Atlantic sub-region of 'Other Regions', including costs of sustainable fisheries partnerships agreements, 2008-2014

For the Indian Ocean West sub-region the value generated is dominated by the three tuna species (90%). The value of yellowfin fell by 6%, skipjack grew by 4% and bigeye fell 34% in 2014. Spanish fleets generated 71% of the total value in the region, followed by French fleets (26%) and the Portuguese fleets (3%). The cost of SFPAs in this region has been estimated at ~€9 million in 2014 (2% of total landing value). Over 80% of the value generated here comes from FAO area 51.5, waters east of Somalia.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.65 Landings value by species and MS for Indian Ocean West sub-region of 'Other Regions', including costs of sustainable fisheries partnerships agreements, 2008-2014

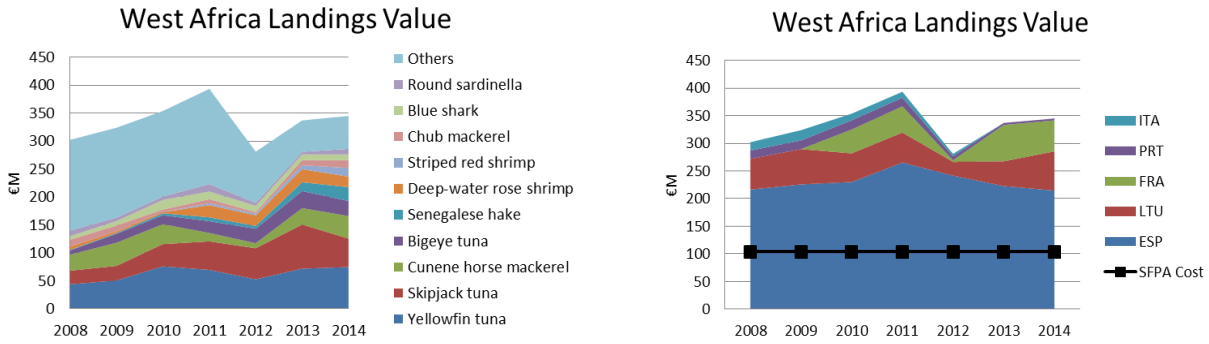
In the West Africa sub-region the tuna fisheries are again amongst the most important. However there are other important pelagic and demersal fisheries exploited by EU fleets making this area quite diverse.

Yellowfin, skipjack and bigeye tuna landings generate 44% of total value in this sub-region with 2014 value stable for yellowfin (+4%) and falling for skipjack (-36%) and bigeye (-11%). The value of yellowfin tuna is shared equally between Spanish and French fleets while Spanish fleets account for over two thirds of the skipjack value and over 85% of bigeye value.

The pelagic fisheries in this sub-region are exploited exclusively by the Lithuanian fleet capturing all the value from the Cunene horse mackerel, chub mackerel and round sardinella fisheries respectively.

The demersal fisheries such as Senegalese hake, rose shrimp and red shrimp are exploited exclusively by Spanish fleets.

Overall, the Spanish fleets account for 62% of total value in this sub-region, followed by the Lithuanian fleet (21%), the French fleets (16%) and the Portuguese fleets (1%). The cost of SFPAs in this sub-region is estimated at €104m in 2014 (30% of total landing value),

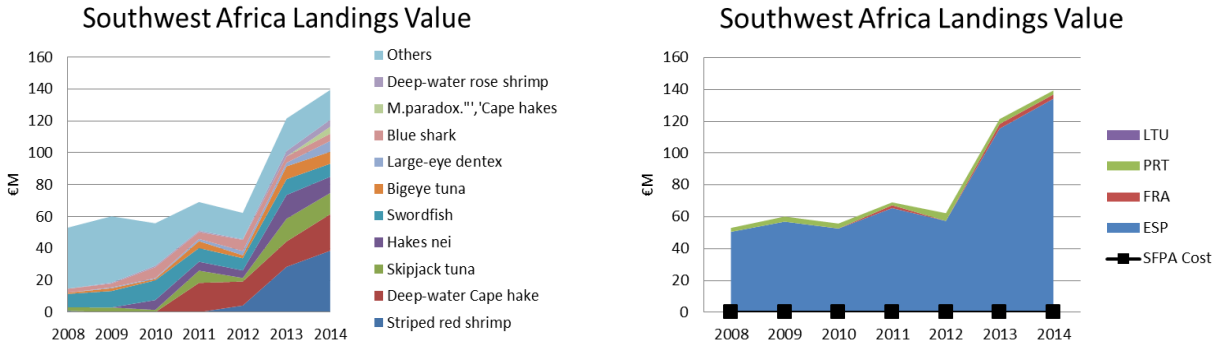


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.66 Landings value by species and MS for West Africa sub-region of 'Other Regions', including costs of sustainable fisheries partnerships agreements, 2008-2014

In the southwest Africa sub-region landing value has more than doubled over the last two years, 2012-2014. The main cause of this has been due to the very strong growth of the striped red shrimp fishery which is now the most important fishery in the area. Shallow water cape hake and swordfish were once the main fisheries however they have declined while the fisheries for shrimp, deep water hake, skipjack tuna, other hakes and bigeye tuna have all increased over the years. The Spanish fleets dominate the value generated here (96%).

No SFPAs are in place with countries in this sub-region. Over 70% of the value generated here comes from waters off Angola.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.67 Landings value by species and MS for Southwest Africa sub-region of 'Other Regions', including costs of sustainable fisheries partnerships agreements, 2008-2014

Description of relevant fisheries in the region

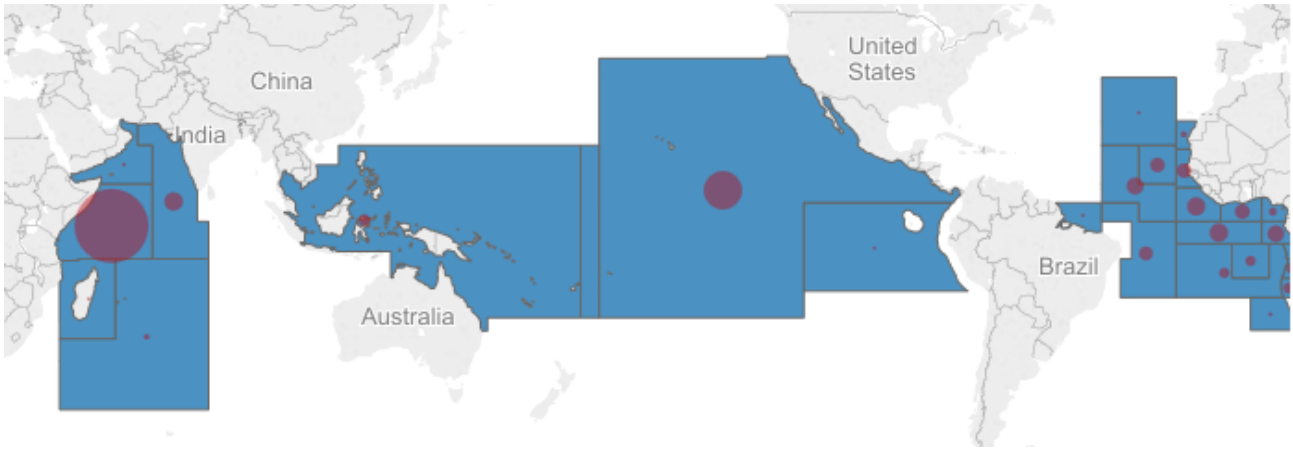
SPAIN[16]

In 2014 Spanish "Other Fishing Regions" (OFR) fleet was composed by a total of 718 vessels (this figure includes 143 distant water vessel, 32 large scale vessels and 543 small scale vessels) with a total capacity of 47 000 tonnes (the majority of this capacity, 42 000 tonnes, belongs to the long-distance fleet over 40 meters). The total full time employment (FTE) of this fleet was 5 759 employees in 2014 (an average of 8 people by vessel although in the case of the Spanish distant water fleet over 40 meters the average crew is 32 people explained by the large size and capacity of the vessels characterising this segment).

The total weight landed by the Spanish fleet operating in the 'Other Fishing Regions' in 2014 was over 550 600 tonnes of fish with an approximated total value of €1.255 billion (an average value of 2.2 €/kg). This fleet was very profitable with a gross profit around €365 million (the majority of this profit corresponds to the Spanish distant-water fleet segment which had almost €328 million in 2014. The gross margin on revenues was 29% but it was better for the distant-water fleet with 35% since in the OFR fleet there are small vessels fishing in the Canary Islands (outermost region) what reduces the overall gross margin of this fleet. In the case of the distant-water fleet, the revenues and profits have increased significantly in the last three years (2012, 2013, and 2014) with net profit margin reaching 30% in 2014.

The Spanish distant-water fleet (vessels over 40 meters) is highly diversified with a broad range of vessel types targeting different species predominantly from West Africa and the Indian Ocean. The fleet targets a variety of species but in particular large pelagic fishes, such as blue shark, bigeye tuna and swordfish. By type of gear, the Spanish Long-Distance fleet is composed of purse seiners (PS), demersal trawlers (DTS), and vessels using passive gear (mainly long-liners).

Purse seiners (PS) over 40m – The Spanish fleet of purse seiners consisted of 33 vessels in 2014, operating in the Indian Ocean and Western Africa (other regions), the Pacific and the Southwest Africa. The Indian Ocean is the most important region for this segment followed by West Africa, where they mainly target tuna species. Bigeye tuna made up 7% of the fleet segments landed value in 2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.68 Activity range of the Spanish distant-water purse seiners (OFR PS40XX) in 2014. Circle size indicates the importance of the fishing region in terms of landed weight.

16 Includes data not captured by the methodology due to incomplete relevant data and other information not provided under the DCF.

Table 4.31 Dependency on stocks with TACs: Spanish distant-water purse seiners over 40 m in 2014.

Dependency by fleet

Fleet segment	Species name	Stock	Dependency	Landings tot	Employment tot	GVA tot	Landings stock	GVA stock
ESP OFR PS40XX	Albacore	ALB/AS05N	0,001%	419,40M	1.226	190,00M	0,003M	0,00M
		ALB/AN05N	0,003%	419,40M	1.226	190,00M	0,013M	0,01M
	Bigeye tuna	BET/ATLANT	6,951%	419,40M	1.226	190,00M	29,154M	13,21M

The average full time employment (FTE) is 48 employees by vessel in 2014. The total landings by this fleet segment was 250 thousand tonnes and the value of these landings was almost €417 million. This fleet segment was very profitable and reported a gross profit of almost €87 million in 2014 with a gross margin on revenues around 24% and over €60 million net profit for a net profit margin over 16%.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.69 Landings value and share of landing in 2014 by sub-region for ESP OFR PS40XX

Demersal trawlers (DTS) over 40m – This segment of the fleet operates in different distant regions such as the Northwest Atlantic, West Africa and Southwest Atlantic, this latter region accounting for the vast majority of the value generated by this segment (Figure 4.70).

It is composed by 30 vessels which fished in 2014 around 150 thousand tonnes with a landing value of €396 million in total and employed, in total, over 900 FTEs. This segment of the fleet is profitable reporting a gross profit of over €68 million in 2014 with a gross margin on revenues between 31%. Net profit for this segment was also very high at €59 million for a net profit rate of 27%.

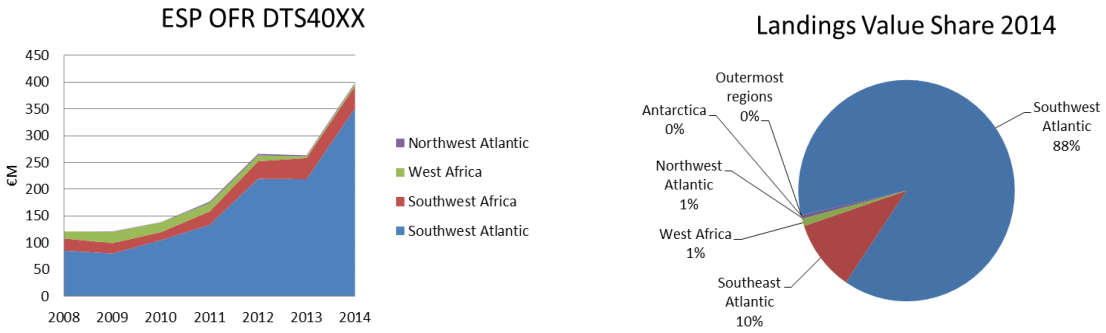
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.70 Activity range of the Spanish distant-water demersal trawlers over 40m (OFR DTS40XX) in 2014. Circle size indicates the importance of the fishing region in terms of landed weight.

Table 4.32 Spanish distant-water purse seiners over 40m: dependency on stocks subjected to TACs in 2014.

Dependency by fleet

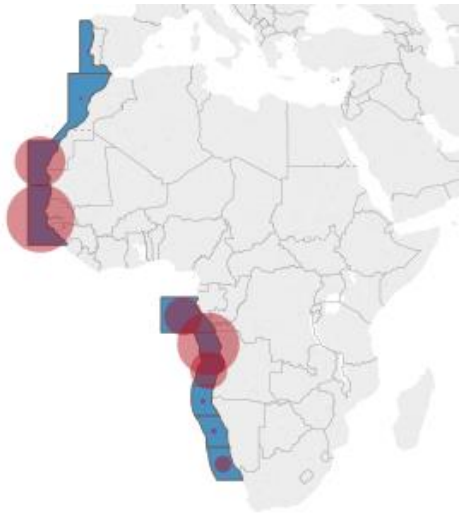
Fleet segment	Species name	Stock	Dependency	Landings tot	Employment tot	GVA tot	Landings stock	GVA stock
ESP OFR DTS40XX	Amer. plaice(=Long rough dab)	PLA/N3LNO.	0,007%	398,99M	1.042	276,50M	0,028M	0,02M
	Atlantic cod	COD/N3M.	0,002%	398,99M	1.042	276,50M	0,010M	0,01M
		COD/N3NO.	0,006%	398,99M	1.042	276,50M	0,026M	0,02M
		COD/N2J3KL	0,001%	398,99M	1.042	276,50M	0,005M	0,00M
	Atlantic redfishes nei	RED/N3O.	0,000%	398,99M	1.042	276,50M	0,000M	0,00M
		RED/N3LN.	0,091%	398,99M	1.042	276,50M	0,365M	0,25M
	Chaceon geryons nei	GER/F47X	0,030%	398,99M	1.042	276,50M	0,119M	0,08M
	Greenland halibut	GHL/N3LMNO	0,205%	398,99M	1.042	276,50M	0,819M	0,57M
	Orange roughy	ORY/F47X	0,001%	398,99M	1.042	276,50M	0,004M	0,00M
	Raja rays nei	SKA/N3LNO.	0,147%	398,99M	1.042	276,50M	0,588M	0,41M
	White hake	HKW/N3NO.	0,000%	398,99M	1.042	276,50M	0,000M	0,00M
	Witch flounder	WIT/N3NO.	0,000%	398,99M	1.042	276,50M	0,000M	0,00M
		WIT/N2J3KL	0,001%	398,99M	1.042	276,50M	0,002M	0,00M
	Yellowtail flounder	YEL/N3LNO.	0,008%	398,99M	1.042	276,50M	0,030M	0,02M



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.71 Landings value and share of landing in 2014 by sub-region for ESP OFR DTS40XX

Demersal trawlers (DTS) 24-40m – this segment operates exclusively in West Africa and Southwest Africa, the latter increasing in prominence in the latest years.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

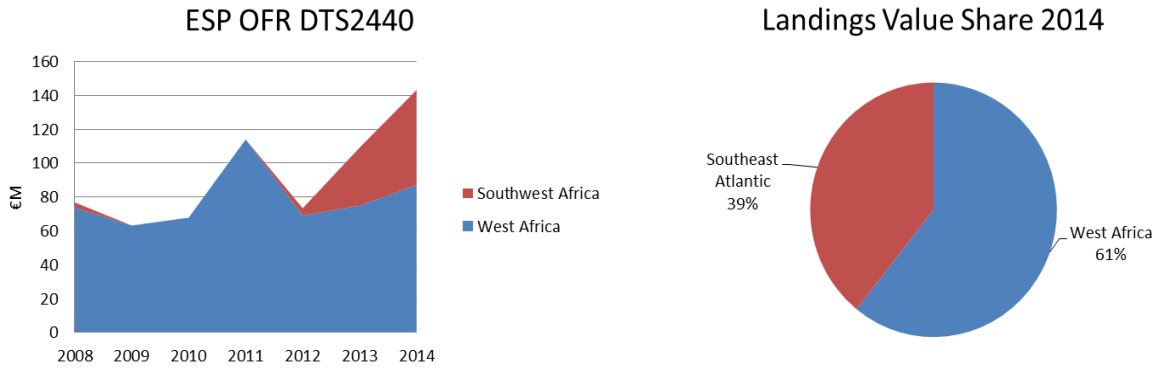
Figure 4.72 Activity range of the Spanish distant-water demersal trawlers 24-40m (OFR DTS 24-40) in 2014. Circle size indicates the importance of the fishing region in terms of landed weight.

Table 4.33 Spanish distant-water demersal trawlers 24-40 m: dependency on stocks with TACs in 2014.

Dependency by fleet

Fleet segment	Species name	Stock	Dependency	Landings tot	Employment tot	GVA tot	Landings stock	GVA stock
ESP OFR DTS2440	Anglerfishes nei	ANF/8C3411	0,001%	143,33M	1.009	87,17M	0,002M	0,00M
	Blackspot(=red) seabream	SBR/09-	0,000%	143,33M	1.009	87,17M	0,000M	0,00M
	Chaceon geryons nei	GER/F47X	0,706%	143,33M	1.009	87,17M	1,012M	0,62M
	Megrims nei	LEZ/8C3411	0,002%	143,33M	1.009	87,17M	0,003M	0,00M
	Sole	SOO/8CDE34	0,000%	143,33M	1.009	87,17M	0,000M	0,00M
	Thornback ray	RJC/89-C.	0,002%	143,33M	1.009	87,17M	0,003M	0,00M

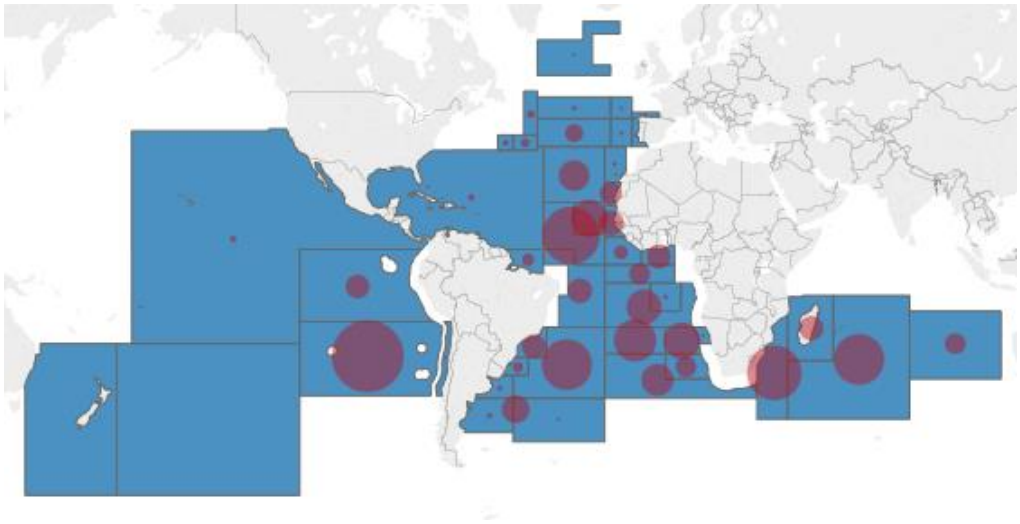
There are 39 vessels in this segment in 2014 employing 1 302 FTE (an average of 33 FTE per vessel). Landings of over 22 thousand tonnes generated €142 million in value. Gross profit rates and net profit rates are astoundingly high, at 68% and 67% respectively, which would indicate an error. In the two previous years this segment made net losses.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.73 Landings value and share of landing in 2014 by sub-region for ESP OFR DTS 2440

Longliners (HOK) 24-40m – In 2014 the segment formerly classified as HOK has now been split to more accurately describe the fishing activity into two segments, HOK and PGO. For the purposes of analysing trends the two segments will be analysed together here. This segment of the fleet operates in multiple OFR sub-regions, the most important of which is West Africa. It is composed by 93 vessels which fished in 2014 around 50 thousand tonnes with a landing value around €96 million and employed 1 460 FTEs (an average of 16 FTE by vessel). This fleet segment was profitable with a gross profit around €9 million in 2014 and a net profit of ~€4.5 million.



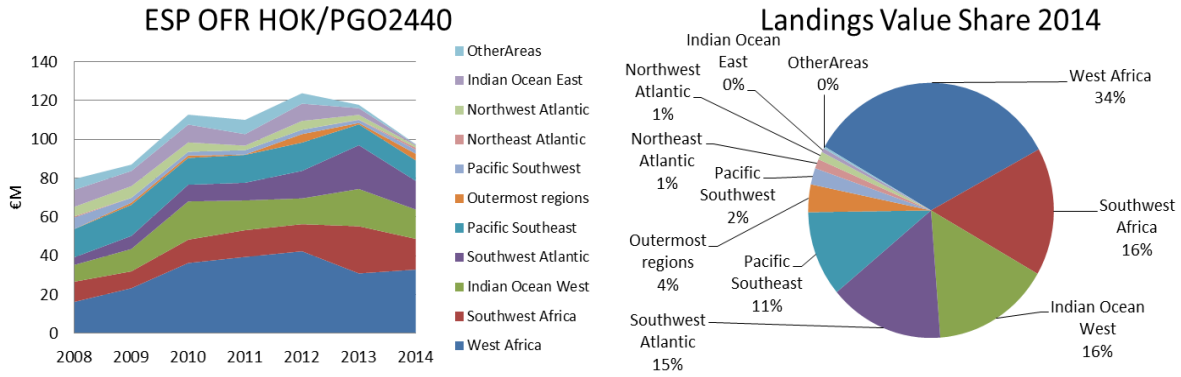
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.74 Activity range of the Spanish distant-water mid-sized longliners (OFR HOK 24-40) in 2014. Circle size indicates the importance of the fishing region in terms of landed weight.

Table 4.34 Spanish distant-water longliners 24- 40m: dependency on stocks with TACs in 2014.

Dependency by fleet

Fleet segment	Species name	Stock	Dependency	Landings tot	Employment tot	GVA tot	Landings stock	GVA stock
ESP OFR PGO2440 °	Albacore	ALB/AS05N	0,160%	81,83M	900	26,01M	0,131M	0,04M
		ALB/AN05N	0,007%	81,83M	900	26,01M	0,006M	0,00M
	Atlantic white marlin	WHM/ATLANT	0,097%	81,83M	900	26,01M	0,080M	0,03M
	Bigeye tuna	BET/ATLANT	6,642%	81,83M	900	26,01M	5,435M	1,73M
	Blue marlin	BUM/ATLANT	0,316%	81,83M	900	26,01M	0,259M	0,08M
	Southern bluefin tuna	SBF/F41-81	0,004%	81,83M	900	26,01M	0,004M	0,00M
	Swordfish	SWO/AS05N	19,712%	81,83M	900	26,01M	16,131M	5,13M
		SWO/AN05N	6,328%	81,83M	900	26,01M	5,178M	1,65M
		SWO/F7120S	1,345%	81,83M	900	26,01M	1,101M	0,35M



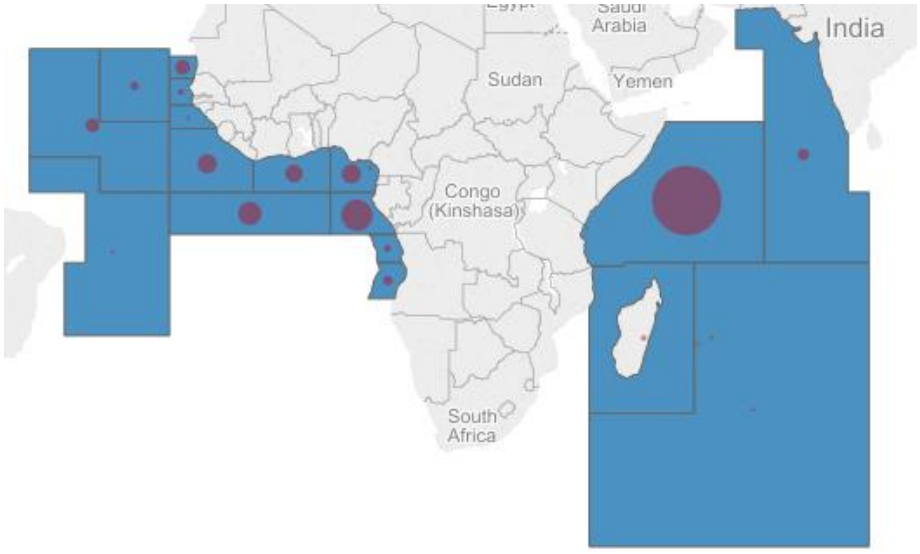
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.75 Landings value and share of landing in 2014 by sub-region for ESP OFR HOK 2440 & ESP OFR PGO2440

FRANCE

The French industrial fleet of purse seiners consisted of 22 vessels in 2014. There are 5 additional vessels included in this fleet segment, compared to 2013, because vessels registered on the Island of Mayotte are identified in the French fleet register from 1 January 2014. Mayotte is a French overseas region located in the Indian Ocean. So it is important to take this into account when analysing the evolution of economic data for this fleet segment in 2014. Moreover, a cluster has been established in 2014 for this segment, which aggregates data from one long liner VL2440, bringing the number to 23 vessels. Economic models of seiners are very different, that is why only the activity of tropical purse seine is analysed in the following text.

The overwhelming majority of this fleet is made of freezer tuna seiners operating in the Indian Ocean and Central Atlantic Ocean.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

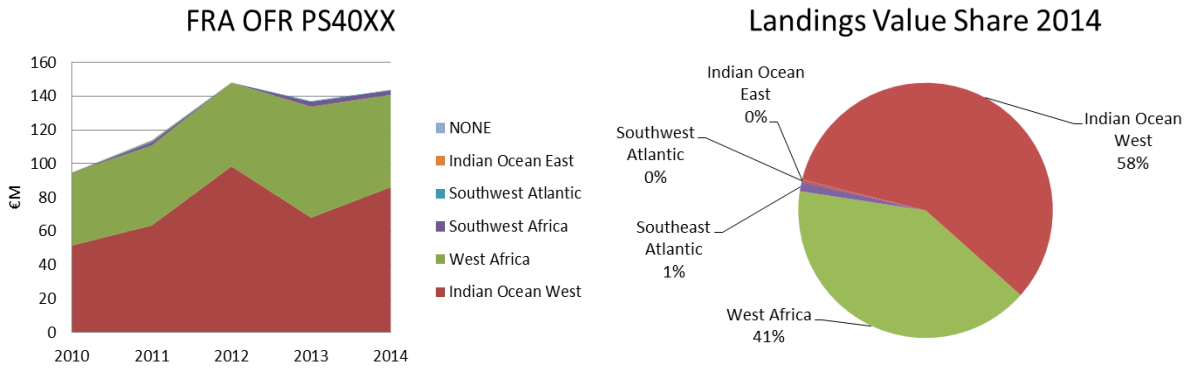
Figure 4.76 Activity range of the French distant-water purse seiners over 40m (OFR PS40XX) in 2014. Circle size indicates the importance of the fishing region in terms of landed weight.

Table 4.35 French distant-water purse seiners over 40m: dependency on stocks with TACs in 2014.

Dependency by fleet

Fleet segment	Species name	Stock	Dependency	Landings tot	Employment tot	GVA tot	Landings stock	GVA stock
FRA OFR PS40XX	Albacore	ALB/AS05N	0,047%	143,78M	578	56,91M	0,068M	0,03M
		ALB/AN05N	0,013%	143,78M	578	56,91M	0,018M	0,01M
	Bigeye tuna	BET/ATLANT	2,428%	143,78M	578	56,91M	3,491M	1,38M

The average age of those 22 vessels in this fleet segment was 16.5 years in 2014 and average length was 78 meters. The average full time employment is around 26 employees by vessel in 2014 (fishers employees come both from France and foreign countries (mostly African).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.77 Landings value and share of landing in 2014 by sub-region for FRA OFR PS40XX

In a general way, year 2014 was marked by difficulties facing tuna activity. The unfavourable market, with the sharp fall in prices of raw tuna, had a significantly negative impact on the turnover and profitability of the firms. Furthermore the significant decline of the yen in the second half of 2014 made less competitive exports of tuna processed in Japan. The decline in 2014 on fuel prices helped however vessels to limit partially the impact on the observed decrease in sales prices.

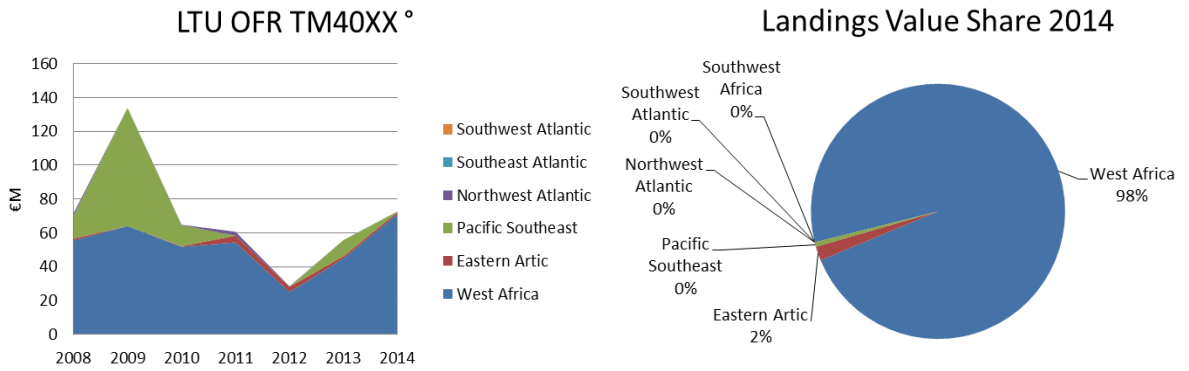
In 2014, total volume of landings of tropical tuna amounted around 100 000 tonnes for the 22 vessels of the fleet segment (a decrease of approximately 3% compared to 2013). In terms of volume almost 60% of fish catches are made by seiners operating in the Indian Ocean and the rest is caught in Atlantic Ocean. Tuna species caught are yellowfin tuna (YFT 54.7% of the total volumes of landings), skipjack tuna (SKJ 36.7%), big eye tuna (BET 8.2%) and albacore (ALB 0.3%).

Total values of landings for the whole 22 vessels reached €143.8 million in 2014. According to economic data collected, the two main cost items are crew wage and energy and represent respectively 30.4% and 24.2% of the income in 2014. Increased operating costs (despite lower fuel prices) combined with the decline in turnover over the period 2014 causes a significant decrease of the operating cash flow, which reaches less than 9% against nearly 18% in 2013. Gross profit was nearly €13 million (9%) in 2014 however, as depreciation costs are not provided for this fleet net profit cannot be assessed.

LITHUANIA

Lithuanian long distance fleet is represented mainly by pelagic trawlers (TM) over 40m operating in Other Fishing regions, predominantly in West Africa with nearly all landing value coming from this sub-region in 2014. The fleet was targeting mainly small pelagic species, such as Cunene horse mackerel (56% of total landing value), chub mackerel (19% of total value), round sardine (14% of total value) and European pilchard (5% of total value. Almost all catches form CECAF is landed in African countries.

In 2014 number of vessels in long distance fleet was 9. Significant decline in capacity and record low volume of landings was related with problematic conditions when from 2012 part of fleet was obliged to suspend activity due prolonged endorsement of bilateral agreement between EU and Mauritania. The fishing effort was mainly driven by individual purchase and exchange of quotas from third countries, operating in the respective region.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.78 Landings value and share of landing in 2014 by sub-region for LTU OFR TM40XX

Since 2012, the value of landings has increased, to €91 million in 2014 and around 413 FTEs were employed in this fleet segment, contributing to 96% and 72% of the total income from landings and FTEs generated by the Lithuanian fishing

fleet, respectively. This fleet segment was not profitable in 2014, with a reported gross profit of around €14 million but a net profit of around -€1 million. Net profit margin was healthy from 2011-2013 with an average of 12% before turning marginally negative in 2014. Labour productivity achieved €34 000 (GVA/FTE).

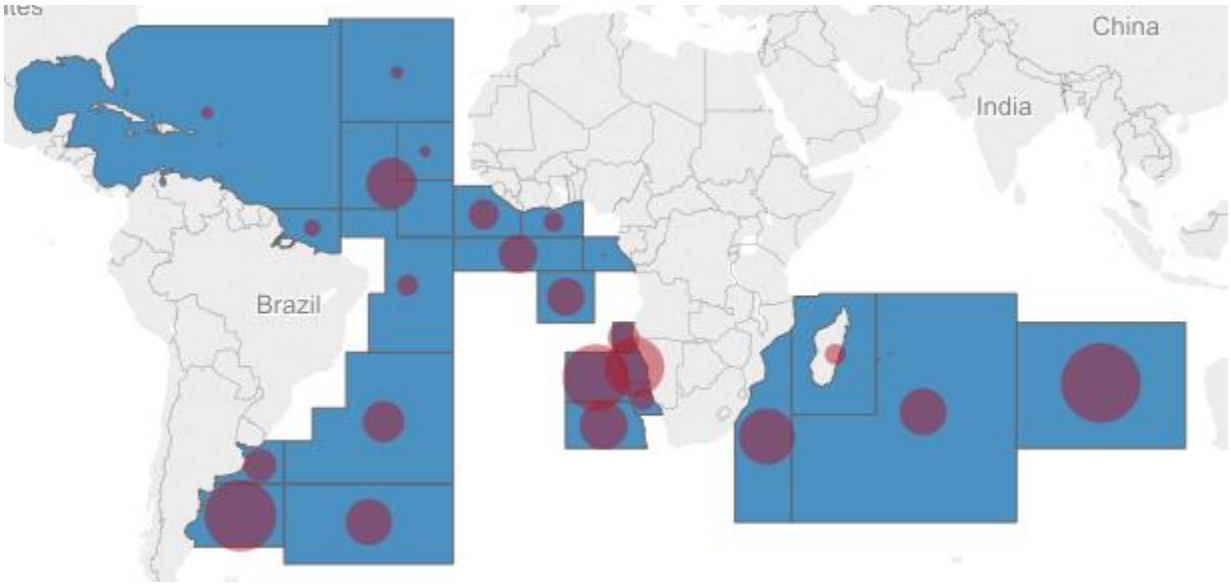
In the course of 2014, Long distance fleet segment was significantly extended, 5 modernised vessels were included to fleet register. In terms of environmental sustainability, renovated vessels decreased kW/GT ratio from 1 to 0.68. New investments are expected to raise profitability and improvement in competitiveness. In 2014 volume of landings by this fleet increased 46.4% compare to 2013 and considering the changes of the segment, further increase in landings is expected for 2015.

POLAND

The Polish distant-water fleet operated in Northwest Atlantic (1 vessel), African (Mauritania, Angola) waters (3 vessels) in 2014. The amount of landings by the Polish distant-water fleet totalled 52 thousand tonnes in 2014 out of which 45 thousand tonnes were caught in Other Regions, with over 6 thousand tonnes caught in Eastern Arctic and the remainder in the Northwest Atlantic. In 2014 Cape horse mackerel generated the highest landed weight (21 thousand tonnes caught in Southwest African waters), followed by horse mackerel (14 thousand tonnes caught in West African waters), Atlantic cod (6.3 thousand tonnes), chub mackerel (6 thousand tonnes) and sardinella (3 thousand tonnes). Poland did not provide economic data for its distant water fleet segments.

PORTUGAL

The Portuguese fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Portuguese Exclusive Economic Zone (27.9.a for the mainland fleet, 27.10 for the Azores's fleet and CECAF 34.1.2 for the Madeira's fleet). 18 vessels make up the **longliners (HOK) 24-40m** segment which operates in the Africa Coast, the outermost regions, Southwest Atlantic and Indian Ocean (FAO 34, 41, 51, 57). The fleet targets a variety of species but in particular large pelagic fishes with the main catches in most regions being blue shark, shortfin mako and swordfish however in outermost regions the fleet targets bigeye tune, skipjack tuna and albacore.



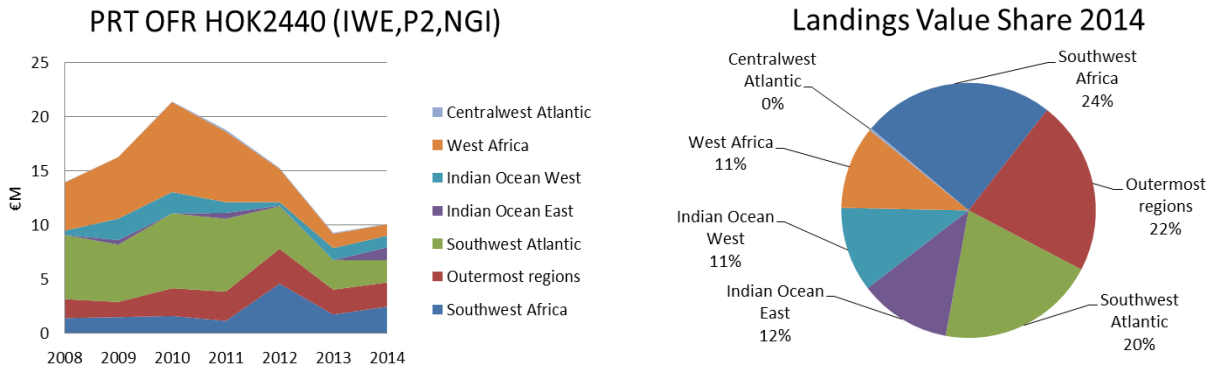
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.79 Activity range of the Portuguese distant-water longliners 24-40m (OFR HOK 24-40) in 2014. Circle size indicates the importance of the fishing region in terms of landed weight.

Table 4.36 Portuguese distant-water longliners 24-40m: dependency on stocks with TACs in 2014.

Dependency by fleet

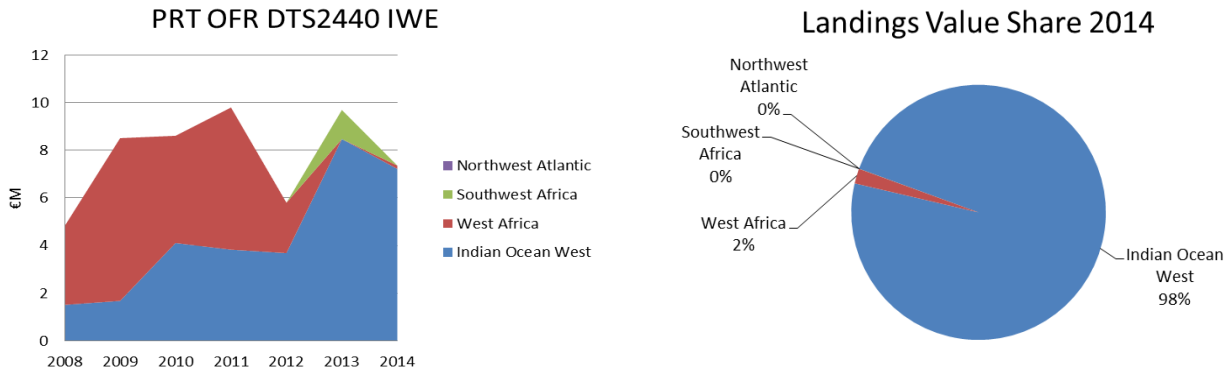
Fleet segment	Species name	Stock	Dependency	Landings tot	Employment tot	GVA tot	Landings stock
PRT OFR HOK2440 IWE	Albacore	ALB/AS05N	0,103%	7,88M	229	1,22M	0,008M
		ALB/AN05N	0,001%	7,88M	229	1,22M	0,000M
	Atlantic white marlin	WHM/ATLANT	0,242%	7,88M	229	1,22M	0,019M
	Bigeye tuna	BET/ATLANT	2,310%	7,88M	229	1,22M	0,182M
	Blue marlin	BUM/ATLANT	0,793%	7,88M	229	1,22M	0,063M
	Swordfish	SWO/AS05N	6,114%	7,88M	229	1,22M	0,482M
		SWO/AN05N	0,560%	7,88M	229	1,22M	0,044M



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.80 Landings value and share of landing in 2014 by sub-region for PRT OFR HOK2440 (IWE, P2 & NGI)

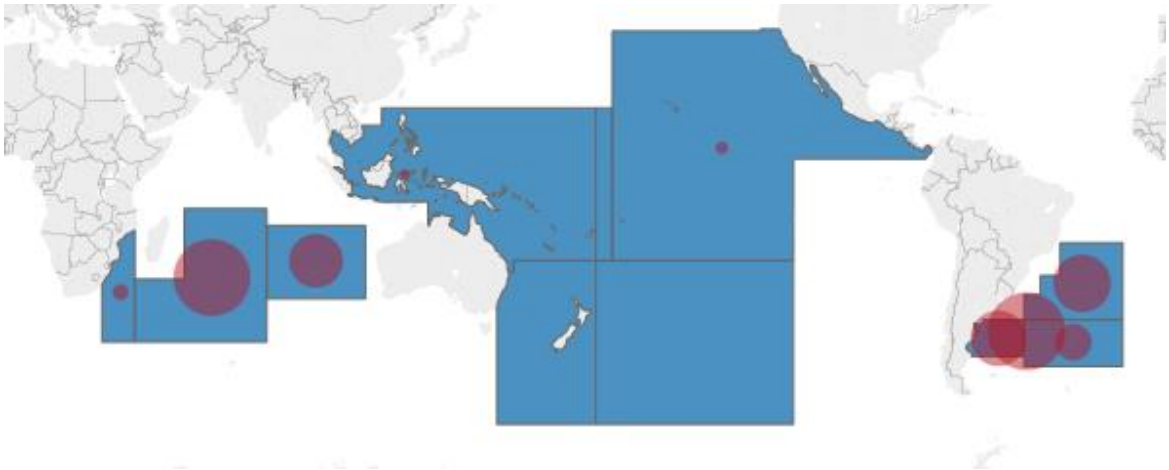
The Portuguese demersal trawlers (DTS) 24-40m have seen their activity change from mainly exploiting waters in West Africa to now solely depending on the Indian Ocean. This fleet targets knife shrimp, Indian white prawns and spiny lobsters mainly.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.81 Landings value and share of landing in 2014 by sub-region for PRT OFR DTS2440 IWE

The Portuguese longliners (HOK) over 40m have seen total landing value decline since 2012. Over a third of value is obtained in the Southwest Atlantic while the significance of the Indian Ocean fishery has declined somewhat over time. The Pacific fishery nearly equals the importance of the Indian Ocean now for this fleet. Blue shark is the main target fishery of this segment.



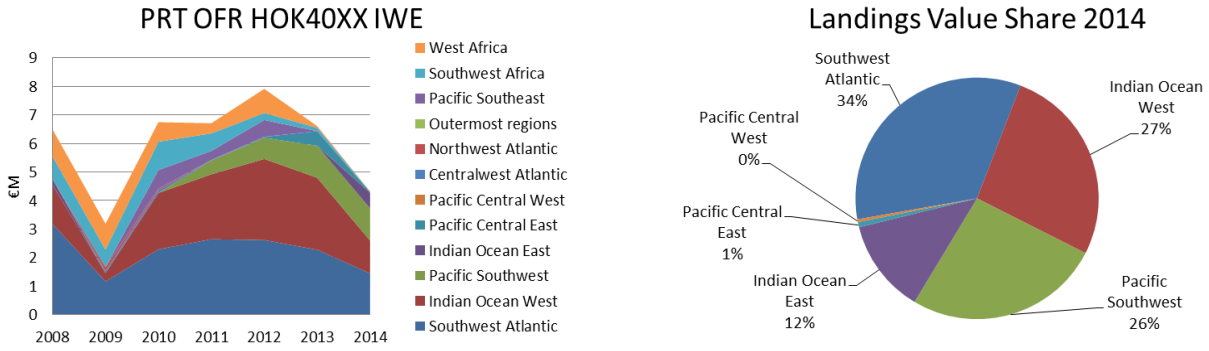
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)).

Figure 4.82 Activity range of the Portuguese distant-water longliners over 40m (OFR HOK40XX) in 2014. Circle size indicates the importance of the fishing region in terms of landed weight.

Table 4.37 Portuguese distant-water longliners over 40m: dependency on stocks with TACs in 2014.

Dependency by fleet

Fleet segment	Species name	Stock	Dependency	Landings tot	Employment tot	GVA tot	Landings stock
PRT OFR HOK40XX IWE	Albacore	ALB/AS05N	0,028%	4,32M	67	0,81M	0,001M
	Bigeye tuna	BET/ATLANT	0,271%	4,32M	67	0,81M	0,012M
	Swordfish	SWO/AS05N	0,681%	4,32M	67	0,81M	0,029M
		SWO/F7120S	0,416%	4,32M	67	0,81M	0,018M

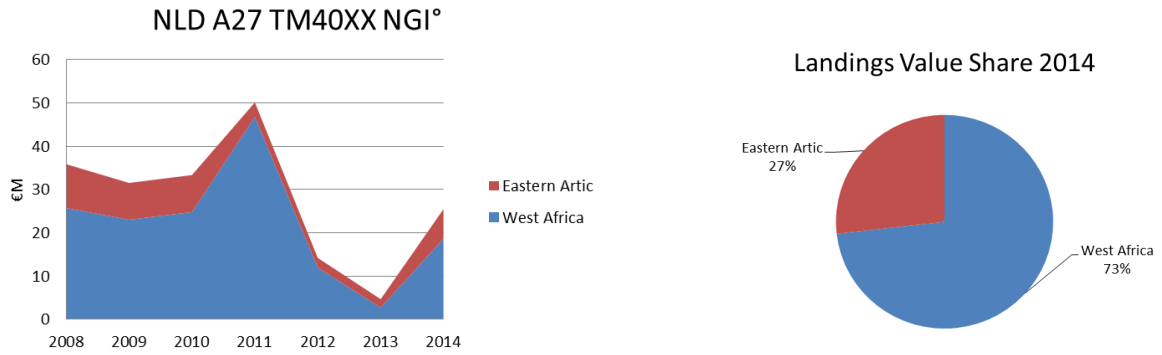


Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.83 Landings value and share of landing in 2014 by sub-region for PRT OFR HOK40XX IWE

NETHERLANDS

The Dutch purse seine fleet segment over 40m landed 70 thousand tonnes from OFR in 2014 which had a value of €25 million. This represents a significant recovery from previous years however the segment still made gross and net losses of €0.9 million and €6 million in 2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 4.84 Landings value and share of landing in 2014 by sub-region for NLD A27 TM40XX

ITALY

At 1st of January 2013, 11 vessels are included in the Italian vessel register as vessels operating outside the Mediterranean Sea. None of these vessels actually operated in 2013. Therefore these vessels have been classified as inactive and only capital costs and capital value have been reported.

Until 2012, the Italian fleet operating in the outside community waters (CECAF Region), was composed of around 5 vessels fishing around Mauritania waters (FAO Area 34.1) and targeting shrimps and cephalopods. In 2013, no fishing activity has operated in this Region, whereas in 2014 only one vessel has been active.

LATVIA

No economic data was provided for the Latvian distant water fleet.

ESTONIA

No economic data was provided for the Estonian distant water fleet.

Table 4.38 EU *Other Fishing Region* fleet structure and economic performance estimates by MS in 2014

		Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
		(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Other regions	ESP	722	6%	4,659	5,531	43,520	4%	43,520	4%	484,217	52%	1,083,579	52%	935,784	119,987	150,965	447,601	47.8	327,614	35.0	284,302	30.4	620.3	80.9
	FRA	22	0%	578	578	360	0%	167	0%	100,717	19%	144,768	13%	143,130	43,633	34,697	55,754	39.1	12,120	8.5			2,534.3	96.5
	GBR	3	0%	37	69	973	0%	702	0%	4,810	1%	6,389	1%	6,957	2,931	1,972	- 106	- 1.5	- 3,037	- 43.7	- 3,673	- 52.8	- 35.4	- 1.5
	LTU	9	9%	413	280	700	8%	661	10%	102,524	88%	70,971	94%	74,755	5,488	18,270	15,000	20.1	9,512	12.7	2,808	3.8	1,666.6	53.6
	NLD	5	1%	73	81	442	1%	353	1%	55,700	15%	18,692	5%	18,865	6,867	5,332	4,035	21.4	- 2,833	- 15.0	- 7,026	- 37.2	806.9	49.5
	POL	2	0%	180	140	529	1%	412	1%	45,259	27%	-			-									
	PRT	43	1%	394	289	4,894	1%	4,749	1%	6,964	4%	20,052	6%	22,469	4,354	5,443	11,165	49.7	7,149	31.8	3,173	14.1	268.4	42.7
Northwest Atlantic	DEU	1	0%	12	11	121	0%	95	0%	1,876	3%	4,440	3%	4,462	967	537	3,118	69.9	2,151	48.2	1,807	40.5	4,454.4	294.7
	ESP	154	1%	391	360	3,746	0%	3,746	0%	24,073	3%	53,107	3%	41,005	13,042	7,491	15,611	38.1	2,569	6.3	- 1,922	- 4.7	101.2	43.3
	PRT	12	0%	275	282	2,064	1%	2,006	1%	15,768	10%	46,579	13%	47,786	12,615	8,224	29,228	61.2	16,613	34.8	10,901	22.8	2,409.6	103.5
Eastern Artic	DEU	2	0.2%	38	26	296	0.3%	234	0.2%	7,100	10%	10,110	8%	10,182	2,349	1,304	6,757	66.4	4,408	43.3	3,308	32.5	3,002.9	263.2
	DNK	1	0.0%	3	6	81	0.1%	32	0.0%	15,185	2%	10,627	3%	10,667	649	491	9,647	90.4	8,998	84.4	7,960	74.6	14,186.2	1,594.5
	ESP	15	0.1%	78	136	899	0.1%	899	0.1%	20,530	2%	77,998	4%	52,314	6,406	3,252	41,819	79.9	35,412	67.7	33,969	64.9	2,787.9	308.2
	FRA	3	0.1%	35	45	638	0.1%	500	0.1%	10,933	2%	25,662	2%	21,803	3,310	2,444	15,664	71.9	12,355	56.7	- 6	- 69.5	4,514.2	349.4
	GBR	4	0.1%	54	50	780	0.2%	622	0.2%	27,462	4%	32,511	3%	35,153	3,134	3,984	21,201	60.3	18,068	51.4	16,223	46.2	4,796.7	420.3
	NLD	1	0.2%	20	19	107	0.2%	87	0.2%	14,139	4%	6,881	2%	6,946	1,571	1,219	3,486	50.2	1,915	27.6	771	11.1	2,472.5	186.7
	SWE		0.0%	1	1	20	0.0%	20	0.0%	3,353	2%	2,850	3%	2,857	30	39	2,775	97.1	2,745	96.1	2,712	94.9	15,417.4	4,405.0
	PRT	4	0.1%	92	29	208	0.1%	199	0.1%	2,370	1%	6,335	2%	6,530	1,283	836	4,256	65.2	2,973	45.5	1,072	16.4	1,064.0	148.7
Outermost regions	ESP	764	6%	1,903	1,470	49,277	5%	49,277	5%	21,577	2%	39,011	2%	52,367	25,920	8,790	23,527	44.9	- 2,393	- 4.6	- 5,566	- 10.9	30.8	16.0
	FRA	1,687	26%	78	75	12,199	3%	10,628	2%	3,425	1%	12,686	1%	7,179	1,898	1,164	1,997	30.7	99	1.5	114	1.9	105.1	26.8
	PRT	123	3%	754	535	12,105	4%	9,164	3%	8,827	5%	19,119	5%	20,560	7,845	3,550	12,077	58.7	4,232	20.6	911	4.4	98.5	22.6
non EU Med	CYP	5	0.6%	27	27	552	0.8%	552	0.8%	84	6%	677	9%	673	163	306	81	12.0	- 83	- 12.3	- 693	- 102.9	16.6	3.0
	ESP	7	0.1%	24	24	686	0.1%	686	0.1%	162	0%	1,841	0%	2,656	431	263	2,025	76.3	1,595	60.0	1,483	55.8	303.2	83.8

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.39 EU Other Fishing Region fleet structure and economic performance estimates by fishing activity and region in 2014

			Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
			(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Other regions	SSF	ESP	5	0.1%	10	7	222	0%	222	0%	104	0%	285	0%	323	107	28	213	65.9	106	32.8	97	30.1	44.8	31.7
Other regions	SSF	FRA	-	0.0%			-	0%	-	0%	75	0%	152	0%		-									
Other regions	LSF	ESP	64	0.9%	136	110	1,775	0%	1,775	0%	3,368	1%	6,379	1%	6,982	2,636	1,356	3,212	46.0	577	8.3	27	0.4	50.4	29.1
Other regions	LSF	FRA	-	0.0%	-	-	-	0%	-	0%	1,146	0%	1,384	0%	431	-	-								
Other regions	LSF	GBR	3	0.2%	37	69	973	1%	702	0%	4,810	1%	6,389	1%	6,957	2,931	1,972	- 106	- 1.5	- 3,037	- 43.7	- 3,673	- 52.8	- 35.4	- 1.5
Other regions	LSF	NLD	5	1.2%	73	81	442	1%	353	1%	55,700	15%	18,692	5%	18,865	6,867	5,332	4,035	21.4	- 2,833	- 15.0	- 7,026	- 37.2	806.9	49.5
Other regions	LSF	PRT	24	2.7%	180	40	744	1%	741	1%	532	0%	2,080	1%	2,191	591	377	1,042	47.6	451	20.6	- 826	- 37.7	43.8	26.2
Other regions	DWF	ESP	653	85.4%	4,514	5,414	41,523	88%	41,523	88%	480,745	97%	1,076,914	98%	928,479	117,245	149,580	444,176	47.8	326,931	35.2	284,178	30.6	680.1	82.0
Other regions	DWF	FRA	22	100.0%	578	578	360	100%	167	100%	99,496	100%	143,233	100%	142,699	43,633	34,697	55,754	39.1	12,120	8.5			2,534.3	96.5
Other regions	DWF	LTU	9	100.0%	413	280	700	100%	661	100%	102,524	100%	70,971	100%	74,755	5,488	18,270	15,000	20.1	9,512	12.7	2,808	3.8	1,666.6	53.6
Other regions	DWF	POL	2	100.0%	180	140	529	100%	412	100%	45,259	100%	-			-									
Other regions	DWF	PRT	20	75.3%	215	250	4,150	77%	4,008	80%	6,433	74%	17,972	82%	20,278	3,763	5,065	10,123	49.9	6,698	33.0	3,999	19.7	568.7	45.7
Northwest Atlantic	LSF	DEU	1	0.2%	12	11	121	0%	95	0%	1,876	3%	4,440	4%	4,462	967	537	3,118	69.9	2,151	48.2	1,807	40.5	4,454.4	294.7
Northwest Atlantic	LSF	ESP	146	2.1%	315	343	3,573	1%	3,573	1%	22,892	6%	50,720	6%	38,998	12,575	6,961	15,984	41.0	3,409	8.7	- 474	- 1.2	109.8	46.6
Northwest Atlantic	LSF	POL	1	0.5%	37	6	40	0%	34	0%	414	0%	-	0%		-									
Northwest Atlantic	LSF	PRT	12	1.4%	275	282	2,064	2%	2,006	2%	15,768	12%	46,579	19%	47,786	12,615	8,224	29,228	61.2	16,613	34.8	10,901	22.8	2,409.6	103.5
Northwest Atlantic	DWF	ESP	9	1.1%	76	17	173	0%	173	0%	1,182	0%	2,388	0%	2,007	467	530	- 373	- 18.6	- 840	- 41.9	- 1,448	- 72.2	- 43.1	- 21.6
Eastern Artic	LSF	DEU	2	0.7%	38	26	296	1%	234	1%	7,100	11%	10,110	8%	10,182	2,349	1,304	6,757	66.4	4,408	43.3	3,308	32.5	3,002.9	263.2
Eastern Artic	LSF	DNK	1	0.1%	3	6	81	0%	32	0%	15,185	2%	10,627	3%	10,667	649	491	9,647	90.4	8,998	84.4	7,960	74.6	14,186.2	1,594.5
Eastern Artic	LSF	ESP	15	0.2%	78	136	899	0%	899	0%	20,530	5%	77,998	9%	52,314	6,406	3,252	41,819	79.9	35,412	67.7	33,969	64.9	2,787.9	308.2
Eastern Artic	LSF	FRA	3	0.2%	35	45	619	0%	480	0%	10,927	3%	25,654	3%	21,794	3,303	2,443	15,662	71.9	12,359	56.7			4,819.1	350.8
Eastern Artic	LSF	GBR	4	0.3%	54	50	768	0%	621	0%	27,462	4%	32,510	3%	35,152	3,132	3,983	21,203	60.3	18,072	51.4	16,228	46.2	4,931.0	421.0
Eastern Artic	LSF	NLD	1	0.3%	20	19	107	0%	87	0%	14,139	4%	6,881	2%	6,946	1,571	1,219	3,486	50.2	1,915	27.6	771	11.1	2,472.5	186.7
Eastern Artic	LSF	PRT	4	0.5%	92	29	208	0%	199	0%	2,370	2%	6,335	3%	6,530	1,283	836	4,256	65.2	2,973	45.5	1,072	16.4	1,064.0	148.7
Outermost regions	SSF	ESP	575	13.2%	1,161	725	37,898	10%	37,898	10%	4,585	16%	9,161	9%	18,140	12,746	1,382	12,728	70.2	- 18	- 0.1	- 898	- 5.3	22.1	17.6
Outermost regions	SSF	FRA	1,649	37.0%			8,141	4%	7,823	4%	584	1%	2,724	1%		-									
Outermost regions	SSF	PRT	52	1.7%	204	79	3,190	1%	2,662	1%	503	2%	1,361	2%	1,097	452	195	706	64.4	254	23.2	102	9.3	13.6	9.0
Outermost regions	LSF	ESP	105	1.5%	353	300	6,379	1%	6,379	1%	5,979	1%	9,244	1%	12,503	6,529	1,722	7,537	60.3	1,008	8.1	372	3.0	71.6	25.2
Outermost regions	LSF	FRA	38	2.0%	78	75	4,058	2%	2,805	1%	2,387	1%	9,288	1%	6,507	1,898	1,164	1,997	30.7	99	1.5	114	1.9	105.1	26.8
Outermost regions	LSF	PRT	64	7.3%	473	362	7,648	7%	5,528	5%	6,072	5%	13,821	6%	14,316	6,253	2,269	8,464	59.1	2,211	15.4	- 200	- 1.4	131.8	23.4
Outermost regions	DWF	ESP	84	11.0%	390	446	5,000	11%	5,000	11%	11,013	2%	20,606	2%	21,724	6,645	5,687	3,261	15.0	- 3,383	- 15.6	- 5,040	- 23.2	38.9	7.3
Outermost regions	DWF	FRA	-	0.0%	-	-	-	0%	-	0%	454	0%	674	0%	672	-	-								
Outermost regions	DWF	PRT	6	24.7%	77	94	1,267	23%	974	20%	2,252	26%	3,937	18%	5,147	1,140	1,085	2,908	56.5	1,767	34.3	1,009	19.6	452.9	30.9
non EU Mediterranean Sea	LSF	CYP	5	17.9%	27	27	552	23%	552	23%	84	11%	677	22%	673	163	306	81	12.0	- 83	- 12.3	- 693	- 102.9	16.6	3.0
non EU Mediterranean Sea	LSF	ESP	7	0.1%	24	24	686	0%	686	0%	162	0%	1,841	0%	2,656	431	263	2,025	76.3	1,595	60.0	1,483	55.8	303.2	83.8

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.40 EU Other Fishing Region fleet structure and economic performance estimates by gear type and region in 2014

Gear Type			Total number of vessels	Estimated % of vessels by gear type	Total employed	FTE	Days at sea	as a % of DAS by gear type	Fishing days	as a % of FD by gear type	Live weight of landings	as a % of landed weight by gear type	Value of landings	as a % of landed value by gear type	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
			(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Pelagic	OFR	Other regions	231	8.4%	2,472	2,676	6,502	3%	6,064	3%	551,436	22%	648,121	34%	600,561	106,007	128,432	212,417	35.4	106,410	17.7	57,738	12.6	927	83.8
	OFR	Eastern Artic	3	0.1%	35	28	254	0%	148	0%	39,101	2%	24,577	1%	24,831	4,252	2,712	15,525	62.5	11,272	45.4	8,306	33.5	5,073	562.1
	OFR	Outermost regions	23	0.8%	114	136	2,380	1%	2,380	1%	4,028	0%	5,250	0%	5,208	2,353	606	2,458	54.2	105	2.3	- 206	- 4.5	108	18.1
	OFR	non EU Mediterranean	0	0.0%	0	0	5	0%	5	0%	13	0%	10	0%	11	10	1	7	60.5	- 3	- 28.6	- 4	- 37.1	163	17.2
	OFR		26	0.9%												-									
Demersal	OFR	Other regions	149	1.3%	2,064	2,305	17,867	1%	17,697	1%	178,367	11%	549,587	16%	447,534	45,886	55,152	265,513	59.3	219,627	49.1	207,589	46.4	1,782	115.2
	OFR	Northwest Atlantic	52	0.5%	565	494	3,514	0.3%	3,424	0.3%	32,204	2%	91,273	3%	80,204	22,718	13,614	41,572	51.8	18,854	23.5	8,924	11.1	810	85.1
	OFR	Eastern Artic	28	0.2%	285	280	2,716	0.2%	2,398	0.2%	61,935	4%	148,244	4%	121,454	14,436	10,843	89,983	74.1	75,547	62.2	57,656	57.9	3,221	320.8
	OFR	Outermost regions	17	0.1%			196	0.0%	177	0.0%	768	0%	1,333	0%		-									
	OFR	non EU Mediterranean	5	0.0%	29	29	694	0.0%	694	0.1%	88	0%	1,099	0%	1,724	320	451	921	53.4	601	34.9	23	1.3	193	31.6
Other	OFR	Other regions	426	1.1%	1,798	1,989	27,049	0.9%	26,803	0.8%	70,387	11%	146,743	9%	153,864	31,369	33,093	55,518	36.2	24,488	16.0	14,257	9.3	131	28.3
	OFR	Northwest Atlantic	116	0.3%	151	166	2,482	0.1%	2,474	0.1%	9,943	2%	12,919	1%	13,143	3,968	2,652	6,405	48.7	2,437	18.5	1,811	13.8	55	38.7
	OFR	Eastern Artic	0	0.0%	1	3	60	0.0%	46	0.0%	37	0%	153	0%	166	43	13	98	58.8	55	33.0	48	28.7	238	38.8
	OFR	Outermost regions	2,534	6.3%	2,621	1,944	71,005	2.2%	66,512	2.1%	29,033	5%	64,232	4%	74,899	33,310	12,898	35,143	46.9	1,833	2.5	- 4,335	- 5.9	40	18.1
	OFR	non EU Mediterranean	7	0.0%	22	22	548	0.0%	542	0.0%	146	0%	1,418	0%	1,607	267	119	1,183	73.6	916	57.0	768	47.8	174	53.6
	OFR	0	51	0.1%												-									

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.41 EU *Other Fishing Region* fleet structure and economic performance estimates by region and fleet segment - Other regions, 2014

			Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
			(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Other regions	ESP	ESP OFR PS40XX	191	99.4%	1,218	1,594	4,425	99%	4,425	99%	248,353	100%	415,168	100%	364,183	49,976	70,130	137,601	37.8	87,625	24.1	61,999	17.0	721.0	86.3
Other regions	ESP	ESP OFR DTS40XX	64	94.1%	981	911	6,726	99%	6,726	99%	150,901	100%	394,600	100%	221,388	32,321	35,750	101,651	45.9	69,329	31.3	60,519	27.3	1,588.3	111.6
Other regions	ESP	ESP OFR DTS2440	75	97.4%	983	1,301	9,911	100%	9,911	100%	22,420	100%	142,420	100%	212,801	11,363	16,287	157,339	73.9	145,977	68.6	144,072	67.7	2,097.9	120.9
Other regions	FRA	FRA OFR PS40XX	22	100.0%	578	578	360	100%	167	100%	99,496	100%	143,233	100%	142,699	43,633	34,697	55,754	39.1	12,120	8.5			2,534.3	96.5
Other regions	LTU	LTU OFR TM40XX °	9	100.0%	413	280	700	100%	661	100%	102,524	100%	70,971	100%	74,755	5,488	18,270	15,000	20.1	9,512	12.7	2,808	3.8	1,666.6	53.6
Other regions	ESP	ESP OFR PGO2440 °	228	81.2%	730	920	12,913	85%	12,913	85%	34,863	88%	71,132	87%	69,070	13,031	16,206	21,856	31.6	8,825	12.8	6,037	8.7	95.8	23.8
Other regions	ESP	ESP OFR PGO40XX °	56	85.8%	417	449	5,321	86%	5,321	86%	14,883	85%	41,174	90%	49,130	7,834	9,725	20,156	41.0	12,322	25.1	9,219	18.8	361.2	44.9
Other regions	NLD	NLD A27 TM40XX °	5	17.9%	73	81	442	20%	353	20%	55,700	19%	18,692	15%	18,865	6,867	5,332	4,035	21.4	-2,833	-15.0	-7,026	-37.2	806.9	49.5
Other regions	ESP	ESP OFR HOK2440 °	36	58.7%	167	225	2,069	59%	2,069	59%	9,066	81%	12,269	79%	11,716	2,442	1,399	5,676	48.4	3,233	27.6	2,762	23.6	155.9	25.3
Other regions	PRT	PRT OFR HOK2440 IWE	8	91.3%	79	104	2,145	91%	2,110	91%	3,595	93%	7,340	93%	8,291	1,065	1,938	3,360	40.5	2,295	27.7	1,128	13.6	408.8	32.2
Other regions	PRT	PRT OFR DTS2440 IWE	6	100.0%	73	74	948	100%	887	100%	922	100%	7,400	100%	7,563	1,773	1,817	4,704	62.2	2,930	38.7	2,060	27.2	783.9	63.8
Other regions	GBR	GBR A27 DTS40XX °	1	11.1%	14	18	258	13%	149	9%	3,806	13%	4,285	11%	4,773	389	1,264	983	20.6	594	12.5	217	4.6	982.9	54.6
Other regions	PRT	PRT OFR HOK40XX IWE	4	71.6%	40	44	733	72%	729	71%	1,715	74%	3,232	74%	4,424	587	1,119	2,059	46.6	1,473	33.3	811	18.3	575.3	47.3
Other regions	ESP	ESP A27 PGO2440	28	10.2%	34	61	915	14%	915	14%	2,427	12%	3,946	13%	4,007	1,484	979	1,624	40.5	140	3.5	-1	-0.0	57.4	26.5
Other regions	GBR	GBR A27 HOK2440 °	2	15.4%	23	51	715	24%	553	24%	1,004	14%	2,104	10%	2,183	2,542	708	-1,089	-49.9	-3,631	-166.3	-3,890	-178.2	-544.6	-21.2
Other regions	PRT	PRT A27 HOK2440	13	35.1%	82	25	484	13%	484	14%	371	14%	1,465	14%	1,523	334	282	730	48.0	396	26.0	-428	-28.1	57.7	29.0
Other regions	ESP	ESP A27 DTS2440	2	0.6%	10	1	23	0%	23	0%	319	0%	882	1%	1,007	39	34	852	84.6	812	80.7	753	74.8	426.0	645.4
Other regions	ESP	ESP OFR HOK1218	9	22.3%	32	21	477	22%	477	22%	224	16%	675	25%	885	423	102	446	50.5	23	2.6	-14	-1.6	50.0	21.8
Other regions	PRT	PRT A27 HOK1824	8	22.2%	66	11	184	4%	184	5%	122	4%	461	4%	509	192	62	259	50.9	67	13.2	-256	-50.2	34.3	23.9
Other regions	ESP	ESP A27 PGP2440 °	5	0.9%	10	12	111	1%	111	1%	175	1%	401	0%	478	418	112	98	20.6	-319	-66.8	-392	-82.1	21.3	8.5
Other regions	FRA	FRA OFR HOK1824 °	-	0.0%	-	-	-	0%	-	0%	1,146	83%	1,384	54%	431	-	-								
Other regions	ESP	ESP OFR HOK1012 °	5	9.3%	10	7	222	9%	222	9%	104	7%	285	10%	323	107	28	213	65.9	106	32.8	97	30.1	44.8	31.7
Other regions	ESP	ESP A27 PGO1824 °	10	8.4%	12	7	84	4%	84	4%	59	2%	174	4%	283	120	80	101	35.6	-19	-6.6	-107	-37.9	10.6	15.1
Other regions	ESP	ESP A37 PGO1824 °	5	6.9%	12	6	96	3%	96	3%	52	3%	232	3%	231	88	39	85	36.7	-3	-1.2	-48	-20.9	17.0	14.9
Other regions	ESP	ESP OFR PMP2440 °	3	15.1%	17	14	158	15%	158	15%	259	15%	151	6%	192	277	84	-103	-53.6	-380	-198.4	-430	-224.3	-34.1	-7.3
Other regions	PRT	PRT A27 HOK2440 P3°	1	1.3%	5	3	50	1%	50	2%	29	1%	124	1%	126	52	30	53	41.8	0	0.4	-43	-34.3	89.4	20.8
Other regions	ESP	ESP OFR PS1218 °	0	1.8%	2	2	43	2%	43	2%	102	4%	54	2%	56	37	3	44	77.5	6	11.2	3	6.2	112.2	19.0
Other regions	PRT	PRT A27 PGP1218	3	7.5%	27	1	26	0%	23	0%	9	0%	31	0%	33	12	4	-0	-1.1	-13	-38.7	-99	-301.4	-0.1	-0.3
Other regions	ESP	ESP A37 HOK1218 °	1	2.7%	5	1	18	1%	18	1%	6	2%	11	1%	27	15	3	-0	-0.1	-15	-56.2	-68	-247.4	-0.0	-0.0

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.42 EU Other Fishing Region fleet structure and economic performance estimates by region and fleet segment - Northwest Atlantic, 2014

			Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
			(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Northwest Atlantic	PRT	PRT A27 DTS40XX IWE	12	75.0%	275	281	2,043	91%	1,985	91%	15,750	87%	46,521	88%	47,726	12,601	8,211	29,199	61.2	16,599	34.8	10,896	22.8	2,433.3	103.8
Northwest Atlantic	ESP	ESP A27 DTS40XX °	35	44.4%	180	186	1,232	39%	1,232	39%	13,462	33%	38,414	30%	26,502	8,779	4,456	9,726	36.7	947	3.6	- 2,386	- 9.0	280.9	52.3
Northwest Atlantic	ESP	ESP A27 PGO2440	111	39.9%	135	157	2,339	37%	2,339	37%	9,429	45%	12,302	40%	12,492	3,793	2,504	6,256	50.1	2,463	19.7	1,912	15.3	56.4	39.9
Northwest Atlantic	DEU	DEU A27 DTS40XX	1	6.4%	12	11	121	8%	95	7%	1,876	9%	4,440	13%	4,462	967	537	3,118	69.9	2,151	48.2	1,807	40.5	4,454.4	294.7
Northwest Atlantic	ESP	ESP OFR DTS40XX	4	5.9%	61	10	77	1%	77	1%	703	0%	1,895	0%	1,512	370	409	- 473	- 31.3	- 843	- 55.8	- 1,394	- 92.2	- 118.3	- 45.4
Northwest Atlantic	ESP	ESP OFR PGO2440 °	5	1.7%	15	7	96	1%	96	1%	479	1%	493	1%	494	97	120	100	20.2	3	0.6	- 54	- 10.9	21.4	14.6
Northwest Atlantic	FRA	FRA A27 DFN1824		0.3%	1	1	25	0%	17	0%	16	0%	66	0%	95	62	15	20	21.4	- 42	- 44.0	- 51	- 53.8	156.4	25.4
Northwest Atlantic	PRT	PRT A27 HOK2440		0.4%	1	1	21	1%	21	1%	19	1%	57	1%	59	15	12	28	47.9	14	23.5	5	8.9	218.9	26.1
Northwest Atlantic	ESP	ESP A27 DTS1824		0.0%	0	0	1	0%	1	0%	0	0%	3	0%	3	1	1	2	66.1	1	44.2	1	40.5	182.1	60.7
Northwest Atlantic	ESP	ESP A27 PGO1824 °		0.1%	0	0	1	0%	1	0%	0	0%	1	0%	2	1	1	0	3.9	- 1	- 61.9	- 2	- 86.3	1.4	1.0
Northwest Atlantic	POL	POL A27 DTS40XX	1	100.0%	37	6	40	100%	34	100%	414	100%	-			-									

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.43 EU *Other Fishing Region* fleet structure and economic performance estimates by region and fleet segment - Eastern Arctic, 2014

			Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
			(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Eastern Artic	ESP	ESP A27 DTS40XX °	15	19.2%	78	136	899	29%	899	29%	20,530	50%	77,998	60%	52,314	6,406	3,252	41,819	79.9	35,412	67.7	33,969	64.9	2,787.9	308.2
Eastern Artic	GBR	GBR A27 DTS40XX °	3	29.4%	37	40	575	29%	479	30%	17,269	61%	24,442	60%	26,854	866	2,816	18,264	68.0	17,397	64.8	16,397	61.1	6,891.9	455.7
Eastern Artic	FRA	FRA A27 DTS40XX	3	19.1%	35	45	619	24%	480	23%	10,927	38%	25,654	48%	21,794	3,303	2,443	15,662	71.9	12,359	56.7			4,819.1	350.8
Eastern Artic	DNK	DNK A27 TM40XX	1	2.3%	3	6	81	3%	32	2%	15,185	5%	10,627	8%	10,667	649	491	9,647	90.4	8,998	84.4	7,960	74.6	14,186.2	1,594.5
Eastern Artic	DEU	DEU A27 DTS40XX	2	20.3%	38	26	293	18%	230	18%	7,039	33%	10,020	28%	10,090	2,341	1,300	6,675	66.2	4,334	43.0	3,236	32.1	2,993.3	260.6
Eastern Artic	GBR	GBR A27 TM40XX °	1	3.3%	12	3	73	3%	36	3%	9,789	2%	7,106	2%	7,257	2,045	1,012	2,408	33.2	363	5.0	- 424	- 5.9	2,361.0	779.4
Eastern Artic	NLD	NLD A27 TM40XX °	1	4.9%	20	18	100	5%	80	5%	14,127	5%	6,844	6%	6,907	1,558	1,210	3,470	50.2	1,912	27.7	771	11.2	2,551.3	187.8
Eastern Artic	PRT	PRT A27 DTS40XX IWE	4	25.0%	92	29	208	9%	199	9%	2,370	13%	6,335	12%	6,530	1,283	836	4,256	65.2	2,973	45.5	1,072	16.4	1,064.0	148.7
Eastern Artic	SWE	SWE A27 DTS2440 °	0	0.3%	1	1	20	0%	20	0%	3,353	2%	2,850	5%	2,857	30	39	2,775	97.1	2,745	96.1	2,712	94.9	15,417.4	4,405.0
Eastern Artic	GBR	GBR A27 DTS2440	1	0.7%	5	5	92	1%	80	1%	374	1%	817	1%	885	187	144	434	49.1	248	28.0	196	22.2	775.7	87.9
Eastern Artic	GBR	GBR A27 DFN2440 °		0.4%	1	2	27	1%	25	1%	30	1%	144	1%	156	33	10	98	62.9	65	41.7	60	38.5	1,631.6	44.1
Eastern Artic	DEU	DEU A27 DTS2440		0.1%	0.1	0.1	3	0%	4	0%	61	1%	90	1%	92	7	4	81	88.3	74	80.2	72	77.9	4,068.3	1,356.1

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.44 EU *Other Fishing Region* fleet structure and economic performance estimates by region and fleet segment - EU Outermost regions, 2014

			Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
			(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Outermost regions	ESP	ESP OFR PMP0010	494	99.8%	986	622	35,590	100%	35,590	100%	3,275	100%	7,262	100%	15,010	11,188	1,106	10,595	70.6	593	4.0	1,161	7.7	21.4	17.0
Outermost regions	ESP	ESP OFR PGO2440 °	31	11.0%	99	125	1,750	12%	1,750	12%	3,665	9%	8,713	11%	8,475	1,766	2,196	2,077	24.5	311	3.7	67	0.8	67.2	16.7
Outermost regions	FRA	FRA OFR HOK1218	15	100.0%	65	62	3,073	100%	2,121	100%	1,338	100%	6,674	100%	6,134	1,661	920	2,328	38.0	667	10.9	114	1.9	155.2	37.8
Outermost regions	PRT	PRT OFR HOK1218 P2	18	100.0%	125	170	3,940	100%	2,669	100%	1,859	100%	5,566	100%	6,004	3,113	754	4,023	67.0	910	15.2	753	12.6	223.5	23.7
Outermost regions	PRT	PRT A27 HOK2440 P3°	21	47.6%	171	92	1,826	47%	1,364	48%	2,996	59%	5,817	51%	5,936	1,908	1,097	3,256	54.9	1,348	22.7	247	4.2	152.1	35.3
Outermost regions	ESP	ESP OFR PGO40XX °	9	14.2%	69	74	877	14%	877	14%	2,629	15%	4,520	10%	5,555	1,291	1,603	780	14.0	512	9.2	1,023	18.4	84.7	10.5
Outermost regions	ESP	ESP OFR PMP1218	20	99.8%	101	62	1,261	100%	1,261	100%	988	100%	1,735	100%	4,288	1,989	498	3,146	73.4	1,156	27.0	1,011	23.6	157.7	50.8
Outermost regions	ESP	ESP OFR HOK2440 °	26	41.3%	118	158	1,454	41%	1,454	41%	2,059	19%	3,347	21%	3,200	1,716	983	1,045	32.7	2,761	86.3	3,093	96.7	40.8	6.6
Outermost regions	ESP	ESP OFR PS1218 °	22	98.2%	107	126	2,353	98%	2,353	98%	2,355	96%	2,972	98%	3,124	2,048	178	2,429	77.8	381	12.2	226	7.2	112.4	19.3
Outermost regions	ESP	ESP OFR PMP2440 °	17	85.0%	97	80	892	85%	892	85%	1,442	85%	2,421	94%	3,082	1,566	476	1,420	46.1	146	4.7	426	13.8	83.6	17.8
Outermost regions	PRT	PRT OFR HOK2440 P2	4	70.3%	53	67	771	70%	478	63%	1,406	87%	2,247	100%	2,971	805	455	2,142	72.1	1,337	45.0	953	32.1	507.5	32.0
Outermost regions	ESP	ESP A27 PGO2440	19	6.7%	23	41	606	9%	606	9%	1,501	7%	2,533	8%	2,573	983	649	994	38.7	12	0.5	81	3.2	53.1	24.5
Outermost regions	ESP	ESP OFR HOK1012 °	32	63.2%	69	46	1,507	60%	1,507	60%	1,154	76%	1,586	58%	1,796	726	192	1,050	58.4	323	18.0	265	14.8	32.5	23.0
Outermost regions	ESP	ESP OFR HOK1218	18	45.2%	65	42	965	45%	965	45%	902	63%	1,251	45%	1,639	857	207	753	45.9	104	6.3	179	10.9	41.7	18.1
Outermost regions	PRT	PRT OFR HOK40XX IWE	1	28.4%	16	17	292	28%	292	29%	596	26%	1,108	26%	1,517	234	446	575	37.9	342	22.5	78	5.2	405.2	33.2
Outermost regions	ESP	ESP OFR PS40XX	1	0.6%	7	10	27	1%	27	1%	1,219	0%	1,604	0%	1,412	305	428	30	2.1	275	19.5	432	30.6	25.4	3.0
Outermost regions	ESP	ESP OFR PMP1012	26	100.0%	65	56	732	100%	732	100%	139	100%	270	100%	1,287	819	81	1,056	82.0	236	18.4			40.6	18.8
Outermost regions	PRT	PRT OFR HOK1824 P2	3	100.0%	24	38	559	100%	317	100%	445	100%	1,056	100%	1,071	498	215	594	55.5	96	9.0	7	0.7	198.1	15.6
Outermost regions	PRT	PRT OFR HOK0010 P2°	51	100.0%	198	74	3,077	100%	2,604	100%	475	100%	1,308	100%	1,044	412	187	675	64.7	263	25.2	124	11.9	13.2	9.1
Outermost regions	PRT	PRT OFR HOK2440 IWE	1	8.7%	8	10	204	9%	204	9%	251	7%	582	7%	659	101	184	190	28.9	89	13.5	22	3.3	244.2	19.2
Outermost regions	PRT	PRT OFR MGP1824 P2°	3	100.0%	31	36	500	100%	476	100%	510	100%	627	100%	635	336	58	412	64.9	76	12.0	28	4.4	137.3	11.4
Outermost regions	ESP	ESP A37 PGO1824 °	12	16.7%	30	14	232	8%	232	8%	98	6%	374	5%	379	212	93	26	6.8	186	49.1	296	78.1	2.1	1.9
Outermost regions	FRA	FRA OFR HOK1824 °	4	100.0%	13	13	512	100%	370	100%	229	17%	1,182	46%	373	236	244	331	88.6	567	152.0			82.7	25.4
Outermost regions	ESP	ESP OFR FPO1218 °	10	100.0%	20	10	898	100%	898	100%	55	100%	236	100%	301	272	34	171	56.9	100	33.4	105	34.9	17.1	17.1
Outermost regions	PRT	PRT A27 HOK2440	3	9.3%	22	7	128	3%	123	4%	50	2%	243	2%	253	88	75	44	17.3	45	17.6	263	103.6	13.1	6.6
Outermost regions	PRT	PRT A27 HOK1218 P3	6	13.0%	39	8	197	4%	101	3%	122	6%	203	4%	203	110	17	90	44.5	20	10.0	111	54.9	15.0	12.0
Outermost regions	PRT	PRT OFR MGP0010 P2	5	100.0%	22	5	390	100%	379	100%	77	100%	252	100%	142	87	16	119	83.9	33	22.9	24	16.8	23.8	23.8
Outermost regions	ESP	ESP A27 PGO1824 °	4	3.1%	5	2	31	2%	31	2%	38	1%	63	1%	102	44	30	35	34.2	9	9.0	42	40.9	10.0	14.2
Outermost regions	ESP	ESP A27 PGP2440 °	1	0.3%	3	3	33	0%	33	0%	43	0%	80	0%	96	124	33	17	17.4	141	146.7	163	169.3	12.1	4.9
Outermost regions	PRT	PRT A27 HOK1824	4	13.1%	39	6	108	3%	99	3%	13	0%	56	1%	72	113	36	75	103.3	187	259.4	377	522.0	16.8	11.7

			Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
			(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
Outermost regions	PRT	PRT A27 HOK1012 P3	1	1.4%	6	5	113	1%	58	1%	27	1%	53	1%	53	40	9	31	58.7	-9	-16.9	-22	-41.2	31.0	6.5
Outermost regions	ESP	ESP A37 PMP0612	1	0.1%	2	0	17	0%	17	0%	12	0%	23	0%	25	3	0	23	90.1	19	76.3	17	65.3	22.9	127.2
Outermost regions	ESP	ESP A27 PMP0010	22	1.0%	39	1	52	0%	52	0%	5	0%	20	0%	22	10	2	6	25.7	-4	-19.0	-19	-86.8	0.3	7.1
Outermost regions	FRA	FRA OFR FPO0010	299	100.0%			17	100%	17	100%	1	100%	2	100%		-									
Outermost regions	FRA	FRA OFR HOK1012	22	100.0%			998	100%	700	100%	194	89%	976	95%		-									
Outermost regions	FRA	FRA OFR DTS1824	17	100.0%			196	100%	177	100%	768	100%	1,333	100%		-									
Outermost regions	FRA	FRA OFR PGP1012	10	100.0%			28	100%	24	100%	5	100%	20	100%		-									
Outermost regions	FRA	FRA OFR FPO1012	3	100.0%			20	100%	19	100%	5	100%	9	100%		-									
Outermost regions	FRA	FRA OFR HOK0010	407	100.0%			6,779	100%	6,765	100%	365	88%	1,670	94%		-									
Outermost regions	FRA	FRA OFR PGO0010	69	100.0%			51	100%	51	100%	4	100%	17	100%		-									
Outermost regions	FRA	FRA OFR PGP0010	634	100.0%			198	100%	197	100%	8	87%	21	90%		-									
Outermost regions	FRA	FRA OFR DFN0010	205	100.0%			50	100%	50	100%	2	100%	9	100%		-									
Outermost regions	FRA	FRA OFR FPO1218	2	100.0%			277	100%	137	100%	51	100%	98	100%		-									

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Table 4.45 EU *Other Fishing Region* fleet structure and economic performance estimates by region and fleet segment - non-EU Mediterranean Sea, 2014

			Estimated no. of vessels	% of total no. of vessels	Estimated employed	Estimated FTE	Days at sea	as a % of total DAS	Fishing days	as a % of total fishing days	Live weight of landings	as a % of total landed weight	Value of landings	as a % of total landed value	Revenue	Labour costs	Energy costs	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average GVA	GVA per FTE
			(#)	(%)	(person)	(#)	(day)	(%)	(day)	(%)	(K tonnes)	(%)	(K €)	(%)	(K €)	(K €)	(K €)	(K €)	(%)	(K €)	(%)	(K €)	(%)	(K €)	(K €)
non EU Mediterranea	ESP	ESP A37 DTS1824	2	0.6%	8	9	270	1%	270	1%	28	0%	569	1%	1,150	158	143	886	77.0	727	63.3	695	60.4	471.2	104.0
non EU Mediterranea	ESP	ESP A37 PGO1824 °	2	3.2%	6	8	138	5%	138	5%	55	4%	597	8%	580	126	55	386	66.5	260	44.8	238	41.1	166.9	47.2
non EU Mediterranea	ESP	ESP A37 HOK1218 °	1	2.0%	4	2	58	2%	58	2%	21	6%	169	9%	439	50	11	392	89.2	342	77.9	304	69.2	536.4	202.9
non EU Mediterranea	CYP	CYP A37 DTS2440 °	3	52.2%	19	19	381	52%	381	52%	51	27%	421	33%	418	133	277	-71	-17.1	-205	-49.0	-742	-177.7	-27.4	-3.7
non EU Mediterranea	CYP	CYP A37 PGP1218 °	2	10.1%	8	8	171	10%	171	10%	33	6%	256	14%	256	30	29	152	59.5	122	47.7	49	19.2	68.1	19.8
non EU Mediterranea	ESP	ESP A37 FPO1218 °	1	4.0%	3	3	123	4%	123	4%	20	6%	322	9%	255	41	18	204	79.8	163	63.8	155	60.8	203.5	79.8
non EU Mediterranea	ESP	ESP A37 DTS2440		0.2%	1	1	41	0%	41	0%	9	0%	106	0%	154	27	30	106	69.0	79	51.4	72	46.6	407.7	80.9
non EU Mediterranea	ESP	ESP A37 PGO1218 °		0.5%	1	1	18	0%	18	0%	3	0%	34	1%	35	12	3	20	55.7	8	22.7	6.3	17.7	94.1	25.7
non EU Mediterranea	ESP	ESP A37 PMP1218 °		0.7%			25	1%	25	1%	13	4%	26	1%	22.8	5.7	1.0	18.2	79.8	13	54.9	11	46.6	91.0	37.9
non EU Mediterranea	ESP	ESP A37 PS1824		0.0%			5	0.0%	5	0.0%	13	0.1%	10	0.0%	10.8	9.6	1.4	6.5	60.5	-3.1	-28.6	-4.0	-37.1	163.4	17.2
non EU Mediterranea	ESP	ESP A37 DFN1218		0.1%			8	0.1%	8	0.1%	1	0.1%	7	0.2%	10.2	1.9	0.5	8.5	83.6	6.6	65.2	6.1	60.1	170.1	121.5
non EU Mediterranea	MLT	MLT A37 HOK1824		0.4%			7	0.4%	1	0.1%	1	0.3%	7	0.3%	9.6	1.5	2.0	3.8	39.2	2.3	23.5	-1.0	-10.1	53.7	8.9
non EU Mediterranea	MLT	MLT A37 DTS1824		0.1%			1	0.1%	1	0.2%	0	0.1%	1	0.1%	1.5	0.3	0.5	0.5	33.4	0.3	16.4	-0.5	-33.7	51.0	10.2
non EU Mediterranea	FRA	FRA A37 DTS1824 °		0.0%			1	0.0%	1	0.0%	0	0.0%	1	0.0%	1.4	0.7	0.8	-0.0	-3.0	-0.8	-56.3	-1.0	-70.5	-4.1	-4.1

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

5 NATIONAL CHAPTERS

KEY FINDINGS 2014

- **BELGIUM**: overall improved performance but operating at a net loss - revenue increased 10%, amounting to €85.4 million; GVA estimated at €36.6 million (+27%), gross profit €7.4 million (+220%) and net profit -€2.9 million (+60%).
- **BULGARIA**: Overall improved performance, although still generating losses - revenue decreased 18%, amounting to €5.5 million; GVA estimated at €2.7 million (+37%), gross profit -€0.1 million (+95%) and net profit -€1.5 million (+3%).
- **CROATIA**: Although operating at a loss, overall improved performance - revenue increased 6%, amounting to €76.5 million; GVA estimated at €36.6 million (+22%), gross profit €13.7 million (+43%).
- **CYPRUS**: Still operating at a loss but general improved performance - revenue increased 5%, amounting to €7.5 million; GVA estimated at €0.8 million (+1230%), gross profit -€0.1 million (+88%) and net profit -€6.1 million (+4%).
- **DENMARK**: Overall deteriorated performance but operating at a profit - revenue decreased 4%, amounting to €385.6 million; GVA estimated at €238.4 million (-6%), gross profit €131.3 million (-8%) and net profit €37.1 million (-20%).
- **ESTONIA**: Overall deteriorated situation but operating at a profit - revenue decreased 6%, amounting to €14.7 million; GVA estimated at €9.3 million (+1%), gross profit €3.9 million (-5%) and net profit €1.6 million (-26%).
- **FINLAND**: Continued deteriorated situation and still operating at a net loss - revenue decreased -11%, amounting to €39.3 million; GVA estimated at €15.5 million (-15%), gross profit €7.2 million (-10%) and net profit -€8.4 million (+78%).
- **FRANCE**: mixed performance - revenue increased 2%, amounting to €1.2 billion; GVA estimated at €580 million (+0.1%), gross profit €150 million (-16%) and net profit €55.6 million (-27%).
- **GERMANY**: overall deterioration but operating at a profit - revenue decreased 9%, amounting to €134.6 million; GVA estimated at €71 million (-13%), gross profit €23.7 million (-31%) and net profit €6.4 million (-52%).
- **GREECE**: Incomplete data – no economic performance results
- **IRLAND**: Overall improved performance - revenue increased 15%, amounting to €320.6 million; GVA estimated at €168 million (+25%), gross profit €86.5 million (+25%) and net profit €49.4 million (+46%).
- **ITALY**: Overall improved performance - revenue decreased 2%, amounting to €824.2 million; GVA estimated at €461 million (+6%), gross profit €226 million (+15%) and net profit €55.6 million (+102%).
- **LATVIA**: Mixed performance results but operating at a profit - revenue decreased 15%, amounting to €20.3 million; GVA estimated at €7.2 million (-12%), gross profit €4.1 million (+5%) and net profit €2.4 million (+36%).
- **LITHUANIA**: Overall deteriorated performance even though revenue increased 51%, amounting to €100.3 million; GVA estimated at €14.4 million (-20%), gross profit €5.2 million (-57%) and net profit -€2.0 million (-121%).
- **MALTA**: Overall improved performance - revenue decreased 22%, amounting to €11.7 million; GVA estimated at €5.3 million (-32%), gross profit -€0.8 million (-117%) and net profit -€5.1 million (+604%).
- **NETHERLANDS**: Overall improved performance - revenue increased 2%, amounting to €380.9 million; GVA estimated at €178.4 million (+18%), gross profit €70.6 million (+45%) and net profit €27.2 million (+656%).
- **POLAND**: Overall deteriorated situation, moving to a loss making position - revenue decreased 15%, amounting to €48.1 million; GVA estimated at €21.7 million (-23%), gross profit €6.1 million (-33%) and net profit -€0.9 million (-139%).
- **PORTUGAL**: Overall improved performance - revenue increased 0.1%, amounting to €364.9 million; GVA estimated at €235.5 million (+5%), gross profit €99.5 million (+14%) and net profit €39.9 million (+110%).
- **ROMANIA**: Overall improved performance - revenue increased 69%, amounting to €2.5 million; GVA estimated at €1.5 million (+77%), gross profit €0.4 million (+62%) and net profit €0.1 million (+36%).
- **SLOVENIA**: Overall improved performance - revenue increased 5%, amounting to €2.7 million; GVA estimated at €2.3 million (+14%), gross profit €1.3 million (+25%) and net profit €1 million (+39%).
- **SPAIN**: Overall improved performance - revenue increased 7%, amounting to €2 billion; GVA estimated at €1.06 billion (+21%), gross profit €444.8 million (+56%) and net profit €332.6 million (+100%).
- **SWEDEN**: Overall deterioration, moving to a loss making position - revenue decreased 22%, amounting to €112 million; GVA estimated at €53.9 million (-25%), gross profit €21.4 million (-44%) and net profit -€0.8 million (-108%).
- **UK**: Overall improved performance - revenue increased 19%, amounting to €1.1 billion; GVA estimated at €535.4 million (+30%), gross profit €281.7 million (+43%) and net profit €204.7 million (+54%).

5.1 BELGIUM

Short description of the national fleet

Fleet capacity

The Belgian national fleet capacity continued to decline with a total of 79 vessels in 2015 (6 of which were inactive), a combined gross tonnage (GT) of 14.6 thousand tonnes and a total engine power of 47.6 thousand kilowatts (kW). Compared to 2014, one vessel ceased its fishing activities and two more were inactive in 2015. No new vessels were introduced.

Fleet structure

In Belgium, the fishing fleet is divided into a large-fleet segment with an engine power of >221 kW (47% of the vessels in 2015) and a small-fleet segment with an engine power of ≤221 kW (53% of the vessels in 2015).

Within the large-fleet segment 78% of the vessels are large beam trawlers of 662 kW or more. Other gears used in this fleet segment include otter trawls, seiners and passive gears. The large-fleet segment represents about 80% of the overall engine power and 77% of the overall GT.

The small-fleet segment can be divided into three sub groups. (1) The coastal vessels (45%) have a GT<70 tonnes and make fishing trips under 48 hours, often even less than 24 hours. (2) The *Eurokotters* (38%) are beam trawlers under 24 m and constructed after 1980. They are mainly active in the Southern and Central part of the North Sea and the English Channel and make fishing trips of approximately five days. Most *Eurokotters* target demersal fish species (mainly sole and plaice), but some vessels also target *Nephrops* during the summer with demersal otter trawls in the Central part of the North Sea and shrimp just after summer. (3) A small number of vessels do not classify under (1) or (2) and use other gears (dredge, seines, otter trawls) and are active in the North Sea and English Channel.

Employment

Employment was estimated at 345 jobs, corresponding to 293 FTEs or an average of 3.9 FTE per vessel in 2014. According to the Social Secretariat of the Coast, 24% of the fishers were over 50 years of age (data for 2013). Three quarters (75%) of fishers employed in the Belgian fishing fleet were Belgian nationals and 23% had Dutch nationality. The remaining 2% were mostly French (data for 2012). The large-fleet segment accounts for most employment in Belgian fisheries.

In 2003, a law on employment ended the "No catch, no pay" era, assuring income security for each sea trip. This is unique in Europe and may contribute to the fight against illegal fishing. Compared to other member states, Belgian fishers have a relatively high income. Even so, finding appropriate crew remains a challenge, as young people who graduate from the Maritime Institute prefer to work for dredging companies or in tourism. Fishing remains one of the most dangerous professions.

Effort

An estimated 16.3 thousand days were spent at sea in 2014, a small increase compared to 2013. While the amount of energy consumed also increased (+4%), overall, energy costs decreased by 6% as a result of lower fuel prices.

Between 2013 and 2014 the number of active vessels remained the same and the landings per unit of fishing effort (kg per fishing day per trip) increased with 7%, indicating an improved efficiency. In general, efforts have been made to use more fuel-efficient engines and fishing techniques since the fuel crisis of 2008.

Belgian vessels operate mainly in the North Sea, the English Channel, the Bristol Channel and other areas of the North Atlantic. Important areas in 2014 were in order of decreasing importance: the Central North Sea (IVb), the Eastern Channel (VIIb), the Southern North Sea (IVc), the Bristol Channel (VIIf), the South-East Irish or Celtic Sea (VIIg). In other areas, the total catch was less than 1000 tonnes.

Production

Landings increased with 4% to 26.2 thousand tonnes of seafood, with a value of €81.5 million in 2014. This represents a 10% increase in value on 2013. The fleet targets mainly demersal species. Sole remains the dominant species, generating the highest landed value (€32.6 million) and representing about 40% of the total landings value. In terms of the weight, European plaice (8.8 thousand tonnes) remains the top landed species, generating the second highest landed value (€10.8 million).

The North Sea was the most important area in terms of landed value (45%), followed by the Eastern Channel (30%), the Bristol Channel (VIIf) and the Celtic Sea (VIIg) (together 16%) and the Bay of Biscay (5%). When considering average prices, landings from the Bay of Biscay were the most valuable (7.55 €/kg), while landings from the North Sea had the lowest value per kg (2.45-3.29 €/kg). As in previous years, these differences are a reflection of the sole proportions in the catches (highest in the Bay of Biscay and lowest in the Central North Sea). Another contributing factor is the amount of anglerfish caught in the Bay of Biscay. Due to the strong quota restrictions in the Irish Sea (VIIa) for sole in 2014, the

landings from this area decreased with 41% compared to 2013. Landings from the Western Channel (VIIe) also decreased (-38%).

Economic results for 2014 and recent trends

National fleet performance

Although the Belgian national fleet remained in a net loss making position in 2014, its economic performance compared to previous years improved and this trend is expected to have continued into 2015, as fuel prices remained lower than in previous years and fish prices were relatively high. Revenue, estimated at €85.4 million, increased by 10% due to an 11% increase in income from landings while other income (€3.6 million) decreased by 5%. When including direct income subsidies, total income (no income from fishing rights) amounted to €87.2 million.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €36.6 million, €7.4 million and -€2.9 million, respectively. GVA increased by 27%, gross profit and net profit increased by 220% and by 60%, respectively. These results indicate a still weak, yet significantly improved economic situation compared to previous years.

Total operating costs increased due to the 11% increase in crew costs, while energy costs decreased by 6%. When including capital costs, total costs amounted to €88.3 million, exceeding total revenue and generating a net loss of -€2.9 million or -€1.1 million when including subsidies. Overall, the cost structure has remained relatively constant over the years. However, in 2014 there was some apparent decrease in the proportion of the energy costs to 27% of the overall costs. In general the proportion of labour costs is relatively high, amounting to 31% in 2014. Contrary to the situation in some other European countries, the crew share is a direct percentage of the value of landings without subtracting variable costs. The crew share usually amounts to 30% of the value of landings. In 2014, the wages and salaries of the crew represented about 33% of the value of landings.

The (depreciated) replacement value of the Belgian fleet was estimated at €58 million and investments amounted to €4.9 million, a 9% decrease compared to 2013. Belgian vessels are old: the average age is 28 years. This figure increases every year as no investment in building or buying new vessels is being made. Even though there is a will to invest in new vessels within the sector, it is unclear who should provide the necessary funds. The current vessel owners do not seem to have the capital to undertake such large investments.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 8.7%, indicating a low operating efficiency of the sector. However, this is an increase of 192% compared to the previous year and of 179% compared to the average of all previous years since 2008. Net profit margin was estimated at -3.5%, a 63% increase on 2013. The Rate of Return on Fixed Tangible Assets (RoFTA) improved in comparison to previous years, but remained negative at -3.9%. After an overall improved development trend since 2008, labour productivity (GVA/FTE) remained stable in 2014: GVA increased by 27%, but the number of FTE also increased by 28%, indicating no efficiency gains. Average gross profit per vessel per day at sea was €5 980.

Fuel consumption per landed tonne has followed an overall decreasing trend since 2008 (-45%), but is still relatively high at 1.5 thousand litres per landed tonne. One of the reasons behind this high fuel consumption is that the fishing grounds are spread out and sometimes far away from the Belgian coast. Another explanation is related to the use of trawling gear, as the focus lays on catching demersal species. Landings per unit of effort (in weight per days at sea) has followed an increasing trend since 2008 and increased a further 4% in 2014. The landings per unit of fishing effort (per weight per fishing day per trip) even increased with 7%. Overall, these figures indicate an improved efficiency.

Drivers affecting the economic performance trends

Higher landings and higher average fish prices, together with lower fuel costs were the main driving forces behind the overall improvement in the profitability of the fleet.

The average fish price in 2014 increased by 4%. More specifically, the increase in average price of several important species, such as plaice, great Atlantic scallop, lemon sole, and turbot led to an increase in income and had a positive impact on profitability. The average price of sole remained relatively stable in 2014. However, increased landing of 25% lead to an increase of €6.45 million for sole alone. This lead to a total higher value of landings of 10% compared to 2013. The value of landings per active vessel was never as high as in 2014.

The average fuel price in 2014 was €0.05 per litre lower than in 2013, which is still high compared to the situation before 2008. The Belgian fleet is dominated by trawlers, both beam and demersal trawlers. Therefore, as trawling is typically fuel intensive, even slight decreases of the fuel price make a difference. Fluctuations in fuel prices are therefore a key driver for the profitability of the fleet.

Specific programmes of the European Common Fisheries Policy (CFP) oriented to decommissioning, lead to an exponential decline in the number of active vessels. In 1992 there were still 205 fishing vessels, while in 2002 there were 130 (-37%). This number stayed then relatively stable for some years, to decrease again in the years before the fuel crisis. The fuel crisis in 2008, followed by the economic crisis, lead to a further large decrease in the capacity of the Belgian fleet and to poor economic performances. However, it would seem that the remaining fleet is now slowly recovering.

Markets and Trade

In 2014, about 19% of landings occurred in foreign harbours. Of the Belgian harbours, Zeebrugge was the most important with about 65% of domestic landings. Around 83% of landings in foreign harbours occurred in the Netherlands and 14% in the UK. This is partly explained by the fact that important fishing grounds for the species landed abroad were situated North of the Netherlands.

In addition, a third of the fleet was owned by Dutch nationals. These owners prefer to land in their home ports, where the price for plaice is generally higher (7 cent per kg higher in the Netherlands as compared to Belgium in 2013). In 2014, the Belgian fleet landed and sold 1.6 thousand tonnes of plaice in Dutch harbours, representing 42% of the Belgian landings in the Netherlands and about 19% of the total landed plaice. In addition, cod caught as by-catch in the plaice fishery was sold in the Netherlands at the same average market price as in Belgium. Sole on the other hand tends to remain more valuable on internal Belgian markets. Scallops were mainly destined for the French and UK markets.

Belgium is a net exporter for both plaice and sole. In 2014, a total of 8.6 thousand tonnes plaice was exported and a total of 2.4 thousand tonnes sole. On average, about 3 thousand tonnes of whole plaice are exported from Belgium to the Netherlands every year, while only 600 tonnes are reversely imported. This represents almost all of the Belgian whole plaice export. Furthermore, about 1.0 thousand tonnes of whole sole are exported from Belgium to the Netherlands.

Management instruments

The fleet is managed mainly through total available catches (TACs), together with a range of input controls. National restrictions are set on the maximum days at sea that a vessel may achieve within a year. In 2014, this maximum was set at 270 days for all vessels (excluding beam trawlers targeting shrimp and dredges targeting scallops), regardless of the area and fishing stock. Exchanges of sea days for catch possibilities were allowed, except for sole, plaice and cod. The fishery in the Bay of Biscay is restricted to only a few months.

In the context of the recovery of cod and hake stocks, a number of measures were implemented depending on the fishing gear in the North Sea, the Irish Sea, Skagerrak and West of Scotland. Many additional yearly restrictions exist, depending on the fleet segment, the species and the area. For example there was a limit of 100 kg of whiting per day in VIIb-k for the small-fleet segment and 200 kg per day for the large-fleet segment.

TACs and quotas

Total initial available quota (TAC) for the Belgian fleet in 2014 was 32 thousand tonnes (an increase of 1%). The global quota for sole, which is especially important for the Belgian fleet, decreased with 15% to 3 thousand tonnes in 2014. Changes varied according to fishing regions and included: 15% decrease in the North Sea (IIa, IV), 36% in the Irish Sea (VIIa), 9% in the Bristol Channel and Celtic Sea (VIIfg), 8% in the Bay of Biscay (VIIIab), 18% decrease in the Eastern Channel (VIId) and 9% in the Western Channel (VIIe).

The global quota for European plaice increased by 9% to 7.4 thousand tonnes in 2014, while the quota for anglerfish increased by 11% to 3.6 thousand tonnes. It remained the same for turbot, brill and lemon sole, but decreased for cod (-8%) and rays (-8%).

Belgium conducted 63 quota trades with 7 other member states in 2014. This, together with the transferable quota from 2013 to 2014, allowed for a sufficient amount of quota for the important species. Trading with other member states allowed for a 25% increase in sole quota, amounting to a total of 3.8 thousand tonnes. For European plaice this amounted to a total of 9.7 thousand tonnes (+30%). Even so, eight closings of the fishing grounds were necessary. Despite closing these fishing grounds a number of quota exceeds were reported mainly for ray.

Innovation and Development

Research on technical innovation as an alternative for the beam trawl in the flatfish and shrimp fishery is on-going. The fuel crisis of 2008 forced the fleet to adjust to the rapidly increasing fuel costs. A number of vessels changed from traditional beam trawling to alternative beam trawling methods. For example, to reduce drag forces, instead of using a beam, a wing was used (sumwing) or a beam on wheels or a combination of both (seawing). Another adjustment was to reduce the overall weight of the used gears. Following the fuel crisis, bankruptcy was a reality for those fishers who did not adjust their fuel consumption. Even though fuel prices have been decreasing since 2013, the remaining fleet is still recovering from this crisis.

Contrary to the Dutch fleet, only one Belgian commercial vessel is currently using the pulse trawl technique. The Flemish government issued three permits to use the pulse technique. However, two of them have not been used. One of the reasons may be that the reduced quota for sole in the North Sea (the only area where the pulse technique is partly permitted) do not justify the investment. Most enterprises own only one vessel and therefore cannot take the risk of investing in a new technique when an increase in revenue is not assured. The risk of bankruptcy when making a wrong decision is high and therefore most enterprise owners are reluctant to make important changes. In general, transition towards the implementation of these new techniques in the sector is slow as fishers are hesitant due to high investments, the uncertainty of the impact of the techniques and the possible market effects.

Facing the soon to be implemented landing obligation, research on gear selectivity is on-going. Devices such as cut-away top panels, square mesh top panels, benthos release panels, T-90 cod-ends, square mesh cod-ends, narrow cod-ends and tunnels in square meshes are being developed and tested in Belgium.

Performance by fishing activity

The Belgian fleet is dominated by beam trawlers and to a lesser extent demersal trawlers and seiners. In both cases, the larger length segments appear to perform better than the smaller length group vessels. In the case of the beam trawlers, roughly the larger vessel length segments correspond to the large-fleet segment, taking long and far trips. The shorter vessel lengths roughly correspond to the coastal vessels and the Eurokotters. In 2014, the economic performance of the coastal vessels and Eurokotters had significantly improved. For the large beam trawlers of more than 662 kW the negative trend of the past years had turned into a more positive outlook.

Performance of selected fleet segments

Beam trawlers: The profitability of the beam trawlers in 2014 was weak, however the economic development trend suggests improvement. The net profit margin increased considerably in comparison to the average of the previous years. Two major external factors in 2013 and 2014 had an influence on this outcome: an increase in fish price combined with a slight decrease in fuel prices.

Beam trawl 18-24m: 27 active vessels operating predominantly in Area 27.4 and Area 27.7, employing 23% of total FTE. Value of landings amounted to €12.4 million, 15% of total national landings. These vessels target a variety of species including common sole (€5.2 million), common shrimp (€3.8 million), European plaice (€1.0 million) and turbot (€0.6 million). They reported a negative gross profit of €3.9 thousand and a net loss of €1.5 million in 2014, but with an improved economic development trend and a GVA of €5.2 million.

Beam Trawl 24-40m: 29 active vessels operating predominantly in Area 27.7, but also in Area 27.4 and 27.8, employing 58% of total FTE. The value of landings amounted to €56 million, representing 68% of total landing value. These vessels target a variety of species, particularly common sole (€25 million), European plaice (€8.2 million), lemon sole (€4 million), anglerfish (€3.5 million), turbot (€2.9 million) and cod (€2.9 million). They reported a positive gross profit of €8.5 million and a net profit of €1.4 million in 2014, an improved situation to 2012 and 2013, due to a higher value of landings. Crew wages were higher in this fleet segment compared to other fleet segments. Labour productivity was also highest.

Demersal trawlers and seiners: This segment included 8 vessels between 18 and 24 m, 5 vessels between 24 and 40 m, and 3 vessels under 18 m, operating predominantly in Area 27.7 and 27.4, together employing around 15% of total FTE. Value of landings amounted to €10.7 million. Targeted species include common sole (€1.7 million), European plaice (€1.6 million) and *Nephrops* (€2.4 million). Profitability was weak with a net loss of -€2.9 million.

Large-scale fleet

The *large-fleet segment* (> 221 kW, as defined in Belgium) includes 46% of all Belgian fishing vessels, but represents about 80% of overall engine power and 77% of overall GT. This segment mainly consists of beam trawlers 24-40 m that assure the majority of annual landed fish and employment of the Belgian fleet and target demersal fish species, with sole, plaice and anglerfish as most important in terms of revenue. With fishing rights in the distant North Sea and the North East Atlantic, many vessels fish in campaigns. In between two fishing trips, these vessels do not return home, but land fish in foreign harbours. There were 29 active vessels with more than 662kW, which coincide with the 29 vessels described above in the *beam trawl 24-40m fleet segment*. A limited number of vessels of the *large-fleet segment* use other fishing gear.

The *Eurokotters* (≤ 221 kW; > 70 GT) are part of the Belgian nationally defined *small-fleet segment*. However, in terms of scale, they can be considered as an intermediate category between the coastal vessels and the beam trawlers belonging to the *large-fleet segment*. They figure in the *beam trawl 18-24m fleet segment* described above and target mainly sole and plaice. There were 16 Eurokotters in 2014.

Small-scale fleet

In 2014, there was only one active fishing vessel under 12m long and there were no vessels belonging to the small-scale fleet according to the European definition (vessels under 12m using passive gears).

Yet, according to Belgian classification, the coastal fishing vessels within the *small-fleet segment* (≤ 221 kW and < 70GT) are considered as small scale. These vessels make short trips of max. 24-48 hours and mainly focus their activities within the 3 nautical mile (nm) zone of the Belgian Part of the North Sea, in which they have exclusive fishing rights. The vessels are equipped with beam or demersal trawls and target demersal fish during winter and spring, and shrimp during summer and autumn. In 2014 there were 17 coastal fishing vessels, representing 22% of the active Belgian fishing vessels, landing 1.4 thousand tonnes or 5% of total landings. Average labour costs for this *coastal-fleet segment* remained rather stable with regards to the landings, representing 26.8% of the value of landings in 2014. The value of landings was on average €2 070 per day at sea with an average fuel consumption of 729 litres per day at sea (compared to 3 606 litres per day at sea for the large beam trawler vessels of more than 662 kW). Fuel costs decreased considerably for the coastal fishers and represented 22% of costs in 2014. The fleet segment was generally profitable in 2014 with an average net profit of €55 thousand, an improvement compared to 2013, when on average it was also profitable. In both years, the prices of common shrimp, sole and lemon sole were relatively high.

Projections for 2015 and outlook

Preliminary results for 2015 forecast a 6% decrease in landed weight, with a 1% increase in landed value. Projections suggest that decreases in effort and fuel consumption translated in part to a 12% decrease in operating costs, and, together with an 8% reduction in capital costs fostered further economic performance improvements in 2015: GVA (+25%), gross profit (+135%) and net profit (+361%).

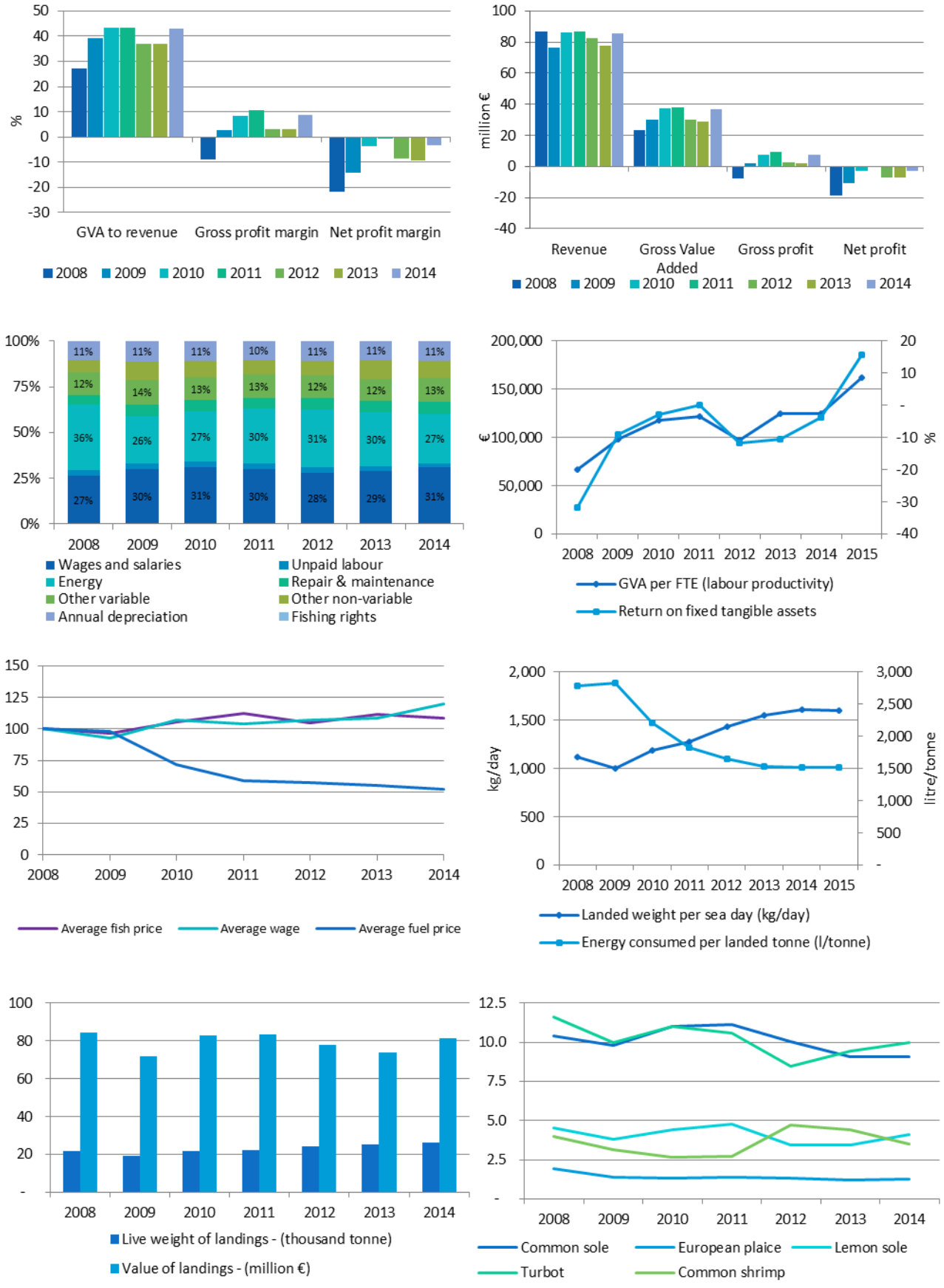
For the first time since at least 2008, projection results suggest that the Belgian fleet operated at a profit in 2015: with an estimated net profit margin of 9.0%. Positive economic developments can also be seen in performance indicators GVA to revenue (53%), GVA per FTE (€183 000) and gross and net profit margins.

The 2015 gains are offset slightly in 2016 as an increase in landings (+15%) is counteracted by low prices, resulting in a 11% decrease in revenue. With fuel costs also declining in 2016 (-19%) the fleet remains profitable with gross and net profit margins of 16% and 5% respectively.

Data issues

No major issues need to be reported. There has been a change in data management: from manually adjusted queries to an automated database since 2015. The data comes from the Department of Agriculture and Fisheries of the Flemish Government who conducts the data collection. Response for economical values of 2014 was obtained from 91% of the active fleet (87% of the total fleet). For effort and landings, the coverage was very close to 100%. Therefore, the overall coverage of the national fleet was very adequate.

Remarks: fishing effort (kg per fishing day per trip) was calculated as the catch per fishing day divided by the total number of trips of the fleet as explained in the 2016 JRC- Report on the 2nd Workshop on Transversal Variables, pp 34-38 (Ribeiro et al. 2016).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.1 Belgium: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.1 Belgium: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	102	102	91	90	88	83	80		-4%	-14%
Number of Inactive vessels_ms	(#)	4	8	3	4	7	7	4		-43%	-27%
Vessel tonnage	(thousand GT)	19.3	19.5	16.1	15.8	15.8	15.1	14.6		-3%	-13%
Engine power	(thousand kW)	62.2	63.1	52.3	51.3	51.1	47.6	46.5		-2%	-15%
Average vessel age	(year)	22	23	23	24	25	26	27		4%	13%
Average vessel length	(metre)	28	28	27	27	27	27	28		0%	0%
Enterprises with one vessel	(#)	92	85	77	87	78	77	75		-3%	-9%
Enterprises with 2 to 5 vessels	(#)	5	7	6	1	2	3	2		-33%	-50%
Enterprises with more than 5 vessels	(#)	-	-	-	-	-	-	-			
FTE	(#)	353	305	317	312	312	230	293		28%	-4%
Total employed	(person)	472	421	394	382	376	345	345		0%	-13%
Days at sea	(thousand day)	19.5	19.3	18.2	17.4	16.8	16.3	16.3		0%	-9%
Fishing days	(thousand day)	19.6	19.6	18.7	17.6	17.2	17.0	16.9		-1%	-8%
Number of fishing trips	(thousand)	4	5	5	5	5	5	5		-1%	1%
Energy consumption	(million litre)	60.64	54.63	47.80	40.64	39.75	38.48	39.83		4%	-15%
Live weight of landings	(thousand tonne)	21.80	19.35	21.67	22.19	24.18	25.17	26.22		4%	17%
Value of landings	(million €)	84.28	71.80	82.81	83.26	77.99	74.04	81.46		10%	3%
Income from landings	(million €)	84.32	71.76	82.32	83.46	78.16	73.89	81.77		11%	4%
Other income	(million €)	2.71	4.87	3.93	3.65	4.19	3.81	3.62		-5%	-6%
Direct income subsidies	(million €)	1.60	1.03	1.53	2.82	1.86	1.75	1.80		3%	2%
Income from leasing fishing rights	(million €)	-	-	-	-	-	-	-			
Wages and salaries of crew	(million €)	28.11	25.49	27.65	26.36	25.07	24.32	27.05		11%	3%
Unpaid labour value	(million €)	3.25	2.51	2.49	2.38	2.69	2.11	2.11		0%	-18%
Energy costs	(million €)	37.88	21.59	24.24	26.28	28.06	25.08	23.53		-6%	-13%
Repair & maintenance costs	(million €)	5.68	5.50	5.51	5.14	5.72	5.23	5.93		13%	9%
Other variable costs	(million €)	12.67	11.41	11.07	10.93	11.16	10.12	11.32		12%	1%
Other non-variable costs	(million €)	7.21	8.18	7.95	6.93	7.05	8.53	8.02		-6%	5%
Annual depreciation costs	(million €)	11.21	9.63	9.58	9.10	9.56	8.86	9.67		9%	0%
Rights costs	(million €)	-	-	-	-	-	-	-			
Opportunity cost of capital	(million €)	- 0.05	3.28	0.84	0.47	0.23	0.74	0.70		-7%	-25%
Tangible asset value (replacement)	(million €)	59.8	84.2	74.6	59.3	59.5	62.1	58.0		-7%	-13%
Fishing rights	(million €)	-	-	-	-	-	-	-			
Investments	(million €)	4.4	12.0	12.8	14.8	12.2	5.4	4.9		-9%	-52%
Financial position	(%)	49.0	67.3	87.5	84.5	91.9	82.3	96.6		17%	25%
Gross Value Added	(million €)	23.6	29.9	37.5	37.8	30.4	28.7	36.6		27%	17%
GVA to revenue	(%)	27.1	39.1	43.5	43.4	36.9	37.0	42.8		16%	13%
Gross profit	(million €)	- 7.8	1.9	7.3	9.1	2.6	2.3	7.4		220%	186%
Gross profit margin	(%)	- 8.9	2.5	8.5	10.4	3.2	3.0	8.7		192%	179%
Net profit	(million €)	- 18.9	- 11.0	- 3.1	- 0.5	- 7.2	- 7.3	- 2.9		60%	63%
Net profit margin	(%)	- 21.7	- 14.3	- 3.6	- 0.6	- 8.7	- 9.4	- 3.4		63%	65%
GVA per FTE (labour productivity)	(thousand €)	67	98	118	121	97	125	125		-0.2%	19%
Return on fixed tangible assets	(%)	- 32	- 9	- 3	- 0	- 12	- 11	- 4		63%	65%

Table 5.2 Belgium: National fleet statistics and economic performance results based on fleet segment level data.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	102	102	91	90	88	83	80	*73*	*72*		-9%	-1%
Total employed	(person)	472	421	394	382	376	345	345	*335*	*334*		-3%	0%
FTE	(#)	351	305	317	312	312	230	293	*249*	*276*		-15%	11%
Days at sea	(day)	19,469	19,340	18,166	17,407	16,806	16,259	16,299	*15,270*	*17,266*		-6%	13%
Energy consumption	(thousand litres)	60,635	54,633	47,805	40,638	39,748	38,483	39,832	*37,248*	*42,138*		-6%	13%
Live weight of landings	(tonne)	21,801	19,354	21,666	22,192	24,180	25,172	26,216	*24,526*	*28,298*		-6%	15%
Value of landings	(thousand €)	84,278	71,797	82,809	83,264	77,991	74,045	81,465	*82,044*	*73,181*		1%	-11%
Income from landings	(thousand €)	84,319	71,755	82,324	83,460	78,164	73,893	81,774	*81,815*	*73,284*		0%	-10%
Other income	(thousand €)	2,715	4,865	3,932	3,647	4,191	3,814	3,617	*3,647*	*3,669*		1%	1%
Wages and salaries of crew	(thousand €)	28,107	25,493	27,655	26,359	25,067	24,320	27,054	*26,743*	*23,996*		-1%	-10%
Unpaid labour value	(thousand €)	3,246	2,507	2,488	2,381	2,687	2,111	2,112	*2,176*	*2,187*		3%	1%
Energy costs	(thousand €)	37,880	21,593	24,243	26,283	28,061	25,076	23,533	*16,892*	*13,702*		-28%	-19%
Repair & maintenance costs	(thousand €)	5,675	5,497	5,509	5,144	5,715	5,230	5,932	*5,308*	*5,300*		-11%	0%
Other variable costs	(thousand €)	12,671	11,406	11,072	10,934	11,161	10,119	11,318	*10,232*	*11,816*		-10%	15%
Other non-variable costs	(thousand €)	7,205	8,176	7,951	6,930	7,049	8,533	8,019	*7,425*	*7,423*		-7%	0%
Annual depreciation costs	(thousand €)	11,210	9,626	9,579	9,101	9,562	8,861	9,671	*8,857*	*8,860*		-8%	0%
Opportunity cost of capital	(thousand €)	- 48	3,284	843	475	232	745	696	*135*	*134*		-81%	-1%
Tangible asset value (replacement)	(thousand €)	59,782	84,218	74,637	59,322	59,548	62,060	57,967	*56,445*	*56,291*		-3%	0%
Gross Value Added	(thousand €)	23,602	29,948	37,481	37,817	30,369	28,749	36,588	*45,604*	*38,713*		25%	-15%
Gross profit	(thousand €)	- 7,751	1,948	7,339	9,076	2,615	2,317	7,422	*16,685*	*12,530*		125%	-25%
Net profit	(thousand €)	- 18,913	- 10,963	- 3,084	- 500	- 7,179	- 7,288	- 2,944	*7,694*	*3,536*		361%	-54%

Table 5.3 Belgium: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		LSF								Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
		2008	2009	2010	2011	2012	2013	2014	2015			
Total number of vessels	(#)	98	94	88	86	81	76	76	*73*		0%	-13%
Vessel tonnage	(thousand GT)	18.8	18.3	15.7	15.0	14.9	14.4	14.2	*14.1*		-2%	-13%
Engine power	(thousand kW)	61	59	51	49	47	46	45	*45*		-2%	-14%
FTE	(#)	351	305	317	312	312	230	293	*274*		28%	-4%
Total employed	(person)	472	421	394	382	376	345	345	*331*		0%	-13%
Days at sea	(thousand day)	19.5	19.3	18.2	17.4	16.8	16.3	16.3	*15.3*		0%	-9%
Fishing days	(thousand day)	19.6	19.6	18.7	17.6	17.2	17.0	16.9	*15.7*		-1%	-8%
Number of fishing trips	(thousand)	4	5	5	5	5	5	5	*4*		-1%	1%
Energy consumption	(million litre)	60.64	54.63	47.80	40.64	39.75	38.48	39.83	*37.55*		4%	-15%
Live weight of landings	(thousand tonne)	21.80	19.35	21.67	22.19	24.18	25.17	26.22	*24.53*		4%	17%
Value of landings	(million €)	84.28	71.80	82.81	83.26	77.99	74.04	81.46	*82.04*		10%	3%
Income from landings	(million €)	84.32	71.76	82.32	83.46	78.16	73.89	81.77	*81.81*		11%	4%
Other income	(million €)	2.71	4.87	3.93	3.65	4.19	3.81	3.62	*3.48*		-5%	-6%
Direct income subsidies	(million €)	1.60	1.03	1.53	2.82	1.86	1.75	1.80			3%	2%
Wages and salaries of crew	(million €)	28.11	25.49	27.65	26.36	25.07	24.32	27.05	*23.92*		11%	3%
Unpaid labour value	(million €)	3.25	2.51	2.49	2.38	2.69	2.11	2.11	*2.17*		0%	-18%
Energy costs	(million €)	37.88	21.59	24.24	26.28	28.06	25.08	23.53	*17.03*		-6%	-13%
Repair & maintenance costs	(million €)	5.68	5.50	5.51	5.14	5.72	5.23	5.93	*5.55*		13%	9%
Other variable costs	(million €)	12.67	11.41	11.07	10.93	11.16	10.12	11.32	*10.59*		12%	1%
Other non-variable costs	(million €)	7.21	8.18	7.95	6.93	7.05	8.53	8.02	*7.71*		-6%	5%
Annual depreciation costs	(million €)	11.21	9.63	9.58	9.10	9.56	8.86	9.67	*9.42*		9%	0%
Opportunity cost of capital	(million €)	- 0.05	3.28	0.84	0.47	0.23	0.74	0.70	*0.11*		-7%	-25%
Tangible asset value (replacement)	(million €)	60	84	75	59	60	62	58	*55*		-7%	-13%
Investments	(million €)	4.4	12.0	12.8	14.8	12.2	5.4	4.9			-9%	-52%
Gross Value Added	(million €)	23.60	29.95	37.48	37.82	30.37	28.75	36.59	*44*		27%	17%
GVA to revenue	(%)	27.1	39.1	43.5	43.4	36.9	37.0	42.8	*52.1*		16%	13%
Gross profit	(million €)	- 7.75	1.95	7.34	9.08	2.61	2.32	7.42	*18*		220%	186%
Gross profit margin	(%)	- 8.9	2.5	8.5	10.4	3.2	3.0	8.7	*21.5*		192%	179%
Net profit	(million €)	- 18.9	- 11.0	- 3.1	- 0.5	- 7.2	- 7.3	- 2.9	*8.8*		60%	63%
Net profit margin	(%)	- 21.7	- 14.3	- 3.6	- 0.6	- 8.7	- 9.4	- 3.4	*10.3*		63%	65%
GVA per FTE (labour productivity)	(thousand €)	67	98	118	121	97	125	125	*162*		0%	19%

Table 5.4 Belgium: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(litre/tonne)	(tonne)	(thousand €)	(thousand €)	€	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
BEL A27 TBB2440	29	169	8,382	1,555	17,776	55,792	58,588	26,883	45.9	8,553	14.6	1,404	2.40	108.5	159.2	6	Weak	144%	Improved
BEL A27 TBB1824 °	27	67	4,586	1,480	3,727	12,401	12,824	5,195	40.5	- 4	- 0.0	- 1,504	- 11.72	77.2	77.1	- 12	Weak	52%	Improved
BEL A27 DTS2440 °	16	44	2,665	1,478	3,856	10,703	11,219	3,198	28.5	- 1,480	- 13.2	- 2,932	- 26.13	106.9	73.1	- 21	Weak	-129%	Deteriorated
BEL A27 PMP1824 °	4	13	666	1,136	857	2,569	2,760	1,311	47.5	353	12.8	86	3.13	73.5	100.6	4	Weak	78%	Improved

Table 5.5 Belgium: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)								Live weight of landings (thousand tonne)								Average landed price (real) (€)							
	2008	2009	2010	2011	2012	2013	2014	2015	2008	2009	2010	2011	2012	2013	2014	2015	2008	2009	2010	2011	2012	2013	2014	2015
Common sole	38.9	38.3	42.6	39.4	30.8	26.2	32.6	*30.7*	3.7	3.9	3.9	3.5	3.1	2.9	3.6	*3.1*	10.4	9.8	11.0	11.1	10.1	9.1	9.1	*10.0*
European plaice	10.0	6.4	7.0	8.8	8.7	9.8	10.8	*11.6*	5.2	4.6	5.4	6.4	6.7	8.2	8.8	*7.8*	1.9	1.4	1.3	1.4	1.3	1.2	1.2	*1.5*
Lemon sole	4.0	2.5	3.0	3.9	3.2	3.7	4.9	*4.6*	0.9	0.7	0.7	0.8	1.0	1.1	1.2	*0.8*	4.5	3.8	4.4	4.8	3.4	3.4	4.1	*5.5*
Turbot	4.3	3.8	3.8	4.1	3.5	3.8	4.4	*4.3*	0.4	0.4	0.4	0.4	0.4	0.4	0.4	*0.5*	11.6	10.0	11.0	10.6	8.5	9.4	10.0	*9.5*
Common shrimp	3.3	2.1	4.5	2.0	4.1	5.3	4.1	*2.9*	0.8	0.7	1.7	0.8	0.9	1.2	1.2	*0.7*	4.0	3.1	2.7	2.7	4.7	4.4	3.5	*4.4*
Anglerfishes	3.8	3.1	3.7	4.5	5.7	5.5	3.8	*4.0*	1.0	0.9	1.0	1.3	1.7	1.7	1.0	*1.1*	3.9	3.7	3.6	3.5	3.3	3.3	3.8	*3.6*
Atlantic cod	3.4	2.6	2.5	2.6	3.3	3.3	3.2	*3.4*	1.1	1.0	0.8	0.9	1.2	1.3	1.5	*1.4*	3.0	2.6	3.1	3.0	2.7	2.5	2.2	*2.4*
Great Atlantic scallop	1.3	1.4	1.8	2.0	1.8	1.4	2.8	*2.4*	0.7	0.8	1.0	0.9	0.7	0.6	1.2	*0.8*	2.0	1.7	1.9	2.3	2.4	2.2	2.3	*3.1*
Norway lobster	1.0	0.6	0.9	1.8	1.9	1.9	2.4	*3.9*	0.2	0.2	0.2	0.3	0.4	0.3	0.4	*0.6*	4.7	3.8	4.8	6.3	5.1	5.7	5.8	*6.2*
Brill	3.0	2.5	2.5	2.5	2.0	2.1	2.3	*2.3*	0.4	0.3	0.4	0.3	0.3	0.3	0.3	*0.4*	8.1	7.3	6.9	7.4	6.3	6.7	7.6	*6.2*

5.2 BULGARIA

Short description of the national fleet

Fleet capacity

In 2015, the Bulgarian fishing fleet consisted of 1 979 registered vessels, of which 1 204 were active and the remaining 775 vessels were inactive. The active fleet had a combined gross tonnage (GT) of 5.0 thousand tonnes, engine power of 39.6 thousand kilowatts (kW) and an average age of 23 years.

Fleet structure

The Bulgarian fishing fleet is divided into a small-scale segment (89.7% in 2015) with an engine power of 22.8 kW and a large-scale fleet segment (10.3% in 2015) with an engine power of 16.9 kW.

The overall size of the Bulgaria fishing fleet decreased between 2013 and 2014, the active small-scale fleet decreased by 9%, the active large-scale fleet increased by 7% and inactive vessels increased by 7%. In the active small-scale fleet, GT and kW decreased 14% and 13%, while in the active large-scale fleet GT and kW increased 1% and 5% respectively.

Employment

Total Employment in 2014 was estimated at 1 517 jobs, corresponding to 532 FTEs with an average of 0.5 FTE per active vessel. The level of employment increased between 2013 and 2014 with 16%, but the total employed for 2014 decreased by 48%, compared to the average FTEs for the period 2008-2013.

In 2015, there were 1 807 fishing enterprises, a significant increase compared to 2008, due to the fact that in 2012 all Bulgarian fishers were obliged to become 'enterprises'.

Effort

The Bulgarian fleet spent over 21 thousand days at sea in 2014, a 95% increase compared to 2008 but a slow decrease since 2013. While the days at sea remained steady in the period, preliminary data for 2015 indicate a slight increase by 8% compared to 2014.

The quantity of fuel consumed in 2013 totalled 1.91 million litres, increase by 17% in 2014, totalling 2.23 million litres. According to preliminary data, the increasing trend 34% seems reliable in 2014 compared to the average million litres for the period 2008-2013, which is 1.67 million litres.

The major factor for the raise of fuel consumption was the increase of days at sea, decreased fuel price and an increase of the active large-scale fleet.

Bulgarian vessels operate only in the Black Sea.

Production

The total landed weight by the Bulgarian fleet in 2015 was 8.3 thousand tonnes of seafood, with a landed value of €3.8 million. The total volume and value of landings increased by 2% and 9% respectively over the period analysed (2008-2014).

Regarding the top species in terms of value, the average first sale price for 2015 for sea snails, red mullet, and European anchovy remained stable compared to the average first sale price for the period 2008-2014. Turbot achieved the highest average price per kilo in 2014 (€5.6 per kg) but decreased by 7% in 2015 (€5.2 per kg). The price of turbot and Mediterranean horse mackerel for 2015 is increased by 11% and 42% respectively over the period 2008-2014. The average first sale price of piked dogfish (€1.3 per kg) decreased by 32% compared to the period 2008-2014.

Economic results for 2014 and recent trends

National fleet performance

The amount of income from landings generated by the Bulgaria national fleet in 2014 was €4.0 million while the non-fishing income was €1.5 million, and total amount of income €5.5 million. The income from landings decreased 3% from 2013 and the non-fishing income decreased 41%.

Costs decreased 14% between 2013 and 2014, except 'wages and salaries of crew costs' and 'annual depreciation costs'.

The operating costs in 2014 amounted to €5.5 million. Crew cost and energy costs were the two major cost items (€2.7 million and €1.5 million respectively). However, €0.5 million of crew cost were estimated for the unpaid labour which remained in the hands of the fishers as working capital.

Between 2013 and 2014, operating costs decreased by 28%. When including capital costs, total costs amounted to €6.3 million, exceeding total revenue and generating a net loss of -€0.8 million.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €2.7 million, -€0.1 million and -€1.5 million, respectively. Although in 2012 and 2013, the economic performance improved, the economic situation for 2014 has deteriorated again.

In 2014, the Bulgarian fleet had an estimated (depreciated) replacement value of €15.3 million and investments amounted to €3.9 million, a 50% reduction on 2013.

The distribution of the fleet has not changed over time. SSF are the main fleet in Bulgaria, with 1 080 active vessels in 2015. They spent 13.8 thousand days at sea and landed 1.8 thousand tonnes of fish for €0.7 million. The LSF spent 8.9 thousand days at sea and landed 6.5 thousand tonnes of fish €3.1 million.

Resource productivity and efficiency indicators

In 2014, the gross profit margin was -0.9%, indicating a low operating efficiency of the sector, but at the same time marked an improvement with 98% over the period 2008-2013. This is also seen in the net profit margin for 2014 which was deteriorated by -28.1% from -23.8% (2013) and increased by 44% over the period 2008-2013.

The Rate of Return on Fixed Tangible Assets (RoFTA) of -5%, in 2014, shows a low improvement when comparing it to previous years.

After an overall improved development trend since 2008, labour productivity (GVA/FTE) has increased by 25% in 2014 compared to 2013. This is due to the fact that GVA increased by 37% and the number of FTE increased by 9%; thus indicating an increase in efficiency.

Fuel consumption per landed tonne has followed an overall increasing trend since 2008. In 2014, it is estimated of 282 litres per landed tonne. This is a standard consumption for a typical fishing vessel in the Black Sea region.

Landings in weight per unit of effort (in days at sea) followed a decreasing trend since 2008 and decreased a further 12% in 2014.

Drivers affecting the economic performance trends

Sustainable income from landings during last years and further capacity/effort reduction were the main driving forces behind the overall improvement.

The increase in average price of turbot and horse mackerel, and the stable average price of other important species as sea snails, red mullet, and European anchovy had a positive impact on profitability.

Markets and Trade

According to the data from the National Statistical Institute, in 2014, total imports of fish and fishery products in Bulgaria amounted to 30 468 tonnes. This is 0.6% below the previous year due to a reduction in imports of processed fish products, while that of fish fillets, shellfish account slight increase.

Over 70% of the total quantities of imported fish and fisheries products in 2014 are from Member States of the EU. Quantities from the Member States reached 21 587 tonnes, -4.3% more than in the previous year. The most significant amounts were supplied by Spain (3.5 thousand tonnes), United Kingdom (3 thousand tonnes), the Netherlands (2.5 thousand tonnes), Lithuania (2.1 thousand tonnes), Poland (1 8 thousand tonnes) and Greece (1.4 thousand tonnes).

On the other hand, in 2014 imports of fish and fisheries products from third countries decreased about 11% annually to 8 881 tonnes. Major importers were Vietnam (1.9 thousand tonnes) and China (1.7 thousand tonnes), followed by Argentina (0.6 thousand tonnes), Thailand (0.5 thousand tonnes), the US (0.4 thousand tonnes) and others.

The total export of fish, aquatic and fishery products in 2014 amounted to 9 063 tonnes, -7.3% lower than the previous year, which is explained by the reduction in catches and aquaculture production during the year. Compared to 2013 there was a significant reduction in exports of fish fillets, shellfish, partially offset by an increase of this processed fish products.

Nearly 74% of total export of fish and fish products during 2014 was for the EU. The amount of 6 740 tonnes allocated to the Member States of the EU decreased 10.3% compared to 2013; the most significant dispatches were for Romania (3.6 thousand tonnes), Sweden (1.4 thousand tonnes), Hungary (1.4 thousand tonnes) and Greece (0.7 thousand tonnes).

