

The 2011 Annual Economic Report on the EU Fishing Fleet (STECF-11-16)

Scientific, Technical and Economic
Committee for Fisheries (STECF)

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THE 2011 ANNUAL ECONOMIC REPORT ON THE EU FISHING FLEET (STECF-11-16)

THIS REPORT WAS REVIEWED DURING THE PLENARY MEETING HELD IN BRUSSELS 7-11 NOVEMBER 2011

Request to the STECF

STECF is requested to review the report of the **EWG-11-04** held from May 23 – 27, 2011 in Ispra, evaluate the findings and make any appropriate comments and recommendations.

Introduction

At its 2011 summer plenary meeting (STECF-PLEN 11-02), STECF commented on a draft version of the 2011 AER. The report has now been finalised and in reviewing the final report, STECF noted the following:

STECF OBSERVATION

STECF notes that procedures for automatic and manual checks introduced by the JRC have improved data coverage and quality. Technical guidelines were introduced by the JRC on clustering vessel segments to protect confidentiality of data. Some MS did not follow the guidelines correctly resulting in inconsistency of some time series.

The first draft of AER 2011 highlighted an inconsistency of approach to capital value estimation across MS. A DCF workshop was held in Naples, June 2011, which produced draft guidelines for the PIM method of capital value estimation. EWG 11-18 on economic data quality issues reviewed the workshop report and endorsed its main findings and conclusions. EWG 11-18 also reviewed current guidelines for AR (technical report) on clustering.

The STECF review noted a number of positive developments in producing the AER and proposes that the following procedures be adopted or continued:

1. The JRC has initiated extremely useful routine data checking procedures for economic data submitted by Member States and would encourage further enhancement of such procedures.
2. Two EWG meetings should be convened to produce the AER in 2012. The first will ideally focus on reviewing and checking quality of submitted data and the second should be solely dedicated to analysis, discussions and drafting the report. The process should be scheduled so that the AER can be finalised and approved at the STECF summer plenary.
3. In an attempt to ensure consistency of data submissions by Member States, the 2012 call for fleet economic data should only request data collected under the DCF, covering 2008, 2009 and 2010.
4. The next fleet economic data call issued by JRC (early 2012) should contain improved guidance on fleet segment codification, particularly in the case of clustering. To do this JRC data call designers

should follow ensure consistency with the guidelines for National Programmes on the nomenclature of clustered segments. Specifically, clustered segments should be named after the “important segment with distinct characteristics” as proposed in the methodology for clustering in Annex 2 of the STECF EWG 11-18 report. It would also be extremely useful if the resulting ‘updated’ guidelines on how to cluster economic data were issued to Member States well of the 2012 fleet economic data call, so that, if necessary, MS will have time to seek clarification on advised procedures before uploading their data.

5. It would be useful if in future, a summary document containing key findings from the EU overview section of the AER report can be prepared and published. As far as possible, the contents of the summary report should follow the proposals given in Section 5.4 of the STECF PLEN 11-01 report.

6. To increase access and transparency of data used to compile the AER, it would be useful if those data can be made available on the JRC data collection website in a user-friendly format.

EXPERT WORKING GROUP REPORT

REPORT TO THE STECF

EXPERT WORKING GROUP OF THE 2011 ANNUAL ECONOMIC REPORT ON THE EU FISHING FLEET (EWG-11-04)

Ispra, Italy, 23-27 May 2011

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

1 EXECUTIVE SUMMARY

The 2011 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides a comprehensive overview of the latest information available on the structure and economic performance of EU Member States fishing fleets.

Results suggest that the total number of fishers employed in the EU fishing fleet (excluding Greece) in 2009 was around 135,000, a decrease of approximately 8% when compared to 2005 figures, despite a slight increase between 2008 and 2009. Data on crew costs and employment levels suggest that average wages have decreased in recent years. The average wage per total employed and per FTE in 2009 was €14,700 and €18,350 respectively, significantly lower than 2004 levels, despite increasing by 37% and 7% respectively from 2008 to 2009.

The total weight and corresponding value of all fish landed by the EU fishing fleet in 2009 was 4.4 million tons and €6.4 billion respectively. Landings by the EU fleet appear to have peaked in both weight and value terms in 2007. Compared with 2007 figures the total weight and value of landings were 17% and 15% lower in 2009 respectively. DCF data submitted on weight and value of landings by species (Greece and Spain excluded) reveal that European sprat achieved the highest volume of landings by the remaining EU fleet, having narrowly overtaken Atlantic herring. The total weight of landings of sprat in 2009 was 508.9 thousand tons, an increase of 25% from 2008, while the total weight of herring landings was 505.1 thousand tons in 2009, a decrease of around 9% from 2008. The data also reveal that Common sole achieved the highest value of landings, having narrowly overtaken Norway lobster. The total value of landings of Common sole in 2009 was €297 million, an increase of 7% from 2008, while the total value of Norway lobster landings was €289 million in 2009, a decrease of around 17% from 2008.

The total amount of income generated by the EU fishing fleet in 2009 (excluding Greece) was €6.8 billion. This amount consisted of just below €6.5 billion in fish sales, €36.9 million in fishing rights transactions, €99.8 million in non-fishing income, and €201.2 million in direct income subsidies. The total costs incurred by the EU fishing fleet in 2009 (excluding Greece) were €6.9 billion. This amount consisted of just below €2 billion in crew wages, €1.1 billion in fuel costs, €580 million in repair costs, €761 million in other variable costs, €898 million in fixed costs, €102 million for the cost of leasing fishing rights, €243 million in unpaid labour, €854 million in depreciation costs and further €353 million in estimated opportunity costs (interest).

In 2008 there was a significant overall reduction in the amount spent on crew wages and repair costs compared to 2007 (18% and 12% respectively), while there was a significant increase in the amount of expenditure on fuel compared to 2007 (+10%), largely due to the fuel price shock experienced by most sectors of the EU fleet in 2008. The data suggest that, as fuel prices eased in 2009, expenditure on crew wages and vessel repairs consequently increased (by 12% and 14% respectively), while the total fuel cost of the EU fleet fell significantly, both in absolute terms and as a proportion of total income.

The total amount of Gross Value Added (GVA), Operating cash flow (OCF) and economic profit generated by the EU fishing fleet (excluding Greece) in 2009 was €3.13 billion (a 13% increase from 2008), €1.35 billion (a 12% increase from 2008) and €-99.5 million (a decrease of €207 million from 2008) respectively. Between 2002 and 2008, GVA as a proportion of total income steadily decreased from around 54% in 2002 to 42% in 2008, while between 2002 and 2007, OCF as a proportion of total income steadily decreased from around 22% in 2002 to 18% in 2007. Data for 2009 appear to have bucked these trends, with an increase in GVA as a proportion of total income from 42% in 2008 to 46% in 2009, and an increase in OCF as a proportion of total income from 18% in 2008 to 20% in

2009. Despite the increases in the GVA and OCF, the EU fleet as a whole moved into a loss making position once capital costs had been accounted for.

When direct income subsidies are removed from the profit equation to calculate profits without direct income subsidies, the overall loss position is greater in 2009, from €99.5 million (-1.5% of total income) to €301 million (-4.6% of total income), while the EU fleet moves from an overall economic profit position to a loss making position in 2008, from €109 million (1.7% of total income) to €103 million (-1.6% of total income).

Analysis of economic performance by Member State reveals a mixed picture. The data suggest that 10 Member States generated an overall economic profit in 2009, compared to 13 in 2008. Eleven Member States made an economic loss in 2009 compared to eight in 2008 (Greece is excluded due to missing data). Only two Member States produced a negative cash flow in 2009, the same as in 2008. The Italian fleet generated the most GVA, OCF and economic profit in absolute terms in 2009 (24%, 31% and 58% of the EU totals respectively), despite earning around €700 million less than the Spanish national fleet. The Spanish fleet generated the second highest level of GVA (22.5% of the EU total), despite producing the largest overall economic losses of all EU Member States (€250 million). In relative terms the Italian fleet was also the most profitable in 2009, with GVA as a proportion of total income of 63%, and operating cash flow and profits as a percentage of income of around 34% and 15% respectively.

When comparing the economic performance of the mobile and passive gear segments, the data suggest that between 2005 and 2009 passive gear segments were more profitable. GVA, OCF and economic profits as a proportion of total income were consistently higher for the passive gears over the time period. GVA as a proportion of income varied between 50-60% for passive gears, compared to 40-50% for mobile gears. OCF fluctuated between 20-40% for passive gears, while mobile gears fluctuated between 10-20%. Passive gears made economic profits in 2008 and 2009, while the mobile gears made economic losses. Of all the gear types, the data suggest that beam trawl segments are the least profitable. During the period 2005-2008, this gear type consistently made losses, and only once generated an OCF greater than 10%.

The 2011 call for fleet economic data requested transversal data (effort, landings and capacity) from Member States for 2010 which was used to forecast fleet economic performance indicators for 2010. Only 10 out of the 22 Member States submitted the data required to carry out the forecasts. Results suggest that in 2010 total fleet income increased in 8 out of the 10 Member States. However, the forecasts also suggest that in 2010, GVA as a proportion of total income decreased in 5 out of 10 Member States, OCF as a proportion of total income decreased in 7 out of 10 Member States, and profit as a proportion of total income decreased in 9 out the 10 Member States.

2 INTRODUCTION

The 2011 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides a comprehensive overview of the latest information available on the structure and economic performance of EU Member States fishing fleets.

This publication includes:

1. An economic and structural overview of the EU fishing fleet
2. A detailed economic and structural overview of the fishing fleets from each EU Member State
3. Qualitative economic performance assessments for 2010 and 2011 for each EU Member State
4. Detailed economic and structural analyses of Member States key fleet segments
5. Analyses of the EU fishing fleet by region
6. The latest information on EU fish prices and price trends
7. Analysis of DCF data relating to direct income subsidies
8. Analyses of DCF data relating to fishing rights

The report has been produced by fisheries economists from the JRC and a working group of economic experts (expert working group 11-04) convened under the Scientific, Technical and Economic Committee for Fisheries (STECF), which took place from the 23rd to 27th May 2011 in Ispra, Italy. The groups consisted of 17 independent experts from within the EU and 4 experts from the Joint Research Centre (JRC). The names and affiliations of these experts can be found in section 13.

The data used to compile all the various analyses contained within the report were collected under the frameworks of the Data Collection Regulation (DCR); cf. Council Regulation (European Commission (EC)) No 1543/2000 of 29 June 2000 and the data collection framework (DCF), cf. Council regulation (European Commission (EC)) No 199/2008 of 25th February 2008). The data call requested economic data for the years 2002 to 2011.

In terms of compliance with the data call deadline, similar to the 2010 data call, most Member States attempted to do so. However, the quality and coverage of most datasets required improvement once inspected by JRC and national experts. The majority of uploading activity again took place after the data call deadline which impacted on EWG 11-04 and JRCs ability to produce the 2011 AER in a timely manner.

In terms of the completeness of the Member States data submissions, most countries submitted the majority of parameters requested under the call. Overall, coverage increased in comparison to the results of the 2010 data call. In many cases missing data relates to fleet segments with low vessel numbers for which data is hard to obtain. However, Greece and to a lesser extent Spain have again not submitted significant amounts of data which makes an evaluation of the overall economic performance of the EU fishing fleet in 2009 not possible. In addition there are question marks as to whether some countries have submitted data on the entirety of their national fleets.

In terms of data quality, inevitably some 'abnormal' estimates for various parameters were detected by JRC or the experts and rectified by the Member States. In addition, guidelines on how to cluster fleet segments to report economic data have in some cases resulted in poorer quality data submissions for some Member States. A number of quality issues remain outstanding and JRC will continue to work on reducing those errors.

2.1 Terms of Reference for STECF EWG-11-04

Following Expert Working Group on Methodologies for 2011 economic reports (EWG -11-03) recommendations on the Annual Economic Report (AER) and the latest DCF call for economic data, is requested to produce a draft of the 2011 AER by analysing and commenting on the economic performance of MS national fishing fleets, regional EU fishing fleets and EU fish prices between 2002 and 2009, completed with 2010 data on catches and effort. In addition the working group will draft a special chapter of applied analysis, including two topics. During the meeting the JRC will provide experts with draft national, regional and fish price chapters that will be assessed and elaborated on by the experts in attendance.

The minimum content of AER-2011 should include:

- EU overview
- Regional Analysis
- National chapters
- Fish price analysis
- Special topics of applied economic analysis:
 - Analysis of the transactions and investments of fishing rights in the EU fleets.
 - Analysis of the subsidies in the EU Fleets and their importance for the fleet profitability.
- Report methodology section
- Appendices of data tables and quality indicator tables

2.2 Participants

The full list of participants at EWG-11-04 is presented in section 13.

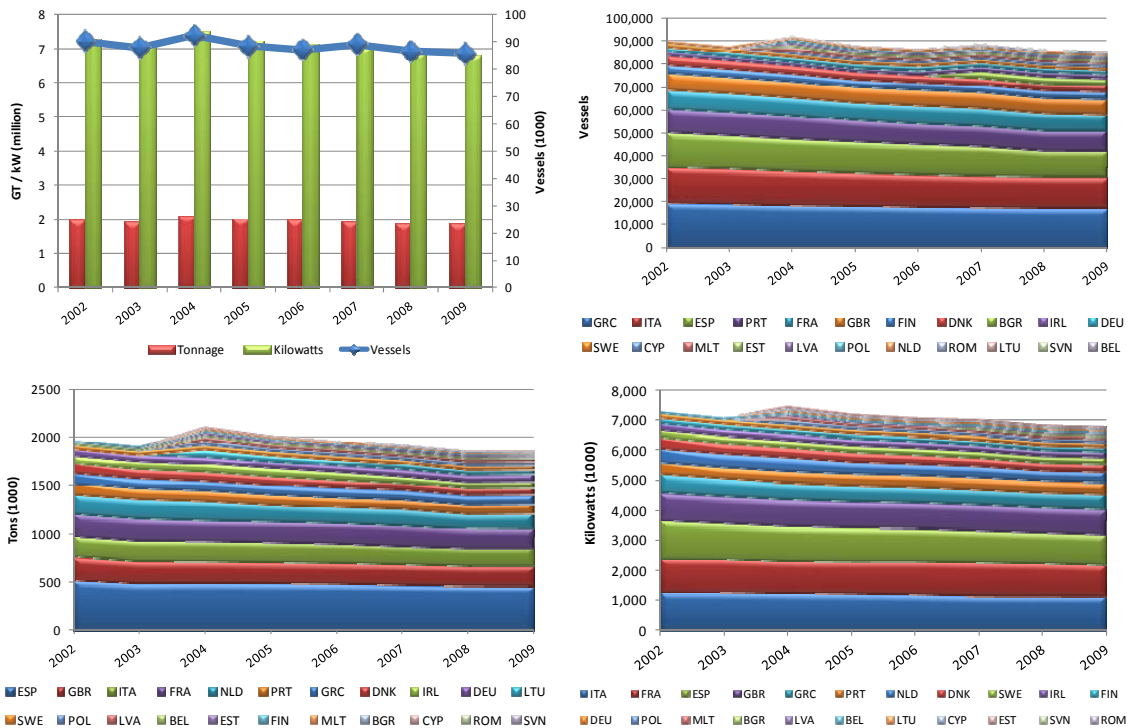
5 EU FLEET OVERVIEW

This chapter provides an overview of the structure and economic performance of the EU fishing fleet in 2009 and highlights some key trends between 2002 and 2010, based on data obtained from the latest DCF fleet economic data call and data held by Eurostat and the EU fishing fleet register.

5.1 EU fleet structure

According to data held by Eurostat and the EU fleet vessel register, the total number of vessels in the EU fishing fleet in 2009 was 85,702 vessels, with a combined gross tonnage (GT) of 1.87 million tons and total engine power of 6.82 million kilowatts (kW). The overall capacity of the EU fleet decreased between 2002 and 2009 (vessels: -4.9%, GT: -4.7% and kW: -6.5%), despite slight increases in 2004 and 2007 due to the inclusion of fleet capacity data for new EU Member States, see Figure 5.1 (upper left).

Figure 5.1 EU fishing fleet capacity trends



(Source: Eurostat / EU Fleet Register)

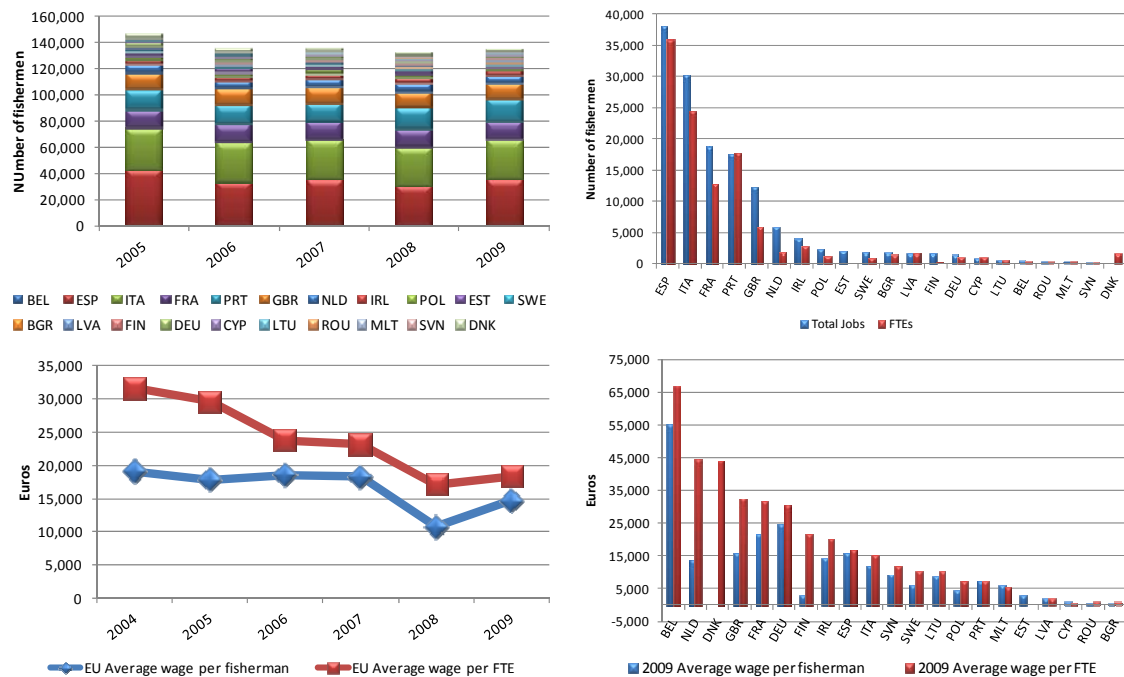
Greece was the Member State with the highest number of vessels in 2009 (20% of the total), followed by Italy (16%) and then Spain (13%), see figure 5.1, (upper right). Spain's fishing fleet was the largest in terms of tonnage (25% of the total), followed by the United Kingdom (11%) and then Italy (10%), see figure 5.1 (bottom left). Italy's fishing fleet was the largest in terms of engine power (17% of the total) followed by France (15%) and then Spain (15%), see figure 5.1 (bottom right). According to DCF data, the average age of vessels in the EU fleet (excluding Greece) was around 25 years in 2009. The Cypriot fleet was the oldest on average at around 48 years, while the Bulgarian fleet was the youngest, with an average vessel age of 15 years.

The total number of fishing enterprises reported by Member States was around 41,000 in 2009, a 2% increase from 2008. The vast majority of fishing enterprises (91%) owned one fishing vessel, while 8.5% of enterprises owned between two and five vessels. There were 245 fishing enterprises with six or more vessels throughout the EU in 2009.

5.2 Socio-economic structure of the EU fleet

According to Member States DCF data submissions, the total number of fishers employed in the EU fishing fleet (excluding Greece) in 2009 was 134,700, a decrease of around 8% when compared to 2005 figures, despite a slight increase between 2008 and 2009, see figure 5.2 (upper left). In arriving at these figures, data on FTEs was used for France and Denmark due to the non submission of data on total employed for these Member States fleets. Spain had the highest level of employment both in terms of total employed and FTEs of all EU Member States (excluding Greece) fleets (28% and 33% respectively), followed by Italy (22% and 23% respectively) and then France (14% and 12% respectively), see figure 5.2 (upper right).

Figure 5.2 EU fleet employment and average wage indicators



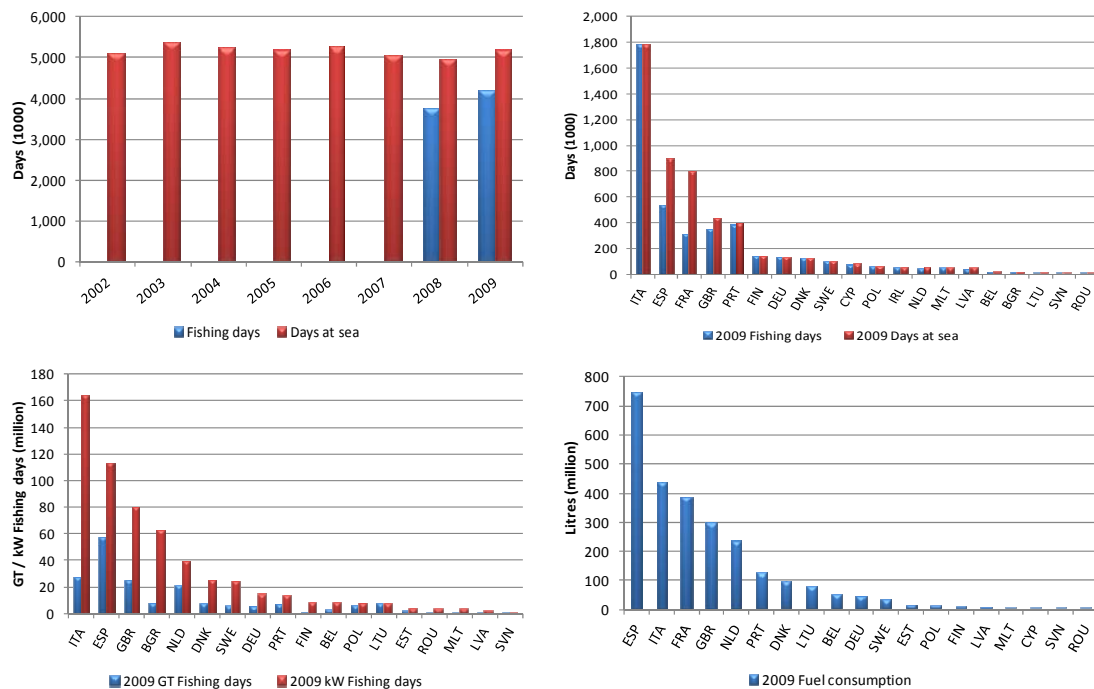
(Source: EU Member States DCF data submissions)

Data on crew costs and employment levels submitted by Member States suggest that average wages in the EU fish catching sector have decreased in recent years. The average wage per total employed and per FTE in 2009 was €14,700 and €18,350 respectively, significantly lower than 2004 levels, despite increasing by 37% and 7% respectively from 2008, see figure 5.2 (lower left). The increase from 2008 to 2009 is thought to be primarily due to higher incomes and lower fuel costs in 2009 compared to 2008. In 2009 the Belgian fishing fleet paid the highest wages per FTE on average (€66,900), followed by the Dutch fleet (€44,600), and then the Danish fleet (€43,800), see figure 5.2 (bottom right).

5.3 EU fleet fishing activity and output

According to Member States data submissions, the total number of days at sea reported by the EU fleet in 2009 was just under 5.2 million days, 4.2 million of which were actual fishing days, an increase of 5% and 12% respectively when compared to 2008; see figure 5.3 (upper left). These figures do not include Greece due to non-submission of data. Italy reported by far the highest number of days at sea in 2009 with 34% of the total, followed by Spain (17%) and then France (15%), see figure 5.3 (upper right).

Figure 5.3 EU fleet fishing effort indicators



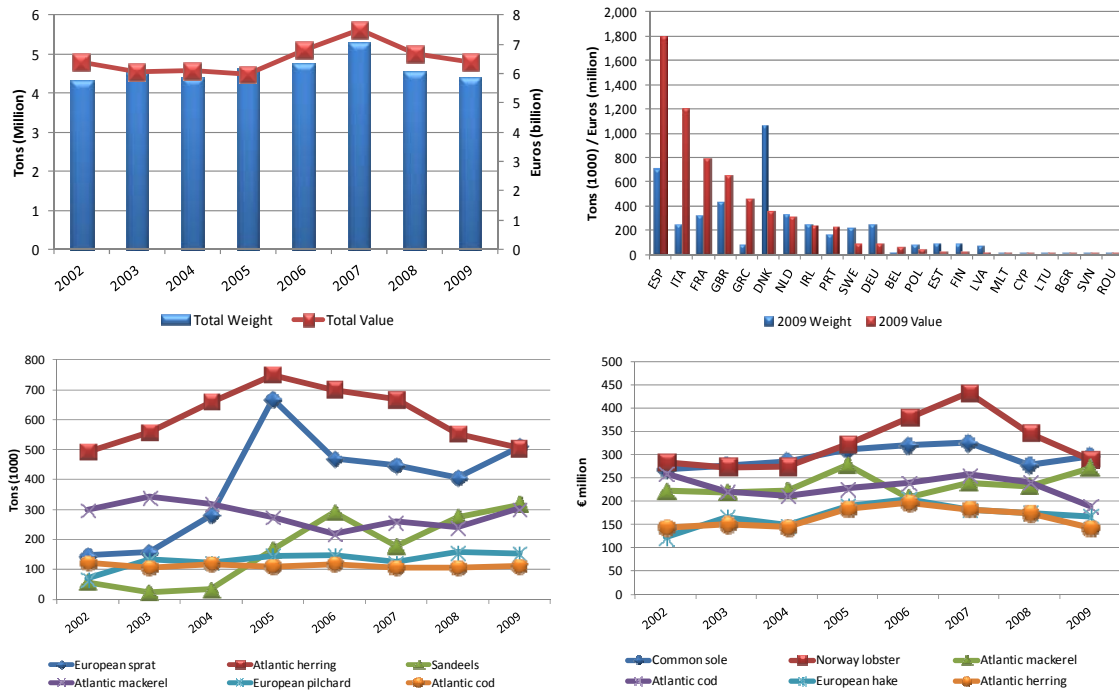
(Source: EU Member States DCF data submissions)

Data submitted on kW and GT fishing days by Member States (Greece, Ireland, France and Cyprus have been excluded due to missing or inconsistent data) reveals that total kW fishing days for the remaining EU fleet in 2009 was 581 million, while total GT days was just under 187 million. The Italian fleet produced the most effort in terms of kW fishing days (28% of the total), while the Spanish fleet produced the most in terms of GT fishing days (31% of the total). The United Kingdom was the third most significant Member State in terms of both GT and kW days (13% and 14% of the totals respectively), see figure 5.3 (bottom left). France, Ireland and Cyprus were excluded due to inconsistent data. Data on the total amount of fuel consumed by Member States reveals that total consumption by the EU fleet was just under 2.6 billion litres in 2009, a 2.2% increase compared to consumption in 2008 (Greece, Ireland, Latvia and Bulgaria are excluded due to missing data). The Spanish fleet by far consumed the most fuel, with 29% of total consumption, followed by the Italian fleet (17%) and then the French fleet (15%), see figure 5.3 (bottom right).

According to Eurostat statistics, the total weight and corresponding value of all fish landed by the EU fishing fleet in 2009 was 4.4 million tons and €6.4 billion respectively.

Landings by the EU fleet appear to have peaked in weight and value terms in 2007, see Figure 5.4 (upper left). Compared with 2007 figures the total weight and value of landings were 17% and 15% lower in 2009 respectively. The Danish fleet landed the most in terms of weight in 2009 with 23% of the total landed in the EU, followed by the Spanish fleet (16%) and then the UK fleet (10%). In terms of the value of landings, in 2009 the Spanish generated the highest value for their catch (28% of the total), followed by Italy (19%) and then France (12%), see figure 5.4 (upper right).

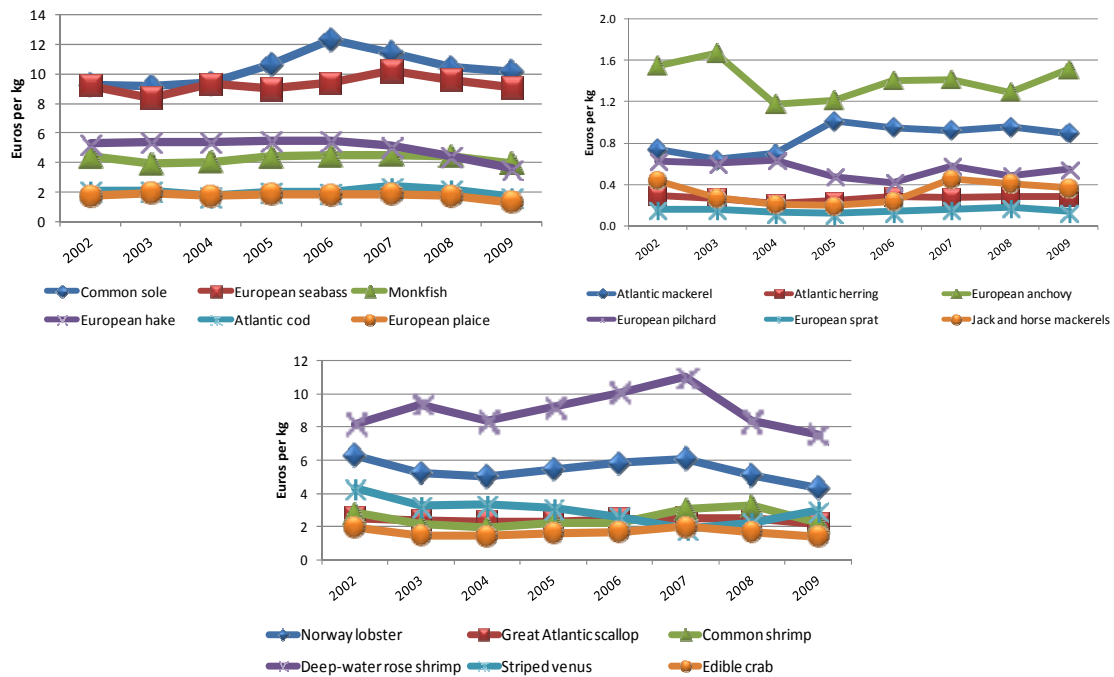
Figure 5.4 EU fleet weight and value of landings trends



(Source: Eurostat (upper) and EU Member States DCF data submissions (lower))

DCF data submitted on weight and value of landings by species (Greece and Spain are excluded due to non submission of landings data) reveal that European sprat achieved the highest volume of landings by the remaining EU fleet, having narrowly overtaken Atlantic herring. The total weight of landings of sprat in 2009 was 508.9 thousand tons, an increase of 25% from 2008, while the total weight of herring landings was 505.1 thousand tons in 2009, a decrease of around 9% from 2008, see Figure 5.4 (lower left). The data also reveals that Common sole achieved the highest volume of landings by the remaining EU fleet, having narrowly overtaken Norway lobster. The total value of landings of Common sole in 2009 was €297 million, an increase of 7% from 2008, while the total value of Norway lobster landings was €289 million in 2009, a decrease of around 17% from 2008, see figure 5.4 (lower right).

Figure 5.5 EU fleet average first sales price trends for key species

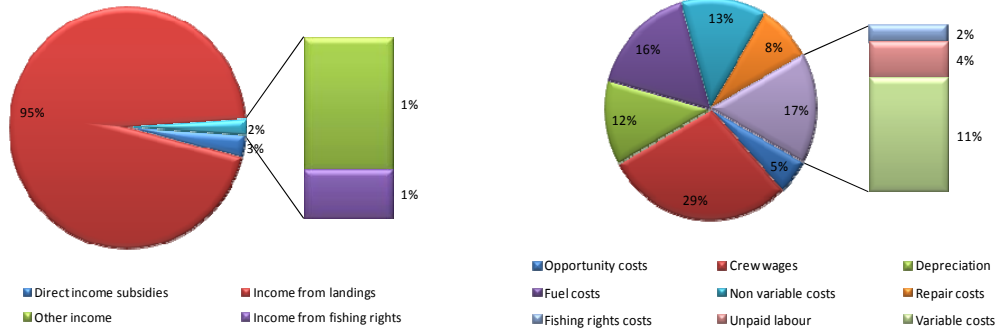


Data on landings volume and value submitted as part of the DCF data call were used to calculate average first sale prices of the most important demersal/flatfish, pelagic and shellfish species at overall EU level in terms of value in 2009, see figure 5.5. Spanish and Greek data were excluded for consistency. In terms of demersal and flatfish species (figure 5.5 upper left), we can see a definite downward slope in the average price of almost the top 6 species from 2007 onwards and in some cases from 2006 onwards. Common sole achieved the highest price in 2009 with €10.2 per kg. In terms of pelagic species (see figure 5.5 upper right) the data suggest an increase in average first sale price of anchovy and pilchards between 2008 and 2009 while the other pelagic species were relatively stable. Of the main pelagic species landed, anchovy achieved the highest first sales price in 2009 with €1.5 per kg. For the shellfish species the data suggest decreases in average first sales prices for most species, particularly Nephrops (Norway lobster), deep-water Rose shrimps (2007-2009) and striped Venus (clams) (2008-2009). Of the main shellfish species landed, deep-water Rose shrimps achieved the highest first sales price in 2009 at €7.5 per kg.

5.4 EU fleet economic performance

According to Member States DCF data submissions, the total amount of income generated by the EU fishing fleet in 2009 (excluding Greece) was €6.8 billion. This amount consisted of just below €6.5 billion in fish sales, €36.9 million in fishing rights rental income, €99.8 million in non-fishing income, and €201.2 million in direct income subsidies, see figure 5.6 (left).

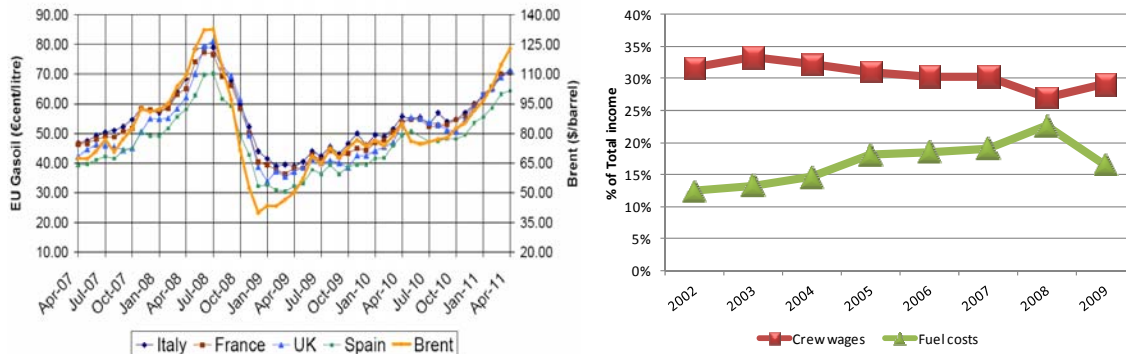
Figure 5.6 Income and cost type breakdown for the EU fleet in 2009



(Source: EU Member States DCF data submissions)

The total costs of the EU fishing fleet in 2009 (excluding Greece) were €6.9 billion. This amount consisted of just under €2 billion in crew wages, €1.1 billion in fuel costs, €580 million in repair costs, €761 million in other variable costs, €898 million in fixed costs, €102 million in fishing rights leasing costs, €243 million in unpaid labour, €854 million in depreciation costs and €353 million in calculated opportunity costs (interest), see figure 5.6 (right). In 2008 there was a significant overall reduction in the amount spent on crew wages and repair costs compared to 2007 (18% and 12% respectively), while there was a significant increase in the amount of expenditure on fuel compared to 2007 (+10%), largely due to the fuel price shock experienced by most sectors of the EU fleet in 2008. The data suggest that as fuel prices eased in 2009, expenditure on crew wages and repairs consequently increased (12% and 14% respectively), while the total fuel cost of the EU fleet fell significantly (-24%), both in real terms and in relation to total income, see figure 5.7 (right). Figure 5.7 (left) provides EU Gasoil and Brent prices for 2007-2011, which peaked in the summer of 2008 and have risen steadily since Spring 2009.

Figure 5.7 Trends in main cost items of the EU fleet

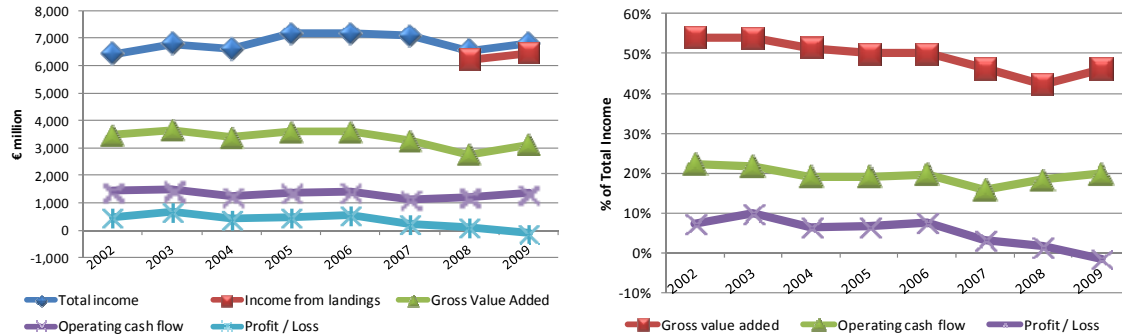


(Source: DG MARE (left) EU Member States DCF data submissions (right))

The total amount of Gross Value Added (GVA), Operating cash flow (OCF) and economic profit / Loss generated by the EU fishing fleet (excluding Greece) in 2009 was €3.13 billion (a 13% increase from 2008), €1.35 billion (a 12% increase from 2008) and €-99.5 million (a decrease of €207 million from 2008) respectively, see figure 5.8 (left). Figure 5.8 (right) shows GVA, OCF and economic profit as a proportion of total income. Between 2002 and 2008, GVA as a proportion of total income steadily decreased from around 54% in 2002 to 42% in 2008, while between 2002 and 2007, OCF as a

proportion of total income steadily decreased from around 22% in 2002 to 18% in 2007. Data for 2009 appears to have bucked these trends, with an increase in GVA as a proportion of total income from 42% in 2008 to 46% in 2009, and an increase in OCF as a proportion of total income from 18% in 2008 to 20% in 2009.

Figure 5.8 EU fleet economic performance indicators 2002-2009



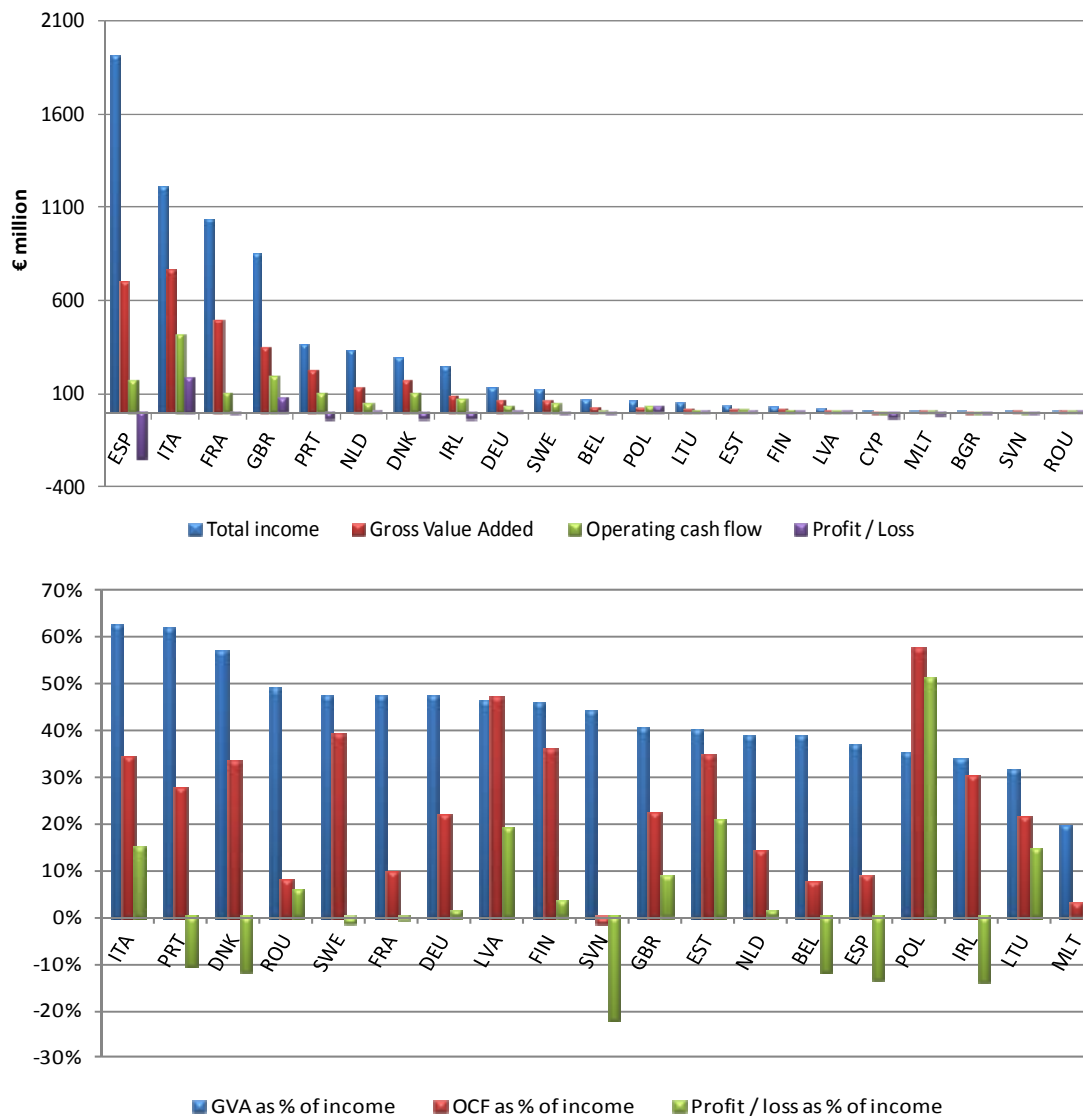
(Source: EU Member States DCF data submissions)

Notably, despite increases in GVA and OCF levels from 2008 to 2009, the EU fleet as a whole moved into a loss making position once capital costs have been accounted for. Capital costs consist of depreciation and opportunity cost. Depreciation values for 2009 are comparable to 2008, however the calculated opportunity costs for 2009 are significantly higher than the corresponding value for 2008 at EU level, resulting in an overall loss making position. Opportunity costs are calculated by taking inflation rates and nominal interest rates (normally long term risk free government bond rate) for each Member State of the year in question, from which the 'real' interest rate is calculated (see methodology section). The real interest rate is then multiplied by the total tangible asset value (current value of the fleet) for each Member State to produce the 'opportunity cost'. Large differences in calculated opportunity costs between 2008 and 2009 occurred for several Member States, which were mainly due to decreases in those Member States inflation rates between 2008 and 2009.

Analysis of economic performance by Member State reveals a mixed picture (see table 5.1 for main indicator totals for all Member States in 2009). Ten Member States generated an overall economic profit in 2009, compared to 13 in 2008. Eleven Member States made an economic loss in 2009 compared to eight in 2008 (Greece is excluded due to missing data). Only two Member States produced a negative cash flow in 2009, the same as in 2008; however the quality of data from these Member States is questionable and requires further investigation.

The Italian fleet generated the most GVA, OCF and economic profit in absolute terms in 2009 (24%, 31% and 58% of the EU totals respectively), despite earning around €700 million less than the Spanish national fleet. The Spanish fleet generated the second highest level of GVA (22.5% of the EU total), despite producing the largest overall economic losses of all EU Member States (€250 million), see figure 5.9 (upper). The Italian fleet was also the most profitable in 2009 in relative terms, see figure 5.9 (lower), with GVA as a proportion of total income of 63%, and operating cash flow and profits as a percentage of income of around 34% and 15% respectively.

Figure 5.9 EU Member States economic performance indicators in 2009



(Source: EU Member States DCF data submissions)

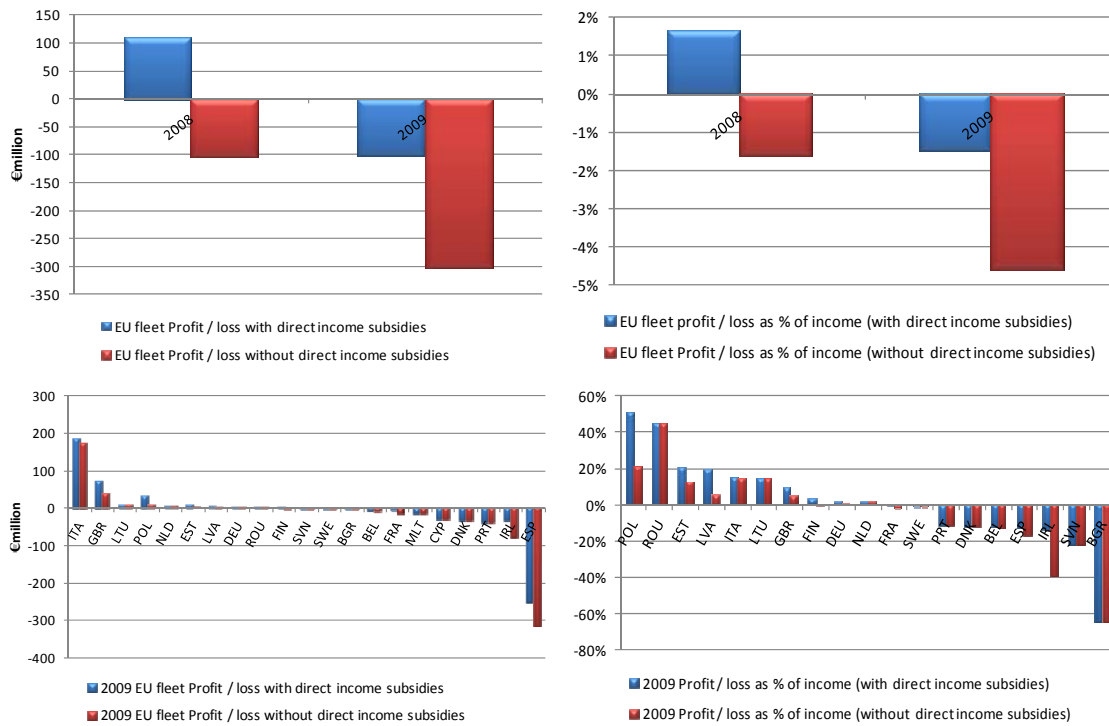
The estimates shown in figures 5.8 and 5.9 include direct income subsidies in the calculation of profit. When we remove the direct income subsidies from the profit equation, the overall loss position becomes greater in 2009, from €99.5 million (-1.5% of total income) to €301 million (-4.6% of total income), while the EU fleet moves from an overall economic profit position to a loss making position in 2008, from €109 million (1.7% of total income) to €-103 million (-1.6% of total income), see figure 5.10 (upper). Figure 5.10 (lower) breaks the calculations down by Member State. More information on the impact direct subsidies have on the economic performance of the EU fishing fleet can be found in chapter 9.

