European Commission

ECONOMIC PERFORMANCE OF SELECTED EUROPEAN FISHING FLEETS

European Commission

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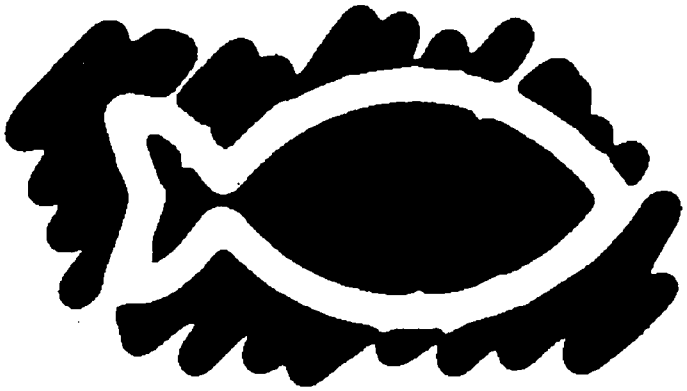

Promotion of common methods for economic assessment of EU fisheries

Economic performance of selected european fishing fleets

Annual report 1999

Concerted action
(FAIR PL97-3541)
2000

A great deal of additional information on the European Union is available on the Internet.
It can be accessed through the Europa server (http://europa.eu.int).

Cataloguing data can be found at the end of this publication.

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Economic Performance of Selected European Fishing Fleets

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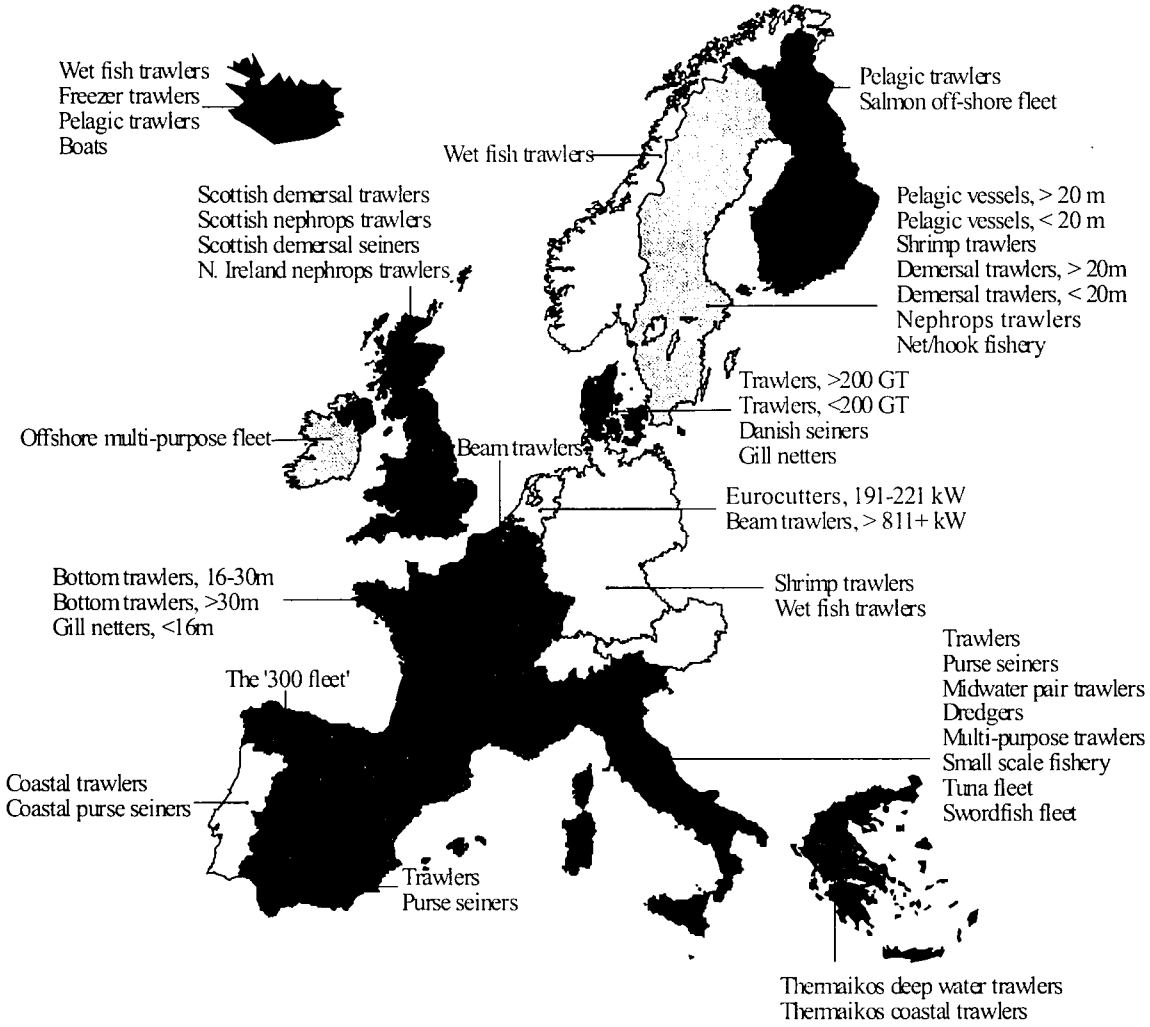


Selected fishing fleets.

Introduction

This Annual Report 1999 on 'Economic performance of selected European fishing fleets' has been prepared by the 'Concerted Action: Promotion of Common Methods for Economic Assessment of EU Fisheries' (FAIR PL97-3541). The report presents information on about 46 segments of fishing fleets, covering all EU Member States, Norway and Iceland.

The report is called for under the article 16 of the EC Reg. 3670/92, which sets out principles of the Common Fisheries Policy. The report aims to contribute to inclusion of economic considerations when new measures under CFP are being developed. The Concerted Action has produced one report in 1998 and it will up-date this report in October 2000.

The selection of the fishing fleets, discussed in this report, is based on practical considerations of data availability or accessibility. Although some major segments of the various national fleets are not (yet) covered, various partners in the Concerted Action have succeeded in bringing together data that has never been published before. Despite unquestionable problems and shortcomings of this report, this is the first time that such broad range of information has been brought together. The report shows data that is available and identifies data that is not. It points to the fundamental problems relating to the possibilities of empirical economic analysis of fishing fleets, given the current state of knowledge and statistics.

The report is composed of 16 chapters, organised by country. A parallel statistical appendix supplements each chapter. All chapters are set up in an identical manner. They contain general information on the total national fishing fleet and elaborate the economic performance of one or several specific fleet segments, which can be identified in that country. The national fleets are discussed in terms of current structure and main trends. Indicators in this respect are size of the fleet, composition by fleet segments, total value of production and total employment on board.

The review of the selected fleet segments is presented in three sections: role in total fishery, economic performance and outlook for 1999. The first section usually gives information on the share of the fleet segment in the national fishing fleet in terms of value of output, employment and the main technical characteristics of the vessels. The section on economic performance refers mostly to the year 1998. It presents information about gross cash flow, gross value added and gross value added per person employed. In case of fleet segments where the data is not available, some other indicators are presented. The third section on the outlook for 1999 attempts to provide some preliminary impressions about the current year. This is often done on the basis of indicative information regarding the first six months of 1999 compared to the same period of 1998. The text often presents percentages. Each section is completed with a graphical representation of time series of six main indicators as far as available. All background figures are provided in the statistical appen-

dices. Each country chapter contains also a brief discussion of the data used, in order to assess the reliability. These sections will be gradually developed into a full-scale technical annex, which will discuss the data in detail. The 'precise' figures, resulting from the surveys can be found in the appendices. The figures in the text are often rounded up for easier reading.

The appendices are also organised by country and by fleet segment, with a given sequence of tables. The first table x.0 contains the most recent data regarding the composition of the national fleet by fleet segment. It is meant as a general overview. The three following tables provide further details on the national fleet. Table x.1.1 gives time series on economic indicators, table x.1.2 on total catches of the main species in value and volume and table x.1.3 offers overview of the composition of the national fleet by size and age classes. The data on the various fleet segments are presented in a similar manner in three tables, segment by segment.

The texts as well as the tables contain information on monetary values expressed in national currencies as well as in Euro. The reason for using both currencies is that in the past in various countries the development of economic indicators may have been very different due to changes in exchange rate. As the report is destined for users at national as well as at European level, it was considered necessary to provide information on both levels. After the full introduction of the Euro, this approach will become superfluous, apart from the countries, which do not participate in the monetary union.

The interpretation of the economic figures provided in this report should be made with care. First of all, the data is based on samples, surveys and estimations with proxies. The reliability is as good as could be achieved with the means available. Further improvements will be implemented in the future. Secondly, the results are assessed from an economic and not from a fiscal point of view. This means particularly that full costs of capital (depreciation and interest) are imputed, which depresses the apparent net profit. In fiscal terms, the fishing companies will have usually higher profit before taxation than indicated in this report. In order to address this problem, the main indicator used for analysis is gross cash flow. Gross cash flow lies close to the views on running business in the fishing companies.

The economic data is developed mostly along one common method. The details of this method are presented in an appendix. Deviations from this common method are specified in the sections regarding comments on data.

The partners of the Concerted Action are well aware of many limitations and problems of this report. In order to develop a publication, which will be of increasing use to industry representatives, administrators and policy makers, the authors would appreciate receiving comments, additions and criticisms regarding contents, presentation or any other aspect of this report. A useful source of information can be only developed in dialogue with the users. Names and addresses of all partners in the Concerted Action can be found at the end of the report.

Executive summary

The report presents economic results for 1998 in 46 fleet segments, representing about 40-45% of the total fishery sector of EU, Norway and Iceland. Coverage by country varies between 1% for Greece and 100% for Italy, Iceland and Sweden.

European fishing fleets employ about 280,000 people on board, of whom 252,000 were in the EU. The value of total production amounted to EUR 9.8 bln (EUR 7.8 bln). Average gross value added per fisherman is estimated at about EUR 26,000, of which major part is disposable income. Still a number of segments show average crew share below EUR 10,000 per man.

36 out of 46 segments have achieved satisfactory to good economic performance over the period 1996-98. Results of only 6 segments faced structural losses over that period. In 1998, compared to 1996-97, 23 segments have improved their performance, while 17 faced some degree of deterioration. The relatively good economic performance can be largely ascribed to three causes: reduction of the size of the segments and in some cases higher fish prices and low fuel costs.

Belgium

Beam trawlers

The economic performance of the beam trawl fleet segment has improved significantly in 1997 and 1998. For 1998 a net profit of BEF 263 mln (EUR 6.5 mln) has been estimated, an increase of 45% compared to 1997. For 1999 however it can be expected that the economic performance of the beam trawlers will deteriorate again due to lower prices for sole. Total value of landings in the first seven months of 1999 was about 12% lower compared to the same period in 1998.

Beam trawling for flatfish and shrimp is the most important fishery in Belgium. About 90 vessels are involved and they account for almost 90% of total value of landings and 80% of total employment.

The Belgian fleet consisted of 139 vessels with a total engine power of 64,000 kW at the end of 1998. Employment has decreased from 850 people in 1993 to 750 at the end of 1998. The financial results of the fleet improved again. Net profit rose from BEF 214 mln (EUR 5.3 mln) in 1997 to an estimated BEF 295 mln (EUR 7.3 mln) in 1998.

Denmark

The major components of the Danish fleet are trawlers of a smaller to medium size, gill netters, purse seiners and Danish seiners. In earlier reports it was chosen to focus on trawlers of the west and north coast, Danish seiners in general and gill net vessels. For this edition two size classes of trawlers were included. These size classes correspond to some degree with the previous geographic subdivision of trawlers in that trawlers of the west coast are typically the larger trawlers and the trawlers in the North and other areas are smaller and more oriented towards consumption fishery.

Larger trawlers (over 200 GT)

The situation of the larger trawlers was better than in 1997. Landings of industrial species increased in 1997 and prices increased both in 1997 and 1998. Although landings of industrial species dropped back significantly in 1998, the revenue remained high due to good prices also for consumption species. Total fuel costs increased between 1996 and 1997 as did maintenance costs. However maintenance is ambiguous as it is also an indicator of optimism. Due to a shortage in international markets of fish for reduction, prices rose in the 1996-1999 period. Now the prices have come down again and landings in first half of 1999 were low, so the result in 1999 is likely to be much less advantageous compared with 1998.

Smaller trawlers (less than 200 GT)

The trawlers of less than 200 GT differ from the larger trawlers by product mix. The average size is smaller and they are distributed over more fishing areas, the North Sea, Skagerak, Kattegat and the Baltic. The share of value of consumption species is larger than for the trawlers over 200 GT. Between 1996 and 1997 gross earnings increased by some 8% and then dropped back again in 1998. Profits came down again in 1998 but remained positive, so that the overall situation and performance is positive for this fleet segment.

Danish seiners

The fleet segment of Danish seiners comprises 95 vessels or 2% of the total number of vessels and takes 6% of the value of catches. The vessels are average in size and power in the national context and the fishery is labour intensive and target at consumption species. The catch value in 1998 and the gross value added were unaltered and the financial loss continued.

Gill net

The fleet segment of gill netters comprises a large variety of vessels from very small to larger vessels fishing in the North Sea far from home port. The main shares of gross yield are from cod, sole and plaice. Landings value dropped a bit in 1998 and gross value added declined accordingly. Still profits remain positive after a minor reduction.

Finland

In the Finnish fishing fleet there is a total of 4,000 registered vessels with capacity of 24,000 GT and power of 220,000 kW. Under the MAGP IV program the fleet is divided into four segments: pelagic trawlers, demersal trawlers, off-shore salmon vessels and vessels under 12 meters with passive gear. In 1998 the total fleet landings reached about 118,800 tonnes and the total catch value was FIM 157 mln (EUR 26 mln).

Pelagic trawlers

The pelagic trawler fleet consists of about 150 vessels. In MAGP IV these vessels constitute one segment. The capacity of these vessels is about 9,100 GT (approximately 40% of total) and 45,000 kW (approximately 20% of total).

The pelagic trawler fleet is the most important segment in Finnish fishery. It accounts for almost 80% of the total volume of landings and over half of total landings value. In 1998 the value of landings was FIM 82.4 mln (EUR 14 mln) slightly less than the year before. Gross value added was FIM 54 mln (EUR 9 mln) in 1998. About half of that is accounted for by labour costs. Gross value added per person employed (FTE) was over FIM 0.4 mln, which can be considered reasonably high.

Salmon off-shore fishery

This salmon fishery has traditionally been very important for Finnish fisheries. As a consequence of restrictive management measures and falling prices salmon off-shore fishing has faced profitability problems and the number of active vessels has decreased noticeably. In MAGP IV there is a 30% reduction objective for these vessels.

In 1998 there were 32 off-shore salmon vessels left in active use. The capacity of these vessels was 800 GT with engine power of 5,900 kW. Average vessel size was 24 GT and 180 kW. Vessels are quite old on average, one third of the vessels are more than 25 years old.

In 1998 the value of landings was at its lowest level for the 1990's, just 4.2 mFIM. However, these vessels operate with low costs and gross cash flow was 1 mFIM. This was not enough to cover imputed financial costs and the vessels were making losses.

France

Bottom trawlers, 16-30m

The decrease in the total capacity of this major segment of the French fleet (387 vessels, 20% of the total revenue) goes with a continuous improvement of its economic performance. In 1998, economic indicators have reached good levels compared with other economic sectors. It is the consequence of a decrease in running costs, partly from the drastic fall of the fuel price but also from individual savings, and of a gradual change of fishing strategies that seems to have been profitable. Cod became in 1998 the first species in terms of value. However, the global fall in landings between 1997 and 1998 is worrying even if it has been overcompensated by an increase in price.

Bottom trawlers, over 30m

This segment, which accounted for 63 vessels in 1998, has seen a continuous diminution in capacity for several years. In 1998, total revenue increased and this confirms the reversal trend noticed since 1996. However, this recovery is based above all on a price effect. The fall of landings is going on and it is now noticeable even for bottom species. In all, economic situation remains fragile according to the continuous problems of stock abundance.

Gill netters, over 16m

In 1998, this segment accounted for 96 vessels and its economic performance reached good levels. However, compared with 1997, the gross cash flow and overall the net profits have roughly diminished. The drastic fall of hake landings, noticed in 1998, is worrying insofar as the total capacity is increasing due to the redeployment of trawlers towards this segment.

Germany

Mixed shrimp/fish trawlers

The 308 mixed shrimp/fish trawlers contribute nearly 20% of the gross earnings of the national German fleet. The size of the fleet was about constant since 1993 but more vessels changed to shrimp fishing. If the common method for calculation of capital cost is used the fleet made losses in 1997 and 1998. The result is unstable and depends on the success of shrimp fishery. Reasonable results are expected over 1999 due to 15% higher quota for sole and plaice and good shrimp prices. There is an indication that shrimp prices have improved structurally as result of a supply agreement between all shrimp fishermen in the Wadden Sea area and the shrimp processing industry. The value of shrimp landings was 30% up over the first half of 1999.

Fish trawlers (near water and coastal fleet)

The 265 fish trawlers contribute 33% of the national landing value. The size of this segment decreased 20% since 1993, but the gross earnings increased more than 50%. Average costs and earnings data of this very heterogeneous group indicate a strong recovery in 1998 as result of 30% higher cod prices. All other years prior to 1998 showed losses and even a negative cash flow. Laying up allowances have been essential for specific sub-segments. The outlooks for 1999 is a balance of lower quota for nearly all North Sea and Baltic stocks and higher prices for bottom fish. Half-year statistics indicate a higher value of cod landings in the Southern Baltic than in1998.

Greece

Thermaikos trawlers

For the year 1998, there were some changes concerning the size of the two groups of Thermaikos trawlers. Two vessels from the coastal group were withdrawn with EU subsidies and two vessels from the same group joined the deep-water trawler group.

In terms of profitability the year 1998 was a rather good year for both groups. Due to the increase of shrimp and common shrimp landings the average revenues per vessel increased for deep-water trawlers by 4% and for the coastal trawlers by almost 10%. This fact combined with a significant decrease of fuel price (almost 15% lower than that of 1997) resulted a in higher gross cash flow (average per vessel for deep water trawlers 65% and for coastal trawlers 113% compared to 1997). Average gross value added for both groups was 29% and 49% higher respectively. Finally average net losses were lower by 33% for the first group and by 57% for the second one.

However this positive performance of both groups was rather a result of random factors (higher quantities of certain species -lower fuel prices) and nobody can say that this positive trend will continue in the future.

Iceland

Wet fish trawlers

In 1997 there were 53 wet fish trawlers. The average size of these vessels was 432 GRT. Their landings totalled 134,000 tonnes of fish in 1997, mainly cod, haddock, saithe, redfish and shrimp. The value of these landing was IKR 7,990 mln (EUR 99.6 mln) or 13.4% of the value of all landings. These vessels employed 954 FTE.

The volume and the value of the landings of this fleet have been decreasing as the vessel-owners prefer the more profitable freezer trawlers.

If the common method is used for estimating the cost of capital the wet fish trawlers were loosing money during the period 1992-1997. The losses were similar in 1997 as they were in 1996.

The profitability of those wet fish trawlers that catch cod and also of those that catch other groundfish species may have increased since 1997 due to price increases. The prices of shrimp have, on the other hand, remained stable while the cost of catching has increased leading to lower profitability compared to 1997 for those vessels that rely on shrimp.

Freezer trawlers

In 1997 there were 65 freezer trawlers. The average size of these vessels was 710 GRT. They caught 177,000 tonnes of fish, mainly redfish, Greenland halibut and shrimp. The value of these landings was IKR 19,218m (EUR 239.7 mln) or 32.2% of the value of all landings. These vessels employed 1923 FTE.

Together with increased capacity and increased number of employees the volume and the value of the landings of this fleet have been increasing continuously during the last two decades.

The profitability of this fleet has been uneven. If the common method is used to estimate the cost of capital, the freezer trawlers were making profit during 1992-1995 but in 1996 and again in 1997 they have been making losses, although at a lower level. It is to be expected that the profitability of freezer trawlers has improved in most cases since 1997 as the market price of their production has increased substantially.

Pelagic vessels

In 1997 there were 49 vessels targeting capelin and herring. The average size of these vessels was 543 GRT. They caught 1,614,000 tonnes of fish, mainly capelin and herring. The value of these landings was IKR 10,823 mln (EUR 135.0 mln) or 18.1% of the value of all landings. These vessels employed 774 FTE.

The pelagic vessels have been making profits during the period 1992-1997 and during 1996 and 1997 the profits were in excess of 10% of the landing value if the common method is used to estimate the cost of capital. Even if there was some decline in the catch of capelin in 1998 the prices were very high as the prices of fishmeal and oil were very high ensuring large profits from the operation of pelagic vessels. In 1999 the catches were similar as in 1998 but the prices declined dramatically. It is to be expected that this decline in prices will show up in lower profits.

Boats

In 1997 there were 578 decked boats. Thereof 183 were less than 10 GRT, 364 were between 10 and 200 GRT and 31 were greater than 200 GRT. These vessels, together with small open boats, caught 274,000 tonnes of fish, mainly cod, haddock, saithe and shrimp. The value of these landing was IKR 21,644 mln (EUR 269.9 mln) or 36.3% of the value of all landings. These vessels employed 2,518 FTE.

If the common method is used for estimating the cost of capital the boats have been losing money every year during the period 1992-1997. In 1997 the losses were highest, amounting to 7.4% of the value of the landings.

Wet fish prices of groundfish increased substantially between 1997 and 1998 and the cost of catching cod decreased. The profitability of those boats that catch cod and also of those that catch other groundfish species may have increased since 1997. The prices of shrimp have, on the other hand, remained stable while the cost of catching has increased, leading to lower profitability compared to 1997 for those vessels that rely on shrimp.

Ireland

Off-shore multi-purpose fleet

The off-shore multi-purpose fleet is a major segment of the Irish fishing fleet. The fleet is involved in a multi-species fishery, targeting mainly demersal stocks in ICES areas VI and VII. In 1998 this fleet accounted for approximately 33% of total fleet GRT and 34% of the total engine power despite comprising only 12% of total registered vessels. The off-shore multi-purpose fleet segment accounted for 29% of the total revenue of the Irish fishing fleet based on some provisional figures for volume of landings. This segment's gross cash flow in 1998 is estimated to total IEP 7 mln (EUR 8 mln). Net financial result (after deduction of depreciation and interest estimates) is expected to be less than IEP 1 mln (EUR 1 mln).

During 1998 the off-shore multi-purpose fleet segment was only marginally smaller in numbers compared to 1997. The stability of vessel numbers in the segment is not true for the national fleet in general. In 1998 registered vessels in the national fleet fell by 86 to 1,112, continuing the pattern since 1995.

Italy

National fleet

The Italian fishing fleet consists of 16,667 vessels with a capacity of 225,400 GRT and 1,519.4 thousand kW. More than 13,200 units have a tonnage of less than 7 GRT. The average age is 25 year. In 1998 the total fleet landings volume reached about 450,600 tonnes and the value of total catch was ITL 3,147 billion (EUR 1,625 mln). The full time employment (FTE) was 48,342.

Trawlers

The 2,342 trawlers, with an average of 44 GRT and 220 kW, employed about 10,200 FTEs.

The total value of landings in 1998 was ITL 1,042 billion (EUR 538 mln), which corresponds to 33% of the total national value. During the period 1993-1998, both gross cash flow and value added have increased (+35% and +28% respectively).

Purse seiners

This segment is composed of 258 vessels and employs 2,866 men. These vessels are characterised by a high average of engine power (248 kW, while national average is 91 kW). Gross value added in 1998 amounted to only 4.4% of the total national fleet. Invested capital was ITL 203.5 billion (EUR 105 mln).

Midwater pair trawlers

This segment is the smallest one for number (158 units) and for total engine power (53.1 thousand kW). The fleet segment has an average of 61 GRT and 336 kW. The average age is 23 years, while the same value for the total fleet is 25 years. The total value of landings has steadily increased during the last six years. Gross value added per employee has not changed (ITL 45 mln, 23 thousand Euro).

Dredgers

Vessels of this segment represents 4.8% of the Italian vessels, 3.7% of total GRT, 3.4% of the employment and 3% of the total value of landings.

Production has dropped in the last decade and has strongly influenced the economic performance of the fleet segment. Clam production went from 34,500 tonnes in 1993 down to 26,000 tonnes in 1998 (-25%).

Multi-purpose trawling vessels

Multipurpose vessels account for almost 21% of total Italian fleet, employing 11,000 men. The average size of vessels is 13 GRT and 114 kW. The age in most of cases is older than 22 years. Net profit per employee in 1998 was ITL 15 mln (7 thousand Euro). The value of landings has increase of 22% during the period 1993-1998.

Small scale fisheries

This is the major segment of the Italian fleet; it accounts for approximately 53% of the total number but only for 19.5% of the total value of landings. The average size of vessels is 3 GRT and 29 kW, while the average size of national fleet is 14 GRT and 91 kW. Boats are older than other segments of the fleet, 26 years on average. These vessels have widely improved their economic performance in recent years.

Tuna fisheries

All vessels that asked for and obtain the authorisation to fish tuna compose this segment. The target species of this segment is tuna, but our estimates are referred to all catches in a year of activity. Tuna fleet consists of about 229 vessels. The capacity of these vessels is about 11,600 GRT (approximately 5% of total) and 54,700 kW (approximately 3.6% of total). Employees on board in 1998 were 2,732. Economic performance measured by total value of landings or gross value added has increased between 1993 and 1998.

Swordfish fisheries

Vessels that are legally authorised to use drift nets («spadara») and that are registered in a specific ministerial list compose the swordfish segment. This segment consists of 594 vessels with a total engine power of 89,900 kW. The economic performance of swordfish fisheries improved slightly in recent years. Full time employment accounts for more than 2,700 units (5.7% of the national figure). For the year 1999, all economic indicators for the total segment will decrease because a lot of vessels will stop this type of fishery to comply with the Italian Drift net Plan (Re-conversion Plan) and with the Community rules.

The Netherlands

National fleet

The Dutch sea fishery fleet can be divided into cutters and freezer trawlers. The cutter fleet consisted of 407 vessels with a total engine power of 323,000 kW in 1998. Since 1993 the number of vessels has decreased by 14%. The main fishing grounds are the North Sea and coastal waters. Pelagic species such as herring, mackerel, horse mackerel, blue whiting and sardinelas are the most important target species for the freezer trawlers who operate mainly outside the North Sea.

Beam trawlers >811 kW

The economic performance of this segment, which accounts for 73% of the total value of landings of the cutter fleet, improved in 1998 mainly because of lower costs. Especially fuel costs went down significantly (-19%) due to lower fuel prices. Depreciation and interest costs decreased as well. The total net profit of vessels in this segment increased from NLG 5 mln (EUR 2.2 mln) in 1997 to NLG 28 mln (EUR 13 mln) in 1998.

The value of landings was about 10% higher until August 1999 compared to the same period in 1998. Overall the economic results of this segment in 1999 will be probably comparable to 1998, because of rising fuel costs.

Shrimpers/eurocutters, 191-221 kW

The total value of landings increased significantly from NLG 94 mln (EUR 41 mln) in 1997 to NLG 114 mln (EUR 52 mln) in 1998. Value of landings of sole and cod doubled as a result of higher landings of both species and higher cod prices. Net profit increased also significantly to NLG 6 mln (EUR 2 mln).
It can be expected that the economic performance of this segment, which accounts for 35% of the number of vessels of the Dutch cutter fleet, will improve considerably in 1999. Value of landings of shrimp almost doubled in the first eight months of 1999 due to higher prices.

Norway

National fleet

From 1996 to 1997, the number of active vessels fell by 100, to 2,771. Their value of landings increased by 8%, while total landings rose by 10% in the period in question.

The *total* number of vessels fell with 400, to 13,252 from 1997 to 1998. The number of fishermen was reduced by 100, to 21,298. The total value of landings increased by 13% although total landings fell with 1%. This trend continues in 1999, where higher prices for demersal species compensate for a fall in quotas and landings.

Wet fish trawlers

From 1996 to 1997 the number of *active* wet fish trawlers increased from 30 to 38 vessels, indicating better prospects for this group of vessels, or merely stating an increase in quotas.

Total value of landings in 1997 was NOK 611 mln (EUR 76 mln). The volume of landings from this segment was 104,000 tonnes. Overall profit for this segment increased from 1996 to 1997 together with the number of vessels. At average per vessel level value of landings was at 1996-level with NOK 16.1 mln (EUR 145,000), but due to increased vessel costs and labour shares, net profit fell by NOK 60,000 (EUR 7,400) although there was a substantial fall in other running costs and interest costs.

Portugal

National fleet

The national fishing fleet is composed of 11,189 vessels, with a total of 114,643 GRT and 394,048 kW (31 December 1998). The total revenue of the Portuguese fishing fleet in 1998 was 64,166.7 mln PTE (EUR 318.1 mln) with a total employment of 27.2 thousand men. Main species are in value sardine, octopus, horse mackerel and miscellaneous high valued demersal fresh consumed species.

Coastal trawlers

The coastal trawling fishery represents 14.4% of the total sales and 12.9% of the total national landed volume. All the vessels operate in mainland coast over the 6 miles. One segment target to demersal fish and molluscs (78 registered vessels); the other crustaceans (29 registered vessels). This segment accounts for a value of landings of PTE 9,218.5 mln (EUR 45.7 mln). The total landed volume was 27.4 thousand tonnes. The gross value added increased about 17% from 1996 to 1998. In this period value of landings has increased 15%. The main species, in value, are horse mackerel (22% of the total sales), 'miscellaneous' demersal (26%) and prawns (16%). This segment has suffered a big drop in quantity in the first semester of 1999 (-44.5%) due to a fishermen strike.

Coastal purse-seiners

The coastal purse seiners (173 registered units) represent 16.4% of the total sales and 44.7% of the total national landed volume. All the vessels operate in the coastal zone and direct their fisheries to small pelagic (sardine and mackerel) and horse mackerel. This segment accounts a value of landings of PTE 10,530.1 mln (EUR 52.2 mln) and a total landed volume of 94.9 thousand tonnes. The gross value added increased about 120% from 1993 to 1998 and the value of landings about 74%. In terms of volume, landings have always been, in this period, between 103 and 85 thousand tonnes. Several assessments and surveys have been carried out because of the concern about the evolution of the biomass and some measures have been taken, namely in the field of reducing the number of vessels and fishing days per vessel. In the first semester of 1999 landings has increased in volume (6.5%) and in value (29.8%) comparing with the first semester of 1998.

Spain - Atlantic

The 300's fleet

The 300's fleet usually operates in ICES areas VI, VII, VIIIa,b,d,e and comprises about 1.3% of the Spanish fishing vessels, 9% of total GRT, 5% of the employment and takes 8.1% of the value of landings. There has been a decreasing trend in the value of landings for the last six years. In 1998 it dropped 2.9% compared to 1997, but running costs went down more than the value of landings (an 8.1%). For this reason, in 1998, the gross value added scarcely changed with regarding to 1997. Drop in the employment promoted cost savings (in 1998 a crew share was a 12.5% less than in 1997). Consequently in 1998 the gross cash flow and the net profit increased (30.1% and 60.2% from 1997, respectively). The 1999 economic situation will be probably close to the results obtained in 1998.

Spain - Mediterranean

Most catches and incomes are realised by purse seiners and trawlers. These two segments represent 31% of the total number of vessels, and about 60% of the total landings in value and volume and in capacity as well (GRT and kW).

Trawling

There were 1,148 vessels in 1998, representing 22% of the total Mediterranean Spanish fleet. With respect to engine power and tonnage, the percentage is larger, 56% and 64% respectively.

Trawlers catch a great variety of species (shrimps, hake and other white groundfishes), which represent only 22% in volume. Thus landings are not very important in volume but prices are high, which lead about 45% in the value of landings.

Purse seine

There were 505 vessels in 1998, representing 9.5% of the total Mediterranean Spanish fleet. With respect to engine power and tonnage, the percentage is larger, but not excessively, 18% and 15% respectively.

Purse seiners catch pelagic species (sardine, anchovy, etc.) in big quantities, 45% of total landings. But revenues are not very important, 20% of landings, because those pelagic species get low market prices.

Sweden

The total landings of the Swedish fleet were in 1998 401,000 tonnes to a value of SEK 1,045 mln (EUR 117.3 mln). The fleet contained in 1998 2,132 vessels with a total GT of 44,700 and an engine power of 234,500 kW. Of existing six MAGP segments, four have been described, whereas in the 1998 report only the pelagic segment was compiled. These four segments accounts for about 90% of total landed values.

Pelagic vessels

The Swedish pelagic fishery represents a major part of the total Swedish fishery, corresponding to over 50% of total income and over 90% of total landed volume. The segment has been divided into two sub-segments because its heterogeneity. The larger vessels are targeting herring, mackerel and sprat while the smaller ones are fishing for herring and vendace. The total pelagic segment (1998) consists of 143 vessels with GT of 21,200 and a total engine power of 68,800 kW. The larger vessels are 69 in numbers, they have a GT of 19,500 and an engine power of 56,200 kW. This sub-segment is by far the most important one.

Shrimp trawlers

The segment of shrimp trawlers is characterised by rather old vessels fishing for prawns and nephrops in Skagerrak and the Kattegat. The segment stands for 10% of landed values but only 3% in volume. In 1998 it contained 64 vessels with a GT of 5,000 and an engine power of 20,700 kW.

Demersal trawlers

The segment of demersal trawlers accounts for 31% of total income but only 4% of total landed volume. Because the segment is rather heterogeneous, it has been divided into three sub-segments. These are: vessels bigger than 20 meters, vessels smaller than 20 meters and trawlers mostly fishing for nephrops. The target species for the first two sub-segments is cod. The third segment has a more diverse catch composition with species like nephrops, cod and prawn. The total segment consists of 183 vessels with a GT of 10,600 and a total engine power of 48,700 kW.

Passive gears

The segment of vessels using passive gears for demersal species accounts for 3% of landing values but only 0.7% of total volume. Target species for the segment are cod and turbot. In 1998 it contained 65 vessels with a GT of almost 2,000 and a total engine power of 10,800 kW.

United Kingdom

In 1998 there were approximately 7,600 active fishing vessels in the UK fleet employing 17,847 fishermen (3,453 on a part time basis). Vessels over 10 metres in length accounted for around 90% of the total registered tonnage of the UK fleet, which in 1998 was around 209,600 tonnes. Fleet landings by value in 1998 totalled GBP 661 mln (EUR 963 mln).

Scottish demersal trawlers

Scottish demersal trawlers (over 10 metres in length) account for some 13% of the registered UK fleet tonnage. Around 10% of the total UK population of fishermen are employed within the segment. In 1998 these vessels accounted for almost 30% (GBP 189 mln, EUR 279 mln) of total UK fleet landings by value. As predicted in the 1998 report, the fleet returned to profitability in 1998 after a number of years of recorded losses. Improved whitefish prices, lower fuel costs and falling interest rates appear to have been the primary factors contributing to net profits of around 11% of the value of this fleet's landings. Gross value added per fisherman employed continued to increase between 1997 and 1998 from GBP 35,600 to GBP 54,400.

Scottish nephrops trawlers

In 1998 the nephrops trawl fleet in Scotland accounted for around 5% of the total registered tonnage of the UK fleet. Around 1,800 fishermen were employed in the sector, approximately 7% of the fishing population. The 1998 value of landings was GBP 71.1 mln, EUR 105 mln (11% of UK fleet landings by value). After recording a small net loss in 1997 (there were concerns about the validity of the 1997 figures), the fleet returned to profitability in 1998, recording its highest net profit over the period 1993-1998 (some 26% of the value of landings). Gross value added per fisherman employed rose from GBP 18,600 in 1997 to GBP 35,209 in 1998 (EUR 52,050).

Scottish demersal seiners

The fleet is small relative to the Scottish demersal trawl segment. In 1998 the seine fleet accounted for approximately 3% of total registered fleet tonnage. Around 500 fishermen were employed in the fishery, less than 3% of the total number of fishermen employed in the UK. In 1998, landings by value from the Scottish seine fleet were around 7% (GBP 45.5 mln, EUR 67.3 mln) of total UK fleet landings. A historical time series is not yet available but the fleet did record a net profit in 1998 of GBP 6.2 mln (EUR 9.2 mln), some 14% of the value of its landings. It is anticipated that more vessels could switch to this method in a bid to secure higher prices for their catch.

Northern Ireland nephrops trawlers

In 1998 the fleet accounted for less than 2% of registered UK fleet tonnage. Approximately 460 fishermen were employed in the segment, about 2.5% of the UK total. The value of landings from the nephrops trawl fleet were approximately GBP 15.5 mln (EUR 22.9 mln), around 2% of the value of UK fleet landings. Despite a fall in nephrops prices between 1997 and 1998, the fleet recorded a net profit of GBP 2.2 mln, some 14% of the value of its landings. Gross value added per fisherman employed was GBP 20,905 (EUR 30,900), substantially less than the figure recorded for the Scottish nephrops trawl fleet.

0. European overview

Scope of the report

This second Annual Report on *Economic Performance of Selected European Fishing Fleets* presents data on 15 countries, including all relevant EU Member States, Iceland and Norway. Details on costs and earnings of 46 specific fleet segments can be considered as a relatively reliable proxy for the performance of most European fisheries.

For most segments performance of 1998 is discussed. In several cases, only data for 1997 was available. In view of the general trends, it can be safely assumed that the 1998 results were at least as good, if not better than in 1997. Assessment on the basis of 1997 is therefore 'on the safe side'.

Coverage of the fisheries of individual countries is presented in table 0.1. Overall, the segments included in this report represent about 45% of European fisheries, depending on the indicator used. As for individual countries the coverage varies from about 1-3% in Greece to 100% for Italy, Sweden and Iceland. Coverage of several other countries is relatively high and could be probably increased further. This applies for Belgium, Denmark, Germany and Netherlands. There exists also substantially more information on Norway. The remaining countries (France, Greece, Portugal, Ireland, Spain and the UK) are presented to the limit of the current data availability.

As for the scope of the report, it may be concluded that a further increase in the coverage of the European fisheries can be only achieved if substantial additional resources (supported by the necessary institutional arrangements) would become available in the future. At the same time it must be pointed out that in various EU Member States relevant data does exist (particularly on catches), but it is not accessible for the purposes of this report.

Table 0.1 Coverage of the countries

	Value of landings	Volume of landings	Employment	Number of vessels	GRT	kW
All countries	47%	30%	35%	22%	41%	40%
EU	48%	25%	35%	25%	39%	55%
Belgium	88%	85%	80%	65%	83%	83%
Denmark	89%	na	93%	46%	90%	93%
Finland	55%	77%	6%	5%	42%	23%
France	32%	25%	23%	9%	35%	26%
Germany	52%	na	31%	25%	na	na
Greece	1%	2%	0%	0%	4%	3%
Iceland	100%	100%	100%	100%	100%	na
Ireland	29%	15%	12%	12%	33%	34%
Italy	100%	100%	100%	100%	100%	100%
Netherlands	64%	20%	70%	72%	53%	78%
Norway	6%	3%	4%	0%	13%	na
Portugal	31%	58%	19%	3%	19%	22%
Spain	15%	na	23%	10%	20%	39%
Sweden	100%	100%	55%	21%	87%	64%
United Kingdom	33%	na	na	8%	16%	na

Economic results in 1998[1]

The 15 countries discussed in the report produced in 1998 approximately 12.4 mln tonnes of fish with an estimated value of EUR 9.8 bln. For the EU alone these values amounted to 7.1 mln tonnes and EUR 7.8 bln.

Some 280,000 fishermen, of whom 253,000 in the EU, are working in this sector. Their average remuneration is approximately 15,000 Euro per year. This seems in some countries rather low. It is not clear to which extent fishing represents the sole source of income. Furthermore profit as well as depreciation and interest on capital constitute part of the disposable income. Average gross value added per fisherman amounted to about 26,000 Euro per year. This seems a more realistic figure. The average age of vessels in many fleet segments is quite high (over 25 years) and therefore costs of depreciation and interest are rather low.

Most important economic indicators per fleet segment are summarised in table 0.2.

Particular attention is drawn to the columns on 'Economic performance'. For the medium term performance the average realised revenues for 1996-98 (in some case 96-97) was compared to the required 'break-even revenue'. The BE-revenue represents a level of production at which all costs are covered, so that the segment could implement regular replacement investments. The ratio realised / break-even revenue was classified in four levels of performance:

- ++, ratio > 105%, which indicates good performance

[1] In some cases data for 1997 had to be used as a proxy.

- +, ratio between 95% and 105%, which is still reasonable in view of natural fluctuations. In this respect it should be mentioned that an economic result at break-even level, is usually quite profitable in fiscal terms.
- -, ratio between 85% and 95%, which could be considered as becoming weak.
- --, ratio under 85%, when losses, probably also in fiscal terms, have been incurred in the previous several years. In this situation, the commitment of the banks to support the fishing company will be gradually eroded.

For the short-term performance, gross cash flow of 1998 was compared to the average gross cash flow of 1996-97. Gross cash flow is a good short-term indicator in fisheries. Positive GCF means that the company is still capable of meeting at least part of its obligations to its creditors (bank). Empirical research shows that companies can survive short-term losses as long as the cash flow remains positive. Three performance classes are distinguished:

- +, ratio > 105%, meaning that the situation is improving;
- +/-, ratio between 95% and 105%, which is considered as short term stability
- -, ratio dropped under 95%, which can be classified as deterioration.

The overview shows that in medium term 36 out of 46 segments have achieved satisfactory to good performance. Only 6 segments fall in the categories below 95%. Furthermore, in 1998 23 segments have improved their performance, while 17 faced deterioration. The relatively good economic performance can be largely ascribed to three causes: reduction of the size of the segments and in some cases also higher fish prices and low fuel costs.

Table 0.2 Main indicators by country

	Value of landings (mEUR)	Employment	Volume of landings (1000 t)	Fleet - number of vessels	Fleet - total GRT (1000)
Belgium	86	750	27	139	23
Denmark	476	7,296	1,814	4,582	98
Finland	26	2,946	118	3,987	23
France	980	15,476	598	6,119	167
Germany	182	4,347	245	2,295	66
Greece	*270*	38,644	*147*	20,455	109
Iceland	744	6,169	2,199	745	127
Ireland	*156*	*5,494*	*261*	1,112	54
Italy	1,625	48,342	450	16,667	225
Netherlands	389	2,320	443	422	146
Norway	1,231	21,298	3,024	13,252	92
Portugal	318	27,200	212	11,189	115
Spain	2,214	79,409	1,444	18,852	547
Sweden	117	2,500	401	2,132	45
United Kingdom	963	17,847	924	7,639	210
All countries	9,779	280,038	12,306	109,587	2,046
EU	7,804	252,571	7,083	95,590	1,827

Note: Figures in italics were estimated exclusively to complete this table and are not based on material presented elsewhere in this report.

Table 0.3 Indicators for individual segments

Country	Segment	Gross val. added/ employed EUR 1000	Gross value / vessel EUR 1000	Landings/ vessel (tonnes)	Economic performance		Average vessel size	
					'96-'98	'98	Crew	GRT
Belgium	Beam trawlers	74	843.6	255.6	++	+	6.7	211.1
Denmark	Trawlers, >200 GT	162	1,264.7	0.0	++	+	4.9	332.1
	Trawlers, <200 GT	63	247.1	0.0	++	+/-	2.4	40.2
	Danish seiners	14	63.2	35.4	--	-	3.2	11.3
	Gill netters	39	280.5	191.6	++	-	4.9	58.9
Finland	Pelagic trawlers	70	93.1	614.9	+	+	0.9	61.5
	Salmon off-shore fleet	7	22.2	9.4	na	na	1.7	25.0
France	Bottom trawlers, 16-30m	51	511.9	237.2	+	+	5.5	74.7
	Bottom trawlers, >30m	na	1,376.4	779.0	na	na	12.6	359.1
	Gill netters, >16m	37	350.6	108.8	++	+/-	6.2	77.7
Germany	Shrimp trawlers	31	118.0	na	+	-	2.2	na
	Fish trawlers	54	228.4	na	+	-	2.5	na
Greece	Thermaik. deep w. trawl	27	221.3	63.5	--	+	4.1	79.5
	Thermaik. coastal trawl	26	136.4	37.3	--	+	3.0	71.9
Iceland	Wet fish trawlers	55	1,874.0	2,525.7	++	+	18.0	431.8
	Freezer trawlers	74	3,675.6	2,725.8	+	-	29.6	710.0
	Pelagic vessels	115	2,745.9	32,941.4	-	-	15.8	543.4
	Boats	59	465.5	473.4	-	-	4.4	53.5
Ireland	Off-shore multi purpose	34	355.1	302.3	+	+	5.0	139.5
Italy	Trawlers	33	228.9	52.6	++	-	4.4	43.9
	Purse seiners	17	274.3	181.0	++	-	11.1	48.1
	Midwater pair trawlers	24	230.3	295.4	++	-	6.0	61.4
	Dredgers	24	60.2	32.4	++	+	2.1	10.4
	Multi-purpose trawlers	28	142.1	33.1	++	-	3.2	13.1
	Small scale fishery	13	35.9	8.1	++	+	2.1	3.0
	Tuna fleet	30	153.5	53.7	++	-	3.6	50.8
	Swordfish fleet	20	138.6	16.5	++	-	4.6	15.2
Nether-lands	Beam trawl. 191-221 kW	64	364.8	140.8	+	+	3.4	77.5
	Beam trawl. >811+ kW	94	1,221.5	417.2	++	+	7.0	411.0
Norway	Wet fish trawlers	41	2,006.0	2,712.2	++	-	24.4	321.6
Portugal	Coastal trawlers	8	427.1	256.0	++	+	29.9	133.7
	Coastal purse seiners	17	301.8	548.7	++	+	11.5	44.6
Spain	'300 fleet'	33	742.6	Na	++	+	15.0	195.1
	Trawlers - Mediterranean	0	114.4	36.3	--	+	6.9	47.2
	Purse seiners - Mediter.	0	116.7	139.0	++	-	13.8	25.5

Table 0.3 Continued

Sweden	Pelagic vessels >20m	76	890.8	5,301.4	++	+	6.0	282.6
	Pelagic vessels <20m	21	58.4	159.5	++	+	2.0	23.0
	Shrimp trawlers	38	179.3	43.8	++	+	3.0	78.1
	Demersal trawlers >20m	25	363.5	274.4	++	-	5.0	153.8
	Demersal trawlers <20m	51	180.6	76.9	++	-	2.0	41.0
	Nephrops	44	147.2	24.8	++	+	2.0	29.5
	Net/hook fishery	21	59.5	46.2	++	+	2.0	29.2
United Kingdom	Scottish demersal trawl	107	1,142.6	0.0	+	+	6.0	140.0
	Scottish nephrops trawl	52	341.5	0.0	++	+	4.0	33.3
	Scottish demersal seiners	72	921.3	0.0	na	na	7.0	78.0
	N. Irel. nephrops trawlers	31	198.1	0.0	na	Na	4.0	34.0
Average all segments		27	184.4	156.1			4.0	34.2
Average EU segments		24	156.2	64.7			3.8	29.5

1. Belgium

Prepared by LEI

1.1 National fleet

Current structure

Belgium is one of the smallest fish producers in the EU. Main target species of the fleet are flatfish (plaice and sole), cod and crustaceans which are mainly caught in the North Sea. Other important fishing grounds are the Irish Sea, the eastern English Channel and the Celtic Sea. Belgian vessels caught about 27,000 tonnes of fish in 1998, almost one third of which were landed in Dutch ports. Most of the vessels use the beam trawl. The value of landings was BEF 3,483 mln (EUR 86 mln) in 1998. About 750 fishermen (FTEs) are working in the Belgian fishery of which approximately 100 have the Dutch nationality.

The Belgian fleet consisted of 139 vessels with a total engine power of 64,000 kW at the end of 1998. The fleet can be further divide into 40 shrimpers, 90 beam trawlers and 9 otter trawlers. Within the group of beam trawlers there are 31 eurocutters (vessels with 221 kW engine power), 9 medium sized beam trawlers and 50 large beam trawlers. About 25% of the Belgian vessels have been built in the last 10 years. Many of the older vessels are shrimpers with less then 70 GRT.

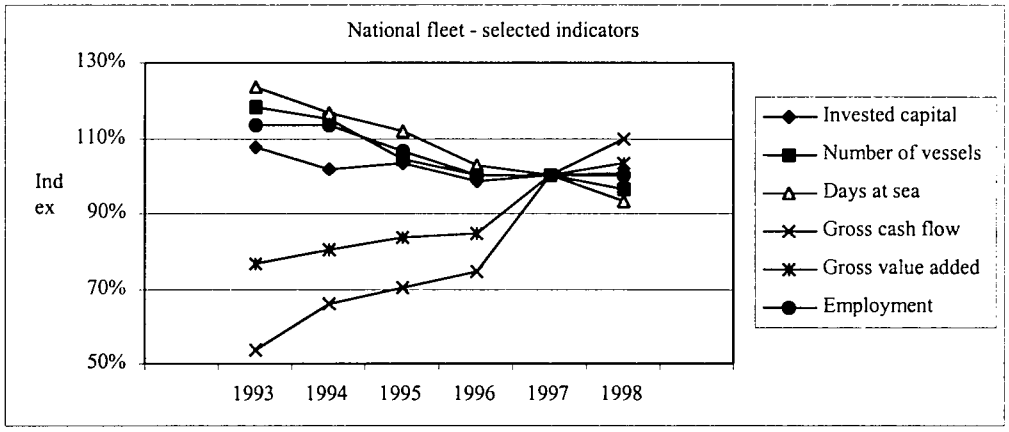
Main trends

Since 1990 the number of vessels has decreased by more than 25%. Especially the number of otter trawlers and shrimpers has been reduced significantly. Capacity in terms of total GRT and kW decreased less sharply; this indicates that the average vessel has become larger and has more engine power than before. In 1998 four new vessels were build of which three beam trawlers while 9 vessels retired from the fishery sector.

As a result of the fleet reduction employment has decreased from 850 people in 1993 to 750 at the end of 1998.

Volume of landings decreased gradually with 20% since 1993. Because of higher prices for flatfish the total value of landings has increased by about 15% in recent years.

The financial results of the fleet improved again in 1998. Net profit rose from BEF 214 mln (EUR 5.3 mln) in 1997 to an estimated BEF 295 mln (EUR 7.3 mln) in 1998. Gross value added increased about 30% between 1993 and 1998 because of higher earnings.



1.2 Beam trawl

Role in total fishery

Beam trawling for flatfish and shrimp is the most important fishery in Belgium. About 90 vessels are involved and they account for almost 90% of total value of landings and 80% of total employment. In terms of capacity the beam trawl segment has a share of 83% of the kWs of the national fleet. The North Sea is the most important fishing area for the beam trawlers. Belgium has fulfilled all requirements of MAGP III regarding the beam trawl segment.

Three groups of beam trawlers can be distinguished:

- Eurocutters (221 kW); vessels built after 1981 above 65 GRT allowed to fish within the 12 mile zone;
- medium sized beam trawlers (222-662 kW);
- large beam trawlers (662-882 kW).

The average age of the beam trawlers is 13 years, compared to 19 years for the national fleet. In the nineties 22 new vessels have been build totalling 1,400 kW engine power.

Other vessels that use the beam trawl are shrimpers (inshore fisheries) with less than 221 kW engine power. These vessels are not included in this analysis of the beam trawl segment because they are less dependent on TAC-decisions.

Economic performance

The economic performance of the beam trawlers has improved significantly in 1997 and 1998. In the years 1992 to 1996 only losses were reported. For 1998 a net profit of BEF 263 mln (EUR 6.5 mln) is estimated, an increase of 45% compared to 1997.

Value of landings remained rather stable in spite of lower landings of flatfish. This was compensated however by higher prices for plaice. Furthermore value of landings of

cod increased by almost 50%. Fuel costs went down considerably because of 20% lower fuel prices and slightly less days at sea. Other costs remained stable.

In general the large beam trawlers with greater engine power (662-882 kW) are more profitable than Eurocutters (221 kW). While the Eurocutters suffered significant losses until 1997, large beam trawlers managed to make some profits. Since 1997 both groups are reporting profits.

Gross value added increased from BEF 1,732 mln (EUR 43 mln) in 1997 to about BEF 1,800 mln (EUR 45 mln). The number of fishermen also increased slightly so that the average gross value added per fisherman remained stable at BEF 3 mln (EUR 70,000). Gross cash flow increased by 10% to BEF 841 mln (EUR 21 mln) in 1998.

The number of beam trawlers increased slightly from 87 in 1997 to 90 vessels in 1998. Three new vessels were build totalling 1800 kW engine power.

Outlook for 1999

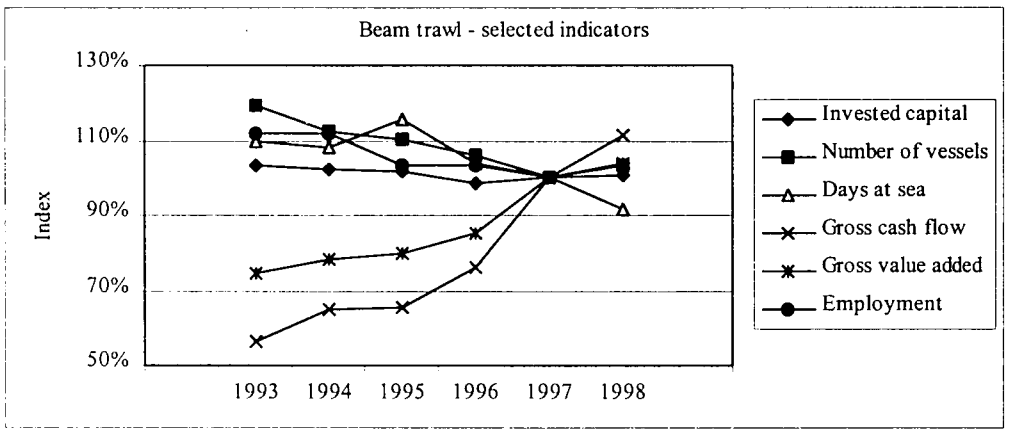
It can be expected that the economic performance of the beam trawlers will deteriorate significantly in 1999.

Value of landings of all Belgian vessels (Belgian harbours) was BEF 1,364 mln (EUR 34 mln) in the first seven months of 1999. This is about 12% lower compared with the same period in 1998. The value of landings of sole, which accounts for about half of total value of landings, decreased by 25% due to lower prices. The value of landings of plaice increased by more than 40%.

Total volume of landings decreased slightly compared to the first seven months of 1998. Landings of cod dropped by about 30%.

Total costs for the fleet will probably be somewhat higher because of increasing fuel prices (+20%). This is compensated somewhat by less days at sea.

Investments in the Belgian fleet are expected to rise in the coming years. In 1999 several new large beam trawlers will be built and more investments are foreseen.
Only national data were available for 1999. As beam trawlers account for almost 90% of national landings this data should be representative for the beam trawl segment.



1.3 Comments on data

For 1998 data on costs and earnings were not yet available for the different fleet segments. Estimations have been made on the basis of the 1997 cost structure and 1998 fuel prices, interest rates and data about landings. Invested capital was based on the book value of the vessel.

Cost of capital was calculated for 1997 and 1998 according to the common method. Replacement values per vessel were estimated according to Dutch standards for building costs, which takes into account a normative amount per GRT. With respect to the years before 1997, capital costs were estimated on the basis of developments in fleet structure and building costs. For the book value (and investment value) of old shrimpers an expert judgement has been made to take account of the residual value of the vessel after depreciation.

In the previous Annual Reports capital costs were based on actual depreciation and interest costs in the accounts of the firm. Compared to the common method, actual depreciation costs are generally 10% higher while actual interest costs are about 10% lower.

Subsidies and financial earnings have not been taken into account.

2. Denmark

Prepared by DIFER

2.1 National fleet

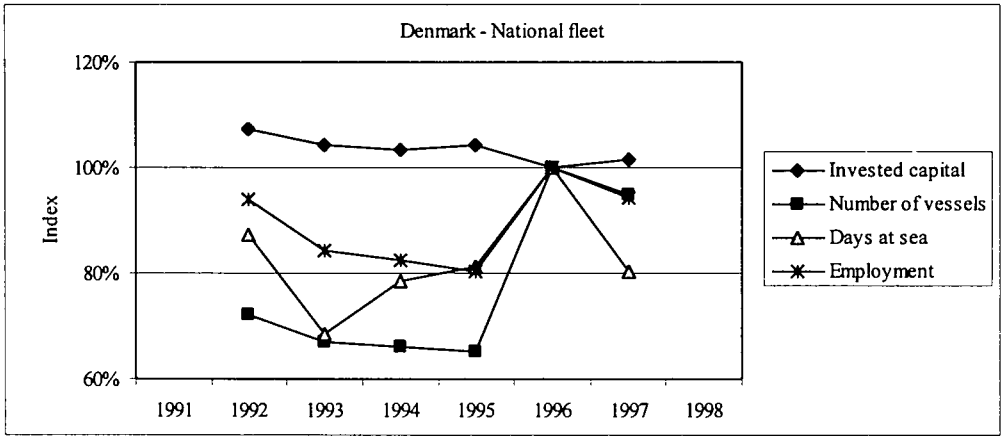
Current structure

The major components of the Danish fleet are trawlers of a smaller to medium size, gill netters, purse seiners and Danish seiners. In earlier reports it was chosen to focus on trawlers of the west and north coast, Danish seiners in general and gill net vessels. For this edition two size classes of trawlers were included. These size classes corresponds to some degree with the previous geographic subdivision of trawlers in that trawlers of the west coast are typically the larger trawlers and the trawlers in the North are smaller and more oriented towards consumption fishery.

Employment has been dropping continually partly due to the increased productivity and partly due to decommissioning. As quoted below direct employment in the national fleet dropped from 8,300 men in 1986 to 7,300 in 1997, where decommisioning stopped.

Main trends

Over the period from 1992 to 1998 the landings have fluctuated, but the level has changed little. The landings value in 1998 was EUR 476 mln, this is higher than average over the period. The years 1993, 1994 and 1996 were years with a low landings value. During 1996 to 1998 prices for industrial species were unusually high and landings were high in 1998, but have dropped again in 1999 as have prices. Prices for consumption species have ramained high.



Costs were calculated for the segments but not for the whole fleet. The number of vessels dropped but the number of GRT and total kW was almost stable after 1993. So the average size and power simply grew to compensate for the large number of vessels decommisioned over the period. Decommissioning stopped after 1996.

Following a number of years with crisis, the general sentiment of the remaining fleet is one of relief, and expectations to the future, even to such an extent that new buildings to the fleet are considered.