Exports of fish and fishery products to third countries increased 2.5% compared to 2013 to 2 323 tonnes, realised mainly in the Republic of Korea, Japan and Turkey.

Management instruments

Bulgaria is currently applying a set of measures to increase the control and monitoring of landings of turbot, which have a positive impact on reducing IUU-fishing, including:

- Designated ports in which landing of turbot;
- Equipment of all turbot fishing vessels with a tracking device;
- Introduced minimum size for turbot.

Bulgaria has introduced extremely stringent requirements, ensuring a low risk of IUU-fishing, to all fishing vessels who receive a permit to catch turbot. Under national legislation, all vessels fishing turbot are required to be equipped with tracking devices regardless of their length. The fleet is managed mainly through TACs, together with a range of input controls.

There are no national restrictions regarding the maximum days at sea per vessel because only 4 vessels in 2015 had more than 200 days at sea (the vessel with maximum days at sea had 221 days). For 2014 the number of vessels with more than 200 days was 3, 9 vessels spent between 150-199 days at sea, 40 vessels were between 100-149 days at sea, 52 vessels spent 50-99 days and 1012 vessels spent between 1-49 days at sea, we should also mention that 442 vessel spent between 1 and 5 days at sea for the whole year.

TACs and quotas

There are two species with quotas in Bulgaria. Turbot and sprat TAC for the Black Sea (quota system) was introduced in 2008 following the accession of Bulgaria and Romania to the European Union (EU).

In 2012 a total of 300 fishing vessels were engaged in fishing for turbot, in 2013 the number was 123, and in 2014, their number decreased to 119. Maintaining of levels of landings of turbot by Bulgarian fishing vessels in recent years as a result of compliance with the level of the total allowable catch of turbot set by the Council in the amount of 43.2 tonnes and a strict regime for fishing of turbot. From 2013 to date, approximately 48% of the number of vessels fishing for turbot are vessels with an overall length of less than 12 meters. During the same period, approximately 80% of all active fishing vessels with an overall length of over 12 meters were involved in the turbot fishery.

In 2015 quotas were 43.2 tonnes of turbot and 8 032.5 tonnes of sprat and landings were 43 tonnes turbot and 3297 tonnes sprat respectively.

Status of Key Stocks

In 2014 research surveys about the biomass, weight and length of the European sprat (*Sprattus sprattus*), Horse mackerel (*Trachurus mediterraneus*), Red mullet (*Mullus barbatus*), European anchovy (*Engraulis encrasicolus*) and turbot (*Psetta maxima*) were made.

Species	**Biomass (t) for 2014**
European sprat (*Sprattus sprattus*)	55 360.49
Horse mackerel (*Trachurus mediterraneus*)	24 257.07
Red mullet (*Mullus barbatus*)	9 241.40
European anchovy (*Engraulis encrasicolus*)	7 976.28
Turbot (*Psetta maxima*)	980

Innovation and Development

In compliance with the Operational Program for the development of the Bulgarian fisheries sector for Programming period 2007-2013, priority axis 1 (Measures for adaptation of the fishing fleet), Measure 1.1. (Public aid for permanent cessation of fishing activities) was used the opportunity to withdraw vessels, that are old and adversely affect the environment, while and the capacity was reduced as well as the effort in the direction of the restructuring of the fishing fleet and conservation of its sustainable management, in compliance with the principles of the Common Fisheries Policy.

Nowadays the basic development in Bulgarian fleet is based on the gear or engine reparation, as well as on improving terms of fish preservation or processing aiming at increasing product quality and value.

Performance by fishing activity

Large-scale

The Bulgarian large-scale fleet consisted of 111 vessels in 2014; 33 of which were under 12 metres but with active gears. 189 FTEs (represented 321 total employed) were employed in LS fleet segment.

This LSF had 5.81 thousand tonnes landings, which is 74% of the landings of the whole fleet and value of the landings €3.11 million, which represents 72% of the value of all landings.

The income from landings decreased 11% while the other income decreased 87%. Wages and salaries of crew increased 11% compared to 2013. Costs generally decreased, except the other non-variable costs, which remained stable.

Small-scale fleet

The majority of the vessels in 2014 (999 from 1 110 active vessels) are with a total length under 12 meters, using only passive gears and are carrying out mainly small-scale coastal, seasonal fishing. Their preferred fishing gear is gillnet (anchored) and for catching of Rapana they use the diving manual method. The total employees were 1196, which is 5% more than the employees in 2013. For the majority of people involved in this type of fishing, this is a seasonal activity closer to a hobby than a business. Most of the small-scale fishers use the catches for private consumption by themselves and their families. The live weight of landings is 2.1 thousand tonnes, decreased by 4% compared to 2013 and by 12% from the period 2008-2013. However, the value of the landings increased by 1%, it was rather stable compared to 2013 and by 31% from the average for the 2008-2013. The net profit and net profit margin remained negative with increase 45% and 74% respectively.

Distant-water fleet

Bulgarian vessels do not operate in distant waters.

Outermost region fleets

Bulgarian vessels do not operate in outermost regions.

Performance results of selected fleet segments

The fleet is diverse with a broad range of vessel types targeting different species predominantly in the Black Sea. The national fleet consisted of 23 (DCF) fleet segments in 2014, with a further 901 inactive vessels. The clustering scheme changed for all the years during the EWG 16-03 meeting in Ispra, Italy. The reason for this change was the inappropriate and inconsistent clustering. Hopefully, this change will ensure consistency in clustering across the time series.

In 2014, the Bulgarian fleet was clustered in 5 segments: drift net 12-18 (13 vessels), purse seiners 0-6 (27 vessels), vessels using active and passive gears 18-24 (11 vessels), vessels using polyvalent passive gears only 06-12 (28 vessels) and pelagic trawls 12-18 (17 vessels).

Only 3 fleet segments obtained more than 1 000 tonnes in live weight of landings:

Pelagic trawl 24-40m – In 2014, 11 vessels made up this segment that targets a variety of species but in particular European sprat and anchovy. In 2014, the total live weight of landings was 2 117 thousand tonnes with value €888 thousand (decreased 14% compare to 2013) and around 34 FTEs were employed in this fleet segment.

Polyvalent mobile and passive gears 6-12m – In 2014, 130 vessels made up this segment that targets a variety of species but in particular sea snails. In 2014, the total live weight of landings was 1591 thousand tonnes with value €868 thousand and the fleet segment employed around 58 FTEs. **Polyvalent mobile and passive gears 12-18m** – In 2014, 28 vessels made up this segment that targets mainly sea snails and Horse mackerel. In 2014, the total live weight of landings was 2023 thousand tonnes with value €1.2 million and the fleet segment employed around 78 FTEs.

The profitability of almost all fleet segments remains weak for 2014, except the drift netters 0-6 and drift netters 6-12, but we should also mention that these two segments include 672 vessels or 60% of the whole active fleet.

Data issues

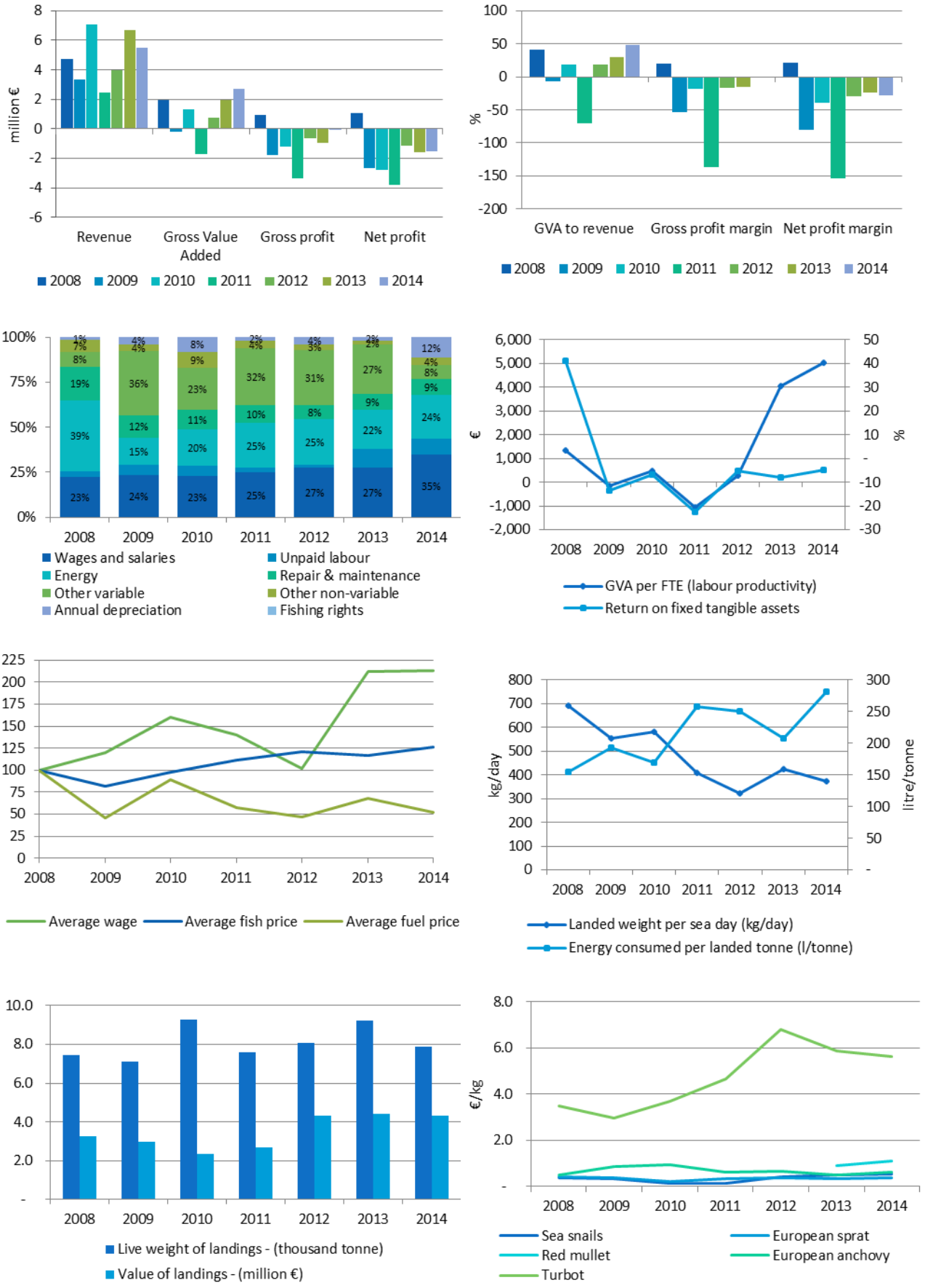
In Bulgaria data collection and processing is conducted by the Executive Agency for Fisheries and Aquaculture. Compared to the previous annual economic report, data may differ due to the changes in data processing and estimating procedures.

During the EWG 16-03 regarding the 2016 Annual Economic Report (AER) of the EU fleet - part 1, some major data issues were detected and removed by the Bulgarian expert who participated in the meeting and the national correspondent. The missing data for fuel consumption for 2011 and 2012 has been estimated as multiplied hours at sea for every segment by the average fuel consumption for 1 hour at sea for the vessels in 2013 and 2014.

There are still differences between the value of landings and the total income for all fleet segments. The main reason for this is different data sources. The income from landings is from questionnaires that the owner of every vessel is obligated to provide every year and the value of landings is estimated as multiplied the total weight that was landed by the vessels in the fleet segment by the average price per kilogram. Bulgaria is currently working to align the discrepancy between the data from both sources and to avoid discrepancies in the future.

The economic data for the fleet segments using hooks with LOA 12-18 and 18-24 for 2012 has not been provided due to confidential reasons (and missing of the proper segment for clustering).

The issues regarding the income and expenditure variables for 2011 will be fixed during the next fleet Fleet-Economic Performance data call.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.2 Bulgaria: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.6 Bulgaria: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	2,680	2,421	2,692	2,343	2,387	2,043	2,005		-2%	-17%
Number of Inactive vessels_ms	(#)	1,826	1,303	1,309	1,335	1,195	862	901		5%	-31%
Vessel tonnage	(thousand GT)	9.5	10.9	10.2	7.5	7.4	6.6	6.4		-3%	-26%
Engine power	(thousand kW)	73.0	81.5	77.7	62.0	62.9	57.4	56.4		-2%	-18%
Average vessel age	(year)	17	16	21	21	25	22	22		1%	10%
Average vessel length	(metre)	13	13	13	13	13	12	12		-1%	-8%
Enterprises with one vessel	(#)	50	56	62	67	161	1,886	1,895		0%	398%
Enterprises with 2 to 5 vessels	(#)	6	12	14	30	22	68	114		68%	350%
Enterprises with more than 5 vessels	(#)	-	1	1	2	1	1	2		100%	100%
FTE	(#)	1,433	1,430	2,889	1,668	2,872	488	532		9%	-70%
Total employed	(person)	1,507	1,732	3,933	3,276	5,638	1,312	1,517		16%	-48%
Days at sea	(thousand day)	10.8	12.8	16.0	18.6	25.1	21.6	21.1		-2%	21%
Fishing days	(thousand day)	10.8	12.8	16.0	18.6	25.1	21.6	21.1		-2%	21%
Number of fishing trips	(thousand)	10.8	12.8	16.0	18.6	25.1	21.6	21.1		-2%	21%
Energy consumption	(million litre)	1.16	1.37	1.57	1.96	2.02	1.91	2.23		17%	34%
Live weight of landings	(thousand tonne)	7.5	7.1	9.3	7.6	8.1	9.2	7.9		-14%	-3%
Value of landings	(million €)	3.2	3.0	2.3	2.7	4.3	4.4	4.3		-2%	30%
Income from landings	(million €)	3.5	3.3	5.3	2.5	3.4	4.1	4.0		-3%	7%
Other income	(million €)	1.23	0.04	1.72		0.55	2.60	1.54		-41%	25%
Direct income subsidies	(million €)	-	-	0.86		0.62	0.05	0.10		106%	-66%
Income from leasing fishing rights	(million €)	-	-	-	-	-	-	-			
Wages and salaries of crew	(million €)	0.87	1.26	2.06	1.49	1.33	2.15	2.20		2%	44%
Unpaid labour value	(million €)	0.12	0.29	0.50	0.15	0.08	0.81	0.54		-33%	66%
Energy costs	(million €)	1.51	0.81	1.83	1.47	1.23	1.69	1.51		-11%	6%
Repair & maintenance costs	(million €)	0.71	0.65	0.99	0.59	0.37	0.70	0.56		-20%	-17%
Other variable costs	(million €)	0.31	1.89	2.11	1.88	1.48	2.13	0.49		-77%	-70%
Other non-variable costs	(million €)	0.27	0.20	0.81	0.26	0.16	0.19	0.24		31%	-22%
Annual depreciation costs	(million €)	0.05	0.21	0.72	0.12	0.19	0.15	0.72		378%	201%
Rights costs	(million €)	-	-	-	-	-	-	-			
Opportunity cost of capital	(million €)	- 0.13	0.67	0.82	0.29	0.33	0.44	0.77		74%	91%
Tangible asset value (replacement)	(million €)	2.2	14.6	28.0	15.4	15.9	14.5	15.3		6%	1%
Fishing rights	(million €)	-	-	-	-	-	-	-			
Investments	(million €)	3.1	0.9	2.3	4.7	11.1	7.8	3.9		-50%	-22%
Financial position	(%)	20.8	4.4	7.4	34.5	36.8	4.8	5.4		13%	-70%
Gross Value Added	(million €)	1.9	- 0.2	1.3	- 1.7	0.8	2.0	2.7		37%	300%
GVA to revenue	(%)	40.9	- 6.9	18.7	- 70.4	18.8	29.5	49.0		66%	856%
Gross profit	(million €)	1.0	- 1.8	- 1.2	- 3.4	- 0.7	- 1.0	- 0.0		95%	96%
Gross profit margin	(%)	20.1	- 53.4	- 17.5	-136.8	- 16.3	- 14.8	- 0.9		94%	98%
Net profit	(million €)	1.0	- 2.7	- 2.8	- 3.8	- 1.2	- 1.6	- 1.5		3%	15%
Net profit margin	(%)	21.8	- 80.0	- 39.3	-153.5	- 29.2	- 23.7	- 28.1		-18%	44%
GVA per FTE (labour productivity)	(thousand €)	1.4	- 0.2	0.5	- 1.0	0.3	4.0	5.0		25%	517%
Return on fixed tangible assets	(%)	41	- 14	- 7	- 23	- 5	- 8	- 5		36%	-99%

Table 5.7 Bulgaria: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		SSF							LSF											
		2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	747	973	1,176	926	1,098	1,100	999	107	145	207	82	94	104	111		-9%	0%		7%	-10%
Vessel tonnage	(thousand GT)	1.5	2.3	2.2	1.8	2.0	2.0	1.7	4.0	5.7	5.2	3.2	3.2	3.0	3.1		-14%	-14%		1%	-24%
Engine power	(thousand kW)	16.1	24.7	24.9	19.9	23.2	24.0	20.8	16.9	26.1	23.5	13.7	14.3	14.8	15.6		-13%	-6%		5%	-15%
FTE	(#)	1,096	1,151	2,604	1,423	2,451	366	343	337	279	285	245	421	122	189		-6%	-77%		56%	-33%
Total employed	(person)	1,293	1,372	3,555	2,823	4,870	1,140	1,196	214	360	378	453	768	172	321		5%	-52%		87%	-18%
Days at sea	(thousand day)	7.7	8.9	11.4	12.7	16.5	14.3	13.3	3.1	4.0	4.6	5.9	8.6	7.3	8.0		-7%	12%		9%	43%
Fishing days	(thousand day)				12.7	16.5	14.3	13.3				5.9	8.6	7.3	8.0		-7%	-8%		9%	9%
Number of fishing trips	(thousand)	8	9	11	13	16	14	13	3	4	5	6	9	7	8		-7%	12%		9%	43%
Energy consumption	(million litre)	0.2	0.5	0.8	0.3	0.4	0.4	0.4	1.0	0.8	0.8	1.6	1.6	1.5	1.9		-11%	-16%		24%	51%
Live weight of landings	(thousand tonne)	2.65	1.81	2.99	2.32	2.33	2.18	2.09	4.82	5.27	6.26	5.27	5.74	7.03	5.81		-4%	-12%		-17%	1%
Value of landings	(million €)	1.14	0.72	0.68	0.55	1.29	1.21	1.22	2.10	2.14	1.55	2.14	3.03	3.21	3.11		1%	31%		-3%	32%
Income from landings	(million €)	1.3	0.9	3.0	0.6	0.9	1.2	1.4	2.2	2.3	2.4	1.9	2.6	2.9	2.6		16%	6%		-11%	8%
Other income	(million €)	-	0.0	1.7		0.5	1.8	1.4	1.2	0.0	0.0		0.1	0.8	0.1		-19%	80%		-87%	-75%
Direct income subsidies	(million €)	-	-	-		0.19	0.03	0.10	-	-	0.86		0.43	0.02	-		204%	128%		-100%	-100%
Wages and salaries of crew	(million €)	0.1	0.8	1.0	0.8	0.6	1.5	1.5	0.7	0.4	1.1	0.7	0.7	0.6	0.7		-1%	85%		11%	-2%
Unpaid labour value	(million €)	0.1	0.3	0.5	0.1	0.0	0.7	0.3	-	-	0.0	0.0	0.0	0.1	0.2		-52%	15%		123%	636%
Energy costs	(million €)	0.2	0.2	0.9	0.4	0.3	0.3	0.4	1.3	0.6	0.9	1.1	1.0	1.3	1.1		14%	3%		-17%	7%
Repair & maintenance costs	(million €)	0.2	0.3	0.6	0.2	0.2	0.2	0.2	0.5	0.4	0.4	0.4	0.2	0.5	0.3		-10%	-24%		-26%	-12%
Other variable costs	(million €)	0.1	0.8	1.2	0.5	0.4	0.5	0.2	0.2	1.1	1.0	1.4	1.1	1.6	0.3		-61%	-64%		-82%	-73%
Other non-variable costs	(million €)	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.2	0.1	0.4	0.1	0.1	0.1	0.1		13%	-16%		67%	-28%
Annual depreciation costs	(million €)	0.0	0.1	0.5	0.1	0.0	0.2	0.3	0.0	0.1	0.2	0.0	0.2	0.0	0.5		77%	78%		38184%	406%
Opportunity cost of capital	(million €)	- 0.03	0.17	0.20	0.08	0.10	0.14	0.24	- 0.10	0.50	0.62	0.21	0.23	0.30	0.53		72%	121%		75%	80%
Tangible asset value (replacement)	(million €)	0.4	3.7	6.8	4.3	4.7	4.6	4.9	1.8	10.9	21.2	11.2	11.2	9.9	10.5		5%	19%		6%	-5%
Investments	(million €)	0.4	0.5	1.2	3.2	9.7	7.0	2.3	2.8	0.4	1.2	1.4	1.4	0.8	1.6		-67%	-38%		108%	23%
Financial position	(%)	23.5	12.6	25.8	134.7	114.3	4.4	67.2	80.5	9.5	11.3	37.6	33.0	0.4	56.7		1424%	28%		15222%	98%
Gross Value Added	(million €)	0.7	- 0.5	1.6	- 0.8	0.5	1.7	1.9	0.6	- 0.2	- 0.3	- 2.4	0.3	0.2	0.8		8%	251%		250%	369%
GVA to revenue	(%)	49.7	- 47.4	34.4	- 515.7	34.2	58.4	66.3	21.5	- 12.9	- 14.3	-3,019.7	11.3	6.3	30.6		14%	203%		385%	106%
Gross profit	(million €)	0.4	- 1.6	0.1	- 1.5	- 0.2	- 0.5	0.0	- 0.1	- 0.7	- 1.4	- 2.8	- 0.4	- 0.5	- 0.1		108%	107%		82%	91%
Gross profit margin	(%)	29.6	- 160.3	2.9	-1,009.2	- 16.7	- 16.7	1.4	- 4.9	- 36.8	- 59.9	-3,599.7	- 16.2	- 13.2	- 3.3		108%	101%		75%	99%
Net profit	(million €)	0.4	- 1.8	- 0.6	- 1.7	- 0.3	- 0.9	- 0.5	- 0.4	- 1.2	- 2.2	- 2.9	- 0.7	- 0.3	- 1.1		45%	42%		-216%	17%
Net profit margin	(%)	28.4	- 184.5	- 13.0	-1,084.0	- 28.4	- 64.8	- 16.7	- 29.2	- 66.4	- 89.5	-3,755.4	- 27.4	- 74.3	- 40.2		74%	93%		46%	94%
GVA per FTE (labour productivity)	(thousand €)	0.6	- 0.4	0.6	- 0.8	0.2	4.7	5.5	2.2	- 1.2	- 1.7	- 14.3	0.7	1.9	4.3		15%	565%		124%	309%

Table 5.8 Bulgaria: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
BGR A37 DFN0612	396	123	4,054	4,944	19	53	1,274	974	76.4	270	21.2	42	3.33	5.7	8	7	Reasonable	102%	Improved
BGR A37 PMP1218	28	78	2,633	272	2,023	1,243	967	310	32.0	43	4.4	-292	-30.25	3.4	4	-5	Weak		
BGR A37 TM2440	11	34	1,840	272	2,117	878	715	247	34.6	38	5.3	-112	-15.67	6.2	7	0	Weak		
BGR A37 DFN0006	276	95	2,728	4,114	12	17	594	466	78.3	234	39.4	167	28.07	2.4	5	27	High	109%	Improved
BGR A37 PMP0612	130	58	3,520	75	1,591	868	446	212	47.5	-339	-75.9	-422	-94.60	9.5	4	-52	Weak		
BGR A37 TM1218 °	17	19	903	711	263	199	280	78	28.0	-62	-22.1	-231	-82.64	7.3	4	-6	Weak		
BGR A37 PMP1824 °	11	20	1,168	332	895	543	279	8	2.9	-157	-56.4	-309	-110.80	8.3	0	-16	Weak		
BGR A37 TM1824	4	13	445	441	329	142	204	80	39.5	34	16.9	-5	-2.69	3.6	6	4	Weak		
BGR A37 PGP0612 °	28	18	446	2,935	20	28	203	49	24.1	-1	-0.6	-62	-30.34	2.8	3	-11	Weak		
BGR A37 DFN1218 °	13	15	557	573	161	94	195	77	39.4	20	10.1	-113	-57.92	3.9	5	-7	Weak		
BGR A37 HOK0612	58	11	669	1,825	7	11	130	85	65.1	8	6.1	-29	-22.41	6.9	8	-5	Weak		
BGR A37 FPO0612	34	18	507	62	74	49	96	53	55.0	-33	-34.0	-49	-51.03	4.9	3	-16	Weak		
BGR A37 PMP0006	39	13	1,037	65	357	190	58	29	49.6	-72	-124.0	-80	-138.45	7.9	2	-79	Weak		
BGR A37 PS0006 °	27	12	408	318	23	13	29	16	55.5	-3	-12.1	-9	-29.91	1.6	1	-17	Weak		
BGR A37 HOK0006	31	6	274	8,995	1	1	9	-1	-13.6	-4	-44.5	-13	-140.63	0.5	0	-11	Weak		
BGR A37 FPO0006	7	2	76	317	5	4	9	5	61.2	-24	-275.8	-25	-291.95	14.4	3	-132	Weak		

Table 5.9 Bulgaria: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)								Live weight of landings (tonne)								Average landed price (real) (€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
Sea snails	1.04	0.72	0.70	0.41	1.63	2.40	2.51	*1.39*	2.9	2.2	4.8	3.1	3.8	4.8	4.7	*4.1*	0.4	0.3	0.1	0.1	0.4	0.5	0.5	*0.3*
European sprat	1.74	1.70	0.88	1.29	1.14	1.24	0.82	*1.22*	4.3	4.6	4.0	4.0	3.2	3.8	2.3	*3.3*	0.4	0.4	0.2	0.3	0.4	0.3	0.4	*0.4*
Red mullet						0.23	0.36	*0.60*						0.3	0.3	*0.6*						0.9	1.1	*1.0*
European anchovy	0.01	0.04	0.03	0.01	-	0.01	0.23	*0.01*	0.0	0.0	0.0	0.0	0.0	0.0	0.4	*0.0*	0.5	0.9	1.0	0.6	0.7	0.5	0.6	*0.7*
Turbot	0.19	0.16	0.17	0.18	0.25	0.23	0.22	*0.22*	0.1	0.1	0.1	0.0	0.0	0.0	0.0	*0.0*	3.5	3.0	3.7	4.7	6.8	5.9	5.6	*5.2*
Mediterranean horse mackere	0.21	0.23	0.20	0.66	0.40	0.26	0.13	*0.15*	0.2	0.2	0.2	0.4	0.4	0.3	0.1	*0.1*	1.2	1.3	1.2	1.7	1.1	1.0	1.2	*1.7*
Picked dogfish	0.04	0.02	0.24	0.13	0.05	0.05	0.06	*0.17*	0.0	0.0	0.1	0.1	0.0	0.0	0.0	*0.1*	2.0	1.9	2.1	1.8	1.8	1.6	1.8	*1.3*

5.3 CROATIA

Short description of the national fleet

Fleet capacity

In 2015, the fleet increased to 7 849 vessels of which 2 795 were active. These had a combined gross tonnage (GT) of 53.8 thousand tonnes and engine power of 429.8 thousand kilowatts (kW). Pursuant to the accession negotiations, 3 500 small-scale vessels were transferred into the commercial small-scale fleet in 2015. The small-scale fleet contributed to the active fleet by active fleet was composed of 63% of small-scale segments. The fleet contained in total 4 385 vessels; 400 vessels, or 9% with length between 12 and 18 meters, 128 vessels, or 3% with length between 18 m and 24 m and 129 vessels, or 3% with length over 24 m.

Fleet structure

The Croatian fleet is divided to the main commercial fleet and a category of small-scale artisanal coastal fisheries, consisting of some 3 500 vessels, and defined by national legislation.

Employment

Employment was estimated at 4 842 in 2014, corresponding to 2 151 FTEs with an average of 0.8 FTE per active vessel. The level of employment remained steady with a slight decrease by 2%, with total employed decreasing by just 5% and the number of FTEs remaining steady. The decrease in the number of employed corresponds to the fall in the number of active vessels in 2014.

Effort

In total 241 thousand days were spent at sea in 2014. While the days at sea remained steady in the period, preliminary data for 2015 indicate a slight decrease in 2015. The quantity of fuel consumed in 2012 totalled 27.5 million litres, decreasing by 26% in 2013, totalling 24.8 million litres. According to preliminary data the declining trend continued in 2014, to 24.2 million litres. The major factors causing the decrease in fuel consumption include increasing fuel efficiency of newer engines, the rising cost of fuel and decreasing activity. Overall however the fleet is working more efficiently with a positive trend in landings weight, value and income, and declining trend in total sea days.

Production

Landings in 2015 included 110 species in total. Quantities landed have been stable over time, with the share of small pelagic species targeted in purse seine fisheries, sardine and anchovy, by far dominating the overall structure (around 88% of total landing weight in 2015). Small pelagic species also constituted the most important species in terms of value, accounting for over 50% of total landing value. On the other hand, species targeted by demersal trawling, Norway lobster and hake, account for less than 0.4% and 1% respectively in terms of quantity, but over 5% and 4% respectively in terms of the value.

Economic results for 2014 and recent trends

National fleet performance

In 2014, the most important fleet segment (%landed) were purse seiners (PS, over 91% of total landings), whereas the largest number of vessels were active in the drift net and fixed nets segment (DFN, in Croatia fixed nets – gill nets and trammel nets, 999 active vessels or 37% of the fleet).

Although hook and line gears (HOK) and miscellaneous active gears (MGO) constitute some 25% of active fleet, their share in landings is negligible (less than 1%). This is primarily due to the fact that these fleet segments are composed almost entirely of small vessels less than 6 m LoA whose activity is largely seasonal and which operate on a local basis. Very often these activities are not the main source of income for the vessel owner.

Total labour costs incurred by the Croatian fleet in 2013 equated to €24.2 million, amounting to 34% of the value of landings. Labour cost and fuel costs, the two major fishing expenses, were €24 million and €20.1 million respectively. Between 2012 and 2013, all major cost items decreased with the exception of other variable costs.

The Croatian fleet had an estimated (depreciated) replacement value of €198.4 million in 2013. Investments by the fleet amounted to €9.1 million in 2013, an increase of 35% when compared to 2012.

The total weight landed by the Croatian fleet in 2013 was 74 902 tonnes of seafood, with a landed value of €71.2 million. According to preliminary data in 2014, although the amount of seafood landed increased 6%, the value has increased only 1% between 2013 and 2014 (79 163 tonnes and €72.15 million respectively), consistent with large quantities of low value small pelagic species being landed.

A total of 109 different species were landed in 2014. The most important ones in terms of quantity and value are listed in the figure above. The trends in terms of quantities landed have been stable over time, with the share of small pelagic species by far dominating the overall structure. Small pelagic species also constituted the most important species in terms of value, accounting for over 53% of total value. On the other hand, Norway lobster accounts for less than 0.43% in landings, but accounts for over 7% of the value. Hake accounts for 1.12% of quantity landed, and 4.38% of value.

The most important fleet segment in terms of contribution to total landings is purse seiners 24 to 40 meters LoA. This fleet segment accounted for almost 55% of landings in 2014. Overall, purse seiner segments, excluding the ones above 40 meters LoA and less than 12 meters LoA make up almost 90% of Croatian landings. This is in accordance with the structure of overall total landings. These fleet segments target sardines and anchovies, and as of October 2013 fall under the provisions of a multiannual management plan for small pelagics in GSA 17.

In terms of active fleet segments active, the majority used driftnets and fixed nets. However, as mentioned above, their share in total landings is small. The most important segment in this gear class was the one between 6 and 12 meters LoA, with 673 vessels, representing over 25% of the fleet. It should be pointed out that only fixed nets are used in Croatia (trammel and gill nets), and that these operate inshore in coastal waters, in limited areas and during limited periods.

The species that constituted the majority of landings of the most important fleet segments are shown in the table below. As can be seen, the majority of the landings of purse seiners in the segment from 24 to 40m LoA included sardine (78%) and anchovies (11%). In the purse seine fleet segment from 18 to 24m LoA, the species included mainly sardine (80%) and anchovies (14%). More or less the same structure can be observed (in similar shares) in all purse seine segments.

On the other hand, the fixed nets segment from 6 m to 12m LoA, which represents the largest number of vessels active in the fleet, landed sole (21%) and a mixture of other demersal species (hake 8%, cuttlefish 5%, sea bream 5%,common octopus 5% and spinous spider crab 4%).

For demersal trawls, the composition in segments from 24m to 40m and from 18m to 24m LoA mainly includes hake (around 16%), deep-water rose shrimp (17% and 14% respectively), Norway lobster (19% and 9%) and red mullet (10% and 20%). The segments from 24m to 40m LoA and from 18 m to 24 m LoA landed also squid (11% and 6% respectively) and horned and musky octopuses (5% and 6%). In the demersal trawl segments from 12 m to 18 m LoA and 6 m to 12m LoA the main species landed were red mullet (30% and 20%), with hake (15% and 14%) and musky octopus (15% and 20%) as two other main species in both segments. The differences between different segments of the same gear groups can be explained by the fishing grounds exploited (smaller segments tend to stay closer to shore, use gears other than bottom trawl nets and exploit different fishing grounds, whereas larger segments tend to operate in areas a bit further from the shore).

Resource productivity and efficiency indicators

Drivers affecting the economic performance trends

Markets and Trade

Market is mostly domestic, with an important influence of the Italian market.

Management instruments

Croatian fleet in managed through the capacity and effort limitations, as well as though time and spatial restrictions. Effort regulations is related to restrictions on issuing fishing licences and transfer of fishing rights from one license to other in terms of permitted fishing gears or fishing zones. This system is preventing increase of fishing effort related to fishing gear or fishing zone, or even subzone. Capacity limitation is related to increase of vessel power and length in terms of total national fleet capacity. Besides that, by the national regulations there are restrictions related to transfer of effort between fishing zones of inner and outer fishing sea preventing increase of effort in the most vulnerable areas of inner sea. Spatial and temporal closures have been used in the past years for management of purse seine and trawling fishery. In the recent period this has become effective measure in preventing catch of smaller categories of small pelagic as well as in protection of areas important for recruitment of species target by bottom trawlers.

In addition to the aforementioned, from 2014 GFCM management plan for small pelagic fish in GSA 17 has been in force. By the provisions of this plan maximum number of fishing days for targeting sardine and anchovy has been set, as well as temporal closure period. Given the full implementation of these measures and additional national restrictions implemented for protection of small pelagic, the total number of days at sea will probably decrease further in the future.

TACs and quotas

Having in mind that fishery in Croatia is based on effort management, only Bluefin tuna fishery is restricted by TAC. Annual quota has been set by ICCAT and allocated by the national allocation key. At the national level total quota is allocated to purse seine fishery for farming purposes, hand lines and recreational fishery. Total Croatian quota for 2014 was 390.59 tonnes and 461.16 tonnes for 2015 with increasing trend. Since almost all BFT catch is intended for farming purposes it has very limited influence on the economics of PS fleet.

Status of Key Stocks

In terms of landing weight most important stock for Croatian fishery are sardine and anchovy which contribute with 75% (sardine) and 12% (anchovy) to total landing weight. Stock assessment for these two species was performed in 2015 by GFCM Working Group on Stock Assessment of Small Pelagic Species (WGSASP), and GFCM Working Group on Stock Assessment of Demersal Species (WGSAD) assessed, red mullet and common sole stocks. According to WGSASP the proposed advice on the status of sardine and anchovy in GSAs 17 and 18 was to reduce F. The biomass of the stocks was above the limit (B/Blim= 1.66 and 1.95 for sardine and anchovy respectively) but below the precautionary reference point (B/Bpa= 0.83 and 0.97 for sardine and anchovy respectively). F was higher than the reference point (F/FMSY= 1.52 and 1.79 for sardine and anchovy respectively). Both stocks were considered overexploited and in overexploitation.

WGSAD proposed advice for Red mullet (*Mullus barbatus*) which was assessed separately in GSA 17 and GSA 18. According to these two assessments, both stocks were in overexploitation with current fishing mortality (F) at 2.5 and 1.1 times higher, respectively, than the fishing mortality at maximum sustainable yield (FMSY) proxy (F0.1). The common sole (*Solea solea*) stock was assessed in GSA 17. Current F was 2.4 times higher than F0.1. The stock was found in overexploitation and at low biomass levels.

On the other hand STECF EWG 15-16 made stock assessment as follows:

Having in mind aforementioned and obligation of reaching MSY level by the 2020, reduction of fishing effort in main segments (PS and DTS) can be expected in further years.

Innovation and Development

After Croatian accession to EU in 2013, there have been some changes in gears due to a full implementation of Mediterranean regulation, mostly referring to new mesh size of towing gears. Some of these changes had highly negative effect reflecting to small scale fishery enabling use of traditional gears such as shore seines that target costal species. On the other side this had effect in the improving selectivity in demersal trawl nets. Beside modifications that arise from MedReg, there has been very few development of fleet in terms of innovation. Investments are based on the gear or engine reparation, as well as on improving terms of fish preservation or processing aiming at increasing product quality and value.

Performance by fishing activity

Small-scale fleet

Prior to its accession to the EU, Croatia had a category of non-commercial fishery that needed to be registered in the commercial fleet, pursuant to the regulations in force. The transition process of their full registration in the commercial fleet ended only in 2015. All these vessels fall under polyvalent passive gears segments, but they are not full-time engaged in the fishery and most of them remain inactive.

Upon entry into the commercial fleet, the vessels previously operating for personal needs are still kept as a ring-fenced category, with specific requirements and constrains. The catches of this particular fleet element and their possibilities to market the fish as well as the gears allowed are strict and technical measures foresee the possibility to exercise this activity on a very local scale. However, as this has been the traditional category existing prior to the accession, the social needs were of particular concern. With all constrains of the operation of this fleet and their particular social and traditional characteristics, it may not be expected that they are economically viable, and the activity they have does not show indications as to the substantial impact on the resources (given their very sporadic and very limited catches and manner of operation). Albeit their number might indicate importance, this is assessed as a skewed indication since their overall activity does not correspond to the activity of the fishers that are engaged in full or even half-time fisheries.

Small-scale fisheries as defined by the Commission, consisting mainly of vessels using passive gears in coastal areas, is not economically significant, however it is of significant social importance due to the large number of vessels. Small-scale fleet segments, with 1 768 active vessels cover almost 63% of active vessels in 2015 and less than 2% of landings. Average length of these vessels is only 7 m and average age 33 years, which limits their fishing activities to fishing grounds near the port and to one day fishing trips. Days at sea have a distinct seasonal character, especially for passive gears, depending on migration of target species to the inner sea during the warmer period of the year as well as the increased consumer demand during the tourist season.

In 2015, the total value of landings of small-scale fishery was €8 million, covering 13% of total value of landings. Most of the catch is sold on the local market, and income is often used as an addition to the home budget. This is the main reason for negative economic indicators in these segments, but for some fishers, commercial benefit from fisheries in not a priority since they depend on other sources of income.

The most prominent fleet segments within the small-scale fisheries are the segments using fixed nets a fishery with an important traditional and social character.

Even though low profitability is indicated for the fleet, with very low landing values, fixed nets segments are considered to be primarily highly artisanal and important in terms of social and economic elements for local population and communities. It is also expected that this fleet segment shall in the forthcoming years be the one mostly encompassed by the EMFF measures of diversification of activities and provision of services complementary to fisheries.

Distant-water fleet

Croatian vessels do not operate in distant waters.

Outermost region fleets

Croatian vessels do not operate in outermost regions.

Performance results of selected fleet segments

In 2015, the most important fleet segment in terms of landing percentage was purse seiners (PS, over 90% of total landings), whereas the largest number of vessels were active in drift net and fixed nets segment (DFN, in Croatia fixed nets – gill nets and trammel nets, 1033 active vessels or 38% of the fleet), but less than 1% of landing volume. In terms of landing of demersal fish most important segment is DTS1218 with 43% of total DTS landing. In PS segments, most significant are PS2440 with 60% and PS1824 with 29% of total PS landing.

Purse seine 24-40m – 70 active vessels targeting sardine and anchovy and operating predominantly in GSA 17. This segment is employing 21% of total FTE, and it has value of landing amounted to €18.8 million, 30% of total national landings value. It reported a gross profit of €2.4 million and a net loss of €5.7 million in 2014. Its GVA is €9.5 million, and it has average wage per FTE of €15.5 thousand.

Purse seine 18-24m – 53 active vessels operating predominantly in GSA 17, and targeting mostly sardine and anchovy. This segment is employing 14% of total FTE, and its landings amounts to €9.5 million, representing 15% of total landing value. It reported a positive gross profit of €2.4 million, but a net loss of €0.6 million in 2014. Average crew wage per FTE was €10.4 thousand.

Demersal trawl 12-18m – 200 active vessels, operating in GSA 17 and targeting different demersal species, mostly European hake, Norway lobster, Red mullet and Deep-water rose shrimp. This segment is employing 10% of total FTE, and it has €6.8 million value of landing, representing 11% of total of landing value. It reported a positive gross profit of €1.9 million, but a net loss of €0.8 million in 2014. Average crew wage per FTE was €9.1 thousand.

Drift and fixed nets 12-18m – 692 active vessels, operating predominantly in the inner sea of GSA 17, targeting different species and using fixed nets and longlines. This segment is employing 14% of total FTE, and in 2014 it had value of landing of €3.4 million, representing 5% of total landing value. It reported a positive gross profit of €1.7 million, but a net loss of €0.11 million in 2014. Average crew wage per FTE was €6.9 thousand.

Projections for 2015 and outlook

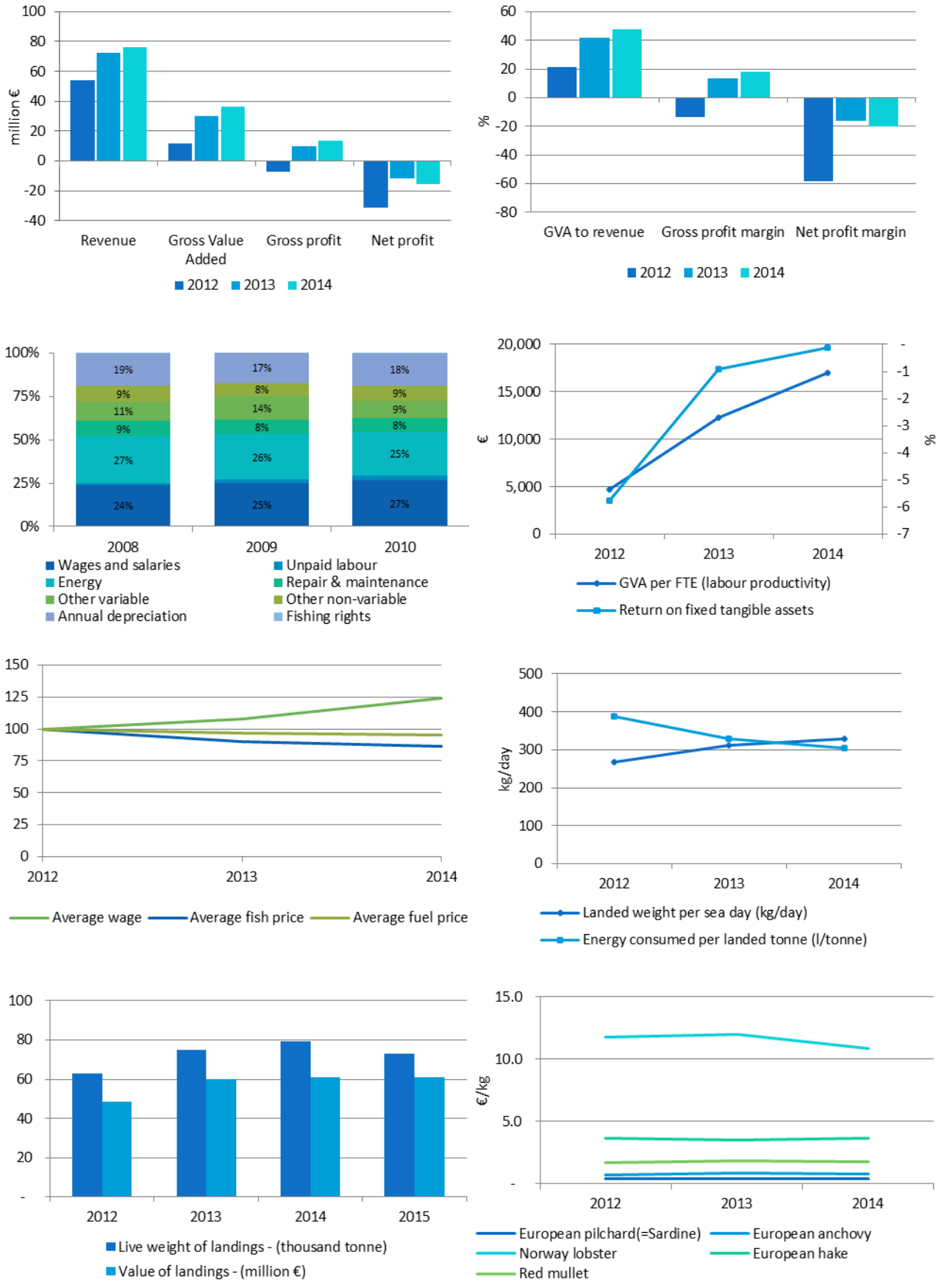
Preliminary results for 2015 suggest a 9% decrease in total landed weight, matched by a similar value of landing as in 2014. Reason for this is in decrease of catch of small pelagic species due to management restrictions, but at the same time increase in value and weight of other demersal species. Followed by the effort restrictions in the main segments (PS) preliminary data and projections for 2015 indicate a drop in number fishing days and energy costs, same as in cost of crew wages and salaries. At the same time projections of economic indicators are showing an increase for 2015 in terms of GVA (23%), gross profit (49%) and GVA per FTE (24%), but decrease of net profit (-38%) and net profit margin (-28%).

Concerning the future period, beyond 2015, status of stocks and MSY obligation, it can be expected that the main characteristic of fishery will be reduction of fishing effort. Regarding the process of introduction of multiannual management plan for small pelagic species in Adriatic it can be assumed that PS segments will be affected the most. Since these segments are showing weak profitability in 2014 we can expect some negative influence on their economic performances in the following years. At the same time, 2017 is a start year for implementation of landing obligation for demersal species which will mostly have an effect on DTS fleet.

Data issues

In Croatia data collection and processing is conducted by the Directorate of Fisheries of the Ministry of Agriculture. Compared to previous annual economic report, data may differ due to the improvements in data processing and estimating procedures, however no major differences were found in regards to trends. Economic data was collected via a sample survey in 2015 with a total sample rate of 37%. The sample rate for the large scale-fleet on average was 59% and 25% for the small-scale fleet. Taking into account the size of the fleet, overall coverage of the fleet was adequate. In contrast, capacity and fleet activity data is collected for the entire fleet.

As Croatia has been a member of the EU since July 1st 2013, data submitted under the DCF is available for a short time series, therefore any conclusions on trends are limited. The capacity ceiling has been fixed by way of Regulation (EU) 1380/2013. Under these circumstances, there are no data currently at our disposal to compare with relevant provisions or trends.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.3 Croatia: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.10 Croatia: National fleet statistics and economic performance results. Data for 2015 are projected.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 are projected.

		2012	2013	2014	2015	Trend	Δ2014 to 2013	Δ2014 to avg. 12-13
Total number of vessels	(#)	4,211	4,358	4,385	*7,849*		1%	2%
Number of Inactive vessels_ms	(#)	1,403	1,551	1,669	*5,028*		8%	13%
Vessel tonnage	(thousand GT)	45.2	46.0	46.1	*53.8*		0%	1%
Engine power	(thousand kW)	329.7	346.3	347.9	*429.8*		0%	3%
Average vessel age	(year)	32	32	33	*34*		3%	4%
Average vessel length	(metre)	9	9	8	*8*		0%	-1%
Enterprises with one vessel	(#)	2,389	2,305	2,259	*5,396*		-2%	-4%
Enterprises with 2 to 5 vessels	(#)	685	700	697	*780*		0%	1%
Enterprises with more than 5 vessels	(#)	2	4	3	*4*		-25%	0%
FTE	(#)	2,467	2,448	2,151	*2,128*		-12%	-12%
Total employed	(person)	4,897	4,946	4,842	*8,667*		-2%	-2%
Days at sea	(thousand day)	235.5	240.4	241.2	*238.7*		0%	1%
Fishing days	(thousand day)	201.1	204.0	206.1	*203.8*		1%	2%
Number of fishing trips	(thousand)	194	199	203	*202*		2%	3%
Energy consumption	(million litre)	24.52	24.57	24.20	*23.94*		-2%	-1%
Live weight of landings	(thousand tonne)	63.1	74.9	79.4	*72.9*		6%	15%
Value of landings	(million €)	48.6	59.9	60.8	*60.9*		2%	12%
Income from landings	(million €)	48.6	59.9	60.8	*60.9*		2%	12%
Other income	(million €)	5.52	12.41	15.64	*27.99*		26%	74%
Direct income subsidies	(million €)	9.92	2.70	8.04			198%	27%
Income from leasing fishing rights	(million €)	0.6	0.4	0.4			-15%	-29%
Wages and salaries of crew	(million €)	18.31	19.14	20.59	*19.32*		8%	10%
Unpaid labour value	(million €)	0.70	1.34	2.29	*1.44*		71%	125%
Energy costs	(million €)	20.43	19.82	19.19	*15.08*		-3%	-5%
Repair & maintenance costs	(million €)	6.90	6.22	6.45	*6.39*		4%	-2%
Other variable costs	(million €)	8.31	10.34	7.22	*7.15*		-30%	-23%
Other non-variable costs	(million €)	6.74	5.82	7.01	*12.55*		20%	12%
Annual depreciation costs	(million €)	14.35	12.94	14.17	*25.36*		10%	4%
Rights costs	(million €)	0.2	0.1	0.4			289%	133%
Opportunity cost of capital	(million €)	9.92	8.31	15.11	*26.83*		82%	66%
Tangible asset value (replacement)	(million €)	376	357	393	*704*		10%	7%
Investments	(million €)	6.7	9.1	7.4			-19%	-6%
Gross Value Added	(million €)	11.7	30.1	36.6	*47.7*		22%	75%
GVA to revenue	(%)	21.6	41.6	47.9	*53.7*		15%	51%
Gross profit	(million €)	- 7.3	9.6	13.7	*26.9*		43%	1104%
Gross profit margin	(%)	- 13.6	13.3	17.9	*30.3*		35%	14452%
Net profit	(million €)	- 31.6	- 11.6	- 15.6	*- 25.3*		-34%	28%
Net profit margin	(%)	- 58.4	- 16.1	- 20.3	*- 28*		-26%	45%
GVA per FTE (labour productivity)	(thousand €)	4.7	12.3	17.0	*22.4*		38%	100%
Return on fixed tangible assets	(%)	- 5.8	- 0.9	- 0.1	*0.2*		88%	97%

Table 5.11 Croatia: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).
Data for 2015 are projected.

	SSF				LSF									
	2012	2013	2014	2015	2012	2013	2014	2015	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 12-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 12-13
Total number of vessels (#)	1,707	1,726	1,665	*1,768*	1,101	1,081	1,051	1,053		-4%	-3%		-3%	-4%
Vessel tonnage (thousand GT)	5.0	5.1	5.0	*4.9*	28.1	27.3	27.2	27.8		2%	70%		0%	-2%
Engine power (thousand kW)	90.3	95.7	94.2	*93.8*	152.1	150.8	149.7	152.2		2%	24%		-1%	-1%
FTE (#)	779	701	537	*508*	1,688	1,747	1,614	1,297		-20%	14%		-8%	-6%
Total employed (person)	2,170	2,156	2,076	*2,089*	2,727	2,790	2,766	2,424		-12%	0%		-1%	0%
Days at sea (thousand day)	135.2	135.7	134.9	*133.4*	100.3	104.7	106.3	105.3		-1%	-12%		2%	4%
Fishing days (thousand day)	115.2	114.2	115.0	*114.0*	85.9	89.8	91.1	89.8		-1%	-12%		1%	4%
Number of fishing trips (thousand)	122	122	123	*123*	72	77	79	79		-1%	-21%		3%	6%
Energy consumption (million litre)	2.8	2.7	2.6	*2.5*	21.8	21.8	21.6	20.9		-3%	72%		-1%	-1%
Live weight of landings (thousand tonne)	1.16	1.23	1.30	*1.34*	61.97	73.69	78.10	71.53		-8%	97%		6%	15%
Value of landings (million €)	6.09	7.09	7.02	*7.86*	42.46	52.79	53.82	53.00		-2%	86%		2%	13%
Income from landings (million €)	6.1	7.1	7.0	*7.9*	42.5	52.8	53.8	53.0		-2%	86%		2%	13%
Other income (million €)	2.2	4.9	8.6	*8.4*	3.4	7.5	7.1	4.3		-39%	-36%		-6%	30%
Direct income subsidies (million €)	1.10	0.20	0.75		8.83	2.49	7.28			-100%	-100%		192%	29%
Income from leasing fishing rights (million €)	-	0.01	-		0.6	0.4	0.4			-100%	-100%		-13%	-29%
Wages and salaries of crew (million €)	3.5	3.6	3.9	*3.4*	14.9	15.5	16.7	13.5		-19%	39%		7%	10%
Unpaid labour value (million €)	0.3	0.8	1.2	*0.9*	0.4	0.5	1.0	0.5		-53%	-38%		96%	131%
Energy costs (million €)	2.1	2.0	1.9	*1.4*	18.3	17.8	17.3	10.2		-41%	5%		-3%	-4%
Repair & maintenance costs (million €)	1.7	1.3	1.3	*1.3*	5.3	4.9	5.1	4.2		-18%	32%		5%	1%
Other variable costs (million €)	2.5	2.3	1.0	*1.0*	5.8	8.0	6.2	5.2		-16%	28%		-23%	-10%
Other non-variable costs (million €)	1.6	1.3	1.4	*1.5*	5.1	4.5	5.7	5.0		-12%	54%		26%	18%
Annual depreciation costs (million €)	2.0	2.0	2.1	*2.1*	12.3	11.0	12.0	10.6		-12%	53%		10%	3%
Rights costs (million €)	-	-	-		0.21	0.09	0.35			-100%	-100%		289%	133%
Opportunity cost of capital (million €)	1.09	0.93	1.65	*1.58*	6.16	4.93	8.93	7.75		-13%	92%		81%	61%
Tangible asset value (million €)	41.3	39.8	42.9	*41.5*	233.4	211.7	232.5	203.3		-13%	52%		10%	4%
Investments (million €)	2.2	3.0	2.6		4.6	6.1	4.8			-100%	-100%		-22%	-10%
Gross Value Added (million €)	0.4	5.0	10.0	*11.0*	11.3	25.1	26.6	26.4		-1%	78%		6%	46%
GVA to revenue (%)	4.7	41.7	64.2	*68.7*	24.7	41.6	43.7	51.8		19%	9%		5%	32%
Gross profit (million €)	- 3.4	0.6	4.9	*6.8*	- 3.9	9.0	8.9	12.5		40%	184%		-2%	248%
Gross profit margin (%)	- 41.2	4.9	31.6	*42.5*	- 8.6	15.0	14.6	24.4		67%	46%		-3%	355%
Net profit (million €)	- 6.5	- 2.3	1.2	*3.2*	- 22.4	- 6.9	- 12.1	- 5.9		51%	10%		-76%	17%
Net profit margin (%)	- 78.8	- 19.3	7.4	*19.9*	- 48.9	- 11.4	- 19.9	- 11.6		42%	4%		-74%	34%
GVA per FTE (thousand €)	0.5	7.2	18.7	*21.7*	6.7	14.4	16.5	20.4		24%	44%		15%	56%

Table 5.12 Croatia: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2012-13)	Economic development trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
HRV A37 PS2440 NGI°	70	456	13,298	118	43,887	18,810	20,160	9,546	47.4	2,491	12.4	-5,736	-28.45	15.5	21	-2	Weak	-22%	Deteriorated
HRV A37 PS1824 NGI	53	311	9,876	107	21,416	9,540	10,527	5,694	54.1	2,453	23.3	-665	-6.32	10.4	18	2	Weak	63%	Improved
HRV A37 DTS1218 NGI	200	227	18,726	2,119	2,162	6,801	9,578	3,987	41.6	1,924	20.1	-833	-8.69	9.1	18	1	Weak	75%	Improved
HRV A37 DFN0612 NGI	692	302	65,520	2,186	575	3,394	6,677	3,841	57.5	1,747	26.2	-118	-1.77	6.9	13	3	Weak	95%	Improved
HRV A37 DTS1824 NGI	41	101	6,247	2,997	963	3,675	4,263	1,058	24.8	192	4.5	-1,624	-38.08	8.6	10	-4	Weak	30%	Improved
HRV A37 DTS2440 NGI	16	66	3,261	3,698	764	3,678	3,753	762	20.3	-112	-3.0	-2,281	-60.79	13.3	12	-6	Weak		
HRV A37 DTS0612 NGI°	192	94	15,901	1,792	1,051	3,169	3,308	875	26.5	-39	-1.2	-1,103	-33.33	9.7	9	-5	Weak	26%	Improved
HRV A37 PS1218 NGI	41	99	5,917	122	6,359	3,208	3,277	1,596	48.7	638	19.5	-72	-2.20	9.7	16	3	Weak	92%	Improved
HRV A37 HOK0612 NGI°	259	70	15,245	2,746	240	1,264	2,995	1,770	59.1	411	13.7	-505	-16.86	19.3	25	-1	Weak	54%	Improved
HRV A37 MGO0006 NGI	270	128	17,356	156	365	1,836	2,535	1,507	59.5	743	29.3	589	23.24	6.0	12	38	High	84%	Improved
HRV A37 FPO0006 NGI	42	11	2,837	1,864	21	131	1,470	1,402	95.4	1,301	88.5	1,264	86.00	9.5	132	316	High	353%	Improved
HRV A37 PMP0612 NGI°	64	45	5,149	1,303	133	441	1,339	1,053	78.6	884	66.1	608	45.43	3.8	24	23	High	140%	Improved
HRV A37 HOK0006 NGI	101	10	4,396	2,894	29	162	1,254	1,183	94.4	945	75.4	868	69.20	23.2	115	103	High	128%	Improved
HRV A37 DRB1218 NGI°	18	32	2,421	1,302	360	1,173	1,189	568	47.8	279	23.5	44	3.71	8.9	18	6	Reasonable		
HRV A37 DFN0006 NGI	320	48	26,673	880	140	627	872	543	62.3	40	4.6	-210	-24.12	10.6	11	-4	Weak	45%	Improved
HRV A37 FPO0612 NGI°	111	32	9,942	2,146	105	667	667	226	33.9	-302	-45.3	-542	-81.33	16.5	7	-16	Weak		
HRV A37 PS0612 NGI°	42	44	4,134	392	455	640	658	320	48.6	133	20.2	-71	-10.77	4.2	7	1	Weak	89%	Improved
HRV A37 DRB0612 NGI	15	12	1,487	1,173	174	588	588	321	54.7	198	33.7	109	18.56	10.1	26	15	High		
HRV A37 MGO0612 NGI°	72	28	6,591	1,362	115	458	563	92	16.3	-120	-21.4	-306	-54.30	7.6	3	-11	Weak	40%	Improved
HRV A37 DFN1218 NGI	21	14	1,108	2,749	36	245	472	243	51.4	93	19.6	-142	-30.10	10.4	17	-2	Weak		
HRV A37 PMP0006 NGI	26	15	2,111	339	34	136	136	-21	-15.6	-41	-30.1	-62	-45.42	1.4	-1	-24	Weak	91%	Improved
HRV A37 PGP0612 NGI°	29	2	1,986	2,895	16	131	131	36	27.2	11	8.5	-71	-54.68	11.1	16	-4	Weak		
HRV A37 PGP0006 NGI°	21	3	1,054	682	11	68	68	-6	-8.2	-58	-86.3	-75	-110.63	20.0	-2	-38	Weak	50%	Improved

Table 5.13 Croatia: Landed value, weight and average price of principal species. Data for 2015 are preliminary.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)				Live weight of landings (tonne)				Average landed price (real) (€)			
	2012	**2013**	**2014**	***2015***	**2012**	**2013**	**2014**	***2015***	**2012**	**2013**	**2014**	***2015***
European pilchard(=Sardine)	17.3	21.6	22.0	*19.3*	44.4	53.8	56.9	*51.1*	0.4	0.4	0.4	*0.4*
European anchovy	6.2	8.2	7.0	*10.7*	8.5	9.3	9.1	*12.6*	0.7	0.9	0.8	*0.9*
Norway lobster	2.8	3.6	3.7	*3.6*	0.2	0.3	0.3	*0.3*	11.8	12.0	10.9	*11.8*
European hake	3.3	3.9	3.3	*2.9*	0.9	1.1	0.9	*0.8*	3.6	3.5	3.6	*3.8*
Red mullet	2.1	2.1	2.0	*1.9*	1.3	1.1	1.2	*1.1*	1.7	1.9	1.8	*1.7*
Deep-water rose shrimp	0.9	1.7	1.7	*1.8*	0.2	0.3	0.4	*0.5*	5.5	5.2	4.5	*3.4*
Pelagic fishes nei	1.0	1.2	1.6	*0.3*	2.9	3.9	5.0	*0.8*	0.3	0.3	0.3	*0.4*
Common octopus	0.9	1.1	1.6	*1.6*	0.2	0.2	0.3	*0.3*	5.5	5.7	5.3	*5.0*
Horned and musky octopuses	1.3	1.6	1.6	*1.2*	0.5	0.6	0.7	*0.5*	2.9	2.8	2.3	*2.4*
Common sole	1.5	1.9	1.5	*2.3*	0.2	0.3	0.2	*0.3*	7.7	7.6	7.9	*8.4*

5.4 CYPRUS

Short description of the national fleet

Fleet capacity

The Cypriot national fleet capacity continued the declining trend from the last 4 years, with a total of 840 vessels in 2015, a combined gross tonnage (GT) of 3.4 thousand tonnes and a total engine power of 38.2 thousand kilowatts (kW). Compared to 2014, fourteen vessels ceased its fishing activities, a 7% of the total fleet. However, GT and KW increased due to the increase in the number of vessels of the large scale fleet.

Fleet structure

In Cyprus, the fishing fleet can be divided into a large-fleet segment with an average engine power of 194 kW (less than 4% of the vessels in 2015) and a small-fleet segment with an engine power of 39 kW (96% of the vessels in 2015).

The large-fleet segment is mainly composed of polyvalent vessels with passive gears and few trawlers. The large-fleet segment represents about 83% of the overall engine power and 56% of the overall GT.

The vessels using *Polyvalent 'passive' gears with length ≥12m* range from 12-26m (the large majority from 12-18m) and are engaged in two fisheries; mainly in the large pelagic fishery using drifting longlines and operating around Cyprus waters and the eastern Mediterranean (targeting swordfish, bluefin tuna and albacore), but also in the inshore demersal fishery using mostly set nets and set longlines. A limited number of licenses are provided for this segment annually.

Demersal trawlers range from 22-27m. The licensed trawlers are categorised, based on their type of license, in those fishing in the territorial waters of Cyprus and those fishing in international waters (eastern and central Mediterranean). For the trawlers fishing in territorial waters a limited number of licenses is provided every year, and an extended closed season (from 1st of June until the 7th of November) is employed

The small-scale fleet segment is mainly operated with bottom set nets and bottom longlines, targeting demersal species. Cyprus Fisheries Law[17] provides for a limited number of licenses for this segment annually and divides it into three (3) subcategories: vessels with fishing license category A', vessels with fishing license category B' and vessels with fishing license category C'.

Employment

Employment was estimated at 1199 jobs in 2015, a 9% decrease from the 1 219 jobs in 2014. In 2014 these jobs corresponded to 729 FTEs or an average of 1.43 fishers per vessel or 0.85 FTE per vessel in 2014.

Effort

An estimated 65.6 thousand days were spent at sea in 2014, a 19% decrease compared to 2013, while the amount of energy consumed increased by 1%. This is due to the decrease in the small-scale vessels, but an increase in the large-scale fleet. However, energy costs decreased 4% as a result of lower fuel prices.

Cypriot vessels only operate in the Mediterranean.

Production

Landings increased 18% to 1.3 thousand tonnes of seafood, with a value of €7.5 million in 2014. This represents a 5% increase in value on 2013.

The bottom trawl fishery in the territorial waters and the inshore fishery with polyvalent passive gears target a mix of demersal species, as it is the case in all Mediterranean demersal fisheries. The exploited stocks are not shared with other countries' fleets. Landings of both fisheries are mainly composed by *Spicara smaris*, *Boops boops*, *Mullus barbatus*, *M. surmuletus*, *Pagellus erythrinus* and cephalopods (*Octopus vulgaris*, *Eledone moschata*, *Loligo vulgaris* and *Sepia officinalis*). The inshore fishery with polyvalent passive gears catches also relatively large quantities of *Sparisoma cretense, Spicara maena* and *Siganus* spp.

Concerning the large pelagic fishery, polyvalent vessels operate in the Eastern Mediterranean, catching basically *Xiphias gladius*, *Thunnus alalunga* and *Thunnus thynnus* with drifting longlines.

[17] Basic Fisheries Law Cap. 135 and subsequent amendments of 1961 to 2007, Fisheries Regulations of 1990 to 2012 based on Article 6 of the Basic Law

Economic results for 2014 and recent trends

National fleet performance

Although the Cypriot national fleet remained in a net loss making position in 2014, its economic performance compared to previous years improved and this trend is expected to have continued into 2015, as fuel prices remained lower than in previous years.

Revenue, estimated at €7.5 million, increased 5% due to an increase in income from landings.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €0.8 million, -€0.1 million and -€6.1 million, respectively, showing an improvement in the economic performance compared to previous years.

Other variable costs, opportunity cost of capital, annual depreciation and energy (fuel) costs are the main costs items with €3.28 million, €3.18 million, €2.85 million and €2.31 million, respectively. While both energy costs and other variable costs have decreased by 4%, the costs related to capital have increased, due to the entrance of larger vessels. In fact, if depreciation and opportunity costs of capital were not considered, net profits would tend to 0. This implies that the Cypriot fleet may have difficulties in the future to maintain the fleet. This would explain the cessation of the activity of many small-scale vessels, despite the incorporation of a few larger ones.

It worth mentioning that during 2015, 66 vessels of A' and B' category of small scale fleet segment were scrapped with public aid within the framework of the Scheme of Permanent Cessation, co-funded by the European Maritime and Fisheries Fund 2014-2020.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was negative (-1.5%), indicating operating inefficiency of the fisheries sector. However, this is an increase of 89% compared to the previous year and of 93% compared to the average of all previous years since 2008. Net Profit margin remained negative since it was estimated at -82.1% but it is an increase of 8% in comparison to 2013 and a significant increase of 14% compared to the average of the previous period 2008-2013. Despite the fact that the Return on Fixed Tangible Assets (RoFTA) is still negative for 2014 at -6% this is an increase of 31% compared to the previous year.

It is clear that there is an overall improved development trend since 2008 and this is also shown in labour productivity (GVA/FTE) which after many years is positive and it has increased greatly in compared to the average of previous years at 254%. Not only the GVA has increased significantly but the number of FTE has decreased by 15%.

Fuel consumption per landed tonne has followed a decreasing trend since 2009 (-32%) but it is still high at 2.07 thousand litres per landed tonne. Only in 2008 the fuel consumption per landed weight was much less compared to 2014. One of the reasons behind this high fuel consumption is the small production.

Landings in weight per unit of effort (in weight per days at sea) followed a decreasing trend for the period 2008-2011 and an increasing one for the period 2012-2014.

Drivers affecting the economic performance trends

Lower overall operational costs together with a reduction in the number of vessels after decommissioning schemes were the main driving forces behind the overall improvement of the economic performance of the Cyprus fleet. However, important economic indicators such as the Gross profit margin and the Net profit margin were still negative.

Markets and Trade

Cyprus has a negative trade balance in fresh fishery products both in value and volume.

Management instruments

The fleet in Cyprus is managed mainly through effort limitations and technical measures. A limited number of licenses are provided for each segment annually. Furthermore, closed seasons, restriction measures on the use of gears and minimum landing sizes are employed, in accordance to national and European regulations. It is noted that for the trawlers fishing in territorial waters an extended closed season (from 1st of June until the 7th of November) is employed.

TACs and quotas

The only species managed in the Mediterranean by quotas is the bluefin tuna and the total initial available quotas for the Cyprus fleet in 2014 amounted to around 70 tonnes. The quota was distributed only on the *Polyvalent 'passive' gears with length ≥12m* fleet segment operating with drifting longlines.

Status of Key Stocks

In 2014 Cyprus has performed stock assessment for two of the main commercially important demersal stocks in GSA25, Bogue (*Boops boops*) and Red mullet (*Mullus barbatus*) and both were found in overexploited status.

Innovation and Development

The small scale fleet is not very technical advanced and neither the polyvalent segment. Only the trawlers segment does it use more advanced technology.

Performance of selected fleet segments

Polyvalent passive gears with length 0-< 6m and 6-< 12m

The vessels using *Polyvalent passive gears with length 0-< 6m and 6-< 12m* compose the small scale inshore fleet, targeting demersal species. They represent the large majority of the fishing vessels in the Register (96%). The main gears used are trammel nets (GTR), set gillnets (GNS) and set longlines (LLS).

The main patterns of this fleet segment are the physical persons, area of operation closed to fishing shelters (operated in Cyprus waters i.e. less than 12 n.m.), use of one or more passive gears even in the same fishing trip, limited daily landings, high quality of the landings and thus higher selling prices compared with the ones enjoyed by trawlers for the same species caught.

There is a decreasing trend in both landings weight and value of landings. The production in terms of weight has been reduced by 23% in 2014 compared to the average of the period 2008-2013. The same picture applies for the value of landings where the decrease of 2014 compared the period 2008-2013 has reached the 31%. It is noted that during 2013, 107 vessels of small scale fleet segment were scrapped with public aid within the framework of the Scheme of Permanent Cessation, co-funded by the European Fisheries Fund 2007-2013.

In overall the operational costs decreased in 2014 compared to previous years mainly due to the reduction in repair & maintenance which was reduced by 24% compared to 2013.

The economic performance of the fleet segment of the Cyprus fishery was increased significantly compared to previous year 2013 but the previous year was very bad for this part of the fleet in economic terms. The Gross Value Added and the Gross profit increased by 86% and 72% respectively. Despite the better economic performance indicators compared to 2013, the indicators are much lower than those registered in the period 2008-2013 characterised by decreasing number of vessels, of employees and production in terms of both value and weight of landings.

Performance by fishing activity

Large-scale fleet

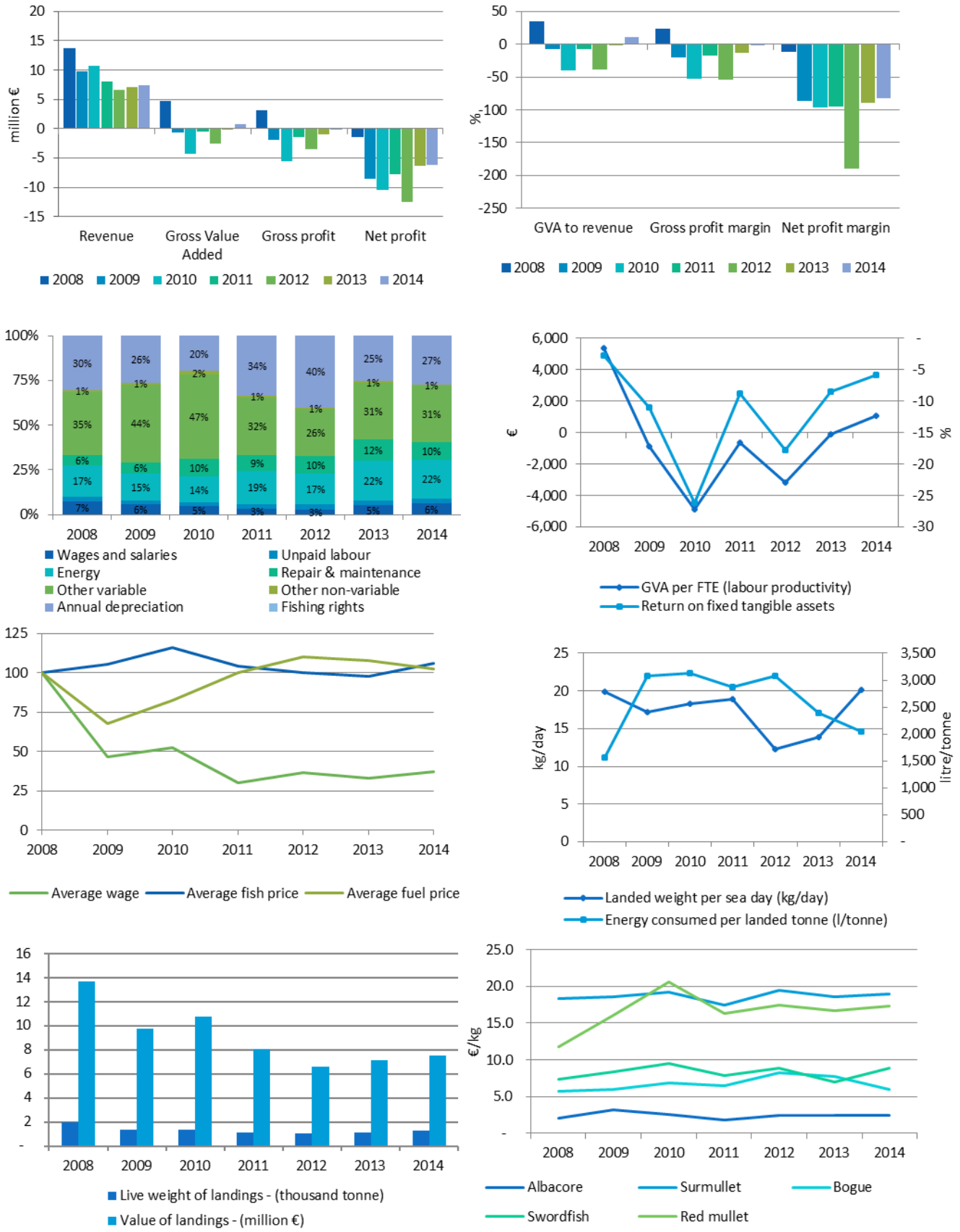
The large –scale fleet composes of *Polyvalent passive gears vessels* and trawlers *with length >12m.* Vessels using *Polyvalent 'passive' gears with length ≥12m* range from 12-26m (the large majority from 12-18m) and are engaged in two fisheries; mainly in the large pelagic fishery using drifting longlines and operating around Cyprus waters and the eastern Mediterranean (targeting swordfish, bluefin tuna and albacore), but also in the inshore demersal fishery using mostly set nets and set longlines. A limited number of licenses are provided for this segment annually.

Demersal trawlers range from 22-27m. The licensed trawlers are categorised, based on their type of license, in those fishing in the territorial waters of Cyprus and those fishing in international waters (eastern and central Mediterranean. A small number of non-exclusive trawlers may receive a license for participating at the large pelagic fishery as well. During 2014, 5 trawlers received a fishing license. From these, 2 had license for fishing both in territorial and international waters, and the remaining 5 for fishing only in international waters.

The large-scale fleet in numbers in 2014 is almost the same as in the previous years. In overall the operational costs decreased in 2014 compared to the previous year mainly due to the reduction in repair & maintenance which was reduced by 24%. The energy cost was also significantly, reduced especially when comparing it with the previous years (2008-2013) where the reduction amounted to 30%. The Gross Profit margin and the Net Profit margin were increased by 45% and 18% respectively compared to the previous year indicating better economic performance than previous year despite the fact that the Net profit is still negative. GVA was also improved compared to previous year.

Data issues

No major issues that need reporting.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.4 Cyprus: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.14 Cyprus: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 are projected.

		2008	2009	2010	2011	2012	2013	2014	*2015*	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	534	911	909	957	907	920	854	*840*		-7%	0%
Vessel tonnage	(thousand GT)	3.4	3.8	3.8	3.5	3.3	3.2	3.1	*3.3*		-5%	-12%
Engine power	(thousand kW)	27.6	40.2	40.4	40.8	38.5	38.4	36.8	*38.2*		-4%	-2%
Average vessel age	(year)	22	20	21	22	22	23	23	*24*		2%	8%
Average vessel length	(metre)	9	8	7	7	7	7	7	*7*		-2%	-6%
Enterprises with one vessel	(#)	532	909	907	955	905	919	851	*840*		-7%	0%
Enterprises with 2 to 5 vessels	(#)	1	1	1	1	1	1	1	-		0%	0%
Enterprises with more than 5 vessels	(#)	-	-	-	-	-	-	-	-			
FTE	(#)	875	777	871	839	810	824	729			-12%	-12%
Total employed	(person)	1,085	909	1,329	1,344	1,301	1,334	1,219	*1,199*		-9%	0%
Days at sea	(thousand day)	100	81	76	59	85	81	66			-19%	-18%
Fishing days	(thousand day)	100	81	76	59	85	80	66			-18%	-18%
Number of fishing trips	(thousand)	100	81	74	58	85	80	65			-19%	-19%
Energy consumption	(million litre)	3.1	4.3	4.3	3.2	3.2	2.7	2.7			1%	-22%
Live weight of landings	(thousand tonne)	2.0	1.4	1.4	1.1	1.0	1.1	1.3			18%	-2%
Value of landings	(million €)	13.7	9.8	10.7	8.1	6.6	7.2	7.5			5%	-20%
Income from landings	(million €)	13.7	9.8	10.7	8.1	6.6	7.2	7.5			5%	-20%
Other income	(million €)	-	-	-	-	-	-	-				
Direct income subsidies	(million €)	0.57	0.52	2.02	0.55	1.00	0.29	0.02			-94%	-98%
Wages and salaries of crew	(million €)	1.12	0.89	0.97	0.49	0.47	0.55	0.64			16%	-15%
Unpaid labour value	(million €)	0.42	0.34	0.41	0.35	0.49	0.33	0.28			-16%	-28%
Energy costs	(million €)	2.59	2.40	2.96	2.66	2.96	2.40	2.31			-4%	-13%
Repair & maintenance costs	(million €)	0.87	0.96	2.02	1.23	1.63	1.30	1.02			-22%	-24%
Other variable costs	(million €)	5.37	6.92	9.63	4.62	4.45	3.41	3.28			-4%	-43%
Other non-variable costs	(million €)	0.17	0.15	0.39	0.13	0.14	0.12	0.08	*0.07*		-34%	-58%
Annual depreciation costs	(million €)	4.59	4.19	4.06	4.80	6.81	2.77	2.85	*2.80*		3%	-37%
Opportunity cost of capital	(million €)	0.10	2.41	0.72	1.54	2.20	2.67	3.18	*3.06*		19%	98%
Tangible asset value (replacement)	(million €)	50.9	55.0	37.0	69.9	58.2	43.9	50.3	*49.5*		15%	-4%
Investments	(million €)	0.3	0.2	0.4	0.5	0.4	0.2	0.2			-26%	-54%
Financial position	(%)	0.3	0.3	0.3	0.5	1.0	1.0	1.0			0%	76%
Gross Value Added	(million €)	4.7	-0.7	-4.3	-0.5	-2.6	-0.1	0.8			1230%	241%
GVA to revenue	(%)	34.4	-6.8	-39.7	-6.8	-38.9	-1.0	10.7			1180%	209%
Gross profit	(million €)	3.2	-1.9	-5.6	-1.4	-3.5	-1.0	-0.1			88%	93%
Gross profit margin	(%)	23.1	-19.4	-52.6	-17.1	-53.4	-13.3	-1.5			89%	93%
Net profit	(million €)	-1.5	-8.5	-10.4	-7.7	-12.5	-6.4	-6.1			4%	22%
Net profit margin	(%)	-11.1	-87.0	-97.1	-95.6	-189.6	-89.4	-82.1			8%	14%
GVA per FTE (labour productivity)	(thousand €)	5.4	-0.9	-4.9	-0.7	-3.2	-0.1	1.1			1378%	254%
Return on fixed tangible assets	(%)	-2.8	-11.1	-26.2	-8.8	-17.8	-8.5	-5.9			31%	53%

Table 5.15 Cyprus: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF											
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	500	880	882	931	880	894	827	34	31	27	26	27	26	27		-7%	0%		4%	-5%
Vessel tonnage (thousand GT)	1.6	2.2	2.2	2.2	2.1	2.1	1.9	1.8	1.6	1.7	1.2	1.2	1.1	1.1		-10%	-7%		4%	-21%
Engine power (thousand kW)	19.6	33.6	34.0	35.5	33.2	33.8	31.9	8.0	6.6	6.3	5.3	5.3	4.7	4.8		-5%	1%		3%	-20%
FTE (#)	697	629	723	740	701	723	616	178	148	148	99	109	101	113		-15%	-12%		12%	-13%
Total employed (person)	895	761	1,181	1,245	1,192	1,233	1,106	190	148	148	99	109	101	113		-10%	2%		12%	-15%
Days at sea (thousand day)	96.7	78.6	72.9	56.6	82.8	77.8	63.2	3.5	2.7	2.7	2.5	2.3	2.9	2.4		-19%	-19%		-15%	-12%
Fishing days (thousand day)	96.7	78.6	72.9	56.6	82.8	77.8	63.2	3.5	2.7	2.7	2.5	2.3	2.4	2.4		-19%	-19%		1%	-9%
Number of fishing trips (thousand)	97	79	73	57	83	78	63	3	2	1	2	2	2	2		-19%	-19%		-10%	-19%
Energy consumption (million litre)	1.2	1.9	2.6	2.0	2.3	1.7	1.7	1.9	2.4	1.7	1.2	1.0	1.0	1.0		0%	-13%		1%	-33%
Live weight of landings (thousand tonn	1.15	0.81	0.85	0.70	0.54	0.49	0.58	0.85	0.58	0.53	0.42	0.51	0.63	0.74		18%	-24%		18%	27%
Value of landings (million €)	9.26	6.82	7.39	6.18	4.32	3.90	4.35	4.46	2.95	3.34	1.90	2.30	3.27	3.14		12%	-31%		-4%	4%
Income from landings (million €)	9.3	6.8	7.4	6.2	4.3	3.9	4.4	4.5	2.9	3.3	1.9	2.3	3.3	3.1		12%	-31%		-4%	3%
Other income (million €)	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Direct income subsidies (million €)	0.53	0.51	1.97	0.52	1.00	0.28	0.02	0.04	0.01	0.05	0.03	-	0.01	-		-93%	-98%		-100%	-100%
Wages and salaries of crew (million €)	-	-	-	-	-	-	-	1.1	0.9	1.0	0.5	0.5	0.6	0.6					0%	-26%
Unpaid labour value (million €)	0.4	0.3	0.4	0.3	0.5	0.3	0.3	-	-	-	-	-	-	-		-16%	-28%			
Energy costs (million €)	1.0	1.0	1.8	1.7	2.1	1.5	1.4	1.6	1.4	1.2	1.0	0.9	0.9	0.8		-4%	-6%		-11%	-30%
Repair & maintenance costs (million €)	0.5	0.6	1.4	0.9	1.3	0.9	0.7	0.3	0.3	0.6	0.3	0.4	0.5	0.3		-23%	-31%		-25%	-15%
Other variable costs (million €)	3.5	5.3	7.9	3.7	3.6	2.6	2.4	1.9	1.7	1.7	0.9	0.9	0.8	0.7		-7%	-45%		-9%	-44%
Other non-variable costs (million €)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.4	0.1	0.1	0.1	0.1		-10%	32%		-13%	-51%
Annual depreciation costs (million €)	2.0	1.9	1.6	2.5	3.0	1.8	2.0	2.6	2.3	2.5	2.3	3.8	1.0	0.8		12%	-7%		-20%	-66%
Opportunity cost of capital (million €)	0.06	1.78	0.49	1.24	1.77	1.80	2.24	0.03	0.64	0.23	0.30	0.44	0.86	0.94		24%	88%		8%	125%
Tangible asset value (replacement) (million €)	33.5	40.4	25.3	56.3	46.7	29.6	35.5	17.4	14.6	11.7	13.6	11.5	14.2	14.8		20%	-8%		4%	7%
Investments (million €)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.3	0.4	0.4	0.2	0.1		-73%	-85%		-9%	-41%
Gross Value Added (million €)	4.3	-0.1	-2.1	0.7	-0.5	-1.1	-0.2	0.5	-0.5	-0.5	-0.4	0.1	1.0	1.2		86%	-178%		18%	11889%
GVA to revenue (%)	46.0	-2.0	-28.8	11.5	-10.6	-27.3	-3.5	10.3	-18.0	-15.8	-21.2	2.9	30.5	37.4		87%	-88%		22%	2093%
Gross profit (million €)	3.8	-0.5	-2.5	0.4	-0.8	-1.4	-0.4	-0.7	-1.4	-1.5	-0.9	-0.4	0.4	0.6		69%	-191%		39%	183%
Gross profit margin (%)	41.4	-7.0	-33.4	6.1	-17.7	-35.8	-9.9	-15.0	-48.2	-44.7	-46.8	-18.3	13.6	19.7		72%	-28%		45%	174%
Net profit (million €)	1.8	-4.2	-4.6	-2.0	-4.5	-5.0	-4.7	-3.3	-4.3	-4.2	-3.5	-4.7	-1.4	-1.1		6%	-52%		21%	68%
Net profit margin (%)	19	-61	-62	-32	-105	-127	-107	-74	-148	-125	-186	-203	-44	-36		16%	-75%		18%	72%
GVA per FTE (labour productivity) (thousand €)	6.1	-0.2	-3.3	1.1	-0.7	-1.5	-0.2	2.6	-3.6	-3.6	-4.1	0.6	9.8	10.4		83%	-200%		5%	3318%

Table 5.16 Cyprus: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(litre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
CYP A37 PG0612	360	488	47,465	2,733	508	3,773	3,773	336	8.9	96	2.6	- 2,692	- 71.36	0.5	0.7	- 5.3	Weak	-26%	Deteriorated
CYP A37 PGP1218 °	22	76	1,689	750	556	1,859	1,859	835	44.9	538	28.9	- 180	- 9.69	3.9	11.0	3.4	Weak	94%	Improved
CYP A37 DTS2440 °	5	37	738	3,326	188	1,285	1,274	335	26.3	80	6.3	- 951	- 74.67	6.9	9.1	- 4.6	Weak	37%	Improved
CYP A37 PG0006	33	45	3,456	2,256	36	264	264	108	40.9	86	32.5	2	0.58	0.5	2.4	6.5	Reasonable	105%	Improved
CYP A37 PGO0006	359	69	9,893	5,869	27	262	262	- 466	- 178.2	- 480	- 183.4	- 1,286	- 491.65	0.2	- 6.8	- 12.8	Weak		
CYP A37 PGO0612	75	14	2,396	6,482	6	54	54	- 131	- 241.3	- 134	- 246.5	- 675	-1,243.62	0.2	- 9.1	- 7.3	Weak		

Table 5.17 Cyprus: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)							Live weight of landings (tonne)							Average landed price (real) (€)						
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014
Albacore	0.49	0.78	0.55	0.44	0.77	0.86	1.11	0.24	0.24	0.21	0.24	0.32	0.35	0.46	2.1	3.2	2.6	1.8	2.4	2.4	2.4
Surmullet	2.19	1.30	1.73	0.81	0.68	1.22	0.86	0.12	0.07	0.09	0.05	0.03	0.05	0.05	18.4	18.6	19.2	17.5	19.5	26.9	18.9
Bogue	1.93	1.52	1.75	0.70	0.73	0.57	0.69	0.34	0.25	0.26	0.11	0.09	0.07	0.11	5.7	6.0	6.8	6.4	8.2	7.8	6.0
Swordfish	0.45	0.22	0.31	0.27	0.32	0.33	0.60	0.06	0.03	0.03	0.03	0.04	0.05	0.07	7.4	8.3	9.5	7.8	8.9	6.9	8.9
Red mullet	0.62	0.41	0.65	0.37	0.33	0.46	0.46	0.05	0.03	0.03	0.02	0.02	0.03	0.03	11.7	16.1	20.6	16.4	17.5	16.8	17.4
Parrotfish	0.61	0.79	0.78	0.33	0.33	0.23	0.34	0.04	0.05	0.05	0.02	0.02	0.02	0.03	16.4	16.0	15.0	13.3	13.6	13.6	11.5
Picarel						0.06	0.27						0.01	0.05						4.9	5.1
Comber	0.04	0.03	0.06	0.05	0.06	0.08	0.25	0.02	0.01	0.02	0.02	0.02	0.03	0.08	2.4	1.9	3.2	3.0	2.6	2.6	2.9
"Octopuses',' etc. nei"	0.63	0.21	0.22	0.27	0.18	0.28	0.24	0.11	0.04	0.03	0.04	0.03	0.05	0.04	5.6	5.6	6.5	6.5	5.7	5.4	6.3
White seabream				0.53		0.11	0.21				0.03		0.01	0.01				18.5		15.3	16.3

5.5 DENMARK

Short description of the national fleet

Fleet capacity

In 2014, the Danish fishing fleet consisted of 1 956 registered vessels, with a combined vessel tonnage of 68 thousand gross tonnages (GT), engine power (kW) of 211 thousand kW and an average age of 32 years. The 1 956 vessels represent production units, which may be active or inactive. In 2014, there were 1 438 active and 518 inactive units. Some of the 1 438 active production units include more than one vessel. The number of registered fishing vessels decreased slightly (-4%) between 2013 and 2014, whereas a small increase was seen in terms of the vessel tonnage (5%) while vessel power decreased slightly (-2%). This comes about after a large decrease in fleet capacity between 2008 and 2012, where total vessel numbers decreased 27% and tonnage (GT) and vessel power (kW) decreased 21% and 25% respectively, mostly due to a cleaning up of inactive vessels in the register. The measure that initiated this process was the introduction of a yearly fee for registering.

Fleet structure

Almost two-thirds of the active part of the fleet consisted of vessels below 10 meters. These made up an even larger part of the fleet when including inactive vessels. The largest vessels in the 24-40m and above 40m group corresponded to 2% each of the total number of active vessels. Almost two thirds of the Danish vessels used passive gears only, primarily used in the below 10m segment, 17% used demersal trawlers or seiners or both, 13% used both active and passive gears, while a minority of vessels used either dredgers, pelagic trawl, or beam trawl. The largest landings in 2014 in terms of value and volume were made by the above 40m vessels. Atlantic herring and Atlantic mackerel were the most important species in this segment in terms of landed value followed by European sprout, sand eel, and blue whiting.

Employment

Total employed in 2014 was estimated at 1 405 jobs, corresponding to 1 619 FTEs. The reason that the FTE is higher than the number of jobs is that the FTEs is estimated based on the DK-standard that a full working year consists of 1 665 working hours. However, in reality yearly working hours in the Danish fishing fleet are more likely to be around 2 000 hours. The total number of employed fell 6% between 2013 and 2014 and the number of FTEs decreased 2%, and the long term trend has indeed been downwards except in 2013 which saw slight increases compared to 2012. In 2014, the number of fishing enterprises in the Danish fleet was 1 414 in total with the vast majority (98%) owning a single vessel.

Effort

In 2014, the Danish fleet spent a total of around 104 thousand days at sea. The total number of days at sea decreased modestly (-2%) between 2013 and 2014. Fuel consumption was at 92 million litres and thus remained at the same level as in 2013.

Production

In 2014, the total volume landed by the Danish fleet was 742 thousand tonnes of seafood with a landing value of €380 million. The total volume of landings increased from 2013 to 2014 by 12%, while the value of landings decreased by 4%. The landing price of most fish species fell in 2014 including the most important species Atlantic herring and Atlantic mackerel. 2014 saw increased landings of important species such as Atlantic mackerel, Atlantic cod, Norway lobster, and European sprat. Landings of Atlantic herring remained stable while landings of sand eel fell by a quarter. 2013 saw a significant increment in the quota for sand eel an important species for the Danish industrial fisheries, which brought the landings back to a more normal level having been at 54 thousand tonnes in 2012.

In 2014, Atlantic herring generated the highest landed value (€64 million) by the national fleet, followed by Atlantic mackerel (€42 million), Atlantic cod (€42 million), European sprat (€37 million) and *sand eel* (€30 million). These were followed by Norway lobster (€28 million) and European plaice (€26 million). In terms of landings weight of the most important species in 2014, European sprat accounted for 170 thousand tonnes, *sand eel* for 156 thousand tonnes and Atlantic herring for 155 thousand tonnes. These were followed by Atlantic mackerel with 42 thousand tonnes, Atlantic cod with 22 thousand tonnes, European plaice with 21 thousand tonnes, and Norway lobster with 3.5 thousand tonnes.

Landing prices of these species fell between 2013 and 2014. Sandeel experienced a drop in price of about a third (-35%), followed by Atlantic herring (-16%), European sprat (-12%), Atlantic mackerel (-8%), Norway lobster (-3%) while the price of Atlantic cod decreased moderately (-2%). The price of European plaice remained the same.

Economic results for 2014 and recent trends

National fleet performance

The total income generated by the Danish fleet in 2014 was €402 million. Total income thus decreased 6% compared to 2013. This consisted of €380 million in income from landings value, €5.5 million in non-fishing income, €16 million from leasing fishing rights and €0.13 million in direct income subsidies. Although the total landed volume increased, decreases

in fish prices were a main cause of the decrease in landings income between 2013 and 2014. The income from leasing fishing rights furthermore decreased 38% from 2013 to 2014. Total operating costs incurred by the Danish national fleet in 2014 equated to €254 million, amounting to 63% of total income. Labour cost (excl. the value of unpaid labour) and fuel costs, the two major fishing expenses, accounted for €71 million and €56 million respectively. Fuel consumption remained stable compared to 2013 but fuel expenses decreased 7% reflecting the fall in fuel prices in 2014. Between 2013 and 2014, total operating costs decreased by 2%, to a large extent due to decreased energy costs and decreases in labour wages as well as the value of unpaid labour.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit, and net profit generated by the Danish national fleet in 2014 were €238 million, €131 million and €37 million, respectively. This corresponded to decreases of 6, 8 and 20%, respectively, compared to 2013. However, when considering 2014 compared to the average of 2008-2013, gross profit in 2014 had increased by 7%, net profit by 37%, while GVA decreased modestly (-1%).

In 2014, the Danish fleet had an estimated (depreciated) replacement value of €577 million and an estimated value of fishing rights of €1 billion. Compared to 2013, the estimated replacement value increased 6% while the estimated value of fishing rights increased by 4%. Investments by the fleet amounted to €74 million in 2014, corresponding to a fall in investments by a third from 2013. Factors causing a change in the capital value of the fleet include variation in investments from year to year, including negative investments by some fleet segments, as well as the variation in the value of fishing rights.

Resource productivity and efficiency indicators

The Danish fleet performed well in 2014 with a gross profit margin of 34%. Compared to 2013, the gross profit margin fell 4% but compared to the average of 2008-2013 it increased 9% in 2014. The rate of return on tangible assets (RoFTA) was 7% in 2014, exhibiting a decrease of almost a fourth compared to 2013, however there was an increase of 20% in 2014 compared to the average of 2008-2013.

Labour productivity, measured as GVA against FTE showed a decrease of 4% from 2013, being at €147 thousand in 2014. However, compared to the average of 2008-2013, GVA per FTE increased 6% in 2014. In terms of fuel efficiency, the Danish fleet used on average 124 litres of fuel per tonne landed fish, a 10% improvement in productivity since 2013. Further, the fleet was able to land on average about 7 tonnes of seafood per sea day which was an increase in productivity of 14% compared to 2013.

Drivers affecting the economic performance trends

2014 showed decreased earnings from landings although landing quantity increased, i.e. a fall in fish prices for a range of species including the most important species Atlantic herring, Atlantic mackerel, Atlantic cod, European sprat, *sand eel*, and Norway lobster. Partly counteracting this, fuel consumption was the same as the year before while expenses for fuel fell by 7%, reflecting a fall in fuel prices in 2014. Further, decreases in labour expenses are observed.

Markets and trade

The trade ban between the EU and Russia may have affected supplies on the world market and thereby prices for Danish fishers usually catching and exporting e.g. Atlantic herring and Atlantic mackerel to Russia.

Management instruments

As reported in the Danish Annual Report on the fishing fleet capacity 2014 (The Danish AgriFish Agency 2015) the number of vessels, tonnage, as well as engine power have decreased since a Vessel Quota Share (VQS) system was put in place in the period 2003-2007. There are indications of a continuous restructuring of the fleet towards fewer, but, on average, larger vessels.

Also as reported in Danish Annual Report on the fishing fleet capacity 2014 (The Danish AgriFish Agency 2015), cod fishery in the Baltic as well as the North Sea and surrounding areas is managed by restricting effort. The period 2003-2014 saw a significant decrease in capacity in the fleets operating in those areas.

TACs and quotas

The quotas of the most valuable species to the Danish fishery were in 2014 the following; Atlantic herring 133 336 tonnes, Atlantic mackerel 45 967 tonnes, Atlantic cod 30 542 tonnes, European sprat 170 029 tonnes, *sand eel* 195 471 tonnes and Norway lobster 5 446 tonnes. The quotas for Atlantic herring, European sprat, *sand eel*, and Norway lobster available to Danish fishers thus decreased by 8%, 11%, 21%, and 4% from 2013 levels, respectively. The quota for cod remained on the same level as in 2013 while the quota for Atlantic mackerel increased by 78%.

Status of key stocks

The European Commission's "Communication from the Commission to the European Parliament and the Council. Consultation on the Fishing Opportunities for 2016 under the Common Fisheries Policies" (European Commission 2015) lists the species with an estimated Maximum Sustainable Yield (MSY) and whether the current fishing levels (in 2013) in specific areas were fished below, at, or above MSY levels. The species most relevant to the Danish fishing fleets and their MSY status as in European Commission (2015) are listed below:

- **Herring** fished *at or below* MSY: The Baltic Sea (area 25-29), the North Sea area IV, subdivisions IIIa and VIId, subareas I,II, V, divisions IVa, XIVa subdivision 30 (Bothnian Sea), subdivision 28.1 (Gulf of Riga)
- **Herring** fished *above* MSY: The Western Baltic Sea, division IIA and area 22-24
- **Mackerel** fished at or below MSY: Northeast Atlantic
- **European sprat** fished *at or below* MSY: The North Sea area IV
- **Cod** fished at levels *above* MSY: The Western Baltic Sea areas 22-24 and Subarea IV (North Sea), division VIId (Eastern Channel), division IIIa (West Skagerrak)
- **Sandeel** fished *above* MSY: The Dogger Bank area SA1, the South Eastern and Central Eastern North Sea
- **Norway lobster** fished *at or below* MSY: Fladen Ground (FU7), Firth of Forth (FU8), Moray Firth (FU9)
- **Norway lobster** fished *above* MSY: Farn Deeps (FU6)
- **Plaice** fished *at or below* MSY: Subarea IV (North Sea)
- (European Commission 2015)

Innovation and Development

A potential for increased earnings has been identified by improving the cuts and thus quality of fish onboard vessels. This could increase the landing price obtained by fishers.

Trials are taking place to improve fishing selectivity to reduce the occurrence of undesired sizes of target species and the occurrence of bycatch.

Performance results of selected fleet segments

Overall, the Danish fleet consists of 19 fleet segments, covering both static and active gears and targeting both demersal and pelagic species. The capacity of the Danish fleet has stabilized in terms of number of active vessels from 2012 onwards experiencing a small decrease of 3% from 2013 to 2014 while total kilowatts power decreased by 2%. Capacity increased by 5% when measured as total gross tonnage. Employment, measured in terms of Full Time Equivalents (FTE) decreased slightly in 2014 compared to 2013.

In economic terms, the gross profit has decreased by 8% whereas the net profit decreased by 20% 2013-2014. Both the gross and the net profit show a significant positive trend if evaluated for the period 2008-2014. This gain is driven by the large-scale fleet; conversely the small-scale fleet is experiencing a minor loss. However, the profitability of the small-scale fleet has improved during 2008-2012. The same positive trend of increasing profitability is the case for the large-scale fisheries and could be the effect of the Vessel Quota Share (VQS) system that was introduced in 1st January 2007.

Performance by fishing activity

The large scale fleet (vessels above 12 meters) targets a large variety of species including codfish, flatfish, Norway lobster, herring, mackerel, sprat and *sand eel* in the Baltic Sea, the Sounds, Kattegat, Skagerrak, the North Sea and the Norwegian Sea. In 2014, the large scale fishing fleet consisted of 434 registered vessels, with a combined vessel tonnage of 63 thousand GT and engine power of 157 thousand kW. The size of the large scale fleet decreased between 2013 and 2014 in terms of number of vessels (-5%) but increased with respect to vessel tonnage and vessel power by 8% and 1% respectively. Comparing 2014 to the average of 2008-2013 the number of vessels in 2014 decreased by 16%, the gross tonnage increased by 7% while the total engine power decreased by 7%.

The revenue generated by the large scale fleet accounted for €363 million in 2014, which was 94% of the national revenue for fisheries. The landing value generated by this fleet decreased by 4% from 2013 to 2014. Total operating costs incurred by the large scale fleet in 2014 equated to €229 million. Of these, crew costs (incl. unpaid labour value) and energy costs are the major fishing expenses for the large scale fleet and accounted for €94 million, of which €69 million were wages, and €54 million were energy costs, respectively, in 2014. Likewise, capital costs are a major expense for the large scale fleet and amount to €89m. Between 2013 and 2014, total operating costs and capital costs decreased by 2% each. The large scale fleet had a gross profit and net profit of €134 million and €44 million in 2014. It had thus decreased its gross profit by €10 million while net profit declined by €8 million, corresponding to a decrease in gross profit of 7% and a decrease in net profit of 15% compared to 2013. A major reason for the fall in gross and net profit is the decreased landing value.

The small scale fleet, which is defined as vessels below 12 meters using static gears, operates mostly in the Baltic Sea, the Sounds and the Kattegat. In 2014, the small scale fishing fleet consisted of 1 004 registered vessels, with a combined vessel tonnage of 3.8 thousand GT and engine power of 40.9 thousand kW. The number of vessels decreased by 2% between 2013 and 2014, while vessel tonnage and engine power decreased by 1% each. Compared to the average in the period 2008-2013, 2014 saw a decrease in number of vessels of 11%, as well as decreases in vessel tonnage and power of 8 and 6% respectively.

The revenue generated by the small scale fleet amounted to €23 million in 2014, which is 6% of the national revenue for fisheries. The landing value generated by the Danish small scale fleet decreased by 7% from 2013-2014 being €22 million in 2014. Total operating costs incurred by the small scale fleet in 2014 equated to €26 million, amounting to more than the revenue. Crew costs are a major fishing expense for the small scale fleet and accounted for €13m in 2014 (incl. unpaid labour value). Between 2013 and 2014, total operating costs decreased by 6%, due to decreases in wages, energy costs, repair and maintenance costs, as well as non-variable costs. The small scale fleet made a loss in 2014 with a gross profit and a net profit of -€2.4 million and -€7.2 million respectively. The gross profit decreased 104% from 2013 to 2014, while the net profit decreased 23%. The increased loss in 2014 was mainly due to lower income from landings. However, compared to the average between 2008 and 2013, gross profit in 2014 remained stable while net profit increased by 8%.

Fleet Segment Level Economic performance

The Danish fleet is highly diversified with a broad range of vessel types operating and targeting different species predominantly in the North Sea, Baltic Sea, and North Atlantic. The national fleet consisted of 19 DCF fleet segments in 2014 consisting of 1 438 active vessels. 10 fleets made losses in 2014, while 9 made an overall profit. A breakdown of the key performance indicators by main fishing activity is provided in table at the end of the chapter for all 19 fleet segments in 2014. A short description of the four most important segments in terms of total value of landings is provided below.

Pelagic trawl >40m – 16 vessels make up this segment which operates predominantly in the North Sea and the Norwegian Sea. The fleet targets pelagic species for consumption (mackerel and herring) as well as reduction species such as *sand eel*, sprat, and blue whiting. In 2014, the total value of landings was around €129 million and 202 FTEs were employed in this fleet segment, contributing to 34% of the total income from landings and 12% of FTEs generated by the Danish fishing fleet. This fleet segment reported a total gross profit of around €74 million and total net profit of €30 million in 2014, corresponding to a decrease of 1 and 18% respectively, mainly due to lower landing prices.

Demersal trawl / seine 24-40m – 33 vessels make up this segment which operates predominantly in the North Sea and Skagerrak. The fleet targets a variety of species but in particular cod, plaice, saithe, and Northern prawn. In 2014, the total value of landings was around €52 million and 239 FTEs were employed in this fleet segment, contributing to 14% of the total income from landings and 15% of the FTEs generated by the Danish fishing fleet. This fleet had a gross profit of €14.7 million and a net profit of €4.4 million in 2014. The gross profit remained at the same level as in 2013 while the net profit increased by 79% from €2.5 million in 2013 and after having been negative in 2012 (-€192 million).

Demersal trawl / seine 18-24m – 55 vessels make up this segment which conducts fisheries in Skagerrak and Kattegat, the North Sea, and the Baltic Sea, targeting a variety of species but where cod, Norway lobster, plaice, sprat, *sand eel*, and haddock are the most important. The total value of landings in this segment was €42 million in 2014 and the segment employed 242 FTEs, making up 11% of the total value of landings and 15% of the FTEs generated by the Danish fishing fleet. This segment increased its gross profit from €8 million in 2013 to €11 million in 2014 and increased its net profit from -€0.3 million in 2013 to €3 million 2014.

Demersal trawl / seine > 40m – 15 vessels make up this segment which operates predominantly in the North Sea and Skagerrak. The fleet targets a variety of species but in particular species for human consumption such as herring and mackerel and reduction species such as *sand eel* and sprat. In 2014, the total value of landings was around €35 million and 94 FTEs were employed in this fleet segment, contributing to 9% of the total value from landings and 6% of FTEs in the Danish fishing fleet. This fleet had a gross profit of €12 million and net profit of €4 million in 2014. From 2013-2014, the gross and net profit of the fleet decreased by 53% and 69% respectively, largely as a result of decreased landing prices.

Projections for 2015 and outlook

Modelling for 2015 forecasts a 20% increase in landed weight, which combined with low prices, leads to a 3% in landed value. The fall in oil prices is expected to decrease energy costs by 34% with repair and maintenance and other variable costs falling as well. The result is high gross and net profit margins for the Danish fleet of 43% and 20% respectively.

Modelling for 2016 forecasts further improvements in economic performance for the Danish fleet with landed weight and landed value both increasing (8% and 7% respectively). Different cost component show mixed trends for 2016 but an increase to income (8%) translates to small increases in gross and net profit margins (to 45% and 25% respectively).

A factor of uncertainty in the coming years is the implementation of the landing obligation, which is being implemented as part of the EU's reform of the Common Fishery Policy. The landing obligation may reduce the profitability by inducing higher operating costs and lower catches depending on the related regulation. It could however, also be a source of innovation in the longer term that brings about a more efficient use of the resources. The gradual implementation of the EU wide landing obligation began in January 2015 and data from 2015 (and onwards) will show any short term effects of this. How the landing obligation may affect the economic performance in the long term remains to be seen.

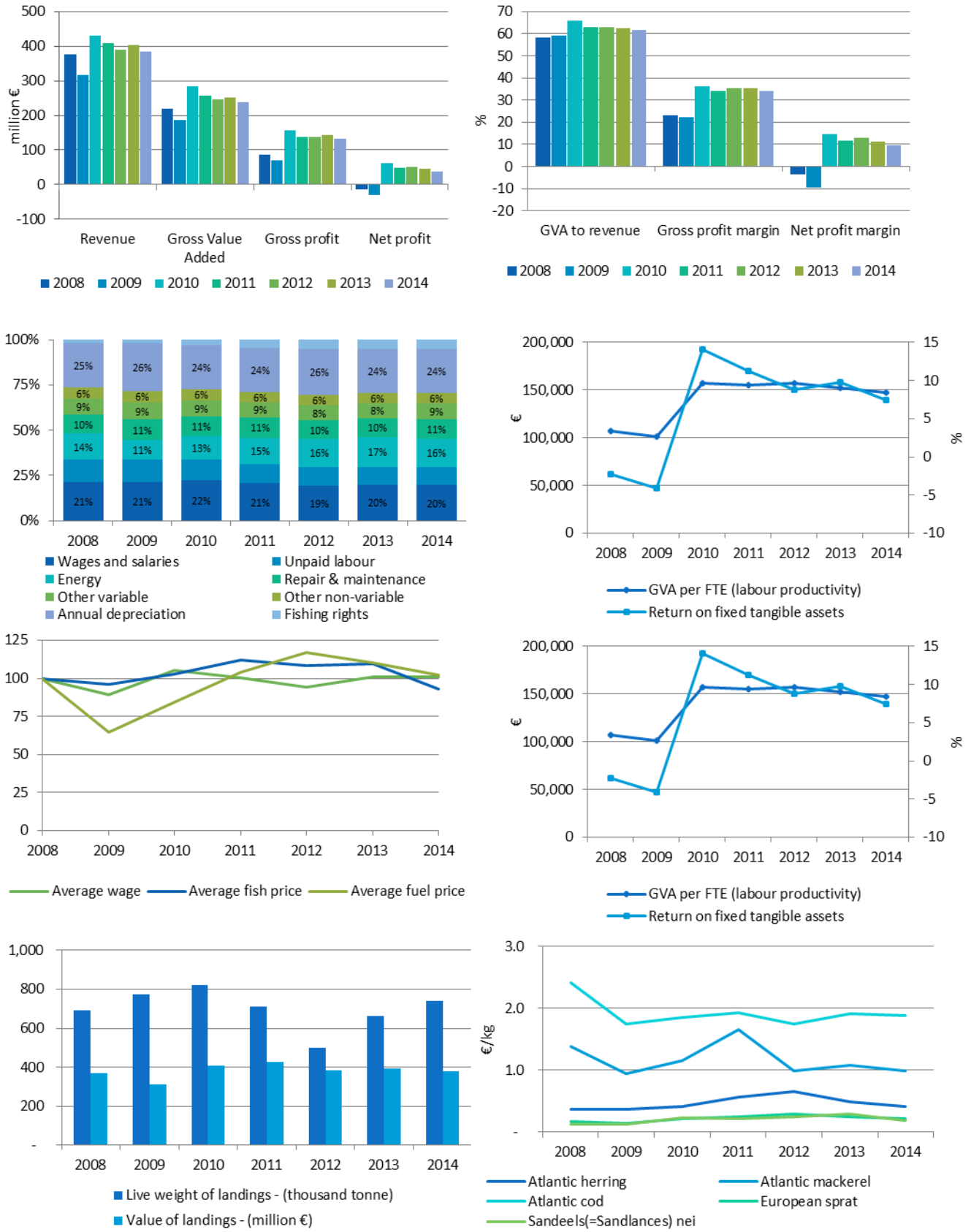
Data issues

For 2012, 2013, and 2014, the value of fishing rights has been calculated based on all registered privately owned quota shares. Previously the calculation had been based on a sample. The comprehensive data give a much better coverage of the quota value, and have changed the level from €764 million to €1 billion from 2011 to 2014. But the result has to be seen as preliminary, as the shadow prices used in the estimations are based on the calculated gain in profit at the individual level instead of the macro level.

Sources:

European Commission (2015), Communication from the Commission to the European Parliament and the Council. Consultation on the Fishing Opportunities for 2016 under the Common Fisheries Policies, COM(2015) 239 final, Brussels, 2.6.2015

The Danish AgriFish Agency, Ministry of Food, Agriculture and Fisheries (2015), *Annual Report on the fishing fleet capacity 2014 - Denmark*



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.5 Denmark: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.18 Denmark: National fleet statistics and economic performance results.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	2,813	2,786	2,682	2,663	2,052	2,048	1,956		-4%	-22%
Number of Inactive vessels_ms	(#)	1,003	1,017	1,043	1,060	515	567	518		-9%	-40%
Vessel tonnage	(thousand GT)	78.8	74.4	68.0	67.5	62.2	64.6	68.2		5%	-2%
Engine power	(thousand kW)	282.9	269.2	247.4	238.8	212.6	215.2	211.0		-2%	-14%
Average vessel age	(year)	29	29	29	30	30	31	32		1%	6%
Average vessel length	(metre)	10	9	9	9	10	10	10		-1%	3%
Enterprises with one vessel	(#)	1,670	1,591	1,517	1,519	1,415	1,414	1,390		-2%	-9%
Enterprises with 2 to 5 vessels	(#)	50	63	56	33	76	36	23		-36%	-56%
Enterprises with more than 5 vessels	(#)	1	1	1	1	1	-	1			20%
FTE	(#)	2,061	1,854	1,804	1,661	1,558	1,652	1,619		-2%	-8%
Total employed	(person)	1,801	1,694	1,528	1,460	1,472	1,489	1,405		-6%	-11%
Days at sea	(thousand day)	129.2	127.5	119.4	116.0	109.4	106.2	103.8		-2%	-12%
Fishing days	(thousand day)	122.5	120.6	112.5	108.5	103.1	102.0	99.2		-3%	-11%
Number of fishing trips	(thousand)	99	96	89	88	82	79	77		-2%	-13%
Energy consumption	(million litre)	94.12	94.54	94.65	88.05	80.99	91.50	91.72		0%	1%
Live weight of landings	(thousand tonne)	690.5	773.0	822.3	711.0	499.3	665.0	741.9		12%	7%
Value of landings	(million €)	366.8	310.3	408.3	427.4	382.8	395.3	380.0		-4%	0%
Income from landings	(million €)	361.9	306.1	411.5	399.5	381.9	394.9	380.1		-4%	1%
Other income	(million €)	14.59	11.73	18.50	8.95	8.11	7.38	5.48		-26%	-53%
Direct income subsidies	(million €)	0.21	0.05	0.07	0.25	0.54	0.05	0.13		167%	-35%
Income from leasing fishing rights	(million €)				8	9	26	16		-36%	14%
Wages and salaries of crew	(million €)	84.71	73.45	83.95	78.05	69.57	73.10	71.31		-2%	-8%
Unpaid labour value	(million €)	48.57	43.04	43.08	40.59	37.11	37.07	35.80		-3%	-14%
Energy costs	(million €)	56.76	36.81	47.94	55.11	57.04	60.88	56.35		-7%	7%
Repair & maintenance costs	(million €)	40.68	38.81	41.54	42.35	36.58	38.24	39.50		3%	-1%
Other variable costs	(million €)	35.44	32.44	34.08	32.22	30.30	30.07	30.92		3%	-5%
Other non-variable costs	(million €)	23.82	22.32	22.67	21.26	20.94	20.78	20.42		-2%	-7%
Annual depreciation costs	(million €)	97.28	89.74	90.82	91.71	92.68	89.24	88.20		-1%	-4%
Rights costs	(million €)	8	7	12	18	18	19	18		-4%	34%
Opportunity cost of capital	(million €)	3.18	11.27	3.33	0.13	- 5.09	6.73	5.94		-12%	82%
Tangible asset value (replacement)	(million €)	475	458	469	421	520	543	577		6%	20%
Fishing rights	(million €)	382	919	786	764	869	969	1,008		4%	29%
Investments	(million €)	63.4	75.9	24.7	20.4	331.3	109.8	73.5		-33%	-29%
Financial position	(%)	64.8	60.1	73.2	79.3	58.2	62.5	68.5		10%	3%
Gross Value Added	(million €)	219.8	187.4	283.8	257.5	245.2	252.3	238.4		-6%	-1%
GVA to revenue	(%)	58.4	59.0	66.0	63.0	62.9	62.7	61.8		-1%	0%
Gross profit	(million €)	86.5	70.9	156.7	138.8	138.5	142.1	131.3		-8%	7%
Gross profit margin	(%)	23.0	22.3	36.4	34.0	35.5	35.3	34.0		-4%	9%
Net profit	(million €)	- 13.9	- 30.1	62.6	47.0	50.9	46.1	37.1		-20%	37%
Net profit margin	(%)	- 3.7	- 9.5	14.6	11.5	13.0	11.5	9.6		-16%	54%
GVA per FTE (labour productivity)	(thousand €)	107	101	157	155	157	153	147		-4%	6%
Return on fixed tangible assets	(%)	- 2	- 4	14	11	9	10	7		-23%	20%

Table 5.19 Denmark: National fleet statistics and economic performance results based on fleet segment level data.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	1810	1769	1639	1603	1537	1481	1,438	*1,343*	*1,294*		-7%	-4%
Total employed	(person)	1800.72	1694.33	1528.19	1460.19	1472.37	1488.81	1405.48	*1,334*	*1,270*		-5%	-5%
FTE	(#)	2,061	1,854	1,804	1,661	1,558	1,652	1,619	*1,528*	*1,517*		-6%	-1%
Days at sea	(day)	131,030	127,501	119,370	115,963	109,435	106,158	103,761	*96,603*	*98,070*		-7%	2%
Energy consumption	(thousand litres)	94,123	94,537	94,654	88,049	80,989	91,499	91,722	*93,545*	*94,193*		2%	1%
Live weight of landings	(tonne)	690,450	773,012	822,281	710,945	499,305	665,041	741,855	*891,545*	*962,182*		20%	8%
Value of landings	(thousand €)	366,675	310,213	408,303	427,194	382,825	395,309	379,968	*389,780*	*416,129*		3%	7%
Income from landings	(thousand €)	361,926	306,087	411,483	399,484	381,922	394,872	380,080	*389,340*	*415,619*		2%	7%
Other income	(thousand €)	14,592	11,728	18,504	8,946	8,111	7,384	5,477	*6,590*	*6,312*		20%	-4%
Wages and salaries of crew	(thousand €)	84,711	73,450	83,953	78,054	69,575	73,101	71,309	*73,420*	*78,766*		3%	7%
Unpaid labour value	(thousand €)	48,571	43,040	43,077	40,593	37,112	37,070	35,800	*33,552*	*31,989*		-6%	-5%
Energy costs	(thousand €)	56,755	36,812	47,941	55,115	57,045	60,881	56,354	*37,405*	*34,888*		-34%	-7%
Repair & maintenance costs	(thousand €)	40,683	38,814	41,539	42,349	36,584	38,245	39,498	*35,732*	*34,020*		-10%	-5%
Other variable costs	(thousand €)	35,440	32,440	34,078	32,217	30,298	30,070	30,924	*27,145*	*34,427*		-12%	27%
Other non-variable costs	(thousand €)	23,823	22,318	22,673	21,263	20,936	20,782	20,420	*19,321*	*18,412*		-5%	-5%
Annual depreciation costs	(thousand €)	97,277	89,740	90,818	91,713	92,681	89,243	88,202	*85,932*	*81,990*		-3%	-5%
Opportunity cost of capital	(thousand €)	3,183	11,273	3,333	126	- 5,093	6,731	5,945	*2,532*	*2,413*		-57%	-5%
Tangible asset value (replacement)	(thousand €)	475,100	458,258	469,427	420,794	519,664	542,850	577,170	*516,836*	*492,673*		-10%	-5%
Gross Value Added	(thousand €)	219,817	187,431	283,756	257,486	245,171	252,278	238,360	*276,327*	*300,183*		16%	9%
Gross profit	(thousand €)	86,534	70,942	156,726	138,838	138,483	142,107	131,251	*169,355*	*189,427*		29%	12%
Net profit	(thousand €)	- 13,925	- 30,072	62,575	46,999	50,895	46,133	37,104	*80,891*	*105,024*		118%	30%

Table 5.20 Denmark: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF										
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	1,228	1,203	1,118	1,102	1,075	1,025	1,004	582	566	521	501	462	456	434		-2%	-11%		-5%	-16%
Vessel tonnage (thousand GT)	4.4	4.3	4.2	4.2	4.1	3.9	3.8	59.4	59.9	58.8	59.1	56.2	58.1	62.7		-1%	-8%		8%	7%
Engine power (thousand kW)	44.9	44.1	44.0	43.7	42.9	41.2	40.9	181.2	178.2	171.1	167.0	154.1	156.1	156.9		-1%	-6%		1%	-7%
FTE (#)	379	319	281	276	252	239	225	1,682	1,535	1,523	1,385	1,307	1,413	1,394		-6%	-23%		-1%	-5%
Total employed (person)	420	378	333	342	345	362	307	1,380	1,317	1,195	1,119	1,127	1,127	1,099		-15%	-16%		-2%	-9%
Days at sea (thousand day)	58.1	53.5	49.3	50.6	45.6	43.5	42.5	73.0	74.0	70.1	65.3	63.8	62.6	61.2		-2%	-15%		-2%	-10%
Fishing days (thousand day)	55.8	53.0	48.8	50.3	45.3	43.4	42.4	66.7	67.6	63.7	58.2	57.8	58.6	56.8		-2%	-14%		-3%	-9%
Number of fishing trips (thousand)	55	53	48	50	45	43	42	43	43	41	38	37	36	35		-2%	-14%		-1%	-11%
Energy consumption (million litre)	3.7	3.7	3.2	3.2	3.1	3.0	2.9	90.4	90.9	91.5	84.8	77.9	88.5	88.8		-3%	-13%		0%	2%
Live weight of landings (thousand tonne)	12.94	11.85	11.18	12.28	11.78	11.22	11.08	677.51	761.17	811.10	698.67	487.52	653.82	730.77		-1%	-7%		12%	7%
Value of landings (million €)	32.02	24.76	24.58	26.90	24.87	23.28	21.64	334.66	285.45	383.72	400.30	357.96	372.03	358.33		-7%	-17%		-4%	1%
Income from landings (million €)	31.2	23.3	22.8	24.6	25.3	23.6	22.0	330.7	282.8	388.6	374.9	356.7	371.3	358.1		-7%	-13%		-4%	2%
Other income (million €)	1.6	1.9	3.5	1.2	2.0	2.4	1.1	13.0	9.9	15.1	7.7	6.1	5.0	4.4		-52%	-46%		-13%	-54%
Direct income subsidies (million €)	-	-	-	0.01	-	-	-	0.21	0.05	0.07	0.24	0.54	0.05	0.13			-100%		167%	-35%
Income from leasing fishing rights (million €)				1.6	0.6	1.1	0.7				6.7	8.5	24.8	15.8		-41%	-42%		-36%	19%
Wages and salaries of crew (million €)	3.7	3.1	2.3	3.0	2.6	3.1	2.6	81.0	70.4	81.7	75.1	67.0	70.0	68.8		-17%	-14%		-2%	-7%
Unpaid labour value (million €)	17.0	14.2	13.2	11.7	11.4	10.8	10.8	31.6	28.8	29.8	28.9	25.7	26.3	25.0		0%	-17%		-5%	-12%
Energy costs (million €)	2.4	1.7	1.8	2.3	2.5	2.2	1.9	54.4	35.1	46.2	52.8	54.6	58.7	54.4		-13%	-9%		-7%	8%
Repair & maintenance costs (million €)	5.3	4.2	3.8	4.2	3.8	3.9	3.7	35.4	34.6	37.8	38.1	32.7	34.4	35.8		-5%	-13%		4%	1%
Other variable costs (million €)	4.5	3.3	3.2	3.1	4.2	3.9	4.0	30.9	29.1	30.9	29.1	26.1	26.2	26.9		4%	9%		3%	-6%
Other non-variable costs (million €)	3.9	3.5	3.5	3.4	3.7	3.3	2.5	19.9	18.8	19.2	17.9	17.2	17.5	17.9		-24%	-29%		3%	-3%
Annual depreciation costs (million €)	7.1	5.8	4.7	4.3	4.6	4.1	4.3	90.2	84.0	86.2	87.4	88.0	85.1	83.9		6%	-15%		-2%	-3%
Rights costs (million €)	0.55	0.46	0.48	0.62	1.06	0.83	0.76	7.21	6.68	11.79	16.94	16.63	18.27	17.49		-9%	14%		-4%	35%
Opportunity cost of capital (million €)	0.28	0.84	0.23	0.01	- 0.36	0.55	0.41	2.90	10.43	3.10	0.12	- 4.73	6.18	5.54		-25%	58%		-10%	85%
Tangible asset value (replacement) (million €)	42.3	34.3	32.4	28.8	37.1	44.2	39.6	432.8	424.0	437.0	392.0	482.5	498.7	537.5		-10%	9%		8%	21%
Fishing rights (million €)	6.6	52.1	34.7	40.3	39.6	34.2	33.8	375.2	866.8	750.9	723.5	829.2	935.2	974.3		-1%	-2%		4%	30%
Investments (million €)	5.0	3.0	3.0	2.3	7.0	1.9	0.8	58.5	73.1	22.3	20.8	324.3	126.1	93.9		-57%	-78%		-26%	-10%
Gross Value Added (million €)	16.6	12.3	14.0	12.8	13.1	12.7	10.9	203.2	175.1	269.7	244.7	232.1	239.6	227.4		-14%	-20%		-5%	0%
GVA to revenue (%)	50.8	49.1	53.4	49.6	48.0	48.8	47.4	59.1	59.8	66.8	63.9	64.0	63.7	62.7		-3%	-5%		-1%	0%
Gross profit (million €)	- 4.1	- 5.0	- 1.4	- 1.9	- 0.9	- 1.2	- 2.4	90.6	75.9	158.2	140.7	139.4	143.3	133.7		-104%	0%		-7%	7%
Gross profit margin (%)	- 12.5	- 19.8	- 5.5	- 7.3	- 3.3	- 4.5	- 10.4	26.4	25.9	39.2	36.8	38.4	38.1	36.9		-130%	-18%		-3%	8%
Net profit (million €)	- 11.4	- 11.6	- 6.3	- 6.2	- 5.2	- 5.8	- 7.2	- 2.5	- 18.5	68.9	53.2	56.1	52.0	44.3		-23%	8%		-15%	27%
Net profit margin (%)	- 34.9	- 46.0	- 24.1	- 24.1	- 19.0	- 22.4	- 31.0	- 0.7	- 6.3	17.1	13.9	15.5	13.8	12.2		-38%	-9%		-12%	38%
GVA per FTE (labour productivity) (thousand €)	44.0	38.7	50.0	46.3	51.9	53.1	48.6	120.8	114.1	177.1	176.6	177.7	169.6	163.2		-9%	3%		-4%	5%

Table 5.21 Denmark: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
DNK A27 TM40XX	16	202	2,852	82	325,344	129,298	131,038	95,790	73.1	74,122	56.6	29,554	22.55	107.2	474	14	High	-31%	Deteriorated
DNK A27 DTS2440 °	33	239	7,617	240	76,093	52,235	52,562	29,078	55.3	14,722	28.0	4,402	8.37	60.0	121	8	Weak	268%	Improved
DNK A27 DTS1824 °	55	242	9,659	162	62,891	42,344	43,296	25,216	58.2	11,107	25.7	2,901	6.70	58.4	104	7	Weak	2065%	Improved
DNK A27 DTS40XX °	15	94	2,201	78	129,476	34,525	34,821	20,461	58.8	12,062	34.6	4,000	11.49	89.1	217	8	Reasonable	-43%	Deteriorated
DNK A27 DTS1218 °	119	205	15,936	307	26,660	30,835	31,282	16,083	51.4	4,539	14.5	- 1,092	- 3.49	56.3	78	- 2	Weak	23%	Improved
DNK A27 PMP1824 °	16	103	3,358	723	7,387	18,288	18,566	10,935	58.9	4,537	24.4	1,353	7.29	61.9	106	9	Weak	1729%	Improved
DNK A27 PGP0010	808	142	29,105	262	4,942	11,730	13,026	6,567	50.4	- 1,970	- 15.1	- 4,272	- 32.80	59.9	46	- 16	Weak	0%	Stable
DNK A27 TM1218	18	36	1,900	44	39,660	9,783	9,536	5,823	61.1	3,123	32.8	1,697	17.80	74.6	161	15	Reasonable	160%	Improved
DNK A27 PGP1218	33	72	4,198	289	3,628	8,963	8,959	5,059	56.5	981	11.0	- 1,131	- 12.63	56.4	70	- 9	Weak	-85%	Deteriorated
DNK A27 PMP1218	34	52	4,172	293	7,371	7,923	7,812	3,675	47.0	847	10.8	- 554	- 7.09	54.1	70	- 4	Weak	3%	Stable
DNK A27 DRB1218	25	37	2,095	20	32,950	7,273	7,509	5,143	68.5	3,413	45.5	2,098	27.94	46.3	138	20	High	248%	Improved
DNK A27 TBB1824	18	53	2,661	1,223	1,950	7,071	7,182	4,149	57.8	1,413	19.7	- 9	- 0.13	51.2	78	1	Weak	99%	Improved
DNK A27 PGP1012	53	45	5,749	247	2,329	4,705	4,782	2,292	47.9	- 147	- 3.1	- 1,003	- 20.98	54.8	51	- 14	Weak	-15%	Deteriorated
DNK A27 TBB1218	12	30	1,852	1,307	1,156	4,215	4,326	2,461	56.9	762	17.6	16	0.37	56.9	82	1	Weak	104%	Improved
DNK A27 DRB1012	19	17	1,133	21	14,925	4,125	4,125	2,946	71.4	1,981	48.0	1,326	32.14	57.8	176	20	High	1129%	Improved
DNK A27 PMP1012	33	19	2,776	205	2,790	2,804	2,861	1,181	41.3	12	0.4	- 758	- 26.49	63.2	64	- 22	Weak	31%	Improved
DNK A27 PMP0010	110	20	4,891	422	1,023	2,402	2,407	888	36.9	- 299	- 12.4	- 1,124	- 46.70	60.6	45	- 23	Weak	-18%	Deteriorated
DNK A27 DTS1012 °	10	6	914	220	1,081	900	915	354	38.7	20	2.2	- 178	- 19.40	53.1	56	- 8	Weak	21%	Improved
DNK A27 DTS0010	11	4	693	488	199	549	553	260	47.1	27	4.9	- 120	- 21.71	65.3	73	- 7	Weak	53%	Improved

Table 5.22 Denmark: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)							Live weight of landings (tonne)							Average landed price (real) (€)						
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014
Atlantic herring	43.2	38.4	36.3	54.4	93.0	74.1	63.6	116.2	105.0	88.9	97.5	142.5	152.5	155.0	0.4	0.4	0.4	0.6	0.7	0.5	0.4
Atlantic mackerel	38.1	22.18	48.2	59.24	36.1	36.9	41.9	27.3	23.5	41.5	35.99	36.6	34.0	42.2	1.4	0.9	1.2	1.7	1.0	1.1	1.0
Atlantic cod	57.2	41.7	49.5	51.9	50.1	39.1	41.9	23.6	23.8	26.7	26.9	28.6	20.5	22.3	2.4	1.8	1.9	1.9	1.8	1.9	1.9
European sprat	18.5	27.1	41.5	36.2	27.9	21.6	36.6	111.9	191.2	185.4	152.3	95.0	86.7	169.9	0.2	0.1	0.2	0.2	0.3	0.3	0.2
Sandeels(=Sandlances) nei	34.0	37.3	65.6	62.5	13.6	61.3	29.7	255.2	293.9	284.8	279.3	53.7	209.4	156.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2
Norway lobster	35.3	28.5	34.3	37.7	29.2	25.4	28.3	4.3	4.5	4.4	3.8	3.7	3.0	3.5	8.2	6.4	7.8	10.0	7.9	8.4	8.1
European plaice	33.0	22.1	23.3	28.8	28.1	27.2	25.9	17.6	16.1	18.1	20.8	21.4	21.9	20.9	1.9	1.4	1.3	1.4	1.3	1.2	1.2
Common shrimp	13.8	7.2	7.7	5.5	11.6	11.9	11.3	3.4	3.1	3.1	3.0	3.1	2.8	3.1	4.1	2.3	2.5	1.8	3.7	4.2	3.6
Northern prawn	6.7	7.7	7.3	9.3	9.5	10.4	10.0	2.3	2.2	1.3	1.5	1.5	2.1	2.5	3.0	3.6	5.8	6.1	6.4	4.9	4.1
Blue mussel	6.3	5.2	4.1	5.3	6.5	6.9	7.5	39.6	38.6	27.9	34.4	39.4	37.5	41.4	0.2	0.1	0.2	0.2	0.2	0.2	0.2

5.6 ESTONIA

Short description of the national fleet

Fleet capacity

In 2015, the Estonian Baltic Sea fishing fleet consisted of 1 534 registered vessels, with a combined gross tonnage of 5.9 thousand GT and engine power of 31.8 thousand kW. The size of the fleet continued to increase compared to previous years. However, the GT and kW decreased slightly. The reason for this contradiction is the different trends in the large-scale and small-scale fleets. If the number of open sea trawlers decreased by 4 vessels, the small-scale fleet showed an increasing trend (23 boats were added). Due to fishing capacity had been released in large-scale segments, the Ministry of Agriculture have decided to use that capacity to meet the additional need of small-scale fishing boat entry into the register.

Fleet structure

The Estonian Baltic Sea fishing fleet is nationally divided into a large-scale fleet (2% of total vessels in 2015) and a small-scale fleet (98% in 2015). The large-scale fleet operates outside the coastal zone. The fleet is using mainly pelagic trawls and is divided into two size groups (12-18m and 24-40m). The small-scale fleet operates in Estonian coastal waters using mainly passive gears and is also divided into two size groups (0-10m and 10-12m).

Employment

Employment was estimated at 2 070 jobs, corresponding to 497 FTEs in 2014. The number of total employed increased, but the FTE decreased at the same time. It refers to the increase in the number of persons for whom fishing is not the only source of income. The average age of employees was around 50 years.

Effort

An estimated 151 thousand days were spent at sea in 2014. The amount of energy consumed increased 4%, which is related to the increase in the number of days at sea. The 8% reduction in energy costs was a result of the lower fuel prices.

Production

The live weight landed by the Estonian Baltic Sea fleet in 2014 was 54.8 thousand tonnes of seafood, with a landed value of €14.5 million. Although the total weight of landings remained rather stable in 2014 the total value of landings decreased 6%. The reason of this was the fall in the first-sale prices for key species (European sprat, Atlantic herring, and European perch).

In 2014, European sprat generated the highest value (€6 million) landed by the Estonian Baltic Sea fleet, followed by Atlantic herring (€4.7 million) and European perch (€2.2 million). In terms of landings weight, European sprat landings were 28.5 thousand tonnes, Atlantic herring 23.1 thousand tonnes and European perch 1.7 thousand tonnes.

Economic results for 2014 and recent trends

National fleet performance

The Estonian national fleet was profitable in 2014, despite of lower first sales prices for key species. Losses in income were covered mainly by lower fuel prices and operational costs. The improvement in economic performance will be not expected also in 2015. Although the fuel prices remain low, the first sales prices for top two species fall further.

Revenue, estimated at €14.7 million, decreased 6% due to a 6% decrease in landings income, however the other income (€0.2 million) increased 12%.

Total operating costs decreased due to the 34% decrease in repair & maintenance costs as crew costs increased 9%. When including capital costs, total costs amounted to €13.1 million.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €9.3 million, €3.9 million and €1.7 million, respectively. GVA increased 1%, gross profit and net profit decreased 6% and 26%, respectively. These results indicate deterioration in the economic situation compared to 2013.

The (depreciated) replacement value of the Estonian fleet was estimated at €19.2 million and investments amounted to €1.6 million, a 25% decrease compared to 2013.

Overall, the cost structure has remained relatively constant over the years, with apparent decrease in energy costs.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 26.7%. Net profit margin was estimated at 11.2%, a 22% decrease compared to 2013.

The Rate of Return on Fixed Tangible Assets (RoFTA) decreased in comparison to 2013 but remained rather a higher level compared to previous years.

Labour productivity (GVA/FTE) continued improved development trend since 2012 when this indicator reached its lowest level between 2008 and 2014.

Fuel consumption per landed tonne and landings in weight per unit of effort (in days at sea) has followed rather decreasing trend compared to 2008.

Drivers affecting the economic performance trends

Changes in first sale fish prices and fuel prices were the main driving forces behind the economic performance in 2014. The decrease in average prices of several important species, such as sprat, herring and perch led to a decrease in income and had a negative impact on profitability. The decline in fuel prices helped to alleviate the situation. The average prices for sprat and herring fall further in 2015 and this affects mainly the performance of large scale fleet. However, the live weight of landing increases in 2015. The reason for that is a large increase (48%) in final available herring quota. Also the fuel prices remain low which helps to save operational costs.

Markets and Trade

Sprat and herring were mainly landed at Estonian ports, where the catch was sold to fish freezing or processing companies, unless the fishing company itself was engaged in the processing and marketing of fish. Estonian trawlers landed fish at 15 Estonian ports. Only 3% of large-scale fleet landings occurred in foreign harbours in 2014. Fish was landed in Latvia, Poland, Sweden and Denmark.

Most of the sprat and herring caught by the large-scale fleet have been sold on the eastern market (Russia, Ukraine et al.) in frozen form. Cod and flounder, on the other hand, were landed and sold at foreign ports mostly Poland and Latvia. At the end of 2013, Russia's restrictions on imports in Russian Customs Union countries caused concern for companies operating in the fisheries sector. For majority of companies were banned the import of production. Only few companies retained the opportunity to sell fish to Russian market. But it lasted until August 2014 when Russia imposed a complete embargo on many food products. For some time the Russian border remained open only to canned fish and spiced sprat. But also the sales of these products were not going well, because of due to inflation, for Russians this was already too expensive fish. War in Ukraine reduced also fish export to Ukraine. Fish exporters began to deep-freeze and store their production in refrigerator warehouses. Generally fresh fish can be frozen for half a year. During this time, companies made attempts to find new markets. Among others, attention focused also towards of export markets in Asia and Africa. Today, about a third of caught sprats and herring go to animal feed, mainly to Danish fur farms.

Management instruments

The procedure for fishing an all water bodies are prescribed in the Fishing Rules established by the Government of Estonia. The main management measures in Estonia are volume quotas (ITQs) in the open water fisheries (trawling) and gear usage quotas (ITE; individual transferable effort) in the coastal fisheries. Fishing quotas are allocated according to the historic fishing rights. The Estonian experience shows that ITQs can be considered an effective method for increasing the allocation of fishing rights to the most efficient enterprises and speeding the process of reducing excessive fleet capacity. The size of the large-scale fleet decreased 47% between 2008 and 2014 (from 64 to 34 vessels). The main reason for that change was capacity reduction to achieve balance between the size of the fishing fleet and fishing opportunities.

TACs and quotas

Herring, sprat and cod are main internationally regulated/managed fish species targeted by the Estonian Baltic Sea fishing fleet. Total final available quota (after quota transfers) for the fleet in 2014 was 56 865 tonnes. The quota for herring increased 11% to 25 050 tonnes but remained rather stable for sprat and cod, 27 489 tonnes and 1 681 tonnes respectively. The quota uptake levels for herring, sprat and cod were 92%, 95% and 10%, respectively. Predicted low profitability rate was the reason for low quota use of cod.

In 2015, total final quota increases 15% to 6 5307 tonnes. The reason for that is a large increase (48%) in herring quota. At the same time the sprat and cod final quotas decline by 11% each.

Status of Key Stocks

International acoustic surveys of pelagic fish stocks conducted in the Baltic Sea in recent years show that stocks have declined mainly in the southern part of the Baltic Sea and that the lion's share of stocks is now located in the central and north-eastern parts of the sea. Thus, the current status of the sprat stock in the economic zone of Estonia can still be regarded as relatively satisfactory. However, it should be noted that fishing prospects still depend on the overall status of

the stock in the Baltic Sea, i.e. the relatively better situation in our waters does not automatically mean better fishing opportunities for our fishers.