Table 5.1 Main indicator totals for Member States fishing fleets in 2009

	Number of registered vessels	GT (1000)	kW (1000)	Total jobs	FTEs	Energy consumption (mln litres)	Days at sea (1000)	Weight of landings (1000 tons)	Value of landings (€ million)	Direct subsidies (€ million)	Total income (€ million)	Gross Value Added (€ million)	Operating cash flow (€ million)	Profit / loss (€ million)	Fixed asset value (€ million)	Value of fishing rights (€ million)
BEL	100	19.0	60.6	409	335	52.9	17.7	19.0	68.0	0.9	69.6	27.0	5.4	-8.2	72.6	0.0
BGR	2205	7.7	60.3	1732	1430		12.8	7.1	2.7	0.0	3.1	-0.2	-1.4	-2.0	2.4	0.0
CYP	1768	6.8	69.3	937	1086	4.3	81.3	1.4	8.8	0.5	9.6	-8.9	-9.2	-30.0	376.0	0.0
DEU	1818	61.3	155.8	1415	1142	47.6	127.6	117.6	128.4	1.2	132.2	63.0	29.5	2.0	134.6	0.0
DNK	2786	74.4	269.2		1546	94.7	122.0	758.0	283.7	0.0	293.3	166.4	98.7	-34.1	422.2	848.3
ESP	12240	445.7	1137.8	38045	35844	745.9	892.4			62.8	1909.2	704.1	168.3	-250.2		
EST	963	17.8	45.9	2004		13.6		94.4	34.3	3.8	38.8	15.6	13.4	8.1	35.4	2.8
FIN	3240	16.9	174.8	1609	229	8.7	143.0	117.5	23.8	1.5	34.0	15.7	12.2	1.2	225.6	0.0
FRA	6475	176.3	929.4	18617	12823	383.5	791.8	336.4	788.0	10.7	1036.5	494.2	101.8	-5.5	1146.6	0.0
GBR	6525	215.6	850.3	12212	5847	296.0	432.0	576.6	754.4	35.9	847.0	344.8	191.6	74.6	555.5	832.7
GRC																
IRL	2026	69.9	193.6	3824	2694		207.9	262.6	173.0	44.9	245.0	82.6	73.5	-33.4	546.6	
ITA	14977	197.6	1270.7	30091	24397	437.6	1782.8	242.4	1202.0	12.8	1214.8	762.5	414.6	186.1	918.8	
LTU	220	50.5	59.8	639	529	77.6	11.3	206.8	39.5	0.0	55.7	17.6	12.2	8.2	31.7	0.0
LVA	814	12.4	32.7	1633	1633	6.6	48.0	78.5	17.5	3.4	23.6	11.0	11.2	4.5	54.8	0.0
MLT	1111	8.3	82.2	244	287	4.9	48.3	1.6	8.6	0.0	8.8	1.7	0.3	-16.5	39.5	1.7
NLD	712	129.4	288.6	5847	1805	233.9	49.2	332.1	309.5	0.0	326.6	127.6	47.1	4.6	165.7	267.4
POL	877	49.1	106.4	2202	1307	12.5	67.3	212.1	37.3	22.9	60.4	21.3	35.0	30.9	130.7	
PRT	8641	105.7	368.1	17511	17613	122.8	392.2	181.0	356.1	0.0	361.5	223.4	99.4	-38.0	996.3	0.0
ROU	441	2.3	8.7	289	244	0.3	6.3	0.3	0.6	0.0	0.6	0.5	0.3	0.3		
SVN	198	1.0	11.6	117	90	0.5	6.9	0.9	2.2	0.0	2.4	1.0	0.0	-0.5	3.3	0.0
SWE	1471	41.7	207.8	1758	1019	33.0	96.2	199.3	101.1	0.0	123.3	59.0	48.5	-1.5	163.3	0.0

(Source: EU Member States DCF data submissions)

Figure 5.10 EU fleet profits with and without direct income subsidies 2008-2009



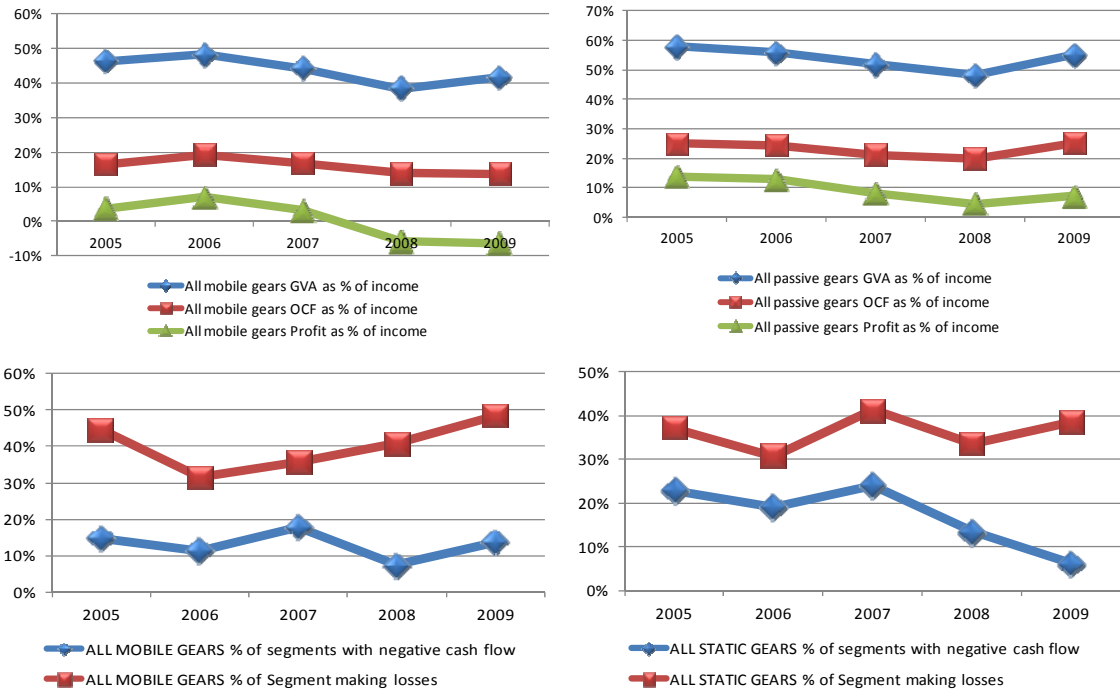
(Source: EU Member States DCF data submissions)

5.5 EU fleet economic performance by gear type

When comparing the economic performance of the mobile and passive gear segments, the data suggest that between 2005 and 2009 the passive gear segments were more profitable than the mobile gear segments. Figure 5.1111 (upper) shows that GVA, OCF and economic profits as a proportion of total income were consistently higher for the passive gears over the time period. GVA as a proportion of income varied between 50-60% for the passive gears, compared to 40-50% for the mobile gears. OCF fluctuated between 20-40% for passive gears, while mobile gears fluctuated between 10-20%. The passive gears made economic profits in 2008 and 2009, while the mobile gears made economic losses. Note that these calculations at segment level do not include all EU fleet segments due to missing and incomplete data sets. The segments included in these analyses accounted for 69% of the total number of vessels in the EU fleet and 86% of the total EU fleet income in 2009.

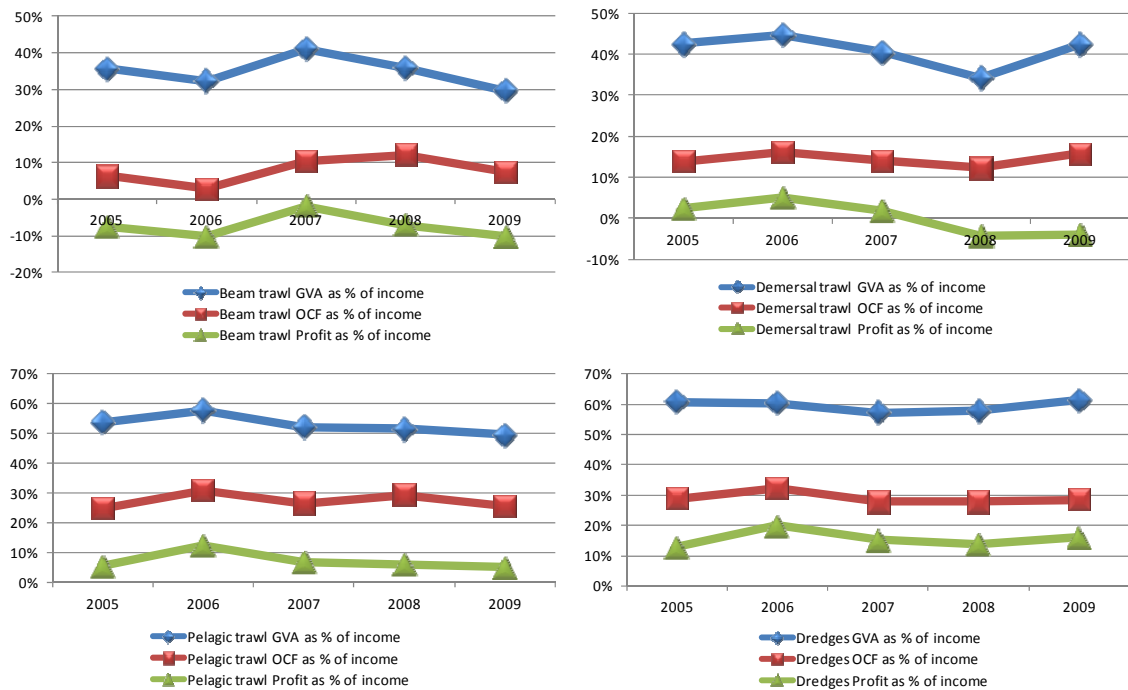
The data also suggest that 48% of mobile gear fleet segments made losses in 2009 i.e. vessels in these segments on average made insufficient returns on capital invested. The corresponding figure for 2008 was 41%. In addition, 14% of mobile gear fleet segments generated negative cash flows on average in 2009 i.e. vessels in these segments on average did not generate enough income to cover operational costs, making no return on invested capital. The corresponding figure for 2008 was 7%, see figure 5.11 (lower left). In comparison, 39% of passive gear fleet segments made losses on average in 2009, compared to 34% in 2008, while 6% of static gear fleet segments generated negative cash flows in 2009, compared to 13% in 2008, see figure 5.11 (lower right).

Figure 5.11 EU fleet economic performance – mobile and passive gears



(Source: EU Member States DCF data submissions)

Figure 5.12 EU fleet economic performance by mobile gear type



(Source: EU Member States DCF data submissions)

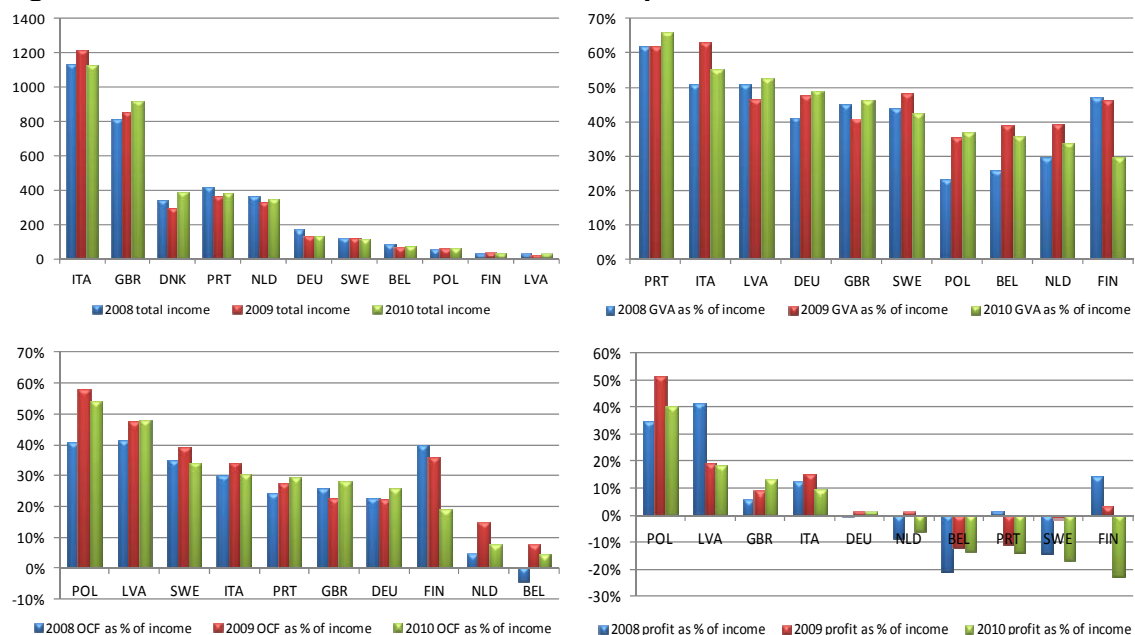
Figure 5.12 contains analyses of economic performance of specific mobile gear types. The data suggest that beam trawl segments are the least profitable. During the period

2005-2009, this gear type consistently made losses (-10% in 2009), and only once generated an OCF greater than 10% (2008). Around 70% of beam trawl segments made losses in 2009, while around 40% generated a negative cash flow in 2009. Dredge segments were the most profitable of the mobile gear types over the period analysed, with GVA, OCF and profits as a proportion of total income at around 60%, 30% and 10-20% respectively. Pelagic trawl segments were also relatively profitable, with GVA, OCF and profits as a proportion of total income at around 50-60%, 25-30% and 5-10% respectively over the time period. Demersal trawl segments moved into a loss making position in 2008 and 2009, although OCF and GVA increased in 2009 compared to 2008.

5.6 Assessment for 2010 and 2011

The 2011 call for fleet economic data requested transversal data (effort, landings and capacity) from Member States for 2010 which was used to forecast fleet economic performance indicators for 2010. Only 10 out of 22 Member States submitted the data required to carry out the forecasts. The remaining Member States were not in a position to provide the data within the necessary timeframe.

Figure 5.13 EU Member States fleet economic performance forecasts for 2010



Projections for total fleet income and GVA, OCF and profits as a proportion of income are presented for 2010, along with corresponding actual 2008 and 2009 data. The forecasts suggest that in 2010 total fleet income increased in 8 out of the 10 Member States. However, the forecasts also suggest that in 2010, GVA as a proportion of total income decreased in 5 out of 10 Member States, OCF as a proportion of total income decreased in 7 out of 10 Member States, and profit as a proportion of total income decreased in 9 out of the 10 Member States. Therefore, although total fleet income increased for the majority of Member States who provided 2010 data, economic performance, particularly in terms of cash flow and profits, is expected to deteriorate.

One of the main reasons for the expected deterioration in economic performance in 2010 is the cost of fuel. In 2010 fuel prices started rising again and by June 2011 had almost reached the same levels as in the summer of 2008, see figure 5.6 (left). A summary of the main issues affecting the economic performance of each EU Member States national fleet in 2010 and 2011 are summarised below:

Belgium

Investments from the EFF are expected to be higher in 2010, especially due to the fuel-regulation. These measures (e.g. lighter engines, improved gear and change of fishing technique) will decrease fuel consumption which is one of the largest expenditure items. The positive effect of the public support on the level of investments will fade out during 2011-2012. Power capacity (kW) is expected to decrease gently due to engine replacements with 20% reduction under the EFF. FTEs will further decrease in 2010. A substantial part of this effect relates to the scrapping of 9 vessels in 2009. The profitability of the two beam trawl fleets will heavily depend on future fish and fuel prices.

Bulgaria

The economic situation in 2010 is driven by the following factors: lack of bank credit policy supporting the fisheries sector; relatively high percentage of fishing vessels over 10 years old; fisheries depends on the seasons and weather conditions. All this reflects the number of days at sea, and quantities of the catches.

Denmark

High prices and landings of especially mackerel and several industrial species, including sandeel, Norway pout and boar fish contributed to an increase in value of landings in 2010 compared to 2009. It is expected that 2011 will also be higher than 2009, but there are uncertainties about the mackerel quotas and the possibility to catch Norway pout, which amongst other things may influence the total value of landings in 2011. Lower fuel prices in 2010 contributed to an increased profitability, but these are expected to increase in 2011, thus having a negative impact on profitability. At the overall level, 2010 and 2011 are expected to be the most profitable years since 2000 for the Danish fishery. The management system based on individual rights has now been in place for several years, and the fleet structure has consolidated, thus entering a phase with a slower rate of adjustment.

Estonia

In 2010 and 2011 the total number of vessels in the Estonian national fleet continued to decline. The decrease mainly takes place among inactive trawlers. In the Baltic trawler segments the total volume and value of landings will decrease due to declining herring catches and average prices for herring and sprat in 2010. Also, in the case of the coastal fishery, the total volume and total value of landings will decrease slightly in 2010. High seas vessels will experience an increase in total volume and value of landings.

Finland

The value of landings of the Finnish fleet was €24.7 million in 2010. The value of landings increased from 2009 to 2010 by 4%. The economic outlook for fishery enterprises suggested that the profitability of large fishing firms improved in 2010. Domestic prices and demand for fish have also developed favorably in 2010, however production costs are increasing. Small fishing enterprises assessed their economic performance to be worse than the large fishing firms in 2010. Large firms are confident

about the future economic development of the sector while the future prospects of small fishing firms seem unchanged.

France

The year 2008 was remembered for high fuel prices and 2009 saw serious market difficulties (reduced exports, rise in imports which increased competition). For French vessels, 2010 was better in term of activity. Average fish prices increased and exports improved, but the results differ depending on the fleet and fishing region (it was a good year for the cephalopods in the Atlantic, but bad for pelagic fish in the Mediterranean). The year 2011 was also good in terms of appearance and price of species. However the problem of the rising fuel prices reappeared and had a negative impact on vessel profitability.

Germany

Fish prices increased slightly after 2009 on average, however brown shrimp fishermen complained about low prices which would not cover costs. This is partly due to the lack of competition on the buyer side as two companies dominate the market. The Eastern Baltic cod stock developed favourably, and stakeholders assessed the limitation of quota increase due to the Long Term Management Plan (LTMP) positive as it helped avoid a short term oversupply with subsequent drops in price. North Sea flatfish developed positively as well, but especially for plaice the price decreased considerably, affecting the profitability of the fisheries concerned. In contrast, Baltic herring quota decreased once again, and even increasing prices could not sufficiently compensate low landings volumes. Blue mussel landings were low, but due to excellent quality prices were above average. Marine Stewardship Council (MSC) certification or renewal has proven to have a beneficial effect on prices for herring, cod, saithe and mackerel. The pelagic fleet which operated in South Pacific waters left that area in 2010 due to low catches.

Ireland

No significant removals or additions to the national fleet occurred in 2010 and 2011 other than adjustments due to accidental loss and damage and occasional redundancy, particularly in the polyvalent segments under 10m. The key drivers influencing the economic performance of the Irish fleet in 2010 were low first point of sale prices and the increasing cost of fuel in the latter part of the year. Oil price increases have continued in 2011 and are expected to further affect the profitability of the Irish fleet. Some fleet segments have sought to consolidate market share, improve market access and product prices through collective engagement with internationally recognised certification processes. Vessels in the pelagic and polyvalent fleets targeting mackerel achieved MSC certification in 2009 and 2010 and an internationally accredited (ISO 65), National Seafood Stewardship Standard was available to the main segments of the Irish National fleet in 2011.

Italy

In 2010 more economic variables are expected to deteriorate because of increased energy costs and restrictions on fishing activity. In 2010, fuel costs increased by 17%, decreasing crew wages and profits. Furthermore during 2010 restrictions on towed nets (increase in the minimum distance from the coast and in mesh size) were introduced, affecting 12-18m trawlers and small scale fisheries (vessels using seines). The deterioration in performance of two of the main Italian segments will likely affect the total income. In addition, in 2010 bluefin tuna purse seine fleet stopped all activity. In 2011 OCF and profits are expected to deteriorate due to higher fuel costs (25% increase in

the second quarter compared to same period during 2010). Revenues are expected to remain quite stable. A significant reduction in fishing activity and income has affected 18-24m long-liners because of swordfish and bluefin tuna catch limitations. The socially and economically important artisanal fishery could be threatened by a loss of expertise in gear use and a change in market demand orientation towards the most valuable species, resulting in a decrease in the average price of the more “minor” species. As a consequence, this could affect fishing strategy as more effort will be dedicated to the most demanded species, altering the balance in the distribution of effort.

Latvia

Decreasing trends for the number of vessels, GT and kW were observed in 2010. The TAC for European sprat decreased 5% and increased 15% for Atlantic cod in 2010. As the volume of landings of Atlantic cod is relatively small, the increase in quota will not significantly influence the total volume landed, but this species has demonstrated average price growth from €1,14 euros/kg in 2009 to €1,35 euros/kg in 2010. Taking these factors into account we can assume that total income increased slightly in 2010. The total amount of expenditure by the Latvian national fleet in 2010 remained relatively stable. The profit changed to a negligible extent. The TAC for European sprat allocated to Latvia in 2011 was 24% less than in 2010. European sprat will be the most common species in terms of volume, so a decrease in catches would suggest a decrease in the value of landings and total income in 2011. The TAC for Atlantic cod allocated to Latvia in 2011 was 15% more than in 2010. The total amount of expenditure by the Latvian national fleet in 2011 will increase, taking into account expected growth of energy costs. Profits are expected to decrease.

Lithuania

The value of landings for the 24-40m demersal trawlers and under 18m drift and fixed netters which operate in the Baltic Sea and coastal areas in 2010 and 2011 are likely to be higher compared to 2009, due to increased quotas and captures of main species as well as recovering cod prices, which decreased in 2009. Total cash flow and GVA could be negatively influenced by the increased energy costs due to the fuel price rise.

Malta

In 2010 the total landed volume reaching around 1,300 tons. Common Dolphinfish landings reached 430 tons, equivalent to about 33% of total landings and were mostly derived from the Fish Aggregating Device (FAD) fishery operating between August and December. The swordfish surface long-line fisheries contributed to about 25% of total landings. In 2010, catches of frigate mackerels (*Scomber* spp.) dropped considerably; landings of this species represented only 4% of the total annual landings. During 2010, 8 fishing vessels stopped fishing activities through the permanent cessation aid scheme. These vessels fished for bluefin tuna. During the same year the investment on board fishing vessels and selectivity scheme was implemented. The scheme is intended to improve the fleet through modernisation in a way that capacity does not exceed the tonnage and power of the existing fleet i.e. through improvements in safety on board, working conditions, enhancing hygiene, product quality, energy efficiency and increased selectivity. Bluefin tuna landings continued to decrease: in 2010 landings of Bluefin tuna represented 10% of total annual landings. Landings of Bluefin tuna amounted to 130.9 tons (gilled and gutted) in 2010. Bluefin tuna vessels landed 153 tons of Bluefin in 2010, within the limit of the catch allocation set for Malta. The fishery is based on ITQs, including the artisanal fleet. Fuel costs increases and a decrease in tuna quotas negatively affected incomes and profitability, particularly for segments where bluefin tuna

is the main species. Although the supply of bluefin tuna decreased, the price remained relatively stable due to the influence of the Japanese market.

The Netherlands

The structure of the Dutch fleet and effort in 2010 was similar to 2009, except effort in the pelagic fleet which decreased by 10-15%. In 2011 the structure of the Dutch cutter fleet changed. Some vessels were laid up, some were sold to the offshore industry and others changed gear (replacing beam trawl in pulse gear). In 2010 sole quota increased by just 1% while quota for plaice were approximately 12% higher compared to 2009. Quota for herring, horse mackerel and blue whiting increased in 2010, but mackerel quotas were lower than the year before. All in all, the total quota for the most important demersal fish species rose by 8% while the total quota for the main pelagic species rose by 20% in 2010. In 2011 sole quota decreased by 1% while quota for plaice rose by 14%. Quota for all important pelagic species decreased in 2011. Blue whiting decreased by more than 85% and other species decreased by 10-25%. Total revenues for the cutter fleet in 2010 are expected to be 10% higher compared to 2009. Revenues rose due to higher landings and also because of higher prices (all species together). Costs however are also expected to be higher, mainly because of increased fuel prices (+33%). The net result of the cutter fleet is expected to reach the level of 5-10 million euro. Revenues of the pelagic fleet will be higher (+€15 million) but due to higher costs the net result is expected to be negative €5-10 million. In 2011 revenues are expected to be at the same level of 2010 but costs are expected to be higher due to higher fuel prices. Effort in the cutter fishery is expected to decrease by around 10% compared to 2010. The beam trawl fishery will partly be replaced by sumwing and pulse-wing fisheries and as a result fuel consumption will also decrease. Prices for fuel will increase substantially so total costs will be higher for most fisheries. Landings of fish are expected to be at the same level in 2010 but prices for shrimp and fish (except sole) are expected to be lower (-10%). Pelagic fleet revenues seem to be lower but so too will costs because the fleet is smaller. The net result is expected to be around break-even level.

Poland

Provisional data indicates that the economic performance of the Polish fleet improved in 2010 compared to 2009. This is a result of an increased value in fish landed - a consequence of a higher cod TAC and generally higher prices. The expected landings value for 2010 is 6.5% higher than in 2009. No significant changes in fleet composition took place in 2010, the total number of vessels was slightly lower (3.8%) than in 2009. Effort (sea days) also declined slightly. The new cod quota allocation system of rotating suspension of 1/3 of the cod fleet continued in 2010 and will also be in use in 2011. It is expected that, similar to 2009, significant amounts of money will be provided to cod vessels as financial compensation for suspension of cod licenses and temporary cessation of fishing activities. The TAC for pelagic species (especially sprats) is lower in 2011 than in 2010, however due to low quota utilisation in recent years this shouldn't have a negative impact on the economic performance of the pelagic fleet. Fish meal prices at the beginning of 2011 remained close to their historically highest level which should be another incentive for the pelagic vessels that are engaged in industrial catches. Since salmon quota has only been utilised at around 50% in recent years a 15% cut in salmon quota shouldn't deteriorate the economic situation of vessels targeting anadromous species (mainly gears using hooks 12m-18m). In 2011 the Baltic cod TAC again increased which should positively influence economic performance of segments targeting demersal species. The main negative influence on the economic

outcome of the fleet in 2011 will be high fuel prices. They shouldn't however significantly affect the profitability of the fleet.

Portugal

In 2010 and 2011 there were no significant changes in structure of the fleet. There is an overall trend of decreasing vessel numbers and capacity, both in tonnage and power. There was also a slight decrease in the number of licensed vessels as a result of no permission/license or for the withdrawal of some vessels, measures implemented as part of the plan to adjust fishing effort. Portuguese landings are expected to increase. Provisional data gives an overall landing value of 203 thousand tons for 2010.

Romania

In 2010 Romania adopted a Fishing Effort Adjustment Plan (FEAP). The plan was introduced in accordance with the Operational Programme for Fisheries 2007-2013 to adapt the fishing fleet to available quotas and to implement the CFP guidelines on reduction of fishing capacity. The objective of this plan is to reach a reduction in fleet capacity by at least 520 GT and 1300 kW by the end of 2013. This will be achieved by reducing the number of vessels over 12m by providing state grants for the permanent cessation of fishing activities by dismantling or reassigning vessels to other activities. The restructuring action of the fleet illustrates a slight improvement of the economic performance in 2010. The application of measures adopted under FEAP will continue throughout 2011. The final goal is to ensure a minimum level of 12–13 vessels over 12m in length, equipped with modern facilities, and a number of small boats fishing for small-scale fishery modernised, providing greater reliability, higher landings volumes and better conditions for efficient activity. The economic outlook for 2011 is similar; income for turbot species decreased due to lower quotas introduced by the Commission, extending the effects of the economic crisis.

Slovenia

Slovenian fleet capacity continued to decrease in 2010 and 2011. The fleet is old and poorly equipped. Effort will probably increase in 2010 and 2011, because of low fish stocks in the Adriatic sea. If fishermen want to hold the volume of landings at the current levels, they will have to increase the number of fishing days. Landing volumes have decreased since 1990, so we can expect that the volume of landings will decrease also in 2010 and 2011. Fuel consumption depends on the price of the fuel. If there will be no major changes in fuel prices, we can expect larger fuel consumption due to an increase in the number of fishing days. When the global crisis ends, we can expect an increase in fish prices. This will also have an impact on incomes which will increase, assuming that catch volumes remain unchanged. The level of expenditure depends mostly on crew wages and fuel costs. We can expect that fuel costs will increase in 2010 and 2011, and that crew wages will probably decrease, due to the decrease in the number of fishing vessels. As the fleet is old, reduced catches and increased costs can be expected and that the profit will decline in 2010 and 2011.

Spain

The current profitability of all Spanish fleet segments implies that the trend of the reduction in the fleet size and overall capacity is not going to change. Furthermore energy costs will rise again to 2008 levels which will create a worsening of profitability. An exception to this trend could be those small (in length) segments for which in 2009 were stable in their profitability.

Sweden

At the end of 2009 Sweden introduced an Individual Tradeable Rights (ITRs) system for pelagic quotas. The first transactions took place in 2010. The effects of these transactions may improve profitability for the pelagic fisheries, however decreases in pelagic quotas (most importantly herring and sprat) may have a negative effect. Fuel prices increased during 2010 and 2011 which has particularly affected active gear segments (e.g. trawls and seiners). Total fuel consumption has decreased in previous years, due to either decreases in capacity or changes in fishing patterns and fishermen's behaviour. The question is how much further this rationalisation can occur without significant investments in new technologies and newer vessels. Since the beginning of the 2000s there has been a general decrease in fleet capacity. This is partly due to management efforts in bringing the fleet size in balance with resources. Some of the decrease is also because a lot of fishermen have left the industry since they can no longer make a living from fishing. There is also a recruitment problem in Swedish fisheries as it is not an attractive way of living for younger people due to low profitability and high entrance costs. The low recruitment is reflected in the increasing average age of the Swedish fisherman. The development of a decreasing fleet size and increasing average age is expected to continue for some time.

United Kingdom

In 2010, the Scottish fisheries administration introduced a scheme to enable vessel owners to combine vessel licences from a number of vessels onto a smaller number of vessels, known as licence parking. The days at sea allocated to the donor vessel(s) could then be shared among the recipient vessel(s). This scheme was in recognition of the fact that further reduction in days at sea allocations under the terms of the cod recovery plan meant that some vessels could not operate enough days at sea to allow them to generate an acceptable return on capital invested in the vessel. For donor vessels whose licence had been parked on other vessels, they no longer had the ability to be active in the fishery. There was a government- and EFF-funded decommissioning scheme for such vessels and around 40 vessels were scrapped under this scheme. In principle, this scheme should allow the available fishing opportunity to be shared between fewer vessels and should improve the profit and return on investment for the remaining vessels compared to the profit they would have generated without the consolidation. The licence parking scheme remains in place but the decommissioning scheme was brought to a close at the end of March 2011.

A substantial trial of catch (rather than landing) quotas for cod only was also introduced in 2010. Some vessels joined the scheme half way through 2010 and received an uplift on their cod quota on the basis that they would land all cod caught and all would count against their quota, including any that was below minimum landing size. They were exempt from the Minimum Landing Size (MLS) and instead required to land all cod. Vessels on the trial would not be allowed to leave port when they no longer had access to cod quota, even if they still had access to quota for other species. This increased the value of cod quota to these vessel owners, even above the value of the cod they landed. Vessels on the trial were not subject to any limits of days at sea and therefore the market demand for purchasing days at sea decreased substantially, and some vessel owners who were parking licences found they were unable to sell their days at sea entitlements. In 2011, the cod catch-quota trial was extended to more vessels until around 26 vessels are on the trial this year. This has further reduced market demand for days at sea and further increased demand for and prices for cod quota leasing (or purchase of current allocation in tons). Prices for cod quota leasing had reached the

market sale value of cod during the first half of 2011. Vessel owners not in the catch quota trial complained that they could not justify leasing-in cod quota at more than the sales value of the cod and so were discarding more cod than previously. These major adjustments to fleet capacity and business incentive make it impossible to estimate likely business outcomes for the fleets affected.

In England, a major restructuring of the under 10m fleet is proposed after an extensive programme to consider and evaluate options. There was an acknowledgement by vessel owners and government that the catch-allowance of quota species was insufficient for vessels to be profitable and for owners to make a living. A temporary allowance was made that under 10m vessels could lease-in quota allocated via POs to over 10m vessels and this opportunity was taken up. In 2011 there is a proposal to allocated to under 10m vessels Fixed Quota Allocation units based on their recent annual average landings record and remove the separation of over and under 10m vessels. It is acknowledged that for many vessels, the share of the catch that is allocated to them will not be enough to keep the vessel active and that owners may decide to sell their fishing rights and leave the fleet. There are around 1,600 inactive vessels under 10m in the UK so the market for second hand vessels is unlikely to be strong enough that owners leaving the industry could achieve a good sale value for their vessels. Under the pool system they would have had no fishing rights to sell, whereas at least under the proposed new system, they will be able to sell their newly-allocated quota units.

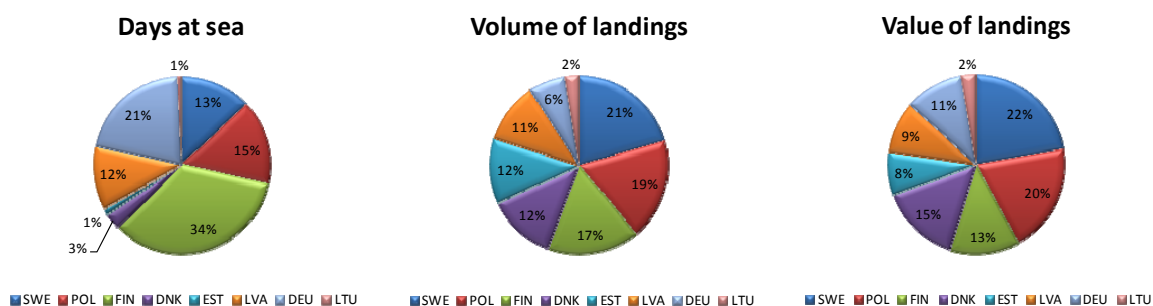
6. REGIONAL ANALYSES

6.1. Baltic Sea

6.1.1. EU Baltic Sea fleet general overview

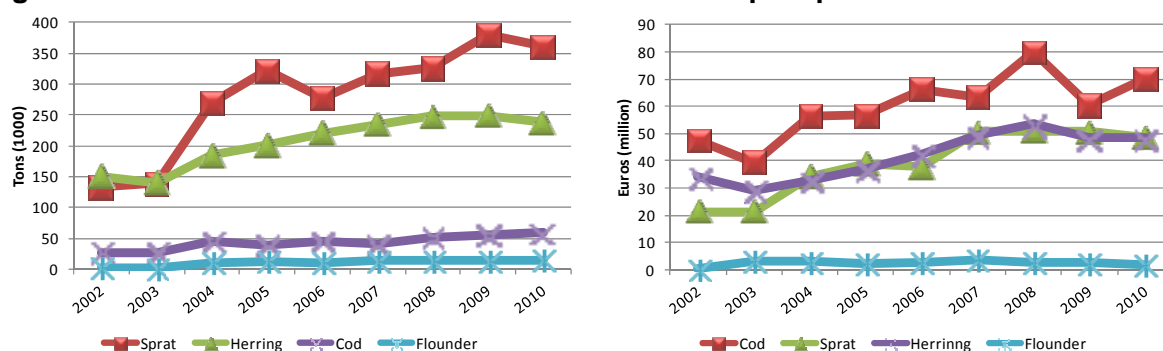
The Baltic Sea is covered by ICES areas IIIb, IIIc and IIId. Eight Member States were involved in Baltic Sea fisheries in 2009. These countries were Denmark, Sweden, Finland, Estonia, Latvia, Lithuania, Poland and Germany. According to the available landings data there were 67 fleet segments operating in the Baltic Sea in 2009. The total number of vessels deployed amounted to 6,900 units, using 448 thousand days at sea. The volume and value of landings amounted to 725 thousand tons and €200 million respectively. Germany, Finland and Poland accounted for around 72% of the total days at sea (mostly generated by small scale fisheries). In terms of landed volume, Sweden (146 thousand tons), Poland (131 thousand tons) and Finland (118 thousand tons) were the leading countries followed by Denmark, Estonia and Latvia. For confidentiality reasons, the total volume of catch does not include the German pelagic trawl segment, which would have increased the total volume of catch of the German fleet by around 45%. The total volume of landings in the Baltic Sea increased 7% between 2008 and 2009. The charts in figure 6.1.1 show the proportion of days at sea, landings volume and landings value attributable to each Baltic Sea Member State in 2010.

Figure 6.1.1 EU Baltic Sea fleet effort and landings in 2010



Sweden, Denmark and Poland amounted for around 60% of the total value of landings in the Baltic Sea. Sweden (€42 million), Poland (€37 million) and Denmark (€27 million) were followed by Finland, Germany and Latvia. The total value of landings in the Baltic Sea decreased 12% between 2008 and 2009.

Figure 6.1.2 EU Baltic Sea fleet volume and value of top 6 species landed



In terms of landings composition, in 2009 sprat, herring, cod and flounder were the common species landed in term of tonnage (379 thousand tons, 249 thousand tons, 56 thousand tons and 14 thousand tons respectively). Cod accounted for the highest value of landings in 2009 (€60 million), followed by sprat (€51 million), and then herring (€48 million), see figure 6.1.2. The volumes of sprat and herring landed in the Baltic Sea decreased slightly from 2009 to 2010.

2010 while the value of sprat landed remained relatively stable. The value of cod landings increased 14% between 2009 and 2010.

Baltic Sea fisheries were affected by several issues in 2009. During the start of 2008, Council Regulation (EC) (1098/2007) established a multiannual plan for cod stocks in the Baltic Sea. According to the provisions of this management plan, the level of TAC for cod was tied with fishing mortality and could not change from one year to another more than +/- 15%. The main issues for the fleet that resulted from the plan was where and how much the vessels were allowed to operate (days absent from port).

In order to avoid by-catch of harbour porpoise in the Baltic Sea, the European Council decided that from 2005, the use of drift-nets would gradually be reduced (by limiting the number of vessels authorised to use them). A total ban of drift-nets was implemented in January 2008. The ban severely affected offshore vessels that harvested salmon and sea trout using drifting gears. The European Commission is currently designing a new management plan for pelagic species that should be implemented shortly. Deteriorating conditions of sprat and herring stocks may negatively influence the pelagic segments in the future and result in pelagic vessels moving to demersal fisheries where cod stocks are currently improving.

6.1.2. EU Baltic Sea fleet economic performance

Economic data was provided for 55 fleet segments out of 67 segments that had landings data in the Baltic Sea in 2009. These fleets covered 97 percent of the total reported catches. The economic data is collected at fleet segment level and does not relate solely to fishing activity in the Baltic Sea. From all the fleets operating in the region, half of their landings volume and two thirds of the value comes from other regions, in particular the North Sea.

The total amount of income generated by the Baltic Sea fleet (55 segments) in 2009 was €645 million, 79% of which was split between three countries - Denmark (€259 million), Germany (€126 million) and Sweden (€123 million). However these fleet segments operated also in other regions where most of the landing value was generated.

Table 6.1.1 EU Baltic Sea fleet economic performance by Member State in 2009

EU Member State	Number of vessels	FTEs	Value of landings in ALL regions (€million)	Value of landings in the Baltic Sea (€million)	Total Income (€ million)	GVA (€ million)	Profit (€ million)	GVA as % of total Income	Profit as % of total Income
Denmark	498	1,191	249.0	27.7	259.0	148.9	-21.0	57%	-8%
Germany	1,223	997	118.2	20.3	125.6	59.0	0.3	47%	0%
Sweden	1,115	941	100.9	41.7	123.1	56.8	2.5	46%	2%
Poland	763	1,307	37.3	37.3	55.5	21.3	26.4	38%	47%
Finland	1,531	229	23.8	23.8	34.0	15.7	2.9	46%	9%
Latvia	814	480	17.5	17.5	23.6	11.0	4.5	47%	19%
Estonia	937	1,872	14.4	14.4	17.3	9.0	3.8	52%	22%
Lithuania	28	11	4.9	4.9	7.1	-0.1	-0.2	-2%	-3%
Total	6,909	7,027	565.9	187.5	645.3	321.7	19.2	50%	3%

Among the countries that operated in the Baltic Sea, the Danish fleet generated the highest GVA but still made losses overall. Estonian and Latvian fleets were the most profitable. The Polish fleet segments received large subsidies that resulted in profits that were higher than GVA (subsidies are not included in the calculation of GVA but are included in the profit calculation).

Table 6.1.2 EU Baltic Sea fleet economic performance by gear type in 2009

Gear type	Number of vessels	FTEs	Value of landings in ALL regions (€million)	Value of landings in the Baltic Sea (€million)	Total Income (€ million)	GVA (€ million)	Profit (€ million)	GVA as % of total Income	Profit as % of total Income
Pelagic trawl	360	1,603	247.3	87.8	276.8	149.8	20.0	54%	7%
Demersal trawl / seine	682	1,443	190.5	50.7	213.3	100.6	-5.9	47%	-3%
Passive gears	4,651	2,930	41.9	36.0	63.6	26.8	7.9	42%	12%
Drift and fixed nets	102	231	13.3	6.9	14.4	4.8	0.0	33%	0%
Passive and mobile gears polyvalent	61	107	12.3	2.1	15.5	7.4	-3.3	48%	-22%
Passive polyvalent gears	765	345	12.1	1.7	12.1	6.9	-3.2	57%	-27%
Gear using hooks	37	82	1.4	1.4	4.0	0.8	2.4	19%	59%
Dredges	34	22	8.7	0.9	8.0	4.2	-0.8	52%	-9%
Beam trawl	217	264	38.4	0.1	37.6	20.5	2.1	55%	6%
Total	6,909	7,027	565.9	187.5	645.3	321.7	19.2	50%	3%

Pelagic and demersal trawl fleet segments were the most important fleets in the Baltic Sea region in 2009. Pelagic trawler fleets produced the highest landings values in all countries. In pelagic fisheries Latvian trawlers produced the highest landings value in the Baltic Sea followed by Polish, Swedish, Finnish and Estonian pelagic trawlers. For the demersal trawlers, Danish fleets accounted for the highest landings value in the Baltic Sea followed by Swedish and then German fleets.

Danish pelagic fleet segments were the most productive in terms of GVA, however they operated mainly in the North Sea. Among the fleets that operated mainly in the Baltic Sea, Latvian pelagic trawlers generated the highest GVA, followed by Estonian, then Finnish and then the Polish pelagic fleets. Latvian pelagic trawlers were also the most profitable segment in the Baltic Sea followed by the Swedish fleet. German demersal trawlers made large losses in 2009.

Overall, pelagic trawlers were profitable while demersal trawlers made losses. Small scale fisheries recorded reasonably high profitability (12% of total income), and are the most important segment on the Baltic Sea, at least in terms of vessel numbers. Negative economic results were calculated for four segments – demersal trawlers, vessels using polyvalent passive gears, Vessels using active and passive gears and Dredgers. On average these fleets generated small profits. Vessels using hooks comprised mainly of Polish vessels that received substantial subsidies making the segment highly profitable.

The outlook for 2010 is that cod stocks appear to be in recovery. According to ICES advice, the fishing mortality rate of Eastern cod decreased to 0.23 in 2009, which is below the target set in the Baltic cod management plan. The TAC for Eastern Baltic cod increased in 2009-2010 by 15% each year. The TAC for Western cod increased 6% in 2011. Therefore it is expected that the economic performance of the demersal segments will improve in 2011.

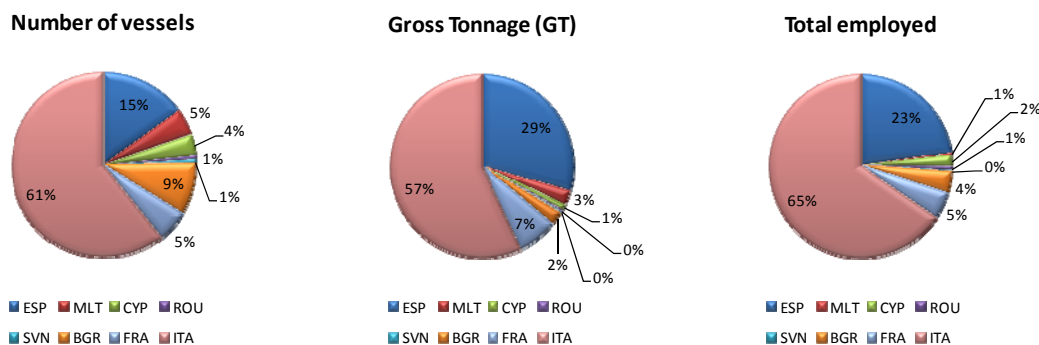
6.2. Mediterranean and Black Sea

6.2.1. EU Mediterranean and Black Sea fleet general overview

EU Member States fishing in Mediterranean waters include Spain, France, Italy, Slovenia, Greece, Malta, Cyprus and Portugal. Bulgaria and Romania fish exclusively in the Black sea. In terms of data availability, Greece did not submit any data for the year 2009. Spain did not submit any data on value of landings by species. Portugal did not submit any data for the Mediterranean area. France submitted only partial data. As a result, Italian production represents the major part of the total, more than 69% in terms of value, 68% in terms of volume and 72% in terms of fishing effort (days). A fully comprehensive analysis could therefore not be carried out.

Based on the available data, the European fleet fishing in the Mediterranean and Black Sea consisted of around 24,624 vessels, with a total gross tonnage (GT) of 326 thousand tons and total kilowatts (kW) of 1.9 million in 2009. The Italian fleet accounted for around 61% of the total number of vessels, followed by the Spanish fleet (15%) and then the Bulgarian fleet (9%). The Italian fleet accounted for around 57% of the total GT, followed by the Spanish fleet (29%) and then the French fleet (7%). In terms of kW, again the Italian fleet accounted for around 64% of the total, followed by the Spanish fleet (19%) and then the French fleet (7%). The oldest fleet is the Cypriot fleet, with vessels averaging at 48.7 years in 2009, followed by the Slovenian and Italian fleet with average ages of 34.2 years and 27.4 years respectively in 2009.

Figure 6.2.1 EU Mediterranean and Black Sea fleet capacity and employment 2009

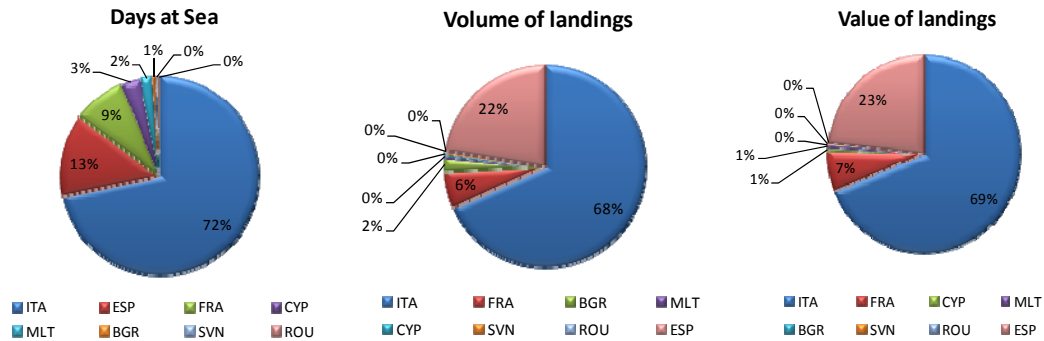


Employment data submitted suggests that the total fishers employed and corresponding FTEs in the Mediterranean and Black Sea were 46,000 and 36,400 in 2009. The Italian fleet accounted for around 65% of both the total employed and FTEs, followed by the Spanish fleet (23% of both total employed and FTEs) and then the French fleet (5%) in terms of total employed or the Bulgarian fleet in terms of FTEs (4%). Based on the available data, a vessel operating in the region will employ 1.9 fishermen on average, which works out at around 1.5 FTEs per vessel.

The Mediterranean and Black Sea fishing fleet spent a total of around 2.5 million days at sea in 2009, which works out as an average of 101 days per vessel. Of the countries who submitted data (Greece and Portugal submitted no data), the Italian fleet accounted for 72% of the total number of days, followed by the Spanish fleet (13%) and then the French fleet (8%). Based on the data submitted, the total energy (fuel) consumption

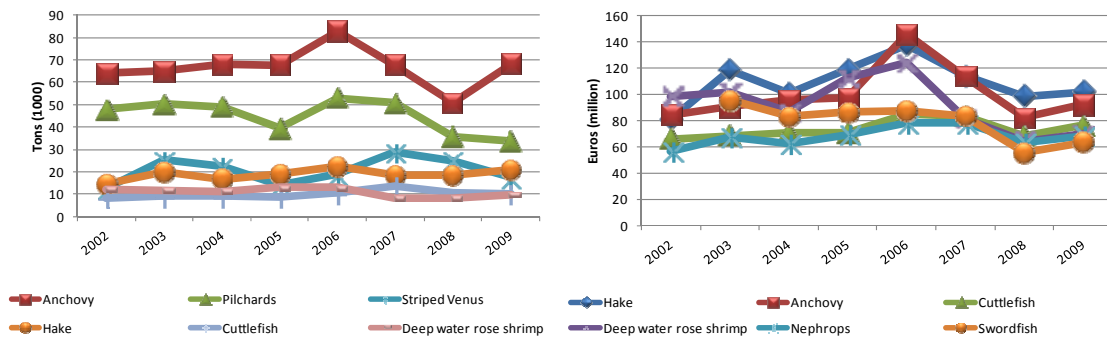
amounts to 484 million litres in 2009, however Greece, Spain, Bulgaria and Portugal did not data on fuel consumption, so in reality the total was significantly higher. Of the Member States who did provide data, the Italian fleet unsurprisingly consumes the most fuel (433 thousand litres, 89%).

Figure 6.2.2 EU Mediterranean and Black Sea fleet effort and landings in 2009



Based on the data submitted, the total volume and value of landings achieved by the Mediterranean and Black Sea fleet in 2009 were 342 thousand tons (excluding Greece and Portugal) and €1.7 billion (excluding Greece and Portugal) respectively. The Italian fleet produced the highest volume of landings in the region (61%), followed by the Spanish fleet (23%) and then the French fleet (6%). The Italian fleet also produced the highest value of landings (69%), followed by the Spanish fleet (23%), and then the French fleet (7%).

Figure 6.2.3 EU Med. and Black Sea fleet volume and value of top 6 species landed



Excluding data on the Greek fleet, the 6 most important species landed by the EU Mediterranean and Black Sea fleets in terms of volume in 2009 were European anchovy, sardine (pilchards), clams (striped venus), European hake and deep-water rose shrimp. In 2009 anchovy volumes were the highest of all species, amounting to 68 thousand tons, 20% of the total amount of landings in 2009 and an increase of around 35% from 2008, see figure 6.2.3 (left). Anchovy is the most important species in the Mediterranean as it has the greatest influence on the total volume of production.

The second most important species in terms of volume landed is sardine (pilchard). In 2009 the total volume of sardine landed was around 34 thousand tons (10% of total landings). Clams (striped venus) were the third most important species in terms of

volume landed in 2009, amounting to 17.4 thousand tons (5% of total landings). This species is mainly landed in the Adriatic Sea by Italian dredgers.

Excluding data on the Greek and Spanish fleets, the 6 most important species landed by the EU Mediterranean and Black Sea fleets in terms of value in 2009 were hake, anchovy, cuttlefish, Nephrops, deep water rose shrimp and swordfish. In 2009 the value of hake landed was the highest of all species, amounting to €102 million, 8.1% of the total value of landings in 2009 and an increase of 3.2% from 2008, see figure 6.2.3 (right). The second most important species in terms of value is anchovy, which amounted to €92 million (7.3% of the total value) in 2009. Cuttlefish were the third most important species in terms of value in 2009, amounting to €76.4 million (6.1% of the total value). None of these species account for more than 10% of the total value of landings, highlighting the fact that the Mediterranean and Black Sea fisheries are highly diversified and not overly dependent on any one particular species at the regional level. Additionally, it is interesting to note that the European hake is targeted by several different segments of the fleet using different gear types.

6.2.2. EU Mediterranean and Black Sea fleet economic performance

Under the DCF, economic data is requested at supra region level. As the Mediterranean and Black Sea region falls under one specific supra region (Area 37) it is possible to calculate profitability indicators for fleets that operate solely within the region. To do this, all fleet segments that operated in Area 37 in 2009 were selected. Data on Greek fleets was unavailable due to non submission of 2009 data. French fleet segments were excluded due to missing depreciation costs at segment level for 2009, while some segments from Malta, Spain and Bulgaria were excluded due to missing economic data for 2009.