2.2 Trawlers, larger (over 200 GT)

Role in total fishery

The fleet segment of trawlers over 200 GT comprises 3% of the number of vessels in the national fleet. The share of tonnage is 45%, so these vessels are above average size in the national fleet. The share of national crew is only 9%, showing a relatively capital-intensive fishery. (Only the purse seiners and a few combination vessels are larger). The landings value of the larger trawlers was 37% of the national total in 1997.

The large trawlers have almost three quarters of their earnings from industrial species. The average industrial share is around two thirds of value. Most important industrial species are sandeel, Norway pout and horse mackerel, whereas in consumption fishery the species of major importance in terms of gross value were: plaice, saithe, cod, herring and hake.

Economic performance

The situation of the larger trawlers was better than in 1997. Landings of industrial species increased in 1997 and prices increased both in 1997 and 1998. Although landings of industrial species dropped back significantly in 1998, the revenue remained high due to good prices also on consumption species. Total fuel costs increased between 1996 and 1997 as did maintenance costs. However maintenance is ambiguous as it is also an indicator of optimism.

Gross value added increased by 16% in 1998. Losses changed to profit from 1996 to 1997and profits doubled in 1998. Partly due to the decommissioning of a significant number of vessels in the nineties the outcome per vessel is looking better. Since the economic situation has improved there is a renewed interest in new buildings and more is spent on maintenance.[1]

[1] "For this edition of the report a new specification of fleets was chosen (aligned with the new national accounting statistics). Since the fleet definitions were changed over the period, graphics on individual fleet segments are not presented. See also notes to tables and the section on comments to data below."

Outlook for 1999

The development in 1999 has been very diasdvantageous to the large trawlers. Landings og industrial species have dropped significantly as have prices. Due to a shortage in international markets of fish for reduction, prices rose in the 1996-1999 period. Now the prices have come down again, so the result in 1999 is likely to be much less advantageous as in 1998.

2.3 Trawlers, less than 200 GT

Role in total fishery

This fleet segment comprises 13% of the number of vessels and 24% of gross tonnage by which it took 30% of landings value in 1997.

The trawlers of less than 200 GT differs from the larger trawlers by product mix. The average size is smaller and by nature they have easier access to go into different waters, North Sea, Skagerak, Kattegat and the Baltic. The share of value of consumption species is larger, than for the trawlers over 200 GT.

Economic performance

Between 1996 and 1997 gross earnings increased by some 8% and then dropped back again in 1998. Gross cash flow increased by 12% betweeen 1996 and 1997. Then dropped again in 1998. Depreciation dropped slightly in 1997 with the result that net profits rose significantly. In 1998 profits came down again but remain positive, so that the overall situation and performanceeis positive for this fleet segment.

Outlook for 1999

Since the smaller trawlers are less dependent on industrial species and more dependent on consumption species, which has been very good in the first half of 1999 the result for the smaller trawlers is expected to be better in 1999 than in 1998, particularly for the vessels participating in the winter-spring cod fishery in the Baltic Also herring fishery has been good. However the vessels participating in the industrial fishery may expirience a reduction in earnings since this fishery both in terms of landings and prices was much less succesful in 1999 compared to the very good 1998.*

*See footnote 1

2.4 Danish seiners

Role in the total fishery

The fleet segment of Danish seiners comprises 95 vessels or 2% of the total number of vessels. The vessels are average in size and power in the national context, but in international context the vessels are small. Employment is a little higher (6% of the national total) showing a relatively labour intensive fishery*.

Seiners only catch species for human consumption. The most important species for the smaller vessels of less than 30 GT are plaice and cod, whereas for the larger vessels plaice, cod, haddock and hake are important.

Economic performance

Landings value were almost the same in 1998 as in 1997 Landings were unchanged and prices were good especially for cod and plaice which are important for this fleet segment. Most cost items were unchanged and gross value added increased slightly.

Outlook for 1999

In the first half of 1999 the plaice fishery has been very good with and increase in landings as well ass prices. Prices for cod remain good, so the over all expectation is that 1999 will be better than 1998. However since net profits for two years have been negative this will also be required to continue the fishery.

2.5 Gill net

Role in the total fishery

The fleet segment of gill netters comprises a large variety of vessels from very small vessels which are occationally used for part time fishing to larger vessels fishing in the North Sea far from home port. So the number of vessels is large and depends on the definition taken, particularly regarding the lower limit.Also the employment is a matter of definition. The main shares of gross yield are from cod, sole and plaice.*

* See footnote 1

Economic performance

Landings value dropped from EUR 83.2 mln to EUR 75.2 mln in 1998. Prices for cod which is important to this fleet remain higher. Also prices for plaice and sole were good in 1997-1998. The result was that gross value added and profits were very satisfactory.

On the whole the sector was satisfied with the situation and the outlook for the remaining vessels. Replacement and modernisation of the ageing fleet has taken place.

Outlook for 1999

Gill net vessels operate mainly in the North Sea and Skagerrak benefit form increased quota of cod. Prices are good, so the gross yield is expected to be slightly over 1998. The gill net vessels depending on sole will probably have a less positive results since sole prices dropped by almost 25% in the first half year of 1999.

2.6 Comments on data

The Ministry has set up a system for collection of a sample of accounts and publish statistics on an annual basis. The DIAFE accounting data base. Thus acounting information for the fishery now is available. Aggregate data which are used in the Economic Report are generated from sample information. The data presented are thus an estimate based on available sample information. For this edition of the Economic Report it was chosen to use a mix of the information provided by the accountants and advisors of the fishery and the official sample of accounts. The reason for this is that accounting information for 1997 is only available in the non offical version at the present time. Effort data were previously given in in terms of trips It is now possible to make an estimate for days-at-sea.

Cost estimations for the Danish seiner fleet, which is not geographicly subdivided were based on extrapolations of data regarding seiners of the west cost and as such only indicative of the level and development.

Missing information. The calculations of economic performance of the trawlers of the North was based on extrapolated cost information and should only be regarded as indicative of the distribution of costs.*

* See footnote 1

3. Finland

Prepared by FGFRI

3.1 National fleet

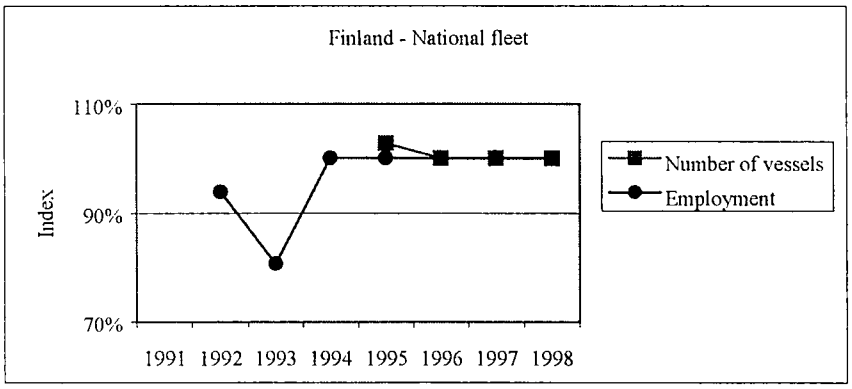
Current structure

In 1998, the Finnish fishing fleet numbered a total of 4,000 registered vessels with a capacity of 24,000 GT and power of 220,000 kW. Under the MAGP IV program the fleet is divided into four segments: pelagic trawlers, demersal trawlers, offshore salmon vessels and vessels under 12 meters with passive gear. Most of the vessels (about 3,600) are less than 12 meters in length and used in inshore fishing. In the pelagic trawler segment there are 240 registered vessels with a capacity of 11,000 GT and power of 60,000 kW. In the demersal trawler segment there are only a few vessels left as a result of a decommissioning scheme relating to MAGP IV. In the salmon fishery there are about 100 vessels (capacity of 2,700 GT and power of 18,000 kW) using drift nets and longlines.

In 1998 the total fleet landings reached about 118,800 tonnes and the total catch value was FIM 157 mln (EUR 26 mln). There were some 3,000 professional fishermen but most of them were part-time.

Main trends

The total volume of landings has increased steadily since the beginning of the 1990s, principally as a result of the increasing demand for Baltic herring and sprat for industrial purposes. The cod stocks in the Baltic Sea have been weak during the last few years and many demersal trawlers have been decommissioned. In the salmon fishery the restrictive management measures which have been put in place over the past few years have put pressure on the fleet segment. The number of fishermen has remained more or less constant since 1995. In MAGP IV there is a 20% reduction objective for demersal trawlers and 30% for offshore salmon vessels.



3.2 Pelagic trawlers

Role in the total fishery

Based on the logbook data there were 148 pelagic trawlers in active use in 1998. In MAGP IV these vessels constitute one segment, which do not have reduction objectives. The capacity of these vessels is about 9,100 GT (approximately 40% of total) and 45,000 kW (approximately 20% of total).

About 100 of these vessels are under 20 metres long. An average vessel is just over 18 metres with capacity of 60 GT and engine power of 300 kW. The variation in fleet composition is quite large and ranges from 400 GT and 1,500 kW to 6 GT and 40 kW. On average, vessels are quite old - about 28 years, with only a few vessels being built in recent years. On average, the larger vessels are older than smaller ones.

There are no solid data for the employment on board but, based on a survey, the estimated employment on board in 1998 was 360 men. As there is quite a large variation in activity of these vessels the employment in FTE was around 130 man-years.

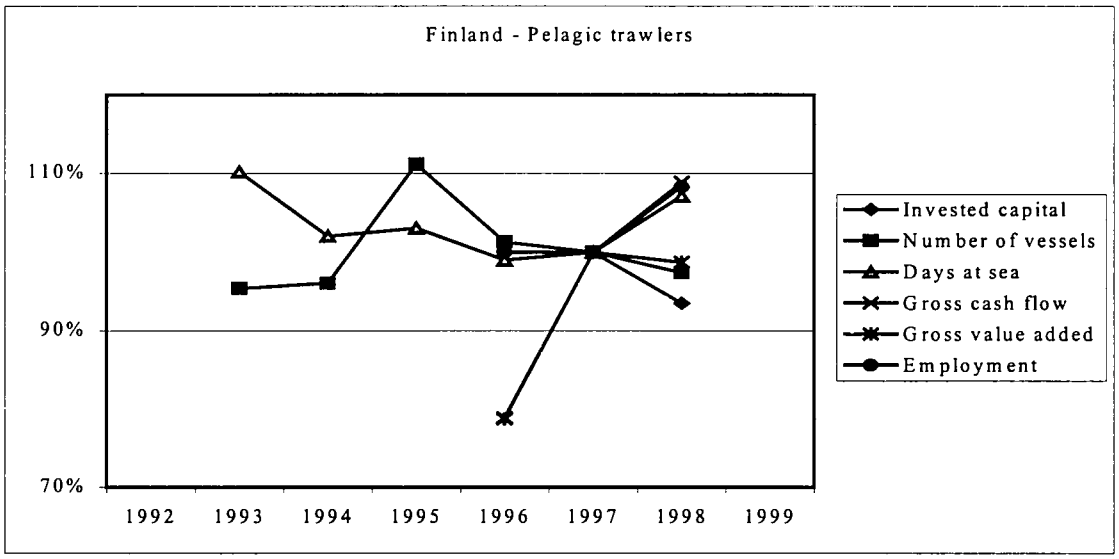
Pelagic trawlers mainly catch Baltic herring but in the last few years sprat has become a more important species. Catches of Baltic herring and sprat are about 90% of the total volume of Finnish professional marine catches and the value of these catches account for about 60% of the total. The Finnish pelagic trawler fleet accounts for about 80% of the total Finnish Baltic herring and sprat catches.

Catches of pelagic trawlers have increased steadily since the beginning of the 1990s. The value of catches also increased until 1995. After joining the EU, Finland abolished the price subsidy scheme that was in place for Baltic herring. Consequently, in 1995 the value of Baltic herring catches declined even though the volume of landings increased. Since then growing demand has increased both the volume and prices of Baltic herring.

Economic performance in 1998

Strengthening demand has increased both prices and volume until 1997. In 1998 the value of landings were FIM 82.4 mln (EUR 14 mln) which was slightly less than the year before.

Gross cash flow was almost FIM 30 mln that shows that operating costs of the fleet is reasonably low compared to other European fleets. Gross value added was FIM 54 mln (EUR 9 mln) in 1998. About half of that is accounted for by labour costs. Gross value added per employed (FTE) was over FIM 0.4 mln which can be considered reasonably high.



Outlook for 1999

The pelagic trawler fleet is dependent on industrial demand. In recent years demand, rather than TACs, has limited fishing. The collapse of the Russian economy lead to the cessation of the export of Baltic herring in 1998. At the same time the demand of fish for industrial purposes has decreased. This reduced demand resulted in falling prices especially for fish used for fodder. These factors may decrease both revenue and profitability of the fleet this year.

3.3 Salmon offshore fishery

Role in the total fishery

Salmon offshore fishery has traditionally been very important for Finnish fisheries. In order to preserve natural salmon stocks, restrictive management measures have been put in place. That has decreased fishing opportunities in recent years. At the same time, a substantial fall in prices has lead to a striking decrease in value of catches. As a consequence, salmon offshore fishing has faced profitability problems and the number of active vessels has decreased noticeably. This is also a result of the decommission scheme in order to meet the objectives in MAGP IV, where there is a 30% reduction objective for this segment. These measures have been focused on the active part of the fleet.

In 1998 there were 32 offshore salmon vessels left in active use (catching more than 1,000 kilos). The capacity of these vessels was 800 GT with engine power of 5,900 kW. Average vessel size was 24 GT and 180 kW. Vessels are quite old on average, one third of the vessels are more than 25 years old. Some of the operating vessels belong to the MAGP segment of small coastal vessels.

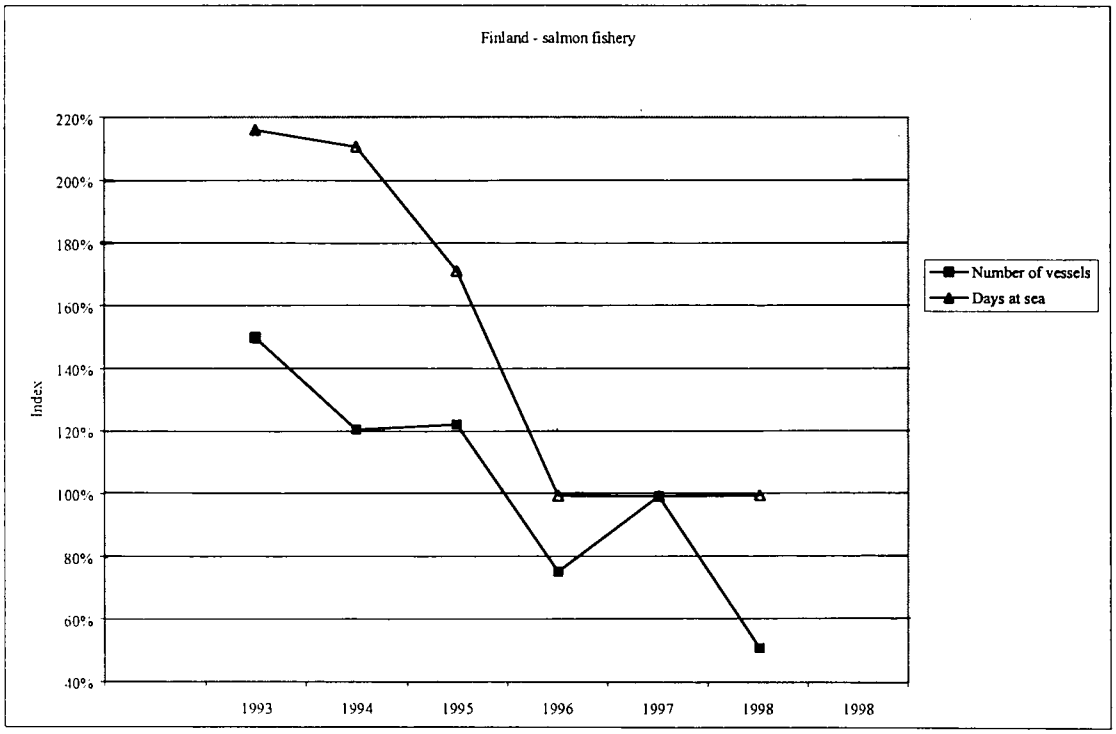
The effort in 1998 was about 1,300 fishing days, which on average gives just 40 days per vessel but activity varies a lot. In these vessels were approximately 50 fishermen. Because of low activity the total employment was under ten FTE in 1998.

Economic performance in 1998

Revenues of salmon offshore vessels have decreased significantly this decade. In 1998 the value of landings was at its lowest level for the 1990's, just FIM 4.2 mln. However, these vessels operate with low costs and gross cash flow was FIM 1 mln. This was not enough to cover imputed financial costs and the vessels were making losses.

Gross value added was FIM 2.4 mln, over half of the revenue, of which FIM 1.4 mln was accounted for by labour.

As the effort has been quite stable since 1996 and the number of active vessels has decreased, it can be assumed that the economic situation of these vessels has been poor for several years.



Outlook for 1999

There is no sign of major improvement in salmon offshore fishing. Stocks are not foreseen to grow substantially in the short run and management measures will continue to be restrictive. Also, the price of salmon is expected to stay at the level it has been, since salmon competes in the same market with farmed rainbow trout and imported Norwegian salmon.

3.4 Comments on data

All figures for earlier years are either not available or are not comparable with the latter. That is because EU membership has changed both the need for, and the gathering system for data. In addition the pelagic trawl segment definition was created for MAGP IV. It was possible to isolate the pelagic trawl segment for 1996 but for earlier years this task proved impossible. Economic indicators that are not gathered on a regular basis are shown by blank boxes on tables in appendix.

Volume and value of landings have been compiled based on official statistics and logbook data. Capacity indicators are from the fishing vessel register. The cost and earnings data are not compiled on a regular basis. The cost structure of pelagic trawlers is developed based on a survey in 1997. The cost structure for 1996 and 1998 is imputed from these figures. The invested capital and financial costs of capital are estimated figures based on the common method.

The cost structure for salmon fishery is also developed based on a survey. The result of the survey was poor in the sense that only one third of the vessel owners participated. With high variation in activity and economic performance of these vessels, the presented figures must be interpreted consciously.

All monetary figures are presented in nominal values.

4. France

Prepared by IFREMER (Service d'économie maritime)

4.1 National fleet

Current structure

At the end of 1998, there were 6,119 vessels active in the French fleet with a total tonnage of 167,000 GRT and a total engine power of 944,000 kW. Around 90% of vessels are less than 50 GRT and these so called 'coastal vessels' are divided between different kinds of fleet according to the gear used: demersal or pelagic trawl, net, dredge, pot, line or multi-gear.

As the vessel size increases, trawlers predominate. Around 80% of vessels over 50 GRT are trawlers and, for most of them, bottom trawlers specialised in fresh landings. In 1998, the category of more than 50 GRT vessels accounted for 70% of the total GRT and 40% of the total engine power.

In 1998, the total value of production was about FRF 6.5 billion (EUR 980 mln), with a total landed weight of approximately 600,000 tonnes. Fresh landings were predominant (85% of the total value) and comprising of fish (70%), crustacean (10%), mussels (8%) and molluscs. French production is very diversified and in 1998, the first four species (sole, anglerfish, nephrops and cod) only contributed to 22% of the total value of total landings and 8% of the total volume.

In 1998, about 15,500 persons were employed in the fishing sector. Including both part and full time, total employment in fisheries was about 21,200 persons.

Main trends

Since the beginning of the 90's, the size of the French fleet has been continuously decreasing, whether measured in terms of the number of vessels, GRT or engine power. The decrease of total employment slowed since 1995 and was nearly nil between 1997 and 1998.

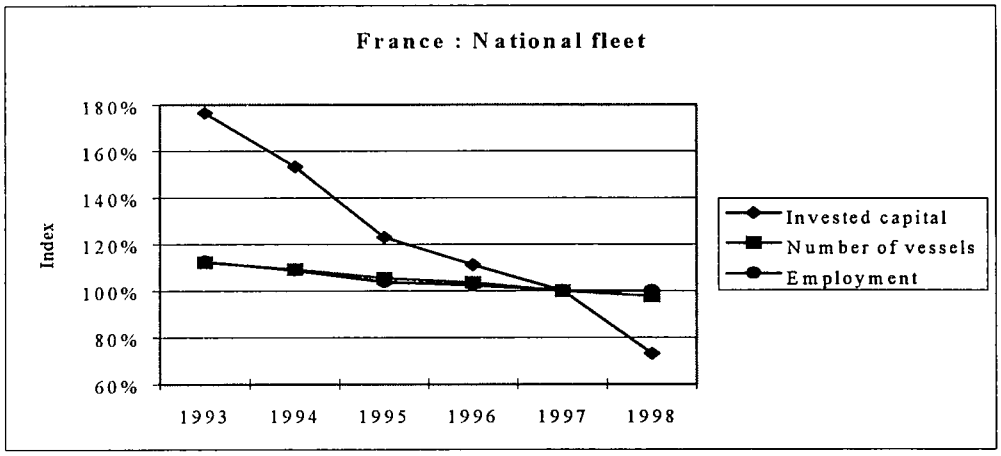
The capital intensity, measured in terms of GRT per employee, increased until 1996, showing that exit movements had firstly concerned highest labour intensive units. Since 1996, capital intensity is decreasing and no major change appears in the average size of vessel. As a consequence of the recent hardening of fishing structural policy, capital seems to be substituted by labour in the fishing sector but this explanation must be taken with caution as some changes may be due to labour organisation or quality of data.

The recovery of national revenue since 1996 firstly was the consequence of a strong increase of the average price. The sudden fall of total landings between 1994 and 1996, after a two-year period of strong increase, seems to have produced scarcity. Between 1997 and 1998, prices continued to increase but at a lower rate (2%), due to the reversal trend of landings (+3%).

Some changes in composition of landings occur over the period. The dramatic fall of hake landings and, to a certain extent, of nephrops, has been compensated by an increase in cod landings. Cod is now a major species at national level and moreover profitable way. Between 1997 and 1998, cod price at national level was 30% up while landings remained constant.

The increasing trend of total revenue does not allow making any conclusion on economic performance as no data on cost exists at national level.

Trends for 1999 are rather pessimistic according to the evolution of auction data during the first half-year. The total value of landings, compared with 1998, is down by 6%, attributed to a fall in landings not compensated by a significant improvement in prices.



4.2 Bottom trawlers, 16 - 30m

This segment includes all the vessels between 16 and 30 meters, using bottom trawl gear for more than 50% of their annual fishing time. It represents around half of the MAGP IV segment 'trawlers less than 30 meters', which is the most important one for the French fleet in terms of kW and GRT.

Role in total fishery

In 1998 this segment comprised 387 vessels and accounted for 17% of the total GRT and 16% of the total kW. Measured in terms of capital invested, its representativeness inside the fishing sector is much more important. The average size of vessels is 75 GRT and 392 kW and large vessels are generally fitted with the most advanced technologies. Overall, boats are on average younger than the rest of the fleet (13 years old). 70% of vessels inside this segment were built during the 80's but new buildings have been drastically reduced in the 90's according to MAGP constraints.

In economic terms, this segment contributes to 20% of total revenue of the fishing sector. Vessels operate mainly from the biggest ports of Brittany and the North region. Their contribution to national fresh landings of several fish (cod, whiting, striped mullet

and anglerfish), crustaceans (mainly nephrops) and molluscs (squid and cuttlefish) are significant and represents more than 50% of the total value of each species production.

Target species may vary between vessels, especially between region. More than 80% of nephrops and anglerfish landings, in value terms, is provided by Brittany vessels while for cod and whiting, North and Brittany contributions are equivalent. In all, the landings composition of 'bottom trawlers 16-30m' remains very diversified as the first four species represent less than 50% of the total value of this segment's production.

Economic performance

Since 1993, the fleet is continuously decreasing, firstly as a consequence of the crisis that had affected this segment in the beginning of 90's and then, according to MAGP constraints. Almost 25% of vessels has left the segment and this has mainly concerned the lowest size category, resulting in an increase in the average size of remaining vessels.

Despite the decrease in total capacity, total revenue remains quite stable around FRF 1.3 billion (EUR 200 mln) and shows evidence of opportune attitudes in term of fishing strategies. Exits have opened large opportunities for the remaining vessels to increase their catches of traditional target species. Furthermore, different short-term evolutions of stock abundance and prices relations between species have given incentives for some changes in catch composition. Species like cod, whiting, striped mullet or cuttlefish have progressively expanded in the landings composition to the detriment of anglerfish and nephrops.

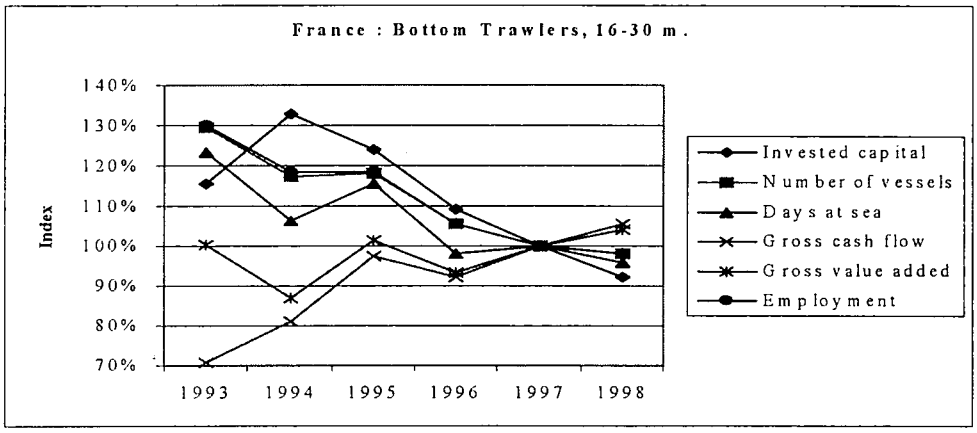
In 1998 for the first time cod was the first species in terms of revenue. However, the fall in landings between 1997 and 1998 is worrying insofar as all the species were affected. Fortunately, it has been overcompensated by a huge increase in prices and especially for cod (62%), anglerfish (39%) and whiting (31%).

The stability of the total revenue over the period is accompanied by a slight increase in gross value added which reached 55% in 1998. Vessel costs expanded since 1996 and seems to be closely linked with the recovery of individual revenues. In 1998, about 10% of the total revenue was assigned to repairs and maintenance. On the contrary, savings have been pursued on other running costs, mainly harbour dues and auction taxes, as the share of this expenditure in the total revenue decreases over the period, from 17% in 1993 to 13% in 1998. Finally, the segment has gained from the drastic fall of fuel price between 1997 and 1998.

In all, net profits have increased gradually, through jointly gross cash flow improvement (5% between 1997 and 1998) and decrease of capital costs as the fleet is ageing and the French real interest rate is decreasing. The return on capital ([net profit + interest cost]/capital invested) was approximately 6% in 1998 which means good economic performance compared with the long-term real interest rate. Unfortunately, the bad quality of employment data at segment level does not allow assessing the changes in labour productivity.

Outlook for 1999

The problem of diminished landings became more pronounced in 1999 and the weakness in price increased, based on auction data, has a good chance to lead to a reversal trend in a medium term. Furthermore, while fuel prices followed a decreasing trend from 1996 to 1998 and particularly last year, a continuous increase has been noticed for the beginning of the year with an acceleration since May.



4.3 Bottom trawlers, >= 30 m

This segment includes all the vessels over 30 meters, using bottom trawl gear for more than 50% of their annual fishing time, and specialised in fresh landings.

Role in total fishery

In 1998, this MAGP IV segment comprised 63 vessels and contributed to 9% of the total revenue of the fishing sector. In terms of capital invested, its representativeness at national level is difficult to assess as vessels are mainly more that 200 GRT, but 20 years old and then almost entirely depreciated. Only four new buildings have been registered in the beginning of 90s, which belong to the lowest size category of this segment.

Specialised in fresh landings, vessels operate from a few ports in Brittany and the North regions where fishing processing factories are mainly concentrated. Their landings of saithe and bottom species (mostly roundnose grenadier and black scabbardfish) are generally destined for processing into fresh filets.

In addition to saithe and bottom species, vessels land species like anglerfish and blue ling. These first five species represented around 60% of the total revenue of the fleet in 1998.

Economic performance

The continuous decline in the number of vessels inside this segment (4% in average per year since 1993) has led to a diminution of the total landings (8% per year) and, until 1996, of the total revenue of the fleet. Exit of capacity seems to have not induced a recovery of individual landings. Problems on saithe stocks are well known since the middle of 80's and switching of fishing effort towards bottom species has not maintained a high level of landings for these large vessels.

While in 1991, the total revenue of this segment was about FRF 850 mln (EUR 125 mln), it dropped to FRF 570 mln (EUR 87 mln) in 1998. However, a recovery of revenue is noticeable since 1996 as a consequence of a huge increase of the target specie prices, which overcompensate fall off landings. Particularly between 1997 and 1998, average price was 33% up while landings were 14% down.

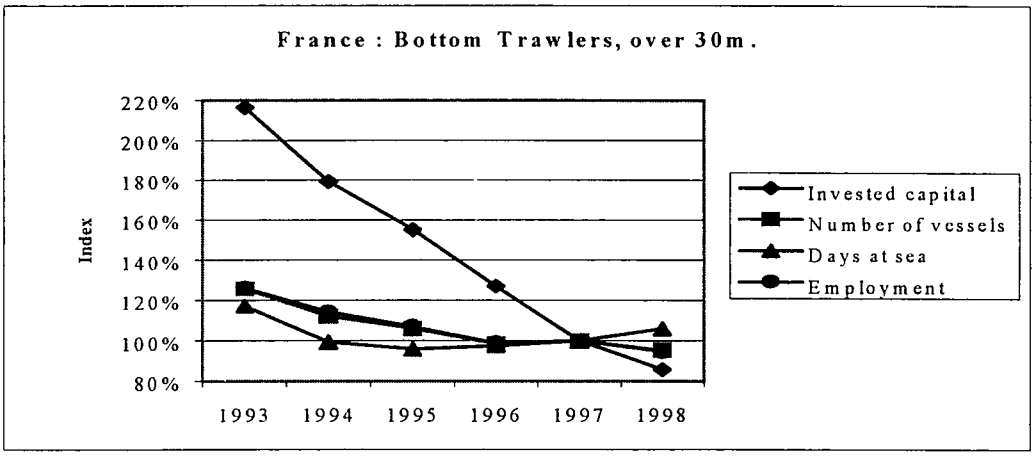
Data on costs are available only from 1993 to 1995. The evolution of gross cash flow during this period gives evidence of economic performance improvement but no recent data can confirm this trend. The generalisation of the landings methods, implemented in the beginning of the 90's, may have contributed to the pursuit of this improvement. These methods consist of landing catches near fishing areas, firstly to avoid costly travel time between home port and distant fishing areas and to increase the potential value of the catches by improving product freshness.

However, according to assumptions made on depreciation and interest cost, positive net result remains difficult to reach even if the ageing of the fleet tends to decrease these costs.

Outlook for 1999

The increase of fuel price in 1999 may roughly affect this segment as fishing waters are far from French coast even though the new landings methods have been implemented partly to reduce this dependency. Compared with 1998, auction data during the first half of 1999 do not allow any prospective in terms of the total revenue of this segment abundance of as different target species various substantially.

According to official data on quota consumption in the first half of 1999, vessels have off-set the decrease of the French saithe quota in West Scotland by shifting their fishing effort to the North Sea where the saithe quota has been increased.



4.4 Gill netters, >= 16 m

This segment includes all the vessels over 16 meters, using nets (all types of gillnets as well as driftnets), for more than 50% of their annual fishing time.

Role in total fishery

In 1998, 96 vessels belonged to this segment, which accounted for less than 5% of the total revenue of the French fleet. While MAGPs impose strong constraints on trawlers, the global capacity of netters over 16 m. increased since 1993 mainly because of the average size of vessel, which increased from 60 GRT in 1993 to 78 GRT in 1998 and from 307 kW to 360 kW. Rather than new construction transfer between segments seems to be responsible for this change. Actually, some trawlers in the beginning of the 90's are now fitting out with nets and it is rather noticeable for large vessels.

In 1998, the total value of landings amounted to FRF 222 mln (EUR 34 mln) for a total volume of 10,000 tonnes. Target species are generally sole (27% of the total revenue in 1998), hake (24%) and albacore (14%) but vessels from the 'Pays de Loire' region particularly target this last specie.

Unlike large trawlers, 'gill netters over 16 meters' are predominant in the southward coastal regions: 'Pays de Loire' and 'Littoral Sud Ouest' and this concentration expands over time.

Economic performance

The increase in total landings, parallel to the capacity increase, has been stopped in 1998 due to the drastic fall in hake landings (rising continuously since 1994) not enough compensated by an increase in prices. The switch in fishing effort towards anglerfish, which is progressively becoming of a major specie for this segment, has allowed to maintain the

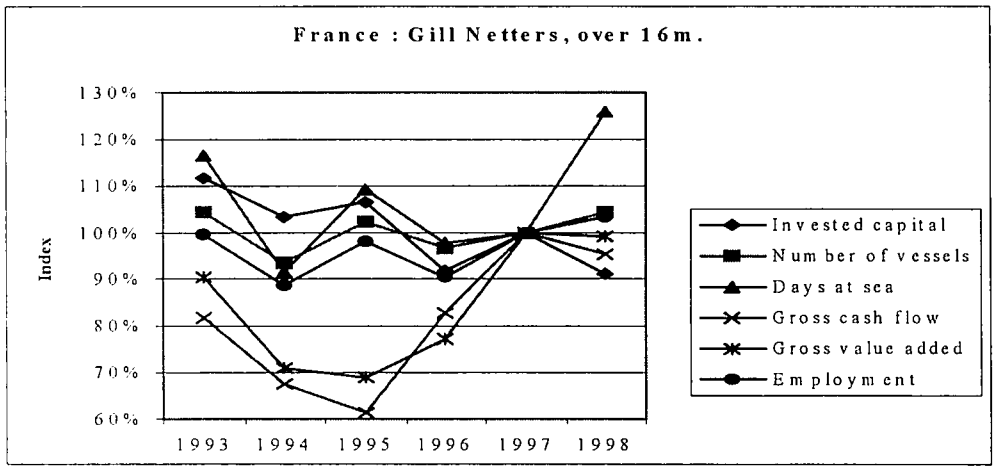
total revenue at its 1997 level, but it was not enough to maintain the past level of economic performance, according to the increase in capacity and effort.

Actually, the fall of fuel prices has produced a positive effect but quite limited as fuel expenses are not a major burden for this fleet. Despite the continuous saving made on harbour dues and more generally on other running costs for several years, vessel costs remain at high levels. The ageing of the fleet and a higher number of days at sea, can be an element of explanation.

In all, the gross cash flow has slightly decreased from 1997 to 1998 and net profits are 40% down even if it remained positive. However, Return on Capital remains at good level (7% in 1998) compared with the long term real interest rate but comments on economic performance must be taken cautiously as data on costs are available from a sample of gill netters from Brittany only with a very poor representativeness.

Outlook for 1999

Based on auction data, the falling trend in hake landings is continuing but the contribution of this segment to the national production of this specie is not enough significant to draw any conclusion from it. The fuel price effect will be certainly less important for this fleet than for the trawler segments.



4.5 Comments on data

Sources and type of information used

- Data on capacity and landings: an agreement between the Fishery Office (Ministry of Agriculture and Fisheries) and IFREMER allowed researchers to exploit data provided from logbooks, French auctions and administrative institutions.
- Data on fishing costs: no collection system is organised at national level and no official data exist. Average cost and earnings accounts per kind of fleets are provided from a Regional Economic Observatory implemented by Fishermen Co-operative in

Brittany. They are used for the estimates of operating costs of bottom trawlers (16-30 m) and gill netters over 16 m. For the moment, no data are available for bottom trawlers over 30 m.

- Data on employment exist at national level and estimates of FTE employment are feasible as data refer to the number of employees per activity time (month) per year. At segment level, data refer to statutory employment per type of vessel and does not have any economic meaning.
- Data on fuel price and other qualitative information on fishing sector are collected close to professionals directly and biologists researchers of IFREMER.
- Data on capital (capital invested and capital costs) are estimates according to the common method. They are based upon a replacement value of vessel of FRF 80,000 per GRT (EUR 12,000).
- Other type of data (inflation rate, rate of government bonds...) are provided from INSEE (French National Institute of Statistics and Economic Studies).

Quality of data obtained

- Catch and effort data from logbooks are generally of good representativeness when they concern French large vessels (over 16 meters). Inside this set, the representativeness may vary between segments: trawlers are generally better registered than gill netters. However, inside the large trawler's fleet (over 30 m.), aggregate values may be underestimated as the size of the vessel increases, according to recent implementations of direct sales or other new landings methods for these vessels.
- Data on fleet technical features are official data, referring to the constraints imposed by the MAGP to member states.
- Estimates of data on fishing costs are rather good quality for bottom trawlers 16-30m as the sample is referring to Brittany vessels and this region accounts for 50% of the total population and 50% of the total value of the segment. However, the representativeness of North vessel is also important and these vessels have got fishing activity rather different (different composition of landings and fishing areas for instance).
- The poor representativeness of the sample (Brittany vessels) decreases the quality of fishing costs estimates for the 'gill netters over 16 m' and hence, comments made on economic performance of this segment. Moreover, this representativeness is globally decreasing over time. Brittany vessels accounted for 20% in 1998 while there were 40% of the total population in 1993.

5. Germany

Prepared by LEI

5.1 National fleet

Current structure

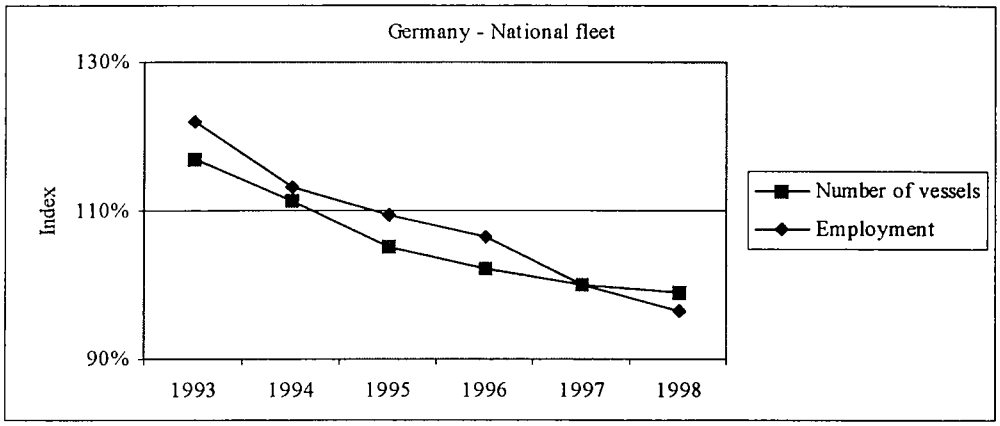
In 1998 the German fleet counted 2,337 vessels. The tonnage of the fleet was 69,000 GT and the engine power 162,000 kW. The 3 major components are the high sea fisheries, the near water and coastal fleet and a large group of open boats. The high sea fleet (Grosse Hochseefischerei) is a group of 8 demersal and 4 pelagic large freezer trawlers that works nearly completely in third country waters. The near water and coastal fleet (Kleine Hochsee und Küstenfischerei) is the main subject of this chapter and will be discussed below. The approximately 1,700 open boats are generally between 6 and 8 meter long and most of them are utilised in the Baltic.

Total earnings of the German fleets were DM 358 mln (EUR 182 mln). The principal species taken are in order of landings value cod, North Sea shrimp, redfish, saithe, mackerel, herring and horsemackerel.

In 1998, 1,940 people were active on fishing vessels, 370 on large vessels and 1,570 in near water and coastal fisheries.

Main trends

The fleet size declined by some 20% over the last 5 years in terms of all indicators (numbers, GT, kW and employment) after previous reductions. The current position is specific for each segment. The dermersal high sea fleet faces widely shortage of fishing opportunities. The performance of the pelagic freezer trawlers is more positive thanks among other things to the acquisition of additional fishing rights in West African waters. The landings of the near water and coastal fisheries remain low due to the poor state of the main stocks, in particular of Baltic and North Sea cod. However, there are indications that the previous fleet reductions leave fair economic opportunities for the current vessels. However, many vessels are extremely old and recruitment of young fishermen is low. Modernisation is difficult since the near water and coastal fleet is supposed to decline further in connection with MAGP IV. Further limitations on the activity of the fleets in coastal waters have been implemented or are proposed in the form of closed periods and closed boxes in order to protect young fish and for environmental reasons.



Near water and coastal fisheries

The near water and coastal fisheries (Kleine Hochsee und Küstenfischerei) is a mixed group of about 500 vessels that are located both in the Baltic and the North Sea area. The exact number depends on the lower size limit. The MAGP segmentation counts 482 vessels larger than 12 metre. In this chapter the vessels under 10 metre have been excluded. This leaves a mixed group of 577 relatively small and old trawlers. About 80% of the vessels are between 10 and 20 meter. More than 80% of the near water vessels is older than 10 year and the average age is about 25 years.

The gross value of landings of the near water and coastal fisheries was DM 197 mln (EUR 100 mln) in 1998. In terms of value, the stocks most relevant for the near water fleet are North Sea shrimp (28%), North Sea and Baltic cod (13% each), North Sea saithe (10%), Baltic herring and North sea sole and plaice.

Role in national fisheries

In 1998, the near water and coastal fisheries contributed 55% of the national landings value and it accounts for 75% of employment on board.

Segments for economic performance

Costs and earnings data are available of the following sub-segments:

- 308 mixed shrimp/fish trawlers: relatively small trawlers that fish for North Sea shrimp or change between shrimp and flatfish. The choice between shrimp and fish as target species is not completely static. Over the last 5 years some 35 fish trawlers changed to shrimp fishing due to the low catch rate of the main flatfish stocks (sole and plaice). Most shrimpers have their homeport along the North Sea coast.

- 265 fish trawlers: a mixed group of small stern trawlers, side trawlers, beam trawlers and otter and pelagic trawlers from North Sea and Baltic ports. The vessels have their homeport along the whole German coast with larger concentrations in Cuxhaven (Niedersachsen), Heiligenhafen (Schleswig-Holstein) and Sassnitz (Mecklenburg-Vorpommern).

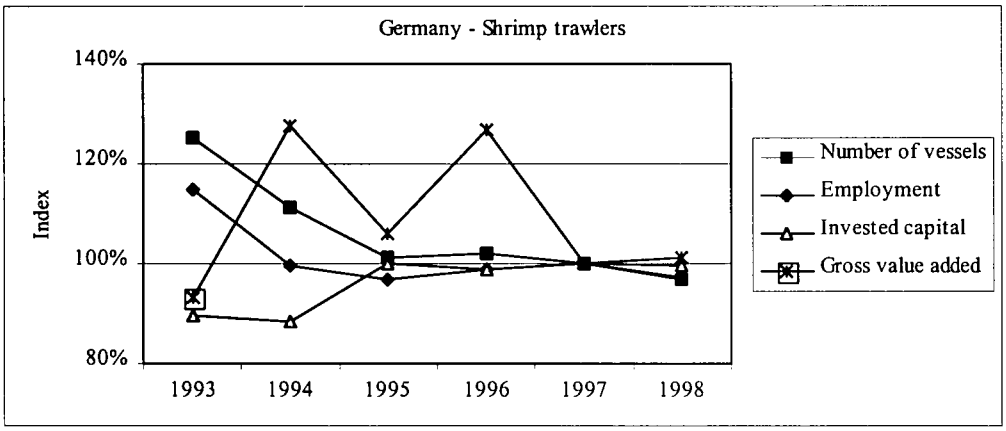
5.2 Shrimp trawlers

Economic performance

The gross earnings of the mixed shrimp/fish trawlers were DM 72 mln (EUR 37 mln) in 1998. In previous years, the group of shrimp trawlers performed on average better than other vessels of the near water and coastal fleet though the economic results are quite unstable. In 1997 and 1998, the fleet was less successful than in 1996, a year with record high earnings for shrimp. In 1998 the gross cash flow was on average DM 9,700 (EUR 5,000) per vessel. A GCF of 4% of the value landed is a weak result for a fishing vessel. The shrimp trawlers achieved an average gross value added of DM 136,000 (EUR 69,000) per vessel. The GVA/man on these vessels was on average low (DM 62,000 EUR 31,000) per man.

Outlook for 1999

The economic results in 1999 may be equal or better than in 1998. The constant fluctuations of the shrimp catches are generally compensated by corresponding adjustments of the price. Agreements between fleets and processors on limited shrimp landings per trip may have improved the economic performance structurally. Over the first months of 1999, shrimp landings and value were up 30%. The quotas for North Sea flatfish for 1999 have been increased by 15% compared to 1998.



5.3 Fish trawlers

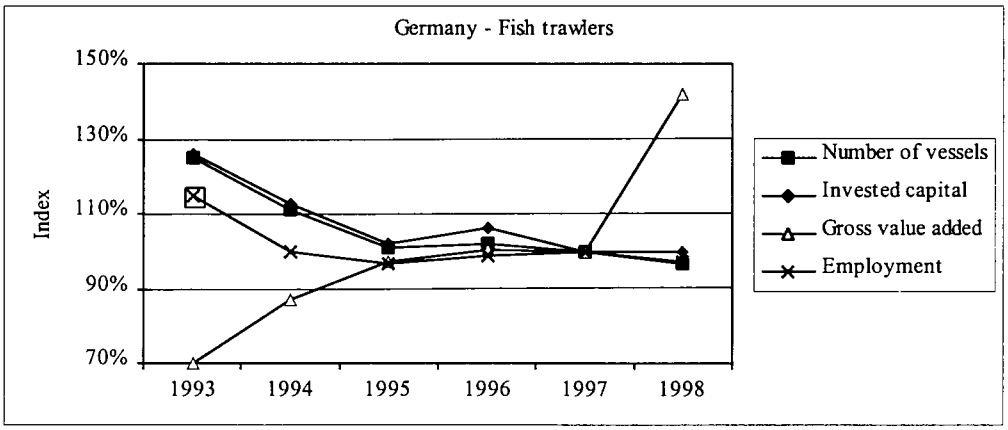
Economic performance

The gross value of landings by the finfish trawlers amounted to DM 116 mln (EUR 59 mln) in 1998.

The economic result of individual vessels within this segment varies largely and depends much on their size and type of fishing gear. 1998 was a successful year as result of 30% higher cod and nearly 50% higher saithe prices. After many bad years for most vessels, the trawlers achieved an average a positive gross cash flow of 39,000 DM (EUR 20,000) per vessel. This is 9% of the value of landings and a reasonable result for fishing vessels. The value added was on average DM 272,000 (EUR 138,000) per vessel and per employed DM 107,000 (EUR 55,000). This is about 50% better than in previous years.

Outlook for 1998

The main indicators for the economic results in 1998 point into different directions. The first indications for the 1999 landings are less favourable compared to 1998. The cod quotas are lower (North Sea -4% and Baltic -15%). The Baltic herring quota is about stable but since many years the quota has not been taken because there is no market for this fish. Presumably, in 1999 this segment will benefit again from the increased international prices for round fish. Half-year statistics indicate a higher value of cod landings in the Southern Baltic than in1998.



5.4 Comments on data

Data	Source	Type of information
Landings (total volume and value, per species) for 2 segments.	BMELF: Jahresbericht über die Fischwirtschaft, 1998 from Statistisches Bundesamt.	National aggregates
Characteristics of vessel in length, year of construction, type, GT, GRT, kW, crew number	BLE: database	Per vessel as at 31 December each year
Costs and earnings accounts of 3 sub-segments of the near water and coastal fleet	BMELF: Agrarbericht	Average costs and earnings per sub-segment
Active vessels and crew	Seekasse (Social security)	National aggregates as at 30 September each year

The German statistical system of the fishing fleet and fish landings involves several country and federal authorities:

- Inspection on first data collection of fleet characteristics and landings is delegated to the countries and local authorities (Fischereiamt).
- National data collection is co-ordinated by Bundesanstalt für Landwirtschaft und Ernährung (BLE) of the Ministry of Food, Agriculture and Forestry (BMELF).
- Diffusion of statistics is a task of Statitistisches Bundesamt. It compiles national statistical tables of landings and landings value.
- This landings statistic is published by BMELF in its annual report on fisheries (Jahresbericht über die Deutsche Fischwirtschaft).
- The crew number in this report has been derived from Seekasse. This is the (compulsory) social security system for all fishermen. The active crew as registered by Seekasse is substantially lower than the legal crew number.

Costs and Earnings data are available of the near water and coastal fleet. The data are collected in collaboration between BMELF and the German coastal states. Participation is voluntary, but BMELF refunds DM 100 to the vessel owner and DM 550 to their accountants. A target of the number of vessels in the sample is set by BMELF. Recruiting of vessel owners and collection of data is organised by the coastal states. Public accountants compile the data. They complete a questionnaire provided by BMELF. BMELF calculates the averages of selected groups and this figure is published in 'Agrarbericht'.

Calculations and assumptions

The fleet segmentation follows from the segmentation applied in the costs and earnings analysis system of BMELF. This segmentation is based on target species (finfish versus shrimp) and country.

- The national statistic does not provide landings data by segment as specified in the cost and earnings data. The gross earnings of each segment have been estimated on base of landings by species.

- In the cost and earnings analysis, substantial amounts of subsidies and laying up allowances have not been included. This explains a repeated negative gross cash flow for specific segments.
- In the German system, depreciation is calculated on base of the present book value. The interest is calculated from paid interest. In this study these variables have been calculated by applying the 'common method' along the following lines:

Replacement value (NLG)	=	1096829 + 6503 * GRT + 1639 * Hp (vessels > 60 Hp)
(Dutch data)		24792 * GRT + 1639 * Hp (vessels < 60 HP)
Depreciation hull	=	4% of Replacement value, 2% after 25 year
Depreciation engine	=	6.7% of Replacement value, 2.5% after 15 year
Invested capital hull + engine	=	Replacement value – accumulation of depreciation Rest value old vessels = annual depreciation

- Over the period 1996 - 1998, replacement value, depreciation and invested capital have been calculated on individual vessel basis. The figures of previous years have been extrapolated from 1996 since characteristics of individual vessels were not available.
- The available data of the fleet give no indication of the age of the engine. The following assumptions have been made:

Age vessel	Age engine
<11	= age vessel
>10 and <25	= 10
> 25	= 15

- The following interest rates have been applied to calculate interest over the book value.

	1993	1994	1995	1996	1997	1998
Interest	6.4	6.9	6.8	6.2	5.7	4.6
Inflation	4.0	2.4	2.1	1.0	0.6	1.2
Real interest rate	2.4	4.5	4.7	5.2	5.1	3.4

- The aggregation of costs, GVA and GCF of each segment have been calculated by connecting the average costs to the gross earnings of that segment.

Quality of data obtained

The quality of the costs and earnings data should be regarded in the light of the rather low profile system of BMELF. When put in time series, some variable are quite unstable. There are a number of explanations:

- Structural fleet changes had impact on the segmentation of BMELF, e.g. over the last years about 50 vessels changed from the finfish segment to shrimp fishing.

- In particular the segment of fish trawlers includes vessels of different type and size.
- BMELF does not receive data of the full target number of vessels.
- In many cases the accountants use costs and earnings data of fishermen that have to present this information because they apply for national or state subsidies. The composition of the samples varies substantially over the years.
- Since some of these data were compiled for a specific purpose, they may be biased and the reliability is not the same for each variable.
  The changes indicated in the time series should therefore be taken cautiously.

Representativeness of the sample (% of total number of vessels)

	Shrimpers	Fish trawlers
Number of vessels	25%	22%

Over the past years the sample and the presentation of costs and earnings data has been modified as result of changes due to the unification of Germany. In the future, the fleets of the Western and Eastern states will probably be merged. This would result in two fleet segments of the near water and coastal fisheries: shrimp trawlers and finfish trawlers. From 1997, BMELF changed to a new questionnaire. This is a second reason why the comparability of data in the presented time series is limited.

The schedule of publishing in 'Agrarbericht' is a serious draw back for the availability of data over recent years. The cost and earnings data get published in the early spring of the second year after the year under review.

6. Greece

Prepared by MARFISH Ltd.

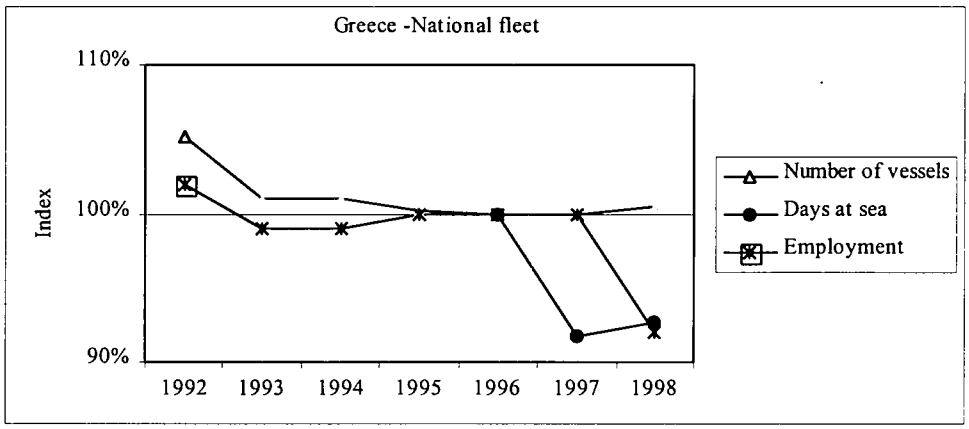
6.1 National fleet

Current structure

The Greek national fleet accounted for 20,455 vessels by the end of 1998 with a total of 108,613 GRT and 646,633 kW. There were some withdrawals with EU subsidies (15 Mediterranean trawlers, 4 international trawlers, 3 sponge fishing boats) and building of 118 new small coastal fishing boats. These changes resulted in a reduction of 2,582 GRT and 10,667 kW. The national trawler fleet was reduced by 15 vessels(4%), 1,427 GRT(6%) and 5,787 kW(5.2%) following the EU directions for reduction of the Greek trawler fleet.

Main trends

There are not data available yet for national total landings and its value. It is expected however that there will be a drop on both of those sizes reflecting a worse economic performance for the national fleet on the average. Employment (not full time) was lower by 3.7% than 1997 and fishing effort remained almost the same.



6.2 Thermaikos deep water trawlers

Role in total fishery

Two vessels from the coastal trawlers group joined the deep waters trawlers. Both of them were vessels built in 1997 and they had all the required standards to fish in distant areas. This new input resulted in:

- increasing the total number of vessels to 20 (18 in 1997) which accounts for 5.5% of the national trawlers fleet;
- increasing the total GRT to 1,592 (1,480 in 1997) which accounts for 7% of the national total;
- increasing the total kW to 6,823 (6,150 in 1997) which accounts for 6.5% of the national.

In this group, the average GRT is 80 and the average kW 341, which both are higher than the national average of the trawler fleet.

The major components of the catch volume and their share of the total landings of the group for 1998 are common shrimp (19%), shrimp (6%), hake (15%) and other species (44%).

Total quantities of fish in 1998 increased by 14%, leading to higher increase of the landing value by 18%. This difference can be justified by the fact that this group, behaving for some time like coastal trawlers group, concentrated in fishing shrimps which stock was very big in this year. It is estimated that shrimp catch -by both groups- for the year 1998 was almost 50% higher than that in 1997. Shrimp landings value by this group was almost tripled the same year. Although there was a significant decrease of the value of other species, the final average sales of this group increased by more than 4%. However the most significant evolution in 1998 which improved the financial position of the group was the fuel price drop (almost 15%). Fuel costs participate by almost 40% in the total running cost of the vessel. This means that any change on fuel price will affect seriously the financial position of an average vessel.

The combination of both lower fuel prices and higher average sales resulted in positive results of the group in 1998.

Economic performance

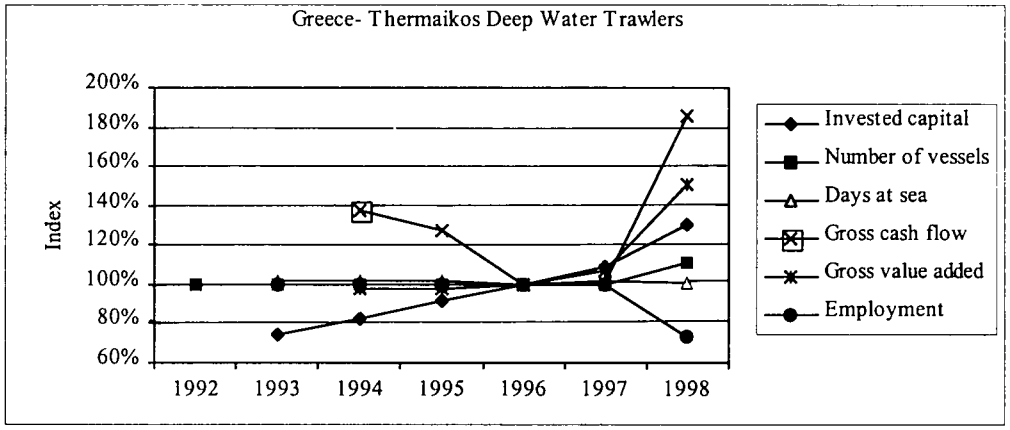
Total quantity of landings in 1998 was 1.27 thousand tonnes, valued at GRD 1,464 mln (EUR 4.4 mln).

The average gross cash flow per vessel was higher by 65% compared to that of 1997. Its value for the whole group was GRD 241 mln (EUR 0.73 mln).

Gross value added for 1998 was GRD 717 mln (EUR 2.2 mln). Gross value added per FT employee was GRD 5.8 mln (EUR 17,500).

Net financial losses decreased to GRD-81 mln (EUR 0.24 mln), compared to GRD -111 mln (EUR 0.33 mln) in 1997.

However, the positive evolution in this group was rather a result of random factors and nothing could guarantee this positive trend for the future time.



Outlook for 1999

For 1999 shrimp and common shrimp landings are expected to be lower whereas their will be an increase on hake landings. Fuel prices on the other hand are expected to be higher than in 1998. Lower revenues from reduced shrimp and common shrimp landings and higher costs from increased fuel prices will result in worse economic performance of this segment in 1999.

6.3 Thermaikos coastal water trawlers

Role in total fishery

In 1998, there were two vessel withdrawals and two vessel exits from the group towards the deep water trawler group. This change resulted in:

- a decrease in the number of vessels to 37 (41 in 1997) or 10% of the national trawler fleet;
- a decrease in the total GRT to 2,663 (2,910 in 1997) or 12% of the national trawler fleet;
- a decrease in the total kW to 12,220 (13,460 in 1997) or 12% of the national trawler fleet.