Unlike sprat, which is treated as a single stock unit i.e. population across the Baltic Sea, in the case of herring the state of stocks is assessed and advice for exploitation is given for four stock units in different subdivisions of the Baltic Sea. Only two stock units, Central Baltic herring and Gulf of Riga herring, are offering more interest to Estonian fishers. The current status of these herring stocks is regarded as relatively satisfactory.

There is still no commercial cod resource in Estonian waters, and directed fishing for this species is not economically feasible. However, Estonian vessels fish for cod in the Southern Baltic in small quantities.

Perch is the most important species in coastal fishery. The perch catches have been relatively stable in recent years, although according to researchers estimate the perch stock is not managed in the most rational way.

Innovation and Development

Innovative and development activities are related to modernization of fishing vessels and ports, but also improvements of fishing gears. For example, in order to reduce fuel consumption old trawl nets are replaced with new ones which have lower resistivity. In order to enhance the protection of fish stocks through the implementation of technical measures, the selectivity and fishing capacity of various commercial fishing methods and types of gear are studied in collaboration with local scientists. A study has also been directed to the mitigation of negative impact of seals in the Estonian coastal fisheries using AHD's (Acoustic Harassment Device) and seal-proof netting material.

Performance by fishing activity

Large-scale fleet

The large-scale fleet operates outside the coastal zone using mainly pelagic trawls. The fleet targets pelagic species such a sprat and herring, but also cod to a lesser extent. The live weight landed by the large-scale fleet in 2014 was 44.4 thousand tonnes of seafood, with a landed value of €9.5 million. The fleet has been profitable.

In 2014, the weight of landings decreased 1% compared to 2013. At the same time the value of landings decreased 4%. The main reason of this was the fall in the first-sale prices for key species as herring and sprat.

Total operating costs decreased due to the 63% fall in repair & maintenance costs. When including capital costs, total costs amounted to €8.4 million in 2014.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €6.5 million, €2.8 million and €1.1 million, respectively. GVA, gross profit and net profit increased 12%, 18% and 19%, respectively. These results indicate improvement in the economic situation compared to 2013.

The (depreciated) replacement value of the large-scale fleet was estimated at €12 million and investments amounted to €0.6 million, decreased 45% compared to 2013.

Small-scale fleet

The small-scale fleet operates in Estonian coastal waters using mainly passive gears. The largest catches taken in 2014 were of herring, followed by perch, smelt, flounder, pikeperch, roach and pike. The live weight landed by the small-scale fleet in 2014 was 10.4 thousand tonnes of seafood, with a landed value of €5.1 million. Generally the total weight of landings has decreased over the period 2008-2014, but the value of landings increased. This shows a general rise in average prices of key species. The fleet has been profitable.

However, in 2014, the value of landings decreased 10% compared to 2013. The main reason of this was the fall in the first-sale prices for some key species (e.g. herring, perch).

Total operating costs increased due to the 21% increase in crew costs. When including capital costs, total costs amounted to €4.7 million in 2014.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €2.8 million, €1.1 million and €0.5 million, respectively. GVA, gross profit and net profit decreased 17%, 36% and 60%, respectively. These results indicate deterioration in the economic situation compared to 2013.

The (depreciated) replacement value of the small scale fleet was estimated at €7 million and investments amounted to €1 million, remained rather stable compared to 2013.

Performance results of selected fleet segments

The 24-40m pelagic trawlers are the most important segment in the Estonian fishing fleet in the Baltic Sea. In 2014 this fleet segment consisted of 28 active vessels accounting for a total of 3 641 GT and 8 727 kW. The number of vessels decreased by one compared to 2013. Employment in 2014 was estimated at 160 jobs, corresponding to 160 FTEs. The segment targets pelagic species such as sprat and herring. The total value of landings was €9.3 million in 2014. The fleet

segment was profitable. Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €6.5 million, €2.8 million and €1.2 million, respectively.

The segment with the highest number of vessels and employment in the Estonian fleet is the 0-10m passive gears segment that operates in the coastal fishery. In 2014 this segment consisted of 1 392 vessels accounting for a total 1 621 GT and 17 534 kW. The number of vessels in this segment increased between 2013 and 2014. The employment in 2014 was estimated at 1 563 jobs, corresponding to 209 FTEs. The fleet targets mostly freshwater species, such as perch, pikeperch, but also marine species such as flounder and herring. The total value of landings was €3.7 million in 2014. The fleet segment was profitable. Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €1.8 million, €0.8 million and €0.3 million, respectively.

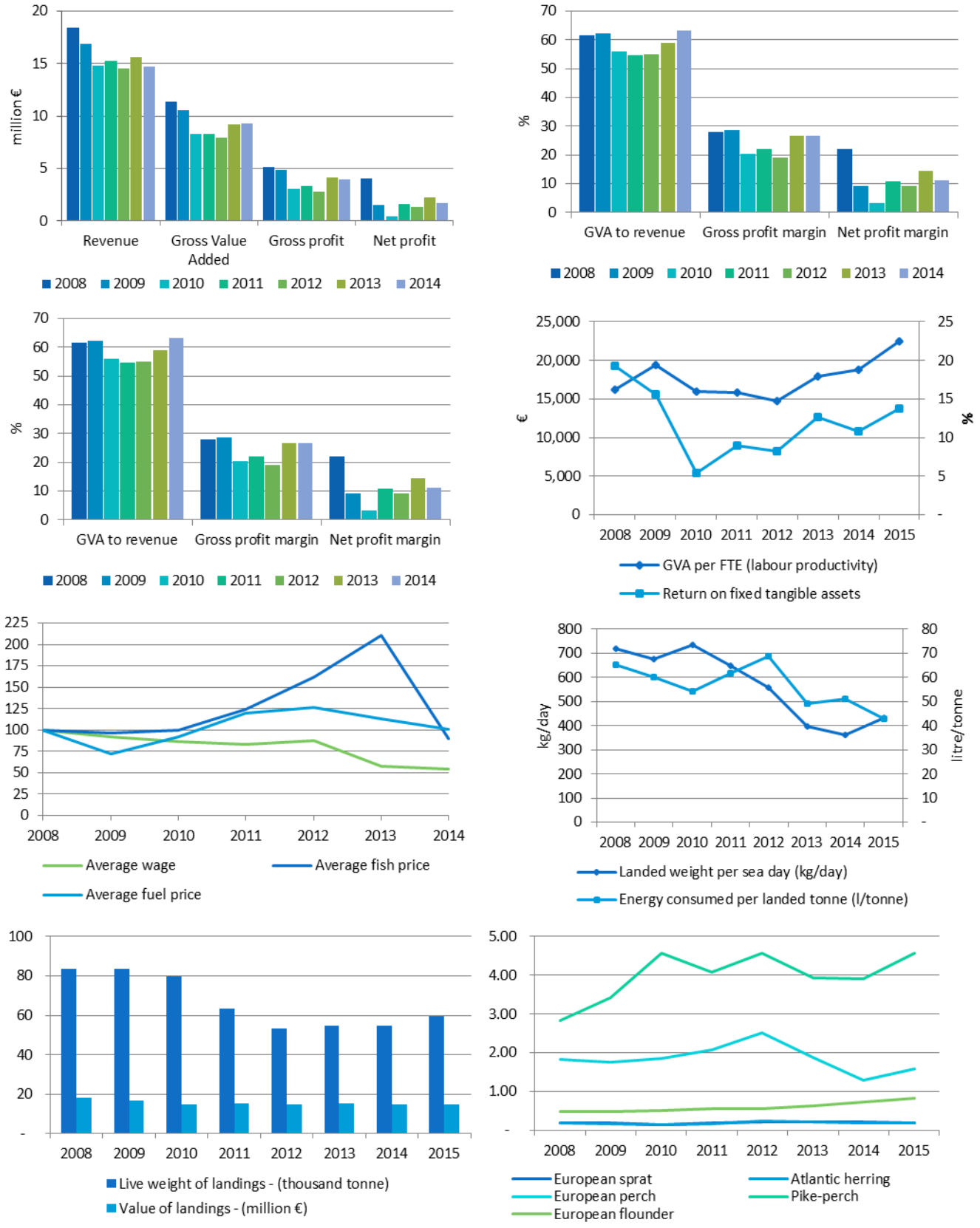
Projections for 2015 and outlook

Preliminary results for 2015 suggest an 8% increase in landed weight, but no change in landed value. Projections suggest mixed changes in costs but an increase in net profits and net profit margins to 30%.

The projections for 2016 show large gains in economic performance with landed weight increasing 14% and landed value increasing 18%. With fuel costs continuing to decline the Estonian fleet has projected gross and net profit margins of 35% and 24% respectively. The Estonian fleet is also one of the few that is expected to increase in vessels and days at sea in 2016.

Data issues

The data concerning economic variables were collected as listed and defined in Appendix VI of Commission Decision 2008/949/EC. For economic variables included in the Estonian Fisheries Information System (EFIS) (which includes logbook data and the fishing vessel register) data were collected on all members of the population. For other economic variables questionnaires were sent out. It is important to mention that all these surveys have been carried out on a voluntary basis. Due to confidentiality issues, the data for the distant-water fleet (DTS VL40XX) are not reported. There were only two owners operating with 4 vessels in this segment in 2014.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.6 Estonia: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.23 Estonia: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	954	955	939	928	917	1,343	1,514		13%	50%
Number of Inactive vessels_ms	(#)	10	18	10	10	9	7	1		-86%	-91%
Vessel tonnage	(thousand GT)	7.6	7.6	7.0	6.4	6.0	6.1	6.0		-2%	-11%
Engine power	(thousand kW)	30.3	30.4	28.7	26.9	26.1	30.6	32.1		5%	11%
Average vessel age	(year)	19	20	21	22	23	21	22		5%	5%
Average vessel length	(metre)	8	8	8	7	7	6	6		-2%	-14%
Enterprises with one vessel	(#)	452	451	462	460	462	838	879		5%	69%
Enterprises with 2 to 5 vessels	(#)	232	232	198	196	194	209	228		9%	8%
Enterprises with more than 5 vessels	(#)	3	3	2	3	2	3	10		233%	275%
FTE	(#)	699	541	521	524	540	514	497		-3%	-11%
Total employed	(person)	3,002	1,899	1,948	1,993	2,046	2,046	2,070		1%	-4%
Days at sea	(thousand day)	116	123	108	98	95	138	151		9%	33%
Fishing days	(thousand day)	153	165	141	124	120	176	196		11%	34%
Number of fishing trips	(thousand)	115	122	108	97	94	138	151		10%	34%
Energy consumption	(million litre)	5.45	5.03	4.32	3.91	3.65	2.69	2.80		4%	-33%
Live weight of landings	(thousand tonne)	83.5	83.5	79.6	63.4	53.3	54.6	54.8		0%	-21%
Value of landings	(million €)	18.4	16.9	14.7	15.1	14.6	15.5	14.5		-6%	-8%
Income from landings	(million €)	18.3	16.8	14.7	15.1	14.4	15.5	14.5		-6%	-8%
Other income	(million €)	0.17	0.10	0.13	0.09	0.12	0.17	0.19		12%	44%
Direct income subsidies	(million €)	0.01	0.01	0.01	-	-	-	-			-100%
Income from leasing fishing rights	(million €)	0.00	0.01	0.01	0.02	0.04	0.01	0.01		37%	-26%
Wages and salaries of crew	(million €)	5.24	4.90	4.48	4.12	4.28	4.06	4.42		9%	-2%
Unpaid labour value	(million €)	0.95	0.74	0.79	0.84	0.93	0.99	0.96		-3%	10%
Energy costs	(million €)	3.78	2.51	2.77	3.23	3.20	2.11	1.94		-8%	-34%
Repair & maintenance costs	(million €)	0.98	1.52	1.64	1.80	1.63	2.21	1.45		-35%	-11%
Other variable costs	(million €)	1.72	1.66	1.56	1.20	1.21	1.32	1.31		0%	-9%
Other non-variable costs	(million €)	0.63	0.71	0.55	0.69	0.50	0.78	0.72		-7%	12%
Annual depreciation costs	(million €)	1.50	1.82	1.92	1.63	1.33	1.85	1.87		1%	12%
Rights costs	(million €)	-	0.05	0.03	0.02	0.04	0.06	0.06		-8%	68%
Opportunity cost of capital	(million €)	- 0.42	1.51	0.66	0.08	0.08	0.07	0.41		489%	24%
Tangible asset value	(million €)	18.9	19.5	20.6	18.9	17.2	18.3	19.2		5%	1%
Fishing rights	(million €)	68.9	67.8	64.8	48.9	39.4	40.5	41.9		3%	-24%
Investments	(million €)	1.0	1.1	1.9	2.4	1.6	2.1	1.6		-25%	-6%
Financial position	(%)	17.0	17.0	17.0	17.0	17.0	17.0	17.0		0%	0%
Gross Value Added	(million €)	11.3	10.5	8.3	8.3	7.9	9.2	9.3		1%	0%
GVA to revenue	(%)	61.4	62.1	56.0	54.5	54.9	58.9	63.2		7%	9%
Gross profit	(million €)	5.1	4.9	3.0	3.3	2.7	4.2	3.9		-5%	1%
Gross profit margin	(%)	27.9	28.8	20.4	21.9	19.0	26.6	26.7		0%	11%
Net profit	(million €)	4.1	1.5	0.5	1.6	1.3	2.2	1.6		-26%	-12%
Net profit margin	(%)	22.0	9.0	3.1	10.7	9.2	14.3	11.2		-22%	-2%
GVA per FTE	(thousand €)	16	19	16	16	15	18	19		5%	12%
Return on fixed tangible assets	(%)	19	16	5	9	8	13	11		-15%	-8%

Table 5.24 Estonia: National fleet statistics and economic performance results based on fleet segment level data.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	944	937	929	918	908	1336	1513	*1,532*	*1,567*		1%	2%
Total employed	(person)	3002	1899	1948	1993	2046	2046	2070	*2,181*	*2,235*		5%	2%
FTE	(#)	699	541	521	524	540	514	497	*506*	*603*		2%	19%
Days at sea	(day)	116,203	123,405	108,322	97,716	95,245	137,985	151,025	*137,255*	*191,764*		-9%	40%
Energy consumption	(thousand litres)	5,446	5,026	4,323	3,910	3,653	2,690	2,795	*3,091*	*2,811*		11%	-9%
Live weight of landings	(tonne)	83,544	83,548	79,572	63,351	53,272	54,557	54,767	*59,326*	*67,401*		8%	14%
Value of landings	(thousand €)	18,359	16,919	14,685	15,127	14,583	15,454	14,544	*14,531*	*17,109*		0%	18%
Income from landings	(thousand €)	18,279	16,812	14,685	15,127	14,367	15,454	14,544	*14,463*	*17,026*		-1%	18%
Other income	(thousand €)	166	98	130	88	122	165	185	*168*	*172*		-9%	2%
Wages and salaries of crew	(thousand €)	5,236	4,903	4,483	4,123	4,276	4,055	4,421	*4,126*	*5,019*		-7%	22%
Unpaid labour value	(thousand €)	949	741	789	835	927	988	959	*1,031*	*1,055*		8%	2%
Energy costs	(thousand €)	3,782	2,513	2,765	3,232	3,198	2,115	1,943	*1,809*	*1,461*		-7%	-19%
Repair & maintenance costs	(thousand €)	982	1,515	1,641	1,801	1,631	2,209	1,446	*1,750*	*1,742*		21%	0%
Other variable costs	(thousand €)	1,721	1,662	1,555	1,204	1,208	1,317	1,312	*1,348*	*1,371*		3%	2%
Other non-variable costs	(thousand €)	635	713	553	688	502	778	720	*622*	*604*		-14%	-3%
Annual depreciation costs	(thousand €)	1,503	1,824	1,915	1,630	1,335	1,848	1,869	*1,607*	*1,580*		-14%	-2%
Opportunity cost of capital	(thousand €)	- 417	1,460	641	78	81	69	409	*188*	*187*		-54%	-1%
Tangible asset value (replacement)	(thousand €)	18,854	18,812	20,165	18,530	16,891	18,175	19,134	*17,550*	*17,450*		-8%	-1%
Gross Value Added	(thousand €)	11,326	10,507	8,301	8,289	7,950	9,200	9,308	*9,102*	*12,021*		-2%	32%
Gross profit	(thousand €)	5,141	4,863	3,029	3,330	2,746	4,157	3,928	*3,945*	*5,947*		0%	51%
Net profit	(thousand €)	4,055	1,579	472	1,622	1,331	2,240	1,650	*2,150*	*4,181*		30%	94%

Table 5.25 Estonia: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Small Scale Coastal Fleet							Large Scale Fleet													
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	880	884	881	876	872	1,300	1,475	64	53	48	42	36	36	38		13%	55%		6%	-18%
Vessel tonnage (thousand GT)	1.8	1.8	1.8	1.7	1.7	2.0	2.2	5.6	5.4	5.0	4.4	4.0	4.0	3.8		10%	22%		-4%	-19%
Engine power (thousand kW)	14.6	14.6	14.5	14.4	14.6	19.6	22.2	15.0	13.7	12.9	11.2	10.3	10.1	9.8		13%	44%		-3%	-20%
FTE (#)	444	301	309	320	362	339	333	255	240	212	204	178	175	164		-2%	-4%		-6%	-22%
Total employed (person)	2,727	1,646	1,721	1,777	1,858	1,865	1,895	275	253	227	216	188	181	175		2%	-2%		-3%	-22%
Days at sea (thousand day)	108.9	117.3	103.2	93.0	91.1	134.7	147.7	7.3	6.1	5.2	4.7	4.2	3.3	3.4		10%	37%		1%	-34%
Fishing days (thousand day)	145.8	159.1	136.1	119.6	115.5	172.9	192.3	6.9	5.6	4.8	4.2	4.0	3.2	3.2		11%	36%		1%	-33%
Number of fishing trips (thousand)	109	117	103	93	91	135	148	6	5	5	4	3	3	3		10%	37%		6%	-28%
Energy consumption (million litre)	0.6	0.6	0.6	0.6	0.5	0.5	0.5	4.8	4.5	3.7	3.3	3.1	2.2	2.3		7%	-8%		3%	-37%
Live weight of landings (thousand tonne)	12.6	14.0	11.2	10.4	8.7	9.6	10.4	70.9	69.5	68.3	53.0	44.5	44.9	44.4		8%	-6%		-1%	-24%
Value of landings (million €)	4.1	4.1	3.9	4.2	4.8	5.6	5.1	14.3	12.8	10.8	10.9	9.7	9.8	9.5		-10%	14%		-3%	-17%
Income from landings (million €)	4.02	4.08	3.86	4.18	4.84	5.62	5.05	14.26	12.73	10.82	10.94	9.52	9.84	9.49		-10%	14%		-3%	-16%
Other income (million €)	0.07	0.08	0.08	0.08	0.10	0.17	0.17	0.09	0.02	0.05	0.01	0.02	-	0.01		6%	79%			-66%
Direct income subsidies (million €)	0.01	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-			-100%			
Wages and salaries of crew (million €)	0.58	0.54	0.46	0.49	0.56	0.58	0.70	4.65	4.36	4.03	3.64	3.72	3.48	3.72		21%	31%		7%	-6%
Unpaid labour value (million €)	0.95	0.74	0.74	0.79	0.88	0.99	0.95	-	-	0.05	0.04	0.05	0.00	0.01		-4%	12%		345%	-69%
Energy costs (million €)	0.67	0.53	0.69	0.71	0.72	0.59	0.57	3.11	1.98	2.08	2.52	2.48	1.53	1.37		-3%	-12%		-10%	-40%
Repair & maintenance costs (million €)	0.60	0.61	0.63	0.63	0.64	0.97	0.98	0.38	0.91	1.01	1.17	0.99	1.24	0.46		2%	44%		-63%	-51%
Other variable costs (million €)	0.42	0.47	0.44	0.43	0.41	0.77	0.78	1.30	1.19	1.12	0.77	0.79	0.55	0.54		0%	58%		-1%	-44%
Other non-variable costs (million €)	0.04	0.04	0.04	0.04	0.04	0.10	0.10	0.59	0.67	0.51	0.64	0.46	0.68	0.62		3%	95%		-9%	4%
Annual depreciation costs (million €)	0.38	0.40	0.40	0.38	0.39	0.48	0.48	1.12	1.43	1.52	1.25	0.95	1.37	1.39		-1%	18%		2%	9%
Opportunity cost of capital (million €)	- 0.18	0.61	0.24	0.03	0.03	0.03	0.15	- 0.23	0.85	0.40	0.05	0.05	0.04	0.26		459%	22%		515%	33%
Tangible asset value (million €)	8.2	7.9	7.6	7.1	6.6	7.2	7.2	10.6	10.9	12.6	11.4	10.3	10.9	11.9		-1%	-3%		9%	7%
Investments (million €)	0.3	0.2	0.3	0.3	0.3	1.0	1.0	0.6	0.9	1.6	2.1	1.4	1.1	0.6		-5%	142%		-45%	-53%
Gross Value Added (million €)	2.4	2.5	2.1	2.4	3.1	3.4	2.8	9	8	6	6	5	6	7		-17%	5%		12%	-1%
GVA to revenue (%)	57.7	60.3	54.3	57.2	63.2	58.0	53.4	62.5	62.7	56.6	53.4	50.6	59.4	68.6		-8%	-9%		15%	19%
Gross profit (million €)	0.8	1.2	0.9	1.2	1.7	1.8	1.1	4	4	2	2	1	2	3		-36%	-10%		18%	7%
Gross profit margin (%)	20.2	29.6	23.9	27.2	34.2	31.0	21.9	30.1	28.5	19.2	19.8	11.1	24.0	29.3		-29%	-21%		22%	33%
Net profit (million €)	0.6	0.2	0.3	0.8	1.3	1.3	0.5	3.4	1.4	0.2	0.9	0.1	1.0	1.1		-60%	-31%		19%	0%
Net profit margin (%)	15.4	5.3	7.7	17.7	25.7	22.2	9.8	23.9	10.6	1.5	7.9	0.6	9.7	12.0		-56%	-38%		23%	32%
GVA per FTE (thousand €)	5.3	8.3	6.9	7.6	8.6	9.9	8.4	35.2	33.3	29.0	28.7	27.1	33.4	39.7		-15%	8%		19%	28%

Table 5.26 Estonia: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(l/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
EST A27 TM2440 °	28	160	3,078	52	43,525	9,317	9,326	6,457	69.2	2,824	30.3	1,198	12.85	22.7	40	12	High	36%	Improved
EST A27 PG0010	1,392	209	146,192	107	3,281	3,676	3,817	1,780	46.6	778	20.4	339	8.89	4.8	9	10	Reasonable	-47%	Deteriorated
EST A27 PG1012	83	124	1,470	24	7,122	1,375	1,408	1,011	71.8	364	25.9	171	12.13	5.2	8	9	High	-7%	Deteriorated
EST A27 TM1218 °	10	4	285	36	839	177	178	60	33.6	- 38	- 21.2	- 58	- 32.76	24.4	15	- 27	Weak	-269%	Deteriorated

Table 5.27 Estonia: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real)								Live weight of landings								Average landed price (real)							
	(million €)								(thousand tonne)								(€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
European sprat	9.67	8.29	7.07	6.43	5.88	6.59	5.99	*4.55*	48.58	47.30	47.86	34.98	28.34	29.81	28.50	*23.95*	0.20	0.18	0.15	0.18	0.21	0.22	0.21	*0.19*
Atlantic herring	5.96	5.36	4.27	4.38	5.09	4.77	4.68	*6.17*	31.83	33.16	28.86	25.33	22.46	21.94	23.13	*32.32*	0.19	0.16	0.15	0.17	0.23	0.22	0.20	*0.19*
European perch	1.28	1.42	1.63	1.65	1.38	2.27	2.22	*2.40*	0.70	0.81	0.88	0.80	0.55	1.22	1.71	*1.52*	1.83	1.75	1.85	2.08	2.51	1.87	1.30	*1.58*
Pike-perch	0.18	0.23	0.33	0.45	0.67	0.48	0.68	*0.38*	0.06	0.07	0.07	0.11	0.15	0.12	0.17	*0.08*	2.82	3.42	4.56	4.07	4.56	3.93	3.91	*4.58*
European flounder	0.14	0.14	0.14	0.16	0.13	0.18	0.22	*0.20*	0.28	0.29	0.29	0.28	0.24	0.28	0.31	*0.24*	0.49	0.49	0.50	0.56	0.55	0.64	0.72	*0.82*
European smelt	0.24	0.21	0.16	0.17	0.32	0.52	0.16	*0.16*	0.74	0.77	0.45	0.20	0.41	0.52	0.23	*0.44*	0.33	0.27	0.35	0.84	0.78	1.01	0.67	*0.36*
Atlantic cod	0.63	1.05	0.83	1.53	0.79	0.24	0.16	*0.17*	0.97	0.82	0.80	1.18	0.69	0.25	0.17	*0.18*	0.64	1.28	1.05	1.30	1.14	0.96	0.96	*0.95*
European whitefish	0.06	0.05	0.05	0.03	0.06	0.08	0.10	*0.09*	0.03	0.02	0.02	0.01	0.02	0.03	0.03	*0.02*	2.09	2.18	3.12	2.19	2.82	2.94	4.02	*4.44*
Northern pike	0.02	0.02	0.03	0.05	0.05	0.09	0.09	*0.08*	0.02	0.01	0.02	0.03	0.04	0.07	0.07	*0.05*	1.15	1.23	1.19	1.44	1.30	1.37	1.40	*1.61*
Garfish	0.04	0.04	0.05	0.09	0.02	0.03	0.05	*0.08*	0.08	0.07	0.09	0.12	0.03	0.02	0.04	*0.12*	0.44	0.50	0.53	0.77	0.92	1.44	1.16	*0.68*

5.7 FINLAND

Short description of the national fleet

Fleet capacity

The Finnish fishing fleet consisted of 3 144 registered vessels of which 1 380 were inactive in 2014; the active fleet consisted of 1 764 vessels, with a combined gross tonnage of 14.5 thousand GT and a total power of 110 thousand kW. The number of active vessels increased in 2014 by 25 vessels. At the same time the total number of registered vessels decreased by 97 vessels indicating decrease in the latent capacity.

Fleet structure

The Finnish fishing fleet is dominated by small scale vessels: 1 699 out of 1 784 (96%) active vessels were operating in small scale coastal fisheries. However the 65 trawlers accounted for two thirds in terms of gross tonnage of the total fleet tonnage.

Employment

Total employment in 2014 was estimated at 1 847 jobs. The majority of the jobs are created by the small scale fleet that is a seasonal fishery. Therefore, the employment in that sector is usually only part-time and in terms of full time equivalent the total fleet added up to 355 FTEs. The number of fishers has been dropping for long time and the average age of fishers is increasing. In 2014 the average age of fishers was 57 and one out of ten was older than 70 years and the equal share were under 37 years old. One aim of EMFF Finnish Operational Programme is to make the fishing sector attractive for younger people to recruit into the sector.

Effort

The total effort in 2014 dropped 8% from the previous year to 126 thousand fishing days. The small scale fleet accounted for 95% of the total effort. Finnish fleet operates exclusively in the Baltic Sea.

Production

The total weight landed by the Finnish fleet in 2014 was 148 thousand tonnes of seafood, with a landed value of €40 million. The total volume of landings increased by 7% compared to 2013, while the value of landings decreased by 14%. The increase in landings came from the pelagic trawler segment. Pelagic species are the most important species for Finnish fisheries in terms of landing weight and value. In 2014 the volume of pelagic species landed increased to record high due to strong herring stocks especially in the most important fishing grounds for Finnish fleet in northern Baltic Sea.

Baltic herring accounted for the highest landed value (€27.5 million), followed by European sprat (€2.4 million). Despite the highest landed volume the value decreased by 14%. The main reason for low prices for pelagics was the Russian embargo on EU food stuff as a countermeasure to EU sanctions due to the Ukraine crisis. And Russian markets have always been important for the pelagic fish.

The landing weight of small scale fleet dropped 20% in 2014. The total value of landings followed that trend with 8% decrease. Small scale coastal fleet target mostly various freshwater fish species: European whitefish and pike-perch were the most important species for the segment.

Economic results for 2014 and recent trends

National fleet performance

The total amount of income generated by the Finnish national fleet in 2014 was €39.3 million; 11% drop from the previous year. Income consisted of €37 million in landings income and €2.3 million in other income. Profitability deteriorated with decreased revenues; gross value added was €15.5 million, 15% less than the year before. Gross profit decreased also with the revenues to €7.2 million and was not high enough to cover the estimated capital costs of the fleet resulting in a negative net profit.

The overall operating cost structure has remained relatively stable; Only the share of fuel cost decreased due to lower fuel prices in 2014.

Resource productivity and efficiency indicators

The gross profit margin remained at 18% and together with decrease in revenues the net profit margin of Finnish national fleet was negative. Both the small scale and the large scale fleet were making losses in 2014; €4.7 million and €3.6 million respectively. The small scale fleet continued making losses with net profit margin of 36%, the net profit margin of trawler sector declined from zero profits to -14%. The main reason for the deteriorating profitability in the trawler sector resulted

from lower prices due to the Russian embargo for EU food stuff. In the small scale segment there are a large number of low activity vessels and accounting the value of capital of all these vessels turned the segment net profit negative.

Drivers affecting the economic performance trends

Most important driver for fisheries is the state of stocks. Due to the strong status of the most important fish stocks for Finnish fleet – pelagic stocks - the total volume of landings in 2014 were highest recorded. However most fish prices decreased in 2014; only prices of salmon and pikeperch increased. Fuel costs are major cost item especially for the trawler fleet. The decrease in fuel prices had a positive impact on profitability however the fleet continued making losses.

Markets and Trade

Russia is a main market for Baltic herring and sprat. Therefore Russian embargo on EU food stuff as a countermeasure to EU sanctions due to the Ukraine crisis has led to decrease in prices of these pelagic species. Apart from salmon and pikeperch all the other fish prices decreased also. On the other had decrease in fuel price has had positive impact especially in the trawler fleet segment.

Management instruments

The offshore fleet is managed mainly through TACs that are shared between Baltic Sea countries. Apart from salmon the coastal fleet target mostly on freshwater species that do not have quotas but are managed with licences and other time and gear restrictions. In 2015 Finnish Ministry of Agriculture and Fisheries have started a process to introduce ITQs in the most important quota species: Baltic herring, sprat and Baltic salmon. The allocation of the fishing rights will follow the grandfathering: fishing rights will be divided according to 2011-2015 fishing records. The objective is that the ITQ system would come into force from the beginning of 2017.

Status of Key Stocks: TACs and quotas

Pelagic fisheries are the most important for the Finnish fleet by terms of volume and value. Both Baltic herring and sprat stocks were in 2014 at the MSY level. Baltic herring stocks are currently exceptionally strong especially in the most important fishing grounds in Botnian Bay. Catches of herring have been increasing and 2014 catches were the highest recorded. In 2015 the caches remained at the same level.

The main quota species for the small scale coastal fisheries is salmon. Salmon quotas have been decreasing during the latest years. However the most important salmon rivers in the Baltic Sea – river Tornio and river Kalix – show that they are on the recovery path towards MSY.

Performance by fishing activity

Small-scale fleet

The Finnish fishing fleet is dominated by small scale vessels: 1 699 out of 1 784 (96%) active vessels were operating in small scale coastal fisheries. However the segment account only one third of the national total volume of landings that is dominated by the pelagic trawler fleet. At the same time the segment employs 92% of total number of fishers and 71% in terms of FTE. Therefore the segment is really important from the social point of view.

In 2014 landed weight of the segment decreased by 20%, however the revenues decreased only 1% to €11.5 million. The segment generated €6.6 million of gross value added. However there are a large number of low activity vessels and accounting the value of capital of all these vessels turned the segment net profit negative.

The profitability of the most active part of the segment is significantly higher than those with low activity. In 2015 the new fishing law defines commercial fisheries as enterprises that are value added tax liable (annual turnover over €8 500). In 2014 there were only 336 fishing unit in the small-scale segment that exceeds that threshold. These companies accounted for 85% of the total value of landings of the total fleet segment. Therefore the average size of a fishing unit more than doubles from 7.9 thousand to 35.8 thousand euros. The increase in the average size has a significant impact on the economic performance. Profitability increases as gross profit margin improves together with the decrease in capital costs at the segment level. The net profit improves significantly: the net profit margin turns positive from -36% to +15%. That proves that the active part of the small scale fisheries the most profitable segment of the Finnish fishing fleet.

Performance results of selected fleet segments

The Finnish fleet operates exclusively in the Baltic Sea and is based on two main fisheries: pelagic trawlers and the small scale fleet. Pelagic trawlers are divided into three segments. The small scale fleet is highly diversified with a range of vessel types targeting species in waters along the Finnish coastline.

Passive gears 0-10m and 10-12m – The coastal small scale fleet is the biggest Finnish fleet segment in terms of number of boats with 1 699 vessels in 2014. The small scale fleet consists of diversified vessels targeting mainly freshwater fish species; European whitefish, pike-perch and perch. In 2014, the total revenue of the small-scale fishery was €13.1 million making a positive gross value added of €6.6 million. Gross profit margin was 25%% but it was not high enough to cover the estimated capital costs: the small scale fleet made losses of €4.7 million.

The coastal fleet is highly seasonal, and there is also a high variation in the activity of the vessels; the 500 most active fishing units make up around 90% of the total landings. These most active vessels are significantly profitable compared to the large number with low activity. However the overall economic performance of the whole small scale fleet has been poor for years and continued making losses in 2014.

Pelagic trawlers 24-40m – this fleet is economically the most important. It targets herring and sprat in the Baltic Sea. In 2014 these 22 vessels accounted for more than half of the total value landed by the Finnish fleet and employed 68 FTE. The average vessel revenue was €0.9 million, employing 3 FTEs. The fleet segment generated Gross Value Added of €5 million. In 2014 the Gross profit margin was 10% which was not high enough to cover the estimated capital costs and the fleet was making losses totalling €2.9 million with a net profit margin of -15%.

Pelagic trawlers 18-24m – This fleet segment consisted of 15 vessels in 2014 also targeting Baltic herring and sprat. The average vessel revenue was €270 thousand, second highest in the Finnish fleet and average on-board employment is 1.4 FTE. The segment generated €2.9 million of Gross Value Added but was making losses totalling €322 thousand with net profit margin of -8%.

Pelagic trawlers 18-24m – The smallest pelagic trawler segment in terms of individual vessel size and consists of 28 vessels. The average vessel revenue was significantly lower than that of the bigger vessels, only €78 000. An average vessel employed less than one FTE. Also this fleet segment was making losses totalling €327 thousand with a net profit margin of -15%.

Projections for 2015 and outlook

The landings of the pelagic trawler fleets continued to increase in 2015 and also the value on landings increased. Together with decrease in fuel prices projections implicate improvement of the economic performance. The small scale fleet size decrease significantly in 2015 that lead to decline in fishing effort and landing volume. That was partly result of the fishing law reform and the 2015 results are not fully comparable with the earlier years. Despite that fact the projections suggest that the profitability decreased together with declined fishing activity. Overall economic performance for the Finnish fleet is projected to improve slightly as no change in landed weight and a 7% decrease in landed value is more than offset by declining operating costs, notably declining fuel costs. While the Finnish fleet remains in negative profits (and a -8% net profit margin), gross profits improve and the gross profit margin improves to 24%.

The projections for 2016 show a significant improvement in the economic performance of the Finnish fleet. Landed weight and value increase (17% and 7% respectively) while operating costs continue to decline leading to the first profitable year since at least 2008 and gross and net profit margins reach 35% and 4% respectively.

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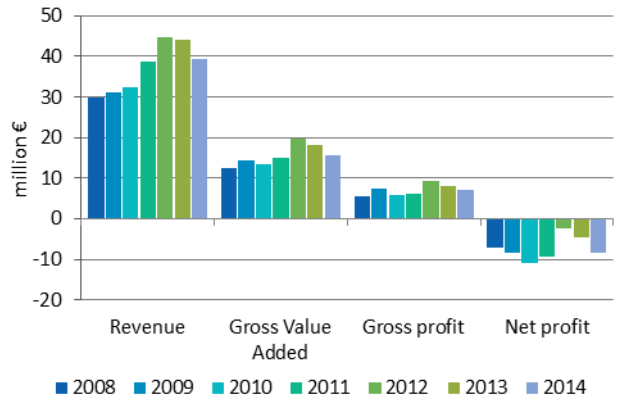
Data issues

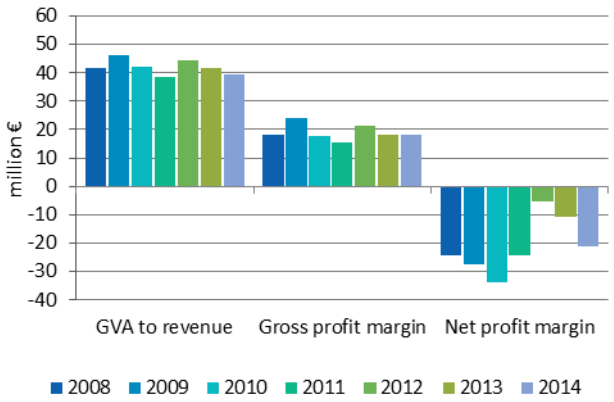
Capacity, logbook and landings data are derived from sources which are covered by different legislation. All these data are available exhaustively. The bigger vessels are covered by log-books and smaller vessels are covered by the coastal fishing report. However in the small scale coastal fisheries the method for correcting non-response was changed in 2014 based the response loss survey. Furthermore the fishing law reform sanctioned the costal fishing reports mandatory for all small scale coastal vessels from the beginning of 2015 and therefore the estimation of non-response have been abolished. Therefore there is a break in the time series relating to the small scale fleet.

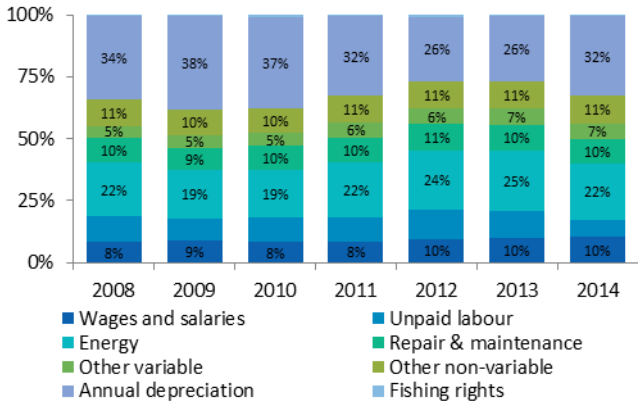
Economic data collection is based on a hierarchical multi-stage survey that combines information from different data sources. The main sources were the central control register on the commercial fishery (includes landings data, the vessel register, and first hand sales of quota species), the financial database in Statistics Finland (SF) and an additional account survey. Starting in 2009, new account data became available for the coastal fishers collected by the Ministry of Agriculture and Forestry in connection to seal damage compensation applications.

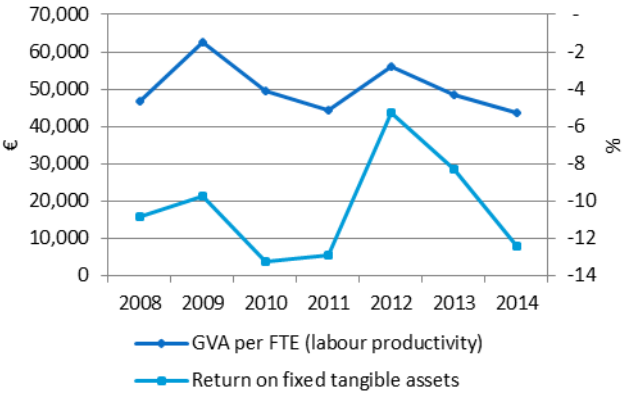
Due to the good coverage of the data collection and an efficient estimation method the achieved precision of the economic variables is satisfactory. However there is a break in the time series of the number of active vessels in small scale fishing in 2012 when the recording of active vessels was re-specified and then again in 2014 and 2015 due to the methodological changes described above.

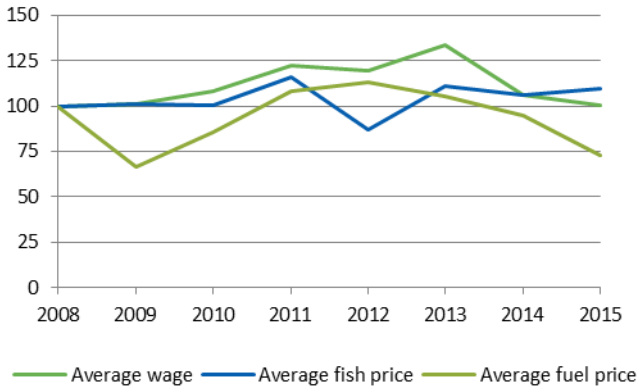
Finland has modified the assumptions used in the Perpetual Inventory Method (PIM) regarding service life of each asset, depreciation rates and share of each asset in total value as well as the price per capacity used. These updates have greatly affected depreciated replacement values and the depreciation reported for 2008-2014 affecting also the net profits of the sector.

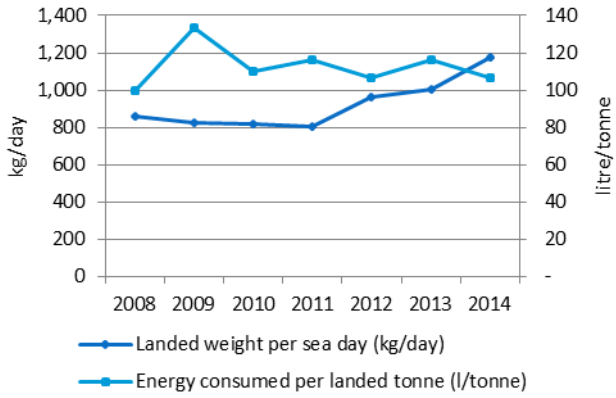


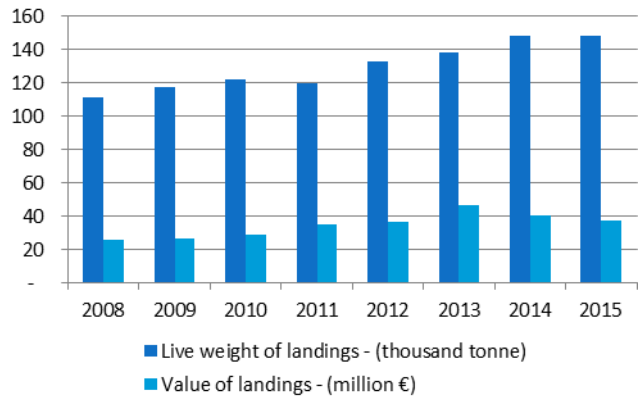


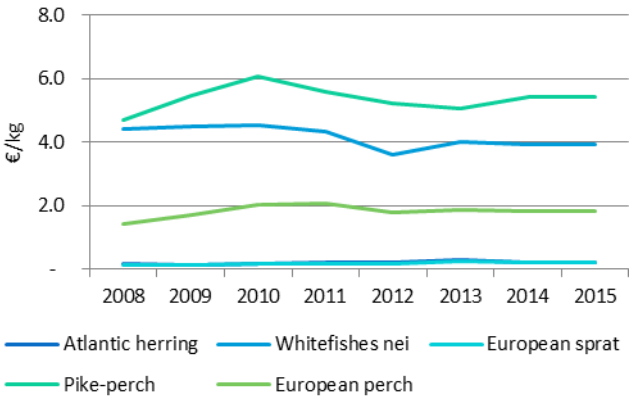












Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.7 Finland: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.28 Finland: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	3,240	3,240	3,270	3,365	3,359	3,241	3,144		-3%	-4%
Number of Inactive vessels_ms	(#)	1,687	1,709	1,651	1,716	1,407	1,508	1,380		-8%	-14%
Vessel tonnage	(thousand GT)	16.4	16.9	16.7	18.1	17.0	16.5	16.8		2%	-1%
Engine power	(thousand kW)	173.4	174.8	175.4	181.6	178.2	172.6	173.0		0%	-2%
Average vessel age	(year)	24	24	24	25	25	26	27		5%	11%
Average vessel length	(metre)	7	7	7	7	7	7	7		0%	-1%
Enterprises with one vessel	(#)	1,450	1,430	1,501	1,569	1,141	1,142	1,053		-8%	-23%
Enterprises with 2 to 5 vessels	(#)	42	37	42	30	300	322	364		13%	183%
Enterprises with more than 5 vessels	(#)	-	-	-	-	-	-	1			
FTE	(#)	263	229	274	337	354	378	355		-6%	16%
Total employed	(person)	1,613	1,606	1,699	1,722	2,035	1,822	1,847		1%	6%
Days at sea	(thousand day)	129.5	143.0	149.7	148.2	137.6	137.8	126.4		-8%	-10%
Fishing days	(thousand day)	128.7	142.4	148.9	147.3	136.8	137.0	125.8		-8%	-10%
Number of fishing trips	(thousand)	127	141	148	146	135	135	123		-9%	-11%
Energy consumption	(million litre)	11.15	15.67	13.42	13.91	14.19	16.07	15.81		-2%	12%
Live weight of landings	(thousand tonne)	111.6	117.5	122.1	119.7	132.9	138.4	148.2		7%	20%
Value of landings	(million €)	26.3	26.7	29.3	34.8	36.8	47.1	40.4		-14%	21%
Income from landings	(million €)	27.3	27.5	29.3	35.7	39.6	41.5	37.0		-11%	10%
Other income	(million €)	2.44	3.51	3.09	3.06	5.06	2.55	2.27		-11%	-31%
Direct income subsidies	(million €)	2.67	1.67	1.48	1.38	1.28	1.14	1.04		-9%	-35%
Income from leasing fishing rights	(million €)	-	-	-	-	-	-	-			
Wages and salaries of crew	(million €)	3.01	3.33	3.52	4.11	4.67	4.93	4.90		-1%	25%
Unpaid labour value	(million €)	3.87	3.54	4.27	4.84	5.67	5.35	3.40		-36%	-26%
Energy costs	(million €)	7.97	7.42	8.23	10.74	11.46	12.08	10.67		-12%	11%
Repair & maintenance costs	(million €)	3.80	3.35	4.07	4.91	5.14	4.92	4.72		-4%	8%
Other variable costs	(million €)	1.72	2.02	2.32	2.88	3.00	3.32	3.15		-5%	24%
Other non-variable costs	(million €)	3.90	3.93	4.21	5.24	5.29	5.48	5.25		-4%	12%
Annual depreciation costs	(million €)	12.38	14.42	15.79	15.61	12.68	12.89	15.38		19%	10%
Rights costs	(million €)	0	0	0	0	0	0	0		-24%	-27%
Opportunity cost of capital	(million €)	0.24	1.51	0.97	- 0.21	- 0.78	- 0.19	0.16		185%	-36%
Tangible asset value (replacement)	(million €)	64	71	75	74	61	59	66		12%	-3%
Fishing rights	(million €)	-	-	-	-	-	-	-			
Investments	(million €)	10.9	17.6	16.5	11.7	7.4	12.5	17.9		43%	40%
Financial position	(%)	45.0	50.0	47.0	52.0	50.0	46.0	50.0		9%	3%
Gross Value Added	(million €)	12.3	14.3	13.6	15.0	19.8	18.3	15.5		-15%	0%
GVA to revenue	(%)	41.5	46.1	41.9	38.6	44.3	41.5	39.4		-5%	-7%
Gross profit	(million €)	5.5	7.4	5.8	6.0	9.5	8.0	7.2		-10%	2%
Gross profit margin	(%)	18.3	24.0	17.8	15.5	21.2	18.1	18.3		1%	-4%
Net profit	(million €)	- 7.2	- 8.5	- 11.0	- 9.4	- 2.4	- 4.7	- 8.4		-78%	-16%
Net profit margin	(%)	- 24.1	- 27.4	- 33.9	- 24.3	- 5.5	- 10.7	- 21.3		-100%	-1%
GVA per FTE (labour productivity)	(thousand €)	47	62	50	44	56	48	44		-10%	-15%
Return on fixed tangible assets	(%)	- 11	- 10	- 13	- 13	- 5	- 8	- 12		-50%	-24%

Table 5.29 Finland: National fleet statistics and economic performance results based on fleet segment level data.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	1553	1531	1619	1649	1952	1733	1764	*1,503*	*1,517*		-15%	1%
Total employed	(person)	1613	1606	1699	1722	2035	1822	1847	*1,597*	*1,606*		-14%	1%
FTE	(#)	263	229	274	337	354	378	355	*283*	*338*		-20%	19%
Days at sea	(day)	129,564	143,013	149,663	148,169	137,593	137,847	126,453	*93,391*	*125,968*		-26%	35%
Energy consumption	(thousand litres)	11,153	15,668	13,416	13,905	14,190	16,069	15,807	*15,916*	*16,783*		1%	5%
Live weight of landings	(tonne)	111,581	117,541	122,078	119,685	132,917	138,388	148,224	*148,630*	*173,431*		0%	17%
Value of landings	(thousand €)	26,290	26,661	29,263	34,823	36,847	47,051	40,359	*37,614*	*40,303*		-7%	7%
Income from landings	(thousand €)	27,290	27,519	29,318	35,661	39,754	41,523	37,005	*37,613*	*38,183*		2%	2%
Other income	(thousand €)	2,444	3,511	3,090	3,064	5,063	2,553	2,273	*2,975*	*2,906*		31%	-2%
Wages and salaries of crew	(thousand €)	3,014	3,330	3,515	4,113	4,671	4,932	4,901	*5,332*	*4,722*		9%	-11%
Unpaid labour value	(thousand €)	3,871	3,540	4,275	4,841	5,671	5,348	3,398	*4,219*	*4,129*		24%	-2%
Energy costs	(thousand €)	7,970	7,422	8,232	10,742	11,462	12,075	10,675	*8,186*	*5,288*		-23%	-35%
Repair & maintenance costs	(thousand €)	3,800	3,355	4,070	4,912	5,139	4,918	4,718	*4,840*	*4,658*		3%	-4%
Other variable costs	(thousand €)	1,723	2,019	2,322	2,881	3,004	3,324	3,148	*2,921*	*2,871*		-7%	-2%
Other non-variable costs	(thousand €)	3,901	3,930	4,210	5,240	5,293	5,481	5,250	*5,189*	*4,975*		-1%	-4%
Annual depreciation costs	(thousand €)	12,384	14,416	15,793	15,614	12,684	12,890	15,380	*12,777*	*12,314*		-17%	-4%
Opportunity cost of capital	(thousand €)	146	908	600	- 129	- 486	- 127	114	*349*	*337*		207%	-3%
Tangible asset value (replacement)	(thousand €)	38,298	43,030	46,474	46,246	38,305	38,395	45,557	*37,879*	*36,605*		-17%	-3%
Gross Value Added	(thousand €)	12,340	14,304	13,574	14,951	19,804	18,277	15,488	*19,452*	*23,297*		26%	20%
Gross profit	(thousand €)	5,455	7,434	5,784	5,997	9,461	7,998	7,189	*9,901*	*14,445*		38%	46%
Net profit	(thousand €)	- 7,075	- 7,890	- 10,608	- 9,488	- 2,736	- 4,766	- 8,305	- *3,225*	*1,793*		61%	156%

Table 5.30 Finland: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF											
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	1,486	1,465	1,559	1,589	1,890	1,674	1,699	67	66	60	60	62	59	65		1%	5%		10%	4%
Vessel tonnage (thousand GT)	4.1	3.8	4.1	4.2	4.0	3.9	5.5	7.1	7.5	7.6	9.2	8.6	8.3	9.0		40%	37%		8%	12%
Engine power (thousand kW)	71.9	68.8	74.9	75.8	76.5	75.6	77.9	27.2	27.6	27.1	31.3	30.3	28.8	32.1		3%	5%		12%	12%
FTE (#)	177	135	181	229	246	275	251	86	94	93	108	108	103	104		-9%	21%		1%	5%
Total employed (person)	1,486	1,465	1,559	1,589	1,895	1,674	1,699	127	141	140	133	140	148	148		1%	5%		0%	7%
Days at sea (thousand day)	124.0	138.0	145.1	142.8	131.6	131.8	120.1	5.6	5.0	4.6	5.4	6.0	6.1	6.3		-9%	-11%		4%	16%
Fishing days (thousand day)	123.9	137.8	144.8	142.5	131.3	131.5	119.8	4.8	4.6	4.1	4.8	5.5	5.4	6.0		-9%	-11%		10%	23%
Number of fishing trips (thousand)	124	138	145	142	131	131	120	4	3	3	3	3	3	3		-9%	-12%		8%	7%
Energy consumption (million litre)	2.2	1.5	2.1	*1.8*	1.8	1.5	1.7	8.9	14.1	11.3	12.1	12.4	14.6	14.2		12%	-9%		-3%	16%
Live weight of landings (thousand tonne)	8.44	9.41	10.18	10.10	13.13	17.91	14.26	103.14	108.13	111.90	109.58	119.79	120.48	133.97		-20%	24%		11%	19%
Value of landings (million €)	8.37	9.15	9.89	11.44	10.75	12.53	11.53	17.92	17.51	19.38	23.38	26.10	34.52	28.83		-8%	11%		-16%	25%
Income from landings (million €)	9.9	10.2	10.6	11.6	12.2	11.5	11.3	17.4	17.4	18.7	24.1	27.4	30.1	25.7		-1%	3%		-14%	14%
Other income (million €)	2.2	2.9	2.3	2.2	3.0	1.7	1.8	0.2	0.6	0.8	0.9	2.0	0.8	0.5		5%	-24%		-44%	-49%
Direct income subsidies (million €)	2.65	1.65	1.45	1.35	1.27	1.14	1.03	0.02	0.02	0.03	0.04	0.01	0.00	0.02		-10%	-35%		3053%	-19%
Income from leasing fishing rights (million €)	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Wages and salaries of crew (million €)	0.6	0.7	0.7	0.6	0.9	0.7	0.7	2.4	2.7	2.8	3.5	3.8	4.2	4.2		1%	4%		-1%	29%
Unpaid labour value (million €)	2.7	2.8	3.5	3.4	4.3	4.0	2.5	1.2	0.8	0.7	1.4	1.3	1.4	0.9		-37%	-28%		-34%	-21%
Energy costs (million €)	1.8	1.0	1.4	1.6	1.7	1.3	1.4	6.1	6.4	6.8	9.2	9.8	10.8	9.3		6%	-5%		-14%	13%
Repair & maintenance costs (million €)	1.9	1.4	1.9	1.9	2.0	1.7	1.8	1.9	2.0	2.1	3.0	3.2	3.2	2.9		8%	2%		-10%	13%
Other variable costs (million €)	0.5	0.7	1.0	1.1	1.1	1.2	1.3	1.2	1.3	1.3	1.7	1.9	2.1	1.8		7%	36%		-12%	16%
Other non-variable costs (million €)	2.0	1.9	2.1	2.4	2.3	2.1	2.0	1.9	2.0	2.1	2.8	3.0	3.4	3.2		-4%	-6%		-5%	27%
Annual depreciation costs (million €)	7.4	6.9	8.0	7.1	6.7	7.1	8.0	5.0	7.5	7.8	8.5	6.0	5.8	7.4		12%	11%		28%	9%
Rights costs (million €)	0.16	0.20	0.24	0.20	0.27	0.25	0.17	0.05	0.05	0.08	0.10	0.10	0.03	0.04		-30%	-21%		24%	-46%
Opportunity cost of capital (million €)	0.09	0.46	0.32	- 0.06	- 0.27	- 0.07	0.06	0.06	0.45	0.28	- 0.07	- 0.22	- 0.05	0.05		185%	-19%		197%	-31%
Tangible asset value (million €)	23.3	21.7	24.9	22.5	21.3	22.3	24.9	15.0	21.3	21.6	23.8	17.0	16.1	20.7		12%	10%		28%	8%
Fishing rights (million €)	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Investments (million €)	7.5	6.5	8.5	5.0	5.3	6.5	8.3	3.4	11.1	7.9	6.7	2.1	6.0	9.6		28%	27%		60%	55%
Gross Value Added (million €)	5.9	8.0	6.4	6.7	8.1	6.9	6.6	6.4	6.3	7.1	8.2	11.7	11.4	8.9		-5%	-6%		-22%	5%
GVA to revenue (%)	48.6	61.1	49.9	48.8	53.2	52.0	50.0	36.6	35.1	36.6	33.0	39.7	37.0	34.1		-4%	-4%		-8%	-6%
Gross profit (million €)	2.6	4.6	2.2	2.7	2.9	2.2	3.3	2.8	2.9	3.6	3.3	6.5	5.8	3.9		53%	17%		-34%	-7%
Gross profit margin (%)	21.6	35.0	16.7	19.4	19.2	16.5	25.4	16.1	15.9	18.6	13.3	22.2	18.8	14.7		54%	19%		-22%	-16%
Net profit (million €)	- 4.9	- 2.8	- 6.1	- 4.4	- 3.5	- 4.9	- 4.7	- 2.2	- 5.1	- 4.5	- 5.1	0.8	0.1	- 3.6		3%	-6%		-4086%	-35%
Net profit margin (%)	- 40	- 21	- 47	- 32	- 23	- 37	- 36	- 13	- 28	- 23	- 20	3	0	- 14		2%	-7%		-4804%	-1%
GVA per FTE (thousand €)	33	59	36	29	33	25	26	75	67	77	76	108	111	86		5%	-27%		-22%	0%

Table 5.31 Finland: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
FIN A27 TM2440 °	22	68	3,593	134	97,951	21,060	19,900	5,075	25.5	1,940	9.7	- 2,951	- 14.83	46.1	75	- 21	Weak	-25%	Deteriorated
FIN A27 PG0010	1,625	246	118,378	143	10,433	10,311	11,866	5,852	49.3	2,817	23.7	- 3,620	- 30.51	12.3	24	- 18	Weak	4%	Stable
FIN A27 TM1824	15	21	1,338	23	25,970	5,361	4,053	2,852	70.4	1,386	34.2	- 322	- 7.94	69.8	136	- 7	Weak	37%	Improved
FIN A27 TM1218 °	28	15	1,385	45	10,047	2,411	2,205	1,004	45.6	525	23.8	- 327	- 14.83	32.0	67	- 14	Weak	44%	Improved
FIN A27 PG1012 °	74	5	1,759	44	3,823	1,216	1,254	705	56.2	520	41.5	- 1,085	- 86.53	36.9	141	- 22	Weak	-38%	Deteriorated

Table 5.32 Finland: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real)								Live weight of landings								Average landed price (real)							
	(thousand €)								(tonne)								(€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
Atlantic herring	13.5	13.4	14.9	19.7	24.0	34.4	27.5	*27.9*	83.1	90.3	92.4	97.6	117.2	121.6	130.4	*132.4*	0.2	0.2	0.2	0.2	0.2	0.3	0.2	*0.2*
Whitefishes nei	2.9	3.1	2.9	3.0	2.4	2.8	2.6	*1.8*	0.7	0.7	0.7	0.7	0.7	0.7	0.7	*0.5*	4.4	4.5	4.6	4.3	3.6	4.0	3.9	*3.9*
European sprat	3.4	3.5	4.0	3.0	1.6	2.6	2.4	*2.4*	24.3	23.2	24.6	15.8	9.0	11.1	11.8	*11.9*	0.1	0.2	0.2	0.2	0.2	0.2	0.2	*0.2*
Pike-perch	1.5	1.7	2.1	2.7	1.9	1.6	2.0	*1.4*	0.3	0.3	0.4	0.5	0.4	0.3	0.4	*0.3*	4.7	5.5	6.1	5.6	5.2	5.1	5.4	*5.4*
European perch	1.2	1.1	1.5	2.0	1.8	1.6	1.9	*1.2*	0.8	0.6	0.7	0.9	1.0	0.8	1.1	*0.6*	1.4	1.7	2.0	2.1	1.8	1.9	1.8	*1.8*
Atlantic salmon	1.3	1.4	1.0	1.1	1.1	0.9	1.0	*0.8*	0.3	0.3	0.2	0.2	0.3	0.3	0.3	*0.2*	4.1	4.3	4.7	4.7	3.3	3.4	4.1	*4.1*
Vendace	0.2	0.2	0.3	0.4	0.5	0.6	0.6	*0.2*	0.1	0.1	0.1	0.2	0.2	0.3	0.3	*0.1*	1.6	2.0	2.2	2.5	2.4	2.5	2.3	*2.3*
European smelt	0.0	0.0	0.1	0.2	0.1	0.6	0.4	*0.4*	0.1	0.1	0.5	1.0	0.6	0.9	0.8	*0.8*	0.2	0.2	0.2	0.2	0.2	0.6	0.5	*0.5*
Atlantic cod	1.5	1.2	1.3	1.4	1.8	0.5	0.4	*0.5*	0.8	0.9	1.0	1.1	1.7	0.5	0.4	*0.4*	1.9	1.3	1.2	1.3	1.1	1.2	1.2	*1.2*
Freshwater bream	0.1	0.1	0.2	0.3	0.6	0.5	0.4	*0.3*	0.3	0.3	0.7	0.7	0.8	1.0	0.9	*0.6*	0.3	0.4	0.2	0.5	0.7	0.5	0.5	*0.4*

5.8 FRANCE

Short description of the national fleet

Fleet capacity

The national fleet capacity continued to slightly decline, with a total of 6 969 vessels, 1 300 of which were inactive, in 2015, having a combined gross tonnage (GT) of 174 thousand tonnes and engine power of 1 010.1 thousand kilowatts (kW).If the number of vessels has been decreasing since 2008 by 13%, the national engine power remained globally stable on the period thanks to increase of average engine power. The major factors causing the fleet to decrease in size were vessel decommissioning schemes, entry barriers and natural wastage due to age. In 2014, five purse seiners more than 40 meters based in Mayotte – overseas territory - were included in the European fleet register, adding 12 thousand tonnes at the national gross tonnage.

Inactive vessels are mainly made up of less than 12 meters vessels (97%) and mostly based in the French overseas territories (66%) - especially in Martinique and Guadeloupe - where they represent 33% of the total number of vessels. The proportion of inactive vessels tends to increase (11% in 2009, 18% in 2015).

Fleet structure

The French fishing fleet is nationally divided into

- a small-scale fleet (73% of total active vessels) that is mainly composed of vessels less than 10 meters long with a large diversity of metiers and an important part of polyvalent vessels. Those vessels are localised on all the French regions as 40% in overseas territories (outermost region fleet), 34% in North East Atlantic and North Sea regions and 26% in the Mediterranean region;

- a large-scale fleet (26% of total active vessels) which is mainly made up of vessels using mobile gears (around 1 350 vessels), especially demersal trawlers and dredgers with length from less than 10 meters to more than 40 meters. Even though they are active in all the French regions, the major proportion of those vessels is based in North East Atlantic and North Sea regions. This large-scale fleet also includes around 200 netters and vessels using hooks more than 12 meters long based in North East Atlantic, North Sea, Mediterranean regions and few of them in the French islands of Reunion (overseas territory);

- a distant-water fleet[18] composed of 22 tropical purse seiners more than 40 meters catching tuna in South Atlantic and Indian Ocean;

In 2015, the number of fishing enterprises totalled 5 961, with the vast majority (88%) owning a single vessel. The percentage of individual companies decreased slightly over the years.

Employment

Employment was estimated at 10 056 jobs in 2014 corresponding to more than 7 200 FTEs[19]. The level of employment decreased between 2009 and 2014, with total number of employed persons decreasing 16% over the period at national level, following the reduction of the number of vessels.

Employment in the distant water fleet increased with 65 jobs in 2014 thanks to the inclusion of five purse seiners more than 40 meters based in Mayotte in the European fleet register.

The small-scale fleet represented 38% of national fleet in terms of jobs (3 805) in 2014.

Effort

An estimated 465.3 thousand days were spent at sea[20], a slim decrease on 2014 observed on small-scale fleet (47% of the national effort) while days at sea for large-scale fleet remained stable.

The amount of energy consumed increased 6.6% between 2013 and 2014 after a decrease of 21% on the period 2009 – 2013. This increase is mainly due to distant water fleet (purse seiners operating in South Atlantic and Indian Ocean), and in a less extent to small-scale fleet.

The decrease in fuel price in 2014 explained the reduction on energy cost at national level we observed also for large-scale fleet. In the case of small-scale fleet, this fuel price reduction made possible the adjustments of fishing strategies as fishing areas more distant from the coast, generating a light increase of 3% in energy cost despite an increase of 13% in energy consumption.

[18] In the AER report, the French distant-water fleet wrongly takes into account a vessel using hook measuring 33m long.
[19] It does not take into account employment for outermost regions (vessels less than 12 meters in overseas territories)
[20] It does not take into account days at sea for outermost regions (vessels less than 12 meters in overseas territories) and is not representative of the whole fleet of vessels less than 12 meters fishing in the Mediterranean Sea.

Production

National production has been increasing over the period by 21% in weight and increased a further 2% in 2014 at 526.9 thousand tonnes of seafood[21], with a landed value of €1.1 billion.

In 2014, 'yellowfin tuna' landings generated the highest value by the national fleet (€100.8 million), followed by 'European hake' (€95.2 million), 'monkfish' (€94.5 million), 'common sole' (€78.6 million), 'Great Atlantic scallop' (€61.2 million) and European seabass (€51.3 million).

In terms of landed weight of fish species, 'yellowfin tuna' generated the highest value (55.3 thousand tonnes) in 2014, followed by 'European hake' (41.4 thousand tonnes) and 'skipjack tuna' (37.4 thousand tonnes).

Landings weight of 'yellowfin tuna' and 'skipjack tuna' mainly caught by the distant-water fleet increased 33% and 26% in 2014 thanks to the inclusion of five purse seiners in the European fleet register, while average landings weight slightly decreased 3% and average landing value 19% due to reduction of prices.

Among top ten species in landings value at national level, prices increased for 'Great Atlantic scallop', 'European seabass', 'Norway lobster' and 'Atlantic mackerel'. In addition to 'yellowfin tuna', landings value increased also for 'European hake', 'Norway lobster' and 'Atlantic mackerel' in 2014.

The total weight landed by the French small-scale fleet decreased 7% in 2014 compared to 2013 and can be partly explained by the 2% decrease in fishing days. Landing value remained globally stable between 2013 and 2014. Seafood production by the small-scale fleet represented 77 thousand tonnes with a landed value of €182.5 million, comprising 15% of the total weight and 16.5% of the total value of the national fleet. In terms of species, 'sole' generated the highest landed value by the small-scale fleet (€27 million), followed by 'bass' (€27 million), 'whelk' (€19 million). Those species and figures are representative of vessels fishing activity in the North Sea and the North East Atlantic but not of the fishing activities in Mediterranean region and overseas territories due to missing data in those regions. Indeed, main species in terms of landings weight in those regions are:

- Mediterranean region: 'European eel', 'Mediterranean mussel', 'mullets', 'changeable nassa' (*Nassarius mutabilis*) and 'gilthead bream' each of them represented between 300 and 1 000 tonnes;

- in the French islands of Reunion: 'bigeye scad', 'yellowfin tuna', 'swordfish', 'albacore', 'dolphinfish' each of them represented between 50 and 200 tonnes;

- Martinique: 'flying fish', 'dolphinfish', 'blue marlin', 'yellowfin tuna', each of them represented between 50 and 150 tonnes;

- Guadeloupe: 'dolphinfish', 'snappers, jobfishesnei', 'Parrotfishes nei', 'spiny lobsters nei', 'yellowtail snapper' each of them represented between 100 and 800 tonnes;

- French Guyana: 'acoupa weakfish', 'green weakfish', 'crucifix sea catfish', each of them represented between 300 and 1 100 tonnes;

The total weight landed by the French large-scale fleet remained globally stable in 2014 – as the fishing effort and the number of vessels - with an amount of 348.8 thousand tonnes and a landed value of €773.3 million. It represented respectively 66% and 70% of the total landings weight and values of the national fleet.

Economic results for 2014 and recent trends

National fleet performance

The French national fleet remained in a net profit making position in 2014. Although its economic performance compared to 2013 worsened in 2014, it remained globally in the average of the previous years (at least in terms of gross value added and gross profit) and is expected to improve in 2015, as fuel prices remained low.

Revenue, estimated at €1.153 billion, slightly increased 1.8% due to a 2% increase in landings income as other income (€18.7 million) decreased 17%. Direct income subsidies amounted to €12.08 million (no income from fishing rights).

Total operating costs increased due to the increase in crew costs (8%), repair and maintenance costs (12%) and other variable costs (7%) – those two costs amounting to their maximum value in 2014 since 2008 - as energy costs decreased 2%. When including capital costs, total costs amounted to €1.116 billion, generating a net profit of €55.6 million.

Overall, the cost structure has remained relatively constant over the last years, with some apparent decrease in labour costs and increase in energy costs in 2012 with the opposite effect in 2014, due to fuel price trends.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €579.7 million, €150.2 million and €55.6 million, respectively. GVA remained stable as slight increase in costs offset increase of revenue.

[21] It does not take into account days at sea for outermost regions (vessels less than 12 meters in overseas territories) and is not representative of the whole fleet of vessels less than 12 meters fishing in the Mediterranean Sea.

Gross profit and net profit decreased 16% and 27%, respectively compared to 2013 as crew cost increased 8%.However, gross profit only decreased 5% compared to the 2008-2013 period average.

These results indicate a downward trend for economic performance of the French fleet in 2014 compared to 2013; however the year 2013 is similar to 2010 and 2012 in terms of gross profit.

The (depreciated) replacement value of the French fleet was estimated at €547 million and investments amounted to €64.4 million in 2014.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 12.8%, indicating a decent operating efficiency of the sector. Net profit margin was estimated at 4.8%, a 29% decrease on 2014. Both margins are at their minimum value in 2014 compared to the period 2010 - 2014 due to operational costs increase in 2014.

The Rate of Return on Fixed Tangible Assets (RoFTA) decreased 22% in comparison to 2013 but remained stable at 11% compared to 2012.

After an overall improved development trend since 2010, labour productivity (GVA/FTE) remained relatively stable in 2014 at €77 thousand.

Fuel consumption per landed tonne has followed an overall decreasing trend since 2009 by 31%, thanks to decrease of average fuel consumption and increase of average landed weight. It amounted 612 litres per tonne in 2014 at national level, a 4% increase compared to 2013 due to fuel price trend, while values for large-scale fleet and small-scale fleet amounted to 685 litres per tonne and 424 litres per tonne the same year.

Despite this decrease in number of vessels and global stability of the number of days at sea, the national landing weight has been increasing over the period by 21% thanks to increase of average landed weight per vessel and landed weight per sea day. Indeed, landings in weight per unit of effort increased a further 4% in 2014 at 1 132 kg per day.

Drivers affecting the economic performance trends

Markets and Trade

In France, 38 fish auction allowed the sale of fish in 2014. The new conditions offered for sale, with new mechanisms (connected market places, remote sales) were rather positive in France for the fish prices. The top three species in terms of value landed in 2014 were Monkfish, Sole and European Hake (without taking into account tuna). However, depending on the target species, destination markets, vessel operating modes or historical patterns, all vessels do not use this sales method to sell their production.

Regarding foreign trade, the France shows a deficit balance that exceeded €3 billion in 2014. France export species like tuna (in Asia), smoked Salmon, frozen Shrimp, great Atlantic Scallop, fresh species like Monkfish, Cuttlefish, Sea Bass or Sole in Italy, Spain, United Kingdom, Belgium, etc. On the other hand, the top three species in terms of value imported in 2014 were Salmon (Norway), frozen Shrimp and Tuna, from multiple countries.

Management instruments

The French fleet is managed through several management tools, as TACs and quotas related to the area and fishing stock, fishing license or multiannual management plans under national regulations. Each plan targets a particular species, specifies for example the allowed fishing gear or additional prohibited days, and all the corresponding technical requirements.

As an example, in 2014, fishing European hake (North and South), monkfish (VII), Great Atlantic scallop and common sole (North Sea, West and East Channel and Bay of Biscay) that are in the top five species in terms of French value of landings required a specific fishing licence as well as herring (west of Scotland), cod (North Sea, East Channel, West of Scotland, Celtic Sea and Ireland Sea), *Nephrops* (VIIIc, IXa), European eel and Anchovy (VIII).

Regional plans also exist, set up by professionals in their area to limit some fleets fishing effort, as the measures governing netters in "North Atlantic Ocean - Western Channel", "Eastern Channel – North Sea" or "south Sea - Atlantic".

The fishing effort adjustment measures, with the exception of aid for permanent cessation of activity, tend to stabilize the maximum effort of the French fishing fleet. The fishing effort does not increase, but causes a mutation of vessel activities. Fleets groupings are observed in order to pool the available fishing effort and fishing quotas allocated to France.

TACs and quotas

Among the 130 stocks under TAC exploited by the French fleet in 2014,

- 6 stocks presented a quota uptake higher than or equal to 100% whose cod (I / IIb) and rays (7d, 2ac-4c) ;
- 18 stocks presented a quota uptake between 90% and 99%. 10 of those stocks had a French quota higher than 1.000 tons in 2014:

In North East Atlantic and North Sea regions:

- Cod (Norwegian waters of I and II);
- Sole and Pollack (Bay of Biscay) ;
- Haddock (VIIb-k, VIII, IX and X; Union waters of CECAF 34.1.1) ;
- Small pelagic as Anchovy (Bay of Biscay), Herring (North Sea) and Mackerel (VI, VII, VIIIa, VIIIb, VIIId and VIIIe; Union and international waters of Vb,IIa, XII and XIV) ;
- Rays (VI, VIIa-k, VIII, IX) ;
- Albacore.

In 2014, the increasing French quotas for Albacore, European hake and blue whiting in some areas of North East Atlantic had a positive impact on the revenue of some fleet segments: the pelagic trawlers benefited from the increase of blue whiting quotas (+42%). Like demersal trawlers and seiners, they also benefited from the increase of albacore quotas (+29%). Like longliners and netters, the demersal trawlers and seiners also benefited from the increase of European hake quotas (+49%). Conversely, they were penalized by decreasing haddock quotas (-33%) in subarea VII (27.7)

Status of Key Stocks

If we focus on the top six species in terms of French value of landings in 2014 that match with sixteen stocks, we notice that

8 of those stocks are considered as being fished in a sustainable way:

- yellowfin tuna (51)
- monkfish (IIIa,IV,VI)
- monkfish (VIIb-k,VIIIabd)
- common sole (VIIe)
- Great Atlantic scallop (VIId)
- Great Atlantic scallop (VIIe)
- Great Atlantic scallop (VIIIa)
- Great Atlantic scallop (VIIIb)

8 are considered as in a bad status:

- yellowfin tuna (47)
- European hake (IIIa,IV,VI,VII,VIIIabd)
- European hake (37.GSA7)
- common sole (VIIIabd)
- common sole (IV)
- common sole (VIId)
- European seabass (IVbc,VIIa,VIId-h)
- European seabass (VIIIab)

Innovation and Development

Maintain the economic viability of a sector forces it to develop a process of technical progress and constant innovation. The whole of the French fishing industry working in this direction to reduce dependence on fuel for the vessels and other operating costs, improve the selectivity of fishing gear and also product quality.
First of all, the fuel crisis of 2008 forced the fleet to adjust to the rapidly increasing fuel costs. Several solutions have been tested in real conditions by ships, to optimize fishing gear for example, or ease the trawl through the use of lighter fiber. Other projects also aim to find an alternative to fuel (for example hydrogen fuel cell, vegetable oil or gas). Some fishers have also decided to work with other technique that reduces fuel consumption especially (Danish seine for example, or automatic longline fishing). In a general way, many projects are underway on all French coastlines, to reduce energy dependency by optimizing the fishing gear adjustment.
Facing the soon to be implemented landing obligation, research on gear selectivity is also on-going in France. Several ships have tested new gear to improve selectivity: using the T90 square mesh, trawl separator sheet for Norway lobster, use of a dispersive ball, etc. So there are many projects and they are carried out in all the French fishing regions.

Performance by fishing activity

Small-scale fleet

In this section we focus on small-scale fleet as defined by the European commission[22]. It concerns 2 492 active vessels fishing in North East Atlantic and North Sea regions (1 408 vessels – 56%) or in the Mediterranean region (1 084 – 44%).

The French small-scale fleet remained in a net profit making position in 2014. Although its economic performance compared to 2013 worsened in 2014, it remained globally stable compared to the year 2012[23].

[22]Vessels measuring less than 12 meters long and using passive gears (DFN, FPO, HOK, PGO, PGP, PMP)
[23] On the time series 2009 – 2014, we notice a clear decrease of income from landings and economic performances of the small-scale fleet between the periods 2009-2011 and 2012-2014. It can be explained by the implementation in 2012 of a different methodology to sample and estimate economic indicators taking into account the non-answering vessels (that usually are vessels less than 10 meters with a limited fishing activity).

Revenue, estimated at €220 million, slightly increased 1.4% in 2014 while total operating costs (€185 million) increased 4% especially due to the increase in repair and maintenance costs (6%) and other non-variable costs (13%). When including capital costs, total costs amounted to €204 million, generating a net profit of €18.4 million with a net profit margin of 8%.

Gross Value Added (GVA) and gross profit in 2014 were estimated at €137 million and €37.2 million, respectively. GVA slightly decreased (-2%) between 2013 and 2014. Gross profit decreased by 13% on this period but only by 7% between 2012 and 2014.

In 2014, the fishing activity in the North East Atlantic and North Sea regions represented 85% of the income from landings, 83% of the gross value added and 83% of the gross profit of the global small-scale fleet fishing activity. Gross value added to revenue and gross profit margin were estimated at 60% / 68% and 15% / 19% for small-scale fleet in the North East Atlantic-North Sea regions / in the Mediterranean region respectively.

In 2014 the average vessel is 24 years old, 10 meters long and 116 fishing days a year with revenue from landings by €133 090 and gross profit of €20 444 in North East Atlantic and North Sea regions while in the Mediterranean region it is about 31 years old, 7 meters long and 42 fishing days with revenue from landings by €30 079 and gross profit of €5 586. For both regions, average gross profit decreased in 2014 compared to 2013 but is equivalent to the year 2012.

The number of active vessels decreased in North East Atlantic and North Sea regions over the time series 2008 - 2014 while it remained relatively stable in the Mediterranean region as average engine power increased in all regions. That explained a slight increase of total engine power in the Mediterranean region versus a slight decrease in North East Atlantic and North Sea regions.

Distant-water fleet

In 2014, there were 23 vessels belonging to the distant-water fleet" according to the European definition. A cluster has been established in 2014 for this segment, which aggregates data from only one long liner VL2440. The other vessels make up the French industrial fleet of Purse Seiners and consisted of 22 vessels in 2014. There are 5 additional vessels included in this fleet segment, compared to 2013, because vessels registered on the Island of Mayotte (French overseas region) are identified in the French fleet register since 1st January 2014. Economic models of seiners are very different, that is why only the activity of tropical purse seiners, operating in the Indian Ocean and Atlantic Ocean, is analysed in the Distant-water fleet.

The average age of those 22 vessels in this fleet segment was 16.5 years in 2014 and average length was 78 meters. The average full time employment is around 26 employees by vessel in 2014 (fishers employees come from both France and foreign countries (mostly African).

In a general way, year 2014 was marked by difficulties facing tuna activity. The unfavourable market, with the sharp fall in prices of raw tuna, had a significantly negative impact on the turnover and profitability of the firms. Furthermore the significant decline of the yen in the second half of 2014 made less competitive exports of tuna processed in Japan. The decline in 2014 on fuel prices helped however vessels to limit partially the impact on the observed decrease in sales prices.

Performance results of selected fleet segments

The French fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North East Atlantic, but also in the Mediterranean and in more distant fisheries. Indeed, the national fleet consisted of 97 (DCF) fleet segments in 2014 (DCF gear*length class). Of the 97 fleet segments, 29 with too few vessels to publish data were clustered. There were 1 311 inactive vessels in 2014.

Table contains a breakdown of key performance indicators for the active fleet segments in 2014. A short description of 5 important segments in terms of total landings value or employment is provided below. Some of these segments include one or two clustered small segments and economic indicators refer to these combined segments. Generally, these smaller segments only have a marginal impact on the indicators. Other segments are important to the economy of the national sector: the "tropical" purse seiners are discussed in the chapter dealing with long distant fisheries, some segments contain too few vessels, such as pelagic trawlers and demersal trawlers or seiners over 40 meters, others are very heterogeneous such as trawlers and seiners from 24 to 40 m.

Drift and fixed nets 10-12m – 181 vessels make up this segment which operates predominantly in the NE Atlantic (excluding overseas). The fleet targets a variety of species but in particular common sole, monkfish and European sea bass (respectively 45%, 7.7% and 7.2% of the total value of landings of this fleet segment). Common sole also represents almost 22% of the volume landed by this fleet segment in 2014 (21.9%). Total income was €51.8 million (landings income and other income) contributing 4.3% to the total income generated from landings in the national fishing fleet. Total operating costs represented almost 86.2% of income generated by this fleet segment in 2014. This fleet segment produced a gross profit of around €7.1 million in 2014 (13.8% of the income).

Drift and fixed nets 12-18m – 84 vessels make up this segment (73 in the NE Atlantic and 11 in the Mediterranean excluding overseas). The top two species in terms of value landed in 2014 were common sole and monkfishes in the NE Atlantic (respectively 36% and 16% of the total value of landings), and common sole and European hake in the

Mediterranean Sea (respectively 29% and 22%). In 2014, total landings value was €36.9 million and around 289 FTEs were employed in this fleet segment, contributing to 3.1% and 3.8% of the total income from landings generated and FTEs in the national fishing fleet, respectively. The NE Atlantic fleet generated a gross profit of around €5.6 million in 2014, and remained stable between 2013 and 2014. It reaches 15.9% of the income for this Atlantic fleet segment in 2014.

Demersal trawlers / seiners 12-18m – 168 vessels make up this segment and they are all based in the NE Atlantic (excluding 4 vessels in Corsica). These vessels target a variety of species. The top three species in terms of value landed in 2014 were Norway lobster, monkfishes and common sole (respectively 30%, 12.5% and 10.1% of the total value of landings of this fleet segment). Total income from landings was almost €82.7 million and 462 FTEs were supported by this segment in 2014, accounting for 6.9% and 6.1% of the national fleet income and national fleet FTEs respectively. This fleet segment generated a gross profit of around €9.1 million in 2014, remaining stable between 2013 and 2014.Total operating costs amounted to 89% of the fleet's income in 2014.

Demersal trawlers / seiners 18-24m – 176 vessels made up this segment in 2014. The vast majority (76%) of these vessels operate in the Atlantic, North Sea and Channel, 15% of the vessels operate in the Mediterranean Sea and 10% in French Guyana (only landings data are available for this region). Depending on the supra region, vessels have different fishing activities in terms of target species or number of days at sea. The vessels operating in the Atlantic, North Sea and the Channel target a variety of species, such as Monkfishes (22.4% of the total values of landings of this fleet segment), Squids and Whiting. In the Mediterranean Sea, vessels target hake (21% of the total values of landings of this fleet segment), Squids and Common octopus. In 2013, total landings value was €136.9 million and around 714 FTEs were employed, contributing to 11.4% and 9.5% of the total income from landings generated and FTEs in the national fishing fleet, respectively. This fleet segment produced a gross profit of around €10.6 million in the Atlantic area and €1.0 million in the Mediterranean in 2014. Total operating costs represented 91% and 89% of the income generated by this fleet segment in 2014, in the Atlantic area and Mediterranean Sea, respectively

Dredgers 12-18m – 92 vessels, plus 7 dredgers between 18 and 24 m and 1 vessel between 24 and 40m, made up this segment in 2014, which operates exclusively in the North Atlantic. The fleet mainly targets great Atlantic scallop (almost 71% of the total value of landings of this fleet segment in 2014) but also a variety of species as sole, mussel or Warty venus. Total income was around €49.5 million in 2014 for all the vessel of the cluster, and around 303 FTEs were employed in this fleet segment, accounting for 4.1% and 4.0% of national fleet and national FTEs respectively. This fleet segment generated gross profit of around €6.3 million in 2014. Total of operating costs represents 87% of income generated by this fleet segment in 2014.

Projections for 2015 and outlook

There is little projected change in landings for the French fleet in 2015 with landed weight and landed value increasing by 3% and 1% respectively. However, with fuel costs decreasing by 39% as well as declines in repair costs and other variable costs, the French is projected to increase its profits significantly, with gross profits projected at €274 million (+82%) and net profits projected at €180 million (+479%). There are also increases to the gross and net profit margins which reach 24% and 16% respectively.

Modelling for 2016 suggests no significant change for the French fleet in 2016, with landed weight (+2%, landed value (-1%) remaining stable and slightly increasing costs leading to similar gross and net profit margins of 23% and 15% respectively.

Investment in new fuel-efficient vessels becomes a key element for the fisheries sector to ensure the economic sustainability of the fishing fleet. The regulation on fish landing obligation will also undoubtedly have an economic impact that is difficult to forecast.

Data issues

It should be highlighted that a lot of improvements have been carried out the last two years especially:

- Standardisation of clusters on the period 2011 – 2014
- Completeness of Capacity region table for recent years (2010 – 2014)
- Implementation of PIM method for years 2011 to 2014

However there still are some issues in particular for previous years (2008 and 2009):

- Completeness of effort data for years 2008 and 2009 and sub-region coverage for recent years (2012, 2013)
- Standardisation of clusters for years 2008 to 2010
- Implementation of PIM method for years 2008 to 2010
- Completeness of Capacity region table for years 2008 and 2009

Thanks to a data source the French government has just received, it should be possible to update employment variables on time series and increase data quality in the next year.

Moreover, it should be highlighted that, apart from the Capacity table, data on effort, landings, employment and economics are not available for outermost region fleets. Around 1700 active fishing vessels less than 12 meters are based in the French islands of Reunion, Martinique, Guadeloupe and French Guyana.

Also, the coverage of effort and landings data is still an issue for vessels less than 12 meters active in the Mediterranean Sea. Thus, effort and landings estimations in DCF database are underestimating for this region. But, the French government has another data source (based on landings observations) that should make possible the update of those data with a better quality at least for some indicators.

A method of probability sampling has been applied to the 2014 data, as for 2012 and 2013 data: vessels have been selected by systematic random sampling, the fleet having been classified inside each segment by size and maritime quartier, to assure a good representativeness of the overall diversity of the French fleet.

Not all data have been collected because of total or partial non-responses: concerning the total non-responses, a statistical method was used to know the criteria (explanatory variables) that could explain the response rate and then to increase the weight of vessels for which data have been collected; concerning the partial non-responses, imputations have been made.

The same clusters (same name and composition) have been established for the years 2011 to 2014. Next year, it will be undertaken to establish the same clusters for previous years.

The 22 over 40m purse seiners and the only 33 m longliner operating in other fishing regions are based and registered in a French metropolitan port but they operate in the Indian ocean and in the South Atlantic ocean. Only economic data for these purse seiners and those of French hooks 12-18m and 18-24m in the Indian Ocean are available for 2011 to 2014 in other fishing regions (41 vessels in total while more than 1700 active fishing vessels less than 12 meters are based in the French islands of Reunion, Martinique, Guadeloupe and French Guyana). Data are not exhaustive either for the small scale fleet in Mediterranean Sea (including Corsican ships).

For example, it is considered in this chapter that there is a total of 10 056 employed, but according to official figures, there are more than 17 000 fishers who sailed at least one day in the year: the difference is due of course to the definition used (10 056 is a total of the average employment in 2014 in each vessel) but also to the incompleteness of data. In fact, the average employment can be estimated at about 13 000.

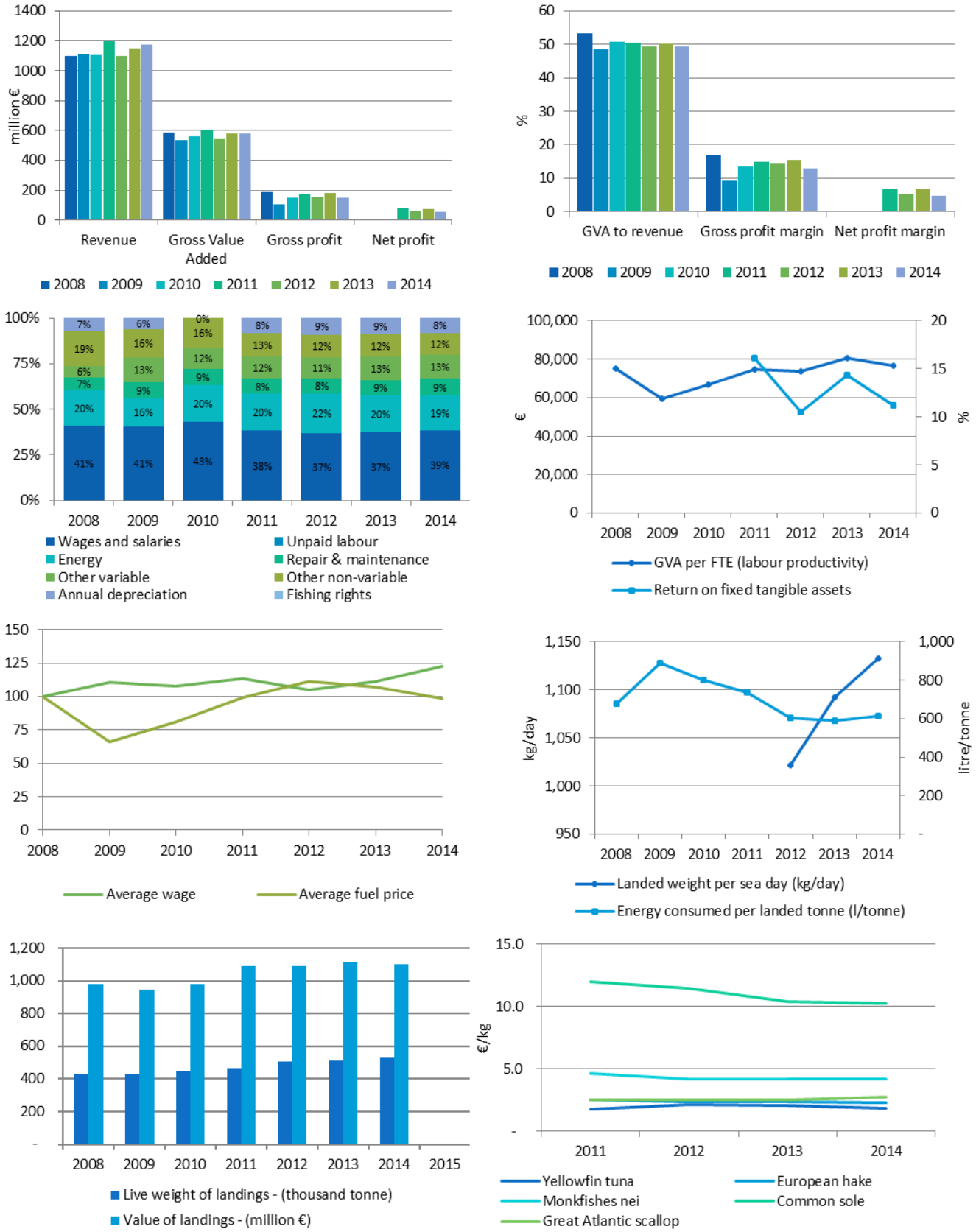
Next year, some estimates will be made to complete the employment, landings and effort data, particularly to take account of all vessels in Mediterranean and overseas territories: another data source (based on landings observations) should make possible the update of landings and effort data with a better quality at least for some indicators. For other economic data, some estimates could be done next year for 2 overseas islands: French Guyana and Guadeloupe.

The existing small-scale fleet definition could be extended in the French case to include all vessels less than 12 meters even if they use active gears as trawls, dredges or various active gears because they concern small vessels fishing in coastal areas with trips during less than 24 hours (606 French vessels are concerned in North Atlantic and 35 vessels in Mediterranean Sea in 2014).

The capital value and depreciation parameters have been calculated with the recommended (PIM) method for years 2011 to 2014.Next year, indicators for years 2008 to 2010 should be calculated with the same method. It was necessary to estimate the purchase prices per meter of vessels for some aggregated fleet segments to use the PIM method. These estimates have been done using the collected purchase price of some vessels and insurance values of other ones. For some segments, these data have not been published: it has been considered they were not relevant. The implementation of this method needs to be improved so data should be used with caution.

Two different sources of information have been used to calculate fishing revenues. In the tables, landings value comes mostly from logbooks, sales notes and satellite monitoring system whereas landings income comes from accounts and responses to a survey. The totals are similar but there may be significant differences for some segments.

Direct subsidies and other income are not available for all segments and are underestimated. Next year, it should be possible to use the exhaustive list of projects co-financed by the EFF and EMFF to update direct subsidies data.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.8 France: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.33 France: National fleet statistics and economic performance results.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	7,919	7,290	7,234	7,211	7,144	7,125	7,069		-1%	-3%
Number of Inactive vessels_ms	(#)	1,314	815	953	1,027	1,132	1,217	1,311		8%	22%
Vessel tonnage	(thousand GT)	197.2	185.3	174.2	171.0	168.3	164.2	175.6		7%	-1%
Engine power	(thousand kW)	1,076.0	1,007.7	994.9	1,001.5	999.3	999.9	1,016.6		2%	0%
Average vessel age	(year)	20	21	21	22	22	23	24		3%	10%
Average vessel length	(metre)	10	10	10	10	10	10	10		1%	0%
Enterprises with one vessel	(#)	5,822	5,706	5,618	5,569	5,450	5,376	5,321		-1%	-5%
Enterprises with 2 to 5 vessels	(#)	672	670	693	694	709	733	723		-1%	4%
Enterprises with more than 5 vessels	(#)	16	13	12	13	12	11	15		36%	17%
FTE	(#)	7,793	9,058	8,403	8,056	7,374	7,190	7,545		5%	-5%
Total employed	(person)	11,140	11,960	11,056	10,945	9,998	10,265	10,056		-2%	-8%
Days at sea	(thousand day)					495	471	465		-1%	-4%
Fishing days	(thousand day)					452	437	432		-1%	-3%
Number of fishing trips	(thousand)			375	392	383	378	368		-3%	-4%
Energy consumption	(million litre)	294.6	383.5	357.3	341.6	306.2	302.3	322.7		7%	-2%
Live weight of landings	(thousand tonne)	433.9	431.4	447.4	463.7	505.7	514.1	526.9		2%	13%
Value of landings	(million €)	978.8	948.0	982.8	1,092.2	1,088.8	1,112.3	1,101.1		-1%	7%
Income from landings	(million €)	1,082.6	1,090.0	1,075.3	1,179.7	1,083.2	1,127.6	1,153.0		2%	4%
Other income	(million €)	17.03	19.75	28.81	17.23	15.53	22.52	18.71		-17%	-7%
Direct income subsidies	(million €)	30.44	11.52	6.30	8.73	14.14	13.30	12.08		-9%	-14%
Wages and salaries of crew	(million €)	402.03	436.07	410.59	426.07	384.16	399.08	429.48		8%	5%
Unpaid labour value	(million €)										
Energy costs	(million €)	194.35	167.29	191.07	223.15	225.40	214.12	209.10		-2%	3%
Repair & maintenance costs	(million €)	69.54	92.63	85.64	92.47	86.70	91.28	102.03		12%	18%
Other variable costs	(million €)	60.87	143.46	110.76	133.15	117.76	136.27	145.16		7%	24%
Other non-variable costs	(million €)	187.36	167.62	156.40	144.99	127.21	130.69	135.71		4%	-11%
Annual depreciation costs	(million €)	71.04	65.22		90.33	95.96	95.00	88.79		-7%	6%
Opportunity cost of capital	(million €)	-	-	-	5.39	1.93	6.95	5.80		-17%	144%
Tangible asset value (replacement)	(million €)				539.4	585.0	584.3	546.9		-6%	-4%
Investments	(million €)			113.1	76.2	62.2		64.4			-23%
Financial position	(%)										
Gross Value Added	(million €)	587.5	538.7	560.3	603.2	541.7	577.7	579.7		0%	2%
GVA to revenue	(%)	53.4	48.5	50.7	50.4	49.3	50.2	49.5		-2%	-2%
Gross profit	(million €)	185.5	102.6	149.7	177.1	157.5	178.6	150.2		-16%	-5%
Gross profit margin	(%)	16.9	9.2	13.6	14.8	14.3	15.5	12.8		-17%	-9%
Net profit	(million €)				81.4	59.6	76.7	55.6		-27%	-23%
Net profit margin	(%)				6.8	5.4	6.7	4.7		-29%	-25%
GVA per FTE (labour productivity)	(thousand €)	75	59	67	75	73	80	77		-4%	7%
Return on fixed tangible assets	(%)				16	11	14	11		-22%	-18%

Table 5.34 France: National fleet statistics and economic performance results based on fleet segment level data.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	6605	6475	6281	6184	6012	5908	5758	*5,812*	*5,715*		1%	-2%
Total employed	(person)	11140	11959.67	11055.86	10944.84	9998.38	10264.73	10029.24	*9,777*	*9,618*		-3%	-2%
FTE	(#)	7,793	9,058	8,403	8,056	7,374	7,190	7,545	*6,700*	*6,955*		-11%	4%
Days at sea	(day)	-	-	505,133	491,931	494,804	470,573	465,287	*449,895*	*432,725*		-3%	-4%
Energy consumption	(thousand litres)	294,585	383,502	357,256	341,597	306,153	302,299	322,705	*279,973*	*263,100*		-13%	-6%
Live weight of landings	(tonne)	-	-	447,431	463,702	505,425	514,001	526,871	*540,167*	*549,734*		3%	2%
Value of landings	(thousand €)	-	-	982,771	1,092,210	1,078,997	1,112,103	1,101,062	*1,110,242*	*1,102,606*		1%	-1%
Income from landings	(thousand €)	1,018,682	1,089,951	1,086,313	1,183,399	1,087,998	1,131,494	1,158,742	*1,127,237*	*1,121,989*		-3%	0%
Other income	(thousand €)	16,984	19,749	28,814	17,230	15,527	22,519	18,710	*18,202*	*17,920*		-3%	-2%
Wages and salaries of crew	(thousand €)	402,026	436,067	410,589	426,073	384,161	399,081	429,483	*407,604*	*406,925*		-5%	0%
Unpaid labour value	(thousand €)	-	-	-	-	-	-	-	-	-			
Energy costs	(thousand €)	194,355	167,288	191,074	223,145	225,399	214,118	209,099	*127,215*	*120,783*		-39%	-5%
Repair & maintenance costs	(thousand €)	69,544	92,626	85,641	92,469	86,700	91,276	102,027	*89,529*	*88,494*		-12%	-1%
Other variable costs	(thousand €)	60,868	143,460	110,759	133,147	117,758	136,269	145,160	*121,444*	*142,162*		-16%	17%
Other non-variable costs	(thousand €)	187,362	167,622	156,401	144,992	127,211	130,687	135,711	*125,779*	*124,293*		-7%	-1%
Annual depreciation costs	(thousand €)	71,040	65,222	-	90,333	95,964	94,999	88,787	*89,589*	*87,992*		1%	-2%
Opportunity cost of capital	(thousand €)	-	-	-	5,394	1,931	6,953	5,797	*4,112*	*4,042*		-29%	-2%
Tangible asset value (replacement)	(thousand €)	-	-	-	539,374	585,029	584,325	546,869	*554,417*	*544,863*		1%	-2%
Gross Value Added	(thousand €)	523,539	538,704	559,020	603,216	541,684	577,725	579,688	*681,471*	*664,178*		18%	-3%
Gross profit	(thousand €)	121,512	102,638	148,431	177,143	157,523	178,644	150,206	*273,868*	*257,253*		82%	-6%
Net profit	(thousand €)	-	-	-	54,251	19,033	42,530	31,110	*180,166*	*165,219*		479%	-8%

Table 5.35 France: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF							DWF													
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	4,589	4,629	4,371	4,480	4,382	4,332	4,198	2,011	1,826	1,889	1,687	1,612	1,559	1,538	5	20	21	17	18	17	22		-3%	-6%		-1%	-13%		29%	1%
Vessel tonnage (thousand GT)	16.1	16.2	15.4	16.2	16.0	15.7	15.6	168.9	126.5	118.9	113.5	109.5	108.0	105.7	3.2	33.6	30.6	28.1	32.7	32.4	45.0		-1%	-2%		-2%	-15%		39%	23%
Engine power (thousand kW)	405.8	418.0	410.4	432.8	428.8	427.6	419.9	547.9	453.6	440.4	410.8	398.6	393.8	386.4	4.6	57.8	53.0	49.5	55.4	54.4	73.8		-2%	0%		-2%	-12%		36%	10%
FTE (#)	2,931	3,015	2,743	2,789	2,421	2,298	2,481	4,862	5,555	5,245	4,829	4,540	4,479	4,486		488	415	438	413	413	578		8%	-8%		0%	-9%		40%	4%
Total employed (person)	4,307	4,270	3,857	4,220	3,913	3,887	3,805	6,833	7,201	6,783	6,287	5,672	5,965	5,647		488	415	438	413	413	578		-2%	-7%		-5%	-13%		40%	3%
Days at sea (thousand day)			217.4	222.9	226.9	225.8	221.1			282.9	269.0	267.8	244.8	243.8			4.9		0.1		0.4		-2%	-1%		0%	-8%			-1%
Fishing days (thousand day)			213.6	219.7	223.3	224.0	219.3			243.8	234.9	228.7	213.3	212.3			4.4		0.0		0.2		-2%	0%		0%	-8%			-1%
Number of fishing trips (thousand)			210	227	225	225	220			165	164	159	148	151			0	0	0	5	5		-2%	-1%		1%	-5%		3%	2%
Energy consumption (million litre)	29.1	33.3	30.8	31.5	25.8	24.0	26.8	265.5	297.3	278.2	262.8	234.3	236.5	237.5		52.9	48.2	47.3	46.0	41.8	58.4		12%	-8%		0%	-10%		40%	5%
Live weight of landings (thousand tonne)			50.77	65.29	73.50	83.48	77.66			311.22	316.41	353.40	351.23	349.26			85.44	82.00	78.53	79.29	99.95		-7%	14%		-1%	5%		26%	5%
Value of landings (million €)			166.01	201.31	187.71	186.15	184.36			715.12	772.47	740.65	787.87	772.80			101.65	118.44	150.63	138.08	143.91		-1%	-1%		-2%	2%		4%	2%
Income from landings (million €)	251.9	251.1	239.9	263.7	214.8	217.9	220.2	766.8	748.4	740.3	789.4	715.9	769.5	789.4		90.4	95.2	126.6	152.5	140.2	143.4		1%	-8%		3%	5%		2%	4%
Other income (million €)	3.7	8.4	14.4	6.9	1.6	3.4	2.3	13.3	11.4	14.4	10.4	13.9	19.1	16.4		-	-	-	-	-	-		-31%	-63%		-14%	19%			
Direct income subsidies (million €)	5.90	0.58	0.22	2.07	0.81	1.02	1.53	23.84	10.94	6.08	6.66	13.33	12.29	10.55		-	-	-	-	-	-		51%	-14%		-14%	-13%			
Wages and salaries of crew (million €)	126.3	121.1	113.2	118.5	96.1	96.6	99.8	275.7	285.4	268.1	270.4	246.6	262.0	286.0		29.6	29.3	37.1	41.5	40.4	43.6		3%	-11%		9%	7%		8%	4%
Unpaid labour value (million €)																														
Energy costs (million €)	20.5	15.9	17.5	21.9	19.4	17.6	18.1	173.9	128.7	150.0	171.6	173.9	166.6	156.3		22.7	23.6	29.6	32.2	29.9	34.7		3%	-4%		-6%	-3%		16%	5%
Repair & maintenance costs (million €)	13.2	13.6	13.1	12.8	10.9	11.6	12.3	56.3	59.9	56.9	60.4	52.6	58.2	63.8		19.2	15.6	19.3	23.2	21.4	25.9		6%	-2%		10%	11%		21%	12%
Other variable costs (million €)	11.2	20.6	23.2	25.9	22.4	25.6	24.0	49.7	94.5	84.4	105.0	90.5	105.4	115.0		28.4	3.1	2.3	4.8	5.3	6.2		-6%	12%		9%	30%		16%	-3%
Other non-variable costs (million €)	45.9	36.7	34.8	34.6	27.6	27.3	31.0	141.5	112.2	105.3	93.2	79.4	85.3	84.5		18.7	16.3	17.3	20.2	18.1	20.2		13%	-10%		-1%	-18%		12%	3%
Annual depreciation costs (million €)	14.3	13.7		21.9	20.2	19.0	17.6	56.7	51.5		68.4	75.8	76.0	71.2									-7%	-1%		-6%	8%			
Opportunity cost of capital (million €)				1.36	0.42	1.40	1.16				4.03	1.51	5.55	4.63									-17%	10%		-17%	25%			
Tangible asset value (replacement) (million €)				136.2	126.0	117.9	109.9				403.2	459.0	466.4	437.0									-7%	-13%		-6%	-1%			
Investments (million €)			56.6	31.8	20.3		17.0			56.5	44.4	41.9		47.4										-53%			0%			
Gross Value Added (million €)	164.8	172.7	165.7	175.4	136.1	139.2	137.0	358.8	364.6	356.7	369.6	333.4	373.1	386.2		1.4	36.6	58.2	72.2	65.4	56.4		-2%	-14%		4%	7%		-14%	3%
GVA to revenue (%)	64.5	66.6	65.2	64.8	62.9	62.9	61.6	46.0	48.0	47.4	46.2	45.7	47.3	47.9		1.6	38.4	46.0	47.3	46.7	39.4		-2%	-4%		1%	3%		-16%	9%
Gross profit (million €)	38.4	51.6	52.5	56.9	40.0	42.5	37.2	83.1	79.1	88.7	99.1	86.9	111.1	100.2	-	28.1	7.3	21.1	30.7	25.0	12.8		-13%	-21%		-10%	10%		-49%	2%
Gross profit margin (%)	15.0	19.9	20.6	21.0	18.5	19.2	16.7	10.6	10.4	11.8	12.4	11.9	14.1	12.4	-	31.1	7.6	16.7	20.1	17.8	8.9		-13%	-12%		-12%	5%		-50%	68%
Net profit (million €)				33.6	19.4	22.2	18.4				20.7	- 0.3	20.4	12.7									-17%	-26%		-38%	-6%			
Net profit margin (%)				12	9	10	8				3	- 0	3	2									-17%	-21%		-39%	-16%			
GVA per FTE (labour productivity) (thousand €)	56	57	60	63	56	61	55	75	65	67	77	73	83	86		3	88	133	175	158	98		-0.088	-0.06277		3%	17%		-38%	-21%

Table 5.36 France: National fleet statistics and economic performance results by fleet segment.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(litre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
FRA OFR PS40XX	22	578	360	585	99,950	143,907	143,371	56,426	39.4	12,792	8.9			75.5	98				
FRA A27 DTS1824 °	135	665	33,892	1,061	50,135	129,804	123,240	47,204	38.3	10,664	8.7	- 3,511	- 2.85	55.0	71	- 3	Weak	19%	Improved
FRA A37 DTS2440 °	92	520	23,388	1,080	44,627	114,831	109,196	38,839	35.6	7,893	7.2	- 8,897	- 8.15	59.6	75	- 8	Weak	18%	Improved
FRA A27 DTS1218	168	462	36,496	1,446	20,723	81,207	82,745	39,432	47.7	9,120	11.0	669	0.81	65.7	85	3	Reasonable	209%	Improved
FRA A27 DFN1012	181	496	29,094	588	10,950	48,804	51,834	31,584	60.9	7,128	13.8	3,004	5.80	49.3	64	14	Reasonable	-35%	Deteriorated
FRA A27 DRB1218 °	100	303	16,021	818	15,426	34,885	49,546	24,980	50.4	6,396	12.9	1,396	2.82	61.3	82	6	Reasonable	815%	Improved
FRA A27 DTS40XX	9	183	2,538	576	28,749	53,323	45,299	18,583	41.0	5,046	11.1			74.0	102				
FRA A27 DFN1824	34	248	7,739	914	7,775	30,486	43,581	20,452	46.9	1,204	2.8	- 1,663	- 3.82	77.5	82	- 10	Weak	-161%	Deteriorated
FRA A27 DTS1012 °	182	306	28,588	1,155	10,940	39,554	41,271	19,929	48.3	5,195	12.6	552	1.34	48.1	65	3	Reasonable	-66%	Deteriorated
FRA A27 DFN2440	18	215	4,657	283	16,476	36,307	40,551	27,028	66.7	5,720	14.1	3,954	9.75	99.0	126	41	Reasonable		
FRA A27 HOK2440 °	14	161	3,494	520	8,968	20,564	38,638	23,216	60.1	8,334	21.6	7,114	18.41	92.5	144	98	High		
FRA A27 DFN1218 °	76	267	15,186	472	8,480	40,563	35,309	20,739	58.7	5,616	15.9	2,115	5.99	56.6	78	12	Reasonable	16%	Improved
FRA A27 TM40XX	3	119	615	113	52,870	46,518	27,989	14,780	52.8	6,777	24.2			67.3	124				
FRA A27 TM1824 °	34	148	8,218	573	20,240	34,245	26,486	9,875	37.3	1,540	5.8	- 1,720	- 6.49	56.2	67	- 8	Weak	-344%	Deteriorated
FRA A27 FPO1012	63	168	11,127	488	7,418	14,696	25,621	14,578	56.9	4,112	16.1	2,478	9.67	62.3	87	26	Reasonable	96%	Improved
FRA A27 DFN0010	310	238	31,109	643	3,677	19,143	23,207	13,610	58.6	3,437	14.8	1,312	5.65	42.7	57	12	Reasonable	-33%	Deteriorated
FRA A27 HOK0010	253	177	26,094	946	3,066	21,879	22,461	13,212	58.8	3,924	17.5	2,084	9.28	52.4	75	21	Reasonable	-24%	Deteriorated
FRA A27 FPO0010	262	264	30,633	295	7,570	21,201	22,139	13,760	62.2	3,835	17.3	1,968	8.89	37.5	52	19	Reasonable	-25%	Deteriorated
FRA A37 PS2440 °	17	17					20,696	16,096	77.8	6,831	33.0	4,820	23.29	552.1	959	34	High	237%	Improved
FRA A27 DRB1012	95	137	10,791	377	9,466	18,694	19,690	11,231	57.0	3,601	18.3	1,281	6.51	55.6	82	11	Reasonable	9%	Improved
FRA A27 PS1218 °	29	117	4,361	80	20,622	19,765	18,511	11,701	63.2	2,656	14.4	1,179	6.37	77.0	100	14	Reasonable	-49%	Deteriorated
FRA A37 DFN0612	509	323	22,636	2,023	952	6,838	15,356	10,765	70.1	3,170	20.6	1,594	10.38	23.5	33	19	High	-28%	Deteriorated
FRA A27 HOK1012	46	106	6,769	817	1,917	9,855	13,894	9,384	67.5	3,285	23.6	2,362	17.00	57.4	88	46	High	142%	Improved
FRA A27 PMP1012 °	49	85	7,259	113	14,455	9,222	10,555	6,087	57.7	1,471	13.9	52	0.49	54.5	72	2	Reasonable	-93%	Deteriorated
FRA A37 DTS1824 °	30	50	4,157	2,047	2,414	9,257	10,150	4,167	41.1	1,066	10.5	244	2.41	62.6	84	7	Reasonable	216%	Improved
FRA A27 MGO0010 °	141	56	7,668	3,330	351	2,894	9,415	5,868	62.3	2,765	29.4	1,295	13.75	55.2	104	17	High	441%	Improved
FRA A27 DTS0010 °	89	70	10,120	1,482	1,506	7,912	8,861	4,431	50.0	1,247	14.1	267	3.01	45.6	63	6	Reasonable	-27%	Deteriorated
FRA A27 MGP1218	13	47	2,316	868	2,057	5,518	8,722	4,202	48.2	1,370	15.7	480	5.50	59.7	89	12	Reasonable	458%	Improved
FRA A27 TM1218	12	52	2,632	480	5,702	7,843	8,659	4,383	50.6	1,112	12.8	521	6.02	62.9	84	16	Reasonable	-16%	Deteriorated
FRA A27 FPO1824 °	15	72	2,967	372	3,828	9,700	7,434	3,583	48.2	635	8.5	- 290	- 3.90	40.8	50	- 5	Weak	-171%	Deteriorated
FRA A27 PGP0010	83	92	8,931	759	876	4,189	7,113	4,390	61.7	1,470	20.7	898	12.63	31.8	48	27	High	72%	Improved
FRA A27 MGP1012 °	27	65	4,196	292	5,665	7,721	6,951	3,937	56.6	1,050	15.1	361	5.19	44.6	61	10	Reasonable	-57%	Deteriorated
FRA OFR HOK1218	15	62	3,073	964	1,338	6,674	6,134	2,328	37.9	667	10.9	114	1.85	27.0	38	4	Reasonable	130%	Improved

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(litre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
FRA A27 DRB0010	63	40	5,300	86	5,827	5,444	5,435	3,493	64.3	1,615	29.7	1,005	18.50	47.2	88	32	High	29%	Improved
FRA A37 PS1218 °	11	22	243	1,804	372	722	5,236	2,319	44.3	1,256	24.0	930	17.77	48.9	107	48	High	-25%	Deteriorated
FRA A27 PGO0010 °	92	83	5,128	15	20,232	3,225	5,172	3,661	70.8	1,280	24.7	656	12.69	28.5	44	18	High	17%	Improved
FRA A27 PMP0010	61	54	6,455	172	3,238	4,245	4,943	2,837	57.4	770	15.6	151	3.06	38.1	52	5	Reasonable	-66%	Deteriorated
FRA A37 PGP0612	99	78	5,978	1,558	506	3,668	4,515	3,105	68.8	883	19.6	541	11.98	28.6	40	28	High	20%	Improved
FRA A37 HOK0612	58	28	2,007	981	255	2,298	3,200	1,983	62.0	573	17.9	341	10.67	50.1	70	26	High	-32%	Deteriorated
FRA A27 PGP1012	14	26	2,254	865	610	2,661	2,925	1,618	55.3	402	13.7	115	3.93	47.1	63	8	Reasonable	-64%	Deteriorated
FRA A37 DFN0006	106	60	4,004	649	258	1,534	2,014	1,468	72.9	432	21.4	328	16.27	17.1	24	62	High	-34%	Deteriorated
FRA A37 FPO0612	52	37	3,717	678	348	2,447	1,966	1,208	61.4	248	12.6	18	0.92	26.2	33	2	Reasonable	-92%	Deteriorated
FRA A37 PS0612	11	22	386	618	240	460	1,898	1,474	77.7	576	30.3	496	26.12	41.3	68	111	High	69%	Improved
FRA OFR HOK0010	407		6,779		415	1,771	1,771												
FRA A37 DFN1218 °	19	22	944	743	135	1,180	1,660	749	45.1	8	0.5	- 230	- 13.88	33.8	34	- 15	Weak		
FRA A27 TBB1218	4		758	1,925	456	1,453	1,453												
FRA A37 FPO0006	75	38	2,999	611	222	2,584	1,447	909	62.8	162	11.2	93	6.40	19.4	24	27	Reasonable	-73%	Deteriorated
FRA OFR DTS1824	17		244		768	1,333	1,333												
FRA A37 PGP0006	47	34	1,864	983	125	1,175	1,256	884	70.3	230	18.3	189	15.03	19.3	26	92	High	-29%	Deteriorated
FRA OFR HOK1012	22		1,015		219	1,029	1,029												
FRA A37 PGO0006	47	29	1,548	693	69	390	969	818	84.4	236	24.3	190	19.56	19.8	28	78	High	-21%	Deteriorated
FRA A27 MGP0010	9	6	883	100	1,553	740	881	526	59.8	171	19.4	69	7.84	63.5	94	15	Reasonable	56%	Improved
FRA A37 PMP0612 °	22	20	1,871	718	201	1,109	855	505	59.1	78	9.1	- 9	- 1.03	21.9	26	- 1	Weak		
FRA OFR HOK1824 °	4	13	512	227	1,375	2,566	804	100	12.5	- 136	- 16.9			18.2	8				
FRA A37 PGO0612	55	39	1,275	2,971	43	261	751	456	60.7	30	4.0			11.0	12				
FRA A37 MGO0612 °	15	12	780	1,473	80	358	635	485	76.4	203	32.0	152	23.98	24.1	41	57	High	84%	Improved
FRA A37 HOK0006	14	6	229	4,592	7	51	341	223	65.3	57	16.7	42	12.25	28.9	39	53	High	14%	Improved
FRA A37 DRB0612 °	9	8	337	674	50	177	160	91	56.8	3	1.8			10.9	11				
FRA OFR FPO1218	2		282		51	98	98												
FRA OFR PGP0010	634		198		9	23	23												
FRA OFR PGP1012	10		36		5	23	23												
FRA OFR PGO0010	69		51		4	17	17												
FRA OFR FPO1012	3		20		5	9	9												
FRA OFR DFN0010	205		50		2	9	9												
FRA OFR FPO0010	299		17		1	2	2												
FRA OFR PS0010	26																		
FRA OFR DFN1012	51																		

Table 5.37 France: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)				Live weight of landings (tonne)				Average landed price (real) (€)			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Yellowfin tuna	68.7	94.5	85.9	100.8	39.1	44.1	41.8	55.3	1.8	2.1	2.1	1.8
European hake	59.2	66.8	75.4	95.2	23.6	27.8	32.1	41.4	2.5	2.4	2.4	2.3
Monkfishes nei	86.0	92.6	97.1	94.5	18.6	22.1	23.3	22.8	4.6	4.2	4.2	4.2
Common sole	97.9	91.3	86.6	78.6	8.2	7.9	8.3	7.7	12.0	11.5	10.4	10.2
Great Atlantic scallop	70.5	66.7	71.7	61.2	27.9	26.6	28.3	22.2	2.5	2.5	2.5	2.8
European seabass	56.4	54.4	57.1	51.3	5.3	5.3	5.4	4.4	10.6	10.2	10.5	11.7
Skipjack tuna	42.6	47.8	40.8	35.8	37.3	29.3	29.6	37.4	1.1	1.6	1.4	1.0
Norway lobster	44.4	32.4	32.4	35.3	4.5	3.1	3.1	3.3	9.8	10.6	10.4	10.8
Atlantic cod	25.1	31.0	35.6	32.2	8.4	11.7	13.1	12.2	3.0	2.7	2.7	2.6
Atlantic mackerel	21.1	14.0	25.1	30.9	16.2	21.1	18.8	22.3	1.3	0.7	1.3	1.4

5.9 GERMANY

Short description of the national fleet

Fleet capacity

The national fleet capacity continued to decline, with a total of 1 478 vessels, 404 of which were inactive, in 2015, having a combined gross tonnage (GT) of 56.5 thousand tonnes and engine power of 130.7 thousand kilowatts (kW). In 2015, the total number of vessels decreased by 44 compared to 2014. Almost all inactive vessels belong to the smallest length class (< 10m). In that length class about 25% of the registered vessels have reported no activity in 2015. The percentage of inactive vessels decreases with increasing length – in the 24-40m length class only one vessel was inactive and offered for sale.

Vessels which target blue mussels are not included in the analysis because they are defined as operating in the aquaculture sector and are therefore covered in the aquaculture report.

The German pelagic trawler fleet is excluded from the analysis except for capacity and weight of landings data as practically the entire segment is owned by one parent company. For confidentiality reasons the data cannot be published.

Fleet structure

In 2015 the German large scale fishing fleet (length >12m) consisted of 282 vessels (=19%), whereas 1196 vessels (=81%) were accounted for the small scale fleet (<12m).

Employment

Employment was estimated at 1 605 jobs in 2014, corresponding to 1253 FTEs.

Effort

About 105 thousand days were spent at sea in 2015, a slight decrease of 5% from 2014 (110 thousand days). The energy consumed in 2014 amounted to an estimated 38.1 million litres and was thus slightly higher (3%) than in 2013. Due to lower fuel prices the energy costs decreased from about €24.7 million in 2013 to €23.2 million in 2014.

German small-scale vessels operate almost exclusively in the Baltic Sea, whereas cutters (<500 GT) above 12m fish in the North Sea and in the Baltic Sea. German high seas trawlers operate mainly in the North Atlantic and Eastern Arctic area, but to some extent also in African and Southern Pacific waters.

Total Production

Total production shows a slightly increasing trend since 2012 with a weight of landings of 238 thousand tonnes in 2015. The main species are herring, cod, common shrimp, saithe and Greenland halibut. In terms of weight herring is by far the dominant species, whereas the highest revenue is generated through brown shrimp.

Economic results for 2014 and recent trends

National fleet performance

Overall the German non-pelagic fleet generated a net profit since 2010 (with the exception of 2011 when brown shrimp prices had dropped below a critical level). Its economic performance has only slightly decreased compared to 2013. Due to the available information on catches in 2015 and the low fuel prices the overall performance in 2015 is expected to be positive as well.

The total revenue of the non-pelagic fleet, including direct income subsidies, was estimated at €138.2 million for 2015. The increase of about €7.8 million was generated only by the large scale fleet, while revenues of the small scale fleet dropped by €0.8 million or 10%. Direct income subsidies accounted for less than €2 million (1.3% of revenues) in 2014.

Total operating costs of the non-pelagic fleet decreased slightly mainly due to a 6% decrease in energy costs. When including capital costs, total costs amounted to €128 million, exceeding total revenue and generating a net profit (excluding direct income subsidies) of €6.4 million.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €71.0 million, €23.8 million and €6.4 million, respectively. GVA decreased by 13%, gross profit and net profit decreased by 31% and 52%, respectively, compared with the considerably more profitable year 2013.

The (depreciated) replacement value of the German fleet was estimated at €83 million and investments amounted to €24.3 million, a 14% decrease on 2013.

Overall, the cost structure has remained relatively constant over the recent years; some relative decrease in depreciation costs coincided with relative increases in labour costs.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 17.6%. Net profit margin was estimated at 4.8%, about half of the rate for 2013.

The Rate of Return on Fixed Tangible Assets (RoFTA) remained positive at 8%, which is higher than in previous years, except for 2013.

Labour productivity (GVA/FTE) for 2014 was estimated at €57 000/FTE.

Fuel consumption per landed tonne has followed an overall decreasing trend since 2008 and was estimated at 168 litres per tonne landed for 2014.

The weight of landings per unit of effort (in days at sea) has followed an increasing trend since 2008 and was again estimated at more than 2 tonnes/DAS in 2014.

All the aforementioned indicators exclude the pelagic fleet for confidentiality reasons.

Drivers affecting the economic performance trends

As the German fleet is dominated by trawlers, the fuel price has always a major impact on the overall economic performance. However, fuel prices decreased only slightly from 2013 to 2014, thus the effect of fuel prices was only marginal.

Prices for brown shrimp always have a major influence on the performance of the national fleet, as it is the most important species in terms of value. A slight decrease of brown shrimp prices from 2013 to 2014 was a major reason for the decreased total value. Prices for other species showed a slightly increasing trend, but could not entirely compensate for the dominant influence of brown shrimp.

The MSC certification gains more and more importance for fish prices. Certificates for cod, saithe, haddock and herring fisheries in the North Sea and in Norwegian waters could be extended or re-approved. Due to the mackerel dispute between the EU, Norway, Iceland and Faroer the certification was not achieved in 2014.

Markets and Trade

Brown shrimp as most important species is mainly landed in Germany, to some extent also in the Netherlands. The wholesale market is dominated by two companies which have a huge influence on the price. However, as fishers formed a producer organisation to gain market power the detrimental results of 2011 did not repeat.

As the plaice stock and quota reached an all-time high, high supplies affected sales prices. Prices for plaice stabilised at a low level but did not again reach the intervention threshold, like in 2013. The sole fishery is being dominated by vessels using the pulse technology which is more efficient with respect to both catch rates and fuel consumption than the traditional gear. The North Sea saithe fishery suffered from decreased quota while prices remained stable.

Due to the lack of a management plan Baltic herring did not qualify for the MSC certificate, which hampered sales.

Pelagic fisheries in Mauritanian and Moroccan waters were performed only temporarily and were ceased due to economic inefficiency. In 2014 no German vessel was involved in South Pacific fishery.

Management instruments

The predominant management measure was TAC. Effort restrictions due to management plans were regarded counter-productive in the case of the North Sea cod management plan. kWdays-limitations for fisheries targeting cod and therefore using larger meshes were a limiting factor. In order to fully exploit the cod quota, cod fishery had to be continued as flatfish fishery with smaller meshes. According to the industry, this increased discards considerably.

TACs and quotas, status of key stocks

Brown shrimp, the most important species of the German fleet, is not a TAC species. Catches depend mainly on abundance, effort and prices. North Sea herring, saithe, plaice, haddock, sole and *Nephrops* are managed at MSY level. The saithe quota decreased slightly, while plaice was further increased. The fishing mortality of North Sea cod is still above MSY, and the recovery did not occur as quick as expected. There are still high discard rates for cod which might hamper the recovery.

In the Baltic Sea herring and sprat were managed at MSY level. Baltic herring fisheries were successful. The quota was almost fully exploited. The Eastern cod quota was exploited at less than 15%. As in previous years the quality of Baltic cod was low due to low weights. The Eastern Baltic cod TAC is in line with the precautionary approach, but due to a missing biological advice no MSY level can be defined.

Performance results of selected fleet segments

The German cutter fleet (below 500 GT) is dominated by beam trawlers and, to a lesser extent, demersal trawlers.

Beam trawlers

German beam trawlers operate in the North Sea. Vessels up to 27m target almost exclusively brown shrimp. There are a few large beam trawlers targeting mainly flatfish. Thus the beam trawler segment 24-40m contains both types of vessels.

The owners of the shrimp beam trawlers are usually also the skippers. They operate in coastal waters: smaller vessels with shallow draught can fish in the tide-ways and the Wadden area between the islands and the coast. These vessels depend on the tide and return to the port daily. These vessels usually do not fish in winter as the target species migrates to deeper areas. Larger vessels operate in greater depths and can also fish year-round. They stay at sea for several days.

Shrimp prices and fuel costs are the crucial elements for the economic performance of shrimp beam trawlers. 2014 was a satisfactory year. It was the first year of the new producer organisation being in operation. Both prices and landings remained at a level similar to the previous year, and so were the costs. The net profit of beam trawlers up to 24m was about €6 million in 2014.

Flatfish beam trawlers are owned and operated mainly by Dutch fishers. They target mainly sole, plaice, and turbot. All of them are equipped with pulse gear. The catch is landed exclusively in the Netherlands. Though the value of landings decreased, the segment was still profitable in 2014. The net profit of beam trawlers larger than 24m was about €0.6 million in 2014. These vessels have the highest energy consumption per landed tonne (1.270l/t).

Demersal trawlers

The German demersal trawler fleet can be divided into high seas trawlers >45m, large cutters between 23 and 45m and smaller cutters below 23m. The high seas trawlers target mainly Greenland halibut, cod and redfish in Eastern Arctic and Greenland waters, the large cutters target saithe, cod, hake and haddock, the ones around 24m (eurocutters) also fish *Nephrops*. These vessels fish almost exclusively in the North Sea and Skagerrak. Some eurocutters shift temporarily to shrimp beam trawling or pelagic trawling for herring. The vessels 20m and below almost exclusively fish in the Baltic Sea, targeting mainly cod, flatfish and – seasonally switching to pelagic gear – herring and sprat.

This indicates that the DCF length thresholds divide the demersal fleet into segments with heterogeneous fishing patterns. Thus the performance indicators in most cases represent a mixture of different fisheries. The negative net profit of demersal trawlers >40m (-€1.2 million) only partly reflects the economic performance as most of these vessels belong to vertically integrated firms. This applies also to most of the larger (23-45 m) demersal cutters (net profit of the 24-40m segment = €0.9 million). The vessel profits are estimated upon internal prices. That means that the profit is made at an advanced stage of the value chain. One new high seas demersal trawler was built in 2015 and two more are announced for 2017. Companies would not invest if the fishery were not regarded profitable.

For the segments with medium sized demersal trawlers (18-24m) positive net profits were determined (€1.6 million), but as described before, this is a mixture of North Sea and Baltic Sea vessels. For the vessels below 18m negative net profits were calculated (-€0.4 million).

Vessels using fixed nets and other passive gear

Larger fixed netters and potters (between 26 and 31 m) operated almost exclusively in Western waters, targeting anglerfish or Red crab. For the related segment net losses of €1.7 million were determined. Smaller vessels using passive gear almost exclusively operate in the coastal areas of the Baltic Sea. Main target species are cod, herring, and to some extent freshwater species in the brackish Bodden areas. While the segment of fixed netters 12-18m achieved a slightly positive net profit (€150 thousand), net losses were calculated for the 10-12m length class (€850 thousand). The passive gear segment with vessels below 10m achieved a net profit of €850 thousand.

Performance by fishing activity

Large-scale fleet

In 2014, 302 active vessels were assigned to the large-scale fleet. These vessels mainly operate in the North Sea and the Baltic Sea, while the large trawlers fish also in the North Atlantic, Eastern Arctic and in distant areas. The cutters (<500 GT) targeting mainly brown shrimp, cod and saithe while the high seas trawlers fish herring, cod, Greenland halibut and other small pelagic species like mackerel.

The value of landings of the large scale fleet decreased from 2013 to 2014, but increased in 2015. The weight of landings shows an increasing trend. Cost variables showed diverging developments, but decreased slightly in total. Though this did not fully compensate for the decreased in income from landings, both gross and net profit remained positive and were at a similar level as in previous years, leaving aside the rather profitable year 2013.

The number or people employed in the large scale fleet decreased slightly. So did the gross value added by full time equivalent.

It has to be born in mind that for confidentiality reasons these observations refer only to the non-pelagic fleet. Only the weight of landings includes the pelagic segment.

Small-scale fleet

In 2014, 817 active vessels were assigned to the small-scale fleet according to the European definition (vessels under 12m using passive gears). These vessels almost exclusively operate in the Baltic Sea, targeting mainly herring and cod and also freshwater species which are not managed under a TAC regime.

Weight and value of landings of the small-fleet decreased from 2013 to 2014 and recovered only slightly in 2015. Even though the total effort increased slightly in terms of days at sea, costs showed a constant or slightly decreasing trend. In 2014 the small scale fishery ended up with a gross profit of €1.5 million and a net profit of almost zero. This was for the first time since 2008 that the net profit was not negative.

The number of people employed remained stable

Projections for 2015 and outlook

Projections for 2015 show that a small decrease in vessels (-4%) and effort was combined with an increase in landed weight (+5%) and landed value (+6%). A large drop in fuel costs (-24%) lead to a improvements in many economic indicators including gross and net profits (+52% and +195% respectively).

Projections for 2016 show relatively stable economic performance, with landed weight decreasing by 5% and no change in landed value. Fuel costs continue to decline (-15%) but these are offset by increases in other variable costs. Gross and net profit margins remain the same as 2015 at 26% and 13% respectively.

There are a number of performance drivers in 2015 that can be explored in more detail. One high seas demersal trawler that had left the German fleet was replaced by a newly constructed trawler in 2015. Two more demersal trawlers are intended to be replaced by new vessels in 2017. Modernisation of on-board equipment was continued as in preceding years.

Audits on MSC certified fisheries (cod, saithe, haddock and herring in the North Sea and Norwegian waters incl. Svalbard) were successful, thus all certificates were extended. Due to the dispute on Atlantic mackerel quota the re-certification of the related fishery could not be achieved even in 2015. The certification procedure for blue whiting was initiated.

High seas trawlers achieved positive results in the cod fishery in Norwegian waters, Svalbard and the Barents Sea. Full exploitation of the quota required fishing until December, 31. Saithe fishery of high seas trawlers in Norwegian waters took place from February to April and turned out to be mediocre. Greenland halibut fisheries in Eastern and Western Greenland waters were more efficient compared to 2014. The Greenland cod quota could be fully exploited. Two vessels performed demersal redfish fisheries in Eastern Greenland waters. Fisheries agreements with Greenland and Norway remain a backbone of the performance of the German high seas demersal fleet.

High seas pelagic fisheries on herring, mackerel, horse mackerel and blue whiting were successful. One vessel performed pelagic fisheries in Moroccan waters in the second half of the year. It was efficient due to quota arrangements with the Netherlands and Ireland.

In 2015 the landing obligation became effective for pelagic fisheries. Non-marketable catch was landed for use as animal feed.

Cutter fisheries further benefitted from increased quota and stock recovery. More than 50% of the targeted stocks in the Northeast Atlantic (including North Sea and Baltic Sea) were managed at MSY level.

The plaice stock further increased, so did the quota. With increased marketing effort the additional catch could be sold at reasonable price levels. The cut in saithe quota could not entirely be compensated by slightly higher prices. The North Sea cod recovery is expected to lead to achieve sustainability target in the very near future. The cessation of the effort limitation is expected as well. It has been criticised for setting incentives to use smaller meshes and thus increase discards.

The brown shrimp fishery in the North Sea performed less successful than in 2013 and 2014. Landings decreased, mainly due to a weak first half of the year, which could not be made up by increasing catches in the second half. Prices remained stable, but could not compensate for lower catches.

The Baltic cod fishery improved in comparison with 2015, and the quota exploitation was much higher than in 2014. The Eastern cod stock was classified as data poor stock which led to a withdrawal of the MSC certificate which will impede the marketing of the catch.

Plaice catches in the Baltic Sea increased and a considerable extent had to be discarded. Herring fisheries in the Baltic developed favourably, and the outlook is also positive.

The industry expects increased problems from an extension of the landing obligation. The different treatment of fisheries leads to landings of undersize fish by one fishery and discards of the same species by another fishery. This is expected to hamper the recovery of stocks. Furthermore, serious problems arising from lacks of quota on choke species are expected.

Data issues

Capacity, logbook and landings data are derived from sources which are covered by different legislations. All these data are available exhaustively. That means that all capacity, landings and effort data are represented at 100%.

The only exception is the group of vessels <8m without logbook obligation. These vessels are sampled for effort data. The remaining variables (cost, employment, fuel consumption) are estimated based on results from an accountants' network and from surveys with questionnaires.

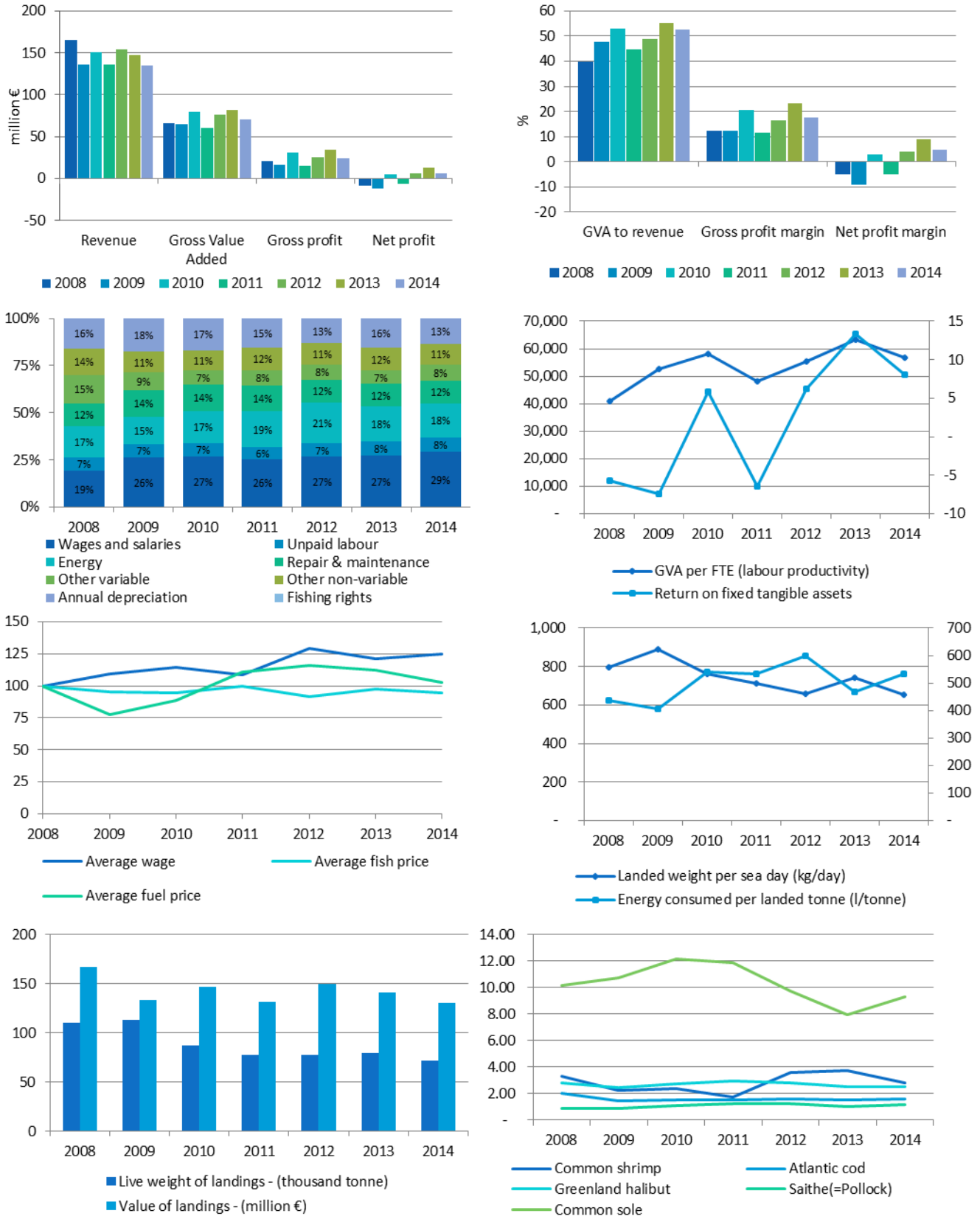
All data on the high seas fleet were collected exhaustively (100%).

The data basis for fleet segment level estimations has become broad over the years. All fleet segments with major contribution to the total catches of the German fleet have been sampled with satisfactory response rates. As segments are not necessarily homogeneous, the results can be quite variable which is reflected in higher coefficients of variation. Some leaps in time series might be due to an improvement in data coverage, with the latest data being most reliable as the raising procedure is based on more comprehensive information. The improvement of the estimation procedure is an on-going process.

The German fishing fleet contains a small number of pelagic vessels which are owned mainly by one company and therefore, for confidentiality reasons, it is impossible to publish this data by segment. Clustering the pelagic vessels with other vessels is not feasible as the pelagic vessels have unique characteristics that would completely bias "pure" segments when clustered. Therefore, the only pelagic fleet data in this report is capacity and weight of landings data, which is public, so please consider this when interpreting national totals; the German pelagic fleet accounts for a substantial part of the national fleets' costs and earnings.

Except for capacity and weight of landings no data for the pelagic fleet could be published due to confidentiality issues. However, all data have been collected. As in previous years, this affects regional analyses. The pelagic fleet mainly operates in the North Sea and North Atlantic (herring, mackerel, blue whiting). Data on pelagic fisheries in the Baltic are hardly affected, as they are performed on a seasonal basis, and vessels are assigned to the DTS segment, which reflects their major activity during the year.