Table 6.2.1 EU Med. & Black Sea economic performance fleet by gear type in 2009

Gear type	Number of vessels	FTEs	Value of landings (€million)	Total Income (€ million)	GVA (€ million)	OCF (€ million)	Profit (€ million)	GVA as % of total Income	OCF as % of total Income	Profit as % of total Income
Dredges	739	581	64.3	64.3	50.1	28.0	14.0	78%	44%	22%
Demersal trawl / seine	3,587	12,247	760.9	782.5	422.0	209.9	35.9	54%	27%	5%
Gears using hooks	600	1,869	100.0	101.8	52.7	22.3	-2.0	52%	22%	-2%
Polyvalent passive gears	10,871	13,561	373.5	374.1	257.4	141.7	77.8	69%	38%	21%
Polyvalent mobile and passive gears	459	1,797	66.5	67.6	25.4	7.5	-19.4	38%	11%	-29%
Purse seine	619	3,483	143.5	145.9	96.0	32.2	-8.5	66%	22%	-6%
Beam trawl	72	323	24.9	24.9	14.9	7.2	1.7	60%	29%	7%
Pelagic trawl	157	907	52.9	54.1	29.2	14.4	4.8	54%	27%	9%
Total	17,104	34,769	1,586.5	1,615.2	947.6	463.3	104.2	59%	29%	6%

Table 6.2.1 contains a summary of economic performance of the Mediterranean and Black Sea fleet by gear type following the above mentioned data cleaning process. This analysis covers 80% of the total number of vessels submitted for Area 37, 93% of employment and 93% of the total value of landings. The capital value of all segments summarised in table 6.2.1 was an estimated €1.7 billion in 2009. The two most important gear types operating in the Mediterranean and Black Sea region are demersal trawls

and seines and polyvalent passive gears, which together represent around 85% of the number of vessels, 74% of employment and 72% of the total value of landings in the region in 2009.

The total income generated by the demersal trawl and seine and polyvalent passive gear segments in 2009 was €782.5 million and €373.5 million respectively. In terms of profitability, the total amount of GVA and economic profit generated by the demersal trawl and seine segments in 2009 was €422 million (54% of total income) and €35.9 million (5% of total income) respectively, while the total amount of GVA and economic profit generated by the polyvalent passive gears segments in 2009 was €257.4 million (69% of total income) and €77.8 million (21% of total income), see table 6.2.1. GVA per FTE was around €34,500 for the demersal trawl and seine gear type in 2009 while the GVA per FTE for the polyvalent passive gears segments was around €19,000. The capital value of both segments combined was an estimated €1 billion in 2009.

The data suggests that dredges were the most profitable gear type in the Mediterranean and Black Sea region in 2009, with GVA and profits as a proportion of total income of 78% and 22% respectively. GVA per FTE was around €86,000 for this gear type in 2009. Polyvalent mobile and passive gears were the least profitable gear type in 2009, with GVA and profits as a proportion of total income of 38% and -29% respectively. GVA per FTE was around €14,000 for this gear type in 2009.

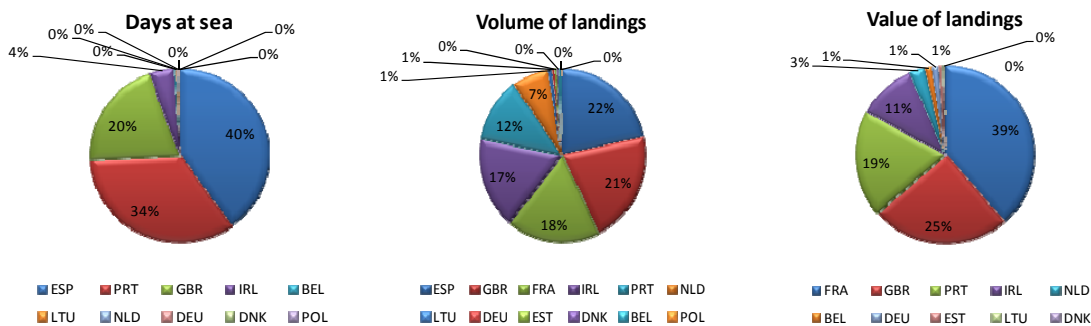
6.3. North Atlantic

6.3.1. EU North Atlantic fleet general overview

North Atlantic covers ICES subdivisions V, VI, VII (except VIIId) and VIII, IX, X, XII, as well as CECAF and NAFO areas. Fisheries in the North Atlantic are made by vessels from 11 different EU countries, United Kingdom, France, Spain, Ireland, Portugal, The Netherlands, Denmark, Lithuania, Germany, Belgium and Poland.

For this analysis there were no landings value data by species available for Spain, while French effort data was not provided at the correct aggregation levels (FAO sub region) and instead was provided at supra region level, which was insufficient for the purposes of the following analysis. In addition French data on volume and value of landings by species was not provided for the year 2008, despite being made available for all the other years requested under the DCF data call. In this case 2008 was estimated based on data from the previous years. The following analyses therefore exclude Spanish data when focusing on value of landings and French data when focusing on effort data.

Figure 6.3.1 EU North Atlantic fleet effort and landings in 2009

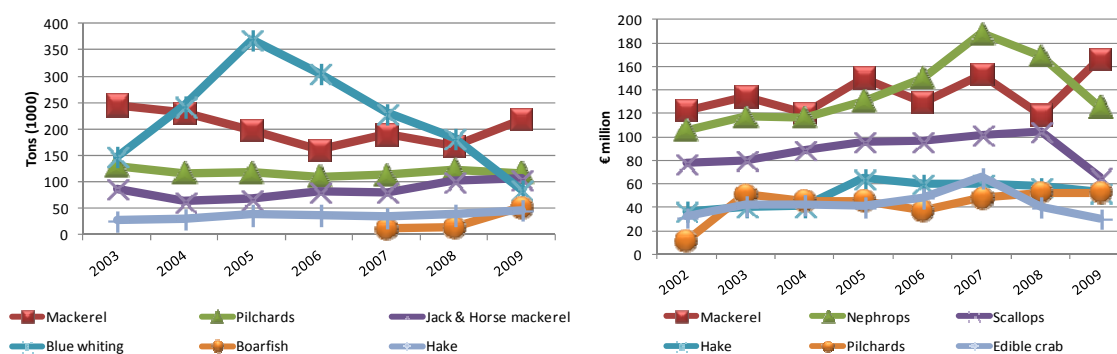


More than 1 million days at sea were recorded by the EU North Atlantic fishing fleet in the North Atlantic in 2009, with Spain (39%), Portugal (35%), United Kingdom (21%) and Ireland (5%) being the major contributors (see figure 6.3.1 (left)). The remaining Member States account in total for 1% (French data not considered).

The data suggests that almost 1.3 million tons of seafood were landed by the EU fleet operating in the North Atlantic in 2009, with Spain (22%), United Kingdom (21%), France (18%), Ireland (17%) and Portugal (12%) being the major contributors (see figure 6.3.1 (centre)). The fleets from the remaining Member States accounted for around 10%.

Excluding data on the Spanish fleet, the remaining EU fleet operating in the North Atlantic generated landings valued at more than €1,400 million in 2009. The French fleet generated the highest share of landed value (40%), followed by the UK fleet (26%), the Portuguese fleet (18%) and then the Irish fleet (11%). The fleets from the remaining Member States accounted for around 6%.

Figure 6.3.2 EU North Atlantic fleet volume and value landed of top 6 species



In terms of volume landed, the main species in the North Atlantic is mackerel (218 thousand tons in 2009) after the decline in landed volume of blue whiting in recent years. Horse mackerel and sardines have maintained a relative stable trend in the years analysed. The increasing trend in boarfish landings in 2008 and 2009 means that it has become one of the most important species in the North Atlantic. In terms of landed value, mackerel was the most important species in 2009 (€167 million), overtaking Nephrops for the first time since 2005. The value of hake, pilchard (sardines), scallops and crab landings remained relatively stable over the period analysed. Other high value species in the North Atlantic are monkfish, and scallops, despite not falling into the top 6 category.

The management plans in force in 2008 for the North Atlantic are:

- Recovery of the Northern hake stock (Council Regulation (EC) No 811/2004). It affects demersal trawl and seine 24-40m, drift and fixed nets 24-40m and gears using hooks 24-40m from Spain, and demersal trawl and seine 12-24m, demersal trawl and seine 24-40m, drift and fixed nets 12-24m and drift and fixed nets 24-40m from France.
- Recovery of the Southern hake and Norway lobster stocks in the Cantabrian Sea and Western Iberian Peninsula (Council Regulation (EC) No 2166/2005). It affects especially all the small length segments of Portugal and Spain.
- Multiannual plan for the sustainable exploitation of the stock of sole in the Bay of Biscay (Council Regulation (EC) No 388/2006). It affects especially all the small length segments of France.
- Multi-annual plan for the sustainable exploitation of the stock of sole in the Western Channel (Council Regulation (EC) No 509/2007).
- Council Regulation (EC) No 1300/2008 establishing a multi-annual plan for the stock of herring distributed to the west of Scotland and the fisheries exploiting that stock (Council Regulation (EC) No 1300/2008)
- Long-term plan for cod stocks and the fisheries exploiting those stocks (Council Regulation (EC) No 1342/2008).
- Multiannual recovery plan for bluefin tuna in the eastern Atlantic and Mediterranean (Council Regulation (EC) No 302/2009).

Other management plans may soon be introduced in this region, such as:

- Long term Management plan for Northern hake
- Long term Management plan for anchovy in the Bay of Biscay

6.3.2. EU North Atlantic fleet economic performance

Table 6.3.1 presents the most important fleet segments in this sea region in terms of volume landed. Data on the Spanish fleet has been excluded as it was not available at the time of the analysis.

The main segment in terms of volume is the UK purse seine/pelagic trawl over 40m fleet. Despite consisting of a relatively small number of vessels, this segment produces around one third to one quarter of the total UK fleet income and is highly profitable, with profits of around 30% of total income in 2009. GVA per FTE for this segment is the highest in the region, at €570 thousand per FTE. The Irish over 24m pelagic trawl segment also catches significant volumes and in 2009 generated around €110 million in landings. This fleet was also profitable in 2009 with GVA and profits as percentage of income of 51% and 3.4% respectively. GVA per FTE for this segment was €174 thousand per FTE in 2009. The data suggests that the Dutch over 40m pelagic trawl vessels are less profitable, despite generating significant income per vessel, with GVA and profits as % of income of 27% and -17% respectively. GVA per FTE for this segment was €57 thousand per FTE in 2009.

Table 6.3.1 EU North Atlantic fleet economic performance by main segment 2009

Fleet segments	No. of vessels	FTEs	Total income (€ million)	GVA (€ million)	Profit (€ million)	GVA as % of total income	Profit as % of total income	GVA/ FTE (1000)
UK pelagic trawl / purse seine over 40m	31	231	213.3	131.7	62.0	61.8%	29.1%	570.3
French demersal trawl / seine	556	2,030	296.1	131.7	37.1	44.5%	12.5%	64.9
Ireland Pelagic trawl over 24m	35	322	109.6	55.9	3.7	51.0%	3.4%	173.6
Portugal demersal trawl / seine 24-40m	74	538	43.3	21.7	-6.1	50.2%	-14.0%	40.4
UK demersal trawl over 12m	597	2,802	278.7	94.4	15.3	33.9%	5.5%	33.7
Dutch pelagic trawl over 40m	13	502	108.0	28.6	-18.7	26.5%	-17.3%	57.1
Irish demersal trawl over 18m	86	497	63.9	22.4	-22.2	35.0%	-34.7%	45.0
French drift and fixed nets 0-24m	670	1,450	138.8	82.4	20.4	59.3%	14.7%	56.8
Belgium Beam trawl 24-40m	40	210	48.6	18.5	-4.3	38.1%	-8.8%	88.1
UK Beam trawl 24-40m	27	145	26.9	-11.5	-17.5	-42.8%	-65.0%	-79.3
Uk pots and traps 0-10m	1,791	1,014	58.3	36.4	9.5	62.4%	16.2%	35.9
Portuguese polyvalent 0-10m	1,618	3,079	28.3	19.5	5.0	68.8%	17.8%	6.3
Portuguese purse seine 18-24m	52	867	24.4	18.2	-1.5	74.6%	-6.1%	21.0
French hooks 0-12m	275	241	25.1	15.5	4.4	61.8%	17.6%	64.5
French pots 10-12m	58	134	15.4	10.0	2.8	64.9%	18.0%	74.5
Total	5,923	14,062	1,479	675	90	46%	6%	48.0

Around 560 French demersal trawl and seine vessels operate in the North Atlantic region, employing around 2,000 FTEs, and produced a total income of around €300 million in 2009. These vessels are profitable on average, with GVA and profits as % of income of 45% and 13% respectively. GVA per FTE for this segment was €65 thousand per FTE in 2009. These vessels however do not operate exclusively in the North Atlantic. Similarly, there are around 600 UK over 12m demersal trawl and seine vessels in total, however a large proportion of those vessels operate in the North Sea. The vessels employ around 2,800 FTEs, generating a total income of around €280 million. The data suggests that these vessels are profitable on average, with a GVA per FTE of €34 thousand in 2009. Data on the Irish demersal trawl over 18m fleet suggests that these vessels were on average unprofitable in 2009, with losses as a % of income of 35%. This segment does however employ around 500 FTEs, with a positive GVA per FTE of around €45 thousand in 2009. Portuguese demersal trawl 24-40m vessels also generated losses in 2009, with GVA and profits as % of income of 50% and -14% respectively. GVA per FTE for this segment was €40 thousand in 2009.

Both UK and Belgian beam trawl segment reported in table 6.3.1 generated losses in 2009. In the case of the UK 24-40m beam trawlers, negative GVA is recorded, meaning that this segment did not generate enough income to cover operational costs (not including crew wages) in 2009. The Belgian beam trawlers were able to generate a positive GVA, with a GVA per FTE of €88 thousand in 2009.

The data suggest that all the under 12m static gear segments reported in table 6.3.1 (French hooks and pots, UK pots and traps, Portuguese polyvalent, French drift and fixed nets (0-24m)), were profitable overall in 2009. Combined, these segments consist of around 4000 vessels and 5000 FTEs, although it is worth noting that some of the UK and French static gear vessels also operate in the North Sea.

6.4. North Sea and Eastern Arctic area

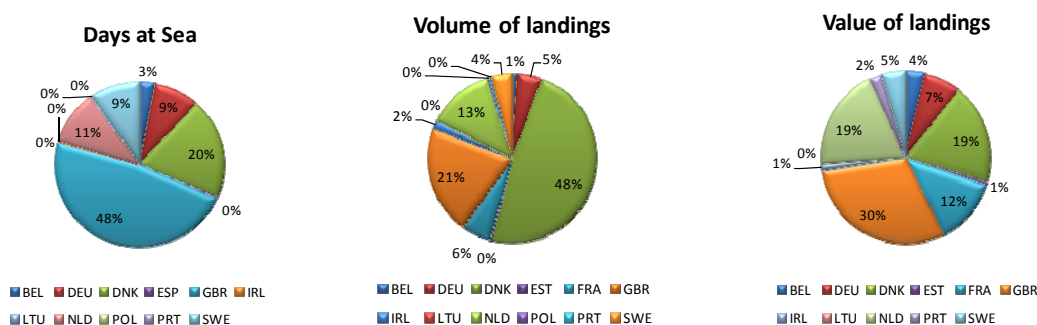
6.4.1. EU North Sea fleet general overview

The North Sea and Eastern Arctic area includes ICES areas IIIa, IV, VIId, I and II. The Member States with reported landings in these areas include Belgium, Germany, Denmark, Estonia, France, UK, Ireland, Lithuania, Netherlands, Poland, Portugal and Sweden.

For this analysis there were no landings value data available for Spain, while French effort data was not provided at the correct aggregation levels (FAO sub region) and instead was provided at supra region level, which was insufficient for the purposes of this analysis. In addition French data on volume and value of landings by species was not provided for the year 2008, despite being made available for all the other years requested under the DCF data call. In addition, Danish effort and landings data were not provided at the correct aggregation levels (FAO sub region) for the years 2002-2007. In these years all effort and landings data were allocated to FAO sub region 27.4.b, when in fact a proportion of those values should have been allocated to Baltic Sea sub regions. This has affected the accuracy of time series information presented in both the North Sea and Baltic Sea chapters of this Annual Economic Report.

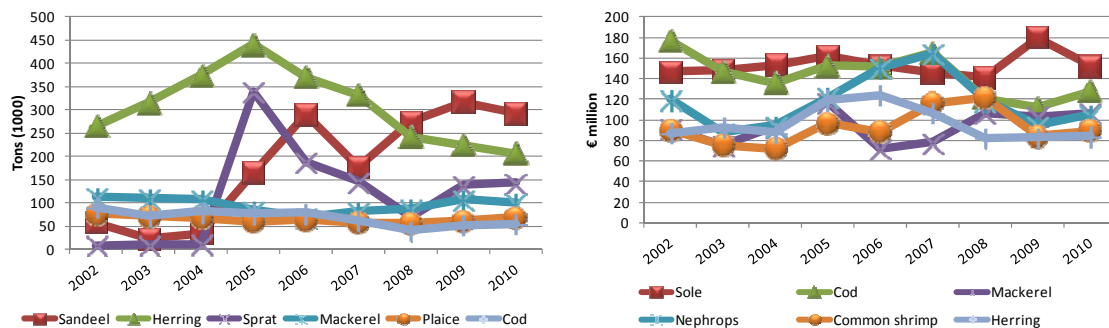
Based on the data available, an estimated total of 11,500 EU vessels operated in the North Sea and Eastern Arctic area in 2009, although most of the fleet segments also operated in other areas such as the Baltic Sea and North Atlantic and almost half of the landings made by these fleets were registered in the North Atlantic and Baltic Sea. In 2009 the total effort (days at sea) spent by EU vessels in the North Sea and Eastern Arctic was an estimated 470 thousand days. The UK fleet had the highest share of total days (48%), followed by Denmark (20%) and then the Netherlands (11%) see figure 6.4.1 (left). The total volume landed by the EU fleet in the North Sea and Eastern Arctic in 2009 was 1.4 million tons of seafood. The Danish fleet had the highest share of the total volume (48%), followed by the UK fleet (21%) and then the Dutch fleet (13%) see figure 6.4.1 (centre). A significant amount of Danish landings consist of fish caught for industrial use and are low value. The total value of landings by the EU fleet in the North Sea and Eastern Arctic in 2009 was €1.3 billion. The UK fleet had the highest share of the total value (30%), followed by the Dutch fleet (19.2%) and then the Danish fleet (18.8%), see figure 6.4.1 (right).

Figure 6.4.1 EU North Sea fleet effort and landings in 2009



The main species in terms of volume landed in the North Sea in 2010 was sandeel (293 thousand tons) after the decline in landed volume of herring between 2005 and 2010 (206 thousand tons in 2010, decrease of 53% between 2005 and 2010). The peak in herring landings occurred at the same time as the peak in sprat landings. The volume of landings of sandeel increased 91% between 2007 and 2009, before decreasing slightly in 2010. The volume of plaice, cod and mackerel landings have all been relatively stable by comparison over the years analysed. Data submitted suggests that landings of industrial fishery species (sandeel, sprat, some herring, Norway pout) have increased, the majority being landed by the Danish fleet.

Figure 6.4.2 EU North Sea fleet volume and value landed of top 6 species



In terms of landed value, sole was the most important species in 2010 (€152 million, a decrease of 15% from 2009). Sole has been the dominant species in terms of value of landings from 2002 to 2010 with the exception of 2007 when Nephrops overtook sole. The data suggests that in 2010 Nephrops was only the 4th most important species landed in terms of value (€105 million), behind cod (€128 million) and mackerel (€107 million). Mackerel landings have been fairly stable over the years, while the value of mackerel landings has varied considerably due to price changes. Just outside the top 6, the value of plaice landings have displayed a generally negative trend although in 2010 the value of landings increased, due to the fact that the price for plaice improved in 2010.

North Sea herring quotas were cut significantly in 2009 and 2010 which is somewhat reflected in the volume of landings. However the price levels for Herring was favourable during this period and the value of the landings increased on total. In 2011 herring quotas increased. The multi-annual plan for North Sea plaice and sole has become effective. Plaice stocks have recovered strongly from 2008 onwards and therefore quotas are increasing, however sole quota and consequently catch have not developed accordingly yet. A cod management plan for the North Sea has been introduced but the beneficial effects of the plan are yet to be felt. The demersal fishing sector has again experienced considerably lower effort quota for vessels using larger mesh sizes.

6.4.2. EU North Sea fleet economic performance

There were in total 151 fleets segments operating in the North Sea and Eastern Arctic region in 2009. Economic data was available for 112 of these fleet segments. These segments covered 85% of the total volume of landings data received for the North Sea

and Eastern Arctic. The following analysis is based on the economic data available and does not reflect the entire fishing activity taking place within the region.

Table 6.4.1 EU North Sea fleet economic performance by MS in 2009

Member State	Number of vessels	FTEs	Value of landings (€million)	Value of landings from the North Sea (€ million)	Total Income (€ million)	GVA (€ million)	Profit (€ million)	GVA as % of total Income	Profit as % of total Income
United Kingdom	4,665	6,783	538.1	305.1	627.2	210.3	13.2	34%	2%
Netherlands	544	1,802	288.1	248.3	326.6	127.0	-3.1	39%	-1%
Denmark	511	1,238	252.5	222.8	264.6	152.1	-22.6	57%	-9%
France	2,795	5,639	632.2	140.3	719.4	360.1	85.2	50%	12%
Germany	1,223	1,019	124.0	89.9	131.2	62.9	2.4	48%	2%
Sweden	1,115	941	100.9	59.2	123.1	56.8	2.5	46%	2%
Ireland	42	403	81.7	16.0	114.9	57.1	2.6	50%	2%
Belgium	86	321	68.0	48.7	69.6	27.0	-8.2	39%	-12%
Portugal	13	487	32.7	30.3	40.7	25.1	-6.5	62%	-16%
Estonia	4	86	9.1	9.1	21.5	6.6	4.8	31%	22%
Total	10,998	18,719	2,127.2	1,169.5	2,438.7	1,084.8	70.4	44.5%	2.9%

Table 6.4.1 shows that, in terms of landed value, the most important Member States operating in the North Sea and Eastern Arctic in 2009 were the UK, Dutch and Danish fleets, in that order. French fleets generated the highest production value overall, however only 20% of French landings are from the North Sea and Eastern Arctic area. UK fleets generated the highest regional landing value and their fleets generated a combined GVA of €210 million. Danish fleets had a high GVA in relation to their total income (57%). Only the Portuguese demersal fleet generated higher productivity in 2009.

Discounting the Estonian fleet, the French fleet was the most profitable fleet operating in the North Sea and Eastern Arctic in 2009, with a 12% profit margin. Portuguese, Belgian and Danish fleets made losses while fleets from the remaining Member States broke even, see table 6.4.1.

Table 6.4.2 shows that the demersal trawl/seine gear type was economically the most important fishing technique in the North Sea and Eastern Arctic region in 2009. Vessels using these gear types accounted 42% of the total GVA in the region. Pelagic fleets generated higher GVA than beam trawl fleets but they tend to operate more in other regions. Other fishing techniques, apart from small scale vessels, were more productive in terms of GVA as a proportion of income. The most profitable gear types were fixed pots and traps, polyvalent mobile gears and dredges. According to the data, small scale fishing vessels generated significant losses, while beam trawlers and polyvalent passive gear segments also made losses.

Table 6.4.2 EU North Sea fleet economic performance by gear type in 2009

Member State	Number of vessels	FTEs	Value of landings (€million)	Value of landings from the North Sea (€ million)	Total Income (€ million)	GVA (€ million)	Profit (€ million)	GVA as % of total Income	Profit as % of total Income
Demersal trawl and seine	2,356	7,534	871.3	447.5	975.3	411.5	48.7	42%	5%
Beam trawl	719	2,109	335.5	296.8	372.2	110.4	-30.6	30%	-8%
Pelagic trawl	175	1,530	353.5	213.1	452.4	209.0	-13.3	46%	-3%
Dredges	529	975	116.9	66.5	129.5	68.1	19.5	53%	15%
Drift and fixed nets	1,405	1,951	179.0	51.4	176.6	101.0	21.3	57%	12%
Fixed pots and traps	2,415	2,388	134.7	42.7	161.4	94.3	26.0	58%	16%
Polyvalent mobile and passive	217	354	32.3	12.5	37.8	21.3	0.8	56%	2%
Passive gears	1,948	834	26.7	12.0	30.4	11.6	-10.7	38%	-35%
Polyvalent passive gears	144	183	16.3	10.6	17.8	10.5	-1.4	59%	-8%
Gears using hooks	826	588	48.2	10.4	57.8	31.9	6.0	55%	10%
Polyvalent mobile gears	80	142	10.3	6.0	16.7	9.1	2.7	55%	16%
Other mobile gears	184	131	2.5	0.0	10.8	6.1	1.4	57%	13%
Total	10,998	18,719	2,127.2	1,169.5	2,438.7	1,084.8	70.4	44.5%	2.9%

The most important fleet segment operating in the North Sea and Eastern Arctic in terms of landed value in 2009 was the Dutch beam trawl over 40m segment, see table 6.4.3. This segment operates 100% in the North Sea, consists of 64 vessels and employs 392 FTEs. These vessels generated a total income of €113 million in 2009, with GVA and profits as a % of income of 50% and 18% respectively. The most important segment operating at least partly in the North Sea in terms of volume of landings was the Danish pelagic trawl over 40m segment. This segment consists of 32 vessels employing 209 FTEs. These vessels generated a total income of €99 million in 2009, with GVA and profits as a % of income of 66% and 0% respectively.

Fuel price increased significantly in 2010 and are not expected to decrease in the near future. This will have quite a significant impact on the profitability of EU fleets, especially for the fuel intensive trawl segments such as beam, demersal and pelagic trawl. Data suggests that the shrimp market seems to have improved in 2010. After two years of extremely low prices (2008 and 2009), the prices increased by 10-15% in 2010.

The introduction of 'Natura 2000' areas are likely to have an impact on fishing operations in the North Sea. In particular the closure of the 'Doggerbank' may have some economic impact on the fleets that operate in that area. Several segments including the Danish industrial fleet may also be impacted. The setup of windmill parks in the North Sea in various locations may also have an impact on the profitability of various segments of the fleet, and the extent of these impacts are yet to be fully researched.

In line with the flatfish management plan, sole quotas will decrease as the sole stock is still recovering. Plaice quotas are likely to increase further.

Table 6.4.3 EU North Sea fleet economic performance by main segments 2009

Fleet segments	% of landed value from North Sea and Eastern Arctic	% of landed volume from North Sea and Eastern Arctic	% of effort in North Sea and Eastern Arctic	Number of vessels	FTEs	Total income (€million)	GVA (€ million)	Profit (€ million)	GVA as % of income (€ million)	Profit as % of income (€ million)
Dutch beam trawl over 40m	100%	100%	100%	64	392	112.7	56.0	20.0	50%	18%
Danish pelagic trawl over 40m	93%	91%	80%	32	209	98.7	64.7	0.3	66%	0%
UK pelagic trawl / purse seine over 40m	38%	42%	37%	31	231	213.3	131.7	62.0	62%	29%
UK Demersal trawl and seine 18-24m	78%	79%	66%	221	1,143	108.4	38.9	7.6	36%	7%
UK Demersal trawl and seine 24-40m	68%	72%	66%	106	765	116.5	34.8	0.5	30%	0%
Danish pelagic trawl 24-40m	90%	86%	91%	46	260	52.6	28.0	-2.2	53%	-4%
Dutch beam trawl 18-24m	100%	100%	100%	173	453	47.9	21.7	-0.8	45%	-2%
Dutch beam, trawl over 40m	52%	53%	51%	13	502	108.0	28.6	-18.7	26%	-17%
German demersal trawl over 24m	68%	60%	68%	24	208	55.2	25.5	-1.9	46%	-3%
Danish demersal trawl 18-24m	89%	89%	89%	77	226	38.6	20.8	-3.8	54%	-10%

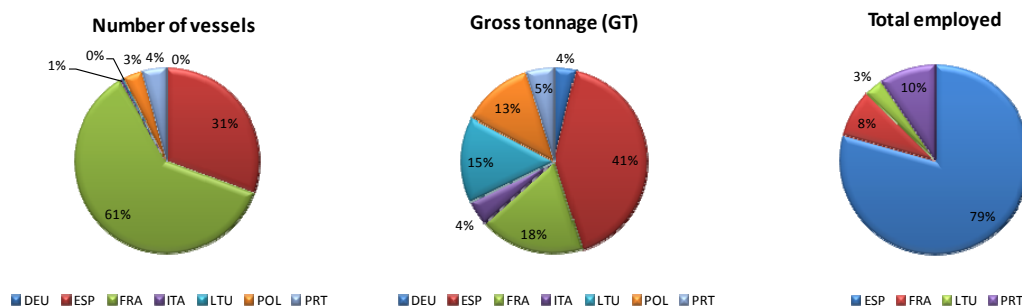
6.5. Other Regions

6.5.1. EU 'other regions' fleet general overview

Although the main fishing grounds for the EU fishing fleet are the Baltic Sea, North Sea, North Atlantic and Mediterranean Sea, parts of the EU fleet operate much further afield. This analysis is concentrated on all the other regions where the EU fleets are present and operational. The majority of production in other regions is the result of high seas (over 40m) vessels however there are some regions such as Madeira and the Canary islands, where coastal fleets of EU Member States also operate.

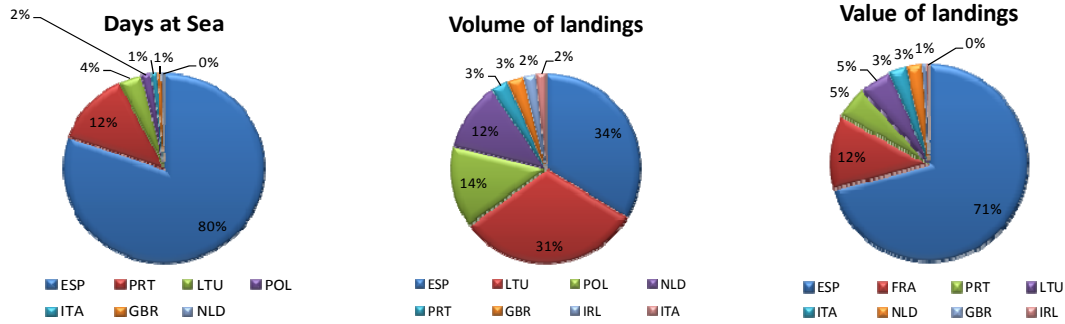
Six Member States provided capacity data for other fishing regions while only four Member States provided employment data. Seven Member States provided data on fishing effort in other regions, six Member States provided data on value of landings by species in other regions (Spain provided value data at fleet segment and supra region only, not broken down by species), and eight Member States provided data on volume landed in other regions. Some EU Member States did not provide any data (i.e. Germany), or provided only partial data (Poland, Netherlands) because of confidentiality reasons. Spain and did not provide any data on value of landings. The French data provided covers a minor part of the fisheries in the other regions. The lack of data provided by Member States such as Spain and France prevents a detailed economic analysis of EU fleets and fisheries in other regions.

Figure 6.5.1 EU 'other regions' fleet capacity and employment in 2009



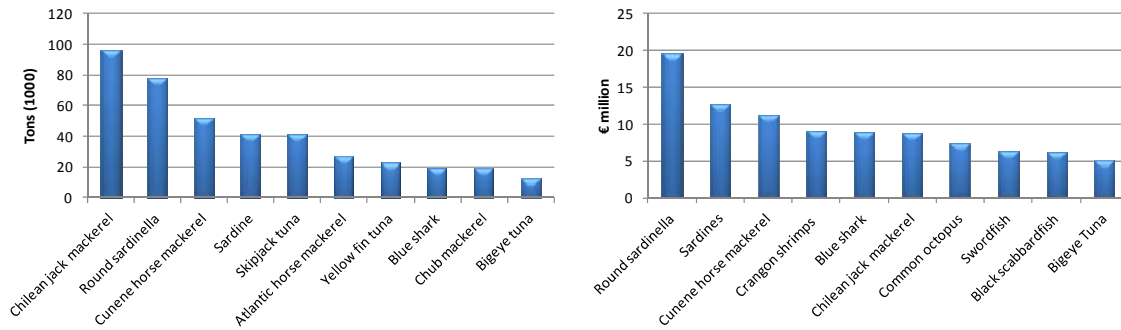
According to the data provided, the total EU fleet operating in the 'other regions' consisted of 3355 vessels. The majority of these vessels were French (61%, of those small coastal vessels made up 96%), followed by Spanish vessels (31%, of those small coastal vessels made up 63%) and Portuguese (4%, of these were small coastal vessels made up 45%), see figure 6.5.1 (left). Most Member States fishing in 'other regions' use large vessels with freezing capabilities that operate outside their national EEZ's. The total number of vessels submitted that were over 12m in length was 613 in 2009 and 61% of those vessels were Spanish. The data suggests that the total tonnage (GT) of all EU vessels operating in other regions was 242 thousand tons in 2009. The Spanish fleet was also the largest in terms of tonnage, with 41% of the total GT, followed by the French fleet (18%) and then the Lithuanian fleet (15%) see figure 6.5.1 (centre). Total employment reported in other regions in 2009 was 9,200 fishermen however this only included data from Spain, France, Lithuania and Portugal. Spain had the highest share of the employment (79%), see figure 6.5.1 (right).

Figure 6.5.2 EU ‘other regions’ effort and landings in 2009



According to the data provided, the number of days at sea by EU vessels fishing in ‘other regions’ was around 152 thousand days in 2009. Around 80% of the days at sea reported belonged to the Spanish fleet, 12% belonged to the Portuguese fleet and 4% to the Lithuanian fleet, see figure 6.5.2 (left). The data also suggests that the EU fleet landed a total of 547 thousand tons of seafood from ‘other regions’ in 2009, however, according to FAO catch statistics, the catches of EU Member States in the South and Central Atlantic, Pacific and Indian Oceans in 2009 were 935 thousand tons. Based on the DCF data, the Spanish fleet again produced the highest volume (34%), followed by the Lithuanian fleet (31%) and then the Polish fleet (14%), see figure 6.5.2 (centre). The data also suggests that the total value of landings generated from ‘other regions’ by the EU fleet in 2009 was around €816 million in 2009. The vast majority of landings value was generated by the Spanish fleet (72%), followed by the French fleet (12%) and then the Lithuanian fleet (5%), see figure 6.5.2 (right).

Figure 6.5.3 EU ‘other regions’ fleet volume and value of top 10 species in 2009



Data submitted on landings by species is incomplete (particularly for earlier years) so coherent time series analysis of landings by species was not possible for the ‘other regions’. Therefore figure 6.5.3 contains both the top 10 species landed that were caught by the EU fleet fishing in ‘other regions’ in 2009. Note that data on value landed by species does not include landings from the Spanish fleet, whereas data on volume landed does include landings by the Spanish fleet. The data suggests that Chilean jack mackerel was the species with the highest volume of landings made by the EU fleet in 2009 from ‘other regions’ (96 thousand tons), followed by round sardinella (78 thousand tons) and Cunene horse mackerel (51 thousand tons). Taking into account the unavailability of data from the Spanish fleet, round sardinella produced the highest landed value overall in 2009 (€19 million), followed by Sardines (€13 million) and then Cunene horse mackerel (€11 million).

Table 6.5.1 EU 'other regions' fleet economic performance by main segment 2009

Fleet segments	No. of vessels	FTEs	Total Income (€ million)	GVA (€ million)	Profit (€ million)	GVA as % of total income	Profit as % of total income	GVA/ FTE (1000)
Spanish demersal trawl / seine 24-40m	13	1,886	116.0	17.0	-26.0	14.6%	-22.4%	9.0
Spanish demersal trawl / seine over 40m	32	686	71.2	23.4	-3.6	32.9%	-5.0%	34.1
Spanish hooks 0-12m	529	244	2.7	1.8	1.2	66.5%	43.6%	7.4
Spanish hooks 12-24m	59	279	9.0	2.4	-2.0	27.0%	-22.5%	8.7
Spanish hooks 24-40mm	131	1,788	104.8	29.5	-9.7	28.2%	-9.3%	16.5
Spanish hooks over 40m	31	989	54.5	17.5	-5.0	32.1%	-9.1%	17.7
Spanish polyvalent mobile and passive 0-12m	26	689	6.7	2.7	-0.3	39.7%	-4.3%	3.9
Spanish polyvalent mobile and passive 12-18m	25	158	8.0	5.5	2.3	68.9%	28.7%	34.8
Spanish purse seine 0-10m	51	62	0.8	0.6	0.1	78.4%	9.7%	10.2
Spanish purse seine 12-18m	21	83	1.5	0.8	0.0	54.4%	-2.4%	9.9
Spanish purse seine over 40m	-	1,968	215.5	17.6	-59.1	8.2%	-27.4%	9.0
French demersal trawl / seine 18-24m	22	-	7.1	2.7	0.2	38.8%	2.2%	-
French hooks 12-40m	34	131	9.7	3.7	0.4	38.1%	3.8%	28.2
French purse seine over 40m	18	0	83.6	1.3	-33.7	1.6%	-40.3%	-
Italian demersal trawl / seine over 40m	17	-	18.5	14.1	4.0	76.2%	21.4%	-
Portuguese demersal trawl / seine 18-40m	8	64	5.6	0.6	-2.0	11.3%	-36.5%	9.7
Portuguese hooks 0-12m	59	112	2.0	1.7	0.0	85.3%	-0.8%	14.9
Portuguese hooks 12-24m	33	364	8.1	4.9	-0.6	60.1%	-7.4%	13.3
Portuguese hooks over 24m	25	248	17.9	8.2	-3.4	45.5%	-18.8%	32.9
Portuguese polyvalent mobile gears 0-10m	5	14	0.3	0.3	0.1	86.4%	29.0%	20.7
Portuguese purse seine 12-24m	7	33	0.8	0.5	0.1	62.9%	12.1%	14.7
Portuguese polyvalent mobile and passive gears 0-18m	5	65	0.8	0.6	-0.2	74.8%	-25.1%	9.5
All	1151	9865.4	745.0	157.4	-137.4	21%	-18%	16.0

Table 6.5.1 contains a breakdown of economic performance of EU fleets segments operating in other fishing regions in 2009. The table does not include all EU segments operating in 'other regions' due to missing data for some Member States and also confidentiality reasons (economic data for some segments with low vessels numbers have been clustered with similar segments operating in areas 27 or 37). The segments reported in table 6.5.1 represent only 34% of the total number of EU vessels reported as active in 'other regions', however these segments do represent 83% of all FTEs in 'other regions' and 90% of the reported total value of landings by the EU fleet in 'other regions'. The largest segment in terms of overall income in 2009 was the Spanish over 40m purse seine segment (€216 million), which employed almost 2,000 FTEs. This segment generated a GVA of 8.2% of total income and made calculated losses of 27.4% of total income. In comparison the French over 40m purse seine fleet segment generated a GVA of 1.6% of total income and made calculated losses of around 40% of total income.

7. NATIONAL CHAPTERS

7.1 Belgium

7.1.1 National fleet structure

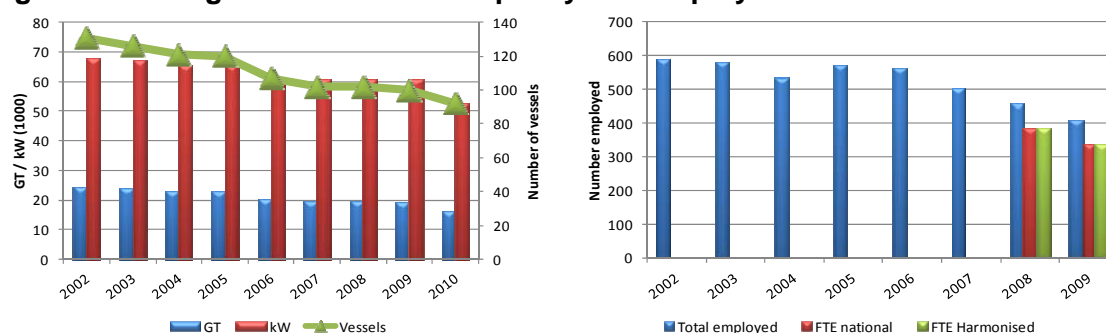
In 2010 the Belgian fishing fleet consisted of 92 registered vessels, with a combined gross tonnage of 16.1 thousand GT and total power of 52.8 thousand kW, see Table 7.1.1 and Figure 7.1.1. The overall average age of vessels was 23 years in 2010. The capacity of the Belgian fishing fleet decreased between 2002 and 2010. The number of vessels decreased by 30% or 39 vessels and the total GT and kW of the fleet increased/decreased by 33% and 22% respectively during that period.

Table 7.1.1 Belgian national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Capacity									
Number of vessels	131	126	121	120	107	102	102	100	92
GT (1000)	24.3	23.8	22.8	22.6	20.0	19.3	19.3	19.0	16.1
kW (1000)	68.0	67.1	65.6	65.4	60.2	60.6	60.6	60.6	52.8
Average age	19.0	19.0	19.0	21.0	22.0	22.0	22.0	23.0	23.0
Employment									
Total employed	590	578	533	570	562	501	458	409	
FTEs							380	335	
Effort									
Days at sea (1000)	27.8	21.7	22.5	21.4	19.5	18.4	19.5	17.7	17.9
Energy consumption (Million litres)	82.4	81.1	65.1	74.5	79.5	63.7	42.4	52.9	
Landings									
Weight (1000 tons)	25.8	23.6	23.6	21.5	20.3	21.8	20.0	19.0	19.8
Value (Million €)	91.9	90.4	85.9	86.3	90.7	90.3	76.3	68.0	76.2
Profitability indicators (Million €)									
Gross Value Added	42.3	40.1	34.5	25.5	20.5	33.3	20.5	27.0	27.6
Operating cash flow	8.6	5.9	1.0	-8.0	-17.8	1.8	-3.6	5.4	3.5
Economic profit	0.0	-1.4	-6.0	-14.4	-23.5	-2.7	-16.8	-8.2	-10.0
Capital value (Million €)									
Tangible assets							53.5	72.6	63.0
Fishing rights							0.0	0.0	

The total number of fishing enterprises in the Belgian fleet was 83 in 2010. The vast majority of fishing enterprises (95%) owned a single vessel. Only 6 fishing enterprises owned two or more fishing vessels. Total employment was 409 jobs and 335 FTEs in the Belgian fleet in 2009, see Table 7.1.1 and Figure 7.1.1. Total employment in the Belgian fishing fleet decreased by around 30% between 2002 and 2009.

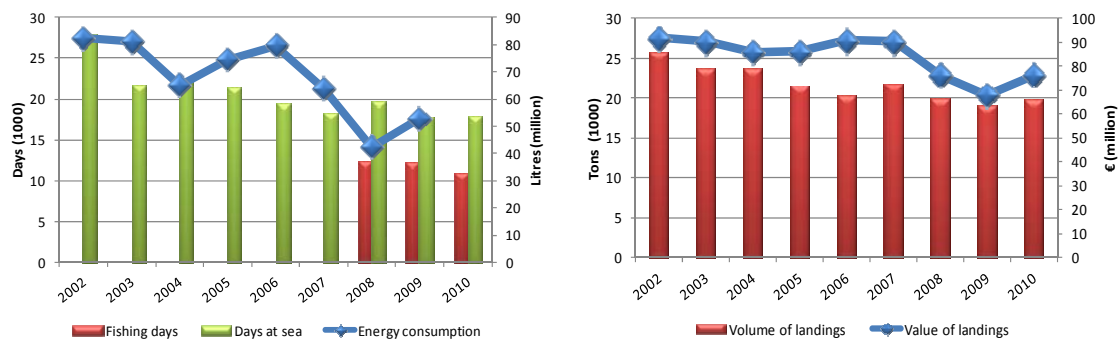
Figure 7.1.1 Belgian national fleet capacity and employment trends



7.1.2 National fleet fishing activity and output

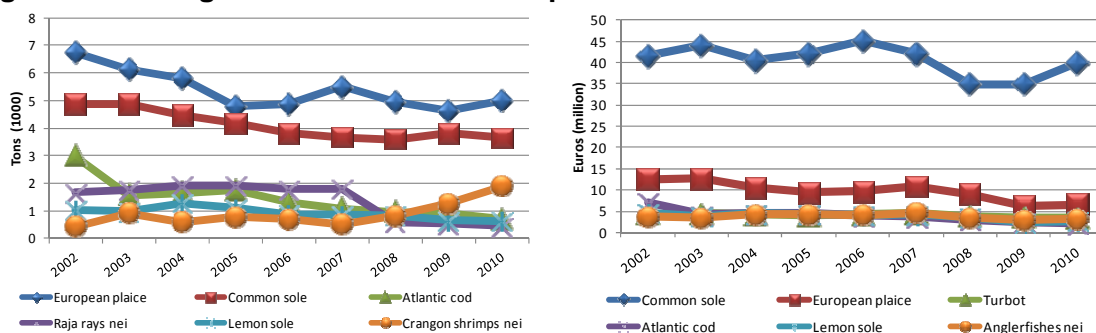
In 2010 the Belgian fishing fleet spent a total of 17.9 thousand days at sea, 61% of which were actual fishing days. The total number of days at sea decreased by 36% between 2002 and 2010, see table 7.1.1 and figure 7.1.2. The total quantity of fuel consumed by the Belgian fleet in 2009 was 52.9 million litres. The total quantity of fuel consumed decreased by around 36% between 2002 and 2009, see table 7.1.1 and figure 7.1.2.

Figure 7.1.2 Belgian national fleet fishing effort and landings trends



The total volume of landings by the Belgian fishing fleet in 2010 was 18.4 thousand tons of seafood. The total volume of landings decreased by 29% between 2002 and 2010, see, table 7.1.1 and figure 7.1.2. In 2010 European plaice was the most common species landed in terms of tonnage (4.5 thousand tons), followed by Common sole (3.6 thousand tons) and Crangon shrimps (1.4 thousand tons), see figure 7.1.3.

Figure 7.1.3 Belgian national fleet main species landed trends



7.1.3 National fleet economic performance

In terms of landings composition, in 2010 Common sole accounted for the highest value of landings (€44.4 million) by the Belgian national fleet, followed by European plaice (€6.6 million) and Turbot (€3.7 million), see figure 7.1.3. The prices obtained for these key species generally followed an increasing trend during the period 2002-2006, followed by a decreasing trend during the period 2006-2009, before increasing again during 2010.

In terms of prices, in 2010 Turbot achieved the highest average price per kilo (€12.8 per kg) by the Belgian national fleet, followed by Common sole (€12.3 per kg) and Anglerfish (€10.4 per kg), see figure 7.1.4.

Table 7.1.2 Belgian national fleet economic performance indicators

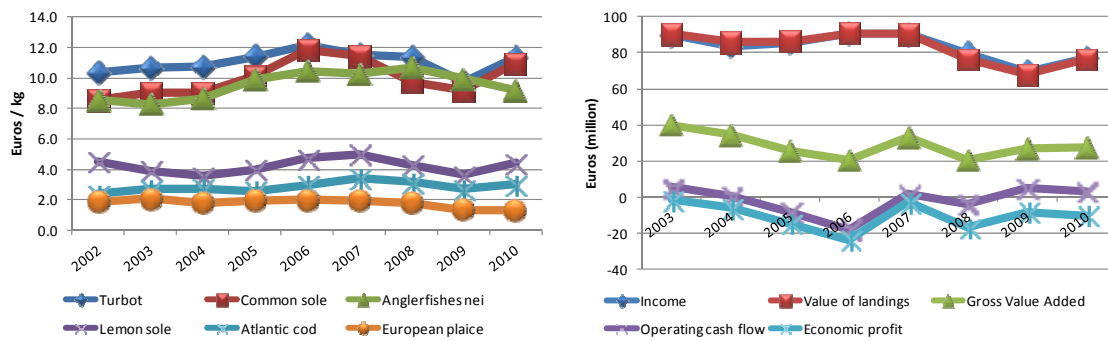
	2002	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)									
Landings							76.3	64.4	73.0
Direct subsidies							1.3	0.9	1.1
Other income							2.3	4.3	3.3
Fishing rights							0.0	0.0	0.0
Total income	91.6	89.8	83.8	85.7	90.7	90.3	79.8	69.6	77.3
Costs (Million €)									
Crew wages	33.7	34.3	33.5	33.6	38.3	31.5	25.3	22.4	25.2
Unpaid labour value							2.8	2.3	2.6
Energy costs	20.6	21.1	20.2	32.0	38.1	30.6	34.1	19.3	26.7
Repair costs	7.4	7.5	7.4	7.7	7.1	6.5	5.4	4.9	5.0
Variable costs	15.2	13.8	13.9	12.8	16.5	12.8	11.9	10.2	10.3
Fixed costs	6.1	7.3	7.7	7.6	8.5	7.1	6.7	7.3	6.7
Rights costs							0.0	0.0	0.0
Capital costs		7.2	7.0	6.3	5.7	4.5			
Depreciation costs							10.4	8.5	9.5
Interest							0.0	2.8	1.4
Profitability indicators (Million €)									
Gross Value added	42.3	40.1	34.5	25.5	20.5	33.3	20.5	27.0	27.6
Operating cash flow	8.6	5.9	1.0	-8.0	-17.8	1.8	-3.6	5.4	3.5
Economic profit	0.0	-1.4	-6.0	-14.4	-23.5	-2.7	-16.8	-8.2	-10.0
Capital value (Million €)									
Total invested	90.6	115.6	107.6	91.4	77.3	68.8			
Tangible assets							53.5	72.6	63.0
In-years investments							3.9	7.3	

The total amount of income generated by the Belgian national fleet in 2009 was €69.6 million euros. This consists of €64.4 million in landings values, €4.3 million in non fishing income, and €0.9 million in direct subsidies, see table 7.1.2 and figure 7.1.4. During the period 2006 and 2009 the total income of the Belgian fleet decreased by 23%, although the forecast for 2010 is an increase of 11%.