The average tonnage per vessel in this group was 72 GRT and the average engine power 329 kW, both higher than the national trawler average.

The major components of the 1998 total landings of this group were common shrimp (19%), shrimp (10%), hake (7%) and other species (52%).

Economic performance

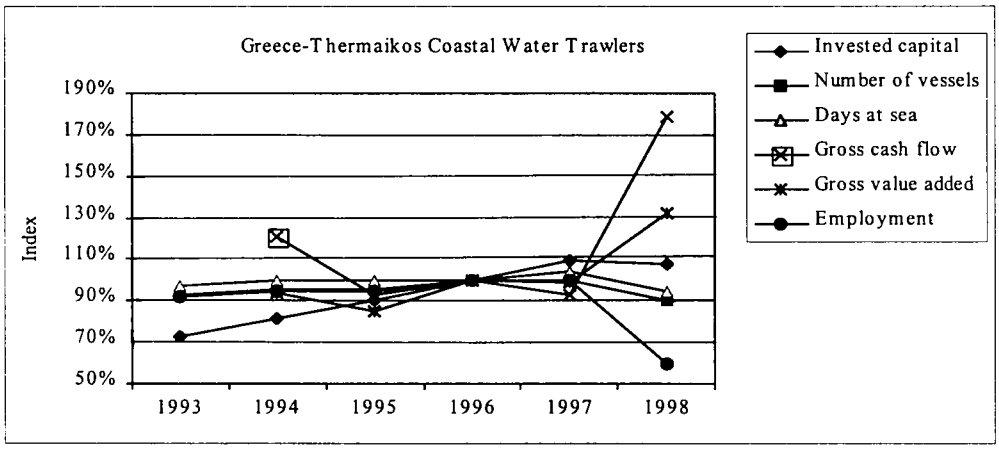
Total landings of this group decreased by 18% amounting to 1,380 tonnes, with only a slight decrease of total landing value GRD 1,670 mln (EUR 5.05) or 1% lower compared with 1997. This is due to the fact that lower total landings were compensated by higher quantities of shrimp and common shrimp. The average sales per vessel however increased by 10% because the number of vessels in the group decreased.

The result from both low fuel cost (which accounts for 33% of total running costs of this group) and higher earnings was the positive evolution of the economic performance in this group.

The average gross cash flow per vessel was almost double that of 1997 amounting to GRD 9.63 mln (EUR 29,117). Its value for the whole group was GRD 356 mln (EUR 1.1 mln)

Gross value added for 1998 was GRD 971 mln (EUR 2.9 mln) while the gross value added per FT employee was GRD 5.8 mln (EUR17,500).

Net losses decreased from GRD -218 mln in 1997 to GRD -93 mln.



Outlook for 1999

This expected - because of the reduction on shrimp and common shrimps catch and higher fuel prices - that this segment will be in a worse economic position than that in 1998.

6.4 Comments on data

There is not any Official Organisation responsible to collect data on economic performance of the fishing sector. For the needs of this study costs and earnings data have given been voluntarily by trawlers skippers in the area. The samples used in this study are two:

1. the deep water trawlers sample consisting of 6 vessels accounting for 30% of the total of 20 vessels in this group.
2. the coastal water sample consisting of 10 vessels accounting for 27% of the total of 37 vessels in this group.

Although there was a chance to have data from more vessels the samples are those because the vessels selected correspond to the most co-operative skippers, expected to give the most reliable data.

Numbers on several sizes on the cost side were given partly based on their records and partly on their estimations Looking through this data, there are no big deviations from the mean average and they are expected to approximate the reality.

Data on the earning side were given through their daily sale invoices presenting quantities and value of their landings sold at the local auction market.

Data on both costs and earnings of vessels from both groups were assessed and the mean average of each size (e.g. fuel consumption, social insurance, transportation costs etc.) was multiplied by the number of vessels in each group to give the total amounts.

The National Statistics Service collects data on catches at national level. Every month, all fishing vessel owners are supposed to submit a statistical questionnaire to the local custom authorities with quantities of fish they have caught. However a significant percent of the fishermen denies completing this questionnaire. This survey covers vessels with engines of more than 20 HP. Although there is lot of missing information and the reliability of the data in this procedure can be challenged this is the only method to have some estimation on the national fish production in Greece.

Concerning the local data as it was mentioned previously, landings can be assessed going through the daily sale invoices. These numbers, especially those referred to quantities are very close to the reality. The method used to assess the total catch in both groups, is to use the mean average of the quantities of most important species multiplied by the number of vessels to give the total quantities of each kind per group. These numbers are cross-checked with the total quantities given officially by the authority of the local auction market. The quantities given through this procedure are multiplied by the average price given by the auction market to get the value of the landings.

The Directory of Fisheries of the Greek Ministry of Agriculture supplies data on fleets at national level. They are expected to be quite reliable because this Service keeps records of all changes of the national fleet for many years now and gives all the information to the European Union Organisations. Information on technical characteristics and changes of the local fleet are provided through the local Department of Fisheries of Thessaloniki, and the Co-operative of Trawlers of N. Mihaniona. All this information can be also characterised as reliable.

There is not any capital data concerning fishing sector available in Greece. Fishermen are not obliged to calculate depreciation. Only a few vessels are insured so that there are not data on vessel insurance value.

The method used here to calculate the capital cost is the commonly used method based on the replacement value of vessel and engine. The local ship constructors gave the vessel building cost and this is mainly related to the length of the vessel rather than the tonnage. Several engine agents, who give their offers to the skippers who change their equipment utilising the subsidy programs by the EU, gave the cost for engine replacement.

The depreciation method used is the linear one, assuming a 25 year life time for the hull and after that a depreciation of 2%. For the engine, the same method was used, assuming a 10% annually for heavy use (deep-water trawlers) and 6.7% for light use (coastal water trawlers).

7. Iceland

Prepared by the National Economic Institute

7.1 National fleet

Current structure

There were 53 trawlers landing mainly wet fish in 1997, 65 freezer trawlers, 49 vessels (large purse-seiners) catching mainly pelagic species, capelin and herring, 578 decked boats and some 1000 open boats (only partly included in the tables). The total value of landings in 1996 was IKR 59,674 mln (EUR 744 mln). Thereof the wet fish trawlers caught 13%, the freezer trawlers 32%, pelagic vessels (large purse seiners) 18% and other boats caught 36%.

The gross value added in fishing was IKR 34,642 mln (EUR 432 mln) giving an average of IKR 5.6 mln (EUR 69,700) for the 6,200 FTEs in the Icelandic fishing industry in 1997. The wet fish trawlers had gross value added per FTE of IKR 4.4 mln (EUR 54,700), for freezer trawlers gross value added per FTE was IKR 5.9 mln (EUR 74,000), for the pelagic vessels gross value added per FTE was IKR 9.3 mln (EUR 115,700) and for the other boats the gross value added per FTE was IKR 4.7 mln (EUR 58,800).

Main trends

During the last years there have been large variations in the composition of the catch but the total catch, measured at constant prices, has been fairly stable. Catches of cod were declining during 1992-1995 but started do increase thereafter. Catches of shrimp increased rapidly until 1996 but have been declining since then. Capelin catches have remained high since 1991 and the catches of herring have been increasing during recent years when Icelandic vessels have been able to fish from the Atlantic-Scandinavian herring stock. The large catches of pelagic species in 1996 and 1997 led to record catches in those years when the total catch exceeded 2 mln tonnes.

The number of vessels has declined steadily, but the size of the fishing fleet in GRT has increased slightly since 1992. The number of people employed has decreased steadily but the value of the capital in the fishing sector has increased.

The share of the freezer trawlers in the Icelandic fisheries has been increasing. Their share of the value of landings increased from 18.2% in 1992 to 32.2% in 1997. This increase was mainly at the expense of wet fish trawlers. Their share of the value of landings decreased from 25.8% in 1992 to 13.4% in 1997. The share of the boats in the value of landings has also decreased. It was 43.9% in 1992 and declined to 36.3% in 1997. The share of pelagic vessels in the value of landings was extraordinarily large in 1997. It was also large in 1998 but declined sharply in 1999.

When the common method is used to estimate the interest cost the profitability of the fishing industry improved during the period 1992-1995. The only year when the total fleet

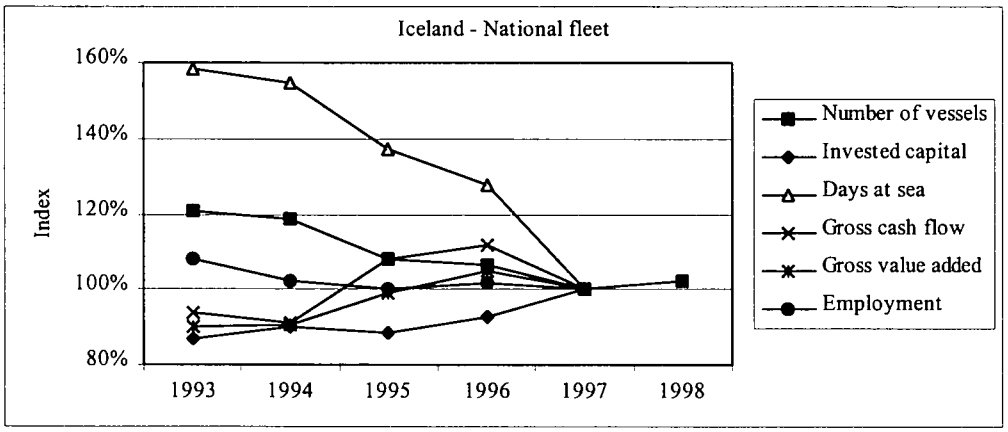
was making profit was in 1995. In 1996 there were losses and in 1997 the losses amounted to IKR 1,612 mln (EUR 20.1 mln).

Outlook for 1999

The catches of capelin were smaller in 1998 and 1999 than they were in 1997 leading to a decline in the total volume of catches. Measured at constant prices the volume of the catch has remained stable.

There are four important factors influencing the current profitability of the Icelandic fisheries. Firstly, the cod stock is growing slowly leading to increased catches and lower unit cost of catching cod. After many years of disappointing recruitment the biologists have observed large number of young cod leading them to expect large recruitment in the near future. Secondly, the shrimp stock has been declining as the biologists forecasted it would do as soon as the cod stock would increase. This led to declining catches of shrimp and increased unit cost of catching. Thirdly the prices of groundfish products on the world market have increased since the middle of 1997. In the first six months of 1999 these prices were almost 20% higher than they were on the average in 1997. Fourthly, the prices of fishmeal and -oil decreased during the first months of 1999 by almost 40%.

It is to be expected that the profitability of the groundfish sector has improved compared to 1997 while the profitability of the pelagic sector and the shrimp sector has deteriorated compared to 1997. It seems probable that the total profitability of the Icelandic fisheries has not changed much since 1997. Analysis of the accounts of the large fishing firms that are listed on the Icelandic Stock Exchange indicates that this is the case.



7.2 Wet fish trawlers

Role in fishery

The number of wet fish trawlers has been decreasing steadily from 87 vessels and 41,000 GRT in 1992 to 53 vessels and 22,900 GRT in 1997. The share in the value of landings has declined accordingly from 25.8% in 1992 to 13.4% in 1997. In 1997 the value of the landings of this fleet was IKR 7,990 mln (EUR 99.6 mln) and it employed 954 FTE.

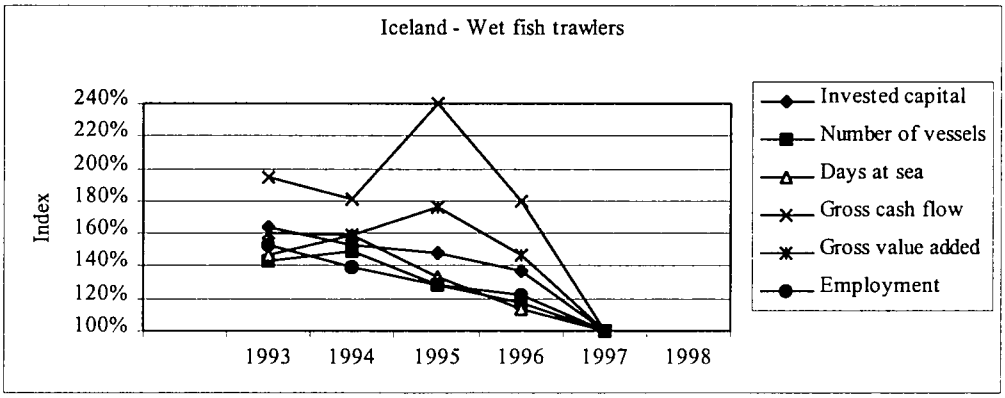
The wet fish trawlers caught 133,900 tonnes in 1997, mainly redfish, cod, saith haddock and shrimp.

Economic performance

If the common method for estimating the cost of capital is applied, the wet fish trawlers have been making losses every year from 1992 to 1997. The losses were smallest in 1995 when they amounted to IKR 9 mln (EUR 109,500) or 0.07% of the value of the landings. In 1997 the losses amounted to IKR 646 mln (EUR 8.1 mln) or 8.1% of the value of the landings.

Outlook for 1999

Wet fish prices of groundfish increased substantially between 1997 and 1998 and the cost of catching cod decreased. The profitability of those wet fish trawlers that catch groundfish, especially those that catch much of cod, has improved since 1997. The price of shrimp has, on the other hand, remained stable while the cost of catching has increased as the stock and the catches have declined leading to lower profitability compared to 1997 for those vessels that catch much of shrimp.



7.3 Freezer trawlers

Role in fishery

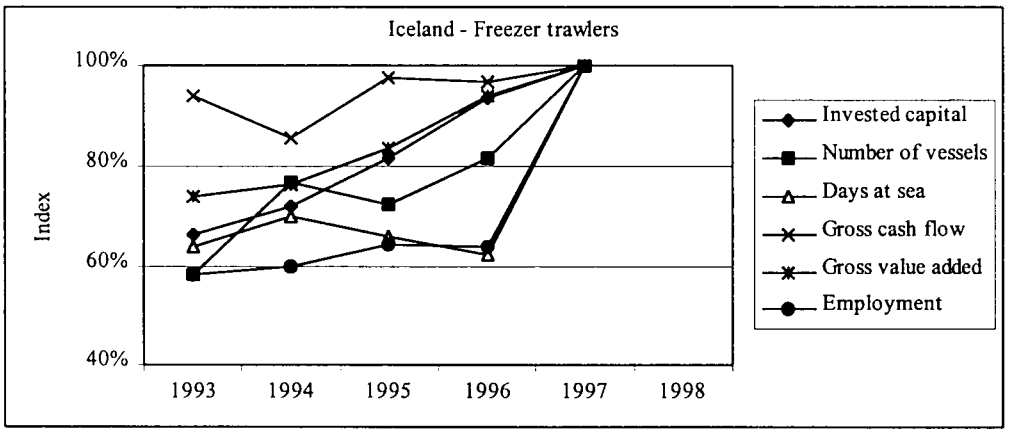
The number of freezer trawlers has been increasing steadily from 29 vessels and 16,600 GRT in 1992 to 65 vessels and 46,100 GRT in 1997. The share in the value of landings has increased accordingly from 18.2% in 1992 to 32.2% in 1997. In 1997 the value of the landings of this fleet was IKR 19,218 mln (EUR 239.7 mln) and it employed 1923 FTE. The freezer trawlers caught 177,200 tonnes in 1997, mainly redfish, shrimp, cod and greenland halibut.

Economic performance

If the common method for estimating the interest cost is applied, the freezer trawlers were making profits during 1992-1995 while they suffered losses in 1996 and 1997. In 1997 these losses amounted to IKR 462 mln (EUR 5.8 mln) or 2.4% of the value of the landings.

Outlook for 1999

The profitability of freezer trawlers has improved since 1997 as the market prices of their production has increased substantially. Some freezer trawlers depend much on shrimp and their profitability suffered as cost of catching shrimp has increased and catches have declined.



7.4 Pelagic vessels

Role in fishery

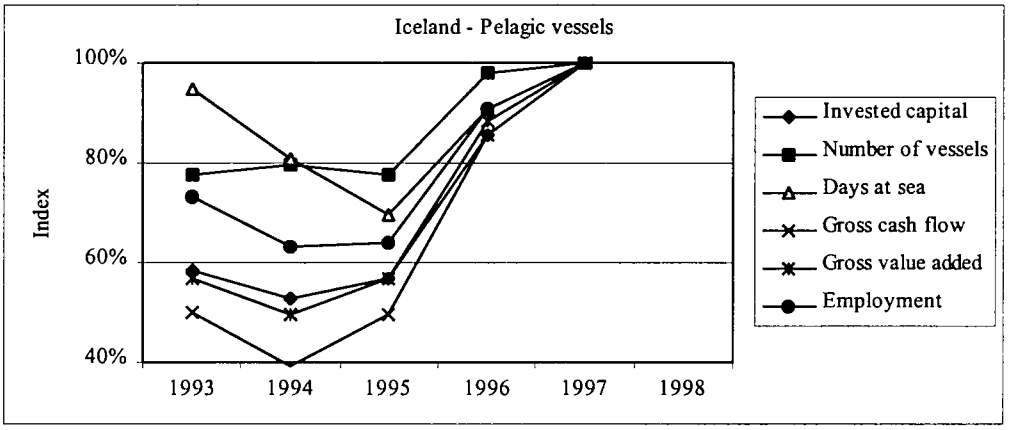
The number of pelagic vessels has been increasing slightly from 45 vessels and 24,000 GRT in 1992 to 49 vessels and 26,600 GRT in 1997. The year 1997 was a record year for the pelagic fleet both in terms of the volume and the value of the landings. The catch was 1,614,100 tonnes, mainly capelin and herring. The value was IKR 10,800 mln (EUR 135.0 mln) which was 18.1% of the value of all landings in 1997. Some of this catch was frozen and salted for human consumption but most was processed into fishmeal and -oil. In 1997 the pelagic vessels employed 774 FTE.

Economic performance

If the common method for estimating the cost of capital is applied, the pelagic vessels were making profits every year during the period 1992-1997. Their profits in 1997 amounted to IKR 1,092 mln (EUR 13.6 mln) or 10.1% of the value of the landings.

Outlook for 1999

In 1999 the catches will be lower than in 1997 but the most important factor affecting the profitability of the pelagic vessels is that the prices declined dramatically by the beginning of 1999. It is to be expected that this decline in prices will show up in lower profits.



7.5 Boats

Role in fishery

The number of decked boats has been decreasing from 746 vessels and 41,300 GRT in 1992 to 578 vessels and 30,900 GRT in 1997. The share in the value of landings has decreased steadily from 43.9% in 1992 to 36.3% in 1997. In 1997 the value of the landings of this fleet amounted to IKR 21,600 mln (EUR 269.9 mln) and it employed 2,518 FTE.

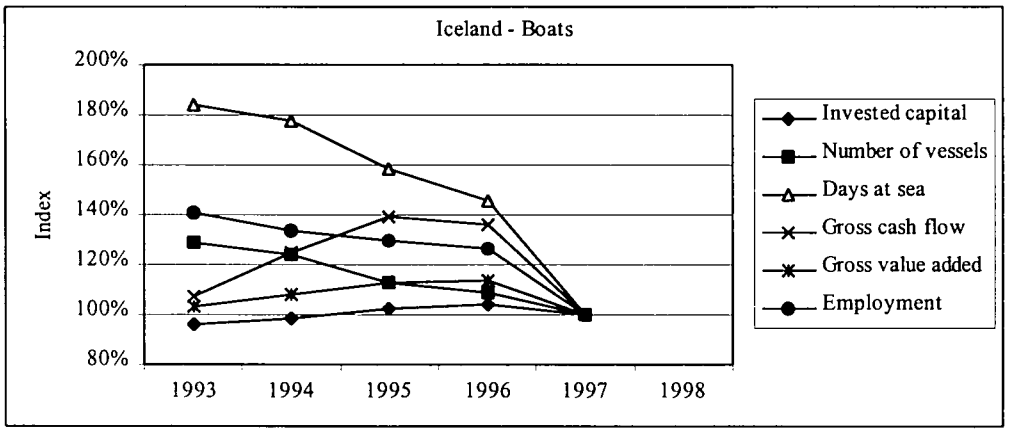
These vessels caught 273,700 tonnes in 1997, mainly cod, shrimp, haddock and saith.

Economic performance

If the common method for estimating the cost of capital is applied, the boats were suffering losses every year during the period 1992-1997. The losses decreased during the period 1992-1995 but then increased again during 1996 and 1997. The losses in 1997 amounted to IKR 1,596 mln (EUR19.9 mln) or 7.4% of the value of the landings.

Outlook for 1999

Wet fish prices of groundfish increased substantially between 1997 and 1998 and the cost of catching cod decreased. The profitability of those wet fish trawlers that catch groundfish, especially those that catch much of cod, has improved since 1997. The price of shrimp has, on the other hand, remained stable while the cost of catching has increased as the stock and the catches have declined. This has led to lower profitability compared to 1997 for those vessels that catch much of shrimp.



7.6 Comments on data

The figures on landings in this chapter (and in the tables on the Icelandic fisheries) include besides income from landings also other incomes of the fishing vessels. The size of this other income varies from 2.2% of the total revenue in 1992 to 6.3% in 1996. An exception to this is that the value of landings for 1998 is the value of landings and nothing else.

Other income includes various posts like income for transport, payments for rescue, rent for some property (possibly a vessel). The post other income has been increasing in recent years. This is due to increasing income form renting of quotas. The post 'Other running cost' covers the cost of renting quotas.

Because of lack of data on the age of the different vessels it was not possible to use the common method for calculating the decpreciations. The depreciations have been calculated by using the same depreciations as the firms use. The depreciation rules allow that the vessel is depreciated by 8.33% of the historical cost price adjusted for the general rate of inflation. Some depreciations of the quota that the vessels have bought is also included. The capital cost has been estimated on the basis of average real rate of governmental bonds and the insurance value of the vessels, i.e. the common method. In 1992 and 1993 the interest cost, which were recorded in the accounts of the firms (in Iceland this cost should only include the real rate of interest, i.e. the nominal interest cost adjusted for the general rate of inflation), were higher than the capital cost estimated on the basis of the common method. The reason for this is that the devaluations of the Icelandic krona in these years lead to high interest costs. In 1996 and 1997 the interest cost which were recorded in the accounts of the firms were substantially lower than the estimated costs according to the common method. The difference is especially large in the case of freezer trawlers.

In Iceland several fishing firms are able to borrow on foreign capital markets and those that are not able to do that obtain foreign loans through the intermediation of the Icelandic bank. These loans are denominated in the foreign currency and the interest rate is the foreign rate of interest plus some surcharge which the Icelandic bank takes for its services.

8. Ireland: off-shore multi-purpose fleet

Prepared by the Economic and Social Research Institute

8.1 National fleet

Current structure

The number of registered fishing vessels in the Irish fishing fleet continued its decline reaching 1,112 vessels in 1998, a reduction of 86 vessels on the year. Fleet tonnage totalled 54,000 GRT with a total engine power of 187,000 kW. The decline in the number of registered vessels has seen average vessel tonnage and engine power increase to 49 GRT and 168 kW (compared to 46 GRT and 160 kW in 1997). But the fleet remains rather old (averaging 27 years) and relatively small (averaging 13 metres with only 44 boats greater than 30 metres and 8 greater than 40 metres).

The Irish fishing fleet is composed of three main segments: polyvalent, pelagic and beam trawl. The polyvalent segment is further sub-divided into vessels on either side of 20 metres in length. Vessels greater than 20 metres are part of the off-shore multi-purpose fleet and though relatively few in number are an important section of the national fleet. In 1998 there were 129 vessels in the off-shore multi-purpose fleet, which accounted for a total of 18,000 GRT and 63,000 kW. The off-shore multi-purpose fleet principally targets demersal species with cod, megrim, hake and whiting important species in value terms. Herring and nephrops are also important target species.

The majority of the polyvalent fleet are vessels under 20 metres (750 vessels). There is a clear dichotomy in the two components of the polyvalent fleet with the vessels less than 20 metres averaging 17 GRT and 86 kW compared to 141 GRT and 489 kW of the off-shore multi-purpose vessels.

The beam trawl fleet is a small segment of 5 vessels, which totalled 900 GRT and 4,000 kW in 1998. This fleet segment is based in the ports of Howth, Co. Dublin and Kilmore Quay, Co. Wexford. In 1998, the average beam trawl vessel was 29 years old and 31 meters in length.

The pelagic fleet is the most modern segment in the fleet and principally targets horse mackerel and mackerel in ICES VI a-b and is based in Killybegs, County Donegal. The pelagic fleet comprised a total of only 18 vessels but had a total of 17,000 GRT and 33,000 kW. In 1998, the average pelagic trawler was 13 years old and 42 meters long.

The three most important species, in revenue terms, for the Irish fishing fleet are herring, mackerel and horse mackerel. The aforementioned pelagic species alone can account for a total of almost 40% of total Irish landings revenue and 60% of the total landings weight. The important demersal species are cod, haddock, monk/angler and megrim with nephrops the most important shellfish species. Each individual demersal species comprises only a small percentage of total landed volume or value of the Irish fleet.

Total employment in the Irish fishing fleet is estimated at 5,494 FTEs. Including employment in aquaculture, processing and ancillary activities, the total employment in the fishing sector is estimated at 11,549 FTEs.

Main trends

The most significant growth in the value of landings of the Irish fleet in recent years occurred in 1995 with an increase of 16%. The value of landings in 1996 and 1997 were a further 9% higher than 1995 so the recent trend in the value of landings has been upward. Based on estimates for 1998 it is likely that this trend will be broken. As much as a 7% reduction can be expected. Across all species the volume of landings fluctuated in recent years with estimates for 1998 down compared to 1997. Of the more important species, the value of mackerel landings has continued to grow throughout the period even though the volume of landings is down considerably since the mid 1990s.

The national fleet has continued to contract in size with 86 fewer vessels on the national register in 1998. The decommissioned vessels appear to be smaller in size as average tonnage and engine power of the remaining fleet has increased. The decommissioned vessels come primarily from the polyvalent vessels less than 20 metres and vessels not classified by segment. These vessels are scattered around the smaller ports along the Irish coast and would have targeted a multitude of species. Since 1993 registered vessels have fallen from 1,459 to 1,112 in 1998.

The average age of the fleet continues to increase with no significant investment in new vessels. The average age of the fleet is 27 years. The only fleet segment significantly different in average age of vessel is the pelagic segment. This is the most modern segment of the fleet but relatively small in size so has little impact on the average age of the national fleet as a whole.

8.2 Off-shore multi-purpose fleet

Role in the total fishery

The off-shore multi-purpose vessels are based in a limited number of ports, primarily Killybegs, Dingle and Castletownbere. The fleet segment comprises a total of 129 vessels each greater than 20 meters in length with engine power ranging from 112 kW to 2,500 kW and averaging 489 kW. The off-shore multi-purpose fleet is involved in a multi-species fishery and targeting both demersal and non-demersal species. Demersal target species include cod, haddock, megrim and hake, while nephrops and herring are the two most important non-demersal target species. The fishery is located primarily in ICES areas VI and VII. This fleet segment is a subsection of the Irish polyvalent fleet (polyvalent >20m) and is consistent with that outlined in the Lassen report.

Economic performance in 1998

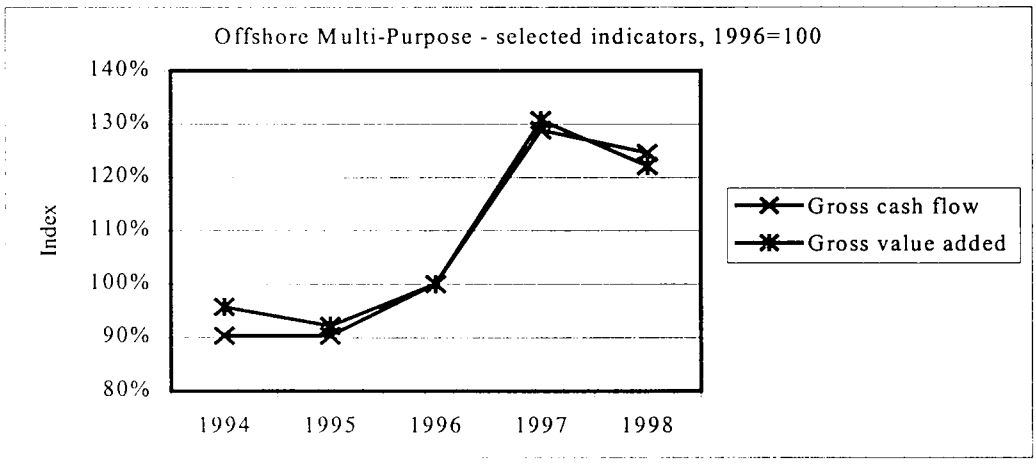
Without official statistics on value and volume of landings it is difficult to assess the economic performance in 1998 of this fleet segment. The figures on which this assessment is made are estimates based on provisional landings volume and are subject to substantial revision when official statistics are eventually released. It is expected that volume of landings will be marginally up on 1997 with the value of landings being somewhat lower. Nephrops landed by volume is expected to have more than doubled compared to 1997. This expectation is based on the significant increase in provisional figures for nephrops landings for the national fleet. Nephrops prices are expected to be back somewhat, however. Apart from nephrops, there is no other significant change in volume of landings expected compared to landings of recent years, which have been relatively stable.

Overall value of landings is expected to be down on 1997 but still above the trend of previous years. The segment is not reliant on a single species and no major change in value terms is expected for any single species.

Outlook for 1999

The outlook for 1999 is mixed. The year started out poorly mainly due to bad weather confining boats to port. For the fleet on the southern coast, landings are generally down though prices have increased. However, for specific species and type of boat the situation varies widely. Whiting landings were quite poor in the first three months but have improved considerably in the middle six months of the year. Landings for in shore vessels (less than 12 miles) have fallen by as much as 30%. For vessels operating off the north-west coast the situation is similar. Due to a lack of supply, prices are up substantially compared to 1998 across all species, both demersal and pelagic. The difficulty in the export markets for mackerel and herring, precipitated by the financial crises in Russia and Asia during the latter part of 1998, has continued into 1999 with generally poor prices.

Interest rates have reached historically low levels in 1999 so the fall in estimated interest costs to the fleet is expected to continue.



8.3 Comments on data

The data on fleet capacity was obtained from the national vessel register. The data we provide on the fleet, however, excludes approximately 1,000 vessels (mostly under 10 m). Many of the time series capacity and effort indicators are not collected at national level and therefore do not appear in tables.

The 1998 figures for landings and revenue are less reliable than previous years. Official figures for 1998 from the Department of the Marine and Natural Resources had not been released at the time of writing. The data presented are based on some provisional figures on species landings by the national fleet. The segment landings and value of landings figures are estimates.

Some shellfish species, notably clams and oysters, as well as salmon that are landed by the fleet are not included in sea fish landings volume or value statistics.

The 1997 costs and effort data are based on a survey of the off-shore multi-purpose fleet conducted by the ESRI and is considered reliable. The information from this survey is used to estimate 1998 costs.

The common method was used in the calculation of both interest and depreciation. For 1998 the nominal interest rate was 4.4% on government bonds with one year to maturity. The rate of inflation as measured by the consumer price index was 2.4%. As a proxy of the real interest rate the following calculation was made: ((1+bond rate)/(1+inflation rate))-1 giving a real interest rate of 1.95%.

No additional information for 1998 was available on on-board employment in the off-shore multi-purpose segment. The figure presented is based on the assumption of average crew size on the boats being decommissioned. An average crew per vessel times the number of vessels leaving the segment (3 vessels at 5 people) was subtracted from the 1997 figure of 660, which comes from the survey of the segment.

Invested capital estimates for the fleet segment are based on the 1997 survey data. The figures are half of the replacement value.

9. Italy

Prepared by IREPA

9.1 National fleet

Current structure

The total number of vessels in the Italian national fleet by the end of 1998 was 16,667 with a total of 225,422 GRT and 1,519,418 kW. More than 13,200 vessels (80% of the total fleet) are smaller than 10 GRT; the mean engine power of these small units is 51 kW. The average age of the national fleet is 25 years, which means that it is a relatively old fleet. In fact, approximately 14,400 units (86%) were built before 1990.

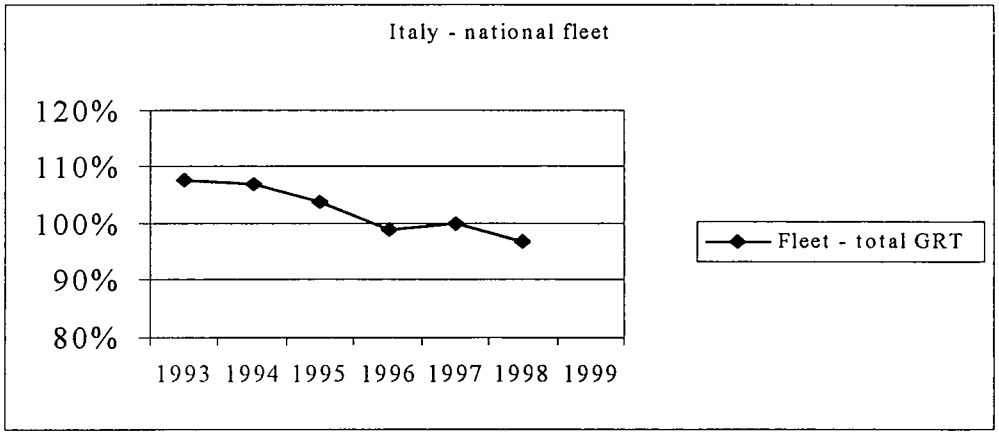
The fleet is classified into the following eight segments: bottom trawlers, purse seiners, midwater pair trawlers, dredgers, multi-purpose trawling vessels, small scale fisheries, tuna fisheries and swordfish fisheries. Bottom trawlers is the main segment in terms of effort (46% and 34% of national figures of GRT and kW, respectively). Multi-purpose trawling segment is composed of small vessels and represents 21% and 23% of the national total number and employment, respectively. Small-scale fishery not using trawling gears is the main segment in terms of vessel numbers and employment and it is composed of vessels with less than 12 metres in length; this segment contains about 8,800 units employing more than 18 thousand people (53% and 37% of the total fleet, respectively). The midwater pair trawlers, dredgers, tuna and swordfish segments are considered apart from the rest of the fleet because of the particular gears used and the importance in terms of national policy and CFP.

The total revenue of the Italian fishing fleet in 1998 was 3,147 billion ITL (EUR 1,625 mln) with a net financial profit of ITL 688 billion (EUR 355 mln). In 1998, 450 thousand tonnes were produced by around 2,660 thousand fishing days by a fleet evaluated at ITL 4,356 billion (EUR 2.25 billion). The full time employment (FTE) in 1998 was 48,342. Concentration of landings by species is very low. The composition of total catches is as following: other fish (finfishes and demersal fishes) 53%, anchovies and pilchards 22%, marine molluscs 18% and marine crustaceans 7%.

Main trends

The Italian fishing fleet has undergone a reduction in total GRT and invested capital, while value and volume of landings, costs, gross cash flow, value added and employees have increased. In the period considered, there has been a reduction of 10% in total GRT. The total number of vessel has increased by 6% (due to the rearrangement of the Italian Archive of Fishing Licences (ALP) by the Ministry of Agricultural Policy and Forestry). The volume of landings has increased steadily over the last six years (+28%). Landings of marine molluscs, instead, has decreased (85.1 mln tonnes in 1993, 78.3 mln tonnes in 1998),

due to the crisis (both in quality and in quantity) of clams (tapes filippinarum) in the Adriatic Sea.



9.2 Trawlers

Role in total fishery

Italian bottom trawlers are 2,342 units with around 103 thousands of GRT (15% and 46% of the national totals, respectively). Fleet boats have an average of 44 GRT and 220 kW; these figures are very high compared with averages of the national fleet (14 GRT and 91 kW, respectively). The average age of the vessels is 27 years, while the same value for the national fleet is 25 years.

In economic terms the segment brings in about 33% of the landing value of the national fleet, which corresponds to ITL 1,042 billion (EUR 538 mln). The total number of employees in this segment is 10,300 persons, which corresponds to the 21% of the total employment on board.

Trawler vessels are present all over Italian coasts; 18% of total trawlers (and 31% of the total GRT) is concentrated in Sicily.

Economic performance

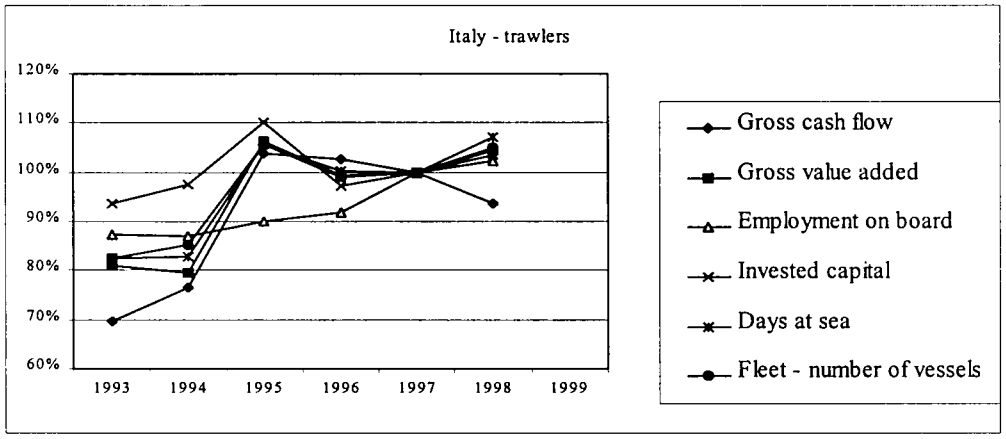
Landings value increased in the period considered due to the trends in volumes and prices of catches. The days at sea do not show any particular trend (the average for vessel - 176 days - is practically constant from 1993 to 1998).

Both gross cash flow and gross value added have increased (+35% and +28% respectively), between 1993 and 1998. With respect to the costs, fuel cost has increased steadily over the last four years; its share of total cost is about 26%.

Composition of catch has not changed, even though there was a drop in the landings of molluscs (-15%), between 1997 and 1998.

Outlook for 1999

The expected outlook for 1999 is a decrease in gross cash flow. In fact, running costs and crew share are expected to increase, while value and volume of landings should decrease due to temporary withdrawal rules as an effect of the war in the Balkans that stopped activity from June to August in the Adriatic sea.



9.3 Purse seiners

Role in total fishery

The segment accounts for 1.5% of the national number of vessels, 5.5% of total GRT and 4.2% of total kW. These vessels are characterised by a high average of engine power (248 kW, while national average is 91 kW).

The total revenue of this segment in 1998 was ITL 137.5 billion (EUR 71 mln) which represents 4.4% of the total Italian landings value. Its share of the total landed volume was 10%. The difference between the above shares is due to the composition of landings; in fact anchovies and pilchards, whose unit value is very low, represent 81% of total catches.

Full time employment in purse-seine boats is 2,866 units and covers 6% of the national total. Vessels in this segment employ 11 persons on average, showing a relatively labour intensive fishery. And in fact crew share is equal to 47% of total revenues, while for the total Italian fleet this share is 36%.

Purse seiners are present only in the Tyrrhenium Sea and in Sicily (where there are 85 of them).

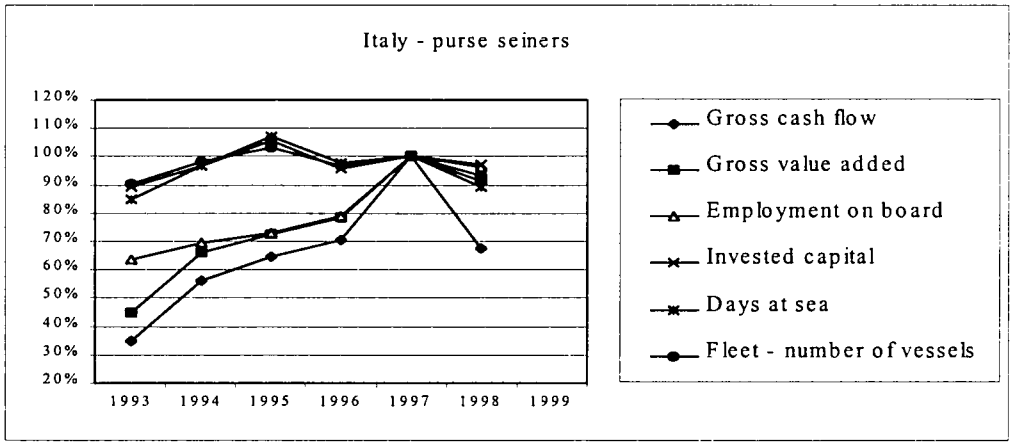
Economic performance

The value of landings has increased steadily during the period 1993-1998, due to the increase of total landings and prices. Fishing effort (capacity and activity) have not changed in the last five years.

Gross value added per employee increased from to ITL 24 mln (12 thousand Euro) in 1993 to ITL 33 mln (17 thousand Euro) in 1998.

Outlook for 1999

Monitoring of activity during 1999 shows a reduction in days at sea for purse seiner's vessels. Total catches are expected to decrease as well as gross cash flow.



9.4 Midwater pair trawlers

Role in total fishery

There are only 158 midwater pair trawlers (volante) and account for 0.9% of the national fleet numbers, 4.3% of the GRT and 3.5% of kW. The fleet segment has an average of 61 GRT and 336 kW. The average age is 23 years, while the total fleet averages 25 years.

Landings are mainly composed of anchovies and pilchards that account for 92% of the total volume of landings. Value of landings was in 1998, ITL 70.7 billion (EUR 36.5 mln), which represents 2.2% of national fish production. Midwater pair trawlers employed about 950 fishermen, 2% of the national fleet employment.

This fleet segment is concentrated exclusively in the Adriatic coast and above all in the regions of Puglia, Marche, Emilia-Romagna and Veneto.

Economic performance

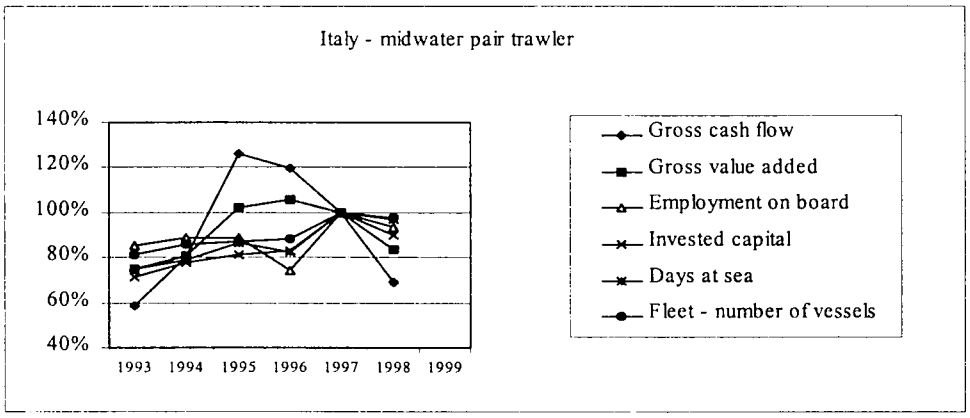
The total value of landings increased between 1993 and 1997 as a consequence of the positive trend in the volume of landings that in 1997 brings 52.1 thousand tonnes. In 1998, total value decreased as well as gross cash flow and gross value added. The negative performance in the last year is due to the reduction of the stocks of pelagic species in the Adriatic Sea, above all anchovies; this reduction has not been compensated by higher volumes of sardines.

Between 1993 and 1998, gross value added increased from 39.4 billion lire (EUR 20.3 mln) to 44 billion lire (EUR 22.7 mln). In 1998, costs were one of the higher levels since 1993; in particular, fuel costs reached 11.3 billion lire (EUR 5.8 mln).

The composition of the volume of the catch has changed; in the period analysed, the quota of anchovies on the total landing has increased (from 53% in 1993 to 61% in 1998).

Outlook for 1999

Gross value added will probably decrease during 1999. Volume of landings should not vary significantly, but composition of catches is expected to change because of the higher volumes of sardines whose value is lower than that of anchovies. Labour cost will remain constant, and this rigidity on the employment structure will allow to a decrease in the gross cash flow.



9.5 Dredges

Role in total fishery

Dredgers are 802 units. In 1998 this segment accounted for 4.8% of the national vessels and for 3.7% in terms of GRT. The average size of vessels is 10 GRT and 109 kW. The average age of the vessels is not very high (16 years) compared to the national average. Entry in the industry is limited.

In economic terms the segment brings in only 3% of the national landings value, which corresponds to 94 billion lire (EUR 48.5 mln) but catches have strong links with resources, transformation and regional fishery dependency. Dredges are highly technically specialised and target stocks are marine molluscs, mainly clams. Vessels are concentrated along the Adriatic coast and more than 1,600 fishermen are employed.

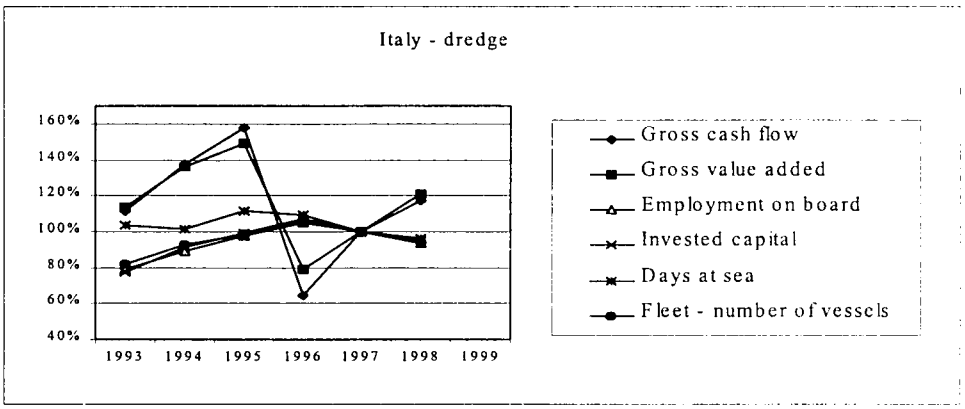
Economic performance

Production has dropped in the last decade and has strongly influenced the economic performance of the fleet segment. Clam production went from 34,500 tonnes in 1993 down to 26,000 tonnes in 1998 (-25%). The reason behind such a decrease can be attributed to the excessive fishing effort in the past, and in recent years measures have been introduced aimed both at controlling the volumes fished and activity levels. Days at sea per vessel have reduced from 112 to 91.

The value of landings decreased dramatically between the years 1995 and 1997. In the same period both gross value added and net profit have decreased in a similar fashion. Running costs and vessel costs have remained quite stable during this period.

Outlook for 1999

Activity during 1999 is expected to decrease because of the Producers Consortiums self-imposed restrictions with respect to days at sea and limitations on the volume of daily catches. Prices should increase as a consequence of the reduction in total supply. Therefore gross cash flow and value added will increase.



9.6 Multipurpose trawling vessels

Role in total fishery

Italian multipurpose vessels are 3,476 units. Vessels using multipurpose trawling gears make up the second largest segment in terms of tonnage and kW after trawlers, accounting for 20% and 26% of the respectively national totals. At the local level, these are character-

ised by a high degree of technical, economic and social heterogeneity. The average size of vessels is 13 GRT and 114 kW. Age is in most of cases older than 22 years.

In economic terms the segment brings in about 30% of the landings value of the national fleet, which corresponds to ITL 960 billion (EUR 496 mln) and brings in about 28% of the national gross value added, which corresponds to more than 590 billion ITL (EUR 305 mln). The total number of employees in this segment is 11,019 persons, which corresponds to the 23% of the total employment on board, which makes the segment the second most important in terms of occupational units. Multipurpose trawling vessels are characterised by artisan features and coastal activities.

Economic performance

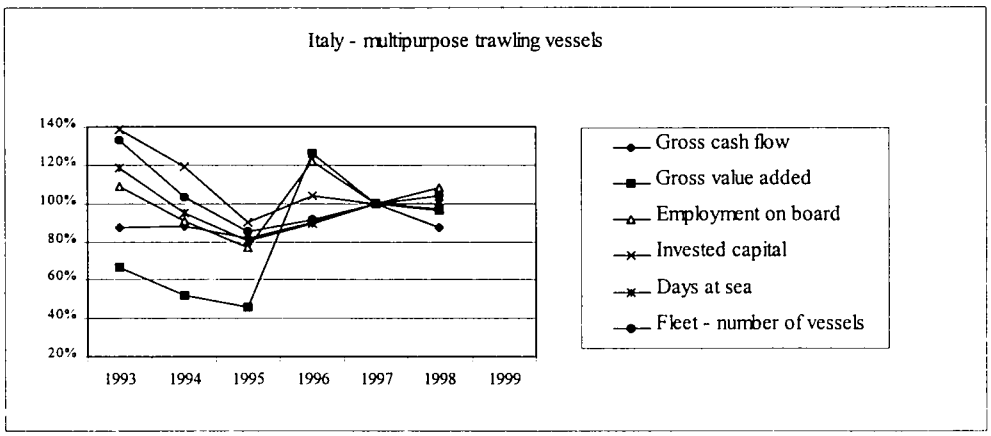
The total value of landing in 1998 was higher than in 1993; the increase in this period has been +23%. During the period, effort (capacity and activity) has dropped by more than 44%, the latter due to compliance with national rules.

The value of landings is estimated to be equal to 960 billion ITL (EUR 496 mln) in 1998 while net profit was ITL 165.3 billion (EUR 85.4 mln). These values have increased in the period under study even if the growth in net profit has been less intensive due to the increase in total costs. Employment level has not changed during the period.

Composition of catches is slightly changed, between 1993 and 1998; there has been a drop in landings of molluscs and crustaceans and a growth in other fish.

Outlook for 1999

Effort (days at sea and fleet size) should vary significantly since many boats are switching to the small-scale segments that operate without trawling gears. Total landings should remain constant because of no changes expected in marine resources and a higher productivity for the remaining boats. Notwithstanding, the gross cash flow is expected to decrease due to higher running costs. In fact, during the last six years, prices of input factors have increased of 19%, while prices of outputs have increased only of 12%.



9.7 Small scale fisheries

Role in total fishery

The small-scale fleet segment is the most important of the Italian fisheries. The small-scale gear boats are distributed along the whole Italian coast and are characterised by the use of mostly passive gears.

It makes up only 12% of the national tonnage, but covers 53% fishing boats in number and only 6% of the national fishing effort. The average size of vessels is 3 GRT and 29 kW, while the average size of national fleet is 14 GRT and 91 kW. Boats are older than other segments of the fleet, with a 26 years old on average.

The small scale fisheries segment accounts for about 16% of the national catch and for 20% of national value of landings. The difference between the above two figures is because the target of small-scale gears is mostly high value species. Low levels of effort and therefore of input costs associated with labour costs results in high net financial profits, which reached ITL 250,5 billion (EUR 129 mln) in 1998 (35% of the national figure). Net financial profit of the small-scale fisheries is the highest one of all segments.

The boat owner alone usually undertakes fishing. Sometimes an additional person is taken on board. The fishermen in 1998 were 18,056, that is the highest employment by fleet segments - 37% of the national figure.

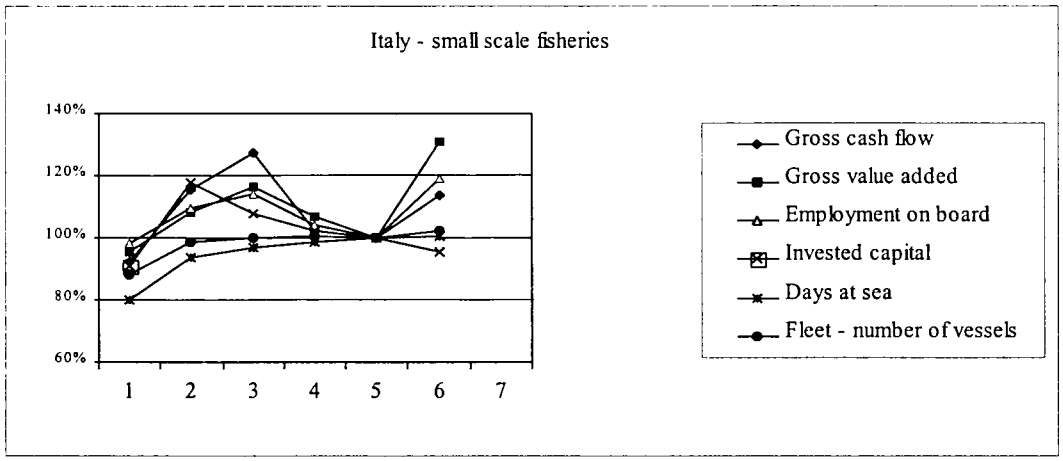
Economic performance

The economic performance measured by total value of landings increased between 1993 and 1998 (+49%). Catches increased from 41 thousand tonnes (1993) to near 71 thousand tonnes (1998), that is a growth rate of 73%. In the same period effort increased only 11%. Input costs (excluding labour costs) have followed the same path as landings but have more than doubled, from about ITL 76 billion (EUR 39 mln) in 1993 to more than ITL 154 billion (EUR 80 mln) in 1998. Fuel cost, in particular increased from 24 billion lire (EUR 12.4 mln) in 1993 to 44 billion lire (EUR 22.7 mln) in 1998. Employment increased with more than 3,200 units added to the fleet segment (+22%).

Profits have increased between 1993 and 1998 by 27% reaching ITL 250 billion, EUR 129 mln (54% of gross output). Net profit as a proportion of gross value added has decreased in the last years because of the growth in total costs.

Outlook for 1999

All the economic indicators should improve in 1999. During the last few years this segment has become more important because of legislation restricting to multipurpose trawler gears. Small-scale fisheries, in fact, include all vessels that use passive gears in substitution of trawl nets.



9.8 Tuna fisheries

Role in total fisheries

In 1997 Italy became member of ICCAT. Tuna fleet segment is defined for the first time during 1998 and following the introduction of a TAC for Red Tuna (*Thunna Thynnys*) in the Mediterranean. National policy has introduced an IQ system. Therefore, the introduction of this new segment in the AER is due to its importance in terms of CPF and management issues. Boats classified as "tuna vessels" are ministerial listed and contains all vessels that asked for and obtained the authorisation to fish tuna. The main target specie of this segment is tuna, but figures are referred to all species landed in a year of activity. Figures of the period 1993 - 98 are therefore backward estimated.

In 1998, this segment contains 229 vessels, with a total of 11,600 GRT and 54,700 kW, accounting for 5.1% and 3.5% of the GRT and kW of the national fleet, respectively. Invested capital in the segment reaches ITL 187.4 billion (around EUR 97 mln) that accounts for 4% of the national total.

This segment accounts for 2% of the total value of landings which amounts to approximately ITL 68.3 billion (EUR 35.3 mln). Its share of the total landed volume was 2.6% during 1998 and its share of employment was 1.7% (12.3 thousand tonnes and 815 employees, respectively).

In economic terms, this segment is characterised by a specific cost structure. Total costs, including labour, represent 77% of total revenue and crew share represents 64% of total costs. Net profit in 1998 is the lowest of the Italian fleet segments (ITL 3.0 billion - EUR 1.5 mln) and equal to 4% of the value of landings and only 2% of invested capital.

Economic performance

Economic performance measured by total value of landings or gross value added has increased between 1993 and 1998. In 1993 - the year that was utilised for the establishment of the TAC - total landings reached 5.9 thousand tonnes with a total value of ITL 22.9 bil-

lion (EUR 11.8 mln); these figures represent the lowest level of catches landed and revenues performed by the tuna segment between 1993 and 1998.

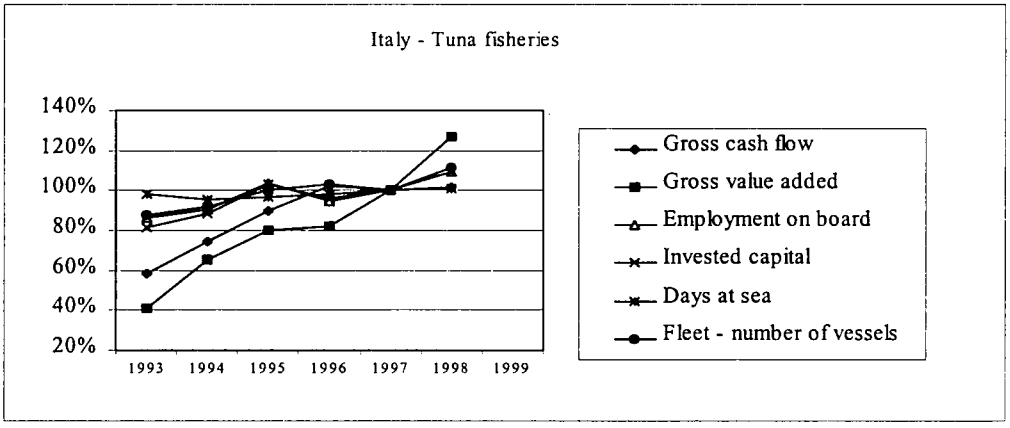
In 1998, total landings (tuna and other species) have grown to 12.3 thousand tonnes with a value of ITL 68.3 billion (EUR 35.3 mln).

Economic accounts for the fleet segment reflects a growth in the net financial profit from minus ITL 1.1 billion (approximately minus EUR 0.6 mln) to ITL 3.0 billion (approximately EUR 1.5 mln). While in 1993 and 1994 net profit was negative, in the last four years, net profit is positive even if with a low value per vessel (about ITL 13 mln, EUR 6.7 thousand).

Activity has been stable while employees increased from about 643 units (1993) to about 815 units (1998). Notwithstanding, the gross value added per employee has increased from ITL 26 mln (EUR 13 thousand) in 1993, to ITL 57 mln (EUR 29 thousand) in 1998.

Outlook for 1999

TAC for red tuna for the Italian fleet has been established for 1999 at 3,436 tonnes. In order to respect these quotas, activity, and therefore all other indicators, should decrease. Negative net financial profit is foreseen for 1999.



9.9 Swordfish fisheries

Role in total fisheries

Vessels that are legally authorised to use drift nets («spadara») and are registered in a specific ministerial list compose the swordfish segment. Vessels authorised are 594 units in 1998 and represent 3.6% of the national total. This type of fishery will become forbidden by the end of 2001 (EC regulation n. 1239/98) and many of the drift nets have complied with the Italian Drift net Plan (Re-conversion Plan) and with the Community rules during

the last two years. In 1998 vessels that fished with 'spadare' are estimated to be about 200 units. Figures herein reported consider quantities and values for the whole fleet using not only drift nets but also alternative gears during the year of reference.

Swordfish segment account for 9.1 thousand GRT and 89.9 thousand kW (4% and 6% of the national figures). Vessels of this segment are 15 GRT and 151 kW on average. 76% have been built before 1983.