Vessels which targeted blue mussels were excluded from the analysis because they are defined as operating in the aquaculture sector. Not all of the participating vessels can be identified by the first gear entry in the fleet register as some vessels are using beam trawls. Instead, the relative catch of blue mussel was used.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.9 Germany: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.38 Germany: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	1,849	1,810	1,745	1,654	1,556	1,530	1,508		-1%	-11%
Number of Inactive vessels_ms	(#)	512	506	497	437	410	399	397		-1%	-14%
Vessel tonnage	(thousand GT)	38.1	39.8	36.9	36.6	34.6	33.6	30.7		-9%	-16%
Engine power	(thousand kW)	131.6	158.3	127.5	125.8	117.5	114.8	110.7		-4%	-14%
Average vessel age	(year)	27	28	28	29	29	30	30		0%	5%
Average vessel length	(metre)	9	9	9	9	9	9	9		0%	0%
Enterprises with one vessel	(#)	939	897	860	805	753	732	718		-2%	-14%
Enterprises with 2 to 5 vessels	(#)	345	340	329	312	289	296	289		-2%	-9%
Enterprises with more than 5 vessels	(#)	9	8	9	11	11	9	9		0%	-5%
FTE	(#)	1,615	1,238	1,365	1,258	1,372	1,281	1,253		-2%	-8%
Total employed	(person)	2,068	1,529	1,744	1,639	1,752	1,647	1,605		-3%	-7%
Days at sea	(thousand day)	138	128	115	109	119	107	110		3%	-8%
Fishing days	(thousand day)	143	133	113	113	124	112	115		2%	-7%
Number of fishing trips	(thousand)	48	44	40	35	37	35	34		-2%	-14%
Energy consumption	(million litre)	48.3	46.1	47.1	41.6	46.6	37.2	38.1		3%	-14%
Live weight of landings	(thousand tonne)	110.2	113.6	87.3	78.1	77.9	79.3	71.7		-10%	-21%
Value of landings	(million €)	167.4	134.0	147.0	131.4	149.7	140.8	130.9		-7%	-10%
Income from landings	(million €)	163.0	133.0	145.5	131.8	152.0	143.5	131.4		-8%	-9%
Other income	(million €)	2.89	3.44	4.85	3.93	2.62	3.61	3.20		-11%	-10%
Direct income subsidies	(million €)	0.88	1.16	1.32	1.73	1.32	1.13	1.80		60%	43%
Wages and salaries of crew	(million €)	33.43	38.35	38.61	36.36	39.62	36.27	37.53		3%	1%
Unpaid labour value	(million €)	12.22	10.13	10.19	8.66	10.87	10.64	9.73		-8%	-7%
Energy costs	(million €)	28.62	21.09	24.64	27.27	31.97	24.69	23.16		-6%	-12%
Repair & maintenance costs	(million €)	20.42	20.34	20.06	19.38	18.24	15.71	15.12		-4%	-21%
Other variable costs	(million €)	26.48	13.52	10.74	11.40	11.59	9.62	10.74		12%	-23%
Other non-variable costs	(million €)	24.09	16.36	15.35	17.21	17.08	15.83	14.57		-8%	-17%
Annual depreciation costs	(million €)	27.40	25.42	24.52	22.04	19.63	21.05	17.04		-19%	-27%
Opportunity cost of capital	(million €)	1.39	3.61	1.62	0.11	- 0.54	- 0.03	0.30		1101%	-71%
Tangible asset value	(million €)	120.6	119.9	106.7	102.5	91.1	99.8	83.2		-17%	-22%
Investments	(million €)	20.0	26.9	23.3	26.0	21.6	28.2	24.3		-14%	0%
Financial position	(%)	68.0	68.0	91.0	105.0	102.0	74.0	69.0		-7%	-19%
Gross Value Added	(million €)	66.2	65.1	79.5	60.5	75.7	81.3	71.0		-13%	-1%
GVA to revenue	(%)	39.9	47.7	52.9	44.6	49.0	55.2	52.8		-4%	9%
Gross profit	(million €)	20.6	16.6	30.7	15.5	25.3	34.4	23.7		-31%	0%
Gross profit margin	(%)	12.4	12.2	20.5	11.4	16.3	23.4	17.6		-24%	10%
Net profit	(million €)	- 8.2	- 12.4	4.6	- 6.7	6.2	13.3	6.4		-52%	1287%
Net profit margin	(%)	- 4.9	- 9.1	3.1	- 4.9	4.0	9.1	4.8		-47%	1089%
GVA per FTE	(thousand €)	41	53	58	48	55	63	57		-11%	7%
Return on fixed tangible assets	(%)	- 6	- 7	6	- 6	6	13	8		-40%	719%

Table 5.39 Germany: National fleet statistics and economic performance results based on fleet segment level data.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	1348	1311	1260	1227	1153	1142	1119	*1,073*	*1,068*		-4%	0%
Total employed	(person)	2068	1529	1744	1639	1752	1647	1605	*1,534*	*1,582*		-4%	3%
FTE	(#)	1,615	1,238	1,365	1,258	1,372	1,281	1,253	*1,166*	*1,134*		-7%	-3%
Days at sea	(day)	138,159	127,891	114,955	109,204	118,303	107,114	109,940	*105,225*	*100,455*		-4%	-5%
Energy consumption	(thousand litres)	48,301	46,106	47,116	41,600	46,577	37,185	38,125	*37,150*	*40,315*		-3%	9%
Live weight of landings	(tonne)	257,992	228,458	220,631	208,020	183,508	218,988	226,785	*238,488*	*226,524*		5%	-5%
Value of landings	(thousand €)	167,439	133,972	146,978	131,380	153,626	145,323	130,617	*138,819*	*138,428*		6%	0%
Income from landings	(thousand €)	162,960	132,955	145,483	131,804	152,001	143,499	131,389	*135,132*	*137,464*		3%	2%
Other income	(thousand €)	2,886	3,440	4,855	3,935	2,621	3,607	3,202	*2,896*	*2,970*		-10%	3%
Wages and salaries of crew	(thousand €)	33,425	38,353	38,613	36,363	39,623	36,269	37,535	*36,415*	*36,527*		-3%	0%
Unpaid labour value	(thousand €)	12,221	10,129	10,186	8,664	10,865	10,636	9,734	*9,697*	*9,694*		0%	0%
Energy costs	(thousand €)	28,623	21,094	24,635	27,266	31,972	24,689	23,159	*17,624*	*14,963*		-24%	-15%
Repair & maintenance costs	(thousand €)	20,424	20,337	20,060	19,383	18,242	15,712	15,371	*14,858*	*15,708*		-3%	6%
Other variable costs	(thousand €)	26,479	13,523	10,745	11,399	11,588	9,622	10,736	*9,410*	*11,175*		-12%	19%
Other non-variable costs	(thousand €)	24,087	16,364	15,348	17,211	17,081	15,828	14,566	*14,406*	*15,175*		-1%	5%
Annual depreciation costs	(thousand €)	27,404	25,417	24,525	22,039	19,633	21,047	17,037	*17,144*	*18,584*		1%	8%
Opportunity cost of capital	(thousand €)	1,310	3,212	1,531	106	- 503	- 27	283	*299*	*323*		5%	8%
Tangible asset value (replacement)	(thousand €)	113,900	106,713	100,730	96,360	85,273	90,088	78,736	*75,505*	*81,777*		-4%	8%
Gross Value Added	(thousand €)	66,233	65,077	79,548	60,481	75,740	81,256	70,760	*81,730*	*83,413*		16%	2%
Gross profit	(thousand €)	20,586	16,595	30,749	15,454	25,252	34,351	23,492	*35,618*	*37,192*		52%	4%
Net profit	(thousand €)	- 8,128	- 12,034	4,693	- 6,690	6,123	13,331	6,171	*18,175*	*18,285*		195%	1%

Table 5.40 Germany: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		SSF							LSF												
		2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	961	939	903	883	852	832	817	387	365	357	344	301	310	302		-2%	-9%		-3%	-12%
Vessel tonnage	(thousand GT)	2.6	2.6	2.5	2.4	2.3	2.2	2.2	61.2	32.9	60.1	59.6	56.8	54.2	54.4		-1%	-10%		0%	0%
Engine power	(thousand kW)	23.8	23.9	23.4	22.6	22.7	22.2	22.4	118.8	95.3	117.9	114.8	105.5	103.0	103.8		1%	-3%		1%	-5%
FTE	(#)	790	464	654	664	668	597	608	825	774	711	594	704	684	645		2%	-5%		-6%	-10%
Total employed	(person)	1,031	559	847	869	876	777	798	1,037	970	897	770	876	870	807		3%	-3%		-7%	-11%
Days at sea	(thousand day)	88.6	79.1	70.4	73.3	75.6	66.5	69.8	49.6	48.8	44.6	35.9	42.7	40.6	40.2		5%	-8%		-1%	-8%
Fishing days	(thousand day)	93.6	84.4	69.6	78.1	81.3	71.4	74.4	49.0	48.4	43.0	34.5	42.1	40.6	40.2		4%	-7%		-1%	-6%
Number of fishing trips	(thousand)	23	19	17	17	17	15	14	25	25	23	18	21	20	19		-5%	-19%		-1%	-11%
Energy consumption	(million litre)	1.7	1.5	1.1	1.2	1.4	1.1	0.9	46.6	44.6	46.0	40.4	45.2	36.1	37.3		-19%	-35%		3%	-14%
Live weight of landings	(thousand tonne)	12.2	9.6	7.9	6.5	8.0	8.1	7.2	245.8	104.0	212.8	201.5	175.5	210.9	219.6		-12%	-18%		4%	15%
Value of landings	(million €)	11.8	8.4	8.3	7.8	9.0	8.8	8.1	155.6	125.6	138.7	123.6	144.6	136.5	122.5		-8%	-10%		-10%	-11%
Income from landings	(million €)	11.6	8.3	8.2	7.7	9.1	8.6	7.9	151.3	124.7	137.3	124.1	143.0	134.9	123.5		-8%	-11%		-8%	-9%
Other income	(million €)	0.5	0.8	0.9	1.4	0.8	0.5	0.7	2.4	2.7	4.0	2.6	1.8	3.1	2.5		34%	-17%		-19%	-8%
Direct income subsidies	(million €)	0.14	0.18	0.32	0.55	0.27	0.45	0.70	0.74	0.98	1.00	1.19	1.06	0.67	1.10		55%	120%		63%	17%
Wages and salaries of crew	(million €)	1.5	2.4	1.4	1.9	1.6	1.8	1.3	31.9	35.9	37.2	34.5	38.0	34.5	36.3		-31%	-29%		5%	3%
Unpaid labour value	(million €)	1.7	1.1	1.0	0.9	1.4	1.4	1.1	10.5	9.0	9.2	7.8	9.5	9.3	8.7		-21%	-14%		-7%	-6%
Energy costs	(million €)	1.3	0.9	0.9	0.9	1.2	1.0	0.8	27.3	20.2	23.8	26.4	30.8	23.7	22.4		-20%	-24%		-6%	-12%
Repair & maintenance costs	(million €)	2.0	2.1	1.3	1.7	1.3	1.3	1.3	18.4	18.2	18.8	17.7	17.0	14.5	14.1		2%	-21%		-3%	-19%
Other variable costs	(million €)	1.5	1.5	1.4	1.1	1.6	2.2	0.9	25.0	12.0	9.3	10.3	10.0	7.4	9.9		-61%	-45%		34%	-20%
Other non-variable costs	(million €)	2.4	2.0	1.7	2.2	2.4	1.8	1.9	21.7	14.3	13.7	15.0	14.7	14.0	12.7		3%	-10%		-9%	-18%
Annual depreciation costs	(million €)	1.8	1.8	1.9	1.7	1.6	1.5	1.4	25.6	23.6	22.6	20.3	18.1	19.6	15.6		-2%	-16%		-20%	-28%
Opportunity cost of capital	(million €)	0.10	0.25	0.12	0.01	- 0.04	- 0.00	0.02	1.21	2.96	1.41	0.10	- 0.46	- 0.03	0.26		1268%	-68%		1139%	-70%
Tangible asset value	(million €)	8.5	8.3	8.1	7.8	7.1	6.7	6.6	105.4	98.4	92.6	88.6	78.2	83.4	72.2		-3%	-15%		-13%	-21%
Investments	(million €)	2.9	4.4	3.6	2.8	2.4	2.5	2.8	17.1	22.5	19.8	23.1	19.2	25.7	21.5		12%	-10%		-16%	1%
Gross Value Added	(million €)	4.9	2.5	3.9	3.1	3.5	2.8	3.8	61.3	62.6	75.7	57.4	72.2	78.4	67.0		33%	10%		-15%	-1%
GVA to revenue	(%)	40.7	27.3	42.5	34.0	35.5	31.2	44.1	39.9	49.2	53.6	45.3	49.9	56.8	53.1		41%	25%		-6%	8%
Gross profit	(million €)	1.7	- 1.1	1.5	0.3	0.5	- 0.3	1.4	18.9	17.7	29.3	15.2	24.7	34.7	22.0		533%	243%		-36%	-6%
Gross profit margin	(%)	14.1	- 12.3	16.0	3.0	5.5	- 3.7	16.9	12.3	13.9	20.7	12.0	17.1	25.1	17.5		562%	348%		-30%	4%
Net profit	(million €)	- 0.2	- 3.1	- 0.6	- 1.5	- 1.0	- 1.8	- 0.0	- 8.0	- 8.9	5.3	- 5.2	7.1	15.1	6.2		100%	100%		-59%	581%
Net profit margin	(%)	- 1.4	- 34.6	- 6.8	- 16.3	- 9.8	- 19.7	- 0.0	- 5.2	- 7.0	3.8	- 4.1	4.9	11.0	4.9		100%	100%		-55%	782%
GVA per FTE	(thousand €)	6.2	5.3	5.9	4.6	5.3	4.8	6.2	74.3	80.9	106.4	96.7	102.6	114.6	103.8		30%	16%		-9%	8%

Table 5.41 Germany: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(litre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
DEU A27 DTS40XX	7	141	1,613	590	21,201	35,189	35,539	17,121	48.2	4,233	11.9	-1,189	-3.34	91.4	121.4	-4	Weak	69%	Improved
DEU A27 TBB1218	117	144	15,592	624	8,389	23,332	24,576	15,336	62.4	6,334	25.8	4,103	16.69	62.5	106.5	45	High	15%	Improved
DEU A27 TBB1824	63	115	9,184	795	6,668	19,213	19,592	11,203	57.2	4,540	23.2	2,010	10.26	57.9	97.4	19	High	98%	Improved
DEU A27 DTS2440	12	51	2,352	481	11,690	16,950	17,666	8,943	50.6	3,099	17.5	940	5.32	114.6	175.3	9	Reasonable	352%	Improved
DEU A27 TBB2440 °	9	38	1,562	1,270	2,866	9,254	9,153	4,414	48.2	2,010	22.0	645	7.05	63.2	116.2	12	Reasonable	3%	Stable
DEU A27 DTS1824	17	42	2,797	370	6,470	8,726	8,942	5,066	56.7	2,350	26.3	1,602	17.91	64.7	120.6	38	High	168%	Improved
DEU A27 PG0010	750	565	63,983	133	4,571	5,954	6,185	3,161	51.1	1,877	30.4	850	13.75	2.3	5.6	19	High	211%	Improved
DEU A27 DFN2440 °	6	63	1,285	1,220	1,154	5,095	4,685	2,230	47.6	-1,001	-21.4	-1,742	-37.19	51.3	35.4	-53	Weak	-26%	Deteriorated
DEU A27 DTS1218	29	22	2,680	210	4,268	2,632	3,094	1,513	48.9	239	7.7	-174	-5.61	57.9	68.8	-8	Weak	27%	Improved
DEU A27 PG1012	67	43	5,801	99	2,584	2,144	2,385	620	26.0	-429	-18.0	-855	-35.82	24.4	14.4	-43	Weak	-80%	Deteriorated
DEU A27 DFN1218	10	12	814	94	725	1,072	1,050	665	63.3	271	25.8	174	16.57	32.9	55.4	37	High	-37%	Deteriorated
DEU A27 DTS1012 °	11	7	931	121	890	637	976	274	28.1	-101	-10.3	-208	-21.30	53.5	39.1	-48	Weak	-38%	Deteriorated
DEU A27 TBB1012 °	13	10	1,346	535	143	419	748	215	28.8	69	9.2	14	1.88	14.6	21.5	7	Reasonable	-3%	Stable
DEU A27 TM40XX °	8				155,166														

Table 5.42 Germany: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (million €)								Live weight of landings (thousand tonne)								Average landed price (real) (€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
Common shrimp	58.64	38.99	43.26	29.91	58.80	60.01	44.69	*40.02*	17.90	17.31	18.38	17.04	16.36	16.16	15.76	*13.93*	3.28	2.25	2.35	1.76	3.59	3.71	2.84	*2.87*
Atlantic cod	34.69	26.52	29.30	25.22	29.84	22.00	24.19	*27.46*	17.39	18.63	19.48	16.38	18.88	14.54	15.22	*15.56*	2.00	1.42	1.50	1.54	1.58	1.51	1.59	*1.76*
Greenland halibut	17.77	16.02	19.56	22.62	18.19	14.77	14.26	*17.80*	6.37	6.53	7.12	7.67	6.44	5.88	5.60	*5.72*	2.79	2.45	2.75	2.95	2.82	2.51	2.54	*3.11*
Saithe(=Pollock)	14.33	13.92	14.28	14.47	11.62	11.25	10.44	*10.86*	16.55	15.73	13.04	11.63	9.43	10.90	8.90	*8.42*	0.87	0.88	1.10	1.24	1.23	1.03	1.17	*1.29*
Common sole	5.59	6.23	6.83	4.28	4.41	4.56	6.00	*7.86*	0.55	0.58	0.56	0.36	0.45	0.57	0.64	*0.77*	10.19	10.71	12.14	11.90	9.77	7.99	9.30	*10.20*
European plaice	6.39	4.48	5.31	5.66	5.68	6.24	5.51	*8.24*	3.41	3.26	4.10	4.27	4.34	5.29	4.63	*5.78*	1.87	1.37	1.29	1.33	1.31	1.18	1.19	*1.43*
Anglerfishes	3.24	2.04	3.04	2.83	1.98	3.00	3.40	*3.02*	0.74	0.63	0.64	0.47	0.63	0.74	0.84	*0.86*	4.40	3.25	4.73	6.03	3.12	4.04	4.04	*3.52*
Atlantic herring	6.32	6.25	4.65	3.28	3.70	5.23	3.01	*2.75*	46.66	37.45	29.56	37.02	51.21	71.84	53.42	*67.12*	0.14	0.17	0.16	0.09	0.07	0.07	0.06	*0.04*
Atlantic redfishes nei	0.04	0.08	0.06	3.42	4.22	2.37	2.40	*2.90*	0.05	0.11	0.06	3.97	3.93	3.20	3.32	*3.18*	0.81	0.73	1.08	0.86	1.08	0.74	0.72	*0.91*
Norway lobster	1.54	1.78	2.35	3.99	2.11	2.34	2.24	*2.58*	0.29	0.43	0.40	0.57	0.40	0.43	0.43	*0.44*	5.39	4.17	5.83	7.02	5.32	5.45	5.28	*5.91*

5.10 GREECE

Short description of the national fleet

Fleet capacity

In 2014, the Greek fishing fleet consisted of 14 755 registered vessels (of which, 13 600 are active), with a combined gross tonnage of 72 thousand GT and a total power of 431 thousand kW. The average vessel age is 28 years. The overall capacity of the Greek fleet has a falling trend between 2008 and 2014. The size of the Greek fishing fleet decreased, with the number of vessels falling by 11% while total tonnage and power also decreased by 10%. The main factor causing the fleet to decrease was the implementation of the fisheries policy to reduce the number and capacity of vessels, according to the Multiyear Orientation Programs for the Greek fishing fleet. Also, it is important to mention that the sector faces ageing of the population without any attractive motive for successors to stay in the business.

Fleet structure

The majority of the active vessels (12 762) are small-scale vessels (less than 12 meters) with a combined gross tonnage of 24.8 thousand GT and a total power of 238.3 thousand kW. On the other hand, there are 838 large-scale vessels (larger than 12 meters) with a combined gross tonnage of 44.1 thousand GT and a total power 158.5 thousand kW.

Employment was estimated at 23 232 jobs that correspond to 20 780 FTEs with a very low average wage per FTE and employed (€6.8 and €6.1 thousand, respectively).

Effort

In 2014 the Greek fleet spent 1 922[24] thousand days at sea corresponding to an annual average of 141 days at sea for each vessel. The amount of energy consumed was estimated at 107.3 million litres and thus was slightly lower than in 2013. The average amount of energy consumption was 7 891 litres per vessel. Due to lower fuel prices and the reduction of the fishing fleet, the energy costs decreased from about €105.5 million in 2013 to €91.4 million in 2014. The fishing effort is concentrated mainly in Aegean (GSA 22) 73%, Ionian (GSA 20) 23.5% and Crete (GSA 23) 3.5%. Greek small-scale vessels spend 1 828 thousand days at sea while large-scale vessels 93.4 thousand days.

Production

The Greek fishing fleet targets a variety of species. The main Greek species in terms of the weight are European pilchard(=sardine) 35%, European hake 15%, red mullet 11%, surmullet 7%, common cuttlefish 7%, common sole, gilthead seabream, and jack and horse mackerels nei. In 2014, production referred to a nine-month period from April to December, so it is underestimated. The core Greek species regarding value are European hake, red mullet, European pilchard (=sardine) and surmullet.

Economic results for 2014 and recent trends

National fleet performance

The basic source of income of Greek fishing vessels is the income from landings, while in few segments, there are also direct subsidies, stemming from duties refunds. No other source of income exists (e.g. income from fishing rights, recreational fisheries). The income generated from landings was enough to cover all expenses except for the imputed value of unpaid labour and, hence the activity produced a positive income for fishers in 2014 (AGRERI, 2016[25]). As the majority of the Greek fishing vessels are mainly based on family labour, this figure provides a clearer picture of the financial position of the owner and therefore it is crucial for the estimation of household economic sustainability. It is also important to emphasize that this figure is estimated as the opportunity cost of labour, using the average daily wage per fishers. However, in many cases, due to the lack of labour demand in local economies, which is even more intense due to the on-going financial recession, the opportunity cost of labour is, in fact, lower or even zero.

The total expenses of the Greek fleet are €377 million. The main expenses of the fishing vessels are energy costs, personnel costs (wage and salaries and imputed value of unpaid labour) as well as other variable costs. Energy costs account for 24.5% of total expenses and exceed a total of €92 million. As far as personnel costs are concerned, they account for 37.7% of total costs. Specifically, wages and salaries are equal to €67 million, and they derive mainly from the large-scale vessels. On the other hand, imputed labour costs are estimated to €73 million and derive mainly from small-scale vessels.

Other variable costs, including lubricants and marketing costs, are also important. These costs are estimated at €73 million. The non-variable costs are significantly lower (€7 million), representing only 1.9% of total expenses, while

[24] It has to be mentioned that in 2014, the National Program was lately initiated and therefore, the transversal variables were only collected for a nine-month period for all segments expect from per seiners and bottom trawlers.
[25] Agricultural Economics Research Institute (AGRERI), 2016. Greek Socio Economic Survey for the Greek fishing Fleet, (year 2015: under the Greek National Program).

repairs and maintenance costs reach €34 million. Finally, the annual depreciation costs account for 7.1% of total costs (€26 million).

As far as the value of physical capital (depreciated replacement value) is concerned, it is equal to €113 million. Moreover, the financial position (debt to asset ratio) of the national fleet is estimated at 0.55% while total investments in physical capital in 2014 are €24 million.

Performance by fishing activity

Small-scale fleet

In Greece, the majority of vessels (94%) are small-scale vessels. Specifically, there are 12 762 small scale vessels with a combined gross tonnage of 24.8 thousand GT and a total power of 238.3 thousand kW in 2014. The number of small-scale vessels decreased from 15 834 in 2008 to 12 762 in 2014, following the general trend of the Greek fleet. This segment spent 95% of the national amount of days at sea. The small-scale fleet employs a total of 15 782 FTEs, thus contributing to 76% of the total national employment of the sector.

The small-scale fleet mainly exploits the extensive Greek coastline, using polyvalent passive gears (mainly nets, longlines, pots, and traps). The vessels in this segment are primarily family-owned, and they are characterized by low invested capital. Moreover, their landings are sold at higher prices compared to the large scale fleet, and they are mainly directed to the market through very short supply-chains. Despite the fact that the vessels of this segment are small, they are vital for the local economies regarding job opportunities and have strong ties to them. They usually offer income and employment to poor and isolated areas with very few alternative economic activities. Therefore, this segment highly contributes to the maintenance of the social and economic sustainability of the coastal communities.

The small scale vessels consume 47.6 million litres fuel and the corresponding energy costs are high. It is crucial to mention that the small-scale fishers due to the limited liquidity that faced, they do not have the flexibility to buy their fuel in advance; instead they buy a limited amount to cover only very short-term needs. This is the main factor that increases the energy cost because they do not gain the reduced price of fuel.

Large-scale fleet

The large scale fleet contains 838 vessels with a combined gross tonnage of 44.1 thousand GT and a total power of 158.5 thousand kW. As larger vessels have higher levels of engine power, are able to conduct more fishing operations in deeper fishing grounds. These vessels mainly use active gears (bottom trawlers and purse seiners) and are characterized by high operating costs. The large scale vessels consume 66.1 million litres of fuel. The large-scale fleet segment in contrast to the small-scale benefits from the reduced price of fuel.

Drivers affecting the economic performance trends

The main drivers affecting the economic performance of the Greek fishing sector involve the general economic environment and the ongoing Greek financial crisis, as well as specific sector characteristics. The cash flow shortage, the limited access to credit together with the high value of inputs such as fuel creates unfavourable conditions for fishers and their activities. It should also be emphasized that due to the overall economic environment, salaries and wages of the sector have decreased.

Furthermore, one of the main problems fishers report concerns the damages of the fishing gears, caused by protected species like dolphins, seals, sea turtles and seabirds. These damages increase the repair and maintenance costs of the vessels and negatively affect their overall economic performance, keeping in mind that fishers do not receive any compensation.

Additionally, the reduction of the fishing stocks in the Mediterranean Sea affects the economic performance of the Greek fishing sector. Pressure on stocks is increased due to the competition of the Greek fishing vessels with vessels from other countries that do not have to follow EU legislation and restrictions, like Turkey.

Another problem that negatively affects the economic performance of professional fishers in Greece is the competition with an increasing number of recreational fishers, who usually fish in coastal areas and sometimes illegally sell their catch at low prices.

Markets and Trade

As far as the market structure is concerned, fishers reported that on average, 32% of their catch is channelled to wholesalers and fish auctions while 45% involves direct sales to consumers. However, if only large-scale vessels are examined (bottom trawlers and purse seiners), fishers report that over 90% of the catch is channelled to wholesalers and fish auctions.

Management instruments

Fisheries in Greece, as in all the Mediterranean countries, are recognized for the large number and variety of commercially important species caught and the range of fishing methods employed. Stocks are managed and

conserved by regulations (1967/2006 and governmental legislation), defining closed areas and seasons (for trawlers, purse-seiners, boat seiners and traps fishery), minimum landing sizes for the most commercial species and restriction on gears characteristics (mesh size, deployed net length, deployed hook amount). Management plans are realized for bottom trawl, night purse seine, and eel fishery.

The recreational fishery is also ruled by certain restrictions and prohibitions in fishing of defined stock (blue fin tuna and eel).

Fishing in international waters has been restricted in the area East of the 25th Meridian during summer to decline the fishing effort and conserve the stocks.

Furthermore, monitoring of the fishing activity is managed through an Integrated Information System.

It should also be mentioned that there is a Greek Operational Programme for 2014-2020 ("Fisheries and Maritime 2014-2020) that aims to promote a sustainable management of the fisheries sector. Amongst others, the program supports the modernization of the sector through onboard investments and improvements of infrastructures.

Status of Key Stocks

One of the main problems of the fisheries sector in Greece is the reduction of stocks in the Mediterranean Sea, caused mainly by overfishing and illegal fishing. Many of the most significant and commercial species are overfished at a young age and small size, which prevents efficient reproduction. It should be emphasized that though special attention is required in the management of these species, there are no quotas for them in the Mediterranean region except tuna.

Regarding the status of the main target species of trawlers, the stock of deep-sea pink shrimp (*Parapenaeus longirostris*) is fully exploited in GSA 22, the stock of hake (*Merluccius merluccius*) is fully exploited in GSAs 20 and 22 while the stock of the red mullet (*Mullus barbatus*) is in good condition in GSAs 20 and 22. On small pelagic species, which reflect the performance of the purse seine fishery, the stock of anchovy (*Engraulis encrasicolus*) is slightly above the appropriate operating point, while the sardine (*Sardina pilchardus*) has high exploitation index.

Innovation and Development

The Greek fleet consists mainly of small-scale, family-owned vessels that use traditional fishing gears. Furthermore, investments are limited due to the economic crisis, while the average age of the vessels is increasing. This environment leaves limited room for new and innovative techniques not only for small-scale fisheries but also for large vessels since the latter also faces high running costs. However, as mentioned above the Greek Operational Programme for 2014-2020 aims at the modernization of the fisheries sector and its sustainability particularly through supporting the use of more selective fishing gear as well as other onboard investments and equipment, the modernization of infrastructures and the improvement of fisheries monitoring and control.

Furthermore, for successful management instruments and policies to be implemented that will promote the sustainability and the development of the fisheries sector, the Greek Fisheries Institute, the Hellenic Centre for Marine Research and the Greek Agricultural Economics Research Institute are providing the necessary scientific knowledge.

Finally, a recent development in the Greek fisheries sector involves the MSC fisheries standard, which for the first time will be implemented in the Mediterranean Sea. WWF Hellas, the Greek Fisheries Institute, a retail company and some fishers using purse seiners are working together, according to the MSC standard to support the sustainability of the fishing sector and the promotion of certified, high-quality products to consumers.

Performance results of selected fleet segments

The Greek fleet is highly diversified with a broad range of vessel types targeting different species. The national fleet consisted of 13 (DCF) fleet segments and 14 755 vessels in 2014.

Bottom trawlers 18-24m: This fleet segment includes 117 active vessels with a total value of landings of €21 million and a total employment that corresponds to 644 FTEs. The share of this segment in the value of landings and total employment (FTEs) is 5% and 3% respectively. Bottom trawlers have multi-species characteristics, captures numerous fish species, such as *merluccius merluccius*, *parapenaeus longirostris*, *mullus barbatus*, *lophius budegass*, *mullus surmuletus*, *octopus vulgaris and many others*. This segment spends on average 151 days at sea per year. Management regulations include seasonal (June 1-Sepetember 30) and spatial closures, as well as a minimum landing size. Energy cost is the main cost element (34% of total costs), followed by other variable costs as well as wages and salaries (21% and 24% share in total costs, respectively). Finally, it should be noted that this feet segment represents 6% of the total value of physical capital and less than 2% of total investments in 2014.

Bottom trawlers 24-40m (DTS 24-40): There are 166 vessels in this fleet segment with a total tonnage of 21 thousand and total power of 52 thousand KW. The average age of these vessels is very low (20 years), which is an indication of increased welfare. They spend on average 179 days at sea per year with a total of landings of €57 million. The total FTEs are 978, representing the 4% of the national FTEs. As in the case of smaller bottom trawlers, the main cost is energy cost that represents 36% of the total costs of the vessels. Other significant expenses are wages and salaries (17%) as well as other variable costs (22%). As far as the value of physical capital is concerned, it represents 16% of the total national value of physical capital while it represents 6% of total national investment for 2013. Finally, it should be noted that, according to AGRERI (2016), this segment appears an exceptional economic performance.

Purse seiners: This segment includes 254 vessels operating predominately in areas Aegean (GSA 22) and Ionian GSA 20. Aegean has the 85% of the fishing effort and Ionian 15%. Purse seiners fishery is the main fishing method for small pelagic species, multispecies mainly *Engraulis encrasicolus*, *Sardina pilchardus, Scomber japonicas, Sardinella aurita, boops boops* and many others. The purse seiners conduct daily trips, and each vessel is responsible for fish searching, catching and transporting its own catches to port. Fishing operations are carried out exclusively during night hours with each vessel carrying around 8–10 persons. Each per seiner spends, on average, 100 days at sea per year. Management regulations currently in force for the purse seine fishery include mesh size regulations (14 mm), technical measures such as time closure (December– February), area closure and fishing prohibitions within specific distances from the coast (100 m).

Purse seiners 18-24m: This segment includes 135 vessels with a value of landings equal to €34 million (10% of the total national value of landings). Each vessel spends on average 114 days at sea per year. The segment employs a total of 1 519 FTEs, and thus it contributes to the 7% of the national total. Wages and salaries, as well as other variable costs, are the largest cost elements in this segment, together representing the 68% of the total cost. The slightly negative net profit estimated for this fleet segment allows for a positive and significant income to the fishers (taking the imputed value of unpaid labour under consideration).

Purse seiners 24-40m: The total number of vessels in this segment is a small one with 31 vessels and unlike the previous segments is characterized by a low average age of the vessels (15 years). Each boat spends on average 148 days at sea per year. The total value of landings is equal to €12 million (3.53% of the national total). This segment employs 410 FTEs, which corresponds to 2% of the total national FTEs. The main costs of the vessels in this segment are the other variable costs (37% of total costs) and the wages and salaries of the crew (28% of total costs). Energy costs are also important contributing to the 20% of the total costs.

Netters 0-6m: It is the second important fish segment in Greece regarding the number of vessels employed 3 363 small vessels. These vessels target multi-species *(*like *merluccius merluccius, octopus vulgaris, etc).* The total value of landings is €32 million (AGRERI, 2016), representing 9.23% of the total national value of landings. Moreover, this fleet segment employs 2 954 FTEs, which corresponds to less than one FTE per vessel. Taking into consideration that the majority of these vessels are family owned, they normally utilize only family labour. The share of the segment in both the national total value of landings and the national FTEs indicates its high importance (9% and 14% respectively).

Unlike large-scale fisheries, the main cost element is the imputed value of unpaid labour (41%), followed by energy costs (21% of total expenses). Finally, it is worth noticing that although this segment includes very small vessels, it highly contributes to the national economy (added value of about €17.2 million) and provides livelihood and income for fishers with limited alternative employment.

Netters 6-12m: This is the largest fleet segment of the Greek fishing fleet, containing 5 402 vessels. The total value of landings is €97 million (AGRERI, 2016) and the total FTEs employed in this fleet segment is 7 696 (representing the 28% and 37% of the Greek fishing fleet respectively). Imputed value of unpaid labour is the main cost item (29% of total expenses), and as in the previous segment, represents the family contribution to the labour. Although the net profit is negative, the profit plus the imputed value of labour provides a notable income to the family.

It is also important to mention that this segment produces the highest added value among fleet segments, which is equal to €45 million (AGRERI, 2016), a fact that reveals its substantial importance. Taking into consideration that the majority of these vessels are active in poor and isolated areas, with very few alternative economic activities, the importance of this sector to the local economies are even more apparent.

Netters 12-18m: There are only 171 vessels in this fleet segment, representing 441 FTEs. Other variable costs contribute to the 24% of total costs, followed by wage and salaries, energy costs and annual depreciation costs. It is worth noticing that the value of net profit plus the imputed value of labour is negative in this segment (AGRERI, 2016).

Longliners: The fleet is made up mostly of small vessels less than 12m, around to 5 000 vessels. This segment has substantial contribution either to landings or employment. In total, it contributes with 4 885 FTEs representing 23.5% of the Greek fishing fleet. This figure highlights the major importance to the local rural economies. Imputed cost of labour is the main type of cost, representing the family contribution to the labour. This has a significant effect due to limiting alternatives for jobs in some specific coastal areas.

Longliners 0-6m: This fleet segment includes 1 517 small vessels (4th largest fishing segment). The total value of landings is €12 million, representing 3.56% of the national total value of landings. Moreover, this fleet segment employs 1 100 FTEs, which corresponds to 5.29% of the total FTEs of the Greek fishing sector. Taking under consideration that the majority of these vessels are family owned, as well as the FTE per vessel is less than one, we can say that this segment utilizes mainly family labour. Unlike large-scale fisheries, the main cost element is the imputed value of unpaid labour (42%), which is more than €7 million.

Longliners 6-12m: This is the 3rd largest fleet segment of the Greek fishing fleet, containing 2 112 vessels. The total value of landings is €53 million (AGRERI, 2016) and the total FTEs employed in this fleet segment is 3 462 (representing the 15% and 17% of the Greek fishing fleet respectively). These figures highlight the importance of this segment to the local, rural economies. Imputed value of unpaid labour is the main type of cost (26% of total expenses), and as in the previous segment, represents the family contribution to the labour. Energy costs are also important, contributed to the 24% of total costs. It is important to mention that this segment produces the 2nd highest added value among fleet segments (€27 million), a fact that reveals its high importance to the rural economies.

Longliners 12-18m: The total number of active vessels that fall in this group is 118, while the average age of vessels is relatively high (40 years). The total value of landings is €9 million while employment corresponds to 323 FTEs. This fleet segment represents 2.63% of the national value of landings and 1.55% of the national FTEs. Energy costs as well as salaries and wages of the crew are also important since they represent 23% and 22% of total costs, respectively. This fleet segment yields positive net profits, as well as very sound profitability indicators (AGRERI, 2016).

Pots and Traps: This fleet is a small one. It includes totally 380 vessels, with the majority of them (302 vessels) with 6-12m. It offers 587 FTEs representing 2.8% of the total FTEs of the Greek fishing sector. The main characteristics of this segment are a high average vessel age; the main cost element is the imputed value of unpaid labour, mainly represents the family contribution to the labour. General, the segment faces low economic results but if you consider the profit including the imputed value of labour the result is positive.

Data issues

There have been significant data issues in producing this chapter. The implementation of the National Programme has faced some difficulties during the last years which resulted in interrupted time series on the economic data. The lack of data and time series has created many shortfalls in the presentation of the fleet economic performance. The figures for costs come from a survey based on probability sampling, and the response rate was satisfied for 2014 while the transversal variables were collected only for nine months for all fishing segments (expect from per seiners and bottom trawlers) because the National Program was lately initiated.

5.11 IRELAND

Short description of the national fleet

Fleet capacity

The national fleet capacity remains relatively stable with small temporal fluctuations, with a total of 2 048 registered vessels (excluding aquaculture), in 2015, having a combined gross tonnage (GT) of 58.9 thousand tonnes and engine power of 179.2 thousand kilowatts (kW). The total estimated inactive vessels in 2015 were 681 vessels. While inactivity for vessels over 10m LOA is known from logbook data inactivity in the less than 10m LOA fleet has been estimated based on equivalent segment activities in the 10-12m segments.

Fleet structure

The Irish fishing fleet is nationally divided into five main segments:

- Refrigerated Seawater (RSW) Pelagic Segment: This segment is engaged predominantly in fishing for pelagic species (herring, mackerel, horse mackerel and blue whiting, mainly).
- Beam Trawler Segment: This contains vessels, dedicated to beam trawling, a simple trawling method used predominantly in Irish inshore waters except in the southeast, where it is used to catch flatfish such as sole and plaice.
- Polyvalent Segment: This segment contains the vast majority of the fleet. These vessels are multi-purpose and include small inshore vessels (netters and potters), and medium and large offshore vessels targeting whitefish, pelagic fish and bivalve molluscs.
- Specific Segment: This segment contains vessels which are permitted to fish for bivalve molluscs and aquaculture species.
- Aquaculture Segment: These vessels must be exclusively used in the management; development and servicing of aquaculture areas and can collect spat from wild mussel stocks as part of a service to aquaculture installations. These vessels are excluded from the analysis.

Employment

Employment in 2014 was estimated at 3 154 jobs, corresponding to 2 395 FTEs or an average of 3.67 and 0.85 FTE per vessel for large scale and small scale fisheries respectively.

Indicative figures from annual employment surveys point toward, 20% of the fishers been over 50 years in 2014. The majority, 28%, of the remaining 80% are in the 41-50 years cohort. Younger fishers make up a small percentage with 8% less than 25 years old. Attracting young people to the industry remains a challenge.

The report of the government task force on non-EEA workers in the Irish fishing fleet estimate non-EEA employment to be 15%.

Effort

An estimated 54.4 thousand sea days and 43.5 thousand fishing days were spent at sea in 2014, a 1% and 2% increase from 2013 respectively. Energy consumption decreased by 2% over the same period.

Effort for some vessel segments less than 10m LOA were estimated which bring the total sea and fishing days for the SSF to 7.3 and 6.7 thousands days respectively in 2014. However this is an underestimation as not all effort for the under 10m LOA segments are included. The lack of logbook data from the under 10m fleet means that the reporting of transversal, landings, activity and true economic performance of this segment (which makes up a large proportion of the Irish fleet) is based solely on this limited results from the sentinel vessel survey.

Vessels operate mainly in the North Atlantic, Celtic and Irish Seas.

Production

Production increased 13% to 266.8 thousand tonnes of seafood, with a landed value of €279.1 million, a 12% increase on 2013 for landings from vessels over 10m LOA. The majority of this increase can be accounted for by an increase in Atlantic Mackerel landings which rose by 83% between 2013 and 2014. The 2014 mackerel quota (104 thousand tonnes) resulted in an increase of 46.56 thousand tonnes with a value of €59 million. The 2015 quota came down to 89 thousand tonnes resulting in landings of 88.7 thousand tonnes with a value of 48.9 million.

Economic results for 2014 and recent trends

National fleet performance

The Irish fleet remained in a net profit making position in 2014 maintaining the positive trend since 2012 when the position changed from net loss to net profit.

Revenue, estimated at €320.6 million, increased 14% due to corresponding increase in landings income and an increase in other income (€5.2 million) to a total of €8.65 million. The value of total landings from vessels over 10m amounted to €279.1 million an increase from €249.5 million in 2013. The majority of this increase is explained by the increase in

Atlantic mackerel quota in 2014 and its resultant increase in value of €59 million. An estimated income from landings value of €32 million was imputed for fleets less than 10m. This is a conservative estimate and is most likely an underestimation.

Operating costs totalled €234 million increased by 11% since 2013 due to increase in crew, repair costs and other variable costs. Energy and other non-variable costs decreased by 2% and 8% respectively. When including capital costs, total costs amounted to €271 million resulting in a net profit of €49.4 million, thus maintaining the increasing upward trend for net profit since 2012. Overall, the cost structure has remained relatively constant over the years, with some apparent decrease in energy costs and increased labour costs.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €168.1 million, €86.5 million and €49.4 million, respectively. GVA increased 25%, gross profit 24% and net profit increased 45% from 2013.

Tangible asset value was estimated at €517 million and investments amounted to €17.6 million, a 2% decrease on 2013.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 27%, indicating a low operating efficiency of the sector. Net profit margin was estimated at 15.4%, a 28% increase on 2013.

The Rate of Return on Fixed Tangible Assets (RoFTA) improved in comparison to previous years but remained low at 12%.

Fuel consumption has remained stable since 2011 and reduced by 2% between 2013 and 2014. Fuel consumption per landed tonne has followed an overall decreasing trend since 2008 and was 250 litres per tonne landed in 2014. However, the low fuel consumption is influenced by the highly efficient pelagic fishery.

Landings in weight per unit of effort (Days at Sea) have fluctuated since 2008 and was 4.9 thousand kg/day in 2014.

The average Landings Per Unit of Effort (LPUE) for the Irish fleet amounted to 5 tonne per DAS in 2015, an increase of 11% from 2014. This was to reduce to 3.3 tonnes per DAS in 2015 a decrease heavily influenced by the reduction in overall pelagic TAC. The pelagic, over 40m, fleet has a LPUE amounting to 83.2 tonne per DAS in 2014. This compares to a value of 2.15 tonnes per DAS for the demersal 24-40m segment. The small scale coastal fleet amounted 0.59 tonnes per DaS but this is misresprentative as both landings and effort are not complete for vessels less than 10m.

Drivers affecting the economic performance trends

Higher average fish prices, lower fuel costs and further capacity/effort reduction were the main driving forces behind the overall improvement.

Markets and Trade

Seafood sales, including aquaculture and processing to the European accounted for 69% of Ireland's total seafood export in 2015 and were valued at €388 million. This represents an 11% increase on €349 million in 2014. Trade to all the main EU markets grew in the year under review with France valued at €129 million (+8%), Great Britain €71 million (+8%), Spain €96 million (+20%), Italy €30 million (+18%) with exports to Germany on a par with 2014 and valued at €21 million.

Exports to countries outside the EU were valued at €176 million in 2015. Nigeria, Cameroon and Egypt remain the leading African markets with combined pelagic exports valued at €98 million. The value of the Asian market grew by 13% to €47 million in 2015 with the Chinese market (including Hong Kong) accounting for €24 million. Exports of Whelk to South Korea grew to €20 million in the same period.

Management instruments

Fleet management in Ireland involves a number of tools that act upon the Irish fleet and other tools that act upon the impact of the fleet on Irish fisheries. Fleet management tools include the specification of the licensing of sea-fishing boats, gear and vessel restrictions associated with the licensing process and a decommissioning scheme carried out in the period 2005 to 2008. Fishery management policy is developed through a transparent and inclusive system. Fishery management tools include a partnership quota management system with Producer Organisations and other key industry players with monthly meetings and allocation arrangements that are responsive to criteria such as marketing infinitives and market prices.

The strengths of the fleet management system include; the strict control exercised by Ireland's Registrar General of Sea Fishing Boats (Ireland's licensing authority for the fleet) over the entry/exit regime and the fleet remained within its reference level; the logical segmentation of the fleet; the well-functioning of the monthly vessel catch limits agreed upon by Irish fishing stakeholders; the success of the last decommissioning scheme carried out in the Irish fleet where improvements in the economic indicators for the polyvalent general segment can be seen since 2008.

The weaknesses in the fleet management system include; overcapitalisation evident in parts of the fleet; challenges in responding to the Landing Obligation which is likely to lead to exacerbation of economic indicators signalling further overcapitalisation, particularly in the smaller and medium sized polyvalent fleet.

TACs and quotas

Ireland's total share of TAC's in 2015 amounted to 227 693 tonnes.

Ireland has 86% of the Celtic Sea herring TAC; 69% of the Boarfish; 37% of *Nephrops* in VII; 25% of Horse Mackerel and 21% of mackerel. In other stocks it has a much lower share of the TAC; 8% of Anglerfish in VII; 15% of Celtic Sea cod and 6% of Northern Hake.

Innovation and Development

Within the framework of the reformed CFP, the North West Atlantic Member States undertook to work together, in consultation with the relevant Advisory Councils and with the Commission, to manage North-Western waters fisheries. In particular, the Member States have endeavoured to develop 'joint recommendations' in line with Article 18 of the Regulation 1380/2013. The Member States established a high-level group composed of Fisheries Directors as well as a Technical group of relevant fisheries officials.

Ireland also established a National Discards Implementation Group in 2013 under an independent Chair involving the Department Of Agriculture, Food & the Marine, State agencies (Marine Institute, BIM, SFPA) and Industry representatives. The purpose of the Working Group was to identify issues at an early stage and develop practical solutions and arrangements for the effective implementation of the obligations to land all catches in respect of fisheries fished by the Irish fleet. A significant proportion of the work carried out in 2015 related to preparation for the demersal landing obligation that would commence in 2016. Ireland continues to carry out gear studies and trials to aid in the development of appropriate measures that enable fishers to avoid juvenile or unwanted catches, which will be very important in the successful full implementation of the policy between now and 2019.

For example, trials were carried out on the effects of increasing the minimum cod-end mesh size from 70mm to 80mm for Irish vessels targeting *Nephrops*. The BIM trials returned very positive results both in terms of increased profitability and sustainability for *Nephrops* stocks. A public consultation has been carried out based on the minimum cod-end mesh size of 80mm applying to all Irish *Nephrops* and Whitefish fisheries using demersal trawls, Danish seines or similar towed gear.

The following actions, some at the initiative of the industry and some by the State, have also taken place to ensure compliance with the landing obligation;

- Insertion of 'move-on' provisions following unintentional Bluefin catches in the Albacore Tuna fishery
- Insertion of a non-allocation of quota clause for Phase 2 of Celtic Sea Herring if overshooting in phase 1 under LO
- Funding of simulation trials and gear selectivity trials
- Provision of EMFF funding to POs to enhance infrastructure to deal with catches under MCRS
- Celtic Sea Herring Management Advisory Committee proposal of 10% weekly tolerance to deal with risk of discards within a weekly quota framework
- Decision not to invoke the potential deminimis allowance available within the Albacore tuna fishery

Performance by fishing activity

Small-scale fleet

In 2014, there were an estimated 898 active vessel belonging to the "small-scale coastal fleet" according to the European definition (vessels under 12m using passive gears).

The number of registered vessels (under 10m) rose by 3% every year from 2009 and prior to 2011 increased by 8% and 5% between the years 2008/2009 and 2009/2010 respectively. Overall, this represents a 25% increase in the number of under 10m vessels (from 1337 to 1677) between the years 2008 and 2013.

The number of the small-scale fleet demonstrates a similar trend. In 2014 the vessel register indicated a reduction in numbers of 2%. The estimate of active vessels shows a decrease in numbers from 2008 until 2011 when there was an increase until 2013 when numbers remain stable.

In 2014 The Inshore Fisheries Forums was founded to act as consultative forums at which members will be representative of 'the inshore sector', fishers using fishing boats of less than 12m overall length. The National Inshore Fisheries Forum (NIFF) provides a national platform on which each of the regional forums can interact with each other and with the Department and the marine agencies. The Regional Inshore Fisheries Forums (RIF) provide formal engagement opportunities between inshore fishers and other marine stakeholders.

Performance results of selected fleet segments

The Irish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in areas VIIa, VIIb, VIIg and VIIj. The national fleet in 2014 consisted of 22 (DCF) fleet segments. For the fourteen segments that have sufficient data to calculate profitability seven have high profitability, and seven with weak profitability classifications.

The Irish fleet is dominated by the polyvalent segment that includes small inshore vessels (netters and potters), medium and large offshore vessels targeting whitefish, *Nephrops*, pelagic fish and bivalve molluscs and the pelagic segment targeting pelagic species.

Pelagic Trawl over 40m – 21 vessels made up this segment in 2014 which operates predominantly in VIa and VIIj. The fleet targets a variety of species but in particular pelagic species, including mackerel, horse mackerel, Atlantic herring and boarfish. In 2014, the total value of landings was €117 million and around 216 FTEs were employed in this fleet segment, contributing 40% and 9% of the total income from landings (over 10m) and overall FTEs generated by the Irish fishing fleet, respectively. Total Live weight of landings (tonne) was 172.8 thousand tonnes.

This segment of the Irish fleet is generally considered one of the best performing segments landing high quantities of pelagic fish.. This fleet segment presented a GVA and Gross Profit of €66 million and €37 million respectively. The fleet segment was profitable, with a reported and net profit of €17 million in 2014. There is high profitability for 2014 with an improved economic development trend in comparison with 2013.

Boarfish landings initially were very small and typically fluctuated between 100 and 700 t per year from 2001 to 2009. As the demand for fishmeal raw material grew and fishers perfected their ability to target and pump boarfish ashore, the volumes increased, peaking at 89 thousand tonnes in 2010. In 2011 a precautionary Total Allowable Catch of 33 thousand tonnes was set for the first time. This was subsequently raised to 88 thousand tonnes in 2012 and 2013 and rose again in 2014 to 127 509 tonnes of which Ireland has the majority of this TAC share with 88 115 tonnes representing 69% of the total TAC. The Atlantic Mackerel TAC peaked in 2014 at 104 thousand tonnes, falling to 89 thousand tonnes in 2015. This increase resulted in a nearly €49 million increase in value of landings and contributed to the positive net profit for 2015. Provisional figures for 2015 show a decrease of €47 million in landing value of Mackerel from 2014 which is expected, along with smaller reductions in value of horse mackerel and herring to affect the profitability in the fleet in 2015.

Economic data for 2015 is only beginning to be collected so it is too early to evaluate whether the landing obligation has had any socioeconomic impacts on pelagic vessels subject to the landing obligation.

Demersal Trawl 12m-18m – 43 vessels make up this segment which operates predominantly in VIa, VIIb and VIIg. The fleet targets a variety of species but in particular demersal species, such as Norway lobster, anglerfish and whiting. In 2014, the total value of landings was almost €9.3 million and around 121 FTEs were employed in this fleet segment, contributing to 5% and <1% of the total FTE and total income from landings generated by the Irish fishing fleet, respectively. This fleet segment presented a negative gross profit of around €0.02 million and negative net profit of €0.6 million in 2014. This indicates weak profitability for 2014 with an deteriorating economic development trend.

Demersal Trawl 18m-24m – 65 vessels make up this segment which operates predominantly in VIa, VIIb and VIIg. The fleet targets a variety of species but in particular demersal species, such as Norway lobster, anglerfish and whiting. In 2014, the total value of landings was almost €51.8 million and around 344 FTEs were employed in this fleet segment, contributing to 14% and 18% of the total FTE and total income from landings generated by the Irish fishing fleet, respectively. This fleet segment presented a gross profit of around €11.2 million and net profit of €6.4 million in 2014. This indicates high profitability for 2014 with an improved economic development trend evident also in the GVA and Gross profit.

Demersal Trawl 24m-40m – 37 vessels make up this segment which operates predominantly in VIa, VIIb and VIIg. The fleet targets a variety of species, such as Norway lobster, anglerfish and mackerel. In 2014, the total value of landings was almost €44.9 million and around 316 FTEs were employed in this fleet segment, contributing to 15% and 13% of the total income from landings and FTEs generated by the Irish fishing fleet, respectively. This fleet segment generated a gross profit of around €10 million and net profit of €5.8 million in 2014. This indicates high profitability for 2014 with an improved economic development trend.

Projections for 2015 and outlook

Total landed weight and landed value are projected to decrease significantly (-13% and -20%) for the Irish fleet in 2015. This decline is partially offset but a fall in energy costs (-32%) as gross profits decline 16% and net profits increase 2%. Gross and net profits for the fleet reach 27% and 16% respectively.

It is important to note that the preliminary figure for total landing value does not include an estimate of the less than 10m fleet. This omission, coupled with a large reduction in Mackerel value, results in a much of the reduction from 2014 to 2015. As such, the results provided for 2015 should be used with caution; the uncertainties are large and many.

Projections for 2016 show a very different picture, with landed weight and landed value increasing by 14% and 21% respectively. Gross profits and net profits also increase by 27% and 16%, although there is less change in profit margins.

These results in the annual fleet report (Pursuant to Article 22 of Regulation (EU) No 1380/2013 of the European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy) suggest that an economic imbalance may exist within the demersal trawl and seiner (polyvalent general) fleet segment of the Irish fleet. Taking into account the introduction of the Landing Obligation in EU fisheries and the negative economic impact that this legislation may entail the results of the economic indicators are consistent with the Ireland Action Plan for an adjustment of the polyvalent fleet (12 to 24m) through schemes to increase sales prices, onboard added value schemes and a fleet decommissioning scheme.

Data issues

Values and figures may differ somewhat from those in previous annual economic reports as more survey returns since last year's AER have changed total national estimates.

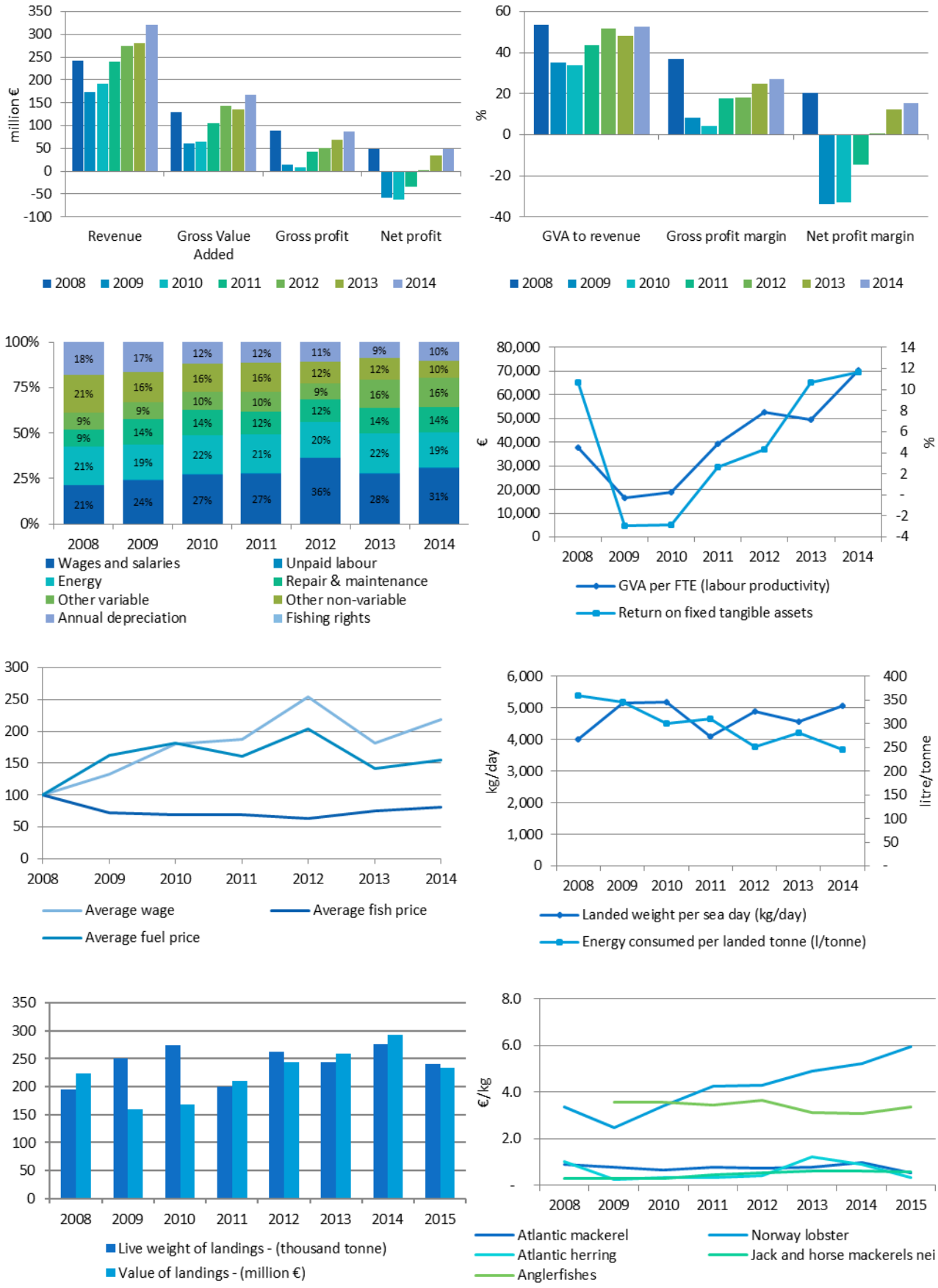
The effort data in the tables and graphs is not complete. The figures for days at sea and fishing days reported are those for vessels over 10m and some segments, in 2015, less than 10m for which effort was possible to calculate based on sales notes data and small scale fishery surveys. The exclusion of the majority of the less than 10m fleet was due to the fact that this segment is not mandated to carry and complete logbooks for fishing operations. Specifically, for 2015, effort was calculated for DRB and FPO. A number of assumptions had to be made mainly that a sale event for a vessel represents a day of fishing.

Total landing income includes estimates, where possible, of income for vessels under 10m in length where data is available. This introduces data for vessels under 10m and as such results in a higher estimate of income value compared to landings values that are not yet reported (As of AER I, it may be provided before AER II). As sample data are raised to population level variability in the data can, in some cases, inflate or reduce the overall landings income estimate for the under 10m fleet.

In previous reports the total number of vessels reported for all segments below 10m excluded any indication of activity. This resulted in a misinterpretation of the size of the fleet. This impacted and skewed any calculations that used total vessels. Conscious of this issue an estimate of activity in the less than 10m segments has been included in this year's report. While activity for this segment is not empirically known it was estimated using proxies for activity which matched equivalent gear segments in the 10-12m vessel length categories.

The MS sampling rates have improved through increased effort in data collection. However, survey target rates vary between fleet segments with a high achievement of sampling targets in a number of segments and an under-achievement of targets in other segments.

The operational division of the fleet into 'small scale' and 'large scale' fisheries is not a satisfactory aggregation for the Irish Fleet. The exclusion of active gears from the small scale fishery definition means that many segments for which there is data, for <10m vessels, are eschewed from this segment. Therefore, the definition of SSF defined in this report excludes a large part of the Irish fleet in vessel numbers as they are below 12m in length and use active gears and thereby excludes important economic data and information currently being collected on this fleet.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.10 Ireland: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.43 Ireland: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	1,939	1,977	2,038	2,074	2,106	2,140	2,095		-2%	2%
Number of Inactive vessels_ms	(#)	509	720	894	859	797	841	752		-11%	-2%
Vessel tonnage	(thousand GT)	73.8	66.9	66.0	67.2	60.3	60.3	59.5		-1%	-9%
Engine power	(thousand kW)	205.2	186.0	184.1	189.2	184.2	183.9	181.6		-1%	-4%
Average vessel age	(year)	24	24	25	25	26	26	27		2%	6%
Average vessel length	(metre)	10	10	10	10	9	9	9		0%	-3%
Enterprises with one vessel	(#)	1,724	1,724	1,768	1,622	1,753	1,685	1,672		-1%	-2%
Enterprises with 2 to 5 vessels	(#)	109	142	161	222	167	166	170		2%	5%
Enterprises with more than 5 vessels	(#)				2	1	1	1		0%	-25%
FTE	(#)	3,404	3,692	3,479	2,688	2,709	2,717	2,395		-12%	-23%
Total employed	(person)	4,485	4,889	4,423	3,243	3,121	3,087	3,154		2%	-19%
Days at sea	(thousand day)	48.8	48.5	52.9	48.8	53.6	53.6	54.4		1%	7%
Fishing days	(thousand day)	40.0	40.0	44.0	40.6	43.3	42.8	43.5		2%	4%
Number of fishing trips	(thousand)	18	19	20	19	21	20	20		-1%	2%
Energy consumption	(million litre)	70.20	86.42	82.59	61.98	66.03	68.75	67.70		-2%	-7%
Live weight of landings	(thousand tonne)	195.5	250.5	274.3	199.4	262.2	244.2	276.4		13%	16%
Value of landings	(million €)	222.8	159.4	168.6	209.5	243.2	258.9	293.1		13%	39%
Income from landings	(million €)	225.2	168.3	187.8	235.3	268.9	276.4	311.9		13%	37%
Other income	(million €)	16.20	4.76	3.42	4.47	6.17	3.41	8.65		154%	35%
Direct income subsidies	(million €)	22.11	17.36	1.02	0.64	0.31	0.54	0.94		74%	-87%
Wages and salaries of crew	(million €)	39.7	46.0	56.4	61.4	91.5	63.7	80.3		26%	34%
Unpaid labour value	(million €)	-	0.2	0.8	1.9	1.0	1.7	1.4		-19%	49%
Energy costs	(million €)	39.3	36.4	45.0	47.4	49.9	50.3	49.4		-2%	10%
Repair & maintenance costs	(million €)	17.4	27.1	28.7	27.8	30.4	31.4	36.0		15%	33%
Other variable costs	(million €)	17.0	17.8	20.2	23.4	23.0	36.4	42.2		16%	84%
Other non-variable costs	(million €)	39.0	31.1	32.4	36.0	29.3	27.1	24.9		-8%	-23%
Annual depreciation costs	(million €)	33.0	31.7	25.2	25.8	28.0	20.6	26.4		28%	-4%
Opportunity cost of capital	(million €)	7.3	41.3	45.9	51.1	21.5	14.9	10.7		-29%	-65%
Tangible asset value	(million €)	523	586	615	616	514	457	517		13%	-6%
Investments	(million €)	26.0	8.4	38.3	10.4	66.0	18.0	17.6		-2%	-37%
Financial position	(%)	0.5	0.7	0.5	0.5	0.7	-	0.6			30%
Gross Value Added	(million €)	128.7	60.7	65.0	105.1	142.6	134.7	168.1		25%	58%
GVA to revenue	(%)	53.3	35.1	34.0	43.9	51.8	48.1	52.4		9%	18%
Gross profit	(million €)	89.0	14.6	7.8	41.9	50.1	69.3	86.5		25%	90%
Gross profit margin	(%)	36.9	8.4	4.1	17.5	18.2	24.7	27.0		9%	47%
Net profit	(million €)	48.7	-58.4	-63.3	-35.1	0.6	33.8	49.4		46%	502%
Net profit margin	(%)	20.2	-33.7	-33.1	-14.6	0.2	12.1	15.4		28%	289%
GVA per FTE	(thousand €)	38	16	19	39	53	50	70		42%	97%
Return on fixed tangible assets	(%)	11	-3	-3	3	4	11	12		9%	210%

Table 5.44 Ireland: National fleet statistics and economic performance results based on fleet segment level data.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	1430.19	1256.68	1143.6	1214.76	1308.76	1299.11	1342.53	*1,367*	*1,281*		2%	-6%
Total employed	(person)	4484.92	4888.87	4422.59	3243.26	3121.05	3086.81	3154.19	*3,188*	*2,999*		1%	-6%
FTE	(#)	3,405	3,692	3,479	2,688	2,709	2,717	2,395	*2,534*	*2,521*		6%	-1%
Days at sea	(day)	48,782	48,548	52,861	48,765	53,600	53,408	54,178	*71,842*	*53,771*		33%	-25%
Energy consumption	(thousand litres)	70,205	86,421	82,592	61,980	66,031	68,754	67,699	*61,461*	*65,707*		-9%	7%
Live weight of landings	(tonne)	195,548	250,468	274,341	199,404	262,176	244,203	276,390	*240,942*	*274,191*		-13%	14%
Value of landings	(thousand €)	222,804	159,449	168,645	209,461	243,218	258,938	293,149	*234,373*	*283,696*		-20%	21%
Income from landings	(thousand €)	228,338	169,038	187,846	235,272	268,938	276,427	311,931	*260,846*	*300,454*		-16%	15%
Other income	(thousand €)	16,200	4,762	3,423	4,471	6,173	3,408	8,652	*6,128*	*5,782*		-29%	-6%
Wages and salaries of crew	(thousand €)	39,703	45,999	56,397	61,369	91,465	63,696	80,286	*70,765*	*81,167*		-12%	15%
Unpaid labour value	(thousand €)	-	151	825	1,900	1,025	1,715	1,390	*1,363*	*1,314*		-2%	-4%
Energy costs	(thousand €)	39,336	36,377	45,002	47,408	49,867	50,272	49,352	*33,339*	*33,853*		-32%	2%
Repair & maintenance costs	(thousand €)	17,356	27,126	28,664	27,795	30,417	31,365	36,049	*32,975*	*30,879*		-9%	-6%
Other variable costs	(thousand €)	16,978	17,750	20,228	23,410	22,952	36,446	42,195	*29,299*	*41,782*		-31%	43%
Other non-variable costs	(thousand €)	38,995	31,113	32,354	36,001	29,258	27,088	24,857	*27,284*	*25,654*		10%	-6%
Annual depreciation costs	(thousand €)	33,024	31,659	25,205	25,805	28,032	20,553	26,366	*25,081*	*23,609*		-5%	-6%
Opportunity cost of capital	(thousand €)	6,378	36,366	41,366	41,784	20,482	13,296	9,904	*5,487*	*5,182*		-45%	-6%
Tangible asset value (replacement)	(thousand €)	458,882	515,825	554,498	503,418	488,820	406,591	480,787	*464,050*	*438,194*		-3%	-6%
Gross Value Added	(thousand €)	127,825	56,966	64,874	101,613	134,071	128,331	167,194	*144,078*	*174,068*		-14%	21%
Gross profit	(thousand €)	83,629	7,522	7,484	44,444	38,954	62,064	85,397	*71,951*	*91,587*		-16%	27%
Net profit	(thousand €)	44,279	- 66,047	- 72,848	- 33,258	- 19,890	24,657	40,412	*41,383*	*62,796*		2%	52%

Table 5.45 Ireland: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Smal Scale Coastal Fleet							Large Scale Fleet													
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	1,030	806	750	786	879	862	898	400	450	393	429	430	438	445		4%	5%		2%	5%
Vessel tonnage (thousand GT)	3.8	3.2	2.4	2.5	2.7	2.6	2.7	63.1	56.0	55.4	50.3	50.4	51.0	51.1		6%	-5%		0%	-6%
Engine power (thousand kW)	31.1	25.5	22.6	23.3	24.9	24.0	24.9	140.8	122.9	120.5	120.2	124.1	125.2	126.5		4%	-1%		1%	1%
FTE (#)	1,667	1,958	1,859	1,067	1,077	1,142	763	1,738	1,734	1,621	1,622	1,632	1,575	1,632		-33%	-48%		4%	-1%
Total employed (person)	2,425	2,705	2,460	1,372	1,278	1,282	1,140	2,060	2,184	1,962	1,872	1,844	1,805	2,014		-11%	-41%		12%	3%
Days at sea (thousand day)	6.9	8.0	8.6	7.6	8.4	7.5	7.3	41.8	40.6	44.2	41.2	45.2	45.9	46.9		-3%	-7%		2%	9%
Fishing days (thousand day)	6.3	7.5	8.2	7.2	7.9	6.9	6.7	33.7	32.5	35.8	33.5	35.4	35.8	36.7		-3%	-9%		3%	7%
Number of fishing trips (thousand)	6	7	7	7	7	6	6	12	12	13	13	14	14	14		-6%	-11%		1%	9%
Energy consumption (million litre)	2.6	4.7	3.5	6.2	3.6	4.3	4.4	67.6	81.7	79.1	55.8	62.4	64.4	63.3		2%	7%		-2%	-8%
Live weight of landings (thousand tonne)	3.1	4.1	4.8	4.6	5.1	10.6	10.5	192.4	246.3	269.5	194.8	257.1	233.6	265.9		-1%	94%		14%	14%
Value of landings (million €)	7.2	5.9	7.0	6.9	5.8	13.4	16.4	215.6	153.5	161.7	202.5	237.4	245.5	276.8		22%	113%		13%	37%
Income from landings (million €)	12.7	14.9	23.5	29.4	25.6	30.9	27.7	212.4	153.4	164.3	205.8	243.4	245.5	284.3		-11%	21%		16%	39%
Other income (million €)	0.2	0.0	0.1	0.1	0.6	0.8	1.6	16.0	4.8	3.3	4.3	5.5	2.6	7.0		102%	417%		170%	15%
Direct income subsidies (million €)	0.08	1.12	0.05	0.06	0.08	0.06	0.22	22.03	16.23	0.97	0.58	0.23	0.48	0.71		280%	-7%		48%	-89%
Wages and salaries of crew (million €)	0.9	-	0.5	3.4	9.4	3.0	5.6	38.8	46.0	55.9	58.0	82.1	60.7	74.6		87%	98%		23%	31%
Unpaid labour value (million €)	-	0.0	0.1	0.9	0.1	0.2	0.5	-	0.1	0.7	1.0	0.9	1.5	0.9		97%	102%		-39%	30%
Energy costs (million €)	1.4	2.0	1.9	4.7	2.7	3.2	3.2	37.9	34.4	43.1	42.7	47.2	47.1	46.1		2%	22%		-2%	10%
Repair & maintenance costs (million €)	0.5	1.2	1.0	2.0	1.6	2.0	2.0	16.9	25.9	27.6	25.8	28.8	29.4	34.1		0%	44%		16%	32%
Other variable costs (million €)	0.6	1.4	1.1	3.0	2.8	3.4	3.5	16.4	16.3	19.1	20.4	20.1	33.0	38.7		2%	69%		17%	85%
Other non-variable costs (million €)	1.2	1.3	1.8	8.2	2.7	2.4	1.5	37.8	29.8	30.6	27.8	26.5	24.7	23.4		-39%	-50%		-5%	-21%
Annual depreciation costs (million €)	0.3	-	-	0.2	0.3	0.2	0.3	32.7	31.7	25.2	25.6	27.7	20.4	26.1		51%	68%		28%	-4%
Opportunity cost of capital (million €)	0.07	-	3.27	2.49	0.28	0.17	0.07	6.31	36.37	38.10	39.29	20.21	13.13	9.84		-59%	-93%		-25%	-62%
Tangible asset value (million €)	4.7	-	43.8	30.0	6.6	5.1	3.3	454.1	515.8	510.7	473.4	482.2	401.5	477.5		-35%	-78%		19%	1%
Investments (million €)	1.0	2.1	2.3	3.2	3.2	2.6	2.0	25.0	6.3	35.9	7.2	62.8	15.5	15.6		-22%	-17%		1%	-39%
Gross Value Added (million €)	9.1	8.9	17.7	11.6	16.4	20.8	19.0	118.7	48.1	47.1	90.4	117.7	107.6	148.2		-8%	35%		38%	68%
GVA to revenue (%)	70.9	60.0	75.3	39.4	62.4	65.4	65.1	52.1	31.1	28.1	43.7	49.0	44.5	51.0		0%	5%		15%	23%
Gross profit (million €)	4.1	5.5	17.1	13.4	4.2	16.5	12.9	79.5	2.0	-9.6	31.4	34.7	45.6	72.5		-22%	27%		59%	137%
Gross profit margin (%)	56.1	61.2	72.8	46.6	18.1	54.3	44.1	35.1	1.3	-5.8	15.2	14.4	18.8	25.0		-19%	-14%		33%	89%
Net profit (million €)	3.8			2.3	-3.2	13.1	10.4	40.5	-66.0	-72.8	-35.6	-16.7	11.6	30.0		-20%	162%		158%	229%
Net profit margin (%)	51			33	-54	52	43	18	-43	-44	-18	-7	5	11		-17%	109%		127%	174%
GVA per FTE (thousand €)	6	5	10	11	15	18	25	73	30	30	57	77	70	92		39%	131%		31%	63%

Table 5.46 Ireland: National fleet statistics and economic performance results by fleet segment.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(ltr/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
IRL A27 TM40XX	21	216	2,078	103	172,890	117,786	121,622	66,738	54.9	37,667	31.0	17,610	14.48	134.6	309	8	High	131%	Improved
IRL A27 DTS1824	65	344	14,500	708	21,716	51,895	52,727	24,248	46.0	11,282	21.4	6,431	12.20	37.7	71	19	High	230%	Improved
IRL A27 DTS2440	37	316	8,956	759	19,256	44,907	45,680	19,441	42.6	10,174	22.3	5,887	12.89	29.3	62	14	High	444%	Improved
IRL A27 TM2440	12	92	1,271	142	28,847	24,045	25,335	11,581	45.7	1,614	6.4	- 3,944	- 15.57	107.9	125	- 5	Weak	49%	Improved
IRL A27 FPO0010	575	443		568	4,240	6,302	17,426	11,690	67.1	9,226	52.9	9,107	52.26	5.6	26	1,332	High		
IRL A27 DRB0010	120	158		1,464	1,028	2,561	10,099	7,285	72.1	2,536	25.1			30.0	46				
IRL A27 DTS1218	43	121	5,686	700	4,978	9,366	9,371	3,118	33.3	- 28	- 0.3	- 676	- 7.22	26.0	26	- 5	Weak	-165%	Deteriorated
IRL A27 TBB2440 °	13	79	3,057	856	2,713	7,678	7,678	4,933	64.2	3,904	50.8			13.1	63				
IRL A27 FPO1012	71	98	5,822	284	3,733	5,375	5,714	3,546	62.0	1,523	26.7	1,386	24.26	20.6	36	81	High	332%	Improved
IRL A27 FPO1218 °	17	43	2,004	213	3,582	5,128	5,155	4,010	77.8	2,866	55.6	2,812	54.55	26.8	94	471	High	663%	Improved
IRL A27 DFN0010	178	158		319	1,836	3,434	4,278	2,701	63.1	1,768	41.3			5.9	17				
IRL A27 DFN1824 °	11	48	1,758	82	2,110	4,249	4,252	3,878	91.2	3,509	82.5	3,496	82.22	7.6	80	9,575	High	128%	Improved
IRL A27 DRB2440 °	8	48	1,859	627	2,697	4,024	4,069	1,142	28.1	- 552	- 13.6	- 737	- 18.11	35.3	24	- 30	Weak	-131%	Deteriorated
IRL A27 DTS1012	19	21	1,552	279	949	1,415	1,560	691	44.3	9	0.6	- 76	- 4.88	32.5	33	- 3	Weak	-121%	Deteriorated
IRL A27 DRB1012 °	29	59	3,551	703	917	1,062	1,064	269	25.3	- 722	- 67.8	- 747	- 70.14	16.8	5	- 589	Weak		
IRL A27 TM1218 °	7	23	400	236	1,556	1,004	1,004	281	27.9	11	1.1	- 82	- 8.19	11.7	12	- 3	Weak		
IRL A27 DFN1012	22	41	1,304	530	489	850	940	429	45.6	16	1.8	- 57	- 6.03	10.0	10	- 4	Weak	-118%	Deteriorated
IRL A27 HOK0010	45	15		1,081	111	280	815	630	77.3	334	41.0			19.6	42				
IRL A27 DTS0010	19	18		-	538	812	812							-					
IRL A27 TM0010 °	21	39	59	38	1,862	671	673	463	68.7	258	38.3			5.2	12				
IRL A27 PMP1218 °	3	7	185	142	259	182	184	122	66.6					-	18				
IRL A27 HOK1012 °	6	8	136	-	83	123	123							0.1					

Table 5.47 Ireland: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)								Live weight of landings (thousand tonne)								Average landed price (real) (€)							
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	***2015***	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	***2015***	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	***2015***
Atlantic mackerel	40.1	48.3	37.1	48.7	45.4	44.5	103.5	*49.1*	44.7	61.0	58.0	63.2	63.1	56.7	103.4	*88.9*	0.9	0.8	0.6	0.8	0.7	0.8	1.0	*0.6*
Norway lobster	31.0	17.5	26.3	33.4	43.6	41.3	46.4	*49.7*	9.2	7.1	7.7	7.8	10.1	8.4	8.9	*8.3*	3.4	2.5	3.4	4.3	4.3	4.9	5.2	*6.0*
Atlantic herring	28.2	6.5	9.2	8.4	11.4	27.7	21.3	*6.7*	27.9	26.2	26.5	24.5	28.3	22.9	23.8	*19.2*	1.0	0.3	0.4	0.3	0.4	1.2	0.9	*0.4*
Jack and horse mackerels	10.9	12.0	10.4	16.2	21.8	21.3	20.0	*12.2*	34.7	39.2	36.7	35.0	41.6	35.4	32.7	*21.7*	0.3	0.3	0.3	0.5	0.5	0.6	0.6	*0.6*
Anglerfishes	31.2	12.0	15.2	13.8	13.6	11.1	12.1	*12.8*	2.8	3.4	4.3	4.0	3.7	3.5	3.9	*3.8*	11.2	3.6	3.6	3.5	3.6	3.1	3.1	*3.4*
Edible crab	6.5	3.9	7.0	6.8	6.2	9.2	10.5	*9.4*	5.7	4.9	6.3	4.8	4.7	9.7	7.8	*10.2*	1.1	0.8	1.1	1.4	1.3	1.0	1.4	*0.9*
Megrims nei	6.1	5.7	7.3	8.0	11.9	10.0	8.6	*9.7*	1.8	2.2	2.7	2.5	3.4	3.4	2.9	*3.0*	3.5	2.6	2.7	3.2	3.5	2.9	3.0	*3.2*
Blue whiting	3.2	1.2	2.5	1.9	5.8	24.2	8.3	*9.6*	22.9	9.3	8.3	1.2	7.6	13.2	21.5	*24.8*	0.1	0.1	0.3	1.6	0.8	1.8	0.4	*0.4*
Whiting	3.4	3.6	5.4	5.9	8.7	11.2	8.0	*8.1*	2.6	3.0	4.5	5.0	6.0	7.0	7.0	*6.6*	1.3	1.2	1.2	1.2	1.5	1.6	1.1	*1.2*
European hake	3.5	3.3	3.9	3.6	3.9	3.5	6.2	*6.7*	1.4	1.6	2.1	1.9	1.9	1.8	2.6	*2.7*	2.5	2.0	1.9	1.9	2.1	2.0	2.4	*2.4*

5.12 ITALY

Short description of the national fleet

Fleet capacity

In 2015 the national fleet capacity continued to decline, with a total of 12 426 vessels, having a combined gross tonnage (GT) of 164 thousand tonnes and engine power of 1 013 thousand kilowatts (kW). In 2015, the proportion of inactive vessels represented 48% of the overall fleet.

Fleet structure

Small Scale Coastal Fleet consisting of vessels of less than 12 metres' length overall using passive gears represents the backbone of the Italian fishing fleet, being composed by 7 469 vessels and accounting for 66% of the total number of vessels in 2015. Large Scale Fleet accounts for 34% of total number of vessels and for 87% of total vessel tonnage.

Employment

In 2014, employment was estimated at 26 932 jobs, corresponding to 20 694 FTEs or an average of 1.6 FTE per vessel. After a long period of decreasing trend, in 2014 employment showed a slim increase of 1% in terms of number of employees and of 5% in terms of national full time equivalent. However, the average age of Italian fishers is quite high and over 50 years in 201426, highlighting a problem of low generational turnover of the sector that is primarily artisanal and family-owned.

Effort

An estimated 1 432 thousand days were spent at sea, with a decrease of 4% on 2013. The amount of energy consumed decreased 5% as a result of limitation of activity; in fact, for some fishing segments (i.e. trawlers) the increased trend in fuel costs forced changes in the management of fishing operations to contain costs.

Vessels operate mainly in the GSA 17 - Northern Adriatic, GSA 10 - South and Central Tyrrhenian Sea and in GSA 19 - Western Ionian Sea.

Production

Landings increased 2% to 176 778 thousand tonnes of seafood, with a landed value of €813 million, a 2% decrease on 2013.

The fleet targets mainly pelagic species, with anchovy remaining the dominant species and generating the highest landed value (€52 million), representing 6% of the landings value and 18% of landing weight. Seven species account for approximately 60% of the total landing volume of Italian fisheries: European pilchards (25.7 thousand tonnes), Striped venus (14 thousand tonnes), hake (8.7 thousand tonnes), deep water rose shrimp (7.6 thousand tonnes), red mullet (6 thousand tonnes), cuttlefish (6 thousand tonnes) and Spottail mantis squillid (5 thousand tonnes).

In terms of landings value, a minimum of 10 species contribute to 50% of the total value. Hake is the species with the highest landing value (€64 million), followed by European anchovy, Deep-water rose shrimp, Common cuttlefish and Giant red shrimp.

Economic results for 2014 and recent trends

National fleet performance

In 2014, the economic performance of the Italian fleet improved compared to previous year. The total amount of Gross Value Added (GVA) and gross profit increased by 6% and by 15%, respectively. Net profit was €55.6 million with an increase of 102% on 2013, but still at very low levels compared to previous years highlighting a -53% on the average period 2008-2013. This general trend confirms a weak recovery of the sector in 2014.

In 2014, revenue was estimated at €824 million, further decreased 2% confirming the downward trend started in 2010. This reduction is mainly consequence of a decrease in income from landings as the other income items increased over the same period.

Total operating costs further decreased by 7% as a consequence of a generalized decrease in all cost items, with the only exceptions of the unpaid labour value and Repair and maintenance costs which together accounts for less than 15% on total operational costs. Between 2008 and 2014, the cost structure has remained relatively constant, with a slight increase in labour cost and a decrease in other variable costs.

[26] Findings of the national project: *"Analisi delle strutture produttive e delle caratteristiche socio-economiche delle marinerie italiane", Programma nazionale triennale della pesca e dell'acquacoltura 2013 – 2015*

The tangible asset value of the Italian fleet continued to decrease in 2014, showing a declining trend over the period 2011-2014. Investments amounted to €22 million, a 46% increase on 2013 but still 54% lower than those registered in the period 2008-2013.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 27.4%, a 13% increase on 2013. Net profit margin was estimated at 27.4% with an improvement of 106% on 2013 but remained low in comparison to the previous years. Similarly, the Rate of Return on Fixed Tangible Assets (RoFTA) improved in comparison to 2013 but remained lower than levels calculated prior than 2011.

Labour productivity (GVA/FTE) remained relatively stable in 2014 as both GVA and the number of FTE increased by 5-6% on 2013.

Fuel consumption per landed tonne has followed an irregular trend since 2008, and shows a decrease of 7% on 2013. Similarly, energy consumption per unit of effort (in days at sea) has followed a decreasing trend since 2011 thus highlighting a general improvement in fuel efficiency.

Landings in weight per unit of effort has followed a decreasing trend since 2011 and increased a further 7% in 2014.

Drivers affecting the economic performance trends

Between 2008 and 2014, the Italian fleet was characterized by decreasing trends in all main productive indicators: landings weight decreased by 17% and landings value by 27%. Over the same period average landed prices (real) of top ten species decreased by 12%, landings weight and landings value reduced by 20% and 30% respectively. Operational costs decreased by 25% on the average period 2008-2013.

Although in 2014, the economic performance of the Italian fleet largely improved compared to 2013, main profitability indicators as Gross value added and Gross profit remain quite below those registered in the previous years. Gross value added and gross profit reduced by 26% and 31% on the average period 2008-2013, respectively. Over the same period, gross value added per FTE reduced by 25% and Return on fixed tangible assets by 30%. The reduction in production can be only partially justified by the contraction in capacity and effort, which reduced by 4% in the number of vessels and by 13% in days at sea over the same period.

Lower volumes of landings can be considered the main driving forces behind the overall deterioration of the economic performance. Between 2008 and 2014, landing's weight of massive species as Striped Venus reduced by around 40%. In the case of small pelagic, European anchovy shows a reduction in landing's weight of about 30% offset by a corresponding increasing of European pilchards (+31%). Other target species reported reductions in landing's weight between -7% (Deep water rose shrimp) and -56% (Norway lobster), with the only exception of Giant red shrimp which reported an increase of 26% over the same period.

Markets and Trade

Italy has a negative trade balance in fresh fishery products, both in terms of volume and value. Between 2013 and 2014, total export quantity and value of fresh products increased by 10.7% and by 6.2% respectively (EUROSTAT). Over the same period, total import increased by around 5% in terms of weight and by 4.1% in terms of value. The Italian trade deficit of fresh products showed an increase of 3.5% reaching €615 million. Spain, Germany and France are the most important markets of Italian seafood products. The main products are anchovy, sardine and clam, which account for a 25% of all export in value.

Management instruments

Fisheries management in Italy, is primarily regulated by effort control, minimum conservation reference sizes (MCRS), closed areas (to protect sensitive habitats) or closed seasons (to protect juveniles or spawning stocks) and restrictions on gear construction (mesh size, gear dimensions, etc.). Management measures are implemented by mean of National Management Plans that have been adopted according to the MEDREG (Council Regulation (EC) No 1967/2006) requirements for certain fishing technique (demersal trawlers, purse seiners, pelagic trawlers and dredges) and by GSAs.

The expected management measures concerning small-scale fishery will be focused on the possibility of enforcing property rights. Recently, through the provision of Article 37 of Regulation (EC) 1198/06 on the European Fisheries Fund - (EFF), which allows the possibility of financing the drafting of local management plans (LMPs) - local communities have been provided with an intervention tool that is totally innovative in relation to presently available management instruments. Currently, in Sicily, 10 local management plans have been adopted and implemented in September 2012. LMPs have been produced by associated groups of fishers, by consortia and Producers Organisations (OPs) that represent at least 70% of the vessels or fishing capacity of the area in which the plan is to be applied. Regional administrations are identified as Intermediate Bodies for promoting the implementation of plans by fishers.

TACs and quotas

Total initial available quota of Bluefin tuna for the Italian fleet in 2014 was 1 950 tonnes, corresponding to 14% of total UE quota. The Italian quota was distributed among hooks (13.6%), purse seine (74.4%), trap (8.5%) and recreational

fishing (0.5%). For purse seine, fishery was allowed from 26 May to 24 June or until the exhaustion of quota. For recreational fishery, tuna fishery was allowed between 16 June and 14 October.

Status of Key Stocks

In 2013, 53 stocks in seven FAO Geographical Sub areas (GSA) out of 673 were assessed. According to the latest STECF and GFCM assessments, only six demersal stocks are currently being exploited at rates consistent with achieving MSY, namely Deep sea pink shrimp (*P. longirostris*) and Giant red shrimp (*Aristaeomorpha foliacea*) in the GSA 9 (Ligurian and North Tyrrhenian Sea), Red mullet (*Mullus barbatus*) and Deep sea pink shrimp (*P.longirostris*) in GSA 10 (South and Central Tyrrhenian Sea), red mullet (*Mullus barbatus*) in GSA 18 (Southern Adriatic Sea) and Norway lobster (*Nephrops norvegicus*) in Gsa 16 (South of Sicily).

The latest assessments for the main small pelagic stocks in the area indicate that they are exploited unsustainably, with the only exception of sardine in GSA16[27].

According to ICCAT, the stock status of Atlantic Bluefin Tuna derived from the 2014 updated assessment has improved in comparison to previous assessments, as F have declined during the recent years; accordingly, TAC has increased by 20.5% in 2015 (ICCAT REPORT 2014-2015 (II).

Innovation and Development

Over the past few years, practices of direct sales (in particular trough e-commerce) have become widespread, as for red shrimp in Sicily or fishery product of small scale fishery in Tuscany. Other producer's organizations obtained partnerships with big retailers as for some cooperatives in Apulia.

In some cases, many producer's organization are also responsible for other stages of processing as gutting and filleting with the aim to increase the value added of products.

Performance by fishing activity

Small-scale fleet

Small-scale fleet (vessels under 12m using passive gears) in Italy play a significant social and economic role: they constitute more than 65% of the fishing fleet, employ at least 50% of those workers directly engaged in fishing activity and account for approximately 25% of the total landing value from capture fisheries 2014. This fleet is homogeneously distributed among the seven Italian Geographical subareas.

The main patterns of this fleet are the family business organisation, area of operation close to landing points (<10 nm), use of one or more passive gears, limited daily landings (30 Kg/day), high quality of the landings and high selling price.
In 2014 both landings weight and landings value slightly increased by 2% compared to 2013. However, production remains quite below the levels of the period 2008-2013: -15% in terms of weight and -27% in terms of value of landings. The reduction of production in fact was not offset by an increase in prices, that remained quite stable over the period considered. Consequently, vessel productivity (landing value per vessel) remained quite low around €27 thousands, 25% lower than those registered in the period 2008-2013.

Operational costs decreased 5% on 2013. This tendency was mainly affected by a decrease in energy costs which accounted for 43% on total operational costs and decreased by 53% between 2013 and 2014. The major reason of the drop in fuel cost is due to the downfall in fuel consumption (-55% on 2013). Days at sea decreased by 6% on 2013 and by 13% on the average period 2008-2013. Between 2013 and 2014 fuel price continued to decline with a reduction from 0.75 €/l to 0.70€/. Landings in weight per unit of effort increased despite the decrease in effort (days at sea).

The economic performance of the Italian small scale fleet increased compared to previous year. The total amount of Gross Value Added (GVA) and gross profit increased by 41% and by 77%, respectively. Although economic indicators improved during 2014, the economic performance indicators are still lower than those registered in the period 2008-2013, highlighting a timid resumption of this sector, characterized by decreasing trends in number of vessels, Vessel productivity (landing value per vessel), number of employees and salaries.

Large-scale fleet

Large-scale fleet includes trawlers, dredgers, purse seiners and pelagic trawlers. This fleet is mainly composed by demersal trawlers 12-18m and 18-24m., which accounted for 33% and 17% of vessel's number over 12m. A 34% of larger vessels is concentrated in GSA 17 (Northern Adriatic Sea), followed by in GSA 16 (South of Sicily) with 12% and GSA 18 (Southern Adriatic Sea) with 13%.
In 2014, the economic performance of this fleet was positive with values similar to those registered in the previous year. Gross profit and net profit are stable from 2013 to 2014, while GVA shows a reduction by 5%. The fleet, which number is almost the same as in the previous year, has registered an increase by 2% in the weight of landings and a decrease in its value by 4%. Given the predominance of the share contract in the Italian fishing sector, the reduction in landings value combined with an increase in energy cost by 5% resulted in a decrease of labour cost by 10%.
In the period 2008-2014 the fleet shows a negative economic trend. Gross profit and net profit in 2014 are lower than the average values of the period by 25 and 44% respectively. This is only partially due to the decreasing trend in the number of vessels and the reduced days at sea, while the main factor is the negative trend in the average price of landings. In

[27] STECF – Assessment of Mediterranean Sea stocks - part 1 (STECF-14-17) , (STECF-15-06), (STECF-15-18) and Annuario Sullo stato delle Risorse e sulle strutture Produttive dei mari italiani, Fig. 3.10.8 pag 62 - http://www.nisea.eu/Annuario.pdf

2014, landings in weight and value are below the average value of the period by 15 and 26%, respectively. Average landings price decreased by 17% from 2008 to 2014. This negative trend can be related to the changes in landing composition: the incidence on total volume of small pelagic species rose from 25% in 2008 to 33% in 2014. On the contrary, species with high average landing prices decreased. For example swordfish and common cuttlefish showed a substantial decrease during the period 2008-2014 both in terms of weight (around -30% on 2008) and in value (-30/-40% on 2008). Over the same period landings weight of Norway lobster and striped venus reduced by 56 and 43%, respectively.
More generally, between 2008 and 2014, landings weight and value of some target species incurred in large reductions in the same way as we observed for the whole Italian fleet, consequently, larger vessels reported a relatively poor economic performance, compared with smaller vessels.

Distant-water fleet

Italian vessels generally operating in distant-water were inactive in 2014 as a consequence of a lack of international agreements. Those vessels are included in the inactive fleet for 2014.

Performance results of selected fleet segments

Fleet Segment Level Economic performance

The Italian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Adriatic and Southern Tyrrhenian Seas. The national fleet consisted of 23 (DCF) fleet segments in 2014 and seven inactive length classes consisting of 1 134 vessels. Five of the active fleet segments made losses in 2014, while 18 made overall net profits.

Passive gears polyvalent 6-12m: In 2014, the landings of passive gears 6-12m amounted to 19% of total national landings in value and 20% in volume. Landings from this segment amounted to 22 231 tonnes, corresponding to almost €160 million. This fleet segment is the most relevant in terms of both landings value and employment, with 5 297 vessels employing 7 172 FTEs. In 2014, each vessel was active for 126 days at sea on average, a decrease of 5% compared to 2013. Landings are dominated by cuttlefish, which amounted to more than 2 thousand tonnes (9% of total fleet segment landings), equivalent to €17 million in value (11% of total fleet segment revenues). The next most important species are European hake and common octopus accounted for 5% of landings in weight each and 7% and 5% in value respectively. The fleet segment was profitable in 2014, with a reported gross profit of around €47 million and a net profit of more than €14 million, equivalent to a net profit margin of 9.1%.

Demersal trawl / seine 12-18m: The second most productive fleet in terms of landings value (€158 million in 2014) consists of 1 254 vessels operating mostly with bottom trawls and beam trawls. These vessels represent 10% of the entire Italian fleet in terms of vessels number, contributing 13% of the volume and 19% of the landings value of the national fleet. Between 2013 and 2014, landings in value generated by this segment decreased by 14%. The level of activity decreased 10% in 2014, achieving an average of 136 days at sea per vessel. From 2013 to 2014, gross profit and net profit decreased 14% and 23% respectively mainly due to a decrease by 14% in landings value. The main species for this fleet segment is European hake with 2 199 tonnes landed and a value of around €15 million in 2014. The second most important species in terms of landed value is deep-water rose shrimp, with 2 039 tonnes and a value of €13.5 million. Other important species are spottail mantis squillid, red mullet and blue and red shrimp accounting for 7% of total landings value each.

Demersal trawl / seine 18-24m: In 2014, this fleet segment consisted of 632 vessels, 1% less than the previous year. These vessels target both demersal and pelagic species. The most important species are European hake and deep water rose shrimp, accounting for 14 and 12% of total landings value respectively. Other important species are Norway lobster and red mullet, which contributed to total landings value for 7% each. The total value of landings, decreased by 3% from 2013 to 2014, amounted to around €152 million and contributed to 19% of the total Italian landings value. In 2014, 2 423 FTEs were employed in the fleet segment, contributing for 12% to the total national FTEs. In the same year, the fleet segment registered a gross profit of €36.4 million, with a reduction by 7% if compared with the previous year.

Demersal trawl / seine 24-40m: In 2014, this fleet segment represented 2% of the total Italian fleet in number, but accounted for 5% of the total Italian landing weight and 10% of total Italian landings value. The main target species are giant red shrimp and deep water rose shrimp, which account for more than a half of total landings value (31 and 22% respectively). Other important species are Norway lobster and European hake, which contributed to total landings value for 9 and 8% respectively. In 2014, the fleet segment employed 1 125 FTEs, 4% less than the same data registered in 2013. In the same year, the fleet segment registered a net loss of €13 million, confirming the negative trend registered in the previous years.

Dredges 12-18m: In 2014, there were 706 vessels operating predominantly around the Central-Northern Adriatic coast (GSA 17), employing 485 FTEs. This fishery targets almost exclusively clams and is co-managed at compartment level by local consortia. In 2014, total landings amounted to 15 600 tonnes, corresponding to around €40 million. The performance of this fleet is highly variable due to cyclic abundance of clams. In 2014, hydraulic dredges operated for 78 days on average, 8% more than the average activity registered in 2013. Between 2013 and 2014, production levels decreased both in weight (-5%) and in value (-9%). The fleet segment was profitable in 2014, with a gross profit of €13.7 million and a net profit of around €3.2 million, equivalent to a net profit margin of 8%. However, net profit confirms the negative trend registered in the last years with a reduction of almost 50% from 2013 to 2014.

Projections for 2015 and outlook

In 2015 the Commission proposed EU multiannual plan for anchovy and sardine in the northern Adriatic Sea and a plan for demersal species in the north-western Mediterranean Sea.

The landing obligation included under Article 15 of Regulation (EU) No 1380/2013 stipulates the progressive elimination of discards. The time-frame for implementation of the landing obligation has been set on a phased basis: (i) as from 1 January 2015 for pelagic species; (ii) as from 1 January 2017 for species which define the demersal fisheries; and (iii) as from 1 January 2019 for other all species subject to minimum sizes.

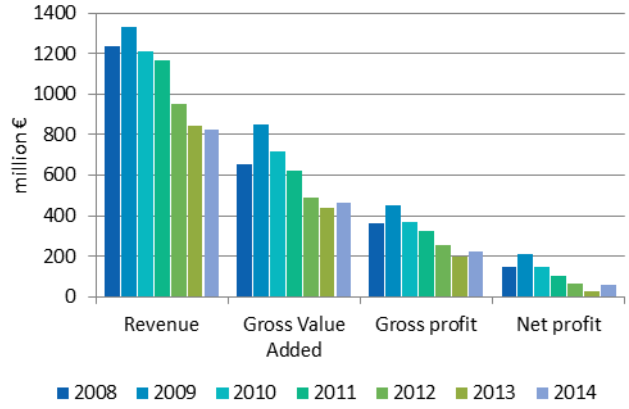
A discard plan for small pelagic fisheries in the Mediterranean Sea was established by the Commission Delegated Regulation (EU) No 1392/2014. This Regulation specifies the details for implementing the landing obligation from 1 January 2015 in the Mediterranean Sea to all catches of species which are subject to minimum sizes in the small pelagic fisheries using mid-water pelagic trawl and purse seine as fishing gears.

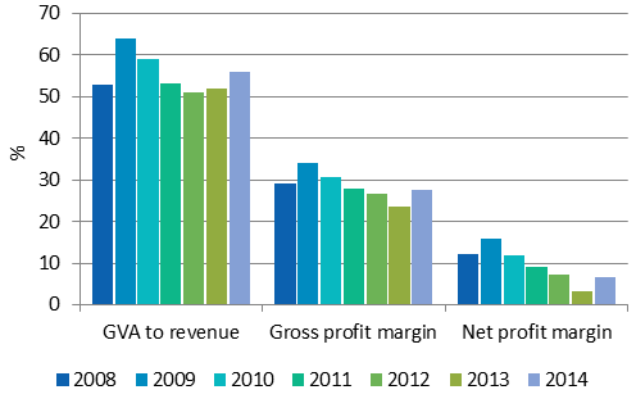
Even though 2015 data on the effects of the Regulation on small pelagic fisheries in Italy are still not available, potential additional costs can be assumed for the management of discards on board and after landing. On board, additional time for sorting and boxing (potential additional labour costs), and conservation costs for ice and cold storage can be expected. Once discards are landed, costs of transport and conservation are expected as well as costs for disposal when landed discards will not find alternative uses than becoming a "special waste"[28].

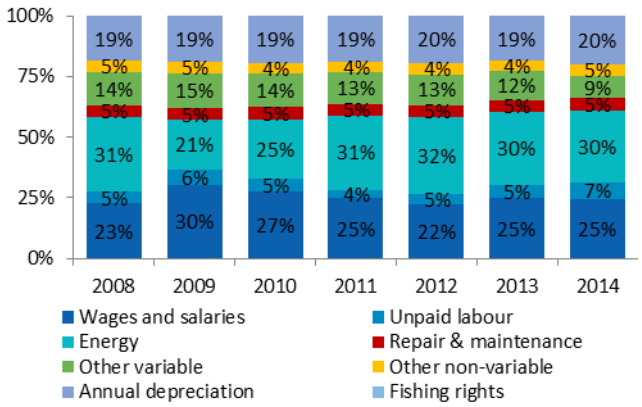
Data issues

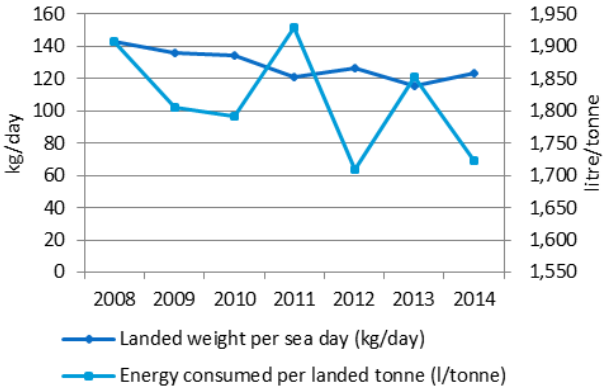
No relevant data issues have been detected for drafting the national chapter and the coverage and quality of MS data appears to be good.

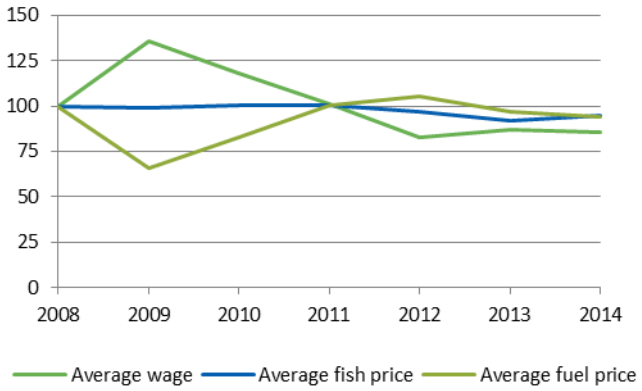
[28] Main conclusions from MAREA: Mediterranean Halieutic Resources Evaluation and Advice, SPECIFIC CONTRACT N° 11: "IMPLICATIONS OF THE IMPLEMENTATION OF THE LANDING OBLIGATIONS PROVISIONS IN SMALL PELAGIC FISHERIES IN MEDITERRANEAN" Contract number MARE/2009/05-Lot 1)

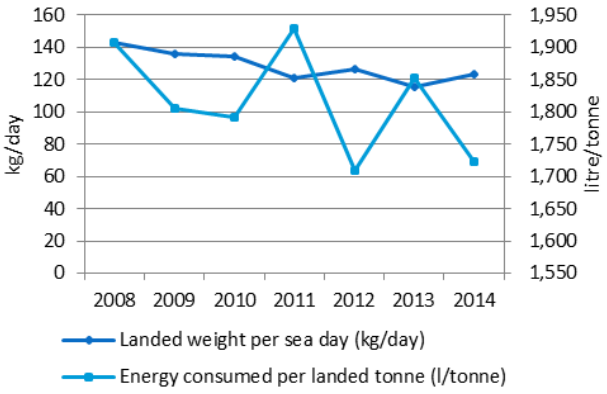


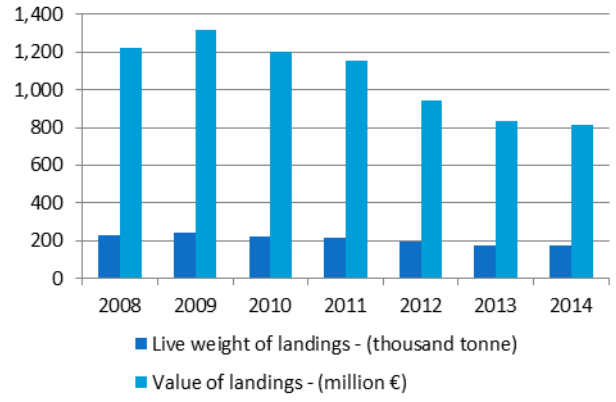


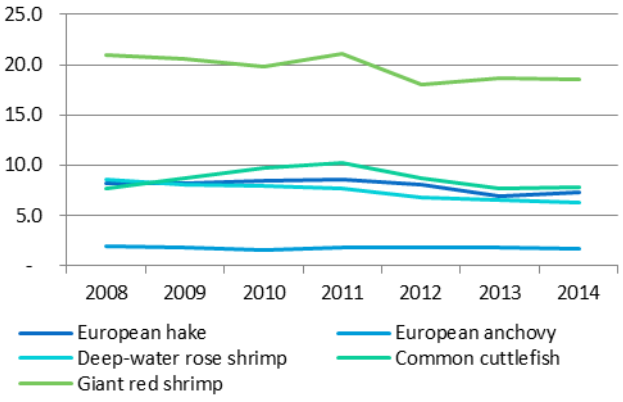












Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.11 Italy: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.48 Italy: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 are projected

		2008	2009	2010	2011	2012	2013	2014	*2015*	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	13,518	13,359	13,348	13,285	12,942	12,746	12,689	*12,426*		0%	-4%
Number of Inactive vessels_ms	(#)	1,163	1,109	1,153	1,126	1,150	1,214	1,134	*1,098*		-7%	-2%
Vessel tonnage	(thousand GT)	197.5	193.0	191.8	179.2	171.2	164.6	163.9	*163.6*		0%	-10%
Engine power	(thousand kW)	1,147.3	1,122.9	1,121.2	1,088.1	1,047.4	1,023.9	1,023.8	*1,013.5*		0%	-6%
Average vessel age	(year)	28	29	29	30	30	31	31	*32*		2%	6%
Average vessel length	(metre)	10	10	10	10	10	10	10	*10*		0%	-1%
Enterprises with one vessel	(#)	8,929	7,702	7,787	7,775	7,669	7,179	6,963	*6,838*		-3%	-11%
Enterprises with 2 to 5 vessels	(#)	825	753	775	1,270	1,236	904	950	*943*		5%	-1%
Enterprises with more than 5 vessels	(#)	206	208	220	229	237	214	219	*223*		2%	0%
FTE	(#)	21,456	21,414	21,169	20,740	20,693	19,749	20,694			5%	-1%
Total employed	(person)	29,604	29,222	29,222	28,964	28,292	26,758	26,932	*26,374*		1%	-6%
Days at sea	(thousand day)	1,591	1,783	1,669	1,749	1,556	1,494	1,433			-4%	-13%
Fishing days	(thousand day)	1,530	1,752	1,646	1,715	1,538	1,581	1,530			-3%	-6%
Number of fishing trips	(thousand)	1,544	1,784	1,634	1,728	1,552	1,536	1,420			-8%	-13%
Energy consumption	(million litre)	433.0	437.6	402.7	409.6	336.4	319.8	304.4			-5%	-22%
Live weight of landings	(thousand tonne)	227.0	242.4	224.8	212.4	196.8	172.6	176.8			2%	-17%
Value of landings	(million €)	1,223.1	1,319.4	1,204.0	1,155.3	944.6	834.1	813.3			-2%	-27%
Income from landings	(million €)	1,223.1	1,319.4	1,204.0	1,155.3	944.6	834.1	813.3			-2%	-27%
Other income	(million €)	12.35	10.35	9.10	8.68	8.87	7.59	10.84	*10.62*		43%	14%
Direct income subsidies	(million €)	33.17	13.87	23.94	11.72	7.83	12.61	17.06			35%	-1%
Income from leasing fishing rights	(million €)						0.5	1.2			125%	125%
Wages and salaries of crew	(million €)	242.75	329.26	286.17	255.90	191.78	196.32	184.72			-6%	-26%
Unpaid labour value	(million €)	51.18	66.67	56.65	37.63	40.06	42.33	50.24			19%	2%
Energy costs	(million €)	334.89	223.86	257.52	318.05	274.52	240.49	221.71			-8%	-19%
Repair & maintenance costs	(million €)	52.09	51.63	49.99	46.79	42.80	37.22	38.02			2%	-19%
Other variable costs	(million €)	146.38	157.40	146.10	137.35	111.27	97.47	69.33			-29%	-48%
Other non-variable costs	(million €)	48.50	48.96	45.26	42.63	38.56	30.77	34.14	*33.43*		11%	-20%
Annual depreciation costs	(million €)	199.77	206.75	202.81	198.36	170.15	148.34	151.70	*148.56*		2%	-19%
Rights costs	(million €)	0.8	0.6	0.4	0.4	0.1						-100%
Opportunity cost of capital	(million €)	10.93	33.84	23.68	22.18	16.68	21.20	18.71	*10.94*		-12%	-13%
Tangible asset value	(million €)	958.5	972.3	986.7	905.5	786.9	711.4	698.3	*683.8*		-2%	-21%
Investments	(million €)	76.4	77.0	54.2	36.9	29.5	15.0	22.0			46%	-54%
Financial position	(%)	78.0	64.0	62.0	77.0	83.0	68.4	68.3			0%	-5%
Gross Value Added	(million €)	653.6	847.9	714.2	619.2	486.3	435.7	461.0			6%	-26%
GVA to revenue	(%)	52.9	63.8	58.9	53.2	51.0	51.8	55.9			8%	1%
Gross profit	(million €)	359.6	452.0	371.4	325.7	254.5	197.0	226.0			15%	-31%
Gross profit margin	(%)	29.1	34.0	30.6	28.0	26.7	23.4	27.4			17%	-4%
Net profit	(million €)	148.9	211.4	144.9	105.1	67.6	27.5	55.6			102%	-53%
Net profit margin	(%)	12.1	15.9	11.9	9.0	7.1	3.3	6.7			106%	-32%
GVA per FTE	(thousand €)	30.5	39.6	33.7	29.9	23.5	22.1	22.3			1%	-25%
Return on fixed tangible assets	(%)	16.7	25.2	17.1	14.1	10.7	6.8	10.6			55%	-30%

Table 5.49 Italy: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF							DWF					Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012						
Total number of vessels (#)	7,885	7,846	7,837	7,866	7,689	7,638	7,611	4,452	4,386	4,351	4,286	4,099	3,894	3,944	18	18	7	7	5		0%	-2%		1%	-7%
Vessel tonnage (thousand GT)	14.9	14.8	14.9	15.3	14.8	14.7	14.7	164.4	161.1	155.2	149.4	142.2	135.0	135.5	10.5	10.5	3.6	3.6	2.7		0%	-1%		0%	-10%
Engine power (thousand kW)	219.9	220.1	223.2	228.3	221.1	219.6	219.6	848.1	831.7	807.6	790.5	753.2	723.2	731.8	21.8	21.8	7.4	7.4	5.3		0%	-1%		1%	-8%
FTE (#)	9,384	9,757	9,865	10,036	9,779	9,706	9,379	11,923	11,559	11,242	10,638	10,890	10,043	11,315	148	97	63	66	25		-3%	-4%		13%	2%
Total employed (person)	13,722	13,698	14,094	14,050	13,856	13,275	13,114	15,627	15,269	14,888	14,675	14,361	13,483	13,819	255	255	240	240	75		-1%	-5%		2%	-6%
Days at sea (thousand day)	989	1,152	1,070	1,178	1,033	986	931	599.7	629.9	597.8	570.5	523.0	507.8	502.1	2.3	15.7	0.8	0.9	0.4		-6%	-13%		-1%	-12%
Fishing days (thousand day)	967	1,152	1,070	1,167	1,033	1,078	1,029	563.0	599.9	576.4	548.2	505.5	503.0	501.9							-5%	-5%		0%	-9%
Number of fishing trips (thousand)	1,006	1,217	1,098	1,212	1,074	1,060	950	539	567	536	516	477	476	470							-10%	-14%		-1%	-9%
Energy consumption (million litre)	56.8	64.1	59.3	74.6	57.0	72.0	32.6	369.7	369.0	343.4	332.3	278.2	247.8	271.9	6.5	4.6	2.5	2.6	1.2		-55%	-49%		10%	-16%
Live weight of landings (thousand tonne)	32.83	38.55	33.67	36.72	31.14	27.18	28.18	183.74	195.53	189.34	173.61	164.70	145.44	148.60	10.44	8.36	1.75	2.05	0.94		4%	-15%		2%	-15%
Value of landings (million €)	285.93	333.40	298.58	311.89	245.98	196.15	203.28	911.26	960.74	892.30	832.21	694.09	637.91	610.04	25.87	25.30	13.07	11.23	4.52		4%	-27%		-4%	-26%
Income from landings (million €)	285.9	333.4	298.6	311.9	246.0	196.1	203.3	911.3	960.7	892.3	832.2	694.1	637.9	610.0	25.9	25.3	13.1	11.2	4.5		4%	-27%		-4%	-26%
Other income (million €)	4.3	5.1	4.8	5.1	4.2	3.7	0.3	8.1	5.2	4.3	3.6	4.7	3.9	10.6	-	-	-	-	-		-92%	-94%		172%	113%
Direct income subsidies (million €)	0.50	0.36	0.41	0.07	0.49	0.08	0.10	32.67	13.51	23.52	11.65	7.34	12.53	16.97	-	-	-	-	-		20%	-70%		35%	1%
Wages and salaries of crew (million €)	32.8	45.4	39.2	51.6	27.3	25.7	31.9	208.2	282.5	246.1	203.4	164.1	170.6	152.8	1.8	1.4	0.9	0.9	0.3		24%	-14%		-10%	-28%
Unpaid labour value (million €)	50.2	64.0	54.7	36.4	38.3	40.7	48.7	0.9	2.7	2.0	1.3	1.7	1.6	1.6	-	-	-	-	-		19%	3%		-1%	-8%
Energy costs (million €)	43.9	32.8	37.7	58.0	46.5	54.1	25.5	285.8	188.7	218.3	258.1	227.2	186.4	196.2	5.2	2.3	1.6	2.0	0.8		-53%	-44%		5%	-14%
Repair & maintenance costs (million €)	15.7	15.6	15.3	14.7	13.3	9.6	9.9	35.9	35.7	34.4	31.9	29.4	27.6	28.1	0.5	0.4	0.3	0.3	0.1		2%	-30%		2%	-13%
Other variable costs (million €)	30.2	35.4	31.9	33.2	26.8	25.0	13.7	114.7	120.9	113.4	103.4	84.2	72.5	55.7	1.5	1.0	0.8	0.8	0.3		-45%	-55%		-23%	-45%
Other non-variable costs (million €)	12.3	12.2	12.0	11.5	10.1	9.9	12.2	35.6	36.3	32.9	30.8	28.3	20.9	21.9	0.6	0.5	0.3	0.4	0.1		24%	8%		5%	-29%
Annual depreciation costs (million €)	35.1	36.3	41.5	41.5	37.8	34.1	33.5	160.0	165.3	156.0	152.5	130.0	114.2	118.2	4.7	5.2	5.3	4.3	2.3		-2%	-11%		3%	-19%
Opportunity cost of capital (million €)	1.55	4.92	3.91	4.00	3.17	4.03	3.53	8.18	25.52	16.31	16.32	12.14	14.90	13.38	0.72	2.07	0.62	0.51	0.24		-13%	-2%		-10%	-14%
Tangible asset value (million €)	135.8	141.3	162.9	163.3	149.6	135.3	131.6	717.4	733.3	679.6	666.0	572.6	500.1	499.1	63.3	59.6	25.7	20.9	11.2		-3%	-11%		0%	-23%
Investments (million €)	9.8	10.2	2.1	10.6	8.7	8.1	8.4	62.8	63.7	51.0	25.1	20.0	7.0	13.6	3.8	3.0	0.1	1.3	0.8		3%	1%		96%	-64%
Gross Value Added (million €)	188.2	242.6	206.5	199.7	153.4	101.2	142.3	447.2	584.2	497.6	411.7	329.7	334.4	318.7	8.9	16.1	10.1	7.8	3.2		41%	-22%		-5%	-27%
GVA to revenue (%)	64.8	71.7	68.1	63.0	61.3	50.7	69.9	48.6	60.5	55.5	49.3	47.2	52.1	51.3	53.4	79.2	77.2	69.3	70.6		38%	10%		-1%	-2%
Gross profit (million €)	105.2	133.2	112.7	111.8	88.1	34.8	61.8	238.1	299.1	249.5	207.0	163.9	162.2	164.2	7.1	14.7	9.2	6.9	2.9		77%	-37%		1%	-25%
Gross profit margin (%)	36.2	39.4	37.1	35.3	35.3	17.4	30.3	25.9	31.0	27.8	24.8	23.4	25.3	26.5	42.6	72.5	70.3	61.1	63.2		74%	-9%		5%	0%
Net profit (million €)	68.5	92.0	67.3	66.2	47.2	-3.3	24.8	69.9	108.3	77.2	38.2	21.7	33.1	32.6	1.9	8.0	3.3	2.0	0.3		843%	-56%		-1%	-44%
Net profit margin (%)	24	27	22	21	19	-2	12	8	11	9	5	3	5	5	12	40	25	18	7		830%	-34%		2%	-22%
GVA per FTE (thousand €)	20	25	21	20	16	10	15	38	51	44	39	30	33	28	60	165	161	119	129		45%	-19%		-15%	-28%

Table 5.50 Italy: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(litre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
ITA A37 DTS1218	1,254	3,211	170,652	3,286	23,758	158,081	161,592	80,654	49.9	44,073	27.3	24,432	15.12	11.4	25	35	High	2%	Stable
ITA A37 PGP0612	5,297	7,172	666,877	1,255	22,231	158,633	158,922	110,108	69.3	46,837	29.5	14,391	9.06	8.8	15	15	Reasonable	-36%	Deteriorated
ITA A37 DTS1824	632	2,423	100,577	3,472	25,754	152,480	156,127	67,612	43.3	36,415	23.3	201	0.13	12.9	28	3	Reasonable	-95%	Deteriorated
ITA A37 DTS2440	195	1,142	32,990	5,348	9,076	77,450	78,927	31,124	39.4	13,906	17.6	-13,248	-16.79	15.1	27	-10	Weak	-66%	Deteriorated
ITA A37 PGP0006	2,300	2,180	262,501	780	5,794	43,598	43,598	31,332	71.9	14,495	33.2	10,041	23.03	7.7	14	71	High	-21%	Deteriorated
ITA A37 DRB1218 °	706	485	54,805	432	15,614	39,679	39,831	28,975	72.7	13,651	34.3	3,194	8.02	31.6	60	11	Reasonable	-60%	Deteriorated
ITA A37 PGP1218 °	369	895	49,099	1,633	3,786	29,020	29,038	18,868	65.0	9,124	31.4	1,979	6.82	10.9	21	10	Reasonable	-52%	Deteriorated
ITA A37 TM2440	67	489	9,794	499	21,603	22,480	23,020	9,304	40.4	4,561	19.8	-1,218	-5.29	9.7	19	-3	Weak	-993%	Deteriorated
ITA A37 HOK1218 °	122	383	16,692	1,327	2,738	18,669	18,669	11,549	61.9	5,485	29.4	3,102	16.62	15.8	30	39	High	15%	Improved
ITA A37 PS40XX	10	27	98	310	1,319	15,185	15,185	13,887	91.5	10,013	65.9	6,379	42.01	143.3	514	45	High	170%	Improved
ITA A37 PS1824	43	290	4,882	492	6,348	15,090	15,090	9,650	64.0	4,877	32.3	2,548	16.88	16.5	33	32	High	11%	Improved
ITA A37 PS1218	93	435	12,326	582	4,769	13,331	13,342	8,905	66.7	3,705	27.8	1,620	12.14	12.0	20	23	High	2675%	Improved
ITA A37 PS2440	37	338	3,688	407	6,868	11,546	11,654	7,516	64.5	3,972	34.1	2	0.01	10.5	22	3	Reasonable	100%	Improved
ITA A37 TM1218 °	39	167	6,218	126	9,709	10,698	10,884	7,653	70.3	4,085	37.5	3,606	33.14	21.4	46	198	High	125%	Improved
ITA A37 TM1824	38	172	5,636	349	10,707	10,039	10,518	4,858	46.2	2,458	23.4	527	5.01	14.0	28	10	Reasonable	38%	Improved
ITA A37 DTS0612	183	241	17,792	1,898	1,495	9,481	9,555	5,355	56.0	2,193	23.0	860	9.00	13.1	22	21	Reasonable	-27%	Deteriorated
ITA A37 TBB1824	29	138	3,804	3,795	1,312	8,656	8,935	3,023	33.8	1,461	16.3	-374	-4.18	11.3	22	-3	Weak		
ITA A37 HOK1824 °	42	217	6,035	1,635	907	6,749	6,749	4,167	61.7	1,738	25.7	-1,324	-19.61	11.2	19	-10	Weak	-1240%	Deteriorated
ITA A37 TBB2440	17	94	2,360	2,192	1,618	5,724	5,779	2,149	37.2	935	16.2	-632	-10.94	12.9	23	-8	Weak	-324%	Deteriorated
ITA A37 PMP1218 °	30	93	2,790	1,851	479	2,865	2,881	1,745	60.6	951	33.0	638	22.16	8.5	19	56	High	67%	Improved
ITA A37 TBB1218	10	37	1,064	1,240	406	1,653	1,653	788	47.7	226	13.7	37	2.24	15.1	21	9	Reasonable	-77%	Deteriorated
ITA A37 PS0612 °	28	41	756	586	333	1,162	1,162	875	75.3	415	35.7	304	26.18	11.3	22	72	High		
ITA A37 PMP0612	14	28	1,153	929	155	1,050	1,050	862	82.1	419	39.9	326	31.05	16.0	31	78	High		

Table 5.51 Italy: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)							Live weight of landings (tonne)							Average landed price (real) (€)						
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014
European hake	102.4	99.4	97.3	90.4	75.6	67.4	63.8	12.6	12.0	11.5	10.5	9.4	9.8	8.7	8.2	8.3	8.4	8.6	8.0	6.9	7.3
European anchovy	85.4	96.4	82.0	82.3	76.8	55.5	52.5	45.0	54.4	54.1	46.2	42.8	29.7	31.8	1.9	1.8	1.5	1.8	1.8	1.9	1.7
Deep-water rose shrimp	70.9	76.7	81.7	77.1	56.6	54.5	48.6	8.2	9.6	10.3	10.0	8.3	8.3	7.7	8.6	8.0	8.0	7.7	6.8	6.6	6.3
Common cuttlefish	74.5	82.6	67.9	58.5	44.6	44.0	45.7	9.7	9.5	7.0	5.7	5.1	5.7	5.8	7.7	8.7	9.7	10.2	8.8	7.7	7.9
Giant red shrimp	37.2	48.1	50.0	49.5	43.0	52.1	41.6	1.8	2.3	2.5	2.4	2.4	2.8	2.2	20.9	20.6	19.9	21.1	18.1	18.7	18.6
Striped venus	62.1	56.9	57.0	55.3	43.0	33.6	32.2	24.9	17.3	19.8	19.7	20.0	14.6	14.1	2.5	3.3	2.9	2.8	2.2	2.3	2.3
Swordfish	59.2	67.3	72.8	64.0	46.5	29.3	31.9	4.5	5.1	6.0	5.4	4.0	2.9	3.4	13.1	13.1	12.1	12.0	11.6	10.2	9.4
Norway lobster	70.4	74.8	66.8	55.5	41.0	36.6	28.5	3.4	3.6	3.2	2.7	2.1	2.0	1.5	20.6	20.9	20.7	20.6	20.0	18.3	19.2
Red mullet	38.9	33.6	31.2	28.3	31.1	24.1	28.3	7.1	6.1	4.9	4.8	5.9	5.1	6.3	5.5	5.5	6.3	5.9	5.3	4.7	4.5
Spottail mantis squillid	43.6	43.6	37.6	37.7	29.9	28.4	27.3	6.0	6.5	6.2	5.4	4.8	5.0	4.7	7.3	6.8	6.1	6.9	6.3	5.7	5.8

5.13 Latvia

Short description of the national fleet

Fleet capacity

In 2014, the Latvian Baltic Sea fishing fleet consisted of 365 registered vessels including 87 inactive vessels, with a combined gross tonnage of 7 thousand tonnes, a total engine power of 19.8 thousand kilowatts and an average age of 28 years. The size of the Latvian fleet followed a decreasing trend between 2013 and 2014. The gross tonnage declined by 10% whiles the total engine power of the fleet declined by 7% during the same period. The reason for the changes during the analysed periods from 2008 to 2014 is connected to vessel scrapping which according to the multi-annual management plan aims to achieve a better balance between fishing capacity and the available resources. The fishing vessels were "reassigned for activities outside fishing (by scrapping or selling)". Vessel scrapping between 2008 and 2013 as well as other structural changes in fleet segments had a positive impact on incomes and minimised total costs resulting in an increase in profitability and overall improvement in the economic effectiveness of several fishing firms.

Fleet structure

Latvian fleet separated into several segments by the length, gears and different operational areas: the Baltic Sea fleet (segment trawlers VL2440 metres), fleet operated predominantly in the Gulf of Riga (segment trawlers VL1218 metres), the small scale fleet operated in the coastal zone (segment with polyvalent fishing gears VL0010 metres) and a distance-water fleet (segment trawlers VL40XX metres) operated in the Atlantic NEAFC and CECAF areas.

Significant differences in the number of vessels and in other related variables were observed between 2010 and 2011. During that period the fleet size decreased by 364 vessels or 53%. The major factor causing the fleet to decrease is that one part of small coastal zone vessels less than 10 metres were excluded from the statistics. The excluded vessels have a licence and obligation to fill coastal logbooks but only fish for self-consumption and are not involved in commercial fishing activity. This type of fishing activity in Latvia has a long historical tradition. The small-scale fleet targets cod, salmon, flounder, smelt, herring and other coastal species.

Employment

Employments were around 607 jobs; corresponding 362 FTEs in 2014. The total employments and FTE decreased by 10% and 13%, respectively between 2013 and 2014 while the average wage per FTE decreased during the same period by 17%. Compared to other member states, Latvia has a low wage for fishers. However, the average wage per employee increased by 20% during the period from 2008 to 2014. The fishers at the Baltic Sea vessels usually are local Latvian inhabitants. For the distance-water vessels fishing companies also invited 3rd countries residents.

Effort

The Latvian Baltic Sea fishing fleet spent a total of around 19.2 thousand days at sea in 2014, 17.1 thousand of which were fishing days. The total number of days at sea and fishing days remained relatively stable between 2013 and 2014. The total quantity of fuel consumed in 2014 was 5.3 million litters. The average fishing days increased by 17% between 2008 and 2014 while energy consumed per landed tone decreased by 6%. The increase in fishing days per vessel indicates increased fishing effort per vessel.

Production

The total weight landed by the fleet in 2014 was 59.2 thousand tonnes of fish with a landed value of €19.5 million. The total weight of landings has decrease by 3% between 2013 and 2014 while landed value decreased by 12% during the same period. The main reason for decrease in weight and value was economic situation deterioration for the fish processing enterprises which are the most important buyers of the fresh fish.

In terms of landings composition in 2014 sprat was the most common species landed in terms of weight 30.7 thousand tonnes, followed by herring 23.3 thousand tonnes and cod around 1.5 thousand tonnes. In 2014 European sprat achieved the highest landed value €10.2 million for the national fleet, followed by herring €6.3 million and then cod €1.6 million. The sprat, herring and cod, accounted for 52%, 32% and 8% respectively of the total landings value in 2014 and contributed to 52%, 39% and 2%, to total landed weight. Total landing value and weight declined by 13% and 16% respectively between 2008 and 2014. The major factor causing the decrease in weight and significant increase in prices was the reduction of Latvian quota for sprat by 50% in the Baltic Sea between 2008 and 2012. The price obtained for sprat increased significantly by 37% between 2008 and 2014 but for cod decline by 25% at the same period. The total landing weight and value for cod decrease significantly by 43% and 46% respectively between 2013 and 2014. The low price for cod can be described with very low concentrations and poor catches as well as a decrease of cod price at the international market what makes it fishery not economically effective.

Economic results for 2014 and recent trends

National fleet performance

The amount of revenue generated by the Latvian national fleet in 2014 was €20.3 million including €19.5 million in income from fish sales and €0.8 million in non-fishing income. Despite of the decreased by 15% for revenue between 2013 and 2014 the Baltic Sea fleet remained in a net profit making position in 2014.

The expenditure for the Latvian fleet in 2014 was €17.8 million and amounting to 88% of revenue. The largest expenditure items in 2014 were non-variable costs, energy costs and variable costs 29%, 19% and 19% respectively. Overall the cost structure has remained relatively stable over the years with slow apparent decrease in energy costs.

Towards the end of 2008 and during 2009 the Latvian fishery sector was negatively affected by the global economic crisis which led to significant decrease of profit levels. The economic efficiency of the fleet started to improve in 2011. However, the net profit declined by 38% between 2011 and 2014. In terms of profitability the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Latvian national fleet in 2014 was €7.2, €4.1 and €2.4 million respectively. It should be mentioned that too high values of net profit in 2008 should not been taken into consideration due to the erroneous negative values for opportunity costs for which in turn negative interest rate was applied for calculation.

In 2014 Latvian fleet had an estimated depreciated replacement value of €9 million. The depreciated replacement value has a low values between 2011 and 2014. The major factors are a long service life of vessels (around 30 years) and obsolete equipment. Investment increased significantly by 89% between 2008 and 2014. However, the invested amount remains less than one million per year.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 20% indicating a high operating efficiency of the sector. Net profit margin was estimated at 12% in 2014. The labour productivity (GVA/FTE) had decline by 31% between 2013 and 2014 but the number of FTE also decrease by 13%.

The Rate of Return on Fixed Tangible Assets (RoFTA) significant decreased in comparison to previous years but remained positive at 1%. Landings in weight per unit of effort (in days at sea) increased significantly by 63% since 2008 (Figure X1).

The average fuel price decrease by 22% from 2013 to 2014 whiles the average price per kg decrease by 17%. The average revenue and wage have followed an overall increasing trend since 2013 by 30%and 18% respectively.

Drivers affecting the economic performance trends

There are no major changes for the small-scale fleet.

The changes for the large-scale fleet connected to vessels scrapping. The unbalance between the fishing fleet's capacity and the fish resources allocated to Latvia had been revealed for the fleet segment netters VL2440 metres. To reach the necessary balance between fleets capacity and the fish resources the exit (scrapping) of vessels from fishery or fleet segment netters VL2440 metres therefore was recommended. It was recommended to eliminate the whole segment netters VL2440 metres totally as this segment as it is targeting only cod and is unable to switch to other fish stocks in conditions when cod stock is in a bad state. The exit (scrapping) of netters VL2440 metres is planned to be accomplished till 31st December 2017. According to the Action plan for 2015-2017 four vessels is going to be scrapped.

The distant-water fleet had significant changes between 2013 and 2015. The three vessels were sold and excluded from the Fleet Register between 2013 and 2015 in the same time eight vessels with the average length around 60 metres were included in the Fleet register. The main reason for the changes was an unlimited fishery in NEAFC area and high stock for crabs in the Barents Sea. The 10 vessels were active from the 12 vessels registered in the Fleet Register for the fleet segment VL40XX in 2015.

Markets and Trade

The fishery sector in Latvia depends on economic situation at external markets as well as of the turnover for the fish processing enterprises. The most important buyers of the fresh fish are fish processing enterprises in Latvia and in neighbour's countries. The main produced product types are fresh or chilled fish and prepared or canned fish. The exported volume of production decreased significantly by 18% or €30 million between 2014 and 2015. The exported volume of production to EU countries declined by 7% or around €8 million during the same period. The highest decline in turnover is observed with 3rd countries where fish production export decreased by 39% in value or €22.6 million. The main reason was negative impact from the Russian product trade ban. The volume of production exported to Russian Federation decreased by 34% in value or €17.9 million between 2014 and 2015. However, Russian Federation ranked a second place in terms of exported fish production volume and fourth place in terms of exported fish production value in 2015.

Management instruments

The scrapping of four vessels are going to be implemented according to the "Action plan for 2015-2017 To reach balance between the Latvian fishing fleet's capacity and the fish resources for fleet segment VL24-40 m Netters targeting Eastern Baltic Cod".

Latvia has one multilateral agreement for data sampling in CECAF area. Starting with 2012 the sampling of pelagic fishery is performed on the basis of multi-lateral agreement between Germany, Latvia, Lithuania, the Netherlands and Poland by local observers.

TACs and quotas

The Latvian fishing fleet economic effectiveness is largely dependent on the quota received for the main species. The sprat fishing quota reduced by 11% (1 558 tonnes) between 2014 and 2015 and was 29 548 tonnes. The quota for the Baltic herring in the Gulf of Riga and in the central region of the Baltic Sea as compared to 2014 increased by 12% (3 089 tonnes). The Baltic herring fishing quota in the Gulf of Riga and in the central region of the Baltic Sea were 4 532 and 20 872 tonnes respectively in 2015. The fishing quota for salmon in the Baltic Sea reduced by 10% and was 12 644. The cod fishing quotas in the western part of the Baltic Sea are reduced by 7%, whereas the reduction in the eastern part was 22%. Cod quotas in the western and eastern part are 574 and 4 393 tonnes respectively. The number of fishing days for cod in the Baltic Sea is defined as 146 days in the eastern part of the Baltic Sea. However, the elasticity for transferring fishing days between fishing vessels as may be required in case a certain vessel experiences a shortage of fishing days whereas the other one does not use the allotted number of days to a certain limit is kept at the level of 15%. Latvia fulfils the sprat and Baltic herring fishing quotas assigned thereto almost completely. The salmon fishing quota is used on a very small scale. However, the remaining share is used in the international quota exchange for sprat.

Innovation and Development

For the elaboration of the national Fisheries Policy the Integrated Control and Information System (ICIS) was developed and improved during 2014 and 2015. The ICIS is used for general management of fishing licences, control and enforcement of the fishing activities. The database contains information from the vessel electronic logbooks as well as includes information from the coastal logbooks for the small scale fleet. Development of the ICIS provide better collaboration between Latvian fishing fleet management institutions and improve the staff work with the data base as well as simplify the process of the data validation and allow make cross checks automatically

Performance by fishing activity

Small-scale fleet

The number of the small-scale vessels was relatively stable between 2013 and 2014. The vessels are included in the segment VL0010 metres using polyvalent or passive gears and operating in the coastal zone. The fishing trip usually is less than 24 hours. The segment targeting salmon and coastal zone species which are included in "Marine fishes nei". The salmon and coastal species achieved the highest average price per kilo €4.17 and €1.84 respectively, followed by Eelpout and cod (€1.28 per kg and €1.10 per kg). Despite of the high prices for coastal species and a high salmon price, these species has negligible values in the total landings composition and does not influence the total value of Latvian landings. The landings weight for the small-scale fleet increased 26% while the value of landings increased by 31% between 2013 and 2014 and was around €1.7 million. The small-scale fishing fleet is important for employment in coastal regions and was estimated at 301 jobs, corresponding to 214 FTEs. Total employment and FTEs for the small-scale fleet decreased 7% and 6% respectively over the observed period. While revenue decreased between 2013 and 2014 by 30%, net profit increased during the same period by 27%. Gross Value Added (GVA) and gross profit increased by 29% and 27% respectively between 2013 and 2014. Nevertheless, the share of landings generated by small coastal vessels in total landed value is relatively insignificant and in 2014 was around 9%.

Large-scale fleet

The opposite trend was observed for the large-scale fleet operating in the Baltic Sea and the Gulf of Riga. The large-scale fleet represented with the 57 trawlers included in two segments VL2440 and VL1218 metres. The segments contribute 91% to total revenue and 65% to net profit in 2014. Employment for the large scale fleet was estimated at 306 jobs in 2014, corresponding to 148 FTEs. The large-scale fleet total employment and FTEs decreased by 13% and 20% respectively over the observed period. The revenue decreased between 2013 and 2014 by 18% while net profit increased during the same period by 55%. In terms of profitability, Gross Value Added (GVA) and gross profit decreased by 20% and 5% respectively between 2013 and 2014.

Distant-water fleet

There five active distant-water vessels made up the segment VL40XX metres in 2014. Four of the vessels with the average length 60 metres were based predominantly in NAFO and NEAFC (area 27). The vessels target species was Beaked Redfish and crabs. There was only one vessel with the length 100 metres operated in CECAF (area 34) targeted horse mackrel, Atlantic mackrel, sardinella and sardine. The main ports for the distant- water vessels landings were Dakchla, Vardø, Basford, Kjøllefjord and Reykjavik. The weight landed by the distant-water fleet was 57 thousand tonnes of fish, with a total landed value €25 million. The total landed weight and value increased by 8% and 11% respectively between 2013 and 2014.

Performance results of selected fleet segments

The Baltic Sea fleet consisted of 3 active fleet segments in 2014. The most important segments for Latvian fishery are trawlers represented in the two segments VL2440 and VL1218 metres with the 57 vessels. A short description for the main segments is provided below.

Pelagic trawl 24-40m – 45 vessels made up this segment in 2014 and are based predominantly in the Baltic Sea. These vessels target species such as sprat, herring and cod. The total value of landings was €15.5 million and around 125 FTEs were employed in this fleet segment in 2014 contributing 79% and 35% of the total income from landings generated and FTEs in the national fleet. This fleet segment was highly profitable with a reported gross profit of around €3.7 million and a net profit of around €2.3 million in 2014.

Pelagic trawl 12-18 – 12 vessels make up this segment in 2014 and the vessels are operating predominantly in the Gulf of Riga. These vessels target a variety of sprat, herring and smelt. The total value of landings was €2.4 million and only 23 FTEs were supported in 2014. The gross and net loss of -€1.2 and -€1.5 million respectively was generated in 2014. The negative economic results could be explained with the redistribution of costs and revenue between the segments VL1218 and VL2440 when one company owns several vessels included in the different segments.

Projections for 2015 and outlook

At the end of 2014 and in the beginning of 2015 important structural changes were observed for the distant-water fleet segment. Six new vessels started to operate with the target species of Queen Crab in the NEAFC area. Four netters targeting cod is going to be scraped before 2017 according to the Action Plan for 2015-2017.

Preliminary results for 2015 suggest a 4% increase in landed weight, matched by a 7% increase in value. A fall in energy costs (-20%), as seen across the EU fleet, leads to improved profitability as gross profits and net profits increase by 27% and 59% respectively.

Projections for 2016 show significantly improved performance on most economic indicators following from increases in landings (6% by weight and 24% by value) and decreases in fuel costs (-18%). Gross profit and net profit increase by a further 85% and 119% and profit margin reach high levels (36% gross profit margin and 31% net profit margin).

Reliable economic data for 2015 will be received by questionnaires in 2016 and results provided in the current tables for 2015 should be used with caution. The precise analysis could be possible to make based on the collected data on fishing company's income and costs attributed to the fishing vessel. The trade of the fresh fish and supply to fish processing enterprises have influence at the fishery sector economic activity in Latvia and determine the opportunities for the future development. The fish processing enterprises turnover in turn may be affected by the geopolitical situation. Consequently, that factor will continue to affect the dynamics of domestic demand and the general level of prices in the Latvian economy.