The total costs (including unpaid labour and capital cost estimates) by the Belgian national fleet in 2009 was €77.7 million euros, see Table 7.1.2. The largest expenditure items were crew wages (29% of total costs) and energy costs (25% of total costs). During the period 2006-2009 the total operating costs (all costs except capital costs) of the Belgian fleet decreased by 39%, although the forecast for 2010 is an overall increase in operating costs of 17%.

In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Belgian national fleet in 2009 was €27 million, €5.4 million and a loss of €8.2 million respectively, see table 7.1.2 and figure 7.1.4. Further decreases in all profitability indicators are predicted for 2010. In 2009, the Belgian fleet had an estimated capital value of €72.6 million.

Figure 7.1.4 Belgian national fleet economic performance trends



7.1.4 Fleet composition

The Belgian national fleet consisted of 2 main Beam trawl fleet segments in 2009. These fleet segments mainly operate in the North Sea and North Atlantic. Both segments made overall losses in 2009.

Table 7.1.3 Belgian fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DRB	2	278	881	7	6	0.42	421	0.6	1.0	0.5	0.1	-0.1	0.2
VL1824	1	68	219	3	2	0.19							
VL1840							421	0.6	1.0	0.5	0.1	-0.1	0.2
VL2440	1	210	662	4	4	0.23							
DTS	7	1,364	4,308	31	28	1.57	2,172	1.4	5.0	2.4	0.9	-0.4	7.0
VL1824	2	186	442	8	6	0.37		0.2	0.9	0.4	0.1	-0.2	0.8
VL2440	5	1,178	3,866	23	22	1.20	2,172	1.1	4.1	2.0	0.7	-0.2	6.2
INACTIVE	8	1,186	4,096										
VL1218	1	24	145										
VL1824	2	152	442										
VL2440	5	1,010	3,509										
PG	4	184	1,524	14	8	0.39	181	0.1	1.1	0.6	0.2	-0.3	2.4
VL1012	1	21	221	3	1	0.07							
VL1024							181	0.1	1.1	0.6	0.2	-0.3	2.4
VL1218	2	30	853	5	4	0.18							
VL1824	1	133	450	6	3	0.15							
TBB	79	15,995	49,811	357	293	15.36	50,089	16.9	62.5	23.5	4.3	-7.4	62.9
VL1218	5	192	944	13	11	0.70	670	0.4	1.2	0.6	0.1	-0.2	1.7
VL1824	34	2,834	7,467	116	72	5.39	8,507	4.0	12.6	4.4	-0.3	-2.8	17.8
VL2440	40	12,969	41,400	228	210	9.26	40,912	12.6	48.6	18.5	4.4	-4.3	43.5
Grand Total	100	19,007	60,620	409	335	17.74	52,864	19.0	69.6	27.0	5.4	-8.2	72.6

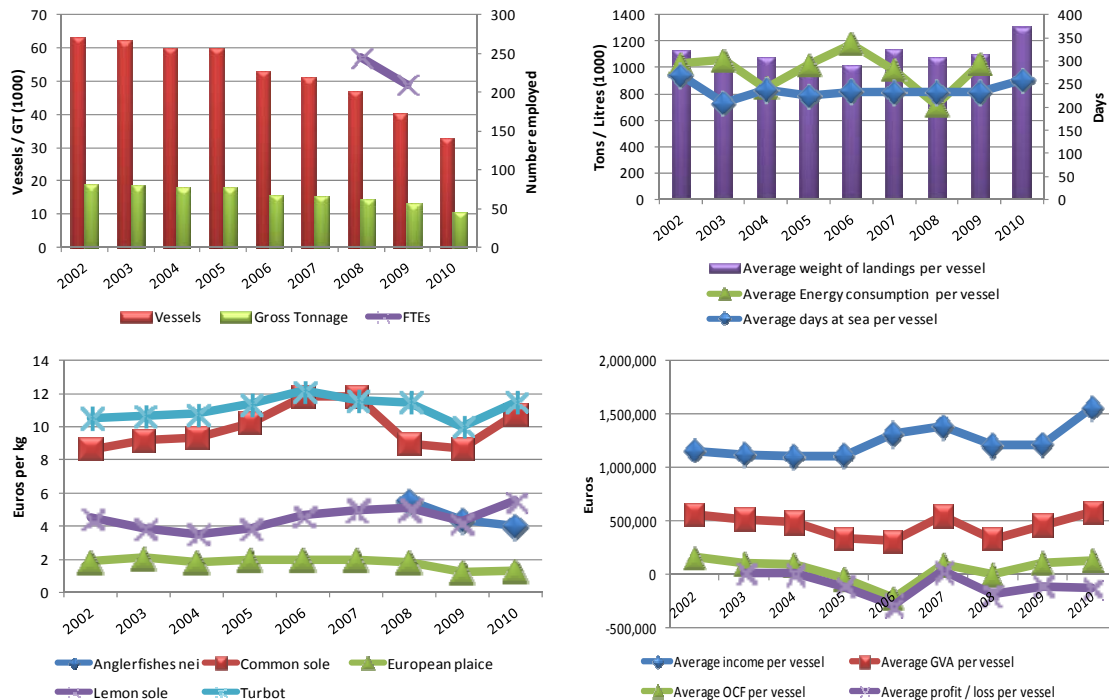
Table 7.1.3 provides a breakdown of key performance indicators for all Belgian fleet segments in 2009. A short description of the two most important segments in terms of total value of landings is given below:

Beam trawl 24-40m – 40 vessels make up this segment and they are based predominantly in the North Sea and North Atlantic. These vessels target a variety of whitefish and flatfish species, such as sole, plaice and monkfish. Their total income was €48.6 million and 228 jobs were supported by this segment in 2009. This fleet segment

made losses in 2009, see Figure 7.1.5 for key economic indicators relating to this fleet segment.

Beam trawl 18-24m – 34 vessels make up this segment and they are based predominantly in the North Sea and North Atlantic. These vessels target a variety of species, such as sole, plaice and monkfish. Their total income was €12.6 million and 116 jobs were supported by this segment in 2009. This fleet segment made losses in 2009.

Figure 7.1.5 Belgian beam trawl 24-40m key indicators



7.1.5 Assessment for 2010 and 2011

Investments are expected to be higher in 2010 due to the European Fisheries Fund (EFF, EC No 1198/2006), especially the fuel-regulation (EC No 744/2008). These measures (e.g. lighter engines, improved gear and change of fishing technique) will decrease fuel consumption which is one of the largest expenditure items. The positive effect of the public support on the level of investments will fade out during 2011-2012. Power capacity (kW) is expected to decrease gently due to engine replacements with 20% reduction under the EFF. The FTEs will further decrease in 2010. A substantial part of this effect relates to the scrapping round in 2009 (9 vessels). The profitability of the two beam trawl fleets will heavily depend on the future fish and fuel prices. Both parameters are difficult to predict.

7.1.6 Data issues

New national regulations require all vessel owners to submit the economic data for their vessel. This has improved considerably the coverage of the different fleet segments. Another particularity of the Belgian fleet relates to the limited number of vessels in most fleet segments as can be seen in Table 7.1.3 .

7.2 Bulgaria

7.2.1 National fleet structure

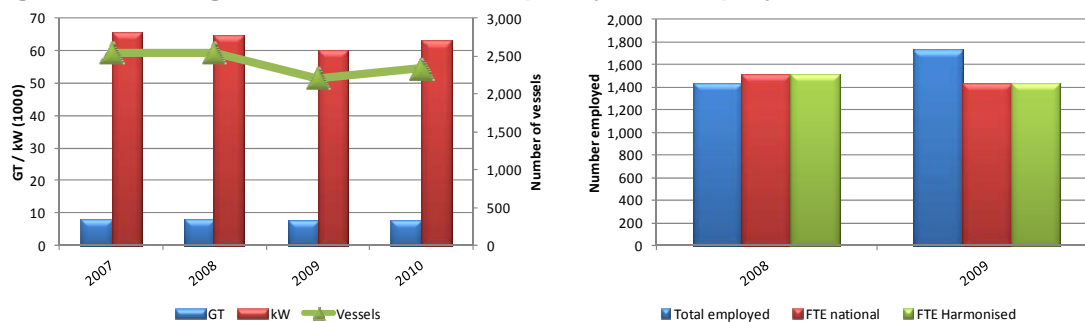
In 2010 the Bulgarian fishing fleet consisted of 2,339 registered vessels, with a combined gross tonnage of 7.9 thousand GT and total power of 63.2 thousand kW, see Table 7.2.1. The overall average age of vessels was 17 years in 2010. The size of the Bulgarian fishing fleet has decreased in size between 2007 and 2010. The number of vessels decreased by 8.2% (208 vessels) and the total GT and kW of the fleet decreased by 2.9% and 3.5% respectively during that period, see figure 7.2.1.

Table 7.2.1 Bulgarian national fleet key indicators

	2007	2008	2009	2010
Capacity				
Number of vessels	2,547	2,543	2,205	2,339
GT (1000)	8.1	8.3	7.7	7.9
kW (1000)	65.5	64.6	60.3	63.2
Average age	18.0	14.0	15.0	17.0
Employment				
Total employed		1,433	1,732	
FTEs		1,507	1,430	
Effort				
Days at sea (1000)	3.8	10.8	12.8	16.0
Landings				
Weight (1000 tons)		7.5	7.1	9.2
Value (Million €)		3.0	2.7	2.2
Profitability indicators (Million €)				
Gross Value Added		1.8	-0.2	-1.7
Operating cash flow		1.0	-1.4	-2.5
Economic profit		0.9	-2.0	-3
Capital value (Million €)				
Tangible assets		2.0	2.4	2.2
Fishing rights		0.0	0.0	

The total number of fishing enterprises in the Bulgarian fleet was 77 in 2010. The vast majority of fishing enterprises (62) owned a single vessel, one enterprise owned two to five fishing vessels and 14 enterprises owned six or more fishing vessels.

Figure 7.2.1 Bulgarian national fleet capacity and employment trends

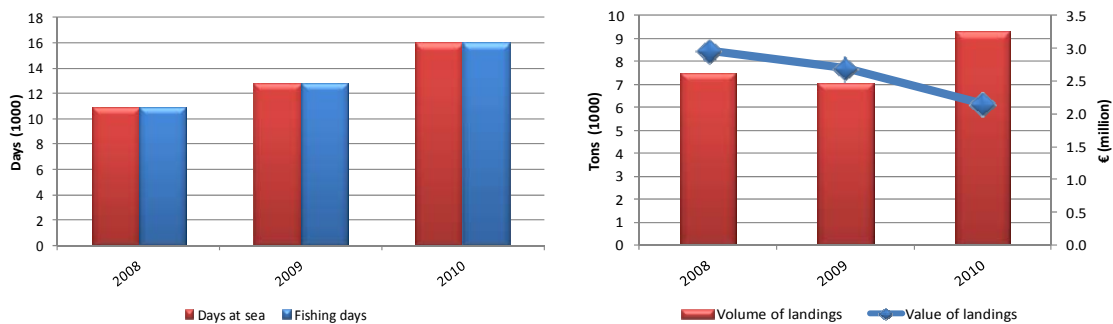


Total employment was 1732 jobs and 1430 FTEs in the Bulgarian fleet in 2009. The data suggests that FTEs decreased between 2008 and 2009, while the total employed increased, see Figure 7.2.1.

7.2.2 National fleet fishing activity and output

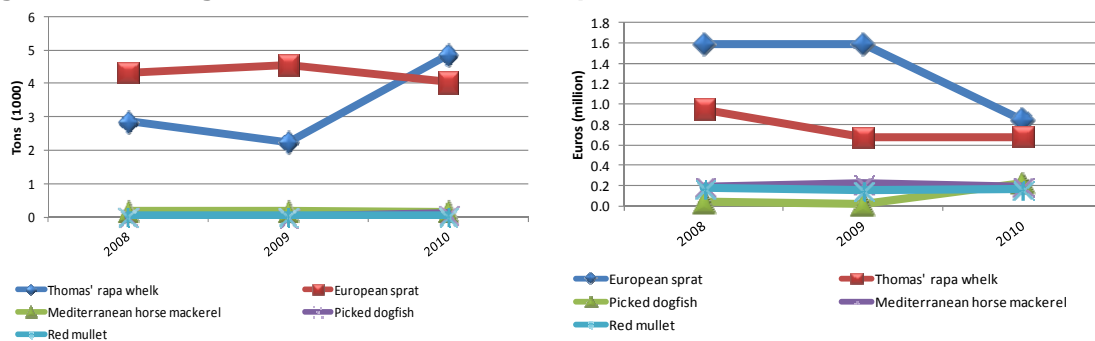
In 2009 the Bulgarian fishing fleet spent a total of 16 thousand days at sea. The total number of days at sea increased by around 47% between 2008 and 2010, see Figure 7.2.2.

Figure 7.2.2 Bulgarian national fleet fishing effort and landings trends



The total volume of landings by the Bulgarian fishing fleet in 2010 was 9.2 thousand tons of seafood. The total volume of landings increased by around 30% between 2009 and 2010, see Figure 7.2.2. In terms of landings composition, in 2010 Thomas' rapa whelk was the most common species landed in terms of tonnage (4.8 thousand tons), followed by European sprat (4 thousand tons) and Mediterranean horse mackerel (165 tons), see figure 7.2.3.

Figure 7.2.3 Bulgarian national fleet main species landed trends



7.2.3 National fleet economic performance

In terms of landings composition, in 2010 European sprat accounted for the highest value of landings by the Bulgarian national fleet (€0.85 million), followed by Thomas' rapa whelk (€0.68 million) and Picked dogfish (€0.23 million), see figure 7.2.3. In terms of prices, in 2010 the average price per kilo for red mullet was €3.6 per kg, picked dogfish was €2.1 per kg and Mediterranean horse mackerel was €1.2 per kg, see figure 7.2.4.

Table 7.2.2 Bulgarian national fleet economic performance indicators

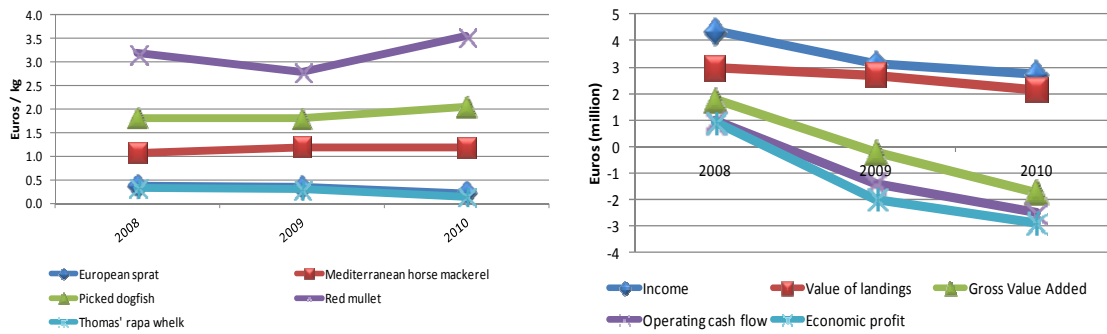
	2008	2009	2010
Income (Million €)			
Landings	3.2	3.1	2.2
Direct subsidies	0.0	0.0	0.0
Other income	1.1	0.0	0.6
Fishing rights	0.0	0.0	0.0
Total income	4.4	3.1	2.7
Costs (Million €)			
Crew wages	0.8	1.2	0.8
Unpaid labour value	0.1	0.3	0.1
Energy costs	1.4	0.8	1.3
Repair costs	0.7	0.6	0.8
Variable costs	0.3	1.8	2.2
Fixed costs	0.2	0.2	0.2
Rights costs	0.0	0.0	0.0
Depreciation costs	0.0	0.2	0.1
Interest	-0.1	0.1	0.1
Profitability indicators (Million €)			
Gross Value added	1.8	-0.2	-1.7
Operating cash flow	1.0	-1.4	-2.5
Economic profit	0.9	-2.0	-2.9
Capital value (Million €)			
Tangible assets	2.0	2.4	2.2
In-years investments	3.2	1.4	

The total amount of income generated by the Bulgarian national fleet in 2010 was an estimated €2.7 million. This consists of €2.2 million in landings values and a projected €0.6 million in non fishing income; see table 7.2.2. Between 2008 and 2010 the total income of the Bulgarian fleet is estimated to have decreased by 37%.

The total amount of expenditure by the Bulgarian national fleet in 2010 was estimated at €5.6 million, see table 7.2.2. The largest expenditure items were other variable costs (€2.2 million) and energy costs (€1.3 million). The total expenditure of the Bulgarian fleet increased 64% between 2008 and 2010.

In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Bulgarian national fleet in 2010 was estimated to be €-1.7 million, €-2.5 million and €-2.9 million respectively, see table 7.2.2. The Bulgarian fleet moved from a profit making position in 2008 to a loss making position in 2009 and 2010, see figure 7.2.4. In 2010, the Bulgarian fleet had an estimated capital value of €2.2 million.

Figure 7.2.4 Bulgarian national fleet economic performance trends



7.2.4 Fleet composition

Table 7.2.3 provides a breakdown of key performance indicators for all Bulgarian fleet segments in 2009.

Table 7.2.3 Bulgarian fleet composition and key indicators in 2009

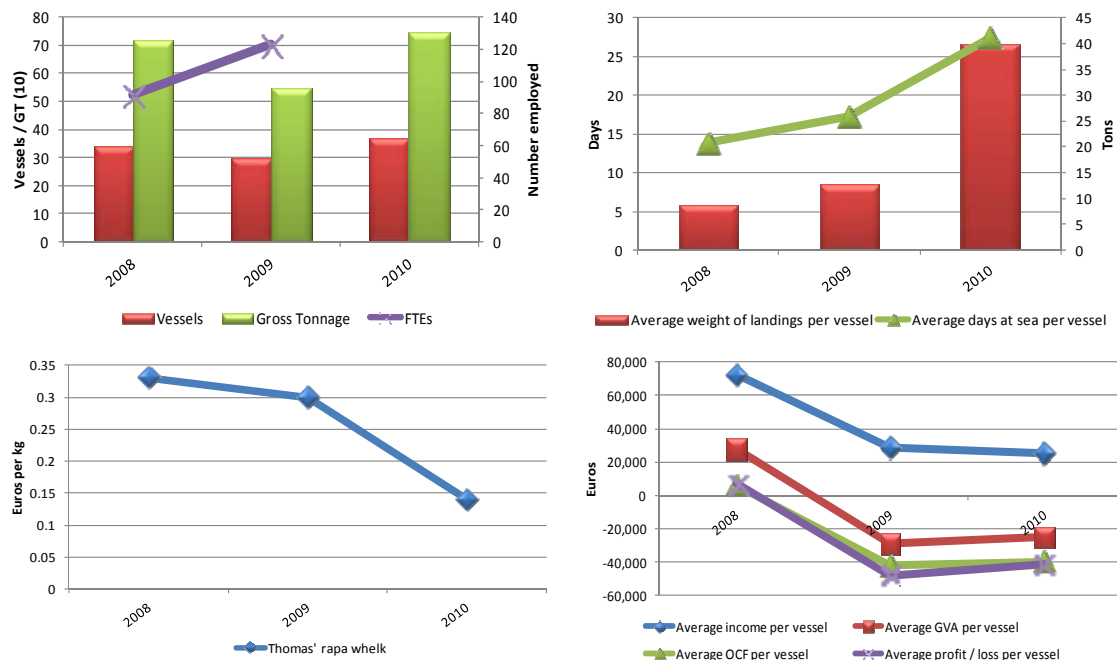
	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	622	812	10,340			5.76	0.1				0.0	0.2
VL0006	246	164	1,681			2.50	0.0				0.0	0.2
VL0612	376	648	8,659			3.07	0.0					
VL1218						0.19	0.0					
VL1824							0.0					
FPO	30	104	944				0.0					
VL0612	30	104	944				0.0					
HOK	23	44	452				0.0					
VL0006	6	4	49				0.0					
VL0612	17	40	403				0.0					
VL1218							0.0					
INACTIVE	1,303	2,918	30,600									
VL0040	1,303	2,918	30,600									
PG				1,372	1,151		0.1	0.9	0.9	0.9	0.9	0.8
VL0006				389	306		0.0	0.1	0.1	0.1	0.1	0.1
VL0612				983	845		0.1	0.8	0.8	0.8	0.7	0.8
PMP	195	1,500	10,260	280	200	3.81	2.2	0.9	-0.4	-0.7	-0.8	0.6
VL0006	32	22	154			0.59	0.1					
VL0612	122	477	4,601			2.70	1.6					
VL1218	30	544	3,756	197	123	0.52	0.4	0.4	-0.4	-0.6	-0.7	0.3
VL1824	11	457	1,749	83	77		0.2	0.4	0.1	-0.1	-0.1	0.3
VL2440							0.0					
PMP-DFN						0.35						
VL1824						0.35						
TM	32	2,283	7,677	80	79	2.90	4.6	1.3	0.6	0.5	0.4	0.9
VL1218	15	395	2,766			0.65	0.4					
VL1824	5	302	1,607			0.57	0.7					
VL2440	12	1,586	3,304	80	79	1.67	3.5	1.3	0.6	0.5	0.4	0.9
Grand Total	2,205	7,661	60,273	1,732	1,430	12.81	7.1	3.1	1.1	0.7	0.5	2.5

The Bulgarian national fleet consisted of 12 fleet segments in 2009. The fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Black Sea. In 2009 there were around 1,300 inactive vessels, more than half the total number of registered vessels in Bulgaria. Of the 12 active fleet segments, economic performance data was available for 5 segments. Two of the active segments made overall losses in 2009 and three made an overall profit. A short description of the five most important segments in terms of total value of landings is given below:

Polyvalent 12-18m – 30 vessels make up this segment, which are based in the Black Sea. These vessels target Thomas rapa whelk. The total income for these vessels was €0.4 million and around 200 jobs were supported by this segment in 2009. This fleet segment made a loss in 2009, see figure 7.2.5.

Pelagic trawl 24-40m - 12 vessels make up this segment, which are based in the Black Sea. These vessels target a variety of species, such as sprat, anchovy and horse mackerel. The total income for this segment was €1.3 million and 80 catching sector jobs were supported by this segment in 2009. This fleet segment was profitable in 2009, see figure 7.2.6.

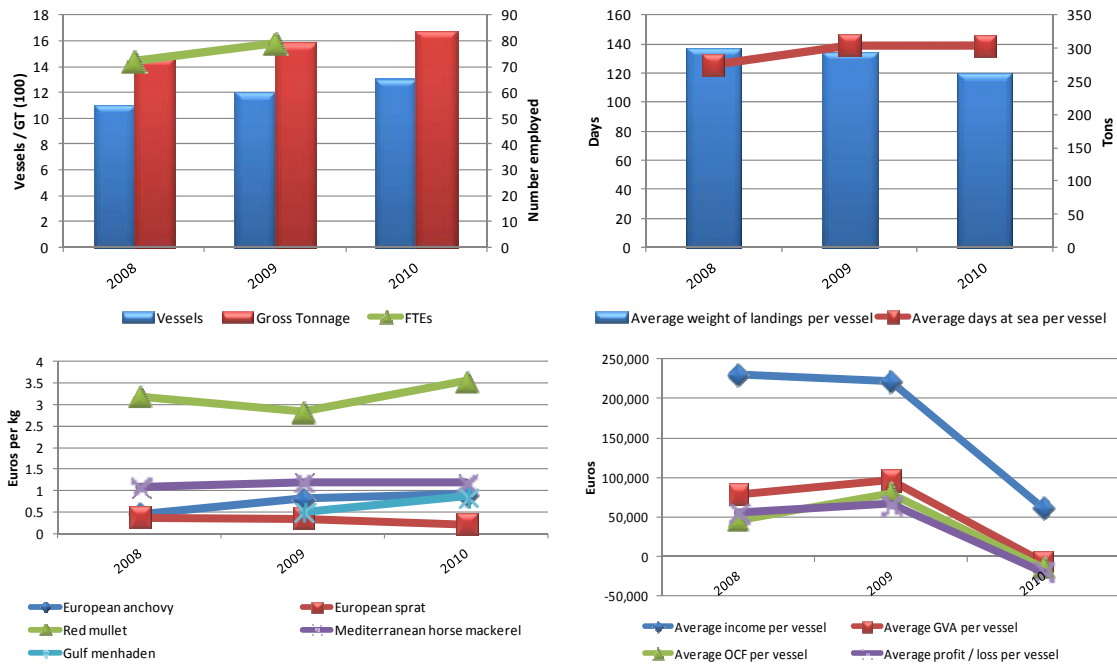
Figure 7. 2.1 Bulgarian polyvalent 12-18m key indicators



7.2.5 Assessment for 2010 and 2011

The economic situation of the fisheries sector in 2010 is driven by the following factors: lack of bank credit policy supporting the fisheries sector; relatively high percentage of fishing vessels over 10 years old; fisheries depends on the seasons and weather conditions. All this reflects the number of days at sea and quantities of the catches. The economic data for 2011 is still not available.

Figure 7. 2.2 Bulgarian pelagic trawl 24-40m key indicators



7.2.6 Data issues

The information about the economic and social indicators is collected only on the basis of anonymous questionnaires and is not validated with any official source of information, because most of the fishermen are not enterprises and do not fill “Annual financial statements”. Most of the fishing vessels owners refuse to fill the questionnaires, because they are afraid that the NAFA staff could notice the “Tax administration” for undeclared revenues and expenditures for the year. The capacity data source is the Fishing fleet register and it is exhaustive for all the fleet.

7.3 Cyprus

7.3.1 National fleet structure

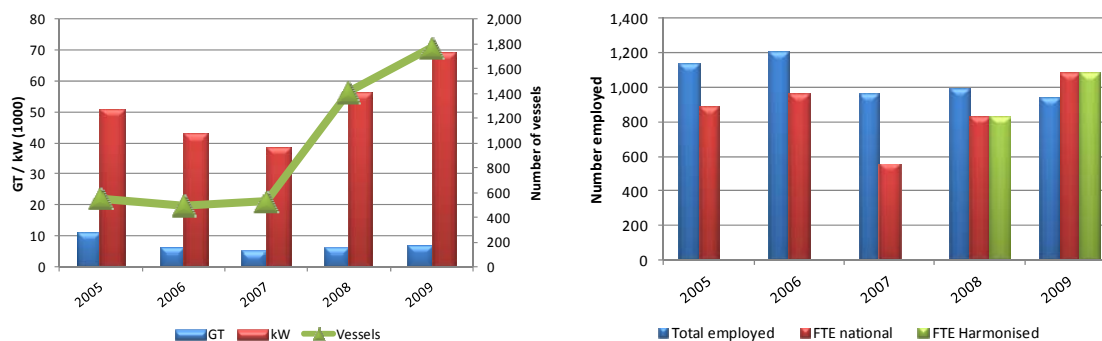
In 2009 the Cypriot fishing fleet consisted of 1,768 registered vessels, with a combined gross tonnage of 6.8 thousand GT and total power of 69.3 thousand kW, see Table 7.3.1. The overall average age of vessels was 48 years in 2009. The data suggests that the size of the Cypriot fishing fleet increased by 25% between 2008 and 2009, see figure 7.3.1 (left) The number of vessels in the Cypriot fleet increased 353 vessels and the total GT and kW of the fleet increased by 13% and 14% respectively during that period.

Table 7.3.1 Cypriot national fleet key indicators

	2005	2006	2007	2008	2009
Capacity					
Number of vessels	550	498	529	1,415	1,768
GT (1000)	11.1	6.2	5.0	6.1	6.8
kW (1000)	50.8	43.0	38.5	56.0	69.3
Average age	18.0	23.2	21.1	54.6	48.7
Employment					
Total employed	1,142	1,204	962	992	937
FTEs	886	960	555	828	1,086
Effort					
Days at sea (1000)	88.2	91.9	103.6	104.9	81.3
Energy consumption (Million litres)	11.6	2.2	2.7	3.4	4.3
Landings					
Weight (1000 tons)	1.9	2.2	2.5	2.0	1.4
Value (Million €)	10.4	12.3	13.7	13.2	8.8
Profitability indicators (Million €)					
Gross Value Added	-1.2	7.6	4.3	3.2	-8.9
Operating cash flow	-3.4	6.9	3.3	2.8	-9.2
Economic profit	0.0	0.0	2.6	-2.4	-30.0
Capital value (Million €)					
Tangible assets				288.2	376.0

The total number of fishing enterprises in the Cypriot fleet was 533 in 2009, with 532 enterprises owning a single vessel. Total employment was 937 jobs and 1,086 FTEs in the Cypriot fleet in 2009, see table 7.3.1 and figure 7.3.1.

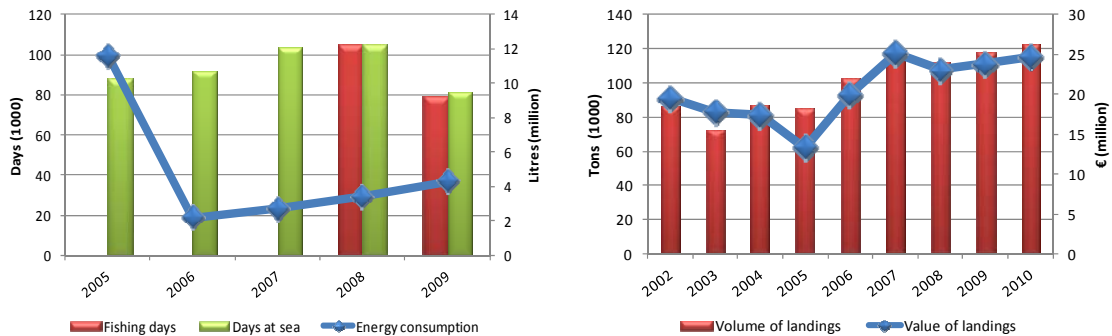
Figure 7.3.1 Cypriot national fleet capacity and employment trends



7.3.2 National fleet fishing activity and output

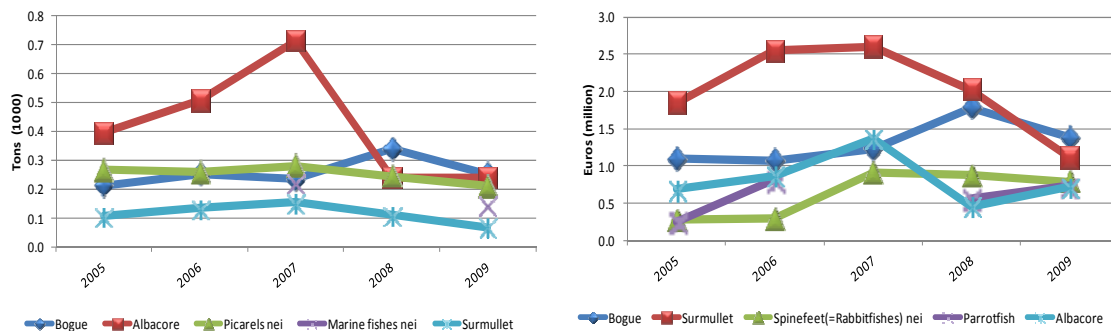
In 2009 the Cypriot fishing fleet spent a total of 105 thousand days at sea, 97% of which were actual fishing days. The total number of days at sea decreased by 23% between 2008 and 2009; see Figure 7.3.2. The total quantity of fuel consumed by the Cypriot fleet in 2009 was 4.3 million litres, an increase of 25% compared to 2008, see Figure 7.3.2 (left).

Figure 7.3.2 Cypriot national fleet fishing effort and landings trends



The total volume of landings by the Cypriot fishing fleet in 2010 was 122 thousand tons of seafood. The total volume of landings increased by 9% between 2008 and 2010, see Figure 7.3.3 (right). The total value of landings in 2010 was €24.7 million, an increase of 7% from 2008. In terms of landings composition, in 2009 bogue was the most common species landed in terms of tonnage (253 tons), followed by albacore (240 tons) and picarels (211 thousand tons), see Figure 7.3.3 (left).

Figure 7.3.3 Cypriot national fleet main species landed trends



7.3.3 National fleet economic performance

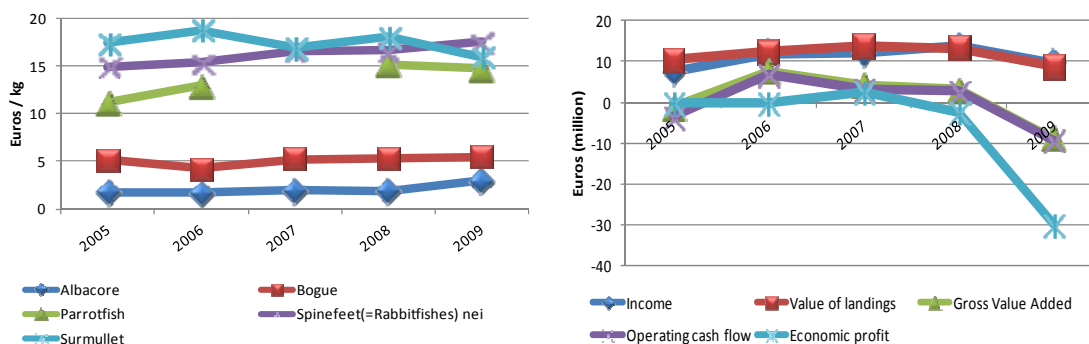
In 2009 bogue accounted for the highest value of landings by the Cypriot national fleet (€1.38 million), followed by surmullet (€1.11 million) and then rabbitfish (€0.79 million), see Figure 7.3.3 (right). In terms of price of the main species landed, in 2009 rabbitfish achieved the highest average price per kilo by the Cypriot national fleet (€17.6 per kg), followed by surmullet (€16 per kg) and then parrotfish (€14.8 per kg), see figure 7.3.4 (left).

Table 7.3.2 Cypriot national fleet economic performance indicators

	2005	2006	2007	2008	2009
Income (Million €)					
Landings				13.2	9.1
Direct subsidies				0.6	0.5
Other income				0.0	0.0
Fishing rights				0.0	0.0
Total income	7.5	11.9	12.0	13.8	9.6
Costs (Million €)					
Crew wages	2.2	0.7	1.0	0.9	0.8
Unpaid labour value				0.4	0.4
Energy costs	4.1	1.2	2.7	2.4	2.2
Repair costs	0.9	0.5	0.6	0.8	0.9
Variable costs	2.8	2.0	3.8	6.6	7.6
Fixed costs	0.9	0.6	0.6	0.2	7.3
Capital costs			0.8		
Depreciation costs				4.3	3.9
Opportunity cost				0.6	16.5
Profitability indicators (Million €)					
Gross Value added	-1.2	7.6	4.3	3.2	-8.9
Operating cash flow	-3.4	6.9	3.3	2.8	-9.2
Economic profit	0.0	0.0	2.6	-2.4	-30.0
Capital value (Million €)					
Total invested	6.6	5.3	7.8		
Tangible assets				288.2	376.0
In-years investments				0.9	0.2

The total amount of income generated by the Cypriot national fleet in 2009 was €9.6 million. This consists of €9.1 million in landings values and €0.5 million in direct subsidies, see table 7.3.2 and figure 7.3.4 (right). Between 2008 and 2009 the total income of the Cypriot fleet decreased 31%. The total costs of the Cypriot national fleet in 2009 were €39.6 million, see Table 7.3.2. The largest cost item was the estimated opportunity cost of capital (€16.5 million). Between 2008 and 2009 the total costs of the Cypriot fleet increased significantly due to the large increase in calculated opportunity cost. The opportunity cost of capital increased significantly due to an increase in the real interest rate from 0.4% to 4.4% between 2008 and 2009.

Figure 7.3.4 Cypriot national fleet economic performance trends



In terms of profitability, the total amount of GVA, OCF, and economic profit generated by the Cypriot national fleet in 2009 was €-8.9 million, €-9.2 million and €-30 million respectively, see table 7.3.2 and figure 7.3.4. The data suggest that the Cypriot fleet does not generate enough income to cover operational costs, making no return on the capital invested in the sector. In addition the data suggests that there is no value added being generated by the sector. In 2009, the Cypriot fleet had an estimated capital value of €376 million.

The quality of some Cypriot fleet data at segment level is questionable and revision is suggested.

7.4 Denmark

7.4.1 National fleet structure

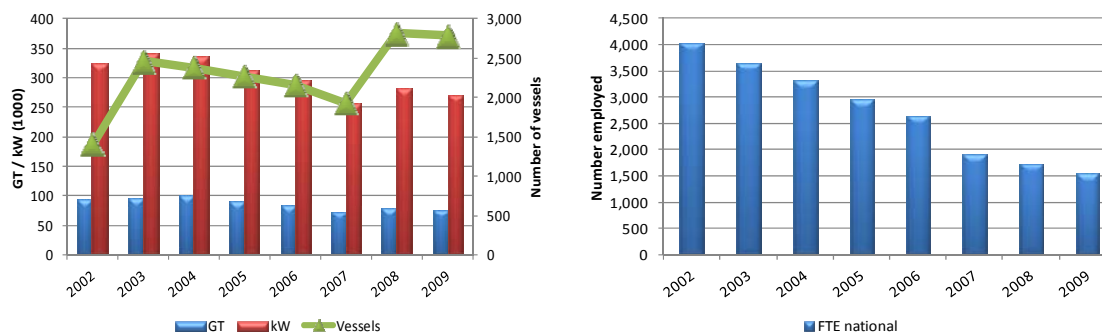
In 2009 the Danish fishing fleet consisted of 2,786 registered vessels, with a combined gross tonnage of 74.4 thousand GT and total power of 269.2 thousand kW, see Table 7.4.1. The overall average age of vessels was 29 years in 2009. The size of the Danish fishing fleet has followed a general decreasing trend between 2002 and 2009. The total gross tonnage and kilowatts of the Danish fleet decreased by 25% and 20% respectively between 2004 and 2009; see figure 7.4.1 (left).

Table 7.4.1 Danish national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Capacity									
Number of vessels	1,408	2,459	2,376	2,267	2,159	1,929	2,813	2,786	
GT (1000)	93.0	96.1	98.8	90.1	83.3	73.4	78.8	74.4	
kW (1000)	323.2	339.0	336.2	313.0	295.8	256.4	282.9	269.2	
Average age	31.3	28.0	28.3	28.5	28.8	28.4	28.8	29.1	
Employment									
FTEs	4,038	3,643	3,315	2,951	2,635	1,917	1,722	1,546	
Effort									
Days at sea (1000)	234.0	223.8	213.9	190.4	176.1	130.9	123.7	122.0	113.9
Energy consumption (Million litres)	185.7	186.6	172.7	146.2	130.6	96.1	94.3	94.7	
Landings									
Weight (1000 tons)	1,426.1	1,030.9	1,085.3	906.1	862.6	649.2	687.1	758.0	782.4
Value (Million €)	485.8	365.3	353.0	381.2	417.1	356.6	334.1	283.7	378.3
Profitability indicators (Million €)									
Gross Value Added	315.9	211.2	189.1	223.3	254.1	216.6	194.1	166.4	
Operating cash flow	109.0	42.1	31.3	67.7	96.9	88.3	116.8	98.7	
Economic profit	14.2	-43.3	-59.1	-12.9	16.4	6.3	-19.3	-34.1	
Capital value (Million €)									
Tangible assets							433.2	422.2	
Fishing rights							348.3	848.3	

The total number of fishing enterprises in the Danish fleet was 1,655 in 2009. The vast majority of fishing enterprises, 96%, owned a single vessel and 63 enterprises owned two to five fishing vessels and just one fishing enterprise owned six or more fishing vessels.

Figure 7.4.1 Danish national fleet capacity and employment trends

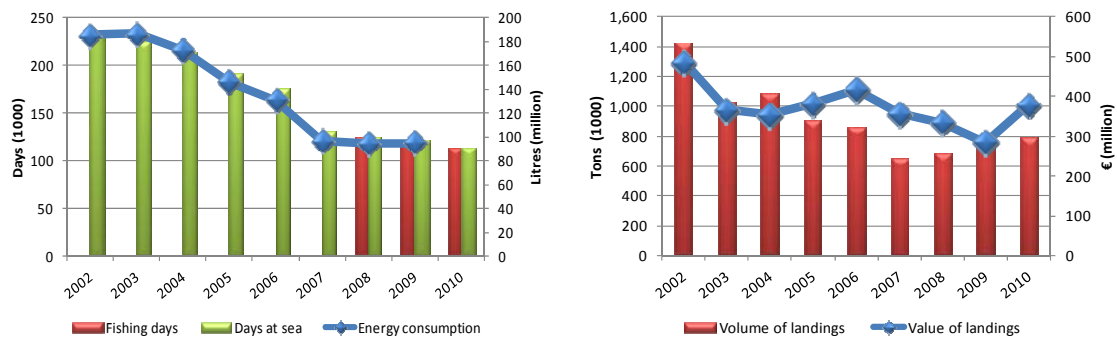


The total number of full time equivalents was 1,546 FTEs in the Danish fleet in 2009, see table 7.4.1. The total number of FTEs in the Danish fleet decreased 62% between 2002 and 2009; see figure 7.4.1 (right).

7.4.2 National fleet fishing activity and output

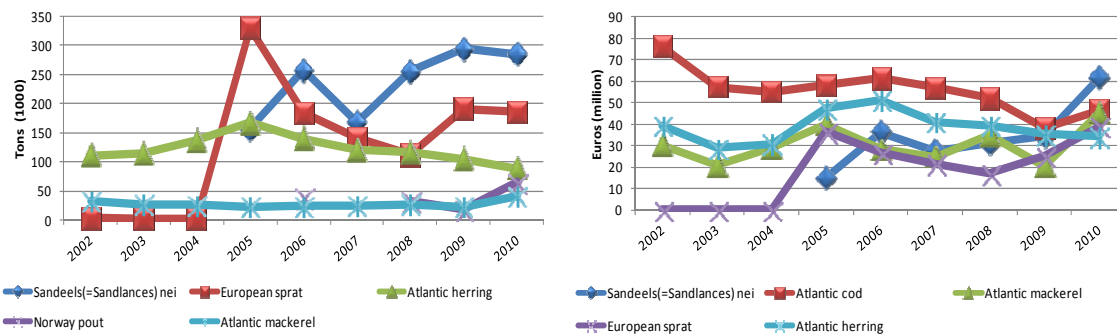
In 2010 the Danish fishing fleet spent a total of 122 thousand days at sea, 99.6% of which were actual fishing days. The total number of days at sea decreased around 50% between 2002 and 2010. The total quantity of fuel consumed by the Danish fleet in 2009 was 94.7 million litres. The total quantity of fuel consumed decreased in line with days at sea between 2002 and 2010, see figure 7.4.2 (left).

Figure 7.4.2 Danish national fleet fishing effort and landings trends



The total volume of landings by the Danish fishing fleet was 782 thousand tons of seafood in 2010. The total volume of landings has increased slightly each year since 2007, following significant decreases in most years between 2002 and 2006, see figure 7.4.2 (right). National landings volume for Denmark in 2010 was 55% of the total volume landed in 2002. In 2010 sandeel was the most common species landed in terms of tonnage (285 thousand tons), followed by sprat (185.4 thousand tons) and Atlantic herring (88.9 thousand tons), see figure 7.4.3 (left).

Figure 7.4.3 Danish national fleet main species landed trends



7.4.3 National fleet economic performance

In 2010 sandeel accounted for the highest value of landings by the Danish national fleet (€61.7 million), followed by cod (€46.5 million) and mackerel (€45.4 million), see figure 7.4.3 (right). Of the main species landed in terms of value in 2010, cod achieved the

highest average price per kilo (€1.7 per kg) by the Danish national fleet, followed by mackerel (€1.1 per kg) and then herring (€0.4 per kg), see figure 7.4.4 (left).

Table 7.4.2 Danish national fleet economic performance indicators

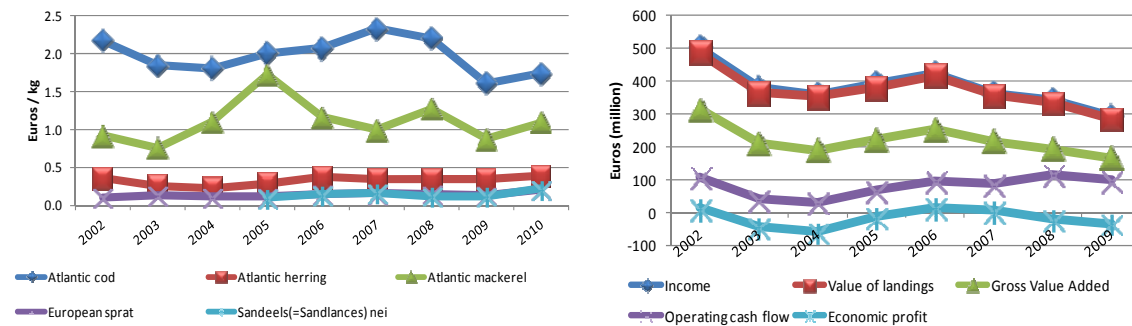
	2002	2003	2004	2005	2006	2007	2008	2009
Income (Million €)								
Landings							331.0	282.6
Direct subsidies							0.2	0.0
Other income							13.3	10.6
Total income	502.7	380.3	360.0	393.2	424.5	362.5	344.5	293.3
Costs (Million €)								
Crew wages	206.9	169.1	157.8	155.6	157.3	128.3	77.4	67.7
Unpaid labour value							44.5	39.7
Energy costs	42.4	42.2	48.4	55.9	54.8	41.3	51.8	34.0
Repair costs	60.5	50.9	48.4	42.7	45.2	40.6	37.2	35.8
Variable costs	54.1	45.4	43.3	40.8	42.6	34.4	32.4	29.9
Fixed costs	29.8	30.6	30.7	30.5	27.9	29.6	21.7	20.6
Rights costs							7.1	6.6
Capital costs	94.8	85.4	90.4	80.7	80.4	81.9		
Depreciation costs							88.8	82.8
Opportunity cost							2.9	10.4
Profitability indicators (Million €)								
Gross Value added	315.9	211.2	189.1	223.3	254.1	216.6	194.1	166.4
Operating cash flow	109.0	42.1	31.3	67.7	96.9	88.3	116.8	98.7
Economic profit	14.2	-43.3	-59.1	-12.9	16.4	6.3	-19.3	-34.1
Capital value (Million €)								
Total invested	612.0	587.7	574.1	589.1	658.5	661.2		
Tangible assets							433.2	422.2
Fishing rights value							348.3	848.3
In-years investments							57.6	69.9

The total amount of income generated by the Danish national fleet in 2009 was €293.3 million. This consisted of €282.6 million in landings values and €10.6 million in non fishing income; see table 7.4.2. Between 2006 and 2009 the total income of the Danish fleet decreased 31%. In 2010, the landings value increased significantly compared to 2009, primarily due to a valuable sandeel and mackerel fishery.

The total costs incurred by the Danish national fleet were €320.9 million in 2009, see table 7.4.2. The largest expenditure items were crew wages (€67.7 million) and energy costs (€34 million). The value of unpaid labour was estimated to be around €40 million. Between 2008 and 2009 the total costs of the Danish fleet decreased by around 10%.

In terms of profitability, the total amount of GVA, OCF and economic profit generated by the Danish national fleet in 2009 was €166.4 million, €98.7 million and €-34.1 million respectively, see table 7.4.2. Figure 7.4.4 (right) shows that all profitability indicators are following a downward trend in absolute terms between 2006 and 2009, with the exception of OCF, which increased in 2008 before decreasing again in 2009. In 2009, the Danish fleet had an estimated capital value of €422.2 million, with a further €69.9 invested in the sector during that year.

Figure 7.4.4 Danish national fleet economic performance trends



7.4.4 Fleet composition

Table 7.4.3 provides a breakdown of key performance indicators for all Danish fleet segments in 2009. The Danish fleet consisted of 14 active fleet segments in 2009. The fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea, Kattegat and Skagerrak and the North Sea. 13 out of the 14 active segments made overall losses in 2009. There were over 1,000 inactive vessels in the Danish fleet in 2009. A short description of the five most important segments in terms of total value of landings is given below:

Pelagic trawl over 40m – 32 vessels make up this segment and they are based predominantly in the North Sea and North Atlantic. These vessels target a variety of pelagic species such as herring, mackerel, sandeel, horse mackerel and sprat. Their total income was €98.7 million and 209 FTEs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Demersal trawl 12-24m – 254 vessels make up this segment and they are based predominantly in the North Sea, Skagerrak and Baltic Sea. These vessels target a variety of species, including nephrops, cod and plaice. Their total income was €76.3 million and 495 FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Pelagic trawl 24-40m – 46 vessels make up this segment and they are based predominantly in the North Sea and Skagerrak. These vessels target a variety of species including cod, sandeel, nephrops, shrimps and saithe. Their total value of landings was €52.6 million and 260 FTEs were supported by this segment in 2009. This fleet segment made an overall loss of €2.2 million in 2009.

Polyvalent passive gears 0-12m – 1067 vessels make up this segment and they are based predominantly in the North Sea, Skagerrak and Baltic Sea. These vessels target a variety of species, but primarily cod, sole and plaice. Their total value of landings was €19.6 million and 229 FTEs were supported by this segment in 2009. This fleet segment made an overall loss of €8.1 million in 2009.

Vessels using active and passive gears 12-24m – 61 vessels make up this segment and they are based predominantly in the North Sea and Skagerrak. These vessels target

primarily cod, nephrops, plaice and sole. Their total value of landings was €15.5 million and 107 FTEs were supported by this segment in 2009. This fleet segment made an overall loss of €3.4 million in 2009.