In 1998, total landings reached 9.8 thousand tonnes with a value of 160 billion ITL (EUR 82,6 mln). In national terms, quantities and value of landings of the swordfish segment represents 2.2% and 5.1%; net profit during 1998 was ITL 44.6 billion (EUR 23 mln) and about ITL 75 mln (38 thousand Euro) per vessel. Full time employment in the swordfish fisheries accounted for more than 2,700 units (5.7% of the national figure). Invested capital totalled ITL 186.6 billion (EUR 96.4 mln).

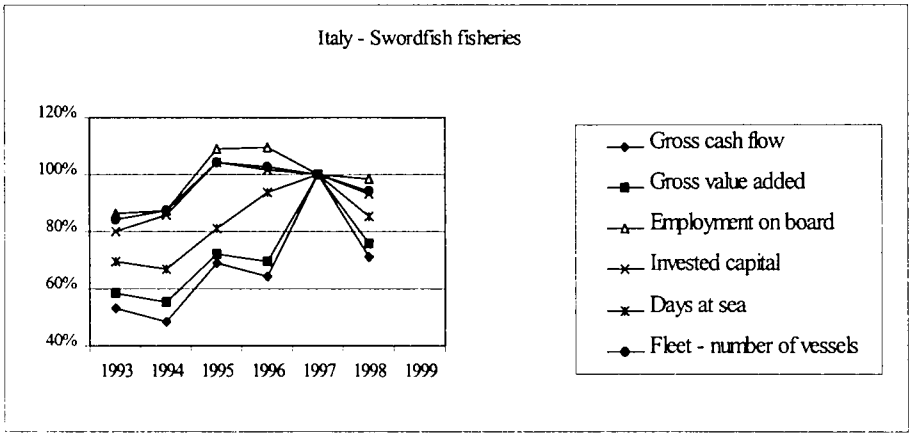
Economic performance

The total value of landings in 1998 was 25% higher than in 1993. The gross value added was up 33% from the level of 1993 (ITL 108.8 billion, EUR 56.2 mln of 1998 against ITL 84.3 billion, EUR 43.5 mln of 1993). This is due to the increase of the volume of landings; 9.8 against 8.0 thousand tonnes (+22.5%).

In 1998, cost levels were not very different from 1993; in particular only fuel costs have increased significantly (+14%); this is probably due to the increase in total kW. Activity at sea (measured by days) was 119 days per vessel in 1998, compared to 108 days per vessel in 1993. Total number of people employed has passed from 2,394 in 1993 to 2,732 in 1998. Output prices have increased by 2%, costs have been stable and catches have increased by 23%, resulting in a growth of around 43% of the net financial profits.

Outlook for 1999

During 1999, a lot of vessels are expected to stop this type of fishery to comply with the Italian Drift net Plan (Re-conversion Plan) and with the Community rules. Therefore, all figures should decrease.



9.10 Comments on data

General comments

The data on vessel characteristics (numbers, GRT, kW, age) are taken from the Archive of Fishing Licences (ALP) from the Ministry of Agricultural Policy and Forestry - Directorate General for Fisheries (MiPAF). Desegregation of total fleet into the eight segments herein considered derives from an elaboration on the ALP and from IREPA censuses of the fleet for the years 1997 and 1998. The segments of tuna and swordfish fisheries have been listed using two specific ministerial lists dated 1991 for swordfish and 1997 for tuna and figures have been backward estimated.

Data reported in the current AER cannot be compared with those of the first report because all statistics and data have been re-estimated in order to consider the new two segments of tuna and swordfish. Instead, time series figures herein reported are homogeneous.

Data on catches, revenues, costs and employment are based on IREPA databank, which is part of the statistical output, produced from the Italian fisheries programme monitoring. Raw data is recorded based on a statistical sample design, which considers about 400 boats (2% of the national fleet). The sample is derived from a two stage sampling method with probability proportional to their size (PPS): the first stage sample units are the landing places and the second stage units are the boats and gears. Therefore, all figures apply to raising factors for the whole fleet segments and are statistically significant.

From the above databank, for each segment, parameters per vessel (or for unit of GRT for tuna and swordfish fisheries) have been calculated and have been applied to each segment. Data herein reported are not official statistics.

Furthermore the following calculations and estimations have been made in order to complete the analysis:

- Invested Capital: official figures from RINA (Italian Navy Register) have been used to obtain a value for unit of GRT which depends on the building material and equipment; this is the replacement value;
- Book value: this value has been calculated as invested capital minus total depreciation;
- Interest: national rates for government bonds calculated on the book value have been used; this national rate has been diminished by the national inflation rate to have a proxy for the real interest cost. Time series of these figures are the following:

	1993	1994	1995	1996	1997	1998
Bond Interest (*ISTAT*)	11.3	10.7	11.9	9.6	6.8	4.9
Inflation rate (*ISTAT*)	4.2	3.9	5.4	3.9	1.7	1.8
Real Interest rate	7.1	6.8	6.5	5.7	5.1	3.1

- Depreciation: 4% per year calculated for 2/3 of the invested capital, and 10% per year calculated for 1/3 of the invested capital, if the vessel age is lower than 25; otherwise 2% per year calculated on the invested capital.

10. The Netherlands

Prepared by LEI

10.1 National fleet

Current structure

The Dutch sea fishery fleet can be divided into cutters and freezer trawlers. For cutters, which all land fresh fish, the main fishing grounds are the North Sea and coastal waters. Target species for the cutter fleet are flatfish (sole and plaice), shrimp and demersal fish (cod and whiting). The Dutch cutter fleet is the biggest producer of flatfish in Europe. Generally flatfish and shrimp are caught by beam trawl. Cod and whiting are caught by demersal (otter)trawl and pair trawl.

Pelagic species like herring, mackerel, horse mackerel, blue whiting and sardinelas are the most important target species of the 15 freezer trawlers. Most of the time they operate in other EU waters than the North Sea and in waters of Namibia and Morocco. All catches are frozen directly on board. Total value of landings increased significantly from NLG 214 mln (EUR 97 mln) in 1997 to NLG 249 mln (EUR 113 mln) in 1998.

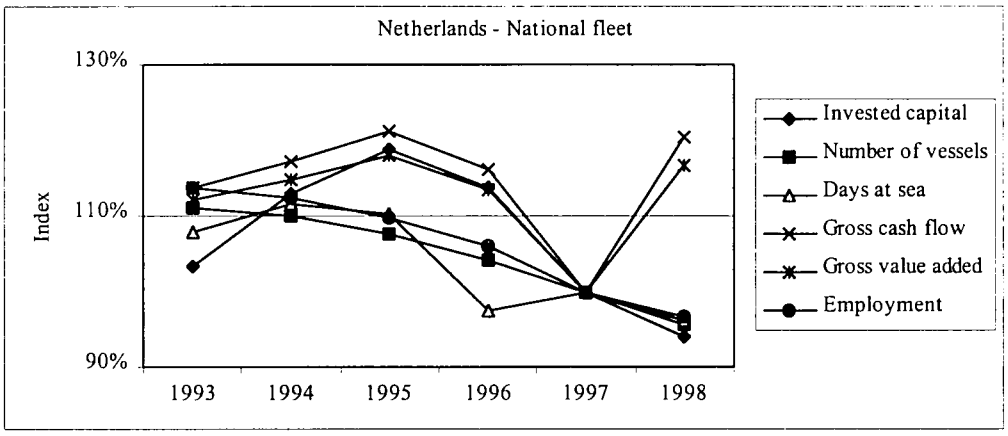
In 1998 the total number of vessels of the Dutch cutter fleet decreased to 407, with a total of 84,000 GT and 323,000 kW. There are two important segments in the cutter fleet, beam trawlers with engine power over 811 kW and shrimpers/eurocutters with engine power between 191 and 221 kW. These two groups accounted for about 75% of the total number of cutters and nearly 90% of the total value of landings and of the total employment on board. Other fleet segments are small shrimpers (less than 191 kW) and some otter trawlers and pair trawlers.

In 1998 the total value of landings of the cutter fleet was NLG 607 mln (EUR 276 mln) and about 1858 fishermen were employed in the Dutch cutter fishery. There is a further concentration going on towards two types of vessels: 221 kW and 1470 kW with an average length of 24 respectively 42 meters. Regarding the MAGP IV, the beam trawlers of 811 kW and more belong to segment B (>221 kW) and the shrimpers/eurocutters of 191-221 kW belong to segment C (-<221 kW).

Main trends

Since 1993 the cutter fleet has been reduced in number of vessels by 14% and in engine capacity by 12.5%. This trend will probably continue in the coming years. Employment on board in that period decreased also by 14%. Investments in new vessels are at a low level meaning that the average age of the vessels increases. Volume of landings decreased steadily since 1993 by about 25%.

The economic performance of the cutters improved considerably in 1998. Net profit increased from zero level in 1997 to NLG 39 mln (EUR 17.7 mln) in 1998 due to higher value of landings (+6%) and lower fuel and capital costs.



10.2 Shrimpers/eurocutters 191-221 kW

Role in total fishery

In 1998 this segment accounted for 35% of the total number of cutters and for 19% in the total value of landings. The share of this segment in the total fleet has been rising continuously in the nineties and is expected to grow in the future. The modern vessels in this segment are equipped mainly for the fishery on flatfish and the older vessels for the fishery on shrimp. However, most of the vessels are multi purpose. The main fishing grounds are the North Sea and coastal waters. The vessels are on average 23 meters long and 78 GT. In 1998 about 479 people were employed in this segment.

Economic performance

The total value of landings increased significantly from NLG 94 mln (EUR 41 mln) in 1997 to NLG 114 mln (EUR 52 mln) in 1998. Value of landings of sole and cod doubled as a result of higher landings of both species and higher cod prices. Costs were stable except for labour costs which increased by 30% following the landings value. Fuel costs went down by 10% due to lower fuel prices.

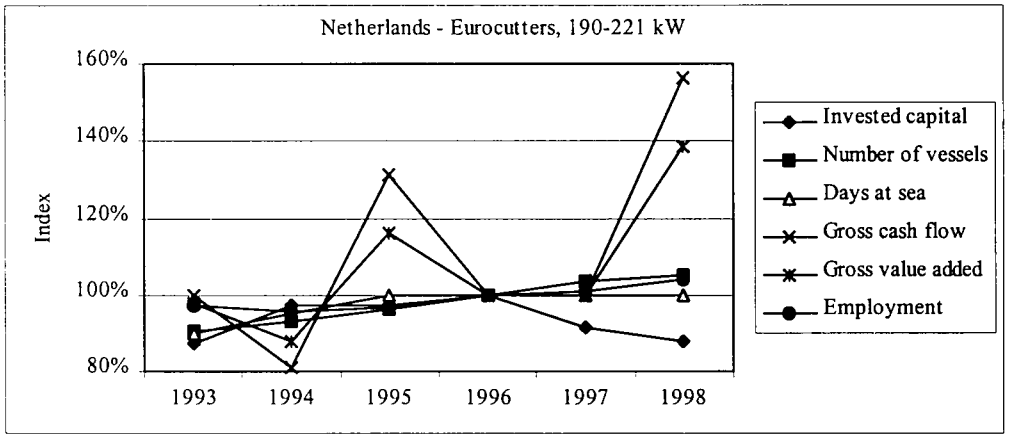
As a result of these developments the gross cash flow of this segment reached the highest level of the past seven years. Net profit increased also significantly to NLG 6 mln (EUR 2 mln).

Gross value added per employee increased by nearly 40% compared with 1997.

Outlook for 1999

It can be expected that the economic performance of this segment will improve considerably in 1999. Value of landings of shrimp almost doubled in the first eight months of 1999 due to higher prices. Generally shrimps account for about 25% of the total landings value of these vessels. Furthermore value of landings of sole and plaice increased by about 10%.

As a result of this total value of landings could rise by 20% if present trends continue. However costs will be higher as well because of increasing fuel prices.



10.3 Beam trawlers 811 kW and more

Role in fishery

In 1998 the vessels of this class accounted for 40% of the total number of vessels and for 73% of the total value of landings of the cutter fleet. The relative share in the fleet remained the same since 1993. In 1998 163 vessels of 811 kW and more were active compared to 194 in 1993. All vessels are equipped for the fishery on flatfish like sole and plaice. The main fishing ground is the North Sea. The beam trawlers have an average length of 40 meters and engine power of about 1,640 kW.

The total number of people employed in this segment has fallen from 1,333 in 1993 to 1,135 in 1998. The value of their landings reached NLG 442 mln (EUR 200 mln) in 1998.

Economic performance

The economic performance of this segment improved in 1998 mainly because of lower costs. Aspecially fuel costs went down significantly (-19%) due to lower fuel prices. Depreciation and interest costs decreased as well because:

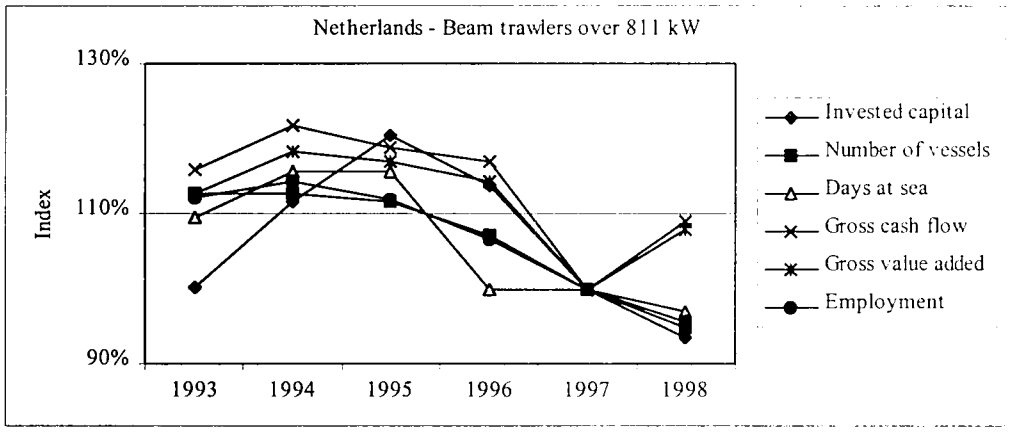
- the number of active vessels decreased from 172 in 1997 to 163 in 1998;
- interest rates were lower;
- the average age of the vessels increased again.

The total value of landings remained almost unchanged. The value of landings of sole decreased slightly despite 33% higher landings.

Total net profit of vessels in this segment increased from NLG 5 mln (EUR 2.2 mln) in 1997 to NLG 28 mln (EUR 13 mln) in 1998. Gross value added per employee increased by about 13% compared with 1997.

Outlook for 1999

The value of landings until august 1999 was about 10% higher compared to the same period in 1998. Landings value of sole and plaice increased but cod landings went down. Costs will probably increase a litte because fuel prices will rise in the second half of the year. Other costs will remain stable. Overall the economic results of this segment will probably be comparable to 1998.



10.4 Comments on data

All data are based on the LEI-panel. This panel represents more than 25% of the population of the cutter fleet. Invested capital has been estimated on the basis of insurance costs. Depreciation and interest costs have been calculated according to the LEI-methodology. Differences in capital costs between the common method and the LEI-system are generally marginal. Depreciation and interest costs with respect to investments in fishing rights have not been taken into account.

11. Norway

Prepared by Norwegian Institute of Fisheries and Aquaculture Ltd.

11.1 National fleet

Current structure

The Norwegian fishing fleet is characterised by its variety in vessel size, fishing gears and seasonal structure of the fisheries. The fleet consists of a large number of vessels. In 1998 there was a total of 13,252 mostly owned and operated by one man only.

4,800 vessels are open boats, and of these only 20% had an income from fishing that exceeded 10,000 NOK. Only 3,400 vessels have an overall length of more than 10 metres.

For sealing, whaling, trawl, purse seine and Danish seine a license is necessary in order to fish. In addition other means like quotas and restricted access are applied to adjust the capacity to the resource. In 1998 458 vessels were granted 785 licenses. These were 103 for cod trawling, 98 purse seine, 46 blue whiting trawling, 108 deep sea prawn trawling, 148 North Sea/industrial trawling, 16 saithe trawling, 139 capelin trawling and 47 other. In 1980 the figures were respectively 996 vessels and 1,315 licenses.

The total catch in 1997 was 3 mln tonnes, of which 87% was caught by an active fleet of 2,771 vessels. In 1998 total value of landings increased by 13% although total landings were reduced by 1%.

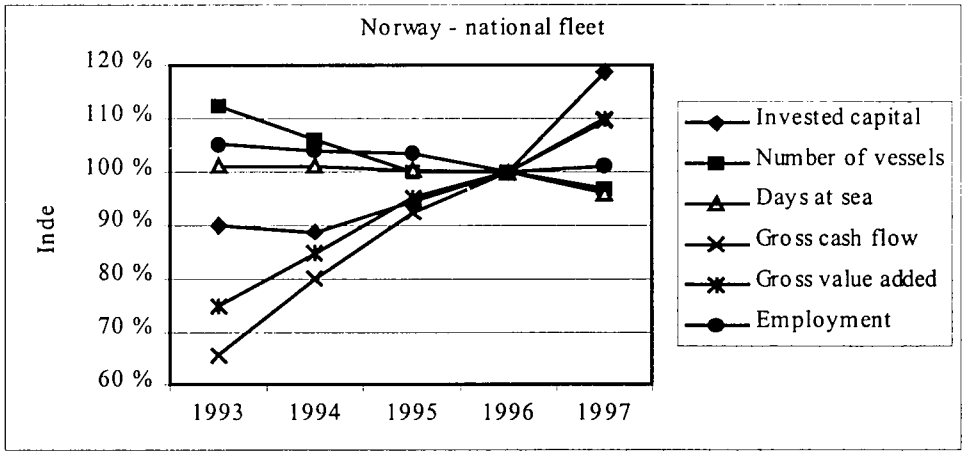
Total employment in the fishing fleet in 1998 was 21,298 of which only 71% (15,141) had fishing as their sole or main occupation. The (estimated) full time employment (FTE) in 1997 was 16,058[1], which represents an increase of 1% from 1996.

Main trends

As seen from the tables in the appendix, the Norwegian fishing fleet has in recent years undergone a reduction in number of vessels and employees, while invested capital, gross cash flow and value added have increased. Preliminary figures from Statistics Norway for 1998 show that even if total catch was almost the same in 1998 as in 1997, the total value of the catch increased by 13%. Pelagic species increased in volume of catch by 2.5%, although value of catch was reduced by 5%. White fish species fell in volume by 10% but the value was increased by 24%. Crustacean catches increased by 34% (mainly prawns) but the total value only increased by 27%.

Due to short supply on the labour market and structural changes in the fishing fleet, the average age of fishermen is increasing and the number of active fishermen is expected to fall in the years to come.

[1] For small boats (8-13m) measures for operating time have not been computed since the 1996-survey. Therefore an approximation is employed, based on the mean for 1993-1996, to get a measure for the FTE-employment in these vessels.



11.2 Wet fish trawlers

Role in total fishery

The number of vessels in this fleet segment in 1997 was 38, which represented 0.3% of the total number of vessels in the Norwegian fishing fleet, though 1.4% of the active fleet. It comprises 3.6% of the total catch and 6.6% of the total value of landings (1997 figures). The average vessel size in 1997 had an overall length of 47.2 meters and a tonnage of 312 GRT/577 GT. In 1996 average engine power was 2,200 kW.

The wet fish trawlers are mainly occupied in the cod fisheries and have few other alternatives. This is reflected in the larger share of their total value of landings, as cod has a higher market price than the average. Species included in the cod fisheries are other gadoids such as haddock and saithe. About one quarter of the wet fish trawlers also carry a shrimp trawl license, which also contributes to a high value of landings. By-catch of other species like redfish and Greenland halibut are also significant, as seen from table over composition of landings. In 1997, 928 normal man-years, or 6% of the fishermen employed in the active fishing fleet, were employed on these vessels.

According to the Norwegian Fish boat owners association, 44 of the vessels licensed for bottom trawling for demersal species can be defined as wet fish trawlers. The number of *active* wet fish trawlers in the cod fisheries will differ from year to year, as the limit for the vessels to be classified as part of the active fleet is a minimum operating time of 30 weeks. The rest (59 vessels) are larger trawlers with on board processing facilities, or small trawlers. Of the 103 cod trawlers, 25 are located at the north western coast of Norway, while almost all of the wet fish trawlers are located in the northernmost part of Norway (Finnmark, Troms and Nordland counties).

Economic performance

The wet fish bottom trawler fleet is in general integrated with land based industry, often by ownership. Some companies in the fish processing industry own or have a major shareholding in several wet fish trawlers. In 1999, the fish processing industry owns 54 out of 79 demersal trawlsers in north of Norway, while fishermen owns the remaining 25.

In 1997 the average price for all Norwegian cod landings was NOK 7.12 per kg, while the corresponding mean for the wet fish trawlers were only NOK 6.32. For some vessels there are regional constraints on where the fish should be landed. These conditions are likely to contribute to very big variance in economic performance within this vessel group. The quota regulations have allowed the companies to transfer quotas between vessels in the same firm. In 1996, 23 of the licensed wet fish trawlers were considered actively involved in the cod fisheries, while the respective number in 1997 was 38. This increase may well be due to the higher quotas in 1997 for both cod and haddock, and that several trawlers participated in the saithe fisheries south of 62°N. In 1998 the number of active vessels is expected to fall due to lower cod quotas.

As mentioned, the presented value of landings may be influenced by the fact that most of the wet fish trawlers are vertically integrated with processing industry firms, due to internal transfer pricing. If this is the case, the net profit presented in the table could be considered to be a lower bound. However, vertical integration makes it possible to subsidise the fleet by reducing the profit of the fish processing industry. In any case, *real* per vessel financial turnover may deviate considerably from the figures presented.

From 1996 to 1997 the value of landings from this fleet segment increased from NOK 371 mln (EUR 45.2 mln) to NOK 611 mln (EUR 76 mln). Gross cash flow increased as well, from NOK 62 mln (EUR 7.6 mln) to NOK 86 mln (EUR 10.7 mln), but at a lower rate than the value of landings.

Gross value added (GVA) increased from NOK 186 mln (EUR 22.7 mln) to NOK 322 mln (EUR 38 mln). In the case of gross value added per employee, the gross value added per man-year (full time equivalents) was NOK 314,000 (EUR 38,300) in 1996 while in 1997 it was NOK 328,000 (EUR 38,800). At vessel level, all these key statistics have been reduced since 1995.

Net profit for this segment increased by 25% from 1996 to 1997. However, considering that the number of vessels increased by 15 (60%) the 1997 profit is at a low level. The varying number of vessels, of course, influences other economic indicators as well.

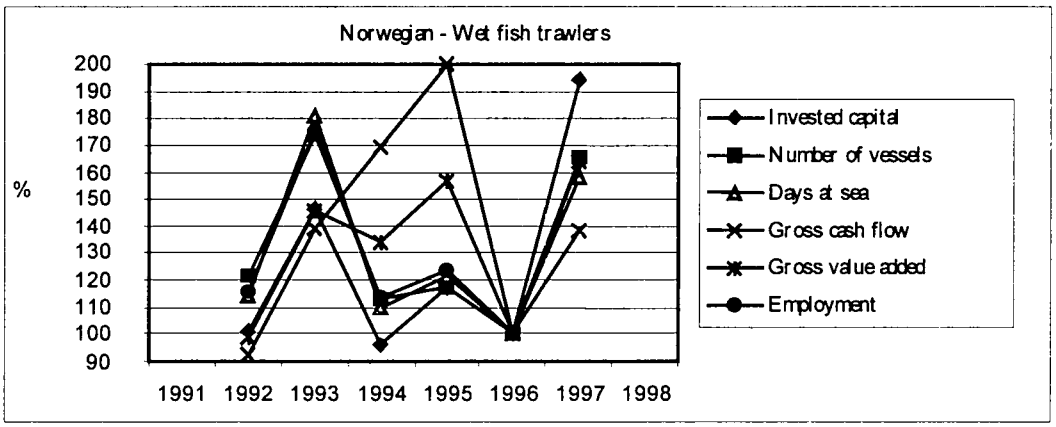
It is difficult to interpret the situation for 1998. Market prices for cod have increased significantly which have raised earnings and profit. But the effect of the fall in quotas may well have superseded the higher income, due to relatively larger abundancy of the cod stock, and higher catch costs.

Outlook for 1998 and 1999

The fishery for pelagic species like herring and mackerel for both consumption and industrial use has throughout the 1990s played an increasingly important role for the value of landings in the Norwegian fishing industry. Until 1998 the landings from the cod fishery

increased in volume, but not in value. This has changed in 1998. The catch of cod declined by 20% from 1997 to 1998, while value increased by 17%. The decline in herring catches was 10%, though price increased by 3%. In spite of a small decrease in the total landings, the total value of landings increased by 13% in 1998. The first half of 1999 shows a similar development. In volume, a 12% decrease in total catch has occurred, where the reduction for cod and herring were 25 and 18% respectively. The total value of landings fell from NOK 5,307 mln to NOK 5,067 mln. Average prices for cod, haddock and saithe continued to rise, while the average prices for pelagic species like herring, blue whiting, Norway pout and sandeel fell. The latter three constitute 45% of the catch but only 7% of the value, while cod and saithe amounted to 56% of the value, but only 20% of the catch.

For the wet fish trawlers the first months of 1998 were turbulent. First of all, the market prices for cod made a considerable leap upwards, probably causing higher revenues for the trawlers. Secondly, the total cod quota, which is distributed among the conventional and trawler fleet, was reduced from 399,000 in 1997 to 313,000 tonnes in 1998, which involved a 23% reduction in quota for the trawlers. In 1999 the cod quota was again reduced, to 236,500 tonnes, and the vessel quota for wet fish trawlers were set to 788 tonnes, of which at least 20% are to be caught after 1st September. However, the largest sales organisation (Norges Råfisklag), has indicated that although total catch has fallen dramatically so far this year, the price increase on cod has more than compensated for this and thus the total revenue from the catch has actually increased. The profitability of the wet fish trawlers is expected to improve in 1998, while the effect in 1999 is uncertain. However the variation within the fleet will be considerable, with the highest expectations for the independent wet fish trawlers and those with a shrimp trawl license.



11.3 Comments on data

The data in this study are mainly collected from the profitability studies of the Directorate of Fisheries, which have been conducted since 1966. In addition, figures have been obtained from Statistics Norway and the Norwegian fishing boat owners' association. The way the profitability survey is carried out was changed from 1997 to 1998, from being voluntary to being compulsory for a sample of the vessels. The alteration has involved that preliminary figures are not available for this study, and therefore no economic indicators for 1998 are presented here.

When looking at the tables in appendix 11, the discrepancy between the total and the active national fleet is conspicuous, especially for the tonnage. This is due to the fact that the active vessels share of landings and landed value are approximately 90%. The active fleet is normally big vessels and when computing the total tonnage of these vessels, based on an average measurement of GRT, we estimate that the active fleet (consisting of 2,860 vessels in 1996) has a total tonnage that exceeds the total fleet (consisting of 13,654 vessels in 1996). When computing the total tonnage, using averages for the active fleet, it does not add up correctly. This is because vessels built later than 1982 are only measured in Gross Tonnage and 5,086 vessels are open boats that therefore hold no cavities. The Norwegian fishing fleet consists of 442 vessels measured in GT, most of them longer than 25 meters, adding up to a total of 267,000 GT, while 8,116 vessels, most of them under 11 meters, are measured in GRT and adds up to a total of 91,500 GRT. In any case the tonnage figures are a bit deceptive.

Furthermore, as profitability figures only are given for the active vessels, economic indicators for the total fleet are inaccessible. This applies for the wet fish trawlers as well as the national fleet. To make a qualified guess, one could argue that vessels that are not active are probably less profitable than the active fleet. On the other hand, if these vessels are only operated during the most profitable fishing seasons (for instance after spawning cod in Lofoten in the winter), the opposite could be the case.

When considering the wet fish trawlers, the most incoherent point is the sample size of the segment that is accounted for earlier. In addition, we have included other incomes sources (interests income, profit on exchange and interests subsidies) in the figures over value of landings in the tables over economic and capacity indicators. The total population of wet fish trawlers is 44 vessels mid-1998, according to the Norwegian fish boat owners' association. The number of active wet fish trawlers will vary due to the activity requirement of 30 weeks operating time. Thirteen of the trawlers also hold a shrimp trawl license.

The modelling of the capital costs (interest and depreciation) is as follows: Interest consist of two components, first the actual interest costs and second an estimated interest cost on capital, stemming from the owners investment in vessels instead of alternative assets. The latter is found by using the real interest rate on 10-year governmental bonds on estimated sales value of the vessel as basis. The estimation of depreciation on vessel is based on a mixed principle. It consists of depreciation on equity, which is estimated depreciation of replacement cost multiplied by (1-debt share), where debt share equals foreign capital divided by the sales value of the vessel. Depreciation on foreign capital equals entered depreciation on vessel multiplied by debt share. The depreciation rates and the

expected lifetime for the main components of the vessels are reported in table below. However, since 1994 the profitability survey has produced economic indicators for the fleet that do not rest on this type of calculations.

Table 11.1 Employed depreciation rates for fishing vessels in the Norwegian Profitability Survey, 1996

Main Components	*Depreciation rates (%)*	*Expected lifetime (years)*
Hull with superstructure etc.	3.3	30
Engine	6.7	15
Electronic equipment	10	10
Hydraulic equipment	10	10
Processing equipment - cold storage etc.	10	10

Compared with the common method, explained in chapter 18, this depreciation system leads to lower cost, thus a higher net profit.

12. Portugal

Prepared by E.P. de Brito, Consultants

12.1 National fleet

Current structure

The National fishing fleet is composed by 11,189 vessels (31 December 1998) of which 9,475 units are smaller than 5 GRT. Only 405 vessels are above 50 GRT. The average engine power of the smaller vessels is 8.9 kW. There are no data available about the age of the total national fleet. However one can say that the average age is *over 20 years*. The total size of the fleet is 114,643 GRT and total engine power is 394,048 kW (31 December 1998).

The fleet is divided into the following 10, MAGP IV, segments:

Mainland:

1. Small scale fishing vessels (demersal, <12 m);
2. Multipurpose vessels (>12m);
3. Coastal demersal trawlers;
4. Coastal small pelagic purse seiners;
5. International waters fishing vessels (demersal and pelagic trawlers, long liners and multipurpose vessels).

Madera:

6. Small scale fishing vessels (demersal, <12 m);
7. Multi-purpose vessels (demersal and pelagic, >12 m);
8. Purse seiners (pelagic).

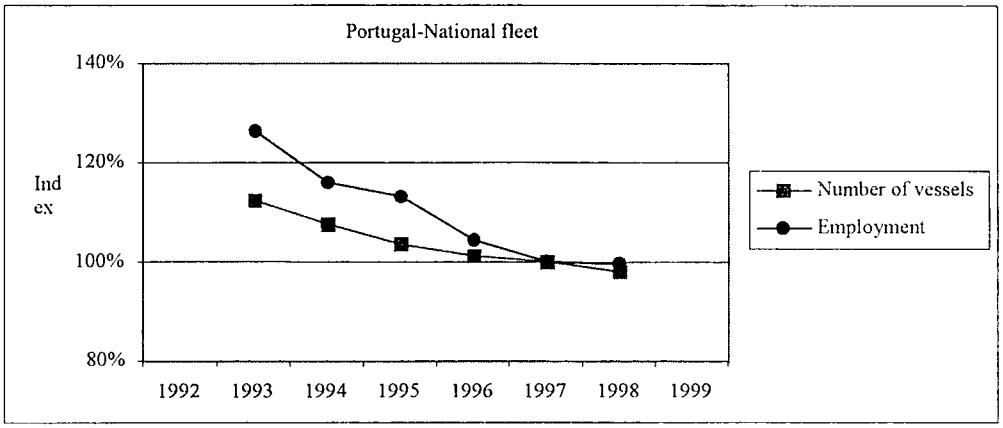
Azores:

9. Small scale fishing vessels (demersal, <12 m);
10. Multipurpose fishing vessels (demersal, pelagic and international waters, >12m).

The total revenue of the Portuguese fishing fleet, in 1998, was PTE 64,166.7 mln (EUR 318.1 mln). Total employment was 27,2 thousand men. Main species are in value sardine, octopus, and horse mackerel and in volume, sardine, horse mackerel and tunas.

Main trends

The value of landings has oscillated around PTE 60,000 mln (EUR 297.5 mln) over the last six years. The fleet size has been reduced, in terms of all the indicators (number, GRT, kW and employment). The volume of landings has reduced steadily from 1993 until 1997. In 1998 an inversion of this trend has taken place, with an increase by about 5%. Production prices have increased by about 35% from 1993 to 1998. General inflation was, in this period, 18.5%.



12.2 Coastal trawlers

The coastal trawling fishery represents a significant part of the total fishery, accounting for just 14.4% of the total sales and 12.9% of the total national landed volume. All the vessels operate in the mainland coast over the 6 miles. One segment target to demersal fish and molluscs (78 registered vessels); the other crustaceans (29 registered vessels).

Role in total fishery

This segment counts less than 1% of the total number of vessels, 12.4% of GRT and 13% of kW. In economic terms the segment had a value of landings of PTE 9,218.5 mln (EUR 45.7 mln) in 1998. The total landed volume was 27.4 thousand tonnes. The employment was, in 1998, about 3.2 thousand men.

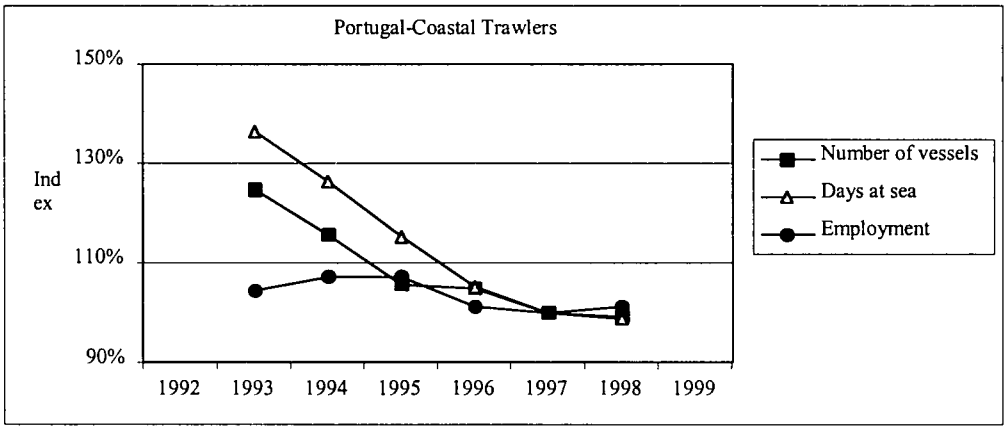
This segment is, both, from a technical and economic point of vieux, the most advanced part of the fleet. On average, the vessels have more sophisticated equipment than, in general, the other coastal units. They are, normally, exploited by companies and not by owner fishermen. The biggest part of the biggest fish demersal vessels operates in the North and has the homeport in Aveiro, Figueira da Foz and Matosinhos. As for crustacean vessels, the main region of production is the South of Portugal (Algarve) mainly with landings in Vila Real de S. Antonio, Portimão and Olhão. The bulk of the catch is sold in auction (Portuguese ports), although a small part of crustacean production is sold in Andaluzia.

All the landed species are sold and consumed in fresh form, normally in Portuguese or Spanish markets. The main species, in volume, are horse mackerel (49%) and 'miscellaneous' high valued species (17%). In value horse mackerel represents 22% of the total sales, 'miscellaneous' 26% and prawns 16%.

Economic performance

Figures of the economic performance of this segment were estimated for the years 1996-1998. The gross value added increased about 17% from 1996 to 1998 (inflation was only 5% in this same period). As for the volume of landings its amount has been always between 27 and 28 thousand tonnes. The value of landings, in this 3 years period has increased by 15% (more 10% than the inflation). The economic performance of this segment improved mainly due to increased prices of fish. Gross cash flow has also increased in this period by 17%, similar to gross value added. The net profit in 1998 was PTE 1,767 mln (EUR 8.76 mln).

These figures have also increased in average terms per vessel.



Outlook for 1999

This segment has suffered a big fishermen strike since 5th April 99 until late summer. This explains the big drop in quantity in the first semester (-44.5%) when compared with equal period of 1998. Average price has increased in the same period 32.2% compared with the first semester of 1998. So, the total landing value has decreased about 27% from 1998. Some prices have increased more than the average. It is the case of the mainly captured specie of fish trawlers, the horse mackerel (44.8%). Prawn registered an increase of 321.6% in volume and a decrease of 64.5% in price.

12.3 Coastal purse-seiners

The coastal purse-seiners also represent a significant part of the Portuguese total fishery, accounting for just 16.4% of the total sales and 44.7% of the total national landed volume. We consider only the vessels registered in the Mainland. However only 5 vessels of this segment operate outside the Mainland (Madera). All the vessels operate in the coastal zone

and direct their fisheries to small pelagic (sardine and mackerel) and horse mackerel. These vessels operate and land, mainly, in the following fishing ports, (quantities of sardine landings are indicated): Peniche (16,0 tonnes); Matosinhos (14,792 tonnes); Figueira da Foz (12,366 tonnes); Portimão (11,509 tonnes); Olhão (7,589 tonnes); Sines (7,366 tonnes).

Role in total fishery

This segment counts less than 2% of the total number of vessels, 6.7% of GRT and 9.3% of kW. In economic terms the segment accounts a value of landings of PTE 10,530 mln (EUR 52.2 mln) in 1998. The total landed volume is 94.900 thousand tonnes. The employment was, in 1998, 2,000 men.

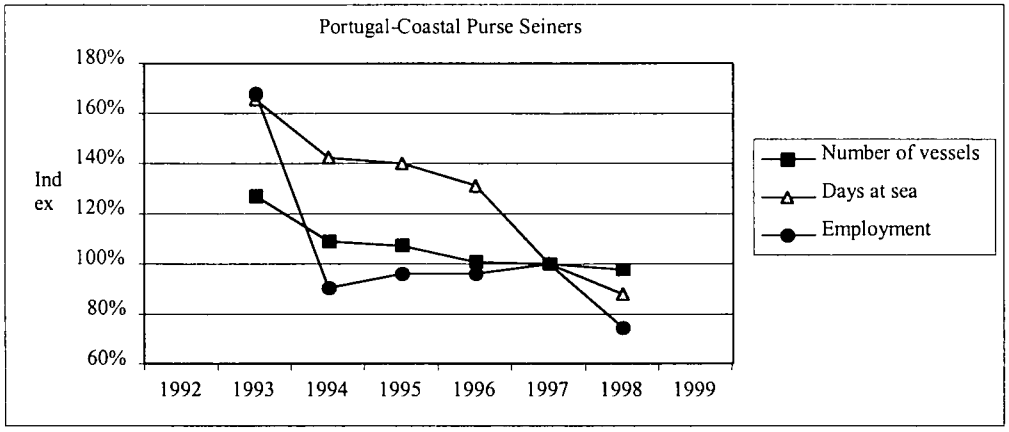
This segment is constituted by 105 vessels with less than 50 GRT and 68 units with more than 50 GRT. 32% of the bigger ones and 67% of the smaller have more than 25 years. 36% of the segment operate in the northern part of the coast (Figueira, Matosinhos and Póvoa do Varzim). 38% operate in the centre/southwest (Peniche, Nazaré, Sesimbra Setúbal and Sines). 26% operate in the South (Portimão and Olhão). These vessels are normally made in wood and operated by their owners.

Sardine represents 81% of the landings in volume and 77% in value. This specie constitutes the main raw material for the canning industry. However, the most part of it is consumed fresh in the Portuguese market mainly in summer time.

Economic performance

Figures of the economic performance of this segment were estimated for the years 1993-1998, through the inquiry of the national association of the Producer's Organisations. The gross value added increased by about 120% from 1993 to 1998 (inflation was only 18.5% in this same period). As for the volume of landings its amount has been always between 103 and 85 thousand tonnes. Several assessments and surveys were carried out because of the concern about the evoiution of the biomass. Some measures were taken, namely in the field of reducing the number of vessels and fishing days per vessel (58,7 thousand fishing days in 1993 and 31,1 in 1998). The value of landings has increased about 74% in this 6 years period (55.5% more than the inflation). The economic performance of this segment improved mainly due to increased prices of fish. Gross cash flow has increased by 99%, from 1995 to 1998. As 1993 and 1994 were years of a big crisis for this segment, we compare the gross cash flow of 1998 with the first year of recuperation. However we can consider that even in 1993, the worst year for purse seining, the gross value added has supported a minimum of sustainability in the social field. After that year, severe reductions have occurred in the number of vessels. This fleet declined from 225 in 1993 via 193 in 1994 to 173 in 1998.

1998 has been a better fishing year comparing with 1997. Gross cash flow has increased by 113%. Gross cash flow per vessel has increased 119% from 1995 to 1998. The net profit in 1998 was PTE 1,303 mln (EUR 6.46 mln).



Outlook for 1999

In the first semester of 1999 landings have increased in volume (6.5%) and in value (29.8%) compared with the first semester of 1998. This means an increase of the average price of 21.8%.

12.4 Comments on data

General comments

The data on vessel characteristics (numbers, GRT, kW) as well as catches, prices, sales and employment are taken from national statistics.

Most economics figures have been collected with the help of fishing associations and experts, namely ADAPI for trawling and ANOP Cerco and Dr. Jorge Abrantes for purse seining. Both associations and experts have collected cost structure data from limited samples of vessels and extrapolations have been made, based on estimations supported by the declarations of several professionals and experts about the differences of the sub-segments in terms of cost structure.

Furthermore the following calculations and estimations have been made in order to supplement the analysis:

- Replacement value (RV): Based upon inquiries.
- Depreciation: Hull: 4% per year calculated on the replacement value, until 25 years of age; 2% after 25 years. Engine: 10%, replacement value, only during the first 10 years of life. The value of hull, equal of 2 times the value of the engine.
- Interest: Interest of Government Bonds rate (10 years) minus the rate of inflation.
- Euro rate: 'European Economy' average of monthly rates for 1998.

Comments to the segmentation

The segments used correspond to the ones of MAGP IV for Mainland: trawlers and purse seiners.

13. Spain - Atlantic

Prepared by Universidade de Vigo

13.1 National Fleet

Current structure

In 1995, the total Spanish fishing landings amounted to 1,443,600 tonnes. In this year the national fleet was composed of 18,500 active vessels (19,000 in 1994 and more than 20,000 in 1990). The total GRT of the fleet has decreased much slower: from about 680,000 GRT in 1990 to 660,000 in 1995. In the period 1990-95 it meant only a drop of 3% in GRT but of 11.5% in terms of number of vessels.

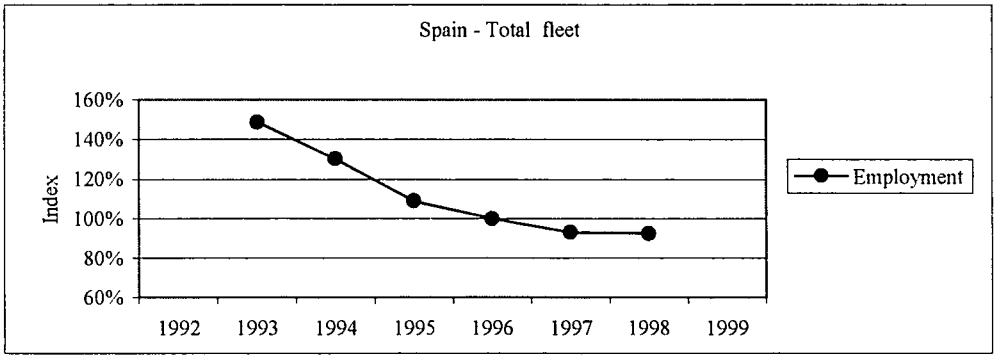
There are a lot of different fleet segments in Spain. Most operates in national waters (about 88% of the vessels, 28% of the total GRT, 41% of the total kW and about 61% of the fishing employment). Another significant segment exploits resources located in international and third countries waters (around 6% of the vessels but 52% of the total GRT and employing 23% of the total fishing crew).

There is little information about Spanish fishing production. The official figures show a increasing trend for the period 1990-95 (from 953,000 Tonnes in 1990 to 1,443,600 tonnes in 1995). This evolution contrasts with the development of employment in the same period (from 94,300 people to 65,900).

Main trends

In a short term, the general situation is expected to be very similar to the present one. The main trends are:

- Reduction of fleet, particulary in number of vessels and less in GRT and kW.
- Stability in production, both in value and in volume of landings.
- Decreasing trend in the total employment.



13.2 The 300's fleet

Role in total fishery

This fleet make up trawlers and some bottom lines and gill nets. This segment is so-called '300's fleet' because in the Adhesion Treaty of Spain to EEC in 1986, only a closed list of 300 vessels were authorized to fish in ICES zones Vb, VI, VII and VIIIa,b,d,e (Irish box excluded). In the Spanish case, the MAGP-IV includes this segment with all vessels up to 12 metres operating in EU waters, and they have already achieved the objectives for the end of the year 2001.

Nowadays, the number of vessels is 204 and comprises 1.3% of the total Spanish fleet. The share of tonnage and engine power are larger, about 9% of the total GRT and total kW.

This segment employs 3,060 people (5.4% of total). The employment level is dropping continually mainly due to the decreasing number of active vessels in this fishery (in the period 1993-98 the employment fell up to 35.9% and the active vessels up to 30.6%).

The 300's fleet is involved in a multi-species fishery and the main targets are hake, megrim, redfish, anglerfish and horse mackerel. The value of landings comprises about 8% of the total.

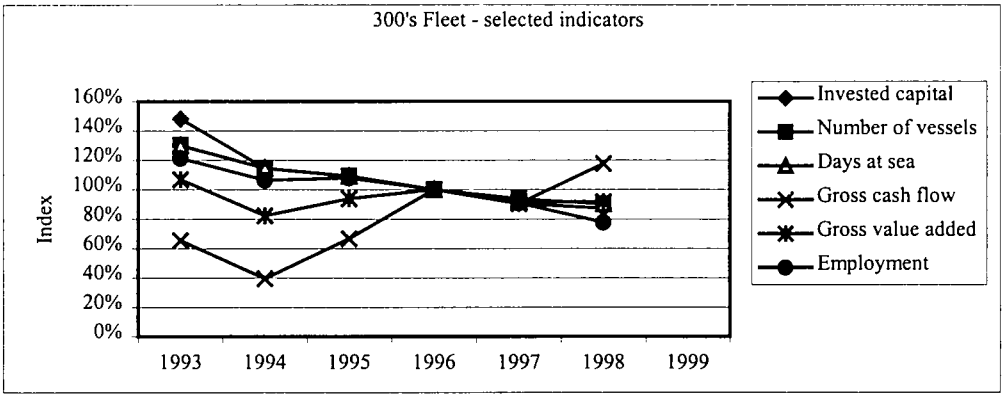
This fleet segment generally shows a tonnage, engine power and length per vessel far above the average of the national fleet. The standard vessel is 200 GRT, has a engine of 600 kW, is 30 meters long and 15 years old.

Economic performance

During the years 1990-93, the 300's fleet were quite stable in costs and incomes. Changes have been observed from 1993, when the fleet began to be renovated, replacing old vessels by new ones. In a short period of time, 4 years, the fleet diminished from 294 vessels to 212, and at the same time, annual investments increased significantly in 1995 as a result of the mentioned renewal. Obviously, the composition by age of the fleet has changed strongly. The average vessel remains the same from the technical point of view (150-250 GRT, 350-750 kW and 24-36 meters long), but nearly 55% of the active vessels have been built recently (less than 10 years), while the rest of the fleet are twenty years old or more. Following the trend in the last six years, landings value decreased from ESP 39,829.1 mln (EUR 213.5 mln) in 1993 to ESP 25,329.2 mln (EUR 151.5 mln) in 1998. The main running costs for this fleet segment are the vessel costs (35% on total running costs in 1998), followed by other running costs (34%). In the period 1993-98, crew share are the main costs and comprise betwen 40 and 50% of the total value of landings.

In accordance with this trends in landings and costs, the estimated gross cash flow and gross value added were positive all years. The gross value added shows a moderate decreasing trend from 1993 to 1998, but this fall has been compensated with the drop in the employment. Therefore the gross cash flow had a increasing trend in the same period.

The productivity in terms of gross value added per employee is growing. It was about ESP 4.1 mln per employee (EUR 24,929) in 1993 and ESP 5.5 mln (EUR 32,949) in 1998.



Outlook for 1998

There is not enough information to estimate the 1999 figures for this segment. Important changes in the trends are not expected. The final results will be probably similar to 1998.

13.3 Comments on data

Despite the importance of the fishing industry in Spain (about 0.8% of total GDP and 0.7% of total employment), the information about this sector, especially statistics, is not suited to its economic size. For the national fleet, the main sources used have been official publications by MAPA (Spanish Ministry for Agriculture, Fish and Food), EUROSTAT, and INE (the Spanish National Institute of Statistics). There is a general lack of datas. Catches and landings by species are the least information items.

Regarding to the selected segment, most information has been obtained from surveys and own estimations. We consider that these calculations are statiscally representative because of the high homogeneity of the 300's fleet. Thus, the economic information was estimated through samples of 28 vessels for 1993, 1994 and 1995, 12 vessels for 1996, 14 vessels for 1997 and 16 vessels for 1998. The effort have been estimated under the assumption of 18 trips per vessel each year (standard trip = 14 days). The composition of the fleet by size and age for 1998 was estimated through a sample of 52 vessels. As for depreciation as the interest, the commom method has been used. The invested capital has been estimated from the booked value defined in the commom method.

14. Spain - Mediterranean area

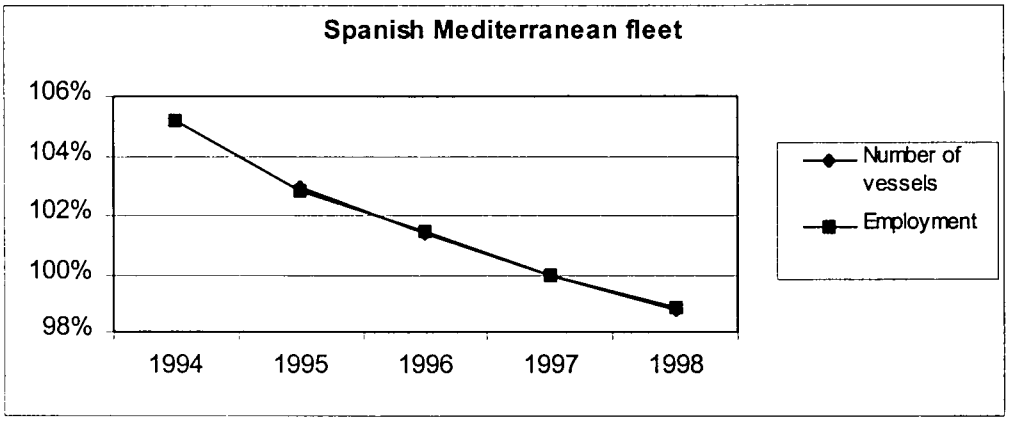
Prepared by GEM

14.1 Mediterranean fleet

Main trends

There was a decreasing trend in landings, between1994-97, which has continued into 1998. Total landings are lower in value, 51,012 mESP, and in volume, 131,400 tonnes in global terms. Looking at hake and shrimps, they have suffered a decrease in volume, but good prices during 1998, led to higher values in these two species. Otherwise, the pelagic species have suffered a decrease in landings as well as in the value they received. Therefore, the poor performance of the purse seine fleet.

In the Spanish Mediterranean, the slow decline in employment and number of vessels continued. Employment fell by 1,292 people, during the period 1994-1998, and by 145 people, since 1997. Evolution of the number of vessels has followed a very similar decreasing trend, with a reduction of 224 vessels during the period 1995-1998, and 66 vessels less since 1997.



14.2 Trawlers

Role in total fishery

The number of vessels was 1,148 in 1998, representing 21.77% of the total Mediterranean Spanish fleet. With respect to engine power and tonnage, the percentage is larger. With 54,170 GRT and 421,530 kW the trawler segment is 63.97% and 55,86% respectively of the fleet total..

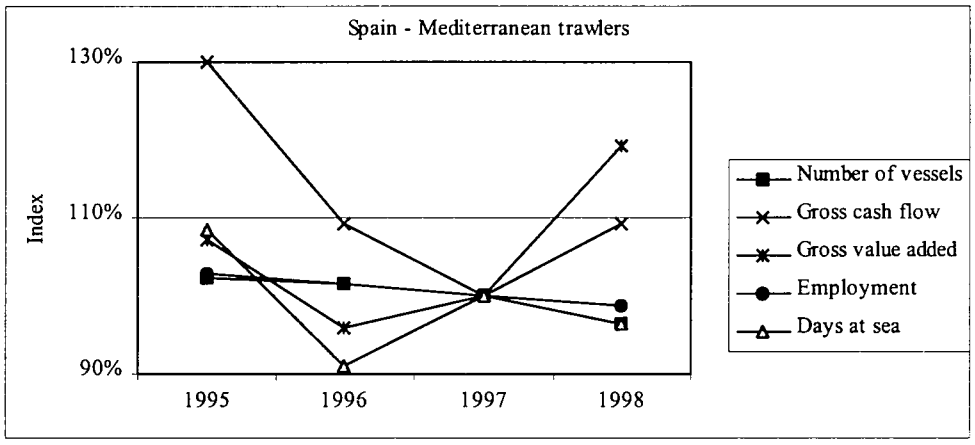
The employment in the trawler segment, which decreased as it happened in the total Spanish Mediterranean, was 7,959 people, nearly 40% the total employment on board in the area.

A trawler standard vessel during 1998 had 367.2 GRT, 47.2 kW, an average age of 30.6 years and a length of 17.04 metres.

Economic performance

In 1998 landings suffered a quite significant decrease in volume, but because of the higher prices of hake, shrimp and other bottom species, revenues increased during last year.

As costs were broadly unchanged, including crew shares, the improved revenues are directly reflected in value added and gross cash flow.



14.3 Purse seiners

Role in total fishery

In 1998 505 vessels belonged to this segment. The segment represented 10,4% of the total number of vessels, 15% of GRT and 18% of kW.

A standard purse seiner vessel during 1998 had 266.6 GRT, 25.5 kW, an average age of 33.1 years and a length of 12.9 metres.

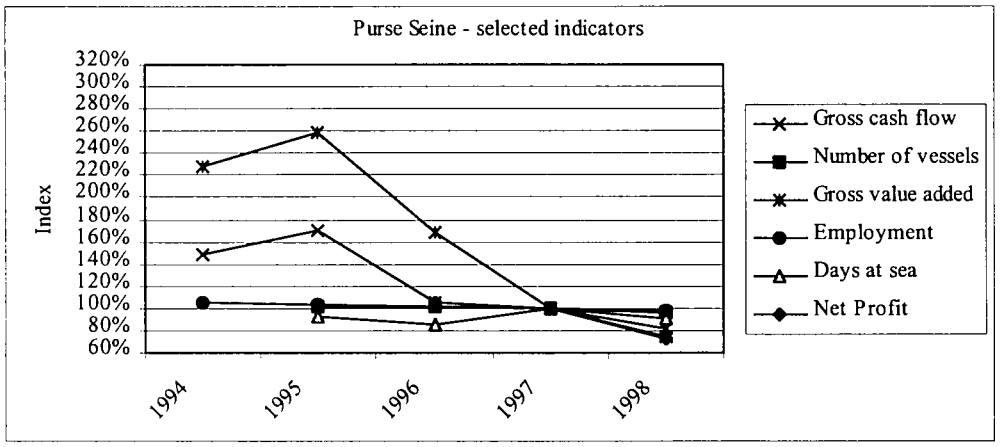
Employment in the purse seiners, decreased during the period 1994-1998 (from 7,417 in 1994 to 6,964 in 1998), at the same time the number of vessels decreased, but by only 10 vessels from 1995 to 1998.

Economic Performance

The purse seine segment has suffered some fluctuations in landing in the period 1994-1998, due to peculiar biological characteristics and overexploitation. An important peak in

volume of landings in 1995 was because of a exceptional sardine catch. It highly effected revenues because at the same time that volume increased, revenues for sardine landings also increased. For this year landings in both volume and value has decreased. As earnings are correlated with catches, income in 1998 was low due to low landings. A global decrease in landings of the different pelagic species, sardine, as well as tuna and anchovy, produced this situation. Historically these species have not received high market prices, which was also true for last years, and this is reflected in segment revenues.

Crew shares structures are related to landings. The proportion can vary among ports but it is a fixed percentage of the value of landings minus running costs. Within the considered running costs there are Cofradia fees, contributions to the National Health system, fuel, oil, ice, etc.



14.4 Comments on Data

In Spain shipowners must to declare what they land, in volume and value. The Cofradias collect such an information and give it to the correspondent regional administration. As in the Spanish Mediterranen area there are five administrations we have add the disaggregated information by species from all of them. So landing data is official data collected from regional administration official provided data.

Relating costs, there are not offcial data on cost because shipowner do not have to declare what they spent in their activity. So, in order to estimate costs, we have used some published practical on the sector. Those studies are based in enquiries to shipowners.
In order to estimate depretiation we have made some assumptions from data provided by shipyards, having obtained a value per GRT and kW and extrapolating it to all the segment.

With respect to rate of interest we have considered the opportunity cost, as the interest rate of the a three years term bond, offered by the Spanish government, corrected by inflation yo get a real rate of interest.

15. Sweden

Prepared by the National Swedish Board of Fisheries

15.1 National fleet

Current structure

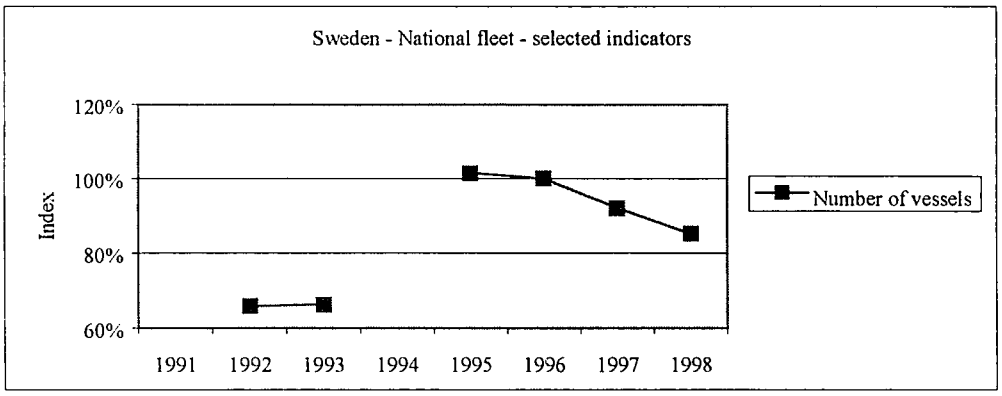
The national fishing fleet contained about 2,100 vessels in 1998. The main part of the fleet is characterised by rather small vessels according to GT, kW and length. The average vessel has a tonnage of 21, an engine of 110 kW and has a length (loa) of 10 meters. Furthermore, the total fleet is rather old, average age is 24 years. The total size of the fishing fleet is about 45,000 GT, with a total engine power of 235,000 kW.