Data issues

All transversal data for 2008 to 2015 were obtained from the 'Integrated Control and Information System' for Latvian fisheries. The information system contains logbook data and technical parameters of fishing vessels from the Vessel Register. The data are reported on a monthly basis and cover all members of the Latvian fishing vessel population. All economic variables for 2008 to 2014 were received from Central Statistical Bureau of Latvia (CSB) state statistical questionnaire form '1-Fisheries' and other statistical sources of economic information based on the annual balance sheet. Primary economic information from the state statistical questionnaire "1-Fisheries" was received annually from owners of fishing firms. Economic data covers all the members of population. Despite that economic data collection is based on questionnaire forms, participation of the respondents is obligatory according to the Latvian legislation. The achieved sample rate was 100%.

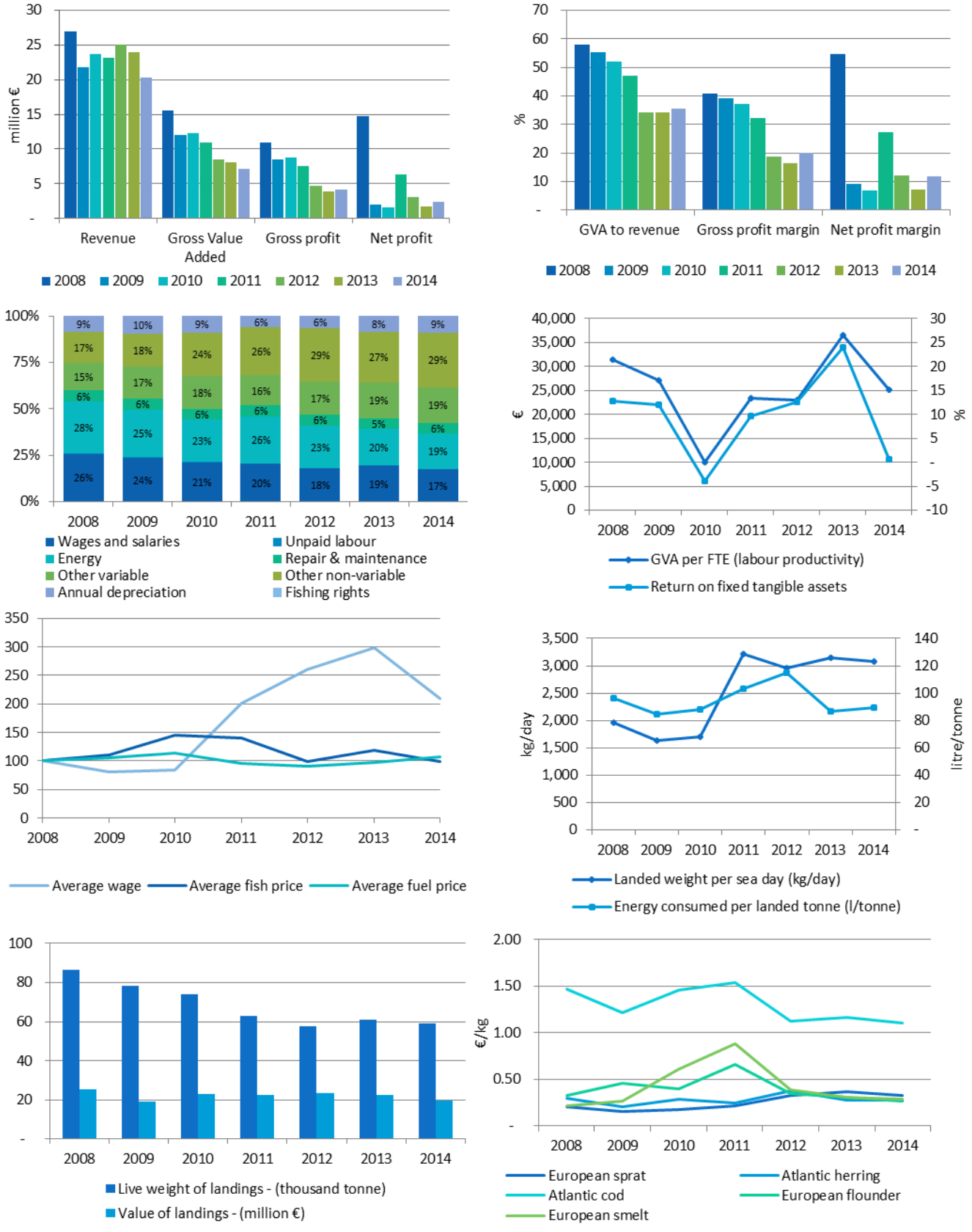
The calculations were applied for FTEs, financial position and income from landings for 2008-2014 based on data received from questionnaires and vessel logbooks.

The observed difference between 2010 and 2011 for the depreciated replacement value is caused by the necessary changes regarding data collection methodology implemented for the more reliable data collection in 2010. The first data collected by the new approach were received for 2011. The data for 2008 and 2010 were imputed, based on formulas for vessel scrapping. More reliable data for the depreciated replacement value were obtained by questionnaire for 2011-2014.

The data for the distant-water fleet (segment VL40XX) operating in the Atlantic area 27 (NEAFC, NAFO) and area 34 (CECAF) were collected but have not been submitted due to different specificity of fishery and other reasons provided below:

- According to the requested format the data should be separated by supra regions and fishing technique. There are three segments operated in Atlantic in 2015: VL40XX FPO AREA 27 (7 vessels); VL40XX TM AREA 27 (1 vessel) and VL40XX TM AREA 34 (2 vessels). The economic data cannot be provided for individual vessel or for the vessels belonging to few companies to ensure data confidentiality.
- The data in some cases are aggregated for all regions where country operates (the Baltic Sea and Atlantic in case of Latvia) and presented in the figures, tables and in some text paragraphs for the Annual Economic Report.
- Some variables for the Atlantic region cannot be compared with the same variables for the Baltic Sea. Those variables cannot be used for the economic analysis.
- The main reasons are:

- the collected economic variable 'Income' for the distant-water fleet is a share of landing received in 3rd countries and related to Latvia. The share of landing included in the file 'Income' is not consistent with Value of landing by species for the file 'Landing';
- the variable 'trips' for the Atlantic not comparable with the Baltic Sea trips. The distant-water vessels have long trips during the year (80 trips in 2015). The Baltic Sea vessels have short trips during the year in the most cases 1-2 days (14800 trips in 2015);
- the variable 'Weight of landing' for Atlantic could not be comparable with the same variable for the Baltic Sea. The weight of landing for the Baltic Sea includes all landings reported in the vessel logbooks but for the Atlantic for the same variable catches from vessel logbooks should be used.
- According to the AER structure all fishing areas are aggregated in the totals for the country. In case when 'Weight of landing' will be submitted for the Atlantic region and later on aggregated with 'Weight of landing' for the Baltic Sea it could cause the problem for the economic analysis at AER. The Baltic Sea landings and catches have similar consistent values but for Atlantic difference between landings and catches was 33% in 2015. The main reason is that distant-water vessels could keep the current catch on board and make landings for these catches later on. The other reason is that fishing companies made a production on board and only one share of the landing could be sold. Also current catches could be combined with the landing received from the other vessel and later on landed not in the port but to another vessel. The Baltic Sea landings and Atlantic catches data aggregation could provide misleading picture and uncertain results.
- the variable 'Value of landing' for the Atlantic due to the reasons mentioned above not consistent with 'Income'. The calculation are applied where weight of catch in Atlantic multiply by price per kg for species. The weight of landing for the Baltic Sea multiplied by price per kg.
- The vessels VL40XX operated in the 3rd countries waters can make their landings in EU and non EU ports. The 'Income' and 'Costs' data are collected only for the EU countries but 'weight' and 'value of landings' for EU and also 3rd countries. Due to that reason for the Atlantic region 'Income' could be lower than value of landings for the same region. If variables 'Value of landing' and 'Income' were submitted, it would make problems for the economic analysis in AER especially for the Gross Value Add and profit calculations.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.12 Latvia: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.52 Latvia: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	858	814	771	407	356	351	365		4%	-38%
Number of Inactive vessels_ms	(#)				88	77	84	87		4%	5%
Vessel tonnage	(thousand GT)	12.9	12.4	9.8	10.1	8.4	7.8	7.0		-10%	-32%
Engine power	(thousand kW)	34.2	32.7	26.7	26.7	22.8	21.3	19.8		-7%	-28%
Average vessel age	(year)	27	27	28	27	30	28	28		0%	1%
Average vessel length	(metre)	23	23	23	24	24	23	22		-4%	-6%
Enterprises with one vessel	(#)	58	68	80	79	65	70	64		-9%	-9%
Enterprises with 2 to 5 vessels	(#)	85	81	69	65	52	53	50		-6%	-26%
Enterprises with more than 5 vessels	(#)	6	4	2	3	6	4	5		25%	20%
FTE	(#)	664	548	521	378	353	414	362		-13%	-25%
Total employed	(person)	1,621	1,666	1,619	712	643	678	607		-10%	-48%
Days at sea	(thousand day)	44.2	48.0	43.6	19.6	19.5	19.4	19.2		-1%	-41%
Fishing days	(thousand day)	35.9	38.2	35.6	17.4	17.3	17.2	17.1		0%	-36%
Number of fishing trips	(thousand)	33	35	31	14	14	14	16		12%	-34%
Energy consumption	(million litre)	8.33	6.63	6.53	6.50	6.61	5.28	5.31		0%	-20%
Live weight of landings	(thousand tonne)	86.5	78.5	74.0	63.1	57.5	60.9	59.2		-3%	-16%
Value of landings	(million €)	25.4	18.9	22.8	22.3	23.6	22.3	19.5		-12%	-13%
Income from landings	(million €)	25.4	18.9	22.8	22.3	23.6	22.3	19.5		-12%	-13%
Other income	(million €)	1.51	2.87	0.90	0.87	1.38	1.64	0.79		-51%	-48%
Direct income subsidies	(million €)	1.75	3.64	0.04	1.65	0.89	0.35	-		-100%	-100%
Wages and salaries of crew	(million €)	4.49	3.46	3.45	3.39	3.86	4.24	3.06		-28%	-20%
Unpaid labour value	(million €)	0.08	0.07	0.05	0.02	0.02	0.01	0.05		243%	11%
Energy costs	(million €)	4.82	3.71	3.70	4.30	4.94	4.37	3.40		-22%	-21%
Repair & maintenance costs	(million €)	1.04	0.90	0.90	0.95	1.39	1.14	1.04		-9%	-1%
Other variable costs	(million €)	2.57	2.51	2.91	2.71	3.76	4.25	3.42		-20%	10%
Other non-variable costs	(million €)	2.92	2.62	3.84	4.35	6.36	6.00	5.23		-13%	20%
Annual depreciation costs	(million €)	1.50	1.40	1.45	1.02	1.39	1.83	1.57		-14%	9%
Opportunity cost of capital	(million €)	- 5.19	5.11	5.73	0.16	0.24	0.33	0.16		-52%	-85%
Tangible asset value (replacement)	(million €)	68	58	49	10	11	10	9		-11%	-74%
Investments	(million €)	0.3	0.3	0.4	0.4	0.5	0.7	0.8		17%	89%
Financial position	(%)	0.0	0.0	0.0	0.1	0.1	0.2	0.3		67%	305%
Gross Value Added	(million €)	15.6	12.0	12.3	10.9	8.5	8.2	7.2		-12%	-36%
GVA to revenue	(%)	57.8	55.2	52.0	46.9	34.1	34.1	35.5		4%	-24%
Gross profit	(million €)	11.0	8.5	8.8	7.5	4.6	3.9	4.1		5%	-45%
Gross profit margin	(%)	40.8	39.0	37.2	32.2	18.6	16.3	20.2		24%	-34%
Net profit	(million €)	14.7	2.0	1.6	6.3	3.0	1.7	2.4		36%	-52%
Net profit margin	(%)	54.6	9.1	6.9	27.1	12.1	7.3	11.7		60%	-40%
GVA per FTE (labour productivity)	(thousand €)	23	22	24	29	24	20	20		1%	-16%
Return on fixed tangible assets	(%)	14	12	15	65	31	21	28		36%	8%

Table 5.53 Latvia: National fleet statistics and economic performance results based on fleet segment level data.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	858	814	771	319	279	267	278	*266*	*257*		-4%	-3%
Total employed	(person)	1621	1666	1619	712	643	678	607	*598*	*575*		-1%	-4%
FTE	(#)	664	548	521	378	353	414	362	*328*	*395*		-9%	20%
Days at sea	(day)	44,239	48,014	43,629	19,634	19,480	19,364	19,197	*17,382*	*22,727*			31%
Energy consumption	(thousand litres)	8,329	6,628	6,530	6,498	6,613	5,284	5,305	*5,527*	*5,084*			-8%
Live weight of landings	(tonne)	86,470	78,464	74,017	63,120	57,473	60,850	59,163	*61,691*	*65,491*		4%	6%
Value of landings	(thousand €)	25,396	18,894	22,751	22,326	23,589	22,276	19,496	*20,883*	*25,902*		7%	24%
Income from landings	(thousand €)	25,396	18,894	22,751	22,326	23,589	22,276	19,496	*20,879*	*25,902*		7%	24%
Other income	(thousand €)	1,508	2,873	899	872	1,383	1,635	794	*764*	*751*		-4%	-2%
Wages and salaries of crew	(thousand €)	4,492	3,457	3,451	3,390	3,857	4,238	3,055	*3,543*	*4,412*		16%	25%
Unpaid labour value	(thousand €)	80	68	46	22	22	13	46	*27*	*26*		-41%	-3%
Energy costs	(thousand €)	4,816	3,712	3,698	4,299	4,942	4,365	3,402	*2,711*	*2,216*		-20%	-18%
Repair & maintenance costs	(thousand €)	1,041	904	904	951	1,387	1,142	1,042	*1,057*	*1,025*		1%	-3%
Other variable costs	(thousand €)	2,567	2,513	2,906	2,710	3,761	4,253	3,422	*3,658*	*4,125*		7%	13%
Other non-variable costs	(thousand €)	2,924	2,617	3,838	4,348	6,357	5,998	5,228	*5,463*	*5,243*		5%	-4%
Annual depreciation costs	(thousand €)	1,502	1,405	1,451	1,021	1,387	1,828	1,567	*1,352*	*1,311*		-14%	-3%
Opportunity cost of capital	(thousand €)	- 5,195	5,106	5,727	164	236	335	161	*66*	*64*		-59%	-4%
Tangible asset value (replacement)	(thousand €)	67,551	58,219	49,035	9,978	10,611	10,019	8,953	*8,726*	*8,409*		-3%	-4%
Gross Value Added	(thousand €)	15,556	12,020	12,304	10,891	8,524	8,152	7,196	*8,753*	*14,043*		22%	60%
Gross profit	(thousand €)	10,984	8,496	8,807	7,478	4,645	3,901	4,095	*5,183*	*9,605*		27%	85%
Net profit	(thousand €)	14,676	1,985	1,629	6,293	3,022	1,738	2,367	*3,764*	*8,230*		59%	119%

Table 5.54 Latvia: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF												
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	736	708	687	245	207	202	221	122	106	84	74	72	65	57		-5%	-44%		-12%	-35%
Vessel tonnage (thousand GT)	1.2	1.1	1.0	0.5	0.4	0.3	0.4	11.6	11.3	8.7	8.0	8.0	7.3	6.5		0%	-32%		-12%	-29%
Engine power (thousand kW)	7.2	6.5	5.9	2.8	2.2	2.2	2.6	27.0	26.2	20.8	19.5	19.8	18.5	16.6		7%	-24%		-10%	-24%
FTE (#)	373	329	329	202	154	228	214	291	219	192	176	199	186	148		-20%	-29%		-20%	-30%
Total employed (person)	992	1,110	1,175	321	258	325	301	629	556	444	391	385	353	306		-5%	-51%		-13%	-33%
Days at sea (thousand day)	30.4	37.3	34.2	10.8	10.9	11.3	12.8	13.8	10.7	9.4	8.8	8.6	8.0	6.4		-20%	-48%		-20%	-35%
Fishing days (thousand day)	23.7	28.6	27.0	9.4	9.4	9.7	10.9	12.2	9.6	8.5	8.1	8.0	7.5	6.3		-20%	-45%		-17%	-30%
Number of fishing trips (thousand)	23	27	24	7	7	8	10	10	8	7	7	6	6	6		-12%	-37%		-11%	-25%
Energy consumption (million litre)	0.1	0.0	0.04	0.04	0.03	0.02	0.03	8.2	6.6	6.5	6.5	6.6	5.3	5.3		-20%	-26%		0%	-20%
Live weight of landings (thousand tonne)	2.84	2.70	2.56	3.33	2.85	3.56	4.48	83.63	75.76	71.46	59.79	54.62	57.29	54.68		-45%	-24%		-5%	-19%
Value of landings (million €)	0.86	0.84	1.33	1.26	1.45	1.33	1.74	24.53	18.05	21.43	21.07	22.13	20.94	17.76		-31%	-9%		-15%	-17%
Income from landings (million €)	0.9	0.8	1.3	1.3	1.5	1.3	1.7	24.5	18.1	21.4	21.1	22.1	20.9	17.8		-31%	-9%		-15%	-17%
Other income (million €)	0.04	0.02	0.04	0.05	0.01	0.01	-	1.5	2.9	0.9	0.8	1.4	1.6	0.8			-100%		-51%	-47%
Direct income subsidies (million €)	-	0.17	-	0.11	0.03	-	-	1.75	3.47	0.04	1.55	0.86	0.35	-			-100%		-100%	-100%
Wages and salaries of crew (million €)	0.11	0.10	0.07	0.07	0.07	0.04	0.06	4.4	3.4	3.4	3.3	3.8	4.2	3.0		-14%	-24%		-29%	-20%
Unpaid labour value (million €)	0.08	0.07	0.05	0.02	0.02	0.01	0.05	-	-	-	-	-	-	-		-48%	-34%			
Energy costs (million €)	0.06	0.03	0.02	0.03	0.02	0.02	0.02	4.8	3.7	3.7	4.3	4.9	4.3	3.4		-38%	-43%		-22%	-21%
Repair & maintenance costs (million €)	0.06	0.02	0.00	0.02	0.01	0.00	0.01	1.0	0.9	0.9	0.9	1.4	1.1	1.0		-20%	-18%		-9%	0%
Other variable costs (million €)	0.04	0.04	0.14	0.05	0.04	0.03	0.03	2.5	2.5	2.8	2.7	3.7	4.2	3.4		-20%	-58%		-20%	11%
Other non-variable costs (million €)	0.05	0.03	0.01	0.01	0.09	0.00	0.01	2.9	2.6	3.8	4.3	6.3	6.0	5.2		-5%	-68%		-13%	21%
Annual depreciation costs (million €)	0.03	0.03	0.01	0.04	0.03	0.02	0.02	1.5	1.4	1.4	1.0	1.4	1.8	1.5		-5%	-28%		-14%	10%
Opportunity cost of capital (million €)	- 0.96	1.16	1.41	0.00	0.00	0.00	0.00	- 4.23	3.94	4.31	0.16	0.23	0.33	0.16		-61%	-100%		-52%	-80%
Tangible asset value (million €)	12.50	13.26	12.11	0.13	0.19	0.04	0.07	55.0	45.0	36.9	9.8	10.4	10.0	8.9		-5%	-99%		-11%	-68%
Investments (million €)	0.01	0.00	0.01	0.02	0.01	0.01	0.02	0.3	0.3	0.3	0.4	0.5	0.7	0.8		-100%	-100%		17%	90%
Gross Value Added (million €)	0.69	0.75	1.19	1.20	1.30	1.29	1.67	14.9	11.3	11.1	9.7	7.2	6.9	5.5		-31%	-6%		-20%	-46%
GVA to revenue (%)	76.7	87.1	87.1	92.0	89.2	96.0	96.1	57.2	53.9	49.9	44.3	30.7	30.4	29.8		0%	5%		-2%	-33%
Gross profit (million €)	0.50	0.58	1.07	1.11	1.21	1.23	1.56	10.5	7.9	7.7	6.4	3.4	2.7	2.5		-31%	-4%		-5%	-61%
Gross profit margin (%)	55.2	67.9	78.9	84.8	82.6	91.6	89.9	40.3	37.8	34.7	29.1	14.6	11.8	13.6		-1%	8%		15%	-51%
Net profit (million €)	1.4	- 0.6	- 0.4	1.1	1.2	1.2	1.5	13.2	2.6	2.0	5.2	1.9	0.5	0.8		-31%	58%		55%	-81%
Net profit margin (%)	159	- 70	- 26	82	80	90	89	51	12	9	24	8	2	4		-1%	116%		88%	-75%
GVA per FTE (thousand €)	2	2	4	6	8	6	8	51	51	58	55	36	37	37		-14%	20%		1%	-22%

Table 5.55 Latvia: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(l/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
LVA A27 TM2440	45	125	4,695	84	46,018	15,346	16,140	5,968	37.0	3,686	22.8	2,313	14.33	18.3	47.7	31	High	-45%	Deteriorated
LVA A27 TM1218	12	23	1,734	164	8,660	2,412	2,412	- 442	- 18.3	- 1,154	- 47.9	- 1,489	- 61.76	30.9	- 19.2	- 143	Weak	-220%	Deteriorated
LVA A27 PGP0010	221	214	12,768	7	4,484	1,739	1,739	1,671	96.1	1,564	89.9	1,543	88.77	0.5	7.8	2,320	High	70%	Improved

Table 5.56 Latvia: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real)								Live weight of landings								Average landed price (real)							
	(thousand €)								(tonne)								(€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
Atlantic cod	5.91	5.58	7.50	7.62	4.79	2.97	1.60	*2.52*	4.02	4.61	5.16	4.95	4.28	2.56	1.46	*2.29*	1.47	1.21	1.45	1.54	1.12	1.16	1.10	*1.10*
European flounder	0.21	0.24	0.11	0.20	0.21	0.44	0.48	*0.53*	0.65	0.52	0.28	0.30	0.61	1.45	1.83	*2.03*	0.33	0.46	0.40	0.66	0.34	0.30	0.26	*0.26*
European sprat	11.93	7.89	7.89	7.25	10.15	12.10	10.17	*10.07*	57.30	49.55	45.84	33.44	30.72	33.31	30.76	*30.51*	0.21	0.16	0.17	0.22	0.33	0.36	0.33	*0.33*
Eelpout	0.01	0.06	0.01	0.04	0.01	0.03	0.05	*0.02*	0.01	0.02	0.01	0.02	0.01	0.03	0.04	*0.01*	0.50	2.42	2.15	1.91	0.82	1.05	1.28	*1.28*
Atlantic herring	6.77	4.38	6.14	5.68	7.51	5.63	6.29	*6.80*	22.53	21.56	21.35	22.82	20.06	20.68	23.27	*25.17*	0.30	0.20	0.29	0.25	0.37	0.27	0.27	*0.27*
Snaggletooth					0.02	0.07	0.03	*0.09*					0.10	0.16	0.08	*0.24*					0.24	0.40	0.39	*0.39*
European smelt	0.38	0.53	0.69	1.29	0.57	0.76	0.44	*0.33*	1.75	1.98	1.13	1.47	1.46	2.51	1.51	*1.12*	0.22	0.27	0.61	0.88	0.39	0.30	0.29	*0.29*
Marine fishes nei	0.17	0.18	0.40	0.24	0.33	0.26	0.40	*0.54*	0.21	0.22	0.24	0.13	0.23	0.14	0.22	*0.31*	0.81	0.81	1.64	1.94	1.42	1.83	1.84	*1.72*
Atlantic salmon	0.01	0.04	0.02	0.01		0.01	0.01		-	0.01	-	-		-	-		2.97	4.54	4.59	4.40		5.86	4.18	

5.14 Lithuania

Short description of the national fleet

Fleet capacity

In 2014 Lithuanian fishing fleet consisted from 143 registered vessels and compare to 2013 it declined by 6%, but in 2015 recovered to 149 of which 105 were active. The fleet had a combined gross tonnage of 49.2 thousand GT with 12% increase from 2013 and engine power of 50.7 thousand kW, corresponding to 3% annual decline. In 2015 capacity in terms of GT and kW increased significantly, 26% and 28% respectively. The average age of fleet was constantly deteriorating and in 2015 reached 29 years. The number of vessels and engine power has a tendency to grow between 2014 and 2015. In 2015 capacity alterations were determined in distant water fleet segment where increasing trend of GT and kW were observed. Other segments of the fleet: small scale coastal fleet and large scale fleet segment remained stable.

Fleet structure

The Lithuanian fishing fleet is represented by small scale fleet segments, fishing in coastal area of Baltic Sea (68% of number of active vessels, in terms of GT – 0.5%), large scale fleet, operating in Baltic Sea (22% of number of active vessels, in terms of GT – 5.9%) and long distance fisheries fleet (10% of number of active vessels and in terms of GT 93.6%).

Employment

Employment figures for 2014 shows that number of persons, employed by fishing fleet, decreased by 1.7%, compare to 2013 and total employment in 2014 was estimated at 750 jobs, corresponding to 573 FTEs. Taking into account number of persons employed at national level, tendency was mostly stable, but at fleet segment level, changes were quite significant - long distance water fleet employment increased by 15% in comparison with 2013, this segment covers 55% of total employment. In large scale fleet, employment decreased by 26% due to the deterioration of economic performance, mainly in demersal trawler fleet. In the small scale sector level of employment remained stable.

Effort

In 2014 effort data as days at sea were sufficiently stable compare to 2013, whereas fishing days decreased by 10%. Difference in in fishing days and days at sea was influenced by long distance fleet, which had to relocate vessels to different region, spending days at sea without fishing operations. In parallel, energy consumption in 2014 significantly increased compare to 2013.

In 2015, effort in terms of days at sea increased by 68%, from 8.7 to 14.6 thousand days. The highest increase was observed in long distance and large scale fleets.

Production

In 2014 volume of landings improved by 63% compare to 2013, but then declined to same level during 2015 and reached 82.3 thousand tones, with corresponding value of €62.4 million. Long distance fleet in 2014 covered 90.6% of national total landed volume. Large scale fleet, operating in Baltic Sea cached 13.3 thousand tons of seafood production and compare to 2013 declined by 19%. In 2015, large scale fleet increased production by 30%.

In terms of landings value, the most important species for long distance fleet in 2014 were Cunene horse mackerel (HMZ), chub mackerel (MAS) and round sardinella (SAA) together representing about 67% of the total landings value. The average price for Cunene horse mackerel in 2014 was 0.92 €/kg, compare to 2013 it increases by 6.4%, but in comparison to 2015, it remained stable. Average price for chub mackerel and Round sardinella in 2014 were 0.74€/kg and 0.44 €/kg respectively. Concerning the development of average price for three main species, annual decline of 12.5% was observed in 2013-2014, whereas in comparison with 2015 it remained stable.

Concerning fisheries in the Baltic Sea and coastal area value of landings decreased by 41% during 2013-2014, but recovered by 17% in 2015. From 2008 to 2011 the highest value of landings in Baltic Sea was generated from Baltic cod catches, whereas from 2011 onwards, the most significant part of income has been generated by European sprat. In 2015, values of European sprat landings from Baltic Sea consisted of €2.2 million, whereas Baltic cod landings generated €1.4 million. In terms of landings weight, European sprat landings amounted to 11 thousand tones, Baltic herring – 4.7 thousand tones and Baltic cod – 1.7 thousand tones. The major factor for the focus on pelagic species was the current demand by processing industry. Consequently, a considerable part of the Baltic Sea fleet increased its effort in the small pelagic fishery. Landed weight of European sprat similarly decreased between 2008 and 2010 but in contrast to Baltic cod, it remained steady between 2010 and 2015. The landed value of Baltic cod between 2008 and 2015 shows a downward trend with an overall 67% decline over the period, also the consumption of the cod quota in Lithuania in 2015 was 40%.

Economic results for 2014 and recent trends

National fleet performance

As the economic indicators of the national fleet are strongly dependent on the activity of the long distance fleet fisheries, factors that affect the performance of other fleet segments have a minor impact at national level. Almost 96% of total national revenues were generated from long distance fleet. Annual economic performance of national fleet deteriorated due to continuously declining effort and profitability in Baltic demersal trawler segment, unexpectedly poor results from Baltic pelagic fisheries and significantly increased expenditures in long distance fleet, mostly related to the modernization of fleet and business restructure. Triggers for decline of performance will be provided separately by segments in relevant chapters hereinafter.

The total amount of income generated by the Lithuanian national fleet in 2014 was €99.9 million, which was 52% higher than in 2013. Total revenues consisted from 99.6% of fishing income and less than 0.4% of other income.

Total operating costs incurred by the Lithuanian national fleet in 2014 equated to €95.17 million and were 75.3% higher compared to the previous year. Increase in operational costs was higher compare to the improvement of revenues, therefore gross profit and related economic performance variables declined compare to 2013. In 2014, 30% of total operating costs were spent on fuel (€28.6 million) and 31% were considered as other variable costs (€29.2 million). Energy costs and other variable costs increased 37% and 110% respectively.

Gross value added (GVA) and gross profit generated by the Lithuanian national fleet in 2014 was €14.4 million and €5.2 million respectively and were significantly lower compare to 2013. In terms of net profit, Lithuanian national fleet incurred €2 million net loss, mainly due to 166% increased annual depreciation costs.

In 2014, value of tangible assets increased by 120%, compared to previous year and was accounted for €95 million. Investments also increased significantly, but only of annual scale. In 2013 investments to the fleet were exceptionally low.

Resource productivity and efficiency indicators

In 2014 the gross profit margin on Lithuanian fleet significantly declined to 5.2%, when in 2012 and 2013 it was 19.6% and 18.3% respectively. National fleet efficiency indicators are highly influenced by long distance fleet performance. The decrease of operating efficiency was influenced by sufficiently increased costs in long distance segment after restructure of fleet, and growth of capital with corresponding capital costs and opportunity costs of capital, which reduced net profit margin. Net profit margin for 2014 was estimated at -2%.

Value of fixed tangible assets in 2014 increased by 120% to €95 million and was the highest value since 2008. Returns form the fleet operations have not increased at such level therefore the rate of return on fixed tangible assets (ROFTA) declined to 1% in 2014. In the long term perspective, ROFTA is expected to increase.

In 2014 labour productivity expressed in terms of GVA/FTE was €25 thousand. Compare to 2013 it was a significant drop due to significantly higher GVA achieved in that year, but if we take into account an average value from 2008, it remained almost stable.

Compare to 2013 Fuel consumption per landed tonne remained almost unchanged and was 406.7 litres per tonne landed. Compare to 2012, it increased by 36%. This indicator is also mostly driven by long distance fleet fisheries. 2013 and 2014 were problematic period for this segment, uncertain situation with quotas and fishing regions increased operating costs and consumption not intended for trawling.

Drivers affecting the economic performance trends

Fuel prices are one of the main drivers affecting large scale and long distance fleet economic performance. In 2014 energy costs accounted for 29% in total cost structure and it decreased from 2013 when was 36%. In 2014 marine fuel prices, compare to 2013 and 2008 dropped by 12% and 29.7% respectively. Despite the decrease in fuel prices, large scale and long distance fleet generated net losses in 2014 and overall economic performance was reduced. It was influenced by the second major driver - fish prices. The average prices of main target species from large scale fleet fishing in Baltic Sea was 0.23 €/kg for sprat and 0.95 EUR/kg for cod, which compare to 2013 declined 30% and 19% respectively. The average price for species, targeted from long distance fleet during 2013-2014 declined from 0.79 €/kg to 0.69 €/kg, with a negative effect on economic performance from that fleet. For small scale fleet European smelt average prices increased by 9.5% from 1.73 €/kg to 1.89 €/kg providing sufficiently good economic results for 10-12 m. in length small scale fleet.

Concerning large scale and long distance fleet, important criteria affecting economic performance and future expectations are average age of fishers. In 2014 about 51% of crew was more than 50 years old, whereas in 2009 it was 45%. Increasing average crew age has a negative impact on labour productivity.

Demand from processing industry is more important for large scale pelagic trawlers fishing in Baltic Sea and long distance fleet, which land production in foreign ports and mainly for the processing. Baltic cod is sold mainly for direct consumption as fresh production. The same situation with small scale fleet, which deliver European smelt and Baltic cod to local market for direct consumption with insignificant amounts coming for processing. In addition, the current situation of the market, concerning small unit size of cod in the Baltic Sea, lowering its price and makes cod catching less profitable.

Administrative control is one of the drivers, currently hampering economic performance, mainly for long distance fleet with regard to bilateral agreement as was already described. Quota administration and delivery issues hampered operations of large scale pelagic fleet fishing in Baltic Sea as well.

Markets and Trade

Lithuanian fleet is represented by three main parts with regard to dependency on trade and market conditions. For instance, all production from long distance fleet is landed outside Lithuania. Largest part of catches from the long distance fleet is landed in Mauritania (50% of total landings) and Netherlands accounting for 23%. In 2015 main market for Lithuanian long distance fleet was Morocco accounting for 37% of total landings, Angola with 19% and Netherlands with 14.7%.

Vessels fishing in Baltic Sea and targeting Baltic cod are dependent on local market situation since almost 84% of total catches in 2014 were landed mainly in national port and was destined mainly for fresh consumption. In 2015 landings of cod in national port decreased to 73% with rest part supplying to Poland. Baltic herring catches are mainly landed in Denmark (60% of total landings), National Klaipeda port (17% of total landings) and other foreign ports. National fleet targeting Baltic sprat is highly dependent from demand in Denmark as 81% of total landings are delivered to Skagen and Neksio ports, with less amount (7.5%) in Latvia.

Small scale fleet is orientated only to local market. Production of European smelt on a seasonal basis are supplied through country's local markets and large food stores. Baltic cod is sold mainly in coastal area.

Management instruments

The fleet is managed mainly through TACs. Mainly quota for species is set in tones, but in shrimps (*pandalus borealis*) fishery restrictions are set on the maximum days at sea that a vessel may achieve within a year – in 2015, 647 days for all Lithuania fleet were set. Exchanges of quota possibilities were allowed in the Baltic Sea, in long distance waters and NAFO and NEAFCO areas.

TACs and quotas

Participation in quota auction is limited only for the units which own vessels, registered in Lithuanian fleet register, whereas exchange of quota could be done within different EU member states. For one part this system will allow to benefit from changing selling of quota, if the fleet is not enough efficient under particular conditions, whereas, more competitive units will have an advantage to uptake additional amounts of allowable catches.

In Mauritania, Morocco Lithuanian fleet operates under EU fishery partnership agreements with third countries and quotas are set for every fishing year. Lithuania has quota for pelagic fishery – 20.7 thousand tones. in Morocco and 57.6 thousand tonnes in Mauritania waters.

In the North Atlantic Lithuania had small quotas in 2015 of species such as Greenland halibut – 17 t., skate and rays– 17 t., grenadier – 81 t., but these quotas are usually swapped for quotas of species that are more interesting for the fleet - cod, redfish or others.

In the Svalbard area in the Norwegian EEZ, Lithuanian vessels were allocated 647 fishing days and one vessel in 2015 caught shrimps in that region.

The fleet was also active in the south Pacific, where quota for jack mackerel, the dominant pelagic species in the region, was 4.9 thousand tonnes for Lithuania in 2015.

In the Baltic Sea, Lithuania has quotas for cod, herring, sprat and salmon, while the most important species in terms of catches are cod, herring and sprat. Quotas for cod, salmon and sprat in 2015 have declined compared with 2014. Cod is down by to 20% to 3 266 t., sprat by 11% to 10.7 thousand tones. The only species where quota increased is herring, which increased by 45% to 4 772 t. Fishers are not filling their quotas for cod, the percentage of uptake was 53% in 2015. This is due to the fish itself which for some years has been small and skinny and does not fetch a good price. The herring and sprat quota was completely fished.

Performance by fishing activity

Small-scale fleet

Small scale fleet consists of two main segments, operating in Baltic Sea coastal area and including one vessel operating in Baltic Sea. Small scale fleet consists of 64 vessels and compare to 2013 remained almost unchanged. The steady trend of capacity in terms of number of vessels is observed from 2011. In terms of capacity, GT and Kw are continuously decreasing from 2008 and stabilized in 2012.

Effort, expressed in days at sea slightly increasing, but decline in average price per landed species resulted in reduction of revenues. Income from landings in small scale fleet decreased 12%. Taking into account the long term development of average fish prices a decreasing trend was observed with modest recover in 2015.

Economic indicators for this fleet are characterized by high annual volatility. In 2014 GVA for small scale fleet declined by 30%, and most likely because the significant increase of the repairing and maintenance costs. Compare to 2008-2013 average, GVA for small scale fisheries declined also by 30%. GVA as part of revenue was increasing from 2008 indicating a growth in economic efficiency as more value is added from generated revenues. Despite the long term increasing trend, annual drop in GVA to revenue was 24%. Although net profit margin showed a decline in 2014 from record high in 2013, it was relatively high compare to large scale fleet.

Total number of employees remained almost stable between 2013 and 2014, whereas FTE increased by 17%. Small scale segment has quite volatile trends of employment, which is specific to this type of fisheries. Relatively high part of labour compare to large scale fleet, taking part on shore, usually under seasonal pattern, and therefore it has relatively low number of FTE compare to total persons employed.

Large scale fleets

Lithuanian large scale fleet is consisting of two segments, operating in Baltic Sea and fishing mainly Baltic cod, Baltic herring and European sprat. It represents two distinct fisheries targeting demersal and pelagic species. Number of vessels in large scale fleet was almost constant within the period 2008-2015. Performance of the fleet shows a declining trend since 2011 in terms of landings, economic efficiency, profitability and employment. Such reductions are mostly influenced from demersal trawler segment.

In 2014, income from landings in large scale fleet decreased by 37%, whereas operating costs declined 25%. Energy and other variable costs were the main items in cost structure. The economic underperformance of this segment does not attract investments which are vital to ensure economic efficiency. For example percentage of GVA to revenue is decreasing sharply, from 38.5% in 2012 to 7.2% in 2014 and is expected to decline further, unless main triggers for deterioration will be taken into account.

Gross profit reached a negative value first time since 2008. Decrease of fish prices for main species is pushing down results of economic performance. For example, average price for Baltic cod and European sprat, the main species for this segment, during 2013-2014 declined by 30% and 19% respectively and further decreasing in 2015. Pelagic trawlers, which were profitable during recent years, in 2014 reduced GVA by 61%. Compare to 2008-2013 average, GVA declined 87%. Net profit margin for large scale fleet from 2013 turned to negative and is continuously decreasing, to -26% in 2014.

In 2014 labour productivity for large scale fleet was around €3 thousand per FTE; compared to 2013 it decreased 77% and reached lowest value since 2008.

Distant-water fleet

In 2014, Lithuanian long distance fleet segment was significantly extended, 3 modernized vessels started to operate and replaced old, depreciated ones. Despite the problematic circumstances regarding bilateral agreement with Mauritania and Morocco for the quota in CECAF area, 2014 volume and value of landings were the record high since 2008, corresponding to 132.6 thousand tones and €91.1 million. Compare to 2013, value of landings increased by 59%. Such increase in fishing performance was resulted from the purchase of quotas from third countries, as suspended bilateral agreement could not provide opportunities for fishing in CECAF. Agreement was signed in 2015. With regard to the opportunities from new agreement with western Africa countries, significant part of long distance fleet was restructured.

The restructure and increase in size of capital, had an impact on profitability results taking into account increased capital depreciation costs as well as repair and other variable expenditures, as outcome from this procedure. Economic performance for this fleet showed a decreasing annual economic trend. In 2014 annual decline of GVA was 13%, while compare to average of 2008-2013 it increased by 22%. Fleet generated €0.9 million net loss whereas gross profit for 2014 was €5.8 million. Significant decline in net profit was driven by increase in annual depreciation costs (215% annual growth) and opportunity costs of capital (193% annual growth).

Economic efficiency in terms of GVA to revenue demonstrated significant decline on annual as well as in long term perspective. Compare to 2013 and average of 2008-2013 it declined by 46% and 33% respectively. Energy consumed per landed tonne, in 2014 decreased by 7%, but was 51% higher compare to 2008-2013. This trend was a result of limited opportunities to operate in CECAF due to administrative issues and part of long distance fleet had to be relocated to other fishing areas resulting in the increase of fuel consumption. Net profit margin was the lowest since 2011 and decreased to -1%.

Labour productivity in terms of GVA per FTE was €34 thousand and compare to 2013 decreased by 37%, however, in comparison with long term 2008-2013 average it dropped only by 4%. Decrease in labour productivity is related to lack of qualified young workers and more frequent rotation. Average wage per FTE in 2014 increased 32% compare to 2013.

Performance results of selected fleet segments

National fleet consists of five main segments, representing four type of fisheries, small scale coastal fleet (two segments), demersal trawlers and pelagic trawlers operating in Baltic Sea and long distance fleet. From the total fleet three main segments will be presented.

Passive Gears (PG) 00-10m – 57 active vessels compose this segment which operates entirely in coastal area of Baltic Sea with the passive gears. The fleet targets a variety of species but Baltic cod and European smelt are dominant. In 2014, revenues generated from Baltic cod and European smelt were 38% and 29% from total value respectively.

In 2014, the total income was €0.26 million and around 29 FTEs were employed, accounting for 5% on total employment. Segment reported €15 thousand gross profit. The major expenses were crew costs including unpaid labour (46% in total operating cost structure) and energy costs (18% in total operational cost structure). This segment had a different cost structure compare to remaining fleet segments, and fuel costs were not a major driver to influence profitability.

Demersal Trawlers and Seiners (DTS) 24-40 – this segment consist from 19 active vessels, fishing entirely in the Baltic Sea with demersal trawlers as main gear. It represents the most important fleet in terms of capacity, employment and effort in Baltic Sea. Vessels mainly target Baltic cod, however part of the landings are generated from second gear used for pelagic species.

Demersal trawlers are energy demanding and expenditure for fuel amounted 32% of total costs. In 2014, the revenue was €1.63 million. All profitability indicators were continuously negative giving a warning signal for significant deterioration of this fleet. Net loss for demersal trawlers segment was €1.04 million. This segment employed 92 FTEs contributing to 16% of the total FTEs generated by the Lithuanian fishing fleet. Compare to 2013 employment declined 24%.

Pelagic Trawlers (TM) 40XX, Long distance fleet – In 2014 9 vessels were fishing in distance waters. Lithuanian high sea vessels predominantly operating in CECAF (area 34) and some have efforts in NAFO and NEAFC. In CECAF region fleet was targeting mainly small pelagic species, such as Cunene horse mackerel, chub mackerel and round sardinella.

In 2014, revenue increased by 62% and was €95.8 million. This fleet was also the most important in terms of employment, providing 413 FTE in 2014. At national level long distance fleet covers 72% of total FTE. Fleet generated €5.8 million gross profit, but incurred €0.9 million net loss, due to significantly increase in depreciation costs after significant growth of capital in 2014.

Projections for 2015 and outlook

In terms of fleet capacity, number of vessels in 2015 increased by 4%, whereas GT by 26%. This expansion of active fleet was resulted from long distance segment. New bilateral agreement with Mauritania and Morocco provide better opportunities for long distance fleet. The current capacity for this segment is excessive compare to the received quotas and economic performance will depend on availability to purchase additional quotas from other MS or third countries. Due to lack of quotas, in 2015 the biggest vessel was located in SPRFMO region, with consequently increased operative costs related to transit.

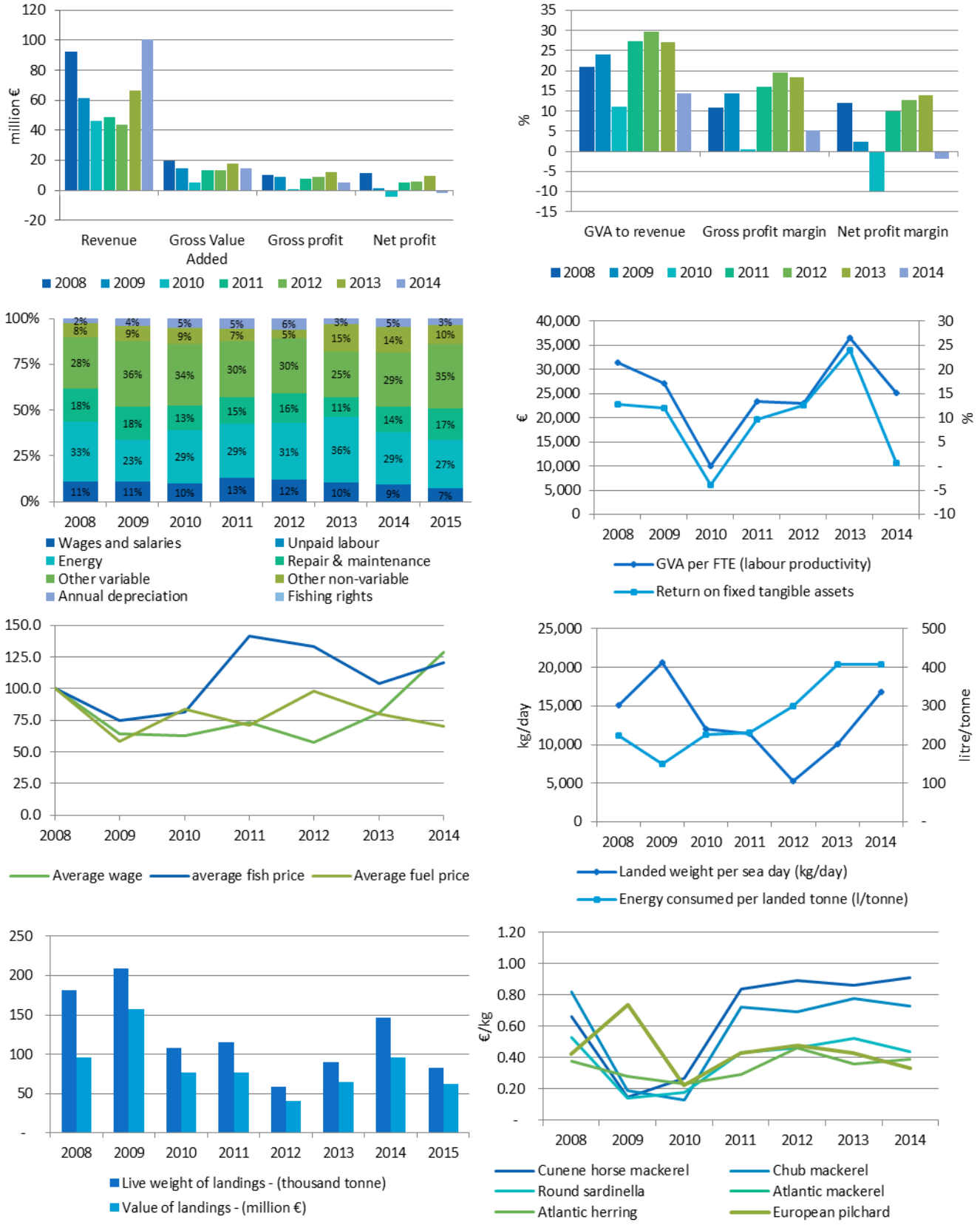
Large decreases in landed weight and value (-44% and -34% respectively) are expected for the Lithuanian fleet in 2015. Much of this is offset by declining energy consumption and fuel prices leading to a decrease in fuel costs of -49%. However, the decline in fuel prices will not benefit in long term perspective if such low investment will be directed to fleet. In national fleet only long distance vessels obtain relatively sufficient amount of investments. Gross profits and net profits diverge in trend with gross profits decreasing by 23% and net profits increasing by 37%. The major changes in effort and landings were observed in long distance fleet and large scale vessels, operating in Baltic Sea.

Projections for 2016 indicate that despite low prices, a large decrease in fixed and variable costs across all measures lead to a significant increase in gross profits (+236%) and net profits (906%), leading to a change in negative to positive profitability (15% net profit margin).

In additional to the modelling, it is important to consider that since 2016 Baltic cod targeting fleet will have an opportunity to supply landings to the newly established fish processing unit, in fishery auction at national port of Klaipeda. Processing is mainly orientated to cod filleting, for fresh and deep frozen production as well as high quality minced cod. Production is expected to be sold in the internal market. Establishment will increase demand for fresh cod for local fishers with an option of better price, compare to previous first sale auction, which was not economically viable.

Data issues

Under DCF, revenues from landings reported from two distinct data sources (total value of landings as transversal variable and total income from landings as economic indicator). In Lithuania, income from landings together with other socio-economic indicators, such as expenditure, employment and capital value are collected through census with a one year lag whereas transversal variables are collected one year prior to economic data.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.13: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.57 Lithuania: National fleet statistics and economic performance results.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	250	219	193	171	151	152	143		-6%	-24%
Number of Inactive vessels_ms	(#)	125	95	89	68	47	55	46		-16%	-42%
Vessel tonnage	(thousand GT)	61.0	50.5	49.3	46.0	45.0	44.0	49.2		12%	0%
Engine power	(thousand kW)	68.9	59.8	56.4	54.4	54.2	52.4	50.7		-3%	-12%
Average vessel age	(year)	30	31	31	32	32	33	30		-9%	-5%
Average vessel length	(metre)	36	38	33	33	34	27	31		15%	-7%
Enterprises with one vessel	(#)	83	81	59	52	43	39	35		-10%	-41%
Enterprises with 2 to 5 vessels	(#)	14	12	16	16	24	29	26		-10%	41%
Enterprises with more than 5 vessels	(#)	2	2	2	2	2	2	2		0%	0%
FTE	(#)	617	544	512	574	566	491	573		17%	4%
Total employed	(person)	1,046	712	706	768	732	763	750		-2%	-5%
Days at sea	(thousand day)	12.0	10.2	9.0	10.0	11.0	8.9	8.7		-3%	-15%
Fishing days	(thousand day)	7.9	7.9	7.5	8.1	8.8	8.7	7.9		-10%	-3%
Number of fishing trips	(thousand)	5	5	5	5	4	4	4		8%	-12%
Energy consumption	(million litre)	40.26	31.41	24.53	26.37	17.40	36.53	59.54		63%	102%
Live weight of landings	(thousand tonne)	180.8	209.1	108.1	114.5	58.0	89.7	146.4		63%	16%
Value of landings	(million €)	96.1	156.8	77.0	76.7	40.6	64.3	95.3		48%	12%
Income from landings	(million €)	92.0	55.0	42.7	48.4	43.1	65.9	99.9		52%	73%
Other income	(million €)	0.26	6.22	3.31	0.44	0.68	0.53	0.44		-17%	-77%
Direct income subsidies	(million €)	0.01	-	0.11	0.27	0.01	0.00	0.03		1233%	-54%
Wages and salaries of crew	(million €)	9.24	5.89	4.80	5.60	4.42	5.83	9.26		59%	55%
Unpaid labour value	(million €)	0.03	0.03	0.02	0.02	0.01	0.01	0.01		-26%	-69%
Energy costs	(million €)	27.51	12.56	14.05	12.77	11.62	19.93	28.61		44%	74%
Repair & maintenance costs	(million €)	15.39	9.84	6.26	6.32	6.17	6.24	14.17		127%	69%
Other variable costs	(million €)	23.20	19.39	16.39	13.17	11.10	13.90	29.24		110%	81%
Other non-variable costs	(million €)	6.75	4.73	4.24	3.14	1.84	8.37	13.88		66%	187%
Annual depreciation costs	(million €)	2.05	2.11	2.42	2.34	2.25	1.76	4.68		166%	117%
Opportunity cost of capital	(million €)	- 3.09	5.22	2.36	0.57	0.79	1.12	2.45		118%	111%
Tangible asset value	(million €)	63	56	55	56	50	43	95		120%	77%
Investments	(million €)	0.5	0.1	22.0	20.9	1.2	0.4	5.8		1560%	-23%
Financial position	(%)	45.2	47.3	60.9	62.8	56.7	7.4	74.4		902%	59%
Gross Value Added	(million €)	19.4	14.7	5.1	13.4	13.0	18.0	14.4		-20%	4%
GVA to revenue	(%)	21.0	24.0	11.1	27.4	29.7	27.1	14.4		-47%	-38%
Gross profit	(million €)	10.1	8.8	0.3	7.8	8.6	12.1	5.2		-57%	-35%
Gross profit margin	(%)	10.9	14.4	0.6	15.9	19.6	18.3	5.2		-72%	-61%
Net profit	(million €)	11.1	1.5	- 4.5	4.8	5.5	9.3	- 2.0		-121%	-142%
Net profit margin	(%)	12.1	2.4	- 9.8	9.9	12.7	13.9	- 1.9		-114%	-128%
GVA per FTE	(thousand €)	31	27	10	23	23	37	25		-31%	0%
Return on fixed tangible assets	(%)	13	12	- 4	10	13	24	1		-98%	-95%

Table 5.58 Lithuania: National fleet statistics and economic performance results based on fleet segment level data.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	125	124	104	103	104	97	97	*105*	*96*		8%	-9%
Total employed	(person)	1046	712	706	768	732	763	750	*854*	*718*		14%	-16%
FTE	(#)	617	544	512	574	566	491	573	*680*	*399*		19%	-41%
Days at sea	(day)	9,763	9,655	8,992	10,044	10,996	9,797	8,417	*9,323*	*8,773*		11%	-6%
Energy consumption	(thousand litres)	40,263	31,411	24,530	26,373	17,403	36,530	59,535	*41,881*	*23,139*		-30%	-45%
Live weight of landings	(tonne)	180,841	209,146	108,135	114,542	58,037	89,723	146,411	*82,248*	*97,893*		-44%	19%
Value of landings	(thousand €)	96,140	156,813	76,953	76,688	40,614	64,333	95,288	*62,428*	*59,853*		-34%	-4%
Income from landings	(thousand €)	91,960	55,021	42,717	48,350	43,066	65,888	99,904	*65,314*	*62,311*		-35%	-5%
Other income	(thousand €)	255	6,223	3,315	445	677	529	439	*532*	*525*		21%	-1%
Wages and salaries of crew	(thousand €)	9,241	5,888	4,803	5,602	4,415	5,825	9,261	*6,063*	*5,786*		-35%	-5%
Unpaid labour value	(thousand €)	32	32	20	24	9	9	7	*9*	*8*		43%	-15%
Energy costs	(thousand €)	27,512	12,557	14,051	12,773	11,625	19,934	28,609	*14,492*	*9,671*		-49%	-33%
Repair & maintenance costs	(thousand €)	15,389	9,843	6,261	6,323	6,170	6,238	14,171	*11,240*	*8,475*		-21%	-25%
Other variable costs	(thousand €)	23,196	19,392	16,387	13,175	11,102	13,900	29,239	*20,008*	*17,796*		-32%	-11%
Other non-variable costs	(thousand €)	6,749	4,732	4,239	3,137	1,838	8,368	13,881	*10,034*	*7,680*		-28%	-23%
Annual depreciation costs	(thousand €)	2,046	2,109	2,416	2,340	2,250	1,759	4,676	*3,625*	*2,770*		-22%	-24%
Opportunity cost of capital	(thousand €)	- 2,157	4,259	2,195	532	761	947	2,366	*1,548*	*1,178*		-35%	-24%
Tangible asset value (replacement)	(thousand €)	43,655	45,312	50,805	52,198	48,163	36,410	91,711	*73,886*	*56,213*		-19%	-24%
Gross Value Added	(thousand €)	19,369	14,719	5,093	13,388	13,009	17,977	14,444	*10,071*	*19,214*		-30%	91%
Gross profit	(thousand €)	10,096	8,799	271	7,761	8,584	12,143	5,177	*3,999*	*13,420*		-23%	236%
Net profit	(thousand €)	10,207	2,431	- 4,340	4,889	5,574	9,437	- 1,865	*- 1,175*	*9,473*		37%	906%

Table 5.59 Lithuania: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF							DWF							Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend DWF	Δ2014 to 2013	Δ2014 to avg. 08-13
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014									
Total number of vessels (#)	89	91	74	69	69	65	64	24	22	22	24	25	25	24	12	11	8	10	10	7	9		-2%	-16%		-4%	1%		29%	-7%
Vessel tonnage (thousand GT)	0.5	0.5	0.4	0.4	0.2	0.2	0.2	3.5	3.3	3.2	3.4	3.5	3.8	3.7	39.5	38.7	36.5	39.7	38.8	30.9	42.9		1%	-48%		-3%	6%		39%	15%
Engine power (thousand kW)	2.6	2.7	2.2	2.0	1.7	1.7	1.8	7.5	7.0	6.5	6.9	7.1	7.6	7.4	40.6	39.0	35.2	40.0	40.3	31.3	37.3		7%	-16%		-3%	4%		19%	-1%
FTE (#)	208	55	49	37	49	39	46	87	175	155	169	162	156	114	322	314	308	368	356	296	413		17%	-37%		-26%	-24%		39%	26%
Total employed (person)	370	158	152	154	149	140	142	132	240	228	231	228	265	195	544	314	326	383	355	358	413		1%	-24%		-26%	-12%		15%	9%
Days at sea (thousand day)	4.7	4.9	4.8	4.3	5.6	5.7	5.9	1.9	1.8	2.5	2.7	3.0	2.8	1.7	3.2	3.0	1.7	3.0	2.4	1.3	0.8		5%	18%		-39%	-29%		-42%	-69%
Fishing days (thousand day)	4.5	4.8	4.6	4.2	5.6	5.6	4.7	1.5	1.5	1.6	2.3	2.0	1.9	1.5	1.7	1.7	1.3	1.6	1.2	1.2	0.7		-17%	-4%		-23%	-16%		-44%	-54%
Number of fishing trips (thousand)	4	4	4	4	3	3	3	1	1	1	1	1	1	1	0	0	0	0	0	0	0		12%	-12%		-15%	-14%		98%	36%
Energy consumption (million litre)	0.3	0.2	0.2	0.2	0.2	0.1	0.1	3.2	2.6	2.1	2.7	2.8	2.9	2.6	36.8	28.6	22.3	23.5	14.5	33.5	56.8		14%	-28%		-11%	-5%		70%	114%
Live weight of landings (thousand tonne)	0.57	0.77	0.71	0.60	0.56	0.61	0.53	27.8	28.4	15.4	17.7	16.3	16.4	13.3	152.5	180.0	92.0	96.2	41.2	72.7	132.6		-13%	-17%		-19%	-35%		82%	25%
Value of landings (million €)	0.75	0.81	0.82	0.62	0.57	0.60	0.47	7.0	6.7	5.9	6.2	6.6	6.6	3.7	88.4	149.3	70.2	69.8	33.5	57.2	91.1		-20%	-32%		-43%	-43%		59%	17%
Income from landings (million €)	0.8	0.9	0.8	0.6	0.6	0.6	0.5	6.8	6.4	5.9	7.3	6.6	6.2	4.0	84.3	47.7	36.0	40.5	35.9	59.1	95.4		-13%	-30%		-37%	-40%		62%	89%
Other income (million €)	0.01	0.03	0.03	0.03	0.03	0.01	0.04	0.2	1.2	1.1	0.4	0.4	0.5	0.02	0.0	5.0	2.2	0.1	0.3	0.05	0.4		366%	79%		-96%	-97%		700%	-70%
Direct income subsidies (million €)	0.01	-	0.08	-	0.01	0.00	0.03	-	-	0.03	-	0.00	0.00	-	-	-	-	0.27	-	-	-		2134%	81%		-100%	-100%			-100%
Wages and salaries of crew (million €)	0.2	0.1	0.1	0.2	0.2	0.2	0.2	1.5	1.2	1.1	1.1	1.1	1.3	1.0	7.5	4.6	3.6	4.3	3.2	4.4	8.1		-3%	-9%		-20%	-16%		84%	77%
Unpaid labour value (million €)	0.03	0.03	0.02	0.02	0.01	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-26%	-69%						
Energy costs (million €)	0.2	0.1	0.1	0.1	0.2	0.1	0.1	1.3	1.0	1.2	1.8	2.0	1.9	1.6	26.0	11.5	12.8	10.8	9.5	17.9	27.0		-11%	-28%		-18%	2%		50%	83%
Repair & maintenance costs (million €)	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.8	0.6	0.7	1.2	0.7	1.0	0.4	14.6	9.2	5.5	5.1	5.4	5.2	13.7		176%	15%		-60%	-52%		163%	83%
Other variable costs (million €)	0.1	0.2	0.2	0.1	0.1	0.0	0.1	2.0	2.1	1.5	0.9	0.8	1.4	1.1	21.1	17.1	14.7	12.2	10.2	12.5	28.1		85%	-38%		-23%	-27%		125%	92%
Other non-variable costs (million €)	0.1	0.1	0.1	0.0	0.1	0.0	0.1	1.3	1.4	1.7	1.1	0.7	0.8	0.7	5.3	3.2	2.5	2.0	1.0	7.5	13.1		28%	-24%		-12%	-41%		74%	265%
Annual depreciation costs (million €)	0.03	0.03	0.04	0.03	0.03	0.02	0.02	0.3	0.3	0.3	0.3	0.3	0.3	0.2	1.7	1.8	2.1	2.0	1.9	1.4	4.5		-15%	-46%		-44%	-40%		216%	146%
Opportunity cost of capital (million €)	- 0.03	0.06	0.03	0.01	0.01	0.01	0.01	-0.35	0.59	0.26	0.07	0.10	0.18	0.13	- 1.78	3.61	1.91	0.46	0.65	0.76	2.23		1%	-39%		-27%	-7%		193%	138%
Tangible asset value ((million €)	0.6	0.6	0.8	0.6	0.5	0.3	0.3	7.0	6.3	5.9	6.4	6.3	6.9	5.1	36.1	38.4	44.1	45.2	41.4	29.2	86.3		2%	-44%		-26%	-21%		195%	121%
Investments (million €)	0.03	0.02	0.01	0.03	0.04	0.02	0.00	0.5	0.1	0.2	0.6	1.0	0.3	0.3	-	-	21.8	20.2	0.2	0.0	5.5		-95%	-96%		18%	-28%		11984%	-22%
Gross Value Added (million €)	0.3	0.5	0.4	0.3	0.4	0.4	0.3	1.8	2.5	2.0	2.7	2.7	1.7	0.3	17.3	11.7	2.8	10.4	10.0	15.9	13.9		-30%	-30%		-83%	-87%		-13%	22%
GVA to revenue (%)	39.9	57.1	44.2	48.6	54.9	64.5	48.8	24.7	32.4	28.0	35.4	38.5	24.9	7.2	20.5	22.3	7.3	25.6	27.6	26.9	14.5		-24%	-5%		-71%	-76%		-46%	-33%
Gross profit (million €)	0.1	0.4	0.2	0.1	0.2	0.2	0.1	0.2	1.3	0.9	1.6	1.6	0.4	- 0.7	9.8	7.1	- 0.8	6.1	6.8	11.5	5.8		-52%	-47%		-268%	-171%		-50%	-14%
Gross profit margin (%)	7.6	41.0	24.2	9.8	26.4	34.4	17.7	3.3	17.1	12.7	20.7	23.0	6.3	-18.0	11.6	13.5	- 2.1	15.1	18.8	19.5	6.0		-48%	-26%		-384%	-230%		-69%	-53%
Net profit (million €)	0.1	0.3	0.1	0.0	0.1	0.2	0.1	0.2	0.4	0.4	1.2	1.2	- 0.1	- 1.0	9.9	1.8	- 4.8	3.6	4.2	9.3	- 0.9		-59%	-47%		-1201%	-285%		-110%	-123%
Net profit margin (%)	8	32	16	4	21	30	13	3	5	5	16	17	- 1	- 26	12	3	- 13	9	12	16	- 1		-55%	-27%		-2098%	-439%		-106%	-115%
GVA per FTE (thousand €)	2	9	7	8	8	10	6	20	14	13	16	16	11	3	54	37	9	28	28	54	34		-40%	-22%		-77%	-83%		-37%	-4%

Table 5.60 Lithuania: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
LTU OFR TM40XX °	9	413	758	429	132,587	91,080	95,828	13,896	14.5	5,797	6.0	- 906.3	- 0.9	19.6	34	2	Weak	-115%	Deteriorated
LTU A27 TM2440 °	5	22	462	136	9,446	2,245	2,346	561	23.9	110	4.7	11.7	0.5	20.6	26	3	Reasonable	-97%	Deteriorated
LTU A27 DTS2440 °	19	92	1,278	332	3,854	1,489	1,633	- 274	- 16.8	- 825	- 50.5	- 1,042.6	- 63.8	6.0	- 3	- 30	Weak	-9376%	Deteriorated
LTU A27 DFN1012 °	7	18	926	302	289	259	278	133	48.0	80	28.7	62.9	22.6	3.1	8	29	High	37%	Improved
LTU A27 PG0010 °	57	29	4,993	214	236	215	258	128	49.7	15	5.9	8.8	3.4	4.0	4	14	Reasonable	-78%	Deteriorated

Table 5.61 Lithuania: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real)								Live weight of landings								Average landed price (real)							
	(thousand €)								(tonne)								(€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
Cunene horse mackerel	33.7	7.9	11.5	15.7	8.9	29.2	39.9	*2.4*	51.0	51.0	42.3	18.6	10.1	33.9	43.7	*2.6*	0.7	0.2	0.3	0.8	0.9	0.9	0.9	*0.9*
Chub mackerel	12.8	3.2	0.9	7.6	2.8	9.4	13.8	*6.9*	15.6	17.2	6.7	10.6	4.1	12.0	18.9	*12.2*	0.8	0.2	0.1	0.7	0.7	0.8	0.7	*0.6*
Round sardinella	11.5	2.0	2.5	13.8	5.4	4.4	10.0	*0.4*	21.6	14.5	14.0	31.9	11.8	8.5	22.7	*0.9*	0.5	0.1	0.2	0.4	0.5	0.5	0.4	*0.5*
Atlantic mackerel		0.02		0.03			8.6	*0.5*		0.1		0.03			9.4	*0.6*		0.2		1.0			0.9	*0.9*
Atlantic herring	0.7	1.1	0.4	0.8	1.0	0.9	5.0	*1.1*	1.8	3.8	1.6	2.7	2.3	2.5	12.6	*4.7*	0.4	0.3	0.2	0.3	0.5	0.4	0.4	*0.2*
European pilchard	4.0	6.0	2.3	9.3	1.9	1.0	3.9	*1.3*	9.6	8.1	10.6	21.9	4.0	2.2	11.6	*3.4*	0.4	0.7	0.2	0.4	0.5	0.4	0.3	*0.4*
Jack and horse mackerels	2.0	0.4	0.4	0.8	1.6		2.9	*5.2*	3.0	4.0	2.5	1.0	1.9		4.8	*6.2*	0.7	0.1	0.2	0.9	0.9		0.6	*0.8*
Beaked redfish	2.3				3.9	1.9	2.4	*2.1*	1.4				1.0	1.4	0.8	*0.5*	1.6				3.7	1.4	3.1	*4.0*
European sprat	2.9	2.3	1.7	1.3	2.9	3.4	2.2	*2.2*	23.3	19.9	10.2	9.7	11.3	10.4	9.7	*11.0*	0.1	0.1	0.2	0.1	0.3	0.3	0.2	*0.2*
Blue whiting(=Poutassou)	1.8						1.8		5.3						4.6		0.3						0.4	

5.15 MALTA

Short description of the national fleet

Fleet capacity

During 2015, the Maltese fishing fleet consisted of 1 040 registered vessels, 253 of which were inactive, having a combined gross tonnage of 7.5 thousand GT, engine power of 76.2 thousand kW and an average age of 28 years. The vast majority of the inactive vessels are below 12m. In 2015, five vessels ceased their fishing activities while the Maltese Fishing Vessel Register (FVR) did not open for new registrations during 2015, though registrations were accepted for recreational vessels. The size of the Maltese fishing fleet decreased between 2008 and 2014, with the number of vessels falling by 21%; the fishing capacity, in terms of GT remained the same while there was a decrease of 13% in kW for the same period. The major factor causing the number of vessels to decrease was the compensations given to vessel owners for decommissioning in line with the three management plans in place within the 25Nm FMZ in order to ensure the sustainability of stocks through better monitoring and to ensure financial stability for fishers.

Fleet structure

The Maltese fishery is a relatively small industry of a typically Mediterranean artisanal type, and is frequently described as a multi-species and multi-gear fishery, with the majority of the fishers switching from one gear to another several times throughout the year. The vast majority of the Maltese fishing fleet is composed of small-scale fishing vessels (92% in 2015) with an engine power of 41.9 thousand kW.

The total number of fishing enterprises in the Maltese fleet was 1 002 in 2015. The majority of fishing enterprises, 70%, owned a single vessel, 29% of enterprises owned two to five fishing vessels while only 1% of the fishing enterprises owned six or more fishing vessels.

Employment

Employment has been increasing since 2012 with total jobs of 1 418 in 2014. This corresponds to 1 116 FTEs or an average of 1.6 FTE per vessel. 77% of the total jobs were employed with the small-scale fishing vessels. This implies that the small-scale fishing sector is of fundamental importance to the social and economic aspects of the Maltese Fishing Fleet. The average age of the fishers within the whole fleet is 46 years old.

Although the Maltese fishing fleet is benefiting from a number of young people who voluntarily help their family whilst at sea, on a seasonal basis, the Maltese fishing industry is experiencing the challenge to obtain the young generation into the profession of fishing. Fishing in Malta is mainly seasonal and as a consequence some of the full-time fishers own at least one small and one large vessel which enable them to practice off-shore fishing during the milder seasons and coastal activities during the winter months. The average number of fishers employed on each full-time boat is increasing when undertaking trips of more than two days. Additionally, extra hands are sometimes recruited for bluefin tuna seines and common dolphinfish seasons.

Effort

The Maltese fleet spent a total of around 25 thousand days at sea in 2015. The total number of days at sea decreased 20% between 2014 and 2015.

The quantity of fuel consumed in 2014 totalled around 3.68 million litres. Although the days at sea and number of trips have increased between 2013 and 2014, the fuel consumption was lowered by 46% in 2014. The fishers purchased extra fuel during 2013 which kept as a reserve to use it in 2014 due to expectation of an increase in fuel prices. In fact the average price per litre of fuel has increased by 38% from 2013 to 2014.

Production

The total weight landed by the Maltese fleet in 2015 was 2.4 thousand tonnes of seafood, with a landed value of €11.6 million, a 10% increase on 2014. The average weight of landings has increased during the period analysed.

The main exploited species include swordfish (*Xiphias gladius)*, common dolphinfish (*Coryphaena hippurus*), Atlantic bluefin tuna (T*hunnus thynnus)*, demersal and small pelagic species and a number of additional species some of which although caught in smaller quantities have a high commercial value such as the red shrimps.

In 2015, swordfish catches produced the highest landed value (€3.1 million) by the national fleet and representing 27% of the total value of landings, followed by Atlantic bluefin tuna (€1.9 million), common dolphinfish (€1.4 million) and giant red shrimp (€0.6 million). In terms of landings weight, swordfish landings amounted to 500 tonnes, Atlantic bluefin tuna 200 tonnes and common dolphinfish 300 tonnes.

The prices obtained for these key species in general increased between 2008 and 2015. Giant red shrimp achieved the highest average price per kilo in 2015 (€20.90 per kg), followed by Atlantic bluefin tuna (€10.80 per kg).

Atlantic bluefin tuna, Giant red shrimp, Red scorpionfish and red porgy attain the highest prices amongst all species landed by the Maltese fishing fleet. This is due to the fact that these species are characterised by a high demand both locally and abroad. In the latter case the main export markets for Giant red shrimp is in Europe while Japan is the main export market for Atlantic bluefin tuna. The price of common dolphinfish and swordfish varies enormously, thus the importance attributed to them will therefore change in different time periods.

Economic results for 2014 and recent trends

National fleet performance

Although the Maltese national fleet remained in a net loss making position in 2014, its economic performance has improved when compared to 2010 but has deteriorated when compared to 2012 and 2013. The trend is expected to improve in 2015, as fuel prices decreased and total value of landings has increased.

The total amount of income generated by the Maltese national fleet in 2014 was around €11.7 million, a decrease of 22% due to a 16% decrease in the total value of landings and a 51% decrease in other income (€1.22 million). When including direct income subsidies and income from fishing rights, total income amounted to €12.1 million.

The operating costs in 2014 amounted to €12.1 million. Crew cost and energy costs were the two major cost items (€6.1 million and €2.7 million respectively). However, €4.1 million of crew cost were estimated for the unpaid labour which remained in the hands of the fishers as working capital. Between 2013 and 2014, operating costs increased by 25%. When including capital costs, total costs amounted to €17.21 million, exceeding total revenue and generating a net loss of -€5.1 million.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €5.3 million, -€0.9 million and -€5.1 million, respectively. Although in 2012 and 2013, the economic performance improved, the economic situation for 2014 has deteriorated again. The increase in the total level of loss was mainly due to an increase in crew cost (mainly unpaid labour) and repairs and maintenance costs.

In 2014, the Maltese fleet had an estimated (depreciated) replacement value of €72 million and investments amounted to €1.2 million, a 20% reduction on 2013.

Resource productivity and efficiency indicators

In 2014, the gross profit margin was -7.3%, indicating a low operating efficiency of the sector. This is also seen in the net profit margin for 2014 which was deteriorated to -43.55% from -4.8% (2013).

The Rate of Return on Fixed Tangible Assets (RoFTA) of -5%, in 2014, shows deterioration when comparing it to previous years.

After an overall improved development trend since 2008, labour productivity (GVA/FTE) has decreased by 52% between 2013 and 2014. This is due to the fact that GVA decreased by 32% and the number of FTE increased by 42%, thus indicating a decrease in efficiency.

Fuel consumption per landed tonne has followed an overall decreasing trend since 2008. In 2014, it is estimated an average of 1.5 thousand litres per tonne landed. This is a standard consumption for a typical fishing vessel in the Mediterranean.

Landings in weight per unit of effort (in days at sea) followed an increasing trend since 2008 but decreased by 7% in 2014. This is due to the fact that while in 2014, the weight of total landings remained the same as 2013, the days at sea for the same year increased by 10%.

Drivers affecting the economic performance trends

Between 2013 and 2014, there was a drop in the value of gross landings by 16% while there was a substantial increase in labour costs and repairs and maintenance costs. These facts were the main driving sources behind the overall decline in the economic performance between 2013 and 2014.

In recent years, the status of the fish stock has reduced which led to an increase in prices for some of the fish species sold at the market. However, the consumption of households on seafood in Malta has increased from in 35 719 thousand units in 2013 to 38 222 thousand units 2014. Such increase in demand also led to an increase in prices for some of the fish species.

Markets and Trade

Fishing in Malta is mainly a traditional artisanal activity which operates on a small scale. The majority of the fish landed is sold in the local market.

Management instruments

Currently there are three management plans in place within the 25nM FMZ for the Maltese national fishing fleet. These were developed in line with Article 19 of Council Regulation 1967/2006 and include: lampara purse seine fishery, bottom otter trawler fishery and lampuki FAD fisheries. The main objectives of management plans are to ensure the sustainability of stocks through better monitoring and to ensure financial stability for fishers.

Lampara fishery targets mainly small pelagic species, including chub mackerel (*Scomber japonicus*) and round sardinella (*Sardinella aurita*). The stocks targeted by the Maltese lampara fishery are stocks shared with Sicily. The lampara vessel activities are monitored by a tracking system and catch logbooks. In addition the fishing capacity in terms of GT and dimensions of the gear is frozen. The objectives of the lampara fishery management plan are to ensure that stocks are fished at sustainable levels, ensuring financial stability for fishers and safeguarding artisanal fishing activity. The Lampara management plans requested the implementation of a 20% reduction in line with the precautionary approach on the current lampara capacity in terms of number of vessels by the end of 2015.

The bottom otter trawl fishery main targets are shared stocks including red shrimps (*Aristeomorpha foliacea*), red mullet (*Mullus* spp.) and deep water rose Shrimp (*Parapenaeus longirostris*). The status of the latter stock together with that of European hake (*Merluccius merluccius*) is monitored annually on a regional level. The statuses of both stocks are in overexploitation. This management plan serves to aid in the recovery of the stocks whilst ensuring financial stability of fishers. The plan indicates that a 30% capacity reduction must be conducted by end of 2016.

Lampuki FAD fishery targets juvenile species of *Coryphaena hippurus* that aggregate under FADs. Lampuki is a highly migratory species and stocks are shared between diverse Mediterranean countries. The management plan for this fishery affects Maltese fishing fleet licensed to fish for the lampuki using FADs inside and outside the 25nM FMZ. The number of fishing vessels authorised to fish in the FAD fishery was frozen (130 vessels). The activities of these vessels are monitored by means of tracking system and catch logbook. Moreover, the management plan stated that the Department of Fisheries and Aquaculture will continue to enhance data collection and research on the stock.

TACs and quotas

The Bluefin tuna fishery in Malta has been managed under an IQ system. In 2009, the transferability of quotas was allowed and the system changed from IQ to ITQ. As a consequence, data on income from leasing out quota or other fishing rights, lease/rental payments for quota or other fishing rights and the value of quota and other fishing rights was collected for the first time for the year 2009.

In 2015, for the first time since the establishment of the bluefin tuna recovery plan in 2006, there was an increase in the quota, as the EU is allowed to fish over 9 372 metric tons. The annual increase in quota of 20% over three years (2015-2017) is due to the progressive recovery of the stock, as demonstrated by scientific evidence. As a result, Malta has benefitted and obtained an increase in the TACs of Bluefin tuna.

In 2015, bluefin tuna represented the 3rd most important species for Maltese fleets in terms of landings (178 tonnes), just after swordfish and common dolphinfish. In terms of value, bluefin tuna is one of the most valued species targeted by the Maltese fleets achieving an average first-sale price of €10.80 per kg in 2015.

The fleet segments involved in the bluefin tuna fisheries, include: Purse seiners (PS); vessels using hooks (HOK); vessels using active and passive gears (PMP); vessels using polyvalent passive gears only (PGP) and vessels using other active gears (MGO,) each accounting for 72.63%; 25.11%; 0.32%; 0.72%; 1.21% of the total landings in weight, respectively.

Innovation and Development

At the end of 2015, Malta inaugurated a larger and more spacious fish market facility than the previous one which was built in 1937. The new fish market facility was built with the latest European standards and innovative technology in order to help the Maltese fishers to compete with other Member State.

New hard standing facilities, landing sites, slip ways and winch rooms were some of the European projects which were finalised during 2015. These new and upgraded facilities will help the Maltese fishers to be more cost efficient.

Amongst several European projects, in 2015, a publicity campaign on fish took place around Malta with the aim to increase the household consumption and the local demand.

Performance by fishing activity

Small-scale fleet

In 2015, there were 724 active vessels belonging to the "small-scale coastal fleet" according to the European definition (defined as vessels less than 12 metres and not using towed gear as listed in table 3 in Annex 1 of Commission Regulation (EC) No 26/2004 of 30 December 2003). This represents 92% of the active vessels or 70% of the whole Maltese fishing fleet.

Fisheries in Malta are a relatively small industry where its social significance far outweighs its economic importance. It is in fact a traditional activity which operates on a small scale, producing small volumes of a very valuable product. The

industry is mainly artisanal and it is considered as a typical fisheries found in many Mediterranean countries. The majority of the small-scale fishing vessels conduct their coastal activities on a seasonal basis. There are no inland fisheries in Malta.

The Maltese national fishing fleet is mainly divided into two categories: The professional full-time fishing vessels and the part-time fishing vessels. 41% of the small-scale fishing vessels work on a full time basis in the fishing industry whilst 59% fish on a part time basis.

In 2014, 77% of the total jobs (1 098 employees) in the Maltese fishing industry worked on small-scale fishing vessels. This corresponds to 804 FTEs. In 2014, there was an increase of 24% in the total jobs of the small-scale fishing vessels. The small-scale fishing sector has an overall increasing trend in jobs for the period analysed. However, there have been constant fluctuations in the crew costs across the years. In 2014, wages amounted to €400 000 while the unpaid labour cost amounted to €3.5 million. The vast majority of the employees in the small-scale fishing are the owners themselves with no employees. Others have their families and friends who voluntarily help them during a fishing trip.

The landings value of the small scale fishery has decreased 3% from 2013 to 2014 but increased again 4% in 2015 when compared to 2013. In terms of profitability, in 2014, the economic performance of the small scale fishery has deteriorated since it registered a gross loss of €2.7 million in 2014 from a gross profit of €2 million in 2013. Same trend was followed for the net profit as it registered a net loss of €3.9 million in 2014 from a net profit of €0.4 million in 2013.

In 2014, the losses incurred by the small- scale fishing vessels (-€3.9 million) is far larger than the large-scale fishing vessels (-€0.8 million). The GVA of the small-scale fishing vessels was €1.2 million while for large-scale fishing vessels was €4m. The large-scale fishing vessels had a gross profit of €1.9 million while the small-scale fishing vessels had a gross loss of -€2.7 million. The main drivers to such losses in the small-scale fishing sector were due to an increase in crew wages, unpaid labour and repairs and maintenance cost.

Moreover it is also interesting to note that in 2014, although the days at sea (26 600 days) and fishing days of the small scale fishing vessels were much higher than the large-scale fishing vessels (4 700 days), the landings value of the small scale vessels (€3.68 million) was much lower than the large-scale vessels (€6.78 million). This implies that with less effort, the landings value of the large scale fishing vessels is twice that of the small scale fishing vessels.

Large-scale fleet

The large scale fishing vessels that were active during 2015 amounted to 63. This represents 8% of the active Maltese fishing vessels. All large-scale fishing vessels work on a full time basis in the fishing industry.

In 2014, 23% of the total jobs (320 employees) in the Maltese fishing industry worked with the large-scale fishing vessels. This corresponds to 312 FTEs. In 2014, there was an increase of 10% in the total jobs of the large-scale fishing vessels. The large-scale fishing sector has an overall increasing trend in jobs since 2008.

In 2014, results show that efforts made by the large scale vessels were less than previous year. Days at sea and fishing days were reduced by 19% and 36% respectively. This led to lower energy cost, energy consumption and operating costs. The value of landing has also decreased by 22%.

Although in 2014, this fishing activity has generated a net loss of €0.8 million, the economic performance of the large-scale fishery has improved such that the net loss for 2014 was the lowest since 2008.

Distant-water fleet

There are no distant-water fleets in Malta.

Outermost region fleets

There are no outermost region fleets in Malta.

Performance results of selected fleet segments

The Maltese fishing fleet is highly diversified with a broad range of vessel types targeting different species in the Mediterranean. The national fleet consisted of 20 active (DCF) fleet segments in 2014, with 5 inactive fleet segments consisting of 336 vessels. These vessels are classed as inactive if they did not land any catch in 2014. Four of the active fleet segments made a net profit in 2014 while sixteen made an overall loss.

93% of the Maltese fishing fleet consists of small-scale vessels under 12m and the entire fleet operates solely in the Mediterranean Sea. The small-scale active vessels increased in terms of vessel numbers, tonnage and power between 2014 and 2015 by 12%, 13% and 16%, respectively.

A short description of two important segments in terms of total value of landings is provided below.

Vessels using hooks 18–24m - 17 vessels made up this segment in 2014, which operates predominantly in the Mediterranean. This segment employed 98 jobs/ FTE during the same period. The fleet targets a variety of species mainly by using surface and bottom long-liners. Surface long-liners target mainly large pelagic species such as Atlantic bluefin

tuna(*Thunnus, thynnus*), swordfish (*Xiphias gladius*), and common dolphinfish (*Coryphaena hippurus*) while bottom long-liners target demersal species such as bluntnose sixgill shark (*Hexanchus griseus*), red scorpion fish (*Scorpaena scrofa*), silver scabbardfish (*Lepidopus caudatus*) species amongst others. In 2014, the total value of landings was about €2.29 million. This segment made profit in 2014, generating a net profit of €0.46 million.

Demersal trawlers 18-24m – 8 vessels make up this segment in 2014, which operates predominantly in the Mediterranean. This segment employed 41 jobs/FTE in 2014. The fleet targets a variety of species but in particular demersal and deep water species, such as deep water rose shrimp (*Parapenaeus longirostris*), giant red shrimp (*Aristeomorpha foliacea*) and red mullets (*Mullus spp*). In 2014, the total value of landings was almost €1.22 million. This fleet segment was not particularly profitable, with a reported gross profit of around €0.54 million and a net loss of €0.14 million in 2014. The main drivers behind the loss are the high costs attributed to the capital costs.

Projections for 2015 and outlook

Overall, at the Maltese national fleet level, slight increases in landings volume and higher in average prices resulted in a 10% increase in the value of landings, from €10.5 million in 2014 to €11.6 million in 2015. Total operational costs for the year 2015 are expected to decline, consistent with the decrease in effort (days at sea) which decreased by 20% between 2014 and 2015. Thus, the economic performance for 2015 is expected to improve due to an expected increase in income from the sales of landings and the lower variable costs. Most economic variables for the year 2015 are expected to decrease due to a reduction in effort. As a consequence, profitability from this point of view is expected to be positively affected. Expected economic performance improvements in 2015 shows GVA (+49%), gross profit (+588%) and net profit (+123%).

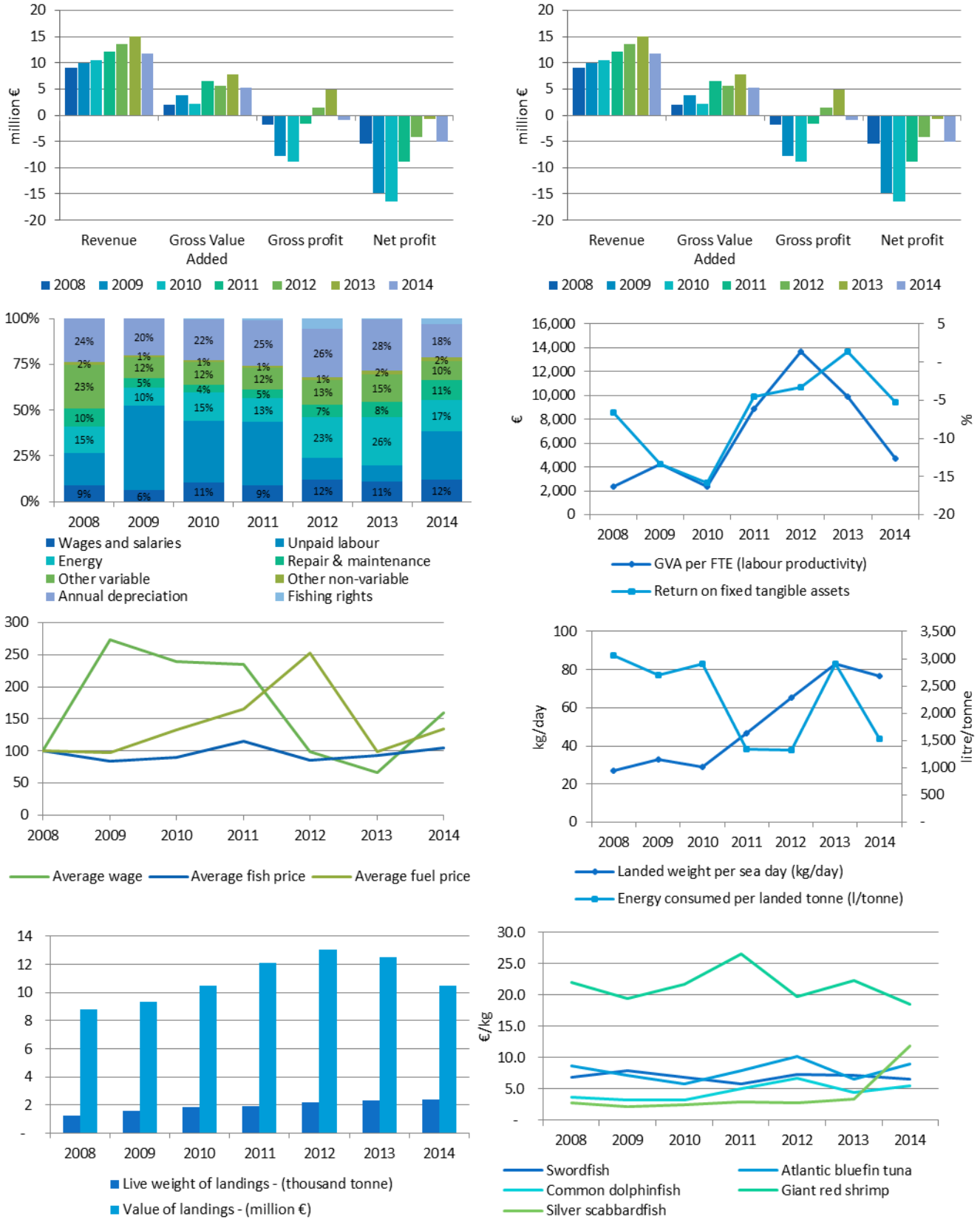
Positive economic developments can also be seen in performance indicators GVA to revenue (+37%), GVA per FTE (+87%) and gross and net profit margins.

Profitability is also expected to be positively affected due to the increase in tuna quotas which will generate higher landings income for certain segments with Atlantic bluefin tuna as the main target species.

Data issues

No major issues detected. In order to improve the data collection system and to address the remarks made in previous annual economic reports; for the reference year 2014, economic data was collected on a census basis instead of a sampling. This eliminated the issue of data quality. Moreover Malta recalculated all the historical data for reference years 2008 to 2013, to ensure standardisation in the methodology of calculation. Before carrying out this exercise, Malta has liaised with other Member States with regards to the methodology used for the preparation of this data, so as to ensure standardisation with other data from the region.

Moreover, given that the Maltese fishing fleet is mainly composed of small-scale fisheries, it is very challenging to collect precise and complete data from the fishers. The reason being that the majority of the small-scale fishery do not engage an accountant and thus they do not have professional bookkeeping. Having said this, Malta does its best to enhance the quality of the data at data collection level and also at analysis level.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.14 Malta: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.62 Malta: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 are projected.

		2008	2009	2010	2011	2012	2013	2014	*2015*	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	1,316	1,111	1,112	1,087	1,060	1,040	1,045	*1,040*		0%	-7%
Number of Inactive vessels_ms	(#)	613	332	264	453	276	266	336	*253*		26%	-9%
Vessel tonnage	(thousand GT)	7.5	8.3	12.3	12.1	8.0	7.8	7.7	*7.5*		-1%	-18%
Engine power	(thousand kW)	87.5	82.2	85.5	83.4	77.9	76.1	75.5	*76.2*		-1%	-8%
Average vessel age	(year)	25	24	25	26	26	28	28	*28*		-1%	8%
Average vessel length	(metre)	7	7	7	7	7	7	7	*7*		-1%	-1%
Enterprises with one vessel	(#)	1,197	1,003	1,048	967	664	586	722	*701*		23%	-21%
Enterprises with 2 to 5 vessels	(#)	120	108	64	120	384	454	324	*294*		-29%	56%
Enterprises with more than 5 vessels	(#)					12			*7*			-100%
FTE	(#)	824	880	896	734	416	784	1,116	*891*		42%	48%
Total employed	(person)	1,009	1,141	1,225	933	1,236	1,201	1,418	*1,411*		18%	26%
Days at sea	(thousand day)	47.0	48.3	63.5	41.2	33.7	28.4	31.3	*25.0*		10%	-28%
Fishing days	(thousand day)	47.0	48.2	63.5	39.6	32.3	25.3	28.6	*23.3*		13%	-33%
Number of fishing trips	(thousand)	43	44	63	38	29	22	27	*21*		21%	-32%
Energy consumption	(million litre)	3.91	4.28	5.32	2.59	2.91	6.83	3.68	*2.94*		-46%	-15%
Live weight of landings	(thousand tonne)	1.3	1.6	1.8	1.9	2.2	2.4	2.4	*2.4*		2%	29%
Value of landings	(million €)	8.8	9.3	10.5	12.1	13.0	12.5	10.5	*11.6*		-16%	-5%
Income from landings	(million €)	8.8	9.3	10.5	12.1	13.0	12.5	10.5	*11.6*		-16%	-5%
Other income	(million €)	0.27	0.55	-	-	0.47	2.49	1.22	*1.21*		-51%	93%
Direct income subsidies	(million €)	0.07	0.02	0.63	0.04	0.55	0.01	0.03			95%	-88%
Income from leasing fishing rights	(million €)		0.0	0.0	0.2	0.1	0.5	0.3			-27%	139%
Wages and salaries of crew	(million €)	1.27	1.39	2.66	1.62	2.12	1.53	1.93	*1.49*		26%	9%
Unpaid labour value	(million €)	2.54	10.18	8.33	6.45	2.09	1.25	4.17	*2.01*		233%	-19%
Energy costs	(million €)	2.14	2.28	3.87	2.33	4.01	3.66	2.70	*1.89*		-26%	-11%
Repair & maintenance costs	(million €)	1.41	1.04	1.10	0.89	1.20	1.16	1.79	*1.43*		54%	58%
Other variable costs	(million €)	3.39	2.62	3.07	2.20	2.36	2.12	1.62	*1.30*		-23%	-38%
Other non-variable costs	(million €)	0.23	0.20	0.28	0.16	0.25	0.30	0.30	*0.30*		2%	28%
Annual depreciation costs	(million €)	3.45	4.43	5.58	4.59	4.67	3.87	2.94	*2.93*		-24%	-34%
Rights costs	(million €)		0.0	0.1	0.2	1.0	0.1	0.5			358%	57%
Opportunity cost of capital	(million €)	0.09	2.46	1.96	2.61	0.89	1.80	1.30	*0.22*		-28%	-21%
Tangible asset value (replacement)	(million €)	80.7	91.5	91.3	134.5	98.5	77.1	72.0	*71.7*		-7%	-25%
Fishing rights	(million €)		1.0	0.9	0.7	0.7	0.8	0.8			-3%	-8%
Investments	(million €)	1.0	1.0	1.5	1.7	2.2	1.5	1.2			-20%	-21%
Gross Value Added	(million €)	1.9	3.7	2.1	6.5	5.7	7.7	5.3	*7.9*		-32%	14%
GVA to revenue	(%)	21.1	37.7	20.4	53.8	42.1	51.7	45.0	*61.5*		-13%	19%
Gross profit	(million €)	- 1.9	- 7.8	- 8.9	- 1.6	1.5	5.0	- 0.8	*4.4*		-117%	63%
Gross profit margin	(%)	- 20.8	- 79.4	- 84.6	- 13.0	11.0	33.1	- 7.3	*34.1*		-122%	72%
Net profit	(million €)	- 5.4	- 14.7	- 16.4	- 8.8	- 4.1	- 0.7	- 5.1	*1.2*		-604%	39%
Net profit margin	(%)	- 59.7	-149.2	-156.8	- 72.6	- 30.1	- 4.8	- 43.5	*9*		-803%	45%
GVA per FTE (labour productivity)	(thousand €)	2.3	4.2	2.4	8.9	13.7	9.9	4.7	*8.8*		-52%	-32%
Return on fixed tangible assets	(%)	- 6.6	- 13.4	- 15.8	- 4.6	- 3.2	1.4	- 5.3	*2.0*		-475%	25%

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Table 5.63 Malta: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF												
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	621	679	759	532	707	707	648	82	100	89	102	77	67	61		-8%	-3%		-9%	-29%
Vessel tonnage (thousand GT)	1.6	1.7	1.8	1.4	1.7	1.7	1.5	3.5	4.3	4.8	5.1	4.4	4.5	3.6		-13%	-9%		-20%	-18%
Engine power (thousand kW)	35.9	38.3	43.3	30.5	40.4	41.3	36.2	18.8	21.5	22.3	24.6	20.4	18.8	16.7		-12%	-5%		-11%	-21%
FTE (#)	695	713	764	592	288	648	804	129	167	132	141	128	135	312		24%	30%		130%	125%
Total employed (person)	849	863	918	668	951	911	1,098	160	278	307	265	285	290	320		21%	28%		10%	21%
Days at sea (thousand day)	43.1	43.6	59.9	35.9	28.3	22.6	26.6	3.9	4.7	3.6	5.3	5.4	5.8	4.7		18%	-32%		-19%	-2%
Fishing days (thousand day)	43.1	43.6	59.9	35.7	28.0	21.4	26.1	3.9	4.6	3.6	3.9	4.3	3.8	2.4		22%	-32%		-36%	-39%
Number of fishing trips (thousand)	41	42	62	35	27	21	26	2	2	2	2	2	2	2		23%	-33%		-4%	-18%
Energy consumption (million litre)	1.4	2.1	1.7	1.1	1.0	1.6	1.2	2.5	2.2	3.7	1.5	1.9	5.2	2.5		-23%	-18%		-53%	-13%
Live weight of landings (thousand tonne)	0.43	0.35	0.76	0.83	0.72	0.69	0.60	0.85	1.24	1.08	1.09	1.48	1.67	1.80		-12%	-4%		8%	46%
Value of landings (million €)	2.82	2.23	4.42	4.60	4.49	3.80	3.68	6.00	7.10	6.04	7.48	8.56	8.69	6.78		-3%	-1%		-22%	-7%
Income from landings (million €)	2.8	2.2	4.4	4.6	4.5	3.8	3.7	6.0	7.1	6.0	7.5	8.6	8.7	6.8		-3%	-1%		-22%	-7%
Other income (million €)	0.0	-	-	-	0.1	1.4	0.0	0.3	0.6	-	-	0.4	1.1	1.2		-99%	-94%		14%	222%
Direct income subsidies (million €)	0.04	-	0.00	0.00	0.04	0.01	0.02	0.03	0.02	0.63	0.04	0.50	0.01	0.01		165%	33%		1%	-97%
Income from leasing fishing rights (million €)		-	0.03	0.00	0.02	0.04	0.06		0.01	0.00	0.15	0.04	0.44	0.29		37%	209%		-33%	129%
Wages and salaries of crew (million €)	0.2	0.2	0.3	0.4	0.4	0.2	0.4	1.1	1.2	2.4	1.3	1.7	1.3	1.5		95%	39%		16%	4%
Unpaid labour value (million €)	2.1	7.4	6.4	5.1	1.4	0.7	3.5	0.4	2.8	1.9	1.3	0.7	0.5	0.6		380%	-9%		24%	-49%
Energy costs (million €)	0.9	1.1	1.3	1.1	1.4	1.3	1.1	1.3	1.2	2.5	1.3	2.7	2.4	1.6		-15%	-5%		-32%	-15%
Repair & maintenance costs (million €)	0.5	0.5	0.5	0.4	0.6	0.3	0.7	0.9	0.5	0.6	0.5	0.6	0.9	1.1		127%	47%		28%	65%
Other variable costs (million €)	1.5	1.3	1.3	0.9	1.2	0.6	0.6	1.9	1.3	1.7	1.3	1.1	1.5	1.0		-3%	-50%		-31%	-29%
Other non-variable costs (million €)	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2		-22%	-23%		19%	82%
Annual depreciation costs (million €)	1.2	1.3	1.6	1.0	1.4	1.2	0.9	2.2	3.2	4.0	3.6	3.3	2.7	2.0		-20%	-26%		-26%	-37%
Rights costs (million €)		0.02	0.02	0.08	0.73	0.08	0.04		0.00	0.10	0.11	0.30	0.02	0.41		-46%	-77%		1966%	290%
Opportunity cost of capital (million €)	0.02	0.49	0.49	0.30	0.18	0.39	0.25	0.04	1.26	1.28	1.07	0.49	1.05	0.61		-36%	-21%		-41%	-29%
Tangible asset value (replacement) (million €)	17.3	18.3	23.0	15.2	20.1	16.6	13.7	36.7	47.0	59.6	55.1	55.0	44.8	34.2		-17%	-25%		-24%	-31%
Fishing rights (million €)		0.1	0.1	0.1	0.1	0.1	0.1		0.9	0.8	0.6	0.6	0.6	0.6		-3%	10%		-2%	-11%
Investments (million €)	0.3	0.5	0.9	1.0	1.4	0.8	0.7	0.7	0.5	0.7	0.7	0.8	0.7	0.5		-10%	-11%		-31%	-31%
Gross Value Added (million €)	- 0.1	- 0.9	1.1	2.2	1.3	2.9	1.2	1.4	3.5	1.2	1.7	4.4	4.5	4.0		-58%	14%		-10%	45%
GVA to revenue (%)	- 4.6	- 39.6	24.0	47.2	28.2	55.5	33.0	27.8	53.8	20.4	34.7	49.3	48.0	50.5		-41%	79%		5%	30%
Gross profit (million €)	- 2.4	- 8.5	- 5.6	- 3.3	- 0.6	2.0	- 2.7	0.0	- 0.4	- 2.9	- 0.8	2.2	2.6	1.8		-237%	12%		-30%	1361%
Gross profit margin (%)	- 84.3	-382.8	-126.0	- 72.2	- 13.1	37.7	- 73.0	0.5	- 5.9	- 47.7	- 16.7	24.3	28.3	23.1		-294%	32%		-18%	909%
Net profit (million €)	- 3.6	- 10.3	- 7.6	- 4.6	- 2.1	0.4	- 3.9	- 1.8	- 3.6	- 8.0	- 3.7	- 1.5	- 0.9	- 0.8		-1057%	16%		18%	76%
Net profit margin (%)	- 128	- 461	- 172	- 101	- 47	8	- 105	- 36	- 54	- 133	- 78	- 16	- 10	- 10		-1457%	30%		4%	82%
GVA per FTE (labour productivity) (thousand €)	- 0	- 1	1	4	5	4	2	11	26	10	14	37	34	13		-66%	-29%		-62%	-41%

Table 5.64 Malta: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
MLT A37 HOK1824 NGI	17	98	1,615	1,887	344	2,292	2,904	1,557	53.6	1,210	41.7	468	16.12	3.5	15.9	6.9	High	135%	Improved
MLT A37 DTS1824 NGI	8	41	895	5,726	129	1,225	1,685	776	46.0	543	32.2	- 142	- 8.41	5.7	18.9	0.2	Weak	89%	Improved
MLT A37 PS2440 NGI	2	21	83	68	698	992	992	918	92.6	441	44.5	275	27.69	22.7	43.7	14.9	High		
MLT A37 PMP0612 NGI	126	211	4,364	2,198	176	989	989	277	28.0	- 1,371	- 138.6	- 1,731	- 174.99	7.8	1.3	- 39.4	Weak	-105%	Deteriorated
MLT A37 HOK1218 NGI	9	37	885	1,656	139	979	979	527	53.9	300	30.6	147	15.02	6.2	14.2	9.2	High	201%	Improved
MLT A37 HOK0612 NGI	32	95	1,541	1,829	147	958	963	397	41.3	- 429	- 44.6	- 615	- 63.92	8.7	4.2	- 27.5	Weak	27%	Improved
MLT A37 PGP0006 NGI	306	285	12,468	1,662	139	832	840	291	34.7	- 610	- 72.6	- 860	- 102.43	3.2	1.0	- 27.5	Weak	88%	Improved
MLT A37 PGP0612 NGI	139	177	6,430	2,441	121	783	785	219	27.9	- 82	- 10.4	- 425	- 54.22	1.7	1.2	- 9.1	Weak	95%	Improved
MLT A37 DTS2440 NGI	4	19	217	10,966	45.0	317.3	451.9	- 252.1	- 55.8	- 464	- 102.7	- 1,035	- 229.14	11.1	- 13.3	- 10.9	Weak	51%	Improved
MLT A37 MGO0612 NGI	12	46	482	1,773	73.4	395.4	395.4	177.3	44.9	- 86	- 21.8	- 186	- 46.99	5.7	3.9	- 14.8	Weak	41%	Improved
MLT A37 MGO1218 NGI	6	32	364	1,289	98.2	386.2	386.2	194.1	50.3	- 123	- 31.8	- 217	- 56.32	9.9	6.1	- 16.1	Weak	-715%	Deteriorated
MLT A37 PS1218 NGI	1	11	72	34	163.1	108.7	108.7	94.7	87.1	47	43.6	39	35.57	4.3	8.6	22.5	High		
MLT A37 PMP0006 NGI	20	15	1,250	1,041	11.3	65.0	65.0	25.1	38.6	- 83	- 128.3	- 99	- 151.89	7.3	1.7	- 50.6	Weak	-724%	Deteriorated
MLT A37 PS1824 NGI	1	3	39	153	98.2	64.8	64.8	46.7	72.0	43	66.4	- 19	- 29.69	1.4	17.7	- 1.1	Weak		
MLT A37 MGO1824 NGI	1	4	14	2,513	11.3	23.8	23.8	- 2.9	- 12.3	- 66	- 275.5	- 93	- 390.74	15.7	- 0.7	- 18.0	Weak		
MLT A37 HOK0006 NGI	10	5	343	3,825	3.3	17.8	17.8	- 0.4	- 2.0	- 14	- 80.0	- 22	- 124.21	2.9	- 0.1	- 20.7	Weak	97%	Improved
MLT A37 FPO0006 NGI	2	2	30	536	2.5	8.2	8.2	4.2	50.6	- 8	- 100.9	- 9	- 114.34	6.9	2.3	- 67.1	Weak		
MLT A37 FPO0612 NGI	1	3	24	1,733	1.6	8.1	8.1	4.3	53.0	- 16	- 197.8	- 20	- 245.05	6.9	1.5	- 43.4	Weak		
MLT A37 DFN0612 NGI	2	3	52	1,518	1.3	7.9	7.9	2.3	28.9	- 16	- 199.7	- 23	- 293.03	6.9	0.9	- 21.0	Weak		
MLT A37 DFN0006 NGI	10	9	133	4,225	1.0	7.1	7.1	- 1.4	- 19.1	- 65	- 921.9	- 82	- 1,155.03	6.8	- 0.1	- 61.2	Weak	26%	Improved

Table 5.65 Malta: Landed value, weight and average price of principal species.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)								Live weight of landings (tonne)								Average landed price (real) (€)							
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	***2015***	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	***2015***	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	***2015***
Swordfish	1.8	2.1	2.9	3.1	3.7	3.3	2.5	*3.1*	0.3	0.3	0.4	0.5	0.5	0.5	0.4	*0.49*	6.8	7.9	6.9	5.8	7.3	7.1	6.6	*6.3*
Atlantic bluefin tuna	2.6	1.9	0.9	1.1	1.4	1.0	1.4	*1.9*	0.3	0.3	0.2	0.1	0.1	0.2	0.2	*0.18*	8.6	7.2	5.8	8.0	10.2	6.5	9.0	*10.8*
Common dolphinfish	0.9	1.3	1.7	1.8	1.2	1.7	1.2	*1.4*	0.2	0.4	0.5	0.4	0.2	0.4	0.2	*0.33*	3.6	3.2	3.2	5.0	6.7	4.5	5.5	*4.3*
Giant red shrimp	0.6	0.8	0.6	1.1	1.0	0.9	0.5	*0.6*	0.03	0.04	0.03	0.04	0.1	0.0	0.0	*0.03*	22.0	19.5	21.7	26.6	19.7	22.3	18.5	*20.9*
Silver scabbardfish	0.0	-	-	-	0.1	0.4	0.4	*0.3*	-	-	-	-	0.02	0.1	0.0	*0.08*	2.8	2.2	2.5	3.0	2.7	3.4	11.9	*4.0*
Surmullet	0.1	0.2	0.5	0.6	0.6	0.2	0.4	*0.3*	0.02	0.0	0.1	0.1	0.1	0.02	0.1	*0.04*	8.1	6.3	8.9	9.8	7.8	7.1	9.4	*8.5*
Chub mackerel	0.0		0.2	0.4	0.5	0.7	0.4	*0.3*	0.02		0.1	0.1	0.3	0.3	0.8	*0.54*	2.5		3.1	3.7	2.1	2.4	0.5	*0.5*
Red porgy	0.1	0.2	0.2	0.4	0.4	0.2	0.4	*0.4*	0.01	0.01	0.02	0.02	0.03	0.01	0.02	*0.02*	18.0	17.4	15.7	16.9	15.9	15.7	16.0	*16.7*
Red scorpionfish	0.2	0.3	0.3	0.3	0.4	0.3	0.3	*0.3*	0.01	0.02	0.02	0.02	0.03	0.02	0.03	*0.02*	15.8	15.9	14.4	14.6	12.8	12.9	13.1	*13.8*
Common octopus		0.1		0.2	0.3	0.2	0.2	*0.2*		0.01		0.03	0.04	0.02	0.03	*0.03*		6.5		6.1	7.0	7.9	7.7	*8.2*

5.16 NETHERLANDS

Short description of the national fleet

Fleet capacity

In 2015, the Dutch fishing fleet consisted of 718 registered vessels, 203 of which were inactive, with a combined gross tonnage of 126 thousand GT, a total power of 266 thousand kW and an average age of 31 years. Within the last 8 years the size of the fishing fleet fluctuated between 713-739 vessels. In 2015, the number of fishing enterprises totalled 571, with the vast majority (84%), owning a single vessel. Around 16% of the enterprises owned two to five fishing vessels and only a few enterprises owned more than 5 vessels.

Fleet structure

According to the EU standards the Dutch fishing fleet can be divided into a small scale coastal fleet (33% of the vessels in 2015) and a large scale fleet (67% of the vessels in 2015). Nationally, the fishing fleet is divided into an active cutter fleet (active vessels with a minimum vessel length of 12m and an income of 50.000 euro or more), a trawler fleet (targeting pelagic fish species) and the other small scale fisheries fleet (fisheries that do not fit in above mentioned fleets).

The cutter fleet can be divided into 4 kW-categories. The first category is the ≤191 kW shrimp vessels fishing with beam trawls or demersal trawls. The second category, vessels with 192-221 kW engines, fish with pulse/SumWing/beam trawls or demersal trawls on shrimps and/or flatfish and are called 'Eurokotters'. The largest kW-category, vessels with 1.105-1.472 kW engines, mainly fish with pulse/SumWing/beam trawls on flatfish. The vessels between the Eurokotters and the largest kW-category, vessels with engines between 222-1.104 kW, fish mainly with seine trawl (flyshoot) or demersal trawls.

The trawler fleet fish with midwater trawls on pelagic fish species. The other small scale fisheries fleet can be subdivided into inactive vessels, static gear vessels, and other coastal fisheries like dredges, pole and line fisheries, etcetera.

Employment

Total employment in 2015 was estimated around 2.000 jobs, corresponding to around 1 700 FTEs. 20-25% of the jobs come from the small scale coastal fleet, where the rest comes from the large scale fleet. The decrease of the number of vessels in the pelagic trawler fleet caused a decrease in the number of jobs.

The cutter fleet represents around 60% of the jobs in Dutch fisheries, where the trawler fleet and the other small scale fisheries represent 20-25% and 15-20% respectively.

Effort

In 2015, the Dutch fleet spent a total of 49 thousand days at sea, a slim increase from 2014. Compared with 2008-2013 average the effort decreased by 5%. The quantity of fuel consumed in 2015 is estimated around 151.9 million litres, an increase of <1% from 2014 but a decrease of 27% compared with the 2008-2013 average. In reality the fuel consumption decreased, but this is not reflected in the model outcome as the reasons for the reduction (shift to more fuel efficient gears) is not included in the calculations. The major factors causing the decrease in fuel consumption include the results of innovation programmes (introduction of new technics in fishing gear) that commenced in 2008 and the decrease of effort in kW-days. Transition to sustainable fisheries is an ongoing process. In 2015, almost all EU allowances for pulse technique were in effect in the Netherlands. This resulted in 40 to 60% less fuel consumption per vessel per day at sea. In the same year a new innovative fuel efficient vessel (MDV-vessel) was introduced in the flatfish fleet. The first results show that the fuel consumption for this vessel is around 400 litres per landed tonne. The fuel consumption per landed tonne for comparable fisheries amounted 800-1 400 litres in 2014. It is estimated that fuel consumption will decrease again in the next few years, depending on the size of the vessels.

The average Landings per unit of Effort (LpuE) for the Dutch large scale fisheries amounted 7.18 tonne per DaS in 2015, a decrease of 14% compared to 2014. De reason of this decrease can be found in the reduced landings of pelagic fish by the pelagic trawler fleet. The average LpuE for the trawler fleet amounted 135.79 tonne per DaS. Without the trawler fleet, the large scale LpuE amounted 1.98 tonne per DaS. The small scale coastal fleet amounted 0.16 tonnes per DaS.

Production

The total weight of fish and shellfish landed by the Dutch fleet in 2015 was 330.5 thousand tonnes, with a value of €367.4 million. Compared to 2014, the total landings weight and value decreased by 14% and 1% respectively. The decrease in weight is mainly caused by the decreased landings weight of pelagic fish species. The total landings of pelagic fish fluctuates from year to year. Due to increased fish prices for the most important demersal fish species there was only a slight decrease in landings value.

The demersal fleet targets mainly flatfish and common shrimp. The top landed flatfish species are European plaice and sole. Where sole is generating the highest landed value (€94.4 million) and representing about 26% of the total landings value, European plaice is most important in terms of the landings weight. European plaice (32.2 thousand tonnes)

generating the third highest landed value (€46.8 million). The second highest landed value is generated by common shrimp (€57.3 million).

The trawler fleet targets mainly pelagic species. In 2015 the most important species were herring (€25.6 million), mackerel (€24.0 million), horse mackerel (€22.9 million), blue whiting (€16.9 million) and pilchard (€5.1 million).

Economic results for 2014 and recent trends

National fleet performance

The economic performance of the Dutch national fleet improved in 2014 and it is expected to continue in 2015 and 2016.

The total amount of income generated by the Dutch national fleet in 2014 was €380.9 million. This consisted of €379.5 million landings value and around €1.4 million in non-fishing income. When including income from leasing fishing rights, total income amounted to €284.7 million. Total income increased between 2013 and 2014 but is expected to have decreased in 2015.

Total costs in 2014 were €371 million, consisting of €328 million in operating costs and a further €43 million in capital costs. Total costs for 2014 increased. Labour and energy costs, the two major fishing expenses, amounted to €98 and €79 million, respectively in 2014. Saving fuel is one of the most important goals of the Dutch fleet. Energy costs decreased 19% between 2013 and 2014 (37% since 2008). Energy costs are likely to decrease further in 2015 and 2016, due to decreasing fuel prices and increased investments in fuel saving gears.

Gross Value Added (GVA), gross profit and net profit generated by the Dutch national fleet in 2014 were estimated at €178 million, €71 million and €27 million, respectively. GVA increased 18%, gross profit and net profit increased 45% and 655%. These results indicate a highly improved economic situation compared to previous years. All indicators are expected to further increase in 2015 and 2016. The major factors causing the improvement in economic performance include higher landings of more valuable species, higher fish prices and lower costs mainly because of decreasing fuel prices and fuel saving (e.g. pulse) techniques in the flatfish fleet.

In 2014, the Dutch fleet had a (depreciated) replacement value of €317 million, which was higher than the year before, and a value of fishing rights of €274 million. Fishing rights and quota are transferable in the Netherlands. Selling/buying and leasing these rights are quite common and prices fluctuate substantially from year to year, depending on market availability (e.g. quota for sole or plaice available or not). Since the introduction of the pulse (high selectivity for sole) sole prices grew substantially (lease prices of around €3.35 in 2015). Investments amounted to €45 million in 2014 and did not change significantly with 2013. Dutch vessels are old: the average age is 31 years. The age increases almost every year as no investment in building new vessels is being made. The introduction of the MDV vessel and improved economic performance can stimulate fleet renewal in the cutter fleet.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 18.5%, indicating a high operating efficiency of the sector. This percentage increased yearly since 2011 (gross profit margin of 5.9%). Net profit margin was estimated at 7.1%, a 644% increase on 2013. The Rate of Return on Fixed Tangible Assets (RoFTA) improved substantially in comparison with previous years and moved from negative to positive between 2013 and 2014, from -2 to 10%.

Labour productivity (GVA/FTE) increased substantially in 2014: €106 thousand per FTE. GVA increased (18%) and the number of FTE decreased (4%), indicating efficiency gains.

Fuel consumption per landed tonne has followed an overall decreasing trend since 2008, and amounted 0.39 thousand litres per tonne landed in 2014. LpuE (in days at sea) also showed a decreasing trend since 2008 but increased by 15% in 2014. The landed weight per DaS amounted 7.86 tonne.

Drivers affecting the economic performance trends

As mentioned earlier in this chapter higher average fish prices, lower fuel costs and further introduction of innovative fuel saving fishing gears were the main driving forces behind the overall improvement.

The Dutch demersal fishing fleet is dominated by trawlers, beam trawlers and demersal trawlers. As trawling is typically fuel intensive, fluctuations in fuel consumption and fuel prices are therefore key drivers of the fleet's profitability.

Markets and Trade

European plaice generally compete with other (non-)European flatfish species. However, they also compete with white fish species on the same market in and outside Europe. An increased dollar exchange rate helped this flatfish to become more attractive, where important non-European whitefish species became less attractive due to relatively higher import prices. As effect of the increased attractiveness the plaice price went up.

Most flatfish caught by the Dutch fishing sector is consumed in southern Europe in countries like Italy, Spain and France. In northern Europe Germany is an important country for the consumption of flatfish. In terms of product characteristics demand varies across Europe. Countries in southern Europe tend to prefer whole fish whereas north western European countries prefer convenience products like fillets.

Nigeria, an important export market for small pelagics, started a structured fish embargo at the start of 2014. In this same year Russia introduced a ban on seafood imports from Europe. These changes decreased the market opportunities for the pelagic trawler sector. In reaction, the EU allowed the fisheries to bank quota to 2015 to prevent waste of fish products.

Management instruments

The Dutch fleet is managed mainly through ITQs for the most important species, together with a range of input controls.

In the context of the recovery of cod stocks, a number of effort measures (including real time closures) were implemented depending on the fishing gear in the North Sea, the Irish Sea, Skagerrak and west of Scotland. Many additional yearly restrictions exist, depending on the fleet segment, the species and area.

Due to Natura 2000 demersal trawl fisheries are facing many closed areas. Beside that other activities in the North Sea other than fisheries claim more and more space. As a result, fisheries are forced to change their fishing grounds.

TACs and quotas

Total initial available quota for the Dutch fleet in 2014 was 294 thousand tonnes. For the most important species, quota are managed through ITQs.

The global quota for sole, which is especially important for the Dutch fleet, was kept more or less stable at 9 281 tonnes in 2015. The Dutch quota for European plaice increased 14% to 47 584. Most of the sole and plaice quota is available for the North Sea and Norwegian Sea, 8 945 tonnes and 46 035 tonnes, respectively.

The Netherlands conducts quota trades with other member states. This, together with the transferable quota from 2014 to 2015, allowed for a sufficient amount of quota for important fish species like plaice in 2015. Trading with other member states allowed for a 4% increase in sole quota, amounting to a total of 9 660 tonnes. For European plaice this amounted to a total of 61 662 tonnes (+30%).

In 2014 and 2015 sole quota was fully used. Lease prices for this species went up from around €0.28 in 2012 to around €3.35 in 2015. Reduced sole TACs and the introduction of pulse technic in the Netherlands (high selectivity for sole) were the main drivers for this increase in quota lease prices. The utilisation of plaice quota was low in 2014 and 2015 and lease prices were also very low.

Status of Key Stocks

Most of the imported stocks fished by the Dutch fleet are fished at MSY. Some other stocks (like Cod) are still overfished.

Innovation and Development

Research on technical innovation as an alternative for the beam trawl in the flatfish fishery is on-going. Around 80 commercial vessels are currently using pulse technique. Most of these vessels target flatfish. There are 4 vessels licensed to fish with pulse technique on shrimp. Dissension within the (Dutch) shrimp sector inhibits the developments of this technique. Increased cooperation between (and within) the Dutch, German and Belgian shrimp fishers could accelerate the innovation process.

Different projects to shorten the fish value chain are also on-going. Some fishers did research on different kinds of cooperation, where other started to sell their own fish directly via internet.

Performance by fishing activity

Small-scale fleet

In 2014, there were 178 vessels belonging to the small-scale coastal fleet according to the European definition (vessels under 12m using passive gears). The segment accounts only <1% of the national total volume of landings. The segment employs 18% of total number of fishers and 6% in terms of FTE.

The segment generated €2.6 million of gross value added (€2.7 million in 2013), €1.4 million of gross profit (€1.4 million in 2013) and €0.4 million of net profit (€0.6 in 2013).

Large-scale fleet

In 2014, there were 357 vessels belonging to the large-scale fleet. The large scale fleet is dominated by the pelagic trawler fleet and demersal beam trawl fleet. The segment accounts over 99% of the national total volume of landings. The segment employs 82% of total number of fishers and 94% in terms of FTE.

The segment generated €175.8 million of gross value added (€148.6 million in 2013), €69.3 million of gross profit (€47.3 million in 2013) and €26.9 million of net profit (-€5.6 million in 2013).

Performance results of selected fleet segments

The Dutch fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North Sea (demersal fleet) and North East Atlantic Ocean (pelagic fleet), around the UK and Ireland. Besides that, a part of the pelagic fleet operates in African waters and in the Pacific.

The economic performance of the fleet relies heavily on innovation and technical/structural development. The Dutch government and the EU supported the fisheries sector to produce fish in a more sustainable way with economic perspectives. Projects started a few years ago (e.g. 'knowledge networks') helped to improve entrepreneurship in fisheries so that fishers will be able to compete in international fish business in future.

The national fleet consisted of 14 (DCF) fleet segments in 2014. Almost all of the larger active fleet segments made profits in 2014. Table 5.16.4 provides a breakdown of key performance indicators for all 14 fleet segments in 2014. A short description of the five most important segments in terms of total value of landings is provided below.

Beam trawl over 40m – 51 vessels make up this segment which operates predominantly in the North Sea. The fleet targets a variety of species but in particular flatfish, such as sole, plaice and turbot. In 2014, the total value of landings was almost €106 million and around 343 FTEs were employed in this fleet segment, contributing to 28% and 20% of the total income from landings and FTEs generated by the Dutch fishing fleet, respectively. This fleet segment was profitable in 2014, with a reported GVA, gross profit and net profit of €53.1 million, €25.9 million and €19.7 million respectively.

Conventional beam trawl vessels and SumWing vessels made a small profit whereas vessels fishing with pulse techniques made a high profit.

Pelagic trawl over 40m – 11 vessels made up this segment which operated predominantly in the North East Atlantic Ocean and to a lesser extend in the North Sea. The fleet targeted pelagic species, particularly herring, mackerel, horse mackerel, blue whiting, pilchard and sardinella. The total value of landings was over €123 million and around 408 FTEs were employed in this fleet segment, contributing to 33% and 24% of the total income from landings and FTEs generated by the Dutch fishing fleet, respectively. This fleet segment was not profitable. It should be noted that the prices obtained from the pelagic sector are internal prices used to calculate the wage of the crew of the fishing vessel. The integrated companies cover the whole production chain from fishing to the consumer and there are no real market prices to compare with. Information about the economic performance of the overall companies is not available, so it is hard to evaluate whether the profits presented here resemble reality.

Beam trawl 18-24m – 154 vessels made up this segment which operated predominantly in the North Sea and in the coastal zone. The fleet mainly targeted common shrimp and some vessels targeted langoustines (seasonally) and flatfish, such as sole, plaice and turbot. In 2014, the total value of landings was around €71 million and around 434 FTEs were employed in this fleet segment, contributing to 19% and 26% of the total income from landings and FTEs generated by the Dutch fishing fleet, respectively.

This fleet segment was profitable in 2014, with a reported GVA, gross profit and net profit of €40.4 million, €14.7 million and €8.3 million respectively.

Beam trawl 24-40m – 28 vessels made up this segment which operated predominantly in the North Sea. The fleet targeted in particular flatfish, such as sole, plaice and turbot. In 2014, the total value of landings was over €28 million and around 138 FTEs were employed in this fleet segment, contributed to 8% of both the total income from landings and FTEs generated by the Dutch fishing fleet.

This fleet segment was profitable in 2014, with a reported GVA, gross profit and net profit of €13.2 million, €5.7 million and €3.3 million respectively.

Demersal trawls and seiners 24-40m – 22 vessels made up this segment which operated predominantly in the North Sea. The fleet targeted a variety of species like mullet, gurnard, squid and sea bass (mainly fly shoot method) but also flatfish, such as plaice and turbot. In 2014, the total value of landings was over €24 million and around 116 FTEs were employed in this fleet segment, contributing to 6% and 7% of the total income from landings and FTEs generated by the Dutch fishing fleet, respectively.

This fleet segment was profitable in 2014, with a reported GVA, gross profit and net profit of €10.4 million, €3.8 million and €1.5 million respectively.

Projections for 2015 and outlook

The number of vessels within the trawler fleet will decrease to 8 in 2015. The pelagic vessels become more efficient (faster freezing technics) and have enough capacity to fish their quota. Despite the reduced landings of pelagic fish species in 2015 (-18%), it is expected that this segment will make further economic performance improvements in this year.

Increased fish prices for sole (+10% to €10.27), plaice (+20% to €1.45) and common shrimp (+7% to €3.03) in 2015, together with increased landing volumes for plaice (+10% to 32.2 thousand tonne), stable landing volumes for sole (+0% to 9.2 thousand tonne) and reduced landing volumes for common shrimp (-19% to 18.9 thousand tonnes) will improve the landings income for the demersal flatfish fisheries and decrease the income for the demersal shrimp fisheries. These changes in income, together with decreased fuel prices (-28% to €0.41) and fuel consumption per vessel (due to further innovations in fishing technics) will realise generally improve economic performance across fleet types and for the Dutch fishery overall.

Projections for 2015 show an overall decrease of 15% in landed weight and a 1% decrease in landed value. However, with the decrease in fixed and variable costs across all measures, most notably fuel costs (-23%), gross profits and net profits are expected to increase by 43% and 129% respectively.

These gains in 2015 gains are also expected for 2016 if fish and fuel prices do not fluctuate too much in the 2nd half of the year. Increases in landed weight (17%) and value (8%) are projected to feed through to further increases in profitability with gross profit margins and net profit margins reaching 30% and 19% respectively.

Vessels that do not own sole quota (e.g. static gear vessels) may face problems in 2015 and 2016. The lease price for sole increased substantially the last years due to optimal use of sole TAC. The relatively high lease price (around €3.30) could realise an enormous increase in total costs for these vessels.

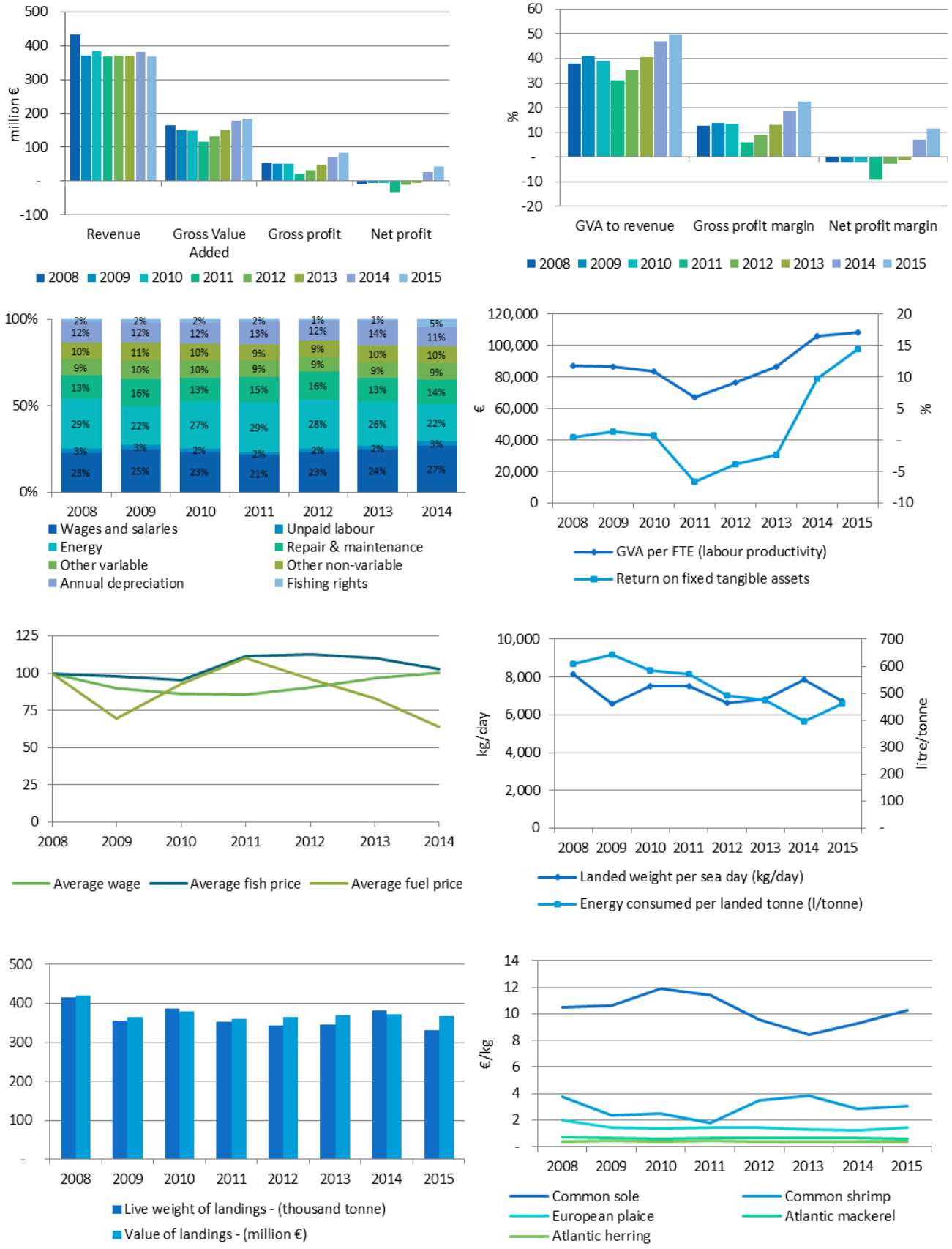
One important future driver is that the fisheries sector is preparing to meet the requirements with respect to landing obligation which started in January 2015 for the pelagic fisheries and in January 2016 for the demersal fisheries. Fishers started projects (supported by the Dutch government and EU) to decrease unwanted bycatch and to develop markets for landed unwanted catch. Generally, fishers share ideas (within knowledge networks) about designs of gear to diminish discards. Besides that, ideas about fishing behaviour are exchanged so that the impact of fisheries will be minimised.

Data issues

Most of the segments in the Dutch fishing fleet were well covered. In some of the smaller segments (DRB 0-10 m, DTS 0-10 m and TBB 12-18 m) variation in activity levels was high resulting in high uncertainty in the economic indicators estimates and large fluctuations from year to year. Moreover the smaller fleet segments are clusters of vessels using different fishing techniques:

- Drift and/or fixed netters 12-18m include drift and/or fixed netters 12-18m and vessels using pots and/or traps 12-18m
- Drift and/or fixed netters 18-24m include drift and/or fixed netters 18-24m, vessels using pots and/or traps 18-24m and vessel using other active gears 18-24m
- Dredgers 24-40m include drift and/or fixed netters 24-40m, dredgers 24-40m and dredgers 40m or larger
- Beam trawlers 0-10m include demersal trawlers and/or demersal seiners 10-12m, purse seiners 0-10m, beam trawlers 0-10m, beam trawlers 10-12m, pelagic trawlers 0-10m and pelagic trawlers 10-12m.
- Beam trawlers 12-18m include demersal trawlers and/or demersal seiners 12-18m, beam trawlers 12-18m and pelagic trawlers 12-18m.