Table 7.4.3 Danish fleet composition and key indicators in 2009

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DRB	66	1,422	8,580	48	3.43	910	37.6	7.2	4.2	2.1	-1.4	18.1
VL0012	32	436	3,509	33		553		4.3	2.8	1.1	-0.3	11.3
VL1012					1.79		16.0					
VL1218	34	986	5,071	15	1.64	357	21.6	2.9	1.5	1.0	-1.1	6.8
DTS	277	13,165	58,772	501	36.00	23,872	108.7	77.0	40.6	21.6	-11.7	107.6
VL0010					0.48		0.1					
VL0012	23	229	2,368	6		318		0.7	0.3	0.3	-0.3	1.6
VL1012					1.12		2.0					
VL1218	177	5,875	32,074	269	22.01	10,965	52.8	37.7	19.5	11.1	-7.6	59.7
VL1824	77	7,062	24,330	226	12.39	12,588	53.8	38.6	20.8	10.2	-3.8	46.3
INACTIVE	1,017	10,176	46,937									
VL0010	914	1,321	16,304									
VL1012	9	115	893									
VL1218	49	1,585	8,617									
VL1824	21	1,508	5,828									
VL2440	23	5,206	14,486									
VL40XX	1	442	809									
PGP	1,124	4,936	43,570	312	53.90	3,927	15.5	30.7	16.1	10.5	-10.5	44.0
VL0010					38.17		6.7					
VL0012	1,067	3,403	35,428	229		2,228		19.6	10.0	7.1	-8.1	24.5
VL1012					7.75		2.6					
VL1218	57	1,533	8,142	84	6.48	1,699	4.6	11.1	6.2	3.4	-2.4	19.6
VL1824					1.50		1.7					
PMP	197	4,039	20,159	148	14.15	6,972	12.2	19.6	8.7	4.9	-6.2	31.1
VL0010					5.04		1.0					
VL0012	136	875	8,624	40		1,585		4.1	1.3	1.2	-2.9	7.3
VL1012					2.75		1.6					
VL1218	46	1,039	6,714	53	5.01	2,117	6.9	7.0	3.2	2.2	-1.6	11.1
VL1824	15	2,125	4,820	54	1.35	3,269	2.7	8.5	4.2	1.5	-1.8	12.6
TBB	27	1,481	5,076	67	4.90	3,752	3.9	7.4	4.1	1.4	-2.4	18.2
VL1218	14	654	2,688	20	2.46	935	1.5	1.8	0.9	0.2	-0.8	4.6
VL1824	13	827	2,388	48	2.44	2,817	2.4	5.6	3.1	1.2	-1.6	13.5
TM	78	39,141	86,137	469	16.30	55,263	580.1	151.4	92.7	58.1	-1.9	203.2
VL2440	46	11,936	28,301	260	10.63	24,469	135.8	52.6	28.0	14.2	-2.2	53.4
VL40XX	32	27,205	57,836	209	5.67	30,794	444.3	98.7	64.7	43.9	0.3	149.8
Grand Total	2,786	74,360	269,231	1,546	128.66	94,695	758.0	293.3	166.4	98.7	-34.1	422.2

Figure 7.4.5 Danish pelagic trawl over 40m key indicators

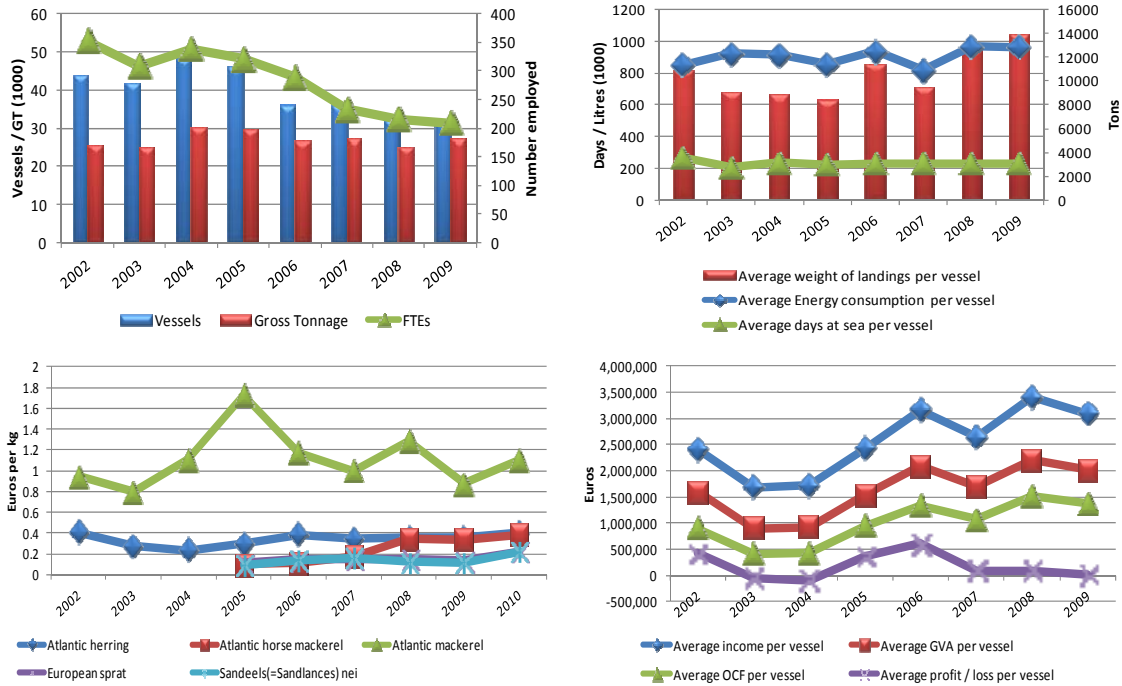


Figure 7.4.6 Danish demersal trawl 12-24m key indicators



7.4.5 Assessment for 2010 and 2011

High prices and landings of especially mackerel and several industrial species, including sandeel, Norway pout and boar fish contributed to an increase in value of landings in 2010 compared to 2009. It is expected that 2011 will also be higher than 2009, but there are uncertainties about the mackerel quotas and the possibility to catch Norway pout, which amongst other things may influence the total value of landings in 2011. Lower fuel prices in 2010 contributed to an increased profitability, but these are expected to increase in 2011, thus having a negative impact on profitability.

At the overall level, 2010 and 2011 are expected to be the most profitable years since 2000 for the Danish fishery. The management system based on individual rights has now been in place for several years, and the fleet structure has consolidated, thus entering a phase with a slower rate of adjustments.

7.4.6 Data issues

The number of vessels shown in table 7.4.1 has three different origins. In 2002 is shown the number of vessels in the commercial fishing fleet, i.e. vessels with revenue above the threshold level (€29,500 in 2002). For the years 2003-2007 the number of vessels is the number of active vessels during the year and for the years 2008-2009 the number of vessels includes both active and inactive vessels.

7.5 Estonia

7.5.1 National fleet structure

In 2011 the Estonian fishing fleet consisted of 935 registered vessels, with a combined gross tonnage of 14838 GT and total power of 40221 kW, see Table 7.5.1. The overall average age of vessels was 22 years in 2011. The size of the Estonian fishing fleet has followed a decreasing trend between 2005 and 2011. The number of vessels in the Estonian fleet declined by 10% or 107 vessels and the total GT and kW of the fleet decreased by 41% and 37% respectively during that period.

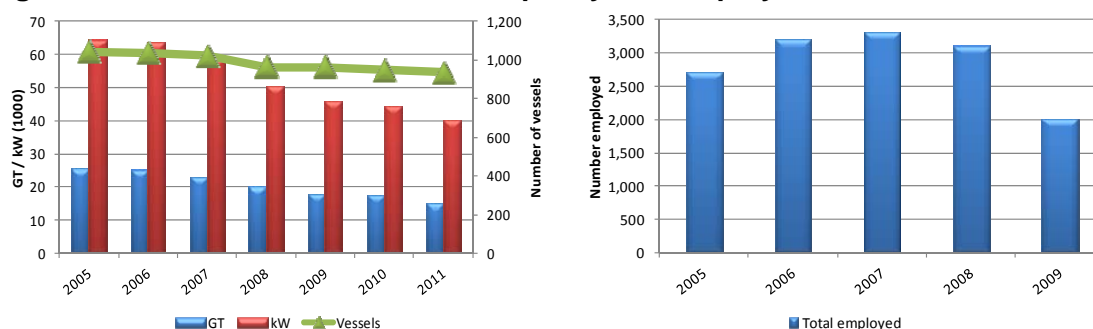
Table 7.5.1 Estonian national fleet key indicators*

	2005	2006	2007	2008	2009	2010	2011
Capacity							
Number of vessels	1,042	1,036	1,021	964	963	947	935
GT (1000)	25.2	25.0	22.9	19.8	17.8	17.3	14.8
kW (1000)	64.0	63.9	59.0	50.3	45.9	44.4	40.2
Average age	18.0	18.0	19.0	19.0	20.0	21.0	22.0
Employment							
Total employed	2,701	3,187	3,311	3,106	2,004		
Effort							
Energy consumption (Million litres)	23.7	17.8	20.3	18.1	13.6		
Landings							
Weight (1000 tons)	93.7	86.1	94.3	98.2	94.4	79.6	
Value (Million €)	34.3	32.5	38.7	41.7	34.3	12.9	
Profitability indicators (Million €)							
Gross Value Added	13.7	13.4	16.1	16.1	15.6		
Operating cash flow	7.6	6.3	9.2	9.5	13.4		
Economic profit	4.5	3.6	6.6	7.9	8.1		
Capital value (Million €)							
Tangible assets				36.8	35.4	36.1	
Fishing rights				2.9	2.8		

* Landings data for 2010 include only Baltic Sea species.

The total number of fishing enterprises in the Estonian fleet was 663 in 2010. The vast majority of fishing enterprises, about 70%, owned a single vessel and about 30% of enterprises owned two to five fishing vessels. Only 2 fishing enterprises owned six or more fishing vessels.

Figure 7.5.1 Estonian national fleet capacity and employment trends

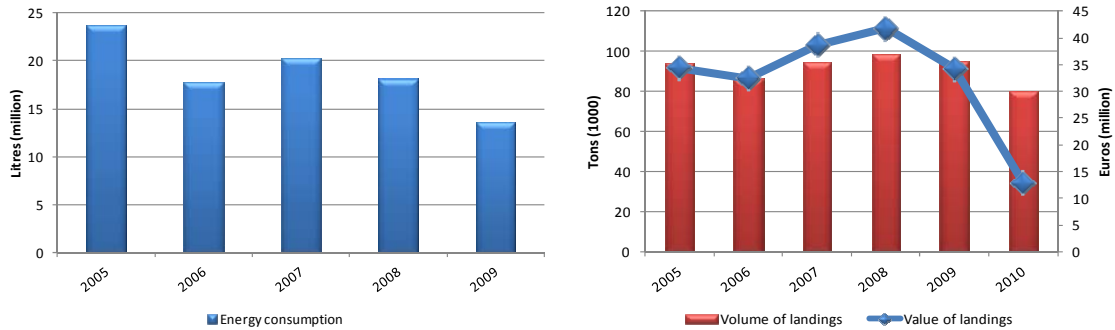


Total employment was 2004 jobs in the Estonian fleet in 2009, see Figure 7.5.1. The level of employment in the Estonian fishing fleet has decreased between 2007 and 2009. The total number employed decreased by 40% between 2007 and 2009.

7.5.2 National fleet fishing activity and output

The total quantity of fuel consumed by the Estonian fleet in 2009 was 13.6 million litres. The total quantity of fuel consumed decreased between 2005 and 2009, see figure 7.5.2.

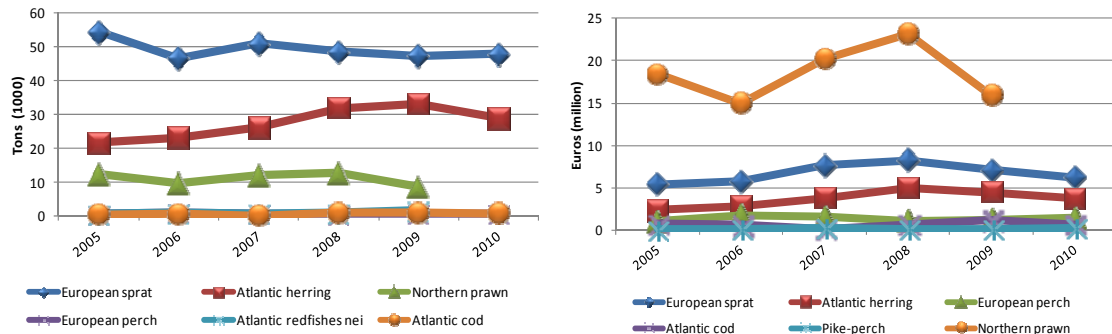
Figure 7.5.2 Estonian national fleet fishing effort and landings trends



The total volume of landings by the Estonian fishing fleet in 2009 was 94.4 thousand tons of seafood. The total volume of landings has slightly increased compared to 2005 but compared to 2008 this trend is falling, see figure 7.5.2. In terms of landings composition, in 2009 European sprat was the most common species landed in terms of tonnage (47.3 thousand tons), followed by Atlantic herring (33.2 thousand tons) and Northern prawn (8.6 thousand tons), see figure 7.5.3.

The main reason for changes in the structure of the national fleet is capacity reduction due to a decommissioning program aimed at achieving balance between the size of the fishing fleet and available fishing opportunities. The decrease mainly took place among trawlers, and a reason why the total GT and kW of the national fleet decreased much more than the total number of vessels.

Figure 7.5.3 Estonian National fleet main species landed trends



There was a significant decrease in the total number employed. The decline occurred mainly in the small scale coastal sector. The reason for this was the formal requirement that all fishermen dealing with commercial fishing must hold a professional certificate.

7.5.3 National fleet economic performance

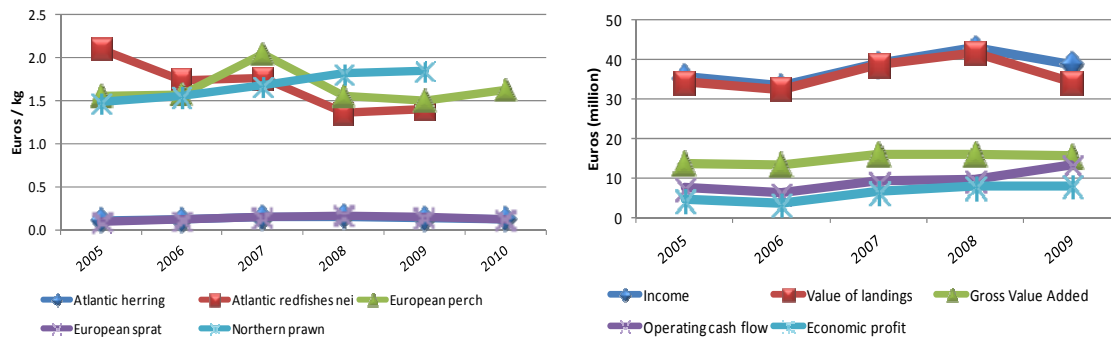
In terms of landings composition, in 2009 Northern prawn accounted for the highest value of landings (€15.9 million) by the Estonian national fleet, followed by European sprat (€7.1 million) and Atlantic herring (€4.5 million), see figure 7.5.3. In terms of prices comparing key species, in 2009 Northern prawn achieved the highest average price per kilo (€1.85 euros/kg) by the Estonian national fleet, followed by European perch (€1.5 euros/kg) and Atlantic redfish (€1.4 per kg) see figure 7.5.4. The prices obtained for high seas key species slightly increased in 2009. But compared to 2008 there was a decrease in prices for the Baltic Sea key species in 2009. The average prices for European sprat and Atlantic herring decreased 11.8% and 12.5%, respectively.

Table 7.5.2 Estonian national fleet economic performance indicators

	2005	2006	2007	2008	2009
Income (Million €)					
Landings				42.5	34.3
Direct subsidies				0.1	3.8
Other income				0.2	0.1
Fishing rights				0.2	0.6
Total income	35.6	33.3	39.0	43.0	38.8
Costs (Million €)					
Crew wages	6.0	7.1	6.9	6.7	6.0
Unpaid labour value				0.0	0.0
Energy costs	9.8	8.2	9.3	10.9	6.1
Repair costs	4.1	3.0	3.1	3.7	2.4
Variable costs	5.6	6.6	7.9	8.5	7.3
Fixed costs	2.4	2.1	2.6	2.8	2.6
Rights costs				0.9	1.0
Capital costs	3.1	2.7	2.5		
Depreciation costs				2.4	2.5
Opportunity cost				-0.8	2.8
Profitability indicators (Million €)					
Gross Value added	13.7	13.4	16.1	16.1	15.6
Operating cash flow	7.6	6.3	9.2	9.5	13.4
Economic profit	4.5	3.6	6.6	7.9	8.1
Capital value (Million €)					
Total invested	78.6	70.8	62.3		
Tangible assets				36.8	35.4
Fishing rights value				2.9	2.8
In-years investments				0.8	1.7

The total amount of income generated by the Estonian national fleet in 2009 was €38.8 million. This consists of €34.3 million in landings values, €0.6 million in fishing rights sales, €0.1 million in non fishing income, and €3.8 million in direct subsidies, see table 7.5.2 and figure 7.5.4. Between 2008 and 2009 the total income of the Estonian fleet decreased 9.8%. The total amount of expenditure by the Estonian national fleet in 2009 was €25.4 million, see Table 7.5.2. The largest expenditure items are variable costs (€7.3 million) and energy costs (€6.1 million). Between 2008 and 2009 the total expenditure of the Estonian fleet decreased 24%. In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Estonian national fleet in 2009 was €13.4 million, €15.6 million and €8.1 million respectively, see Table 7.5.2 and Figure 7.5.4. In 2009, the Estonian fleet had an estimated capital value of €36.1 million and a return on investment of 22.9%.

Figure 7.5.4 Estonian national fleet economic performance trends



The main reasons for decline of the total income of the Estonian fleet in 2009 were decreases in the volume of landings by the high seas vessels and in the average prices of the most common Baltic Sea species, such as European sprat and Atlantic herring. The decrease in the number of trawlers, in particular the missing of the two large high seas vessels, significantly affected the total energy costs in 2009. A slight decline in fuel prices also played a role.

7.5.4 Fleet composition

The Estonian national fleet consisted of 8 fleet segments in 2009. The Estonian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea, in the North Atlantic and Eastern Arctic. There are 3 inactive segments consisting of 22 vessels. These vessels are classed as inactive if they did not land any catch in 2009. Five of the active segments made overall profit in 2009. Table 7.5.3 provides a breakdown of key performance indicators for all Estonian fleet segments in 2009. A short description of the five most important segments in terms of total value of landings is given below:

Demersal trawlers / seiners over 40m – 4 vessels make up this segment and are based predominantly in the North Atlantic and Eastern Arctic. These vessels target a variety of species but mainly this segment is focused on Northern prawn. Their total value of landings was €19.9 million and 84 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Pelagic trawlers 24-40m – 38 vessels make up this segment and are based only in the Baltic Sea. These vessels target mainly sprat and herring. Their total value of landings was €10.4 million and 223 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

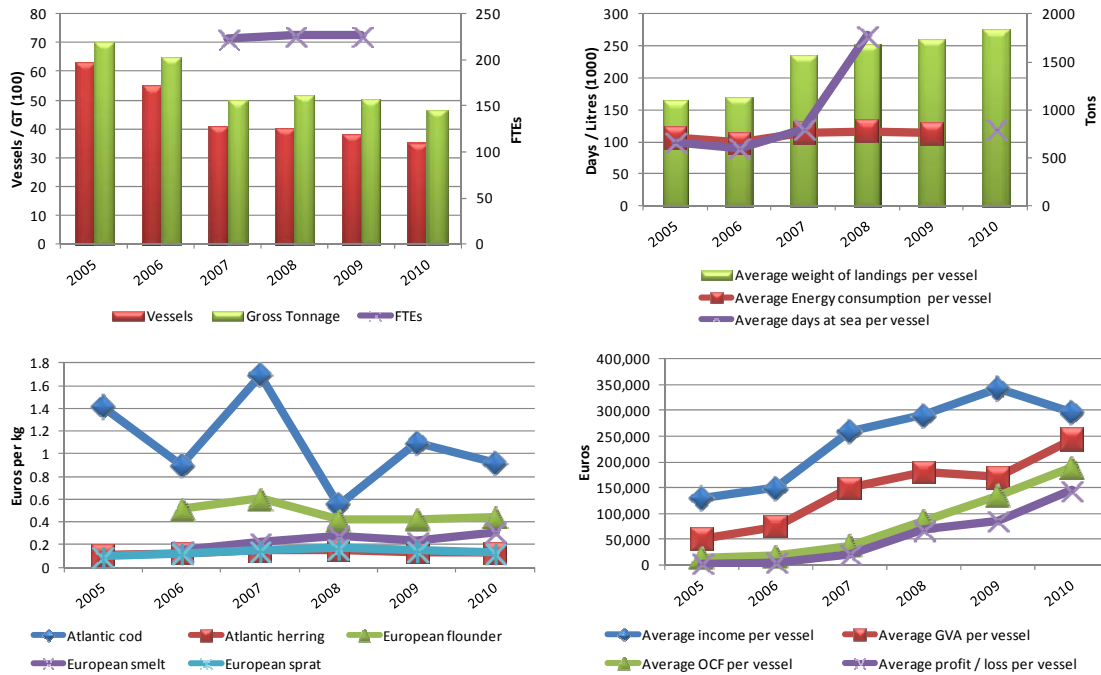
Passive gears 0-10m – 794 vessels make up this segment and are based only in the Baltic Sea. These vessels target mostly freshwater species such as pikeperch, perch, but also marine species such as flounder and spawning stocks of herring and smelt. Their total value of landings was €2.4 million and 1331 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Table 7.5.3 Estonian fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DTS	4	6,195	9,558	84	94	8,609	10.9	21.5	6.6	6.8	4.8	13.6
VL40XX	4	6,195	9,558	84	94	8,609	10.9	21.5	6.6	6.8	4.8	13.6
INACTIVE	22	4,547	8,217								-0.4	5.7
VL1218	15	140	1,243								0.0	0.0
VL2440	3	271	898								0.0	0.6
VL40XX	4	4,136	6,076								-0.4	5.1
PG	884	1,772	14,570	1,646		572	14.0	3.6	2.2	1.1	0.3	6.7
VL0010	794	1,144	9,975	1,331		400	6.5	2.5	1.5	0.9	0.3	4.0
VL1012	90	628	4,595	315		172	7.5	1.1	0.6	0.3	-0.1	2.7
TM	53	5,327	13,552	249	244	4,454	69.5	13.7	6.8	5.5	3.6	9.4
VL1218	15	321	1,453	26	17	149	3.6	0.7	0.4	0.4	0.3	1.0
VL2440	38	5,006	12,099	223	227	4,305	65.9	13.0	6.5	5.1	3.3	8.4
Grand Total	963	17,841	45,897	1,979	338	13,635	94.4	38.8	15.6	13.4	8.1	35.4

Passive gears 10-12m – 90 vessels make up this segment and are based only in the Baltic Sea. These vessels target mainly herring. Their total value of landings was €1.1 million and 315 jobs were supported by this segment in 2009. This fleet segment made small losses in 2009.

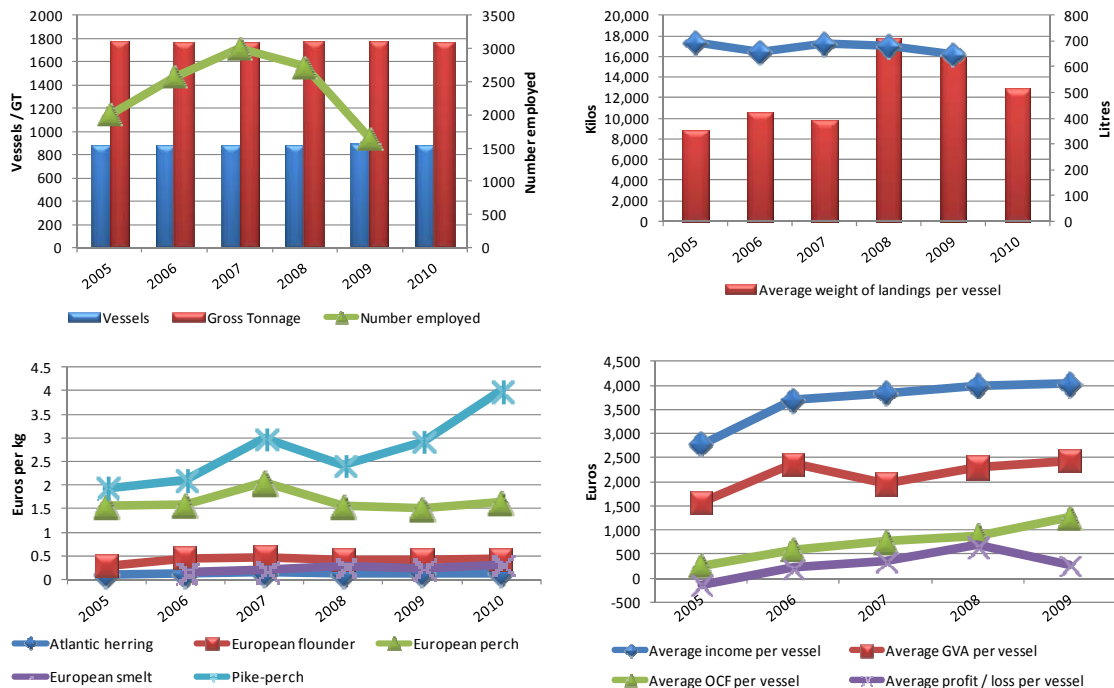
Figure 7.5.5 Estonian pelagic trawl 24-40m key indicators



Pelagic trawlers 12-18m – 15 vessels make up this segment and are based only in the Baltic Sea. These vessels target mainly sprat and herring. Their total value of landings

was €514 thousand and 26 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Figure 7.5.6 Estonian passive gears 0-12m key indicators



7.5.5 Assessment for 2010 and 2011

In 2010 and 2011 the total number of vessels in the Estonian national fleet continued to decline. The decrease mainly takes place among inactive trawlers. In the Baltic trawler segments the total volume and value of landings will decrease due to declining herring catches and average prices for herring and sprat in 2010. Also, in the case of the coastal fishery, the total volume and value of landings will decrease slightly in 2010. On the contrary, in the high sea vessels, the increase in total volume and total value of landings is expected. No significant changes in national fisheries in 2011 is expected.

7.5.6 Data issues

The data concerning economic variables were collected as listed and defined in Appendix VI of Commission Decision 2008/949/EC. For economic variables included in Estonian Fisheries Information System (EFIS) (includes log book data, fishing vessel register) data were collected on all members of the fishing fleet population. For other economic variables questionnaires were sent out. It is important to mention that all these surveys have been carried out on a voluntary basis.

7.6 Finland

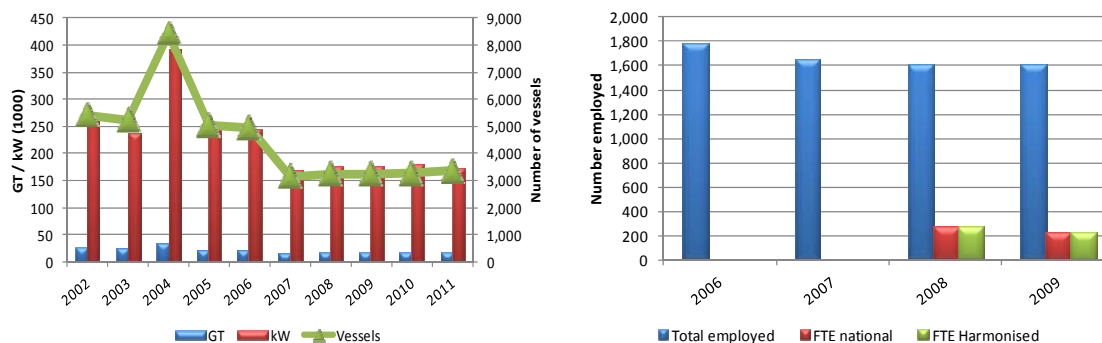
7.6.1 National fleet structure

In 2011 the Finnish fishing fleet consisted of 3,365 registered vessels, with a combined gross tonnage of 16,661 GT and total power of 172,827 kW, see Table 7.6.1. The overall average age of vessels was 24.7 years in 2011. The size of the Finnish fishing fleet followed a decreasing trend between 2002 and 2007 and remained quite stable from 2007 to 2011. The number of vessels in the Finnish fleet declined by 38% or 2044 vessels and the total GT and kW of the fleet decreased by 36% and 34% respectively from 2002 to 2011, see figure 7.6.1 (left).

Table 7.6.1 Finnish national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capacity										
Number of vessels	5,409	5,245	8,432	5,056	4,954	3,161	3,240	3,240	3,272	3,365
GT (1000)	25.9	25.1	33.8	22.7	22.5	16.0	16.4	16.9	17.0	16.7
kW (1000)	261.9	238.0	392.0	245.6	244.5	167.7	173.4	174.8	178.9	172.8
Average age	19.2	19.8	20.6	21.2	21.6	22.3	23.6	23.6	24.2	24.7
Employment										
Total employed	582	462	618	408	1,782	1,647	1,613	1,609		
FTEs							264	229		
Effort										
Days at sea (1000)	62.2	43.7	49.1	35.7	150.8	136.1	129.5	143.0	142.5	
Energy consumption (Million litres)							6.0	8.7		
Landings										
Weight (1000 tons)	86.0	72.5	87.0	84.7	102.6	117.9	111.5	117.5	121.7	
Value (Million €)	19.5	17.8	17.4	13.3	20.0	25.2	23.1	23.8	24.7	
Profitability indicators (Million €)										
Gross Value Added	13.1	9.9	10.8	10.5	14.4	20.4	13.5	15.7	8.6	
Operating cash flow	6.4	4.6	5.2	5.9	8.6	14.3	11.5	12.2	5.6	
Economic profit	2.1	0.6	0.5	2.9	2.2	9.1	4.2	1.2	-6.6	
Capital value (Million €)										
Tangible assets							227.3	225.6	226.4	

Figure 7.6.1 Finnish national fleet capacity and employment trends



The total number of fishing enterprises in the Finnish fleet was 1,496 in 2009. The vast majority of fishing enterprises, 98%, owned a single vessel and 2% of enterprises owned

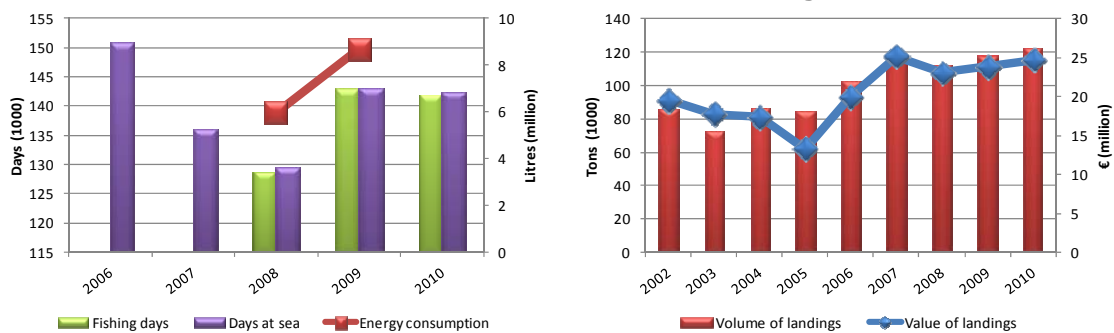
two to five fishing vessels. There were no fishing enterprises owning six or more fishing vessels. Pelagic trawlers dominate the national production. Traditional offshore gillnet fishing has gradually disappeared due to restrictive management decisions and poor cod stock situation. Due to the driftnet ban in 2008 the fleet practically ceased to exist. Small-scale coastal fisheries remain an extremely important part of Finnish fisheries in socio-economic terms. They employ many fishermen even though their shares of national catches are small.

Total employment was 1,609 jobs and 229 FTEs in the Finnish fleet in 2009, see figure 7.6.1 (right). The level of employment in the Finnish fishing fleet has decreased slightly between 2008 and 2009. The total number employed decreased by 10% between 2006 and 2009.

7.6.2 National fleet fishing activity and output

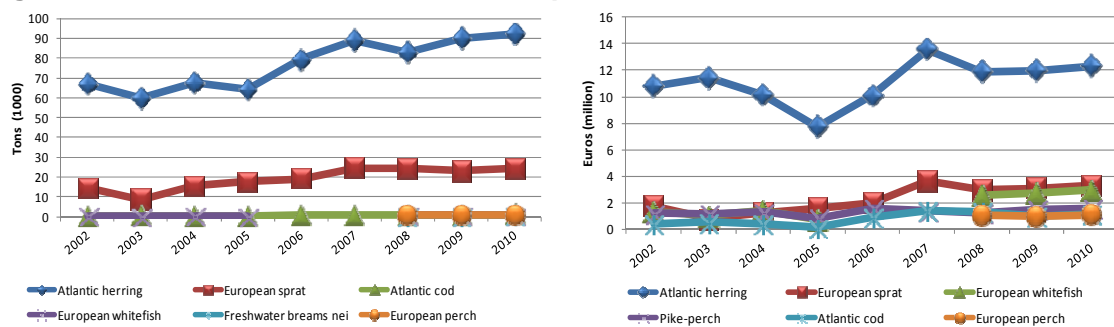
In 2010 the Finnish fishing fleet spent a total of 142.5 thousand days at sea. The total number of days at sea remained stable between 2009 and 2010. The total quantity of fuel consumed by the Finnish fleet in 2009 was 8.7 million litres. The total quantity of fuel consumed increased between 2008 and 2009, see figure 7.6.2 (left).

Figure 7.6.2 Finnish national fleet fishing effort and landings trends



The total volume of landings by the Finnish fishing fleet in 2010 was 121.7 thousand tons of seafood. The total volume of landings increased between 2009 and 2010, see figure 7.6.2 (right). In terms of landings composition, in 2010 Baltic herring was the most common species landed in terms of tonnage (92.2 thousand tons), followed by European sprat (24.4 thousand tons) and Atlantic cod (1 thousand tons), see figure 7.6.3 (left).

Figure 7.6.3 Finland national fleet main species landed trends



7.6.3 National fleet economic performance

In terms of landings composition, in 2010 Baltic herring accounted for the highest value of landings (€12.3 million) by the Finnish national fleet, followed by European sprat (€3.3 million) and European whitefish (€3.0 million), see figure 7.6.3 (right). The prices obtained for these key species generally remained relatively stable between 2009 and 2010. In terms of prices, in 2009 pike-perch achieved the highest average price per kilo (€4.9 per kg) by the Finnish national fleet, followed by European whitefish (€4.0 per kg) and European perch (€1.5 per kg), see figure 7.6.4 (left).

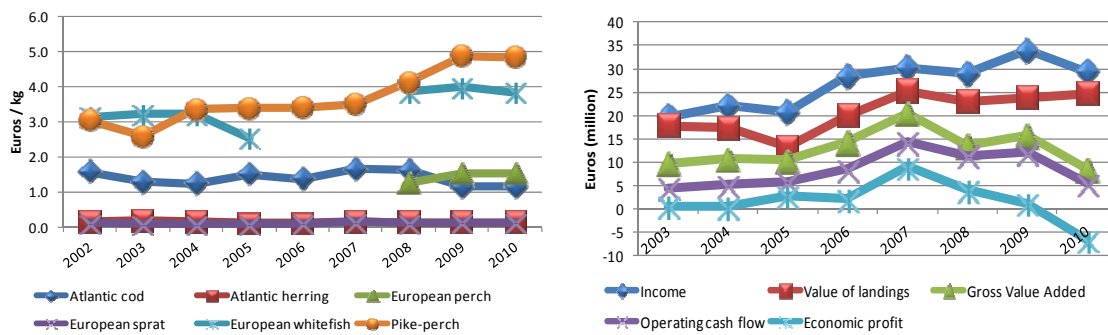
Table 7.6.2 Finnish national fleet economic performance indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)									
Landings							24.5	27.4	23.8
Direct subsidies							2.2	1.5	1.8
Other income							2.3	5.1	3.7
Fishing rights							0.0	0.0	0.0
Total income	24.0	19.8	22.0	20.6	28.4	30.2	29.0	34.0	29.4
Costs (Million €)									
Crew wages	6.7	5.2	5.6	4.6	5.8	6.1	4.3	5.0	4.9
Unpaid labour value							1.2	1.2	1.2
Energy costs	2.6	2.0	2.4	3.3	3.5	5.9	5.4	5.9	8.0
Repair costs	8.2	8.0	8.8	6.8	10.5	3.9	3.7	5.0	5.0
Variable costs							0.9	1.5	1.5
Fixed costs							3.0	4.2	4.3
Rights costs							0.2	0.3	0.2
Capital costs	4.3	4.0	4.7	3.0	6.4	5.2			
Depreciation costs							5.3	5.0	5.2
Opportunity cost							0.9	4.8	5.8
Profitability indicators (Million €)									
Gross Value added	13.1	9.9	10.8	10.5	14.4	20.4	13.5	15.7	8.6
Operating cash flow	6.4	4.6	5.2	5.9	8.6	14.3	11.5	12.2	5.6
Economic profit	2.1	0.6	0.5	2.9	2.2	9.1	4.2	1.2	-6.6
Capital value (Million €)									
Total invested	23.9	21.4	22.9	11.8	24.5	23.1			
Tangible assets							227.3	225.6	226.4
In-years investments							5.0	3.4	

The total amount of income generated by the Finnish national fleet in 2009 was €34 million. This consists of €27.4 million in landings values, €5.1 million in non fishing income, and €1.5 million in direct subsidies. See table 7.6.2. Between 2008 and 2009 the total income of the Finnish fleet increased by 17%, see figure 7.6.4 (right). The total costs incurred by the Finnish national fleet in 2009 was €21.9 million, see table 7.6.2. The largest expenditure items are energy costs (€5.9 million) and crew wages and repair costs (€5.0 million respectively). The total expenditure of the Finnish fleet increased 25% between 2008 and 2009.

In terms of profitability, the total amount of GVA, operating cash flow and economic profit generated by the Finnish national fleet in 2009 was €15.7 million, €12.2 million and €1.2 million respectively, see table 7.6.2 and figure 7.6.4 (right). In 2009, the Finnish fleet had an estimated capital value of €226 million and a return on investment of 0.5%.

Figure 7.6.4 Finnish national fleet economic performance trends



Increasing fuel prices are decreasing the economic performance and profitability of fishing sector as a whole. Direct subsidies (especially the seal damage compensation) are important part of total income for small scale fisheries making the business more profitable.

7.6.4 Fleet composition

The Finnish national fleet consisted of six fleet segments in 2009. There are five inactive segments consisting of 1,709 vessels. These vessels are classed as inactive if they did not land any catch in 2009. All of the active segments made overall losses in 2009, except for passive gears 0-10m. However the total sector was profitable as passive gears 0-10m formed 93% of the total Finnish fleet. Table 7.6.3 provides a breakdown of key performance indicators for all Finnish fleet segments in 2009. A short description of the three most important segments in terms of total value of landings is given below:

Table 7.6.3 Finland fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	13	277	2,634	13	1	0.71	32	0.1	0.2	0.1	0.1	-0.2	4.0
VL1218	13	277	2,634	13	1	0.71	32	0.1	0.2	0.1	0.1	-0.2	4.0
INACTIVE	1,709	5,577	78,317									-1.7	82.2
VL0010	1,513	2,723	48,265									-0.9	42.1
VL1012	150	1,425	20,565									-0.4	21.3
VL1218	42	1,092	7,904									-0.3	14.8
VL1824	3	179	848									-0.1	4.0
VL2440	1	158	735										
PG	1,465	3,841	68,831	1,465	135	138.01	1,324	9.4	17.9	8.1	8.6	4.8	56.4
VL0010	1,421	3,410	62,240	1,421	131	135.75	1,273	7.5	17.3	7.7	8.3	5.0	49.8
VL1012	44	431	6,591	44	4	2.26	51	1.9	0.6	0.3	0.3	-0.2	6.5
TM	53	7,235	25,015	131	93	4.30	7,299	108.0	15.9	7.6	3.5	-1.7	83.1
VL1218	22	673	4,880	22	6	1.07	224	7.3	0.8	0.5	0.3	-0.3	8.8
VL1824	16	1,102	5,267	18	15	0.96	577	17.3	2.1	1.2	0.9	-0.1	12.7
VL2440	15	5,460	14,868	91	72	2.26	6,498	83.4	13.0	5.8	2.2	-1.3	61.5
Grand Total	3,240	16,930	174,797	1,609	229	143.01	8,655	117.5	34.0	15.7	12.2	1.2	225.6

Passive gears 0-10m – 1,421 vessels make up this segment and they are based predominantly in the coastal area. These vessels target mainly Baltic herring. Their total value of landings was €11.4 million and 131 FTEs were supported by this segment in

2009. This fleet segment was profitable in 2009. The fleet segment gets substantial subsidies from the government as seal damage compensation. In 2009 the subsidies in total were €1.4 million.

Figure 7.6.5 Finnish pelagic trawl 12-24m key indicators

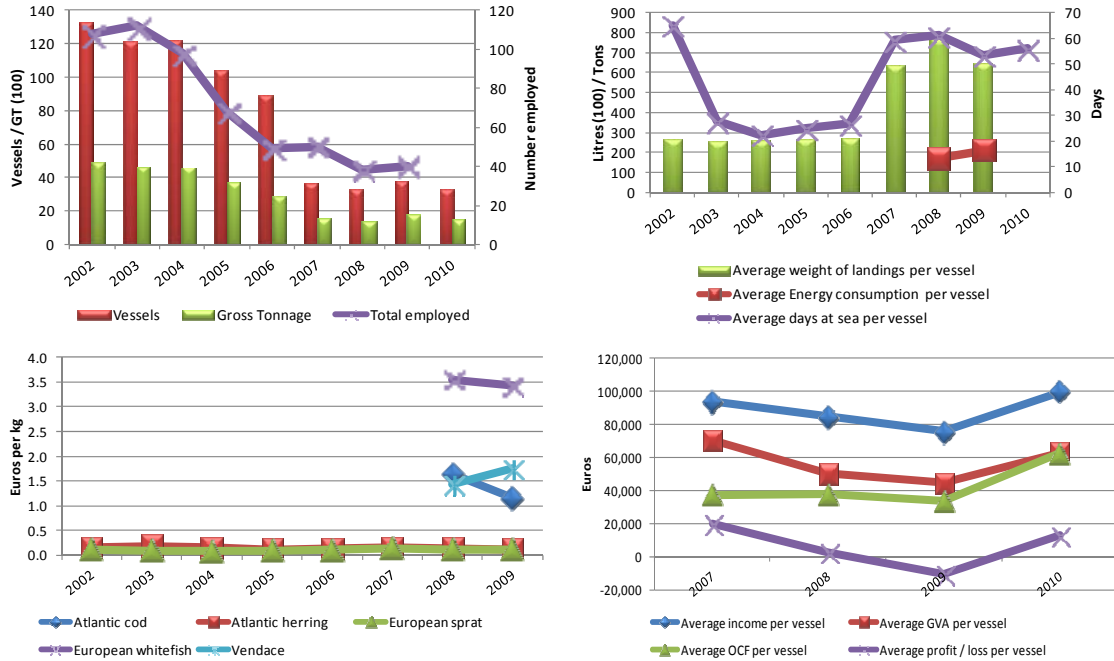
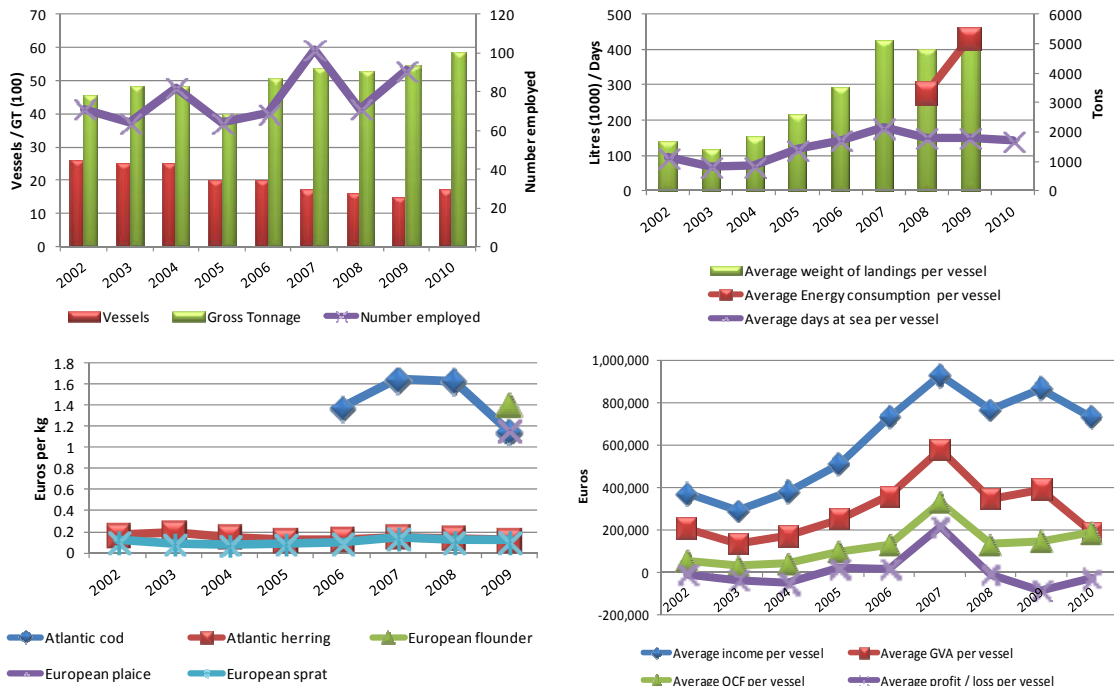


Figure 7.6.6 Finnish pelagic trawl 24-40m key indicators



Pelagic trawlers 24-40m – 15 vessels make up this segment and are based predominantly in the Bothnian Sea and Archipelago. These vessels target mostly Baltic

herring and sprat. While the bulk of Baltic herring and sprat are for industrial purposes, the catch of these vessels are mostly used for human consumption. Their total value of landings was €12.6 million and 72 FTEs were supported by this segment in 2009. The trawler segment has experienced significant structural change during the past few years. Production is heavily concentrated to larger vessels, especially those that have invested in RSW (Refrigerated Sea Water) technology. Despite the increase of efficiency, this fleet segment made losses in 2009.

Pelagic trawlers 18-24m – 16 vessels make up this segment and are based predominantly in the Bothnian Sea and Archipelago. These vessels target Baltic herring and sprat. Their total value of landings was €2.0 million and 15 FTEs were supported by this segment in 2009. This fleet segment made small losses in 2009.

7.6.5 Assessment for 2010 and 2011

The value of landings of the Finnish fleet was €24.7 million in 2010. The value of landings increased from 2009 to 2010 by 4%. According to the Economic Outlook of Finnish Fishery Enterprises published by Finnish Game and Fisheries Research Institute the profitability of big fishing firms improved in 2010. Also domestic prices and demand for fish have developed favorably in 2010, but the production costs are rising. Small fishing enterprises assessed their economic performance to be worse than that of large fishing firms in 2010. Big firms are confident about the future economic development of the sector meanwhile the future prospects of small fishing firms seems unchanged.

The Finnish government has set up a pilot project in 2010 to encourage fishermen to actively fish low value fish (mostly cyprinid fish) to remove nutrients from the water system. The government pays a compensation based on the volume of catch for fishermen fishing low value fish to remove nutrients from the Baltic Sea. Total amount of the compensation is 2 million euros and it will be paid during years 2010 and 2011. This could have a valuable impact on the total income of small scale fishermen operating in coastal areas.

7.6.6 Data issues

As stated in the Finnish national program, the data collection was done based solely on the commercially active fleet until 2005. Vessel economic activity was determined by a threshold level of income above about €9,500, this being the reason for the inconsistency in time series on economic performance and effort variables. Data on economic performance and effort prior to 2006 consisted of information only on the commercially active part of the fleet, while from 2006 onwards the data covers all active fishing vessels. The data on capacity includes all fishing vessels in the fleet register for the whole time series.

There is a break in the time series for capital value from 2007 to 2008, due to methodological issues. Prior to 2008 the capital value was calculated as book value and from 2007 on it has been calculated as depreciated replacement value.

7.7 France

7.7.1 National fleet structure

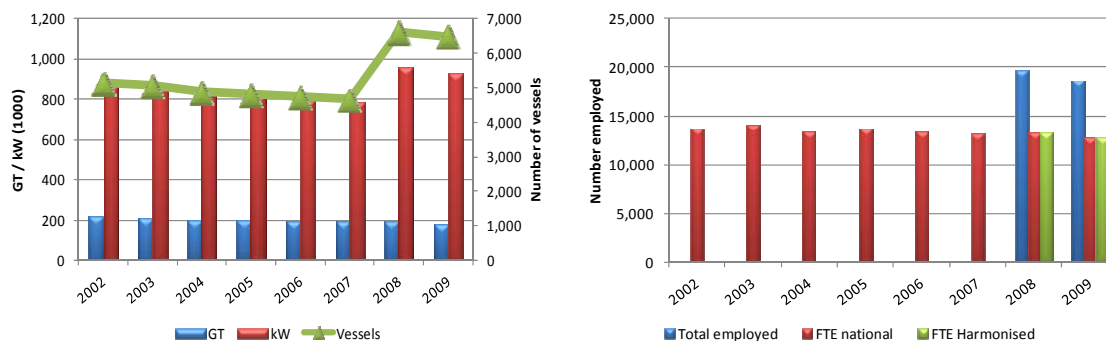
In 2009 the French fishing fleet consisted of 6,475 active vessels (including Corsica and overseas), with a combined gross tonnage of 176,348 GT and total power of 929,414 kW, see Table 7.7.1. There are also 815 inactive vessels in 2009 in the French fishing fleet. The overall average age of vessels was 20.6 years in 2009. The size of the French fishing fleet decreased between 2009 and 2008. The number of vessels in the French fleet declined by 2% and the total GT and kW of the fleet decreased by 6.3% and 3% respectively during that period, see figure 7.7.1 (left).