The fleet is divided into six MAGP IV segments: 1.coastal vessels smaller than 12 meters, 2.shrimp trawlers, 3.pelagic vessels, 4.demersal trawlers, 5.vessels using passive gears and fishing for demersal species and 6.vessels fishing with passive gears for salmon.

The total revenue of the Swedish fishing fleet in 1998 was SEK 1,045 mln (EUR 117 mln). Total employment was approximately 2,500 FTE.

Main trends

The value of landings has increased over the last years by about 3%. The size of the fleet has been reduced for many years, in terms of all indicators (numbers, GT, kW and employment). A very characteristic feature for the landings of 1998 is that fish for reduction purposes is the largest part. For many years cod has been the number one species. From 1997 to 1998 the landing volumes of cod has nearly halved. The foremost cause for this, is the weak cod stock in the Baltic Sea.



15.2 Pelagic vessels

The pelagic segment represents a major part of the total fishery, accounting for over 50% of total landing values and over 90% of the total landed volume. Compared to 1997 the segment has increased its share of the total fishery both in terms of volume and value. The main fishing gear is trawl but some vessels also operate as purse-seiners. The segment is very heterogeneous, and therefore it has been divided into two sub-segments, vessels >= 20 meters and vessels < 20 meters. The most important species for the larger vessels are herring, mackerel and sprat. Fishing for reduction purposes is the main part of the fishery, targeting sprat and herring. This fishery takes place mainly in the Baltic Sea.

15.2.1 Pelagic vessels over 20 meters

Role in total fishery

This sub-segment (>=20 meters) stands for about 3% of total numbers, 43% of GT and 24% of kW. In economic terms it represents about 52% of total landing values (1997: 44%). Its share of total landed volume is 91% (1997: 85%) and its share of employment is about 17% (1997: 14%).

This sub-segment is the most advanced part of the fleet. It is characterised by having more sophisticated equipment and the vessels are frequently operated in a very commercial way. Most of the vessels have their homeports on the Swedish westcoast. The largest parts of the landings are made in Danish ports. The segment is very dependent on the prices for fish- meal and oil. There are no freezer trawlers in the segment.

Economic performance

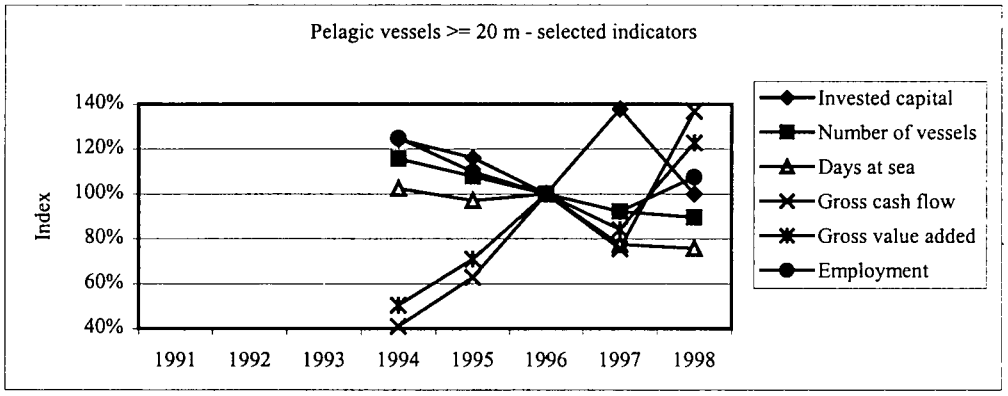
Figures of the economic performance are available for the years 1994 - 1998. The size of the sub-segment for 1998 is about that of 1997 according to numbers, GT and kW. Total value of landings has increased by 23% between 1997 and 1998. The economic performance improved mainly due to increased prices of fish for reduction purposes. Both gross cash flow and gross value added have increased considerably between 1997 and 1998. The net profit compared to value of landings has a historical peak in 1998. An important reason for good net (financial) profit is that there are no imputed costs for depreciation and interest. The reason for this is that the fleet is old, with an average age of 27 years (1998).

The figures for 1997 as concern employment are an estimate but the figure for 1998 is based on a survey to the fishers, and is therefore more correct. Gross value added per employed has increased by 25% between 1997 and 1998.

Outlook for 1999 and 2000

For the period covering the first 8 months in 1999 revenues were on the same level as the year before. For the whole year 1999, total revenue will probably decrease due to decreasing volumes and prices. The cost structure will probably be the same as in the past where costs have tracked revenue closely. There is no indication that the costs have increased, however the prices of fuel are uncertain.

For the year 2000 forecast should be based on TAC. Reduced quotas for 2000 and continuing decreasing prices for the pelagic species, especially fish for reduction purposes, will give decreasing incomes, although from a very high level.



15.2.2 Pelagic vessels below 20 meters

Role in total fishery

This sub-segment stands for about 3% of total numbers, 4% of GT and 5% of kW. In economic terms it has about 4% of total landing values (1997: 5%). Its share of total landed volume is 3% (1997: 3%) and its share of employment is about 6% (1997: 4%).

Most vessels are coastal and fish for many different species mostly in the Baltic Sea. The most important ones are vendace and herring. Compared to the other pelagic subsegment this one plays a minor role in economic terms. The segment however plays an important role in several areas of the Swedish coastline.

Economic performance

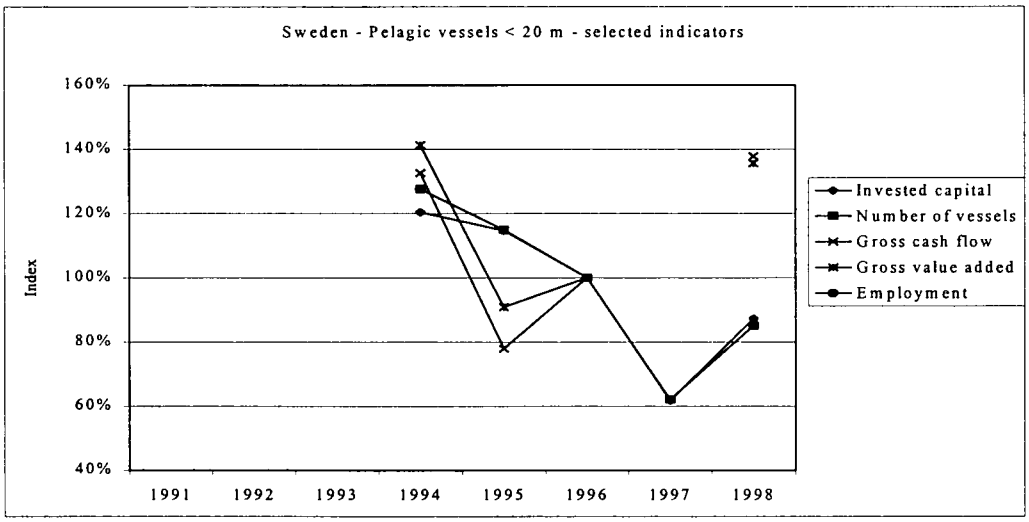
Figures of the economic performance are available for the years 1994-1996 and for 1998. The data for 1997 was not sufficient for making analysis. Therefore the data for 1998 has to be compared with 1996. The composition of the fleet has changed between the years 1996 and 1998. Total value of landings (value/vessel) has increased by almost 44% between 1996 and 1998. Both gross cash flow and gross value added has increased

considerably between the two years. The imputed interest cost is rather low because the fleet is old, average age of 24 years (1998). The number of fishers has decreased during the period. Gross value added per employed was in 1998 SEK 190,000 (EUR 21,000).The same figure in 1996 was SEK 120,000 (EUR 13,500).

Outlook for 1999 and 2000

For 1999 the forecasted revenues will increase compared to 1998. The main species for this sub-segment is herring and sprat as well as vendace. For herring and sprat there have been price reductions between 1998 and 1999. The increase in revenues seems to originate from increasing volumes. The cost structure will probably be the same as in the past where costs have tracked revenue closely.

For the year 2000 forecast should be based on TAC. There have been reductions in TAC for both herring and sprat for 2000 in the Baltic Sea. Total revenue will probably decrease.



15.3 Shrimp trawlers

This segment is characterised by rather old vessels fishing mostly for prawns and nephrops in the Skagerrak and the Kattegat. The average ages of the vessels are as high as 39 years. The segment accounts for 10% of total landing values but only 3% of the total landed volume. The third most important species for the segment is cod.

Role in total fishery

The segment stands for 3% of total numbers, 11% of GT and 9% of kW. In economic terms the segment represents about 10% of total landing values (1997: 12%). Its share of

total landed volume is only 0.7% (1997: 0.9%) and the share of employment is 8% (1997: 9%).

The segment is fishing small quantities of rather expensive species in the Skagerrak and the Kattegat.

Economic performance

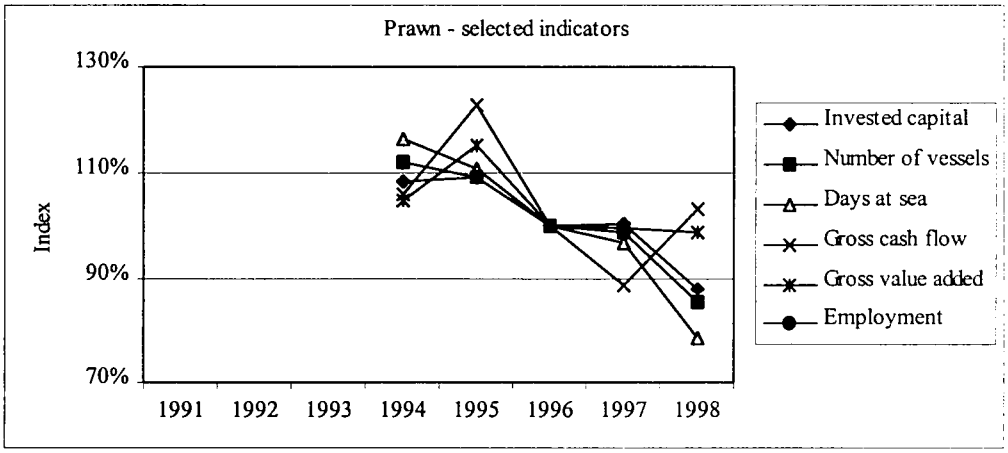
Figures of the economic performance are available for 1994-1998. Total value of landings (value /vessel) is the same between 1997 and 1998 with a value of about SEK 1.6 mln (EUR 180,000). Both gross cash flow and gross value added have increased between 1997 and 1998. Because of the age, no imputed capital costs are estimated.

The number of fishers has decreased all the years. Gross value added per employed has increased by 14% between 1997 and 1998.

Outlook for 1999 and 2000

For 1999 the forecasted revenues are to remain at the same level as in 1998. There have been decreases in volumes but at the same time increases in prices. In the past, costs have tracked revenue closely. The gross value added per employed will be higher in 1999 as rationalisation leads to smaller crews.

For the year 2000 forecast should be based on TAC. These are not decided until late autumn 1999. The forecast therefore has to rely on unchanged TAC. If the prices of 1999 do not change, income will stay at the same level.



15.4 Demersal trawlers

For the whole demersal segment figures of the economic performance are available for 1994 - 1998.

The segment accounts for about 31% of total landing values (1997: 37%) and 4% of total landing volumes (1997: 6.5%). Both in terms of landed value and volume the segment

has decreased. The segment has been divided into three sub-segments because its heterogeneity. The sub-segments are: vessels >= 20 meters, vessels < 20 meters and vessels mostly fishing for nephrops. For the two first groups, the most important species is cod. The third segment is fishing for nephrops, prawns and cod. During the last year a transfer from the first two sub-segments to the nephrop one, has taken place.

15.4.1 Demersal trawlers over 20 meters

Role in total fishery

The sub-segment (>=20 meters) accounts for 2% of total numbers, 13% of GT and 8% of kW. In economic terms it stands for 12% of total landing values (1997: 17%). Its share of total landed volume is 3% (1997: 4%) and its share of employment is 8% (1997: 11%).

The segment is very dependent of one species and that is cod. Landed volumes of cod have decreased substantially between 1997 and 1998. The prices however have increased with almost the same percentage. Like many Swedish segments, also this one has vessels with a high average age.

Economic performance

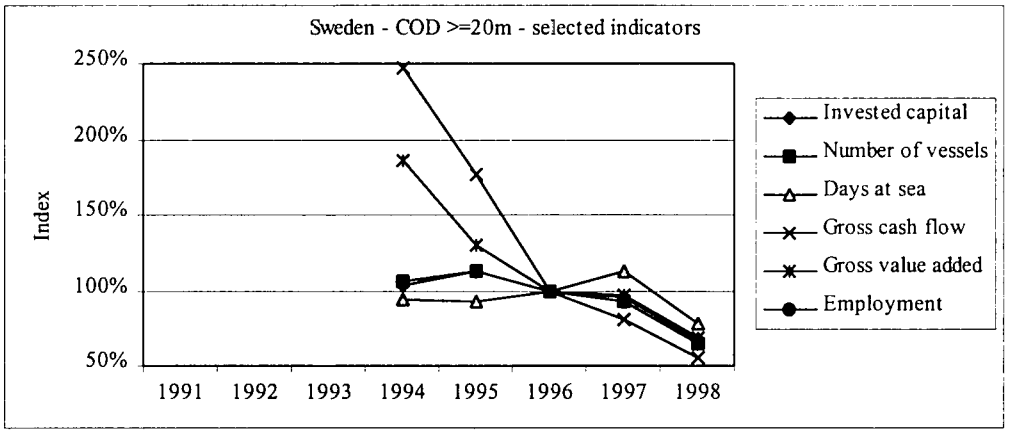
Total value of landings (value/vessel) is almost the same in 1998 compared to 1997, with a value of about SEK 3.2 mln (EUR 359,000). Gross cash flow has the same average value for the two years. For gross value added there has been a small increase by 3% (value/vessel).

Gross value added per employed has also increased by 3%, with a value for 1998 of SEK 223,000 (EUR 25,000).

Outlook for 1999 and 2000

For 1999 the forecasted revenue will increase compared to 1998.The increase seems to depend on both increases in prices and in volumes. The cost structure will probably be the same as in the past where costs have tracked revenue closely.

For the year 2000 forecast should be based on TAC. The TAC has decreased for both 1999 and 2000 for cod in the Baltic Sea by 15% per year. This will lead to decreased volumes and probably to worse economic performance. There is no indication of increasing prices.



15.4.2 Demersal trawlers below 20 meters

Role in total fishery

The sub-segment accounts for 2% of total numbers, 3% of GT and 4% of kW. In economic terms this segment stands for 6% of total landed values (1997: 8%). Its share of landed volume is only 0.7% (1997: 1.3%) and the share of employment is 3% (1997: 4%).

This sub-segment is very similar to that of trawlers over 20 meters. Also this one is very dependent on one species, namely cod. This smaller segment, however, has a higher catch of nephrops than the above segment.

Economic performance

Total value of landings (value/vessel) has decreased between 1997 and 1998 by 8%. However both gross cash flow (+29%) and gross value added (+10%) has increased between the two years. The imputed interest cost is rather low because of the old fleet.

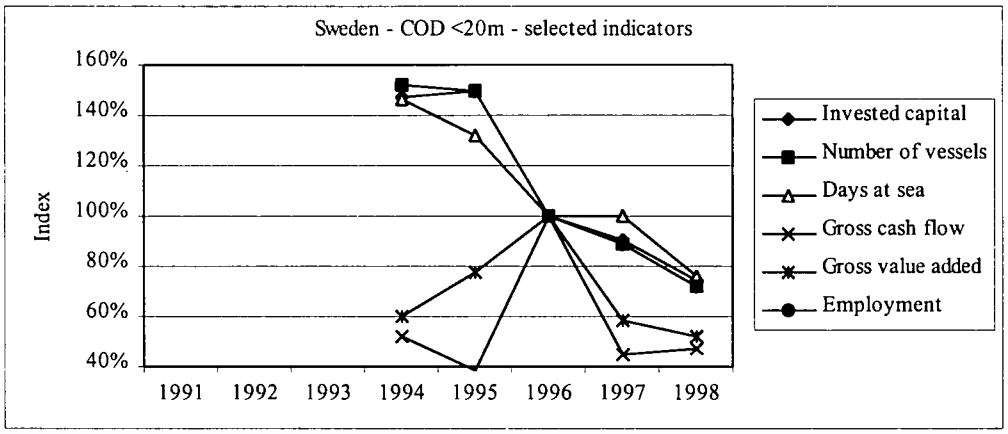
The number of fishers has decreased all the years. Gross value added per employed has increased by 10% between the two years.

Outlook for 1999 and 2000

For 1999 the forecasted revenues will increase compared to 1998, similar to the bigger vessels. The increase seems to depend on both increased price and volume. The cost structure will probably be the same as in the past where costs have tracked revenue closely.

One third of the vessels of this sub-segment is concentrated on the Swedish eastcoast and totally depending on fishing in the Baltic Sea. Two third of the vessels have Swedish west-coast ports as their homeports. They fish an important part of their catches in the Baltic but they also fish for nephrops and cod in the Skagerrak and the Kattegat. The Baltic vessels will be affected heavily by decreasing TAC for cod in the Baltic Sea. This will lead to decreasing volumes and a worse economic performance. The other part of the sub-

segment will probably have better opportunities. TAC for 2000 is expected to stay at the same level as for 1999 and nephrops stock is rather good.



15.4.3 Demersal trawlers, fishing for nephrops

Role in total fishery

This sub-segment accounts for 5% of total numbers, 7% of GT and about 9% of kW. In economic terms the segment stands for 13% of total landing values (1997: 11%). Its share of total landed volume is 0.6% (1997: 0.7%) and its share of employment is about 8% (1997: 7%).

This sub-segment differs a little from the other two sub-segment targeting three species, nephrops, cod and prawn. This sub-segment has increased its size during the last year when the two other have decreased.

Economic performance

Total value of landings (value/vessel) has increased by 4% from 1997 to 1998. Both gross cash flow and gross value added has increased much between the two years. The average value per vessel for 1998 is SEK 429,000 (EUR 48,000) for GCF and SEK 778,000 (EUR 87,000) for GVA.

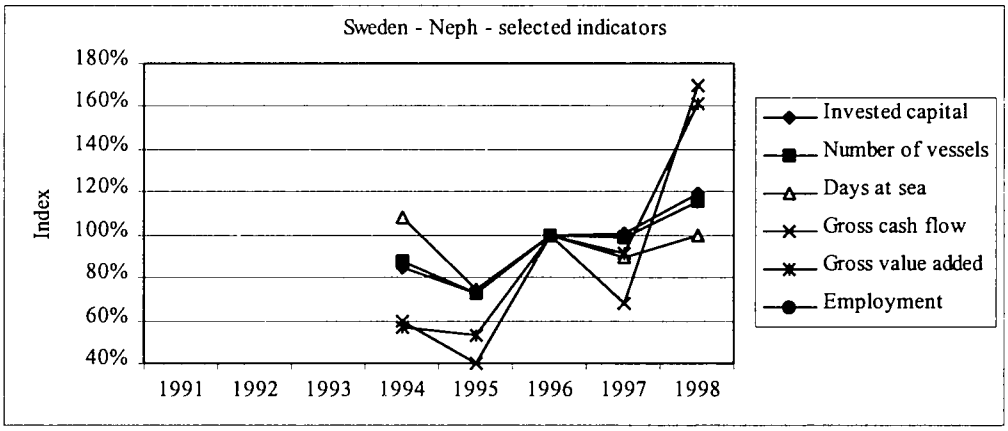
There has been an increase in vessels in 1998.Gross value added per employed has increased by almost 52% from 1997 to 1998.

Outlook for 1999 and 2000

For 1999 the forecasted revenues will increase compared to 1998, but not as much as for the other two sub-segments. The small increase in revenues seems to depend on increases in prices and on reductions in volumes. This sub-segment is most dependent on nephrops,

cod and prawns. The fishing for nephrops has its peak season mostly in September and October. These two months are not included in the comparison of sales-notes. The prices for all the three species have increased between 1998 and 1999. The volumes of prawn have decreased, nephrop is unchanged and cod has increased. The cost structure will probably be the same as in the past where costs have tracked revenue closely.

For the year 2000 forecast should be based on TAC. The TAC for this sub-segment are not decided until late autumn 1999. The forecast therefore has to rely on unchanged TAC and a stable price. If the prices of 1999 do not change dramatically, income will probably stay at the level of 1999.



15.5 Passive gears, demersal species

This segment is one out of two fishing with passive gears. The target species for this segment are demersal. Important species are cod and turbot. The fishing gears used are primarily net and hook.

Role in total fishery

The segment accounts for 3% of total numbers, 4% of GT and almost 5% of kW. In economic terms this segment stands for about 3% of total landed values (1997: 4.5%). Its share of landed volume is only 0.7% (1997: 1.4%) and the share of employment is 5% (1997: 7%).

Characteristic for fishing with passive gears is the rather high figures for effort, counted as 'days at sea'. Because cod is a target species, this segment as well is influenced by the scarcity of cod.

Economic performance

Figures of the economic performance are available for the years 1994-1998. For the figures of 1998 there is some uncertainty depending on distorted data. Most of this uncertainty lies

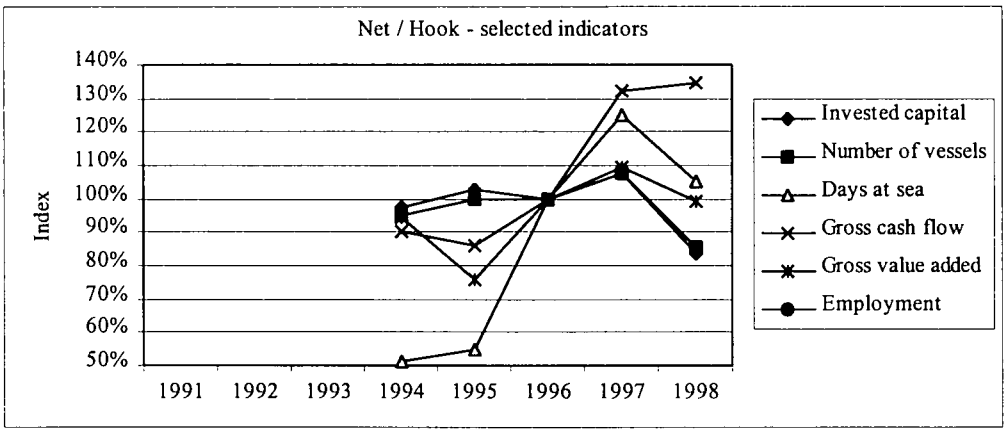
in the allocation of costs between fuel, other running costs and vessel costs. Total value of landings (value/vessel) has decreased by 4% from 1997 to 1998. Both gross cash flow and gross value added has increased between the two years. GCF has increased by 28% and GVA by 14%.

The number of fishers is now at its lowest level for many years. Gross value added per employed has increased by 14% from 1997 to 1998 and has a value for 1998 of SEK 183,000 (EUR 20,500) per employed.

Outlook for 1999 and 2000

For 1999 the forecast is for revenues to increase compared to 1998. This segment is most dependent in cod and turbot. The prices have increased for both species in 1999. For cod there has been increased volume but for turbot a small decrease. The cost structure will probably be the same as in the past where costs have tracked revenue closely.

For the year 2000 forecast should be based mainly on TAC. The TAC has decreased for both 1999 and 2000 for cod in the Baltic Sea by 15% per year. This will lead to decreased volumes and probably to worse economic performance. There is no indication of increasing prices. For turbot (not a TAC species), decreasing stocks have been reported. Turbot, however, is not as important for this segment as cod. If the prices of 1999 do not change, income will probably stay at the same level as for 1999.



15.6 Comments on data

General comments

The data on vessel characteristics (numbers, GT, kW, age) as well as catches and sales-notes are taken from different databases compiled by the National Board of Fisheries (Sweden). When Sweden joined the European Union in January 1995 the statistics were adapted to the Union regulations. Because of this the figures for 1995 are not comparable

to those of 1994. Most economic figures have been collected with the help of fishers who, on a voluntary basis, have furnished the National Board of Fisheries with their company accounts.

Furthermore the following calculations and estimations have been made in order to supplement the analysis:

Replacement value (RV): Historical values have been used and indexed according to the Swedish official index for fabricated metal products, machinery and equipment.

Days at sea: According to logbook figures.

Employment: The average figures for the different vessels have been taken from a survey made by the National Board.

Depreciation: 4% per year calculated on the replacement value. After 25 years no depreciation is calculated.

Interest: Interest rate is based on government bonds minus inflation (calculated on monthly figures) for all years. Interest costs are based on replacement value minus depreciation.

Euro-rate: An average rate for 1998 have been used, calculated on monthly values. The rate calculated is 8.9085. The rate of September 10, 1999 is 8.6075.

Total revenue and costs: The revenue and cost figures (supplied by fishers) for the years 1994-1998, have been used to make estimations for the whole sub-segments. A statistical package (SPSS) was used to estimate linear regressions. From these equations revenues and costs were estimated.

Prices for species: Data from statistics Sweden (landed volumes and values). The forecast for 1999 is mainly based on a comparison between sales-notes of 1999, (first 8 months) to those of the same period in 1998.

Differences in capital cost, based on the 'common method'

We have no separate figures for the engine. Therefore we must consider the vessel as a whole and undivided economic unit and not as one composed of different components. Depreciation has been calculated with 4% on replacement value irrespective of hull and engine.

The '2% rule' is not used for renewal investments. All improvements are booked as costs with an immediate effect on the result. Therefore it would be illogical to increase the costs with an additional depreciation of 2% for the improvements. Also the taxation laws of Sweden permits this practice.

Except for the above mentioned principles the common method is used in AER.

Replacement value: historical values have been used and indexed according to the Swedish official index for fabricated metal products, machinery and equipment.

16. United Kingdom

Prepared by SFIA

16.1 National fleet

Current structure

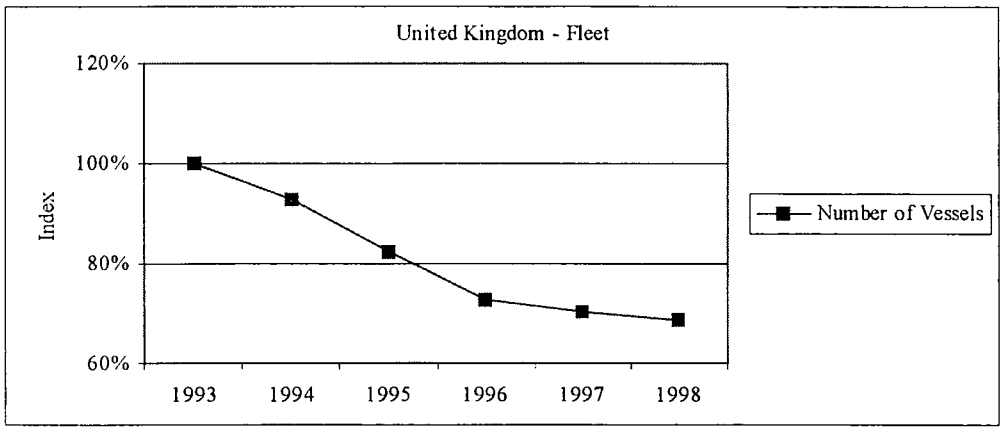
In 1998 the UK fishing fleet comprised around 7,600 vessels with a combined registered tonnage of 209,600. Whilst in terms of vessel numbers a sizeable portion (68%) of the UK fleet continued to comprise small vessels of length less than 10 metres, vessels greater than 10 metres in length accounted for over 90% of total UK registered tonnage.

Around 70% of UK fleet capacity (measured in GTs) is to be found within three of the eight MAGP IV segments. The demersal trawl, seine and nephrops trawl segment still predominates, with around 1,318 vessels collectively accounting for approximately 43% of UK fleet capacity. Whilst only 50 vessels are contained within the pelagic segment, these vessels account for around 20% of UK fleet capacity. The third major segment comprises the beam trawlers in which there were 123 vessels in 1998 collectively accounting for 11% of fleet capacity. The remainder of the fleet comprised vessels using lines and nets or those fishing for other shellfish using mobile or static gear. 14 vessels featured in the distant water segment in 1998.

Additionally, 17,847 fishermen were employed in the catching sector of which 3,453 were engaged on a part-time basis. The total value of landings by the UK fleet was approximately GBP 661mln or EUR 963 mln.

Main trends

Over the period 1993-98, the fleet contracted by around 30% in terms of numbers of vessels and around 4,900 fishermen left the Industry (170 vessels disappeared from the fleet between 1997 and 1998). Whilst this trend can be explained by successive rounds of decommissioning and policy-induced structural cuts, it is notable that over the same period, registered tonnage only fell by around 2%. There is a continuing trend towards capacity aggregation (larger vessels) with associated concentration in vessel ownership.



Both the pelagic and beam trawl segments of the fleet are currently the subject of effort limitation measures to ensure compliance with MAGP IV targets. There will be a continuing reduction in effort allocations to both fleets up until the end of 2001. Any future expansion is also capped by the 'ring-fencing' of both segments which makes it illegal to aggregate licences from other MAGP segments to facilitate 'new-build'.

The value of UK fleet landings has risen steadily over the period 1993-1998. In 1998, for the first time in many years, mackerel displaced cod as the principal species landed by the UK fleet in value terms (GBP 87.6 mln). This was a consequence of particularly strong prices, most notably in Norway. Prices, however, slumped in the early part of 1999 mainly due to economic dislocation in the Far East and Russia. In 1998, cod was the principle demersal species (GBP 83.9 mln) followed by haddock (targeted particularly by the Scottish vessels) at GBP 57.7 mln. The continuing importance of nephrops to the fleet is apparent by observing the fact that in 1998 it was the third major species landed by value at GBP 58.1 mln. In the shellfish sector, scallop landings reached an all time high over the period 1993-1998 with aggregate value of GBP 30.2 mln.

16.2 Scottish demersal trawlers

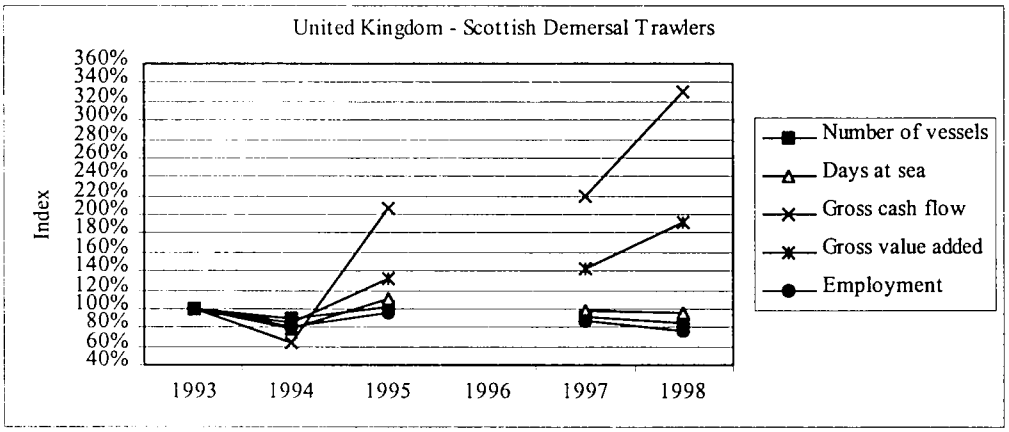
Role in the total fishery

1998 figures indicate that there are currently 341 over 10-metre vessels in this segment of the fleet (a reduction of 30 from 1997). In 1998, these trawlers accounted for around 4% of the total UK fleet by vessel number but over 13% of total UK registered fleet tonnage. Of the total, 237 vessels were < 24 metres in length and 104 were > 24 metres. In 1998 Scottish Demersal trawlers landed GBP 189.3 mln worth of fish, some 29% of the total value of landings by the UK fleet (26% in 1997). Around 1,800 fishermen were employed in this fleet; around 10% of the total number of UK fishermen employed. Of the 1,800, 1,185 were employed on vessels < 24 metres in length and 624 on vessels > 24 metres in length.

Economic performance

As predicted in the 1998 report, the fleet returned to profitability in 1998 recording a net profit of GBP 21mln (11% of the value of landings). This was the first net profit to be recorded over the period 1993-1998 and several factors appear to have been responsible for the improved position. In the first instance, both cod and haddock prices rose by 14% and 27% respectively between 1997 and 1998. A considerable drop in oil prices between 1997 and 1998 reduced fuel costs and falling interest costs in the UK also appear to have contributed to improved financial performance.

Gross cash flow and gross value added continued to improve both reaching their highest levels over the period 1993-1998 (for an explanation of the break in the data, see section 16.6). The fleet also continued to record efficiency improvements as the number of fishermen fell. Gross value added per fisherman employed in the fleet showed a dramatic increase from its 1997 level of GBP 35,600 to GBP 54,400 in 1998. As was the case in 1997, efficiency (measured by gross value added per fisherman employed) was highest in the case of the larger vessels of length 24 metres and over.



Outlook for 1999

Prices of the key whitefish species exploited by the fleet are likely to remain high at on average GBP 1,000 per tonne. On the whole, economic performance of the fleet is expected to be strong in 1999 and profitability may increase because of higher prices. At the time of writing however (September 1999), there are concerns that the North Sea haddock TAC could be exhausted before the end of the year which would have a destabilising effect on the fleet. It is possible that the fleet might return to losses in the longer term. Despite the fact that this segment of the fleet has met its MAGP-IV obligations, the number of vessels looks set to decline further.

Whilst the majority of vessels continue to target cod, haddock and whiting (the traditional whitefish species), there has been an increasing trend towards the construction of

larger more powerful whitefish trawlers (some of length 40 metres) which are beginning to exploit deep-water Atlantic species. These vessels also target monkfish and megrim.

16.3 Scottish nephrops trawlers

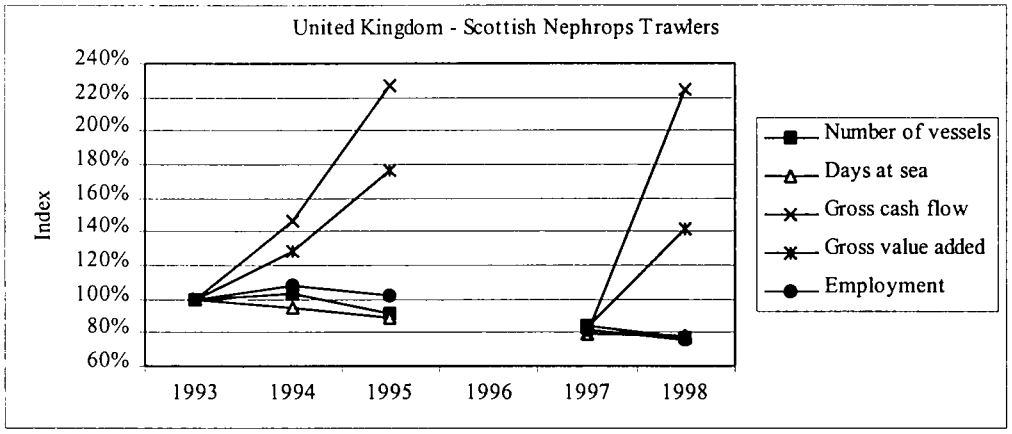
Role in the total fishery

In 1998, the Scottish nephrops trawl fleet accounted for about 4% of the UK fleet by vessel number and 5% of total registered tonnage. 1,244 fishermen worked in the fishery, around 7% of the UK total. In 1998, landings from this sector of the fleet by value were approximately GBP 71.1 mln, or 11% of the value of landings of the UK fleet as a whole. The number of vessels in the segment continued to decline, falling by around 93 between 1993 and 1998. However, registered tonnage in the segment rose by about 13%. Whilst a number of vessel owners have taken advantage of UK decommissioning schemes in the past, the most recent decommissioning scheme for mobile gears excluded nephrops trawlers.

Economic performance

Although well down on their 1995 high, the value of landings from the fleet appeared to rise quite dramatically between 1997 and 1998, from GBP 52.1 mln to GBP 71.8 mln. That said and as discussed in last year's report, the 1997 landings values seemed very low and there are strong grounds for questioning their validity. The improvement in earnings was observed despite a marginal fall in average nephrops prices between 1997 and 1998. This is undoubtedly explained by the tendency of these vessels to target key whitefish species (e.g. cod and haddock) for which prices rose substantially between 1997 and 1998. After recording a small loss in 1997, the fleet appeared to return to profitability in 1998 recording a net result of GBP 18.8 mln (a healthy 26% of the value of landings). This was the highest net result recorded over the period 1993-1998. The improvement was mainly due to improved earnings. What was rather surprising however was a notable increase in fuel costs between 1997 and 1998 despite the reduction in both effort and fuel prices. The estimate of fuel costs for 1997 is therefore questionable.

Gross cash flow and gross value added were both healthy at GBP 22.4 mln and GBP 43.8 mln respectively. Efficiency, measured in terms of gross value added per fisherman employed, has continued to increase steadily over the reference period (1993-1998) from GBP 18,700 in 1993 to GBP 35,200 in 1998. This is partially explained by falling numbers of fishermen employed in the segment from 1,656 in 1993 to 1,244 in 1998.



Outlook for 1999

A strong summer fishery in most areas suggests that landed volumes will remain strong. In aggregate, the profitability of the fleet is not anticipated to decline drastically over 1999 particularly given increases in the prices of whitefish species. However, at the time of writing, the market price for nephrops tails as opposed to whole nephrops continues to drop. It is understood that this is causing particular problems on the West Coast of Scotland where a surge in the landed volume of tails may cause economic difficulties for some of the vessels which tend to target nephrops exclusively.

16.4 Scottish demersal seine netters

Role in the total fishery

This is the first year of analysis of this particular segment, which targets whitefish species. In 1998 there were 73 over 10-metre demersal seiners operating in Scotland. The fleet is small relative to the demersal trawl fleet and accounts for around 1% of the total UK fleet by number and approximately 3% of registered fleet tonnage. About 500 fishermen were employed in this fishery in 1998, less than 3% of the total number of UK fishermen employed.

In 1998 landings from the seine fleet totalled GBP 45.5 mln, or some 7% of the total value of landings made by the UK fleet. Principle species targeted include cod and haddock. Although historic data is unavailable, this method of fishing has been declining in significance over the years as more vessels have switched to trawling. This is about to change however.

Economic performance

In the absence of historical data it is difficult to say very much about trends in economic performance. In 1998 however, the net profit of the fleet was positive at some GBP 6.2

mln, around 14% of the value of its landings. Increases in prices of cod and haddock between 1997 and 1998 undoubtedly contributed to positive profitability.

Gross value added was approximately GBP 24.8 mln and gross value added per fisherman employed was approximately GBP 48,500, somewhat less than the figure recorded by the Scottish demersal trawl fleet.

Outlook for 1999

In recent years, the number of seine net vessels has declined as increasing numbers of fishermen have turned to demersal trawling because of the perceived efficiency of the latter method. However, it is anticipated that there is likely to be a resurgence of interest in the seine method. The reasons for the reversal in the trend may well have much to do with increasing awareness of the importance of quality and the ability of the seine net to produce a fish of high quality. Fuel costs also tend to be lower when using this method. Consequently, against the backdrop of already strong whitefish prices, price premiums associated with fish caught using the seine method may well lead to an improvement in the economic performance of the fleet in the short term.

16.5 Northern Irish nephrops trawlers

Role in the total fishery

Again this is the first year of inclusion of the Northern Irish nephrops trawl fleet in the report. The fleet is the smallest of those which have been looked at in depth in this report. In 1998 there were 116 vessels in the segment which accounted for less than 2% of the UK fleet in terms of registered tonnage. Around 460 fishermen were employed in 1998, about 2.5% of the UK total. The Northern Ireland nephrops trawl fleet accounted for around 2% of total UK landings by value in 1998 (GBP 15.5 mln). Whilst the fleet is in many ways similar to its Scottish counterpart, there may have been slightly more dependence on nephrops and slightly less switching of effort to whitefish species. However, this requires to be verified if 'composition of landings' data become available. Although historical data are unavailable, there has been a steady decline in the numbers of vessels and fishermen employed in the segment. Northern Ireland has also made use of successive UK decommissioning schemes.

Economic performance

In 1998 and despite lower overall nephrops prices relative to 1997, the fleet recorded a net profit of GBP 2.2 mln, (some 14% of the value of its landings), a gross cash flow of GBP 3.5 mln and gross value added of GBP 9.7 mln.

In terms of overall efficiency, gross value added per fisherman employed was GBP 20,905, considerably less than the efficiency measure recorded by the Scottish nephrops trawl fleet.

Outlook for 1999

Prospects for the Irish fleet mirror those of Scottish nephrops trawlers. In terms of bulk, landings so far in 1999 have been strong. Prices for nephrops tails are fairly low although not as depressed as those prevailing in Scotland. Whilst it is conceivable that the Irish Sea nephrops trawlers may not benefit as much from strong whitefish prices (relative to Scottish vessels), the economic performance of the segment in terms of earnings and profitability is predicted to remain fairly stable in 1999.

16.6 Comments on data

Costs and earnings data are supplied by the Sea Fish Industry Authority and are based on samples of vessels within relevant segments, physical interviews and data obtained from other sources, e.g. fish salesmen and agents. Other data are sourced from the MAFF Sea Fisheries Statistics 1998 and Scottish Executive Rural Affairs Department's Scottish Sea Fisheries Statistics 1998. Nautilus Consultants undertook the fieldwork for the collection of cost and earnings data.

In the analysis of the selected segments, it will be noted that there is a break in the time series between 1995 and 1997. This reflects the fact that there was a break in the physical collection of cost and earnings survey data between 1995 and 1997. In the 1998 economic report, data received in 1998 was attributed to the year 1996. However, after further investigation it became apparent that the data were pertinent to the year 1997. To add to the problems, all the cost information originally attributed to 1996 was grossed-up using 1997 fleet data. For the purposes of this year's report and to correct the position, it has been decided that the time series in the segments under review should feature a break between 1995 and 1997.

In most cases, registered tonnage is used instead of GRT because of a number of systems of measurement in the UK. The fleet is still in the process of being re-measured to GT although GT estimates have been used to define the principal MAGP IV segments at the beginning of the text.

Depreciation is based on the common method in all years except for 1997, where a straight line 10% of insurance value calculation was made. This leads to a lower profitability compared with the 'Common Method'.

Interest is derived from the present Government bond rate adjusted for inflation (using All Items Retail Price Index). The exception is 1997 where the rate used was 8.5%. This compares to a rate of 2.09% in 1998.

1. Belgium

1.0 Belgium: Composition of the national fleet, 1998

	Total fleet	Fleet segments	
		Beamtrawl	Other
Economic indicators			
Value of landings (mEUR)	86	76	10
Gross value added (mEUR)	50	45	5
Gross cash flow (mEUR)	23	21	2
Net (financial) profit (mEUR)	7	6	1
Other economic indicators			
Employment on board (FTEs)	750	600	150
Invested capital (mEUR)	109	100	9
Effort (1000 days at sea)	28	22	6
Capacity indicators			
Volume of landings (1000 t)	27	23	4
Fleet - number of vessels	139	90	49
Fleet - total GRT (1000)	23	19	4
Fleet - total kW (1000)	64	53	11
Average characteristics of vessels			
GRT	163	208	81
kW	461	593	272
Length, loa	27	30	21
Age	19	13	31

Sources: Dienst voor de Zeevisserij: De Belgische zeevisserij: aanvoer en besomming; Uitkomsten.
* Preliminary results.

1.1.1 Belgium: National fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998*
Costs and earnings (mBEF)						
Value of landings	3,084	2,996	3,043	3,185	3,536	3,483
Fuel costs	529	449	432	520	534	397
Other running costs	721	666	661	695	728	738
Vessel costs	327	306	310	315	314	318
Crew share	1,044	1,007	1,037	1,013	1,101	1,084
Gross cash flow	464	568	603	642	861	946
Depreciation	460	466	448	441	459	462
Interest	212	200	180	192	188	189
Net profit	-208	-99	-24	9	214	295
Gross value added	1,508	1,575	1,640	1,656	1,961	2,030
Other economic indicators						
Employment on board (FTEs)	850	850	800	750	750	750
Invested capital (mBEF)	4,690	4,448	4,507	4,292	4,361	4,394
Effort (1000 days at sea)	37	35	34	31	30	28
Capacity indicators						
Volume of landings (1000 t)	32	30	31	27	27	27
Fleet - number of vessels	170	166	150	144	144	139
Fleet - total GRT (1000)	24	24	23	22	23	23
Fleet - total kW (1000)	70	68	65	63	64	64

Sources: Dienst voor de Zeevisserij: De Belgische zeevisserij: aanvoer en besomming; Uitkomsten.
* Estimation.

1.1.2 Belgium: National fleet, composition of landings, 1993-1998

Major species	Value (mBEF))						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Sole	1,202	1,210	1,230	1,487	1,689	1,442	5	5	5	5	4	4
Plaice	693	579	494	483	497	523	12	10	9	7	7	7
Cod	249	211	287	226	226	455	4	3	5	4	5	6
Other	940	996	1,032	989	1,124	1,063	11	12	12	11	11	10
Total	3,084	2,996	3,043	3,185	3,536	3,483	32	30	31	27	27	27

Sources: Dienst voor de Zeevisserij: De Belgische zeevisserij: aanvoer en besomming; Uitkomsten.

1.1.3 Belgium: National fleet, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
1 - 35 GRT	13	0.4	2.6	1998	4	0.8	2.2
35 - 70 GRT	31	1.7	6.4	1996-97	8	1.5	3.6
70 - 180 GRT	41	4.4	11.0	1994-95	3	0.9	1.5
180 - 400 GRT	51	14.8	41.4	1992-93	3	1.1	7.2
400 -	3	1.4	2.6	1990-91	9	3.0	13.0
				1988-89	14	2.0	12.0
				1987and older	102	14.2	26.7
Total	139	22.7	64.0	Total	139	22.7	64.0

Sources: Officiele lijst der Belgische vissersvaartuigen.

1.2.1 Belgium: beam trawl: economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	*1998**
Costs and earnings (mBEF)						
Value of landings	2,623	2,579	2,597	2,815	3,132	*3,084*
Fuel costs	481	408	390	476	492	*360*
Other running costs	599	570	571	608	645	*654*
Vessel costs	254	250	257	259	263	*267*
Crew share	863	861	885	897	977	*962*
Gross cash flow	426	490	495	576	755	*841*
Depreciation	378	383	393	393	402	*405*
Interest	195	190	168	184	172	*173*
Net profit	-147	-83	-65	-1	181	*263*
Gross value added	1,289	1,351	1,380	1,473	1,732	*1,803*
Other economic indicators						
Employment on board (FTEs)	650	650	600	600	580	*600*
Invested capital (mBEF)	4,125	4,084	4,071	3,949	4,000	*4,030*
Effort (1000 days at sea)	26	26	28	25	24	*22*
Capacity indicators						
Volume of landings (1000 t)	27	25	26	23	22	23
Fleet - number of vessels	104	98	96	92	87	90
Fleet - total GRT (1000)					19	19
Fleet - total kW (1000)	56	53	54	53	54	53

Sources: Dienst voor de Zeevisserij: De Belgische Zeevisserij: aanvoer en besomming; uitkomsten.
* Estimation.

1.2.2 Belgium: beam trawl, composition of landings, 1993-1998

Major species	**Value (mBEF)**						**Volume (1000 t)**					
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Sole:	1,164	1,174	1,195	1,437	1,653	1,402	5	5	5	5	4.2	3.8
- II,IV											1.5	1.4
- VIId											1.2	1.4
- VIIa											0.6	0.4
Plaice:	666	556	476	458	472	488	12	9	9	7	7.0	6.5
- IV											5.2	5.0
Cod:	174	147	198	162	193	331	3	2	4	3	2.9	4.3
- IV											1.9	
Other	619	702	728	758	814	863	7	9	8	8	8.0	8.5
Total	2,623	2,579	2,597	2,815	3,132	3,084	27	25	26	23	22.1	23.1

Sources: Dienst voor de Zeevisserij: De Belgische zeevisserij: aanvoer en besomming; Uitkomsten.

1.2.3 *Belgium: beam trawl, composition by size and age, 1998*

Size class	**Number**	**GRT (1000)**	**kW (1000)**	**Age class**	**Number**	**GRT (1000)**	**kW (1000)**
1 - 35 GRT	1	0.02	0.5	1997 - 98	6	1.5	3.1
35 - 70 GRT	9	0.60	2.0	1995 - 96	3	0.9	2.0
70 - 180 GRT	29	3.10	8.8	1993 - 94	3	0.9	1.9
180 - 400 GRT	48	13.60	39.5	1991 - 92	7	2.1	4.7
400 -	3	1.40	2.6	1989 - 90	9	2.5	5.6
				1988 and older	62	10.8	36.1
Total	90	18.70	53.4	Total	90	18.7	53.4

Sources: Officiële lijst der Belgische vissersvaartuigen.

2. Denmark

2.0 Denmark: composition of the national fleet, 1997

	Total fleet	Fleet segments			
		Trawlers u. 200 GT	Trawlers o. 200 GT	Danish Seiners	Gill Net
Economic indicators					
Value of landings (mEUR)	476.0	145.0	169.5	26.8	82.3
Gross value added (mEUR)		90.9	106.4	18.3	57.8
Gross cash flow (mEUR)		53.0	50.1	0.2	35.2
Net (financiel) profit (mEUR)		24.5	7.0	-13.7	17.3
Other Economic indicators					
Employment on board	7,296	1,432	656	466	4,200
Invested capital (mEUR)	634.4	131.1	190.2	40.4	100.7
Effort (1000 trips)	214			15.7	
Capacity indicators					
Volume of landings	1,814	1,302	416.5	18.2	49.2
Fleet number of vessels	4,582	587	134	95	1,302
Fleet total GRT (1000)	98	23.6	44.5	5.6	14.7
Fleet - total kW (1000)	394.4	133	96.6	31.2	107.7
Average characteristics of vessels					
GRT	21.4	40.2	332.1	58.9	11.3
kW	86.1	226.6	720.9	328.4	82.7
Length	9.6				
Age	30.0	30.0	30.0	30.0	30.0

Sources: Fisheries Directorate. Accounting statistics, DIAFE.
Fleet capacity statistics 31 December 1997. All commercial vessels

2.1.1 Denmark: National fleet: economic and capacity indicators, 1992-1998

	1992	1993	1994	1995	1996	1997	1998
Costs and earnings (mEUR)							
Value of landings 1)	491.8	338.5	385.5	412.3	409.6	456.4	476.0
Fuel costs							
Other running costs							
Vessel costs							
Crew share							
Gross cash flow							
Depreciation							
Interest							
Net profit							
Gross value added							
Other economic indicators							
Employment on board (FTEs)	7,277	6,530	6,397	6,223	7,754	7,296	
Invested capital (mEUR)	670.4	651.4	645.2	651.0	625.1	634.4	
Effort (1000 trips/days at sea)	232	182.1	208.5	216	266	214	
Capacity indicators							
Volume of landings (1000 t)1)	1,953	1,614	1,864	2,026	1,681	1,826	1,539
Fleet - number of vessels	3,488	3,232	3,188	3,152	4,830	4,582	
Fleet - total GRT (1000)	110.3	96.4	98.2	96.4	97.5	98	
Fleet - total kW (1000)	479.3	425.2	413.8	403.9	409.3	394.4	

Sources: Fisheries Directorate. Fisheries Statistical Yearbook. CBS.
From 1996 all commercial vessels. 1) Incl landings in foreign ports. Effort in days at sea from 1996.

2.1.2 Denmark: National fleet, composition of landings, 1992-1997

Major species/-groups of species	Value (mEUR)						Volume (1000 t)					
	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997
Cod	60.7	62.4	70.7	88.6	93.7	95.8	55.5	40.9	47.9	67.5	78.1	69.2
Sand eel	41.2	42.4	59.4	60.7	56.2	80.7	952.8	631.5	839.8	844.5	669.0	840.8
Plaice	36.9	38.0	40.9	35.5	39.0	40.2	29.3	25.1	25.9	22.4	20.9	22.2
Herring	36.1	37.1	38.8	34.6	25.0	17.6	153.5	162.7	170.5	157.0	92.9	75.7
Other	164.5	169.2	175.1	192.6	195.8	208.5	738.6	733.6	761.0	861.8	692.6	714.7
Total	339.5	349.1	384.9	412.1	409.6	442.8	1,929.7	1,593.8	1,845.1	1,953.2	1,553.5	1,722.6

Sources: Fisheries Directotrate. Fishery Statistics Yearbook. Landings in Danish ports only.

2.1.3 Denmark: National fleet: composition by size and age, 31 December 1996

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
- 4.9 GRT	2,658	4	231.6	1996-97			
5 -19 GRT	1,410	33.9	47.3	1994-95			
20 -99 GRT	307	32.7	8.3	1992-93			
100 -249 GRT	103	18.1	122.1	1990-91			
>250 GRT	207	44.3		1988-89			
				1988 and older			
Total	4,830	98	409,3	Total			

Sources: Fisheries Directorate: Fisheries Statistics Yearbook.

2.2.1 Denmark: Trawlers over 200 GT (West), economic and capacity indicators, 1992-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (mEUR)						
Value of landings	107.9	119.3	133.1	122.1	169.5	*197.4*
Fuel costs	13.6	12	12.4	13.4	16.0	
Other running costs	16.5	16.8	19.1	16.8	22.0	
Vessel costs	22.6	27.2	32.4	20.4	25.1	
Crew share	35.9	39.1	43.1	39.7	56.3	
Gross cash flow	19	25.4	26.1	31.8	50.1	
Depreciation	17.8	17.7	17.2	23.6	26.9	
Interest	14.7	20.2	18.4	15.8	16.2	
Net profit	-13.5	-12.5	-9.5	-7.6	7.0	
Gross value added	54.8	63.3	69.2	71.5	106.4	
Other economic indicators						
Employment on board (FTEs)		908	889	621	656	
Invested capital (1000 Euro)		241.3	244.4	171.6	190.2	
Effort (1000 days at sea)		19.1	19.7			
Capacity indicators						
Volume of landings (1000 t)		1,184	1,302			
Fleet - number of vessels		280	271	128	134	
Fleet - total GRT (1000)		38.1	37.8	40.1	44.5	
Fleet - total kW (1000)		107.2	104.8	89.2	96.6	

Sources: DIAFE and F. Directorate.
Before 1996 West coast trawlers (segment definition has changed).

2.2.2 Denmark: Trawlers over 200 GT (West), composition of landings, 1992-1997

Major species/-groups of species	Value (Euro)						Volume (1000 t)					
	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997
	82.2	59.3	71.2	82.4			1,079.5	850.5	1,014.2	1,130.7		
	8.7	6	5.9	9			4.6	3.8	3.7	6.7		
	7.6	9.9	9.8	8.9			5.7	6.8	6.4	5.8		
	1.8	1.5	1.1	0.6			1.5	1.7	1.2	0.8		
Other	31.3	31.3	31.2	32.3			138.1	146	157.6	158.3		
Total	131.6	108	119.3	133.1			1,229.4	1,008.8	1,183.1	1,302.4		

Sources: F. Directorate for trawlers of the West Coast.

2.2.3 Denmark: Trawlers over 200 GT (West), composition by size and age, 31.12.1996

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT	78	2.2	15.3	1967-1994			
50 - 119 GRT	43	2.5	10	1986 and older	241	35.2	104.2
120 - 149 GRT	58	9.3	30.3				
>200 GRT	62	21.3	48.6				
Total	241	35.3	104.2	Total	241	35.2	104.2

2.3.1 Denmark: Trawlers under 200 GT (North), economic and capacity indicators, 1992-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (mEUR)						
Value of landings		81.9	84.7	134.6	145.0	*125.9*
Fuel costs		6.5	6.8	13.2	13.1	
Other running costs		11	11.5	15.6	17.0	
Vessel costs		18.7	22.1	23.5	24.1	
Crew share		28.4	30.3	34.9	37.9	
Gross cash flow		17.3	14.1	47.4	53.0	
Depreciation		9.5	9.3	18.5	17.7	
Interest		10.7	9.8	10.6	10.8	
Net profit		-2.9	-5	18.3	24.5	
Gross value added		45.6	44.4	82.4	90.9	
Other economic indicators						
Employment on board (FTEs)		864	841	1,616	1,432	
Invested capital (1000 Euro)		131.8	134.3	144.7	131.1	
Effort (1000 days at sea)		35.2	33.4			
Capacity indicators						
Volume of landings (1000 t)		421.2	416.5			
Fleet - number of vessels		334	321	647	587	
Fleet - total GRT (1000)		19.1	19.3	26.4	23.6	
Fleet - total kW (1000)		90.3	88.4	148.1	133	

Sources: DIAFE and F. Directorate.
Before 1996 trawlers of the North (segment definition has changed).

2.3.2 Denmark: Trawlers under 200 GT (North), composition of landings, 1992-1997

Major species/-groups of species	Value *(national currency)*						Volume (1000 t)					
	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997
Other												
Total												

2.3.3 Denmark: Trawlers under 200 GT (North), composition by size and age, date

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT				1996-97			
50 - 119 GRT				1994-95			
120 - 149 GRT				1992-93			
>200 GRT				1990-91			
				1988-89			
				1988 and older			
Total				Total			

2.4.1 Denmark: Seiners, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (mEUR)						
Value of landings	25.8	25.2	26.6	22.7	26.6	26.8
Fuel costs	1.4	1.0	1.2	1.0	0.9	
Other running costs	4.0	3.4	3.8	2.9	3.4	
Vessel costs	6.1	5.7	6.4	3.2	4.0	
Crew share	12.6	11.4	11.6	13.7	18.1	
Gross cash flow	0.5	2.4	3.5	1.9	0.2	
Depreciation	2.4	2.4	2.5	3.2	8.5	
Interest	2.0	2.8	2.8	5.3	5.4	
Net profit	-3.9	-2.8	-1.8	-6.7	-13.7	
Gross value added	13.0	13.8	15.1	15.6	18.3	
Other economic indicators						
Employment on board (FTEs)	533	480	466			
Invested capital (1000 Euro)	42.3	39.5	39.3	40.6	40.4	
Effort (1000 days at sea)		8.1	8.4	23.8	15.7	
Capacity indicators						
Volume of landings (1000 t)	19	15.8	18.2	16.3	18.2	
Fleet - number of vessels	173	161	157	104	95	
Fleet - total GRT (1000)	6.2	5.5	5.4	5.7	5.6	
Fleet - total kW (1000)	26.1	23.8	23.6	30.8	31.2	

Sources: DIAFE Accounting statistics from 1996. Fleet Capacity data from the Fisheries Directorate.