Therefore, these figures should be viewed as indicative for the size of the sector rather than describing the exact trends. Currently work is being carried out to improve the estimation procedures.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.15 Netherlands: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.66 Netherlands: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	727	713	725	737	735	739	735		-1%	1%
Number of Inactive vessels_ms	(#)	181	152	155	192	190	208	200		-4%	11%
Vessel tonnage	(thousand GT)	155.4	138.8	137.2	130.5	135.5	128.7	134.1		4%	-3%
Engine power	(thousand kW)	338.4	296.0	294.0	288.8	287.9	276.2	280.1		1%	-6%
Average vessel age	(year)	27	28	29	29	30	30	30		0%	5%
Average vessel length	(metre)	21	20	20	19	19	19	19		-1%	-5%
Enterprises with one vessel	(#)	447	447	464	475	465	473	481		2%	4%
Enterprises with 2 to 5 vessels	(#)	99	102	96	96	100	98	93		-5%	-6%
Enterprises with more than 5 vessels	(#)	4	3	4	4	3	4	2		-50%	-45%
FTE	(#)	1,883	1,752	1,792	1,705	1,720	1,742	1,680		-4%	-5%
Total employed	(person)	2,211	2,089	2,097	2,054	2,034	2,098	2,024		-4%	-3%
Days at sea	(thousand day)	50.9	53.9	51.3	47.1	51.8	50.7	48.7		-4%	-5%
Fishing days	(thousand day)	44.6	47.4	45.0	41.2	45.6	44.7	42.9		-4%	-4%
Number of fishing trips	(thousand)	28	29	30	27	28	28	28		1%	-1%
Energy consumption	(million litre)	252.52	228.78	226.39	201.20	168.50	164.05	150.90		-8%	-27%
Live weight of landings	(thousand tonne)	416.0	355.8	386.7	353.2	343.7	345.1	382.4		11%	4%
Value of landings	(million €)	421.2	365.5	378.8	360.3	364.4	368.7	372.0		1%	-1%
Income from landings	(million €)	430.5	369.6	382.6	365.8	369.1	370.0	379.5		3%	0%
Other income	(million €)	1.47	1.65	1.91	1.83	2.40	2.01	1.39		-31%	-26%
Income from leasing fishing rights	(million €)	1.6	2.4	2.3	1.6	1.2	2.8	3.8		34%	90%
Wages and salaries of crew	(million €)	98.56	91.91	90.56	86.57	90.63	93.36	97.88		5%	6%
Unpaid labour value	(million €)	10.93	9.49	8.03	6.62	8.04	9.26	9.88		7%	13%
Energy costs	(million €)	126.08	81.28	105.33	118.21	109.39	98.38	79.26		-19%	-26%
Repair & maintenance costs	(million €)	58.79	60.86	51.04	59.69	61.82	50.97	51.34		1%	-10%
Other variable costs	(million €)	41.42	37.20	40.17	37.62	33.70	34.36	34.15		-1%	-9%
Other non-variable costs	(million €)	41.58	39.73	38.39	37.30	35.28	37.01	37.77		2%	-1%
Annual depreciation costs	(million €)	52.48	42.81	47.01	53.48	46.10	55.34	39.82		-28%	-20%
Rights costs	(million €)	7	7	7	7	3	3	17		476%	200%
Opportunity cost of capital	(million €)	10.67	15.11	11.17	2.29	- 3.05	- 1.76	3.64		307%	-37%
Tangible asset value	(million €)	536	568	540	478	359	283	317		12%	-31%
Fishing rights	(million €)	132	172	179	288	251	259	274		6%	28%
Investments	(million €)	73.5	129.9	115.1	83.2	92.4	47.5	45.1		-5%	-50%
Financial position	(%)	51.0	51.1	51.3	54.6	57.2	53.7	51.6		-4%	-3%
Gross Value Added	(million €)	164.1	152.2	149.6	114.8	131.3	151.3	178.4		18%	24%
GVA to revenue	(%)	38.0	41.0	38.9	31.2	35.3	40.7	46.8		15%	25%
Gross profit	(million €)	54.6	50.8	51.0	21.6	32.7	48.7	70.6		45%	63%
Gross profit margin	(%)	12.6	13.7	13.3	5.9	8.8	13.1	18.5		42%	65%
Net profit	(million €)	- 8.5	- 7.1	- 7.2	- 34.2	- 10.4	- 4.9	27.2		656%	326%
Net profit margin	(%)	- 2.0	- 1.9	- 1.9	- 9.3	- 2.8	- 1.3	7.1		643%	323%
GVA per FTE	(thousand €)	87	87	84	67	76	87	106		22%	31%
Return on fixed tangible assets	(%)	0.4	1.4	0.7	- 6.7	- 3.7	- 2.3	9.7		515%	672%

Table 5.67 Lithuania: National fleet statistics and economic performance results based on fleet segment level data.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	546	561	570	545	545	531	535	*515*	*530*		-4%	3%
Total employed	(person)	2211	2089	2097	2053.67	2034.25	2098	2024	*1,850*	*1,991*		-9%	8%
FTE	(#)	1,883	1,752	1,792	1,705	1,720	1,742	1,680	*1,534*	*1,522*		-9%	-1%
Days at sea	(day)	50,900	53,934	51,302	47,141	51,833	50,715	48,672	*49,000*	*47,047*		1%	-4%
Energy consumption	(thousand litres)	252,519	228,779	226,388	201,202	168,497	164,051	150,897	*145,878*	*152,238*		-3%	4%
Live weight of landings	(tonne)	415,987	355,788	386,750	353,240	343,712	345,085	382,352	*330,507*	*385,106*		-14%	17%
Value of landings	(thousand €)	421,231	365,487	378,809	360,330	364,424	368,671	372,035	*367,376*	*398,138*		-1%	8%
Income from landings	(thousand €)	430,514	369,609	382,618	365,792	369,117	370,037	379,516	*370,824*	*402,769*		-2%	9%
Other income	(thousand €)	1,471	1,653	1,906	1,828	2,395	2,008	1,394	*1,944*	*1,867*		39%	-4%
Wages and salaries of crew	(thousand €)	98,565	91,914	90,562	86,573	90,626	93,362	97,878	*92,692*	*100,285*		-5%	8%
Unpaid labour value	(thousand €)	10,933	9,486	8,030	6,616	8,036	9,262	9,883	*9,087*	*8,751*		-8%	-4%
Energy costs	(thousand €)	126,079	81,284	105,326	118,212	109,385	98,384	79,262	*60,686*	*51,176*		-23%	-16%
Repair & maintenance costs	(thousand €)	58,788	60,862	51,036	59,688	61,823	50,973	51,344	*45,154*	*52,201*		-12%	16%
Other variable costs	(thousand €)	41,419	37,196	40,173	37,624	33,700	34,361	34,151	*30,559*	*33,963*		-11%	11%
Other non-variable costs	(thousand €)	41,582	39,727	38,387	37,296	35,277	37,009	37,766	*33,708*	*35,033*		-11%	4%
Annual depreciation costs	(thousand €)	52,480	42,813	47,015	53,476	46,097	55,336	39,823	*37,246*	*44,926*		-6%	21%
Opportunity cost of capital	(thousand €)	10,495	14,361	10,487	2,153	- 2,846	- 1,659	3,479	*1,202*	*1,413*		-65%	18%
Tangible asset value (replacement)	(thousand €)	527,373	539,872	506,636	448,442	334,865	267,607	302,553	*245,406*	*288,518*		-19%	18%
Gross Value Added	(thousand €)	164,116	152,193	149,602	114,800	131,328	151,318	178,386	*202,661*	*232,263*		14%	15%
Gross profit	(thousand €)	54,618	50,793	51,010	21,612	32,666	48,694	70,625	*100,882*	*123,228*		43%	22%
Net profit	(thousand €)	- 8,356	- 6,381	- 6,492	- 34,016	- 10,584	- 4,983	27,323	*62,434*	*76,888*		129%	23%

Table 5.68 Netherlands: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF													
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	155	174	175	163	176	184	178	391	387	395	382	369	347	357		-4%	-2%		3%	-6%
Vessel tonnage (thousand GT)	0.4	0.5	0.5	0.5	0.5	0.5	0.5	143.7	131.2	130.5	123.3	128.7	119.4	124.7		-3%	-9%		4%	-4%
Engine power (thousand kW)	8.6	12.2	12.7	13.5	16.3	17.5	16.9	291.6	260.7	260.0	250.0	247.7	225.8	231.2		12%	27%		2%	-10%
FTE (#)	132	94	125	73	106	105	99	1,751	1,658	1,667	1,633	1,615	1,637	1,581		3%	2%		-3%	-5%
Total employed (person)	350	301	324	301	333	384	362	1,861	1,788	1,773	1,753	1,701	1,714	1,662		-4%	4%		-3%	-6%
Days at sea (thousand day)	2.5	2.6	2.7	2.5	2.9	2.8	2.9	48.4	51.3	48.6	44.6	48.9	47.9	45.7		4%	11%		-5%	-5%
Fishing days (thousand day)	2.4	2.4	2.5	2.4	2.7	2.6	2.7	42.2	44.9	42.5	38.9	42.9	42.0	40.1		3%	11%		-4%	-5%
Number of fishing trips (thousand)	5	4	4	4	5	4	4	24	25	26	23	24	24	24		12%	6%		1%	0%
Energy consumption (million litre)	0.9	0.6	0.8	1.2	0.7	0.8	0.8	251.6	228.2	225.6	200.0	167.8	163.2	150.1		3%	-2%		-8%	-27%
Live weight of landings (thousand tonne)	0.46	0.53	0.50	0.42	0.51	0.48	0.40	415.53	355.26	386.25	352.82	343.20	344.60	381.95		20%	2%		11%	4%
Value of landings (million €)	3.27	3.15	3.54	3.61	3.92	3.33	2.57	417.96	362.34	375.27	356.72	360.51	365.34	369.47		-6%	-28%		1%	-1%
Income from landings (million €)	8.9	5.5	4.8	4.5	5.2	5.0	4.8	421.6	364.1	377.8	361.3	363.9	365.1	374.7		-50%	-52%		3%	0%
Other income (million €)	-	-	-	-	0.2	0.1	0.1	1.5	1.7	1.9	1.8	2.2	1.9	1.3		-4%	47%		-32%	-30%
Direct income subsidies (million €)																				
Wages and salaries of crew (million €)	1.4	0.6	0.4	0.4	0.7	0.6	0.5	97.2	91.3	90.2	86.2	89.9	92.8	97.3		20%	21%		5%	7%
Unpaid labour value (million €)	1.1	0.8	0.5	0.5	0.7	0.7	0.7	9.8	8.7	7.5	6.1	7.3	8.5	9.2		9%	14%		8%	15%
Energy costs (million €)	0.8	0.4	0.6	0.5	0.6	0.6	0.6	125.3	80.9	104.8	117.7	108.8	97.8	78.7		-20%	-12%		-20%	-26%
Repair & maintenance costs (million €)	1.2	0.6	0.8	0.6	0.6	1.1	1.0	57.6	60.3	50.2	59.1	61.2	49.9	50.3		3%	35%		1%	-11%
Other variable costs (million €)	0.7	0.4	0.6	0.2	0.3	0.3	0.3	40.7	36.8	39.5	37.4	33.4	34.0	33.8		3%	-9%		-1%	-9%
Other non-variable costs (million €)	0.7	0.4	0.6	0.3	0.4	0.4	0.4	40.9	39.3	37.8	37.0	34.8	36.6	37.4		-4%	-14%		2%	-1%
Annual depreciation costs (million €)	1.7	1.0	1.4	0.9	1.0	0.9	0.8	50.8	41.8	45.6	52.5	45.1	54.4	39.0		-4%	-19%		-28%	-19%
Opportunity cost of capital (million €)	0.41	0.32	0.30	0.06	-0.10	-0.07	0.12	10.08	14.04	10.19	2.10	-2.75	-1.59	3.36		-60%	-53%		311%	-37%
Tangible asset value (million €)	20.8	12.2	14.3	11.9	11.6	11.0	10.6	506.6	527.7	492.3	436.5	323.3	256.6	291.9		-4%	-14%		14%	-31%
Investments (million €)	20.8	12.2	14.3	11.9	11.6	11.0	10.6	43.7	89.6	67.8	41.6	57.0	21.0	20.5		-100%	-100%		-2%	-62%
Gross Value Added (million €)	5.6	3.7	2.2	2.9	3.6	2.7	2.6	158.5	148.5	147.4	111.9	127.8	148.6	175.8		-89%	-90%		18%	25%
GVA to revenue (%)	62.8	66.7	45.8	64.8	65.4	52.6	52.9	37.5	40.6	38.8	30.8	34.9	40.5	46.8		-78%	-80%		15%	26%
Gross profit (million €)	3.1	2.3	1.3	2.1	2.1	1.4	1.4	51.5	48.5	49.7	19.6	30.6	47.3	69.3		-181%	-164%		46%	68%
Gross profit margin (%)	34.8	41.0	26.9	45.7	38.1	27.3	27.8	12.2	13.3	13.1	5.4	8.4	12.9	18.4		-258%	-228%		43%	70%
Net profit (million €)	1.0	1.0	-0.4	1.1	1.2	0.6	0.4	-9.4	-7.3	-6.1	-35.1	-11.8	-5.6	26.9		-596%	-414%		584%	315%
Net profit margin (%)	11	18	-9	23	22	11	8	-2	-2	-2	-10	-3	-2	7		-1067%	-739%		573%	313%
GVA per FTE (thousand €)	42	39	18	40	34	26	26	91	90	88	69	79	91	111		-89%	-91%		22%	32%

Table 5.69 Netherlands: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)								Live weight of landings (tonne)								Average landed price (real) (€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
Common sole	98.74	101.72	104.35	90.65	87.00	83.87	85.38	*94.44*	9.43	9.60	8.78	7.97	9.09	9.99	9.18	*9.20*	10.48	10.60	11.89	11.37	9.57	8.40	9.30	*10.27*
Common shrimp	58.30	45.33	43.54	29.08	50.76	76.81	65.65	*57.26*	15.40	19.24	17.28	15.95	14.57	20.11	23.31	*18.93*	3.79	2.36	2.52	1.82	3.48	3.82	2.82	*3.03*
European plaice	40.76	33.44	38.31	40.81	45.33	42.70	35.43	*46.82*	20.72	23.41	28.27	28.80	32.24	33.75	29.28	*32.20*	1.97	1.43	1.36	1.42	1.41	1.27	1.21	*1.45*
Atlantic mackerel	14.43	15.10	14.76	19.21	17.60	14.46	31.96	*24.04*	20.07	23.42	24.90	28.39	25.70	21.60	46.81	*39.36*	0.72	0.64	0.59	0.68	0.68	0.67	0.68	*0.61*
Atlantic herring	21.79	22.07	20.83	18.57	32.73	31.76	31.20	*25.55*	56.71	47.73	55.78	45.35	85.10	88.01	85.24	*75.90*	0.38	0.46	0.37	0.41	0.38	0.36	0.37	*0.34*
Atlantic horse mackerel				0.02	0.01	0.10	18.30	*15.25*				0.01	-	0.16	36.35	*30.30*				3.88	4.86	0.66	0.50	*0.50*
Turbot	18.25	15.74	15.43	14.94	13.81	13.81	15.21	*15.18*	1.75	1.70	1.48	1.50	1.77	1.80	1.62	*1.78*	10.43	9.28	10.44	9.97	7.80	7.68	9.37	*8.52*
European pilchard(=Sardine)	4.27	7.56	9.17	17.42	9.34	2.09	13.85	*5.12*	11.38	27.18	27.07	48.23	27.04	4.60	46.81	*13.05*	0.38	0.28	0.34	0.36	0.35	0.45	0.30	*0.39*
Blue whiting(=Poutassou)	29.50	12.21	11.54	1.61	9.40	17.06	10.50	*16.92*	78.45	35.73	34.97	4.60	27.24	51.58	38.62	*56.40*	0.38	0.34	0.33	0.35	0.35	0.33	0.27	*0.30*
Round sardinella	21.00	17.27	19.30	15.38	3.49	2.76	7.43	*0.08*	67.47	39.02	56.39	43.96	10.19	8.37	17.65	*0.19*	0.31	0.44	0.34	0.35	0.34	0.33	0.42	*0.42*

Table 5.70 Netherlands: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
NLD A27 TM40XX °	11	408	2,211	207	296,050	123,305	124,448	49,224	39.6	14,833	11.9	- 8,650	- 6.95	84.3	121	- 4	Weak	54%	Improved
NLD A27 TBB40XX °	51	343	10,130	1,270	31,328	105,887	108,297	53,159	49.1	25,864	23.9	19,725	18.21	79.5	155	54	High	400%	Improved
NLD A27 TBB1824 °	154	434	20,333	882	23,861	70,972	73,878	40,380	54.7	14,664	19.8	8,279	11.21	59.2	93	19	High	1309%	Improved
NLD A27 TBB2440 °	28	138	4,410	1,406	9,617	28,045	28,132	13,249	47.1	5,651	20.1	3,331	11.84	54.9	96	24	High	588%	Improved
NLD A27 DTS2440 °	22	116	4,171	819	11,878	23,837	24,143	10,368	42.9	3,777	15.6	1,454	6.02	57.0	90	9	Reasonable	502%	Improved
NLD A27 DTS1824 °	11	47	1,927	1,017	3,169	7,815	7,965	3,848	48.3	1,482	18.6	750	9.42	50.6	82	14	Reasonable	261%	Improved
NLD A27 DRB2440 °	8	32	478	25	4,896	6,156	5,485	3,945	71.9	2,459	44.8	2,377	43.34	47.2	125	241	High	68%	Improved
NLD A27 PG0010 °	164	90	2,590	2,427	291	2,055	4,465	2,364	52.9	1,243	27.8	362	8.10	12.4	26	5	Reasonable	-37%	Deteriorated
NLD A27 TBB1218 °	15	30	889	1,863	708	1,973	1,999	729	36.5	41	2.1	- 426	- 21.30	23.2	25	- 8	Weak	6%	Improved
NLD A27 DFN1824 °	11	11	437	584	99	278	585	355	60.7	204	34.9	98	16.76	13.2	31	8	High	32%	Improved
NLD A27 TBB0010 °	20	8	223	550	101	235	488	225	46.1	108	22.2	- 62	- 12.64	14.4	28	- 2	Weak	83%	Improved
NLD A27 PG1012 °	14	9	340	617	114	511	447	236	52.9	124	27.8	36	8.10	12.4	26	5	Reasonable	-37%	Deteriorated
NLD A27 DFN1218 °	13	7	466	316	184	880	368	195	52.9	102	27.8	30	8.10	12.4	26	5	Reasonable	-37%	Deteriorated
NLD A27 DTS0010 °	13	7	66	833	56	85	211	109	51.9	73	34.7	18	8.48	5.5	16	4	Reasonable	107%	Improved

5.17 POLAND

Short description of the national fleet

Fleet capacity

The national fleet capacity continued to slowly increase, with a total of 873 vessels, 68 of which were inactive in 2015, having a combined gross tonnage (GT) of 34.0 thousand tonnes and engine power of 81.5 thousand kilowatts (kW). In 2015, the total number of vessels increased by 35 compared to 2014. Majority of the inactive vessels belong to the two smallest length classes (<10, and 10-12m). In 10-12m length class about 18% of the registered vessels reported no activity in 2015. The share of inactive vessels in a total number of other segments doesn't exceed 10%.

The Polish distant water trawler fleet (one vessel operating in North Atlantic and two vessels in African waters) is excluded from the analysis except for capacity, employment and weight of landings data as practically the entire segment is owned by one parent company. For confidentiality reasons the data cannot be published.

Fleet structure

In 2015 the Polish large scale fishing fleet (length >12m) consisted of 192 vessels (=24%), whereas 611 vessels (=76%) were accounted for the small scale fleet (<12m passive gears).

Employment was estimated at 2703 jobs, corresponding to 2550 FTEs or an average of 3.2 FTE per vessel in 2014.

Effort An estimated 74.6 thousand days were spent at sea in 2014, a slight increase (5%) on 2013, while the amount of energy consumed decreased by 5%. This can be explained by slim relative increase of passive gear effort deployed in the fleet as well as an effect of energy consumption investments.

The 13% reduction in energy costs was a result of the lower fuel prices and efforts made to use more fuel efficient engines and fishing techniques.

Polish vessels operate mainly in the Baltic Sea. There are only two vessels fishing in African waters (FAO 34 and 47) and one operating in North Atlantic (FAO 27.1 and 27.2). Because of the vessels size they contribute negligible to the total effort but substantially to the total production.

The total Production shows in 2015 a slightly increase compared to 2014, with a weight of landings of 188 thousand tonnes. The main species in the Baltic are European sprat, Atlantic cod, Atlantic herring, and European flounder. In terms of weight sprat is by far the dominant species (64 thousand tonnes), whereas the highest revenue was generated by Atlantic cod in 2015 (€14.7 million and 18.5 thousand tonnes) following by sprat (€13.0 million).

Economic results for 2014 and recent trends

National fleet performance

Polish Baltic fleet generated €0.9 million net loss in 2014. Its economic performance has gradually deteriorated since 2012. Based on the available information on catches value in 2015 and the effort deployed the overall performance in 2015 is expected to improve slightly, however the small scale segment may continue to be in red as a result of tough situation with Baltic cod.

Revenue, estimated at €48.1 million, decreased 15% due to a 15% drop in landings income as other income increase remarkably however remain relatively to landings revenue at very low level. When including direct income subsidies, total income (no income from fishing rights) amounted to €54.7 million. Direct income subsidies accounted for less than €6.7 million (42% less than in 2013).

Total operating costs decreased due to the 21% decrease in crew costs and lower (-13%) energy costs as other variable costs increased by 22%. When including capital costs, total costs amounted to €48.9 million, exceeding total revenue and generating a net loss of -€0.9 million.

Gross Value Added (GVA), gross profit in 2014 were estimated at €21.7 million, €6.1 million respectively. GVA decreased 23%, gross profit decreased by 33%. In contrary to 2013 the net output was negative. These results indicate a deteriorated economic situation compared to previous years.

The (depreciated) replacement value of the Polish fleet was estimated at €99.3 million and investments amounted to €2.5 million, a 60% decrease compared to 2013 what can be explained by very reduced money available from EU founds.

Generally, the cost structure has remained relatively constant over the years, with some apparent increase in depreciation costs.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 12.7% compared to 16.2% in 2013 and 17.2% in 2012, indicating a deteriorating efficiency of the sector. Net profit margin was estimated at -1.8%, a significant decrease compared to 2013 (4.0%).

The Rate of Return on Fixed Tangible Assets (RoFTA) deteriorated in comparison to previous years and amounted to 2.5% (5.5% in 2013)

After an overall improved development trend since 2008, labour productivity (GVA/FTE) decreased in 2014 by 29%.

Fuel consumption per landed tonne has fluctuated in analysed period. In 2014, amounted to 107 litres per landed tonne, an 8% increase compared to 2013.

Landings in weight per unit of effort (in days at sea) indicator decreased in 2014 by 16% and amounted to 2.3 tonnes per day.

Drivers affecting the economic performance trends

Polish fleet is dominated by trawlers, so the fuel price has always a major impact on the overall economic performance. Fuel prices decreased slightly from 2013 to 2014, thus it has limited positive effect on the fleet. Since the EU accession (2004) subsidies for fisheries became a substantial part of the Polish fisheries sector incomes. In 2014 however due to termination of EFF (2007-2013) the inflow of money to the fisheries has decreased significantly what affected direct incomes as well as funds that used to be available mainly for repairs and investments. Polish fish market is characterised by very well developed fish processing sector with total annual output exceeding €2 billion and generating a total demand close to million tons of raw material (live weight). Taking this into account the Polish market is dominated by imported fish and highly dependent on global market prices. This has strong positive and negative impact on the fisheries incomes by influencing first sale prices offered to fishers.

Markets and Trade

Cod has been the most economically important species for Polish fishers for many years. This situation has changed in 2013 as a result of historically high sprat prices which followed world fish meal prices. In 2014 sprat prices dropped by 11% however remained at higher than before 2013 level. About 30% of sprat landings occur in foreign harbours, mostly Danish one. The remaining is landed in national ports mostly for human consumption to satisfy domestic canneries and smoke houses needs but also exported by trucks to Danish fish meal plants. Despite pelagic species (except for sprat also herring) become more important for Polish fishers, cod remain the essential species for small scale coastal fishery. The main problem of this fish that remained in 2014 unchanged was poor physical condition of individual fish (skinny fish issue). On the other hand strong competition of good quality Norwegian cod products affects the Baltic cod demand and market prices for that fish.

Management instruments

The fleet is managed mainly through TACs and subsequently individual quotas imposed for TAC species (sprat, herring, cod, salmon). In order to protect Baltic cod resources number of days during which using cod nets is allowed was restricted in 2014 to 146 (Eastern Baltic) or 147 (western Baltic) by EU regulation. This restriction is however neutral for Polish fishers since they usually spend less days at sea than allowed maximum. A management plan for cod in the Baltic Sea was agreed in September 2007 by the EU. For the Western cod this plan aimed at reduction in F by 10% each year until the target F is reached. ICES evaluated the management plan in 2009 and 2011 and considered it, at that time, to be in accordance with the precautionary approach. For the Eastern cod there is a large difference between the FMSY and the target F in the management plan, due to changes in cod growth rate ICES decided not to use the multi-annual plan as the basis for advice.

TACs and quotas

Total available quota for the Polish fleet in 2014 was 114.6 thousand tonnes. As was mentioned earlier sprat was most economically important species, its quota amounted (after swaps and 2013 overshooting reduction) to 62 thousand tonnes of which 58.6 thousand tonnes was consumed (94%). Available herring quota amounted to 30.6 thousand tonnes in 2014 and was utilised in 92%. Combined western and eastern Baltic cod quota available for Polish fishers (after swaps) amounted to 21.6 thousand tonnes (+4% compared to 2013). Due to poor physical condition of the fish, low prices and low CPUE cod TAC was utilised only in 55%.

As a consequence of overutilization of TAC in 2013 (and early closure), the individual sprat quotas allocated in 2014 were significantly reduced. For the biggest vessels (over 30 meters) IQ were lowered from 3.4 thousand tonnes to only 1 thousand tonnes. The second pelagic species dependant segment (cutters of 25-30 meters) suffered reduction of 2 thousand tonnes.

Severe reduction of individual quotas as well as number of vessels authorised to fish took place also in herring fisheries. The quotas for biggest vessels (over 25 meters) were reduced from 800 tonnes to 335 tonnes. Also smaller vessels – up to 12 meters using static gears in herring catches experience severe reduction (-60%). Total number of vessels authorised to fish herring were reduced from 590 to 363.

The reverse situation took place in cod fisheries, in order to increase TAC utilisation it was decided to allocate higher quotas to vessels traditionally specialising in demersal catches. The vessels of 20.5-25.5 meters were given 83 tonnes (+52%), cod quota allocated for vessels of 18.5-20.5m increased from 54.5 tonnes to 74.7 tonnes (+37%).

Status of Key Stocks

Due to a missing biological advice for Eastern cod no MSY level could be defined for 2015. According to ICES Advice 2014 CPUE from the Baltic International Trawl Survey (BITS) of fish larger than or equal to 30 cm were assumed as a proxy for SSB and have decreased since 2011. The average SSB proxy in the last two years (2013–2014) was 46% lower than the SSB index in the three previous years (2010–2012). The harvest rate has declined and has remained stable since 2009. Western cod were exploited above MSY (F_{MSY}). Baltic herring (stock 25-29) were managed below and sprat above MSY level.

Performance by fishing activity

Small-scale fleet

In 2014, 595 active vessels were assigned to the small-scale fleet according to the European definition (vessels under 12m using passive gears). These vessels operate exclusively in the Baltic Sea and two brackish water lagoons, targeting mainly herring, cod, flounder and various kinds of freshwater species which are not managed under a TAC regime.

Weight and value of landings of the small-fleet has not changed significantly over the past years and varied between 10-13 thousand tonnes or €10-12 million. The effort however has increased remarkably between 2010 and 2014 by 30% in number of fishing days, sea day or fishing trips. According to preliminary data in 2015 the trend will be discontinued and effort as well as landings will be lower than in 2014. This is mainly due to poor condition of Baltic cod stocks to be especially evident in the shallow coastal areas. In 2014 GVA of the fleet amounted to €6.9 million, 6% less than in 2013. The sector suffered negative gross and net profits of €0.3 and 1.6 million respectively. The number of people working in the fleet increased in 2014 by 10% compared to 2013 or 18% on 2008-2013 average. The wages (that are major cost item) did not however follow the increased number of engaged people and were 9% lower than in 2013. This indicates that average salaries deteriorated significantly.

Large-scale fleet

In 2014, 199 active vessels were assigned to the large-scale fleet. These vessels mainly operated in the Baltic Sea, while one large trawler fished in the North Atlantic. The Baltic vessels targeting mainly sprats, herring, cod and flounder.

After two very good years (2012-2013) the value of landings of the large scale fleet decreased in 2014 by 17% and come back to the value generated in 2011 (€36 million). The weight of landings showed an increasing trend since 2010 until 2013. In 2014 the fleet landed 113.3 thousand tonnes of fish, 11% decrease. In 2015 the landings volume beat the record value (129.3 thousand tonnes) however value of fish landed was lower than in 2012 or 2013.

The costs of the fleet generated in 2014 were 90% of 2013 value. The decrease could be especially observed in case of two most important cost items i.e. energy and wages – decline respectively by 15% and 26%. Cost variables showed mostly downward developments except for non-variable cost where almost 40% growth were observed. The fleet generated GVA €40.3 million, produced €6.4 million gross and €0.8 million net profit. Unfortunately all economic parameters deteriorated remarkably, GVA by 29%, gross profit by 36%, and net profit by 82%.

The number or people employed in the large scale fleet increased slightly by 6% (FTE or total jobs).

Performance results of selected fleet segments

Pelagic trawlers (24-40)

Polish pelagic trawlers below 40 m length operate exclusively in the Baltic Sea. In 2014 43 vessels make up this segment. The number of vessels and employment in the segment did not change significantly compared to 2013. The segment contributed to 51% and 37% of the total volume of landings and income from landings generated by the Polish Baltic fishing fleet. The fleet targets a variety of species but in particular pelagic species, such as sprat and herring. Sprat had 65% share in catch composition of the segment, following by herring (31%). In 2014, the total value of landings was €17.5 million (27% less compared to 2013) and 254 FTEs were employed. In 2014 the segment was affected by two negative factors. The first one was severe cuts in individual sprat and herring quotas. This was a consequence of lower TAC for sprat (-20%) as well as a new quota allocation system implemented for sprat and herring, that reduced significantly fishing opportunities. The second factor that negatively influenced the segment was sprat prices decrease of 11% compared to 2013. The fleet segment was profitable, with a reported gross profit of around €3.2 million, however it produced a negative net profit of €0.3 million in 2014 (-€0.1 million in 2013). Most of segment's economic indicators have deteriorated in 2014 compared to 2013. The segment generated lower GVA in total but also per FTE (-37%). Net profit margin was negative (1.69%). Profitability indicators did not improve compared to 2013 and remained weak.

Passive gears 0-10 m

The passive gears segment constitutes of 489 vessels (in 2013, 456 vessels) operating in the Baltic Area including lagoon brackish waters. The fleet targets a variety of saltwater species: Atlantic herring, European flounder, Atlantic cod and a variety of freshwater species, such as freshwater bream, pike perch and pike. In 2014, the total value of landings was 8.6 thousand tonnes (+2% compared to 2013) worth €7.8 million (-5% compared to 2013). The segment is the biggest one in terms of people engaged. In 2014 there were 1064 FTEs (or 1152 total jobs). The number of fishers increased 12%. The segment produced negative net output €0.8m and negative gross profit €0.1m. The economic development trend deteriorated in 2014 – net profit margin was 96% lower compared to the 2008-2013 average, profitability was again weak. The segment is affected by poor condition and availability of Baltic cod. Before 2012 cod had been the most important species in terms of landings value (over €2 million) in the segment. In 2014 cod landings dropped to €1.4 million and in 2015 to €1.1 million.

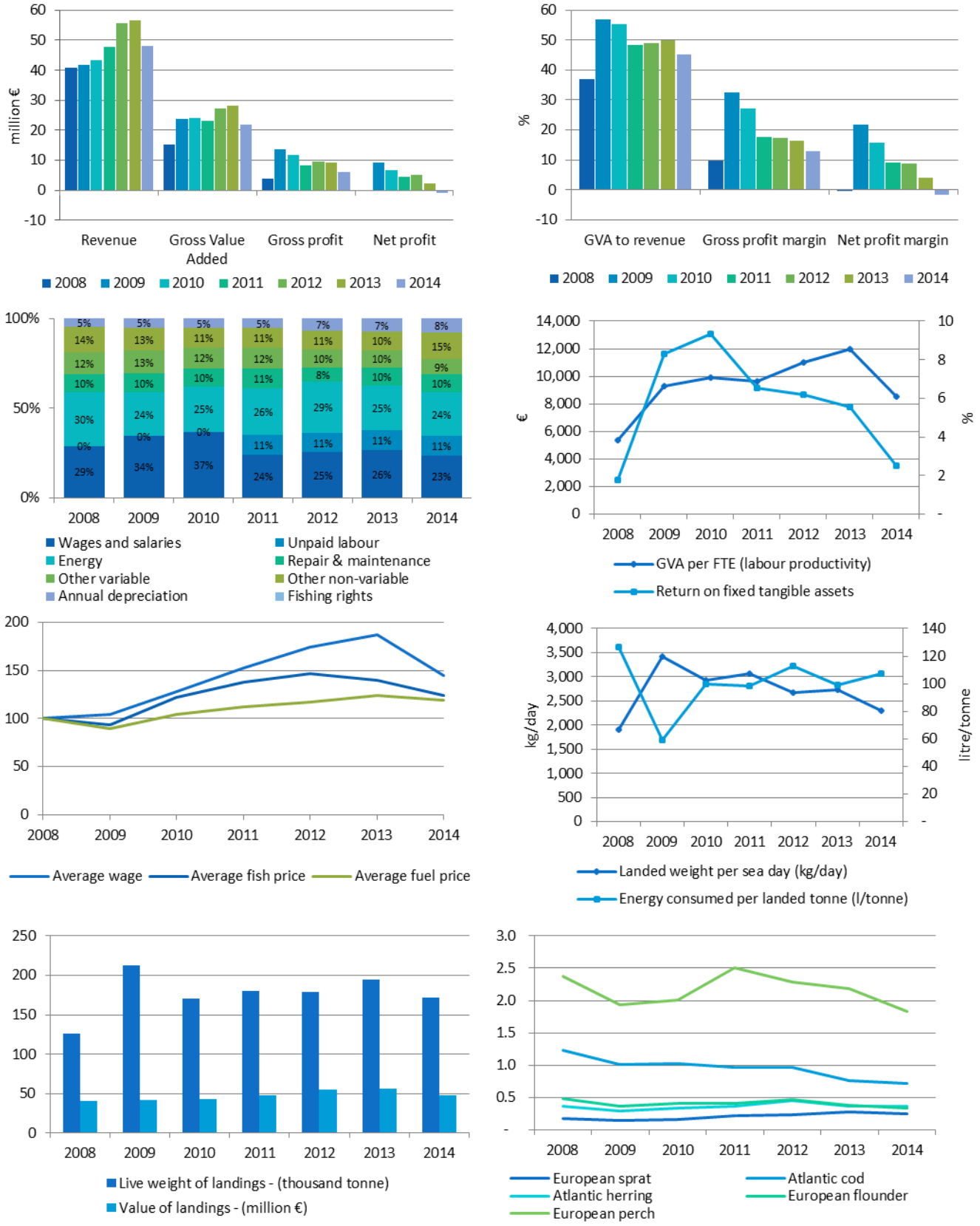
Projections for 2015 and outlook

Preliminary results for 2015 forecast a 10% increase in landed weight and a 3% increase in landed value. Projections suggest that relatively stable effort combined with a decrease in fuel costs (-19%) fostered improvements to economic performance in 2015: GVA (+17%), gross profit (+48%) and net profit (+396%). This is despite the Polish fleet slightly increasing in size. GVA per revenue is relatively high at 52% although GVA per FTE is relatively low at €10 700.

These economic gains are projected to continue in 2016, with landed weight increasing by 4%, landed value by 9%, and an even further fall in fuel costs (-28%). Gross profit margins and net profit margins are projected to reach 26% and 13% respectively.

Data issues

Similar to previous years, due to confidentiality reasons, distant water fleet (vessels over 40m fishing outside Baltic Sea) were excluded from the economic analysis. However, transversal data (except for value of landings) and employment data were provided for all fleet segments. In order to ensure consistency with data provided for previous years, premiums paid by government for scrapped vessels were taken into account when calculating invested capital (not the PIM method).



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.16 Poland: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.71 Poland: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	864	832	806	793	790	798	838		5%	3%
Number of Inactive vessels_ms	(#)	41	109	99	84	38	43	42		-2%	-39%
Vessel tonnage	(thousand GT)	30.0	41.0	38.2	37.3	33.4	33.4	33.9		1%	-5%
Engine power	(thousand kW)	96.6	99.0	90.7	86.9	82.9	81.9	81.4		-1%	-9%
Average vessel age	(year)	28	28	28	28	29	29	28		-1%	1%
Average vessel length	(metre)	12	12	12	11	11	11	11		-2%	-5%
Enterprises with one vessel	(#)	758	719	673	657	645	633	646		2%	-5%
Enterprises with 2 to 5 vessels	(#)	44	44	50	54	55	64	72		13%	39%
Enterprises with more than 5 vessels	(#)	1	2	3	2	2	2	2		0%	0%
FTE	(#)	2,822	2,552	2,433	2,400	2,487	2,361	2,550		8%	2%
Total employed	(person)	3,026	2,699	2,590	2,548	2,601	2,515	2,703		7%	1%
Days at sea	(thousand day)	66.4	62.1	58.1	58.7	67.2	71.3	74.6		5%	17%
Fishing days	(thousand day)	62.5	59.8	55.5	56.8	64.1	68.1	71.2		5%	17%
Number of fishing trips	(thousand)	54	52	47	48	54	59	62		6%	19%
Energy consumption	(million litre)	15.97	12.52	17.07	17.63	20.20	19.28	18.37		-5%	7%
Live weight of landings	(thousand tonne)	126.2	212.1	170.8	179.5	179.2	195.0	171.3		-12%	-3%
Value of landings	(million €)	40.0	41.3	43.1	47.4	55.4	56.5	47.9		-15%	1%
Income from landings	(million €)	40.0	41.3	43.2	47.4	55.4	56.5	47.9		-15%	1%
Other income	(million €)	0.84	0.47	0.17	0.38	0.18	0.09	0.16		80%	-54%
Direct income subsidies	(million €)	24.75	19.90	16.01	17.91	15.37	11.54	6.68		-42%	-62%
Wages and salaries of crew	(million €)	11.16	10.21	12.28	9.98	12.54	13.51	10.69		-21%	-8%
Unpaid labour value	(million €)				4.67	5.21	5.63	4.92		-13%	-5%
Energy costs	(million €)	11.56	7.26	8.39	10.69	14.17	12.78	11.07		-13%	2%
Repair & maintenance costs	(million €)	4.01	3.11	3.32	4.54	3.96	5.26	4.58		-13%	14%
Other variable costs	(million €)	4.73	3.75	3.99	4.87	4.86	4.98	3.90		-22%	-14%
Other non-variable costs	(million €)	5.48	3.85	3.59	4.62	5.28	5.27	6.78		29%	45%
Annual depreciation costs	(million €)	1.82	1.56	1.81	2.22	3.39	3.80	3.61		-5%	48%
Opportunity cost of capital	(million €)	2.17	2.95	3.20	1.88	1.25	3.11	3.40		9%	40%
Tangible asset value	(million €)	121.4	144.8	106.8	94.5	99.6	97.0	99.3		2%	-10%
Investments	(million €)	8.7	2.2	3.8	8.6	6.9	6.1	2.5		-60%	-59%
Financial position	(%)	8.0	6.0	5.0	14.5	12.9	10.5	4.6		-56%	-51%
Gross Value Added	(million €)	15.1	23.8	24.0	23.0	27.3	28.3	21.7		-23%	-8%
GVA to revenue	(%)	36.9	57.0	55.5	48.2	49.1	50.0	45.2		-10%	-9%
Gross profit	(million €)	3.9	13.6	11.8	8.4	9.6	9.2	6.1		-33%	-35%
Gross profit margin	(%)	9.6	32.5	27.1	17.6	17.2	16.2	12.7		-22%	-37%
Net profit	(million €)	- 0.1	9.1	6.7	4.3	4.9	2.3	- 0.9		-139%	-120%
Net profit margin	(%)	- 0.1	21.7	15.6	9.0	8.9	4.0	- 1.8		-146%	-119%
GVA per FTE	(thousand €)	5.4	9.3	9.9	9.6	11.0	12.0	8.5		-29%	-10%
Return on fixed tangible assets	(%)	1.7	8.3	9.3	6.5	6.2	5.5	2.5		-54%	-60%

Table 5.72 Poland: National fleet statistics and economic performance results based on fleet segment level data.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	823	723	707	709	752	755	796	*813*	*836*		2%	3%
Total employed	(person)	3026	2699	2590	2548	2601	2515	2702	*2,719*	*2,798*		1%	3%
FTE	(#)	2,822	2,553	2,434	2,399	2,487	2,361	2,550	*2,375*	*2,593*		-7%	9%
Days at sea	(day)	66,446	62,129	58,148	58,743	67,175	71,316	74,555	*72,354*	*81,827*		-3%	13%
Energy consumption	(thousand litres)	15,970	12,518	17,072	17,625	20,204	19,277	18,372	*18,863*	*19,150*		3%	2%
Live weight of landings	(tonne)	126,150	212,126	170,771	179,540	179,239	194,958	171,305	*188,341*	*195,945*		10%	4%
Value of landings	(thousand €)	40,041	41,281	43,104	47,370	55,410	56,512	47,898	*49,325*	*53,614*		3%	9%
Income from landings	(thousand €)	40,041	41,281	43,158	47,370	55,410	56,512	47,898	*49,325*	*53,614*		3%	9%
Other income	(thousand €)	840	473	166	382	177	90	162	*136*	*138*		-16%	2%
Wages and salaries of crew	(thousand €)	11,160	10,214	12,282	9,982	12,544	13,509	10,695	*10,945*	*12,621*		2%	15%
Unpaid labour value	(thousand €)	-	-	-	4,667	5,212	5,626	4,922	*5,484*	*5,650*		11%	3%
Energy costs	(thousand €)	11,563	7,264	8,390	10,685	14,166	12,779	11,067	*8,989*	*6,480*		-19%	-28%
Repair & maintenance costs	(thousand €)	4,009	3,111	3,317	4,543	3,962	5,261	4,581	*4,647*	*4,864*		1%	5%
Other variable costs	(thousand €)	4,734	3,749	3,988	4,867	4,862	4,981	3,901	*4,464*	*4,238*		14%	-5%
Other non-variable costs	(thousand €)	5,475	3,851	3,588	4,621	5,279	5,268	6,777	*5,867*	*6,074*		-13%	4%
Annual depreciation costs	(thousand €)	1,821	1,559	1,811	2,219	3,389	3,798	3,606	*3,424*	*3,642*		-5%	6%
Opportunity cost of capital	(thousand €)	2,093	2,526	2,747	1,678	1,195	2,990	3,290	*3,334*	*3,448*		1%	3%
Tangible asset value (replacement)	(thousand €)	116,907	123,802	91,563	84,304	95,578	93,438	96,198	*97,323*	*100,650*		1%	3%
Gross Value Added	(thousand €)	15,101	23,780	24,041	23,036	27,317	28,313	21,734	*25,493*	*32,096*		17%	26%
Gross profit	(thousand €)	- 1,068	13,566	11,759	8,387	9,561	9,178	6,117	*9,063*	*13,824*		48%	53%
Net profit	(thousand €)	- 4,472	9,481	7,201	4,490	4,977	2,390	- 780	*2,305*	*6,734*		396%	192%

Table 5.73 Poland: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF							DWF							Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend DWF	Δ2014 to 2013	Δ2014 to avg. 08-13
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014									
Total number of vessels (#)	563	509	517	518	545	553	595	259	211	187	188	205	200	199	1	3	3	3	2	2	2		8%	11%		-1%	-4%		0%	-14%
Vessel tonnage (thousand GT)	2.7	2.3	2.3	2.4	2.6	2.6	2.7	22.8	16.5	14.1	13.8	14.6	14.8	15.4	3.9	19.4	19.5	19.5	15.6	15.6	15.4		4%	9%		4%	-5%		-1%	-1%
Engine power (thousand kW)	23.8	20.3	19.8	19.7	21.1	20.9	21.3	67.0	53.7	46.5	44.7	47.5	46.6	46.8	3.2	14.4	15.0	15.0	11.8	11.8	11.2		2%	2%		0%	-8%		-5%	-6%
FTE (#)	1,201	1,202	1,121	1,163	1,271	1,290	1,420	1,351	1,093	1,043	966	1,036	934	990	270	258	270	270	180	137	140		10%	18%		6%	-8%		2%	-39%
Total employed (person)	1,379	1,313	1,264	1,301	1,372	1,389	1,519	1,377	1,116	1,056	977	1,049	946	1,003	270	270	270	270	180	180	180		9%	14%		6%	-8%		0%	-25%
Days at sea (thousand day)	45.6	42.8	39.5	40.0	43.5	48.1	51.2	20.3	18.4	17.8	17.9	23.3	22.7	22.8	0.5	0.9	0.9	0.8	0.5	0.5	0.5		6%	18%		1%	14%		2%	-22%
Fishing days (thousand day)	45.0	42.4	38.7	39.5	42.6	47.4	50.5	17.3	16.8	16.3	16.7	21.1	20.3	20.3	0.3	0.7	0.5	0.6	0.4	0.5	0.4		7%	19%		0%	12%		-11%	-16%
Number of fishing trips (thousand)	44.4	42.0	38.2	38.5	41.8	46.4	49.7	9.9	9.6	9.2	9.2	12.3	12.1	12.5	0	0	0	0	0	0	0		7%	19%		3%	20%		-7%	-14%
Energy consumption (million litre)	2.1	1.5	1.9	1.7	1.7	2.0	2.2	13.8	11.0	15.2	15.9	18.5	17.2	16.2									7%	19%		-6%	6%			
Live weight of landings (thousand tonne)	9.9	11.5	11.0	11.4	12.6	13.0	12.8	90.2	124.1	104.5	104.2	112.8	127.9	113.3	26.1	76.5	55.4	63.9	53.8	54.1	45.3		-2%	10%		-11%	2%		-16%	-18%
Value of landings (million €)	10.44	10.65	10.44	11.29	11.99	11.96	11.09	29.60	30.63	32.67	36.08	43.42	44.56	36.81									-7%	0%		-17%	2%			
Income from landings (million €)	10.4	10.7	10.4	11.3	12.0	12.0	11.1	29.6	30.6	32.7	36.1	43.4	44.6	36.8									-7%	0%		-17%	2%			
Other income (million €)	0.3	0.2	0.1	0.1	0.0	0.0	0.1	0.6	0.3	0.1	0.3	0.1	0.1	0.1									52%	-47%		101%	-58%			
Direct income subsidies (million €)	12.80	9.14	6.70	7.27	10.56	8.71	5.48	11.94	10.76	9.31	10.64	4.80	2.83	1.20									-37%	-40%		-58%	-86%			
Wages and salaries of crew (million €)	1.0	2.5	3.6	3.1	3.7	4.3	3.9	10.2	7.7	8.7	6.8	8.8	9.2	6.8									-9%	27%		-26%	-20%			
Unpaid labour value (million €)				3.3	3.4	3.8	3.2				1.4	1.9	1.8	1.7									-15%	-7%		-7%	-1%			
Energy costs (million €)	1.5	0.9	1.1	1.2	1.3	1.4	1.4	10.0	6.3	7.3	9.5	12.9	11.4	9.7									-1%	12%		-15%	1%			
Repair & maintenance costs (million €)	0.5	0.6	0.4	0.7	0.6	0.9	0.7	3.5	2.6	2.9	3.8	3.3	4.4	3.9									-19%	16%		-12%	13%			
Other variable costs (million €)	1.2	1.0	1.0	1.2	1.3	1.5	1.5	3.5	2.7	3.0	3.7	3.5	3.5	2.4									-4%	21%		-29%	-27%			
Other non-variable costs (million €)	1.0	0.7	0.7	0.8	1.0	0.9	0.7	4.4	3.1	2.9	3.9	4.3	4.4	6.0									-17%	-15%		38%	58%			
Annual depreciation costs (million €)	0.2	0.3	0.4	0.4	0.3	0.4	0.3	1.6	1.3	1.4	1.8	3.1	3.4	3.3									-15%	6%		-4%	55%			
Opportunity cost of capital (million €)	0.55	0.67	0.77	0.48	0.36	0.88	0.97	1.54	1.86	1.98	1.20	0.84	2.11	2.32									10%	57%		10%	46%			
Tangible asset value (million €)	30.7	32.8	25.6	24.2	28.4	27.5	28.4	86.2	91.0	66.0	60.1	67.1	66.0	67.8									3%	1%		3%	-7%			
Investments (million €)	0.3	0.7	1.2	0.5	1.3	0.8	0.7	8.4	1.5	2.6	8.2	5.7	5.3	1.7									-11%	-10%		-67%	-67%			
Gross Value Added (million €)	6.4	7.6	7.3	7.5	7.8	7.3	6.9	8.7	16.2	16.7	15.5	19.6	21.0	14.9									-6%	-6%		-29%	-9%			
GVA to revenue (%)	60.1	69.9	69.7	66.3	64.5	60.9	61.5	28.7	52.4	50.9	42.6	44.9	47.1	40.3									1%	-6%		-14%	-9%			
Gross profit (million €)	0.5	5.1	3.7	1.1	0.7	-0.8	-0.3	-1.5	8.5	8.1	7.2	8.9	10.0	6.4									68%	-115%		-36%	-7%			
Gross profit margin (%)	18.2	47.0	35.3	10.0	5.5	-6.5	-2.2	-5.1	27.4	24.6	19.9	20.4	22.3	17.3									65%	-112%		-23%	-5%			
Net profit (million €)	0.2	4.1	2.5	0.3	0.0	-2.1	-1.6	-4.7	5.4	4.7	4.2	5.0	4.4	0.8									24%	-282%		-82%	-75%			
Net profit margin (%)	9.6	38.2	24.1	2.5	0.2	-17.2	-14.0	-15.7	17.3	14.2	11.6	11.4	10.0	2.1									18%	-247%		-79%	-74%			
GVA per FTE (thousand €)	5.4	6.3	6.5	6.5	6.1	5.7	4.8	6.8	15.4	16.7	16.7	19.6	23.4	15.6									-15%	-21%		-33%	-5%			

Table 5.74 Poland: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development. trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
POL A27 TM2440 °	43	254	4,530	118	60,853	17,534	17,543	7,457	42.5	3,211	18.3	- 296	- 1.69	16.7	29	2	Weak	-127%	Deteriorated
POL A27 DTS1218 °	71	297	8,963	265	17,903	8,657	8,712	3,683	42.3	1,524	17.5	658	7.56	7.3	12	8	Reasonable	-63%	Deteriorated
POL A27 PG0010 °	489	1,064	41,998	131	8,607	7,830	7,858	5,365	68.3	- 90	- 1.1	- 830	- 10.56	5.1	5	- 2	Weak	-96%	Deteriorated
POL A27 DTS1824 °	35	174	3,747	166	13,536	5,643	5,649	1,690	29.9	806	14.3	177	3.14	5.1	10	5	Reasonable	-89%	Deteriorated
POL A27 TM1824	21	99	2,518	115	12,926	3,750	3,756	1,633	43.5	1,214	32.3	857	22.83	4.2	16	14	High		
POL A27 PG1012	106	356	9,198	252	4,156	3,263	3,295	1,490	45.2	- 160	- 4.9	- 735	- 22.31	4.6	4	- 3	Weak	-433%	Deteriorated
POL A27 DFN1218 °	28	129	2,803	404	1,272	1,221	1,248	416	33.3	- 388	- 31.1	- 612	- 49.02	6.2	3	- 8	Weak	-6168%	Deteriorated
POL OFR TM40XX	2	140	529		45,259									-					
POL A27 DTS40XX	1	37	269		6,793									-					

Table 5.75 Poland: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real)								Live weight of landings								Average landed price (real)							
	(thousand €)								(tonne)								(€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
European sprat	9.3	11.7	8.5	11.6	14.6	21.9	13.9	*13.0*	55.4	84.6	58.8	56.1	62.8	80.3	58.3	*64.0*	0.2	0.1	0.2	0.2	0.2	0.3	0.2	*0.2*
Atlantic cod	15.0	12.6	15.1	14.9	17.9	14.6	13.1	*14.7*	12.2	12.4	14.9	15.6	18.6	19.2	18.2	*18.5*	1.2	1.0	1.0	1.0	1.0	0.8	0.7	*0.8*
Atlantic herring	6.2	6.6	8.2	11.2	12.0	8.7	10.4	*11.7*	17.0	22.5	24.8	30.0	27.0	23.6	28.3	*38.0*	0.4	0.3	0.3	0.4	0.5	0.4	0.4	*0.3*
European flounder	4.3	3.6	4.6	3.9	4.6	4.5	4.1	*3.2*	9.1	9.7	11.2	9.7	10.1	11.8	12.6	*9.3*	0.5	0.4	0.4	0.4	0.5	0.4	0.3	*0.3*
European perch	1.8	1.3	1.7	2.0	2.3	2.1	2.1	*1.3*	0.7	0.7	0.8	0.8	1.0	1.0	1.1	*0.9*	2.4	1.9	2.0	2.5	2.3	2.2	1.8	*1.5*
Pike-perch	1.0	0.8	0.8	0.7	1.3	1.7	1.2	*1.0*	0.2	0.2	0.2	0.1	0.3	0.4	0.3	*0.2*	5.0	4.5	5.2	5.1	4.1	4.1	4.1	*4.3*
Sea trout	0.5	1.9	2.1	1.1	0.7	0.7	0.6	*0.7*	0.1	0.4	0.4	0.2	0.2	0.1	0.1	*0.1*	4.1	5.2	5.5	5.4	4.9	5.8	5.1	*5.9*
Sandeels(=Sandlances)	-	-	-	-	0.4	0.3	0.5	*0.7*	-	-	-	-	2.3	1.6	3.6	*4.2*	0.3	0.3	0.3	0.3	0.2	0.2	0.2	*0.2*
European eel	0.6	0.5	0.5	0.4	0.5	0.7	0.5	*0.4*	0.1	0.1	0.1	0.0	0.0	0.1	0.0	*0.0*	12.0	9.3	9.4	12.1	15.3	14.8	12.9	*10.0*
Freshwater bream	0.3	1.2	0.4	0.7	0.3	0.4	0.4	*0.4*	0.6	0.8	0.6	0.7	0.5	0.6	0.5	*0.8*	0.5	1.4	0.7	1.0	0.5	0.6	0.7	*0.5*

5.18 PORTUGAL

Short description of the national fleet

Fleet capacity

The national fleet capacity continued to decline, with a total of 8 256 vessels in 2014, having a combined gross tonnage (GT) of 100 thousand tonnes and engine power of 368 thousand kilowatts (kW), distributed by Mainland Fleet, Azores and Madeira. In 2014, 44 new vessels entered the Portuguese fleet, while 81 ceased their fishing activities. The national fleet is characterized by a prevalence of small fishing vessels, representing 90% of the all fleet, have a length of less than 12 meters, with small gross tonnage, representing about 13% of the national total. The average vessel length is 7m and the average age of the registered fleet is around 31 years but in terms of active fleet is around 21 years. The active fleet represents about 48% of the national fleet.

Fleet structure

The Portuguese fishing fleet includes the Mainland Fleet, Azores and Madeira and developing the respective fisheries in accordance with the operating areas and gears. The national fleet contains vessels from the small scale, large scale and vessels witch operated in long distance waters and are grouped into 11 major segments (DFN, DRB, DTS, FPO, HOK, MGO, PS, TBB, MGP, PGP and PMP). The most important segments are: Demersal Trawl and seine over 40m, Demersal Trawl and seine 24-40m, Hooks 24-40 metres and Purse Seiners 18-24 metres.

Employment

Employment was estimated at 16 991 jobs, corresponding to 8 514 FTEs or an average of 2.2 FTE per vessel. Although the results shows a part time structure of the employment, many fishers works full time on fisheries but working part time on more than one vessel. The average FTE per vessel increased from 1.9 to 2.2 in the 200-14 period. The average wage per FTE remained stable on the same period, at around €16 000. According to the 2011 census of the population, the average age of the fishers was 43.6 years. In 2014 the average wage was estimated to increase to around 44.4 years.

Effort

An estimated 336 thousand days were spent at sea, confirming the decreasing trend of the whole period 2008-14 (a 11% decrease over the period). The average days at sea per vessel shows the same trend of decreasing effort. 2014 achieved a new low of 85 days per vessel, a decrease of 8% when comparing it to 2008. Landed weight per sea day seems to be increasing over the period, albeit the normal fluctuations from year to year; at 487 kg/sea day, it was 2% higher than the 2008 value. All these indicators point to a sustainable reduction on the effort over the years.

Energy consumption is been decreasing over the years, a direct consequence of the reduction on the number of vessels and on the number of days at sea. Energy consumption per landed tonne decreased significantly only on the last two years, while the same indicator per landed value remained stable over the period, due to fuel price variation, only reducing on 2014. This trend revealed an effort from the fleet to compensate for fuel prices.

Vessels operate mainly in the Northwest Atlantic, with some important activities in the NAFO and Savlbard/Irminger areas (Demersal trawlers), Indian and Pacific oceans (Surface longliners) and near Madeira coast, for the Madeiran fleet.

Production

Production decreased 14% to an historical minimum of 163 thousand tonnes of seafood. Total landed value was €353 million. The decreasing of landings resulted mainly from the fall in the quantity of sea fish landed in the Mainland, especially sardine, tuna and mackerel, that dropped -42.8%, -21.2% and -20.8%, respectively and also from the decrease of catches in Azores, because of less tuna available, which is very important in this autonomous region.

In 2014, common octopus surpassed European pilchard (sardine) generating the highest landed value (€44.5 million) by the national fleet. The reason for this change was due to the increased restrictions of sardine catches, due to the poor performance of the stock. European pilchard generated with €31.8 million followed by Atlantic redfish (€24.3 million) and then Atlantic cod (€17.0 million). It should be noted that prices for Atlantic cod and redfish (and other frozen products) are estimates and may not necessarily equate to the real values (and therefore limit the type of analysis that can be made). Between 2013 and 2014, prices obtained for these key species increased for all these 5 species. Common octopus achieved an average price of €4.2 per kg, contrasting with the €2.9 from 2013. The increase in sardine prices can be explained by the low availability of the species in the market due to legal restrictions on catches. These restrictions pushed the €0.7 per kg on 2008 to the €2.0 per kg in 2014. Further restrictions in 2015 and 2016 will push the prices higher.

In terms of landed weight, 29.6 thousand tonnes of chub mackerel were landed in 2013, followed by European pilchard (16 thousand tonnes), Atlantic horse mackerel (20.6 thousand tonnes) and common octopus (10.7 thousand tonnes).

Economic results for 2014 and recent trends

National fleet performance

The Portuguese national fleet is improving its economic performance, recovering from the minimum low of 2012 where it achieved a net loss into a net profit of €39.9 million. This trend is expected to continue into 2015 and 2016, as fuel prices remained low and the average price per kg continues to increase.

Revenue, estimated at €364.9 million, remained at 2013 levels, due to increased fish prices which compensate for the low catches. When including direct income subsidies, total income (no income from fishing rights) amounted to €369.2 million.

Total operating costs decreased mainly due to the decreasing of crew and energy costs. From 2012 to 2014 crew costs decreased by 11% while energy costs decreased by 27%. When including capital costs, total costs amounted to €325.0 million.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €235.56 million, €99.5 million and €39.9 million, respectively. Over the 2008-14 period GVA increased 5%, gross profit and net profit increased 14% and 110%, respectively. These results indicate an improving economic situation compared to previous years, benefiting from low costs and higher fish prices.

The (depreciated) replacement value of the Portuguese fleet was estimated at €457 million and investments amounted to €17.9 million, a 16% increase on 2013 and 35% on 2008, reflecting a good perspective of the sector for the following years.

Overall, the cost structure has remained relatively constant over the years.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 27.3%, indicating a satisfactory operating efficiency of the sector, with room for improvement. Net profit margin was estimated at 10.9%, a 101% increase on 2013.

The Rate of Return on Fixed Tangible Assets (RoFTA) has been improving since 2012, where it achieved a minimum of 7.9% due to drop of landings revenue. Since then decreasing operational costs due to the reduction of fishing effort, lower fuel prices and higher prices of fish have been contributing to the better economic performance of the fishing fleet. In 2014 RoFTA achieved 12.69%.

Labour productivity (GVA/FTE) increased in 2014 (+21% by comparison with the previous year), reversing the decreasing trend of 2012 and 2013. This was due to the combination of improving GVA and a decrease in FTE (-13%), indicating strong gains in efficiency.

Fuel consumption per landed tonne has followed a decreasing trend since 2013 to an all-time low of 507 litres per tonne landed.

Landings in weight per unit of effort (in days at sea) has decreased by 8% from the previous year, when it achieved its highest value. The indicator shows some mixed results, increasing in 2010 and remained stable after that year, due to the decreasing of both effort and landings.

Drivers affecting the economic performance trends

Higher average fish prices, lower fuel costs and further effort reduction were the main driving forces behind the overall improvement.

The increase in the average prices was a consequence of the lower availability of fish due to decreasing catches. The decrease on landings on sardine, traditionally the most caught specie in Portugal, due to the restrictions imposed on catches, made the average price of this species go up from €0.80 in 2011 to €2.00 in 2014 and mitigating the economic effects on purse seiners.

Markets and Trade

About 21% of landings occur in foreign harbours. Of the Portuguese harbours, Sesimbra, Aveiro, Matosinhos and Peniche are the most important with about 12.2%, 9.6%, 7.6% and 7.1% of domestic landings, respectively.

Around 85% of landings in foreign harbours occur in Spain, 5% in Uruguay, 4% in Namibia, 2% in Mauritia's and the remaining in several third countries.

There are 15 recognized Producers organizations of which 12 on mainland. These organizations account for 1585 vessels, approximately 37% of total licensed vessels. Purse seiners are the most represented segment in those structures and sardine and chub mackerel the main species landed. Around 98.6% of sardine and 82.9% of chub mackerel landed in Portugal were accounted to producers organizations.

The average price of fresh fish landed in 2014 in national harbours increased by 19.1% related to 2013, from €1.70 €/kg to 2.02 €/kg. The biggest increase happened in Azores (+24.1%), followed by mainland (+21.1%). In Madeira the average price decreased by 15.1%, due to the decrease of tuna prices in the region.

Management instruments

In 2014, remained licensing limitations on the use of certain gear for catching species considered most vulnerable. In specific situations, the administration has allowed the arts transfers between ships using the slaughter of vessels lost art, providing the vessels that remain active better economic profitability without increasing fishing effort. The allocation of new fishing licenses for the use of gear is strongly conditioned to avoid fishing effort increases on the various harvested resources and promote the maintenance of the existing balances.

In 2014 they were implemented the following effective recovery plans / adjustment of fishing effort or capacity control schemes:

Recovery plan for hake and Norway lobster / Plan Adjustment covering vessels with special fishing permit included in the Hake Recovery Plan White South and Scampi with the overall objective of reducing fishing mortality rate of 10% per year by reducing the activity of the fleet (reduction of fishing days).

Fishing capacity of the control system for deep-sea species that includes vessels licensed for longline directed at deep-sea species, aiming at a reduction of fishing capacity involved by limiting the licenses granted.

Plan Sardine Fishery Management 2012-2015, which defines the subject amounts capture determining consequently, management measures and monitoring the activity of vessels catching sardines with art enclosure, aiming to reach MSY in three years.

Plan Adjustment of Fishing Effort - Licensed Vessels for longline surface with Swordfish share in the Atlantic north of 5 ° N, which provides for the adjustment of fleet capacity licensed to operate with surface longlines in the capture directed to highly migratory species, owner of swordfish quotas in the Atlantic Ocean north of 5 ° N, aiming to reduce this fleet by about 38%, increasing the quotas available per vessel.

TACs and quotas

Total initial available quota for the Portuguese fleet in 2014 was 74 thousand tonnes, an increase of 18% due to increased quotas of horse mackerel (+16%), Atlantic mackerel (+28%) and blue whiting (+114%).

Portugal have fishing quotas on national and international waters and through partnership fisheries agreements with third countries. Some fishing possibilities are also available on NAFO, NEAFC, ICCAT and IOTC areas. On the North Atlantic there was a slight increase of around 2% for the fish possibilities by comparison with 2013, mainly codfish in Svalbard, Norway and NAFO. By the end of the year, and due to swaps with other member states, Portugal increased its fishing opportunities by 4% on that area, mainly on codfish and redfish on NAFO.

North Atlantic quotas (NAFO, Norway, and Svalbard) are usually not sufficient to cover the fishing needs of the Portuguese fleet segments operating in those waters, with the quotas being completely used.

On the south Atlantic, tuna and tuna like quotas increased by 12%, mainly due to increasing in the albacore quota. By the end of 2014 a new increase of 7% was achieved due to swaps of swordfish and albacore with other MS.

As for the partnership agreements with third countries, there was a lack of interest by the Portuguese fleet in using the fishing possibilities available in Cabo Verde waters. Some difficulties were appointed by the sector regarding juridical uncertainties to catch pelagic sharks, increased taxes and difficult technical activities. In Mozambique and Madagascar the fishing possibilities actually used were 20% and 50% less than those of 2013. For The Morocco FPA, 4 vessels were licenced in the last semester of 2014. As for the FPA with Mauritania, the difficult technical conditions meant a lack of interest by the sector in operating on those waters.

Performance by fishing activity

Small-scale fleet

In 2014, the small-scale fleet (SSF) comprised 3 097 vessels, corresponding to 79% of the total active fleet, with a combined gross tonnage of 7.4 thousand GT and a total power of 99.9 thousand kW. The majority of SSF operate along the coast, using polyvalent passive gears (mainly nets, longlines, pots and traps) catching a diverse amount of species, being the small pelagic (chub mackerel, horse mackerel, sardine) the major group followed by some demersal species (conger, scabbard fish, seabream), cephalopods. In 2014 generated 8 957 jobs, about 53% of the national employment and a decrease of 9% in FTE by comparison with the previous year. The activity of this fleet decreased over the period 2008-14, achieving an average of 69 days at sea per vessel in 2014, from the 75 days in 2008 with also a reduction in energy costs. Landings in weight decreased slightly, following the trend of the whole fleet but with improved prices of fish it achieved a higher level of value. In 2014 landings from the SSF represented 12.4% of the total Portuguese landings.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the SSF in 2014 were €65.3 million, €29.4 million and €17.9 million, respectively. The performance of the fleet improved

consistently since 2012. Furthermore, this part of the national fleet contributes significantly to the economic and social sustainability of local fishing communities. Projections for 2015 and 2016, suggest that small scale fleet continued to decrease in capacity (number, GT and kW) but in terms of economic performance, a further improvement is expected.

The cost structure of the fleet remained stable over the period 2008-14 with Wages and salaries of the crew being the major cost and highly linked to the income from landings.

Large Scale Fleet

The large scale fleet comprised 822 vessels with a combined gross tonnage of 61.3 thousand GT and a total power of 165.5 thousand kW, representing 27% of the active Portuguese fleet. The majority of large scale fleet use mobile gears (purse seine, demersal trawl and dredges) and in 2014 generated 5 199 jobs, representing 61% of total fleet employment. In 2014, the activity of this fleet decreased but income and the majority of the costs remained stable. The economic performance achieved remained approximately the same of the previous year, with Gross Value Added (GVA), gross profit and net profit increasing due to the amount of subsidies received, the low fuel costs and a slight reduction on crew costs. Net profit margin increased to 9%. Investments are increasing over the years showing a will for the sector to remain in business.

Distant-water fleet

The distant water fleet comprised 26 vessels in 2014, including 12 demersal trawlers and 15 surface longliners, with a combined gross tonnage of 8.9 thousand GT and a total engine power of 17.2 thousand kW. In 2014 the fleet generated 381 jobs. Demersal trawlers and surface longliners have distinct areas of operation. While the first group operates on the NAFO and Norwegian waters/Svalbard catching mainly cod and red fishes, and as so highly dependent on quotas limitations, the second group operates on the South Atlantic, IOTC and in one case, on the Pacific Ocean, targeting swordfish and blue shark. Comparing 2014 to 2013, there was also a decrease in fleet activity, but with higher landings and jobs. In terms of economic performance, the fleet showed improvements in 2014 with an estimated Gross Value Added (GVA), gross profit and net profit of €12.4 million, €7.4 million and €2.8 million, respectively.

Outermost region fleets

Madeira

The Madeiran fleet consisted of 436 vessels in 2014, having a combined gross tonnage (GT) of 3.9 thousand and an engine power of 15.9 thousand kW. 89.5% of these fleet had an overall length of 12 meters or less and the active fleet amounted to only 86 vessels in 2014. The Madeiran fleet develops its activity mainly in Subarea 2 ZEE-Madeira, with vessels operating in certain seasons of the year in Azorean waters and the Canary Islands, under reciprocity agreements. The majority of the active vessels operated with long-lines and the most representative species are tuna, black swordfish and small pelagic (mackerel and horse mackerel) representing about 91% of the total of landings.

Azores

In 2014, the fleet of Azores consisted of 767 vessels, having a combined gross tonnage of 8.4 thousand GT and an engine power of 51.4 thousand kW. 85.5% of this fleet had an overall length of 12 meters or less and the active fleet represents 78.3% of the fleet. The Azorean fleet develops its activity mainly in Sub-area Azores EEZ, and is licensed mostly for longliners (HOK) and nets (DFN). The most representative species are; tuna, swordfish, mackerel, conger eel and horse mackerel representing around 66% of the total of landings.

Performance results of selected fleet segments

The Portuguese fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Portuguese Exclusive Economic Zone (27.9.a for the mainland fleet, 27.10 for the Azores's fleet and CECAF 34.1.2 for the Madeira's fleet). The national fleet consisted of 54 (DCF) fleet segments in 2014, and 6 inactive length classes. A short description of the most important segments is provided below.

Demersal trawl and seine over 40m (mainland fleet) – 12 vessels made up this segment which operates predominantly in Area 27 (NAFO, Norway, Banana hole and Irminger). The fleet targets a variety of species but in particular Atlantic Cod, Atlantic redfish and Greenland halibut. In 2014, the total value of landings was around €52.9 million and around 322 FTEs were employed in this fleet segment, contributing to 15% and 3.8% of the total income from landings and FTEs generated by the Portuguese fishing fleet respectively. This fleet segment was reasonably profitable, with a reported gross profit of around €32.6 million and net profit of €10.1 million in 2014.

Demersal trawl and seine 24-40m (mainland fleet) – 61 vessels made up this segment in 2014; the fleet targets a variety of species but in particular deep water rose shrimp, Atlantic horse mackerel and Atlantic mackerel. In 2014, the total value of landings was around €42 million and around 458 FTEs were employed in this fleet segment, contributing to 12% and 5% of the total income from landings and FTEs generated by the Portuguese fishing fleet, respectively. The fleet segment reported a gross profit of around €19.6 million and net profit of -€82 thousand.

Hooks 24-40m (OFR – mainland fleet) – 9 vessels made up this segment, which operates predominantly along the African Coast and in the Indian Ocean (FAO areas 34, 41, 51 and 57). The fleet targets a variety of species but in particular large pelagic fishes such as blue shark, bigeye tuna and swordfish. In 2014, the income from landings reached

€7.9 million and 115 FTEs were employed in this fleet segment, contributing 2.4% and 1.4% of the total income from landings and FTEs generated by the Portuguese fishing fleet, respectively. This fleet segment had a reported gross profit of around €3.5 million and net profit of €0.6 million in 2014. This is an improvement of performance relating to 2013 when there was an adjustment in the capacity of the segment targeting swordfish in the Atlantic Ocean north of 5º N.

Purse seine 18-24m (mainland fleet) – 51 vessels made up this segment in 2014, which operates predominantly in Area 27 (27.9.a and 27.8.c). The fleet targets a variety of species but in particular small pelagic fishes, such as Atlantic pilchard, chub mackerel and Atlantic horse mackerel. In 2014, the total value of landings was €23.6 million and the fleet segment employed around 533 FTEs, contributing 6.7% and 6.3% of the total income from landings and FTEs, respectively. In 2014 this segment's profitability deteriorated, due to constraints on its activity, imposed through a management plan on the sardine. The fleet segment achieved a reported gross profit of around €4.4 million and net profit of €1.3 million. The average price per kg continued its upward trend in 2013, contributing to the stability of the segment.

Hooks 24-40m (Azores) – This fleet segment generates over 37% of total landings value and around 46% of total weight in Azores. It's composed by 26 vessels operating exclusively in Area 27.10.a. The fleet targets mainly tuna fishes (Big Eye tuna, Skipjack and Albacore). In 2014 the total value from landings was €11.4 million and the fleet segment employed 195 FTEs. Albeit the importance of the fleet segment, its going through difficult years with weak profitability, achieving a reported gross profit of €2 million and net profit of -€1.4 million.

Hooks 12-18m (Madeira) - This fleet segment generates over 50% of total landings value and around 37% of total weight in Madeira. It's composed by 18 vessels operating exclusively in Madeiran waters (34.1.2). The fleet targets mainly Black Scabbard Fish (BSF), which constitutes over 89% of the fleet segment landings value. In 2014 the total value from landings was €5.6 million and the fleet segment employed 170 FTEs. The fleet segment remained profitable over the period 2008-2014, generating a reported gross profit of €0.9 million and a net profit of €0.7 million.

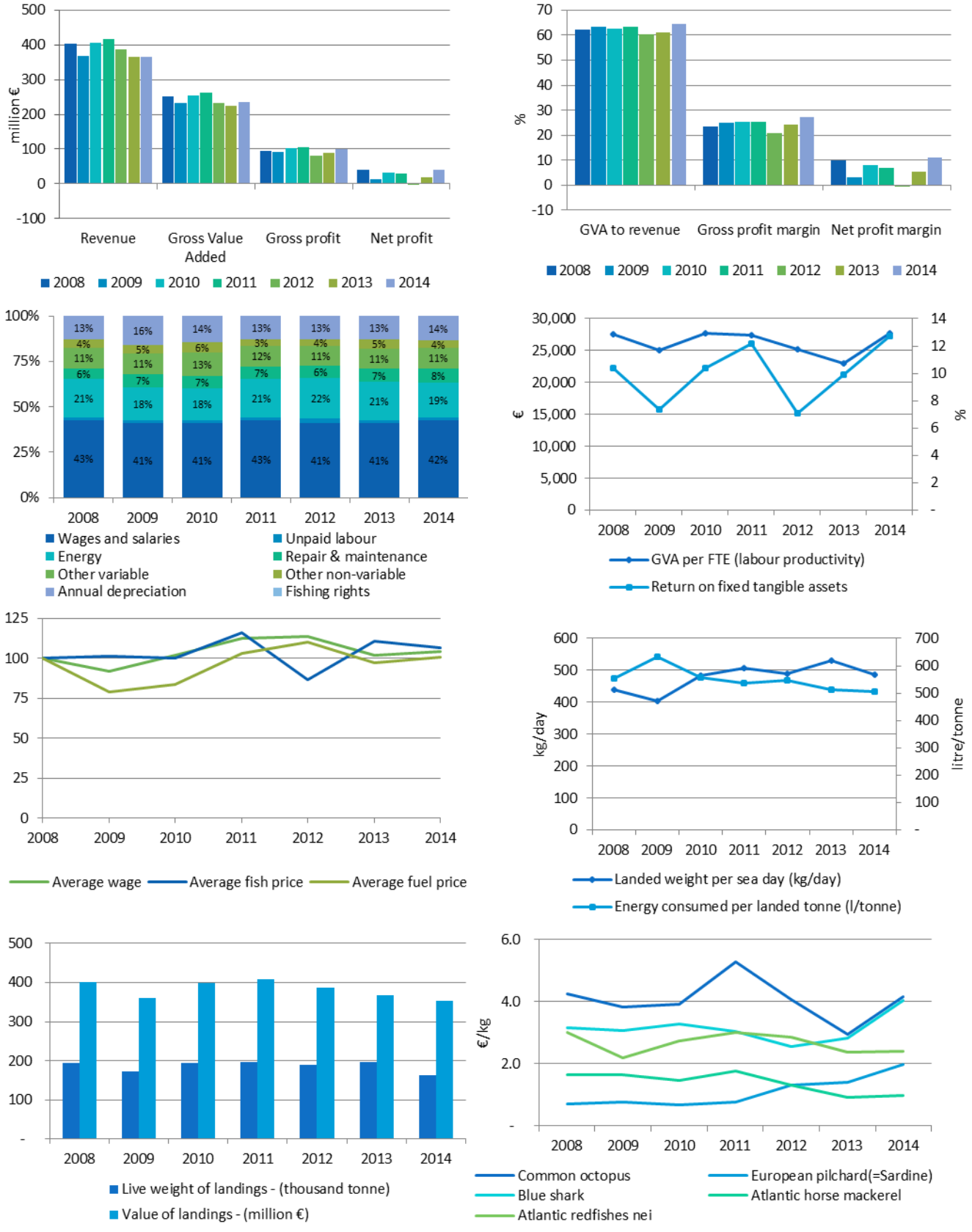
Projections for 2015 and outlook

Preliminary results for 2015 forecast a 15% increase in landed weight and a 5% increase in landed value. Projections suggest that relatively stable effort combined with a decrease in fuel costs (-20%) fostered improvements to economic performance in 2015: GVA (+12%), gross profit (+23%) and net profit (+69%). GVA per revenue is amongst the highest in the EU at 71%.

These economic gains are projected to stall and decline slightly in 2016, with landed weight decreasing by 1% and landed value decreasing by 9%. Gross profit margins and net profit margins remain relatively stable at 21% and 19% respectively.

Data issues

Some differences were detected in the total value of landings and income from landings, as they are the result of two different data collection procedures, the first from administrative sources, the second from the annual economic survey to the fleet. Differences should be less than 5%, according to the survey specifications.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.17 Portugal: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.76 Portugal: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	8,770	8,731	8,655	8,507	8,399	8,311	8,256		-1%	-4%
Number of Inactive vessels_ms	(#)	4,016	4,105	4,178	4,260	4,316	4,287	4,311		1%	3%
Vessel tonnage	(thousand GT)	107.2	107.7	104.4	102.2	101.1	100.1	100.4		0%	-3%
Engine power	(thousand kW)	389.2	393.2	383.6	374.9	371.2	368.0	368.1		0%	-3%
Average vessel age	(year)	26	27	28	28	29	30	31		3%	10%
Average vessel length	(metre)	7	7	7	7	7	7	7		0%	0%
Enterprises with one vessel	(#)	2,985	3,042	3,106	3,126	3,187	3,342	3,474		4%	11%
Enterprises with 2 to 5 vessels	(#)	142	151	152	158	161	173	180		4%	15%
Enterprises with more than 5 vessels	(#)	1	1	1	3	3	3	3		0%	50%
FTE	(#)	9,155	9,260	9,155	9,614	9,241	9,748	8,515		-13%	-9%
Total employed	(person)	17,239	17,860	16,583	18,258	16,754	17,867	16,992		-5%	-2%
Days at sea	(thousand day)	441.1	425.0	402.3	390.9	385.4	368.8	335.6		-9%	-17%
Fishing days	(thousand day)	399.6	383.7	362.1	351.9	348.9	331.5	321.5		-3%	-11%
Number of fishing trips	(thousand)	382	371	357	343	336	313	311		-1%	-11%
Live weight of landings	(thousand tonne)	193.9	171.6	194.7	197.7	189.1	196.0	163.4		-17%	-14%
Value of landings	(million €)	400.8	361.0	399.2	408.9	386.8	367.7	353.4		-4%	-9%
Income from landings	(million €)	402.9	367.2	402.5	412.7	382.6	362.9	363.7		0%	-6%
Other income	(million €)	1.28	0.94	3.56	3.77	3.38	1.87	1.18		-37%	-52%
Direct income subsidies	(million €)	-	4.15	3.26	1.95	0.99	0.09	4.25		4597%	144%
Income from leasing fishing rights	(million €)	-	-	-	-	-	-	-			
Wages and salaries of crew	(million €)	151.55	135.10	144.82	151.89	144.68	131.08	130.38		-1%	-9%
Unpaid labour value	(million €)	5.83	5.74	6.00	5.99	8.72	4.81	5.56		16%	-10%
Repair & maintenance costs	(million €)	21.47	23.57	24.41	23.85	22.77	22.49	24.79		10%	7%
Other variable costs	(million €)	40.55	37.69	44.27	41.62	38.17	35.65	34.20		-4%	-14%
Annual depreciation costs	(million €)	45.83	52.71	51.19	45.93	45.65	41.05	41.50		1%	-12%
Rights costs	(million €)	-	-	-	-	-	-	-			
Opportunity cost of capital	(million €)	8.32	27.26	19.63	31.43	36.21	27.53	18.10		-34%	-28%
Tangible asset value (replacement)	(million €)	470	528	498	490	480	469	457		-3%	-7%
Fishing rights	(million €)	-	-	-	-	-	-	-			
Investments	(million €)	9.4	21.1	22.5	14.4	11.5	13.3	17.9		35%	16%
Gross Value Added	(million €)	252.1	232.6	253.8	263.6	233.2	223.5	235.5		5%	-3%
GVA to revenue	(%)	62.4	63.2	62.5	63.3	60.4	61.3	64.5		5%	4%
Gross profit	(million €)	94.7	91.8	103.0	105.7	79.8	87.6	99.5		14%	6%
Gross profit margin	(%)	23.4	24.9	25.4	25.4	20.7	24.0	27.3		14%	14%
Net profit	(million €)	40.5	11.8	32.2	28.3	- 2.0	19.0	39.9		110%	85%
Net profit margin	(%)	10.0	3.2	7.9	6.8	- 0.5	5.2	10.9		110%	101%
GVA per FTE (labour productivity)	(thousand €)	28	25	28	27	25	23	28		21%	6%
Return on fixed tangible assets	(%)	10	7	10	12	7	10	13		28%	33%

Table 5.77 Portugal: National fleet statistics and economic performance results based on fleet segment level data

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	4754	4626	4477	4247	4083	4024	3945	*3,876*	*964*		-2%	-75%
Total employed	(person)	17239	17860	16584	18259	16756	17870	16991	*16,637*	*16,790*		-2%	1%
FTE	(#)	9,154	9,260	9,157	9,615	9,243	9,751	8,514	*8,293*	*8,476*		-3%	2%
Days at sea	(day)	441,081	424,951	402,326	390,878	385,422	368,778	335,577	*340,427*	*275,642*		1%	-19%
Energy consumption	(thousand litres)	107,655	108,593	108,467	106,055	103,622	100,410	82,871	*91,016*	*73,183*		10%	-20%
Live weight of landings	(tonne)	193,902	171,605	194,721	197,710	187,744	195,819	163,403	*188,173*	*185,850*		15%	-1%
Value of landings	(thousand €)	400,793	360,964	399,230	408,894	380,976	367,381	353,393	*370,829*	*369,286*		5%	0%
Income from landings	(thousand €)	403,034	367,323	402,578	412,851	382,627	362,879	363,729	*373,289*	*371,764*		3%	0%
Other income	(thousand €)	1,284	938	3,560	3,771	3,383	1,866	1,181	*2,060*	*2,069*		74%	0%
Wages and salaries of crew	(thousand €)	151,553	135,102	144,817	151,891	144,681	131,083	130,384	*136,459*	*135,953*		5%	0%
Unpaid labour value	(thousand €)	5,829	5,745	5,996	5,989	8,723	4,807	5,558	*6,198*	*6,228*		12%	0%
Energy costs	(thousand €)	74,258	59,374	62,673	75,379	78,723	67,281	57,662	*46,278*	*42,944*		-20%	-7%
Repair & maintenance costs	(thousand €)	21,474	23,571	24,409	23,851	22,773	22,488	24,791	*21,991*	*22,396*		-11%	2%
Other variable costs	(thousand €)	40,548	37,690	44,272	41,619	38,173	35,654	34,199	*29,294*	*36,179*		-14%	24%
Other non-variable costs	(thousand €)	15,825	14,874	20,817	12,074	13,132	15,864	12,781	*13,116*	*13,378*		3%	2%
Annual depreciation costs	(thousand €)	45,835	52,707	51,188	45,927	45,649	41,052	41,496	*40,387*	*40,972*		-3%	1%
Opportunity cost of capital	(thousand €)	6,301	20,825	15,075	24,252	27,734	21,062	13,526	*6,440*	*6,538*		-52%	2%
Tangible asset value (replacement)	(thousand €)	355,976	403,577	382,618	378,346	367,819	358,800	341,571	*336,486*	*341,633*		-1%	2%
Gross Value Added	(thousand €)	252,051	232,610	253,846	263,583	233,209	223,458	235,476	*264,669*	*258,935*		12%	-2%
Gross profit	(thousand €)	94,669	91,764	103,033	105,703	79,805	87,567	99,534	*122,012*	*116,754*		23%	-4%
Net profit	(thousand €)	42,533	18,232	36,769	35,524	6,423	25,454	44,512	*75,186*	*69,244*		69%	-8%

Table 5.78 Portugal: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF							DWF														
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend DWF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	3,792	3,665	3,540	3,338	3,230	3,185	3,097	922	923	898	874	819	812	822	40	38	39	35	34	27	26		-3%	-10%		1%	-6%		-4%	-27%
Vessel tonnage (thousand GT)	7.9	7.8	7.7	7.5	7.5	7.4	7.4	63.8	65.6	63.2	63.0	60.9	61.7	61.3	13.5	12.0	12.7	11.5	11.1	9.1	8.9		0%	-3%		-1%	-3%		-3%	-24%
Engine power (thousand kW)	107.9	108.1	107.2	103.7	102.9	101.0	99.9	177.8	179.4	171.6	169.7	164.1	166.1	165.5	26.5	24.4	25.0	22.5	21.8	18.0	17.2		-1%	-5%		0%	-3%		-5%	-25%
FTE (#)	3,246	3,063	2,827	3,370	3,022	3,413	2,967	5,537	5,835	5,949	5,835	5,825	6,037	5,199	371	362	381	410	396	301	348		-13%	-6%		-14%	-11%		16%	-6%
Total employed (person)	9,397	9,321	8,523	10,075	8,862	9,857	8,957	7,431	8,124	7,651	7,751	7,478	7,668	7,653	411	415	410	433	416	345	381		-9%	-4%		0%	0%		10%	-6%
Days at sea (thousand day)	285.1	272.0	253.6	245.8	248.5	236.4	213.8	146.5	144.5	138.9	136.4	130.2	126.7	116.4	9.4	8.4	9.8	8.7	6.7	5.6	5.4		-10%	-17%		-8%	-15%		-4%	-34%
Fishing days (thousand day)	264.8	253.7	236.2	228.4	231.2	218.8	212.1	127.8	123.7	118.9	116.7	111.5	107.5	104.5	7.0	6.3	7.1	6.8	6.2	5.2	4.9		-3%	-11%		-3%	-11%		-5%	-23%
Number of fishing trips (thousand)	256	245	232	224	227	213	215	126	125	125	119	109	99	96	0.3	0.2	0.3	0.3	0.3	0.3	0.3		1%	-8%		-4%	-18%		-10%	-3%
Energy consumption (million litre)	12.3	12.6	12.7	11.7	12.1	10.8	7.7	78.7	81.1	78.9	78.7	78.9	79.0	65.1	16.6	14.9	16.9	15.6	12.7	10.6	10.1		-29%	-36%		-18%	-18%		-5%	-31%
Live weight of landings (thousand tonne)	22.0	19.4	21.9	17.8	20.5	22.1	20.2	162.5	142.7	160.4	168.3	155.7	166.3	134.5	9.5	9.5	12.4	11.6	11.5	7.5	8.7		-8%	-2%		-19%	-16%		16%	-16%
Value of landings (million €)	95.8	76.6	79.6	76.6	76.7	76.1	82.3	277.5	253.5	278.3	295.4	273.7	265.4	249.2	27.5	30.9	41.3	36.9	30.5	25.8	21.9		8%	3%		-6%	-9%		-15%	-32%
Income from landings (million €)	97.5	79.1	79.8	76.6	76.4	75.7	83.0	277.8	255.5	279.3	297.5	277.5	258.0	255.4	27.5	32.6	43.4	38.7	28.8	29.3	25.3		10%	3%		-1%	-7%		-14%	-24%
Other income (million €)	0.1	0.1	0.8	0.4	0.5	0.2	0.0	1.2	0.7	2.4	2.9	2.7	1.6	0.9	-	0.1	0.3	0.5	0.2	0.1	0.2		-89%	-95%		-41%	-51%		118%	5%
Direct income subsidies (million €)	-	0.12	0.21	0.02	0.00	0.00	0.01	-	3.93	2.74	1.90	0.99	0.09	4.24	-	0.10	0.31	0.03	-	-	-		241%	-83%		4743%	164%			-100%
Wages and salaries of crew (million €)	37.5	30.2	30.7	29.4	29.9	28.9	30.9	108.9	100.1	107.1	115.6	110.0	96.7	94.5	5.2	4.8	7.0	6.9	4.9	5.5	5.0		7%	-1%		-2%	-11%		-9%	-13%
Unpaid labour value (million €)	4.3	4.8	4.0	4.8	8.2	4.2	4.9	1.5	1.0	2.0	1.1	0.5	0.6	0.6	-	-	-	-	-	-	-		17%	-2%		8%	-44%			
Energy costs (million €)	8.4	7.5	7.6	8.5	8.6	8.0	7.2	54.5	43.7	45.3	55.4	60.5	51.9	44.2	11.3	8.2	9.8	11.5	9.6	7.4	6.3		-9%	-11%		-15%	-15%		-16%	-35%
Repair & maintenance costs (million €)	3.0	3.3	3.3	3.1	3.1	3.1	3.2	15.7	17.5	17.7	17.7	17.2	17.1	19.5	2.8	2.8	3.4	3.0	2.5	2.2	2.1		1%	0%		14%	14%		-4%	-24%
Other variable costs (million €)	6.3	5.4	5.2	5.0	4.9	4.8	5.5	28.6	26.8	29.7	30.2	28.0	25.5	24.8	5.7	5.5	9.4	6.5	5.2	5.4	3.8		15%	5%		-3%	-12%		-28%	-39%
Other non-variable costs (million €)	2.7	1.8	2.8	1.9	1.9	2.2	1.8	11.6	11.4	15.2	9.3	10.0	11.8	10.1	1.6	1.7	2.7	0.9	1.2	1.8	0.9		-19%	-19%		-15%	-13%		-49%	-44%
Annual depreciation costs (million €)	8.7	9.7	9.6	9.0	9.2	9.1	8.8	31.6	37.5	35.7	31.7	31.6	27.9	29.2	5.5	5.6	5.9	5.3	4.8	4.1	3.5		-3%	-4%		5%	-11%		-15%	-33%
Opportunity cost of capital (million €)	1.29	4.12	3.10	4.73	5.51	4.21	2.70	4.23	14.50	10.23	16.67	19.09	14.82	9.68	0.78	2.21	1.75	2.85	3.13	2.03	1.14		-36%	-29%		-35%	-27%		-44%	-46%
Tangible asset value (replacement) (million €)	72.8	79.8	78.7	73.7	73.1	71.7	68.1	238.8	281.0	259.6	260.1	253.2	252.5	244.5	44.3	42.8	44.3	44.5	41.6	34.6	28.9		-5%	-9%		-3%	-5%		-16%	-31%
Investments (million €)	2.7	4.6	2.9	1.3	1.3	1.2	1.6	6.0	14.4	18.1	11.9	9.2	11.3	15.5	0.6	2.1	1.4	1.2	1.0	0.8	0.8		34%	-33%		37%	31%		-2%	-32%
Gross Value Added (million €)	77.3	61.1	61.6	58.5	58.3	57.7	65.3	168.7	156.9	173.8	187.8	164.4	153.2	157.9	6.1	14.6	18.4	17.3	10.5	12.6	12.4		13%	5%		3%	-6%		-2%	-7%
GVA to revenue (%)	79.2	77.2	76.4	76.0	75.8	76.0	78.6	60.4	61.2	61.7	62.5	58.7	59.0	61.6	22.2	44.7	42.1	44.2	36.4	42.8	48.5		3%	2%		4%	2%		13%	25%
Gross profit (million €)	35.5	26.1	26.9	24.2	20.3	24.5	29.4	58.3	55.8	64.8	71.0	53.9	55.9	62.7	0.9	9.8	11.4	10.5	5.7	7.1	7.4		20%	12%		12%	5%		4%	-2%
Gross profit margin (%)	36.3	33.0	33.3	31.5	26.3	32.4	35.4	20.9	21.8	23.0	23.6	19.2	21.6	24.5	3.4	30.1	26.1	26.7	19.6	24.2	29.0		9%	10%		14%	13%		20%	34%
Net profit (million €)	25.5	12.3	14.2	10.5	5.6	11.3	17.9	22.5	3.8	18.9	22.7	3.1	13.3	23.9	- 5.4	2.1	3.8	2.3	- 2.3	0.9	2.7		59%	35%		80%	70%		196%	1076%
Net profit margin (%)	26.1	15.6	17.6	13.7	7.3	14.9	21.5	8.0	1.5	6.7	7.6	1.1	5.1	9.3	- 19.5	6.3	8.6	5.9	- 7.9	3.2	10.8		45%	36%		82%	86%		241%	1985%
GVA per FTE (labour productivity) (thousand €)	23.8	20.0	21.8	17.3	19.3	16.9	22.0	30.5	26.9	29.2	32.2	28.2	25.4	30.4	16.5	40.4	48.3	42.3	26.6	41.7	35.5		30%	11%		20%	6%		-15%	-1%

Table 5.79 Portugal: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development . trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
PRT A27 DTS40XX IWE	12	322	2,031	819	18,119	52,857	54,269	32,603	60.1	18,177	33.5	10,097	18.61	44.8	101	25	High	244%	Improved
PRT A27 DTS2440	61	458	12,924	768	28,962	42,290	44,812	19,581	43.7	7,072	15.8	- 82	- 0.18	27.3	43	4	Weak	96%	Improved
PRT A27 PGP0010	1,701	1,423	123,424	337	9,411	37,359	37,364	29,062	77.8	11,743	31.4	6,443	17.24	12.2	20	25	High	22%	Improved
PRT A27 PS1824	51	533	7,267	124	26,919	23,611	24,180	17,577	72.7	4,427	18.3	1,267	5.24	24.7	33	10	Reasonable	-38%	Deteriorated
PRT A27 HOK2440 P3°	26	195	3,775	695	5,118	11,416	11,649	5,989	51.4	1,955	16.8	- 1,398	- 12.00	20.7	31	- 4	Weak	-627%	Deteriorated
PRT A27 PS2440	18	217	2,444	159	9,969	11,541	11,562	8,283	71.6	1,904	16.5	382	3.31	29.4	38	8	Reasonable	-43%	Deteriorated
PRT A27 FPO1218	57	373	8,510	319	3,332	11,536	11,545	8,816	76.4	4,056	35.1	2,535	21.96	12.8	24	32	High	125%	Improved
PRT A27 HOK1824	22	246	4,092	502	2,993	10,298	10,975	6,718	61.2	2,362	21.5	911	8.30	17.7	27	13	Reasonable	-5%	Stable
PRT A27 HOK2440	20	198	3,648	1,204	2,673	10,507	10,907	5,197	47.7	2,569	23.6	224	2.06	13.3	26	6	Reasonable	32%	Improved
PRT A27 DFN1218	63	371	10,740	530	2,795	10,241	10,285	7,524	73.2	2,966	28.8	1,229	11.95	12.3	20	15	High	502%	Improved
PRT A27 HOK0010 P3	358	376	22,606	386	2,420	9,987	10,029	8,074	80.5	4,605	45.9	2,928	29.19	9.2	21	32	High	28%	Improved
PRT OFR HOK2440 IWE	9	115	2,275	1,004	3,846	7,922	8,997	3,508	39.0	2,334	25.9	629	6.99	10.2	31	10	Reasonable	600%	Improved
PRT A27 FPO0010	163	157	12,875	363	1,536	7,730	7,794	6,307	80.9	3,296	42.3	2,550	32.71	19.2	40	59	High	15%	Improved
PRT OFR DTS2440 IWE	6	74	951	2,980	922	7,400	7,563	4,659	61.6	2,880	38.1	1,865	24.66	24.0	63	36	High	366%	Improved
PRT A27 PS1218	34	187	4,580	81	9,209	7,491	7,549	5,880	77.9	1,910	25.3	1,165	15.43	21.2	31	28	High	13%	Improved
PRT A27 PGP1218	37	274	5,701	514	2,246	7,266	7,312	5,124	70.1	2,393	32.7	1,239	16.95	10.0	19	20	High	178%	Improved
PRT A27 HOK1012 P3	73	334	7,953	554	1,934	6,889	6,889	5,343	77.6	2,535	36.8	1,586	23.03	8.4	16	32	High	71%	Improved
PRT A27 DFN1824	27	342	5,734	597	2,511	6,635	6,673	4,359	65.3	1,626	24.4	197	2.95	8.0	13	6	Reasonable	122%	Improved
PRT OFR HOK1218 P2	18	170	3,940	580	1,859	5,566	6,005	3,998	66.6	885	14.7	668	11.12	18.3	24	42	High	-43%	Deteriorated
PRT OFR HOK40XX IWE	5	64	1,065	1,120	2,311	4,340	5,947	2,422	40.7	1,559	26.2	449	7.54	13.5	38	9	Reasonable	123%	Improved
PRT A27 FPO1012	52	126	7,051	435	1,241	5,930	5,938	4,664	78.5	2,403	40.5	1,693	28.52	17.9	37	43	High	16%	Improved
PRT A27 HOK1218 P3	41	174	4,566	349	2,129	5,750	5,750	4,087	71.1	1,524	26.5	825	14.35	14.7	23	23	High	18%	Improved
PRT A27 HOK1218	23	180	3,710	452	1,625	5,257	5,400	3,493	64.7	984	18.2	490	9.08	13.9	19	17	Reasonable	-39%	Deteriorated
PRT A27 DFN0010	408	180	15,427	346	982	4,530	4,594	3,663	79.7	914	19.9	40	0.86	15.3	20	5	Reasonable	202%	Improved
PRT A27 DTS1824	7	37	1,511	1,683	786	3,345	3,367	1,747	51.9	568	16.9	62	1.83	31.8	47	6	Reasonable	-44%	Deteriorated
PRT A27 PS1012	28	111	2,825	148	2,914	3,269	3,282	2,414	73.6	865	26.4	419	12.77	14.0	22	20	High	-34%	Deteriorated

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development. trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
PRT OFR HOK2440 P2	6	95	1,095	536	1,606	2,247	2,971	1,768	59.5	624	21.0	- 193	- 6.49	12.0	19	0	Weak	63%	Improved
PRT A27 DTS1218	9	42	1,829	1,115	824	2,438	2,588	1,549	59.9	626	24.2	313	12.11	22.0	37	19	High	7%	Improved
PRT A27 HOK0010	146	89	9,530	225	578	2,363	2,378	1,963	82.6	636	26.7	412	17.35	14.9	22	37	High	418%	Improved
PRT A27 DFN1012	25	64	3,143	625	467	2,313	2,316	1,832	79.1	888	38.4	569	24.56	14.7	29	31	High	93%	Improved
PRT A27 DRB1218	15	51	1,555	347	921	2,259	2,270	1,798	79.2	1,002	44.1	706	31.09	15.6	35	39	High	323%	Improved
PRT A27 HOK1012	12	41	1,269	518	286	1,231	2,070	1,783	86.1	1,332	64.3	1,187	57.35	11.0	43	123	High	160%	Improved
PRT A27 FPO1824	7	76	1,460	367	767	2,021	2,057	1,436	69.8	637	31.0	254	12.37	10.5	19	12	High	98%	Improved
PRT A27 MGO0010	31	122	2,363	45	2,191	1,781	2,054	1,741	84.8	778	37.9	638	31.09	7.9	14	72	High	232%	Improved
PRT A37 FPO2440	2	27	502	6,141	73	1,553	1,564	934	59.7	454	29.0	308	19.70	17.8	35	24	High	196%	Improved
PRT A27 TBB0010	52	99	4,233	703	377	1,281	1,281	869	67.9	371	29.0	201	15.67	5.0	9	23	High	10831%	Improved
PRT A27 DTS0010	5	17	936	310	343	1,245	1,254	1,043	83.2	602	48.0	512	40.83	25.9	61	91	High	58%	Improved
PRT A27 PS0010	24	28	1,265	170	933	1,247	1,251	1,002	80.1	477	38.1	304	24.30	18.8	36	34	High	0%	Stable
PRT A27 PS1012 P3°	13	106	2,265	377	915	1,191	1,213	904	74.5	553	45.6	395	32.56	3.3	9	43	High	240%	Improved
PRT OFR HOK1824 P2	3	38	559	671	445	1,056	1,071	573	53.5	74	6.9	- 97	- 9.10	13.1	15	- 7	Weak	36%	Improved
PRT A27 PMP0010	45	26	2,436	346	341	1,047	1,051	787	74.9	214	20.3	66	6.23	22.1	30	12	Reasonable	11%	Improved
PRT OFR HOK0010 P2°	51	74	3,077	423	475	1,308	1,044	675	64.7	263	25.2	124	11.85	5.6	9	18	High	-54%	Deteriorated
PRT A27 DRB1012	24	38	2,134	907	518	1,003	1,003	472	47.0	158	15.8	- 175	- 17.47	8.2	12	- 4	Weak	13%	Improved
PRT A27 DRB0010	44	42	4,428	703	579	999	999	529	53.0	119	11.9	- 87	- 8.67	9.8	13	- 2	Weak	67%	Improved
PRT A27 DFN0010 P3	33	38	2,713	290	269	683	684	507	74.1	306	44.7	229	33.43	5.3	13	50	High	26%	Improved
PRT OFR MGP1824 P2°	3	36	500	156	510	627	637	410	64.3	74	11.7	10	1.51	9.3	11	6	Reasonable	108%	Improved
PRT A27 PGP1012	10	15	820	478	165	595	605	426	70.4	201	33.2	49	8.09	15.0	28	9	Reasonable	-10%	Deteriorated
PRT A27 TBB1012	10	27	1,076	493	327	584	585	411	70.2	160	27.3	59	10.12	9.3	15	11	High	261%	Improved
PRT A27 MGO1012	5	25	516	80	279	470	470	373	79.4	173	36.7	131	27.78	8.0	15	48	High	76%	Improved
PRT A27 PS0010 P3	25	32	2,400	601	280	345	429	307	71.6	198	46.1	156	36.34	3.4	10	39	High	776%	Improved
PRT A27 PGP0010 P3°	20	24	1,458	608	97	288	288	175	60.7	72	24.9	5	1.66	4.3	7	5	Reasonable	-83%	Deteriorated
PRT OFR MGP0010 P2	5	5	390	152	77	252	142	119	83.8	33	22.9	24	16.75	17.3	24	56	High	-32%	Deteriorated

Table 5.80 Portugal: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)							Live weight of landings (tonne)							Average landed price (real) (€)						
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014
Common octopus	42.7	26.3	39.3	36.4	36.7	33.8	40.2	10.1	6.9	10.0	6.9	9.0	11.5	9.6	4.3	3.8	3.9	5.3	4.1	2.9	4.2
European pilchard(=Sardine)	55.4	51.4	48.0	48.1	42.1	38.6	31.8	78.3	67.0	69.9	61.4	32.5	27.7	16.1	0.7	0.8	0.7	0.8	1.3	1.4	2.0
Blue shark	21.3	21.6	28.3	26.7	18.6	15.0	25.7	6.8	7.1	8.7	8.8	7.3	5.3	6.3	3.2	3.1	3.3	3.0	2.6	2.8	4.1
Atlantic horse mackerel	16.3	19.0	17.3	19.0	21.6	17.5	21.0	10.0	11.5	11.8	10.8	16.4	19.2	21.2	1.6	1.7	1.5	1.8	1.3	0.9	1.0
Atlantic redfishes nei	18.4	20.3	25.6	28.2	23.8	21.4	19.6	6.2	9.3	9.4	9.3	8.3	9.0	8.2	3.0	2.2	2.7	3.0	2.9	2.4	2.4
Atlantic cod	9.5	8.3	11.8	14.5	13.8	19.6	14.6	3.2	3.8	4.3	4.8	4.8	8.3	6.2	3.0	2.2	2.7	3.0	2.9	2.4	2.4
Swordfish	4.3	5.3	7.1	5.7	4.9	6.5	11.0	1.2	1.4	1.9	1.6	1.8	1.9	2.6	3.7	3.7	3.8	3.5	2.8	3.4	4.2
Bigeye tuna	1.6	1.1	3.1	1.5	0.7	0.5	9.6	0.6	0.4	0.7	0.4	0.2	0.2	4.3	2.7	2.8	4.4	3.5	3.0	2.5	2.3
Atlantic mackerel	2.6	2.5	5.1	7.1	8.1	5.7	8.9	1.9	2.1	3.9	6.1	5.7	4.2	8.5	1.4	1.2	1.3	1.2	1.4	1.3	1.1
Chub mackerel	9.2	3.5	6.7	14.2	12.5	17.9	7.5	30.7	15.4	24.5	33.1	36.7	44.2	28.3	0.3	0.2	0.3	0.4	0.3	0.4	0.3

5.19 ROMANIA

Short description of the national fleet

Fleet capacity

In 2015, the Romanian fishing fleet consisted of 151 registered vessels, with a combined gross tonnage of 0.9 thousand GT, a total power of 6.0 thousand kW and an average age of 18 years. The size of the Romania fishing fleet decreased between 2008 and 2015, with the number of vessels falling by 58% and GT and kW by 41% and 11% respectively. The major factors causing the fleet decrease over the time period included the restructuring plan for the fleet, less investment in the industry (financial difficulties encountered in this period did not make the sector attractive to investors) and the lack of fishing infrastructure (no specialised ports on the Romanian coast - landing sites and first sale centres need modernizing). No subsidies or any other kind of support were granted by the authorities to possible investors or fishers, which used partly the availabilities of the EFF for fleet restructuring.

Fleet structure

The Romanian fishing flees nationally divided into a small-fleet segment (75% of all active vessels in 2015) with an engine power of 2.1 thousand kW and a large-fleet segment (25% of all active vessels in 2015) with an engine power of 3.7 thousand kW. The number of vessels in small scale fleet decrease for 46% from 2008-2015, while the number of large scale vessels increase for 132% in the same period.

Employment

In 2014, the number of fishing enterprises in the Romanian fleet totalled 77. Total employment in 2014 was estimated at 330 jobs, corresponding to 38 FTEs (note, these values are explained by the accentuated seasonality and the low qualification of fishers). The level of employment decreased between 2008 and 2015, with total employed decreasing 30% while the number of FTEs increased around 5% over the period. The major factors causing employment to decrease include a reduction of number of active vessels, a lot of fishers acting occasionally on their own because of the economic crisis and, as a consequence, the decrease of the funds available for investments and business development. The restrictive exploitation of species such as turbot (under the quota system introduced by the EC) and the fact that young fishers have not joined the sector were also reasons for the lower jobs number.

Effort

The Romania fleet spent a total of around 2.8 thousand days at sea in 2014. The total number of days at sea decreased around 21% between 2008 and 2014, with the evolution of fishing days following a similar trend. The major factors causing the decrease in days at sea include the reduction of the active vessel numbers as a result of the measures for fleet restructuring; this decrease corresponds to the continuing reduction of the number of fishers from 875 in 2008 to 330 in 2014. In the last two years activity was focused to fishing Thomas' rapa whelk due to an increase in demand in the market, especially in the tourist season, and fishers trying to reduce the effect of the quota system for turbot introduced in 2009.

The quantity of fuel consumed in 2014 totalled around 0.55 million litres, an increase of around 53% from 2013. The fuel consumption is mainly explained by the lack of investment in new equipment, despite the reducing number of days at sea and the number of active boats, but also in the improvement of the data collection process from year to year.

Production

The total weight landed by the Romanian fleet in 2014 was 2.2 thousand tonnes of seafood, with a landed value of €2.5 million. The total weight and value of landings increased overall during the period 2008 to 2014. Thomas' rapa whelk generated the highest landed value by the national fleet around €1.8 thousand, followed by turbot around €340 thousand. In terms of landings weight, in 2014 Thomas' rapa whelk was 1950 tonnes, European sprat 80 tonnes, European anchovy 60 tonnes, the main important species landed.

The prices obtained for the 5 key species remained relatively stable between 2008 and 2014. Thomas' rapa whelk, is an exception achieving its highest average price per kilo in 2011 (€4.4 per kg) due to unusual demand on the market in the tourist season, followed the next year with a calmer market, reflected also in the decreasing quantity landed. And, as mentioned, due to the switching type of sales from the "whole individual" for foreign market, instead of continuing to process (even in a preliminary stage, for restaurants buying), the price decline. The major factors causing changes in the price of individual species include the expected inverse relationship between price and availability of supplies. Another explanation is that the specialized vessels over 18m capturing sprat in 2008 were mostly inactive from 2009 onwards; this fleet segment only contained one or two vessels active during the time period, including 2014.

The economic evolution of the Romania fleet is strictly related to the changes in the structure of the fleet segments during 2008-2014 and the seasonality of small pelagic. This change resulted in the current structure of the Romanian fleet which is characterised as being an ageing small scale fleet, with a low level of technical capacity.

Economic results *for 2014 and recent trends*

National fleet performance

The fishing activity is traditional for the fishers communities. These communities comprise a small number of fishers. The decreasing number is due to the fact that the young people are not attracted by this activity. The investment lacking in the sector causes a poor level of productivity, small quantities of catches, and a low level of technical working conditions. The infrastructure for stabilisation of the activity is missing: there are no fishing ports (specialised on discharging, receiving, storing, selling, etc.). The fishing activity is largely dependent on the weather conditions in the Black Sea having very large differences of temperature between winter and summer and strong winds. The switches in fishing technique produce high instability in activity and in the process of data collection. Enterprises do not using an accounting system and they are not able to allocate costs to each kind of technique and to each gear type used. The data are delivered in bulk as a whole for the entire activity during the year, for they own small boats.

As a conclusion it should be mentioned that the fishery in Romania is not specialised, as techniques and gears used; it is a mixed small scale fishery on which the segments/techniques/gear types are not the main consideration of fishers, catching mainly small pelagic species. The quota system for better exploitation of existing stocks, in terms of stability, has to be improved by the member state. As it was also mentioned in several reports of the previous years, no income (such as: fishing rights, direct subsidies, and other income – no additional activities) other than landings income were reported/recorded by member state. The large percentage of inactive vessels, related to the diminishing number of fishers, is a reason of the poor activity and low results of the Romanian fishing fleet.

The amount of income generated by the Romanian national fleet from landings in 2014 was €2.5 million. No information is available on non-fishing income, due to the unreported data by the fishers. The Romanian fleet's total income increased 70% between 2013 and 2014. Total operating costs incurred by the Romanian national fleet in 2014 equated to €2.37 million, amounting to 95% of total income. Crew cost and fuel costs, the two major fishing expenses, were €0.80 and €0.55 million respectively. Between 2008 and 2014, total operating costs increased 144%.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Romania national fleet in 2014 were €1.5 million, €0.4 million and €0.1 million respectively. Gross Value Added (GVA), gross profit and net profit increased 77%, 57% and 30% respectively between 2013 and 2014.

In 2014, the Romanian fleet had an estimated depreciated replacement value of €3.17 million. Investments in the fleet amounted only to €0.18 million in 2014. The major factors causing this stable situation at a lower level in the capital value of the fleet include several factors: the smaller dimension of the fleet (decreased number of active vessels, number of fishers), less concentration of the capital (there still exist a large number of companies owning one small boat – less than 12m), a high dependency to the internal market, the absence of the fishing infrastructure and government subsidies system, the lack of an integrated supply chain (including an organised selling system – no fishery auction). The small companies did not develop alternative activities, resulting in no other income recorded. The sector is not so attractive for investment due to the reasons mentioned and to the constraints imposed by operating only in the Black Sea exploiting weather conditions affecting the small scale fishery – the main segment of the Romanian fleet, one of the smallest in the EU.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 18.1%, a 7% decrease from 2008. Net profit margin was estimated at 5.4% in 2014, resulting in 256% increase from 2008.

The Rate of Return on Fixed Tangible Assets (RoFTA) improved in comparison to previous and amounted 7% in 2014. Labour productivity (GVA/FTE) also record increase in period 2008- 2014 for 117%: GVA increased for 140% and the number of FTE also increased by 5% in the period analysed.

Fuel consumption per landed tonne amounted 248 litres per tonne landed in 2014. On the other hand, the landed weight per sea day increased significantly for 566% from 2008-2014.

Drivers affecting the economic performance trends

Higher income from landings and further capacity/effort reduction were the main driving forces behind the overall improvement.

Between 2008 and 2014 landing income increased for 140%, while the total number of vessels decreased for 64%.

Performance by fishing activity

Two of active segments (PMP VL00-06, PG VL06-12) belongs to small-scale fleet and two (PMP VL12-18, PMP VL24-40) belongs to the large-scale fleet.

Small-scale fleet

In 2014, there were 158 active vessels of which around 111 (70% of all active vessels) are classified as small-scale (an decrease for 46% from 2008).

The amount of income generated by the Romanian small-scale fleet in 2014 was €1.2 million. Landings income increased 47% between 2008 and 2014.

In terms of economic performance, the amount of Gross Value Added (GVA), gross profit and net profit generated by the small-scale fleet in 2014 were €0.7 million, €0.2 million and €0.1 million, respectively. Between 2008 and 2014, GVA and gross profit increased 44%, 29% respectively, while net profit decrease for 5% in the same period.

Large-scale fleet

12 vessels (8% of all active vessels) represents Romanian large-scale sector in 2014.

The amount of income generated by the Romanian large-scale fleet in 2014 was €1.3 million. Landings income increased 477% between 2008 and 2014.

In terms of economic performance, the amount of Gross Value Added (GVA), gross profit and net profit generated by the large-scale fleet in 2014 were €0.8 million, €0.1 million and €0.01 million, respectively. Between 2008 and 2014, GVA, gross profit and net profit increased 525%, 431% and 500% respectively.

Performance results of selected fleet segments

The Romanian fleet is diversified with a small range of vessel types targeting different species only in the Black Sea. The national fleet consisted of 4 main (DCF) fleet segments in 2014, with 123 active vessels. Three of the active fleet segments made a slight profit in 2014 and one of the segments makes a loss.

Vessels using passive gears only for vessels VL06-12m

PG VL06-12m, makes up the largest segment. It operates only in the Romanian waters of the Black Sea, as does all the national fleet. The fleet targets a variety of species sometimes using several gears on the same trip. The fleet particularly targets small pelagic species, such as European anchovy, European sprat, other small pelagic species as well as picked dogfish and Thomas' rapa whelk. It should be mentioned that turbot is a target species, but the quantity available is subject to EC TAC limits; this species is fished by fixed gears, using small boats. The main characteristic of the segment – for all boats used, is that during the fishing season the fishers switch from one fishing technique to another, using the same boats and targeting the mentioned species. It is not a specialized fishery, but a mixed one. The fishery includes also the artisanal fishery. This is due to the fact that investment is lacking in the sector for improvement of the quality of activity. The biggest change is observed in the increasing of the number of engines/motors used, compared with 2008. In 2014, the total value of landings was almost €1.15 million and around 23 FTEs was employed in this fleet segment, contributing more than 47% of the total income from landings and 60% of the FTEs generated by the Romanian fishing fleet, respectively. This fleet segment continued to be the most important in the Romanian fleet, with a reported gross profit of around €0.21million and net profit of €0.1 million in 2014.

Projections for 2015 and outlook

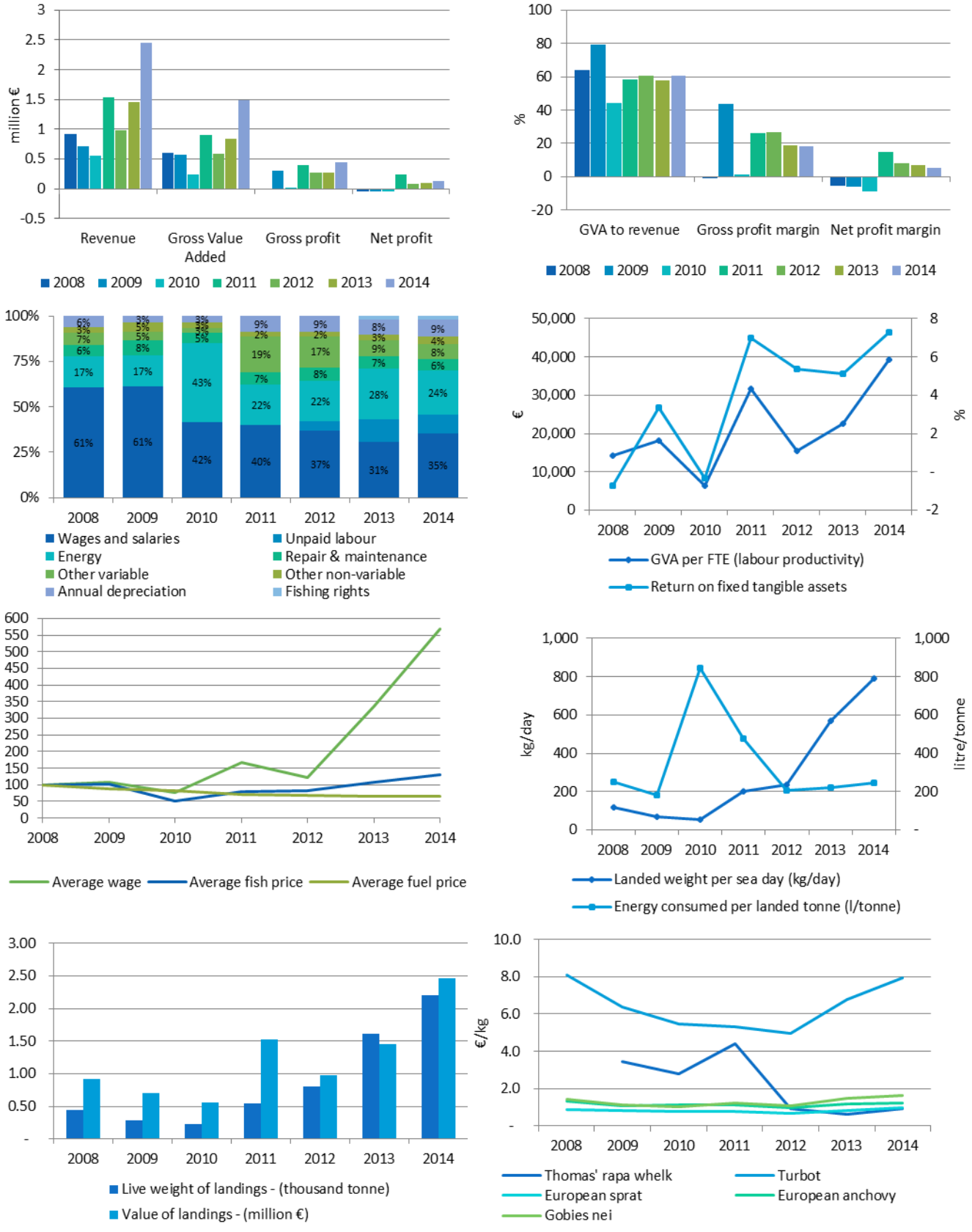
The national fishing fleet of Romania is almost entirely represented by the small scale fishery. The small scale fleet has mainly similar levels with a marked improvement of the value landed due to the demand on the internal market. This situation with poor concentration of ownership is the main explanation of the low level of investments in the sector, resulting in insufficient means for the improvement of technical conditions of the boats used. The trend of the decreasing number of vessels was present in 2014 compared with 2013, figures indicating the same trend for 2015/2016. This corresponds to a reduction of number of days at sea and days fishing. These trends reflect the fluctuating character of activity year to year and season to season.

Should be remarked the fact that no other activities are reported/recorded fishery being total separated by other activities. The difficult access of fishers to the finance, including loans, is reflected in the character of the sector's general and technical efficiency.

The small scale fishery is represented by those vessels less than 12m overall length using, in the same season, polyvalent gears and polyvalent mobile and passive gears, the same boats shifting from one gear to another in the same period of time. The reported data are supplied by fishers more or less in strict correspondence with the effective fishing activity, because the same fishers are using simultaneously those kinds of gear during the season, and even for themselves are not recording in an accurate way all the expenses/selling value, etc. of the species captured for each type of gear or technique used. This fishery is characterized by a very high mixture of techniques due to the lack of a target species for catching and sale on the market.

Data issues

The collection of data process, as explained above should be improved by the member state. Fishers are delivering aggregated data for their activity; the member state is encouraged to apply survey estimates, in order to have the relevant data for all indicators for every fleet segment and gear type, improving the quality of data usable for various types of analyses. Acting in such a way, the data will be better used, especially for assessment of the evaluation indictors on profitability of the fleet, for the economic and social indicators analyses. Also, data will be used in the next planning activity by the EC for the future multiannual management plans in the Black Sea waters. This comprises measures that should be applied for demersal and pelagic targeted species for sustainable fishing activity.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.18 Romania: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.81 Romania: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 are projected.

		2008	2009	2010	2011	2012	2013	2014	*2015*	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	441	440	429	488	261	196	158	*151*		-19%	-58%
Number of Inactive vessels_ms	(#)	36	280	223	288	78	84	35	*24*		-58%	-79%
Vessel tonnage	(thousand GT)	2.3	2.3	1.0	1.0	0.7	0.6	0.8	*0.9*		30%	-41%
Engine power	(thousand kW)	8.7	8.2	5.4	7.0	5.9	6.2	6.1	*6.0*		-1%	-11%
Average vessel age	(year)	19	21	22	17	12	15	17	*18*		13%	-2%
Average vessel length	(metre)	7	8	8	7	7	8	8	*8*		4%	4%
Enterprises with one vessel	(#)	89	12	18	83	57	50	50	*60*		0%	-3%
Enterprises with 2 to 5 vessels	(#)	37	15	18	19	31	23	25	*19*		9%	5%
Enterprises with more than 5 vessels	(#)	12	6	7	3	3	1	2	*1*		100%	-63%
FTE	(#)	42	31	38	28	39	37	38	*55*		2%	5%
Total employed	(person)	875	289	444	454	471	304	330	*315*		9%	-30%
Days at sea	(thousand day)	3.7	4.1	4.3	2.6	3.4	2.8	2.8	*4.0*		-2%	-21%
Fishing days	(thousand day)	3.7	3.9	4.1	2.5	3.4	2.7	2.7	*3.7*		1%	-19%
Number of fishing trips	(thousand)	4	4	4	3	3	3	3	*4*		-6%	-22%
Energy consumption	(million litre)	0.11	0.05	0.19	0.26	0.17	0.36	0.55	*0.80*		51%	187%
Live weight of landings	(thousand tonne)	0.4	0.3	0.2	0.5	0.8	1.6	2.2	*4.8*		36%	236%
Value of landings	(million €)	0.9	0.7	0.6	1.5	1.0	1.5	2.5	*4.3*		69%	140%
Income from landings	(million €)	0.9	0.7	0.6	1.5	1.0	1.5	2.5	*4.3*		69%	140%
Wages and salaries of crew	(million €)	0.60	0.25	0.24	0.50	0.29	0.40	0.80	*0.67*		101%	112%
Unpaid labour value	(million €)	-	-	-	-	0.04	0.16	0.24	*0.20*		45%	593%
Energy costs	(million €)	0.17	0.07	0.25	0.28	0.17	0.36	0.55	*0.63*		52%	155%
Repair & maintenance costs	(million €)	0.06	0.03	0.03	0.09	0.06	0.09	0.14	*0.20*		49%	122%
Other variable costs	(million €)	0.07	0.02	0.02	0.24	0.13	0.11	0.19	*0.28*		70%	96%
Other non-variable costs	(million €)	0.03	0.02	0.02	0.03	0.02	0.04	0.09	*0.09*		104%	242%
Annual depreciation costs	(million €)	0.06	0.01	0.02	0.11	0.07	0.11	0.21	*0.20*		101%	235%
Opportunity cost of capital	(million €)	-0.02	0.34	0.04	0.06	0.11	0.07	0.10	*0.12*		37%	-4%
Tangible asset value (replacement)	(million €)	10	9	3	4	4	3	3	*3*		-3%	-43%
Fishing rights	(million €)	0.06	0.02	0.03	0.03	0.02	0.01	0.02			14%	-44%
Investments	(million €)	0.2	0.1	0.1	0.1	0.1	0.1	0.2			68%	59%
Financial position	(%)	40.0	28.0	31.0	34.0	45.0	59.0	11.0			-81%	-72%
Gross Value Added	(million €)	0.6	0.6	0.2	0.9	0.6	0.8	1.5	*3.1*		77%	139%
GVA to revenue	(%)	64.3	79.4	44.2	58.7	60.6	57.7	60.4	*72.0*		5%	-1%
Gross profit	(million €)	- 0.0	0.3	0.0	0.4	0.3	0.3	0.4	*2.2*		62%	113%
Gross profit margin	(%)	- 0.8	43.5	1.6	26.3	26.9	19.0	18.1	*51.8*		-5%	-7%
Net profit	(million €)	- 0.1	- 0.0	- 0.1	0.2	0.1	0.1	0.1	*1.9*		36%	204%
Net profit margin	(%)	- 5.6	- 6.2	- 9.1	15.2	8.1	6.8	5.4	*44*		-20%	256%
GVA per FTE (labour productivity)	(thousand €)	14.2	18.1	6.4	31.6	15.4	22.5	39.2	*55.8*		74%	117%
Return on fixed tangible assets	(%)	- 0.7	3.4	- 0.3	7.0	5.4	5.1	7.3	*66.5*		41%	120%

Table 5.82 Romania: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF												
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	395	153	205	197	179	106	111	10	7	1	3	4	6	12		5%	-46%		100%	132%
Vessel tonnage (thousand GT)	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.8	0.5	0.1	0.4	0.3	0.4	0.5		12%	-23%		55%	38%
Engine power (thousand kW)	3.1	1.2	1.7	3.4	3.5	3.2	2.4	2.4	1.6	0.3	1.1	1.2	2.1	3.2		-26%	-12%		54%	118%
FTE (#)	31	28	38	26	35	27	24	11	4	0	3	4	10	14		-12%	-23%		39%	172%
Total employed (person)	790	242	436	434	445	278	279	85	47	8	20	26	26	51		0%	-36%		96%	44%
Days at sea (thousand day)	3.4	3.9	4.3	2.6	3.3	2.5	2.2	0.3	0.1	0.0	0.1	0.1	0.4	0.6		-11%	-34%		57%	259%
Fishing days (thousand day)	3.4	3.8	4.1	2.5	3.3	2.4	2.2	0.2	0.1	0.0	0.1	0.1	0.3	0.6		-8%	-33%		64%	296%
Number of fishing trips (thousand)	3	4	4	3	3	2	2	0	0	0	0	0	0	1		-13%	-34%		41%	320%
Energy consumption (million litre)	0.04	0.03	0.19	0.2	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.3		5%	78%		140%	486%
Live weight of landings (thousand tonne)	0.15	0.20	0.23	0.41	0.73	1.04	1.00	0.30	0.09	0.00	0.12	0.08	0.57	1.20		-5%	116%		110%	522%
Value of landings (million €)	0.39	0.59	0.55	1.42	0.88	0.99	1.18	0.54	0.12	0.00	0.11	0.10	0.46	1.28		18%	46%		180%	482%
Income from landings (million €)	0.4	0.6	0.6	1.4	0.9	1.0	1.2	0.5	0.1	0.0	0.1	0.1	0.5	1.3		18%	46%		180%	482%
Wages and salaries of crew (million €)	0.42	0.21	0.24	0.46	0.26	0.27	0.39	0.18	0.04	0.00	0.04	0.03	0.13	0.42		42%	24%		227%	499%
Unpaid labour value (million €)	-	-	-	-	0.04	0.12	0.12	-	-	-	-	-	0.04	0.11		4%	365%		154%	1423%
Energy costs (million €)	0.06	0.04	0.24	0.23	0.14	0.24	0.25	0.11	0.03	0.00	0.05	0.04	0.13	0.30		4%	59%		142%	407%
Repair & maintenance costs (million €)	0.02	0.02	0.03	0.08	0.05	0.07	0.07	0.04	0.01	-	0.01	0.01	0.03	0.07		3%	45%		168%	371%
Other variable costs (million €)	0.02	0.01	0.02	0.23	0.13	0.08	0.10	0.04	0.01	0.00	0.01	0.01	0.04	0.10		25%	20%		172%	440%
Other non-variable costs (million €)	0.01	0.02	0.02	0.03	0.01	0.03	0.04	0.02	0.00	0.00	0.00	0.00	0.02	0.05		44%	108%		200%	583%
Annual depreciation costs (million €)	0.00	0.00	0.02	0.10	0.06	0.08	0.11	0.06	0.01	-	0.01	0.01	0.03	0.11		42%	139%		246%	457%
Rights costs (million €)	-	-	-	-	-	0.02	0.02	-	-	-	-	-	0.01	0.03		2%	511%		372%	2731%
Opportunity cost of capital (million €)	- 0.00	0.03	0.01	0.01	0.03	0.02	0.01	- 0.01	0.09	0.01	0.02	0.05	0.04	0.09		-50%	-46%		101%	157%
Tangible asset value (replacement) (million €)	1.7	0.7	0.9	0.9	1.0	0.8	0.3	3.3	2.3	0.6	1.5	1.6	2.0	2.8		-65%	-72%		41%	53%
Fishing rights (million €)	0.1	0.021	0.027	0.023	0.018	0.011	0.013	0.001	0.001	0.000	0.001	0.001	0.001	0.002		24%	-51%		102%	178%
Investments (million €)	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1		34%	66%		310%	206%
Financial position (%)	79.0	150.0	162.0	171.0	138.0	192.0	34.0	173.0	177.0	65.0	114.0	168.0	164.0	27.0		-82%	-77%		-84%	-81%
Gross Value Added (million €)	0.3	0.5	0.2	0.9	0.6	0.6	0.7	0.3	0.1	- 0.0	0.0	0.0	0.3	0.8		24%	44%		199%	532%
GVA to revenue (%)	70.1	84.8	44.2	60.2	62.6	58.7	61.4	60.2	51.7	- 24.8	40.3	42.1	55.7	59.5		5%	-3%		7%	59%
Gross profit (million €)	- 0.1	0.3	0.0	0.4	0.3	0.2	0.2	0.1	0.0	- 0.0	0.0	0.0	0.1	0.2		10%	29%		181%	435%
Gross profit margin (%)	- 38.4	48.8	1.6	27.8	28.7	19.4	18.1	26.4	16.2	- 56.9	7.3	9.2	18.0	18.1		-7%	23%		0%	437%
Net profit (million €)	- 0.1	0.3	- 0.0	0.3	0.2	0.1	0.1	0.1	- 0.1		- 0.02	- 0.05	0.01	0.04		-3%	-7%		340%	486%
Net profit margin (%)	- 38.4	44.2	- 3.7	19.5	18.0	10.0	8.2	16.4	- 70.3		- 16.6	- 48.3	1.9	3.0		-18%	0%		57%	113%
GVA per FTE (labour productivity) (thousand €)	8.9	18.2	6.4	32.8	15.8	21.5	30.3	28.7	17.1	- 1.3	18.5	11.1	25.2	54.1		41%	76%		115%	227%

Table 5.83 Romania: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development. trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)		(%)			
ROU A37 PG0612 °	101	23	2,036	247	983	1,158	1,158	711	61.4	210	18.2	97	8.34	22.2	32	40	Reasonable	0%	Stable
ROU A37 PMP1218 °	10	7	392	222	911	950	950	589	62.0	180	19.0	42	4.38	56.3	81	5	Reasonable	114%	Improved
ROU A37 PMP2440 °	2	7	177	328	291	332	332	174	52.5	51	15.5	- 3	- 0.93	18.0	25	3	Weak	96%	Improved
ROU A37 PG0006 °	10	1	169	339	14	18	18	10	57.5	2	12.1	0	1.74	6.5	8	5	Reasonable	-84%	Deteriorated

Table 5.84 Romania: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real)								Live weight of landings								Average landed price (real)							
	(thousand €)								(tonne)								(€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
Thomas' rapa whelk		0.01	0.03	0.96	0.55	0.78	1.83	*3.48*		-	0.01	0.22	0.59	1.31	1.95	*4.46*		3.4	2.8	4.4	0.9	0.6	0.9	*0.8*
Turbot	0.38	0.31	0.26	0.23	0.21	0.29	0.34	*0.27*	0.05	0.05	0.05	0.04	0.04	0.04	0.04	*0.03*	8.1	6.4	5.5	5.3	4.9	6.8	7.9	*8.7*
European sprat	0.21	0.07	0.02	0.10	0.06	0.05	0.08	*0.10*	0.23	0.09	0.03	0.13	0.09	0.06	0.08	*0.11*	0.9	0.8	0.8	0.8	0.7	0.8	1.0	*1.0*
European anchovy	0.02	0.02	0.05	0.05	0.02	0.13	0.07	*0.1*	0.02	0.02	0.05	0.04	0.02	0.11	0.06	*0.11*	1.4	1.1	1.1	1.1	1.0	1.2	1.2	*1.2*
Gobies nei	0.02	0.02	0.01	0.02	0.02	0.01	0.02	*0.0*	0.01	0.01	0.01	0.02	0.02	0.01	0.01	*0.02*	1.4	1.1	1.0	1.2	1.1	1.5	1.6	*1.6*
Bluefish		-	-	-	0.01	-	0.02	*0.0*		-	-	-	-	-	-	-		2.6	2.5	2.4	3.4	4.1	4.5	*4.7*
Mediterranean horse mackere	0.04	0.04	0.01	0.03	0.04	0.07	0.02	*0.0*	0.01	0.02	0.01	0.02	0.02	0.03	0.01	*0.01*	3.0	2.4	2.0	1.5	1.8	2.8	3.0	*3.0*
Red mullet	-	-	-	-	-	-	0.01	*0.0*	-	-	-	-	-	-	0.01	*0.01*	3.5	2.0	0.9	1.0	1.4	1.5	1.6	*1.9*
Caspian shad	-	0.01	-	-	-	0.03	0.01	*0.0*	-	0.01	-	-	-	0.02	0.01	*0.01*	1.5	1.1	1.0	1.0	1.1	1.2	1.5	*1.4*
Common stingray		-		-	-	-	0.01	*0.0*		-		-	-	-	-	-		2.5		2.2	2.5	2.7	3.1	*3.8*

5.20 SLOVENIA

Short description of the national fleet

Fleet capacity

In 2015, the Slovenian fishing fleet consisted of 169 registered vessels, with a combined gross tonnage of 596.95 GT, a total power of 8.5 thousand kW and an average age of 37.6 years. The average length of the fishing vessels was 7, 02 metres in the same year. The size of the fleet decreased between 2008 and 2015; the number of vessels by 6% and GT and kW by 34% and 18%, respectively. The major factors causing the fleet to decrease include the scrapping of vessels, including two of the largest vessels in Slovenian fishing fleet.

In 2015, there were 88 active vessels which represent 52% of all fishing vessels in the same year. The number of all active vessel increase for 7% from 2008-2015. One of the reasons for increased number of active vessels is scrapping of some large vessels. Many fishers lose their jobs and decided to starts fishing on his own. Also the economic crisis over the past few years had the similar effect on increased number of active vessels. Regardless of increased number of active vessels, the number of passive vessels is still very high. The case is complex and there are several reasons for this situation. One of the reasons is high age of these vessels. Many vessels are very old and they are no longer suitable for fishing. Also many owners cannot fish anymore because they are retired but they do not have a successor who would continue with the fisheries. In many cases the fishers found a new job, because he could no longer earn a living from fishing, but still own the fishing vessel.

Fleet structure

The Slovenian fishing flees nationally divided into a small-fleet segment (86% of all active vessels in 2015) with an engine power of 3.8 thousand kW and a large-fleet segment (14% of all active vessels in 2015) with an engine power of 1.8 thousand kW. The number of vessels in small scale fleet increase for 19% from 2008-2015, while the number of large scale vessels decrease for 36% in the same period. Scrapping is the major factor for decreased large-scale fleet. On the other hand, those fishers who lost their jobs because of scrapping, starts to fish on their own, which results in a higher number of small scale vessels.

The Slovenian national economy is insignificantly influenced by the marine fisheries sector. However, the sector has a particular social impact in terms of employment. The watershed moment for Slovenian marine fisheries began with Slovenian independency in the year 1991. This period marked a decrease in the extent of fishing regions and a substantial loss of market for fish products. A large number of poorly equipped small-scale fishers, inadaptability of large-scale fishers, along with discordance among fishing, producing and marketing capabilities brought the sector into crisis. Landings of almost 6 thousand tonnes in 1990 have decreased to less than 200 tonnes in 2015.

The existence of two sea fishery reserves where all fishing activities are banned (Portorož and Strunjan fishery reserves) further limit the reduced Slovenian fishing area. For the last few years, this has had a negative impact, particularly on those fishers who are engaged only in small-scale coastal fishing.

Employment

In 2014, the number of fishing enterprises totalled 102, with the majority (76%), owning a single vessel. 24% of the enterprises owned two to five fishing vessels and none of the enterprises owned six or more vessels. Total employment in 2014 was estimated at 126 jobs, corresponding to 80 FTEs. The level of employment increased between 2008 and 2014, with total employed increasing by 13%, whiles the number of FTEs increased by 6%.

The Slovenian fishing fleet consists predominantly of small vessels of less than 12 meters (mainly vessels of 6 meters). Self-employed fishers who own one fishing vessel about six meters long represent a typical Slovenian fishing enterprise.

Effort

In 2014, the fleet spent a total of around 8.6 thousand days at sea. Effort, in days at sea, increased 16% between 2008 and 2014. The fisheries in the Adriatic Sea is very intense, consequently most of the fish stocks are overexploited. Although small Slovenian fisheries have a negligible effect on fish stocks, feels the effects of intensive fishing, which resulting in lower landings and increased effort. Furthermore, the fisheries sector, particularly the small scale fleet, is affected by the limited size of marine fishing area. Most of the fleet is poorly equipped and unable to operate in international waters. One of the reasons for increased days at sea is also the high price of fuel in the past few years, which encourages the fishers to do shorter and more frequent trips.

The quantity of fuel consumed in 2014 was around 220 thousand litres, a decrease of around 60% from 2008. The major factor causing this decrease includes the scrapping of several vessels in the fleet, including two of the largest vessels.

Production

The total weight of seafood landed in 2014 was around 250 tonnes, with a landed value of €1.28 million. The total weight and value of landings decreased by 58% and 34%, respectively, over the period analysed. In 2009, the national fleet generated the highest landed value (€2.4 million), followed by 2008 (€2.3 million). In terms of landings weight, in 2009

the fleet landed around 866 tonnes, 2010 (764 tonnes) and 2011 (719 tonnes). The major factor causing the decrease in landed weight and value, especially for European anchovy and sardine, include scrapping of fishing vessels. In the last quarter of 2011, Slovenia sent the two largest ships to be scrapped (pelagic trawlers 24-40m); those vessels targeted mainly sardine and anchovy and represented around 50% of the Slovenian landed weight. The climate changes could be also one of the reason for reduce landings. The Northern Adriatic Sea was very warm over the past few years, which could be the reason for the reduced presence of certain fish species, e.g. whiting. The landings volume of whiting decreased from 2012 to 2015 for more than 85%.

Prices obtained for the key species targeted by the fleet generally remain stable between 2008 and 2014. Slight annual variations of the prices are the results of increased or decreased volume of landings thru the period. European pilchard accounted for 26% of the total landings value obtained by the Slovenian fleet in 2008, decreasing to only 10% of income in 2014, while European anchovy decreased from 23% in 2008 to 6% in 2014. On the other hand Gilthead sea bream, Common sole and European squid records increased value of landings from 2008-2014 for 408%, 117% and 40% respectively. Slovenia, in the last period, invested a large amount of money in marine aquaculture, especially in shellfish farming. Increased production of shellfish could be one of the reasons for the increased Gilthead sea bream value of landings.

Economic results for 2014 and recent trends

National fleet performance

The amount of income generated by the Slovenian national fleet in 2014 was €2.83 million. This consisted of €1.29 million in landings value, €1.48 million in non-fishing income and €0.06 in subsidies. The Slovenian fleet's landings income decreased 34% between 2008 and 2014, while other income increased 37% during the same period. Due to reduced landings, Slovenian fishers are looking for the opportunity to generate earnings in other industries, such as tourism, aquaculture etc.

Total operating costs incurred by the fleet in 2014 equated to €1.76 million, amounting to 62% of total income. Crew cost and Annual depreciation costs, the two major fishing expenses, were €0.68 and €0.25 million, respectively. Between 2008 and 2014, total operating costs decreased 26%, largely due to scrapping of several vessels. In the last few years, especially in 2012 and 2013, Slovenian fisheries sector records an increased value of direct income subsidies. It has been intended primarily to diversify their activities. The results of these investments are also increased value of depreciation costs and other income of fishers.

In terms of economic performance, the amount of Gross Value Added (GVA), gross profit and net profit generated by the Slovenian fleet in 2014 were €2.26 million, €1.34 million and €1.01 million, respectively. Between 2008 and 2014, GVA, gross profit and net profit increased 16%, 52% and 58% respectively. The major factors causing the improvement in economic performance in 2014 included lower expenditure in fuel and labour costs and increases in income from other sources. Regardless of the increase in economic performance, the fleet was in a poor economic condition because of old and poorly equipped fleet and reduced catches. In 2014, the Slovenian fleet had an estimated (depreciated) replacement value of €3.94 million. Investments by the fleet amounted to €0.22 million in 2014.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 49%, a 66% increase from 2008. Net profit margin was estimated at 36% in 2014, resulting in 79% increase from 2008.

The Rate of Return on Fixed Tangible Assets (RoFTA) improved in comparison to previous and amounted 28% in 2014. Labour productivity (GVA/FTE) also record increase in period 2008- 2014 for 9%: GVA increased for 16% and the number of FTE also increased by 6% in the period analysed.

Fuel consumption per landed tonne has followed an overall increasing trend since 2008, and amounted 869 litres per tonne landed in 2014. On the other hand, the landed weight per sea day decreased significantly for 70% from 2008-2014. One of the reasons for that is scrapping of some large vessels with high volume of landings and, subsequently, changed composition of the fleet consisting now in majority of smaller vessels with lower landed weight per sea day.

Drivers affecting the economic performance trends

Higher income from other sources, lower operating cost, especially fuel costs and further capacity/effort reduction were the main driving forces behind the overall improvement.

The Slovenian fleet's landings income decreased 34% between 2008 and 2014, while other income increased 37% during the same period. Due to reduced landings, Slovenian fishers are looking for the opportunity to generate earnings in other industries, such as tourism, aquaculture etc. In the last few years, especially in 2012 and 2013, Slovenian fisheries sector records an increased value of direct income subsidies. It has been intended primarily to diversify their activities.

Between 2008 and 2014, total operating costs decreased 26%, largely due to scrapping of several vessels including two of the largest vessels in Slovenian fishing fleet.

Performance by fishing activity

The Slovenian fleet has a range of vessel types targeting different species predominantly in the Adriatic Sea. The fleet consisted of 8 (DCF) fleet segments in 2014, with 4 inactive length classes consisting of 81 vessels. Two of active segments (DFN VL00-06, DFN VL06-12) belongs to small-scale fleet and two (DTS VL12-18, PS VL12-18) belongs to the large-scale fleet.

Small-scale fleet

In 2014, there were 88 active vessels of which around 76 (86% of all active vessels) are classified as small-scale (an increase for 28% from 2008). The majority of these vessels operate in the coastal waters of Slovenia.

The amount of income generated by the Slovenian small-scale fleet in 2014 was €1.46 million. This consisted of €0.61 million in landings value and €0.85 million in non-fishing income. Landings income increased 56% between 2008 and 2014, while other income increased for more than 300% during the same period. Due to reduced landings, Slovenian fishers are looking for the opportunity to generate earnings in other industries, such as tourism, aquaculture etc.

In terms of economic performance, the amount of Gross Value Added (GVA), gross profit and net profit generated by the small-scale fleet in 2014 were €1.21 million, €0.73 million and €0.49 million, respectively. Between 2008 and 2014, GVA, gross profit and net profit increased 64%, 142% and 135% respectively. The major factors causing the improvement in economic performance in 2014 included increases in landing income and income from other sources while, on the other hand, operation costs remain relative stabile during the period analysed. In 2014, the small-scale fleet had an estimated (depreciated) replacement value of €1.5 million. Investments by the fleet amounted to €0.16 million in 2014.

Large-scale fleet

12 vessels (14% of all active vessels) represents Slovenian large-scale sector in 2014. The majority of these vessels operate in the coastal waters of Slovenia.

The amount of income generated by the Slovenian large-scale fleet in 2014 was €1.35 million. This consisted of €0.67 million in landings value, €0.07 million in direct subsidies and €0.61million in non-fishing income. Landings income decreased 65% between 2008 and 2014, while other income increased for 17% during the same period. The major factor for decreased value of landing income is scrapping of some vessels.

In terms of economic performance, the amount of Gross Value Added (GVA), gross profit and net profit generated by the large-scale fleet in 2014 were €1.05 million, €0.61 million and €0.52 million, respectively. Between 2008 and 2014, gross profit and net profit increased 5% and 20% respectively, while the GVA decreased for 14% in the same period. The major factor causing decreasing GVA is lover income from landings. In 2014, the large-scale fleet had an estimated (depreciated) replacement value of €1.28 million. Investments by the fleet amounted to €0.05 million in 2014.

Performance results of selected fleet segments

The entire active fleet made an overall profit in 2014. All of the segments also revealed an improving economic trend in 2014.

Demersal trawlers and demersal seiners 12-18m - 10 vessels make up this segment and are based predominantly in the Adriatic. The fleet targets a variety of species, the most important being whiting, musky octopus and European squid. The value of landings was €0.41 million and 10 FTEs were employed in this fleet segment in 2014, contributing to 32% and 12.5% of the total income from landings and FTEs generated by the MS fishing fleet respectively. This fleet segment made a profit in 2014.

Purse seiners 12-18m - 4 vessels make up this segment and are based predominantly in the Adriatic. The most important targeting species are European anchovy and European pilchard. The value of landings was €0.26 million and 10 FTEs were employed in this fleet segment in 2014, contributing to 20% and 12.5% of the total income from landings and FTEs generated by the MS fishing fleet respectively. This fleet segment made a profit in 2014.

Drift and fixed netters 0-6m – Around 35 vessels make up this segment which operate in Slovenian coastal areas of the Adriatic. These vessels target demersal species, such as sole, European flounder and sea bream. The total value of landings was €0.19 million and around 24 FTEs were employed in this fleet segment in 2014, contributing 15% and 30% of the total income from landings and FTEs generated by the national fleet respectively. This fleet segment made a profit in 2014.

Drift and fixed netters 6-12m – Around 42 vessels make up this segment which operate in Slovenian coastal areas of the Adriatic. These vessels target demersal species, such as sole, Mullets, turbot and sea bream. The total value of landings was €0.42 million and around 36 FTEs were employed in this fleet segment in 2014, contributing 33% and 45% of the total income from landings and FTEs generated by the national fleet respectively. This fleet segment made a profit in 2014.

Projections for 2015 and outlook

National Fleet

Due to scrapping the size of the fishing fleet decreased between 2008 and 2015; the number of vessels by 6% and GT and kW by 34% and 18% respectively. Consequently, the weight of landings decreases in 2015 by more than 70% regarding 2008. On the other hand, we can expect decreased number of inactive vessels, because some of them will be reactivated by fishers who lost their jobs on the vessels which been scrapped. Due to the reduction of the fleet and related reduction of fishing effort we can expect improvement in the biological status of fish stocks. Because of that and because of decreased number of inactive vessels, weight of landings will probably start to increase again due to better catches.