Table 7.7.1 French national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009
Capacity								
Number of vessels	5,132	5,054	4,875	4,810	4,741	4,661	6,605	6,475
GT (1000)	209.9	207.4	193.8	191.5	190.7	186.1	188.2	176.3
kW (1000)	872.3	857.7	832.5	808.1	790.8	779.3	958.3	929.4
Employment								
Total employed	0	0	0	0	0	0	19,624	18,617
FTEs	13,592	13,961	13,403	13,649	13,399	13,155	13,285	12,823
Effort								
Days at sea (1000)	957.4	952.8	880.8	885.7	866.1	832.4	757.2	791.8
Energy consumption (Million litres)	346.1	371.7	355.5	477.1	490.7	454.7	371.5	383.5
Landings								
Weight (1000 tons)	525.8	532.1	498.9	496.3	541.1	497.1	342.2	336.4
Value (Million €)	853.8	873.0	833.0	885.4	988.7	1,011.9	777.8	788.0
Profitability indicators (Million €)								
Gross Value Added	620.8	691.5	672.0	679.2	668.0	650.4	504.9	494.2
Operating cash flow	223.1	194.3	188.6	202.0	183.5	172.2	140.1	101.8
Economic profit	97.9	56.6	46.8	63.4	38.2	46.4	60.4	-5.5
Capital value (Million €)								
Tangible assets							1,169.0	1,146.6
Fishing rights							0.0	0.0

The total number of fishing enterprises in the French fleet was 5,771 in 2009. The vast majority of fishing enterprises, more than 97%, owned a single vessel. The last 3% correspond to the enterprises owned two to five fishing vessels and six or more fishing vessels.

Figure 7.7.1 French national fleet capacity and employment trends

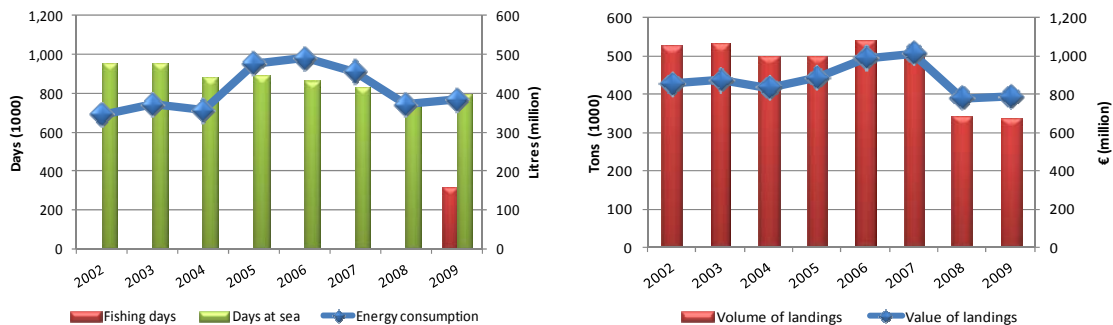


Total employment was 18,617 jobs and 12,823 FTEs in the French fleet in 2009, see Figure 7.7.1. The level of employment in the French fishing fleet decreased between 2008 and 2009. The total number employed decreased by 5% between 2008 and 2009 while the number of FTEs decreased by 4%.

7.7.2 National fleet fishing activity and output

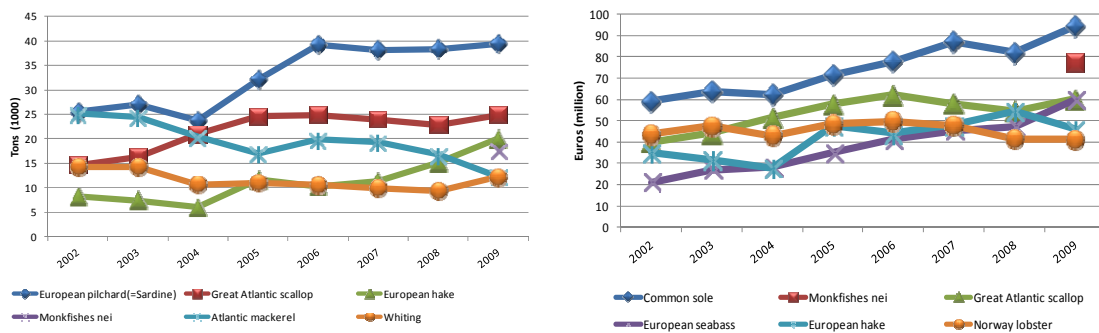
In 2009 the French fishing fleet spent a total of 791,8 thousand days at sea. The total number of days at sea decreased by 4,9% between 2007 and 2009, see Figure 7.7.1 (2008 data is not comparable with 2009 data, see chapter “data issues” for more details). The total quantity of fuel consumed by the French fleet in 2009 was 383.5 million litres. The total quantity of fuel consumed remained relatively stable between 2008 and 2009, see Figure 7.7.2. Fuel prices were lower in 2009 than in 2008.

Figure 7.7.2 French national fleet fishing effort and landings trends



The total volume of landings by the French fishing fleet in 2009 was 336.4 thousand tons of seafood. The total volume of landings decreased by 1.7% between 2008 and 2009, see Figure 7.7.2. In terms of landings composition, in 2009 European pilchard was the most common species landed in volume (39.4 thousand tons), followed by Great Atlantic scallop (24.8 thousand tons) and European hake (20.1 thousand tons), see Figure 7.7.3.

Figure 7.7.3 French national fleet main species landed trends



7.7.3 National fleet economic performance

In terms of landings composition, in 2009 common sole accounted for the highest value of landings (€94.3 million) by the French national fleet, followed by Monkfish (€77.2 million) and Great Atlantic scallop (€60.1 million), see Figure 7.7.3. Average prices

reached in 2009 by the top 2 species in terms of landed value, were €10.27 per kg for the common sole and €4.37 per kg for Monkfish. Average prices reached in 2009 by the top 2 of species in terms of landed volume, were €0.51 per kg for the European pilchard and €2.42 per kg for the Great Atlantic scallop. The prices obtained for these key species generally decreased between 2008 and 2009.

Table 7.7.2 French national fleet economic performance indicators

	2002	2003	2004	2005	2006	2007	2008	2009
Income (Million €)								
Landings							999.7	1,007.6
Direct subsidies							28.1	10.7
Other income							15.7	18.3
Fishing rights							0.0	0.0
Total income	1,141.3	1,206.9	1,195.4	1,214.9	1,271.0	1,259.3	1,043.5	1,036.5
Costs (Million €)								
Crew wages	397.7	497.2	483.4	477.2	484.5	478.2	392.9	403.1
Unpaid labour value							0.0	0.0
Energy costs	118.5	131.2	146.6	163.7	198.1	209.0	191.4	154.6
Repair costs	97.8	107.4	108.4	94.7	103.9	103.9	71.2	85.6
Variable costs	304.2	276.9	268.4	277.3	301.1	296.0	65.3	136.4
Fixed costs	0.0	0.0	0.0	0.0	0.0	0.0	182.6	155.0
Rights costs							0.0	0.0
Capital costs	125.2	137.7	141.8	138.6	145.2	125.8		
Depreciation costs							68.0	66.7
Interest							11.7	40.7
Profitability indicators (Million €)								
Gross Value added	620.8	691.5	672.0	679.2	668.0	650.4	504.9	494.2
Operating cash flow	223.1	194.3	188.6	202.0	183.5	172.2	140.1	101.8
Economic profit	97.9	56.6	46.8	63.4	38.2	46.4	60.4	-5.5
Capital value (Million €)								
Total invested	1,331.4	1,432.6	1,437.0	1,423.4	1,549.7	1,459.6		
Tangible assets							1,169.0	1,146.6
Fishing rights value							0.0	0.0
In-years investments							105.7	138.3

The total amount of income generated by the French national fleet in 2009 was €1,036 million. This consists of €1,007 million in landings values (see chapter “data issues” for more details), €18.3 million in non fishing income, and €10.7 million in direct subsidies. See Table 7.7.2 and Figure 7.7.4. Between 2008 and 2009, the total income of the French fleet remained relatively stable. In general, the total income of the French fleet decreased consistently during the period 2003-2009 (-14%).

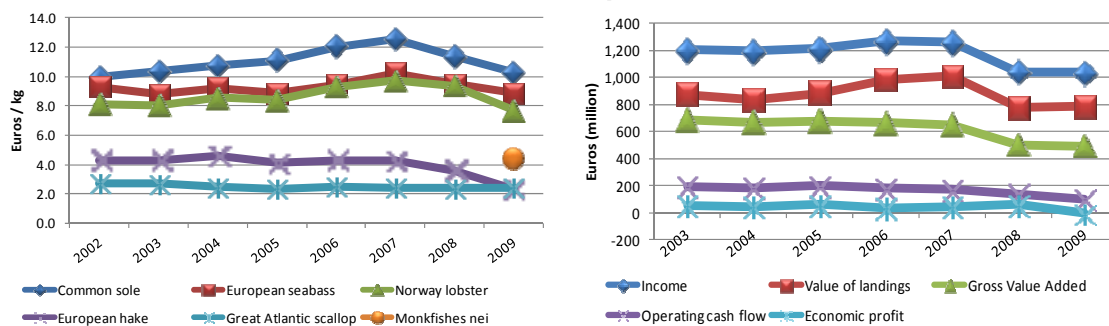
The total amount of expenditure by the French national fleet in 2009 was €934.7 million, see Table 7.7.2. The largest expenditure items were crew wages (€403.1 million, representing almost 40% of total income), fixed costs (€155 million) and energy costs (€155 million). Energy costs accounted for 15.3% of total income in 2009. Between 2008 and 2009 the total expenditure of the French fleet increased 3.5%, despite the significant decrease in fuel costs in 2009.

In terms of profitability, the total GVA and operating cash flow generated by the French national fleet in 2009 was €494.2 million and €101.8 million respectively, see Table 7.7.2 and Figure 7.7.4. The profitability of exploitation (Operating cash flow to Income ratio) reached 9.8% in 2009, a decrease when compared to 2008. The economic profit

indicator for 2009 cannot be compared to the previous year, because it was not possible to calculate “depreciation” in 2009. An evaluation of depreciation costs still requires some detailed methodological work before it is adopted for the French fishing fleet. However, in order to ensure a comparison between Member States at a national level, this indicator was estimated from the available data in the previous year (2008). Interpretation should therefore be made with precaution at this stage. Using the method above, economic profit becomes negative in 2009, see Table 7.7.3.

The total amount of tangible assets by the French national fleet in 2008 was €1,169 million. In 2009, evaluation of fleet capital values still required some methodological work before being adopted for the French fishing fleet. That is why the data was estimated from the available data the previous year (2008).

Figure 7.7.4 French national fleet economic performance trends



7.7.4 Fleet composition

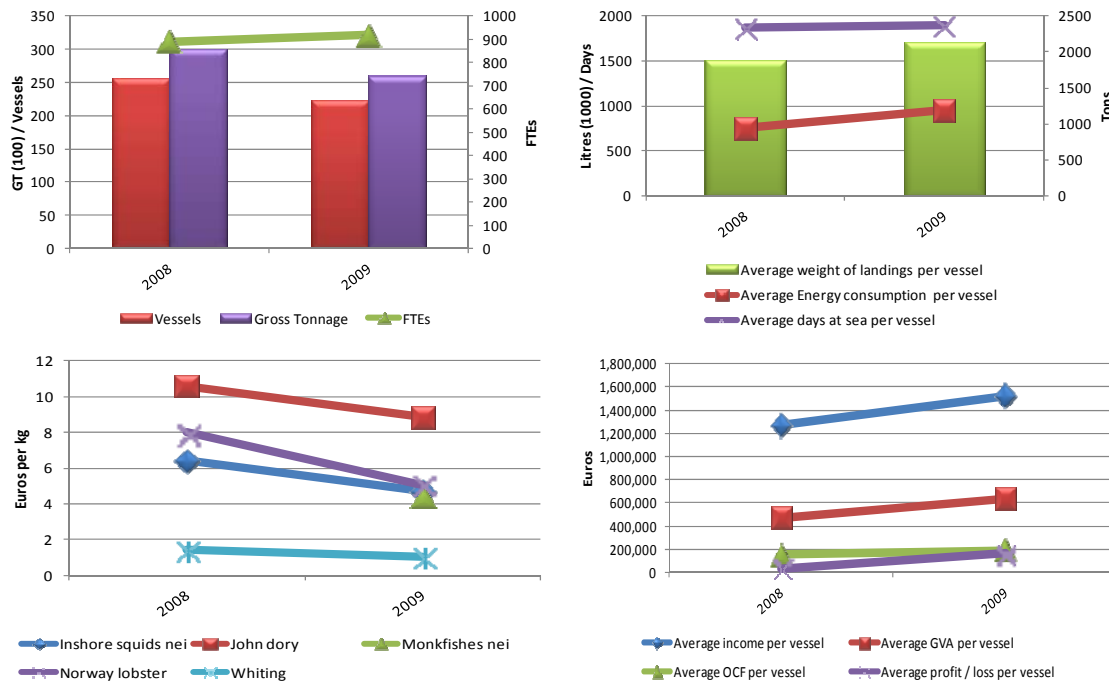
The French national fleet consisted of 72 fleet segments in 2009. The French fleet is highly diversified with a broad range of vessel types targeting different species, predominantly in area 27. The inactive segments consist of 815 vessels. These vessels are classed as inactive if they did not land any catch in 2009. Table 7.7.3 provides a breakdown of key performance indicators for all French fleet segments in 2009. A description of the five most important segments in terms of total value of landings is given below:

Demersal trawl/seine 18-24m – 200 vessels make up this segment (excluding overseas), accounting for a total of 23,687 GT and 80,098 kW and are based predominantly in area 27 (Atlantic, North Sea and the Channel). The average age of the vessels in this fleet segment was 19.9 years in 2009 and average size was 21.3 metres in length. The number of vessels in this fleet segment decreased 12% between 2008 and 2009.

These vessels target a variety of species. The three most important in terms of value landed by this segment is anglerfish, nephrops (lobster) and squid (code FAO: SQZ). The total value of landings was €136.8 million and 1,208 jobs were supported by this segment in 2009. Overall profitability of exploitation reached 12.7% in 2009. These vessels operate mainly in the Atlantic and Mediterranean Sea. They generated an average income of around €690 thousand per vessel in 2009 (-14.8% compared with 2008). In 2009 the average days at sea per vessel was 219. It is important to distinguish between supra region at this stage, because even if the vessels are in the same fleet

segment, they have very different fishing activities, in terms of target species or number of days at sea. For example, the three most landed species by vessels working in the Atlantic Sea in terms of value are anglerfish, Norway lobster and inshore squids. For vessels operating in the Mediterranean Sea, the three most landed species in terms of value were European hake, inshore squids and European seabass. Anglerfish represented 23% of the total landings value for vessels in the Atlantic Sea, while European hake represented 33% for vessels in Mediterranean Sea in 2009. Average prices followed a different trend between the Atlantic and the Mediterranean. The average prices of the top two species decreased significantly in 2009 for vessels in the Atlantic (-18% and -37%), while they remained rather stable in the Mediterranean Sea.

Figure 7.7.5 French demersal trawl/seine 18-24m key indicators

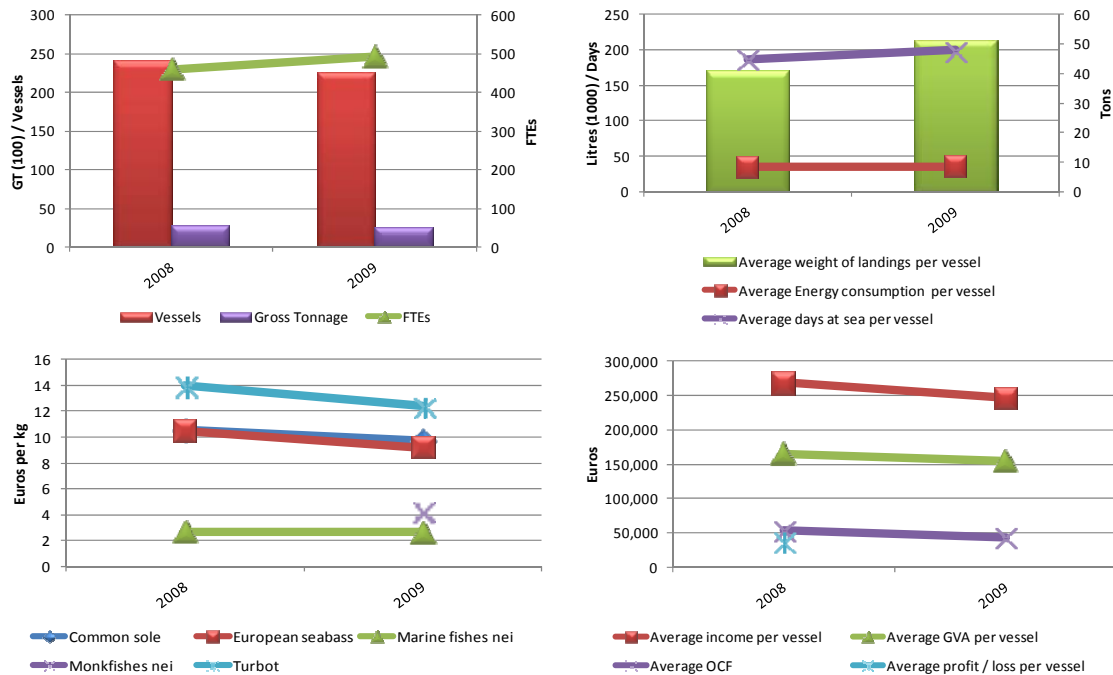


For all vessels in this fleet segment (Atlantic and Mediterranean Sea), total income decreased by 15% in 2009. The fall in price of fuel observed in 2009 (this segment is characterised by a strong dependence with the fuel) had a positive impact on the total costs of exploitation. The situation differs between regions. In the Atlantic, the reduction of total running costs compensated for the decrease in total income and improved profitability. The operating cash flow to income ratio reached 12.9% in 2009. In the Mediterranean Sea, the decrease in fuel price did not entirely compensate for the increase in other running costs and the reduction of total income. The profitability of exploitation decreased 31% in the Mediterranean Sea in 2009, attaining 13.3% of total income in 2009. This French fleet segment is the most important in terms of turnover generated. However, vessel dependency on high energy consumption, dependency of quota species and ageing vessels limits possibilities for further development. For economic profit, the indicator presented for 2009 cannot be compared with the previous year as the depreciation indicator could not be estimated for all segments.

Drift and fixed nets 10-12m – 189 vessels make up this segment (excluding overseas) and are predominantly based in area 27. In 2009 this segment accounted for a total of

2,335 GT and 30,450 kW (excluding overseas). Average vessel age for this fleet segment was 20.4 years in 2009 and average size is 11.5 metres in length. The number of vessels decreased 5% between 2008 and 2009, a trend broadly followed by GT and kW. These vessels operate mainly in the Atlantic sea, and generated average incomes of around €246,000 thousand per vessel (-8% compared to 2008). In 2009 the average days at sea per vessel was 199. The three top species landed in terms of value were common sole, anglerfish and European sea bass. The total value of landings was €46.5 million and 619 jobs were supported by this segment in 2009. The profitability of exploitation reached 17.6% in 2009.

Figure 7.7.6 French drift and fixed nets 10-12m key indicators



The top three species landed by the vessels in this segment in terms of value, were common sole, anglerfish and European seabass, but sole represented 50.2% of the total landed value in 2009. This specie is very important for income in this segment. The average price of common sole decreased by 7.7% in 2009 compared to 2008. Fuel consumption is lower for this segment because of the nature of their activity. Fuel costs reached about 5.8% of total income in 2009, a reduction when compared to 2008, due to the fall in fuel prices In 2009. For economic profit, the indicator showed in 2009 cannot be compared with the previous year, because we are not in capacity to calculate the indicator “depreciation” in 2009 for all segments. Evaluation of the depreciation cost still requires a work detailed on methodology to adopt for the French fishing fleet. The good evaluation of this estimated indicator takes all its importance since it returns in account in the calculation of the profit.

Demersal trawl / seine 24-40m – 91 vessels comprise this segment (excluding overseas) and are based predominantly in area 27. The three top species landed in terms of value by the vessels of this segment are anglerfish, squid (code FAO: SQZ) and European hake. Their total landings value was €80.8 million and 705 jobs were

supported by this segment in 2009. The profitability of exploitation reached 8.5% in 2009.

Demersal trawl / seine 12-18m – 174 vessels make up this segment (excluding overseas) and they are based predominantly in the area 27. These vessels target a variety of species. The top three species in terms of value landed by these vessels in 2009 were nephrops (lobster), anglerfish and sole. Their total value of landings was €71.3 million and 604 jobs were supported by this segment in 2009. The profitability of exploitation for this segment reached 15.9% in 2009.

Drift and fixed nets 12-18m – 109 vessels make up this segment (excluding overseas) and are based predominantly in area 27. The top three species in terms of value landed are common sole, anglerfish and spinous spider crab (code FAO: SCR). The total value of landings was €36.7 million and 464 jobs were supported by this segment in 2009. The profitability of exploitation for this segment reached 14% in 2009.

7.7.5 Assessment for 2010 and 2011

The year 2008 was marked by high fuel prices, while in 2009 market difficulties (reduced exports and increased imports which subsequently increased competition) for the French vessels. The year 2010 was better in term of activity, with an average increase in fish price and improvement in exports. However, results contrast according to fleet segment and supra region (good year for cephalopods in the Atlantic, bad for pelagic fish in the Mediterranean, etc).

The beginning of the year 2011 was also rather good, in terms of stock abundance and price of species. However the problem of rising of fuel prices reappeared and will again have a direct negative impact on the profitability of vessels.

7.7.6 Data issues

GT and kW data: as of 2008, French fleet capacity data includes vessels from overseas territories, which explains the significant increase in this data.

Table 7.7.3 French fleet composition and key indicators 2009

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Depreciated replacement value (Million Euros)
DFN	1,603	21,081	177,492	2,992	2,296	236.78	26,035	38.7	203.3	137.2	58.0	0.0
VL0006	83	91	2,879	90	51	11.71	294	0.1	2.3	1.6	0.4	0.0
VL0010	572	1,742	44,316	493	349	61.68	3,483	8.0	26.8	16.2	3.8	0.0
VL0612	548	1,887	47,007	743	495	93.11	3,241	0.6	34.1	26.0	10.9	0.0
VL1012	225	2,605	32,915	619	494	37.69	6,655	9.7	46.5	29.3	8.2	0.0
VL1218	111	3,843	22,047	464	370	23.16	6,515	7.3	39.2	22.8	5.5	0.0
VL1824	43	4,858	15,469	299	258	9.43	5,846	6.2	28.4	15.2	3.2	0.0
VL2440	20	5,264	11,387	263	259			6.3				
VL24XX									26.0	26.0	26.0	
VL40XX	1	791	1,472	21	20			0.4				
DFN-PGP						5.95	6,053					0.0
VL24XX						5.95	6,053					0.0
DRB	270	6,367	43,029	830	511	39.01	17,001	32.3	59.8	33.4	9.3	0.0
VL0006	4	4	126	4	2			0.0				
VL0010	75	506	6,328	158	74	8.67	1,031	4.9	7.1	4.8	1.4	0.0
VL0012						1.30	67		0.5	0.3	0.1	0.0
VL0612	12	63	1,300	12	4			0.0				
VL1012	90	1,286	11,934	246	152	13.91	4,098	11.2	16.8	9.9	2.8	0.0
VL1218	82	3,917	20,767	372	255	14.04	10,482	15.1	32.1	16.8	4.5	0.0
VL1824	6	467	1,985	32	18			0.9				
VL1840						1.09	1,323		3.3	1.7	0.5	0.0
VL2440	1	123	589	6	6			0.2				
DTS	761	65,914	224,809	3,269	2,331	151.50	201,154	139.3	387.5	166.8	43.0	0.0
VL0010	99	686	8,671	136	93	16.84	2,992	1.5	9.1	4.8	0.8	0.0
VL0612	3	29	269	0	0	0.00	0	0.0				
VL1012	157	2,156	19,899	368	255	27.00	11,060	9.1	32.1	17.4	5.2	0.0
VL1218	174	7,917	43,690	604	481	32.84	30,730	19.3	70.3	37.0	11.2	0.0
VL1824	222	25,991	87,084	1,208	917	48.33	79,886	54.2	146.2	61.1	18.6	0.0
VL2440	95	17,293	44,665	705	585	23.12	54,010	36.5	87.3	33.8	7.4	0.0
VL40XX	11	11,841	20,531	248	0	3.37	22,475	18.6	42.6	12.7	-0.3	0.0
FPO	863	4,316	68,120	868	631	84.02	8,612	17.2	52.8	34.7	9.3	0.0
VL0006	100	89	2,617	103	59	15.51	151	0.1	2.1	1.6	0.5	0.0
VL0010	650	1,580	46,751	455	340	49.57	3,934	5.1	27.3	18.4	5.2	0.0
VL0612	24	40	1,684	26	16	3.78	49	0.1	0.5	0.3	0.0	0.0
VL1012	66	699	10,464	171	134	11.59	2,565	8.4	15.4	10.0	2.8	0.0
VL1218	10	396	2,017	37	27	1.55	419	1.0	2.6	1.6	0.4	0.0
VL1824	13	1,510	4,587	76	55	2.02	1,494	2.5	4.9	2.8	0.4	0.0
HOK	952	8,485	113,827	744	555	73.65	12,028	8.9	52.1	29.5	5.9	0.0
VL0006	5	6	122	5	3			0.0				
VL0010	773	2,287	80,167	346	241	48.71	3,985	3.2	25.1	15.5	4.4	0.0
VL0018						7.57	416		2.3	1.6	0.4	0.0
VL0612	57	214	5,170	64	32			0.1				
VL1012	70	697	11,887	119	90	8.95	1,894	2.1	9.8	6.3	2.0	0.0
VL1218	24	774	5,566	93	78	4.31	1,705	1.3	6.9	3.1	0.4	0.0
VL1824	10	1,435	3,930	61	55			0.7				
VL1840						4.12	4,029		7.9	3.0	-1.3	0.0
VL2440	13	3,072	6,985	56	56			1.6				
MGO	198	690	12,247	257	143	28.34	1,765	0.5	11.6	6.8	1.6	0.0
VL0006	1	1	18	1	0							
VL0010	171	468	10,167	209	124	24.92	1,538	0.4	9.6	5.3	1.1	0.0
VL0018						1.76	89		0.8	0.6	0.1	0.0
VL0612	12	74	694	21	12			0.0				
VL1012	13	125	1,221	26	7	1.66	138	0.1	1.3	0.8	0.3	0.0
VL1218	1	21	147	0	0			0.0				
MGP	148	5,127	26,800	466	354	26.95	18,661	16.0	44.6	23.4	6.4	0.0
VL0010	29	182	2,345	42	24	3.90	611	0.8	2.4	1.4	0.4	0.0
VL1012	51	807	6,988	154	118	9.69	5,083	4.2	14.3	7.7	2.3	0.0
VL1218	51	2,160	11,897	199	154			7.1				
VL1224						10.25	8,138		19.9	10.4	2.8	0.0
VL1824	5	470	1,778	21	16			1.1				
VL1840						3.11	4,829		8.0	3.9	1.0	0.0
VL2440	12	1,508	3,792	50	42			2.9				

Table 7.7.3 French fleet composition and key indicators 2009 continued

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Depreciated replacement value (Million Euros)
PGO	339	548	16,939	340	197	39.15	810	1.1	10.4	8.3	2.8	0.0
VL0006	74	61	2,226	74	35	8.69	142	0.0	1.5	1.1	0.3	0.0
VL0010	179	277	8,327					0.4				
VL0012				175	116	19.76	521		7.1	5.7	2.1	0.0
VL0612	80	156	5,752	91	46	10.70	148	0.1	1.8	1.4	0.4	0.0
VL1012	6	54	634					0.6				
PGP	961	5,024	102,822	361	273	48.71	2,052	2.1	22.9	15.3	3.7	0.0
VL0006	55	49	1,556	55	40	9.97	170	0.1	1.8	1.5	0.5	0.0
VL0010	775	1,773	83,237	126	99	17.60	794	0.9	6.7	4.4	1.0	0.0
VL0012									6.7	4.4	1.0	
VL0612	104	329	9,699	139	99			0.2				0.0
VL0618						19.12	685		5.0	3.4	0.7	
VL1012	20	195	4,306	25	22			0.3				0.0
VL1018						2.01	404		2.7	1.7	0.5	
VL1218	5	104	826	8	5			0.2				0.0
VL2440	1	230	588	9	9			0.3				0.0
VL40XX	1	2,343	2,610									
PMP	172	1,591	18,251	362	265	30.28	4,182	14.6	45.7	28.5	8.5	0.0
VL0006	3	4	77	3	2							0.0
VL0010	76	448	5,952	118	87	13.50	823	2.3	6.0	3.9	0.9	0.0
VL0012									20.5	12.8	3.9	
VL0018						2.10	151		1.2	0.8	0.1	
VL0612	11	46	1,310	32	16			0.0				0.0
VL1012	73	851	8,956	183	140	13.33	2,781	11.6	14.5	8.9	2.9	0.0
VL1218	9	242	1,956	26	20	1.36	428	0.6	1.8	1.1	0.3	0.0
VL1224									1.8	1.1	0.3	
PS	126	39,839	88,477	923	132	12.22	55,684	31.2	110.4	18.1	-20.6	216.2
VL0010	29	78	3,788									
VL0612	12	84	1,513	39	20			0.1				0.0
VL0618						2.41	175		1.6	1.2	0.3	
VL1012	2	18	278	4	3			0.3				0.0
VL1024						3.99	1,296		14.4	9.7	3.7	
VL1218	28	965	5,646	154	97			26.7				0.0
VL1224									1.0	0.6	0.1	
VL1824	7	374	2,203	56	12	0.38	188	3.1	1.0	0.6	0.1	0.0
VL2440	19	3,603	10,350	0	0	0.00	0	0.7				0.0
VL40XX	29	34,717	64,699	670	0	5.44	54,025	0.4	92.4	5.9	-24.7	216.2
TBB	7	310	1,508	24	19	1.03	1,218	0.8	5.5	2.9	0.9	0.0
VL1218	7	310	1,508	24	19	1.03	1,218	0.8	2.8	1.5	0.4	0.0
VL1224									2.8	1.5	0.4	
TM	75	17,058	35,093	505	275	14.24	28,249	33.8	70.2	24.8	-4.2	46.8
VL0012									1.2	0.8	0.2	
VL1012	6	87	1,009	17	11	0.95	299	1.0	1.2	0.8	0.2	0.0
VL1218	16	853	4,761	64	45	2.80	2,834	3.8	6.4	2.9	0.9	0.0
VL1224									6.4	2.9	-6.4	
VL1824	34	3,927	12,735	202	154			13.2			-7.3	0.0
VL1840						9.64	15,157		30.9	13.9	11.8	
VL2440	15	2,200	5,064	74	65			8.3				0.0
VL40XX	4	9,991	11,524	148	0	0.85	9,959	7.5	24.1	3.6	-3.7	46.8

Employment data: data available in the employment DCF table is calculated with provisional sample data. The final data in the AER report is supplied through an official administrative “social insurance” database (only for total employment).

Days at sea data: 2008 data was only available for area 27. For 2009, data was available for areas 27 and 37 (excluding overseas territories).

Landings values data: the break in the 2008 annual series is explained by a change in the information system. A new data center was in charge of the data entry but starting only with logbooks for the year 2009.

Capital value data: still requires detailed methodological work before it is used for the French fishing fleet.

Economic profit: the indicator presented for 2009 cannot be compared with the previous year because it was not possible to calculate depreciation in 2009. Evaluation of the depreciation cost still requires detailed methodological work before it is adopted for the French fishing fleet. However, to ensure a comparison between Member States at a national level, we estimated this indicator using available data from the previous year (2008). Interpretation must thus be made with caution at this stage.

Data are missing for some segments. In particular, data of landings value for purse seines over 40m fishing in the Indian Ocean are not taken into account in the results presented in this report. Therefore analysis must be carried out with caution. Table 7.7.3 is an aggregation of economic data from the 3 supra-regions (areas 27, 37 and OFR). When studying the French data it is necessary to remember that within the same segment, economic results from different supra-regions can differ.

7.8 Germany

7.8.1 National fleet structure

The German fishing fleet contains a small number of fishing vessels representing the pelagic fleet. These vessels belong to a small number of companies. For confidentiality reasons it is impossible to publish these data by segment. On the other hand, clustering is not feasible as vessels have unique characteristics which would completely bias “pure” segments when clustered. Therefore, the pelagic fleet data are not published, except for capacity data, which is public. This has to be born in mind when interpreting national totals. They exclude the pelagic fleet which stands for a substantial part of costs and earnings in the German fleet.

In 2011 the German fishing fleet consisted of 1679 registered vessels, with a combined gross tonnage of 67.700 GT and total power of 159.500 kW, see Table 7.8.1. The overall average age of vessels was 29 years in 2011. The size of the German fishing fleet has followed a decreasing trend between 2002 and 2011. The number of vessels in the German fleet declined by 26% (603 vessels) while the total GT and kW of the fleet only decreased by only 4% and 5% respectively during that period.

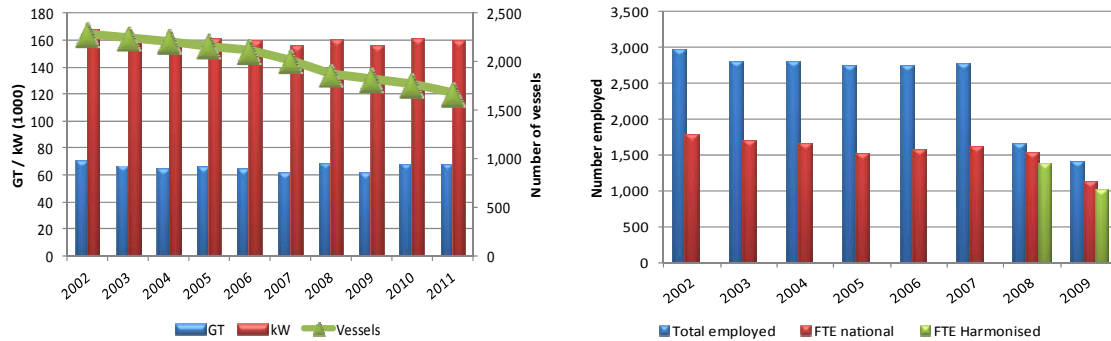
Table 7.8.1 German national fleet* key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capacity										
Number of vessels	2,282	2,241	2,210	2,161	2,114	2,014	1,870	1,818	1,766	1,679
GT (1000)	70.7	66.7	64.0	66.2	64.1	61.9	69.1	61.3	68.2	67.7
kW (1000)	167.6	160.7	158.5	161.8	159.2	155.6	160.8	155.8	161.5	159.5
Average age	25.0	29.0	27.0	28.0	30.0	30.0	27.0	28.0	28.0	29.0
Employment										
Total employed	2,984	2,798	2,805	2,736	2,740	2,770	1,665	1,415		
FTEs	1,791	1,697	1,676	1,526	1,579	1,617	1,537	1,142		
Effort										
Days at sea (1000)	151.7	144.7	143.1	149.3	157.0	187.7	133.5	127.6	115.3	
Energy consumption (Million litres)	21.8	32.7	31.8	27.4	27.1	29.0	54.3	47.6		
Landings										
Weight (1000 tons)	105.0	140.3	126.2	132.7	126.3	118.2	110.4	117.6	92.2	
Value (Million €)	133.4	131.6	131.0	150.6	151.3	163.0	158.9	128.4	141.1	
Profitability indicators (Million €)										
Gross Value Added	82.9	85.9	79.2	97.1	103.5	105.4	68.9	63.0	67.0	
Operating cash flow	8.7	31.1	23.5	36.7	50.9	49.6	37.9	29.5	35.3	
Economic profit	-9.6	20.0	0.1	28.7	43.5	41.2	-0.2	2.0	1.8	
Capital value (Million €)										
Tangible assets							153.6	134.6	144.1	
Fishing rights							0.0	0.0		

*pelagic fleet excluded except for capacity

The total number of fishing enterprises in the German fleet was 1439 in 2010. The vast majority of fishing enterprises, 83%, owned a single vessel and 16% of enterprises owned two to five fishing vessels. Only 4 fishing enterprises owned six or more fishing vessels.

Figure 7.8.1 German national fleet capacity and employment trends

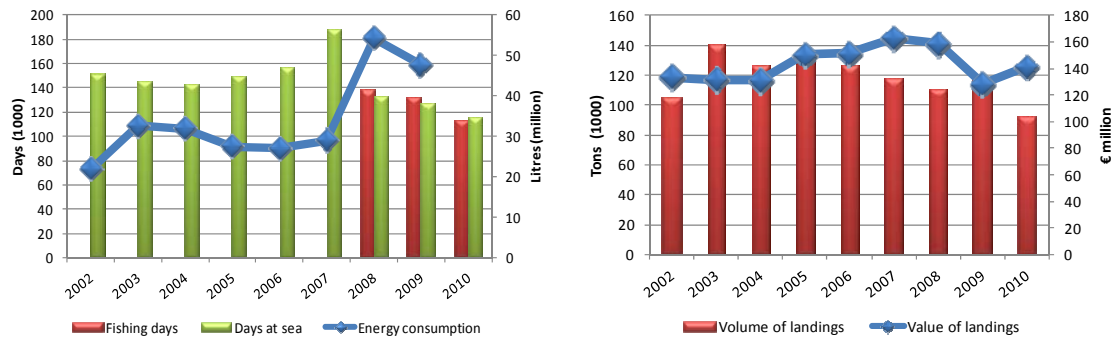


Total employment was estimated at 1415 jobs, translating into 1142 FTEs in the German fleet in 2009, see figure 7.8.1. The level of employment in the German fishing fleet decreased between 2002 and 2009. The FTEs decreased by 36% between 2002 and 2009. Accordingly, the number of total number employed decreased as well, but the direct comparison is misleading as the approach for estimation has changed between 2007 and 2008, resulting in much lower numbers for more recent years.

7.8.2 National fleet fishing activity and output

In 2010 the German fishing fleet (excluding the pelagic fleet) spent a total of 115 thousand days at sea, about the same number as actual fishing days. The total number of days at sea remained relatively stable between 2002 and 2007 and shows a decreasing trend in recent years, see Figure 7.8.2. The total quantity of fuel consumed by the German fleet (excluding the pelagic fleet) in 2009 was 49 million litres. The total quantity of fuel consumed decreased between 2007 and 2009, see figure 7.8.2. As the estimation procedure has been amended due to a broader data basis for numbers from 2008 onwards, the time series is interrupted and does not allow for direct comparison.

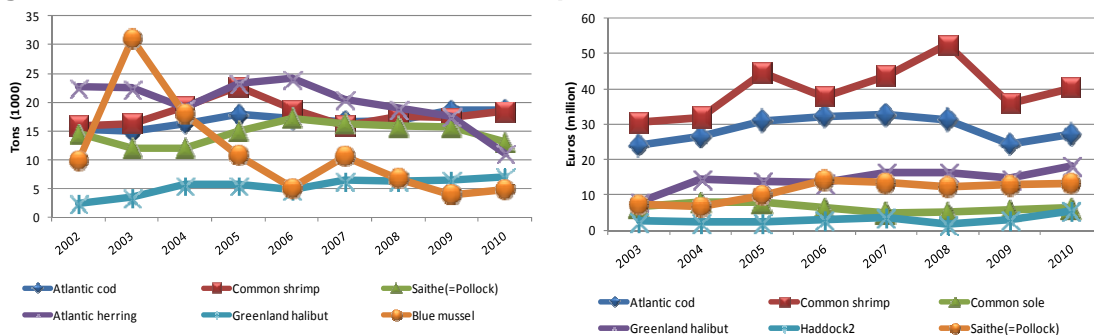
Figure 7.8.2 German national fleet fishing effort and landings trends



The total volume of landings by the German fishing fleet (excluding the pelagic segments) in 2010 was 92 thousand tons of seafood. In general, the total volume of landings shows a decreasing trend between 2002 and 2010, see Figure 7.8.2. The value of landings has increased by and large since 2002 with a sharp decline in 2009 and a slight recovery in 2010.

In terms of landings composition of the non-pelagic fleet segments, in 2010 Atlantic cod was the most common species landed in terms of tonnage (18.7 thousand tons), followed by common shrimp (18.4 thousand tons) and saithe (13.0 thousand tons), see Figure 7.8.3. An ongoing decline of landings of herring can be observed since 2006, which is due to poor recruitment and resulting cuts in quota. Catches of blue mussels have remained at a relatively low level, compared with years prior to 2006, due to ongoing low recruitment. This trend could only partly be compensated by the favourable price development which was supported by the high product quality. Innovative approaches for the collection of seed mussels show promising results and might improve the situation in the future. Sprat is no longer amongst the top 6 species in terms of volume.

Figure 7.8.3 German national fleet main species landed trends



7.8.3 National fleet economic performance

In terms of value of landings composition of the German non-pelagic fleet, in 2010 common shrimp again accounted for the highest value of landings (€40.3 million), followed by Atlantic cod (€27.3 million) and Greenland halibut (€18.2 million), see Figure 7.8.3. In terms of prices of these top 6 species in terms of value of landings, in 2010 common sole achieved the highest average price per kilo (€ 11.31 per kg) by the German national fleet, followed by Greenland halibut (€ 2.56 per kg) and common shrimp (€2.19 per kg), see Figure 7.8.4. The prices obtained for these key species generally recovered from 2009 to 2010, after a noticeable decline in the year before.

The income from landings generated by the German national fleet (excluding the pelagic fleet) in 2010 was €133 million. The amount of other income and subsidies is negligible in relation to the total (see table 7.8.2 and figure 7.8.4). Between 2002 and 2010 the income from landings of the German fleet (excl. pelagic) firstly increased by 22% until 2007 and then dropped back approximately to the level of 2002-2004.

The total amount of expenditure (excluding capital cost and imputed employers' labour cost) by the German national fleet (excluding the pelagic fleet) in 2009 (most recent data) was €103 million, see table 7.8.2. The largest expenditure items were crew wages (€34.7 million) and energy costs (€20.0 million). Between 2002 and 2009 the total expenditure of the German fleet indicated an increasing trend. However, it has to be stressed that the sampling coverage and estimation of energy cost has considerably advanced from 2008 onwards. Prior data are likely to be underestimated.

Table 7.8.2 German national fleet economic performance indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)									
Landings							163.0	127.6	132.9
Direct subsidies							0.9	1.2	1.0
Other income							3.2	3.4	3.3
Fishing rights							0.0	0.0	0.0
Total income	133.4	131.6	131.0	150.6	151.3	163.0	167.0	132.2	137.2
Costs (Million €)									
Crew wages	74.2	54.8	55.7	60.4	52.6	55.7	31.8	34.7	32.7
Unpaid labour value							11.3	9.3	9.5
Energy costs	9.6	9.1	9.5	14.3	14.2	16.8	29.4	20.0	24.7
Repair costs	14.0	10.0	9.6	11.5	9.5	12.4	21.8	19.2	17.3
Variable costs	6.2	7.1	8.1	6.5	6.8	7.5	25.8	13.0	11.8
Fixed costs	20.6	19.6	24.5	21.1	17.3	20.9	20.2	15.8	15.4
Rights costs								0.0	0.0
Capital costs	18.3	11.0	23.4	8.0	7.4	8.4			
Depreciation costs							25.1	14.1	19.6
Opportunity cost							1.8	4.1	4.4
Profitability indicators (Million €)									
Gross Value added	82.9	85.9	79.2	97.1	103.5	105.4	68.9	63.0	67.0
Operating cash flow	8.7	31.1	23.5	36.7	50.9	49.6	37.9	29.5	35.3
Economic profit	-9.6	20.0	0.1	28.7	43.5	41.2	-0.2	2.0	1.8
Capital value (Million €)									
Total invested	23.1	33.5	57.9	15.7	21.2	21.6			
Tangible assets							153.6	134.6	144.1
Fishing rights value							0.0	0.0	
In-years investments							20.6	24.7	

In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the German national fleet (excl. pelagic) in 2009 was €29.5 million, €63.0 million and €2 million respectively, see table 7.8.2 and figure 7.8.4. In 2010, the German fleet (excl. pelagic) had an estimated capital value (tangible assets – only vessel) of €144 million.

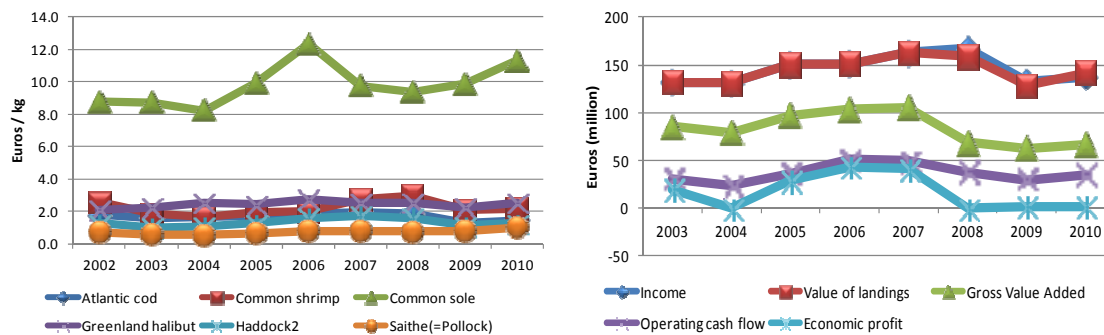
According to the German Deep Sea Trawler Association, 2010 has been an economically positive year. The association managed to utilize the catching capacity by quota exchange and thus curb costs. Quota cuts have led to problems, but at least prices have on average remained stable. It was judged favorable that under management plans quota increases were capped at 15%. This prevented markets from oversupplies and thus helped keep prices relatively stable. However, high plaice supplies let the price drop to the intervention level.

Baltic coastal fisheries heavily suffered from cuts in herring quota as there is no alternative fishery to generate revenues. The effect was only to a lesser extent compensated by higher prices.

Brown shrimp fisheries still suffer from low prices and extra costs for additional equipment as recently required by law.

Overall, MSC certification could be achieved for several fisheries, positively affecting sales.

Figure 7.8.4 German national fleet economic performance trends



7.8.4 Fleet composition

The German national fleet consisted of 25 fleet segments in 2009. The German fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North Sea, Baltic Sea and North Atlantic. High seas trawlers operate also in the Arctic, Moroccan and South Pacific waters. A total of 505 vessels of all length classes reported no activities or catches in 2009 and were therefore regarded as inactive. For confidentiality reasons data for some small segments had to be clustered. Therefore separate data are available for 13 clustered or un-clustered segments. In 2009, all segments displayed had a profit close to zero. Apart from the beam trawlers, for which all length segments have gained some low profits, there is no clear pattern within a gear or length class: some made profits, some losses.

The operating cash flow, however, has been positive for almost all segments. The difference between profit and operating cash flow is the capital cost, derived from the estimated assets value. Both are imputed values and, in general, grossly overestimated the actual flow of money. Therefore the real profitability of the fleet segments is likely to be more favorable than displayed by the indicator “profit”.

Table 7.8.3 provides a breakdown of key performance indicators for all German fleet segments in 2009. A short description of the most important segments in terms of total value of landings is given below:

Demersal trawlers >24 m – 24 vessels make up this clustered segment. The largest vessels are based predominantly in the North Sea, Eastern Arctic and North Atlantic. These vessels target cod, Greenland halibut, saithe and haddock. The smaller vessels operate in the North Sea and Baltic Sea. Those vessels primarily catch cod and saithe, but seasonally to some extent also small pelagic species (herring, sprat). The total value of landings of the clustered segment was €56 million and an estimated number of 315 jobs were supported by this segment in 2009. This fleet segment made minor losses in 2009.

Vessels < 10m using passive gear – 861 vessels make up this segment and they are based exclusively in the Baltic Sea. These vessels target a variety of species, of which herring is the most important, both in volume and value. Cod and flounder are amongst the top 10 in terms of earnings. As these vessels often operate in the lagoon-like areas (Bodden, Haff), freshwater species like pike-perch, eel and roach are of major importance. The total value of landings was €4.5 million and an estimated 435 jobs were

supported by this segment in 2009. This fleet segment was just profitable in 2009. The segment is of importance not so much because of the landings, but because of the number of people employed, and as an attraction for tourists this kind of artisanal fishery causes positive external effects.