2.4.2 Denmark: Seiners, compositions of landings, 1993-1997

Major species/-groups of species	Value (Euro)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Cod												
Sole												
Plaice												
Turbot												
Other												
Total												

2.4.3 Denmark: Seiners, composition by size and age, 31.12.1996

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 29 GRT	54	1	5,8	1987-1994			
> 30 GRT	119			1986 and older	173	6	25,4
Total	173	6	25,4	Total	173	6	25,4

2.5.1 Denmark: Gill net, economic and capacity indicators, 1992-1997

	1993	1994	1995	1996	1997	1998
Costs and earnings (mEUR)						
Value of landings				85.1	82.3	75.7
Fuel costs				3.4	3.2	
Other running costs				10.7	9.4	
Vessel costs				13.3	11.9	
Crew share				20.5	22.6	
Gross cash flow				37.3	35.2	
Depreciation				13.0	10.6	
Interest				8.6	7.3	
Net profit				15.6	17.3	
Gross value added				57.7	57.8	
Other economic indicators						
Employment on board (FTEs)				4,200		
Invested capital			108.3	100.7		
Effort (1000 days at sea)						
Capacity indicators						
Volume of landings (1000 t)			53.2	46.1		
Fleet number of vessels			1,420	1,302		
Fleet - total GRT (1000)			16	14.7		
Fleet - total kW (1000)			115.5	107.7		

Sources: Fisheries Directorate regarding capacity data. Accounting information based on DIAFE Acc. stat.

2.5.2 Denmark: Gill net, composition of landings, 1993-1997

Major species/-groups of species	Value (mEUR)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Cod	27.4	32.7	37.8	38.5	39.9		19.3	23.7	29.5	32.9	28.5	
Sole	11.8	12.6	13	11.9	10.1		1.9	2	2.1	1.5	1	
Plaice	9.9	13	11.7	12.4	11.3		7.1	9.2	8.1	7.5	6.7	
Turbot	4.8	5.3	4.8	4.7	3.4		0.9	1	0.9	0.7	0.5	
Other	14.9	18	17.5	18	17.6		10.1	10.8	8.4	10.6	9.4	
Total	68.8	81.6	84.8	85.5	82.3	75.7	39.3	46.7	49	53.2	46.1	

2.5.3 Denmark: Gill net, composition by size and age, 31.12.1997

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
- 20 GT	1,243			1996-97			
>20 GT	59			1994-95			
				1992-93			
				1990-91			
				1988-89			
				1988 and older			
Total	1,302			Total			

3. Finland

3.0 Finland: composition of the national fleet, 1998

	Total fleet	Fleet segments	
		Pelagic trawlers	Salmon vessels
Economic indicators			
Value of landings (mEUR)	26.3	13.8	0.7
Gross value added (mEUR)		9.1	0.4
Gross cash flow (mEUR)		4.9	0.2
Net (financial) profit (mEUR)		0.8	-0.3
Other economic indicators			
Employment on board (number)	2,948	360	54
Invested capital (mEUR)		20.8	2.7
Effort (1000 days at sea)		10.5	1.3
Capacity indicators			
Volume of landings (1000 t)	118.8	91	0.3
Fleet - number of vessels	3,987	148	32
Fleet - total GT (1000)	23.3	9.1	0.8
Fleet - total kW (1000)	217	44.9	5.8
Average characteristics of vessels			
GT		60	24
kW		300	180
Length, loa		18	13
Age		28	24

* Active fleet.

3.1.1 Finland: National fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (m Euro)						
Value of landings	27.4	27.3	22	25.4	26.7	26.3
Fuel costs						
Other running costs						
Vessel costs						
Crew share						
Gross cash flow						
Depreciation						
Interest						
Net profit						
Gross value added						
Other economic indicators						
Employment on board	2,765	2,375	2,948	2,948	2,946	2,948
Invested capital						
Effort (1000 days at sea)						
Capacity indicators						
Volume of landings (1000 t)	83.6	103.4	106.1	116.6	117.6	118.8
Fleet – number of vessels			3,881	4,100	3,987	3,987
Fleet - total GT (1000)			22.6	24.7	24	24
Fleet - total kW (1000)			216	230	219	219

3.1.2 Finland: National fleet, composition of landings, 1993-1998

Major species/-groups of species	Value (m Euro)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Baltic herring	14.9	16.4	12.1	13.1	14.2	14.2	77.4	97.7	94.6	93.3	90.3	85.5
Sprat	0.1	0.2	0.5	1.5	2.1	2.6	0.2	0.5	4.1	14.4	19.9	27.0
Whitefish	3	2.8	2.2	2.7	2.4	3.1	1.2	1.1	1.2	1.3	1.2	1.4
Cod	0.1	0.5	1.2	2.6	1.6	1.2	0.2	0.5	1.9	3.1	1.5	1.0
Salmon	5.9	4.2	2.9	2.1	2.3	1.7	1.6	1.0	1.2	1.0	1.1	0.7
Pike-perch	1	1.4	1.4	1.6	2.1	1.4	0.4	0.5	0.5	0.6	0.7	0.5
Others	2.4	1.8	1.7	1.8	2	2.1	2.6	2.1	2.6	2.9	2.9	2.9
Total	27.4	27.3	22	25.4	26.7	26.3	84	103	106	117	118	119

3.1.3 Finland: National fleet, composition by size and age, 1.1.1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
<10	3,300	6.6	101.6	1993-97	394	1.1	17.8
10 - 15	559	7.5	72.6	1988-92	894	3.7	50.6
15 - 20	67	2.7	16.8	1983-87	982	4.1	47.4
20 - 25	34	2.8	11.9	1978-82	691	3.6	33.9
25 - 30	18	2.5	10.4	1973-77	418	2.5	20.2
>30	9	2.0	6.1	<1972	608	9.1	49.6
Total	3,987	24.1	219.4	Total	3,987	24.1	219.4

3.2.1 Finland: Pelagic trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (m FIM)						
Value of landings	71.5	83.6	67.8	65.2	82.8	82.4
Fuel costs				7.1	9.0	9.2
Other running costs				1.5	2.0	2.1
Vessel costs				13.2	16.7	16.7
Crew share				22.1	28.1	25.0
Gross cash flow				21.3	27.0	29.4
Depreciation				18.6	20.4	21.1
Interest				5.0	4.8	3.6
Net profit				-2.3	1.8	4.8
Gross value added				43.4	55.1	54.4
Other economic indicators						
Employment on board				120	120	130
Invested capital				135.6	132.4	123.8
Effort (1000 days at sea)	10,8	10	10,1	9.7	9.8	10.5
Capacity indicators						
Volume of landings (1000 t)	63.2	84.3	90.3	87.2	90.6	91
Fleet - number of vessels	145	146	169	154	152	148
Fleet - total GT (1000)				8	8.9	9.1
Fleet - total kW (1000)				42.7	45.5	44.9

3.2.2 Finland: Pelagic trawlers, composition of landings, 1993-1998

Major species/-groups of species	Value (m FIM)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Baltic herring	71.0	82.7	64.7	58.3	75.7	71.5	63.0	83.8	86.2	75.0	77.3	71.8
Sprat	0.6	1.0	3.1	7.0	7.1	10.9	0.2	0.5	4.1	12.2	11.9	19.2
Total	71.5	83.6	67.8	65.2	82.8	82.4	63.2	84.3	90.3	87.2	89.2	91.0

3.2.3 Finland: Pelagic trawlers, compostion by size and age, 1.1.1998

Size class (m)	Number	GT (1000)	kW (1000)	Age class	Number	GT (1000)	kW (1000)
4 - 50	86	2.3	17.0	1993-	3	0.1	0.9
50 - 119	47	3.7	17.0	1988-92	20	1.1	6.2
120 - 149	3	0.4	1.6	1983-87	17	0.7	4.3
150 - 200	4	0.7	2.8	1978-82	25	0.9	5.9
>200	8	2.0	6.5	1973-77	18	0.7	3.4
				1972 and older	65	5.5	24.2
Total	148	9.1	44.9	Total	148	9.1	44.9

3.3.1 Finland: Salmon offshore, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(mln FIM)*						
Value of landings	14.6	14.1	10.0	4.7	5.1	4.2
Fuel costs						0.4
Other running costs						0.1
Vessel costs						1.3
Crew share						1.4
Gross cash flow						1.0
Depreciation						2.1
Interest						0.5
Net profit						-1.7
Gross value added						2.4
Other economic indicators						
Employment on board						54
Invested capital *(mln FIM)*						16.3
Effort (1000 days at sea)	2.7	2.6	2.2	1.3	1.3	1.3
Capacity indicators						
Volume of landings (1000 t)						0.3
Fleet - number of vessels	93	75	76	47	62	32
Fleet - total GT						776
Fleet - total kW						5,854

3.3.2 Finland: Salmon offshore vessels, composition of landings, 1993-1998

Major species/-groups of species	**Value *(mln FIM)***						**Volume (1000 t)**					
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Salmon	15	14	10	5	5	4	0.8	0.7	0.7	0.4	0.4	0.3
Other												
Total							0.8	0.7	0.7	0.4	0.4	0.3

3.3.3 Finland: Salmon offshore vessels, composition by size and age, 1.1.1998

Size class (m)	**Number**	**GT**	**kW**	**Age class**	**Number**	**GT**	**kW**
5 - 49	29	532	4,990	1993-97	1	22	213
50 -	3	244	864	1988-92	4	72	598
				1983-87	11	252	2,589
				1978-82	3	28	324
				1973-77	2	56	300
				1972 and older	11	345	1,829
Total	32	776	5,854	Total	32	776	5,854

4. France

4.0 France: Composition of the national fleet, 1998

	Total fleet	Fleet segments			
		Bottom trawlers, 16-30m.	Bottom Trawlers, >= 30m.	Gill netters, >= 16m.	Others
Economic indicators					
Value of landings (mEUR) *	*980*	198	87	34	662
Gross value added (mEUR) **		*109*		*22*	
Gross cash flow (m EUR) **		*32*		*7*	
Net (financial) profit (mEUR) **		*5*		*1*	
Other economic indicators					
Employment on board ***	*15,476*	*2,142*	*791*	*596*	
Invested capital (mEUR)	*398*	*202*	*57*	*28*	*112*
Effort (1000 days at sea)		77	18	17	
Capacity indicators					
Volume of landings (1,000 t) *	*598*	92	49	10	446
Fleet - number of vessels	6,119	387	63	96	5,573
Fleet - total GRT (1,000)	167	29	23	7	108
Fleet - total kW (1,000)	944	152	59	35	698
Average characteristics of vessels					
GRT	27	75	359	78	
kW	154	392	943	360	
Length, loa	11	21	41	21	
Age	19	13	20	18	

Sources: DPMCM, IFREMER, OFIMER (exFIOM), CAAM, CRTS, Copyright - Federation Bretonne de la Cooperation Maritime, ARECOM/IBS.

* Based on the trends of auction data; ** Based on provisional data from a sample of Brittany vessels; *** Estimates of FTE for total fleet/ Based on the legal crew size for fleet segments.

4.1.1 France: National fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (m FRF)						
Value of landings *	5,952	5,674	5,422	5,685	6,213	*6,483*
Fuel costs						
Other running costs						
Vessel costs						
Crew share						
Gross cash flow						
Depreciation	*696*	*680*	*674*	*669*	*649*	*636*
Interest	*306*	*321*	*239*	*185*	*160*	*105*
Net profit						
Gross value added						
Other economic indicators						
Employment on board **	*17,440*	*16,843*	*16,099*	*15,850*	*15,501*	*15,476*
Invested capital (m FRF)	*6,367*	*5,531*	*4,430*	*4,009*	*3,605*	*2,636*
Effort (1,000 days at sea)						
Capacity indicators						
Volume of landings (1,000 t)*	614	645	603	585	585	*598*
Fleet - number of vessels	7,021	6,837	6,593	6,475	6,255	6,119
Fleet - total GRT (1,000)	184	179	175	176	170	167
Fleet - total kW (1,000)	1,034	1,011	991	988	961	944

Sources: DPMCM, OFIMER (exFIOM), CAAM, CRTS.
* Based on the trends of auction data for 1998; ** Based on the number of months employed per fishermen.

4.1.2 France: National fleet, composition of landings, 1993-1998

Major species/-groups of species	Value (m FRF)						Volume (1,000 t)					
	1993	1994	1995	1996	1997	1998*	1993	1994	1995	1996	1997	1998*
Sole	444	427	400	433	482	*476*	9	10	9	8	8	*7*
Anglerfish	297	297	353	365	422	*408*	11	13	16	16	16	*14*
Nephrops	341	328	350	337	308	*288*	9	9	9	8	7	*6*
Cod	182	170	180	193	210	*264*	14	14	16	17	19	*18*
Other	4,687	4,452	4,139	4,357	4,791	*5,047*	570	600	554	535	536	*552*
Total	5,952	5,674	5,422	5,685	6,213	*6,483*	614	645	603	585	585	*598*

Sources: DPMCM, OFIMER(exFIOM), IFREMER.
* Based on the trends of auction data.

4.1.3 France: National fleet, composition by size and age, 1998

Size class	Number	GRT (1,000)	kW (1,000)	Age class	Number	GRT (1,000)	kW (1,000)
5 - 49 GRT	5,540	53.2	578.9	1997-98	101	2.6	16.1
50 - 119 GRT	301	22.6	112.1	1995-96	138	6.2	28.7
120 - 199 GRT	166	20.4	81.6	1993-94	104	1.8	13.9
>= 200 GRT	112	70.4	171.3	1991-92	203	7.5	37.5
				1989-90	410	21.2	99.9
				1988 and older	5,163	127.3	747.8
Total	6,119	166.6	943.9	Total	6,119	166.6	943.9

Sources: DPMCM, OFIMER(exFIOM), CAAM.

4.2.1 France: Bottom trawlers, 16-30 m, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (m FRF)						
Value of landings	1,461	1,185	1,359	1,238	1,315	1,308
Fuel costs *	*192*	*135*	*148*	*152*	*162*	*124*
Other running costs *	*250*	*188*	*212*	*188*	*189*	*176*
Vessel costs *	*325*	*261*	*299*	*255*	*273*	*290*
Crew share *	*550*	*437*	*502*	*456*	*487*	*504*
Gross cash flow	*144*	*165*	*198*	*187*	*203*	*214*
Depreciation	*158*	*148*	*148*	*135*	*131*	*130*
Interest	*80*	*112*	*97*	*73*	*65*	*53*
Net profit	*-95*	*-96*	*-47*	*-21*	*8*	*30*
Gross value added	*694*	*601*	*700*	*643*	*690*	*718*
Other economic indicators						
Employment on board **	*2,837*	*2,593*	*2,592*	*2,306*	*2,185*	*2,142*
Invested capital (m FRF)	*1,677*	*1,935*	*1,802*	*1,587*	*1,453*	*1,338*
Effort (1,000 days at sea)	98	85	92	78	80	77
Capacity indicators						
Volume of landings (1,000 t)	111	105	119	106	111	92
Fleet - number of vessels	511	463	466	416	394	387
Fleet - total GRT (1,000)	35	33	32	30	29	29
Fleet - total kW (1,000)	190	176	176	160	154	152

Sources: DPMCM, IFREMER, OFIMER (exFIOM), CAAM, CRTS, Copyright - Fédération Bretonne de la Coopération maritime, ARECOM/IBS.
* Provisional data for 1998; ** Based on the legal crew size per vessel.

4.2.2 France: Bottom trawlers, 16-30 m, composition of landings, 1993-1998

Major species/-groups of species	Value (m FRF)						Volume (1,000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Nephrops	225	188	213	178	151	133	6	6	6	5	4	3
Anglerfish	166	167	202	150	150	139	7	9	11	8	7	5
Cod	90	86	106	102	142	175	8	8	11	11	15	12
Whiting	84	87	96	96	101	110	14	17	18	16	16	14
Other	896	658	742	713	771	752	75	66	71	67	68	59
Total	1,461	1,185	1,359	1,238	1,315	1,308	111	105	119	106	111	92

Sources: DPMCM, IFREMER, OFIMER(exFIOM), CAAM, CRTS.

4.2.3 France: Bottom trawlers, 16-30 m, composition by size and age, 1998

Size class	Number	GRT (1,000)	kW (1,000)	Age class	Number	GRT (1,000)	kW (1,000)
5 - 49 GRT	142	6.1	45.6	1997-98	3	0.4	1.7
50 - 119 GRT	207	17.8	87.5	1995-96	2	0.2	0.9
120 - 199 GRT	38	5.0	18.5	1993-94	3	0.3	1.5
>= 200 GRT	0	0.0	0.0	1991-92	34	3.2	13.2
				1989-90	58	5.5	24.6
				1988 and older	287	19.4	109.7
Total	387	28.9	151.5	Total	387	28.9	151.5

Sources: DPMCM, IFREMER, CAAM, CRTS.

4.3.1 France: Bottom trawlers, > = 30 m, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (m FRF)						
Value of landings	605	548	485	480	524	572
Fuel costs	*85*	*65*	*55*			
Other running costs	*105*	*101*	*80*			
Vessel costs	*184*	*165*	*135*			
Crew share	*264*	*209*	*189*			
Gross cash flow	*-32*	*8*	*26*			
Depreciation	*118*	*107*	*99*	*92*	*93*	*87*
Interest	*45*	*45*	*37*	*26*	*19*	*15*
Net profit	*-195*	*-144*	*-110*			
Gross value added	*233*	*217*	*215*			
Other economic indicators						
Employment on board *	*1,056*	*956*	*897*	*828*	*837*	*791*
Invested capital (m FRF)	*945*	*783*	*678*	*555*	*437*	*374*
Effort (1,000 days at sea)	19	17	16	16	17	18
Capacity indicators						
Volume of landings (1,000 t)	83	74	66	63	60	49
Fleet – number of vessels	83	74	70	65	66	63
Fleet - total GRT (1,000)	31	28	26	24	24	23
Fleet - total kW (1,000)	79	72	68	63	63	59

Sources: DPMCM, IFREMER, CAAM, CRTS, AREDIPEB.
* Based on the legal crew size per vessel.

4.3.2 France: Bottom trawlers, > = 30 m, composition of landings, 1993-1998

Major species/-groups of species	Value (m FRF)						Volume (1,000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Saithe	105	110	93	89	86	113	28	26	20	20	18	16
Roundnose grenadier	51	51	50	54	59	67	9	8	8	7	7	7
Anglerfish	63	55	51	52	66	70	3	3	3	4	3	3
Black scabbardfish	38	36	36	43	36	36	4	3	3	4	3	2
Other	348	296	255	242	277	287	40	34	31	29	28	22
Total	605	548	485	480	524	572	83	74	66	63	60	49

Sources: DPMCM, IFREMER, OFIMER (exFIOM), CAAM, CRTS.

4.3.3 France: Bottom trawlers, > = 30 m, composition by size and age, 1998

Size class	Number	GRT (1,000)	kW (1,000)	Age class	Number	GRT (1,000)	kW (1,000)
5 - 49 GRT	0	0.0	0.0	1997-98	1	0.3	0.8
50 - 119 GRT	0	0.0	0.0	1995-96	0	0.0	0.0
120 - 199 GRT	4	0.7	2.3	1993-94	0	0.0	0.0
> = 200 GRT	59	21.9	57.2	1991-92	1	0.2	0.6
				1989-90	2	0.5	1.2
				1988 and older	59	21.7	56.9
Total	63	22.6	59.4	Total	63	22.6	59.4

Sources: DPMCM, IFREMER, CAAM, CRTS.

4.4.1 France: Gill netters, > = 16 m, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (m FRF)						
Value of landings	207	160	161	169	225	222
Fuel costs *	*9*	*7*	*6*	*7*	*10*	*8*
Other running costs *	*18*	*13*	*12*	*11*	*16*	*15*
Vessel costs *	*47*	*36*	*41*	*37*	*53*	*54*
Crew share *	*95*	*72*	*72*	*74*	*100*	*101*
Gross cash flow	*38*	*32*	*29*	*39*	*47*	*45*
Depreciation	*26*	*24*	*26*	*25*	*29*	*33*
Interest	*11*	*12*	*12*	*9*	*9*	*7*
Net profit	*2*	*-4*	*-9*	*5*	*8*	*5*
Gross value added	*133*	*104*	*101*	*113*	*147*	*145*
Other economic indicators						
Employment on board **	*576*	*514*	*568*	*523*	*578*	*596*
Invested capital (m FRF)	*225*	*207*	*214*	*185*	*201*	*183*
Effort (1,000 days at sea)	15	12	14	13	13	17
Capacity indicators						
Volume of landings (1,000 t)	9	8	8	9	11	10
Fleet - number of vessels	96	86	94	89	92	96
Fleet - total GRT (1,000)	6	5	6	6	7	7
Fleet - total kW (1,000)	29	26	30	29	31	35

Sources: DPMCM, IFREMER, CAAM, CRTS, Copyright - Fédération Bretonne de la Coopération maritime, ARECOM/IBS.
* Provisional data for 1998; ** Based on the legal crew size per vessel.

4.4.2 France: Gill netters, > = 16 m, composition of landings, 1993-1998

Major species/-groups of species	Value (m FRF)						Volume (1,000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Hake	56	44	41	50	72	53	2	2	2	3	4	2
Sole	54	44	45	47	64	60	1	1	1	1	1	1
Albacore	45	36	26	24	24	31	3	3	2	2	2	2
Anglerfish	7	2	5	6	16	23	0	0	0	0	0	1
Other	46	33	44	42	58	54	3	2	3	3	4	5
Total	207	160	161	169	225	222	9	8	8	9	11	10

Sources: DPMCM, IFREMER, OFIMER(exFIOM), CAAM, CRTS.

4.4.3 France: Gill netters, > = 16 m, composition by size and age, 1998

Size class	Number	GRT (1,000)	kW (1,000)	Age class	Number	GRT (1,000)	kW (1,000)
5 - 49 GRT	49	2.1	14.5	1997-98	0	0.0	0.0
50 - 119 GRT	35	2.8	13.1	1995-96	1	0.1	0.5
120 - 199 GRT	8	1.2	3.9	1993-94	1	0.1	0.3
>= 200 GRT	4	1.4	3.2	1991-92	4	0.4	1.4
				1989-90	13	1.0	4.8
				1988 and older	77	6.0	27.6
Total	96	7.5	34.6	Total	96	7.5	34.6

Sources: DPMCM, IFREMER, CAAM, CRTS.

5. Germany

5.1.0 Germany: Composition of the national fleet, 1998

	Total fleet	Fleet segments	
		Shrimpers	Fish trawlers
Economic indicators			
Value of landings (mEUR)	182	72	116
Gross value added (mEUR)		42	70
Gross cash flow (mEUR)		3	10
Net (financial) profit (mEUR)		-11	-1
Other economic indicators			
Employment on board (FTEs)	2,839	678	651
Invested capital (mEUR)		92	90
Effort (1000 days at sea)			
Capacity indicators			
Volume cf landings (1000 t)	245		
Fleet - number of vessels	2,295	308	257
Fleet - total GT (1000)	66		
Fleet - total kW (1000)	156		
Average characteristics of vessels			
GT	29		
kW	68		
Length, loa			
Age			

* Active fleet, excl. mussel boats.

5.1.1 Germany: National fleet, economic and capacity indicators, 1992-1997

	1993	1994	1995	1996	1997	1998
Costs and earnings (mDM)						
Value of landings	147	144	152	171	170	182
Fuel costs						
Other running costs						
Vessel costs						
Crew share						
Gross cash flow						
Depreciation						
Interest						
Net profit						
Gross value added						
Other economic indicators						
Employment on board (FTEs)	3,307	3,221	3,036	3,008	2,932	2,839
Invested capital (m DM)						
Effort (1000 days at sea)						
Capacity indicators						
Volume of landings (1000 t)	213	193	224	216	225	245
Fleet - number of vessels	2,713	2,586	2,441	2,375	2,324	2,295
Fleet - total GRT (1000)	86	82	77	74	70	66
Fleet - total kW (1000)	181	172	167	164	162	156

Sources: Jahresbericht ueber die Deutsche Fischwirtschaft, Agrarbericht der Bundesregierung.

5.1.2 Germany: National fleet, composition of landings, 1993-1998

	Value (mDM)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Cod	41	47	52	62	53	65	14	17	23	27	19	18
Saithe	18	17	17	18	19	28	13	10	11	12	12	11
Redfish	43	46	31	40	38	41	13	10	8	9	9	9
Plaice	17	16	15	16	13	10	7	6	6	4	3	3
Sole	13	14	14	10	10	9	1	1	1	1	1	1
Herring	29	26	27	21	22	22	50	51	58	40	40	44
Sardinelle				4	10	8				10	24	17
Mackerel	17	15	15	12	19	27	24	18	22	14	15	21
Horsemackerel	15	13	10	11	21	19	30	19	20	22	37	34
Shrimp	42	54	48	61	53	54	12	15	10	14	17	13
Other	49	225	56	72	76	74	52	103	65	61	48	75
Total	285	277	285	327	333	358	213	193	224	216	225	245

Sources: BMELF: Jahresbericht ueber die Deutsche Fischwirtschaft, Statistisches Bundesamt Berlin.

5.1.3 Germany: National fleet, composition by size and age, 31.12.1997

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
- 49 GRT	2,203	16	86	1996-97	54	5	6
50 - 119 GRT	69	6	17	1994-95	47	3	6
120 - 149 GRT	22	3	7	1992-93	54	1	3
150 - 199 GRT	16	3	9	1990-91	125	3	10
>200 GRT	25	32	42	1988-89	78	6	8
Unspecified	2	0	0	1988 and older	1,849	42	127
				Unspecified	130	0	2
Total	2,337	59	162	Total	2,337	59	162

Sources: BMELF, Jahresbericht ueber die Deutsche Fischwirtschaft.

*5.2.1 Near water and coastal fleet, economic and capacity indicators, 1993-1998 **

	1993	1994	1995	1996	1997	1998
Costs and earnings (m DM)						
Value of landings	141	162	164	186	167	187
Fuel costs	18	15	16	19	19	*19*
Other running costs	28	28	32	35	35	*35*
Vessel costs	22	23	25	30	22	*22*
Crew share	78	89	89	85	87	*98*
Gross cash flow	-5	6	2	16	3	*14*
Depreciation	18	17	17	17	17	*17*
Interest	5	8	9	10	9	*9*
Net profit	-27	-19	-24	-11	-23	*-13*
Gross value added	73	96	91	102	90	*112*
Other economic indicators						
Employment on board (FTEs)	1,343	1,244	1,272	1,320	1,355	1,329
Invested capital (m DM)	201	188	190	192	183	*182*
Effort (1000 days at sea)						
Capacity indicators						
Volume of landings (1000 t)						
Fleet - number of vessels	629	584	587	584	577	565
Fleet - total GRT (1000)						
Fleet - total kW (1000)						

* Totals of two segments, shrimp and fish trawlers, descripted in chapter 5.

5.2.2 Germany: near water fleet, composition of landings, 1993-1998

Major species/-groups of species	Value(mDM)						Volume (1000t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Cod	23	30	38	46	40	52	9	14	20	24	16	16
Saithe	13	11	12	12	12	19	10	8	9	9	8	9
Redfish	0	0	0	0	0	1	0	0	0	0	0	0
Plaice	17	16	15	16	13	10	7	12	5	5	4	3
Sole	13	13	12	10	10	9	1	1	1	1	0	1
Herring	5	6	6	3	5	4	13	14	14	7	12	8
Mackerel	0	0	0	0	0	0	0	0	0	0	0	0
Shrimp	42	54	47	61	53	54	12	15	10	14	17	13
Other	41	34	48	47	50	47	45	12	41	47	33	43
Total	154	163	179	195	183	197	97	75	100	106	91	93

Sources: BMELF: Jahresbericht ueber die Deutsche Fischwirtschaft, Statistische Bundesamt Berlin.

5.2.3 Germany: near water and coastal fleet, composition by size and age, 31.12.1997

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
- 49 GRT	374	10	57	1996-97	6	0	1
50 - 119 GRT	69	6	17	1994-95	7	1	2
120 - 149 GRT	17	2	6	1992-93	9	1	3
150 - 199 GRT	11	2	6	1990-91	21	1	4
>200 GRT	10	3	8	1988-89	8	1	3
Unspecified	1	0	0	1988 and older	422	18	82
				Unspecified	9	0	0
Total	482	22	95	Total	482	22	95

Sources: BMELF, Jahresbericht ueber die Deutsche Fischwirtschaft.

5.3.1 Germany: Shrimp trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (m DM)						
Value of landings	63	77	68	83	71	72
Fuel costs	7	6	6	6	6	*6*
Other running costs	9	9	8	11	12	*12*
Vessel costs	9	10	11	13	12	*12*
Crew share	36	41	39	36	38	*39*
Gross cash flow	2	12	4	16	3	*3*
Depreciation	9	9	10	10	10	*10*
Interest	2	4	5	5	5	*5*
Net profit	-9	-1	-10	1	-12	*-11*
Gross value added	39	53	44	52	41	*42*
Other economic indicators						
Employment on board (FTEs)	574	576	623	657	684	678
Invested capital (m DM)	87	86	97	96	92	*92*
Effort (1000 days at sea)						
Capacity indicators						
Volume of landings (1000 t)						
Fleet - number of vessels	296	288	318	313	311	308
Fleet - total GRT (1000)						
Fleet - total kW (1000)						

5.3.2 Germany: Shrimp trawlers, composition of landings, 1993-1998

Major species/-groups of species	Value (DM)						Volume (1,000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998

5.3.3 Germany: Shrimp trawlers, composition by size and age, 1998

Size class	Number	GRT (1,000)	kW (1,000)	Age class	Number	GRT (1,000)	kW (1,000)
5 - 49 GRT				1997-98			
50 - 119 GRT				1995-96			
120 - 199 GRT				1993-94			
> = 200 GRT				1991-92			
				1989-90			
				1988 and older			
Total				Total			

5.4.1 Germany: fish trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (m DM)						
Value of landings	78	85	95	103	95	116
Fuel costs	12	10	11	13	13	*13*
Other running costs	19	19	23	24	23	*23*
Vessel costs	13	13	14	17	10	*10*
Crew share	41	49	50	49	49	*59*
Gross cash flow	-7	-6	-2	0	0	*10*
Depreciation	9	8	7	7	7	*7*
Interest	3	5	4	5	5	*5*
Net profit	-18	-18	-13	-12	-12	*-1*
Gross value added	34	43	48	49	49	*70*
Other economic indicators						
Employment on board (FTEs)	769	668	649	663	671	651
Invested capital (m DM)	114	102	92	96	91	*90*
Effort (1000 days at sea)						
Capacity indicators						
Volume of landings (1000 t)						
Fleet - number of vessels	333	296	269	271	266	257
Fleet - total GRT (1000)						
Fleet - total kW (1000)						

5.4.2 Germany: fish trawlers, composition of landings, 1993-1998

Major species/-groups of species	Value (DM)						Volume (1,000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998

5.4.3 Germany: fish trawlers, composition by size and age, 1998

Size class	Number	GRT (1,000)	kW (1,000)	Age class	Number	GRT (1,000)	kW (1,000)
5 - 49 GRT				1997-98			
50 - 119 GRT				1995-96			
120 - 199 GRT				1993-94			
> = 200 GRT				1991-92			
				1989-90			
				1988 and older			
Total				Total			

6. Greece

6.0 Greece: composition of the national fleet, 1998

	Total fleet	Fleet segments		
		Deep water Trawlers	Coastal trawlers	Other
Economic indicators				
Value of landings (mEUR)		*4.4*	*5.1*	
Gross value added (mEUR)		*2.2*	*2.9*	
Gross cash flow (mEUR)		*0.7*	*1.1*	
Net (financial) profit (mEUR)		*-0.2*	*-0.3*	
Other economic indicators				
Employment on board (FTEs)	38,644	81	111	38,452
Invested capital (mEUR)		*7.3*	*11.6*	
Effort (1000 days at sea)	3,970	*3.8*	*6.8*	3,959
Capacity indicators				
Volume of landings (1000 t)		*1.3*	*1.4*	
Fleet - number of vessels	20,455	20	37	20,408
Fleet - total GRT (1000)	108.6	1.6	2.7	104.3
Fleet - total kW (1000)	646.6	6.8	12.2	627.6
Average characteristics of vessels				
GRT	5.3	80	72	
kW	32	341	330	
Length, loa	5.8	27.8	24.0	
Age	23	8	20	

Source: Directory of Fisheries-Ministry of Agriculture, Cooperative of Trawlers of N.Mihaniona.

6.1.1 Greece: National fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997
Costs and earnings *(m GRD)*					
Value of landings	96,728	109,443	103,713	106,201	105,496
Fuel costs					
Other running costs					
Vessel costs					
Crew share					
Gross cash flow					
Depreciation					
Interest					
Net profit					
Gross value added					
Other economic indicators					
Employment on board (FTEs)	41,270	41,512	41,757	41,822	41,893
Invested capital *(m GRD)*					
Effort (1000 days at sea)				4,285	3,930
Capacity indicators					
Volume of landings (1000 t)	170	191	159	157	154
Fleet - number of vessels	20,580	20,563	20,413	20,364	20,359
Fleet - total GRT (1000)	116.8	115.0	112.0	111.6	111.2
Fleet - total kW (1000)	679.0	674.3	660.2	657.3	657.3

Sources: National Satistics Service, Directory of Fisheries Ministry of Agriculture.

6.1.2 Greece: National fleet, composition of landings, 1993-1998

Major species/-groups ofspecies	Value *(m GRD)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Hake	3,578.3	5,754.9	6,245.7	5,524.2	5,211.4		5.09	6.43	5.45	4.65	4.23	
Anglerfish	275.9	461.1	626.7	434.3	517.5		0.73	1.31	1.51	0.94	0.90	
Common shrimp	1,304.3	901.7	847.4	913.5	1,036.7		1.07	0.68	0.87	1.26	1.63	
Shrimp	2,694.7	3,289.5	2,328.7	2,382.6	2,984.1		2.91	2.25	1.86	2.28	2.45	
Crawfish	925.0	1,321.1	1,661.0	910.9	676.6		0.81	1.09	1.10	0.49	0.35	
Red mullet	3,068.2	3,584.5	3,452.8	3,711.5	3,746.4		2.82	3.03	2.60	2.53	2.40	
Anchovies	5,927.6	6,502.5	4,937.7	5,847.2	4,881.0		14.60	17.34	13.87	15.07	14.57	
Bogues	3,893.6	5,354.5	2,777.0	3,295.9	3,189.8		12.40	14.59	6.84	6.74	5.94	
Chub mackerel	3,025.0	4,378.9	2,251.6	2,973.1	2,553.8		11.00	14.31	6.47	6.52	5.65	
Other	72,035.7	77,894.2	78,584.6	80,207.9	80,699.7		118.53	129.57	118.30	116.29	114.68	
Total	96,728.2	109,442.9	103,713.2	106,201.0	105,496.8		169.96	190.96	158.87	156.77	152.80	

Sources:National Statistics Service

6.1.3 Greece: National fleet, composition by size and age, 31.12.1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
- 49 GRT				1996-97			
50 - 119 GRT				1994-95			
120 - 149 GRT				1992-93			
150 - 199 GRT				1990-91			
>200 GRT				1988-89			
				1988 and older			
Total				Total			

6.2.1 Greece: Thermaikos deep water trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(mGRD)*						
Value of landings	*870.6*	*918.0*	*993.9*	*1,128.3*	*1,241.0*	*1,463.5*
Fuel costs		*168.0*	*202.1*	*247.8*	*259.1*	*244.8*
Other running costs		*215.2*	*242.9*	*243.1*	*286.4*	*311.1*
Vessel costs		*69.5*	*87.4*	*164.0*	*189.9*	*191.0*
Crew share		*286.2*	*296.6*	*343.6*	*374.4*	*492.9*
Gross cash flow		*179.1*	*165.0*	*129.8*	*131.2*	*241.0*
Depreciation	*89.3*	*100.8*	*110.2*	*120.3*	*132.5*	*159.0*
Interest	*121.9*	*127.4*	*134.6*	*82.9*	*110.0*	*163.0*
Net profit		*-49.1*	*-79.9*	*-73.4*	*-111.3*	*-81.0*
Gross value added		*465.3*	*461.5*	*473.4*	*505.6*	*716.6*
Other economic indicators						
Employment on board (FTEs)	110	110	110	110	110	81
Invested capital (m GRD)	*1,372.5*	*1,534.6*	*1,695.6*	*1,849.6*	*2,007.8*	*2,404.6*
Effort (1000 days at sea)	*3.5*	*3.5*	*3.5*	*3.4*	*3.5*	*3.4*
Capacity Indicators						
Volume of landings (1000 t)	*0.58*	*0.78*	*1.04*	*1.15*	*1.11*	*1.27*
Fleet - number of vessels	18	18	18	18	18	20
Fleet - total GRT (1000)	1.48	1.48	1.48	1.48	1.48	1.59
Fleet - total kW (1000)	6.15	6.15	6.15	6.15	6.15	6.82

Sources: Producers sales Invoices, Personal Interviews with producers,Department of Fisheries of Thessaloniki.

6.2.2 Greece: Thermaikos deep water trawlers, composition of landings, 1993-1998

Major species/-groups of species	**Value *(mGRD)***						**Volume (1000 t)**					
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Shrimp		*81.2*	*43.0*	*57.2*	*69.5*	*226.3*		*0.02*	*0.01*	*0.02*	*0.02*	*0.08*
Crawfish		*153.2*	*187.1*	*210.2*	*179.7*	*242.1*		*0.07*	*0.09*	*0.09*	*0.07*	*0.08*
Common shrimp		*12.1*	*45.3*	*127.2*	*151.5*	*232.0*		*0.01*	*0.05*	*0.18*	*0.23*	*0.24*
Hake		*17.9*	*129.8*	*161.8*	*229.3*	*276.7*		*0.01*	*0.09*	*0.11*	*0.13*	*0.19*
Anglerfish		*27.1*	*47.7*	*80.7*	*40.6*	*56.2*		*0.07*	*0.11*	*0.17*	*0.13*	*0.08*
Red mullet		*53.7*	*62.8*	*58.2*	*56.4*	*73.8*		*0.04*	*0.04*	*0.03*	*0.03*	*0.04*
Other		*572.8*	*478.3*	*433.0*	*513.9*	*356.4*		*0.56*	*0.64*	*0.56*	*0.50*	*0.56*
Total		*918.0*	*994.0*	*1128.3*	*1241.0*	*1463.5*		*0.78*	*1.04*	*1.15*	*1.11*	*1.27*

Sources:Wholesale Auction Fishmarket of Thessaloniki, Producers sales invoices.

6.2.3 Greece: Thermaikos deep water trawlers, composition by size and age, 31.12.98

Size class	**Number**	**GRT (1000)**	**kW (1000)**	**Age class**	**Number**	**GRT (1000)**	**kW (1000)**
5 - 49 GRT	2	0.14	0.92	1996-97	2	0.16	0.7
50 - 119 GRT	18	1.45	5.9	1994-95	4	0.28	1.32
120 - 149 GRT				1992-93	0	0	0
>200 GRT				1990-91	3	0.18	0.85
				1988-89	3	0.23	1.07
				1988 and older	8	0.74	2.88
Total	20	1.59	6.82	Total	20	1.59	6.82

Source:Cooperative of Trawlers of N.Mihaniona,Department of Fisheries of Thessaloniki.

6.3.1 Greece: Thermaikos coastal trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(m GRD)*						
Value of landings	*1,469.7*	*1,464.2*	*1,531.0*	*1,669.3*	*1,719.4*	*1,669.50*
Fuel costs		*297.8*	*353.6*	*382.7*	*400.5*	*232.9*
Other running costs		*340.0*	*386.3*	*321.2*	*357.0*	*338.8*
Vessel costs		*135.2*	*167.7*	*231.2*	*237.5*	*157*
Crew share		*451.1*	*438.7*	*535.2*	*538.9*	*619.6*
Gross cash flow		*241.1*	*184.7*	*199.1*	*185.5*	*356.3*
Depreciation	*129.5*	*144.8*	*158.6*	*172.3*	*191.6*	*190*
Interest	*230.4*	*240.1*	*253.1*	*158.9*	*212.7*	*259.4*
Net profit		*-144.7*	*-227.0*	*-132.1*	*-218.7*	*-93.1*
Gross value added		*691.1*	*623.4*	*734.3*	*724.4*	*970.9*
Other economic indicators						
Employment on board (FTEs)	171	176	176	185	185	111
Invested capital *(m GRD)*	*2,594.0*	*2,894.7*	*3,187.9*	*3,547.8*	*3,881.3*	*3,825.80*
Effort (1000 days at sea)	*7*	*7.2*	*7.2*	*7.2*	*7.5*	*6.8*
Capacity indicators						
Volume of landings (1000 t)	*0.86*	*1.22*	*1.51*	*1.44*	*1.69*	*1.38*
Fleet - number of vessels	38	39	39	41	41	37
Fleet - total GRT (1000)	2.73	2.83	2.83	2.91	2.91	2.66
Fleet - total kW (1000)	12.54	12.89	12.89	13.46	13.46	12.22

Sources:Producers Sales Invoices, Personal Interviews with producers,Department of Fisheries of Thesssaloniki.

6.3.2 Greece: Thermaikos coastal trawlers, composition of landings, 1993-1998

Major species/-groups of species	**Value *(mGRD)***						**Volume (1000 t)**					
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Shrimp		*248.6*	*223.1*	*414.1*	*417.2*	*416*		*0.09*	*0.08*	*0.13*	*0.13*	*0.14*
Crawfish		*139.2*	*170.0*	*177.2*	*172.5*	*89.8*		*0.06*	*0.08*	*0.07*	*0.06*	*0.03*
Common shrimp		*25.3*	*38.4*	*135.3*	*167.8*	*244.7*		*0.01*	*0.04*	*0.15*	*0.20*	*0.26*
Hake		*28.7*	*94.4*	*126.4*	*153.9*	*148.8*		*0.01*	*0.07*	*0.08*	*0.09*	*0.1*
Anglerfish		*37.4*	*65.8*	*94.3*	*98.6*	*54.6*		*0.10*	*0.15*	*0.20*	*0.21*	*0.08*
Red mullet		*63.4*	*62.8*	*50.9*	*62.3*	*93.8*		*0.04*	*0.04*	*0.03*	*0.03*	*0.05*
Other		*921.2*	*876.3*	*671.1*	*646.8*	*651.8*		*0.91*	*1.04*	*0.78*	*0.97*	*0.72*
Total		*1463.8*	*1530.8*	*1669.3*	*1719.2*	*1699.5*		*1.22*	*1.51*	*1.44*	*1.69*	*1.38*

Sources:Wholesale Auction Fishmarket of Thessaloniki, Producers sales invoices.

6.3.3 Greece: Thermaikos coastal trawlers, composition by size and age, 31.12.98

Size class	**Number**	**GRT (1000)**	**kW (1000)**	**Age class**	**Number**	**GRT (1000)**	**kW (1000)**
5 - 49 GRT	6	0.31	1.75	1997-98	1	0.05	0.27
50 - 119 GRT	31	2.35	10.47	1995-96	2	0.16	0.81
120 - 149 GRT				1993-94	1	0.06	0.3
>200 GRT				1991-92	1	0.06	0.37
				1989-90	3	0.27	1.1
				1988 and older	29	2.06	9.37
Total	37	2.66	12.22	Total	37	2.66	12.22

Source: Cooperative of Trawlers of N.Mihaniona,Department of Fisheries of Thessaloniki.

7. Iceland

7.0 Iceland: composition of the national fleet, 1997

	Total fleet	Fleet segments			
		Boats	Pelagic	Wetfish trawlers	Freezer trawlers
Economic indicators					
Value of landings (mEUR)	744.3	269.9	135.0	99.6	239.7
Gross value added (mEUR)	432.1	148.0	89.6	52.2	142.3
Gross cash flow (mEUR)	134.7	36.5	40.1	12.6	45.6
Net (financial) profit (mEUR)	-20.1	-19.9	13.6	-8.1	-5.8
Other economic indicators					
Employment on board (FTEs)	6,169	2,518	774	954	1,923
Invested capital (mEUR)	1,048.6	341.4	152.1	142.5	412.7
Effort (1000 days at sea)	146.4	102.4	11.5	14.3	18.1
Capacity indicators					
Volume of landings (1000 t)	2,198.8	273.7	1,614.1	133.9	177.2
Fleet - number of vessels (excl. small boats)	745	578	49	53	65
Fleet - total GRT (1000) (excl. small boats)	126.6	30.9	26.6	22.9	46.1
Fleet - total kW (1000)					
Average characteristics of vessels					
GRT (excl. small boats)	169.9	53.5	543.4	431.8	710.0
kW					
Length, loa					
Age	20				

Source: Fisheries association of Iceland and the National Economic Institute

*) Active fleet

7.1.1 Iceland: National fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (m IKR)						
Value of landings	52,314	53,347	56,624	61,350	59,674	59,295
Fuel costs	4,386	4,414	4,059	4,776	5,108	
Other running costs	9,203	9,440	10,531	11,291	10,552	
Vessel costs	7,897	8,383	8,176	9,316	9,767	
Crew share	20,687	21,259	22,203	23,893	23,443	
Gross cash flow	10,140	9,851	11,655	12,074	10,804	
Depreciation	6,930	6,678	6,542	8,079	7,943	
Interest	3,647	3,821	4,396	4,532	4,473	
Net profit	-436	-649	717	-536	-1,612	
Gross value added	30,828	31,110	33,858	35,967	34,247	
Other economic indicators						
Employment on board (FTEs)	6,697	6,343	6,219	6,312	6,200	
Invested capital (m IKR)	72,936	75,667	74,513	77,997	84,073	
Effort (1000 days at sea)	232	227	201	187	146	
Capacity indicators						
Volume of landings (1000 t)	1,715	1,551	1,605	2,076	2,199	
Fleet - number of vessels	899	884	804	792	745	
Fleet - total GRT (1000)	121	122	118	124	127	
Fleet - total kW (1000)						

Sources: Fisheries Association of Iceland and the National Economic Institute.

7.1.2 Iceland: National fleet, composition of landings, 1993-1998

Major species/-groups of species	Value (m IKR)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Cod	17,176	14,933	14,390	14,634	15,580		261	216	202	204	209	245
Redfish	7,782	9,616	7,813	7,609	7,645		116	142	117	121	112	122
Shrimp	5,950	7,436	10,489	11,266	9,341		56	73	83	90	83	63
Capelin	3,700	3,580	3,553	6,494	7,888		941	753	716	1,179	1,320	752
Other	16,146	16,423	20,379	21,347	19,220		341	366	486	462	476	508
Total	50,754	51,988	56,624	61,350	59,674		1,715	1,551	1,605	2,055	2,199	1,689

Sources: Fisheries Association of Iceland.

7.1.3 Iceland: National fleet, composition by size and age, 31.12.1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 49 GRT		5.6	65.8	1996-97			
50 - 110 GRT	80	6.2	28.7	1994-95			
111 - 200 GRT	78	12.2	44.5	1992-93			
201 - 500 GRT	115	39.9	119.8	1990-91			
> 500 GRT	70	56.8	155.1	1988-89			
				1988 and older			
Total		120.7	414.0	Total			

Sources: Fisheries Association of Iceland.

7.2.1 Iceland: Wet fish trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(m IKR)*						
Value of landings	12,436	12,483	12,684	11,586	7,990	
Fuel costs	1,381	1,467	1,265	1,318	999	
Other running costs	2,532	2,664	2,415	2,473	1,619	
Vessel costs	2,036	1,871	1,781	1,843	1,208	
Crew share	4,518	4,656	4,803	4,134	3,153	
Gross cash flow	1,970	1,825	2,421	1,817	1,011	
Depreciation	1,822	1,701	1,436	1,517	1,049	
Interest	934	881	994	907	608	
Net profit	-786	-757	-9	-606	-646	
Gross value added	6,719	6,655	7,395	6,146	4,187	
Other economic indicators						
Employment on board (FTEs)	1,463	1,331	1,228	1,159	954	
Invested capital *(m IKR)*	18,684	17,452	16,849	15,605	11,422	
Effort (1000 days at sea)	21.0	22.6	18.9	16.2	14.3	
Capacity indicators						
Volume of landings (1000 t)	202.7	187.6	169.5	169.9	133.9	
Fleet - number of vessels	76	79	68	62	53	
Fleet - total GRT (1000)	35.3	36.5	31.8	30.1	22.9	
Fleet - total kW (1000)						

Sources: Fisheries Association of Icland and the National Economic Institute.

7.2.2 Iceland: Wet fish trawlers, composition of landings, 1993-1998

Major species/-groups of species	Value *(m IKR)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Cod							66.5	49.9	39.1	37.8	33.0	
Haddock							15.1	21.8	21.9	19.8	11.9	
Saith							29.1	22.2	16.8	15.0	12.9	
Redfish							63.0	63.4	60.5	56.0	41.3	
Other							29.0	30.3	31.3	41.3	34.8	
Total	12,436	12,483	12,684	11,586	7,990		202.7	187.6	169.5	169.9	133.9	

Sources: Fisheries Association of Iceland.

7.2.3 Iceland: Wet fish trawlers, composition by size and age, 1997

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT				1996-97			
50 - 119 GRT				1994-95			
120 - 149 GRT				1992-93			
>200 GRT				1990-91			
				1988-89			
				1988 and older			
Total				Total			

Sources: Fisheries Association of Iceland.

7.3.1 Iceland: Freezer trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(m IKR)*						
Value of landings	12,771	13,850	15,679	18,023	19,218	
Fuel costs	954	1,060	1,179	1,664	1,907	
Other running costs	2,048	2,343	3,198	3,313	3,749	
Vessel costs	1,491	1,936	1,922	2,614	2,281	
Crew share	4,838	5,389	5,807	6,896	7,625	
Gross cash flow	3,441	3,123	3,573	3,535	3,656	
Depreciation	1,759	1,762	1,848	2,646	2,358	
Interest	821	1,172	1,387	1,541	1,760	
Net profit	861	189	338	-652	-462	
Gross value added	8,419	8,693	9,528	10,707	11,406	
Other economic indicators						
Employment on board (FTEs)	1,121	1,151	1,237	1,234	1,923	
Invested capital *(m IKR)*	16,422	23,208	23,502	26,520	33,086	
Effort (1000 days at sea)	11.6	12.7	12.0	11.3	18.1	
Capacity indicators						
Volume of landings (1000 t)	134.3	153.4	148.9	177.0	177.2	
Fleet - number of vessels	38	50	47	53	65	
Fleet - total GRT (1000)	23.9	30.2	30.9	37.1	46.1	
Fleet - total kW (1000)						

Source: Fisheries Association of Iceland and the National Economic Institute.

7.3.2 Iceland: Freezer trawlers, composition of landings, 1993-1998

Major species/-groups of species	Value *(m IKR)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Cod							40.3	45.3	43.3	39.0	36.8	
Redfish							42.5	69.3	49.2	57.4	63.6	
Greenland halibut							20.6	14.4	16.1	11.5	11.4	
Shrimp							4.7	6.9	20.3	52.2	39.3	
Other							26.2	17.5	20.0	16.8	26.1	
Total	12,771	13,850	15,679	18,023	19,218		134.3	153.4	148.9	177.0	177.2	

Sources: Fisheries Association of Iceland.

7.3.3 Iceland: Freezer trawlers, composition by size and age, 1997

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT				1996-97			
50 - 119 GRT				1994-95			
120 - 149 GRT				1992-93			
>200 GRT				1990-91			
				1988-89			
				1988 and older			
Total				Total			

Sources: Fisheries Association of Iceland.

7.4.1 Iceland: Pelagic vessels, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(m IKR)*						
Value of landings	6,304	5,728	6,165	9,268	10,823	
Fuel costs	608	518	477	565	796	
Other running costs	644	716	713	1,128	1,420	
Vessel costs	1,061	1,011	976	1,342	1,482	
Crew share	2,384	2,224	2,400	3,478	3,911	
Gross cash flow	1,608	1,259	1,599	2,755	3,214	
Depreciation	667	734	590	1,009	1,474	
Interest	429	406	464	567	649	
Net profit	512	120	544	1,179	1,092	
Gross value added	4,071	3,565	4,071	6,359	7,183	
Other economic indicators						
Employment on board (FTEs)	567	490	494	702	774	
Invested capital *(m IKR)*	8,589	8,031	7,870	9,762	12,194	
Effort (1000 days at sea)	10.9	9.3	8.0	10.5	11.5	
Capacity indicators						
Volume of landings (1000 t)	1,054.4	889.3	961.5	1,436.5	1,614.1	
Fleet – number of vessels	38	39	38	48	49	
Fleet - total GRT (1000)	23.9	18.7	18.2	24.2	26.6	
Fleet - total kW (1000)						

Sources: Fisheries Association of Icland and the National Economic Institute.

7.4.2 Iceland: Pelagic vessels, composition of landings, 199301998

Major species/-groups of species	Value *(m IKR)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Capelin									695.1	1,172.1	1,309.9	
Herring									258.2	259.1	286.1	
Other									8.3	5.3	18.2	
Total	6,304	5,728	6,165	9,268	10,823		1,054.4	889.3	961.5	1,436.5	1,614.1	

Sources: Fisheries Association of Iceland

7.4.3 Iceland: Pelagic vessels, composition by size and age, 1997

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT				1996-97			
50 - 119 GRT				1994-95			
120 - 149 GRT				1992-93			
>200 GRT				1990-91			
				1988-89			
				1988 and older			
Total				Total			

Sources: Fisheries Association of Iceland.

7.5.1 Iceland: Boats, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(m IKR)*						
Value of landings	20,802	21,285	22,096	22,474	21,643	
Fuel costs	1,444	1,369	1,138	1,229	1,406	
Other running costs	3,980	3,718	4,205	4,377	3,763	
Vessel costs	3,309	3,566	3,497	3,516	4,797	
Crew share	8,948	8,990	9,194	9,385	8,755	
Gross cash flow	3,122	3,643	4,063	3,967	2,923	
Depreciation	2,682	2,482	2,667	2,906	3,062	
Interest	1,462	1,362	1,551	1,517	1,456	
Net profit	-1,023	-202	-156	-456	-1,596	
Gross value added	12,285	12,768	13,361	13,517	11,866	
Other economic indicators						
Employment on board (FTEs)	3,545	3,371	3,260	3,187	2,518	
Invested capital *(m IKR)*	29,242	26,976	26,291	26,110	27,371	
Effort (1000 days at sea)	188.2	182.2	162.2	149.0	102.4	
Capacity indicators						
Volume of landings (1000 t)	323.6	320.4	324.7	292.2	273.7	
Fleet - number of vessels	743	716	651	629	578	
Fleet - total GRT (1000)	40.7	36.9	37.5	32.1	30.9	
Fleet - total kW (1000)						

Sources: Fisheries Association of Icland and the National Economic Institute

7.5.2 Iceland: Boats, composition of landings, 1993-1998

Major species/-groups of species	Value *(m IKR)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Cod									119.4	125.5	131.3	
Haddock									26.8	26.3	24.7	
Saith									25.4	20.1	17.2	
Shrimp									38.5	34.5	25.5	
Other									114.6	85.8	74.9	
Total	20,802	21,285	22,096	22,474	21,643		323.6	320.4	324.7	292.2	273.7	

Sources: Fisheries Association of Iceland.

7.5.3 Iceland: Boats, composition by size and age, 1997. Decked boats only

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 20 GRT	364	21,703		1996-97			
20 - 200 GRT	31	8,049		1994-95			
> 200 GRT	49	26,626		1992-93			
				1990-91			
				1988-89			
				1988 and older			
Total	444	56,378		Total			

Sources: Fisheries Association of Iceland

8. Ireland

8.0 Ireland: Composition of the national fleet, 1998

	Total fleet	Fleet segments			
		OFMP **	Beamer	Pelagic	Other
Economic indicators					
Value of landings (mEUR)	*156.2*	*45.8*			
Gross value added (mEUR)		*21.7*			
Gross cash flow (mEUR)		*8.2*			
Net (financial) profit (mEUR)		*0.7*			
Other economic indicators					
Employment on board (FTEs)	*5,494*	*645*			
Invested capital (mEUR)		*99*			
Effort (1000 days at sea)					
Capacity indicators					
Volume of landings (1000 t)					
Fleet – number of vessels	1,112	129	5	18	960
Fleet - total GRT (1000)	54	18	1	17	18
Fleet - total kW (1000)	187	63	4	33	87
Average characteristics of vessels					
GRT	49	141	183	960	19
kW	168	488	877	1,824	90
Length, loa	13	26	31	42	11
Age	27	29	29	13	27

Sources: ESRI, Department of the Marine and Natural Resources Vessel register.
* 1998 are estimates based on provisional figures; ** Offshore multi-purpose fleet.

8.1.1 Ireland: National fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998*
Costs and earnings *(mln Irish Pounds)*						
Value of landings	96	104	121	133	132	*123*
Fuel costs						
Other running costs						
Vessel costs						
Crew share						
Gross cash flow						
Depreciation						
Interest						
Net profit						
Gross value added						
Other economic indicators						
Employment on board (FTEs)					5,500	*5,494*
Invested capital *(mln Irish Pounds)*						
Effort (1000 days at sea)						
Capacity indicators						
Volume of landings (1000 t)	279	289	384	332	292	*306*
Fleet numbers	1,459	1,446	1,385	1,249	1,198	1,112
Fleet - total GRT (1000)	52	54	56	55	55	54
Fleet - total kW (1000)	196	200	198	191	191	187

* 1998 are estimates based on provisional figures.
Sources: ESRI estimations, CSO, Department of the Marine and the Natural Resources vessel register.

8.1.2 Ireland: National fleet, composition of landings, 1994-1998

Major species/-groups of species	**Value *(mln Irish Pounds)***					**Volume (1000 t)**				
	1994	**1995**	**1996**	**1997**	**1998***	**1994**	**1995**	**1996**	**1997**	**1998***
Cod	6	7	9	6	*7*	5	6	8	6	*5*
Herring	9	8	12	8	*8*	51	47	72	57	*58*
Mackerel	12	15	19	18	*24*	86	178	50	53	*66*
Horse Mackerel	9	16	18	16	*15*	86	78	128	75	*71*
Other	69	75	75	84	*69*	61	75	74	101	*106*
Total	104	121	133	132	*123*	289	384	332	292	*306*

* 1998 are estimates based on provisional figures. Sources: Department of Marine and Natural Resources, Central Statistics Office.