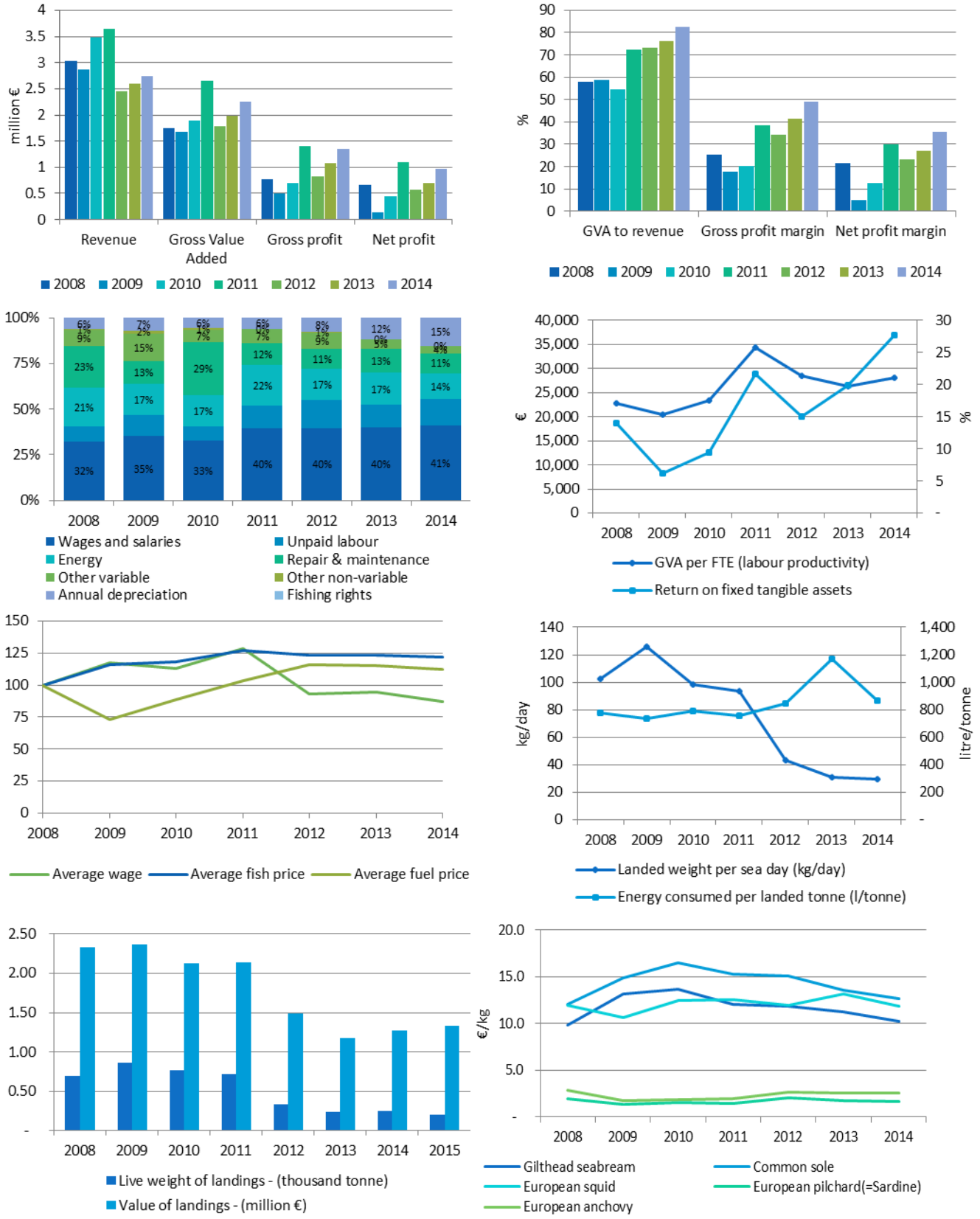
As the fleet is generally old and poorly equipped we can expect that repair and maintenance costs will continue to increase in the future.

Small scale Fleet

The same issues apply to the small scale fleet. Around 20 fishers have lost their jobs due to vessel scrapping. In the future we can expect an increase of small scale vessels because some of them will start operating in a self-employed manner. Due to reduced catch we can also expect higher prices for European pilchard (sardine) and anchovy and, consequently, higher income for those targeting these species.

Data issues

No major issues detected. The economic data on the fishing sector were collected mostly from accounting records – AJPES, from data base 'InfoRib', through questionnaires and sales notes. In the monitoring programme all fishing vessels were included (approximately 180 units). The data collected from all sources were combined in such a way that a complete set of accounting items is compared for each business enterprise. The target population was all fishing sector in Slovenia. There were approx. 100 companies or fishers in Slovenia. In March 2015 the questionnaires for 2014 were sent to all users of fishing vessels in Slovenia. Where the questionnaire was the only source used, the response rate was around 70%. Where the data from annual accounts of business enterprises was used the response rate was 100%, because there are economic reports for all investigated companies or fishers.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.19 Slovenia: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.85 Slovenia: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 are projected.

		2008	2009	2010	2011	2012	2013	2014	2015	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	181	185	185	186	181	171	170	*169*		-1%	-6%
Number of Inactive vessels_ms	(#)	96	98	94	102	92	88	79	*81*		-10%	-17%
Vessel tonnage	(thousand GT)	1.0	1.0	1.0	1.0	0.8	0.6	0.6	*0.6*		0%	-34%
Engine power	(thousand kW)	10.7	11.0	11.0	10.9	10.1	8.5	8.5	*8.5*		1%	-18%
Average vessel age	(year)	33	34	35	36	36	36	37	*38*		3%	6%
Average vessel length	(metre)	7	7	7	7	7	7	7	*7*		0%	-4%
Enterprises with one vessel	(#)	86	84	84	86	102	101	78	*76*		-23%	-14%
Enterprises with 2 to 5 vessels	(#)	47	52	47	51	42	39	24	*23*		-38%	-48%
Enterprises with more than 5 vessels	(#)	2	2	1	1	2	2				-100%	-100%
FTE	(#)	77	82	81	77	63	75	80	*81*		7%	6%
Total employed	(person)	109	117	116	114	107	107	126	*125*		18%	13%
Days at sea	(thousand day)	6.8	6.9	7.7	7.7	7.6	7.6	8.6	*8.7*		12%	16%
Fishing days	(thousand day)	6.8	6.9	7.7	7.7	7.6	7.6	8.6	*8.7*		12%	16%
Number of fishing trips	(thousand)	6	6	6	6	6	5	6	*6*		13%	9%
Energy consumption	(million litre)	0.54	0.64	0.60	0.55	0.28	0.28	0.22	*0.22*		-21%	-54%
Live weight of landings	(thousand tonne)	0.7	0.9	0.8	0.7	0.3	0.2	0.3	*0.2*		7%	-58%
Value of landings	(million €)	2.3	2.4	2.1	2.1	1.5	1.2	1.3	*1.3*		9%	-34%
Income from landings	(million €)	2.3	2.4	2.1	2.1	1.5	1.2	1.3	*1.3*		9%	-34%
Other income	(million €)	0.70	0.49	1.35	1.50	0.96	1.43	1.46	*1.46*		3%	37%
Direct income subsidies	(million €)	0.24	0.27	0.24	0.28	0.41	0.53	0.07			-88%	-80%
Wages and salaries of crew	(million €)	0.78	0.89	0.96	0.94	0.69	0.69	0.68	*0.75*		-1%	-18%
Unpaid labour value	(million €)	0.20	0.29	0.22	0.30	0.26	0.22	0.24	*0.26*		10%	-4%
Energy costs	(million €)	0.51	0.44	0.50	0.53	0.30	0.30	0.23	*0.18*		-23%	-46%
Repair & maintenance costs	(million €)	0.55	0.32	0.86	0.28	0.19	0.23	0.18	*0.18*		-23%	-56%
Other variable costs	(million €)	0.20	0.38	0.20	0.18	0.16	0.09	0.06	*0.06*		-25%	-68%
Other non-variable costs	(million €)	0.01	0.04	0.03	0.01	0.01	0.00	0.00	*0.00*		3%	-78%
Annual depreciation costs	(million €)	0.15	0.18	0.17	0.14	0.13	0.20	0.25	*0.25*		25%	56%
Opportunity cost of capital	(million €)	-0.04	0.19	0.10	0.16	0.14	0.17	0.11	*0.10*		-33%	-5%
Tangible asset value	(million €)	4.4	5.4	5.7	5.8	4.6	4.4	3.9	*3.9*		-10%	-22%
Investments	(million €)	0.3	0.3	0.4	0.2	0.3	0.2	0.2			12%	-24%
Financial position	(%)	50.6	59.8	57.3	54.8	68.7	51.8	42.9			-17%	-25%
Gross Value Added	(million €)	1.7	1.7	1.9	2.6	1.8	2.0	2.3	*2.4*		14%	16%
GVA to revenue	(%)	57.8	58.8	54.5	72.5	73.1	76.1	82.5	*84.7*		8%	26%
Gross profit	(million €)	0.8	0.5	0.7	1.4	0.8	1.1	1.3	*1.4*		25%	52%
Gross profit margin	(%)	25.4	17.7	20.3	38.4	34.1	41.2	49.0	*48.4*		19%	66%
Net profit	(million €)	0.7	0.1	0.4	1.1	0.6	0.7	1.0	*1.0*		39%	63%
Net profit margin	(%)	21.7	5.1	12.7	30.1	23.1	27.0	35.7	*36*		32%	79%
GVA per FTE	(thousand €)	23	20	23	34	29	26	28	*29*		7%	9%
Return on fixed tangible assets	(%)	14	6	9	22	15	20	28	*28*		39%	92%

Table 5.86 Slovenia: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF											
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	60	62	67	62	67	69	77	25	25	24	22	22	14	14		12%	19%		0%	-36%
Vessel tonnage (thousand GT)	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.6	0.6	0.6	0.6	0.5	0.2	0.2		11%	27%		0%	-62%
Engine power (thousand kW)	2.5	2.5	3.0	2.5	2.7	4.0	4.3	4.6	4.4	4.4	4.1	3.6	1.9	1.9		8%	51%		1%	-49%
FTE (#)	48	45	49	42	44	50	60	29	37	32	35	19	25	20		19%	30%		-18%	-32%
Total employed (person)	67	64	72	62	68	71	89	42	53	44	52	39	36	37		25%	32%		3%	-17%
Days at sea (thousand day)	4.8	4.7	5.4	5.7	6.2	6.4	7.4	2.0	2.2	2.4	2.0	1.4	1.3	1.2		16%	35%		-7%	-38%
Fishing days (thousand day)	4.8	4.7	5.4	5.7	6.2	6.4	7.4	2.0	2.2	2.4	2.0	1.4	1.3	1.2		16%	35%		-7%	-38%
Number of fishing trips (thousand)	4	3	4	4	4	4	5	2	2	2	2	1	1	1		17%	29%		0%	-36%
Energy consumption (million litre)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.5	0.6	0.5	0.5	0.2	0.2	0.2		-16%	-9%		-23%	-62%
Live weight of landings (thousand tonne)	0.06	0.05	0.05	0.05	0.06	0.06	0.07	0.64	0.81	0.71	0.66	0.27	0.18	0.19		19%	18%		3%	-65%
Value of landings (million €)	0.39	0.47	0.49	0.50	0.52	0.51	0.61	1.94	1.90	1.64	1.64	0.97	0.67	0.67		20%	27%		0%	-54%
Income from landings (million €)	0.4	0.5	0.5	0.5	0.5	0.5	0.6	1.9	1.9	1.6	1.6	1.0	0.7	0.7		20%	27%		0%	-54%
Other income (million €)	0.2	0.3	0.9	0.9	0.4	0.7	0.9	0.5	0.2	0.5	0.6	0.6	0.7	0.6		15%	52%		-11%	20%
Direct income subsidies (million €)	0.03	-	-	0.04	0.07	0.01	-	0.21	0.27	0.24	0.24	0.34	0.51	0.07		-100%	-100%		-87%	-78%
Wages and salaries of crew (million €)	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.5	0.6	0.6	0.7	0.3	0.2	0.3		-31%	1%		65%	-30%
Unpaid labour value (million €)	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1		33%	48%		-16%	-40%
Energy costs (million €)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.4	0.5	0.2	0.2	0.1		-17%	-3%		-26%	-57%
Repair & maintenance costs (million €)	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.4	0.2	0.6	0.2	0.1	0.1	0.1		-9%	-10%		-38%	-76%
Other variable costs (million €)	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.3	0.1	0.1	0.1	0.0	0.0		-6%	-48%		-52%	-85%
Other non-variable costs (million €)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		-37%	-28%		43%	-83%
Annual depreciation costs (million €)	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1		26%	197%		22%	-40%
Opportunity cost of capital (million €)	- 0.01	0.03	0.02	0.03	0.04	0.06	0.04	- 0.02	0.09	0.05	0.09	0.05	0.04	0.04		-27%	45%		-18%	-25%
Tangible asset value (million €)	1.1	1.0	1.4	1.1	1.3	1.5	1.5	2.8	2.6	2.8	3.2	1.6	1.2	1.3		-2%	20%		10%	-45%
Investments (million €)	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.0	0.1	0.1	0.1		95%	35%		-26%	-45%
Gross Value Added (million €)	0.2	0.4	0.9	1.2	0.6	1.0	1.2	1.5	1.3	1.0	1.4	1.2	1.0	1.0		26%	65%		3%	-14%
GVA to revenue (%)	42.8	59.0	69.5	82.9	69.9	77.7	83.2	61.3	58.7	45.0	65.7	75.0	74.6	81.7		7%	24%		10%	29%
Gross profit (million €)	- 0.1	0.1	0.5	0.8	0.2	0.4	0.7	0.9	0.4	0.2	0.6	0.7	0.7	0.6		95%	140%		-12%	6%
Gross profit margin (%)	- 18.8	14.2	38.5	52.5	19.3	30.0	50.0	35.7	18.9	8.8	29.2	42.6	51.5	47.8		67%	121%		-7%	54%
Net profit (million €)	- 0.1	0.0	0.4	0.7	0.1	0.2	0.5	0.8	0.2	0.0	0.5	0.5	0.6	0.5		206%	136%		-14%	20%
Net profit margin (%)	- 22.1	4.4	32.4	46.7	8.1	12.9	33.8	31.7	8.2	1.5	21.0	35.1	44.7	40.4		161%	146%		-10%	71%
GVA per FTE (thousand €)	5.1	9.6	19.2	28.8	14.3	19.2	20.2	51.4	33.5	29.6	40.8	61.9	41.0	51.6		5%	26%			

Table 5.87 Slovenia: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development. trend
	(#)	(#)	(day)	itre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
SVN A37 DFN0612 NGI°	42	36	4,096	981	46	422	1,192	1,023	85.8	690	57.9	472	39.58	9.4	29	37	High	81%	Improved
SVN A37 DTS1218 NGI°	10	10	836	1,970	73	411	842	637	75.7	348	41.3	287	34.02	28.7	63	35	High	40%	Improved
SVN A37 PS1218 NGI°	4	10	322	126	115	258	440	411	93.3	265	60.2	232	52.71	14.3	40	61	High		
SVN A37 DFN0006 NGI°	35	24	3,341	879	20	187	267	191	71.4	40	15.0	21	7.98	6.2	8	19	Weak	134%	Improved

Table 5.88 Slovenia: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real)								Live weight of landings								Average landed price (real)							
	€								kg								€							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
Gilthead seabream	38,890	34,664	68,719	58,530	129,753	117,118	197,686	*353,820*	3,950	2,638	5,042	4,872	10,911	10,434	19,358	*28,849*	9.8	13.1	13.6	12.0	11.9	11.2	10.2	*12.3*
Common sole	84,682	161,408	140,061	202,862	127,828	201,091	184,363	*209,834*	7,053	10,864	8,493	13,321	8,502	14,860	14,541	*13,225*	12.0	14.9	16.5	15.2	15.0	13.5	12.7	*15.9*
European squid	98,542	109,145	298,237	221,855	149,004	131,261	138,207	*131,009*	8,270	10,279	23,907	17,640	12,490	9,958	11,636	*10,434*	11.9	10.6	12.5	12.6	11.9	13.2	11.9	*12.6*
European pilchard(=Sardine)	608,380	584,092	611,150	439,634	37,311	47,351	132,067	*112,761*	307,628	428,551	402,727	305,916	18,344	27,702	78,427	*43,857*	2.0	1.4	1.5	1.4	2.0	1.7	1.7	*2.6*
European anchovy	525,948	355,588	259,562	312,376	116,590	55,483	84,388	*43,208*	185,529	209,586	143,794	163,364	43,629	21,476	33,167	*14,758*	2.8	1.7	1.8	1.9	2.7	2.6	2.5	*2.9*
Whiting	223,832	269,826	209,724	229,877	222,994	167,716	75,558	*41,611*	51,946	53,467	68,681	56,202	80,865	56,752	18,519	*11,644*	4.3	5.0	3.1	4.1	2.8	3.0	4.1	*3.6*
Musky octopus	63,505	134,154	52,991	97,083	93,236	83,431	60,832	*32,310*	13,821	24,572	19,540	25,395	25,453	18,968	16,809	*8,003*	4.6	5.5	2.7	3.8	3.7	4.4	3.6	*4.0*
European seabass	43,168	95,932	58,909	61,170	48,885	36,970	39,648	*59,049*	4,445	6,932	3,573	3,819	2,865	2,253	2,445	*3,767*	9.7	13.8	16.5	16.0	17.1	16.4	16.2	*15.7*
Common cuttlefish	80,098	93,599	38,558	49,738	63,973	21,106	35,658	*29,644*	14,813	13,822	6,940	8,362	10,106	3,150	5,177	*4,331*	5.4	6.8	5.6	5.9	6.3	6.7	6.9	*6.8*
Turbot	5,424	13,138	19,249	19,843	20,434	20,054	32,600	*26,959*	776	729	980	973	1,059	1,049	1,733	*1,083*	7.0	18.0	19.6	20.4	19.3	19.1	18.8	*24.9*

5.21 SPAIN

Short description of the national fleet

Fleet capacity

In 2015, the Spanish fishing fleet consisted of 9 686 registered vessels, with a combined gross tonnage of 367 tonnes, engine power of 842 thousand kW, and an average age of 30 years

The Spanish fishing fleet is significantly decreasing in the number of vessels, engine power and gross tonnage in the last years in order to bring fishing capacity in balance with the fishing opportunities. From 2008 till 2015, 3 429 vessels have stopped their fishing activities and this decrease on the number of vessels, engine power, and gross tonnage is going to be maintained as the trend for the coming years.

In 2015, 1 185 vessels were inactive which represents the 12% of the Spanish fleet (if we look back to 2008, we can confirm the restructuration of the Spanish fleet sector, as the decrease of inactive vessels is clear, on 2008 25% of the Spanish fleet was inactive); almost 90% of these inactive vessels are small vessels, of less than12 meters of length.

Fleet structure

The Spanish fleet, with 9 686 vessels registered in 2015, is the biggest fleet all over the EU, and the one that carries out the fishing activities in more fishing zones. More than 70% of the Spanish fleet are vessels under 12 meters of length and the activity of this type of vessels is carried out on trips that last less than one day. 21% of the Spanish fleet are vessels with a length 12-24 meters, and only 8.3% of the vessels are over 24 meters of length.

Even though the average vessel age is 30 years old, the oldest is the small scale fleet under 12 meters of length (32 years old). The fleet comprised in the range of 12-24 meters vessels is 18 years, and for those vessels that are over 24 meters, the average vessel age is 11 years. From 2012, the average vessel age shows an increase; the main reason is that there is very few inversion or replacement of the old vessels, due to the Spanish economical bad situation.

Around 95% of the 8 501 active vessels have carried out the fishing activity on Spanish fishing areas (FAO 27.VIII, 27 IXa, 37.1, and the Canary Island waters 34.1.2), with a combined gross tonnage of 41.9% of the total of the Spanish GT, and 65.4% of the total engine power (Kw)

The rest of the Spanish fleet is integrated by vessels that carry out their fishing activities on EU waters (1.4% of the active fleet, 9.6% of GT and 6.2% of the total kW) the main gear they are using are trawl nets, drift and/or fix netters, and bottom-set longline and vessels on international fishing areas, with a capacity of 48.8% GT and 28.45% out of the total kW, that carry out their activity under international agreement, Regional Fishery Bodies, or private licenses, these vessels are mainly demersal trawlers, tuna purse seiners, and surface longliners.

The classification presented in this report, shows distorted image for the Spanish fleet, as it fishes in very different fishing grounds. Also, as the data are aggregated at a Supra region level, this report is giving for the North Atlantic area the same profitability for NAFO drift and/or fix netters, CIEM drift and/or fix netters, or for the drift and/or fix netter vessels that fish in national waters, which have different target species, different fuel consumption, and therefore incomes, costs, profitability very variable depending of the type of DTS.

Also, it has to be taken into account that with the data uploaded to the Fleet Economic Data Call (based on 6 length section, main gears, and three supra regions) the fleet is reclassified as:

- Small-scale fleet (SSF) - includes all vessels under 12m using static gears.
- Large-scale fleet (LSF) - segment includes all vessels using towed gears, and vessels over 12 meters using static gears operating in EU fishing regions.
- And distant-water fleet (DWF) - includes EU registered vessels over 24 meters operating in 'other fishing regions' including EU outermost regions.

With this definition of the fleet, 1 881 Spanish dredgers (towed gear which are under 12 meters length) with coastal activity on Spanish waters should be classified as SSF and instead of that, they are evaluated at the LSF group, which results as a distortion on the data analysis. Moreover, before 2013 this fleet was included by the Spanish authorities on the polyvalent gears group, and so they were evaluated as their natural group (Small scale fleet)

Employment

The number of fishing enterprises reached 8 979 in 2015. If we look back to 2008 we can see that the small enterprises are disappearing, due to the decrease of the number of vessels. While the enterprises with 5 or more vessels are more stable, this trend will continue the following years, with a decrease of 516 enterprises in this year.

Total employment in the Spanish fishing fleet for 2014 was estimated at 33 121 jobs, corresponding to 28 629 FTEs, with an average wage per employee of €19 000, and an average wage per FTE of €22 000. We can see that the downward trend continues; this trend started in 2010 with the economic crisis, being especially detrimental this year for the coastal fleet (SSF) that showed a false increase on the employment, due to the decrease in the number of vessels and the restructuration of the Spanish fleet sector.

Effort

In 2014, the Spanish fleet spent 1 118 thousand days at sea, (2% more than in 2013), with 1 073 thousand fishing days (increase of 2%). This increase is mainly due to the coastal fleet, and the reason could be the economic crisis, that force this fleet (that usually has part time workers) to have more activity. However, the trend 2008-2014 shows a decrease of the effort (days at sea), mainly because even though the total vessel are less, the number of inactive vessels is also decreasing, so inactive vessels from one year are active the year after.

The quantity of fuel consumed in 2014 was 641 million litres, which shows a decrease of 8% from 2013. All fleets (SSF, LSF and DWF) reduced their consumption of fuel, mainly due to a higher reduction on 2014 on the number of active vessels, of over 10% as well as a better fuel efficiency in all segments, leading from 1.29 tonnes per litre in 2013, to 1.45 tonnes per litre in 2014. This trend of cost decrease and consumption decrease is being constant since 2011, due to the better efficiency of the Spanish fleet.

Production

During 2014 the weight of landings have increased and also the value of landings. Several are the reason for this increase; first of all, the Spanish fleet have had a reduction not only on number (total vessels), but also on activity (the number of inactive vessels have decreased), and as seen on the number of days at sea of the vessels that carry out the activity on partial time are having a more active activity, due to the economic crisis that motivates an income increase needs.
In terms of live weight and value of landings The main species for the Spanish fleet are: highly migratory stocks (skipjack tuna, yellowfin tuna, big eye tuna), landed by 33 tuna purse seiners that belong to the distant-water-fleet, small pelagic species (European pilchard and European anchovy) which are mainly fished by purse seiners of Spanish fisheries of north Atlantic and Mediterranean.
For demersal species, the distance water fleet, trawlers and seiners that fish long-tail southern cod and Patagonian squid, followed by the LSF trawlers and seiners that fish in EU waters mainly hake.
It is important to pay attention to the total amount of the weight of landings, 50% of which is landed by the DWF, representing only 1% of the total number of vessels in the Spanish fleet. For this segment, there was a decrease in tunas and swordfish landings and an increase of demersal species from big demersal trawlers, due to the successfully agreements EU-third countries for this fleet.
Patagonian squid shows an increase in the value of landings, from €56.2 thousand in 2013 to €109.9 thousand in 2014, which is mainly due to the biological cycle of this specie, which from time to time has an increase in population in those areas, so the fleet that has this specie as target has increased the caches on 2014.

Economic results for 2014 and recent trends

National fleet performance

On this point as explained before, it is important to clarify the improvement done during the last years by the Spanish authorities in order to segment the Spanish fleet on the most precise way possible. Due to the complexity of the Spanish fleet in terms of the gears, but also on the regions where the fishing activity is carried out, this Spanish segment of the is not the same that the one presented on this Report.

The economic performance of the Spanish fleet shows an improvement over previous years. Unlike the situation in 2013, in which income from landings decreased while the value of landings suffered a slight increase, in 2014 the trend for both values are increasing, accounting for a 6% and 5% respectively, and is expected to have continued through 2015.

Revenue estimated at €2.021 billion, increased 7% on 2014, breaking the downward trend that started in 2012. However, this increase is mainly due to the increase of revenue in the DFW segment. It is important to pay attention to the fact that the data come from the economic survey of maritime fisheries; on this survey the sample included some vessels with very high incomes, which activity includes shellfish, as the agreement with Morocco resumed, so the total result of income for the Spanish fleet resulted to be high.

Gross Value Added (GVA), gross profit and net profit for the Spanish fleet in 2014 were estimated at €1.06 billion, €444.8 million and €332.6 million, respectively. These figures show a better profitability of the sector (ROFTA). The main reasons are higher income, lower costs, mainly fuel price (16%), the cost of investments and repair and maintenance cost that have also been reduced which is reflected on higher profit

Having a look at the employment results, even though the total number of employment for the Spanish fleet is stable, a decrease is shown on the coastal fleet, that has been more affected by the economic crisis, with less incomes and GVA. However the other fleet segments show an increase trend.

On the other hand, unpaid labour value must be highlighted, as in 2014 had a decrease of 6% from 2013, although the trend of this variable has not been as clear as wages and salaries values, which are increasing. Difficulties in the estimation of the results of these items in the survey is the main reason.

The tangible asset value of the Spanish fleet was estimated at €490.6 million, and investments amounted to €33.6 million in 2014, a 2% and 6%, decrease. The (depreciated) replacement value keeps with the downward trend for the SSF and LSF segments seen from 2011), for DWS indicators, TAV and investments shows an increase This fleet is more modernized and technically improved and younger (average age of 10 years).

However, if the period 2008-2013 is analysed, several facts can be checked. First of all, the investments data has a high variability and no clear trend; second the decrease on investment on 2014 does not seem to be realistic, as the information on 2013 compared to 2012 shows an increase of 277% (from €23.1 million to €87.1 million). If we remove the data of 2013 to analyse the information, we can see that the investments done on 2014 are more consistent with the total series, being higher than 2012.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 22%, showing the efficiency of the sector, which generates profits, turning inputs into outputs. On the same way net profit margin was estimated on 16.5%, as the capital cost decrease 7%. This, added to higher incomes and less operational costs, leads to an increase of net profit margin

Labour productivity (GVA/FTE) keeps with the downward trend and is estimated on 37% (21% higher than the year before). This reflects a high competitiveness on this sector, due to the increase on GVA, decrease of the fuel consumption and FTE is stable, one unit of labour input produces more outputs.

Fuel efficiency (litter/tonne) keeps with the downward trend started on 2013: 0.68 mil litres per tonne, 11% less than the year before, due to the increase of the efficiency.

All the economical profitability indicators (GVA to revenue, Gross profit margin and Net profit margin) continues with the positive trend started in 2011, showing a recovery of the crisis for the Spanish sector. However, the increase showed on 2014 is higher as the income from landings is higher than in 2013.

Performance by fishing activity

The Spanish fleet is highly diversified, not only on the number of catches species, but also on the gears and fishing areas. This diversity can be seen on the high number of segments that make it up, 60 fleet segments.

Small scale fleet represents 48% of the total fleet (4 156 active vessels in 2014), while 49% of the fleet (4 307 active vessels) belong to the large scale fleet, and the remaining 3% are covered by the distant water fleet (230 active vessels)

Even though the SSF has the higher number of vessels, the live weight of landings, and the incomes are higher for the vessels that belonging to the DWF segment, 53% and 47.2% respectively.

A common fact must be highlighted for all the segments and for the total fleet collectively: the decrease in energy costs, showing the same behaviour for all the segments and for the national total.

Small scale fleet

On 2014, 4 156 active vessels were covered by the fishing activity "Small scale fleet" in accordance with the European definition. However, this classification differs from the Spanish classification that includes on this fishing activity the mobile gears of 12 meters (DTS, DRB, and PS). This type of vessels are covered under the EU classification on the activity "Large Scale Fleet", so the result is that the information that emanates from this report will show some distorted data with the reality of the Spanish small and the large scale fleet. However the analysis of this fleet is carried out according to the European definition, but using as the beginning of the period of reference 2011 (first year in which the Spanish classification included mobile gears belong 12 meters on the Small Scale fleet)

Economic data need to be treated with caution, as almost 50% of this fleet carried out their activity on partial time (less than 90 days/year). The random selection of the sample can led to mistakes when the information collected is assumed for the total segment; this could happen on 2013, as the number of vessels have apparently increased, and so the information of employ, salaries and costs, meanwhile, since apparently as allegedly the sample is covering mainly part time vessels, the days at sea, the weight and value of catches have decreased, so it seems more appropriate to compare 2014 with the average of the period 2011-2013.

In 2014, related to the average 2011-2013, the decrease on the number of vessels is accompanied by an increase of power. This is due to the fact that a vessel regulation is been carried out in Spain, on the chapter of costs, the decrease on the fuel consumption, showing an important fuel efficiency.

This segment has suffered a decrease on Total employed and FTE, 14.2% and 7.9% compared to the average 2011-2013, the fact that the FTE shows a most pronounced decrease than the total number of employed leads us to believe that most of the people contracted in this fleet are part time.

During 2014, the number of days at sea has been increased, and so the weight and value of landings, mainly due to the economic crisis in Spain, that forces to increase the effort of the fleet that carries out the activity part time. However the income for fishing activity €126.2 million, have decreased 5.7% compared to the average. The high income from landings that appear in 2013, €158.9 million, have an impact on this average. The same situation can be seen with the salaries, although they have an increasing trend, salaries on 2014 are less than 2013.

In terms of GVA, this is a segment economically profitable, €86.7 million. However, as the labour costs have increased (salaries and unpaid labour) the Gross profit is negative, (-€4.4 million). This leads to a segment with losses, as the incomes are less, the margins of gross profit, and net profit also decreased.

In terms of labour productivity, as GVA grows, and FTE decrease, productivity increase, leading to same benefits with less FTE.

Large scale fleet

In 2014, 4 307 active vessels were included in the "Large scale fleet" segment according to the European definition (1857 DRB vessels are included in this fishing activity). This fishing activity represents almost half of the Spanish fleet. The decrease on the number of vessels, vessel tonnage, and engine power continues, although this reduction is less marked than on the average of the period 2011-2013.

With a decrease of 1% on the number of vessels, the number of days at sea, and the incomes have increased (7%), so for the period covered by this analysis the downward trend is broken. This added to the high decrease on the energy costs (17%), leads to that even though the other costs have been increased, the result is a GVA positive, contributing to the total national GVA on 50% (€526.6 million).

A high increase on salaries and employment compared to 2013, and for the period analysed, as the energy combustion has decreased, this segment is profitable, with an increase on the gross profit margin (99%) and an increase on the labour productivity of 14%, due to a higher GVA, with an increase of the part time work.

Distant water fleet

In 2014, 230 active vessels were included on the "distant water fleet" less than 3% of the total Spanish fleet, but with a contribution to the total weight of landings in more than 50%, almost half of the incomes, and of the Gross Added value.

Even though the number of vessels is reduced, the power has increased; the reason is that the surface longliners have reduced their activity, while the international trawlers (with more power) have increased.

The number of days at sea have decreased (opposite to SSF, and LSF), 3% compared to 2013, 14% compared to the average of the period 2008-2013.There are also increases on weight, and incomes for landings. This facts, linked to the decrease in almost all the costs, even staff costs (although the Total employed and the FTE have increased) makes that GVA, gross profit, and net profit have positive values, and higher than the previous year, so this segment is very profitable (although with a downward trend for the period).

The positive trend of the entire indicator from 2008 can be seen, particularly gross profit and Net profit results, 179% and 90%,

However, despite the improvement is clear in both indicators, two variables (with a great impact on this indicators) are not observed directly and the way to calculate both of them has changed over the years, with several problems. These variables are unpaid work and annual depreciation, with a decrease of 63% and 46% compared to the average 2008-2013. These sharp decreases have a direct consequence on the indicators, with high increases; we can talk about improvement, but not of this magnitude.

In summary, the main characteristic of this segment is that all economic data, and so all the indicators have a stable and constant trend, incomes are increasing from 2008, while costs (except other variable costs) are decreasing.

Outermost regions (Canarias)

The Spanish outermost region, Canary Islands (FAO 34.1.2) has a fleet with the following main characteristics: is the oldest Spanish fleet, with an average vessel age of 35 years; mainly small size of vessels, 557 vessels are below 12 meters in length, 65% of the active vessels carried out their fishing activity less than 90 days/year, these vessels carry out the polyvalent fishing activity (polyvalent gears, for more than one specie as target).

This fleet is not quota species dependent, and do not fish high risk species, in terms of stock status.

Only 6% of the total Canary island fleet carry out the fishing activity outside Canary waters. These 6% vessels are DTS and tuna hooks that fish on COPACE waters.

The income of this fleet has suffered an increase of 32% from the average of the period 2011-2013, the same trend can be seen on the GVA; the value is 54% higher than the average of the period 2011-2013, the abnormal economic data for 2013 must be taken into account.

Goss profit has improved, mainly due to the decline in the unpaid labour value; this value was very high in 2011.

On the other hand labour productivity (GVA/FTE) follows the increasing trend started in 2011, 12% higher than in 2013 and 77% higher than the average of the period 2011-2013.

Even though the economic indicators for this particular fleet are mainly negative, a positive trend is been discovered from 2011 to 2014. The main problem for this fleet is the inactivity; fisheries are partial time and complementary activity. 22% of the Canary Island fleet is inactive so a plan for this fleet is being carried out.

Drivers affecting the economic performance trends

Markets and Trade

During 2014, the Spanish fleet has continued under by fisheries agreements with Third Countries: through 2014, there were agreements with the following countries: Morocco, Mauritania, Cape Verde, Guinea Bissau, Ivory Coast, São Tomé and Príncipe, Gabón, Mozambique, Comoros Islands, Madagascar, Seychelles, Kiribati and Mauritius islands. These agreements have allowed the Spanish fleet to carry out their fishing activities on many different places, and for different target species.

Commercial Balance:

In 2014, 1.62 million tonnes of fishery products were imported into Spain (1.68 million tonnes in 2015). The main origins of these products were: Morocco, China, Argentina, Peru and Ecuador.

In the EU framework, the main countries of origin of the imports were: Portugal, France, and The Netherlands.

On the other hand, the exports of Spanish products reached the total of 1 million tonnes in 2014, with a value of €3.3 billion 2014 (€3.4 billion in 2015), the main Spanish destination of the products was the EU market (61%). Italy, Portugal and France were the main destinations.

Management instruments

The fleet is managed through several management tools, such as fishing license, engine power limited, time at sea, TACs and quotas related to the area and fishing stock. Under national regulations there are managements plans set down; each plan covers species, gears allowed for the fisheries, additional prohibited days, and technical requirements (such as power, Vessel tonnage ,length). In several cases the management or recovery plans have also a reduction objective that is funded by the European Maritime and Fisheries Fund (EMFF). As an example, on 2015 there were (among others) managements plans for hake and Norway lobster, specific management plan for LDLL fishing at Atlantic, Indian, and Pacific, management plan for Bluefin tuna, or management plan on Bay of Cadiz affecting the Purse Seiners fleet.

TACs and quotas

Total initial available quota for the Spanish fleet in 2014 had increased in almost all the relevant species for the Spanish fleet. European hake quota had an increase of 49%, horse mackerel 28% increase, whiting 71% increase, megrims 86%, anglerfishes nei of Grand Sole and Bay of Biscay 15%

This increase was especially important for north European hake stock which is the most important specie for Spain A 49% increase compared to 2013 for great sole and Bay of Biscay 7.500 tonnes more than the year before, the south European hake stock has also been increased, 15% more than 2013, which means that 1 350 tonnes over the quota of 2013 had been achieved.

For horse mackerel the quota increased in 28% with a final quota of 29 019 tonnes, whiting quota had a huge increase, as the Spanish quota increased 71%, anglerfishes nei of Grand Sole and Bay of Biscay had an increase of 15%, while megrims nei of Spanish fishery has had an increase of quota of 86% which means that a total of 2.084 tonnes were the final quota for this specie. The anglerfishes nei of Spanish fishing zone had a quota of 2 191 tonnes, with an increase compare to the previous year of a 6%

The Cantabrian Sea jack and horse mackerels nei quota decreased 26%, jack and horse mackerels nei quota of zone IX increase 17%, with a final quota of 9 055 tonnes, and Norway lobster (NEP) VII quota decreased 9%.

Status of Key stocks

The following species have been chosen taking into account the landing weight and landing value, these species are under quota, and they can be divided according their distribution to the ICES zone in different stocks by North and South.

Hake in division IIIa, sub areas IV, VI y VII and in division VIIIa,b,d (North stock). Biological indicators point to the good health of this stock. The SSB reached its historical peak in 2012, registering a new record in 2014 reaching approximately 249 017 tonnes, significantly above Bpa. Fishing mortality is also at their best rates, standing at 0.33, very close to (0.27) and far from the historical average of 0.78. Also the good evolution of recruitment, which experienced an upturn from the last calculated.

Megrim Divisions IVa y VI a (North stock). Stock status is healthy with a decline in F which lies clearly below Fmsy, and a biomass well above MSY despite a slight decline last year.

Megrim in divisions VIII c y IX a (South stock). The two species of megrims (*Lepidorhombus boscii* and *Lepidorhombus whiffiagonis*) have a joint recommendation of TAC. The approach is to give the advice based on the worst situation of each of the two species; the southern megrim stock is almost exclusively caught in mixed bottom-trawl fisheries targeting demersal fish, including four-spot megrim, southern hake, anglerfish, and *Nephrops*. Management measures aimed at reducing fishing mortality on any of these stocks should also reduce fishing pressure on megrim. Since

2000, the Spanish trawl fleet has changed its main target species, focusing more often on pelagic species such as horse mackerel, blue whiting, or mackerel, and normally not taking megrim in the catch.

Megrim: *Lepidorhombus boscii*). Fishing mortality that led downward trend since 2001, following the upturn started two years ago. This situation is somewhat strange because of the effort reductions in drag (10%), the main art capture. Spawning biomass undergoes a slight decrease over the previous year, but continues to record highs clearly standing above Bpa since 2001. FMSY was estimated at 0.17 regardless of *L. whiffiagonis*, but then in recommending both stocks are linked. F for this year has been located behind the upturn in 0.30.

Megrim: *Lepidorhombus whiffiagonis*. After significant declines in previous years in mortality, a significant upturn occurs, placing the current F significantly above the Fmsy. The spawning biomass falls but still remains above Bpa. Stock status is worse than last year by fishing mortality.

Monkfish in divisions VIIb-k y VIIIa, b, d (North stock). The management of the two species of anglerfishes under a combined TAC prevents effective control of the single species and could lead to overexploitation of the two species. However, biomass has increased. In the case of *L. piscatorius* (white monkfish) the average stock in the period 2012-2013 is 60% higher than the previous years, while the abundance index suggests average levels of recruitment (maintained) since 2008 with a decline in 2013. In the case of *L. budegassa* (black monkfish) biomass has fluctuated but with the average value of the indicator from 2012 to 2013 at a 33% higher than the average for the preceding three years (2009-2011).

Monkfish in divisions VIIIc y IXa (South stock). Anglerfish species, *Lophius piscatorius* and *L. budegassa*, are caught together in bottom trawl and gillnet fisheries. These fisheries also catch hake, *Nephrops*, and megrim. The white anglerfish situated in recent years slightly below the Fmsy. In addition it is observed a slight decrease of biomass for the last year, while recruitment points to a slight increase. By contrast, in the case of black monkfish, all parameters are favourable, resulting in a further decline of F placing it clearly below Fmsy, while increasing the biomass

Hake in divisions VIIIc & IXa (South stock). In 2006, started to apply a recovery plan which main measure contemplate annual reductions of fishing effort of 10% for those fleets that generate a significant fishing mortality (F) on this population. Until 2009, these reductions had no significant effect on F, which remained relatively stable above 0.9. However from 2010 these reductions of effort had a gradual impact in fishing mortality, which started to decrease. This decrease continued over the time, despite the slight increase observed in the last year. Recruitment seems to recover and is situated close to the average.

Mackerel (MAC-NEA) (*Scomber scombrus*) in Subareas I–VII & XIV and divisions VIIIa–e & IXa (North Atlantic). Traditionally, the fishing areas with higher catches of mackerel have been in the northern North Sea (along the border of Divisions IVa and IIa), around the Shetland Islands, and off the west coast of Scotland and Ireland. The southern fishery off Spain's northern coast has also accounted for significant catches. In recent years, significant catches have also been taken in Icelandic and Faroese waters, areas where almost no catches were reported prior to 2008. In 2013, catches in this area constituted approximately half of the total reported landings. In the Icelandic and Faroese fisheries, in the northwestern part of the distribution area, mackerel are sometimes caught together with herring. In the southern part of the distribution area, Atlantic mackerel (*Scomber scombrus*) can be caught together with Spanish mackerel (*Scomber colias*). Catches of both species are reported separately. It is estimated that the spawning stock biomass (SSB) has increased since the 2000s and it has been above the MSY -Btrigger since 2009. Fishing mortality (F) has been declining since the mid-2000s, but still higher than the Fpa. Stock biomass is considered to have been situated above Btrigger, Bpa and Blim in the last three years. Recruitment has a slight upward trend. So stock still maintained a very good productivity and that translates into good recruitments.

Horse mackerel (*Trachurus trachurus*) in Division IXa (Atlantic Iberian Waters). Horse mackerel is caught in mixed fisheries. Changes in the availability of other species caught in the same fisheries could affect the targeting of horse mackerel. Traditionally, horse mackerel catches have a large proportion of juveniles. The Spanish bottom trawl fleet, targeting mainly adult fish increased in importance until 2010 and has subsequently declined. Other species of horse mackerel are caught together with *T. trachurus* in Division IXa, in particular *T. picturatus* of which 300–800 t were caught annually in the past. The advice for Southern horse mackerel applies to the southern stock of *T. trachurus* only.

Fishing mortality (F) has been below FMSY over the whole time-series and the spawning–stock biomass (SSB) has been relatively stable, showing a recent increase resulting from the strong recruitments in 2011 and 2012. Recruitment (R) in 2013 is estimated to be close to the average of the entire time-series.

Horse mackerel (*Trachurus trachurus*) in Subarea VIII and Divisions IIa, IVa, Vb, VIa, and VIIa–c, e–k (Northeast Atlantic). The TAC is calculated based on gender (JAX) and not by discriminating the dominant species. Therefore, this TAC includes *T. trachurus, T.mediterraneus* and *T. picturatus*. The stock and the fishery are very dependent on occasional high recruitments. The very high 1982 recruitment showed a peak in SSB in 1988, and the relatively high one in 2001 gave a moderate increase in SSB up to 2009. In recent years, SSB has been declining and is currently just above MSY Btrigger. Fishing mortality has been increasing since 2007, but remains just below FMSY. Recruitment has been low from 2002 onwards.

Anchovy in Subarea VIII (Bay of Biscay). Anchovy is targeted by trawlers and purse-seiners. The Spanish and French fleets fishing for anchovy in subarea VIII are spatially and temporally well separated. The Spanish fleet operates mainly in Divisions VIIIc and VIIIb in spring, while the French fleets operate in Division VIIIa in summer and autumn and in Division VIIIb in winter and summer. Since 2003 the fleets of both countries have decreased. The evaluation recently published by ICES shows abundance of historical biomass, having expanded the stocks to areas where it was not present since the 60's. The operating ratio is below average (catch / biomass) which is an example of the good situation of the stock. Due to management plan this stock of anchovy, the biomass has been recuperated.

Anchovy (*Engraulis encrasicolus*) in Division IXa (Atlantic Iberian Waters)

Most of the fishery for this anchovy stock takes place in Subdivision IXa South. The fleets in the northern and western parts of Division IXa (targeting European Pilchard) occasionally target anchovy when abundant, which occurred in 1995, 2011 and 2014. Recent studies on genetics indicate that the stock inhabiting Division IXa South (Algarve and Cadiz) is different genetically from the one inhabiting the remaining parts of Division IXa (Zarraonaindia et al., 2012). This stock has a qualitative assessment because there is no reference points to reach an analytical assessment of the stock. The responsible for the biological evaluation of the stock, with the latest results obtained independent indices of the fishery (research surveys at sea will be presented: Pelacus spring, Ecocadiz Summer and Ecocádiz recruits in autumn, being the latter two that analyse the Gulf of Cadiz. There is a compromise to meet a benchmark in relation to establish reference points.

Blue whiting (*Micromesistius poutassou*) in Subareas I–IX, XII, and XIV (Northeast Atlantic)

Blue whiting is widely distributed in the eastern part of the North Atlantic from Norway to the south of Portugal, with the highest concentrations along the edge of the continental shelf between 300 and 600 m from the coast. The population is comprised of at least two components (a northern and a southern component) within this region (ICES, 2014c). Both components spawn along the shelf edge and on banks west of the British Islands. Juveniles are also widely distributed, including in the Bay of Biscay and Iberian waters, with the main nursery area believed to be in the Norwegian Sea. The main fisheries on blue whiting in 2013 were conducted west of Scotland, around the Porcupine Bank, and south of the Faroe Islands. Most blue whiting catches occurred in the first half of the year and are mainly used for industrial purposes. Fishing mortality (F) has increased since 2011, which was relatively low to be above FMSY in 2014. The spawning stock biomass (SSB) increased from 2010 to 2014 and is above MSY Btrigger. Recently recruitment is estimated above average, but with an uncertainty. Additional information indicates an above average recruitment in 2014 and 2015 and this is taken into account in the short-term prognosis.

Innovation and Development

In the field of technological development and innovation in the Spanish fishing sector, Spain has adopted the so-called Strategic Plan for Innovation and Technological Development in Fisheries and Aquaculture, covering the period from 2014 to 2020. Its main objective is to increase the competitiveness of Spanish fisheries and aquaculture sectors through innovation and technological development, optimizing resources in the context of the European Union and considering economic, social, and environmental and health requirements.

As regards fishing technologies, priorities and specific strategic objectives were established, highlighting priority. Among all of them, the following:

Innovation in more selective gear, in order to avoid non-target catches, reducing the environmental impact of fishing, capture reduction of sensitive species and by catch, promotion of energy audits, to promote energy savings, design of energy efficient fishing gear, automation of fishing practices, adaptation of fuel cells for marine use (fuel cells are an energy alternative that should be raised in the medium term).

Complementarily, it has been established other priorities in the field of marine resources:

Quantification of socioeconomic exploitation of fisheries and integration in all studies on the state of resources and exploitation models, conservation of marine and coastal ecosystems, study of profitability of the fleet, genetic characterization of biodiversity, determination of the impact of aquaculture on the marine environment, recovery of discards and new species.

Finally, there is an organization called the "Spanish Technology Platform of Fisheries and Aquaculture (PTEPA, in Spanish)", that helps coordinate actions and public and private investments in research, development and innovation.

Performance results of selected fleet segments

Small Scale Fleet

The Spanish coastal fleet (SSF and DRB under 12 meters), involves more that 72% of the Spanish fleet, in terms of number of vessels, but only 4.1% of the total vessel tonnage and 18% of engine power. Their fishing activity comprises only the 4% of the total weight, and 6.6% of the total value of landings.

Economic results for this fleet (as explained on "*Performance by fishing activity*") shows a marked economical imbalance, with negative indicators, and worst results in 2014 compared to the average 2011-2013, except for some segments with hooks and dredgers on Atlantic, that had on 2014 a positive net profit margin.

Large Scale Fleet

At this scale, two segments are highlighted: Purse seiners in North Atlantic and Mediterranean Trawlers

Purse seiners North Atlantic

315 active vessels were part of this fleet segment in 2014, operating predominantly in National Waters (Area 27.VIIIc and 27.IXa) and it targets European Pilchard, Atlantic, horse mackerel, anchovy and other small pelagic. These vessels change the gear when they go fishing to the Cantabrian Sea as pole-lines, bait and trolling vessels. For the species Atlantic bonito and Atlantic mackerel (Areas 27.VII and VIII abd) this fleet is highly dependent on TACs and stocks status

They represent only 7% of the total number of LSF vessels, but 30% in terms of weight of landings, and contribute to LSF with the 17% of the GVA (€88.4 million), €16.3 gross profit, and €10.8 million net profit, with a labour productivity of €30 million per FTE

It is mainly a profitable fleet, as it was also seen on the indicator GVA to revenue (69%). This value decrease if we refer to gross profit margin 12.8% mainly due to employment cost, very high on big vessels, the same can be seen with the Net profit margin 8.5%

Purse Seiners North Atlantic 18-24 m: almost 100 active vessels, with a negative net profit, the reason will probably be that this part of the segment does not fish on the Cantabrian Sea, main difference with the 24-40m.

Mediterranean Trawlers

Out of the total of Spanish vessels that fish at the Mediterranean Sea, the 26.6% are trawlers (66% of the total vessel tonnage and 53% of engine power at Mediterranean Sea). This fleet is highly and stocks status dependent (rose shrimp and Hake mainly, less important mullet, lobster and poutassou)

633 vessels are Mediterranean Trawlers (15% of the total vessels of LSF, and 4% of total landings of LSF).In terms of economic data, this segment mean 18% of the revenue and 14% of GVA of the LSF, with €72.7 million GVA, €16.3 million Gross profit, and €4.9 million net profit, with a labour productivity of €24 million per FTE

Even though this segment is profitable in terms of GVA to revenue (44.3%), if we have a look to the net profit margin (3%) we can see a high decrease, mainly due to the labour cost, and the less fuel efficiency (6 litres per tonne the highest of the LDF)

Distant Water Fleet

Purse seiners over 40m: 33 active vessels (freezer tuna seiners), (14% of the total DWF), that represents 50% of the total weight of landings of the DWF, 39% of revenue and 31% of GVA of DWF

Starting with an income of €365.6 million, GVA of €137.6 million and €61.6 million of net profit, which is a high figure as we are talking only about 33 vessels.

GVA to revenue (37.7%), Gross profit margin (23.9%), net profit margin (16.84%) these values are in line with the economic performance of the DWF segment; only the labour productivity is higher €86 million for this segment, while for the total of DWF is €76 million.

These vessels have a high profitability with high benefits, operate in international waters covered by Regional fishing organisations (Atlantic, Pacific and Indian), in the EEZ of third countries (under Sustainable Fisheries Partnership agreements), or in places where the vessels have private licences.

Surface longline fleet

The management of this fishery is carried out by national regulation that covers the surface longline fleet for highly migratory species (mainly swordfish, tunas and pelagic sharks). A unified census of surface longline is developed. In this census the right to carry out the fishing activity is set down, for each vessel and fishery area, also the percentage of quota for those areas subject to TACs (South and North Atlantic swordfish) for each of the 7 areas in which this fishery is split

Zone 1: Mediterranean

Zone 2: waters covered by the sovereignty or jurisdiction of Spain till 80 miles on Atlantic

Zone 3: Waters of the Atlantic Ocean north of latitude 5°N and outside sovereignty or jurisdiction of Spain till 80 miles of base lines.

Zone 4: Waters of the Atlantic Ocean south of latitude 5°N.

Zone 5: Waters of the Indian Ocean (IOTC)

Zone 6: Waters of the Pacific Ocean (IATTC)

Zone 7: Western & Central Pacific Ocean (WCPFC)

Surface longline (Large Scale Fleet)

109 active vessels are part of this subgroup (45 of the Mediterranean, 64 North Atlantic), with a GVA of €24.8 million, 50% of this amount belongs to Surface LL North Atlantic 24-40m (€14.1 million) the same can be seen with Gross profit (€6.7 million) where half of it belongs to Surface LL North Atlantic 24-40m, and with Net profit (€3.3 million),) where €2.3 million belongs to Surface LL North Atlantic 24-40m.

The results of the performance indicators in 2014 were: GVA to revenue (46.8%) and gross and net profit margins 12.7% and 6.2%, so this fleet segment is profitable.

Surface longline (Distant Water Fleet)

94 active vessels are part of this subgroup (69 vessels 24-40m, and 25 over 40m) represent 41 percent of the total DWF, but only 12% of the total weight of landings, 14% of revenue and 10% of GVA of the DWF, with a GVA of €44.5 million, net profit of €13 million, the labour productivity reaches €28 million/FTE

The results of the performance indicators in 2014 were: GVA to revenue (33.3%) and gross and net profit margins 15.1% and 9.8%, so this fleet segment is profitable.

If we split the two lengths that are part of this group, the one with the largest number of vessels, people employed, and incomes is 24-40, but the GVA is similar in both lengths; meanwhile the net profit is higher on over 40 (€8.2 million). So even though both are profitable, the subgroup over 40 is more profitable (net profit margin 15%) than 24-40 (net profit margin 6.2%)

Projections for 2015 and outlook

Preliminary results for 2015 suggest that the structural policy carried out to reduce the number of vessel will continue, not only on number of vessels but also in tonnage and power. Of the total 9 686 vessels, 8 501 were active during 2015, if you have a look to the inactive vessels, more than 90% of them were less than 12 meters of length.

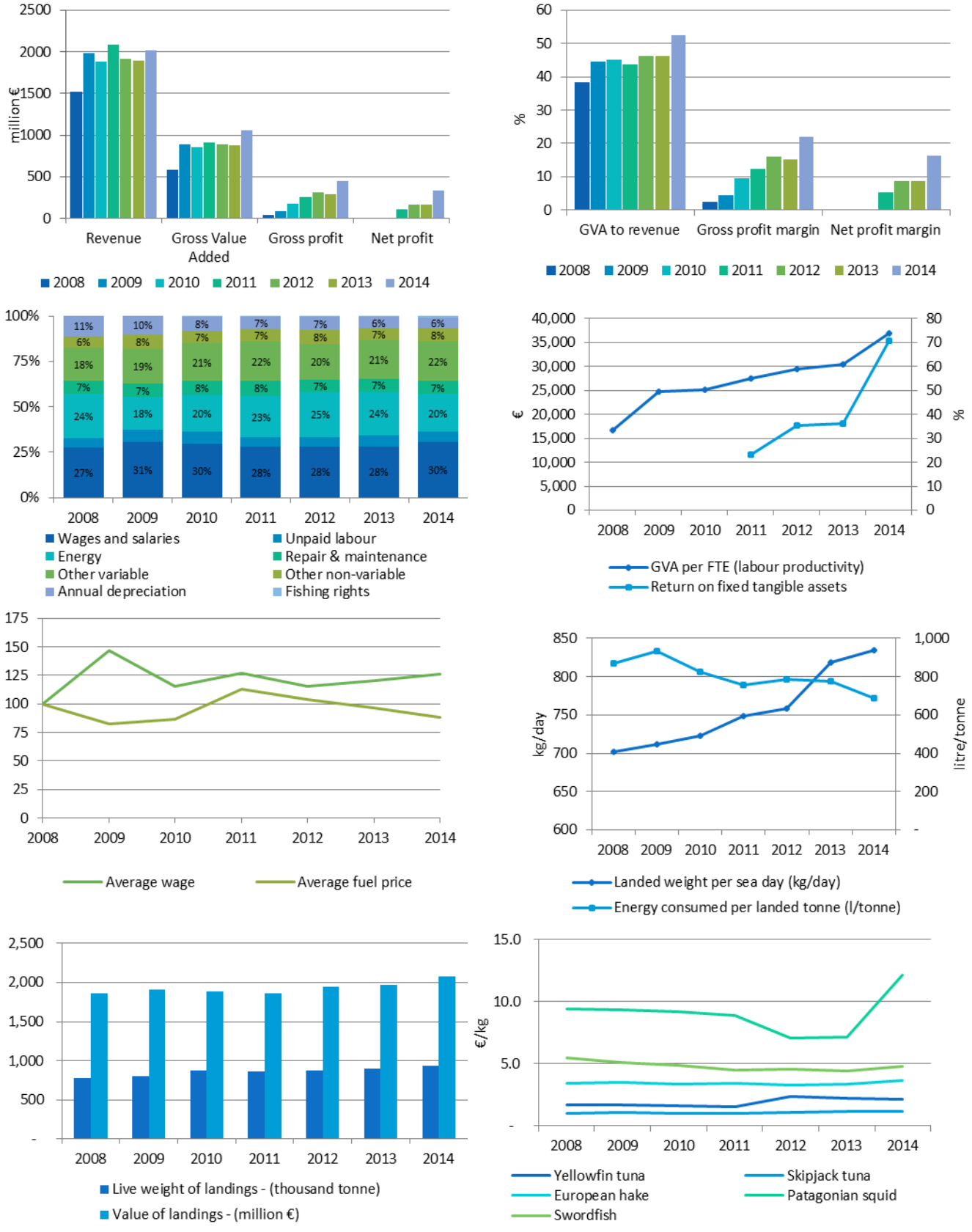
Landed weight is expected to increase by 7% and landed value by 2%. Decreasing costs, particularly a 37% decrease in fuel costs and other variable costs lead to significant economic improvements in the Spanish fleet with gross profit margins and net profit margins increasing to 36% and 32% respectively. These profit margins are amongst the highest in the EU for 2015.

Projections for 2016 show relatively stable performance, although there are further reductions in the number of vessels. Landed weight is expected to remain unchanged in 2015 while landed value increases by 2%. An increase in variable costs due in part to the landing obligation decreases gross and net profit by 22% and 28, while GVA as a percentage of revenue falls, but to a relatively high level of 58%.

In terms of live weight and value of landings the main species for the Spanish fleet in 2015 were highly migratory stocks (skipjack tuna, yellowfin tuna, big eye tuna). An important decrease in European pilchard due to the recovery plan, and the bad situation of these stocks.

Data issues

For vessel under 10 m, the information the information comes from the sales notes. In Spain, the Autonomous Communities authorities are in charge of picking up/collecting the information, and transmit it to the Central Authorities (General Secretary for Fisheries). In case of scientific data the information is prepared and collected (the biological information)by the Institutes that are involved in the National Data Collection Programme .These institutes received all the information provided in the whole system that Spain has to collect and gather all the information produced by the activity of the fleet operating. This information comprises the electronic reporting system, sales notes, fleet register and the vessel monitoring system. This information is provided by The General Secretary of Fisheries.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.20 Spain: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.89 Spain: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	13,115	11,501	11,209	10,900	10,544	10,167	9,921		-2%	-12%
Number of Inactive vessels_ms	(#)	3,312	1,818	854	1,784	1,606	1,372	1,228		-10%	-31%
Vessel tonnage	(thousand GT)	470.1	459.5	439.7	415.4	400.1	384.9	379.4		-1%	-11%
Engine power	(thousand kW)	1,067.9	1,027.3	983.2	937.7	903.6	873.9	867.0		-1%	-10%
Average vessel age	(year)	28	26	27	28	28	29	29		0%	5%
Average vessel length	(metre)	11	11	11	11	11	11	11		1%	1%
Enterprises with one vessel	(#)	11,248	9,902	9,659	9,438	9,146	8,835	8,588		-3%	-12%
Enterprises with 2 to 5 vessels	(#)	841	710	686	652	625	596	599		1%	-13%
Enterprises with more than 5 vessels	(#)	4	4	6	6	5	7	8		14%	50%
FTE	(#)	34,921	35,844	33,678	33,210	30,302	28,782	28,629		-1%	-13%
Total employed	(person)	36,672	38,045	39,281	35,808	34,399	33,129	33,121		0%	-9%
Days at sea	(thousand day)	1,105	1,122	1,209	1,151	1,149	1,097	1,118		2%	-2%
Fishing days	(thousand day)	1,050	1,068	1,154	1,100	1,102	1,049	1,073		2%	-1%
Number of fishing trips	(thousand)	861	886	978	964	941	890	900		1%	-2%
Energy consumption	(million litre)	674.9	745.9	719.2	653.3	683.3	695.4	641.1		-8%	-8%
Live weight of landings	(thousand tonne)	775.9	798.9	873.4	861.0	871.1	898.1	932.7		4%	10%
Value of landings	(million €)	1,864.4	1,907.0	1,885.0	1,861.6	1,942.4	1,970.0	2,074.8		5%	9%
Income from landings	(million €)	1,526.3	1,988.2	1,868.1	2,036.0	1,920.9	1,884.7	1,997.6		6%	7%
Other income	(million €)	-	-	16.75	45.46	0.12	12.74	23.28		83%	86%
Direct income subsidies	(million €)	60.89	68.11	34.63	30.86	22.82	11.42	12.26		7%	-68%
Income from leasing fishing rights	(million €)			0.6	0.1	0.8	6.6	14.3		117%	603%
Wages and salaries of crew	(million €)	460.13	649.26	554.91	548.46	493.80	486.22	513.95		6%	-3%
Unpaid labour value	(million €)	89.79	149.18	116.78	102.86	87.26	107.12	100.83		-6%	-7%
Energy costs	(million €)	411.23	375.70	378.04	448.38	433.08	409.32	345.74		-16%	-16%
Repair & maintenance costs	(million €)	118.01	153.29	141.49	163.61	122.18	127.66	120.99		-5%	-12%
Other variable costs	(million €)	303.80	405.49	384.77	423.85	341.17	362.46	367.63		1%	-1%
Other non-variable costs	(million €)	107.44	169.26	130.69	134.93	133.42	119.02	126.92		7%	-4%
Annual depreciation costs	(million €)	188.82	219.00	140.83	134.82	126.82	104.07	97.84		-6%	-36%
Rights costs	(million €)			9	8	10	12	14		19%	46%
Opportunity cost of capital	(million €)	-	-	-	12.11	17.46	15.07	14.38		-5%	93%
Tangible asset value (replacement)	(million €)				533.4	518.1	500.5	490.6		-2%	-5%
Fishing rights	(million €)			71	65	56	114	222		94%	189%
Investments	(million €)	105.1	29.2	47.2	34.2	23.1	87.1	33.6		-61%	-38%
Financial position	(%)				7.9	8.6	5.9	2.2		-63%	-70%
Gross Value Added	(million €)	585.8	884.4	849.9	910.7	891.2	879.0	1,059.6		21%	27%
GVA to revenue	(%)	38.4	44.5	45.1	43.8	46.4	46.3	52.4		13%	19%
Gross profit	(million €)	35.9	86.0	178.2	259.4	310.1	285.7	444.8		56%	131%
Gross profit margin	(%)	2.4	4.3	9.5	12.5	16.1	15.1	22.0		46%	121%
Net profit	(million €)				112.4	165.8	166.5	332.6		100%	124%
Net profit margin	(%)				5.4	8.6	8.8	16.5		88%	116%
GVA per FTE (labour productivity)	(thousand €)	16.8	24.7	25.2	27.4	29.4	30.5	37.0		21%	44%
Return on fixed tangible assets	(%)				23.3	35.4	36.3	70.7		95%	123%

Table 5.90 Spain: National fleet statistics and economic performance results based on fleet segment level data.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	9803	9683	10355	9116	8938	8795	8693	*8,564*	*7,745*		-1%	-10%
Total employed	(person)	36672	38044.77	39281.35	35808.41	34399.33	33129.09	33120.91	*32,409*	*30,331*		-2%	-6%
FTE	(#)	34,921	35,844	33,678	33,210	30,302	28,782	28,629	*26,635*	*26,056*		-7%	-2%
Days at sea	(day)	1,105,028	1,122,326	1,208,861	1,150,705	1,149,129	1,096,886	1,117,674	*1,040,539*	*911,234*		-7%	-12%
Energy consumption	(thousand litres)	674,938	745,929	719,203	653,350	683,290	695,423	641,074	*648,639*	*491,060*		1%	-24%
Live weight of landings	(tonne)	775,941	798,859	873,435	860,778	871,085	898,143	932,722	*999,275*	*1,002,673*		7%	0%
Value of landings	(thousand €)	1,864,446	1,906,997	1,885,024	1,858,748	1,942,448	1,970,013	2,074,754	*2,119,765*	*2,152,068*		2%	2%
Income from landings	(thousand €)	1,526,329	1,988,155	1,869,319	2,036,003	1,920,884	1,884,726	1,997,624	*2,041,896*	*2,085,673*		2%	2%
Other income	(thousand €)	-	-	16,755	45,457	119	12,740	23,279	*14,486*	*13,235*		-38%	-9%
Wages and salaries of crew	(thousand €)	460,129	649,258	554,914	548,464	493,799	486,216	513,954	*532,715*	*551,963*		4%	4%
Unpaid labour value	(thousand €)	89,791	149,175	116,778	102,856	87,256	107,123	100,832	*94,431*	*84,393*		-6%	-11%
Energy costs	(thousand €)	411,232	375,698	378,036	448,382	433,081	409,319	345,736	*216,652*	*244,246*		-37%	13%
Repair & maintenance costs	(thousand €)	118,007	153,287	141,487	163,612	122,181	127,657	120,989	*118,058*	*112,795*		-2%	-4%
Other variable costs	(thousand €)	303,801	405,492	384,772	423,855	341,165	362,456	367,631	*230,893*	*407,965*		-37%	77%
Other non-variable costs	(thousand €)	107,444	169,258	130,688	134,931	133,422	119,022	126,917	*116,744*	*112,072*		-8%	-4%
Annual depreciation costs	(thousand €)	188,817	219,001	140,833	134,825	126,815	104,073	97,844	*106,890*	*100,871*		9%	-6%
Opportunity cost of capital	(thousand €)	-	-	-	11,566	16,539	14,222	13,469	*10,747*	*10,244*		-20%	-5%
Tangible asset value (replacement)	(thousand €)	-	-	-	509,512	490,782	472,488	459,689	*457,342*	*435,942*		-1%	-5%
Gross Value Added	(thousand €)	585,845	884,421	849,389	910,185	891,155	878,354	1,059,630	*1,374,036*	*1,221,830*		30%	-11%
Gross profit	(thousand €)	35,925	85,988	181,056	258,749	310,100	282,880	442,141	*746,890*	*585,474*		69%	-22%
Net profit	(thousand €)	-	-	-	112,159	165,226	164,084	327,897	*659,252*	*474,359*		101%	-28%

Table 5.91 Spain: National fleet statistics and economic performance results by fishing activity.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	SSF							LSF							DWF														
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend DWF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	6,420	6,315	7,102	4,214	4,188	4,215	4,156	3,089	3,101	2,956	4,622	4,486	4,340	4,307	294	267	297	280	264	240	230		-1%	-23%		-1%	14%		-4%	-16%
Vessel tonnage (thousand GT)	14.4	14.1	15.1	13.1	11.6	11.5	11.5	268.0	262.8	237.2	202.9	189.7	185.3	178.0	176.6	173.4	179.4	169.3	174.0	162.7	163.6		0%	-14%		-4%	-21%		1%	-5%
Engine power (thousand kW)	139.0	135.5	146.9	115.2	109.0	109.8	110.5	624.5	609.6	556.7	513.4	487.7	472.3	465.2	252.4	245.9	255.3	237.6	240.5	225.5	228.8		1%	-12%		-2%	-14%		1%	-6%
FTE (#)	7,059	7,261	8,222	6,695	5,378	7,317	5,546	21,266	21,266	17,140	19,802	19,033	16,110	17,179	6,596	7,317	8,316	6,713	5,891	5,355	5,905		-24%	-21%		7%	-10%		10%	-12%
Total employed (person)	11,785	11,797	12,697	8,803	8,601	9,484	8,251	19,982	20,714	19,524	21,545	21,085	18,991	19,809	4,905	5,534	7,060	5,460	4,713	4,654	5,061		-13%	-22%		4%	-2%		9%	-6%
Days at sea (thousand day)	515.1	532.2	624.3	393.1	392.2	391.1	406.7	514.0	516.5	504.8	680.0	684.9	640.5	647.3	75.9	73.7	79.8	77.6	72.0	65.3	63.7		4%	-14%		1%	10%		-2%	-14%
Fishing days (thousand day)	515.1	532.1	624.2	392.7	392.2	390.9	406.5	469.9	473.0	460.7	639.7	647.6	600.9	610.7	64.9	62.9	68.7	67.6	62.6	57.1	56.1		4%	-14%		2%	11%		-2%	-12%
Number of fishing trips (thousand)	504	522	614	391	383	381	393	344	356	357	565	553	506	506	12	9	8	7	4	3	2		3%	-16%		0%	13%		-31%	-70%
Energy consumption (million litre)	26.2	33.9	34.7	21.6	21.3	28.4	22.8	439.4	439.3	388.4	366.3	373.5	378.3	350.0	209.3	272.7	296.0	265.4	288.5	288.7	268.2		-20%	-18%		-7%	-12%		-7%	-1%
Live weight of landings (thousand tonn	25.9	25.3	28.1	25.5	28.5	26.0	29.6	432	478	442	400	395	390	410	318	296	403	435	448	482	494		14%	11%		5%	-3%		2%	24%
Value of landings (million €)	129.9	128.2	137.9	112.2	100.9	94.7	104.4	1,076	1,159	1,048	947	896	855	869	659	620	699	799	946	1,020	1,101		10%	-11%		2%	-13%		8%	39%
Income from landings (million €)	121.1	195.6	198.0	129.5	113.2	158.8	126.2	915	1,201	927	1,071	980	877	933	490.3	591.7	743.5	835.6	827.5	849.0	938.0		-21%	-17%		6%	-6%		10%	30%
Other income (million €)	-	-	1.8	0.6	0.0	0.1	0.0	-	-	3.5	18.8	-	6.2	8.1	-	-	11.4	26.1	0.1	6.4	15.2		-90%	-98%		29%	70%		137%	107%
Direct income subsidies (million €)	0.53	4.77	0.62	1.31	1.20	0.96	0.22	45.71	56.44	19.67	17.85	8.33	4.09	6.37	14.64	6.90	14.34	11.71	13.29	6.37	5.66		-77%	-86%		56%	-75%		-11%	-49%
Income from leasing fishing rights (million €)			-	-	-	-	-			0.6	0.1	0.8	5.6	13.6			-	-	0.0	0.9	0.7					141%	660%		-29%	180%
Wages and salaries of crew (million €)	32.6	53.1	45.7	39.3	35.2	50.0	41.4	327.7	466.3	349.8	358.2	323.7	300.5	348.3	99.9	129.8	159.4	151.0	134.9	135.7	124.3		-17%	-3%		16%	-2%		-8%	-8%
Unpaid labour value (million €)	50.7	88.9	79.5	63.3	35.7	62.1	47.1	38.3	58.4	36.7	38.1	50.2	44.4	53.3	0.8	1.8	0.5	1.5	1.4	0.7	0.4		-24%	-26%		20%	20%		-41%	-63%
Energy costs (million €)	15.5	19.6	25.9	16.2	14.5	17.7	12.6	257.9	216.8	187.6	251.4	234.3	212.0	176.9	137.8	139.3	164.6	180.8	184.3	179.6	156.3		-29%	-31%		-17%	-22%		-13%	-5%
Repair & maintenance costs (million €)	8.5	16.3	13.7	6.0	7.0	10.7	6.1	76.4	92.1	76.9	97.9	56.8	56.1	62.9	33.1	44.9	50.9	59.7	58.4	60.8	52.0		-43%	-41%		12%	-17%		-15%	1%
Other variable costs (million €)	18.2	25.6	30.0	18.5	14.5	23.2	16.4	145.9	192.1	125.3	165.9	115.7	125.8	115.2	139.8	187.8	229.4	239.4	210.9	213.5	236.0		-29%	-25%		-8%	-21%		11%	16%
Other non-variable costs (million €)	3.2	6.1	6.8	7.9	4.4	7.4	4.4	59.7	100.2	63.8	65.7	56.8	55.1	59.9	44.6	63.0	60.1	61.4	72.2	56.5	62.7		-41%	-26%		9%	-10%		11%	5%
Annual depreciation costs (million €)	6.8	9.4	8.6	8.3	4.4	4.9	5.3	119.9	144.7	77.8	82.7	77.4	50.1	53.0	62.1	65.0	54.4	43.9	44.9	49.1	39.6		7%	-26%		6%	-42%		-19%	-26%
Rights costs (million €)			-	0.05	0.03	0.06	0.01			6.60	4.57	8.47	10.81	12.81			2.08	3.09	1.23	0.79	1.02		-90%	-82%		18%	68%		30%	-43%
Opportunity cost of capital (million €)				0.78	1.12	1.02	0.95				6.53	8.99	8.01	6.84				4.26	6.43	5.19	5.68		-7%	-3%		-15%	-13%		10%	7%
Tangible asset value (replacement) (million €)				34.2	33.3	33.9	32.3				287.6	266.7	266.3	233.4				187.7	190.8	172.3	193.9		-5%	-4%		-12%	-15%		13%	6%
Fishing rights (million €)			-	-	-	44	25			61	65	56	61	178			11	-	-	9	19		-44%	125%		192%	193%		107%	278%
Investments (million €)	7.4	4.7	5.0	7.8	1.8	10.5	3.3	74.2	15.9	16.2	17.8	14.7	63.9	15.6	23.5	8.6	26.0	8.5	6.5	12.7	14.7		-68%	-46%		-76%	-54%		16%	3%
Gross Value Added (million €)	75.7	128.1	123.5	81.4	72.7	99.9	86.7	375.1	599.6	476.4	508.8	516.6	434.1	526.6	135.0	156.7	250.0	320.5	301.8	345.0	446.3		-13%	-10%		21%	9%		29%	77%
GVA to revenue (%)	62.5	65.5	61.8	62.6	64.3	62.9	68.7	41.0	49.9	51.2	46.7	52.7	49.2	55.9	27.5	26.5	33.1	37.2	36.5	40.3	46.8		9%	9%		14%	15%		16%	40%
Gross profit (million €)	- 7.5	- 14.0	1.2	- 21.2	1.9	- 14.9	- 4.4	9.1	74.9	89.7	111.9	142.7	89.2	125.0	34.3	25.1	90.0	168.0	165.5	208.6	321.5		70%	51%		40%	45%		54%	179%
Gross profit margin (%)	- 6.2	- 7.1	0.6	- 16.3	1.6	- 9.7	- 3.6	1.0	6.2	9.6	10.3	14.6	10.1	13.3	7.0	4.2	11.9	19.5	20.0	24.4	33.7		63%	41%		31%	54%		38%	133%
Net profit (million €)			-	29.9	1.0	- 20.7	- 12.2				22.2	50.1	30.5	63.9				119.9	114.2	154.3	276.3		41%	26%		109%	86%		79%	113%
Net profit margin (%)			-	24.9	1.1	- 14.0	- 10.7				2.1	5.3	3.5	6.9				13.9	13.8	18.0	29.0		23%	15%		99%	92%		61%	90%
GVA per FTE (labour productivity) (thousand €)	10.7	17.6	15.0	12.2	13.5	13.7	15.6	17.6	28.2	27.8	25.7	27.1	26.9	30.7	20.5	21.4	30.1	47.7	51.2	64.4	75.6		15%	13%		14%	20%		17%	93%

Table 5.92 Spain: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(litre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
ESP OFR PS40XX	33	1,604	8,780	460	249,571	416,773	365,595	137,631	37.6	87,350	23.9	61,567	16.84	31.4	86	53	High		
ESP OFR DTS40XX	30	921	8,604	391	151,604	396,495	222,900	101,177	45.4	68,486	30.7	59,125	26.53	35.5	110	262	High	572%	Improved
ESP OFR DTS2440	39	1,302	10,911	1,568	22,424	142,431	212,818	157,008	73.8	145,634	68.4	143,678	67.51	8.7	121	1,539	High	4190%	Improved
ESP A27 DTS2440	140	1,593	34,072	1,326	75,162	133,504	152,677	66,071	43.3	18,530	12.1	8,918	5.84	29.8	41	24	Reasonable	577%	Improved
ESP A27 PGP2440 °	67	1,162	16,487	819	25,886	86,057	102,089	63,329	62.0	21,200	20.8	12,972	12.71	36.3	55	73	High		
ESP A27 DTS40XX °	18	474	3,999	464	40,676	129,308	88,165	47,155	53.5	24,779	28.1	17,274	19.59	47.2	99	134	High		
ESP A37 DTS1824	327	1,538	66,011	6,023	7,932	41,923	84,838	37,168	43.8	8,571	10.1	2,669	3.15	18.6	24	13	Reasonable	904%	Improved
ESP OFR PGO2440 °	69	1,077	20,544	853	39,688	81,320	79,065	23,592	29.8	8,338	10.5	4,903	6.20	14.2	22	27	Reasonable		
ESP A27 PS2440	89	1,496	15,692	283	51,823	60,085	72,281	50,193	69.4	12,373	17.1	10,279	14.22	25.3	34	85	High	2%	Stable
ESP OFR PGO40XX °	25	524	8,073	1,126	17,512	45,695	54,685	20,926	38.3	11,797	21.6	8,183	14.96	17.4	40	75	High		
ESP A37 DTS2440	146	795	29,816	5,933	5,363	35,187	50,948	22,031	43.2	5,541	10.9	1,051	2.06	20.7	28	8	Reasonable	114%	Improved
ESP A37 PS1824	89	978	20,223	372	22,564	41,910	46,134	35,010	75.9	9,936	21.5	7,513	16.29	25.6	36	86	High	29%	Improved
ESP A27 PMP0010	1,993	2,723	181,075	781	9,260	39,760	42,477	28,606	67.3	- 5,093	- 12.0	- 6,510	- 15.33	12.4	11	- 47	Weak		
ESP A37 PMP0612	999	1,149	110,572	1,076	6,075	29,525	32,311	23,867	73.9	1,628	5.0	- 1,252	- 3.87	19.4	21	- 12	Weak		
ESP A27 PGO2440	30	429	9,126	644	20,727	30,573	31,046	14,096	45.4	3,728	12.0	2,349	7.56	24.2	33	31	Reasonable		
ESP A27 PS1824	98	840	16,803	141	42,461	41,550	29,343	19,387	66.1	1,921	6.5	- 899	- 3.06	20.8	23	- 7	Weak	-858%	Deteriorated
ESP A37 PS1218	90	713	19,588	179	18,253	30,572	28,910	20,601	71.3	5,624	19.5	5,004	17.31	21.0	29	142	High		
ESP A37 DTS1218	160	733	30,269	4,886	3,203	12,371	28,529	13,529	47.4	2,226	7.8	1,205	4.22	15.4	18	19	Reasonable	208%	Improved
ESP A27 DRB0010	1,845	1,604	198,892	1,403	3,044	23,158	27,504	20,021	72.8	- 8,520	- 31.0	- 9,423	- 34.26	17.8	12	- 121	Weak	-452%	Deteriorated
ESP A27 PS1218	128	658	17,946	197	27,811	27,764	26,255	18,792	71.6	2,030	7.7	1,449	5.52	25.5	29	40	Reasonable	2%	Stable
ESP A27 DTS1824	83	377	14,086	1,829	8,021	21,201	21,875	9,433	43.1	1,432	6.5	46	0.21	21.2	25	4	Reasonable	106%	Improved
ESP A37 PS2440 °	25	177	4,430	284	5,906	23,552	17,606	11,418	64.9	3,168	18.0	1,103	6.27	46.7	65	22	Reasonable	-64%	Deteriorated
ESP OFR PMP0010	494	622	35,592	626	3,289	7,274	15,036	10,620	70.6	- 569	- 3.8	- 1,138	- 7.57	18.0	17	- 47	Weak		
ESP OFR HOK2440 °	24	383	4,841	386	11,125	15,616	14,916	4,628	31.0	468	3.1	- 334	- 2.24	10.9	12	- 4	Weak		
ESP A27 DFN1218	159	752	26,851	628	6,986	18,212	14,106	8,095	57.4	490	3.5	- 152	- 1.08	10.1	11	0	Weak		
ESP A27 DFN1824 °	31	272	6,486	497	4,193	12,051	12,876	8,343	64.8	1,862	14.5	1,427	11.08	23.9	31	56	High		
ESP A27 DTS1218 °	59	182	10,232	2,507	2,580	12,096	10,767	5,001	46.4	256	2.4			26.1	27				
ESP A37 DFN0612	84	172	13,297	2,647	725	3,437	9,768	6,524	66.8	- 1,739	- 17.8	- 2,126	- 21.76	48.2	38	- 191	Weak		
ESP A27 HOK1218	72	245	10,738	406	4,232	9,076	9,401	6,156	65.5	928	9.9	813	8.64	21.4	25	26	Reasonable	329%	Improved
ESP A27 DRB1218	81	128	11,715	1,898	3,302	7,958	8,638	5,784	67.0	757	8.8	- 614	- 7.11	39.2	45	- 20	Weak	59%	Improved

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(litre/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
ESP A27 HOK1824	30	258	5,075	659	4,451	9,307	8,347	4,912	58.8	485	5.8	358	4.29	17.2	19	23	Reasonable	248%	Improved
ESP A27 PGO1824 °	15	151	2,895	1,137	2,628	4,859	7,887	3,917	49.7	1,207	15.3	154	1.95	17.9	26	12	Reasonable		
ESP A37 PGO1824 °	23	169	4,214	1,356	1,570	7,861	7,692	3,596	46.8	992	12.9	334	4.34	15.4	21	18	Reasonable		
ESP A27 PMP1218 °	64	227	9,372	828	3,201	6,213	6,706	4,237	63.2	57	0.8	- 126	- 1.88	18.4	19	- 2	Weak		
ESP A37 PGO1218 °	41	154	6,238	1,830	1,152	6,104	6,329	3,156	49.9	798	12.6	425	6.72	15.3	20	28	Reasonable		
ESP A27 HOK2440	15	135	2,497	523	3,680	6,605	5,341	3,589	67.2	921	17.3			19.8	27				
ESP A37 HOK1218 °	31	96	3,606	2,633	349	1,967	5,108	2,740	53.7	272	5.3	- 1,670	- 32.70	25.7	29	- 126	Weak		
ESP A37 DFN1218	63	90	11,293	1,964	730	3,362	4,910	2,704	55.1	253	5.1	- 440	- 8.95	27.1	30	- 26	Weak		
ESP A27 HOK1012 °	66	162	6,890	240	2,268	3,807	4,639	3,211	69.2	1,125	24.2	784	16.90	12.9	20	77	High		
ESP A27 PMP1012	96	154	10,700	588	1,861	3,613	4,393	2,746	62.5	1,996	45.4			4.9	18				
ESP OFR PMP1218	19	62	2,408	848	989	1,736	4,291	3,146	73.3	1,151	26.8	1,006	23.45	32.1	51	207	High		
ESP A27 DFN1012 °	123	179	18,293	446	2,760	6,486	4,062	2,027	49.9	- 1,771	- 43.6	- 2,148	- 52.88	21.2	11	- 87	Weak		
ESP A37 PMP0006	118	75	8,989	1,450	353	1,659	3,661	2,703	73.8					-	36				
ESP OFR HOK1218	26	92	2,472	529	1,432	2,751	3,606	1,647	45.7	- 244	- 6.8	- 410	- 11.37	20.6	18	- 41	Weak	-232%	Deteriorated
ESP OFR PMP2440 °	10	94	1,941	721	1,701	2,572	3,274	1,318	40.3	- 526	- 16.1	- 855	- 26.13	19.6	14	- 51	Weak		
ESP OFR PS1218 °	20	128	2,907	143	2,457	3,025	3,180	2,473	77.8	387	12.2	229	7.21	16.3	19	45	Reasonable		
ESP OFR HOK1012 °	37	76	2,895	346	1,517	2,739	3,101	1,870	60.3	665	21.5	573	18.49	15.9	25	120	High		
ESP A37 FPO1218 °	21	64	3,451	2,440	319	3,637	2,878	1,590	55.3	569	19.8	379	13.15	16.0	25	50	High		
ESP A37 HOK0612	55	87	6,500	1,091	422	2,252	2,782	1,742	62.6	- 360	- 13.0	- 419	- 15.07	24.3	20	- 43	Weak		
ESP A27 FPO1012	65	93	10,203	653	890	3,582	2,653	1,766	66.6	- 543	- 20.5			24.8	19				
ESP A27 FPO1218	56	138	7,998	762	943	3,427	2,476	1,581	63.8	- 111	- 4.5			12.2	11				
ESP A37 PMP1218 °	27	69	4,313	733	358	1,813	1,612	946	58.7	125	7.8	- 150	- 9.32	11.9	14	- 6	Weak		
ESP A37 DTS0612	21	37	3,505	1,666	331	1,240	1,563	850	54.4	318	20.3			14.5	23				
ESP A27 PS1012 °	20	47	1,835	70	2,431	1,949	1,542	1,101	71.4	262	17.0	246	15.94	17.8	23	89	High	2962%	Improved
ESP A37 DRB1218	12	25	2,173	2,256	182	1,108	1,493	967	64.8	394	26.4	369	24.72	22.9	39	145	High	112%	Improved
ESP OFR PMP1012	26	56	1,673	1,013	139	270	1,287	1,056	82.0	236	18.4			14.6	19				
ESP A27 DRB1012	10	19	1,433	536	361	885	1,151	828	72.0	341	29.6	283	24.61	25.0	43	286	High	80%	Improved
ESP A37 PS0612	20	34	3,200	83	1,669	2,898	749	577	77.1	64	8.5			15.3	17				
ESP A37 DRB0612 °	26	28	1,969	394	124	356	327	272	83.0	45	13.9			8.0	10				
ESP OFR FPO1218 °	10	10	985	1,072	55	236	301	171	56.9	- 100	- 33.3	- 105	- 34.88	27.1	17	- 82	Weak		

Table 5.93 Spain: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (thousand €)							Live weight of landings (tonne)							Average landed price (real) (€)						
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014
Yellowfin tuna	134.5	115.2	136.2	148.0	241.8	221.0	195.3	81.1	68.0	84.7	95.7	103.1	98.6	90.1	1.7	1.7	1.6	1.6	2.4	2.2	2.2
Skipjack tuna	127.6	117.7	132.4	139.0	153.8	182.3	167.0	122.4	111.8	130.3	138.8	147.1	159.3	146.1	1.0	1.1	1.0	1.0	1.1	1.1	1.1
European hake	146.3	161.4	130.4	99.3	96.3	100.3	125.0	42.8	46.3	39.2	29.0	29.2	30.2	34.4	3.4	3.5	3.3	3.4	3.3	3.3	3.6
Patagonian squid	14.8	22.2	20.1	45.2	78.7	56.2	109.9	1.6	2.4	2.2	5.1	11.2	7.9	9.1	9.4	9.3	9.2	8.9	7.0	7.2	12.1
Swordfish	130.2	130.1	126.0	114.0	133.6	134.2	105.7	23.9	25.3	26.0	25.4	29.0	30.5	22.2	5.4	5.1	4.9	4.5	4.6	4.4	4.8
Bigeye tuna	47.8	57.8	48.6	68.1	58.1	95.8	81.7	18.5	20.7	18.6	27.7	22.4	32.6	30.4	2.6	2.8	2.6	2.5	2.6	2.9	2.7
European anchovy	17.0	35.0	46.7	61.5	57.1	75.9	81.6	7.0	14.1	19.7	27.0	24.0	36.1	42.6	2.4	2.5	2.4	2.3	2.4	2.1	1.9
Argentine hake	27.0	27.9	31.3	25.1	44.5	74.0	72.8	13.3	13.8	15.8	13.0	18.2	38.5	36.4	2.0	2.0	2.0	1.9	2.5	1.9	2.0
European pilchard(=Sardine)	61.3	54.1	53.8	52.2	61.9	57.0	63.0	47.9	41.2	43.3	44.7	52.3	44.2	44.9	1.3	1.3	1.2	1.2	1.2	1.3	1.4
Longtail Southern cod	29.8	25.6	30.8	22.7	24.6	19.7	57.8	18.0	15.5	19.0	14.4	17.0	7.7	29.2	1.7	1.7	1.6	1.6	1.5	2.6	2.0

5.22 SWEDEN

Short description of the national fleet

Fleet capacity

The national fleet capacity continued to decline, with a total of 9 vessels, 4 of which were inactive, in 2015, having a combined gross tonnage (GT) of 30.4 thousand tonnes and engine power of 164.6 thousand kilowatts (kW). The proportion of inactive vessels tends to decrease in same rate as active vessels.

Fleet structure

The Swedish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea, Skagerrak, and Kattegat regions. The national fleet consisted of 10 clustered fleet segments in 2008-2015 with a total of 1257 vessel including 3 clustered inactive length classes consisting of 284 vessels in 2015.

Employment

Employment in 2014, latest data on employment, was estimated at 1 568 jobs, corresponding to 845 FTEs or an average of 1.6 FTE per vessel. The level of employment decreased between 2008 and 2014, with total employed decreasing by 21% and the number of FTEs decreasing by 25% over the period. The major factors causing employment to decrease include the decreasing fleet size and less labour intensive vessels. That total employment decreased less than FTE means that the share of part-time fishers is slightly increasing in Sweden. In 2014 there were in average 0.54 FTE per employed. The average wage per employed and per FTE has increased heavily over the period 2008 to 2014, 26% and 44% respectively. This means average wages has increased well above the Swedish national average for all employees over the same period (slightly under 2 %).

Effort

An estimated 77.8 thousand days were spent at sea during 2014, a slight decrease compared to 2013, while the amount of energy consumed decreased 15%. The quantity of fuel consumed in 2014 totalled around 41.1 million litres, a decrease of around 34% from 2009, driven by fewer vessels, days at sea and increased fuel efficiency.

Production

The total weight landed by the Swedish fleet in 2014 was 166 thousand tonnes of seafood (202 thousand tonnes; 2015), with a landed value of €107 million (€115 million; 2015). The total weight and the value of landings vary over the period analysed due to quotas, especially the pelagic). In 2012, the catch was exceptionally low due to low quotas.

The fleet targets both pelagic and demersal species, with herring remaining the dominant species, generating the highest landed value with €30 million (€35 million; 2015) and representing about 28% of the total landings value in 2014. Other important species in value for the Swedish fleet in 2014 were Norway lobster €15 million (€15 million; 2015), sprat €13 million (€12 million; 2015), northern prawn €14 million (€12 million; 2015), and then cod €10 million (€10 million; 2015).

Economic results for 2014 and recent trends

National fleet performance

The Swedish national fleet went from a net profit to a net loss making position in 2014, due to lower quotas combined with lower landing prices. The economic performance could have looked worse if not costs had decreased, especially the effect of low fuel prices. This trend is not expected to have continued into 2015, since landings and fish prices increased, and as fuel prices remained low.

Revenue in 2014, estimated at €112 million, decreased 22% due to a 16% decrease in landings income as other income (€5.3 million) decreased 69%.

Total operating costs decreased 14% due to the 10% decrease in crew costs and the 24% decrease in energy. When including capital costs, total costs amounted to €112.9 million, exceeding just total revenue and generating a net loss of -€0.8 million.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €53.9 million, €21.4 million and -€0.8 million, respectively. GVA decreased 25%, gross profit and net profit decreased 44% and 108%, respectively. These results indicate a bad year, yet much improved since costs decreased compared to previous years with normal fish prices and quotas 2014 should have been a good year.

The (depreciated) replacement value of the Swedish fleet was estimated at €120 million, a decrease of 19%. Investments amounted to €17.7 million, a 200% increase on 2013.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 19.1%, indicating a relatively high operating efficiency of the sector. Net profit margin was estimated at -0.8%, a 111% decrease on 2013.

The Rate of Return on Fixed Tangible Assets (RoFTA) decreased in comparison to previous years but remained positive at 0.8%.

After an overall improved development trend since 2008, labour productivity (GVA/FTE) remained stable in 2014: GVA decreased (25%) but the number of FTE also decreased (5%), indicating no efficiency gains in the short run but GVA were exceptionally low in 2014 due to low quotas .

Fuel consumption per landed tonne has followed an overall decreasing trend since 2009, and is relatively low at 0.247 thousand litres per tonne landed in 2014.

Landings in weight per unit of effort (in days at sea) has been relatively stable since 2008 at around 2 tonnes per day, 2 139 tonnes/day in 2014 but increased to 2 796 tonnes/day in 2015.

Drivers affecting the economic performance trends

Lower quotas and lower average fish prices were the main driving forces behind the overall degeneration of profits in 2014.

The Swedish fleet is income dominated by trawlers, both pelagic and demersal trawlers. As trawling is typically fuel intensive, fluctuations in fuel prices are therefore a key driver of the fleet's profitability. Together with decreased landings, the low average price of several important species, such as Norwegian lobster, herring, and cod led to a decrease in income and had a negative impact on profitability in 2014.

Markets and Trade

A well-known market characteristic is that during the last decades, the consumption of frozen fish, seafood products (including dried and salted items), and prepared and preserved items has shown an increase while the fresh has declined. The number of market places for landed fish has also decreased. In Sweden, the market places for fishers have been concentrated to the west coast of Sweden, resulting in logistical problems for selling and also distributing fresh fish to the rest of Sweden. This problem is especially evident for the small-scaled fishery. A new fish market, governmental funded, has now been opened in Stockholm on the east coast of Sweden. Not only to solve the structural problem but also to offer consumers environmental sustainable fresh fish.

Management instruments

The entry-exit scheme for vessel capacity in gross tonnes and kilowatts has resulted in a continued reduction in fleet capacity. The kilowatt day system, which was introduced as a result of the cod recovery plan for the North Sea, Skagerrak and Kattegat, has continued to provide an incentive for further structural change within cod fishing on the Swedish west coast as it restricts the vessels' fishing effort. Furthermore, the system of individual transferable fishing rights within the pelagic segment has had a major impact on the structural change within this segment.

A current major challenge with regards to fleet management is the adjustment to the landing obligation. An obligation to land all catches of quota species, including catches that were previously discarded, requires a system of allocating fishing opportunities that makes it possible to match catches and fishing rights. Current work regarding allocation of fishing opportunities to be able to successfully manage the landing obligation includes an overview of the quota allocation systems for the demersal fisheries in the North Sea where the landing obligation gradually beginning to be introduced in 2016. With regard to the Baltic Sea, an overview of the system with yearly allowed catches of cod is undertaken.

TACs and quotas

Most of the important stocks fished by the Swedish fleet are fished at MSY. Landings and total available quota for the Swedish fleet in 2014 decreased slightly compared to 2013 but has increased again in 2015. The quota for herring and sprat, which is especially important for the Swedish fleet, decreased in Skagerrak, Kattegat, and North Sea. In the Baltic Sea herring and sprat were managed at MSY level. Baltic herring fisheries were successful. The quota was almost fully exploited.

The important quota for Cod in the Baltic remained more or less the same, with some geographical re-distribution to eastern stock. Despite, small sized and with bad conditioned cods, the fishery performed economically poorly. The Eastern cod quota was exploited at less than 25%. The Eastern Baltic cod TAC is in line with the precautionary approach, but due to a missing biological advice no MSY level can be defined.

Status of Key Stocks

The Baltic cod stock was depleted and overexploited for decades until the mid-2000s, when fishing mortality rapidly declined and biomass started to increase, as shown by stock assessments. These positive developments were partly

assigned to effective management measures. In contrast to this optimistic view, the analytical stock assessment failed in 2014, leaving the present stock status unclear. A number of adverse developments such as low nutritional condition and disappearance of larger individuals indicate that the stock is in distress.

The stock of herring and sprat in Baltic, which is especially important for the Swedish fleet, are mainly managed through ITQs. The herring stock is developing positively and sustainable at MSY but the sprat stock is developing negatively with a harvest above MSY.

Innovation and Development

Towards the end of 2009, Sweden introduced a tradable fishing right system for pelagic quotas. Pelagic vessels both in the system and not are clustered together with other vessels, mostly in the demersal trawl/seine 18-24m and 24-40m segments. The reason, in addition to confidentiality issues, is that many of the pelagic vessels also fish cod and vice-versa. A clear positive economic effect of the pelagic system can be seen. The first transactions took place in early 2010 and the first effects of these transactions became visible in late 2010 in terms of profitability for the pelagic fisheries. But the effect of the new system can be better seen in the profitability of 2012, 2013, and 2014, once capacity had been removed. However, decreases in quotas for pelagic species (most importantly for herring and sprat) and increases in fuel prices have had a chilling effect on the expected profitability increase resulting from the introduction of the system. There have also been investments in new vessels (replacement); these investments cannot be seen clearly in the statistics, just that the new capital gives an increased capital cost when new vessels are introduced.

The increasing seal population around the Swedish coastline has caused a growing conflict between seals and inshore fisheries. Seals damage the fisher´s catch and fishing gear which causes significant economic losses to the fishing industry. In some areas it is even impossible to conduct a profitable fishery. The development of seal-safe fishing gear is at present the only long lasting and sustainable solution to the conflict. The fishing gear also needs to catch fish effectively, be easy to handle by the fishers and cause low environmental impact. The development can be carried out by improving traditional fixed gear, such as push-up traps for salmon and by developing new alternatives to the net fisheries, such as cod pots.

Also in the shrimp and lobster fishery research for new and more sustainable fishing techniques is on-going. In general, transition towards the implementation of these new techniques in the sector is slow as fishers are hesitant due to high investments, the uncertainty of the impact of the techniques and the possible market effects.

Performance by fishing activity

Small-scale fleet

The number of small-scale vessels decreased from 819 in 2008 to 732 in 2015, a decrease of 11%, following the general trend of the Swedish fleet. But from 2014 to 2015 the number of small-scale vessels actually increased by one vessel, the number of vessels between 10-12 meter still decreased but were outnumbered by an increase in vessels under 10 meters. Close to half of this decrease in number of vessel between 2008-2015 stems from vessels with main income from fishing European eel. The Swedish authorities, through different management actions, such as permits, have tried to diminish effort in the threatened European eel fishery. The number of vessel with main income (more than 50% in value) from cod, salmon, or Norwegian lobster fisheries have also decreased while vessel numbers increased slightly for main income originating from mixed fishery.

The numbers employed in the small-scale fisheries follows the same decreasing trend as the fleet in general over the period 2008-2015, with FTE decreasing more rapidly, indicating a larger portion of part-time fishers of the remaining. Vessel tonnage has decreased slightly but power has remained stable over the period. These figures indicate that the new vessels entering, despite lower numbers, have more engine power perhaps going for higher speed.

Overall, the small-scale fleet is not profitable, generating a negative net profit margin of 50%. Gross value added is positive but relatively low per FTE at €21 thousand. As tangible assets are, in most cases, probably paid off, these vessels can afford to continue to fish. Low GVA estimates signal that there are other reasons for fishing than just profit, such as part-time employment or a way of life. Additionally, increased seal populations along the Swedish coastline are heavily affecting both income, by taking and eating fish directly from the gears, and costs, by destroying gears as well as creating extra work.

Large-scale fleet

For the large-scale fleet, the number of vessels decreased from 329 in 2008 to 241 in 2015, a decrease of nearly 27%. More than half of this decrease stems from vessels with main income from the Norwegian lobster fishery. The Swedish authorities have promoted fishing lobster with passive gears and as cod populations are in bad conditions, mixed fisheries with cod and lobster are no longer a profitable option. Vessels fishing for cod as main source of income have also decreased. Some of these vessels also fished pelagic species and after the introduction of fishing-rights in the pelagic fishery they sold their rights and left the fishery.

The numbers employed in the large-scale fisheries follows the same decreasing trend as the fleet in general, but with FTE decreasing less the numbers employed, indicating a decreasing portion of part-time fishers, meaning more pure fishers doing just fishing. Vessel tonnage and power has decreased heavily but seems to have stabilised the last two years in the period.

The weight and value of landings for the large-scale vessels from 2008 to 2015 is more dependent on the quotas than the same measure for the small-scale. The landings weight has decreased substantially over the period due to reduced quotas. The landing values follows but with more variation due to changes in fish prices. Despite, the large-scale fleet seems to perform fairly well but the variation is large. Vessels fishing pelagic species and those that fish in the north Baltic for vendance rom are performing very well while those fishing for cod, northern prawn and Norwegian lobster are performing poorly.

The large-scale fleet has decreased their operational costs and capital costs, especially energy (lower fuel prices). However, the decrease in landing incomes together with decrease in other incomes accedes the gains from lower costs resulting in lower net profits in 2014 compared to 2013. But, higher net profits can be expected for 2015 since landing values has increased.

Performance results of selected fleet segments

The Swedish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea, Skagerrak, and Kattegat regions. One of the active fleet segments made losses in 2014, passive gear under 10 meters, while the remaining 6 made overall gross profits. All segments, both with active and passive gear less than 12m made negative net profits in 2014. Also, vessels between 18–24 meters fishing with active vessels made negative net profits.

It can further be observed that the vessels with active gears account for the main part of the landed value and the landed weight. During the time period 2008-14, the vessels with active gears annually accounted for 96-97% of the total catch measured in weight, and 85-89% of the total catch value. Thus, the vessels with passive gears only accounts for 3-4% of the total catch measured in weight, and 11-15% of the total catch value.

A short description of the 2 most important segments in terms of total value of landings is provided below.

Demersal trawl seine 18-24m: In 2014, 41 vessels made up this clustered segment that uses different types of active fishing gear. It operates predominantly in the Baltic Sea, Skagerrak and Kattegat. The fleet segment targets a variety of species but in particular demersal species such as cod, lobster and prawn and pelagic species such as herring and sprat. In 2014, the total value of landings was €16.7 million and around 126 FTEs were employed in this fleet segment, contributing 16% and 15% of the total income from landings and FTEs in the Swedish fishing fleet, respectively. This fleet segment was not profitable, with a small reported net loss of around €15 thousand in 2014. There is a distinct difference in performance within the segment. The vessels in the segment fishing lobsters and vessels fishing pelagic species are profitable, while the vessels fishing for cod and prawn are making net loses. Around one fifth of the vessels are within the tradable fishing rights system for the pelagic species.

Demersal trawl seine 24-40m: There were 45 vessels in this clustered segment in 2014, which also contains vessels using polyvalent active gear (only), purse seiners and 16 pelagic trawlers (8 of the pelagic trawlers are over 40 m), This segment is operating in the Baltic Sea, Kattegat, Skagerrak, and North Sea. The fleet targets a variety of species, in particular pelagic species such as herring and sprat but also demersal species such as cod and prawn. In 2014, the total value of landings was almost €55 million and around 214 FTEs were employed in this fleet segment, contributing to 52% and 25% of the total income from landings and FTEs in the Swedish fishing fleet, respectively. This segment dominates the Swedish fishing fleet with 83% of the total landings in weight.

This fleet segment was profitable, with a reported gross profit of around €19.6 million and a net profit of €7.8 million in 2014. There is a distinct difference in performance within the segment. The profit is generated from vessels fishing mainly pelagic species, just above 60% of the vessels. Around 49% of the vessels in the segment are inside the "pelagic system" with tradable fishing rights and these are highly profitable. Vessels with more than 50% cod or prawn in landing value are making loses.

Projections for 2015 and outlook

Preliminary results for 2015 suggest a 22% increase in landed weight, matched by an 8% increase in value. Projections suggest that decreases in effort and fuel consumption translated in part to a decrease in operating costs, together with a reduction in capital costs, will make 2015 to a better year than 2014: GVA (+27%), gross profit (+74%) and net profit (+2322%). Positive economic developments can also be seen in performance indicators GVA to revenue, GVA per FTE and gross and net profit margins.

Modelling for 2016 indicates further economic improvements, owing in part to decreased fuel costs (-12%) but importantly a large increase in prices and value of landings (+26%). In turn, Swedish profit margins are among the highest in the EU with gross profit margins reaching 41% and net profit margins reach 28%.

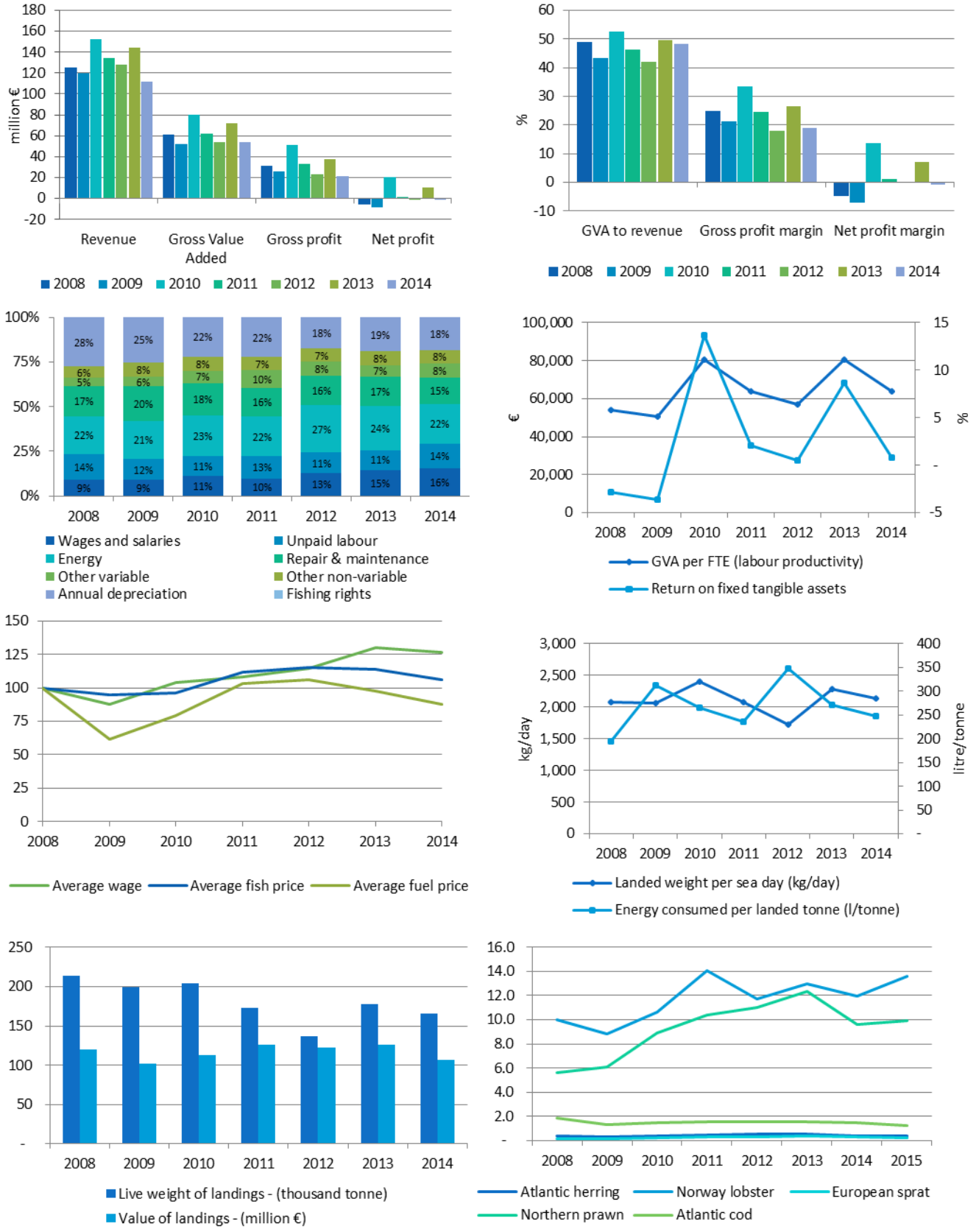
The general trend since the beginning of the 2000s is a decrease in Swedish fleet capacity, i.e. in the number of vessels that also reflects reduction of total engine power and gross tonnage. This is partly due to management efforts directed at decreasing fleet size in order to bring it in balance with the resources. But that is not the whole truth since a part of the decrease is due to the fact that many fishers have left the sector since they can no longer make a living from fishing. Some of the fishers operating inside the pelagic fishing rights system sold their rights and left the sector while others just left the sector without being compensated. The profitability of the diminishing Swedish fleet is increasing perhaps not as fast as expected due to decreasing quotas. The analysis of economic performance shows that most Swedish segments with vessels over 12 m are making positive net profits. The segments with vessels with a length of less than 12 m and fishing with passive gear are all making net losses. These segments are heavily affected by increasing populations of seals in recent years.

There is also a crew recruitment problem as jobs on board fishing vessels is not a particularly attractive way of making a living for younger people due to the low wages and relatively poor working conditions compared to other land-based jobs. This poor recruitment is reflected in the increasing average age of Swedish fishers. This coupled with a decreasing fleet size is expected to continue for some time but will lead to a better economic performance in the long run.

Data issues

There are no other major data issues in the Swedish DCF data. Most of the Swedish data comes from registers but cost data is collected separately. Sweden uses mandatory questionnaires for data on costs (combined with tax declarations from registers). Previously, Sweden used probability sampling when sending out the questionnaires. Since 2012, questionnaires requesting 2011 data are sent to all vessels (census). Instead of getting 60% response from a 50% sample, Sweden now gets more than 85% response from a census sample, i.e. the number of data points has increased threefold.

An important issue is clustering. With a small and diminishing fleet, Sweden is forced to cluster all of the economic data and also report cluster definitions. At the same time Sweden is recommended to report un-clustered transversal data on capacity, landings etc. Previously Sweden used different clusters for different years but has now worked around this problem, back-calculating all data, and is now using the same clusters for the whole DCF period. This makes it easier to follow trends and since the sampling is by census it's easy to re-cluster for analytical reasons.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.21 Sweden: Main trends in economic performance indicators (absolute value, panel 1a/top left and relative value, panel 1b/top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.94 Sweden: National fleet statistics and economic performance results.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	1,507	1,471	1,415	1,359	1,322	1,299	1,266		-3%	-9%
Number of Inactive vessels_ms	(#)	359	339	351	328	303	315	288		-9%	-13%
Vessel tonnage	(thousand GT)	43.0	41.7	38.6	32.9	29.5	30.5	29.0		-5%	-19%
Engine power	(thousand kW)	211.8	207.9	196.4	178.1	169.1	170.7	163.9		-4%	-13%
Average vessel age	(year)	31	32	31	31	32	32	33		2%	5%
Average vessel length	(metre)	11	11	10	10	10	10	10		-1%	-3%
Enterprises with one vessel	(#)	959	935	904	866	833	818	751		-8%	-15%
Enterprises with 2 to 5 vessels	(#)	251	245	229	222	221	216	233		8%	1%
Enterprises with more than 5 vessels	(#)	1	1	1	1	1	1	1		0%	0%
FTE	(#)	1,133	1,019	990	974	942	886	845		-5%	-15%
Total employed	(person)	1,980	1,758	1,765	1,679	1,663	1,577	1,568		-1%	-10%
Days at sea	(thousand day)	102.7	96.6	85.1	83.7	78.9	77.7	77.7		0%	-11%
Fishing days	(thousand day)	102.7	96.6	85.1	83.7	78.9	77.7	77.7		0%	-11%
Number of fishing trips	(thousand)	87.7	82.9	73.6	72.5	70.3	69.9	71.2		2%	-7%
Energy consumption	(million litre)	41.38	62.22	54.13	40.90	47.37	48.11	41.07		-15%	-16%
Live weight of landings	(thousand tonne)	213.2	199.3	204.4	173.3	136.5	177.6	166.1		-6%	-10%
Value of landings	(million €)	120.4	101.7	113.0	125.6	122.4	126.4	106.7		-16%	-10%
Income from landings	(million €)	120.4	101.7	113.0	125.6	122.4	126.4	106.7		-16%	-10%
Other income	(million €)	5.24	18.08	39.09	8.81	5.70	17.42	5.34		-69%	-66%
Direct income subsidies	(million €)	1.80	-	-	-	-	-	-			-100%
Wages and salaries of crew	(million €)	11.77	11.05	14.21	12.61	16.32	19.10	17.26		-10%	22%
Unpaid labour value	(million €)	18.41	15.15	14.79	16.71	14.43	14.48	15.25		5%	-3%
Energy costs	(million €)	28.14	26.19	29.28	28.65	34.16	32.00	24.48		-24%	-18%
Repair & maintenance costs	(million €)	21.88	24.63	23.82	21.44	20.61	21.63	16.48		-24%	-26%
Other variable costs	(million €)	5.98	6.96	8.99	12.67	10.07	8.76	8.79		0%	-1%
Other non-variable costs	(million €)	8.38	10.20	10.13	9.58	9.43	9.94	8.37		-16%	-13%
Annual depreciation costs	(million €)	36.04	31.69	28.64	29.32	22.44	25.10	20.41		-19%	-29%
Opportunity cost of capital	(million €)	1.00	2.22	1.59	2.00	0.88	2.53	1.82		-28%	7%
Tangible asset value (replacement)	(million €)	175	168	164	168	130	148	120		-19%	-25%
Investments	(million €)	13.6	4.7	8.4	5.4	7.3	5.9	17.7		199%	134%
Financial position	(%)	62.0	63.4	87.7	72.9	102.4	105.8	109.6		4%	33%
Gross Value Added	(million €)	61.3	51.8	79.9	62.1	53.8	71.5	53.9		-25%	-15%
GVA to revenue	(%)	48.8	43.2	52.5	46.2	42.0	49.7	48.1		-3%	2%
Gross profit	(million €)	31.1	25.6	50.9	32.8	23.1	38.0	21.4		-44%	-36%
Gross profit margin	(%)	24.7	21.3	33.5	24.4	18.0	26.4	19.1		-28%	-23%
Net profit	(million €)	- 5.9	- 8.4	20.7	1.5	- 0.2	10.3	- 0.8		-108%	-128%
Net profit margin	(%)	- 4.7	- 7.0	13.6	1.1	- 0.2	7.2	- 0.7		-110%	-145%
GVA per FTE (labour productivity)	(thousand €)	54	51	81	64	57	81	64		-21%	-1%
Return on fixed tangible assets	(%)	- 3	- 4	14	2	0	9	1		-91%	-73%

Table 5.95 Sweden: National fleet statistics and economic performance results based on fleet segment level data.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	1148	1132	1064	1031	1019	984	978	*973*	*964*		-1%	-1%
Total employed	(person)	1979.92	1758.45	1764.61	1679.08	1663	1576.7	1568.47	*1,540*	*1,530*		-2%	-1%
FTE	(#)	1,133	1,019	990	974	942	886	845	*779*	*819*		-8%	5%
Days at sea	(day)	102,732	96,589	85,094	83,690	78,918	77,739	77,669	*72,208*	*75,490*		-7%	5%
Energy consumption	(thousand litres)	41,377	62,219	54,130	40,900	47,369	48,106	41,072	*41,113*	*44,847*		0%	9%
Live weight of landings	(tonne)	213,201	199,298	204,400	173,343	136,459	177,622	166,103	*202,060*	*208,535*		22%	3%
Value of landings	(thousand €)	120,411	101,655	113,047	125,627	122,391	126,445	106,666	*115,018*	*145,438*		8%	26%
Income from landings	(thousand €)	120,411	101,655	113,047	125,627	122,391	126,445	106,666	*115,018*	*145,438*		8%	26%
Other income	(thousand €)	5,240	18,078	39,094	8,813	5,698	17,420	5,344	*8,776*	*8,766*		64%	0%
Wages and salaries of crew	(thousand €)	11,770	11,053	14,210	12,608	16,320	19,101	17,257	*17,026*	*21,717*		-1%	28%
Unpaid labour value	(thousand €)	18,411	15,148	14,792	16,714	14,432	14,475	15,246	*14,229*	*14,115*		-7%	-1%
Energy costs	(thousand €)	28,137	26,193	29,282	28,650	34,155	32,001	24,480	*20,393*	*17,854*		-17%	-12%
Repair & maintenance costs	(thousand €)	21,882	24,633	23,820	21,440	20,607	21,630	16,482	*18,095*	*17,945*		10%	-1%
Other variable costs	(thousand €)	5,977	6,960	8,989	12,668	10,073	8,758	8,793	*8,267*	*10,081*		-6%	22%
Other non-variable costs	(thousand €)	8,379	10,196	10,128	9,579	9,431	9,937	8,365	*8,605*	*8,541*		3%	-1%
Annual depreciation costs	(thousand €)	36,038	31,688	28,638	29,324	22,438	25,104	20,405	*20,794*	*20,728*		2%	0%
Opportunity cost of capital	(thousand €)	919	2,056	1,495	1,884	844	2,415	1,719	*22*	*22*		-99%	0%
Tangible asset value (replacement)	(thousand €)	161,169	155,770	154,110	158,345	124,175	141,216	113,076	*115,735*	*115,354*		2%	0%
Gross Value Added	(thousand €)	61,275	51,752	79,921	62,103	53,823	71,539	53,890	*68,435*	*99,782*		27%	46%
Gross profit	(thousand €)	31,095	25,551	50,919	32,781	23,072	37,963	21,387	*37,181*	*63,950*		74%	72%
Net profit	(thousand €)	- 5,862	- 8,193	20,786	1,573	- 210	10,444	- 737	*16,364*	*43,201*		2322%	164%

Table 5.96 Sweden: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Small scale coastal fleet							Large scale fleet												
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	819	818	776	754	754	729	731	329	314	288	277	265	255	247		0%	-6%		-3%	-14%
Vessel tonnage (thousand GT)	3.8	3.8	3.6	3.5	3.6	3.5	3.3	33.7	32.4	29.5	26.6	24.8	25.4	23.6		-3%	-7%		-7%	-18%
Engine power (thousand kW)	53.7	53.9	51.8	51.6	53.3	52.7	51.8	128.9	125.1	113.0	104.6	98.5	98.0	92.5		-2%	-2%		-6%	-17%
FTE (#)	470	383	384	367	340	321	332	663	636	606	606	602	565	513		3%	-12%		-9%	-16%
Total employed (person)	1,073	929	951	925	920	902	914	907	829	813	754	743	675	655		1%	-4%		-3%	-17%
Days at sea (thousand day)	66.5	63.4	56.2	53.6	49.3	48.1	50.4	36.3	33.2	28.9	30.1	29.6	29.6	27.3		5%	-10%		-8%	-13%
Fishing days (thousand day)	66.5	63.4	56.2	53.6	49.3	48.1	50.4	36.3	33.2	28.9	30.1	29.6	29.6	27.3		5%	-10%		-8%	-13%
Number of fishing trips (thousand)	66	63	55	53	49	48	50	21	20	18	20	22	22	21		5%	-10%		-4%	4%
Energy consumption (million litre)	3.2	4.4	4.2	4.9	4.3	3.8	4.0	38.1	57.8	49.9	36.0	43.1	44.3	37.1		4%	-5%		-16%	-17%
Live weight of landings (thousand tonne)	6.6	6.6	5.4	5.1	5.2	4.5	4.7	206.6	192.7	199.0	168.2	131.3	173.1	161.4		5%	-16%		-7%	-10%
Value of landings (million €)	17.2	14.2	14.0	14.7	16.0	14.9	14.3	103.2	87.5	99.0	110.9	106.4	111.6	92.3		-4%	-5%		-17%	-10%
Income from landings (million €)	17.2	14.2	14.0	14.7	16.0	14.9	14.3	103.2	87.5	99.0	110.9	106.4	111.6	92.3		-4%	-5%		-17%	-10%
Other income (million €)	4.0	2.7	2.9	6.0	3.1	2.7	1.9	1.2	15.4	36.2	2.8	2.6	14.7	3.4		-29%	-47%		-77%	-72%
Wages and salaries of crew (million €)	0.4	0.6	0.8	0.9	1.1	1.1	1.3	11.4	10.5	13.4	11.7	15.3	18.0	16.0		17%	61%		-11%	19%
Unpaid labour value (million €)	10.4	8.0	8.9	9.1	8.8	8.8	9.7	8.0	7.1	5.8	7.6	5.7	5.7	5.6		10%	7%		-2%	-16%
Energy costs (million €)	2.4	2.2	2.7	3.5	3.3	2.8	2.7	25.7	24.0	26.6	25.1	30.9	29.2	21.7		-3%	-3%		-25%	-19%
Repair & maintenance costs (million €)	3.8	3.1	2.9	3.3	3.2	3.3	2.9	18.1	21.6	20.9	18.1	17.4	18.3	13.5		-11%	-10%		-26%	-29%
Other variable costs (million €)	1.2	1.3	1.3	2.0	1.9	1.6	1.3	4.7	5.7	7.6	10.7	8.2	7.2	7.5		-16%	-14%		4%	1%
Other non-variable costs (million €)	1.6	1.9	2.1	2.4	2.1	2.1	2.2	6.7	8.3	8.0	7.1	7.3	7.8	6.1		7%	9%		-22%	-19%
Annual depreciation costs (million €)	8.5	7.8	5.2	4.9	3.4	3.8	3.7	27.5	23.9	23.5	24.4	19.0	21.3	16.7		-2%	-34%		-22%	-28%
Opportunity cost of capital (million €)	0.23	0.52	0.25	0.30	0.12	0.35	0.29	0.69	1.53	1.24	1.58	0.72	2.07	1.42		-15%	-1%		-31%	9%
Tangible asset value (million €)	40.8	39.5	25.9	25.6	18.4	20.3	19.4	120.4	116.3	128.2	132.8	105.8	121.0	93.7		-4%	-32%		-23%	-22%
Investments (million €)	0.6	1.2	1.4	1.5	1.6	1.5	1.2	13.1	3.5	7.0	4.0	5.8	4.4	16.5		-19%	-5%		274%	163%
Gross Value Added (million €)	12.1	8.3	7.9	9.4	8.5	7.7	7.0	49.2	43.4	72.0	52.7	45.3	63.8	46.9		-10%	-22%		-26%	-14%
GVA to revenue (%)	57.2	49.5	46.5	45.5	44.6	44.0	43.0	47.1	42.2	53.3	46.3	41.6	50.5	49.0		-2%	-10%		-3%	5%
Gross profit (million €)	1.3	-0.3	-1.8	-0.6	-1.3	-2.2	-4.0	29.8	25.8	52.8	33.3	24.4	40.2	25.4		-82%	-385%		-37%	-26%
Gross profit margin (%)	6.1	-1.8	-10.9	-2.7	-6.9	-12.5	-24.6	28.5	25.1	39.0	29.3	22.4	31.8	26.5		-96%	-413%		-17%	-10%
Net profit (million €)	-7.5	-8.6	-7.3	-5.8	-4.9	-6.4	-8.0	1.6	0.4	28.0	7.4	4.7	16.8	7.3		-26%	-19%		-57%	-26%
Net profit margin (%)	-35	-51	-43	-28	-26	-36	-49	2	0	21	6	4	13	8		-36%	-35%		-43%	-3%
GVA per FTE (thousand €)	26	22	21	26	25	24	21	74	68	119	87	75	113	91		-13%	-12%		-19%	2%

Table 5.97 Sweden: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(ltr/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
SWE A27 DTS2440 °	42	214	6,770	170	137,964	54,968	57,470	29,694	51.7	19,605	34.1	7,767	13.52	47.2	138.8	14	High	44%	Improved
SWE A27 DTS1824 °	41	126	6,515	460	14,366	16,728	16,728	6,684	40.0	2,218	13.3	- 15	- 0.09	35.4	52.9	1	Weak	-101%	Deteriorated
SWE A27 DTS1218 °	69	106	7,580	768	6,456	13,906	14,578	7,168	49.2	2,724	18.7	631	4.33	41.7	67.3	8	Reasonable	44%	Improved
SWE A27 DFN0010 °	595	255	40,918	945	2,421	8,901	10,274	4,320	42.0	- 4,126	- 40.2	- 6,623	- 64.46	33.1	16.9	- 53	Weak	-32%	Deteriorated
SWE A27 DFN1012 °	136	77	9,436	739	2,257	5,438	5,972	2,666	44.6	133	2.2	- 1,378	- 23.07	33.1	34.8	- 17	Weak	-40%	Deteriorated
SWE A27 DTS1012 °	79	54	5,078	873	2,181	5,884	5,967	2,769	46.4	646	10.8	- 1,157	- 19.39	39.0	50.8	- 11	Weak	-57%	Deteriorated
SWE A27 DFN1218 °	16	12	1,372	437	457	841	1,020	591	57.9	187	18.4	39	3.78	33.1	48.4	7	Reasonable	13%	Improved

Table 5.98 Sweden: Landed value, weight and average price of principal species.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (million €)								Live weight of landings (thousand tonnes)								Average landed price (real) (€)							
	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*	2008	2009	2010	2011	2012	2013	2014	*2015*
Atlantic herring	30.5	23.2	24.3	28.1	33.1	37.9	30.0	*34.9*	91.0	76.0	70.1	58.6	60.7	77.9	77.1	*96.5*	0.3	0.3	0.4	0.5	0.6	0.5	0.4	*0.4*
Norway lobster	14.8	11.6	13.1	13.2	15.8	14.6	15.0	*15.4*	1.5	1.3	1.2	0.9	1.4	1.1	1.3	*1.1*	10.0	8.8	10.6	14.0	11.8	13.0	11.9	*13.6*
European sprat	14.2	12.2	16.0	14.9	13.4	17.4	13.0	*12.0*	83.9	80.1	77.8	56.9	45.9	52.9	49.5	*51.0*	0.2	0.2	0.2	0.3	0.3	0.3	0.3	*0.2*
Northern prawn	13.2	13.7	14.4	17.0	15.7	13.6	12.2	*15.0*	2.3	2.3	1.6	1.6	1.4	1.1	1.3	*1.5*	5.6	6.1	8.9	10.4	11.1	12.3	9.6	*9.9*
Atlantic cod	22.8	17.1	17.9	20.9	20.0	12.4	10.4	*9.9*	12.5	13.1	12.2	13.4	13.3	7.9	6.9	*8.0*	1.8	1.3	1.5	1.6	1.5	1.6	1.5	*1.2*
Vendace	2.7	2.0	3.6	4.5	5.5	6.1	5.6	*6.7*	0.6	0.8	1.0	1.1	1.3	1.5	1.8	*1.9*	4.5	2.3	3.6	4.0	4.4	4.2	3.1	*3.6*
Atlantic mackerel	6.0	6.9	3.7	6.5	5.0	3.5	4.6	*3.3*	3.6	7.4	3.4	3.5	4.4	2.9	4.5	*4.0*	1.6	0.9	1.1	1.8	1.1	1.2	1.0	*0.8*
Sandeels	1.9	1.8	8.5	7.3	1.1	8.1	3.5	*6.6*	12.3	12.5	33.1	32.4	3.9	27.5	19.1	*33.4*	0.2	0.1	0.3	0.2	0.3	0.3	0.2	*0.2*
Saithe(=Pollock)	1.5	1.6	2.1	2.1	2.0	1.8	1.8	*1.6*	1.6	1.4	1.6	1.3	1.3	1.4	1.3	*1.2*	1.0	1.2	1.4	1.6	1.6	1.3	1.4	*1.4*
Greater weever	0.9	2.1	0.2	1.3	1.4	1.8	1.7	*0.1*	0.3	1.0	0.1	0.8	0.7	0.8	0.9	*0.0*	2.7	2.2	2.0	1.7	1.9	2.2	1.9	*3.7*

5.23 UNITED KINGDOM

Short description of the national fleet

Fleet capacity

In 2014, the UK fishing fleet consisted of 6 383 registered vessels of which 1 987 were inactive. The fleet had a combined gross tonnage (GT) of 195 thousand tonnes and engine power of 790 thousand kilowatts (Kw). Estimates for 2015 show the size of the overall fleet was static but with a slight decrease in the number of active vessels.

Fleet structure

The UK fleet can be divided into a small scale fleet (69% of the active fleet in 2014) made up of vessels under 12m in length using passive gears and large scale fleet (31% of the active fleet in 2014) made up of vessels greater than 12m in length using passive gears and vessels of any length using active gears. Of the active fleet, 1 625 vessels (36%) had annual landings with a value of less than £10 000. These vessels are termed as 'low activity' in UK-specific analysis.

Employment

Total employment in 2014 was estimated at 11 845 jobs, corresponding to 7 909 FTEs or 1.2 FTE per vessel. The small scale fleet represented 47% of total jobs but only 25% of FTEs, a large number of vessels in this fleet operate on a part-time basis.

Many UK fishers are paid as a share of what is landed and hence crew share is strongly linked with fishing income; therefore crew shares across segments reflect the variability in fishing income.

Effort

An estimated 428 thousand days were spent at sea in 2014, a 7% increase on the previous year. At the same time energy consumption decreased by 2%. Static vessel numbers with increased sea-days and a small reduction in fishing effort indicate increased fishing effort.

The reduction in energy costs was as a result of the increasing fuel efficiency of newer engine types and a decrease in fuel price in the second half of 2014. A much larger reduction in fuel costs occurred in 2015 due to the continued decrease in fuel price.

Vessels operate mainly in the North Sea, West of Scotland, English Channel and Western Approaches.

Production

Between 2013 and 2014, production increased 21% to 760 thousand tonnes of seafood with a landed value of €1.069 billion, a 20% increase on 2013.

The UK fleet is extremely diverse with a wide variety of fleets targeting different species. In terms of landings value, demersal species, pelagic species and shellfish each represented approximately one third of total UK landings. In terms of the weight, pelagic species represented 58% of total landings. Due to increased quotas for key species, pelagic landings have increased by 49% in 2014.

In 2014 the dominant species was Atlantic mackerel generating both the highest landings value (€282 million) and landed weight (288 thousand tonnes), representing 26% of the total value of landings and 38% of the total weight of landings by the UK fleet. Norway lobster generated the second highest landings value (€113 million), representing 12% of the total value of landings but only 4% of the weight.

Economic results for 2014 and recent trends

National fleet performance

The UK national fleet remained in a profit making position in 2014 as its economic performance improved compared to previous years. In 2015 the fleet is expected to remain profitable although less so than 2014, this is due to decreased landings and despite a reduction in fuel costs.

In 2014, revenue, estimated at €1.118 billion, increased 20% due to a 21% increase in landings income whilst other income (€41 million) decreased 6%. When including income from fishing rights, total income amounted to €1.120 billion.

Total operating costs increased due to the large increase in production, energy costs decreased by 2% as fuel price decreased in the second half of the year. When including capital costs, total costs amounted to €913 million generating a net profit of €205 million.

Gross Value Added (GVA), gross profit and net profit in 2014 were estimated at €535 million, €282 million and €205 million, respectively. GVA increased 30%, gross profit and net profit increased 43% and 54%, respectively. These results indicate an improved economic situation compared to previous years although it should be noted that much of this improved performance can be attributed to a relatively small number of vessels from the large scale fleet.

The (depreciated) replacement value of the UK fleet was estimated at €632 million and investments amounted to €106 million, a 29% decrease on 2013.

Overall, the cost structure has remained relatively constant over the years even with variations in landings and fuel price influencing crew and energy costs respectively.

Resource productivity and efficiency indicators

The gross profit margin in 2014 was 25%, indicating a high operating efficiency of the sector. Net profit margin was estimated at 18%, a 29% increase on 2013.

The Rate of Return on Fixed Tangible Assets (RoFTA) improved in comparison to 2013, increasing to 33% although this has remained largely static since 2011.

Following an overall improved development trend since 2008, labour productivity (GVA/FTE) increased in 2014: GVA increased by 30% whilst the number of FTE increased by just 1% in 2014 indicating efficiency gains within the fleet.

Fuel consumption per landed tonne has followed an overall decreasing trend since 2008, but is still relatively high at 370 litres per tonne landed.

Landings in weight per unit of effort (in days at sea) has followed an increasing trend since 2008 and increased a further 13% in 2014.

Drivers affecting the economic performance trends

Access to additional quota leading to increased landings, higher average fish prices for a number of prominent species and lower fuel costs were the main driving forces behind the overall improvement in profitability.

There were, however, some fleets that saw a reduction in profitability as fishing opportunities reduced due to deterioration in the stock status. With a fleet as diverse as the UK fishing fleet it is difficult to define main drivers of economic performance as different factors will have varying levels of impact on different fleets.

Markets and Trade

By volume, sixty percent of the UK fishing fleet's 2014 total catch was landed in the UK amounting to 71% of total value. The UK fleet accounted for 86% of all fish landed into the UK.

Peterhead remains the port with by far the highest landings in terms of both volume (159 thousand tonnes) and value (£144.7 million). Shellfish formed the majority of landings by the UK fleet into England, Wales and Northern Ireland whilst pelagic fish had the highest share of landings into Scotland.

Landings into the UK by foreign vessels rose by 21% to 73 thousand tonnes as a result of the large increase in mackerel quota.

In 2014, UK vessels landed 305 thousand tonnes of fish abroad with 155 thousand tonnes of mostly mackerel landed in Norway, 60 thousand tonnes landed in the Netherlands and 41 thousand tonnes landed in Denmark. A small sector of the UK registered fishing fleet is in Dutch economic ownership which contributes to these large quantities landed in the Netherlands. The majority of fish landed in Dutch and Danish ports were pelagic whilst most fish landed in Germany and Spain were demersal.

Management instruments

The fleet is managed mainly through TACs and quotas, together with a range of input controls.

Quotas are mostly managed by a variety of producer organisations (PO) with just under two thirds of over 10m vessels a member of a PO in 2014. 87% of the volume of all landings by the UK fishing fleet was landed by vessels who were a member of a PO. Vessels without producer organisation membership were primarily targeting shellfish.

Restrictions on effort have been set in certain areas with the introduction of a number of marine conservation zones in England, Wales and Northern Ireland and marine protected areas in Scotland. In addition sole and cod recovery zones as well as limitations to activity in the Western Waters have been in place since the early years of the 21st century.

TACs and quotas

Total initial available quota for the UK fleet in 2014 was 869 thousand tonnes.

In 2015 the UK was allocated quota in 188 stock management units of which 22 provide around 85% of revenue (from quota managed stocks) or 50-55% of the total landed value (included other, non quota managed species).

The large increase in mackerel quota in 2014 was a main driver of increased economic performance.

Innovation and Development

With the landing obligation being phased in, the need for innovation and development of new types of gear technology has become more important than ever before. From mesh panels to strategically placed lights, there are various different methods for reducing bycatch being trialled and it is clear that there won't be a simple 'one size fits all' solution. Investing in innovation would appear to be necessary for the continued survival of the industry but achieving these improvements must be balanced with the economic realities of the situation with many vessel owners unable to access the required capital. If the gear has not been approved by the government it can be a lengthy process and depending on the scale of alterations could incur significant costs.

Participants in the recent Seafish strategic intentions survey expressed an inability to make long-term plans due to a climate of uncertainty linked to changes in regulation amongst other things. This focus on day-to-day operations, whilst necessary for the survival of a large number of vessels, can hinder innovation and development.

Performance by fishing activity

Small-scale fleet

In 2014, there were 3 138 active vessels belonging to the 'small-scale coastal fleet' (vessels under 12m using passive gears). Like the UK fleet as a whole, estimates suggest the fleet remained profitable in 2014.

Weight of landings for the small-scale fleet fell by 1% but the value of landings increased by 11% due to a strong price achieved by a number of key species such as Norway and European lobster.

Costs across the board increased in line with increased effort (days at sea) and FTE jobs, however, profitability still increased. GVA, gross profit and net profit in 2014 were estimated at €66 million, €19 million and €7.8 million, respectively. GVA increased 16%, gross profit and net profit increased 23% and 33%, respectively.

Vessels included in the small-scale fleet have benefitted from a reallocation of quota from the over 10m sector to the under 10m sector and the introduction of marine conservation zones in England, Wales and Northern Ireland and marine protected areas in Scotland.

Large-scale fleet

In 2014, there were 1 427 vessels belonging to the 'large-scale fleet' (all vessels using active gears and vessels over 12m using passive gears). This fleet was chiefly responsible for driving the large increase in profitability achieved by the UK fleet as a whole with weight and value of landings increasing by 22% even as effort (in terms of days at sea, fishing days, trips) remained static.

Labour costs increased at roughly the same rate as landings with many fishers in the UK paid as a share of the total value of landings. Energy costs fell by 2% despite fuel consumption increasing 3% with vessels benefitting from the decrease in fuel price in the second half of 2014.

GVA increased by 32% to €470 million while gross profit increased by 44% and net profit by 55% to €254 million and €197 million respectively.

The large-scale fleet is extremely diverse and once more it needs to be taken into account that much of the increase in profitability was driven by a relatively small number of larger vessels targeting pelagic and certain demersal species. At the other end of the spectrum a number of the beam trawl and hooks fleets recorded net losses.

Performance results of selected fleet segments

The UK fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Berring Sea, North Sea, West of Scotland and English Channel and Western Approaches. These overlapping areas of interest make it difficult to provide a simple explanation of fleet structures across the UK. For example, the Scottish fleet has moved toward higher capacity vessels that can cover large sea areas and catch several hundred tonnes of fish per trip whilst a greater proportion of the English fleet is engaged in cover inshore areas remaining economically viable by catching smaller quantities of more valuable fish.

Pelagic trawlers (>40m)

This fleet is made up of 31 large scale trawlers, responsible for more than half of the total weight of fish landed by the UK fishing fleet in 2014. This volume of fish equated to more than 30% of the total value of landings with the segment making a net profit of €105 million in 2014. Whilst this segment has been consistently profitable, in 2014 economic performance was particularly strong due to the increase in quota for the main species targeted.

These vessels generally operate out of Scottish ports and target pelagic species in the North Sea and West of Scotland. Mackerel and herring are the two main species landed by the UK fleet, accounting for 88% by weight and 94% by value of total pelagic landings in 2014. Mackerel prices were at a record high in 2011 but have since fallen as landings have increased. The average price of herring has also fallen as volume of landings has increased.

More than half of the pelagic species caught by the UK fishing fleet are landed abroad with Norway, the Netherlands and Denmark the main locations.

Pot and traps (<10m)

This fleet is a main employer for the UK fishing fleet with 1 096 FTEs generated in 2014. There are 1 753 vessels in the segment although around 700 of these vessels would be termed as low activity (annual landings less than £10 000).

Excluding the lower activity vessels, whelks account for the majority of volume landed however higher priced lobster species are more important to the fleet in terms of value. For these higher activity vessels the total value of landings increased 14% to €70 million even as total volume landed remained static (26 thousand tonnes), yet, net profit margin was also static having previously declined in 2011.

Demersal trawlers and seiners

This segment represented 18% (830 vessels) of the total UK fishing fleet in 2014. It landed 23% (172 thousand tonnes) of the total weight and 36% (€382 million) of the total value of the landings of the UK fishing fleet. Of particular importance are the 179 vessels between 18 and 24 m and the 85 vessels between 24 and 40 m with net profits of €18.3 million and €34.6 million respectively in 2014. Together these two segments employ 25% of total FTEs and generated €128 million in GVA.

The fleet targets a variety of species but in particular the demersal species, such as monkfish, cod, haddock and whiting, and the shellfish species, Norway lobster. Higher prices for these species helped increase profitability in 2014.

There is however differences in the economic performance of vessels in this fleet operating in different areas of UK waters with *Nephrops* trawlers operating mainly in Area VIIA and the West of Scotland appearing more profitable than those operating mainly in the North Sea in 2014.