Table 7.8.3 German fleet composition and key indicators in 2009

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	23	1,361	4,485	22	17	1.64	95	1.2	1.8	1.3	1.0	0.7	1.2
VL1218	16	365	2,216	22	17	1.64	95	1.2	1.8	1.3	1.0	0.7	1.2
VL1824	2	119	352										
VL2440	5	877	1,917										
DFN-HOK-FPO-PGO				69	56	1.60	2,728	1.4					3.9
VL1240				69	56	1.60	2,728	1.4					3.9
DRB	5	1,055	3,392	10	7	0.21	1,692	4.0					4.1
VL00XX				10	7	0.21	1,692	4.0					4.1
VL1218	1	53	252										
VL2440	3	625	2,066										
VL40XX	1	377	1,074										
DTS	106	20,804	41,646	440	337	14.43	28,486	82.4	69.2	32.3	10.4	-2.6	81.0
VL0010	2	24	190										
VL0012				10	9	1.37	519	1.8	1.0	0.1	-0.2	-0.5	0.9
VL1012	13	213	2,055										
VL1218	39	1,310	7,283	41	34	3.87	1,039	6.7	3.6	1.7	1.0	-0.1	3.7
VL1824	28	3,045	6,122	74	62	4.04	2,915	9.4	9.4	5.1	2.4	0.0	11.1
VL2440	16	3,439	7,409										
VL24XX				315	232	5.16	24,013	64.5	55.2	25.5	7.2	-1.9	65.2
VL40XX	8	12,773	18,587										
FPO	3	402	1,083										
VL1218	1	24	220										
VL2440	2	378	863										
HOK	1	28	210										
VL1218	1	28	210										
INACTIVE	505	4,356	14,863										
VL0010	468	613	4,934										
VL1012	8	70	637										
VL1218	12	350	1,866										
VL1824	6	529	1,237										
VL2440	7	1,300	2,978										
VL40XX	4	1,494	3,211										
PG	937	2,589	23,926	506	420	78.52	1,390	9.6	8.8	2.6	2.4	0.0	9.7
VL0010	861	1,749	17,569	435	361	70.43	1,098	5.8	6.0	1.7	1.6	0.3	6.9
VL1012	76	840	6,357	71	59	8.08	293	3.8	2.7	0.9	0.7	-0.2	2.8
TBB	232	10,309	47,992	368	305	31.17	13,194	19.0	42.4	23.5	15.1	4.6	34.6
VL0010	15	49	603										
VL0012				15	12	1.62	86	0.2	0.4	0.3	0.3	0.2	0.4
VL1012	5	61	457										
VL1218	140	4,260	25,718	190	158	18.80	5,732	10.6	21.6	12.5	8.1	2.4	13.9
VL1824	63	3,878	13,421	122	101	9.14	4,693	6.1	13.8	6.8	4.1	0.3	13.7
VL2440	8	1,615	6,322										
VL24XX				41	34	1.62	2,684	2.1	6.6	3.9	2.7	1.7	6.7
VL40XX	1	446	1,471										
TM	6	20,414	18,192										
VL2440	2	495	918										
VL40XX	4	19,919	17,274										
Grand Total	1,818	61,318	155,789	1,415	1,142	127.57	47,586	117.6	122.1	59.8	28.9	2.7	134.6

Demersal trawlers 12-18m – 39 vessels make up these segments and they are based only in the Baltic Sea. These vessels target herring, sprat, cod and flatfish (flounder, dab and plaice). Their total value of landings was about €3.2 million and estimated 41 FTE were supported by this segment in 2009. This fleet segment was just unprofitable in 2009.

Figure 7.8.5 German demersal trawl 12-18m key indicators

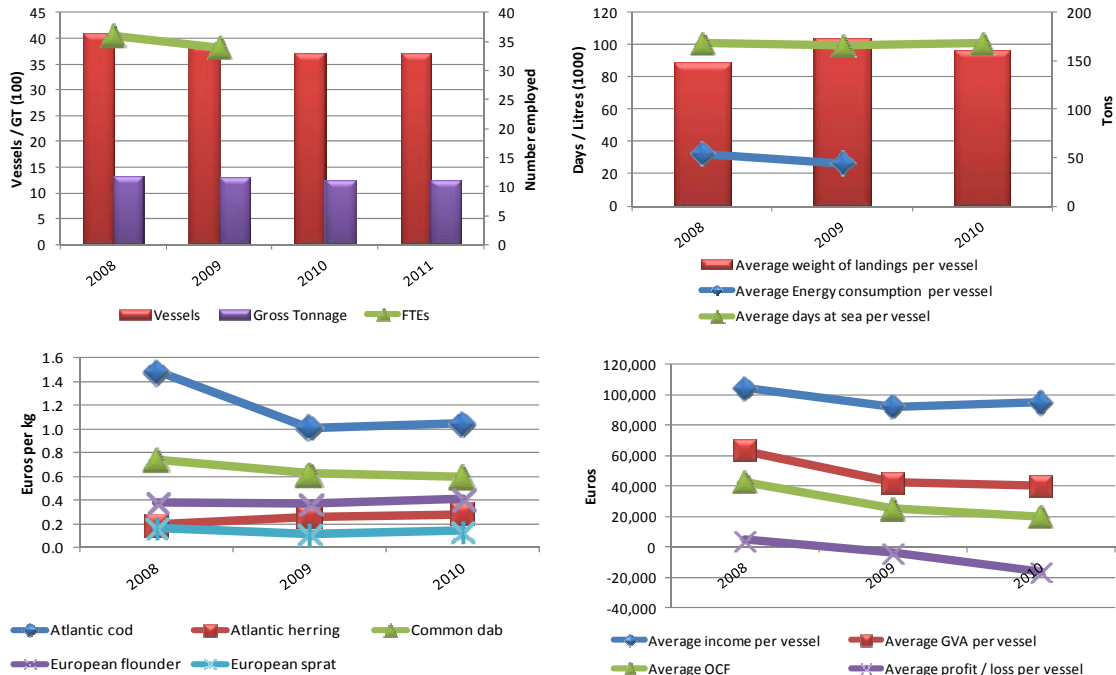
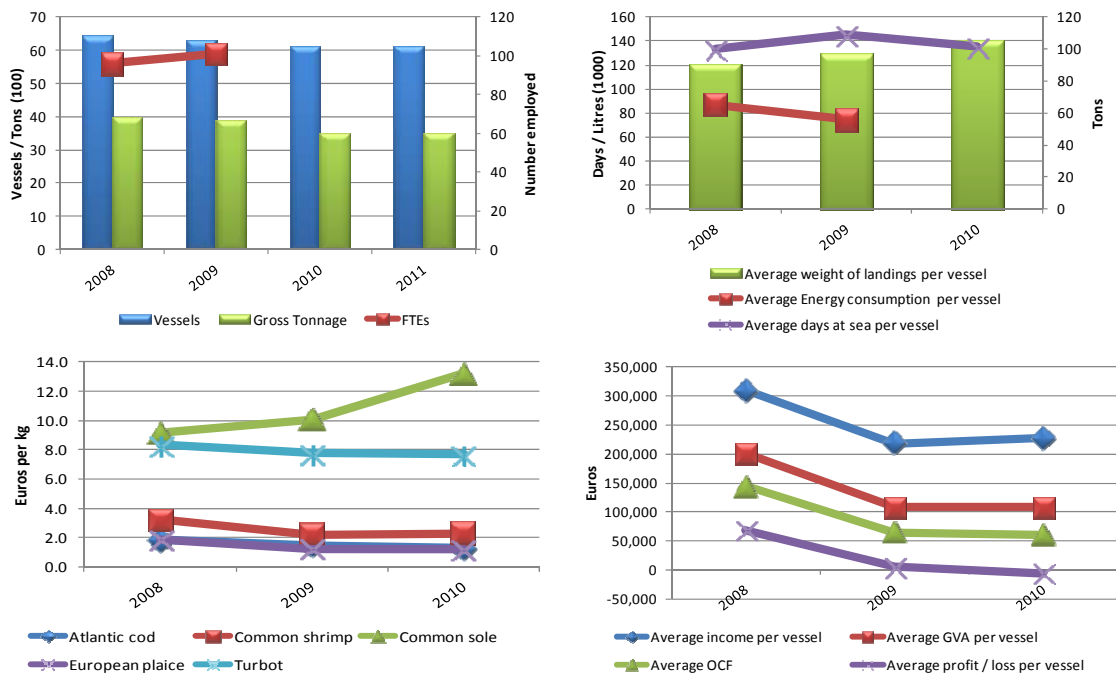


Figure 7.8.6 German beam trawl 18-24m key indicators



Beam trawlers 12-18m and 18-24m – 140/63 vessels make up these segments and they are based exclusively in the coastal North Sea. These vessels target brown shrimp with marginal amounts of cod and flatfish as by-catch. Their total value of landings was €19.1/12.2 million and estimated 190/122 jobs were supported by this segment in 2009. This fleet segment was just profitable in 2009.

7.8.5 Assessment for 2010 and 2011

2009 was strongly influenced by the worldwide economic crisis. Taking the comparatively low prices of 2009 as reference, an increase in 2010, when economies started recovering, is a quasi-inevitable consequence. This refers to fuel in particular, which is also a major cost factor in fisheries. However, the highest prices of 2008 have not been reached to date. On average, also prices for fish have increased slightly after 2009. Brown shrimp fishermen complain about low prices which would do not allow for covering costs. This has been an ongoing discussion. The situation is partly due to the lack of competition on the buyer side with two companies dominating the market.

The Eastern Baltic cod stock developed favourably, and stakeholders positively assessed the limitation of quota increase due to the LTMP as it helped avoid a short term oversupply with subsequent drops in price. North Sea flatfish developed positively as well, but especially for plaice the price decreased considerably, affecting the profitability of the fisheries concerned. In contrast, Baltic herring quota decreased once again, and even increasing prices could not sufficiently compensate for low landings. Blue mussel landings were low, but due to excellent quality prices were above average.

MSC certification or renewal has proven a beneficial effect on prices achieved for herring, cod, saithe and mackerel. The pelagic fleet which operated in South Pacific waters left that area in 2010 due to low catches.

7.8.6 Data issues

As initially mentioned, data for pelagic vessels are published only on capacity, as cost and earnings are subject to confidentiality. This also considerably affects national totals. For the description of data quality the variables have to be regarded as two groups. One group of data is derived from data sets which are compiled under other EU legislation, e.g. fleet register, logbooks, landings declaration. These data are in most cases collected exhaustively (except for vessels < 8m without logbook obligation). From these sources capacity and effort data are either taken directly or derived indirectly.

Cost and employment items are compiled from accountant network data or from questionnaires. Also the quality of these data on the German fleet has continuously improved over the years. Several segments have been sampled exhaustively, and especially for the most important segments a high response rate can be achieved thanks to the cooperation of the related fishermen and companies. For few fleet segments there were only poor responses or none. However, these are of minor importance, and reasonable estimates have been performed. Some time series, however, should be analysed with caution. For the past, some information might be ambiguous.

7.9 Greece

7.9.1 National fleet structure

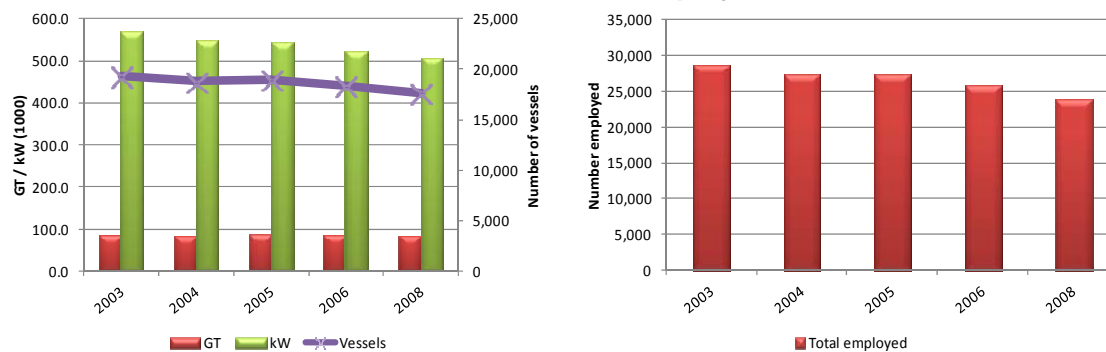
In 2008 the Greek fishing fleet consisted of 17,657 registered vessels, with a combined gross tonnage of 84.4 thousand GT and total power of 506.1 thousand kW, see table 7.9.1. The overall average age of vessels was 25.2 years in 2008. The size of the Greek fishing fleet decreased between 2003 and 2008. The number of vessels in the Greek fleet decreased by around 9% or 1,716 vessels and the total GT and kW of the fleet decreased by 0.5% and 11% respectively during that period, see figure 7.9.1 (left).

Table 7.9.1 Greek national fleet key indicators

	2003	2004	2005	2006	2007	2008	2009
Capacity							
Number of vessels	19,373	18,804	18,968	18,359	-	17,657	-
GT (1000)	84.8	84.0	88.4	86.3	-	84.4	-
kW (1000)	567.6	546.1	545.1	523.6	-	506.1	-
Average age	24.0	25.0	25.0	24.0	-	25.2	-
Employment							
Total employed	28,636	27,343	27,356	25,806	-	23,862	-
Effort							
Days at sea (1000)	3,099.1	2,857.8	2,978.4	2,816.2	-	2,721.4	-
Energy consumption (Million litres)		162.3	177.0	169.0	-	156.9	-
Landings							
Weight (1000 tons)	120.3	123.1	126.9	125.1	-	133.6	-
Value (Million €)		428.1	506.6	589.1	-	544.0	-
Profitability indicators (Million €)							
Gross Value Added		375.7	475.3	591.0	-	-	-
Operating cash flow		311.3	390.4	501.7	-	-	-
Economic profit		284.5	368.2	477.1	-	-	-

Total employment in the Greek national fleet was 23,862 jobs in 2008, see table 7.9.1. The level of employment in the Greek fishing fleet decreased by around 17% between 2003 and 2008, see figure 7.9.1 (right).

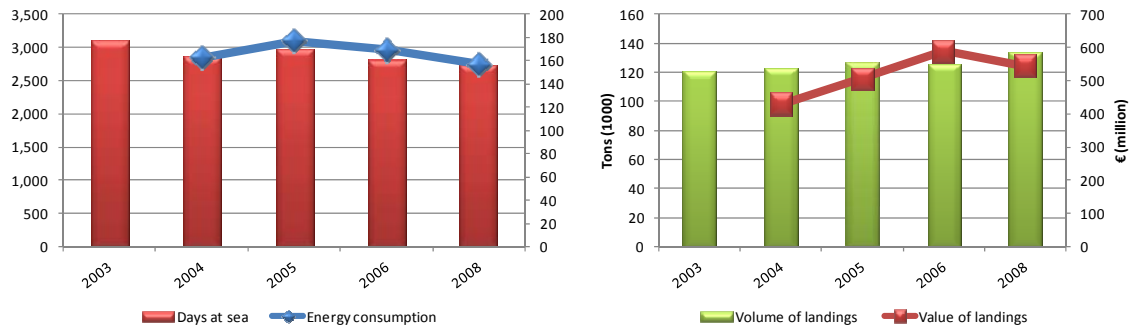
Figure 7.9.1 Greek national fleet capacity and employment trends



7.9.2 National fleet fishing activity and output

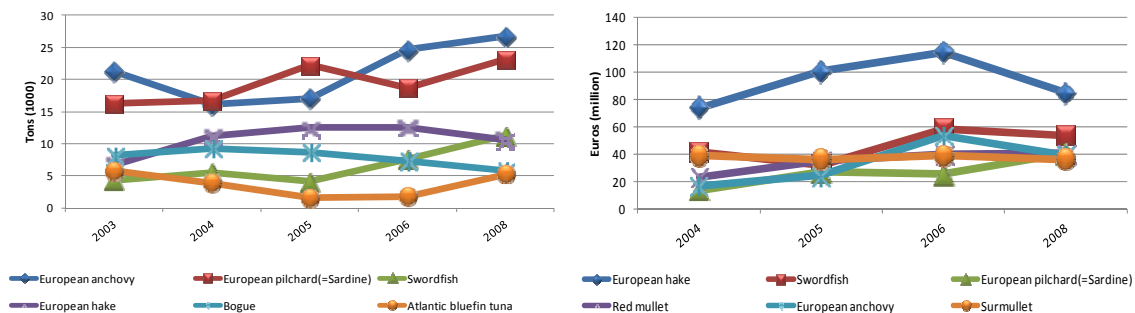
In 2008 the Greek fishing fleet spent a total of 2,721 thousand days at sea, see table 7.9.1. The total number of days at sea decreased by around 12% between 2003 and 2008; see figure 7.9.2 (left). The total quantity of fuel consumed by the Greek fleet in 2008 was 156.9 million litres, see table 7.9.1. The total quantity of fuel consumed decreased by around 3.5% between 2004 and 2008, see figure 7.9.2 (left).

Figure 7.9.2 Greek national fleet fishing effort and landings trends



The total volume of landings by the Greek fishing fleet in 2008 was 133.6 thousand tons of seafood, see table 7.9.1. The total volume of landings increased by around 11% between 2003 and 2008, see figure 7.9.2 (right). In 2008 European anchovy was the most common species landed in terms of tonnage (26.7 thousand tons), followed by European pilchard (23.1 thousand tons) and then swordfish (11.3 thousand tons), see figure 7.9.3 (left).

Figure 7.9.3 Greek national fleet main species landed trends



7.9.3 National fleet economic performance

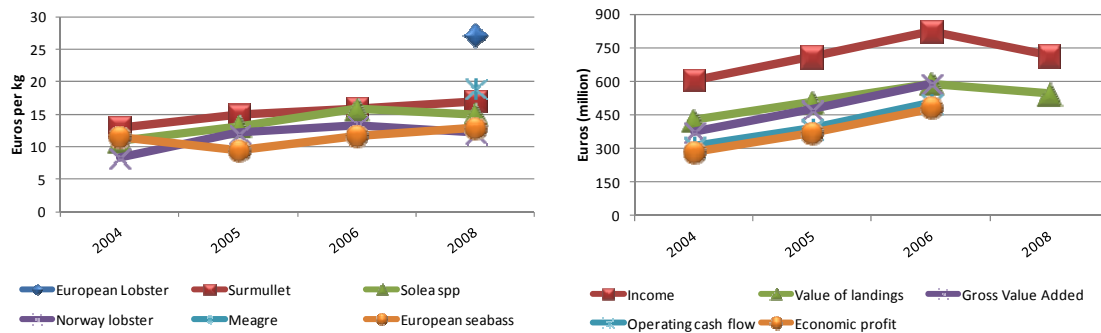
In 2008 European Hake accounted for the highest value of landings (€84.7 million) by the Greek national fleet, followed by swordfish (€53.7 million) and then European pilchard (€40.6 million), see figure 7.9.3 (right). In terms of prices, in 2008 European lobster achieved the highest average price per kilo (€27.1 per kg), followed by surmullet (€17 per kg) and then solea (€15.0 per kg), see figure 7.9.4 (left).

Table 7.9.2 Greek national fleet economic performance indicators

	2004	2005	2006	2007	2008
Income (Million €)					
Landings					544.0
Total income	605.8	710.9	821.7	-	714.7
Costs (Million €)					
Crew wages	64.3	84.9	89.2	-	74.7
Energy costs	92.9	74.7	79.0	-	92.2
Repair costs	55.6	62.1	60.9	-	55.2
Variable costs	77.4	93.3	86.0	-	-
Fixed costs	4.2	5.5	4.9	-	-
Capital costs	26.8	22.2	24.6	-	28.8
Profitability indicators (Million €)					
Gross Value added	375.7	475.3	591.0	-	-
Operating cash flow	311.3	390.4	501.7	-	-
Economic profit	284.5	368.2	477.1	-	-
Capital value (Million €)					
Total invested	164.8	213.6	239.0	-	-

The total amount of income generated by the Greek national fleet in 2008 was €714.7 million. This consists of €544 million in landings values, see table 7.9.2. The total income of the Greek national fleet decreased around 13% between 2006 and 2008. The total amount of expenditure by the Greek national fleet in 2008 was €250.9 million, see table 7.9.2. The largest expenditure items are energy costs (€92.2 million) and crew wages (€74.7 million). Data on fixed and other variable costs were not submitted for 2008.

Figure 7.9.4 Greek national fleet economic performance trends



7.9.4 Fleet composition

The Greek national fleet consisted of 10 main fleet segments in 2008. Table 7.9.3 provides a breakdown of key performance indicators for all Greek fleet segments in 2008. The Greek fleet is highly diversified with a broad range of vessel types targeting different species in the Mediterranean Sea. There were over 5,000 inactive vessels registered in Greece in 2008. According to the data submitted, all active Greek fleet segments made profits in 2008.

Table 7.9.3 Greek fleet composition and key indicators in 2008

		VESSELS	GT	KW	TOTAL EMPLOYED	DAYS ('1000)	FUELCONS (million litres)	WEIGHT ('1000 tons)	INCOME (million euros)	GVA (million euros)	OCF (million euros)	PROFIT/LOSS (million euros)	INVESTMENT (million euros)
HOK	VL0012	695	2687	21751	1406	76.6	6.1	10.5	19.9				0.9
	VL1224	175	3644	17901	594	18.5	4.7	3.7	21.2				1.3
	VL2440	3	339	1020		0.0	0.0	0.0	0.0				0.0
HOK Total		873	6670	40672	2000	95.2	10.9	14.2	41.0				2.2
NONACTIVE	VL0012	4890	9793	93206									
	VL1224	254	7368	37905									
	VL2440	68	8582	20747									
NONACTIVE Total		5212	25743	151858									
PG	VL0012	10804	19851	191130	17789	2441.4	69.3	42.9	489.2				22.7
	VL1224	131	2117	11807	317	43.0	4.2	2.1	12.7				0.3
PG Total		10935	21968	202938	18106	2484.4	73.5	45.1	501.9				23.0
PMP	VL0012	195	1074	10614	571	32.6	1.8	3.5	10.6				0.7
	VL1224	30	425	3154	108	5.3	0.4	0.7	1.8				0.0
PMP Total		225	1498	13769	679	37.9	2.2	4.3	12.5				0.7
PTS	VL0012	7	35	300		0.0	0.0	0.0	0.0				0.0
	VL1224	169	6080	29253	1510	40.3	11.4	41.8	65.7				1.6
	VL2440	18	1706	4118	255	4.9	3.0	8.7	15.8				0.1
PTS Total		194	7821	33672	1765	45.2	14.3	50.5	81.5				1.8
TBB	VL0012	1	7	46		0.0	0.0	0.0	0.0				0.0
	VL1224	92	4680	24541	512	24.1	19.4	6.6	25.1				1.7
	VL2440	123	15982	38582	800	34.5	36.6	12.9	52.6				1.3
TBB Total		217	20669	63170	1312	58.6	56.0	19.5	77.8				3.0

A short description of some of the important segments is given below:

Passive gears 0-12m – 10,804 vessels make up this segment. These vessels operate all around the Greek coastline, targeting a variety of species, including hake, surmullet, red mullet, solea, octopus, and sardines. The total income for this segment was around €489 million and 17.8 thousand jobs were supported by this segment in 2008, see figure 7.9.5.

Gears using hooks 0-12m – 695 vessels make up this segment. These vessels also operate all around the Greek coastline, targeting a variety of species, including swordfish and bluefin tuna. Their total income was around €20 million and around 1,400 jobs were supported by this segment in 2008, see figure 7.9.6.

Pelagic trawl and seine 12-24m – 169 vessels make up this segment. These vessels operate in various locations throughout the Mediterranean Sea, and target a variety of pelagic species, including anchovy. Their total income was around €66 million and around 1,500 jobs were supported by this segment in 2008.

Figure 7.9.5 Greek passive gear 0-12m key indicators

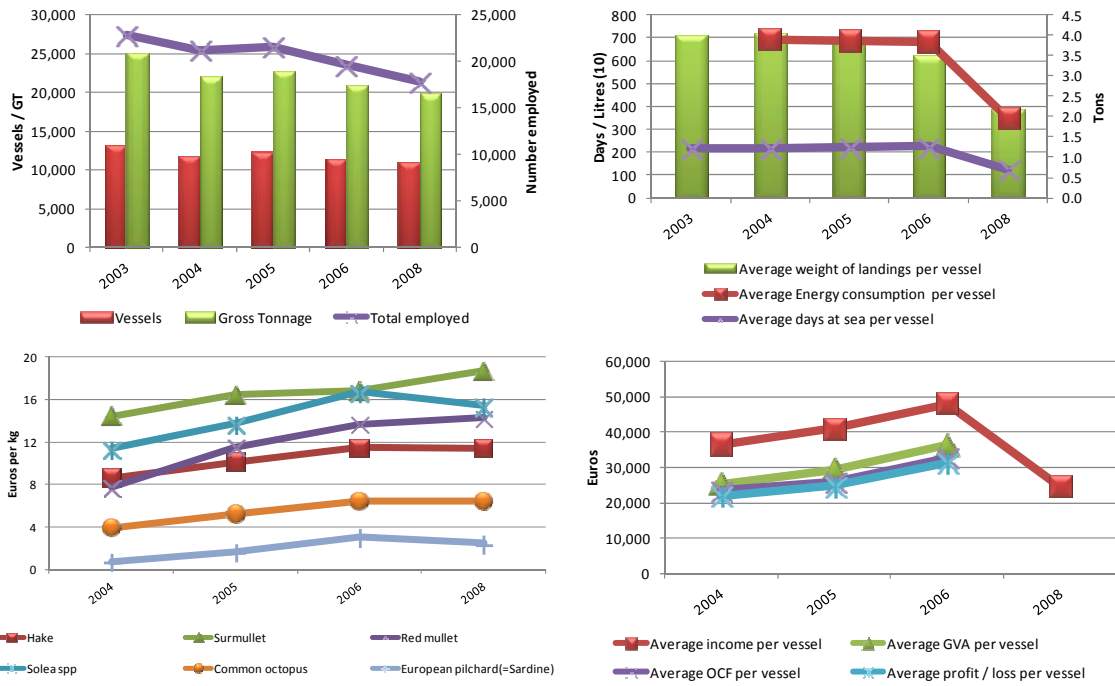
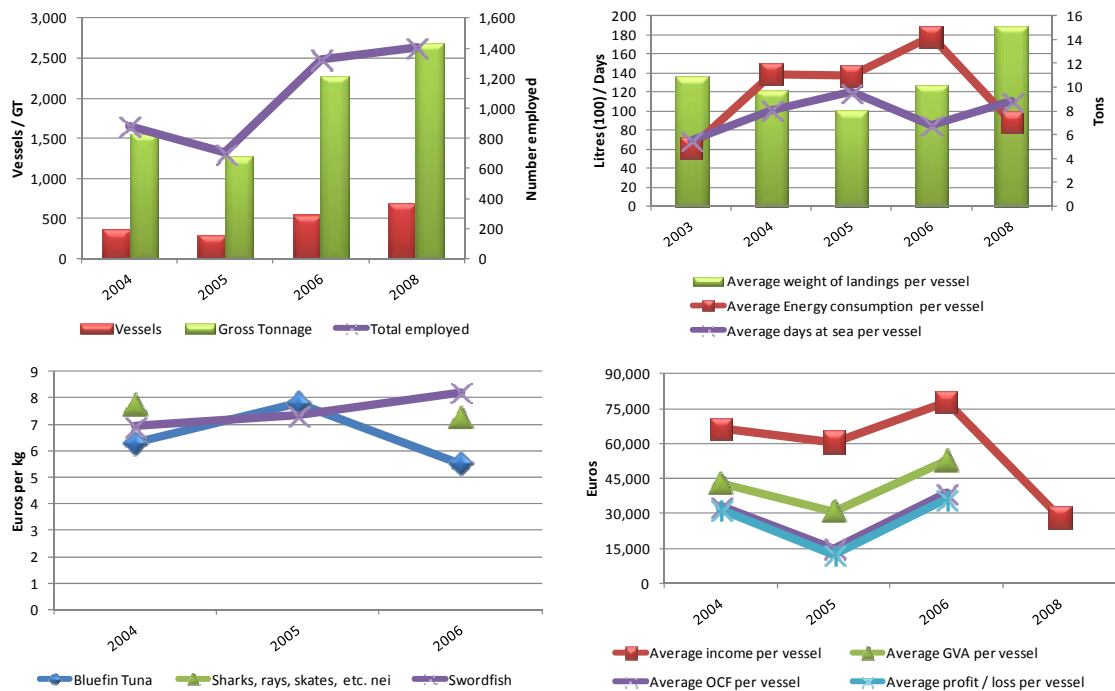


Figure 7.9.6 Greek gears using hooks 0-12m key indicators



7.10 Ireland

7.10.1 National fleet structure

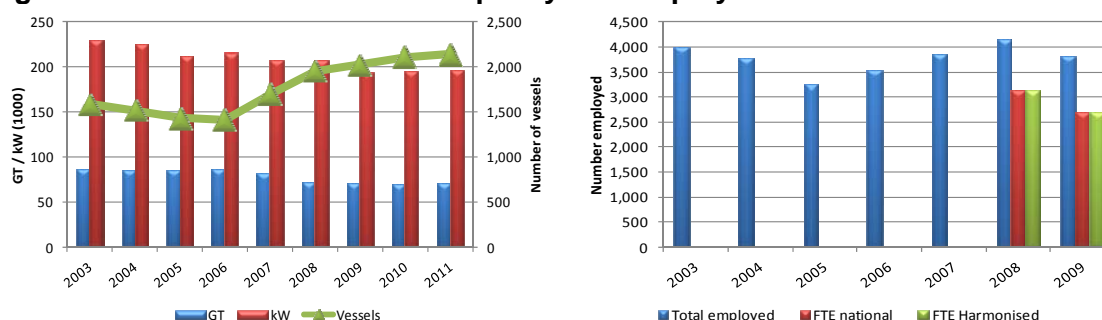
In 2011, the Irish fishing fleet consisted of 2,144 registered vessels, with a combined gross tonnage of 69,406 GT and total power of 195,300 kW, see table 7.10.1. The overall average age of vessels was 25.2 years in 2011. The size of the Irish fishing fleet has followed an increasing trend between 2010 and 2011. The number of vessels in the Irish fleet increased by 1.6% or 35 vessels and the total GT and kW of the fleet increased by 1% and 0.7% respectively during that period.

Table 7.10.1 Irish national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capacity										
Number of vessels		1,592	1,516	1,433	1,414	1,699	1,955	2,026	2,109	2,144
GT (1000)		86.5	85.8	85.3	86.3	81.6	70.7	69.9	68.7	69.4
kW (1000)		228.9	223.8	212.1	214.6	207.0	206.9	193.6	193.9	195.3
Average age		22.4	23.5	22.5	22.2	21.2	24.6	24.5	24.8	25.2
Employment										
Total employed		3,978	3,782	3,253	3,518	3,838	4,150	3,824		
FTEs							3,124	2,694		
Effort										
Days at sea (1000)		161.0	158.0	147.6	138.5	178.8	204.6	207.9		
Energy consumption (Million litres)		0.0	109.2	90.2	68.2	64.8	81.2	93.9		
Landings										
Weight (1000 tons)		268.9	284.3	276.0	223.8	218.5	197.9	262.6		
Value (Million €)		168.0	178.5	180.9	173.6	222.2	197.5	173.0		
Profitability indicators (Million €)										
Gross Value Added			118.5	107.4	142.0	83.9	104.4	82.6		
Operating cash flow			13.6	23.2	71.2	39.4	72.3	73.5		
Economic profit			-3.3	-5.1	48.6	28.2	24.9	-33.4		
Capital value (Million €)										
Tangible assets							499.1	546.6		

The total number of fishing enterprises in the Irish fleet was 1929 in 2011. The vast majority of fishing enterprises, 91%, owned a single vessel and 9% of enterprises owned two to five fishing vessels. No fishing enterprises owned six or more fishing vessels. It is possible, however, that individuals can own multiple vessels, which are registered under different company names.

Figure 7.10.1 Irish national fleet capacity and employment trends

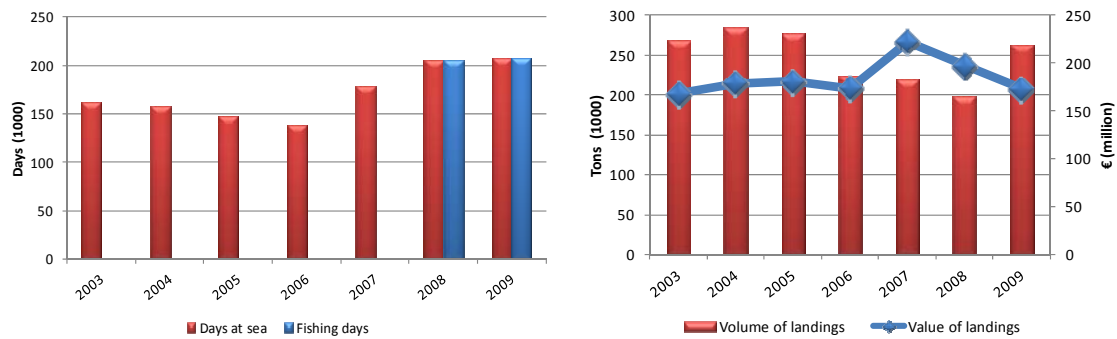


Total employment was 4150 jobs and 3124 FTEs in the Irish fleet in 2008, see figure 7.10.1. The level of employment in the Irish fishing fleet increased between 2007 and 2008. The total number employed increased by 8% between 2007 and 2008. Total employment was 3824 jobs and 2694 FTEs in the Irish fleet in 2009, see figure 7.10.1. The level of employment in the Irish fishing fleet decreased between 2008 and 2009. The total number employed decreased by 7% between 2008 and 2009 while the number of FTEs decreased by 13%.

7.10.2 National fleet fishing activity and output

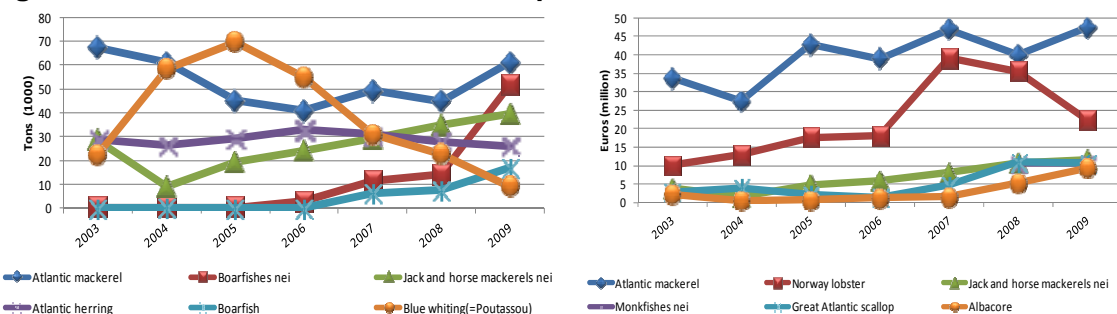
In 2009, the Irish fishing fleet, over 10m vessels, spent a total of 50 thousand days at sea. The actual fishing days (%) could not be estimated as these data were not available. The total number of days at sea for over 10m vessels increased between 2008 and 2009, from 46 thousand days to 50 thousand days, see figure 7.10.2.

Figure 7.10.2 Irish national fleet fishing effort and landings trends



Estimates of total days at sea for vessels under 10m LOA are 158,482 and 157,728 for 2008 and 2009, respectively. These have been combined with the reported days at sea for the over 10m fleet to achieve national fleet totals for days at sea. See section 7.10.5 (Data Issues) for more details. The total quantity of fuel consumed by the Irish fleet in 2009 was 93.9 million litres. The total volume of landings by the Irish fishing fleet in 2009 was 262.2 thousand tons of seafood. The total volume of landings increased between 2008 and 2009 see figure 7.10.2.

Figure 7.10.3 Irish national fleet main species landed trends



In terms of landings composition, in 2009 Atlantic mackerel was the most common

species landed in terms of tonnage (61 thousand tons), followed by boarfish (51.6 thousand tons) and Jack and Horse mackerel (39.5 thousand tons) see figure 7.10.3.

7.10.3 National fleet economic performance

In terms of landings composition, in 2009 Mackerel accounted for the highest value of landings (€47.2 million) by the Irish national fleet, followed by Norway lobster (€22.3 million) and jack and horse mackerel (€11.7 million), see figure 7.1.3. The prices obtained for these key species generally decreased between 2008 and 2009. In terms of prices, in 2009 palinurid spiny lobsters achieved the highest average price per kilo by the Irish national fleet (€29.43 per kg), followed by European lobster (€12.12 per kg) and Common shrimp (€11.34 per kg) see figure 7.1.4.

The next top six species in terms of price per kilo were:

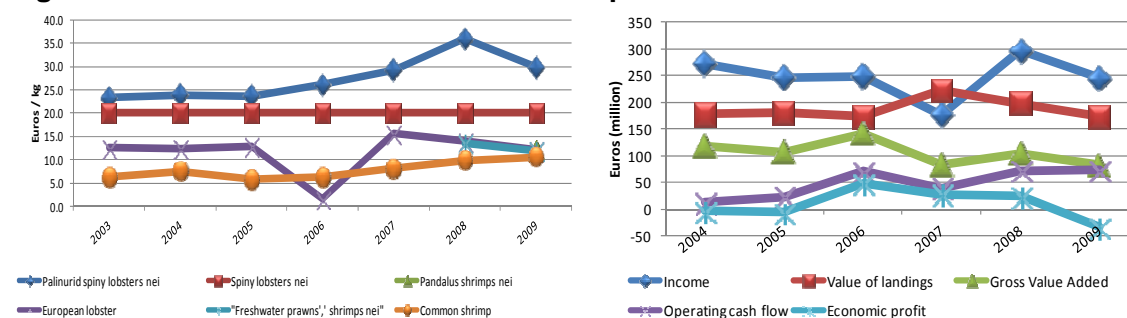
- Atlantic halibut €9.94 per kg;
- Common sole €9.21 per kg;
- Turbot €7.96 per kg;
- Atlantic bluefin tuna €7.00 per kg;
- Brill €5.34 per kg;
- Albacore tuna €4.61 per kg.

Table 7.10.2 Irish national fleet economic performance indicators

	2002	2003	2004	2005	2006	2007	2008	2009
Income (Million €)								
Landings							243.4	191.5
Direct subsidies							34.2	44.9
Other income							18.8	8.7
Fishing rights								
Total income		0.0	272.6	246.7	248.5	177.3	296.4	245.0
Costs (Million €)								
Crew wages		81.5	104.9	84.2	70.8	44.5	66.3	54.0
Unpaid labour value							6.2	7.9
Energy costs		37.8	35.9	37.9	33.4	31.7	51.6	39.2
Repair costs		30.0	32.5	32.2	18.9	18.2	27.9	32.8
Variable costs		47.4	43.3	32.2	25.0	21.9	24.5	18.8
Fixed costs		56.3	42.4	37.1	29.2	21.6	53.8	26.6
Rights costs								
Capital costs		0.0	16.9	28.3	22.6	11.2		
Depreciation costs							34.3	60.4
Opportunity cost							6.9	38.5
Profitability indicators (Million €)								
Gross Value added	0.0	0.0	118.5	107.4	142.0	83.9	104.4	82.6
Operating cash flow	0.0	0.0	13.6	23.2	71.2	39.4	72.3	73.5
Economic profit	0.0	0.0	-3.3	-5.1	48.6	28.2	24.9	-33.4
Capital value (Million €)								
Total invested		599.2	435.1	469.2	442.2	194.3		
Tangible assets							499.1	546.6
In-years investments							44.5	34.5

The total amount of income generated by the Irish national fleet in 2009 was €244.9 million. This consisted of €191.4 million in landings, €8.6 million in non-fishing income and €44.8 million in direct subsidies see table 7.10.2 and figure 7.10.4. The total income of the Irish fleet decreased 17% between 2008 and 2009. The total amount of expenditure by the Irish national fleet in 2009 was €239 million see table 7.10.2. The largest expenditure items were crew wages (€53.9 million) and fuel costs (€39.2 million). Between 2008 and 2009, the total expenditure of the Irish fleet decreased by 9%. In terms of profitability, the total amount of GVA, operating cash flow and economic profit/loss generated by the Irish national fleet in 2009 was €82.6 million, €73.5 million and €-33.4 million respectively (table 7.10.2 and figure 7.10.4). In 2009, the Irish fleet had an estimated capital value of €546.6 million.

Figure 7.10.4 Irish national fleet economic performance trends



7.10.4 Fleet composition

The Irish national fleet consisted of 40 fleet segments in 2009. The Irish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in areas VIIa, VIIb VIIg and VIIj,. There were 156 inactive vessels in the over 10m segments in 2009. These vessels were classed as inactive if they did not land any catch in 2009. It is not possible to estimate the number of inactive vessels less than 10m LOA as these vessels are not required to provide landing declarations. Table 7.10.3 provides a breakdown of key performance indicators for all Irish fleet segments in 2009. A short description of the three most important segments in terms of total value of landings is given below.

Pelagic trawl over 40m – 21 vessels, based predominantly in area VIa make up this segment. This fleet targets a variety of pelagic species, the top landings consisting of boarfish, Atlantic mackerel, horse mackerel and herring. The total value of landings in 2009 was €63.6 million and 242/224 jobs/FTEs were supported. This fleet segment reported a loss in 2009.

Demersal trawl and seine 18-24m – 59 vessels, based predominantly in VIIg, make up this segment. These vessels target a variety of species, the top three landings consisting of Norway lobster, haddock and whiting. The total value of landings was €30.0 million in 2009 and 472/294 jobs/FTEs were supported. This fleet segment reported a loss in 2009.

Table 7.10.3 Irish fleet composition and key indicators 2009

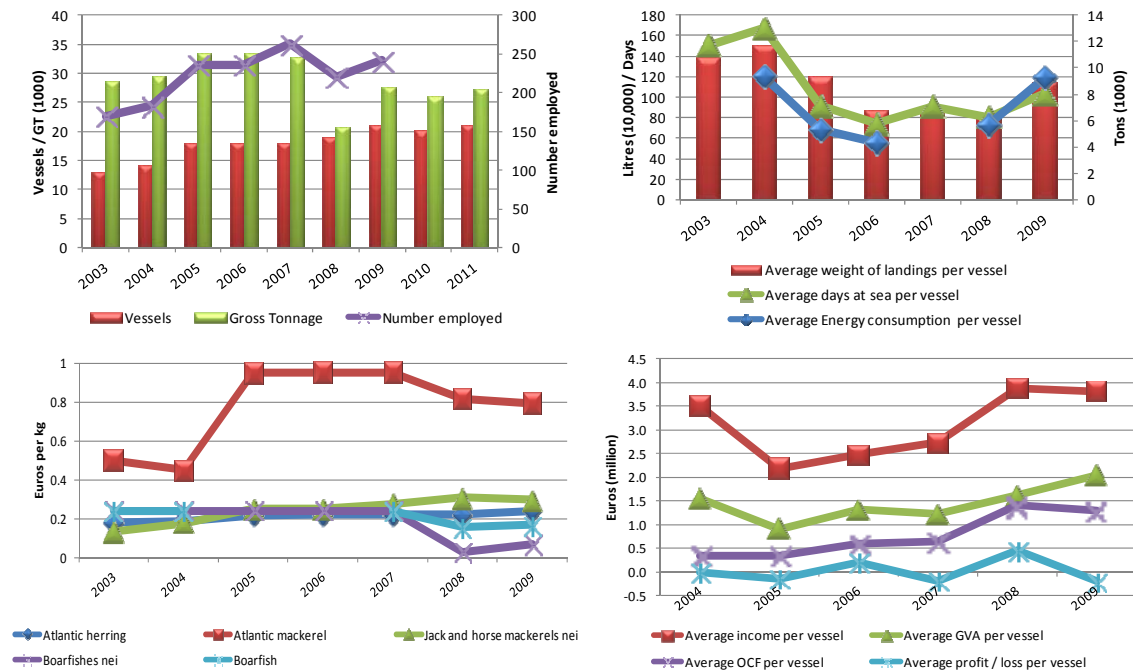
	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres weight or landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)	
DFN													
VL0010	328	822	6,985			63		0.0					
VL1012	44	444	3,098			1,317		0.3					
VL1218	8	213	1,048	40	29	603		0.3					
VL1824	5	620	1,525			842		0.9					
VL2440	3	644	2,103			215		0.2					
DRB													
VL0010	318	884	8,154	636	413	99	4,014	0.0					
VL1012	51	500	4,546	130	85	740	1,066	0.2					
VL1218	13	359	1,399			245	0	0.1					
VL1824	6	442	1,294			527	1,630	1.0	5.6	2.4	0.4	-10.9	
VL2440	30	4,042	12,098			450	4,882	1.9	85.5	28.3	50.9	38.2	68.8
VL40XX	4	1,941	2,786										
DTS													
VL0010	25	67	705			329		0.0					
VL1012	24	327	2,235			1,476		0.4					
VL1218	58	2,471	9,613	203	184	6,814	5,507	3.6	26.4	7.7	6.8	-12.0	13.1
VL1824	59	7,916	23,467	472	294	12,824	14,102	16.4	53.9	20.3	5.0	-60.1	53.6
VL2440	27	6,120	13,687	279	203	6,088	13,848	10.9	74.0	24.4	37.6	15.7	44.6
FPO													
VL0010	688	1,361	15,980	1,295	842	88	7,688	0.1					
VL1012	111	1,120	9,026	229	149	6,655	2,216	3.4					
VL1218	20	353	2,236	53	35	1,249	732	1.1	4.6	2.7	1.7	-0.9	1.6
VL1824	4	619	1,152	32	30	1,323	876	1.6	5.4	1.2	1.0	-0.4	8.2
VL2440	3	690	1,210	51	51	677	1,523	1.1	5.0	1.3	-0.1	-1.7	4.2
HOK													
VL0010	24	38	442			55		0.0					
VL1012	8	71	724			222		0.1					
VL2440	2	751	1,100			24		0.2					
PGP													
VL0010	1	2	38										
VL1012	2	12	125			73		0.0					
PMP													
VL1218	3	93	410			445		0.2					
PS													
VL0010	5	18	134										
VL1218	4	90	526										
VL1824	1	146	422										
VL2440	1	361	744										
TBB													
VL0010	3	20	207										
VL1824	7	744	1,799	28	28	1,428	3,047	0.9	4.2	-0.4	-2.3	-3.7	0.6
VL2440	6	1,038	3,123	36	30	1,368	2,314	1.1	6.0	1.7	0.2	-1.9	2.6
TM													
VL0010	54	239	1,977										
VL1012	19	212	1,347										
VL1218	12	399	1,685			188		0.3					
VL1824	10	1,281	3,601			141		1.8					
VL2440	14	4,831	10,190	98	98	1,405	5,464	27.7	58.8	25.6	26.9	15.6	55.6
VL40XX	21	27,587	40,645	242	224	2,171	25,002	186.4	160.5	86.2	54.9	-8.2	285.6

Demersal trawl and seine 24-40m – 27 vessels, based predominantly in VIIg, make up this segment. These vessels target a variety of species, including Norway lobster, mackerel and haddock. The total value of landings in 2009 was €19.5 million and 279/203 jobs/FTEs were supported. This fleet segment reported a loss in 2009

Figure 7.10.5 Irish demersal trawl 12-24m key indicators



Figure 7.10.6 Irish pelagic trawl over 40m key indicators



7.10.5 Assessment for 2010 and 2011

The composition, by segment, of the Irish national fleet (i.e. >10m and <10m LOA) in 2010 and 2011 reflects that reported for 2009. No significant removals or additions to the

national fleet have occurred other than adjustments due to accidental loss and damage and occasional redundancy, particularly in the polyvalent segments <10m LOA.

The key drivers influencing the economic performance of the Irish National fleet in 2010 were low first point of sale prices returned to vessels and the increasing cost of fuel in the latter part of the year. Oil price increases have continued in 2011 and are expected to further affect the profitability of the Irish National Fleet.

Segments of the fleet have sought to consolidate market share, improve market access and product prices, through collective engagement with internationally recognized certification processes. Vessels of the pelagic and polyvalent fleets targeting mackerel, achieved Marine Stewardship Council (MSC) certification in 2009 and 2010 and an internationally accredited (ISO 65), National, Seafood Stewardship Standard is available to the main segments of the Irish National fleet in 2011.

7.10.6 Data issues

Although the operation of the economic aspect of the data collection framework has been much improved relative to previous years, the MS sampling targets were not fully achieved in 2011 (for 2009 data). Lacking a mandatory European legislative framework to ensure compliance with DCF data requests, the MS continues to be forced to rely on the goodwill of the seafood industry to provide data on a voluntary basis.

This situation is far from ideal and as a result, survey response rates are highly variable and unpredictable. Survey target rates vary between fleet segments with a high achievement of sampling targets in a number of segments and an underachievement of targets in other segments.

7.11 Italy

7.11.1 National fleet structure

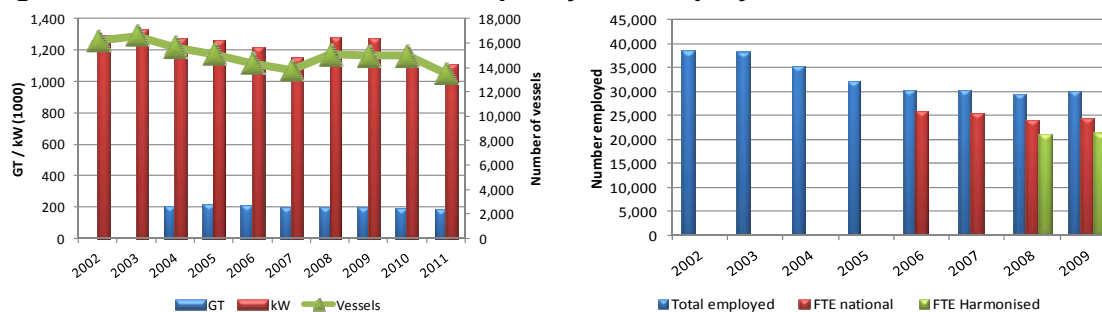
In 2010 the Italian fishing fleet consisted of 14,969 registered vessels, with a combined gross tonnage of 191.2 GT and total power of 1,118.6 kW, see Table 7.11.1. The overall average age of vessels was 27.9 years in 2010. The size of the Italian fishing fleet has followed a decreasing trend between 2002 and 2010. The number of vessels in the Italian fleet declined by 7.3% or 1,181 vessels and the total GT and kW of the fleet decreased by 7.7% and 13.1% respectively during that period (GT data are available only since 2004). The fishing sector is highly fragmented in many regions and there are structural and technical differences in vessels from different geographical areas. Two fishing areas, Adriatic Sea and Sicily Channel, supply almost two thirds of landings.