8.1.3 Ireland: National fleet, composition by size and age, 1998

Size class	**Number**	**GRT (1000)**	**kW (1000)**	**Age class**	**Number**	**GRT (1000)**	**kW (1000)**
5 - 49 GRT	864	10	57	1988-1998	61	13	28
50 - 119 GRT	172	13	54	1980-1987	219	12	36
120 - 199 GRT	33	5	18	1972-1979	395	16	65
>200 GRT	44	26	57	1964-1971	249	7	34
				1956-1963	96	4	16
				1956 and Older	92	2	9
Total	1,113	54	187	Total	1,112	54	187

Sources: ESRI Estimations using Department of Marine and Natural Resources Vessel Register. *includes only registered vessels.

8.2.1 Ireland: Offshore multi-purpose, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998*
Costs and earnings (mln Irish Pounds)						
Value of landings		29.4	27.9	29.7	39.0	*36.0*
Fuel costs		4.7	4.3	4.3	5.7	*5.2*
Other running costs		4.1	3.9	4.2	5.5	*5.0*
Vessel costs		7.2	6.8	7.2	9.5	*8.6*
Crew share		8.7	8.2	8.8	11.5	*10.6*
Gross cash flow		4.7	4.7	5.2	6.7	*6.5*
Depreciation		5.2	5.3	5.4	5.5	*5.4*
Interest		1.1	1.2	1.3	1.3	*0.5*
Net profit		-1.6	-1.8	-1.5	0.0	*0.6*
Gross value added		13.4	12.9	14.0	18.3	*17.1*
Other economic indicators						
Employment on board (FTEs)					660	*645*
Invested capital (Mln *Irish Pounds*)					80	*78*
Effort (1000 days at sea)					28	
Capacity indicators						
Volume of landings (1000 t)		33	31	33	37	*39*
Fleet - number of vessels		132			132	129
Fleet - total GRT (1000)					19	18
Fleet - total kW (1000)					65	63

* 1998 are estimates based on provisional figures.
Sources: Department of Marine and Natural Resources Vessel register, ESRI cost and earnings survey for 1997, ESRI estimates.

8.2.2 Ireland: Offshore multi-purpose, composition of landings, 1994-1998

Major species/-groups of species	Value *(mln Irish Pounds)*					Volume (1000 t)				
	1994	1995	1996	1997	1998*	1994	1995	1996	1997	1998*
Cod	3	3	4	4	*4*	2	3	3	3	*3*
Megrim	3	3	3	3	*4*	2	2	2	2	*2*
Nephrops	4	5	3	4	*4*	1	2	1	1	*3*
Herring	2	1	2	2	*1*	10	8	9	9	*9*
Other	19	15	18	26	*23*	19	17	18	22	*22*
Total	29	28	30	39	*36*	33	31	33	37	*39*

* 1998 are estimates based on provisional figures.
Sources: ESRI estimates based on Department of Marine and Natural resources special tabulation.

8.2.3 Ireland: Offshore multi-purpose, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT	4	0	1	1988-1998	2	1	2
50 - 119 GRT	76	7	27	1980-1988	21	3	10
120 - 149 GRT	24	4	12	1972-1980	51	9	31
>200 GRT	25	8	23	1964-1972	26	3	10
				1956-1964	20	2	8
				1956 and older	9	1	2
Total	129	18	63	Total	129	18	63

Sources: ESRI calculations based on Department of Marine and Natural Resources Vessel register.

9. Italy

9.0 Italy: Position of the segments in national fleet, 1998

	Total fleet	Fleet segments							
		trawlers	purse seiners	midwater pair trawlers	dredgers	multi-porpose trawlers	small scale fisheries	tuna fisheries	swordfish fisheries
Economic indicators									
Value of landings (mEUR)	1,618.8	535.9	70.7	36.4	48.3	493.8	316.0	35.1	82.3
Gross value added (mEUR)	1,071.7	339.6	48.1	22.6	39.5	305.2	236.6	24.0	56.0
Gross cash flow	486.7	134.8	14.9	7.9	21.6	117.6	152.2	8.1	29.6
Net (financial) profit (mEUR)	354.1	90.2	9.5	3.4	12.4	85.0	128.9	1.5	22.9
Employment on board (FTEs)	48,342	10,258	2,866	951	1,644	11,019	18,056	815	2,732
Invested capital (mEUR)	2,240.8	879.0	104.7	78.9	109.6	505.5	370.7	96.4	96.0
Capacity indicators									
Fleet - number of vessels	16,667	2,342	258	158	802	3,476	8,808	229	594
Fleet - GRT (1000)	225.4	102.8	12.4	9.7	8.3	45.4	26.0	11.6	9.1
Fleet - kW(1000)	1,519.4	516.4	64.1	53.1	87.4	396.9	257.0	54.7	89.9
Average characteristics of vessels									
GRT	14	44	48	61	10	13	3	51	15
kW	91	220	248	336	109	114	29	239	151
Length	11	20	21	23	14	13	7	19	13
Age	25	27	23	25	16	22	26	20	22

Source: Irepa.

9.1.1 Italy: National fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (billion ITL)						
Value of landings	2,296.9	2,455.6	2,890.0	2,988.4	2,977.6	3,146.6
Fuel costs	251.4	273.4	339.8	375.1	363.8	394.9
Other running costs	231.5	252.4	303.5	348.0	350.1	392.8
Vessel costs	178.6	185.1	226.0	268.2	259.6	275.5
Crew share	849.3	856.7	1,000.5	1,059.2	1,002.9	1,137.3
Gross cash flow	786.0	887.9	1,020.2	937.9	1,001.1	946.1
Depreciation	209.3	210.5	195.5	191.2	189.1	184.9
Interest	64.1	91.5	76.1	79.1	74.4	73.0
Net (financial) profit	512.7	585.9	748.7	667.6	737.6	688.3
Gross value added	1,635.4	1,744.6	2,020.6	1,997.0	2,004.1	2,083.3
Other economic indicators						
Employment on board (FTEs)	41,889	42,188	42,755	46,141	44,668	48,342
Invested capital (billion ITL)	4,421.8	4,572.4	4,512.6	4,383.9	4,396.3	4,356.1
Effort (days 1000)	2,350.9	2,429.7	2,510.3	2,574.2	2,652.1	2,662.9
Capacity indicators						
Volume of landings (1000 t)	351.1	371.8	437.4	437.0	437.5	450.6
Fleet - number of vessels	15,656	15,784	15,921	16,068	16,307	16,667
Fleet - total GRT (1000)	250.7	249.1	241.5	229.9	232.7	225.4
Fleet - total kW (1000)	1,436.1	1,448.8	1,446.9	1,436.4	1,447.7	1,519.4

Source: Irepa.

9.1.2 Italy: National fleet, composition of landings, 1993-1998

Major species/ groups of species	Value (billion ITL)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Anchovis	115.4	133.6	148.3	144.7	189.9	169.9	29.3	33.3	50.3	39.9	61.5	53.6
Pilchards	24.5	25.1	25.8	36.1	35.5	49.4	32.0	30.7	33.5	42.5	40.7	44.8
Other fish	1,277.5	1,362.5	1,601.5	1,629.9	1,616.6	1,893.8	175.8	184.5	217.0	219.9	210.2	241.3
Marine molluscs	449.7	475.5	555.1	515.5	572.7	511.1	85.1	93.3	103.1	94.0	90.5	78.3
Marine crustaceans	429.9	458.9	559.4	662.1	562.9	522.3	28.9	30.1	33.6	40.6	34.6	32.6
Total	2,296.9	2,455.6	2,890.0	2,988.3	2,977.6	3,146.6	351.1	371.8	437.5	436.9	437.5	450.6

Source: Irepa.

9.1.3 Italy: National fleet, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 2.99	6,245	11.9	113.0	1997-98	270	3.5	33.9
3 - 5.99	2,975	12.8	136.9	1995-96	462	5.2	51.9
6 - 9.99	4,005	35.3	427.9	1993-94	389	5.1	45.7
10 - 20.99	659	10.4	92.9	1991-92	418	5.7	50.7
21 - 35.99	1,100	30.0	219.2	1989-90	750	10.0	83.0
36 - 50.99	608	26.3	147.1	1987-88	894	11.2	92.2
51 - 99.99	698	47.9	225.9	1985-86	1,038	11.5	93.1
100 - 199.99	367	48.4	151.1	1983-84	994	8.7	75.5
>199.99	10	2.4	5.4	Older	11,452	164.5	993.5
Total	16,667	225.4	1,519.4	Total	16,667	225.4	1,519.4

Source: Irepa.

9.2.1 Italy: Trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (billion ITL)						
Value of landings	748.9	749.9	1,001.6	970.1	987.0	1,041.8
Fuel costs	99.3	100.6	136.4	145.5	148.7	160.1
Other running costs	67.3	70.3	95.3	98.0	113.2	122.8
Vessel costs	69.4	76.3	98.9	98.7	92.7	98.6
Crew share	318.5	289.0	380.6	340.5	352.6	398.2
Gross cash flow	194.4	213.7	290.4	287.4	279.7	262.0
Depreciation	68.2	68.4	70.8	62.3	63.2	64.2
Interest	16.6	24.7	23.2	22.0	21.5	22.4
Net (finanacial) profit	109.7	120.6	196.4	203.1	195.0	175.4
Gross value added	513.0	502.7	671.0	627.9	632.3	660.2
Other economic indicators						
Employment on board (FTEs)	8,760	8,720	9,015	9,207	10,031	10,258
Invested capital (billion ITL)	1,545.9	1,607.2	1,818.6	1,606.0	1,650.0	1,708.8
Effort (days 1000)	315.2	316.6	404.3	382.9	382.4	409.9
Capacity indicators						
Volume of landings (1000 t)	103.1	101.4	128.7	117.0	119.8	123.1
Fleet - number of vessels	1,837	1,897	2,352	2,208	2,229	2,342
Fleet - total GRT (1000)	102.4	102.1	110.3	96.6	99.6	102.8
Fleet -- total kW (1000)	409.3	422.5	508.5	470.6	484.8	516.4

Source: Irepa.

9.2.2 Italy: Trawlers, composition of landings, 1993-1998

Major species/ groups of species	Value (billion ITL)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Anchovis	2.3	3.0	3.9	0.6	1.2		0.6	0.8	1.6	0.2	0.4	
Pilchards	0.8	0.5	0.7	0.2	0.3		0.9	0.4	1.4	0.1	0.3	
Other fish	390.2	382.5	482.5	466.1	474.9	534.7	60.8	59.8	75.0	71.1	72.2	80.5
Marine molluscs	133.7	129.8	186.0	167.0	192.7	169.5	23.2	22.8	28.4	23.6	26.5	22.3
Marine crustaceans	221.9	234.2	328.4	336.2	317.9	337.6	17.6	17.8	22.4	22.1	20.3	20.4
Total	748.9	749.9	1,001.6	970.1	987.0	1,041.8	103.1	101.4	128.7	117.0	119.8	123.1

Source: Irepa.

9.2.3 Italy: Trawlers, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 2.99	7	0.0	0.1	1997-98	37	1.4	9.2
3 - 5.99	35	0.2	2.3	1995-96	68	2.2	15.3
6 - 9.99	534	5.0	63.6	1993-94	68	2.1	14.5
10 - 20.99	171	2.8	25.2	1991-92	64	1.9	13.3
21 - 35.99	552	15.4	107.2	1989-90	73	3.0	19.2
36 - 50.99	378	16.3	89.1	1987-88	80	2.8	20.1
51 - 99.99	403	27.6	122.5	1985-86	81	3.2	19.1
100 - 199.99	259	35.0	103.9	1983-84	69	2.2	14.0
>199.99	3	0.7	2.4	Older	1,802	84.1	391.6
Total	2,342	102.8	516.4	Total	2,342	102.8	516.4

Source: Irepa.

9.3.1 Italy: Purse seiners, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (billion ITL)						
Value of landings	60.4	90.1	97.9	111.3	146.7	135
Fuel costs	4.0	6.2	6.8	10.9	12.0	11.4
Other running costs	6.3	0.1	10.5	15.4	21.4	21.1
Vessel costs	4.1	6.0	6.2	6.2	10.6	11.4
Crew share	31.1	43.7	46.7	48.5	59.8	64.7
Gross cash flow	14.9	24.0	27.8	30.3	42.9	28.9
Depreciation	9.2	9.2	9.4	8.4	8.5	7.7
Interest	3.0	4.1	3.8	3.5	3.4	2.8
Net (finanacial) profit	2.6	10.8	14.6	18.4	31.1	18.4
Gross value added	45.9	67.8	74.4	78.8	102.7	93.6
Other economic indicators						
Employment on board (FTEs)	1,892	2,070	2,177	2,360	2,984	2,866
Invested capital (billion ITL)	186.8	202.9	221.5	200.4	209.3	203.5
Effort (days 1000)	30.4	34.7	38.4	35.0	35.9	32.1
Capacity indicators						
Volume of landings (1000 t)	21.6	31.5	35.9	35.8	53.0	46.7
Fleet - number of vessels	249	271	285	267	276	258
Fleet - total GRT (1000)	12.2	12.7	13.5	12.1	12.7	12.4
Fleet -- total kW (1000)	62.8	65.6	69.2	63.9	66.6	64.1

Source: Irepa.

9.3.2 Italy: Purse seiners, composition of landings, 1993-1998

Major species/ groups of species	Value (billion ITL)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Anchovis	45.8	68.0	76.1	73.7	112.5	98.3	9.8	14.7	19.3	16.1	29.3	24.4
Pilchards	4.8	8.6	6.8	11.4	12.0	13.1	6.5	9.7	9.8	12.4	14.0	14.3
Other fish	9.4	13.4	15.0	25.1	22.1	26.1	5.3	7.0	6.8	7.2	9.7	8.0
Marine molluscs	0.4	0.2	0.1	0.6	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Marine crustaceans				0.5						0.0		
Total	60.4	90.1	97.9	111.3	146.7	137.5	21.6	31.5	35.9	35.8	53.0	46.7

Source: Irepa.

9.3.3 Italy: Purse seiners, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 2.99				1997-98			
3 - 5.99				1995-96	2	0.2	1.2
6 - 9.99	46	0.4	5.4	1993-94	6	0.2	1.2
10 - 20.99	24	0.4	3.8	1991-92	11	0.2	2.1
21 - 35.99	59	1.6	11.8	1989-90	15	0.5	3.5
36 - 50.99	28	1.2	6.8	1987-88	10	0.5	2.6
51 - 99.99	69	5.1	23.4	1985-86	19	1.0	5.3
100 - 199.99	32	3.7	13.0	1983-84	12	0.4	2.9
>199.99				older	183	9.4	45.1
Total	258	12.4	64.1	Total	258	12.4	64.1

Source: Irepa.

9.4.1 Italy: Midwater pair trawlers, economic andcapacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (billion ITL)						
Value of landings	56.3	60.2	73.9	79.7	81.5	70.7
Fuel costs	7.0	7.9	9.1	9.8	12.1	11.3
Other running costs	4.5	4.7	5.6	8.5	9.9	9.0
Vessel costs	5.4	5.2	5.5	5.7	6.9	6.4
Crew share	26.5	24.6	25.7	29.1	30.3	28.7
Gross cash flow	13.0	17.8	28.0	26.6	22.2	15.4
Depreciation	5.7	5.9	5.6	5.8	7.1	6.1
Interest	1.6	2.3	2.2	2.4	2.7	2.6
Net (finanacial) profit	5.7	9.6	20.1	18.3	12.5	6.7
Gross value added	39.4	42.4	53.7	55.6	52.5	44.0
Other economic indicators						
Employment on board (FTEs)	866	906	907	758	1,017	951
Invested capital (billion ITL)	122.1	132.8	138.8	141.9	170.4	153.4
Effort (days 1000)	21.0	22.1	24.3	23.2	28.0	27.1
Capacity indicators						
Volume of landings (1000 t)	31.9	31.3	45.5	46.4	52.1	46.7
Fleet - number of vessels	132	139	141	143	162	158
Fleet - total GRT (1000)	8.2	8.6	8.8	9.0	10.9	9.7
Fleet - total kW (1000)	42.8	45.7	46.6	47.6	54.5	53.1

Source: Irepa.

9.4.2 Italy: Midwater pair trawlers, composition of landings, 1993-1998

Major species/ groups of species	Value (billion ITL)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Anchovis	32.5	38.4	48.0	53.6	55.8	43.2	10.5	12.1	23.1	18.5	25.9	21.5
Pilchards	14.0	12.8	15.8	19.6	17.2	18.4	18.3	16.3	19.2	25.9	22.5	21.5
Other fish	9.9	8.8	10.2	6.3	8.5	9.2	3.2	2.9	3.2	2.0	3.7	3.7
Marine molluscs		0.2		0.0	0.0			0.0		0.0	0.0	
Marine crustaceans												
Total	56.3	60.2	73.9	79.7	81.5	70.7	31.9	31.3	45.5	46.4	52.1	46.7

Source: Irepa.

9.4.3 Italy: Midwater pair trawlers, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 2.99	2	0.0	0.1	1997-98	2	0.1	0.7
3 - 5.99	1	0.0	0.0	1995-96	7	0.4	2.4
6 - 9.99	13	0.1	1.7	1993-94	5	0.3	2.0
10 - 20.99	2	0.0	0.2	1991-92	10	0.6	4.1
21 - 35.99	21	0.6	4.9	1989-90	4	0.1	0.9
36 - 50.99	32	1.4	9.8	1987-88	7	0.4	2.5
51 - 99.99	54	3.9	23.5	1985-86	1	0.1	0.5
100 - 199.99	33	3.6	12.8	1983-84	4	0.3	1.6
>199.99				older	118	7.4	38.2
Total	158	9.7	53.1	Total	158	9.7	53.1

Source: Irepa.

9.5.1 Italy: Dredgers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (billion ITL)						
Value of landings	87.0	103.3	113.3	69.1	83.0	93.9
Fuel costs	5.5	5.7	6.4	6.2	6.6	6.0
Other running costs	3.0	3.1	3.4	3.8	3.5	3.2
Vessel costs	6.2	8.0	8.7	8.8	9.3	8.0
Crew share	32.3	37.2	38.3	27.0	27.8	34.8
Gross cash flow	40.1	49.3	56.5	23.1	35.9	42.0
Depreciation	10.0	11.8	12.6	13.7	12.7	12.0
Interest	4.5	7.1	6.5	7.3	6.2	5.7
Net (finanacial) profit	25.6	30.4	37.5	2.2	17.0	24.2
Gross value added	72.3	86.5	94.8	50.2	63.6	76.7
Other economic indicators						
Employment on board (FTEs)	1,390	1,574	1,720	1,847	1,760	1,644
Invested capital (billion ITL)	173.5	205.5	223.2	240.4	224.5	213.1
Effort (days 1000)	78.5	76.8	84.4	83.2	75.9	73.0
Capacity indicators						
Volume of landings (1000 t)	34.5	38.4	42.9	32.6	25.3	26.0
Fleet - number of vessels	695	787	835	901	850	802
Fleet - total GRT (1000)	12.2	12.7	13.5	12.1	12.7	8.3
Fleet - total kW (1000)	62.8	65.6	69.2	63.9	66.6	87.4

Source: Irepa.

9.5.2 Italy: Dredgers, composition of landings, 1993-1998

Major species/ groups of species	Value (billion ITL)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Anchovis												
Pilchards												
Other fish												
Marine molluscs	87.0	103.3	113.3	69.1	83.0	93.9	34.5	38.4	42.9	32.6	25.3	26.0
Marine crustaceans												
Total	87.0	103.3	113.3	69.1	83.0	93.9	34.5	38.4	42.9	32.6	25.3	26.0

Source: Irepa.

9.5.3 Italy: Dredgers, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 2.99	2	0.0	0.1	1997-98	8	0.1	0.8
3 - 5.99	19	0.1	1.4	1995-96	26	0.2	2.6
6 - 9.99	648	6.1	69.9	1993-94	13	0.1	1.2
10 - 20.99	118	1.7	13.6	1991-92	16	0.1	1.6
21 - 35.99	14	0.3	2.2	1989-90	75	0.9	7.8
36 - 50.99	1	0.0	0.2	1987-88	120	1.4	13.0
51 - 99.99				1985-86	117	1.2	12.9
100 - 199.99				1983-84	95	0.9	10.9
>199.99				older	332	3.4	36.5
Total	802	8.3	87.4	Total	802	8.3	87.4

Source: Irepa.

9.6.1 Italy: Multi-purpose trawling vessels, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (billion ITL)						
Value of landings	781.4	823.2	904.7	1,049.3	934.1	960.0
Fuel costs	93.2	105.4	130.4	137.5	119.7	138.4
Other running costs	97.2	103.7	130.8	143.4	117.7	138.8
Vessel costs	63.1	70.8	84.3	93.1	80.4	89.5
Crew share	297.6	311.5	343.6	439.0	353.5	364.7
Gross cash flow	230.4	231.7	215.5	236.4	262.9	228.7
Depreciation	66.6	55.5	40.0	46.7	44.5	44.1
Interest	21.5	24.9	17.0	21.0	19.1	19.3
Net (finanacial) profit	142.2	151.4	158.4	168.7	199.3	165.3
Gross value added	527.9	543.2	559.1	675.4	616.4	593.3
Other economic indicators						
Employment on board (FTEs)	11,105	9,238	7,863	12,436	10,211	11,019
Invested capital (billion ITL)	1,406.9	1,210.6	910.7	1,053.4	1,014.7	982.6
Effort (days 1000)	643.4	518.2	438.1	487.7	544.4	543.9
Capacity indicators						
Volume of landings (1000 t)	105.1	107.3	116.6	128.4	112.5	115.1
Fleet - number of vessels	4,460	3,447	2,849	3,063	3,348	3,476
Fleet - total GRT (1000)	69.0	63.5	44.7	52.1	49.0	45.4
Fleet - total kW (1000)	489.2	447.2	344.3	401.9	391.3	396.9

Source: Irepa.

9.6.2 Italy: Multi-purpose trawling vessels, composition of landings, 1993-1998

Major species/ groups of species	Value (billion ITL)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Anchovis	34.8	24.3	20.2	16.5	18.0	28.4	8.5	5.7	6.3	5.1	5.6	7.7
Pilchards	5.0	3.2	2.5	3.0	3.3	17.9	6.3	4.2	3.1	3.0	3.2	9.0
Other fish	443.1	478.8	558.7	558.3	516.7	633.2	67.4	70.2	82.2	79.7	69.0	73.3
Marine molluscs	135.4	142.7	146.4	180.2	176.4	123.1	15.4	18.8	17.4	25.0	22.2	14.4
Marine crustaceans	163.1	174.2	176.8	291.2	219.8	157.4	7.5	8.3	7.6	15.6	12.4	10.6
Total	781.4	823.2	904.7	1,049.3	934.1	960.0	105.1	107.3	116.6	128.4	112.5	115.1

Source: Irepa.

9.6.3 Italy: Multi-purpose trawling vessels, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 2.99	139	0.3	3.0	1997-98	76	1.3	12.7
3 - 5.99	810	3.6	41.8	1995-96	89	1.3	14.9
6 - 9.99	1,725	15.3	186.7	1993-94	103	1.7	17.6
10 - 20.99	253	4.0	35.7	1991-92	113	1.2	15.1
21 - 35.99	315	8.4	62.3	1989-90	182	2.6	26.0
36 - 50.99	114	5.0	27.8	1987-88	164	3.0	26.2
51 - 99.99	105	6.9	34.5	1985-86	203	2.8	26.4
100 - 199.99	15	2.0	5.1	1983-84	187	2.0	19.7
>199.99				older	2,359	29.5	238.2
Total	3,476	45.4	396.9	Total	3,476	45.4	396.9

Source: Irepa.

9.7.1 Italy: Small scale fisheries, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (billion ITL)						
Value of landings	412.0	467.1	500.4	509.4	490.9	614.4
Fuel costs	24.0	28.0	30.0	43.6	41.6	44.0
Other running costs	31.2	35.2	37.2	56.2	59.2	69.2
Vessel costs	21.2	8.0	2.1	33.9	38.5	41.2
Crew share	94.7	95.7	99.1	109.7	91.0	164.2
Gross cash flow	240.9	300.2	332.0	265.9	260.5	295.8
Depreciation	33.0	42.3	37.1	35.2	34.1	32.0
Interest	11.0	20.0	15.2	14.8	14.1	13.3
Net (finanacial) profit	196.9	238.0	279.8	215.9	212.3	250.5
Gross value added	335.6	395.9	431.1	375.6	351.5	460.0
Other economic indicators						
Employment on board (FTEs)	14,839	16,581	17,282	15,793	15,148	18,056
Invested capital (billion ITL)	688.0	890.3	814.6	774.4	756.2	720.7
Effort (days 1000)	1,182.7	1,384.3	1,431.9	1,462.2	1,480.0	1,483.4
Capacity indicators						
Volume of landings (1000 t)	41.0	45.8	47.8	55.1	51.0	70.9
Fleet - number of vessels	7,571	8,503	8,598	8,630	8,607	8,808
Fleet - total GRT (1000)	29.3	31.4	29.7	28.1	27.5	26.0
Fleet - total kW (1000)	254.9	282.5	269.0	253.2	254.3	257.0

Source: Irepa.

9.7.2 Italy: Small scale fisheries, composition of landings, 1993-1998

Major species/ groups of species	Value (billion ITL)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Anchovis				0.3	2.4					0.0	0.3	
Pilchards				1.9	2.8					1.1	0.7	
Other fish	274.1	317.2	337.0	374.5	340.0	462.3	25.2	28.5	30.0	38.3	31.7	53.7
Marine molluscs	93.2	99.4	109.3	98.6	120.6	124.6	12.0	13.3	14.2	12.9	16.4	15.6
Marine crustaceans	44.8	50.5	54.2	34.2	25.2	27.4	3.8	4.0	3.6	2.8	1.8	1.6
Total	412.0	467.1	500.4	509.4	490.9	614.4	41.0	45.8	47.8	55.1	51.0	70.9

Source: Irepa.

9.7.3 Italy: Small scale fisheries, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 2.99	6,027	11.5	108.6	1997-98	141	0.5	9.0
3 - 5.99	2,012	8.5	86.1	1995-96	263	0.8	14.4
6 - 9.99	757	5.9	60.5	1993-94	188	0.6	8.2
10 - 20.99	11	0.1	1.7	1991-92	188	0.6	8.8
21 - 35.99	1	0.0	0.0	1989-90	361	1.2	15.4
36 - 50.99				1987-88	458	1.5	16.5
51 - 99.99				1985-86	559	1.8	18.2
100 - 199.99				1983-84	591	1.9	19.1
>199.99				older	6,059	17.1	147.2
Total	8,808	26.0	257.0	Total	8,808	26.0	257.0

Source: Irepa.

9.8.1 Italy: Tuna fisheries, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (billion ITL)						
Value of landings	22.9	37.8	49.2	50.6	59.5	68.3
Fuel costs	1.1	2.1	2.8	2.3	3.0	4.2
Other running costs	3.0	5.6	7.7	6.2	8.1	10.8
Vessel costs	1.8	3.3	5.8	8.3	7.3	6.6
Crew share	7.8	15.3	18.8	17.7	25.6	30.9
Gross cash flow	9.1	11.6	14.0	16.0	15.6	15.8
Depreciation	7.7	8.2	9.0	8.2	8.6	9.2
Interest	2.5	3.8	3.6	3.6	3.4	3.6
Net (finanacial) profit	- 1.1	- 0.4	1.5	4.1	3.7	3.0
Gross value added	16.8	26.8	32.8	33.7	41.2	46.7
Other economic indicators						
Employment on board (FTEs)	643	674	773	708	746	815
Invested capital (billion ITL)	139.1	151.5	177.0	164.5	171.4	187.4
Effort (days 1000)	22.4	21.7	22.1	22.3	22.8	23.0
Capacity indicators						
Volume of landings (1000 t)	5.9	8.3	10.2	12.0	11.9	12.3
Fleet - number of vessels	180	189	205	211	205	229
Fleet - total GRT (1000)	9.2	9.6	11.0	10.1	10.7	11.6
Fleet - total kW (1000)	45.4	48.1	54.4	51.8	48.6	54.7

Source: Irepa.

9.8.2 Italy: Tuna fisheries, composition of landings, 1993-1998

Major species/ groups of species	Value (billion ITL)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Anchovis Pilchards Other fish Marine molluscs Marine crustaceans	22.9	37.8	49.2	50.6	59.5	68.3	5.9	8.3	10.2	12.0	11.9	12.3
Total	22.9	37.8	49.2	50.6	59.5	68.3	5.9	8.3	10.2	12.0	11.9	12.3

Source: Irepa.

9.8.3 Italy: Tuna fisheries, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 2.99	7	0.0	0.1	1997-98	6	0.1	1.4
3 - 5.99	17	0.1	1.1	1995-96	7	0.1	1.1
6 - 9.99	55	0.5	6.0	1993-94	4	0.1	0.8
10 - 20.99	13	0.2	2.0	1991-92	12	0.9	5.0
21 - 35.99	33	0.9	6.5	1989-90	16	1.0	4.1
36 - 50.99	24	1.1	6.0	1987-88	14	0.6	3.5
51 - 99.99	46	3.2	14.0	1985-86	19	0.7	3.7
100 - 199.99	27	4.0	16.0	1983-84	5	0.3	1.6
>199.99	7	1.8	3.0	older	146	7.9	33.6
Total	229	11.6	54.7	Total	229	11.6	54.7

Source: Irepa.

9.9.1 Italy: Swordfish fisheries, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (billion ITL)						
Value of landings	128.0	124.0	149.0	149.0	195.0	160.0
Fuel costs	17.3	17.5	17.7	19.3	20.1	19.7
Other running costs	19.1	19.7	13.1	16.3	17.2	17.8
Vessel costs	7.2	7.5	14.5	13.5	14.0	13.8
Crew share	41.0	39.7	47.7	47.7	62.4	51.2
Gross cash flow	43.4	39.5	56.0	52.2	81.3	57.6
Depreciation	8.9	9.3	11.0	10.7	10.4	9.5
Interest	3.3	4.7	4.7	4.6	4.1	3.5
Net (finanacial) profit	31.1	25.5	40.4	36.9	66.8	44.6
Gross value added	84.3	79.2	103.7	99.9	143.7	108.8
Other economic indicators						
Employment on board (FTEs)	2,394	2,424	3,018	3,032	2,772	2,732
Invested capital (billion ITL)	159.5	171.7	208.2	202.8	199.9	186.6
Effort (days 1000)	57.4	55.3	66.8	77.7	82.7	70.6
Capacity indicators						
Volume of landings (1000 t)	8.0	7.8	9.6	9.6	12.0	9.8
Fleet - number of vessels	532	551	656	645	630	594
Fleet - total GRT (1000)	8.2	8.5	10.1	9.8	9.7	9.1
Fleet -- total kW (1000)	68.9	71.7	85.6	83.4	81.1	89.9

Source: Irepa.

9.9.2 Italy: Swordfish fisheries, composition of landings, 1993-1998

Major species/ groups of species	Value (billion ITL)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Anchovis Pilchards Other fish Marine molluscs Marine crustaceans	128.0	124.0	149.0	149.0	195.0	160.0	8.0	7.8	9.6	9.6	12.0	9.8
Total	128.0	124.0	149.0	149.0	195.0	160.0	8.0	7.8	9.6	9.6	12.0	9.8

Source: Irepa.

9.9.3 Italy: Swordfish fisheries, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 2.99	61	0.1	1.0	1997-98			
3 - 5.99	81	0.4	4.2	1995-96			
6 - 9.99	227	2.0	34.0	1993-94	2	0.0	0.2
10 - 20.99	67	1.1	10.7	1991-92	4	0.0	0.6
21 - 35.99	105	2.7	24.3	1989-90	24	0.8	6.0
36 - 50.99	31	1.3	7.3	1987-88	41	1.0	7.6
51 - 99.99	21	1.3	8.1	1985-86	39	0.8	7.0
100 - 199.99	1	0.1	0.4	1983-84	31	0.6	5.5
>199.99				older	453	5.8	63.0
Total	594	9.1	89.9	Total	594	9.1	89.9

Source: Irepa.

10. The Netherlands

10.1.0 The Netherlands, composition of the national fleet, 1998

	Total fleet *	Fleet segments			
		Shrimp/Eurocutter 191-221 kW	Beam trawlers >811 kW	Other cutters	Pelagic trawlers
Economic indicators					
Value of landings (mEUR)	389.0	52	201	17.1	96.9
Gross value added (mEUR)		31	107	14.7	
Gross cash flow (mEUR)		11	50	6.3	
Net (financial) profit (mEUR)		3	13	1.7	
Other economic indicators					
Employment on board (FTEs)	2,320	479	1,135	244.0	462
Invested capital (mEUR)		80	350	36.0	
Effort (1000 days at sea)	78,0	20	31	23.0	4
Capacity indicators					
Volume of landings (1000 t)	443	20	68	10	345
Fleet - number of vessels **)	422	142	163	102	15
Fleet - total GRT (1000)	146	11	67	6	62.5
Fleet - total kW (1000)	386	31	269	23	63
Average characteristics of vessels					
GRT ***)	347	78	415	207	4,166
kW	915	217	1,638	878	4,200
Length, loa	32	23	40	28	92
Age	24	25	14	33	9

Source:LEI.

* Mussel - and cockle sector excluded; ** Active fleet; *** GRT = GT.

10.1.1 The Netherlands: national fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(mNLG)*						
Value of landings	801	772	796	798	785	856
Fuel costs						
Other running costs						
Vessel costs						
Crew share						
Gross cash flow						
Depreciation						
Interest						
Net profit						
Gross value added						
Employment on board (FTEs)	2,581	2,583	2,530	2,463	2,347	2,320
Invested capital *(mNLG)*						
Effort (1000 days at sea)	87	90	88	79	81	78
Capacity indicators						
Volume of landings (1000 t)	416	377	408	408	405	443
Fleet - number of vessels	485	481	470	458	440	422
Fleet - total GRT (1000)*	145	147	147	145	140	146
Fleet - total kW (1000)	421	423	417	411	394	386

* GRT = GT.
Sources: LEI.

10.1.2 The Netherlands: national fleet, composition of landings, 1993-1998

Major species/-groups of species	Value *(mNLG)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Sole	298	291	295	295	248	261	22	24	21	17	11	16
Plaice	143	160	134	134	131	126	45	47	41	35	33	30
Cod	32	20	30	25	34	55	8	5	10	8	9	13
Pelagic fish	185	147	166	190	214	249	287	244	278	305	332	345
Other	143	154	171	154	158	165	54	57	58	43	47	39
Total	801	772	796	798	785	856	416	377	408	408	432	443

Sources: LEI.

10.1.3 The Netherlands: national fleet, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT	103	4	17	1998	5	1	3
50 - 119 GRT	114	9	26	1996-97	6	9	9
120 - 149 GRT	11	1	4	1994-95	13	5	11
150 - 200 GRT	14	2	4	1992-93	26	26	50
>200 GRT	180	130.5	335	1990-91	25	12	27
				1988-89	33	24	51
				1987 and older	314	69.5	235
Total	422	146.5	386	Total	422	146.5	386

Source: LEI.

10.2.1 The Netherlands: Eurocutters 261-300 HP (191-221 kW): economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(mNLG)*						
Value of landings	87	84	97	93	94	115
Fuel costs	9	8	8	10	10	9
Other running costs	18	20	18	19	20	21
Vessel costs	12	13	14	15	15	17
Crew share	32	30	36	33	33	43
Gross cash flow	16	13	21	16	16	25
Depreciation	11	11	11	12	12	14
Interest	6	6	7	6	5	5
Net profit	-1	-4	3	-2	-1	6
Gross value added	48	43	57	49	49	68
Other economic indicators						
Employment on board (FTEs)	448	440	445	460	464	479
Invested capital *(mNLG)*	176	195	196	201	184	177
Effort (1000 days at sea)	18	19	20	20	20	20
Capacity indicators						
Volume of landings (1000 t)	14	16	17	16	19	20
Fleet - number of vessels	122	126	130	135	140	142
Fleet - total GRT (1000)				11	11	11
Fleet - total kW (1000)	27	27	28	29	30	31

Source: LEI.

10.2.2 The Netherlands: Eurocuttuer 261-300 HP(191-221 kW), composition of landings, 1993-1998

Major species/-groups of species	Value (mNLG)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Sole	37.4	33.3	27.8	27.5	17.2	37.5	2.8	2.7	2	1.6	0.7	2.2
Plaice	9.4	13.1	8.1	10.7	10.8	11.9	2.8	3.8	2.4	2.7	2.7	2.7
Cod	8.1	4.7	8.4	5.3	9.6	17.5	1.9	1.2	2.8	1.6	2.8	4.1
Other	32.6	32.9	52.9	49.4	56.2	48.5	6.8	8	10.3	10.1	13.1	10.7
Total	87.5	84	97.2	92.9	93.8	115.4	14.3	15.7	17.5	16	19.3	19.7

Source: LEI.

10.2.3 The Netherland: Eurocutters 261-300 HP (191-221 kW), composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT	27	1.1	5.8	1998	1	0.2	0.2
50 - 119 GRT	101	7.8	22.4	1996-97	3	0.4	0.7
120 - 149 GRT	5	0.7	1.1	1994-95	4	0.4	0.9
150 - 200 GRT	9	1.4	2	1992-93	4	0.5	0.9
>200 GRT	0	0	0	1990-91	10	1.2	2.2
				1988-89	6	0.4	1.3
				1987 and older	114	7.9	25.1
Total	142	11	31.3	Total	142	11	31.3

Source: LEI.

10.3.1 The Netherlands: Beam trawlers >811 kW, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings (mNLG)						
Value of landings	472	486	481	463	440	442
Fuel costs	94	90	83	81	91	74
Other running costs	83	78	82	74	76	79
Vessel costs	54	56	60	58	54	53
Crew share	130	136	136	132	118	126
Gross cash flow	117	123	120	118	101	110
Depreciation	79	82	82	76	72	65
Interest	33	35	38	30	24	17
Net profit	5	6	0	12	5	28
Gross value added	247	259	256	250	219	236
Other economic indicators						
Employment on board (FTEs)	1,333	1,357	1,328	1,266	1,188	1,135
Invested capital (mNLG)	825	920	992	937	824	771
Effort (1000 days at sea)	35	37	37	32	32	31
Capacity indicators						
Volume of landings (1000 t)	101	104	99	76	71	68
Fleet - number of vessels	194	194	192	184	172	163
Fleet - total GT (1000)	n.a	n.a	76	74	70	67
Fleet - total kW (1000)	298	302	301	293	278	269

Source: LEI.

10.3.2 The Netherlands, beam trawlers >811 kW, composition of landings, 1993-1998

Majorspecies	Value (m NLG)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Sole	255.9	253.3	263.4	263.6	230.5	223.4	19.0	20.8	19.1	15.0	9.9	13.3
Plaice	130.5	141.9	123.5	119.8	118.3	111.9	41.2	42.1	38.1	31.5	30.0	26.6
Cod	8.3	7.6	11.1	12.6	14.9	24.7	2.1	2.1	3.9	3.9	4.1	5.8
Other	77.5	83.7	82.6	67.0	76.3	81.9	38.7	38.9	37.6	25.9	27.1	22.7
Total	472.2	486.5	480.6	463.0	440.0	441.9	101.0	103.9	98.7	76.3	71.1	68.4

Source: LEI.

10.3.3 The Netherland: Beam trawlers >811 kW, composition by size and age, 1998

Size class	Number	GT (1000)	kW (1000)	Age class	Number	GT (1000)	kW (1000)
5 - 49 GT	0	0	0	1998	1	0.5	1.5
50 - 119 GT	0	0	0	1996-97	1	0.5	1.5
120 - 149 GT	0	0	0	1994-95	6	3.1	8.8
150 - 200 GT	0	0	0	1992-93	19	8.0	27.5
>200 GT	163	66.7	268.6	1990-91	11	4.9	16.1
				1988-89	9	3.6	13.0
				1987 and older	125	49.3	209.8
Total	163	66.7	268.6	Total	163	66.7	268.6

Sources: LEI.

11. Norway

11.0 Norway: composition of the national fleet, 1998

	Total fleet	Fleet segments		
Economic indicators				
Value of landings (mEUR) *	1,231.2			
Gross value added (mEUR)				
Gross cash flow (mEUR)				
Net (financial) profit (mEUR)				
Other economic indicators				
Employment on board	21,298			
Invested capital (mln Euro)				
Effort (1000 days at sea)				
Capacity indicators				
Volume of landings (1000 t) *	3,024			
Fleet - number of vessels	13,252			
Fleet - total GRT (1000) **	92.3			
Fleet - total kW (1000)	2,289.8			
Average characteristics of vessels				
GRT	11.5			
kW	172.8			
Length, loa	9,45			
Age	23.8			

Source: Statistics Norway, Directorate of Fisheries.
* Preliminary figures. 1998: NOK/Euro = 8.46587; ** In addition to these 8,002 vessels, 459 vessels constitute a total of 279,000 GT.

11.1.1 Norway: National fleet, economic and capacity indicators, 1992-1997

	1992	1993	1994	1995	1996	1997
Costs and earnings (mln NOK)						
Value of landings		6,419.5	7,002.0	7,635.9	8,232.6	8,863.0
Fuel costs		625.2	544.4	533.7	624.5	756.1
Other running costs		843.1	928.1	893.7	1,043.2	1,150.7
Vessel costs		1,354.5	1,443.7	1,627.1	1,746.7	1,760.7
Crew share		2,476.2	2,718.9	3,003.5	3,113.6	3,420.7
Gross cash flow		1,120.5	1,366.9	1,577.9	1,704.6	1,871.1
Depreciation		916.9	668.8	717.8	797.5	876.6
Interest		767.1	591.2	558.0	568.0	493.6
Net profit		-563.5	107.0	302.1	339.0	500.9
Gross value added		3,596.7	4,085.8	4,581.4	4,818.2	5,291.9
Other economic indicators						
Employment on board (FTEs)		16,743	16,546	16,438	15,892	*16,058*
Invested capital (mln NOK)		20,382	20,163	21,409	22,663	26,907
Effort (1000 days at sea)		568.2	568.3	564.2	561.8	540.4
Capacity indicators						
Volume of landings (1000 t)			2,195.6	2,332.0	2,418.3	2,695.5
Fleet - number of vessels		3,210	3,032	2,855	2,860	2,771
Fleet - total GRT (1000)		199.4	167.8	161.9	165.1	168.9
Fleet - total kW (1000)						

Source: Profitability studies for the respective years, whole year operating vessels between 8-12,9 m. and above 13 m.loa. Computations based on active fleet.

11.1.2 Norway: National fleet, composition of landings, 1994-1998

Major species/-groups of species	Value (mln NOK)					Volume (1000 t)				
	1994	1995	1996*	1997*	1998*	1994	1995	1996*	1997*	1998*
Cod	2,790	2,808	2,516	2,861	3,343	374	365	358	402	322
Herring	745	982	1,470	1,575	1,461	550	687	763	923	831
Mackerel	635	696	1,064	1,113	839	260	202	137	137	158
Saithe	630	894	827	704	1,041	189	219	222	184	193
Other	2,705	2,835	2,820	2,942	3,739	1,178	1,229	1,333	1,401	1,520
Total	7,505	8,215	8,697	9,195	10,423	2,551	2,702	2,813	3,047	3,024

Sources: Statistics Norway, Fishery Statistics, and 'Fiskets gang' no. 1/99.
*) Preliminary figures.

11.1.3 Norway: National fleet, composition by size and age, 1998

Size class	Number	GRT (1000)*	kW (1000)	Age class	Number	GRT (1000)	kW (1000)**
Up to 10 m. loa.	9,869	25.1	497.5	1995-98	398		
10 - 20 m. loa.	2,720	48.2	683.8	1990-94	595		
20 - 30 m. loa.	292	18.6	216.4	1985-89	1,777		
above 30 m. loa.	371	0.4	892.1	1980-84	2,654		
				1970-79	4,204		
				1969 and older	3,624		
Total	13,252	92.3	2,289.8	Total	13,252	92.3	2,289.8

Sources: Directorate of fisheries, "The fishing fleet 1998".
*) Only 8,002 vessels are measured in GRT and enter this calculation, and only 14 vessels over 25m; **) The average age of all engines in the fishing fleet was 17.9 years in 1997.

11.2.1 Norway: Wet fish trawlers, economic and capacity indicators, 1992-1997

	1992	1993	1994	1995	1996	1997
Costs and earnings (mln NOK)						
Value of landings	359.1	525.1	426.6	506.4	370.6	611.3
Fuel costs	40.4	62.7	36.2	42.3	42.4	68.5
Other running costs	44.3	68.8	50.8	59.7	52.2	70.5
Vessel costs	90.4	121.9	90.9	113.6	89.9	167.4
Crew share	126.6	185.3	143.5	166.8	123.9	219.1
Gross cash flow	57.5	86.5	105.3	124.1	62.1	85.9
Depreciation	41.2	62.2	27.9	40.0	32.6	54.2
Interest	43.7	59.7	22.9	29.7	23.7	24.2
Net profit	-27.5	-35.4	54.5	54.4	5.9	7.4
Gross value added	184.1	271.8	248.7	290.9	186.0	305.0
Other economic indicators						
Employment on board (FTEs)	685.9	1,037.4	674.2	733.8	592.6	927.8
Invested capital *(mln NOK)*	1,005.1	1,455.4	955.6	1,167.7	995.3	1,928.8
Effort (1000 days at sea)	6.1	9.7	5.9	6.5	5.4	8.5
Capacity indicators						
Volume of landings (1000 t)	66.9	104.2	74.4	88.8	72.0	103.1
Fleet - number of vessels*)	28	40	26	27	23	38
Fleet - total GRT (1000)	9.9	13.2	8.4	8.5	7.2	12.2
Fleet - total kW (1000)	60.9	86.3	55.8	59.9	50.9	

Source: Directorate of fisheries, 'Profitability studies for fishing vessels, 13 m. loa and above'.
*) Average length over all in 1997 was 47.2 meters.

11.2.2 Norway: Wetfish trawlers, composition of landings, 1992-1997

Major species/-groups of species	Value (mln NOK)					Volume (1000 t)				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
Cod		263.6	249.9	179.6	365.1		38.78	36.75	29.93	57.75
Saithe		59.1	109.1	66.0	61.3		19.50	31.46	20.98	15.97
Haddock		34.5	53.7	64.4	100.8		6.47	11.07	15.44	21.97
Shrimp		23.5	58.2	19.6	34.3		2.18	3.39	1.93	2.44
Greenland halibut		11.3	18.6	18.6	16.3		0.85	1.26	1.22	1.08
Redfish		16.3	12.8	13.3	21.1		3.23	2.54	2.53	3.99
Other species		1.9	2.3	1.8	1.7		0.34	0.45	0.35	0.23
Total	501.3	410.2	504.6	363.4	603.2	104.24	71.35	86.92	72.39	103.94

Source: Directorate of fisheries, Profitability studies.

11.2.3 Norway: Wet fish trawlers, composition by size and age, 1997

Size class	Number*	GT (1000)	kW (1000)	Age class	Number**	GT (1000)	kW (1000)
400 - 499GRT	4	1.9		1990-97	2		9.0
500 - 599 GRT	24	13.3		1980-89	2		6.6
600 - 699 GRT	3	1.9		1970-79	27		57.1
700 - 799 GRT	3	2.3		1969 and older	2		4.8
800 - 999 GRT	3	2.8					
>1000 GRT	4	4.7					
Total	41	26.9		Total	33		42.5

Sources: Norwegian Fishingboatowners' Association and the Norwegian Directorate of Fisheries.
*) 3 vessels measured in GRT; **) From the 33 survey respondents.

12. Portugal

12.0 Portugal: composition of the national fleet, 1998

	Total fleet	Fleet segments		
		Trawl	Purse Seine	Other
Economic indicators				
Value of landings (mEUR)*	318.1	45.7	52.2	220.2
Gross value added (mEUR)		25.8	33.2	
Gross cash flow (mEUR)		13.4	8.6	
Net (financial) profit (mEUR)		8.8	6.5	
Other economic indicators				
Employment on board (000)**	27.2	4,4	2	20.8
Invested capital (mEUR)		33.2	15.6	
Effort (1000 days at sea)***	*2,916*	*31*	*31*	*2,854.6*
Capacity indicators				
Volume of landings (1000 t)	212.1	27.4	94.9	89.8
Fleet - number of vessels	11,189	107	173	10,909
Fleet - total GRT (1000)	114.6	14.3	7.7	92.6
Fleet - total kW (1000)	394	51.2	36.7	306.1
Average characteristics of vessels				
GRT	10.2	133.7	44.6	8.5
kW	35.2	478.9	212.3	28.1
Length, loa		27.4	20	
Age		22	26	

Source: INE, DGPA and our estimates based on inquiries to the Industry.
* Value of auction sales. Includes salt, frozen and aquaculture. Our estimates for trawling;**Registered fishermen on 31 December 98; *** Our estimates.

12.1.1 Portugal: National fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(mln PTE)*						
Value of landings*	60,389.9	58,563.2	61,528.2	56,161.4	58,156.8	64,166.7
Fuel costs						
Other running costs						
Vessel costs						
Crew share						
Gross cash flow						
Depreciation						
Interest						
Net profit						
Gross value added						
Other economic indicators						
Employment on board (000)**	34.5	31.7	30.9	28.5	27.3	27.2
Invested capital *(000 PTE)*						
Effort (1000 days at sea)***	3,371.6	*3,221.8*	*3,102.6*	*3,037.4*	*2,985.3*	*2,916.2*
Capacity indicators						
Volume of landings (1000 t)	269.5	246	244.5	217	202.2	212.1
Fleet - number of vessels	12,871	12,299	11,846	11,597	11,440	11,189
Fleet - total GRT (1000)	148.4	131.3	123.4	120.4	117.7	114.6
Fleet - total kW (1000)	439.2	419.4	399.4	395.3	396.6	394

Source: INE, DGPA and our estimates based on inquiries to the Industry.
* Value of auction sales. Includes salt, frozen and aquaculture. Our estimates for trawling; ** Registered fishermen on 31 December;*** Our estimates.

12.1.2 Portugal: National fleet, composition of landings, 1993-1998

Major species/-groups of species	Value *(mln PTE)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Sardine	4,070	5,486	5,142	6,844	6,499	8,444	90	94	82	83	76	80
Octopus	3,178	3,899	6,263	7,944	6,925	4,633	7	7	10	12	9	6
Horse Mackerel	4,584	3,830	3,562	2,523	3,399	3,708	28	21	19	14	18	20
Chub Mackerel	494	394	254	322	315	365	9	6	4	6	7	8
Black scabbardfish	1,486	1,615	1,640	1,624	1,928	2,251	8	7	8	7	8	8
Silver scabbardfish	2,913	2,927	3,028	2,676	2,428	1,983	9	9	9	8	8	5
Common Sole	2,290	2,182	2,254	1,820	1,737	1,764	2	2	2	1	1	1
Grooved Carpet	909	342	105	84	122	130	8	2	0	0	0	0
Hake	3,764	3,140	2,806	2,558	2,307	2,296	4	4	4	3	3	3
Pout	1,543	1,358	1,235	1,051	915	957	4	3	3	2	2	2
Tunas	2,467	2,062	3,364	3,070	3,187	3,110	17	13	22	17	12	12
Blue Jack Mackerel	111	76	53	428	407	484	1	1	1	3	4	3
Other	21,863	18,522	19,500	18,876	18,331	20,793	56	46	49	46	37	40
Total	49,672	45,833	49,208	49,820	48,499	50,916	244	215	212	203	185	190

Sources: INE.

12.1.3 Portugal: National fleet, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 5 GRT	9,475	13.6	84.1	1997-98			
5.01 - 25 GRT	1,012	11.2	64.8	1995-96			
25.01 - 50 GRT	297	10.1	48.7	1993-94			
50.01 - 100 GRT	163	11	45.7	1991-92			
> 100 GRT	242	68.8	150.8	1989-90			
				1988 and older			
Total	11,189	114.6	394	Total			

Sources: INE, DGPA.

12.2.1 Portugal: Coastal trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(mln PTE)*						
Value of landings	7,582.34	6,431.54	7,919.36	*8,026.1*	*8,791.8*	*9,218.5*
Fuel costs				*1,019.7*	*1,084.6*	*1,166.4*
Other running costs				*738.2*	*804.8*	*818.0*
Vessel costs				*1,827.5*	*1,883.2*	*2,024.2*
Crew share				*2,137.2*	*2,273.6*	*2,512.5*
Gross cash flow				*2,303.4*	*2,745.6*	*2,697.4*
Depreciation				*1,099.1*	*1,058.7*	*836.6*
Interest				*191.1*	*130.9*	*94.0*
Net profit				*1,013.2*	*1,556.0*	*1,766.80*
Gross value added				*4,440.6*	*5,019.2*	*5,209.90*
Other economic indicators						
Employment on board (000) *	3.3	3.4	3.4	*3.2*	*3.2* **	*3.2*
Invested capital *(000 PTE)*				*6,944.01*	*6,888.90*	*6,715.13*
Effort (1000 days at sea)	*42.3*	*39.1*	*35.7*	*32.6*	*31.0*	*30.7*
Capacity indicators						
Volume of landings (1000 t)	29.4	22.06	26.4	*27.9*	*27.3*	*27.4*
Fleet - number of vessels	135	125	114	*113*	*108*	*107*
Fleet - total GRT (1000)	18.3	16.6	15.2	*15.1*	*14.5*	*14.3*
Fleet - total kW (1000)	65.7	58.6	54.3	*53.4*	*51.6*	*51.2*

Sources: INE, DGPA and our estimates.
* Registered fishermen on 31 December; Estimated for 1998.

12.2.2 Portugal: Coastal trawlers, composition of landings, 1993-1998

Major species/-groups of species	**Value *(mln PTE)****						**Volume (1000 t)**					
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Horse mackerel	2,040	1,397	1,417	1,292	1,887	1,843	15	8	8	7	11	11
Pout	409	241	288	255	275	283	1	1	1	1	1	1
Hake	527	584	576	509	562	645	1	1	1	1	1	1
Mackerel	66	39	54	38	38	77	1	0	1	0	0	1
Sardine	9	20	30	103	87	49	0	1	1	2	1	1
Anglerfish	230	160	120	190	165	205	0	0	0	0	0	0
Blue whiting	64	141	220	341	184	126	1	2	2	3	2	1
Prawn	232	366	635	631	886	1,332	0	0	0	0	0	1
Norway lobster	457	537	530	371	379	515	0	0	0	0	0	0
Squid (Loligo)	356	253	689	412	780	722	0	0	1	0	1	1
Octopus	351	512	743	1,023	857	532	1	1	2	2	1	1
Other	2,574	1,622	1,801	1,850	1,987	2,202	6	4	4	4	4	4
Total	7,315	5,872	7,105	7,014	8,086	8,531	27	18	20	21	23	22

Source: INE.
* Includes only landings in Mainland.

12.2.3 Portugal: Coastal trawlers, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 50 GRT	10	0.3	1.6	1997-98	4	0.6	1.9
50,01 - 100 GRT	14	1.0	4.7	1995-96	5	0.6	2.0
100,01 - 150 GRT	35	4.4	14.0	1993-94	3	0.4	1.5
150,01 - 200 GRT	46	8.1	29.0	1991-92	7	0.9	3.3
>200 GRT	2	0.5	1.9	1989-90	5	0.6	2.0
				Older	83	11.1	40.5
TOTAL	107	14.3	51.2	TOTAL	107	14.3	51.2

Source: DGPA.

12.3.1 Portugal: Coastal Purse Seiners, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(mln PTE)*						
Value of landings	6,050.5	7,153.5	7,783.2	8,689.7	7,998.5	10,530.1
Fuel costs	*532.4*	*465.0*	*428.1*	*477.9*	*514.7*	*519.9*
Other running costs	*556.6*	*693.9*	*840.6*	*738.6*	*933.0*	*889.6*
Vessel costs	*1,930.1*	*1,874.2*	*1,603.3*	*2,085.5*	*2,008.5*	*2,434.2*
Crew share	*3,188.6*	*3,755.6*	*4,039.5*	*4,492.6*	*3,727.7*	*4,947.1*
Gross cash flow	*-157,3*	*364.8*	*871.7*	*895.0*	*814.5*	*1,739.2*
Depreciation					*391.6*	*392.38*
Interest					*111.6*	*44.06*
Net profit					*311.4*	*1,302.8*
Gross value added	*3,031.3*	*4,120.4*	*4,911.2*	*5,387.6*	*4,542.3*	*6,686.3*
Other economic indicators						
Employment on board (000) *	4.5	2,4	2.6	2.6	2.7	2.0
Invested capital *(000 PTE)*					3,186.1	3,149.6
Effort (1000 days at sea)	*58.7*	*50.4*	*49.6*	*46.5*	*35.5*	*31.1*
Capacity indicators						
Volume of landings (1000 t)	103.5	103.87	95.5	91.0	84.7	94.9
Fleet - number of vessels	225	193	190	178	177	173
Fleet - total GRT (1000)	10,0	8.5	8.4	7.8	7.8	7.7
Fleet - total kW (1000)	46.3	39.6	39.1	36.3	36.8	36.7

Sources: INE, DGPA, Inquiries, ANOPC and J.Abrantes.
* Registered fishermen on 31 December.

12.3.2 Portugal: Coastal Purse Seiners, composition of landings, 1993-1998

Major species/-groups of species	Value *(mln PTE)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Sardine	3,908	5,229	4,973	6,566	6,229	8,084	87	90	79	79	73	77
Horse mackerel	1,019	1,031	695	514	933	1,223	5	5	3	2	4	6
Chub mackerel	263	97	53	87	92	163	6	3	2	3	3	5
Atlantic mackerel	18	36	44	43	30	69	1	1	2	1	1	1
Blue jack mackerel	41	31	11	20	18	7	1	0	0	0	0	0
Bogue	13	12	11	11	10	8	0	0	0	0	0	0
Axillary seabream	147	74	157	108	47	47	0	0	0	0	0	0
Sargo	102	119	170	129	103	112	0	0	0	0	0	0
Anchovy (N.Att.)	8	95	450	746	221	323	0	0	2	3	1	2
Other	530	432	1,218	466	316	494	4	3	7	2	2	4
Total	6,051	7,154	7,783	8,690	7,999	10,530	103	104	95	91	85	95

Sources: INE.

12.3.3 Portugal: Coastal Purse Seiners, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
0 - 50 GRT	105	3.3	17.4	1997-98	5	0.3	1.4
50,01 - 100 GRT	66	4.2	18.4	1995-96	7	0.4	1.8
100,01 - 150 GRT	2	0,2	0.9	1993-94	1	0.1	0.2
150,01 - 200 GRT	0	0,0	0,0	1991-92	3	0.2	0.7
>200 GRT	0	0,0	0,0	1989-90	10	0.5	2.6
				1988 and older	147	6.3	29.9
Total	173	7,7	36,7	TOTAL	173	7.7	36.7

Source: DGPA.