Projections for 2015 and outlook

Preliminary results for 2015 suggest a 7% decrease in landed weight, matched by a 6% decrease in value of landings. Projections suggest operating costs will be static with the notable exception of energy costs which are estimated to decrease by 23% due to the continued decrease in the price of fuel. In terms of economic performance, GVA, gross profit and net profit are estimated to decrease by 4%, 9% and 13% respectively. The performance indicators of gross profit margin, net profit margin, GVA to revenue and GVA per FTE all remained stable in 2015.

This pattern of initial increase and subsequent deterioration of fishing income and weight of landings in 2014 and 2015 respectively was mainly driven by the pelagic sector. The pattern could be partly related to the Russian trade ban in August 2014 and the subsequent deterioration of the average mackerel price recorded between 2011 and 2015.

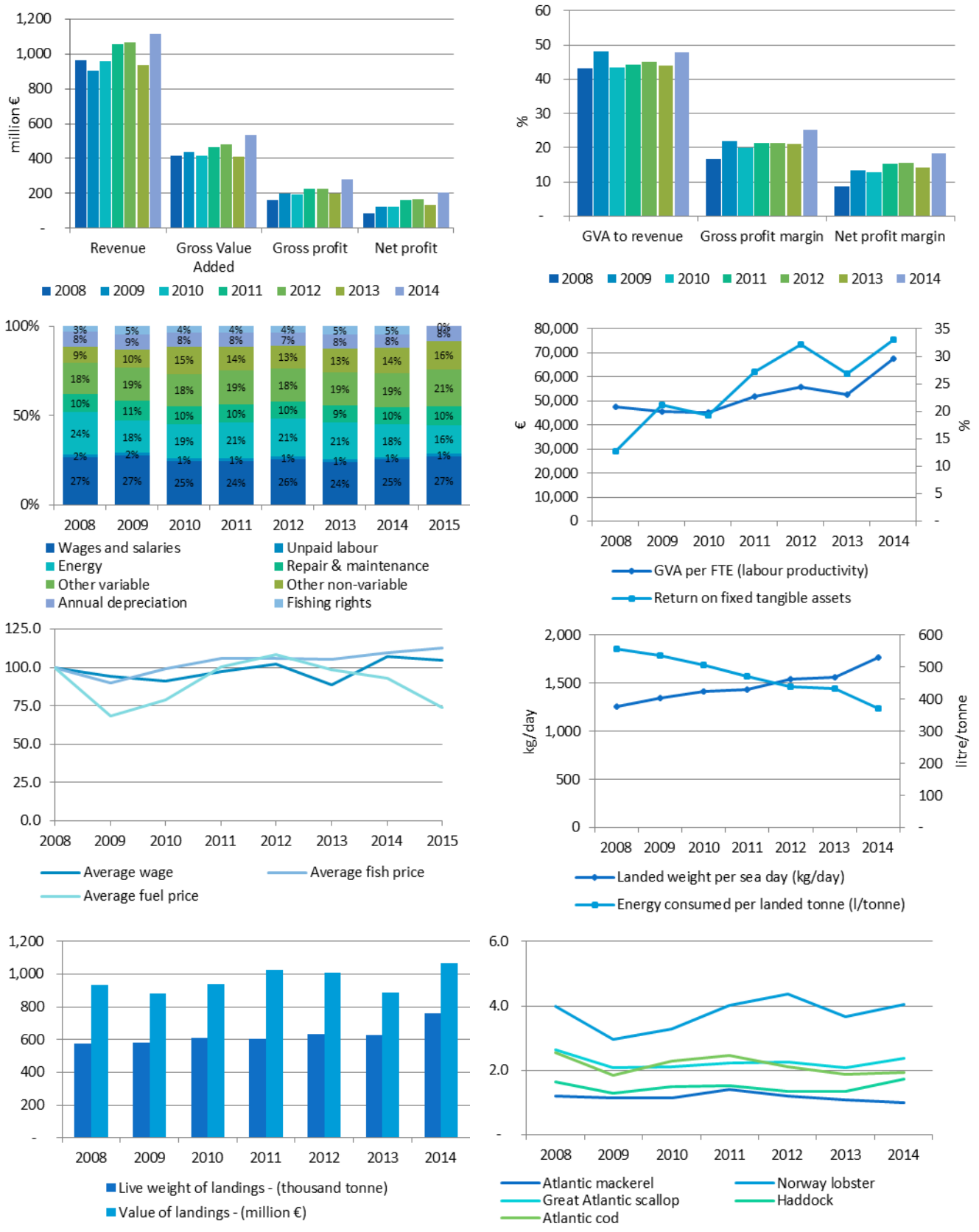
Modelling for 2016 suggests few significant changes, although lower prices mean that a 6% increase in landed weight results in a 5% decrease in landed value. Profits are forecasted to be stable with gross and net profit margins decreasing by 2% and 3% respectively.

Based on recent economic impact assessments carried out by Seafish, it seems likely that the upcoming landing obligation will have a significant impact on a number of sectors of the UK fishing fleet. It is as of yet unclear how the impacts of the regulation will be mitigated by policy, fleet and market responses but it is likely to provide many fishers in the UK, particularly those operating in highly mixed fisheries, with significant operational challenges.

Data issues

No major issues detected. In 2015 changes were made to segmentation in order to provide a fuller picture of fleet performance and therefore values and figures may differ from previous reports.

The reader should note that UK fleet revenues and costs do not include trade in quota. Quota trades take two forms; transfer in perpetuity and transfers for a defined period, usually one year – generally called leasing. There are two components within each of these. First, there is windfall accruing to those enjoying the initial allocation of the resource in 1999 and secondly the normal capital gain or loss arising on the transfer of the asset. Only the latter should be included in the accounts used in this report. However, it is impossible to identify the contribution of each component, but as the proportion of the total value is declining with each transfer of the original allocation, the problem will disappear as time goes by. Initially, however, the windfall component will be by far the greater proportion and hence for the time being omission of transfers limits any distortion of the fleet profitability figures.



Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

Figure 5.22 United Kingdom: Main trends in economic performance indicators (absolute value, panel 1a – top left and relative value, panel 1b – top right); cost structure (panel 2a); productivity (panel 2b); key input/outputs (panel 3a); efficiency (panel 3b); landings (panel 4a); average price of top species (panel 4b).

Table 5.99 United Kingdom: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

		2008	2009	2010	2011	2012	2013	2014	Trend	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels	(#)	6,976	6,783	6,717	6,609	6,580	6,570	6,552		0%	-2%
Number of Inactive vessels_ms	(#)	2,077	1,945	1,943	1,811	1,818	1,940	1,987		2%	3%
Vessel tonnage	(thousand GT)	220.9	213.4	221.4	209.1	204.1	204.5	203.9		0%	-4%
Engine power	(thousand kW)	892.0	861.0	867.0	837.2	819.9	821.7	820.5		0%	-3%
Average vessel age	(year)	24	25	26	26	26	27	27		0%	5%
Average vessel length	(metre)	22	21	22	22	23	20	21		1%	-5%
Enterprises with one vessel	(#)	5,375	5,348	5,242	5,150	5,032	4,945	5,062		2%	-2%
Enterprises with 2 to 5 vessels	(#)	615	549	563	562	577	548	564		3%	-1%
Enterprises with more than 5 vessels	(#)	5	6	5	5	6	8	10		25%	71%
FTE	(#)	8,698	9,535	9,244	8,978	8,593	7,800	7,909		1%	-10%
Total employed	(person)	12,614	12,212	12,703	12,405	12,445	12,235	11,845		-3%	-5%
Days at sea	(thousand day)	456.2	433.3	429.2	420.0	411.6	401.3	428.0		7%	1%
Fishing days	(thousand day)	377.5	348.4	343.2	337.3	337.2	323.4	325.0		0%	-6%
Number of fishing trips	(thousand)	201.6	231.3	229.5	230.8	231.3	227.0	226.4		0%	1%
Energy consumption	(million litre)	319.8	313.4	308.9	285.1	278.4	271.6	281.4		4%	-5%
Live weight of landings	(thousand tonne)	575.0	582.8	608.4	603.7	634.4	628.5	758.8		21%	25%
Value of landings	(million €)	932.7	880.3	938.7	1,026.8	1,010.6	887.8	1,068.8		20%	13%
Income from landings	(million €)	930.6	879.4	939.0	1,028.8	1,022.9	893.1	1,076.7		21%	13%
Other income	(million €)	30.76	23.55	20.10	26.89	41.95	44.05	41.28		-6%	32%
Direct income subsidies	(million €)	-	-	-	-	-	-	-			
Income from leasing fishing rights	(million €)	-	2.9	2.3	1.8	4.1	4.2	2.2		-49%	-15%
Wages and salaries of crew	(million €)	239.6	223.4	213.3	229.3	240.5	203.7	242.1		19%	8%
Unpaid labour value	(million €)	14.9	14.0	12.4	12.8	12.7	10.2	11.6		14%	-9%
Energy costs	(million €)	214.6	143.6	163.1	192.6	202.0	179.1	175.9		-2%	-4%
Repair & maintenance costs	(million €)	90.8	90.2	90.5	93.5	89.5	77.3	90.8		18%	2%
Other variable costs	(million €)	158.2	151.6	155.9	175.3	173.1	160.0	179.1		12%	10%
Other non-variable costs	(million €)	82.9	82.5	133.2	127.2	119.3	109.2	136.8		25%	25%
Annual depreciation costs	(million €)	72.2	69.2	67.8	71.9	68.8	67.2	73.0		9%	5%
Rights costs	(million €)	30.2	38.1	30.5	35.7	35.8	41.3	43.5		5%	23%
Opportunity cost of capital	(million €)	6.1	6.9	0.4	- 8.8	- 5.1	- 2.7	4.0		247%	834%
Tangible asset value	(million €)	695.6	604.9	638.5	562.2	494.8	485.4	632.2		30%	9%
Fishing rights	(million €)	689.3	694.8	649.3	808.6	801.5	613.4	763.1		24%	8%
Investments	(million €)	52.8	57.7	76.5	73.1	87.6	148.4	106.1		-29%	28%
Financial position	(%)	43.0	53.3	47.3	39.2	44.4	19.4	24.6		27%	-40%
Gross Value Added	(million €)	414.9	435.0	416.4	467.1	481.0	411.5	535.4		30%	22%
GVA to revenue	(%)	43.2	48.2	43.4	44.2	45.2	43.9	47.9		9%	7%
Gross profit	(million €)	160.3	197.6	190.7	225.0	227.8	197.6	281.7		43%	41%
Gross profit margin	(%)	16.7	21.9	19.9	21.3	21.4	21.1	25.2		19%	24%
Net profit	(million €)	82.1	121.5	122.6	161.8	164.1	133.2	204.7		54%	56%
Net profit margin	(%)	8.5	13.5	12.8	15.3	15.4	14.2	18.3		29%	38%
GVA per FTE	(thousand €)	48	46	45	52	56	53	68		28%	36%
Return on fixed tangible assets	(%)	13	21	19	27	32	27	33		23%	42%

Table 5.100 United Kingdom: National fleet statistics and economic performance results based on fleet segment level data.

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015). Data for 2015 and 2016 are projected.

Variable / indictor	unit	2008	2009	2010	2011	2012	2013	2014	*2015*	*2016*	Trend	Δ2015 to 2014	Δ2016 to 2015
Total number of vessels	(#)	4899	4838	4774	4798	4762	4630	4565	*4,536*	*4,509*		-1%	-1%
Total employed	(person)	12614.01	12212.03	12703.01	12405.02	12445.01	12235	11845	*11,850*	*11,756*		0%	-1%
FTE	(#)	8,698	9,535	9,244	8,978	8,593	7,800	7,909	*7,777*	*7,440*		-2%	-4%
Days at sea	(day)	456,154	433,348	429,174	419,974	411,610	401,325	428,001	*425,347*	*389,067*		-1%	-9%
Energy consumption	(thousand litres)	319,771	313,370	308,895	285,094	278,419	271,552	281,356	*272,298*	*268,536*		-3%	-1%
Live weight of landings	(tonne)	575,003	582,817	608,441	603,743	634,405	628,468	758,848	*705,714*	*750,234*		-7%	6%
Value of landings	(thousand €)	932,749	880,252	938,736	1,026,755	1,010,594	887,847	1,068,817	*1,008,330*	*962,581*		-6%	-5%
Income from landings	(thousand €)	930,622	879,400	938,975	1,028,819	1,022,904	893,056	1,076,709	*1,015,864*	*970,464*		-6%	-4%
Other income	(thousand €)	30,755	23,554	20,102	26,889	41,952	44,052	41,282	*41,244*	*40,675*		0%	-1%
Wages and salaries of crew	(thousand €)	239,648	223,401	213,342	229,342	240,468	203,656	242,053	*237,780*	*230,512*		-2%	-3%
Unpaid labour value	(thousand €)	14,871	13,964	12,355	12,808	12,731	10,216	11,644	*11,227*	*11,184*		-4%	0%
Energy costs	(thousand €)	214,635	143,616	163,085	192,595	201,977	179,093	175,909	*134,670*	*97,315*		-23%	-28%
Repair & maintenance costs	(thousand €)	90,758	90,243	90,467	93,471	89,525	77,254	90,815	*83,138*	*81,911*		-8%	-1%
Other variable costs	(thousand €)	158,210	151,641	155,875	175,304	173,069	160,043	179,069	*168,376*	*174,522*		-6%	4%
Other non-variable costs	(thousand €)	82,910	82,460	133,211	127,203	119,263	109,222	136,825	*114,552*	*115,289*		-16%	1%
Annual depreciation costs	(thousand €)	72,154	69,207	67,793	71,924	68,834	67,153	72,990	*66,725*	*66,394*		-9%	0%
Opportunity cost of capital	(thousand €)	5,467	6,260	353	- 7,970	- 4,576	- 2,523	3,707	*8,365*	*8,420*		126%	1%
Tangible asset value (replacement)	(thousand €)	628,398	549,149	588,894	510,869	444,282	450,543	588,399	*469,050*	*472,163*		-20%	1%
Gross Value Added	(thousand €)	414,863	434,993	416,439	467,136	481,022	411,495	535,373	*556,373*	*542,102*		4%	-3%
Gross profit	(thousand €)	160,344	197,628	190,743	224,985	227,823	197,623	281,676	*307,365*	*300,406*		9%	-2%
Net profit	(thousand €)	82,723	122,161	122,596	161,031	163,565	132,992	204,980	*232,276*	*225,592*		13%	-3%

Table 5.101 All monetary values have been adjusted for inflation to constant prices (2015).

Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Small Scale Coastal Fleet							Large Scale Fleet													
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014	Trend SSCF	Δ2014 to 2013	Δ2014 to avg. 08-13	Trend LSF	Δ2014 to 2013	Δ2014 to avg. 08-13
Total number of vessels (#)	3,256	3,243	3,266	3,325	3,307	3,195	3,138	1,643	1,595	1,508	1,473	1,455	1,435	1,427		-2%	-4%		-1%	-6%
Vessel tonnage (thousand GT)	12.6	12.5	12.6	12.7	12.4	12.3	12.8	186.0	180.6	192.1	177.7	178.1	173.1	170.9		4%	2%		-1%	-6%
Engine power (thousand kW)	192.2	192.6	191.9	197.5	195.3	195.5	194.0	557.6	535.6	549.9	518.9	515.9	507.1	501.8		-1%	0%		-1%	-5%
FTE (#)	1,745	1,954	1,993	2,066	1,785	1,788	1,954	6,954	7,581	7,251	6,913	6,808	6,012	5,955		9%	3%		-1%	-14%
Total employed (person)	5,292	5,503	5,862	5,979	5,633	5,837	5,625	7,322	6,709	6,841	6,426	6,812	6,398	6,220		-4%	-1%		-3%	-8%
Days at sea (thousand day)	237.4	219.3	223.1	226.4	219.4	213.8	237.0	218.7	214.1	206.1	193.5	192.2	187.5	191.0		11%	6%		2%	-5%
Fishing days (thousand day)	182.0	156.9	158.6	164.9	168.3	159.7	162.1	195.5	191.5	184.6	172.4	168.9	163.7	162.9		1%	-2%		0%	-9%
Number of fishing trips (thousand)	99	127	131	135	134	128	131	103	105	99	96	97	99	95		2%	5%		-3%	-5%
Energy consumption (million litre)	28.6	26.6	27.7	27.6	27.3	26.9	29.5	291.1	286.8	281.2	257.5	251.1	244.7	251.9		10%	7%		3%	-6%
Live weight of landings (thousand tonne)	38.6	37.6	41.3	42.0	45.2	47.0	46.6	536.4	545.2	567.1	561.7	589.2	581.5	712.3		-1%	11%		22%	26%
Value of landings (million €)	128.4	105.6	114.3	117.7	122.3	111.6	123.5	804.3	774.7	824.4	909.1	888.2	776.3	945.3		11%	6%		22%	14%
Income from landings (million €)	128.1	105.4	114.4	118.4	123.1	112.4	124.7	802.5	774.0	824.6	910.4	899.8	780.6	952.0		11%	7%		22%	14%
Other income (million €)	5.6	3.2	4.2	4.8	6.1	5.6	7.0	25.1	20.3	15.9	22.1	35.8	38.4	34.3		23%	41%		-11%	31%
Direct income subsidies (million €)	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Wages and salaries of crew (million €)	41.1	29.9	33.1	30.2	33.4	31.9	36.1	198.5	193.5	180.2	199.1	207.0	171.7	206.0		13%	8%		20%	7%
Unpaid labour value (million €)	12.9	11.8	10.7	11.3	11.1	9.0	10.3	1.9	2.1	1.7	1.5	1.6	1.2	1.3		15%	-8%		7%	-20%
Energy costs (million €)	19.2	12.2	14.6	18.7	19.8	17.7	18.4	195.4	131.4	148.4	173.9	182.2	161.4	157.5		4%	8%		-2%	-5%
Repair & maintenance costs (million €)	10.4	6.9	8.7	10.6	9.7	8.0	8.2	80.3	83.4	81.7	82.9	79.8	69.2	82.6		2%	-10%		19%	4%
Other variable costs (million €)	18.7	17.7	19.5	25.9	26.5	24.8	27.7	139.5	133.9	136.4	149.4	146.5	135.2	151.4		12%	25%		12%	8%
Other non-variable costs (million €)	11.8	10.8	13.5	10.1	11.7	10.8	11.6	71.1	71.6	119.7	117.1	107.5	98.5	125.2		8%	1%		27%	28%
Annual depreciation costs (million €)	10.8	9.9	7.8	8.3	10.6	10.5	11.1	61.3	59.3	60.0	63.7	58.3	56.7	61.9		6%	15%		9%	3%
Opportunity cost of capital (million €)	0.75	0.86	0.05	- 1.13	- 0.78	- 0.51	0.53	4.71	5.40	0.31	- 6.84	- 3.79	- 2.02	3.17		206%	524%		257%	953%
Tangible asset value (million €)	86.7	75.9	77.1	72.7	75.9	90.4	84.9	541.7	473.3	511.8	438.2	368.3	360.2	503.5		-6%	6%		40%	12%
Investments (million €)	1.1	10.3	17.6	44.3	20.1	32.4	22.6	51.7	47.4	58.9	28.8	67.5	116.1	83.5		-30%	8%		-28%	35%
Gross Value Added (million €)	73.6	61.1	62.2	58.0	61.5	56.7	65.8	341.3	373.9	354.2	409.1	419.6	354.8	469.6		16%	6%		32%	25%
GVA to revenue (%)	55.0	56.2	52.5	47.1	47.6	48.0	50.0	41.2	47.1	42.1	43.9	44.8	43.3	47.6		4%	-2%		10%	9%
Gross profit (million €)	19.5	19.4	18.4	16.4	16.9	15.8	19.4	140.8	178.3	172.3	208.6	210.9	181.8	262.3		23%	9%		44%	44%
Gross profit margin (%)	14.6	17.8	15.5	13.3	13.1	13.4	14.7	17.0	22.4	20.5	22.4	22.5	22.2	26.6		10%	1%		20%	26%
Net profit (million €)	7.9	8.6	10.5	9.3	7.2	5.8	7.8	74.8	113.5	112.1	151.7	156.4	127.1	197.2		33%	-6%		55%	61%
Net profit margin (%)	5.9	7.9	8.9	7.6	5.5	5.0	5.9	9.0	14.3	13.3	16.3	16.7	15.5	20.0		19%	-13%		29%	41%
GVA per FTE (thousand €)	42.2	31.3	31.2	28.1	34.4	31.7	33.7	49.1	49.3	48.8	59.2	61.6	59.0	78.9		6%	2%		34%	45%

Table 5.102 United Kingdom: National fleet statistics and economic performance results by fishing activity.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Total number of vessels	FTE	Days at sea	Energy consumed per landed tonne	Live weight of landings	Value of landings	Revenue	Gross Value Added	GVA to revenue	Gross profit	Gross profit margin	Net profit	Net profit margin	Average wage per FTE	GVA per FTE (labour productivity)	Return on fixed tangible assets	Profitability (2014)	Net profit margin %Δ 2013 - average (2008-13)	Economic development trend
	(#)	(#)	(day)	(l/tonne)	(tonne)	(thousand €)	(thousand €)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(%)	(thousand €)	(thousand €)	(%)			
GBR A27 TM40XX °	31	90	2,134	111	424,637	328,287	332,891	188,352	56.6	128,744	38.7	104,739	31.46	662.8	2,094	47	High	33%	Improved
GBR A27 DTS2440	85	889	16,470	612	67,879	145,295	155,726	76,085	48.9	42,531	27.3	34,696	22.28	37.7	86	70	High	97%	Improved
GBR A27 DTS1824	179	1,095	30,032	815	46,305	113,242	119,770	52,301	43.7	26,625	22.2	18,314	15.29	23.4	48	24	High	57%	Improved
GBR A27 FPO0010	1,753	1,096	158,057	717	27,335	73,602	78,771	37,985	48.2	9,627	12.2	2,415	3.07	25.9	35	6	Reasonable	-42%	Deteriorated
GBR A27 DTS1218 °	213	772	31,443	977	18,740	53,900	57,168	25,099	43.9	12,016	21.0	7,247	12.68	16.9	33	34	High	21%	Improved
GBR A27 DTS40XX °	9	150	2,149	568	29,650	42,418	47,146	15,348	32.6	12,111	25.7	8,716	18.49	21.6	102	114	High	13%	Improved
GBR A27 TBB2440 °	31	372	6,791	1,643	16,303	38,285	39,680	9,284	23.4	1,978	5.0	-937	-2.36	19.6	25	-11	Weak	-293%	Deteriorated
GBR A27 FPO1218	80	389	13,264	485	16,026	30,619	32,203	14,890	46.2	5,767	17.9	3,840	11.92	23.4	38	44	High	47%	Improved
GBR A27 DRB1218	109	255	13,505	510	18,442	30,034	30,379	13,780	45.4	6,201	20.4	4,338	14.28	29.7	54	28	High	13%	Improved
GBR A27 HOK2440 °	13	238	3,316	620	8,466	26,613	27,395	9,818	35.8	-1,973	-7.2	-3,652	-13.33	49.5	41	-79	Weak	-398%	Deteriorated
GBR A27 DRB2440 °	34	240	6,233	702	11,993	24,651	24,801	10,360	41.8	4,325	17.4	3,451	13.92	25.1	43	55	High	-15%	Deteriorated
GBR A27 FPO1012 °	173	393	26,032	403	9,647	22,803	23,247	13,252	57.0	6,429	27.7	4,274	18.38	17.4	34	31	High	8%	Improved
GBR A27 DTS0010	257	262	21,829	783	5,398	16,016	17,865	7,851	43.9	2,873	16.1	1,516	8.49	19.0	30	12	Reasonable	14%	Improved
GBR A27 DFN2440 °	16	283	3,468	417	4,985	15,833	17,744	10,009	56.4	5,814	32.8	4,526	25.51	14.8	35	102	High	115%	Improved
GBR A27 DFN0010	632	211	28,522	517	5,084	15,200	16,784	8,639	51.5	2,660	15.9	1,335	7.95	28.3	41	14	Reasonable	15%	Improved
GBR A27 TBB1824	19	152	4,693	1,313	4,605	15,214	15,839	6,432	40.6	2,255	14.2	1,725	10.89	27.4	42	24	High	103%	Improved
GBR A27 FPO1824 °	13	167	3,250	318	7,660	14,482	15,228	7,815	51.3	3,501	23.0	2,561	16.82	25.9	47	30	High	29%	Improved
GBR A27 DRB1824	24	116	4,413	524	9,772	13,498	13,554	5,336	39.4	2,037	15.0	1,541	11.37	28.3	46	25	High	-32%	Deteriorated
GBR A27 DTS1012	87	169	10,494	848	4,236	11,998	12,496	5,763	46.1	3,087	24.7	2,184	17.48	15.9	34	25	High	57%	Improved
GBR A27 HOK0010	462	158	18,071	670	1,865	6,633	7,267	3,940	54.2	544	7.5	-2	-0.03	21.6	25	1	Weak	99%	Improved
GBR A27 DFN1218	11	76	1,685	190	3,781	5,715	6,710	3,828	57.0	2,242	33.4	1,744	25.98	21.0	51	51	High	140%	Improved
GBR A27 DRB0010	109	63	5,664	662	3,282	5,693	5,815	2,436	41.9	630	10.8	171	2.94	28.8	39	3	Reasonable	-18%	Deteriorated
GBR A27 DRB1012	29	44	3,030	651	2,472	5,705	5,776	2,807	48.6	1,322	22.9	886	15.35	33.9	64	37	High	59%	Improved
GBR A27 MGP1218 °	30	44	2,427	260	5,491	3,650	3,712	1,528	41.2	703	18.9	481	12.97	18.9	35	11	High	15%	Improved
GBR A27 TBB1218	18	55	2,215	1,804	1,207	2,412	2,513	18	0.7	-512	-20.4	-704	-27.99	9.7	0	-12	Weak	-97%	Deteriorated
GBR A27 DFN1012	12	32	965	191	1,580	1,945	2,163	1,188	54.9	677	31.3	515	23.79	16.2	38	36	High	320%	Improved
GBR A27 PGP0010 °	86	28	3,751	888	688	1,806	1,923	801	41.6	134	7.0	-19	-0.99	23.6	28	-0	Weak	-270%	Deteriorated
GBR A27 HOK1012 °	20	37	1,555	3,176	374	1,485	1,498	-26	-1.7	-666	-44.5	-762	-50.86	17.3	-1	-86	Weak	-200%	Deteriorated
GBR A27 TBB0010 °	15	21	1,263	1,358	524	937	992	88	8.9	-128	-12.9	-215	-21.63	10.5	4	-9	Weak	-121%	Deteriorated
GBR A27 MGP0010 °	15	14	1,281	731	421	847	932	369	39.6	123	13.2	53	5.66	17.6	26	8	Reasonable	-1%	Stable

Table 5.103 United Kingdom: National fleet statistics and economic performance results by fleet segment.
Data source: MS data submissions under the DCF 2016 Fleet Economic (MARE/A3/AC(2016)); All monetary values have been adjusted for inflation; constant prices (2015).

	Value of landings (real) (million €)								Live weight of landings (thousand tonne)								Average landed price (real) (€)							
	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	***2015***	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	***2015***	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	***2015***
Atlantic mackerel	152.0	198.5	180.9	253.2	203.2	174.9	281.8	*194.4*	128.0	172.3	160.7	182.2	168.8	163.8	288.0	*248.0*	1.2	1.2	1.1	1.4	1.2	1.1	1.0	*0.8*
Norway lobster	173.7	127.0	126.6	138.9	143.0	104.1	123.4	*112.9*	43.6	43.0	38.7	34.5	32.8	28.5	30.5	*25.8*	4.0	3.0	3.3	4.0	4.4	3.7	4.0	*4.4*
Great Atlantic scallop	58.7	57.7	65.4	67.2	77.0	65.3	67.1	*78.9*	22.3	27.6	30.9	30.1	34.4	31.2	28.5	*28.3*	2.6	2.1	2.1	2.2	2.2	2.1	2.4	*2.8*
Haddock	54.0	46.2	49.7	45.1	47.6	53.4	62.5	*61.7*	33.1	36.3	33.6	29.8	35.2	39.8	36.4	*33.2*	1.6	1.3	1.5	1.5	1.4	1.3	1.7	*1.9*
Atlantic cod	49.6	41.3	59.1	57.1	56.2	55.4	59.2	*50.0*	19.3	22.5	25.8	23.2	26.5	29.6	30.7	*27.7*	2.6	1.8	2.3	2.5	2.1	1.9	1.9	*1.8*
Anglerfishes	63.0	61.4	61.9	62.6	56.6	49.4	56.9	*63.7*	15.4	15.1	14.4	15.2	13.5	13.6	15.9	*18.0*	4.1	4.1	4.3	4.1	4.2	3.6	3.6	*3.6*
Edible crab	41.0	32.8	38.6	41.0	45.2	45.8	55.3	*53.1*	22.8	22.6	24.8	26.8	28.4	29.3	33.1	*29.5*	1.8	1.5	1.6	1.5	1.6	1.6	1.7	*1.8*
European lobster	46.0	35.0	35.4	40.5	40.2	36.1	41.9	*44.0*	2.7	2.8	2.8	3.2	3.2	3.0	3.4	*3.1*	17.1	12.5	12.9	12.6	12.7	12.1	12.3	*14.2*
Atlantic herring	27.6	29.6	29.0	36.3	50.6	39.8	35.7	*39.1*	67.1	67.1	66.9	61.6	90.4	93.8	97.7	*93.7*	0.4	0.4	0.4	0.6	0.6	0.4	0.4	*0.4*
European hake	15.9	20.0	16.4	18.1	22.7	27.3	32.2	*38.7*	6.1	7.9	6.9	8.0	8.4	9.0	11.3	*12.6*	2.6	2.5	2.4	2.3	2.7	3.0	2.9	*3.1*

6 AER REPORT METHODOLOGY

6.1 Background

The data used to compile the various analyses contained within the report were collected under the framework of the Data Collection Framework (DCF), cf. Council regulation (European Commission (EC) No 199/2008 of 25th February 2008).

The 2016 data call for economic data on the EU fishing fleet for EU Member States was the eighth data call to be requested under the DCF. This year's fishing fleet economic data call was issued by DG MARE on the 2 February 2016 with a one month deadline (2 March 2016).

The 2016 data call requested transversal and economic data for the years 2008 to 2014/2015. Capacity data was requested up to and including 2015, while employment and economic parameters were requested up to and including 2014.

Most effort and all landings data were requested up to and including 2015, as well as, income from landings (non-mandatory) to allow for economic performance projections to be estimated at fleet segment and national level for 2015.

The table below outlines all the DCF economic and transversal variables to be submitted for the years 2008-2015, along with their uploading acronyms and corresponding aggregation levels. All the various definitions for variables, aggregation levels, gear types, length classes, DCF supra regions, FAO sub regions, species, sampling strategies and precision levels can be found by navigating through the data collection website.

See https://datacollection.jrc.ec.europa.eu

6.2 DCF VARIABLES REQUESTED

Table 6.1 2015 DCF Fleet economic data call contents for years 2008-2014/15.

Variable group	Variable	Years	Aggregation level
Fishing Enterprises	Enterprises consisting of 1 vessel	2008 - 2015	Yearly, by 1) National totals
	Enterprises consisting of 2-5 vessels	2008 - 2015	
	Enterprises consisting of > 5 vessels	2008 - 2015	
Employment	Number of engaged crew	2008 - 2014	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	FTE national	2008 - 2014	
	FTE harmonised	2008 - 2014	
Income	Value of landings	2008 – 2015*	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	Income from fishing rights	2008 - 2014	
	Direct subsidies	2008 - 2014	
	Other income	2008 - 2014	
Costs	Crew wages	2008 - 2014	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	Value of unpaid labour	2008 - 2014	
	Energy costs	2008 - 2014	
	Repair and maintenance costs	2008 - 2014	
	Other variable costs	2008 - 2014	
	Other non-variable costs	2008 - 2014	
	Rights costs	2008 - 2014	
	Annual depreciation costs	2008 - 2014	
Capital and Investments	Vessel replacement value	2008 – 2014	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	Value of fishing rights	2008 - 2014	
	In-year investments	2008 - 2014	
	Financial position	2008 - 2014	
	Vessel historical value**	2008 - 2014	
Capacity	Number of vessels	2008 - 2015	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	Mean length overall	2008 - 2015	
	Total GT	2008 - 2015	
	Total kW	2008 - 2015	
	Mean age	2008 - 2015	
	Number of vessels by region	2008-2014	Yearly, by 1) Fleet segment, Supra-region, Region (level 2)

Variable group	Variable	Years	Aggregation level
Effort	Fishing days	2008 – 2015*	Yearly, by 1) National Totals, 2) Fleet segment, Supra-region, FAO Area level 4 (Baltic), GFCM-GSA (Mediterranean & Black Sea), FAO Area level 3 (All other regions), and 3) (2) + gear type
	kW fishing days	2008 – 2014	
	GT fishing days	2008 – 2014	
	Hours at sea***	2008 – 2014	Yearly, by 1) Fleet segment, Supra-region, FAO Area level 4 (Baltic), GFCM-GSA (Mediterranean & Black Sea), FAO Area level 3 (All other regions)
	GT hours at sea***	2008 – 2014	
	kW hours at sea***	2008 – 2014	
	Days at sea	2008 – 2015*	Yearly, by 1) Fleet segment, Supra-region, FAO Area level 4 (Baltic), GFCM-GSA (Mediterranean & Black Sea), FAO Area level 3 (All other regions) 2) National Totals
	Number of trips	2008 – 2014	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	Energy Consumption	2008 - 2014	
	Maximum days at sea ***	2008-2014	Yearly, by 1) Fleet segment, Supra-region
Landings	Weight of landings per species	2008 – 2015*	Yearly, by 1) Fleet segment, Supra-region, FAO Area level 4 (Baltic), GFCM-GSA (Mediterranean & Black Sea), FAO Area level 3 (All other regions), and gear type 2) National Totals
	Value of landings per species	2008 – 2015*	
Recreational Catches	Weight of catch	2008-2015	Yearly, by Region (level 2)

* 2015 data not mandatory but requested from MS wherever possible in order to estimate economic projections for 2015. These data, if provided, are flagged as preliminary in the 2016 Annual Fleet Economic Report and corresponding data tables.

** Optional

***Non-mandatory under the DCF

6.3 CONCEPTS, TERMS AND DEFINITIONS

Revenue

Revenue – the value of production (sale of landed seafood products) and income generated from the use of the vessel in other, non-commercial fishing activities, such as recreational fishing, transport, tourism, oil rig duty, research, etc., may also include insurance payment for gear damage/loss /vessel. Income from direct subsidies and fishing rights are excluded.

Gross Value Added (GVA)

Gross Value Added - net output of a sector after deducting intermediate inputs from all outputs. It is a measure of the contribution to GDP made by an individual producer, industry or sector. The Gross Value Added indicator calculated in this report is similar, but does not fully correspond to the Value added at factor cost of the Structural Business Statistics.

GVA to Revenue

Gross value added to revenue ratio - indicates the share of revenue that contributes to the economy through factors of production (returns to labour and returns to capital). Indicator is calculated as the ratio between gross value added and revenue and expressed as a percentage.

Gross profit

Gross profit – the normal profit after accounting for operating costs, excluding capital costs. Also referred to as gross cash flow, i.e. the flow of cash into and out of a sector or firm over a period of time.

Gross profit margin (%)

Gross profit margin - a measure of profitability that can be used to analyse how efficiently a sector is using its inputs to generate profit. Calculated as the ratio between gross profit and revenue. Expressed as a percentage.

Gross profit margin indicates the normal profitability of a firm and is of most interest to fishers as it represents the share of income they are left with at the end of the year. For managers, it may be used as an indication of the viability of an industry in terms of its commercial profitability by measuring the share of cash coming in and out of an industry. A high gross profit margin indicates that the sector has a low-cost operating model; reflects efficiency in turning inputs into outputs. A low percentage value can indicate a low margin of safety, i.e. a higher risk that declines in production or increases in costs may result in a net loss, or negative profit margin.

Net profit

Net profit is the difference between revenue and explicit costs and opportunity costs. Explicit costs include all operational costs, such as wages, energy, repair and other variable and non-variable costs. Net profit differs from gross profit in that it includes depreciation and opportunity costs of capital. It measures the efficiency of a producer in society's view by evaluating the total costs of inputs (excluding natural resource costs) in comparison to outputs or revenue.

Economic profit is the primary indicator of economic performance and is often used as a proxy of resource rent in fisheries. Economic profits emerge as the excess of revenue over the opportunity cost of producing the good. Also referred to as supernormal or abnormal profits. Abnormal profits in a sector is an incentive for other firms to enter the industry (if they can). Zero or a negative profit margin may indicate high competition in the sector and can be used as one of the indicators of overcapacity.

Net profit margin (%)

Economic profit margin - a measure of profitability after all costs have been accounted for, and reflects the percentage of revenue that a sector retains as profit. It measures the relative performance of the sector compared to other activities in the economy and provides an indication of the sector's operating efficiency as it captures the amount of surplus generated per unit of production.

Labour productivity (GVA/FTE):

Labour productivity - defined as output per unit of labour. Calculated as Gross Value Added (measure of output) by full-time equivalent (FTE) employment (unit of labour input). Labour productivity can be used as a measure of economic growth, competitiveness, and living standards within a sector. An increase in labour productivity indicates that a unit of input labour is producing more output or that the same amount of output is being produced with fewer units of labour. Labour productivity may also provide an indicator of worker's wellbeing or living standards, assuming that increases in productivity are matched by wage increases.

Capital productivity

Capital productivity - the return of the investment divided by the cost of the investment, also referred to as ROI (Rate on Investment). It measures profits in relation to capital invested, i.e. indicates how profitable a sector is relative to its total assets. The higher the return, the more efficient the sector is in utilising its asset base.

As data on intangible assets (e.g. fishing rights, natural resource) are not always available in fisheries, the Return on Fixed Tangible Assets (ROFTA) is used as an approximation of ROI.

Fuel efficiency

Fuel efficiency - ratio between the quantity of energy consumed and the quantity of output (e.g. landing value or weight). Calculated as the amount of litres of fuel consumed for each kilogram of fish landed (litres per tonne landed). Fuel efficiency may vary considerably in function of fishing effort and specific fisheries characteristics such as fishing gear and targeted species.

6.4 ECONOMIC PERFORMANCE INDICATOR CALCULATIONS

From the data submitted by Member States, indicators were calculated in order to assess the economic performance of fleet segments, national fleets, regional fleets and the EU fleet as a whole.

In order to account for inflation over the given time-period, all nominal values (i.e., the actual price in a given year) were converted to real values before estimating indictors.

For this conversion from nominal to real values, a Consumer Price Index (CPI) 'deflator' for each MS was applied to nominal values. Annual CPI data from taken from Eurostat's time-series of harmonised CPI http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/data/database (Table 6.2).

$$Real\ value\ _i = \frac{Nominal\ value_i}{\frac{CPI_i}{CPI_{2014}}}$$

where i represents the year for which the nominal value is converted into 2014 real value

All values in this report are therefore given in real 2014 EUR, rather than nominal EUR.

Table 6.2 Consumer price index by EU Member State 2008-2015

	2008	2009	2010	2011	2012	2013	2014	2015
BEL	90.0	90.0	92.1	95.2	97.7	98.9	99.4	100.0
BGR	91.6	93.8	96.7	99.9	102.3	102.7	101.1	100.0
DNK	91.2	92.1	94.1	96.6	98.9	99.4	99.8	100.0
DEU	91.9	92.1	93.2	95.5	97.5	99.1	99.9	100.0
EST	85.5	85.6	88.0	92.4	96.3	99.5	99.9	100.0
IRL	99.5	97.8	96.2	97.4	99.2	99.7	100.0	100.0
GBR	84.7	86.6	89.4	93.4	96.1	98.5	100.0	100.0
GRC	93.6	94.8	99.3	102.4	103.4	102.5	101.1	100.0
ESP	92.4	92.2	94.1	96.9	99.3	100.8	100.6	100.0
FRA	92.3	92.4	94.1	96.2	98.3	99.3	99.9	100.0
HRV	89.6	91.6	92.6	94.6	97.8	100.0	100.3	100.0
ITA	90.4	91.1	92.6	95.3	98.4	99.7	99.9	100.0
CYP	92.6	92.7	95.1	98.4	101.5	101.8	101.6	100.0
LVA	91.1	94.1	93.0	96.9	99.1	99.1	99.8	100.0
LTU	87.7	91.3	92.4	96.2	99.3	100.4	100.7	100.0
MLT	88.3	90.0	91.8	94.1	97.1	98.1	98.8	100.0
NLD	90.3	91.2	92.1	94.3	97.0	99.5	99.8	100.0
POL	86.8	90.3	92.7	96.3	99.8	100.6	100.7	100.0
PRT	92.8	92.0	93.2	96.5	99.2	99.7	99.5	100.0
ROU	78.3	82.7	87.7	92.8	96.0	99.0	100.4	100.0
SVN	91.1	91.9	93.9	95.8	98.5	100.4	100.8	100.0
FIN	87.9	89.3	90.8	93.9	96.8	99.0	100.2	100.0
SWE	92.8	94.6	96.4	97.8	98.7	99.1	99.3	100.0

HICP (2015 = 100) - annual data (average index and rate of change) Source: Eurostat

For economic performance calculations relating to the years 2008-2014, the following formulas were used:

Total Income:

Total Revenue = Income from landings + income from fishing rights + other income + direct subsidies

Revenue:

Revenue = Income from landings + other income

Gross Value Added (GVA):

GVA = Income from landings + other income – energy costs – repair costs – other variable costs – non variable costs

Gross Profit (GRP):

GRP = Income from landings + other income – crew costs – unpaid labour - energy costs – repair and maintenance costs – other variable costs – non variable costs

Net Profit/Loss:

Net Profit = Income from landings + other income – crew costs – unpaid labour - energy costs – repair costs – other variable costs – non variable costs – depreciation cost – opportunity cost of capital

Where opportunity cost of capital = fixed tangible asset value * real interest

Where real interest (r) = [(1 + i)/ (1 + п)] -1.

Where i is the nominal interest rate of the Member State in the year concerned and π is the inflation rate of the Member State in the year concerned. See Table 6.3.

Table 6.3 Inflation and nominal LT interest rates by EU Member State 2008-2014

MS	Inflation							Interest rate						
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014
BEL	4.5	0	2.3	3.4	2.6	1.2	0.5	4.42	3.90	3.46	4.23	3.00	2.41	1.71
BGR	12	2.5	3	3.4	2.4	0.4	-1.6	5.38	7.22	6.01	5.36	4.50	3.47	3.35
CYP	4.4	0.2	2.6	3.5	3.1	0.4	-0.3	4.60	4.60	4.60	5.79	7.00	6.50	6.00
DEU	2.8	0.2	1.2	2.5	2.1	1.6	0.8	3.98	3.22	2.74	2.61	1.50	1.57	1.16
DNK	3.6	1.1	2.2	2.7	2.4	0.5	0.3	4.29	3.59	2.93	2.73	1.40	1.75	1.33
ESP	4.1	-0.2	2	3.1	2.4	1.5	-0.2	4.37	3.98	4.25	5.44	5.85	4.56	2.72
EST	10.6	0.2	2.7	5.1	4.2	3.2	0.5	8.16	7.98	5.97	:	:		
FIN	3.9	1.6	1.7	3.3	3.2	2.2	1.2	4.29	3.74	3.01	3.01	1.89	1.86	1.45
FRA	3.2	0.1	1.7	2.3	2.2	1	0.6	4.23	3.65	3.12	3.32	2.54	2.20	1.67
GBR	3.6	2.2	3.3	4.5	2.8	2.6	1.5	4.50	3.36	3.36	2.87	1.74	2.03	2.14
GRC	4.2	1.3	4.7	3.1	1	-0.9	-1.4	4.80	5.17	9.09	15.75	22.50	10.05	6.93
HRV	5.8	2.2	1.1	2.2	3.4	2.3	0.2	6.04	7.83	6.29	6.54	6.13	4.68	4.05
IRE	3.1	-1.7	-1.6	1.2	1.9	0.5	0.3	4.53	5.23	5.74	9.60	6.17	3.79	2.37
ITA	3.5	0.8	1.6	2.9	3.3	1.3	0.2	4.68	4.31	4.04	5.42	5.49	4.32	2.89
LTU	11.1	4.2	1.2	4.1	3.2	1.2	0.2	5.61	14.00	5.57	5.16	4.83	3.83	2.79
LVA	15.3	3.3	-1.2	4.2	2.3	0	0.7	6.43	12.36	10.34	5.91	4.57	3.34	2.51
MLT	4.7	1.8	2	2.5	3.2	1	0.8	4.81	4.54	4.19	4.49	4.13	3.36	2.61
NLD	2.2	1	0.9	2.5	2.8	2.6	0.3	4.23	3.69	2.99	2.99	1.93	1.96	1.45
POL	4.2	4	2.7	3.9	3.7	0.8	0.1	6.07	6.12	5.78	5.97	5.00	4.03	3.52
PRT	2.7	-0.9	1.4	3.6	2.8	0.4	-0.2	4.52	4.21	5.40	10.24	10.55	6.29	3.75
ROU	7.9	5.6	6.1	5.8	3.4	3.2	1.4	7.70	9.69	7.34	7.29	6.68	5.41	4.48
SVN	5.5	0.9	2.1	2.1	2.8	1.9	0.4	4.61	4.38	3.83	4.97	5.81	5.81	3.27
SWE	3.3	1.9	1.9	1.4	0.9	0.4	0.2	3.89	3.25	2.89	2.61	1.59	2.12	1.72

Annual average rate of change (%) HICP - Inflation rate – Source: Eurostat http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/data/main_tables
Harmonised long-term interest rates for convergence assessment purposes - Source: ECB http://www.ecb.int/stats/money/long/html/index.en.html

Rate of Return on Fixed Tangible Assets (RoFTA):

RoFTA = (net profit + opportunity cost of capital) / tangible asset value (vessel depreciated replacement value)

Rate of Return on Investment (RoI):

RoI = (net profit + opportunity cost of capital) / capital asset value

Where net profit is calculated as:

Net Profit = Income from landings + other income + income from fishing rights – crew costs – unpaid labour - energy costs – repair costs – other variable costs – non variable costs – fishing rights costs – depreciation cost – opportunity cost of capital

And capital asset value as:

Capital asset value = vessel depreciated replacement value + estimated value of fishing rights

Break-even revenue (BER):

BER = (Fixed costs + opportunity costs of capital +depreciation) / (1-(crew costs + unpaid labour + energy costs + repair and maintenance costs + other variable costs)/Revenue)

Revenue to Break-even revenue Ratio (CR/BER):

CR/BER = revenue / break-even revenue = Income from landings + other income / BER

CR/BER gives an indication of the short term profitability of the fleet/fleet segment (or over/under capitalised): if the ratio is greater than 1, then enough cash flow is generated to cover fixed costs (economically viable in the short term). If the ratio is less than 1, insufficient cash flow is generated to cover fixed costs (indicating that the segment is economically unviable in the short to mid-term).

ECONOMIC PERFORMANCE INDICATOR CLASSIFICATIONS

Development trend

The development trend, calculated as the change between 2014 and the average value 2008-2013, for the economic performance indicators analysed, such as GVA, gross profit, net profit and GVA/FTE were classified as High, Reasonable or Weak according to the criteria in Table 6.4.

Table 6.4 Development trend classification

Development - change 2013/2008-2012 average	
>5%	Improved
-5% - 5%	Stable
< -5%	Deterioration

Based on: Pavel, AER 2005

Profitability

Profitability, as net profit (or net profit as a % of income, where income includes income from the sale of fish and other non-fishing income and excludes direct income subsidies and income from fishing rights) was classified as *High*, *Reasonable* or *Weak* according to the criteria in Table 6.5.

Table 6.5 Profitability classification

Profitability: Net profit margin in 2013		
>10%	High	Profitability is good and segment is generating a good amount of resource rent
0-10%	Reasonable	Segment is profitable generating some resource rents
<0%	Weak	The segment is making losses; economic overcapacity

6.5 ECONOMIC PERFORMANCE PROJECTIONS

In addition to some capacity and transversal data (i.e. effort, landings), Income from landings in 2015 was also requested in the 2016 data call in order to calculate projection estimates for the year 2015. If MS were not in a position to provide figures for *Income from landings* in 2014, then the *value of landings* was used as a proxy in the calculations.

The economic performance projections at fleet segment level were estimated based on recommendations and main conclusions reported in STECF 11-19, using the following formulas:

Crew wages (CW) and unpaid labour costs (ULab) were estimated using the average of the ratios crew wage / days at sea (DAS) during the three previous years:

Crew wages:

$$CW_t = \frac{\sum_{t-1}^{t-3} CW}{\sum_{t-1}^{t-3} DAS} \times DAS_t$$

Unpaid labour costs: $$ULab_t = \frac{\sum_{t-1}^{t-3} ULab}{\sum_{t-1}^{t-3} DAS} \times DAS_t$$

When days at sea unavailable, Crew wages (CW) were estimated as an average proportion of the value of landing (VaL) during the three previous years:

Crew wages: $$CW_t = \frac{\sum_{t-1}^{t-3} CW}{\sum_{t-1}^{t-3} VaL} \times VaL_t$$

Non-variable costs (NVC) were estimated using the change in capacity i.e. number of vessels (N):

Non-variable costs: $$NVC_t = \frac{NVC_{t-1}}{N_{t-1}} \times N_t$$

This method was also used to project total employed (JOB), Other income (OInc), annual depreciation (DEP) and fleet depreciated replacement value (REP).

Total employed: $$JOB_t = \frac{JOB_{t-1}}{N_{t-1}} \times N_t$$

Other Income: $$OInc_t = \frac{OInc_{t-1}}{N_{t-1}} \times N_t$$

Annual depreciation: $$DEP_t = \frac{DEP_{t-1}}{N_{t-1}} \times N_t$$

Fleet depreciated replacement value: $$REP_t = \frac{REP_{t-1}}{N_{t-1}} \times N_t$$

Variable costs (VC) were projected using change in effort, i.e. Days at Sea (DAS):

Variable costs: $$VC_t = \frac{VC_{t-1}}{DAS_{t-1}} \times DAS_t$$

The same method applied on variable costs was also used to project FTE (FTE), Repair & Maintenance costs (RMC) and Fuel consumption (FCon).

FTE:
$$FTE_t = \frac{FTE_{t-1}}{DAS_{t-1}} \times DAS_t$$

Repair & Maintenance costs:
$$RMC_t = \frac{RMC_{t-1}}{DAS_{t-1}} \times DAS_t$$

Fuel consumption:
$$FCon_t = \frac{FCon_{t-1}}{DAS_{t-1}} \times DAS_t$$

Fuel costs (FC) were projected using change in effort (DAS) and change in average fuel price (P):

Fuel costs:
$$FC_t = \frac{FC_{t-1}}{DAS_{t-1}} \times DAS_t \times \frac{P_t}{P_{t-1}}$$

6.6 DISAGGREGATION OF ECONOMIC DATA

Fleet economic data cannot be collected at higher resolution than defined in the DCF. Only landings (value and weight) and effort data (days at sea, fishing days, etc.) are provided by Member States at the sub-region level by fleet segment. Therefore, the correlation with transversal data is the only viable way for disaggregating economic data at the sea basin level (Baltic Sea, North Sea, NE Atlantic, Mediterranean & Black Sea and Other Fishing Regions).

Several assumptions can be made based on correlations between transversal and economic data, which were previously examined during the PGECON workshop in Hamburg 2012. However, these analyses are still preliminary and considered as work in progress. PCEGON (2013) strongly recommended a study on the disaggregation that delivers a comprehensive analysis of different approaches and methods, while also addressing the availability of individual data which varies by MS.

This year, an effort based approach was used to disaggregate economic data. Seeing that the methodology is still to be validated, this exploratory exercise set out to estimate the economic performance indicators at the sea basin level by MS and fleet segment.

For this exercise, transversal and economic data by fleet segment were disaggregated based on either the number of active vessels in a region, value of landings or effort (days at sea), as:

(1) Number of vessels in region (N_{Reg}) – used to estimate fleet capacity, non-variable costs and capital costs (annual depreciation and opportunity costs of capital)
(2) Value of landings (VaL) – used to allocate income from landings;
(3) Effort in days at sea (DAS) – used to allocate all variable costs, including labour, energy, repair & maintenance, and fuel consumption. DAS was also used to estimate the number of vessels when N_{Reg} was not available (if days at sea were not available, fishing days were used as a proxy).

The number of vessels operating in each region (N_{Reg}) was again requested in the 2016 data call. However, not all Member States were able to provide this information.

In cases where N_{Reg} was not available, the estimated number of vessels in the region (N_{Reg*}) was calculated based on DAS and using the total number of vessels (N_{tot}), as:

$$N_{\mathrm{Reg}^*} = \frac{DAS_{\mathrm{Reg}}}{\sum DAS_{\mathrm{Reg}}} \times N_{Tot}$$

When available, the number of vessels operating in a given region (N_{Reg}) was used to disaggregate other capacity variables (GT and kW), as:

Gross tonnage (GT): $GT_{reg} = \frac{N_{\mathrm{Reg}}}{\sum N_{\mathrm{Reg}}} \times GT_{Tot}$, if N_{Reg} is missing, $GT_{reg} = \frac{GT_{Tot}}{N_{Tot}} \times N_{\mathrm{Reg}^*}$

Engine power (kW): $kW_{\mathrm{Reg}} = \frac{N_{\mathrm{Reg}}}{\sum N_{\mathrm{Reg}}} \times kW_{Tot}$, if N_{Reg} is missing, $kW_{reg} = \frac{kW_{Tot}}{N_{Tot}} \times N_{\mathrm{Reg}^*}$

The number of vessels in the region was also used to disaggregate employment, *other income* (OInc), *non-variable costs* and capital costs (*opportunity cost of capital* and *annual depreciation*), as:

Total employed (JOB): $JOB_{reg} = \frac{N_{\mathrm{Reg}}}{\sum N_{\mathrm{Reg}}} \times JOB_{Tot}$

If N_{Reg} is missing, $JOB_{\mathrm{Reg}}(OInc) = \frac{N_{\mathrm{Reg}^*}}{N_{Tot}} \times JOB_{tot}$

Other income as: $Other\ \ Income_{\mathrm{Reg}}(OInc) = \frac{N_{\mathrm{Reg}}}{\sum N_{\mathrm{Reg}}} \times OInc_{tot}$

If N_{Reg} is missing, $Other\ \ Income_{\mathrm{Reg}}(OInc) = \frac{N_{\mathrm{Reg}^*}}{N_{Tot}} \times OInc_{tot}$

Opportunity cost of capital as: $Opportunity\ \ Cost\ \ of\ \ Capital_{\mathrm{Reg}}(OPC) = \frac{N_{\mathrm{Reg}}}{\sum N_{\mathrm{Reg}}} \times OPC_{tot}$

If N_{Reg} is missing, $Opportunity\ \ Cost\ \ of\ \ Capital_{\mathrm{Reg}}(OPC) = \frac{N_{\mathrm{Reg}^*}}{N_{Tot}} \times OPC_{tot}$

Annual Depreciation costs as: $Annual\ \ Depreciation\ Costs_{\mathrm{Reg}}(DEP) = \frac{N_{\mathrm{Reg}}}{\sum N_{\mathrm{Reg}}} \times DEP_{tot}$

If N_{Reg} is missing, $Annual\ \ Depreciation\ Costs_{\mathrm{Reg}}(DEP) = \frac{N_{\mathrm{Reg}^*}}{N_{Tot}} \times DEP_{tot}$

Income from Landings was disaggregated based on the value of landings (VaL) in the region and the total value of landings for the fleet segment multiplied by Income:

Income from landings: $$Landings\ \ Income_{\ Reg}(LInc) = \frac{VAL_{Reg}}{\sum VAL_{Reg}} \times LInc_{Tot}$$

If N_{Reg} is missing, $$Landings\ \ Income_{\ Reg}(LInc) = \frac{VAL_{Reg}}{VAL_{Tot}} \times LInc_{Tot}$$

Crew wage (CW), *unpaid labour*, *fuel costs* (FC), *repair & maintenance* (REP) and *other variables costs* (VAR) were allocated based on effort (DAS) as:

Crew wages: $$CW_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times CW_{Tot}$$

Unpaid labour costs: $$ULab_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times ULab_{Tot}$$

Fuel costs: $$FC_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times FC_{Tot}$$

Repair costs: $$REP_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times REP_{Tot}$$

Other variable costs: $$VAR_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times VAR_{Tot}$$

This method was also used to disaggregate fuel consumption.

Fuel consumption: $$FCon_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times FCon_{Tot}$$

Full Time Equivalent (FTE): $$FTE_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times FTE_{Tot}$$

Data Limitations

Complete estimates were not possible due to fleet segments with incomplete or missing data sets submitted by MS (i.e. number of vessels by region, landings and efforts variables by sub-region).

Fleet segments for which days at sea (or fishing days as a proxy) or landings in value were not available at the sub-region level, could not be completely disaggregated. Information on these MS fleet segments is provided, when either the days at sea or landings values that were available, occurred on only one region. In all other cases, only incomplete results could be provided. This affects the entire Spanish fleet as days at sea were not available, although fishing days were available for several years and used as a proxy to days at sea. Greece is excluded due to missing DCF data on effort and landings, as well as income. Additional information to fill gaps is provided where possible.

6.7 PROJECTIONS IN 2015 AND 2016 FORECASTS USING BEMEF

Model description

In order to provide up-to-date information on the economic performance of European fishing fleets, the Bio-Economic Model of European Fleets (BEMEF) was used to estimate performance in 2015, where preliminary data has not been provided, and to forecast fleet performance in 2016. BEMEF, and its predecessor, the EIAA model, have been used in the Annual Economic Report over a number of years to model fleet performance and use the most recent data available through the Data Collection Framework, timely information from other sources, and knowledge about key economic relationships in the fishing industry. The methodology used in the BEMEF model is documented in this chapter.

Data approach

BEMEF uses the most recent three years of verified data (2012-2014) as a baseline from which to model future performance. A three-year base period removes some of the year-to-year variance while ensuring that the data used for projections is current and relevant.[29] From this base period, projections for 2015 and 2016 are calculated using what is known about fleet performance in these years from non-DCF data sources and by using equations that approximate fleet behaviour on key economic relationships. These equations are documented at the end of this chapter. Where data has already been provided for a fleet in 2015, this preliminary data is used. For many fleets and member states, this means that the 2015 figures are a mix of preliminary data where it is available and modelled data where no data has been provided. All data for 2016 is modelled as no preliminary data is available at the fleet level until the end of the year.

Additional data inputs for the projections are:

- Total Allowable Catches (2015 and 2016);
- changes in spawning stock biomass (2015 and 2016 for the Baltic stocks;
- changes in the number of registered vessels by member state and by length class (2015 and 2016);
- changes in import/export fish prices by member state and species (2015 and 2016 January-April);
- changes in fuel prices by member state (2015 and 2016 January-April);
- interest rates by member state (2015 and 2016 January-April).

Data incorporation

The data on 2015 and 2016 Total Allowable Catches comes from the relevant Council legislation and agreements with third countries. BEMEF uses the majority of these TACs as inputs, covering 25 quota species and 150 TACs. Each fleet's allocation of its member state TAC is determined based on its proportion of the member state landings in the base period.

The spawning stock biomass is published by the International Council for Exploration of the Sea (ICES) for most stocks in 2015 and for the Baltic stocks for 2016. This information is used to estimate changes in catchability.

The number of vessels comes from the EU Fleet Register. For integration in BEMEF this data is grouped by member state and by three length classes (0-12m, 12-24m, 24m+) using the 1 January registration. These figures are then compared to the average 1 January registration from 2012-2014 to calculate the relative change in vessel numbers for each fleet.

Import/export fish prices come from the European Market Observatory for Fisheries and Aquaculture Products (EUMOFA). These prices may not directly reflect the price at first sale that vessels receive, but the relative change from the base period to 2015 and 2016 should approximate overall prices in the supply chain. Member state prices are calculated per species and then an average is taken between the import/export price for the member state of the fleet and the EU as a whole to account for landings to foreign ports.

Fuel oil prices are extracted from European Commission's Weekly oil bulletin and the change in price between periods is calculated for each member state as the price change is non-uniform between member states.

The interest rate by member state is provided by the European Central Bank and is used to calculate opportunity costs.[30]

Other model drivers

A level of technological change of 2% per annum is used to simulate the observed trend in EU fisheries of increasing catchability (measured as catch per unit of effort) due to gear improvement. The consequence of this driver is that fewer days at sea are required per unit of catch and thus a decrease in all variable costs. A further technological change factor of 2% per annum is used to simulate the substitution of labour for capital. As the 2015 projections are made from a three-year base period, these technological change factors are calculated as compounded over two years (as 2013 is the midpoint of the base period).

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[29] Fleets that change clusters over this time period were aggregated to their 2014 clustering to harmonise data reporting with the rest of this report. A two-year base period is used for effort data from Estonia as there was a change in reporting methodology from 2012 to 2013.

[30] In keeping with the rest of this report, the interest rate for Estonia is calculated as an average of interest rates for Lithuania and Latvia.

The implementation of the landing obligation is a significant policy change that is likely to impact fleet economic performance, especially for fleets with large, historic discard rates. The landing obligation is already in place in the Baltic Sea and pelagic fisheries, although the estimated economic impact is considered to be relatively small, especially in future forecasts, so it is not included in the BEMEF modelling.

There will be a noteworthy change in 2016 with the implementation of the landing obligation for a number of demersal fisheries. The amount of expected discards for each fleet is calculated by using discard rates from the effort data call and applying this rate (minus a 10% improvement in selectivity for 2016) to the expected catches in 2016.

There are expected to be impacts on the operating costs of vessels for increased labour to help with sorting fish, steaming costs when hold capacity is reached earlier due to discards, and processing costs to handle the discarded fish onshore. An estimate of €305 per tonne of landed discards is applied in BEMEF following a Dutch trial run by LEI Wageningen UR.[31] There are also expected to be impacts on fleet revenues as TACs may raise due to quota uplift, but some of this landed fish will have a much lower price as it cannot be sold for human consumption. The Dutch trial shows an expected price of €100 per tonne of landed discards. The amount of landed discards under the 2016 landing obligation is also used to adjust catchability to model hold capacity. No choke analysis was included in this modelling but is recommended for any projections to 2017 and beyond.

Coverage of fleets and member states

Projections for 2015 and 2016 have been calculated for the fleets of 15 member states with significant fishing operations in the Northeast Atlantic (FAO area 27): Belgium, Germany, Denmark, Spain, Estonia, Finland, France, the United Kingdom, Ireland, Lithuania, Latvia, the Netherlands, Poland, Portugal and Sweden. Projections for EU member states that do not operate in this area were not calculated due to the importance of TACs as an external driver – especially for the 2016 projections. Some of the member states covered have fleets outside of the Northeast Atlantic and projections are made for these fleets. Although the projections for these fleets are more simplified, this approach allows member state performance to be projected by summing the performance of all fleets.

Coverage of economic variables

BEMEF provides projections for 2015 and 2016 by fleet segment for a range of economic performance measures consistent with the data collection framework reporting:

- Active vessels (#)32
- Full time equivalent fishers (#)
- Total employed (person)
- Days at sea (day)
- Energy consumption (thousand litre)
- Live weight of landings (thousand tonne)
- Value of landings (thousand €)
- Income from landings (thousand €)
- Other income (thousand €)
- Wages and salaries of crew (thousand €)
- Unpaid labour value (thousand €)
- Energy costs (thousand €)
- Repair and maintenance costs (thousand €)
- Other variable costs (thousand €)
- Other non-variable costs (thousand €)
- Annual depreciation costs (thousand €)
- Opportunity cost of capital (thousand €)
- Tangible asset value (thousand €)
- Gross value added (GVA) (thousand €)
- GVA to revenue (%)
- Gross profit (thousand €)
- Gross profit margin (%)
- Net profit (thousand €)
- Net profit margin (%)
- GVA per FTE (thousand €)
- Return of fixed tangible assets (%)

Member state totals

Economic performance is calculated in BEMEF at the fleet level and is then summed to member state totals. Some fleets have incomplete data, so the total figure at the member state level may have varying degrees of coverage.[33] This issue is mirrored in the member state chapters.

Methodology

[31] Baarssen, J., Luchies, J., Turenhout, M., Buisman, F.C. (2015). Verkenning economische impact aanlandplicht op Nederlandse kottervloot. Flynth adviseurs en accountants & LEI Wageningen UR.
[32] This differs from the historic tables in this report which refer to total vessels.
[33] The exception is Germany, where the DEU A27 TM40XX fleet is excluded in the calculation of total weight of landings due to incomplete data on other variables.

The following section covers the equations used to calculate the economic performance measures. The full model methodology and data sources for BEMEF can be found online at www.fisheriesmodel.eu. If preliminary data is available for 2015, the preliminary data is used instead of the calculations listed here.

Due to the importance of fishing quota as an output constraint, the model structure of BEMEF is 'backwards' by first setting the TAC, using the TAC to determine landings, determining the amount of effort required to harvest those landings, and then calculating the associated costs and revenues with that level of effort and landings.

Live weight of landings

The following equation is used to determine landings for a fleet:

$$L_{j,t,k} = \sum FSS_{j,k} RU_{j,k} RS_{c,k} Q_{t,k} + NQL_{t,j}$$

Where:

- L - Quantity of landings
- j - Fleet segment
- k - TAC (species and area)
- c - Member state
- t - Time period
- FSS - Fleet segment share
- RU - Realised uptake
- RS - Relative stability
- Q – Quota
- NQL – Non-quota landings
- 0/t - Time period

For the fleet segment share (FSS) the default assumption is that quota is allocated to fleets within member states based on historic landings reported in the base period.

Not all of the quota that is allocated to a member state or fleet will actually be landed in a given year and model simulations account for this more likely outcome. The default level of uptake (RU) is calculated for each TAC and for each country using reported landings from the AER database and comparing this to the amount of quota allocated to a country through relative stability. This is calculated using the following equation:

$$RU_{j,k} = \frac{L_{0,j,k}}{FSS_{0,j,k} Q_{0,k}}$$

Likewise, the relative stability of quota between member states is assumed to be fixed, but any quota trading between member states is captured by the realised uptake percentages.

Not all fleet landing will be covered by quota species. This amount of landings (NQL, in tonnes) is calculated from the base period and assumed to be constant in future periods:

$$NQL_{t,j} = L_{0,j} - QL_{0,j}$$

Where:

- QL – Quota landings

Value of landings

The value of landings (LV) is determined by the price of quota species applied to the quantity of quota species:

$$LV_{t,j} = \sum_i P_{t,i,j} QL_{t,i,j} + NQLV_{t,j}$$

Where:

- i – Species

The value of landings of non-quota species (NQLV) is calculated from the base period and assumed to be constant in future periods:

$$NQLV_{t,j} = LV_{0,j} - QLV_{0,j}$$

Where:

- LV - Value of landings
- QLV – Value of landings under quota management
- NQLV - Value of landings not under quota management

For the majority of commercial fish species the EUMOFA database covers import/export prices by Member State. In these situations future prices by fleet and species are calculated as the average of the change in Member State and EU import/export prices. The adjustment factor is adjusted by inflation as the EUMOFA prices are nominal.

Where EUMOFA prices are used:

$$P_{t,i,j} = P_{0,i,j} * \frac{\left[\left(\frac{EUP_{0,i,m}}{EUP_{t,i,m}}\right) + \left(\frac{EUP_{0,i,eu}}{EUP_{t,i,eu}}\right)\right]}{2}$$

Where:

- EUP – EUMOFA import/export price
- m – Member state
- eu – European Union average

Prices in the base period (P) are calculated using fleet level data:

$$P_{0,i,j} = \frac{LV_{0,i,j}}{L_{0,i,j}}$$

Where species are not covered by the EUMOFA database a fish price flexibility is used. Fish price flexibilities (the inverse of a price elasticity) tend to follow an inverse demand model with a decrease in supply leading to an increase in price. The reference rates for a species' price flexibility largely come from academic literature and those used in other bio-economic models.

Where price flexibility is required:

$$P_{t,i,j} = P_{0,i,j} * \left(\frac{Q_{t,i,j}}{Q_{0,i,j}}\right)^{e}$$

Where:

- e - Price flexibility by species

For 2016 the value of landings is extended to include some potential impacts of the landing obligation on fleet performance

$$LV_{t,j} = \sum_{i} P_{t,i,j} QL_{t,i,j} + NQLV_{t,j} - \left(DR_{t,j,k} * sc * \frac{L_{t,j,k}}{(1 - DR_{t,j,k})} * (P_{t,i,j} - dp)\right)$$

Where:

- DR – discard rate
- sc – selectivity change of 90% (a 10% change)
- dp – landed discard price of €100/tonne

Income from landings

$$LI_{t,j} = LV_{t,j} * \left(\frac{LI_{0,j}}{LV_{0,j}}\right)$$

Where:

- LI – income from landings

Other income

$$OI_{t,j} = OI_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Where:

- OI – Other income
- V – Number of vessels

Energy costs

$$EC_{t,j} = EC_{0,j} * A_{t,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Where:

- EC – Energy costs
- A – Activity coefficient

An activity variable is calculated and used in the model to adjust variable costs. These changes are calculated within a fleet segment, rather than between fleets.

This calculation takes the form of an inverse Cobb-Douglas production function to isolate for the effort change variable.

$$A_{t,j} = \sum \left(L_{0,i,j} P_{t,i,j} \theta_{t,i,j}\right) * \left(\frac{SSB_{t,i,j}}{SSB_{0,i,j}}\right)^{\Upsilon_{i,j}} * \left(\frac{Q_{t,i,j}}{Q_{0,i,j}}\right)^{\chi_{i,j}}$$

Where:

- θ - Effort driver
- SSB - Spawning stock biomass
- ϒ - Activity-stock flexibility rate (β/α)
- χ - Activity-landing flexibility rate (1/α)
- α - catch-effort coefficient
- β - stock-catch coefficient

Other variable costs

$$OVC_{t,j} = OVC_{0,j} * A_{t,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

For 2016 variable costs are extended to include some potential impacts of the landing obligation on fleet performance

$$OVC_{t,j} = \left(OVC_{0,j} * A_{t,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)\right) + \left(DR_{t,j,k} * sc * \frac{L_{t,j,k}}{\left(1 - DR_{t,j,k}\right)} * dc\right)$$

Where:

- OVC – other variable costs
- θ - Effort driver
- SSB - Spawning stock biomass
- ϒ - Activity-stock flexibility rate (β/α)
- χ - Activity-landing flexibility rate (1/α)
- α - catch-effort coefficient
- β - stock-catch coefficient
- dc – discard processing costs of €305/tonne

Repair and maintenance costs

$$RC_{t,j} = RC_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Where:

- RC – repair and maintenance costs

Other non-variable costs

$$NVC_{t,j} = NVC_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Where:

- NVS – Other non-variable costs

Wages and salaries

$$LC_{t,j} = MAX\left[\left(\left(LI_{t,j}\right) * \left(\frac{LC_{0,j}}{LI_{0,j}}\right)\middle|\left(\frac{LC_{0,j}}{FTE_{0,j}}\right) * FTE_{t,j} * \ 0.5\right)\right]$$

Where:

- LC – Labour costs (wages and salaries)

Unpaid labour value

$$ULC_{t,j} = ULC_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Where:

- ULC – unpaid labour costs

Annual depreciation costs

$$D_{t,j} = D_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Where:

- D – Depreciation costs

Tangible asset value

$$TAV_{t,j} = \ TAV_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Where:

- TAV – Tangible asset value

Opportunity cost of capital

$$O_{t,j} = TAV_{t,j} * \ r_{t,m}$$

Where:

- O – Opportunity cost
- r – real interest rate

The opportunity cost of capital uses a real interest rate (r) which is calculated as:

$$r_{t,m} = \frac{1 + i_{t,m}}{1 + \pi_{t,m}} - 1$$

Where:

- i – interest rate
- π – inflation rate

Gross value added

$$GVA_{t,j} = \ LI_{t,j} + \ OI_{t,j} - \ EC_{t,j} - \ OVC_{t,j} - RC_{t,j} - NVC_{t,j}$$

Where:

- GVA – Gross value added

GVA to revenue

$$(GVA/TR)_{t,j} = \frac{GVA_{t,j}}{TR_{t,j}}$$

Total revenue includes landing income (LI) and other income (OI):

$$TR_{t,j} = LI_{t,j} + OI_{t,j}$$

Where:

- TR – Total revenue

Gross profit

$$GCF_{t,j} = GVA_{t,j} - LC_{t,j}$$

Where:

- GCF – Gross cash flow (gross profits)

Gross profit margin

$$GPM_{t,j} = \frac{GCF_{t,j}}{TR_{t,j}}$$

Where:

- GPM – Gross profit margin

Net Profit

$$P_{t,j} = GCF_{t,j} - D_{t,j} - O_{t,j}$$

Where:

- P – Net profit

Net profit margin

$$NPM_{t,j} = \frac{P_{t,j}}{TR_{t,j}}$$

Where:

- NPM – Net profit margin

GVA per FTE

$$(GVA/FTE)_{t,j} = \frac{GVA_{t,j}}{FTE_{t,j}}$$

Where:

- FTE – Full time equivalent (national) employees

Return of fixed tangible assets

$$RoFTA_{t,j} = \frac{P_{t,j} + O_{t,j}}{TAV_{t,j}}$$

Where:

- RoFTA – Return on fixed tangible assets

Full time equivalent fishers

$$FTE_{t,j} = \frac{FTE_{0,j}}{SD_{0,j}} * SD_{t,i,j} * \frac{1}{1 + LS^t}$$

Where:

- α - catch-effort coefficient
- β - stock-catch coefficient
- SD - Sea days
- LS – Labour substitution of 2% per annum

Total employed

$$TE_{t,j} = TE_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Where:

- TE – Total employed

Days at sea

$$SD_{t,i,j} = L_{t,i,j} CPUE_{t,i,j}$$

The number of sea days in future periods uses a measure of catachability, measured as catch per unit of effort (CPUE):

$$CPUE_{0,i,j} = \frac{L_{0,i,j}}{SD_{0,j}}$$

Where

- CPUE - Catch per unit of effort

Then future catchability using a Cobb-Douglas productions function

$$CPUE_{t,i,j} = CPUE_{0,i,j} * \left(\frac{L_{t,i,j}}{L_{0,i,j}}\right)^{1-\left(\frac{1}{\alpha_{i,j}}\right)} * \left(\frac{SSB_{t,i,j}}{SSB_{0,i,j}}\right)^{\frac{\beta_i}{\alpha_{i,j}}} * TI^t$$

Where:

- TI – Technological improvement of 2% per annum

Energy consumption

$$EC_{t,j} = EC_{0,j} * \frac{SD_{t,j}}{SD_{0,j}}$$

Where:

- EC – Energy consumption

7 DCF DATA COVERAGE AND QUALITY

7.1 Data quality and coverage checking procedures – AER Exercise

Quality and Coverage checking procedures on the data submitted under the 2016 fleet economic data call

Although the quality and coverage of the fleet economic data reported under the Data Collection Framework (DCF) are a responsibility of the EU Member States, JRC has undertaken quality and coverage checking procedures on the data submitted, some carried out during the data uploading phase and some afterwards. The quality and coverage of the data has also been checked by national fisheries experts during the STECF EWG 16-03 meeting on the 2016 Annual Economic Report of the EU fishing fleet which took place at the JRC premises during the week 25 – 29 April 2016.

Fleet data submitted under the 2016 fleet economic data and to be used for the present report have been checked in four subsequent steps. This section provides a synthetic description of each of them. More information of the quality and coverage checking procedures undertaken on DCF fleet data are available in the JRC technical report available at:

http://datacollection.jrc.ec.europa.eu/

Step 1- Data checks before and during uploading procedure to the JRC/DCF database

Several data checks are already embedded in the excel templates which the Member States are required to use for uploading data on their national fleets. In specific cells of these files, the data entry is restricted to certain records (e.g. acceptable codes, value types and ranges) through an embedded Data Validation Tool (DVTool). This tool consists in a set of macros developed in Visual Basic for Applications (VBA) which allow the MS to detect possible errors in the data before submission.

Furthermore, during the data uploading procedure, a number of automatic syntactic checks are carried out on the data before it is accepted by the DCF database hosted by JRC. Syntactic checks are carried out without any specific knowledge of what the data contains or its meaning. They tell if the data is present or not and in the correct format. These checks automatically reject data that do not confirm to specific restrictions, such as ensuring textual data is validated against defined parameters lists (e.g. Species types and FAO code). In addition, numeric data are checked to make sure they contain numbers and not strings. Member States receive immediate feedback when attempting to upload their data submissions.

Step 2 - JRC experts have analysed the results of the data quality checks/analyses

Once the datasets with the fleet data are successfully uploaded by the Member States, JRC produces different analyses on the data submitted in order to facilitate the assessment of its quality and coverage. Some of these analyses are presented in interactive online dashboards created using the software Tableau. The same software is also used for analyses not specifically related to data quality, i.e. analyses on the structure and economic performance of the EU Fleets and overviews of the uploading status of DCF fleet data.

All the analyses performed by JRC in Tableau are available in interactive online dashboards, which are refreshed every morning and are accessible (only after authentication), on the following link:https://datacollection.jrc.ec.europa.eu/da/fleet/data-and-quality

Besides developing the checks and analyses, JRC experts actively participate in the analysis of their results. All quality issues (e.g. inconsistencies, outliers and missing data) concerning the data submitted, identified through the analyses performed in Tableau or with manual checks are listed by JRC in excel files, one for each MS, including the most relevant information concerning the problems identified (e.g. description of the problem, structural and economic indicators affected and assessed impact on the analyses of the Annual Economic Report), together with comments and actions recommended by JRC to solve the issues.

Step 3 – The results of the data quality checks/analyses have been sent to the national correspondents

The excel files listing the data quality issues (and including JRC experts' comments and opinions on the action to undertake) are sent to the national correspondents (each national correspondent receives information only about the country he/she represents).

MS are requested to consider the potential anomalies listed in the excel file, amend and re-submit the data as necessary. They are also requested to go over the quality analyses performed in order to detect additional (if any) problems and add them to the list. Finally, they are asked to provide feedback (i.e. whether or not the problem has been resolved, which actions have been taken and possible comments) in designated columns of the excel file.

Step 4 – The quality and coverage of the data have been checked by the STECF Expert Working Groups

In addition to being analysed by JRC's experts, the quality and coverage of fleet data submitted under the DCF is also checked by national fisheries experts during the STECF EWGs meetings. Data submitted under the 2016 fleet economic data call has been checked during the EWG meeting 16-03 which took place during the week 25 – 29 April 2016.

Data for each country are analysed by two experts. At the beginning of the meeting, the experts received the excel files with the list of data transmission issues of the MS assigned to them, which also included for each specific issue comments by JRC and feedback sent by the MS. MS have been contacted whenever an inconsistency was found and the expert attending the meeting could not solve it by resubmitting data. Furthermore, all experts have been given access to the tableau dashboards. This has allowed them to visualise changes in the data whenever the MS have uploaded revised data during the meeting or submitted new templates.

The comments provided by the experts have been added in designated columns of the excel files and were then used to decide on the exclusion of part of the data submitted from the analyses of the AERs, due to data coverage or quality issues.

Main data issues

In terms of the completeness of the Member States data submissions, most countries submitted the majority of the parameters requested under the call. Overall, there has been an improvement in the data quality and coverage compared to previous years. In many cases missing data relates to fleet segments with low vessel numbers for which data is hard to obtain.

This year Greece provided economic data but only 2014, with substantial amount of missing data, in particular some effort and landings variables. Croatia submitted DCF data for the third time, providing economic data from 2012 onwards. Submission from France and Spain continue to be incomplete especially for the period 2008-2010 and some minor data quality issues remain for several other Member States.

In terms of data quality, inevitably some 'abnormal' estimates for various parameters were detected by JRC or the experts and in many cases rectified by the Member States. However, some quality issues remain outstanding. Furthermore, incomplete time series data due to either the non-submission of data, questionable data and/or new MS additions, make trend analysis at the EU level impossible without excluding the MS fleets that are incomplete. These discrepancies make an evaluation of the overall economic performance of the EU fishing fleet in 2014 not possible (Greece had to be excluded).

Under the DCF, Member States provide transversal and economic data on their fleets at the national level and by fleet segments (combination of main fishing technology and vessel length group at the supra-region level). For this report, national level datasets were used for the EU and Member State level analyses while data submitted at the fleet segment level were used to analyse performance by fleet segment and fishing activity. While in theory both national level and fleet segment datasets submitted by MS should equate, this is not always the case and some discrepancies exist between the two. These discrepancies are mainly due to missing/incomplete datasets at the fleet segment level or the non-submission of data due to confidentiality issues.

Due to these and other data related issues, a complete overview of the EU fishing fleet for all reference years was not possible.

Fleets for MS that were unable to deliver all the required and reliable data had to be excluded from the analyses at the EU and Regional levels.

To mitigate data deficiencies, a status quo of the EU fleet in 2014 was provided considering only Member State fleets for which reliable data was provided while trend analyses included only the MS that provided the necessary data over the entire period (2008-2014/15). The National Chapters present all the DCF data provided by MS (some questionable data has been highlighted).

All MS were included in the EU overview analyses for 2014, with the exception of Greece, which needed to be excluded from all economic analyses.

The MS that were excluded from the trend analyses and the main reasons for their exclusion were:

Croatia: excluded (or otherwise highlighted) due to the fact that it is a new MS and therefore able only to provide data on a shorter time frame than other MS (i.e. 2012-2014)

Ireland: excluded only from the trend analysis at the fishing activity analyses due to some missing data for under 10 m segments

France: missing data for essential parts of the data call, such as effort, landings and capital costs in 2008 and 2009

Greece: most variables missing for the entire time series; partial and questionable economic data available only for 2014

Spain: missing data for essential parts of the data call, such as effort and capital costs for most of the period.

A more detailed account of the data transmission issues can be found in Annex 3.

For confidentiality reasons, Member States may aggregate fleet segments into clusters to provide sensitive economic data. In several cases, clustering may not be enough to guarantee confidentiality, and hence, parts of MS fleets are not completely covered, these include MS such as Germany and Lithuania. Other MS, such as Estonia and Latvia, simply do not provide any data on part of their fleet (high sea fleet).

When fleet segments are clustered to provide economic data, one result may be that some MS fleet segments appear to be missing but these have just been grouped together with other segments, becoming part of a cluster.

Another result may be the clustering of fleet segments with different characteristics, such as different vessel length groups or fishing gears, which could bias results when assessing by type of fishing gear or activity, such as small-scale versus large-scale fleet. For example, a fleet segment that would otherwise be considered as small scale (i.e. vessel under 12 m using non-towed gears) may be clustered into a large-scale fleet segment (i.e. vessel under 12m using towed gears), and vice-versa. Hence, results at the fishing activity level should be considered as only indicative of each fishing type. Furthermore, although clustering of fleet segment should be applied consistently, as far as possible, over the period, this is not always the case, making time-series hard to follow.

8 List of Participants EWG 16-03 and 16-07

8.1 Contact details of STECF members and EWGS-16-03 and 16-07 List of Participants

1 - Information on STECF members and invited experts' affiliations is displayed for information only. In any case, Members of the STECF, invited experts, and JRC experts shall act independently. In the context of the STECF work, the committee members and other experts do not represent the institutions/bodies they are affiliated to in their daily jobs. STECF members and experts also declare at each meeting of the STECF and of its Expert Working Groups any specific interest which might be considered prejudicial to their independence in relation to specific items on the agenda. These declarations are displayed on the public meeting's website if experts explicitly authorized the JRC to do so in accordance with EU legislation on the protection of personnel data. For more information: http://stecf.jrc.ec.europa.eu/adm-declarations

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9 List of Annexes

Electronic annexes are published on the meeting's web site on:

http://stecf.jrc.ec.europa.eu/web/stecf/

List of electronic annexes documents:

10 List of Background Documents

Background documents are published on the EWG-16-03 meeting's web site on:

http://stecf.jrc.ec.europa.eu/web/stecf/ewg1603

Background documents are published on the EWG-16-07 meeting's web site on:

http://stecf.jrc.ec.europa.eu/web/stecf/ewg1607

List of background documents:

EWG-16-03 and 16-07 – Doc 1 - Declarations of invited and JRC experts (see also section 8 of this report – List of participants)

11 ANNEXES

Annex 1 – EWG considerations on deviations in calculating some key economic indicators and capital cost estimation

Return of investment (RoI) and Return on Fixed Tangible assets (RoFTA)

Background

Currently, there is a lack of homogeneity when estimating some key economic performance indicators among the two main STECF reports dealing with economic indicators and the DCF data collected under the call for economic data on the EU fishing fleet, namely: (1) STECF's Annual Economic Report on the EU fishing fleet (AER) and (2) STECF's Assessment of balance indicators for key fleet segments and review on national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (*Balance*), that follows the Commission Guidelines to MS on national report (COM (2014) 545 final) (hereafter referred to as the *guidelines*).

The EWG noted that different methodologies are applied when calculating the indicators: *Return on Investment* (*RoI*), *Return on Fixed Tangible Assets* (*RoFTA*), and *Net profit*.

Methodology

The *RoI* and *RoFTA* (often referred to as capital productivity[34]) compare the long-term profitability of fishing fleet segments to other available investments. Both indicators report the profitability (in percentage) per unit of capital invested in the fisheries sector (fleet segments).

RoI is the return of the investment divided by the cost of the investment. It measures profits in relation to the capital invested, i.e. indicates how profitable a sector is relative to its total assets.

The Commission "g*uidelines*" suggest the following calculation method, which is applied by the JRC to calculate and report the 'economic Balance indicators':

$$RoI = \text{Net profit} / \text{Capital asset value} \qquad \textbf{(eq. 1)}$$

Where net profit is estimated as:

$$\text{Net profit} = (\text{Income from landings} + \text{Other income}) - (\text{Crew costs} + \text{Unpaid labour costs} + \text{Energy costs} + \text{Repair and maintenance costs} + \text{Other variable costs} + \text{Non variable costs} + \text{Depreciation costs}) \quad \textbf{(eq. 2)}$$

And where the *Capital asset value* is estimated as:

$$\text{Capital asset value} = \text{Vessel replacement value} + \text{Estimated value of fishing rights} \qquad \textbf{(eq. 3)}$$

The "*guidelines*" explain that, ideally, the capital asset value should consist of both fixed tangible assets (vessel, gear and electronics etc.) and intangible assets (estimated value of fishing rights such as quota, licence etc.). However, when data on intangible assets (e.g. fishing rights) are not available, *RoFTA* should be used as an approximation of *RoI*.

According to the "*Guidelines*", *RoFTA* should be calculated using exactly the same calculation method as for *RoI*, but without including an estimated value for fishing rights.

$$RoFTA = \text{Net profit} / \text{Vessel replacement value} \qquad \textbf{(eq. 4)}$$

While the STECF 'AER' specifically states that as data on intangible assets (e.g. fishing rights, natural resource) are not always available in fisheries, *RoFTA* is used as an approximation of *RoI*. Nonetheless, both indicators include the Opportunity cost of capital as it is considered a cost in the *Net profit* estimation.

[34] The use of the term "capital productivity" is not recommended as it can easily be misleading as it can be used to report either the profits, the gross value added or the revenues as a share of the value of the capital assets.

The AER methodology defines the calculation (although not generally reported) of RoI as:

RoI = (Net profit ***+ opportunity cost of capital****) / Capital asset value* ***(eq. 5)***

Where net profit is estimated as:

Net profit = (Income from landings + Other income ***+ income from fishing rights****) -* ***(****Crew costs + Unpaid labour costs + Energy costs + Repair and maintenance costs + Other variable costs + Non variable costs* ***+ fishing rights costs*** *+ Depreciation costs* ***+ Opportunity cost of capital****)* ***(eq. 6)***

And *Capital asset value* is estimated as:

Capital asset value = Vessel replacement value + Estimated value of fishing rights ***(eq. 7)***

And *RoFTA* is defined as:

RoFTA = (Net profit ***+ opportunity cost of capital****) /* ***Tangible asset value*** ***(eq. 8)***

Where net profit is estimated as:

Net profit = (Income from landings + Other income) - (Crew costs + Unpaid labour costs + Energy costs + Repair and maintenance costs + Other variable costs + Non variable costs + Depreciation costs ***+ Opportunity cost of capital****)* ***(eq. 9)***

And Tangible asset value is the **vessel depreciated replacement value** (or tangible asset value).

The '*Balance*' report follows the methodology set out in the Commission '*Guidelines'* to estimate *net profits*

Therefore, *RoFTA* estimates reported in the Balance report based on the "*Guidelines*" and in the "*AER*" should match as neither account for the *Opportunity cost of capital*, despite the existing divergence in the *net profit* estimation (as opportunity costs is 'cancelled' out in the AER formula, hence, equating to the Guidelines as such).

The AER accounts for the Opportunity cost of capital in the Net profit estimation. The AER defines the Opportunity cost of capital as:

*Opportunity cost of capital = Fixed tangible asset value * real interest rate* ***(eq. 10)***

Where the *real interest rate* is:

Real interest rate = ((1 + interest rate) / (1 + inflation)) - 1 ***(eq. 11)***

While the "*Guidelines*" state that the *RoI* compares the long-term profitability of the fishing fleet segment to other available investments (the *opportunity cost of capital*). If the *RoI* is lower than the low-risk long term interest rates available elsewhere, then this suggests that there could be an imbalance (i.e., the fleet segment may be overcapitalised). The "*Guidelines*" use the following estimation of the *opportunity cost of capital*:

*Opportunity cost of capital = capital asset value * low risk long term interest rate* ***(eq. 12)***

So, as the AER used the long-term real interest rate, in the '*Guidelines*', the Commission proposes the use of the latest 5-year arithmetic average[35] nominal harmonised long-term interest rates for convergence assessment calculated by the European Central Bank (long-term interest rates for convergence assessment purposes (government bonds with maturities of close to ten years)[36] as the "*low risk long term interest rate*".

[35] Hence, for example, the purposes of the 2013 assessment of balance, the interest rate to be used will be that corresponding to the period 2008-2012.
[36] Available at http://www.ecb.int/stats/money/long/html/index.en.html.

The issue

There is a mismatch between the AER and the *Balance* report (by following the '*Guidelines*') regarding the use and calculation of the *opportunity cost of capital*.

The opportunity cost of capital is defined as the cost of an alternative that must be forgone in order to pursue a certain action[37]. In other words, it is the profits that could have been received by investing the capital in an alternative non-risk investment.

The long-term (with maturities close to ten years) government bonds have been commonly used as a proxy of the *opportunity cost of capital*. However, due to the economic crisis, in recent years there has been a high variability in interest rates, leading sometimes to negative real interest rates (i.e., interest rate below inflation). This last fact, has led to negative *opportunity cost of capital* (and thus, a source of income) for several countries in given years.

Figure 1 highlights the differences in the interest rates used to calculate the three *opportunity cost of capital* approaches: i) the nominal long-term government bonds (harmonised long-term interest rates for convergence assessment calculated by the European Central Bank), ii) the 5-year arithmetic average nominal long-term government bonds (harmonised long-term interest rates for convergence assessment calculated by the European Central Bank), and iii) the real (corrected for inflation) long-term government bonds (harmonised long-term interest rates for convergence assessment calculated by the European Central Bank).

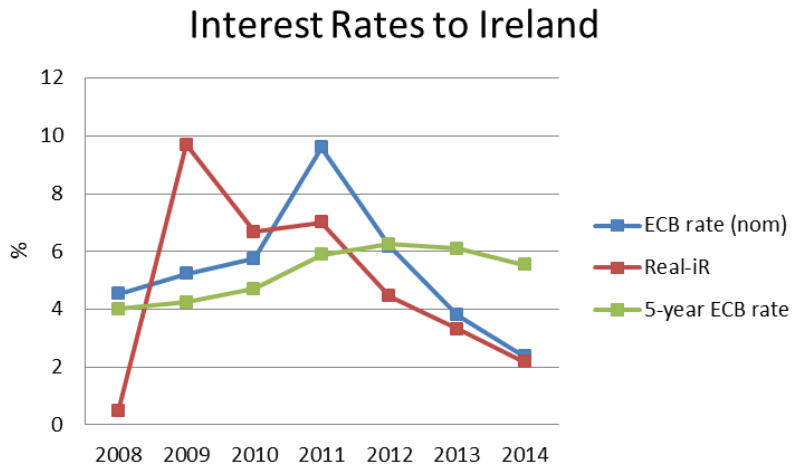

Figure 1: Nominal, real and 5 year average nominal interest rates for Ireland

Potential solutions

There are different possible solutions to deal with the interest rate variability, in particular when these are negative:

Normalised "risk-free" rates: This is a practice that has become prevalent in both the US and Europe, where risk free rates have dropped to historic lows. To compensate, analysts are using the average rate across long periods as a normalised risk free rate. However, this approach offers several problems or shortcomings.

Leave the risk free rate negative (when accounting for risk): In valuation, the use of the risk free rate is done in conjunction with a risk premium. Risk premiums may offset the negative risk free rate and yield a cost of equity and/or debt similar to what it did prior to the negative interest rate setting. In addition, negative interest rates indicate economies with low or no real growth combined with deflation and the average growth rate for stable companies in these economies should therefore be negative for those same reasons.

Use a risk free country (e.g. Germany): The German government bonds could be used as a proxy of a risk free investment. This can be justified by the fact that EU citizens have free movement of capital, and as such can invest in German bonds if they wish. However, this approach also offers some drawbacks. First, it may not be politically correct to ask other member states to use the interest rate of bonds from another government. Moreover, even if Germany may be the strongest economy in the EU, it is also not exempt of risk.

Use a constant rate: It has been a common practise to use a constant rate of discount or opportunity cost when analysing revenues and profitability over periods of time. Rates between 3% and 5% were previously commonly used; yet due to the instability and current economic situation, rates between 2% and 3% could be more appropriate.

[37] http://www.investopedia.com/terms/o/opportunitycost.asp.

Discussion

Apart from discussing whether it is better to use one year or five year averages, real or nominal interest rates, it is important to consider whether government bonds can continue to be a good proxy of risk free investments.

The answer is quite clear: none of the government interest rates refer to a risk free investment. This is because the economic crisis brought high instability to financial markets. It is well-known that some EU countries pay higher interest rates (i.e., premium) in their government bonds than others, and this premium takes into account the expected risk of the investment[38]. Hence, they are not good proxies for a risk free investment. Moreover, they can add a lot of variability and uncertainty in the results, year to year (high interest rates would lead to artificially reducing the economic performance of the fleets, while low or even negative interest rates would artificially increase the economic performance of the fleets).

Thus, the use of a constant rate for the *opportunity cost of capital* across MS would avoid most of the problems the use of interest rates carry. In addition, it would harmonise the rate of the *opportunity cost of capital* (for previous years) and the rate of discount to estimate the net present value of future cash flows.

Another issue, is the difference in the *Net profit* estimation between the AER and Balance exercises. The AER accounts for the *Opportunity cost of capital* as a cost in the *Net profit* estimation, but this is not the case in the Balance exercise.

However, this is not the sole problem with the *Net profit* estimation. In fact, it should be considered whether what it is reported as *Net profits* is actually *Net profits* or something else. *Net profits* are defined according to the "*Guidelines*" as:

$$\textit{Net profit} = (\textit{Income from landings} + \textit{Other income}) - (\textit{Crew costs} + \textit{Unpaid labour costs} + \textit{Energy costs} + \textit{Repair and maintenance costs} + \textit{Other variable costs} + \textit{Non variable costs} + \textit{Depreciation costs}) \quad \textbf{(eq. 2)}$$

Guillen et al. (2016) presented a simplified classification of the economic performance indicators:

- *Gross profit = Turnover (i.e., Value of landings) – Direct (variable) costs.*
- *Operating cash flow = Gross profit – Fixed costs.*
- *Operating profit = Operating cash flow – Depreciation.*
- *EBIT (Earnings Before Interest and Taxes) = Operating profit + Non fishing income (not belonging to the fishing activity, e.g. subsidies, fishing tourism) – Non fishing costs.*
- *Net profit =EBIT – Taxes - Financial costs.*

Following this classification, the "*Net profit*" estimated in "*Balance*" is similar to EBIT (and not *Net profits*) because *financial costs* are not considered. If it is assumed that the vessel owner has no debts then profitability is estimated as "*Full equity profit*". When assuming full equity profits and taxes to be insignificant, then the economic performance estimated is according to *Net profits*.

When the *opportunity cost of capital* is deduced to the (normal) *net profits* as in the "*AER*", then economic (or extraordinary) *net profits* are estimated.

It is important to assure harmonisation between the AER and Balance reports in what concerns *Net profit* estimation, but even more important is to assure consistency in the *"AER"* between the use of the *opportunity cost of capital* in the *Net profit* and *RoFTA* estimation.

Given the large number of inactive vessels, and especially because achieving MSY would lead to important reductions in fishing effort and capacity, it is important to consider the capital costs of those vessels, more than ever when the impact of different management measures need to be assessed (e.g. impact assessments). Hence, it is important to account for the *opportunity cost of capital* of vessels that cease their activity.

Concluding remarks

There is a lack of homogeneity in the methodology to estimate key economic indicators among the main EU fisheries reference documents: i) STECF's Annual Economic Report (*AER*) and ii) STECF's Assessment of balance indicators for key fleet segments and review on national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities (*Balance*), the latter of which is based on the Commission Guidelines to MS on national report (COM (2014) 545 final) (*Guidelines*).

Despite the use of different methodologies for the calculation of Return on Investment (*RoI*) and Return on Fixed Tangible Assets (*RoFTA*), the indicators used in the two reference documents are the same. However, net profits are different in the AER compared to the Balance (and so "*Guidelines*") report. This is because in the AER the opportunity cost of capital is considered as a cost.

[38] Long-term foreign currency credit ratings for sovereign bonds are reported by the three major credit rating agencies: Standard & Poor's, Fitch, and Moody's.

The different reference documents use different reference points for *RoFTA* (and *RoI*). The different approximations (proxies) of the opportunity cost of capital: the real interest rate in the AER, and the 5-year arithmetic average nominal harmonised long-term interest rates of the government bonds with maturities of close to ten years in the "Guidelines".

There is also a difference in the *Net profit* estimation between the AER and the "*Guidelines*". The AER accounts for the *Opportunity cost of capital* as a cost in the *Net profit* estimation, but not in the "*Guidelines*". "*Net profit*" as estimated in the Balance exercise is similar to EBIT because *financial costs* are not considered. When assuming full equity profits (i.e., vessel owner has no debts) and taxes to be insignificant, then the economic performance estimated is according to *Net profits* in the "*Guidelines*". When the *opportunity cost of capital* is deduced to the (normal) *net profits* as in the "*AER*", then economic (or extraordinary) *net profits* are estimated.

Given the large number of inactive vessels, and especially because achieving MSY would lead to important reductions in fishing effort and capacity, it is important to consider the capital costs of those vessels, more than ever when the impact of different management measures are required to be analysed (e.g. impact assessments). Hence, it is important to account for the *opportunity cost of capital* of those vessels that cease their activity. If the opportunity cost of capital was considered as a cost in the AER and the Balance reports for *Net profit* and *RoFTA* estimation, then the estimation *Net profit* and *RoFTA* would be harmonised and consistent across both reports.

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11.1 Annex 2 - The Question of Investment: Beneficial or Detrimental?

Introduction

The objective of this special chapter is to devise a statistical indicator of the desirability of changes in investment in a fleet which is capable of being applied by Member States in the relevant sections of the Annual Economic Report.

The Problem of Defining the Correct Level of Investment

In most industries positive changes in levels of investment, ΔI, are considered virtuous, indicating confidence in the future and promising growth. Such changes are constrained by the powerful market force of marginal profitability.

In fisheries, however, ΔI reflects changes in fleet capacity and positive changes may not always be beneficial. There are two main reasons for this; first, the limited nature of the fish stock reserves and secondly the dissipation of the resource rent - the profit from exploiting the stock - associated with open or inadequately limited access[39] to the fish stock reserves. This is illustrated in Figures Inv1a and Inv1b. As increasing amounts of labour and capital inputs are used the total revenue product from the fishery increases but with diminishing returns to scale. However, the limited ability of the fish stock to renew itself means that beyond a certain point the total revenue product will be lower despite the greater use of the factors of production. At the same time the total cost of the factors of production employed will be higher – in the diagram they are assumed to reflect constant outlays to scale.

Open access equilibrium (OAE) occurs where Total Revenue Product (TRP) equals Total Factor Cost (TFC). This is an economically inefficient point because the profit at that point is zero. It occurs because absent or poor management allows excessive levels of investment to develop. It will be noted from Figure Inv1a that any level of TRP below the maximum (which equates to Maximum Sustainable Yield, MSY) can be obtained by two levels of input. Obviously, each upper level of input incurs unnecessarily higher costs and is wasteful.

However, neither can the point of maximum TRP be regarded as optimal. The Maximum Economic Yield (MEY) is obtained where the gradient of the tangent to the TRP curve equals that of the TFC curve. It follows that levels of investment which use factors at a level greater than is necessary to obtain MEY are inefficient, wasteful of the non-fish stock resources and therefore undesirable. Figure Inv1b shows the MEY and its maximum below the MSY. The economic incentive to dissipate the resource rent is the continued presence of profits to be made beyond the level of input which achieves MEY, a market failure which seldom occurs in other industries but which leads to depletion of the fish stock reserves and impoverishment of the fishery.

Figures Inv1a and Inv1b show a static equilibrium analysis. In reality the situation is dynamic and hence it is the changes in the level of investment which are as important as the levels themselves. The question is whether the changes are driving the fishery towards the MEY or away from it.

While the model considered is of the long run, similar conclusions may be drawn from a short run version. The TRP curve in the short run, where the fish stock reserve is fixed, is asymptotic rather than quadratic.

It can readily be seen that the direction of the changes offers no clue as to their desirability or otherwise. Additional information regarding the current position of the fishery is required. This can be obtained from the observed trends in profitability.

An additional thought is that Nett Value Added (NVA), the sum of the returns to both capital (nett profit) and labour (crew share), is generally regarded as a better means of defining the returns to society than using the profits alone. This shifts the optimal point to a position between MEY and MSY but does not materially affect the flavour of the analysis. Changes which push the level of investment towards maximum NVA may be described as desirable, ("good" in Figure Inv1b), or detrimental, ("bad").

Thus there exists the basis for a Decision Rule to determine whether changes in investment are desirable:

- If the change in NVA is positive then a change in investment may be regarded as desirable,
- If the change in NVA is negative then a change in investment may be regarded as detrimental.

[39] Here "open access" means not constrained by an economic cost of the appropriate amount. It does not imply physical constraints such as licencing, seasonal closures and other so-called "effort" controls.

Figure: Inv1a

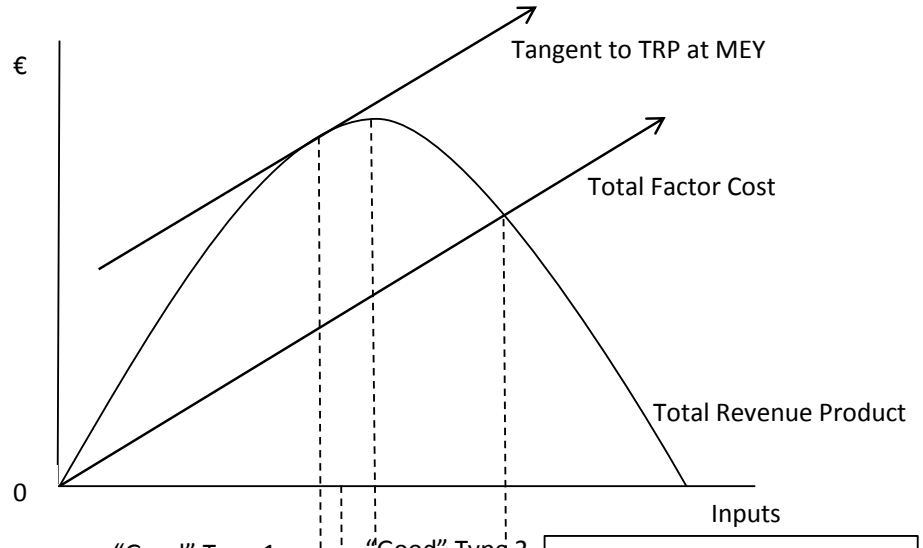
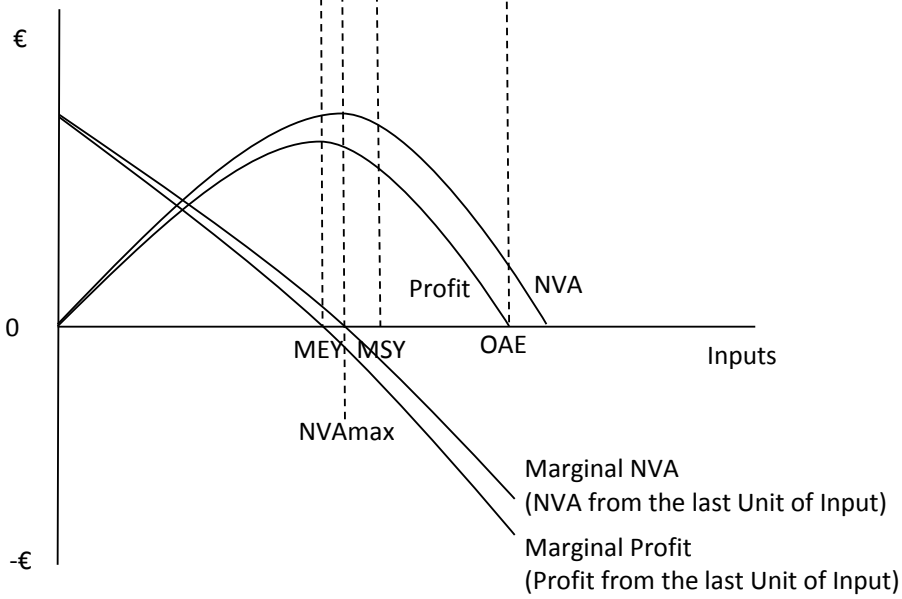


Figure: Inv1b



Defining an Indicator for the Desirability of Investment in a Fishing Fleet

A number of questions disturb the theoretical static analysis above which must be considered in attempting to apply the Decision Rule set out above.

The first, of course, is that the economy of a fishery is dynamic. The implication of this is that the fish stock reserves, the quantity of labour and the costs are changing all the time. None of these detracts from the application of the Decision Rule in practice because the indicator that is to be used in the Decision Rule (changes in the NVA) is itself dynamic. It is also readily observable and available in the data shown in the Annual Economic Report (AER). However, it is also the case that the optimal position is always changing as a consequence not only of stock changes, but also of other changes on the cost side as well as any influences from the demand side which have been assumed away in the discussion above. The effect of this is to leave the system continually hunting for the equilibrium position rather than achieving an absolutely stable position. It is the skill of the entrepreneur that copes with this risk and uncertainty.

A shortcoming is that changes in NVA (ΔNVA) can only be observed historically. That is to say the indicator can only tell us what has happened during an observation period which has concluded and not what is happening at present. These are likely to be different, but this is a problem applicable to most macro- and micro-economic indicators and is no reason to discount ΔNVA as valueless. It is, nevertheless, a reason to be cautious in acting upon the indicator because actions may exaggerate a directional change that is already taking place of its own accord, rather than correcting a wayward movement, highlighted by the indicator, as intended. As such a view needs to be taken of the likely future progress of fish stock

reserves and factor costs before action is taken on the basis of the indicator. The cost of labour is unlikely to be affected because of the share system of payment commonly used.

A further matter to be given some thought is that there will be a time lag between changes in the level of investment and the costs or benefits appearing.

The exposition set out in Section 1 above relies on a deterministic model of the fish stock which assumes that changes in the fish stock reserves occur only as a result of the physical ability of the fish to reproduce and grow, a constant rate of natural mortality and as a result of fishing.

Fish stock reserves are, however, subject to additional natural variability and therefore the Total Revenue Product curve may move both vertically and horizontally about the origin. The effect of this is that what is the optimal level of fleet capacity at one moment is unlikely to remain so.

The skill of the entrepreneur in fishing should be to maintain a level of capacity, taking into account the need to hold sufficient spare capacity in reserve to minimise the effects of variability and risk, which is optimal in the long run.

It is difficult for a fishery manager to know the correct level of spare capacity at any given time. Worse, spare capacity in fishing fleets has a bad habit of being used because it is profitable to use it as a result of the market failure but to the detriment of the resource rent.

An indicator to describe the magnitude of the desirability of ΔNVA against ΔI could be

$$\text{Desirability of } \Delta\text{I} = \frac{\Delta\text{NVA}\%}{1 + \sqrt{(\Delta\text{I}\%^2)}} \qquad (1)$$

The complicated denominator simply serves to guarantee a positive value for the direction of ΔI against which ΔNVA can be compared, indicating whether ΔI has been desirable (a positive figure) or detrimental (negative).

NVA may be found from the data tables used in the AER and is precisely "Net Profit" (*Π*) plus "Wages and salaries of crew" (*W*) plus "Unpaid labour value" (*U*). The percentage change is the value of NVA in the current year minus the value in the previous year all divided by the value in the previous year.

I may be also found from the data tables used in the AER and is precisely "Tangible asset value" (*A*) plus "Fishing rights" (*R*) plus "Investments" (*I*) plus "Wages and salaries of crew" (*W*) plus "Unpaid labour value" (*U*). The percentage change is also the value of I in the current year minus the value in the previous year all divided by the value in the previous year.

These definitions may be included in (1) to give the Desirability of ΔI

$$= \frac{\dfrac{(\Pi_t + W_t + U_t) - (\Pi_{t-1} + W_{t-1} + U_{t-1})}{(\Pi_{t-1} + W_{t-1} + U_{t-1})}}{1 + \sqrt{\left(\left(\dfrac{(A_t + R_t + I_t + W_t + U_t) - (A_{t-1} + R_{t-1} + I_{t-1} + W_{t-1} + U_{t-1})}{(A_{t-1} + R_{t-1} + I_{t-1} + W_{t-1} + U_{t-1})}\right)^2\right)}} \qquad (2)$$

A positive value for (1) and (2) indicates that a fishery is moving towards the optimal size to maximise the nett value added, for society, the combined returns to capital and labour. This ratio can be applied at EU, regional, national and fishery levels but using it at the most disaggregated level, the fleet, offers the opportunity to identify precisely where over- or under-investment is occurring.

A test application at the national level using UK data from the national chapter repeated below shows a fluctuating Desirability indicator. This could be interpreted as suggesting that the UK fleet as a whole is operating close to the optimum. The fluctuations are almost certainly attributable to the fact that the fleet is hunting for the optimum in an ever-changing situation. A similar set of results appears for the use of a lagged investment variable. There is no continuous trend in either variations of the indicator and in no case does the Type 4 (indicating growing investment and falling revenue) appear. It must be noted that no credence in management terms should be placed on these results as they are experimental. Additional work is necessary to consider the appropriate use of a lag structure.

A final consideration may be that ΔNVA (rather than the desirability indicator) may highlight ΔI that are not identified by the definition of I employed in the AER. From this point of view it serves as a useful check, catching influences that may have escaped the strict definition of I but which nevertheless have an impact on capacity.

UK (€m)	2008	2009	2010	2011	2012	2013	2014
Income from landings	931	879	939	1,029	1,023	893	1,077
Other income	31	24	20	27	42	44	41
Direct income subsidies	0	0	0	0	0	0	0
Income from leasing fishing rights	0	3	2	2	4	4	2
Wages and salaries of crew	240	223	213	229	240	204	242
Unpaid labour value	15	14	12	13	13	10	12
Energy costs	215	144	163	193	202	179	176
Repair & maintenance costs	91	90	90	93	90	77	91
Other variable costs	158	152	156	175	173	160	179
Other non-variable costs	83	82	133	127	119	109	137
Annual depreciation costs	72	69	68	72	69	67	73
Rights costs	30	38	30	36	36	41	44
Opportunity cost of capital	6	7	0	-9	-5	-3	4
Gross Value Added	415	435	416	467	481	412	535
Gross profit	160	198	191	225	228	198	282
Net profit	82	122	123	162	164	133	205
Net Value Added	337	359	348	404	417	347	458
Indicator (No lag)		0.06	-0.03	0.15	0.03	-0.15	0.27
Change in Investment		-0.06	0.00	0.06	-0.03	-0.11	0.20
Change Type		2	3	1	2	3	1
Indicator (Investment Lagged 1 Period)			-0.03	0.16	0.03	-0.16	0.29
Change in Investment (1 period lag)			-0.06	0.00	0.06	-0.03	-0.11
Change Type			3	2	1	3	2

The Extent of Capacity Divergences from the Optimum

While the indicator in (1) and (2) identifies the dynamic and is of general applicability, it is not able to indicate the extent of over- or under-capacity present in a fleet (whatever the chosen level defined). It simply determines whether changes have been beneficial or detrimental and the strength of the changes.

However, Carvalho *et al* (2016) have developed a means of estimating the divergence from the optimum. It depends on estimating an assumed parabolic TRP curve using only three points; the single observation of TRP and "effort" available from the MS data submitted to the AER Expert Working Group (EWG), the MSY and its associated "effort" level estimated by marine scientists working under the umbrella of the International Council for the Exploration of the Sea (ICES) and the origin. Observed costs can then be applied under the assumption of constant unit costs of "effort". This enables the long run OAE, TRP_{max}, and MEY points to be calculated along with their corresponding "effort" levels. The model cannot be used on disaggregated fleets fishing an ICES-defined fish stock.

This means that for the time being and until some other source or approach to MSY (strictly TRP_{max}) is found the model can be applied only at the fish stock resource level used by ICES and only to fish stocks assessed by ICES. Nevertheless, this clearly is an area which deserves further investigation.

Preliminary Results for 2014

The Desirability Ratio was deployed to test investment and shifts towards the optimal value added on the data for 2014 assuming an immediate impact and, owing to a shortage of time during the EWG, without attempting to tease out a lag structure for the investment variable.

Of the 161 fleets examined, 85 showed Type 1 Desirability of Investment – increased investment providing sustainable increased value added. 65 fleets showed Type 2 Desirability – sustainable increased value added accompanied by disinvestment. 5 fleets showed Type 3 Desirability – reduced but sustainable value added accompanied by disinvestment. (This could be as a consequence of improved investment opportunities elsewhere and not just in fishing, or could be the result of the fleet being redefined). 6 fleets showed Type 4 Desirability – decreased value added accompanied by increased investment.

The ratios are, however, mostly less than 1% suggesting that the fleets are close to their desirable levels and merely hunting for the ideal position. Only two of the 161 fleets show serious levels of the highly undesirable Type 4 ratio and the cause remains to be investigated.

References

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Investment Desirability Ratios

ICES SEA AREA	FISHING METHOD	FLEET BY LENGTH	FLEET MS AND METIER	2014 Ratio	TYPE
AREA27	DFN	VL0010	GBR A27 DFN0010 NGI	0.52	1
			PRT A27 DFN0010 NGI	-0.03	2
			PRT A27 DFN0010 P3	0.12	1
			SWE A27 DFN0010 NGI°	-0.04	2
		VL1012	GBR A27 DFN1012 NGI	0.57	1
			LTU A27 DFN1012 °	-0.17	2
			PRT A27 DFN1012 NGI	-0.02	2
			SWE A27 DFN1012 NGI°	-0.30	2
		VL1218	DEU A27 DFN1218	-0.41	2
			GBR A27 DFN1218 NGI	0.39	1
			NLD A27 DFN1218 NGI°	-0.06	2
			PRT A27 DFN1218 NGI	0.23	1
			SWE A27 DFN1218 NGI°	-0.26	2
		VL1824	NLD A27 DFN1824 NGI°	-0.55	2
			PRT A27 DFN1824 NGI	0.27	1
		VL2440	DEU A27 DFN2440 °	0.03	1
			GBR A27 DFN2440 NGI°	0.41	1
	DRB	VL0010	GBR A27 DRB0010 NGI	0.26	1
			PRT A27 DRB0010 NGI	0.25	1
		VL1012	DNK A27 DRB1012 NGI	0.63	1
			PRT A27 DRB1012 NGI	-0.41	2
		VL1218	DNK A27 DRB1218 NGI	0.46	1
			GBR A27 DRB1218 NGI	0.29	1
			PRT A27 DRB1218 NGI	0.43	1
		VL1824	GBR A27 DRB1824 NGI	-0.13	2
		VL2440	GBR A27 DRB2440 NGI°	-0.07	2
			IRL A27 DRB2440 °	-0.49	2
			NLD A27 DRB2440 NGI°	0.19	1
	DTS	VL0010	DNK A27 DTS0010 NGI	-24.80	4
			GBR A27 DTS0010 NGI	0.01	1
			NLD A27 DTS0010 NGI°	-0.26	2
		VL1012	DEU A27 DTS1012 °	0.01	1
			GBR A27 DTS1012 NGI	0.04	1
			SWE A27 DTS1012 NGI°	-0.43	2
		VL1218	DEU A27 DTS1218	0.07	1
			DNK A27 DTS1218 NGI°	-0.12	2
			GBR A27 DTS1218 NGI°	0.04	1
			IRL A27 DTS1218	-0.15	2
			PRT A27 DTS1218 NGI	0.08	1
			SWE A27 DTS1218 NGI°	0.11	1
		VL1824	DEU A27 DTS1824	-0.27	2
			DNK A27 DTS1824 NGI°	0.26	1
			GBR A27 DTS1824 NGI	0.14	1

			IRL A27 DTS1824	0.22	1
			NLD A27 DTS1824 NGI°	0.25	1
			PRT A27 DTS1824 NGI	0.17	1
			SWE A27 DTS1824 NGI°	-0.15	2
		VL2440	BEL A27 DTS2440 NGI°	-0.18	2
			DEU A27 DTS2440	0.09	1
			DNK A27 DTS2440 NGI°	0.11	1
			GBR A27 DTS2440 NGI	0.21	1
			IRL A27 DTS2440	-0.05	2
			LTU A27 DTS2440 °	5.96	3
			NLD A27 DTS2440 NGI°	0.22	1
			PRT A27 DTS2440 NGI	0.45	1
			SWE A27 DTS2440 NGI°	-0.32	2
		VL40XX	DEU A27 DTS40XX	0.43	1
			DNK A27 DTS40XX NGI°	-0.34	2
			PRT A27 DTS40XX IWE	0.14	1
	FPO	VL0010	GBR A27 FPO0010 NGI	0.05	1
			PRT A27 FPO0010 NGI	0.15	1
		VL1012	GBR A27 FPO1012 NGI°	0.20	1
			PRT A27 FPO1012 NGI	0.27	1
		VL1218	GBR A27 FPO1218 NGI	0.30	1
			IRL A27 FPO1218 °	1.10	1
			PRT A27 FPO1218 NGI	0.38	1
		VL1824	GBR A27 FPO1824 NGI°	0.20	1
			PRT A27 FPO1824 NGI	0.26	1
	HOK	VL0010	GBR A27 HOK0010 NGI	0.05	1
			PRT A27 HOK0010 NGI	0.15	1
			PRT A27 HOK0010 P3	0.37	1
		VL1012	PRT A27 HOK1012 NGI	1.34	1
			PRT A27 HOK1012 P3	0.24	1
		VL1218	PRT A27 HOK1218 NGI	-0.25	2
			PRT A27 HOK1218 P3	0.04	1
		VL1824	PRT A27 HOK1824 NGI	-0.06	2
		VL2440	GBR A27 HOK2440 NGI°	0.11	1
			PRT A27 HOK2440 NGI	0.90	1
			PRT A27 HOK2440 P3°	-0.16	2
	MGO	VL0010	PRT A27 MGO0010 NGI	1.27	1
	PG	VL0010	DEU A27 PG0010	2.33	1
			EST A27 PG0010 NGI	-0.21	2
			FIN A27 PG0010	7.90	3
			LTU A27 PG0010 °	-0.41	2
			NLD A27 PG0010 NGI°	-0.13	2
		VL1012	DEU A27 PG1012	-0.69	2
			EST A27 PG1012 NGI	-0.26	2
			FIN A27 PG1012 °	3.58	3
			NLD A27 PG1012 NGI°	0.12	1
	PGP	VL0010	LVA A27 PGP0010 NGI	0.19	1
			PRT A27 PGP0010 NGI	0.21	1

			PRT A27 PGP0010 P3°	0.24	1
		VL1012	DNK A27 PGP1012 NGI	-0.07	2
			PRT A27 PGP1012 NGI	-0.23	2
		VL1218	DNK A27 PGP1218 NGI	-0.28	2
			PRT A27 PGP1218 NGI	0.80	1
	PMP	VL0010	PRT A27 PMP0010 NGI	-0.03	2
		VL1218	DNK A27 PMP1218 NGI	-0.11	2
		VL1824	BEL A27 PMP1824 NGI°	0.38	1
			DNK A27 PMP1824 NGI°	0.07	1
	PS	VL0010	PRT A27 PS0010 NGI	0.15	1
			PRT A27 PS0010 P3	4.32	1
		VL1012	PRT A27 PS1012 NGI	-0.03	2
			PRT A27 PS1012 P3°	0.48	1
		VL1218	PRT A27 PS1218 NGI	0.09	1
		VL1824	PRT A27 PS1824 NGI	-0.23	2
		VL2440	PRT A27 PS2440 NGI	-0.27	2
	TBB	VL0010	GBR A27 TBB0010 NGI°	-0.50	2
			NLD A27 TBB0010 NGI°	-0.34	2
			PRT A27 TBB0010 NGI	0.28	1
		VL1012	DEU A27 TBB1012 °	-0.68	2
		VL1218	DEU A27 TBB1218	-0.29	2
			DNK A27 TBB1218 NGI	-0.21	2
			GBR A27 TBB1218 NGI	-0.57	2
			NLD A27 TBB1218 NGI°	-0.41	2
		VL1824	BEL A27 TBB1824 NGI°	0.51	1
			DEU A27 TBB1824	-0.28	2
			DNK A27 TBB1824 NGI	-0.23	2
			GBR A27 TBB1824 NGI	0.11	1
			NLD A27 TBB1824 NGI°	-0.08	2
		VL2440	BEL A27 TBB2440 NGI	0.38	1
			DEU A27 TBB2440 °	0.01	1
			GBR A27 TBB2440 NGI°	0.11	1
			NLD A27 TBB2440 NGI°	0.09	1
		VL40XX	NLD A27 TBB40XX NGI°	0.45	1
	TM	VL1218	EST A27 TM1218 NGI°	-0.51	2
			FIN A27 TM1218 °	-0.65	2
			LVA A27 TM1218 NGI	-0.24	4
		VL1824	FIN A27 TM1824	0.18	1
		VL2440	EST A27 TM2440 NGI°	0.11	1
			FIN A27 TM2440 °	-0.79	2
			IRL A27 TM2440	-0.15	2
			LTU A27 TM2440 °	-0.48	2
			LVA A27 TM2440 NGI	-0.11	2
		VL40XX	GBR A27 TM40XX NGI°	0.45	1
			IRL A27 TM40XX	1.07	1
			NLD A27 TM40XX NGI°	5.66	1
AREA37	DFN	VL0006	BGR A37 DFN0006 NGI	-4.83	4
			SVN A37 DFN0006 NGI°	0.27	1

		VL0612	BGR A37 DFN0612 NGI	0.46	1
			SVN A37 DFN0612 NGI°	0.29	1
	DTS	VL1218	SVN A37 DTS1218 NGI°	0.15	1
		VL2440	CYP A37 DTS2440 °	6.60	3
	PG	VL0006	CYP A37 PG0006	-1.33	4
			ROU A37 PG0006 NGI°	-0.51	2
		VL0612	CYP A37 PG0612	-0.02	4
			ROU A37 PG0612 NGI°	0.48	1
	PGP	VL0006	MLT A37 PGP0006 NGI	-0.19	2
		VL0612	MLT A37 PGP0612 NGI	-1.02	2
		VL1218	CYP A37 PGP1218 °	-0.99	4
	PMP	VL0612	MLT A37 PMP0612 NGI	0.13	3
OFR	DTS	VL2440	PRT OFR DTS2440 IWE	-0.24	2
	HOK	VL0010	PRT OFR HOK0010 P2°	-0.12	2
		VL1218	PRT OFR HOK1218 P2	-0.02	2
		VL1824	PRT OFR HOK1824 P2	-0.27	2
		VL2440	PRT OFR HOK2440 IWE	0.71	1
			PRT OFR HOK2440 P2	11.82	1
		VL40XX	PRT OFR HOK40XX IWE	0.60	1
	MGP	VL0010	PRT OFR MGP0010 P2	-0.38	2
		VL1824	PRT OFR MGP1824 P2°	-0.03	2
	TM	VL40XX	LTU OFR TM40XX °	-0.16	2

11.2 Annex 3 – Data transmission issues: 2016 DCF call for economic data on the EU fishing fleet

Country	End User	Data call	Data Requested	Issue	Issue Type	Severity	End User Comments
Finland	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	Difference greater than 5% for some fleet segments and years	QUALITY	LOW	This is because landing value estimated from landings volume using average values; income derived from financial statements. But there should be no divergence between both variables.
Finland	STECF, JRC, MARE, AER?	DCF fleet economic	Gross tonnage	The gross tonnage reported as national total is significantly higher than the sum of all fleet segments for 2014.	QUALITY	LOW	
Germany	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	Difference greater than 5% for some fleet segments and years	QUALITY	LOW	Value contains estimated values for landings without declared sales revenues; income data are adjusted in case accountant data were available. However, there should be no divergence between both variables.
Germany	STECF, JRC, MARE, AER?	DCF fleet economic	Number of vessels, total employment	Number of vessels is greater than the number of total employed for some fleets and years	QUALITY	LOW	Employment is estimated based on effort; If too low then less than 1 or even 0 Totjob is assigned to a vessel. Independent on how it is estimated, there should not be more vessels than fishers.
Germany	STECF, JRC, MARE, AER?	DCF fleet economic	Weight and value of landings	Mismatch between the number species reported in the weight and value of landings for several fleets and years.	QUALITY	LOW	Refers to few entries of few kg, probably not marketable. But if not marketable, the value (price) should be 0.
Netherlands	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	Difference greater than 5% for some fleet segments and years	QUALITY	LOW	This is because Income value from enquiries (25% of fleet segment) and total landings value from logbooks (100%), where landings below 50 kg are not registered.
Netherlands	STECF, JRC, MARE, AER?	DCF fleet economic	Direct income subsidies	Direct income subsidies data are not provided for any year. If there are no subsidies of this type, a 0 should be provided.	QUALITY	LOW	This is because Income value from enquiries (25% of fleet segment) and total landings value from logbooks (100%), where landings below 50 kg are not registered.
Belgium	STECF, JRC, MARE, AER?	DCF fleet economic	Weight and value of landings	Mismatch between the number species reported in the weight and value of landings for several fleets and years.	QUALITY	LOW	Even if it happens for a several fleets and years, they represent a low number of observations, and they only represent a very small part of the catch
Lithuania	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	For the period 2008-2014 There are some FS (on each year) were the difference between Landings value and landings Income is greater than 5%	QUALITY	LOW	Lithuania is making an effort in order to provide correct data for futher data calls. Income from landings and value of landings for some segments are obtained from different data sources and methodologies. Income is provided from questionnaires (accountancy data) whereas value of landings is estimated as price times landed volume.
Malta	STECF, JRC, MARE, AER?	DCF fleet economic	Costs data	Missing costs data for some fleets and years, when income is provided.	COVERAGE	LOW	Missing data for six segments (which have limited number of vessels). Clustering is not a solution per se if cost data are not provided for all vessels involved in the cluster. In this sense, clustering should only benefit those segments that cannot provide data due to confidentiality reasons. The other missing data may require some estimation.
Sweden	STECF, JRC, MARE, AER?	DCF fleet economic	Employment and FTE	Employment is lower than FTE for the fleet segment SWE A27 DTS1824 NGI° furing the period 2012-2014.	QUALITY	LOW	The impact made by this calculation affects data quality issue insignificantly.

Country	End User	Data call	Data Requested	Issue	Issue Type	Severity	End User Comments
Spain	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	There are significant differences between 2008-2014 landings value and income from landings for several fleet segments.	QUALITY	LOW/MEDIUM	It involves a large number of fleet segments and years. The impact made by this difference affects data quality.
Spain	STECF, JRC, MARE, AER?	DCF fleet economic	Tangible asset value and financial position	Missing parameters for the period 2008-2010: tangible asset value and financial position. The missing data are not for the latest period and do not have a high impact on up to date analysis, only for time series.	COVERAGE	LOW	Tangible asset value and financial position have been provided for the period 2011-2014. It is still missing tangible asset value and financial position for the period 2008-2010.
Spain	STECF, JRC, MARE, AER?	DCF fleet economic	Effort_FAO and Effort _gear templates	Effort_FAO and Effort _gear templates missing for the period 2008-2010. Days at sea at FAO level missing for all years.	COVERAGE	MEDIUM	Missing Effort_FAO and Effort _gear data for the period 2008-10 and all fleet segments. Regional analysis with regard to fishing effort at fishing sub-region level is not feasible for the period 2008-10. Days at sea at FAO level have not been provided for any year, increasing the difficulties in the preparation of the regional analysis
Ireland	STECF, JRC, MARE, AER?	DCF fleet economic	Weight and value of landings	Mismatch between the number species reported in the weight and value of landings for several fleets and years.	QUALITY	LOW/MEDIUM	It involves a significant number of fleet segments and years. The impact made by this difference affects data quality.
Ireland	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	Difference greater than 5% for some fleet segments and years	QUALITY	LOW	
Ireland	STECF, JRC, MARE, AER?	DCF fleet economic	Effort	Missing effort data for some small-scale fleets for all years	COVERAGE	MEDIUM/HIGH	
Greece	STECF, JRC, MARE, AER?	DCF fleet economic	Days at sea, kw fishing days, gt fishing days, live weight and value of	Missing days at sea, kw fishing days, gt fishing days, live weight and value of landings data for 2013	COVERAGE	HIGH	MEDIUM
Greece	STECF, JRC, MARE, AER?	DCF fleet economic	fishing days, number of fishing trips	Missing fishing days and number of fishing trips data for 2013; 2014	COVERAGE	LOW	MEDIUM
Greece	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income	Missing landings income data for GRC A37 DTS0612 for 2013	COVERAGE	HIGH	MEDIUM
Greece	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income	Missing landings income data for GRC A37 DTS1218 for 2013	COVERAGE	HIGH	MEDIUM
Greece	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income	Missing landings income data for all segments for 2012	COVERAGE	HIGH	MEDIUM
ITALY	STECF, JRC, MARE, AER?	DCF fleet economic	total employment, total number of vessels	There are decimals in the total employment and total number of vessels variables for all years.	QUALITY	LOW	Data was not corrected (rounding the figures). MS claims that employment data are an estimation and so they will automatically come with a decimal. But it does not matter the way data are obtained, the number of fishers in a segment cannot have decimals (MS can always round estimations). Moreover, the number of vessels should reflect the vessels in the register. So it should not have decimals.
ITALY	STECF, JRC, MARE, AER?	DCF fleet economic	Vessel length	Average vessel length should fall within fleet segment length range. While, average vessel length of 36.25 cannot be in the VL40XX segment; average vessel length of 36.25 cannot be in the VL40XX segment; average vessel length of 13.65 cannot be in the VL0612 segment.	QUALITY	LOW	According to the Italian national plan, the sample is stratified by segments according to Appendix III and by geographical sub area (GSA). This double level of stratification of the population (technical and geographical) may generate very small strata that have to be grouped in order to get a statistical sample. In fact when a strata is too small (<10 vessels) it is very difficult to randomly select sample. At the same time the sample plan is subject to budget constraints and clustering of small segments is also necessary to reach cost efficiency.
ITALY	STECF, JRC, MARE, AER?	DCF fleet economic	Days at sea, number of vessels	The fleet segment DTS40XX for 2009 reports more fishing days than 365. Days at sea (15555.30), number of vessels (17).	QUALITY	LOW	
ITALY	STECF, JRC, MARE, AER?	DCF fleet economic	Days at sea, fishing trips	For some fleet segments the number of fishing trips is higher than the number of days at sea for 2013 and 2014.	QUALITY	LOW	According to the tableau the segments (9 in total) that had the error of fishing days should be greater than days at sea only if only than 1 gear is used per day. It seems that out of these 9 errors, DTS0612 for 2014, HOK1218 for 2014 and TM1218 for 2014 do not change the gear in 1 trip

Country	End User	Data call	Data Requested	Issue	Issue Type	Severity	End User Comments
Latvia	STECF, JRC, MARE, AER?	DCF fleet economic	Depreciated replacement value	There are significant differences for Depreciated replacement value between the reported national total and the sum of the fleet segments in 2011	QUALITY	LOW	
Bulgaria	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	Difference greater than 5% for some fleet segments and years	QUALITY	LOW	Total landings income in calculated from the questionnaires that fishermen are required to submit each year and the total landings value is calculated by multiplying the quantity landed and the declared average price for a particular type of fish. The majority of fish caught by boats under 10 meters is for personal consumption and has not been sold.
Bulgaria	STECF, JRC, MARE, AER?	DCF fleet economic	Costs data	Missing costs data for some fleets in 2011, when income is provided.	COVERAGE	LOW	Bulgaria is making an effort in order to provide correct data for futher data calls
Bulgaria	STECF, JRC, MARE, AER?	DCF fleet economic	Other income and income from	Missing other income and income from subsidies data for all fleets in 2011.	COVERAGE	MEDIUM	Bulgaria is making an effort in order to provide correct data for futher data calls
Portugal	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	Difference greater than 5% for some fleet segments and years	QUALITY	LOW	
Portugal	STECF, JRC, MARE, AER?	DCF fleet economic	Weight and value of landings	Mismatch between the number species reported in the weight and value of landings for several fleets and years.	COVERAGE	LOW	
Poland	STECF, JRC, MARE, AER?	DCF fleet economic	Weight and value of landings	Mismatch between the number species reported in the weight and value of landings for POL A27 PG0010 in 2010.	COVERAGE	LOW	It misses to report the value of 1 fish item of 16kg.
Poland	STECF, JRC, MARE, AER?	DCF fleet economic	Unpaid labour	Unpaid labour data is not provided for the period 2008-10.	COVERAGE	LOW	
Denmark	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	Difference greater than 5% for some fleet segments and years	QUALITY	LOW/MEDIUM	It involves a large number of fleet segments and years. The impact made by this difference affects data quality.
Denmark	STECF, JRC, MARE, AER?	DCF fleet economic	Weight and value of landings	Mismatch between the number species reported in the weight and value of landings for several fleets and years.	COVERAGE	LOW	
Denmark	STECF, JRC, MARE, AER?	DCF fleet economic	FTE and total employment	FTE is larger than effort for some fleet segments and years.	QUALITY	LOW	
Denmark	STECF, JRC, MARE, AER?	DCF fleet economic	Number of vessels, total employment	Number of vessels is greater than the number of total employed for some fleets and years	QUALITY	LOW	
Denmark	STECF, JRC, MARE, AER?	DCF fleet economic	Capacity and transversal data	Capacity and transversal data is missing for 2015	QUALITY	HIGH	
UK	STECF, JRC,	DCF fleet economic	Landings income and	Difference greater than 5% between landings income and	QUALITY	LOW	Differences due to procedure for estimating value of landings abroad

Country	End User	Data call	Data Requested	Issue	Issue Type	Severity	End User Comments
France	STECF, JRC, MARE, AER?	DCF fleet economic	Financial position and unpaid labour cost	Financial position and unpaid labour missing for all years	COVERAGE	LOW	Unpaid labour: all data relative to salaries (crew and vessel owner) are included in the variable crewWage. No data available for the value of salaries that unpaid workers would receive if their work was remunerated.
France	STECF, JRC, MARE, AER?	DCF fleet economic	Annual depreciation	Annual depreciation missing for 2010	COVERAGE	MEDIUM	
France	STECF, JRC, MARE, AER?	DCF fleet economic	Tangible asset value	Tangible asset value missing for 2008-10	COVERAGE	MEDIUM	
France	STECF, JRC, MARE, AER?	DCF fleet economic	Investments	Investments missing for 2008, 2009 and 2013	COVERAGE	MEDIUM	
France	STECF, JRC, MARE, AER?	DCF fleet economic	Fishing days, kw fishing days and GT	Fishing days, kw fishing days and GT fishing days missing between 2008 and 2011	COVERAGE	MEDIUM	MEDIUM/HIGH effort data are essential for regional chapter of the report… to split costs between regions
France	STECF, JRC, MARE, AER?	DCF fleet economic	number of fishing trips	Number of fishing trips missing for 2008 and 2009	COVERAGE	MEDIUM	
France	STECF, JRC, MARE, AER?	DCF fleet economic	Capacity by region	Missing capacity by region data for 2008 and 2009	COVERAGE	LOW	
France	STECF, JRC, MARE, AER?	DCF fleet economic	Landings income and landings value	Difference greater than 5% for many fleet segments and years (and national totals)	QUALITY	LOW/MEDIU	It involves a large number of fleet segments and years. The impact made by this difference affects data quality.
France	STECF, JRC, MARE, AER?	DCF fleet economic	Income from landings	The income from landings reported as national total is significantly different than the sum of all fleet segments for 2009	QUALITY	LOW	
France	STECF, JRC, MARE, AER?	DCF fleet economic	Weight and value of landings	Mismatch between the number species reported in the weight and value of landings for many fleets and many years	COVERAGE	LOW/MEDIUM	
France	STECF, JRC, MARE, AER?	DCF fleet economic	Income from landings for 2009	Income from landings missing for 2009	COVERAGE	LOW	4 Fleet segments, between 2 and 6 vessels in each. These segments could be clustered in order to avoid confidentiality issues. However, clustering is not a solution per se if cost data are not provided for all vessels involved in the cluster. In this sense, clustering should only benefit those segments that cannot provide data due to confidentiality reasons. The other missing data may require some estimation.
France	STECF, JRC, MARE, AER?	DCF fleet economic	Recreational catches data	Recreational catches data are missing for the period 2012 to 2015	COVERAGE	LOW	
Belgium	STECF, JRC, MARE, AER?	DCF fleet economic	Recreational catches data	Recreational catches data are missing for the whole period	COVERAGE	LOW	
UK	STECF, JRC, MARE, AER?	DCF fleet economic	Recreational catches data	Recreational catches data are missing for the whole period	COVERAGE	LOW	The UK is implementing a new survey for recreational fishing and DG MARE allowed a grace period to review results of a pilot and expert group advice (ARES (2014) 362888). This should have enabled data collection for the 2015 reference year. However there were difficulties with awarding contracts and the work had to be re-tendered leading to a delay. CEFAS are leading the work and have instigated a recall survey to plug gaps for 2015.
Denmark	STECF, JRC, MARE, AER?	DCF fleet economic	Recreational catches data	Recreational catches data are missing for 2015	COVERAGE	LOW	
Lithuania	STECF, JRC, MARE, AER?	DCF fleet economic	Recreational catches data	Recreational catches data are missing for the period 2008 to 2013	COVERAGE	LOW	
Malta	STECF, JRC, MARE, AER?	DCF fleet economic	Recreational catches data	Recreational catches data are missing for the period 2008 to 2010	COVERAGE	LOW	
Netherlands	STECF, JRC, MARE, AER?	DCF fleet economic	Recreational catches data	Recreational catches data are missing for 2008, 2009, 2011, 2013, 2014, and 2015	COVERAGE	LOW	

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LB-AQ-16-001-EN-N

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doi:10.2788/842673

ISBN 978-92-79-64633-1

Publications Office