13. Spain - Atlantic

13.0 Spain: composition of the national fleet, 1995

	Total fleet	Fleet segments			
		National waters	Intern-Third countries waters	300's fleet EEC waters	Other
Economic indicators					
Value of landings (m Euro)	2,214.1			179.6	
Gross value added (m Euro)				105.9	
Gross cash flow (m Euro)				22.3	
Net (financial) profit (m Euro)					
Other economic indicators					
Employment on board (FTEs)	79,409	48,703	17,454	4,252	7,533
Invested capital (m Euro)				25.5	
Effort (1000 days at sea)				62.2	
Capacity indicators					
Volume of landings (1000 t)	1,443.6			34.6	
Fleet - number of vessels	18,852	1,679	1,093	247	722
Fleet - total GRT (1000)	546.8	157.5	285.1	49.4	54.8
Fleet - total kW (1000)	1,717.8	744.2	665.7	148.2	159.7
Average characteristics of vessels					
GRT	29.0	9.4	260.8	200.0	75.9
kW	91.1	44.3	609.1	600.0	221.2
Length, loa	9.3	6.5	33.6	31.2	27.3
Age	22.0	20.0	25.0	20.0	25.0

Source: Agroconsulting and own estimations. Value and volume of landings from MAPA.

13.1.1 Spain: National fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and earnings *(m ESP)*						
Value of landings *1	291,222.1	348,022.8	360,898.3			
Fuel costs						
Other running costs						
Vessel costs						
Crew share						
Gross cash flow						
Depreciation						
Interest						
Net profit						
Gross value added						
Other economic indicators						
Employment on board (FTEs) *3	90,000	78,700	65,900	60,500	56,300	56,000
Invested capital *(m ESP)*						
Effort (1000 days at sea)						
Capacity indicators						
Volume of landings (1000 t) *1	1,355.3	1,540.0	1,443.6			
Fleet - number of vessels*3	20,190	19,011	18,483			
Fleet - total GRT (1000)*3	585.9	703.8	658.2			
Fleet - total kW (1000) *1		1,737.7	1,717.8			

Sources: 1) Ministerio de Agricultura Pesca y Alimentación, MAPA;2) INE: Encuesta de población activa. Data referred to ocupped population; 3) Eurostat.

13.1.2 Spain: National fleet, composition of landings, 1993-1998

Major species/-groups of species	Value *(m ESP)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Hakes	51,099	58,406					104.6	116.3				
Tunas	34,392	48,895					246.5	260.1				
Other pelagic species	34,284	35,918					255.9	289.7				
Crustaceans	36,538	32,059					32.9	28.7				
Cephalopod	27,996	37,758					111.7	129.5				
Other Molluscs	26,233	51,239					102.1	153.9				
Halibut	7,857	13,239					26.3	40.8				
Other	72,820	70,507					475.4	519.0				
Total	291,219	348,021	360,895				1,355.4	1,538.0	1,443.6			

Source: MAPA.

13.1.3 Spain: National fleet, composition by size and age, 1995

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT	15,714	73		1992-97	751	47	
50 - 119 GRT	1,050	76		1987-91	1,839	159	
120 - 149 GRT	665	82		1982-86	2,245	56	
150 - 249 GRT	541	105		1977-81	1,615	73	
250 - 499 GRT	322	106		1976 and older	11,932	318	
> 500 GRT	191	217		Unknown	101	5	
Total	18,483	658		Total	18,483	658	

Sources: EUROSTAT. Fisheries Yearly Statistics.

13.2.1 Spain - Atlantic: 300's Fleet EEC waters, economic and capacity indicators, 1993-98

	1993	1994	1995	1996	1997	1998
Costs and earnings *(mESP)*						
Value of landings	31,829.1	26,189.1	29,276.6	27,916.7	26,088.1	25,329.2
Fuel costs	2,717.3	2,409.6	2,449.7	3,035.9	3,254.2	2,608.7
Other running costs	5,054.6	4,465.8	5,030.0	2,054.7	1,830.8	2,893.0
Vessel costs	4,395.2	4,198.5	4,536.9	4,448.4	4,131.0	2,970.8
Crew share	16,103.5	12,959.0	13,630.9	12,932.9	11,955.3	10,457.6
Gross cash flow	3,557.3	2,156.1	3,629.1	5,442.8	4,916.9	6,399.2
Depreciation	2,205.3	1,709.4	1,630.2	1,491.6	2,146.7	2,071.5
Interest	309.7	200.4	253.5	155.9	116.9	76.3
Net profit	1,042.3	246.3	1,745.5	3,795.3	2,653.3	4,251.4
Gross value added	19,660.9	15,115.2	17,260.1	18,375.7	16,872.2	16,856.8
Other economic indicators						
Employment on board (FTEs)	4,777	4,190	4,252	3,936	3,574	3,060
Invested capital *(m ESP)* [*1]	5,631.1	4,357.4	4,155.5	3,802.2	3,438.4	3,318.2
Effort (1000 days at sea)	74.1	65.3	62.2	57.0	53.4	51.4
Capacity indicators						
Volume of landings (t)	28,931	27,375	34,628	30,744	35,321	
Fleet - number of vessels	294	259	247	226	212	204
Fleet - total GRT (1000)	64.6	51.8	49.4	45.2	41.3	39.8
Fleet - total kW (1000)	218.3	155.4	148.2	135.6	120.2	115.7

Sources: Own estimations.
1) Investment capital has been calculated from booked value.

13.2.2 Spain - Atlantic: 300's fleet EEC waters, composition of landings, 1993-1998

Major species/-groups of species	Value *(m ESP)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
1. Hake							18.6	17.6	23.9	15.5	17.6	
2. Megrim							4.9	5	5.5	5.6	6	
3. Redfish										4	4.3	
4. Anglerfish							2.1	2.2	2.3	2.1	3	
5. Horse Mackerel							1.8	1.2	1.6	2.6	2.9	
6. Blue Whiting							0.3	0.2	0.2	0.2	0.8	
7. Norway Lobster							1	1	1	0.5	0.6	
8. Others *							0.2	0.2	0.2	0.2	0.2	
Total	31,829.1	26,189.1	29,276.6	27,916.7	26,088.1	25,329.2	28.9	27.4	34.6	30.7	35.3	

Sources: Own estimations and MAPA.
*) Others: Pollack, Whiting, Mackerel, Sole, Haddock, etc.

13.2.3 Spain - Atlantic area: 300's fleet ECC water, composition by size and age, 1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 100 GRT	0	0.0	0.0	1993-97	97	18,514.0	49,050.0
100 - 149.9 GRT	13	1,793.0	5,808.0	1988-92	17	3,824.0	10,049.0
150 - 249.9 GRT	191	36,490.0	110,329.0	1978-87	0	0.0	0.0
250 - 499.9 GRT	8	2,896.0	4,061.0	1973-77	30	5,833.0	21,582.0
>500 GRT	0	0.0	0.0	1972 and older	68	13,008.0	39,517.0
Total	212	41,179.0	120,198.0	Total	212	41,179.0	120,198.0

Sources: Own estimations from a sample of 52 vessels.

14. Spain - Mediterranean

14.0 Spain: Mediterranean Area, composition of the national fleet, 1998

	Total fleet	Fleet segments		
		Trawlers	Purse Seiners	Other
Economic indicators				
Value of landings (mEUR)	305	131	59	115
Gross value added mEUR)		53	14	
Gross cash flow (mEUR)		8	11	
Net profit (mEUR)		-8	6	
Other economic indicators				
Employment on board (FTEs)	19,898	*7,959*	*6,973*	*4,965*
Invested capital (mEUR)				
Effort (1000 days at sea)		*165.2*	*101.1*	
Capacity indicators				
Volume of landings (t)	131,400	*31,706*	*5,436*	*48,258*
Fleet - number of vessels	5,273	1,148	505	3,620
Fleet - total GRT	84,674	54,169	12,877	17,628
Fleet - total kW	754,546	421,525	134,651	198,370
Average characteristics of vessels				
GRT	16.1	47.2	25.5	4.9
kW	143.1	367.2	266.6	54.8
Length, loa	9.7	17.0	12.9	6.9
Age	48.7	30.6	33.1	32.0

14.1.1 Spain: Mediterranean Area, economic and capacity indicators, 1994-1998

	1994	1995	1996	1997	1998
Costs andearnings *(*m ESP)					
Value of landings	57,264	54,413	54,298	55,202	51,012
Fuel costs					
Other running costs					
Crew share					
Gross cash flow					
Depreciation					
Interest*					
Net profit					
Gross value added					
Other economic indicators					
Employment on board (FTEs)	21,190	20,714	20,434	20,143	19,898
Invested capital *(m ESP)*					
Effort (1000 days at sea)					
Capacity indicators					
Volume of landings (1000 t)	200.40	183.84	158.59	150.85	131.40
Fleet - number of vessels		*5,497*	5,412	5,339	5,273
Fleet - total GRT (1000)			87.92	87.11	84.67
Fleet - total kW (1000)			782.87	772.92	754.55

Sources: *'Informe GGPM, Roma 2-5 març 1998', 'Encuesta de Población Activa. INE',* 'Official fleet census; 1996,1997 and 1998', 'CCAA: C.A de la Región de Murcia, C.Illes Balears, Junta de Andalucía, Generalitat de Catalunya', 'Generalitat Valenciana; Informe del Sector Agrari Valencià, 1994-1998', 'Estadísticas Agrarias y Pesqueras en Andalucía 1990, 91, 92 y 95', 'Our own estimations'.

14.1.2 Spain - Mediterranean Area, composition of landings, 1994-1998

Major species/-groups of species	**Value *(mESP)***					**Volume (1000 Tones)**				
	1994	**1995**	**1996**	**1997**	**1998**	**1994**	**1995**	**1996**	**1997**	**1998**
Hake	6,691	7,457	5,909	6,868	7,936	9.57	10.82	6.95	9.00	7.40
Shrimps	5,877	4,962	4,822	5,037	5,498	6.23	3.02	1.71	2.31	1.98
Tuna	2,172	2,705	1,277	1,195	862	8.82	6.27	2.81	1.80	1.50
Anxovy	7,247	4,646	5,789	4,582	3,176	28.96	17.83	17.58	14.52	10.35
Sardine	4,918	10,711	6,034	5,187	4,763	58.13	64.86	51.39	43.83	39.61
Other	30,360	23,932	30,467	32,332	28,777	88.69	81.03	78.15	79.39	70.56
Total:	57,264	54,413	54,298	55,202	51,012	200.40	183.84	158.59	150.85	131.40

Sources: 'Regional Communities. Census and ofittial Annual Reports.

14.1.3 Spain - Mediterranean Area, composition by size and age, 1998

Size class	**Number**	**GRT (1000)**	**kW (1000)**	**Age class**	**Number**	**GRT (1000)**	**kW (1000)**
<5 GRT	2,861	6.3	86.4	1997-98	124	4.0	27.2
5 - 49 GRT	1,906	40.3	382.5	1995-96	132	3.0	21.5
50 - 119 GRT	482	34.5	266.6	1993-94	130	3.5	25.3
120 - 149 GRT	16	2.2	14.1	1991-92	186	4.6	36.9
150 - 199 GRT	2	0.4	1.3	1989-90	212	5.5	45.3
>200 GRT	4	1.0	3.8	1988 and older	4,428	64.0	596.6
Unknown	2	0.0	0.0	Unknown	61	0.2	1.8
Total	5,273	84.674	754.546	Total	5,273	84.7	754.5

Sources: Official census and GEM estimations.

14.2.1 Spanish Mediterranean: Trawlers, economic and capacity indicators, 1994-1998

	1994	1995	1996	1997	1998
Costs and earnings *(m ESP)*					
Value of landings	*21,840.9*	*21,475.3*	*20,590.1*	*20,910.5*	*21,951.5*
Running costs		*7,968.9*	*8,160.4*	*8,327.0*	*8,033.0*
Vessel Costs		*4,969.6*	*5,117.4*	*5,135.3*	*5,044.9*
Crew share		*6,474.2*	*5,881.6*	*6,291.8*	*7,609.2*
Gross cash flow		*1,504.5*	*1,264.1*	*1,156.5*	*1,264.4*
Depreciation			*2,809.1*	*2,721.0*	*2,552.9*
Interest			*247.3*	*162.0*	*79.3*
Gross value added		*7,978.7*	*7,145.7*	*7,448.2*	*8,873.6*
Net profit			*-1,792.2*	*-1,726.6*	*-1,367.8*
Other economic indicators					
Employment on board (FTEs)	*8,476*	*8,285*	*8,174*	*8,057*	*7,959*
Invested capital *(national currency)*					
Effort (1000 days at sea)		*185.6*	*155.9*	*171.2*	*165.2*
Capacity indicators					
Volume of landings (t)	*57,594*	*53,202*	*43,993*	*45,013*	*41,706*
Fleet - number of vessels		*1,216*	1,208	1,190	1,148
Fleet - total GRT			57,530	56,783	54,169
Fleet - total kW			449,372	442,686	421,525

Sources: 'INE. Encuesta de Población Activa', 'Official fleet census; 1996,1997 and 1998', 'CCAA: C.A de la Región de Murcia, C.Illes Balears, Junta de Andalucía, Generalitat de Catalunya', 'Generalitat Valenciana; Informe del Sector Agrari Valencià, 1994-1998', 'Estadísticas Agrarias y Pesqueras en Andalucía 1990, 91, 92 y 95', 'Our own estimations'.

14.2.2 Spain - Mediterranean Area: Trawler, composition of landings, 1994-1998

Major species/-groups of species	**Value*(m ESP)***					**Volume (1000 t)**				
	1992	**1993**	**1995**	**1996**	**1997**	**1992**	**1993**	**1995**	**1996**	**1997**
Hake										
Shrimps										
Tuna										
Anxovy										
Sardine										
Other										
Total	*21,840.9*	*21,475.3*	*20,590.1*	*20,910.5*	*21,951.5*	*57.6*	*53.2*	*44.0*	*45.0*	*41.7*

Sources: Own estimations.

14.2.3 Spanish Mediterranean: Trawler, composition by size and age, 1998

Size class	**Number**	**GRT (1000)**	**kW (1000)**	**Age class**	**Number**	**GRT (1000)**	**kW (1000)**
<5 GRT	9	0,0	0,6	1997-98	41	2.4	14.7
5 - 49 GRT	727	23.3	182,9	1995-96	47	1.9	12.3
50 - 119 GRT	400	29.0	226.0	1993-94	59	2.5	16.3
120 - 149 GRT	10	1.3	9.5	1991-92	89	3.1	23.1
150 - 199 GRT	0	0.0	0	1989-90	83	3.7	26.9
>200 GRT	2	0.5	2,6	1988 and older	829	40.5	328.4
Total	1,148	54.2	421.5	Total	1,148	54.2	421.5

Sources: 1998 Official Census.

14.3.1 Spain - Mediterranean Area: Purse seiners, economic and capacity indicators, 1994-1998

	1994	1995	1996	1997	1998
Costs and earnings (mESP)					
Value of landings	13,943.3	15,181.7	12,559.0	10,510.5	9,857.7
Running costs	6,049.7	6,234.8	6,462.9	5,589.6	5,709.9
Vessel costs	671.1	702.8	728.1	742.1	755.5
Crew share	3,946.8	4,473.5	3,048.1	1,960.5	1,573.9
Gross cash flow	3,275.7	3,770.7	2,320.0	2,218.3	1,818.4
Depreciation			711.3	694.2	709.8
Interest			62.9	41.6	22.2
Gross Value Added	7,222.5	8,244.2	5,368.1	3,178.8	2,392.3
Net profit			1,545.8	1,482.6	1,086.5
Other economic indicators					
Employment on board (FTEs)	7,417	7,250	7,152	7,050	6,964
Invested capital (national currency)					
Effort (1000 days-at-sea)	947	1,042	959	1,124	1,022
Capacity indicators					
Volume of landings (1000 t)	84.167	104.786	76.441	80.583	70.193
Fleet - number of vessels		515	500	496	505
Fleet - total GRT (1000)			12.4	12.3	12.9
Fleet - total kW (1000)			131.3	130.4	134.7

Sources: "INE. Encuesta de Población Activa", "Official fleet census; 1996,1997 and 1998", "CCAA: C.A de la Región de Murcia, C.Illes Balears, Junta de Andalucía, Generalitat de Catalunya, "Generalitat Valenciana; Informe del Sector Agrari Valencià, 1994-1998", "Estadísticas Agrarias y Pesqueras en Andalucía 1990, 91, 92 y 95", "Our own estimations".

14.3.2 Spain - Mediterranean Area: Purse seiners, composition of landings, 1994-1998

Major species/-groups of species	**Value *(m ESP)***					**Volume (1000 t)**				
	1994	**1995**	**1996**	**1997**	**1998**	**1994**	**1995**	**1996**	**1997**	**1998**
Hake										
Shrimps										
Tuna										
Anxovy										
Sardine										
Other										
Total	*13,943.3*	*15,181.7*	*12,559.0*	*10,510.5*	*9,857.7*	*84.2*	*104.8*	*76.4*	*80.6*	*70.2*

Sources: Own estimations.

14.3.3 Spain - Mediterranean Area, Purse seiners, composition by size and age, 1998

Size class	**Number**	**GRT (1000)**	**kW (1000)**	**Age class**	**Number**	**GRT (1000)**	**kW (1000)**
<5 GRT	72	0.1	1.7	1997-98	15	0.4	3.8
5 - 49 GRT	380	9.3	104.0	1995-96	10	0.3	2.6
50 - 119 GRT	52	3.3	27.7	1993-94	11	0.3	2.9
120 - 149 GRT	1	0.1	1.0	1991-92	26	0.8	7.3
150 - 199 GRT				1989-90	28	1.0	9.9
>200 GRT				1988 and older	415	10.1	108.2
Total	505	12.9	134.4	Total	505	12.9	134.7

Sources: 1998 Official census.

15. Sweden

15.0 Sweden: Composition of the national fleet, 1998

	Total fleet	Fleet segments						
		Pelagic >=20m	Pelagic <20m	Prawn	Cod >=20m	Cod <20m	Nephrops	Net/ Hook
Economic indicators								
Value of landings (mEUR)	117.3	61.5	4.3	11.5	14.2	7.0	15.5	3.9
Gross value added (mEUR)		31.5	3.2	7.2	4.9	4.0	9.2	2.7
Gross cash flow (mEUR)		15.6	2.7	3.8	1.9	2.8	5.1	2.0
Net (financial) profit (mEUR)		15.6	2	3.8	1.9	1.9	5.1	2.0
Other economic indicators								
Employment on board (FTEs)	2,500	414	148	192	195	78	210	130
Invested capital (mEUR)	-	68.2	15.4	24.9	28.9	12.1	28.5	15.0
Effort (1000 days at sea)	218.7	12.8	5.6	9.5	6.4	4.8	11.6	8.4
Capacity indicators								
Volume of landings (1000 t)	400.9	365.8	11.8	2.8	10.7	3	2.6	3
Fleet - number of vessels	2,132	69	74	64	39	39	105	65
Fleet - total GT (1000)	44.7	19.5	1.7	5	6	1.5	3.1	1.9
Fleet - total kW (1000)	234.5	56.2	12.6	20.7	19.4	8.9	20.4	10.8
Average characteristics of vessels								
GT	21	282	22	79	155	40	29	29
kW	110	815	170	323	497	228	194	166
Length, loa	10	33	13	20	25	15	14	14
Age	24	27	24	39	25	22	26	31

Source: National Board of Fisheries (unpublished).

15.1.1 Sweden: National fleet, economic and capacity indicators, 1992-1998

	1992	1993	1994	1995	1996	1997	1998
Costs and earnings *(SEK m)*							
Value of landings	744	740	884	878	984	1,011	1,045
Fuel costs							
Other running costs							
Vessel costs							
Crew share							
Gross cash flow							
Depreciation							
Interest							
Net profit							
Gross value added							
Other economic indicators							
Employment on board (FTEs)	3,000					2,500	2,500
Invested capital *(mln SEK)*							
Effort (1000 days at sea)						243.7	218.7
Capacity indicators							
Volume of landings (1000 t)	300.9	335.7	379	395.7	361.7	349.8	400.9
Fleet - number of vessels	1,647	1,659		2,541	2,504	2,305	2,132
Fleet - total GT (1000)	45.7	43.4	41.3	52.7	49.7	49.7	44.7
Fleet - total kW (1000)	233.7	228.7	223.5	270.2	255.9	248.3	234.5

Sources: National Board of Fisheries.

15.1.2 Sweden: National fleet, composition of landings, 1992-1998

Major species/-groups of species	**Value *(SEK m)***							**Volume (1000 t)**						
	1992	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Cod	206	152	232	252	285	308	273	19.1	15.5	26.8	28.6	35.9	30.2	19.5
Herring - cons	141	112	123	133	155	110	85	93.6	64.5	53.1	55.5	56.7	44.7	35.7
Fish for reduction	94	154	177	194	153	213	330	165.1	233.3	272.1	290.1	219.6	254.3	317
Pandalus Borealis	61	64	74	93	87	92	86	2.1	2.2	2.6	2.7	2.2	2.4	2.3
Nephrops	43	44	43	54	62	71	86	0.8	0.9	0.8	0.9	1.1	1.1	1.3
Total	545	527	649	726	742	794	860	280.7	316.4	355.4	377.8	315.5	332.7	375.8

Source: Statistics Sweden.

15.1.3 Sweden: National fleet, composition by size and age, date 1998

Size class	**Number**	**GT (1000)**	**kW (1000)**	**Age class**	**Number**	**GT (1000)**	**kW (1000)**
0 - 49 GT	1,936	10.7	127.4	1998-99	7	0.9	3.5
50 - 119 GT	95	7.3	30.7	1996-97	34	1.6	8.8
120 - 149 GT	22	2.9	10	1994-95	43	0.4	4.5
150 - 200 GT	18	3.2	11.2	1992-93	38	0.7	4.1
> 200 GT	61	20.6	55.1	1990-91	71	1.4	10
				1988-89	104	2.7	15.7
				1988 and older	1,835	37	187.8
Total	2,132	44.7	234.4	Total	2,132	44.7	234.4

Sources: National Board of Fisheries (unpublished)

15.2 Sweden: Pelagic vessels > = 20m: economic and capacity indicators, 1992-1998

	1992	1993	1994	1995	1996	1997	1998
Costs and earnings *(SEK m)*							
Value of landings			283.6	378.5	489.3	445.3	548
Fuel costs			43.4	57.9	74.9	68.1	70.1
Other running costs			44.8	59.8	77.3	70.4	99.7
Vessel costs			80	98.6	108.3	114.2	97.1
Crew share			73.7	98.4	127.2	115.8	142
Gross cash flow			41.7	63.8	101.6	76.8	139.1
Depreciation			0	0	0	0	0
Interest			0	0	0	0	0
Net profit			41.7	63.8	101.6	76.8	139.1
Gross value added			115.4	162.2	228.8	192.6	281
Other economic indicators							
Employment on board (FTEs)			481	423	385	355	414
Invested capital *(SEK m)*			756	706	608	838	608
Effort (1000 days at sea)			17.3	16.4	16.9	13.1	12.8
Capacity indicators							
Volume of landings (1000 t)			312.5	330.6	297.9	298.6	365.8
Fleet - number of vessels			89	83	77	71	69
Fleet - total GT (1000)			21.1	20	18.9	19	19.5
Fleet - total kW (1000)			66	62.3	58.4	57.6	56.2

Sources: National Board of Fisheries (unpublished).

15.2.1 Sweden: Pelagic vessels > = 20 m, composition of landings, 1992-1998

Major species/-groups of species	Value *(SEK m)*						Volume (1000 t)					
	1992	1994	1995	1996	1997	1998	1992	1994	1995	1996	1997	1998
Herring		164.3	177.8	226	206.9	221.6		144.5	158.9	172.8	172.4	178.6
Sprat		80.9	79.4	70.9	94	140.4		124.3	118.5	101.3	111.9	135
Mackerel		17.6	23.2	40.4	38.3	24.7		7	6.2	5.2	4.7	5.1
Other								36.8	47	18.7	9.7	47.1
Total		262.8	280.4	337.3	339.2	386.7		312.6	330.6	298	298.7	365.8

Sources: Statistics Sweden.

15.2.2 Sweden: Pelagic vessels > =20 m: composition by size and age, 1998

Size class	Number	GT (1000)	kW (1000)	Age class	Number	GT (1000)	kW (1000)
5 - 49 GT	2	0	1.3	1998-99	1	0.8	2.7
50 - 119 GT	10	0.9	4	1996-97	3	1.3	4.3
120 - 149 GT	8	1,1	3.6	1994-95	1	0.1	0.5
150 - 200 GT	3	0.5	2.4	1992-93	1	0.4	1
>200 GT	46	17	44.9	1990-91	1	0.7	2.4
				1988-89	3	1.3	3.2
				1988 and older	59	14.8	42.2
Total	69	19.5	56.2	Total	69	19.4	56.3

Sources: National Board of Fisheries (unpublished).

15.3 Sweden: Pelagic vessels < 20 m: economic and capacity indicators, 1992-1998

	1992	1993	1994	1995	1996	1997	1998
Costs and earnings *(SEK m)*							
Value of landings			57	47.5	31.5		38.5
Fuel costs			4.9	4.1	2.7		3.9
Other running costs			8.4	7	4.6		6.2
Vessel costs			14.3	17.5	3.4		0.2
Crew share			6.6	5.5	3.6		4.5
Gross cash flow			22.8	13.4	17.2		23.7
Depreciation			7.6	7.2	6.3		5.5
Interest			1.5	1	0.4		0
Net profit			13.7	5.2	10.5		18.2
Gross value added			29.4	18.9	20.8		28.2
Other economic indicators							
Employment on board (FTEs)			222	200	174	108	148
Invested capital *(SEK m)*			189	180	157	97	137
Effort (1000 days at sea)							5.6
Capacity indicators							
Volume of landings (1000 t)			12.2	13.9	7.5	8.5	11.8
Fleet - number of vessels			111	100	87	54	74
Fleet - total GT (1000)			2.2	1.9	1.4	1,3	1.7
Fleet - total kW (1000)			15	14.5	11.5	10.4	12.6

Sources: National Board of Fisheries (unpublished).

15.3.1 Sweden: Pelagic vessels < 20 m: composition of landings, 1992-1998

Major species/-groups of species	Value *(SEK m)*						Volume (1000 t)					
	1992	1994	1995	1996	1997	1998	1992	1994	1995	1996	1997	1998
Herring		19.5	24.2	14.3	13.2	12.6		8.4	10.1	5.2	5.4	5.3
Sprat		1.3	1.1	0.7	1.7	6		1.9	1.6	1	2	5.7
Other								1.9	2.2	1.3	1.1	0.8
Total		20.8	25.3	15	14.9	18.6		12.2	13.9	7.5	8.5	11.8

Sources: Statistics Sweden.

15.3.2 Sweden: Pelagic vessels < 20m: composition by size and age, 1998

Size class	Number	GT (1000)	kW (1000)	Age class	Number	GT (1000)	kW (1000)
5 - 49 GT	64	1	9.7	1996-97	-	-	-
50 - 119 GT	10	0.7	2.8	1994-95	2	0.04	0.6
120 - 149 GT	-	-	-	1992-93	1	0.01	0.3
150 - 200 GT	-	-	-	1990-91	3	0.1	0.9
>200 GT	-	-	-	1988-89	5	0.2	1.4
				1988 and older	63	1.3	9.4
Total	74	1.7	12.5	Total	74	1.7	12.6

Sources: National Board of Fisheries (unpublished).

15.4 Sweden: Prawn: economic and capacity indicators, 1992-1998

	1992	1993	1994	1995	1996	1997	1998
Costs and earnings *(SEK m)*							
Value of landings			111.2	116.1	107.3	118.4	102.3
Fuel costs			15.8	16.5	15.2	16.8	12
Other running costs			23	24	22.2	24.5	22.4
Vessel costs			4.2	0.5	4.8	12.2	3.7
Crew share			33.6	35	32.4	35.8	30.4
Gross cash flow			34.6	40.1	32.7	29.1	33.8
Depreciation			0	0	0	0	0
Interest			0	0	0	0	0
Net profit			34.6	40.1	32.7	29.1	33.8
Gross value added			68.2	75.1	65.1	64.9	64.2
Other economic indicators							
Employment on board (FTEs)			252	246	225	222	192
Invested capital *(SEK m)*			272.6	274.8	251.6	252.4	221.9
Effort (1000 days at sea)			14.1	13.4	12.1	11.7	9.5
Capacity indicators							
Volume of landings (1000 t)			4.7	10.2	4	3.1	2.8
Fleet - number of vessels			84	82	75	74	64
Fleet - total GT (1000)			6.4	6.3	5.9	5.9	5
Fleet - total kW (1000)			26.1	25.6	23.6	23.2	20.7

Sources: National Board of Fisheries (unpublished).

15.4.1 Sweden: Prawn: composition of landings, 1992-1998

Major species/-groups of species	Value *(SEK m)*						Volume (1000 t)					
	1992	1994	1995	1996	1997	1998	1992	1994	1995	1996	1997	1998
Prawn		65.5	82.2	79.7	87.3	79.2		2.3	2.4	2	2.3	2.1
Cod		4.7	7.8	5.4	2.6	2.5		0.5	0.9	0.7	0.2	0.2
Nephrops		5.6	8.4	8.6	8.2	9.8		0.1	0.1	0.1	0.1	0.1
Other								1.8	6.8	1.2	0.4	0.4
Total		75.8	98.4	93.7	98.1			4.7	10.2	4	3	2.8

Sources: Statistics Sweden.

15.4.2 Sweden: Prawn: composition by size and age, 1998

Size class	Number	GT (1000)	kW (1000)	Age class	Number	GT (1000)	kW (1000)
5 - 49 GT	28	0.7	4.8	1996-97	1	0	0
50 - 119 GT	20	1.7	6.8	1994-95	-	-	-
120 - 149 GT	7	0.9	3.7	1992-93	-	-	-
150 - 200 GT	7	1.2	4.2	1990-91	-	-	-
>200 GRT	2	0.4	1.2	1988-89	-	-	-
				1988 and older	63	5	20.6
Total	64	5	20.7	Total	64	5	20.7

Sources: National Board of Fisheries (unpublished).

15.5 Sweden: Cod > = 20m: economic and capacity indicators, 1992-1998

	1992	1993	1994	1995	1996	1997	1998
Costs and earnings (SEK m)							
Value of landings			201	134.9	156.1	173.4	126.4
Fuel costs			30	20.1	23.3	25.8	16.2
Other running costs			37.2	25	28.9	32.1	28.8
Vessel costs			17.2	8.3	41.2	55.1	38
Crew share			42	28.2	32.6	36.2	26.5
Gross cash flow			74.6	53.3	30.2	24.2	16.9
Depreciation			0	0	0	0	0
Interest			0	0	0	0	0
Net profit			74.6	53.3	30.2	24.2	16.9
Gross value added			116.6	81.5	62.8	60.4	43.4
Other economic indicators							
Employment on board (FTEs)			320	340	300	280	195
Invested capital *(SEK m)*			395.8	434.4	383.6	364	257.8
Effort (1000 days at sea)			7.7	7.6	8.2	9.2	6.4
Capacity indicators							
Volume of landings (1000 t)			21.3	22.8	16.9	15.7	10.7
Fleet - number of vessels			64	68	60	56	39
Fleet - total GT (1000)			10	10.6	9.6	9.1	6
Fleet - total kW (1000)			32.8	35	31.2	28.9	19.4

Sources: National Board of Fisheries (unpublished).

15.5.1 Sweden: Cod > = 20m: composition of landings, 1992-1998

Major species/-groups of species	Value (SEK m)						Volume (1000 t)					
	1992	1994	1995	1996	1997	1998	1992	1994	1995	1996	1997	1998
Cod		61.8	96.2	101.4	124.3	106.6		7.1	10.9	12.7	12.2	7.6
Nephrops		1.4	3.1	1.4	1.8	2		0.02	0.05	0.03	0.03	0.03
Prawn		2.2	4.2	0	0	0		0.08	0.1	0	0	0
Other								3	14.1	11.7	4.1	3.5
Total		65.4	103.5	102.8	126.1	108.6		10.2	25.15	24.43	16.33	11.13

Sources: Statistics Sweden.

15.5.2 Sweden: Cod > = 20m: composition by size and age, 1998

Size class	Number	GT (1000)	kW (1000)	Age class	Number	GT (1000)	kW (1000)
5 - 49 GT				1996-97	1	0.2	0.7
50 - 119 GT	14	1.2	5.2	1994-95			
120 - 149 GT	6	0.8	2.4	1992-93			
150 - 200 GT	7	1.2	4	1990-91	1	0.2	1
>200 GT	12	2.8	7.8	1988-89	4	0.7	2.4
				1988 and older	33	5	15.3
Total	39	6	19.4	Total	39	6.1	19.4

Sources: National Board of Fisheries (unpublished).

15.6 Sweden: Cod < 20 m: economic and capacity indicators, 1992-1998

	1992	1993	1994	1995	1996	1997	1998
Costs and earnings (SEK m)							
Value of landings			75.2	153.1	99.5	84.5	62.8
Fuel costs			7.1	14.5	9.5	8	5
Other running costs			12.4	25.3	16.4	13.9	12.7
Vessel costs			14.7	60.1	5.2	22.6	9.5
Crew share			17.5	35.7	23.2	19.7	14.4
Gross cash flow			23.4	17.5	45.2	20.2	21.2
Depreciation			0	0	0	0	4.3
Interest			0	0	0	0	0.4
Net profit			23.4	17.5	45.2	20.2	16.5
Gross value added			40.9	53.2	68.4	39.9	35.6
Other economic indicators							
Employment on board (FTEs)			164	162	108	96	78
Invested capital *(SEK m)*			211.8	216.1	144.2	130.3	107.6
Effort (1000 days at sea)			9.2	8.3	6.3	6.3	4.8
Capacity indicators							
Volume of landings (1000 t)			5.1	7.6	4.7	4.7	3
Fleet - number of vessels			82	81	54	48	39
Fleet - total GT (1000)			3.3	3.5	2.3	2.3	1.6
Fleet - total kW (1000)			18.1	18.9	12.7	11.6	8.9

Sources: National Board of Fisheries (unpublished).

15.6.1 Sweden: Cod < 20 m: composition of landings, 1992-1998

Major species/-groups of species	Value (SEK m)						Volume (1000 t)					
	1992	1994	1995	1996	1997	1998	1992	1994	1995	1996	1997	1998
Cod		29.7	37.6	29.8	32.8	32		3.4	4.3	3.7	3.2	2.3
Nephrops		7.3	11.3	5.8	10.7	7.9		0.1	0.2	0.1	0.2	0.1
Prawn		1.7	2	1	0	0		0.06	0.06	0.03	0	0
Other								1.5	3	0.8	1.3	0.6
Total		38.7	50.9	36.6	43.5	39.9		5.06	7.56	4.63	4.7	3.0

Sources: Statistics Sweden.

15.6.2 Sweden: Cod < 20m: composition by size and age, 1998

Size class	Number	GT (1000)	kW (1000)	Age class	Number	GT (1000)	kW (1000)
5 - 49 GT	24	0.5	4.1	1996-97	1	0.1	0.3
50 - 119 GT	15	1	4.8	1994-95	-	-	-
120 - 149 GT				1992-93	2	0.1	0.5
150 - 200 GT				1990-91	2	0.1	0.7
>200 GT				1988-89	4	0.1	1
				1988 and older	30	1.1	6.4
Total	39	1,5	8.9	Total	39	1.5	8.9

Sources: National Board of Fisheries (unpublished).

15.7 Sweden: Nephrops: economic and capacity indicators, 1992-1998

	1992	1993	1994	1995	1996	1997	1998
Costs and earnings (SEK m)							
Value of landings			53.1	65.1	97.8	113.1	137.8
Fuel costs			6.1	7.5	11.2	13	14
Other running costs			10.6	13	19.6	22.6	34.5
Vessel costs			7.5	17.8	16.3	31.5	7.5
Crew share			13.1	16.1	24.1	27.9	36.7
Gross cash flow			15.8	10.7	26.5	18.1	45.1
Depreciation			0	0	0	0	0
Interest			0	0	0	0	0
Net profit			15.8	10.7	26.5	18.1	45.1
Gross value added			28.9	26.8	50.6	46	81.7
Other economic indicators							
Employment on board (FTEs)			160	132	182	180	210
Invested capital *(mSEK)*			181.1	154.3	212.9	214.1	254
Effort (1000 days at sea)			12.5	8.7	11.6	10.4	11.6
Capacity indicators							
Volume of landings (1000 t)			2.1	1.8	2.5	2.4	2.6
Fleet - number of vessels			80	66	91	90	105
Fleet - total GT (1000)			2.8	2.3	3.1	2.7	3.1
Fleet - total kW (1000)			16.4	13.8	18.4	17.5	20.4

Sources: National Board of Fisheries (unpublished).

15.7.1 Sweden: Nephrops, composition of landings, 1992-1998

Major species/-groups of species	Value (SEK m)						Volume (1000 t)					
	1992	1994	1995	1996	1997	1998	1992	1994	1995	1996	1997	1998
Cod		6.4	6.6	8	10	15.7		0.7	0.7	1	1	1.1
Nephrops		21.4	22.2	33.3	40	53.2		0.4	0.4	0.6	0.6	0.8
Prawn		1.7	3.8	3.5	1	1.4		0.06	0.1	0.1	0.03	0.04
Other								0.9	0.6	0.8	0.7	0.7
Total		29.5	32.6	44.8	50.9	70.3		2.06	1.8	2.5	2.33	2.64

Sources: Statistics Sweden.

15.7.2 Sweden: Nephrops: composition by size and age, 1998

Size class	Number	GT (1000)	kW (1000)	Age class	Number	GT (1000)	kW (1000)
5 - 49 GT	87	1.9	15.5	1998-99	1	0.1	0,4
50 - 119 GT	18	1.2	4.9	1996-97			
120 - 149 GT				1994-95	1	0	0.2
150 - 200 GT				1992-93			
>200 GT				1990-91	4	0.1	0.9
				1988-89	10	0.2	2.2
				1988 and older	89	2.7	16.7
Total	105	3.1	20.4	Total	105	3.1	20.4

Sources: National Board of Fisheries (unpublished).

15.8 Sweden: Net / Hook: economic and capacity indicators, 1992-1998

	1992	1993	1994	1995	1996	1997	1998
Costs and earnings *(SEK m)*							
Value of landings			57	35.9	57	45.5	34.5
Fuel costs			4.1	2.6	4.1	3.3	2.2
Other running costs			12.4	7.8	12.4	9.9	8.2
Vessel costs			17.8	7.3	16.5	6	0.3
Crew share			10.4	6.5	10.4	8.3	5.5
Gross cash flow			12.3	11.7	13.6	18	18.3
Depreciation			0	0	0	0	0
Interest			0	0	0	0	0
Net profit			12.3	11.7	13.6	18	18.3
Gross value added			22.7	18.2	24	26.3	23.8
Other economic indicators							
Employment on board (FTEs)			144	152	152	164	130
Invested capital *(SEK m)*			154.7	163.7	159.2	171.4	133.2
Effort (1000 days at sea)			4.1	4.4	8	10	8.4
Capacity indicators							
Volume of landings (1000 t)			2.4	3.7	5.4	4.9	3
Fleet - number of vessels			72	76	76	82	65
Fleet - total GT (1000)			2.3	2.6	2.6	2.7	1.9
Fleet - total kW (1000)			11.8	12.9	12.9	13.8	10.8

15.8.1 Sweden: Net / Hook: composition of landings, 1992-1998

Major species/-groups of species	Value (SEK m)						Volume (1000 t)					
	1992	1994	1995	1996	1997	1998	1992	1994	1995	1996	1997	1998
Cod		18.3	30.6	40.8	47.9	38		2.1	3.5	5.1	4.7	2.7
Herring		0.5	0.3	0.6	0.2	0.3		0.2	0.1	0.2	0.1	0.1
Turbot		0	1.2	2.8	2.5	2.8		0	0.04	0.08	0.07	0.07
Other								0.06	0.03	0.03	0.05	0.06
Total		18.8	32.1	44.2	50.6	41.1		2.36	3.67	5.41	4.92	2.93

15.8.2 Sweden: Net / Hook: composition by size and age, 1998

Size class	Number	GT (1000)	kW (1000)	Age class	Number	GT (1000)	kW (1000)
5 - 49 GT	58	1.3	8.9	1996-97	2	0.04	0.4
50 - 119 GT	6	0.4	1.6	1994-95			
120 - 149 GT	1	0.1	0.3	1992-93	1	0.1	0.3
150 - 200 GT				1990-91			
>200 GT				1988-89	3	0.1	0.5
				1988 and older	59	1.6	9.6
Total	65	1.8	10.8	Total	65	1.8	10.8

16. The United Kingdom

16.0 United Kingdom: Position of segments in national fleet, 1998

	Total Fleet	Fleet segment					
		Scottish Demersal Trawlers <24M	Scottish Demersal Trawlers 24M and Over	North Sea and West of Scotland Nephrop Trawlers	Scottish Demersal Seiners	N. Ireland Nephrops Trawlers	Others
Economic Indicators							
Value of Landings (mEUR)	962.9	158.5	116.9	104.5	66.2	22.6	494.2
Gross Value Added (mEUR)		77.3	65.9	63.7	36.1	14.1	
Gross Cash Flow (mEUR)		24.1	24.0	32.6	12.7	5.1	
Net (financial) result (mEUR)		14.0	16.5	27.4	9.0	3.2	
Other economic indicators							
Employment on Board	17,847	1,185	624	1,244	511	464	13,819
Invested Capital (mEUR)		128.4	138.7	64.4	80.3	16.3	
Effort (days-at-sea)		54,676	28,808	63,260	19,272	23,432	
Capacity Indicators							
Volume of Landings (000t)	923.8						
Fleet - Number of Vessels (inc. <10m)	7,639	237	104	311	73	116	6,798
Fleet - Total Registered Tonnage (000s)	209.6	13.2	14.6	10.4	5.7	3.9	161.8
Fleet - Total kW (000s)		72.5	57.0	57.0	30.3	21.8	

Source: MAFF, SERAD, Sea Fish Industry Authority

16.1.1 United Kingdom: national fleet, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and Earnings (mGBP)						
Value of Landings	526.0	561.4	590.1	636.5	621.9	661.5
Fuel Costs						
Other Running Costs						
Vessel Costs						
Crew Share						
Gross Cash Flow						
Depreciation						
Interest						
Net Result						
Gross Value Added						
Other Economic Indicators						
Employment on Board	22,757	20,703	19,921	19,044	18,604	17,847
Invested Capital (mGBP)						
Effort (Days-at-Sea)						
Capacity Indicators						
Volume of Landings (000t)	857.6	874.9	911.8	892.3	881.9	923.8
Fleet - Number of Vessels (inc. <10m)	11,108	10,297	9,174	8,073	7,812	7,639
Fleet - Total Registered Tonnage (000s)	213.7	205.7	206.6	205.8	206.3	209.6
Fleet - Total kW (000s)						

Source: MAFF, Sea Fish Industry Authority.

16.1.2 United Kingdom: National fleet, composition of landings, 1993-1998

Group of species	Value (mGBP)						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Haddock	55.2	61.6	55.4	54.7	45.4	57.7	87.6	93.7	86.3	89.7	83.4	83.4
Cod	67.9	68.6	70.3	74.2	71.4	83.9	67.3	68.9	78.7	79.8	74.6	77.2
Monks	37.5	40.2	45.1	57.2	56.1	45.9	18.9	20.0	24.5	32.2	29.8	21.7
Mackerel	38.7	37.7	40.4	58.8	61.7	87.6	257.7	238.5	218.5	148.2	149.5	179.7
Nephrops	51.1	62.4	63.1	58.9	65.0	58.1	28.8	30.5	31.9	29.7	31.7	29.2
Plaice	40.2	37.4	33.4	33.0	32.4	27.3	36.3	32.8	29.2	25.7	26.6	23.5
Scallops	13.8	21.2	24.3	27.0	27.6	30.2	9.3	14.0	15.7	17.1	18.7	20.1
Other	221.6	232.3	258.1	272.7	262.3	270.8	351.7	376.5	427.0	469.9	467.6	489.0
Total	526.0	561.4	590.1	636.5	621.9	661.5	857.6	874.9	911.8	892.3	881.9	923.8

Source: MAFF.

16.1.3 United Kingdom: National fleet, composition of the segment by age and size, 1998

Size Class (RT)	Number	RT (1000)	kW (1000)	Age Class	Number	RT (1000)	kW (1000)
20-149				1998	23	9.2	24.9
150-249				1997	23	7.5	16.6
250-349				1996	28	13.0	21.0
350-449				1995	24	5.1	15.3
450-549				1994	14	2.9	8.8
550-649				1986-93	476	39.9	151.2
650 +				1981-85	251	21.0	84.0
				1976-80	258	23.6	93.9
				1971-75	402	29.6	129.9
				Older	653	38.6	150.9
Total	2,152	190.4	696.5	Total	2,152	190.4	696.5

Source: MAFF.
Over 10m vessels only (excluding Channel Islands).

16.2.1 United Kingdom: Scottisch demersal trawlers, economic and capacity indicators, 1993-1998

	1993	*1994*	1995	1996	1997	1998
Costs and Earnings (mGBP)						
Value of Landings	135.1	*111.8*	155.7		164.0	189.3
Fuel Costs	14.7	*11.4*	16.6		18.0	13.7
Other Running Costs	23.0	*19.0*	28.2		33.1	36.2
Vessel Costs	45.9	*38.1*	43.4		39.2	41.0
Crew Share	41.5	*36.9*	47.0		51.7	65.3
Gross Cash Flow	10.0	*6.4*	20.6		22.0	33.1
Depreciation	17.2	*14.5*	17.5		18.3	9.9
Interest	7.6	*6.3*	5.4		15.5	2.1
Net Result	-14.8	*-14.4*	-2.3		-11.8	21.0
Gross Value Added	51.5	*43.3*	67.5		73.8	98.4
Other Economic Indicators						
Employment on Board	2,378	*1,923*	2,285		2,073	1,809
Invested Capital (mGBP)	178.6		205.7		182.8	183.5
Effort (Days-at-Sea)	87,854	*68,709*	96,288		85,435	83,484
Capacity Indicators						
Volume of Landings (000t)						
Fleet - Number of Vessels (not inc. <10m)	403	*362*	408		371	341
Fleet - Total Registered Tonnage (000s)	29,0	*28.6*	30.0		27,1	27,8
Fleet - Total kW (000s)	149.0	*142.6*	155.6		148.1	129,4

Source: SERAD, Sea Fish Industry Authority.

16.2.2 United Kingdom: Scottish demersal trawlers, composition of landings, 1993-1998

Major species/-groups of species	Value (Euro						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Other												
Total												

16.2.3 United Kingdom, Scottish demersal trawlers, composition by size and age, 31.12.1998

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT				1967-1994			
50 - 119 GRT				1986 and older			
120 - 149 GRT							
>200 GRT							
Total				Total			

16.3.1 United Kingdom: Scottish nephrops trawlers, economic and capacity indicators, 1993-1998

	1993	*1994*	1995	1996	1997	1998
Costs and Earnings (mGBP)						
Value of Landings	73.7	*89.7*	102.4		52.1	71.8
Fuel Costs	8.8	*8.8*	8.5		4.7	7.8
Other Running Costs	12.0	*14.2*	14.8		10.0	8.9
Vessel Costs	21.8	*26.9*	24.5		11.8	11.4
Crew Share	21.0	*25.1*	31.9		17.7	21.4
Gross Cash Flow	10.0	*14.6*	22.7		7.9	22.4
Depreciation	8.7	*6.8*	6.8		4.4	2.8
Interest	2.7	*2.6*	1.5		3.7	0.8
Net Result	-1.5	*5.2*	14.5		-0.2	18.8
Gross Value Added	31.0	*39.8*	54.6		25.7	43.8
Other Economic Indicators						
Employment on Board	1,656	*1,789*	1,693		1,356	1,244
Invested Capital (mGBP)			102.5		44.1	44.3
Effort (Days-at-Sea)	81,608	*77,376*	72,496		64,749	63,260
Capacity Indicators						
Volume of Landings (000t)						
Fleet - Number of Vessels (inc. <10m)	404	*416*	368		339	311
Fleet - Total Registered Tonnage (000s)	9.2	*9.6*	8.7		11.4	10.4
Fleet - Total kW (000s)	59.9	*64.5*	58.0		67.1	57.0

Source: SERAD, Sea Fish Industry Authority.

16.3.2 United Kingdom: Scottish nephrops trawlers, composition of landings, 1993-1998

Major species/-groups of species	**Value *(national currency)***						**Volume (1000 t)**					
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Other												
Total												

16.3.3 United Kingdom: Scottish nephrops trawlers, composition by size and age, 31.12.98

Size class	**Number**	**GRT (1000)**	**kW (1000)**	**Age class**	**Number**	**GRT (1000)**	**kW (1000)**
5 - 49 GRT				1996-97			
50 - 119 GRT				1994-95			
120 - 149 GRT				1992-93			
>200 GRT				1990-91			
				1988-89			
				1988 and older			
Total				Total			

16.4.1 United Kingdom: Scottish demersal seiners, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and Earnings (mGBP)						
Value of Landings						45.5
Fuel Costs						3.1
Other Running Costs						9.7
Vessel Costs						7.9
Crew Share						16.1
Gross Cash Flow						8.7
Depreciation						2.1
Interest						0.4
Net Result						6.2
Gross Value Added						24.8
Other Economic Indicators						
Employment on Board						511
Invested Capital (mGBP)						55.2
Effort (days-at-Sea)						19,272
Capacity Indicators						
Volume of Landings (000t)						
Fleet - Number of Vessels (not inc. <10m)						73
Fleet - Total Registered Tonnage (000s)						5.7
Fleet - Total kW (000s)						30.3

Source: SERAD, Sea Fish Industry Authorithy.

16.4.2 United Kingdom: Scottish demersal seiners, composition of landings, 1993-1998

Major species/-groups of species	**Value *(national currency)***						**Volume (1000 t)**					
	1993	**1994**	**1995**	**1996**	**1997**	**1998**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Other												
Total												

16.4.3 United Kingdom: Scottish demersal seiners, composition by size and age, 31.12.98

Size class	**Number**	**GRT (1000)**	**kW (1000)**	**Age class**	**Number**	**GRT (1000)**	**kW (1000)**
5 - 49 GRT				1996-97			
50 - 119 GRT				1994-95			
120 - 149 GRT				1992-93			
>200 GRT				1990-91			
				1988-89			
				1988 and older			
Total				Total			

16.5.1 United Kingdom: N. Ireland neprophs trawlers, economic and capacity indicators, 1993-1998

	1993	1994	1995	1996	1997	1998
Costs and Earnings (mGBP)						
Value of Landings						15.5
Fuel Costs						1.0
Other Running Costs						1.9
Vessel Costs						2.9
Crew Share						6.2
Gross Cash Flow						3.5
Depreciation						1.1
Interest						0.2
Net Result						2.2
Gross Value Added						9.7
Other Economic Indicators						
Employment on Board						464
Invested Capital (mGBP)						11.2
Effort (Days-at-Sea)						23,432
Capacity Indicators						
Volume of Landings (000t)						
Fleet - Number of Vessels (inc. <10m)						116
Fleet - Total Registered Tonnage (000s)						3.9
Fleet - Total kW (000s)						21.8

Source: Richard Banks Ltd., Sea Fish Industry Authority.

16.5.2 United Kingdom: N. Ireland nephrops trawlers, composition of landings, 1993-1998

Major species/-groups of species	Value *(national currency)*						Volume (1000 t)					
	1993	1994	1995	1996	1997	1998	1993	1994	1995	1996	1997	1998
Other												
Total												

16.5.3 United Kingdom: N. Ireland nephrops trawlers, composition by size and age, 31.12.98

Size class	Number	GRT (1000)	kW (1000)	Age class	Number	GRT (1000)	kW (1000)
5 - 49 GRT				1996-97			
50 - 119 GRT				1994-95			
120 - 149 GRT				1992-93			
>200 GRT				1990-91			
				1988-89			
				1988 and older			
Total				Total			

17. Common Method

The following indicators have been commonly used in the different country contributions. Most of them are the same as have been developed duringthe Workshop on an Annual Economic Report, held in Brussels, 20-23 February 1995 [1]). The methodology of imputing capital cost follows the common method in Davidse et al. (1993) [2]).

Value of landings

The volume of landed fish valued against actual market prices.

Gross value added (GVA)

Value of landings minus cost paid to other (supplying) industries. The remaining amount is the reward for labour and capital, employed in fisheries. It is the sum of cost of labour, depreciation, interest and the net profit. The gross value added is also expressed per employed, for reasons of comparison.

Gross cash-flow (GCF)

Value of landings minus all expenses, except depreciation and interest. This indicator shows the amount available for interest payments and repayments of loans and also for depreciation and interest regarding own capital.

Net profit

Value of landings minus all cost, including depreciation and an imputed interest amount. This balance is the reward for entrepreneurship.

Employment on board

The number of crew members measured as full time equivalents (FTEs).

[1] EC, Commission Staff Working Paper: Assesing the economic performances of selected fleet segments in the EU, 1996,

[2] W.P.Davidse et al., Costs and earnings of fishing vessels in four EC countries, LEI-DLO Research Report 110, June 1993.

Invested capital

The amount of capital invested in the vessel at a certain moment. Hence, not the annual investments in new buildings etc. The book value, based on the replacement value, is a measure for the invested capital; in a number of cases, the insured value of the vessel has been taken as an approach for the invested capital. The value of fishing rights has not been included.

Effort

Measured in days at sea, which may include days for travelling to and from the fishing grounds.

Other running cost

This cost item consists of cost of selling fish via the auction, cost of treatment of the fish, etc.

Vessel cost

Repair and maintenance cost form the biggest part of these cost. The amounts may be biased by investments for equipments, occurring in profitable years. These investments could not always be separated from 'real' annual repair and maintenance cost.

Depreciation

Many different depreciation systems occur in the countries included in this report. Therefore a common method of depreciation has been developed. The replacement value of the vessel is the basis of this depreciation.The replacement value is equal to the current building costs of a similar new vessel.

The hull of the vessel is depreciated in 25 years, 4% per year (straight-line) on the basis of the replacement cost. After this period 2% of the replacement value is depreciated as an estimate for improvements on these older vessels.

Engines with heavy use are depreciated in ten years, 10% per year and 4% after this period. In cases of more light use the depreciation period is 15 years, 6.7% per year and 2.5% after this period. All percentages are applied on the replacement cost.

When the amount of the engine alone is not known a breakdown between hull and engine of 2:1 is assumed.

Interest

The real interest cost per vessel differ widely due to differences in the level of loans. To eliminate these differences an imputed interest has been calculated which reflects the opportunity cost of the capital, invested in the vessel. Hence, this interest is independent of the way the vessel is financed.

Basis for this calculation is the book value of the vessel, which is derived from the above mentioned replacement value and the depreciation system.

The real interest rate, i.e. the difference between the rate for Government Bonds and the inflation rate, has been applied on this book value. This results in the imputed interest amount.

18. Exchange rates and inflation indices

Macro-economic data (source: European Economy 1998)

Exchange rates (Euro = ...National currency)

	1991	1992	1993	1994	1995	1996	1997	1998
BEF	42.223	41.593	40.471	39.657	38.552	39.299	40.530	40.620
DKK	7.909	7.809	7.594	7.543	7.328	7.359	7.484	7.499
DEM	2.051	2.020	1.936	1.925	1.874	1.910	1.964	1.969
GRD		2,470.30	2,685.70	2,880.30	3,029.90	3,055.50	3,093.60	3,307.30
ESP	1,325.30	1,491.20	1,589.20	1,630.00	1,607.50	1,658.90	1,671.80	1,672.00
FRF	6.973	6.848	6.634	6.583	6.525	6.493	6.593	6.601
IEP	0.768	0.761	0.800	0.794	0.816	0.793	0.748	0.786
ITL	1,533.200	1,595.500	1,841.200	1,915.100	2,130.100	1,959.000	1,929.300	1,943.700
NLG	2.311	2.275	2.175	2.158	2.099	2.140	2.211	2.220
ATS	14.431	14.217	13.624	13.540	13.182	13.435	13.820	13.850
PTE	1,786.10	1,747.10	1,883.70	1,969.00	1,961.00	1,957.60	1,985.90	2,017.00
FIM	5.002	5.807	6.696	6.191	5.709	5.828	5.881	5.983
SEK	7.479	7.533	9.122	9.163	9.332	8.515	8.651	8.916
GBP	0.701	0.738	0.780	0.776	0.829	0.814	0.692	0.676
IC			79.253	83.106	84.685	84.656	80.439	79.698
NO			8.310	8.374	8.286	8.197	8.019	8.466
USD	1.239	1.298	1.171	1.190	1.308	1.270	1.134	1.121

Price deflator GDP at market prices

	1991	1992	1993	1994	1995	1996	1997	1998
B	3.2	3.6	4.2	2.3	1.7	1.6	1.5	1.4
DK	2.2	3.2	0.6	1.6	2	1.9	2.7	2.7
D	3.9	5.6	4	2.4	2.1	1	0.6	1.2
EL	19.8	14.8	14.5	11.3	9.1	8.5	6.7	4
E	7.1	6.9	4.3	4	4.9	3.1	2.2	2.4
F	3.2	2.4	2.1	1.6	2.1	1.7	1.1	0.7
IRL	1.8	2.1	4.3	1	0.4	1.1	2.4	2.2
I	7.7	4.7	4.4	3.5	5	5.1	2.6	2.2
L	1.5	4.3	0.7	5.3	0.7	0	3.1	2.8
NL	2.7	2.3	1.9	2.3	1.6	1.3	2	2.2
A	3.7	4.3	2.8	2.8	2.1	2.1	1.4	1.5
P	12.1	10.6	6	5.9	5.1	2.4	2	2.8
FIN	2.5	0.7	2.4	1.3	2.4	1.3	1.2	2
S	7.6	1	2.6	2.5	3.7	1	1.2	2
UK	6.6	4.6	3.2	1.6	2.4	3	2.6	2.3
EUR 15	5.5	4.5	3.7	2.6	2.9	2.4	1.8	1.9
EU 11	4.9	4.5	3.7	2.7	2.9	2.2	1.5	1.7
IC								
NO								
US	3.9	2.7	2.7	2.2	2.2	2.3	2	2
JP	2.7	1.7	0.6	0.2	-0.7	-0.4	0.7	0.05

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