Table 7.11.1 Italian national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capacity										
Number of vessels	16,150	16,556	15,628	15,112	14,367	13,804	15,038	14,977	14,969	13,515
GT (1000)			207.1	217.0	211.7	197.3	199.0	197.6	191.2	186.1
kW (1000)	1,287.2	1,328.8	1,270.2	1,251.9	1,213.8	1,150.9	1,272.8	1,270.7	1,118.6	1,112.0
Average age	27.1	26.8	27.7	28.5	27.9	28.5	26.7	27.4	27.9	29.1
Employment										
Total employed	38,284	38,062	35,195	32,174	30,351	30,214	29,349	30,091		
FTEs					26,030	25,426	24,083	24,397		
Effort										
Days at sea (1000)	2,562.5	2,439.0	2,208.7	2,024.8	1,985.6	1,813.6	1,590.2	1,782.8	1,667.8	
Energy consumption (Million litres)	736.0	699.9	646.7	558.8	510.7	500.1	433.0	437.6		
Landings										
Weight (1000 tons)	318.7	333.8	307.1	282.0	299.6	276.7	227.0	242.4	223.0	
Value (Million €)	1,432.8	1,521.7	1,407.8	1,412.9	1,519.5	1,364.8	1,105.6	1,202.0	1,102.8	
Profitability indicators (Million €)										
Gross Value Added	924.3	1,002.8	892.2	873.4	964.2	831.2	575.5	762.5	617.2	
Operating cash flow	473.3	538.0	491.8	476.6	532.0	449.7	339.4	414.6	339.1	
Economic profit	309.9	325.8	268.5	259.0	320.1	212.6	136.9	186.1	101.6	
Capital value (Million €)										
Tangible assets							866.5	918.8	892.6	

The total number of fishing enterprises in the Italian fleet was 8,663 in 2009. The vast majority of fishing enterprises, 89%, owned a single vessel and 8.6% of enterprises owned two to five fishing vessels. Only 208 fishing enterprises owned six or more fishing vessels.

Figure 7.11.1 Italian national fleet capacity and employment trends

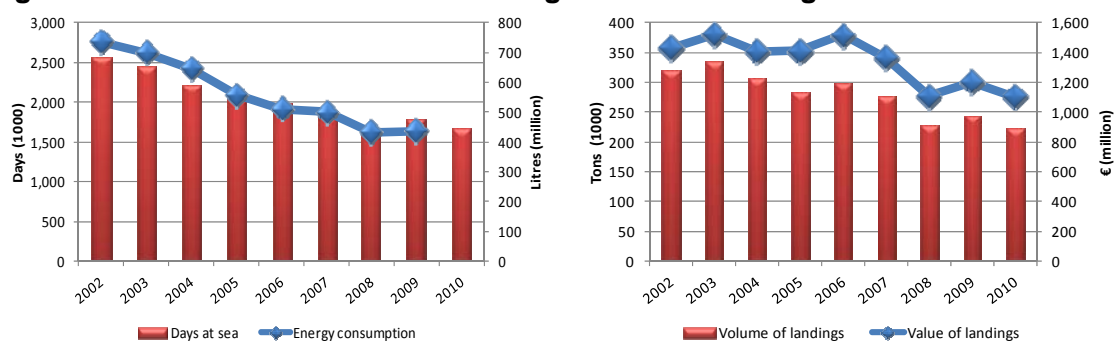


Total employment was 30,091 jobs and 24,397 FTEs in the Italian fleet in 2009, see Figure 7.11.1. The level of employment in the Italian fishing fleet has decreased between 2002 and 2009. The total number employed decreased by 21.4% between 2002 and 2009 while the number of FTEs decreased by 6.3% between 2004 and 2009 (FTEs data are available only since 2004). The average age of the fishers is increasing year by year, young people are moving towards other economic sectors.

7.11.2 National fleet fishing activity and output

In 2009 the Italian fishing fleet spent a total of 1,782.8 thousand days at sea. The total number of days at sea increased between 2008 and 2009, see Figure 7.11.1. The total quantity of fuel consumed by the Italian fleet in 2009 was 437.6 million litres. The total quantity of fuel consumed remained relatively stable between 2008 and 2009, see Figure 7.11.2.

Figure 7.11.2 Italian national fleet fishing effort and landings trends



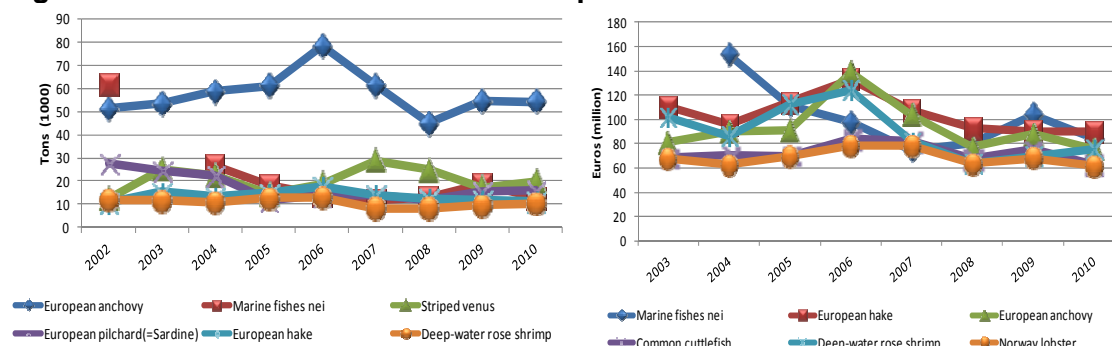
The total volume of landings by the Italian fishing fleet in 2009 was 242.4 thousand tons of seafood. The total volume of landings increased by 7% between 2009 and 2008, changing the negative trend that characterised the previous two years, see Figure 7.11.2. In terms of landings composition, in 2009 European anchovy was the most common species landed in terms of tonnage (54.4 thousand tons), followed by striped Venus (17.3 thousand tons) and European pilchard (15.6 thousand tons), see Figure 7.11.3.

The improvement in total production (in volume and value) was principally driven by the landings of European anchovy and crustaceans, White and Red shrimp and Norway lobster in particular. Relatively to the European anchovy, volume increased by 21% and the average price remained relatively stable. The reason of this good performance has been due to a mix of environmental, commercial and managerial factors. Namely the good status of the stock, the improved methods of conservation on board, that affected the quality of the product, and also the regulated and coordinated daily landings of Producers Organization. The latter has improved the export to foreign markets for a part of the production, so as to maintain the price stable.

The increase in the landings of crustaceans has been due to the increasing number of trawlers involved in deep water activity, mainly in the South of Sicily, where the specialised deep water trawler fleet is located.

Additionally, swordfish and common sole have also affected the improvement of production. Both species are targeted by specific métier: drifting longline for swordfish and beam-trawl for common sole. The main fishing areas are the Thirrenian and Ionian Sea for swordfish and the Adriatic for common sole. The total volume increased by 13% for swordfish and 23% for common sole, while the average price remained relatively stable for both species.

Figure 7.11.3 Italian national fleet main species landed trends



7.11.3 National fleet economic performance

In terms of landings composition, in 2009 European hake accounted for the highest value of landings (€104 million) by the Italian national fleet, followed by European anchovy (€87.8 million) and common cuttlefish (€75.2 million), see Figure 7.11.3. The prices obtained for these key species generally increased between 2009 and 2008, with the only exception of European anchovy, whose price remained quite stable.

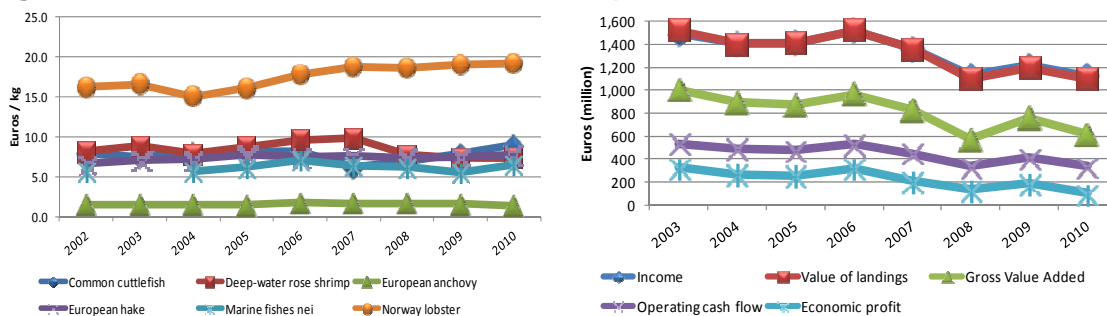
Table 7.11.2 Italian national fleet economic performance indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)									
Landings						1,102.3	1,202.0	1,101.1	
Direct subsidies						29.4	12.8	21.1	
Other income								0.0	
Fishing rights								0.0	
Total income	1,403.3	1,492.5	1,407.8	1,412.9	1,519.3	1,364.8	1,131.7	1,214.8	1,122.2
Costs (Million €)									
Crew wages	451.0	464.7	400.4	396.8	432.2	381.5	265.5	360.7	299.2
Unpaid labour value									
Energy costs	205.0	207.0	224.6	281.2	283.7	274.9	302.7	203.9	260.6
Repair costs	56.2	57.9	80.1	52.0	49.7	48.5	47.1	47.0	44.0
Variable costs	158.0	164.3	155.9	155.8	177.2	165.6	132.4	143.4	134.1
Fixed costs	59.8	60.5	55.0	50.4	44.6	44.7	43.8	44.6	44.6
Rights costs							0.7	0.6	0.6
Capital costs	163.5	212.2	223.3	217.7	211.9	237.1			
Depreciation costs							192.7	196.5	194.6
Opportunity cost							9.9	32.0	42.9
Profitability indicators (Million €)									
Gross Value added	924.3	1,002.8	892.2	873.4	964.2	831.2	575.5	762.5	617.2
Operating cash flow	473.3	538.0	491.8	476.6	532.0	449.7	339.4	414.6	339.1
Economic profit	309.9	325.8	268.5	259.0	320.1	212.6	136.9	186.1	101.6
Capital value (Million €)									
Total invested	603.8	803.7	871.7	862.8	841.9	883.3			
Tangible assets							866.5	918.8	892.6

In terms of prices, in 2009 Norway lobster achieved the highest average price per kilo (€19 per kg) by the Italian national fleet, followed by common cuttlefish (€7.9 per kg) and European hake (€7.5 per kg), see Figure 7.11.4. The total amount of income generated by the Italian national fleet in 2009 was €1,214.4 million. This consisted of €1,202 million in landings values and €12.8 million in direct subsidies. See Table 7.11.2 and Figure 7.11.4. Between 2009 and 2008 the total income of the Italian fleet increased 7.3%.

The total amount of expenditure by the Italian national fleet in 2009 was €800.2 million, see Table 7.11.2. The largest expenditure items are crew wages (€360.7 million) and energy costs (€203.9 million). Between 2009 and 2008 the total expenditure of the Italian fleet remained relatively stable (+1%). In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Italian national fleet in 2009 was €401.8 million, €762.5 million and €173.3 million respectively, see table 7.11.1 and figure 7.11.4. In 2009, the Italian fleet had an estimated capital value of €918.8 million and a return on investment of 19%.

Figure 7.11.4 Italian national fleet economic performance trends



The good economic performance of the Italian fishing fleet in 2009 has been driven by the following factors:

- Decreasing energy costs
- Increase in activity (days at sea per vessel)
- Increased value of landings

The first two factors are 'exogenous', driven by international economics and weather condition. The value of production, a key element in determining profit, is a direct result of the management approach implemented in recent years in Italy.

Fishing effort regulations (capacity and activity), together with other complementary technical measures such as mesh size, area, time closure, Individual Quotas (IQs) for bluefin tuna and co-management approach for clams, have affected the quality of landings and stabilised daily landings of product onto the market. The introduction of other tools such as management plans has further encouraged this trend.

7.11.4 Fleet composition

The Italian national fleet consisted of 28 fleet segments in 2009. The Italian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Mediterranean Sea. There are five inactive segments consisting of 1,603 vessels.

These vessels are classed as inactive if they did not land any catch in 2009. Three of the active segments made overall losses in 2009 and 20 made an overall profit.

Table 7.11.3 provides a breakdown of key performance indicators for all Italian fleet segments in 2009. A short description of the five most important segments in terms of total value of landings is given below:

Table 7.11.3 Italian fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DRB	707	9,317	75,955	1,404	531	61.19	14,020	19.7	63.4	49.6	27.7	14.8	47.3
VL1218	707	9,317	75,955	1,404	531	61.19	14,020	19.7	63.4	49.6	27.7	14.8	47.3
DTS	2,620	115,628	528,313	8,540	8,351	415.65	284,458	84.9	581.3	335.7	174.8	56.2	459.8
VL0612	169	1,087	13,129	327	277	23.00	6,841	2.5	15.7	9.7	4.8	3.3	5.2
VL1218	1,412	26,226	195,021	3,770	3,637	222.14	97,506	34.7	226.5	140.3	70.6	45.6	96.3
VL1824	752	43,463	193,199	2,763	2,762	122.45	105,009	31.3	208.0	117.4	61.4	17.3	166.9
VL2440	271	36,532	108,850	1,680	1,675	46.82	70,550	13.5	112.7	54.3	25.2	-13.9	152.3
VL40XX	17	8,319	18,114			1.24	4,552	2.9	18.5	14.1	12.8	4.0	39.1
HOK	198	6,419	40,173	802	748	24.94	8,864	4.6	37.4	21.5	9.9	1.9	27.8
VL1218	145	2,426	22,086	547	493	16.54	4,981	2.1	18.8	10.9	4.4	1.2	11.1
VL1824	53	3,993	18,086	254	254	8.40	3,883	2.4	18.6	10.6	5.5	0.6	16.7
INACTIVE	1,603	5,126	150,376									-1.2	33.9
VL0006	359	171	10,218									0.0	1.0
VL0612	862	952	61,891									-0.2	4.7
VL1218	338	2,090	63,108									-0.4	12.7
VL1824	37	562	11,218									-0.1	3.4
VL2440	7	1,351	3,942									-0.4	12.1
PGP	9,274	22,702	309,189	15,762	12,252	1,208.99	76,164	46.8	363.3	257.5	142.1	90.7	178.4
VL0006	2,883	2,886	22,287	4,220	3,102	366.28	11,406	10.0	79.2	62.0	33.0	27.3	19.1
VL0612	5,945	13,596	222,239	10,207	7,945	781.56	52,262	28.3	222.5	152.8	82.4	46.3	124.0
VL1218	446	6,219	64,663	1,335	1,205	61.15	12,496	8.6	61.6	42.8	26.7	17.1	35.3
PMP	51	566	5,574	156	116	8.27	1,968	1.1	7.0	4.9	3.1	2.6	1.9
VL0612	12	88	994	41	29	3.87	402	0.3	2.1	1.6	1.3	1.1	0.7
VL1218	39	478	4,580	115	87	4.40	1,566	0.8	4.9	3.2	1.8	1.4	1.3
PS	315	21,735	87,568	2,303	1,276	26.40	16,191	41.5	74.3	50.3	24.3	3.4	112.3
VL1218	145	2,555	19,348	758	441	15.53	5,853	7.4	20.9	13.6	6.2	3.9	9.2
VL1824	80	4,476	19,684	487	255	4.13	4,188	10.1	17.5	11.9	4.1	0.7	12.4
VL2440	65	6,547	25,383	722	485	6.07	4,780	16.6	24.9	17.2	8.8	1.2	43.2
VL40XX	25	8,157	23,152	336	95	0.67	1,369	7.4	11.0	7.6	5.2	-2.4	47.6
TBB	72	5,103	24,133	323	323	11.89	12,180	3.9	24.9	14.9	7.2	1.7	20.2
VL1218	13	356	2,819	50	50	2.07	1,385	0.6	2.3	1.2	0.5	0.3	0.8
VL1824	26	1,503	8,516	109	109	4.49	4,136	1.1	6.7	3.2	1.0	-0.5	5.1
VL2440	33	3,244	12,797	163	163	5.33	6,659	2.2	15.9	10.5	5.8	1.9	14.3
TM	137	11,031	49,383	801	801	25.49	23,730	40.1	50.5	28.1	12.6	3.3	37.0
VL1218	33	801	5,011	104	104	6.04	3,161	8.8	8.1	5.3	2.1	1.8	1.6
VL1824	25	2,040	8,083	190	190	7.37	5,155	9.2	10.1	5.0	2.3	0.2	7.3
VL2440	79	8,190	36,289	507	507	12.08	15,414	22.1	32.2	17.9	8.2	1.3	28.1
Grand Total	14,977	197,627	1,270,662	30,091	24,397	1,782.82	437,575	242.4	1,202.0	762.5	401.8	173.3	918.6

Demersal trawl / seine 12-18m – 1,412 vessels make up this segment and they are based predominantly in the Adriatic Sea and Sicily channel, the two areas where there is an extensive continental shelf. These vessels target a variety of shelf/slope demersal species (cuttlefish, octopus, red and striped mullet, hake, horse mackerel, white shrimp, spottail mantis squillid, horned and musky octopuses). Their total value of landings was €226.5 million and 3,770 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Passive gears polyvalent 6-12m – 5,945 vessels make up this segment and they are scattered all around the Italian coastline. These vessels target a variety of species, mainly demersal (red and striped mullet, octopus, cuttlefish, sea bass, hake), and use mainly fixed nets (trammel and gill nets), pots and bottom longline. Their total value of

landings was €222.5 million and 10,207 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Figure 7.11.5 Italian demersal trawl 12-24m key indicators

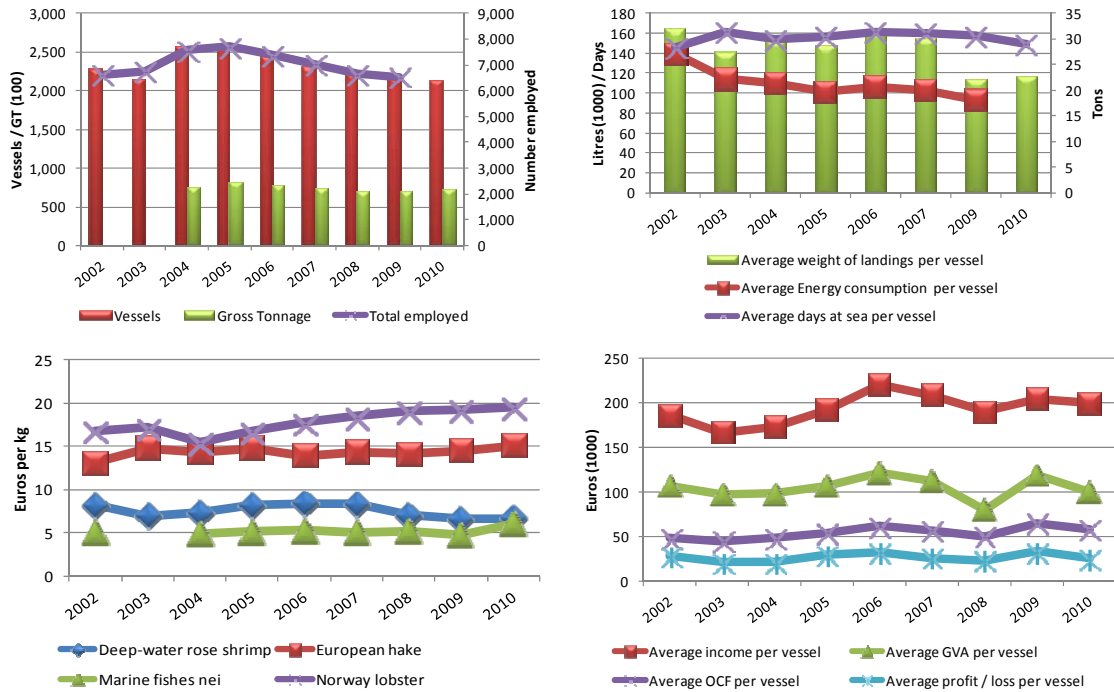
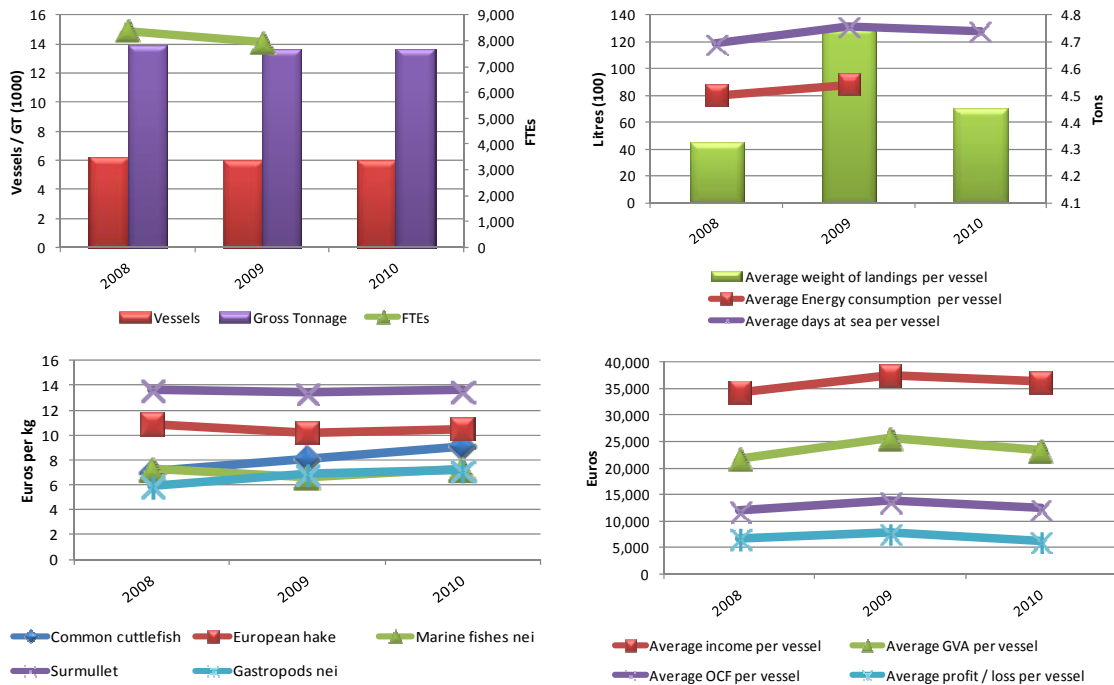


Figure 7.11.6 Italian polyvalent passive gears 6-12m key indicators



Demersal trawl / seine 24-40m – 271 vessels make up this segment and they are based predominantly in the harbour of Mazara del Vallo, in the south of Sicily. The majority of these vessels mainly target crustaceans (red and white shrimps), usually freezing the catch on board. Their total value of landings was €112.7 million and 1,680 jobs were supported by this segment in 2009. This fleet segment made losses in 2009. The poor economic performances are mainly due to the overcapitalisation (high level of capital investment) of the fleet which has generated higher depreciation costs, not sufficiently offset by the revenues.

7.11.5 Assessment for 2010 and 2011

In 2010 more economic variables are expected to deteriorate due to increased energy costs and restrictions of fishing activity.

In 2010 the fuel cost increased by 17%, deteriorating the crew wages and the profit of the fishing enterprises.

Furthermore during 2010 the EU Reg. 1967/2006 was enforced. This has introduced restrictions to the towed nets (increasing in the minimum distance from the coast and increase in the mesh size). This has in particular affected the segment of trawlers with a LOA between 12-18 meters and the small scale fisheries (for the use of the boat seine). The deterioration of the performance of two of the main Italian segments will probably affect total income.

In addition, in 2010 the bluefin tuna purse seine fleet stopped fishing activity.

In 2011, operating cash flow, and consequently profit are expected to decrease due to an increase in fuel costs (an increase of 25% in the second quarter compared with the same period during 2010). Revenues are expected to remain quite stable. A significant reduction in fishing activity and income will affect the 18-24m longliners because of catch limitations for large pelagic species (swordfish and bluefin tuna).

Additionally, the artisanal fishery, a very important segment from both a social and economic point of view, could be threatened by the following factors in the medium/long term:

- A big loss in the level of expertise with regards to the use of gears will result in a decrease in the segment's performance;
- Market demand becoming more oriented towards the most valuable species, resulting in a decrease in the average price of "minor" species. As a consequence, this could affect the fishing strategy as more effort will be dedicated to the most demanded species, altering the distribution of the effort.

7.12 Latvia

7.12.1 National fleet structure

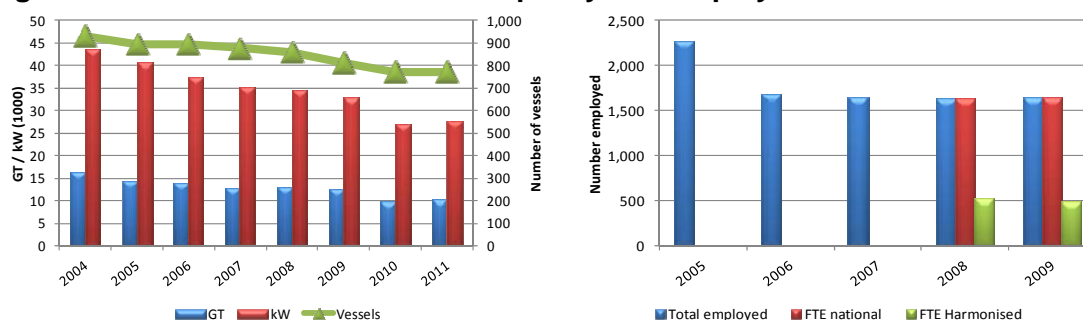
In 2009 the Latvian fishing fleet consisted of 814 registered vessels, with a combined gross tonnage of 12.4 thousand GT and total power of 32.7 thousand kW, see Table 7.12.1 (the data for 2002 and 2003 are shown without coastal fishery segment). The overall average age of vessels was 27 years in 2009. The size of the Latvian fishing fleet has followed a decreasing trend between 2005 and 2009.

Table 7.12.1 Latvian national fleet key indicators

	2004	2005	2006	2007	2008	2009	2010	2011
Capacity								
Number of vessels	930	895	896	877	858	814	771	771
GT (1000)	16.4	14.3	13.8	12.7	12.9	12.4	9.8	10.1
kW (1000)	43.5	40.3	37.4	34.9	34.2	32.7	26.7	27.6
Average age	20.0	20.0	23.0	22.0	27.0	27.0	28.0	29.0
Employment								
Total employed	951	2,260	1,676	1,632	1,621	1,633		
FTEs					1,621	1,633		
Effort								
Days at sea (1000)	24.3	18.6	16.5	15.9	44.2	48.0	42.1	
Energy consumption (Million litres)					9.0	6.6		
Landings								
Weight (1000 tons)	84.1	92.7	80.7	84.1	86.5	78.5	74.1	
Value (Million €)	19.8	23.2	17.6	18.1	23.1	17.5	20.4	
Profitability indicators (Million €)								
Gross Value Added	3.5	7.7	10.2	8.7	13.3	11.0	13.1	
Operating cash flow	-1.6	2.2	7.5	5.8	10.8	11.2	11.9	
Economic profit					10.8	4.5	4.6	
Capital value (Million €)								
Tangible assets						54.8		

The number of vessels in the Latvian fleet declined by 9,1% or 81 vessels and the total GT and kW of the fleet decreased by 13% and 19% respectively during that period. This is the result of the scrapping of vessels according to the multi-annual management plan to achieve a better balance between fishing capacity and the available resources. The fishing vessels were “reassigned for activities outside fishing (by scrapping or selling)”.

Figure 7.12.1 Latvian national fleet capacity and employment trends



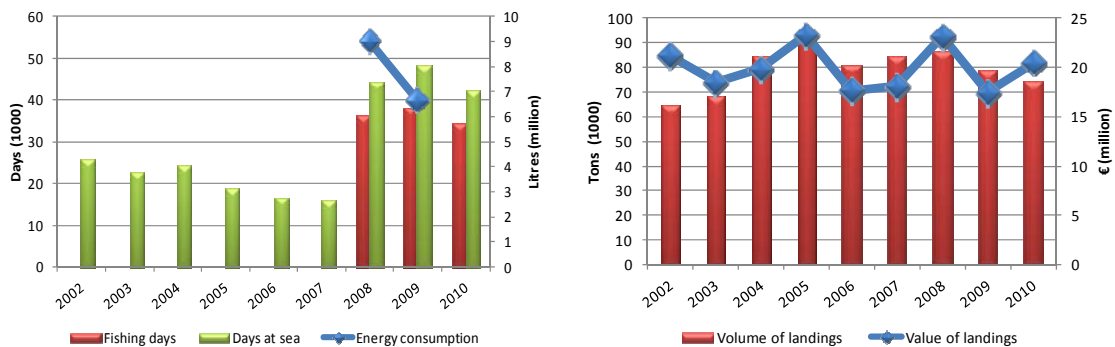
The total number of fishing enterprises in the Latvian fleet was 582 in 2009. The vast majority of fishing enterprises, 77%, owned a single vessel (most of these enterprises have boats operating in the coastal zone) and 22% of enterprises owned two to five fishing vessels. Only 4 fishing enterprises owned six or more fishing vessels.

Total employment was 1,633 jobs and the same numbers of FTEs in the Latvian fleet in 2009, see figure 7.12.1 (the data for 2002-2004 are shown without the coastal fishery segment). The level of employment in the Latvian fishing fleet decreased between 2005 and 2009. The total number employed decreased by 28% between 2005 and 2009.

7.12.2 National fleet fishing activity and output

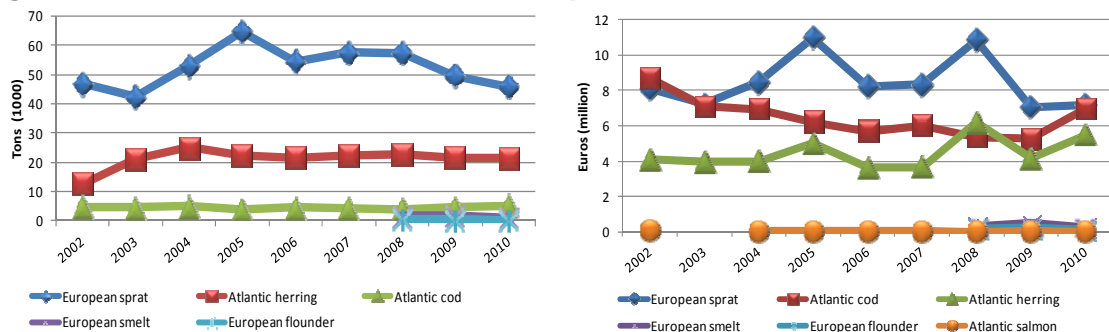
In 2008 the Latvian fishing fleet spent a total of 48 thousand days at sea, 80% of which were actual fishing days. The total number of days at sea remained relatively stable between 2008 and 2009, see figure 7.12.2 (the data for 2002–2007 are shown without the coastal fishery segment). The total quantity of fuel consumed by the Latvian fleet in 2009 was 6.6 million litres. The total quantity of fuel consumed decreased between 2008 and 2009, see figure 7.12.2.

Figure 7.12.2 Latvian national fleet fishing effort and landings trends



The total volume of landings by the Latvian fishing fleet in 2009 was 78.5 thousand tons of seafood. The total volume of landings remained relatively stable between 2005 and 2009, see figure 7.12.2. In terms of landings composition, in 2009 European sprat was the most common species landed in terms of tonnage (49,5 thousand tons), followed by Atlantic herring (21.6 thousand tons) and Atlantic cod (4.6 thousand tons), see figure 7.12.3.

Figure 7.12.3 Latvian national fleet main species landed trends



7.12.3 National fleet economic performance

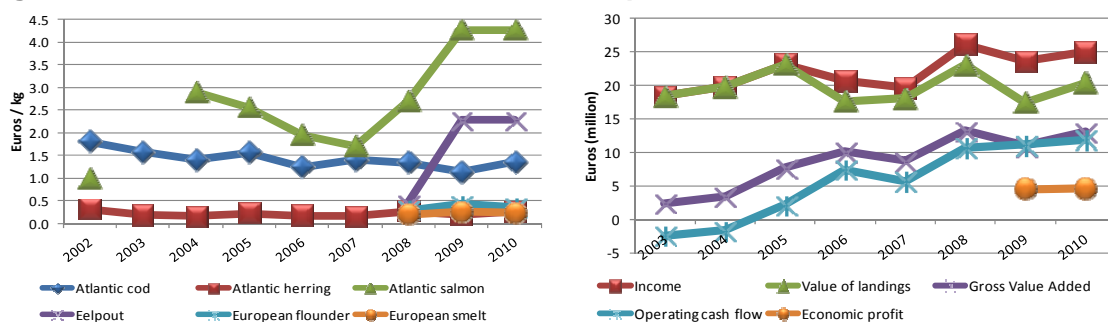
In terms of landings composition, in 2009 European sprat accounted for the highest value of landings (€7,06 million) by the Latvian national fleet, followed by Atlantic cod (€5,3 million) and Atlantic herring (4,2 million), see figure 7.12.3. The price for European sprat and Atlantic herring decreased between 2008 and 2009 by 25% and 30%. The price for Atlantic cod remained relatively stable between 2008 and 2009. In terms of prices, in 2009 Atlantic salmon achieved the highest average price per kilo (€4.27 per kg) followed by eelpout (€2.28 per kg) and Atlantic cod (€1.14 per kg), see figure 7.12.4.

Table 7.12.2 Latvian national fleet economic performance indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)									
Landings							23.1	17.5	20.4
Direct subsidies							1.6	3.4	2.5
Other income							1.4	2.7	2.0
Total income	21.2	18.4	19.8	23.2	20.7	19.6	26.1	23.6	25.0
Costs (Million €)									
Crew wages	3.6	4.8	5.1	5.5	2.7	2.9	4.1	3.3	3.7
Unpaid labour value								0.5	0.3
Energy costs	4.7	5.2	5.5	7.6	4.2	4.2	4.4	3.5	4.2
Repair costs	7.7	4.9	5.0	5.5	1.2	1.2	0.9	0.9	0.7
Variable costs	0.6	0.5	0.6	0.6	2.6	3.0	3.1	2.1	1.9
Fixed costs	5.3	5.4	5.2	1.8	2.5	2.5	2.7	2.5	2.3
Rights costs							0.2	0.2	0.2
Depreciation costs								1.3	0.7
Opportunity cost							0.0	4.8	6.4
Profitability indicators (Million €)									
Gross Value added	2.9	2.4	3.5	7.7	10.2	8.7	13.3	11.0	13.1
Operating cash flow	-0.7	-2.4	-1.6	2.2	7.5	5.8	10.8	11.2	11.9
Economic profit								4.5	4.6
Capital value (Million €)									
Total invested	16.8	17.6	17.1	5.0					
Tangible assets								54.8	
In-years investments								0.2	

The total amount of income generated by the Latvian national fleet in 2009 was €23.6 million, consisting of €17.5 million in landed value, €2.7 million in non fishing income, and €3.4 million in direct subsidies, see Table 7.12.2 and Figure 7.12.4. Between 2008 and 2009 the total income of the Latvian fleet remained relatively stable.

Figure 7.12.4 Latvian national fleet economic performance trends



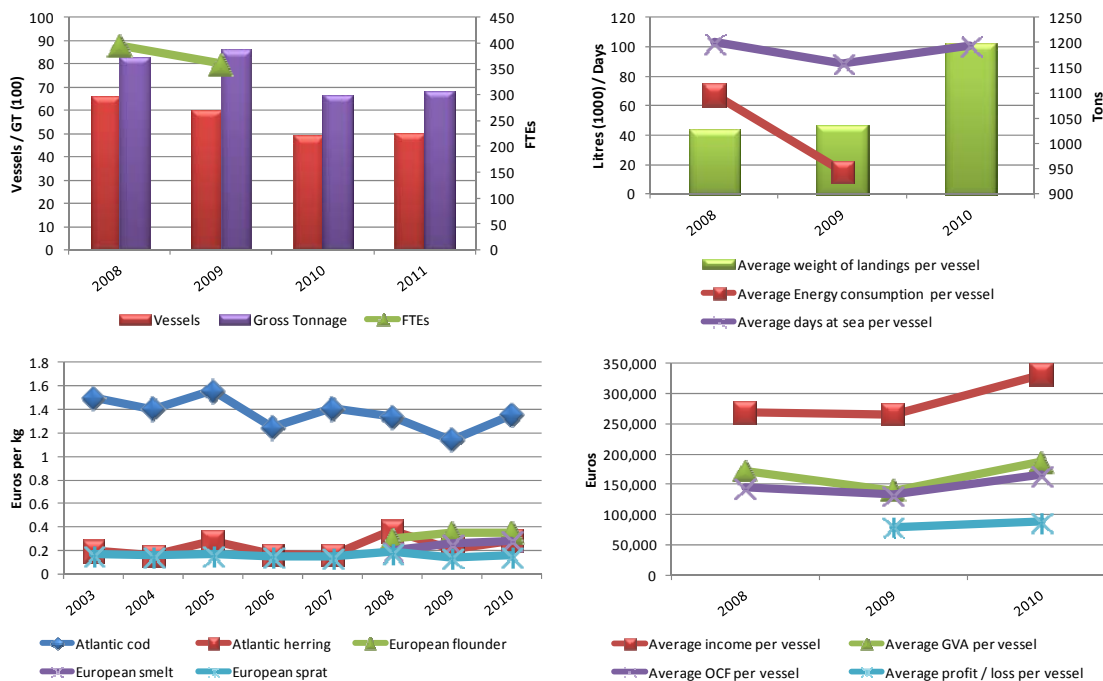
The total amount of expenditure by the Latvian national fleet in 2009 was €12.2 million, see Table 7.12.2. The largest expenditure items are energy costs (€3.5 million) and crew wages (€3.3 million). Between 2008 and 2009 the total expenditure of the Latvian fleet remained relatively stable. In terms of profitability, the total amount of OCF, GVA and economic profit generated by the Latvian national fleet in 2009 was €11.2 million, €11.0 million and €4.5 million respectively, see Table 7.12.2 and Figure 7.12.4. In 2009, the Latvian fleet had an estimated capital value of €54.8 million and a return on investment of 0.4%.

7.12.4 Fleet composition

The Latvian national fleet consisted of 4 fleet segments in 2009. The Latvian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea. All collected data refer exclusively to active vessels, because there were no inactive vessels in the Latvian fishing fleet. However, vessels which have sunk are still included in the fleet register. Table 7.12.3 provides a breakdown of key performance indicators for all Latvian fleet segments in 2009. A short description of the two most important segments in terms of total value of landings is given below:

Pelagic trawl 24-40m – 60 vessels make up this segment and are based predominantly in the Baltic Sea (area 27.3.d). These vessels target a variety of European sprat, Atlantic herring, Atlantic cod, European flounder, European smelt and eelpout. Their total value of landings was €12 million and 360 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Figure 7.12.5 Latvian pelagic trawl 24-40m key indicators



Drift and fixed nets 24-40m - 23 vessels make up this segment and are based predominantly in the Baltic Sea (area 27.3.d). These vessels target a variety of Atlantic

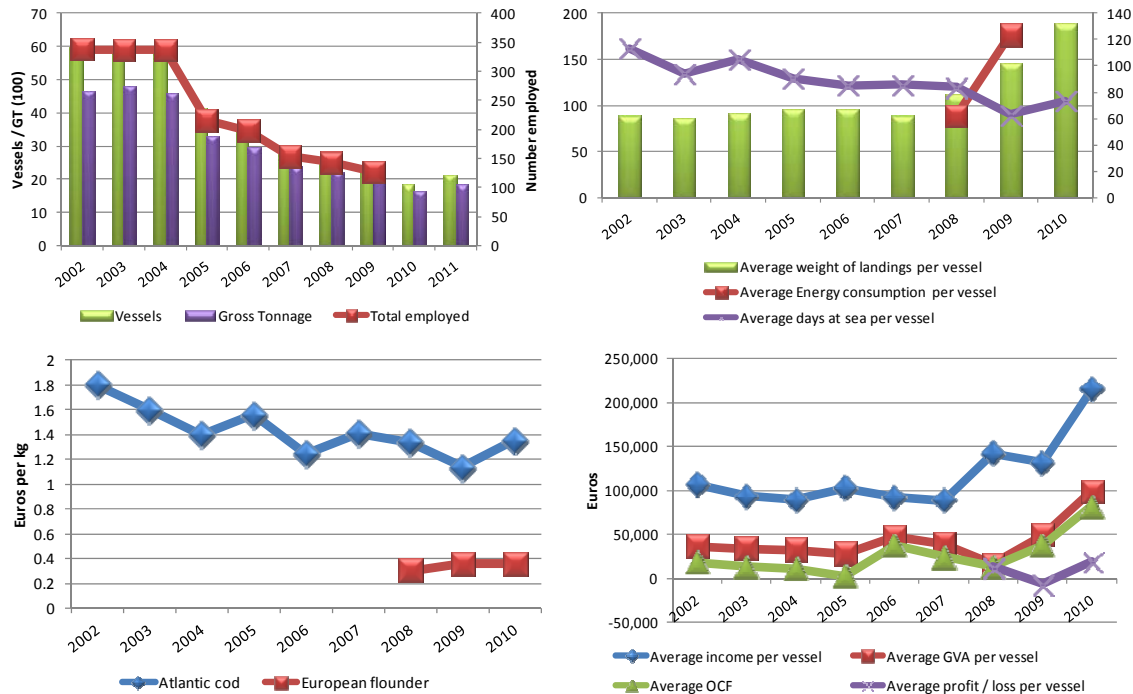
cod and European flounder. Their total value of landings was €2.7 million and 127 jobs were supported by this segment in 2009. This fleet segment made losses in 2009, one of the reasons being a reduction in price of 15% between 2008 and 2009.

Table 7.12.3 Latvian fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	23	2,017	4,040	127	127	2.08	4,071	2.3	3.0	1.1	0.9	-0.1	8.5
VL2440	23	2,017	4,040	127	127	2.08	4,071	2.3	3.0	1.1	0.9	-0.1	8.5
PGP	708	1,110	6,521	1,077	1,077	37.30	49	2.7	1.0	0.7	0.8	-0.9	12.5
VL0010	708	1,110	6,521	1,077	1,077	37.30	49	2.7	1.0	0.7	0.8	-0.9	12.5
TM	83	9,241	22,140	429	429	8.64	2,509	73.4	19.6	9.1	9.5	5.5	33.8
VL1218	23	635	3,675	69	69	3.30	1,575	11.2	3.6	0.7	1.5	0.7	3.6
VL2440	60	8,606	18,465	360	360	5.34	934	62.2	16.0	8.4	8.0	4.8	30.2
Grand Total	814	12,368	32,701	1,633	1,633	48.01	6,628	78.5	23.6	11.0	11.2	4.5	54.8

Passive gears polyvalent 0-10m – 708 vessels make up this segment and are based predominantly in the Baltic Sea and coastal zones of the Gulf of Riga. These vessels target a variety of Atlantic cod, Atlantic salmon, European flounder, European smelt, Atlantic herring, European sprat and other coastal species. Their total value of landings was €0.8 million and 1,077 jobs were supported by this segment in 2009. This fleet segment made losses in 2009. Around 50% of these fishermen fish for family consumption and do not sell their catch, so this segment has the largest number of ‘employees’. This form of fishing activity was introduced into fishery sector as a result of local historical tradition. The share of national landings value of this small coastal segment is quite insignificant (about 3%), however this segment is very important for the country as it provides the market with rare species.

Figure 7.12.6 Latvian drift and fixed nets 24-40m key indicators



Pelagic trawl 12-18m – 23 vessels make up this segment and are based predominantly in the Gulf of Riga. These vessels target a variety of European sprat, Atlantic herring and European smelt. Their total value of landings was €2.0 million and 69 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

7.12.5 Assessment for 2010 and 2011

Decreasing trends for the number of vessels, GT and kW were also observed in 2010, see Table 7.12.1. The TAC for European sprat decreased by 5% but increased 156% for Atlantic cod in 2010. As the volume of landings of Atlantic cod is relatively small, the increase in quota will not significantly influence total volume, but this species has demonstrated an increase in average price from €1.14 per kg in 2009 to €1.35 per kg in 2010. Taking into account both these factors it can be assumed that the total income will slightly increase in 2010. The total amount of expenditure by the Latvian national fleet in 2010 will remain relatively stable. The profit will change in negligible extent.

The TAC for European sprat allocated to Latvia in 2011 was reduced by 24% compared to 2010. European sprat will be the most common species in terms of volume, so lower catches will significantly influence the value of landings and total income in 2011. The TAC for Atlantic cod allocated to Latvia in 2011 was 15% higher than in 2010. The total expenditures by the Latvian national fleet in 2011 will increase taking into account expected increase in energy costs. Economic profits are expected to decrease.

7.12.6 Data issues

All transversal data for 2008 and 2009 on the whole fleet were taken from ICIS database, which includes logbook data and vessel technical parameters from the national fishing vessels register. The data were obtained monthly and covered the entire fishing population. All economic variables for 2008 and 2009 were received from the Central Statistic Bureau of Latvia (CSB) state statistical form/questionnaire “1-Fisheries” and other statistical sources of economic information based on the annual balance sheet. Primary economic information from state statistical form/questionnaire “1-Fisheries” was received quarterly from owners of fishing firms aggregated by fleet segments. Economic data covered all the members of the population. The achieved sample rate was 100%. Despite economic data collection is based on questionnaire form, participation of respondents is obligatory according to Latvian legislation. Latvia had derogations for collecting capital cost data in the Latvian National programme for 2008-2009, so the data on Depreciation cost were not received.

The data are not complete for some variables in 2002-2007. Information on the coastal fishery segment was not included in the data on capacity (2002-2003), employment (2002-2004) and days at sea (2002-2007). Energy consumption and capital costs data were not received for 2002-2007.

Qualitative economic analysis can be performed only for the period 2008-2009 due to lack of comparable data in 2002-2007.

7.13 Lithuania

7.13.1 National fleet structure

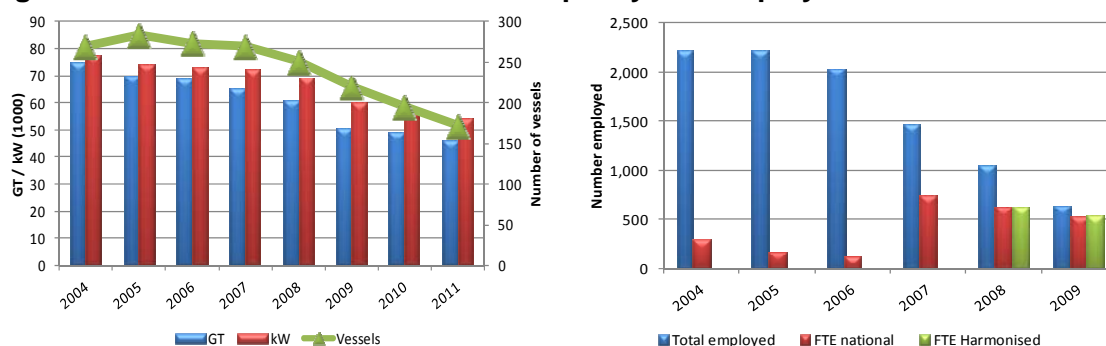
In 2010 the Lithuanian fishing fleet consisted of 195 registered vessels, with a combined gross tonnage of 49.3 thousand GT and total power of 56.4 thousand kW, see Table 7.13.1. The overall average age of vessels was 25.4 years in 2010. Capacity in terms of vessel numbers has constantly decreased since 2005 due to the implementation of decommissioning schemes and capacity reduction policy.

Table 7.13.1 Lithuanian national fleet key indicators

	2004	2005	2006	2007	2008	2009	2010	2011
Capacity								
Number of vessels	269	283	273	269	251	220	195	172
GT (1000)	75.3	70.1	68.6	65.0	61.0	50.5	49.3	46.0
kW (1000)	77.4	74.1	73.0	72.4	69.0	59.8	56.4	54.4
Average age	22.0	22.0	23.0	24.0	24.3	24.5	25.4	26.0
Employment								
Total employed	2,212	2,220	2,026	1,459	1,046	639		
FTEs				744	617	529		
Effort								
Days at sea (1000)	11.7	10.6	23.3	19.2		11.3		
Energy consumption (Million litres)						77.6		
Landings								
Weight (1000 tons)	151.7	132.1	141.2	192.0	201.4	206.8		
Value (Million €)				70.8	91.7	39.5		
Profitability indicators (Million €)								
Gross Value Added					17.0	17.6	12.5	
Operating cash flow					8.9	12.2	11.9	
Economic profit					0.7	8.2	6.0	
Capital value (Million €)								
Tangible assets						31.7		

The main change in GT and kW were driven by structural changes in the high seas fleet (vessels over 40m), which makes up around 90% of Lithuanian fleet capacity (GT and kW). The size of the Lithuanian fleet also decreased between 2009 and 2010. The number of vessels decreased by 11% and the total GT and kW of the fleet slightly decreased by 2.4% and 5.7% respectively during that period.

Figure 7.13.1 Lithuanian national fleet capacity and employment trends

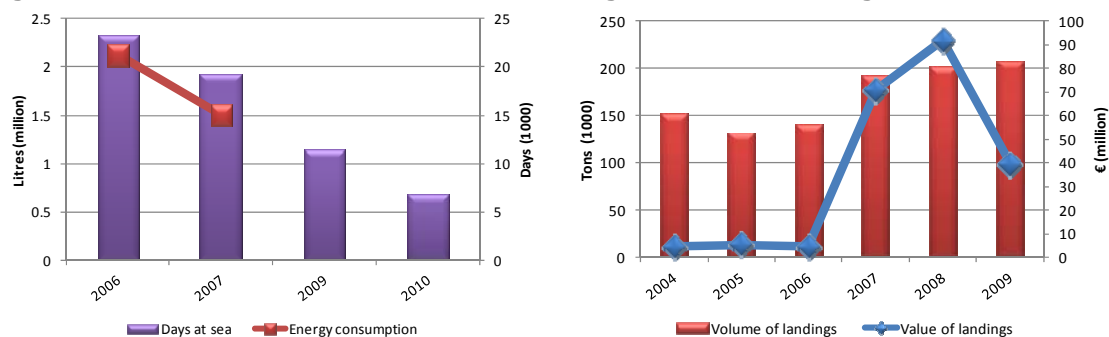


Total employment was 639 jobs and 529 FTEs in the Lithuanian fleet in 2009, see figure 7.13.1. The level of employment in the Lithuanian fishing fleet has declined between 2008 and 2009. The total FTEs decreased by 14%. This reduction mostly influenced small enterprises located in the coastal area and was also driven by compensations for the permanent cessation of the fleet, which has been mostly oriented towards the small scale coastal fishery in 2008-2010.

7.13.2 National fleet fishing activity and output

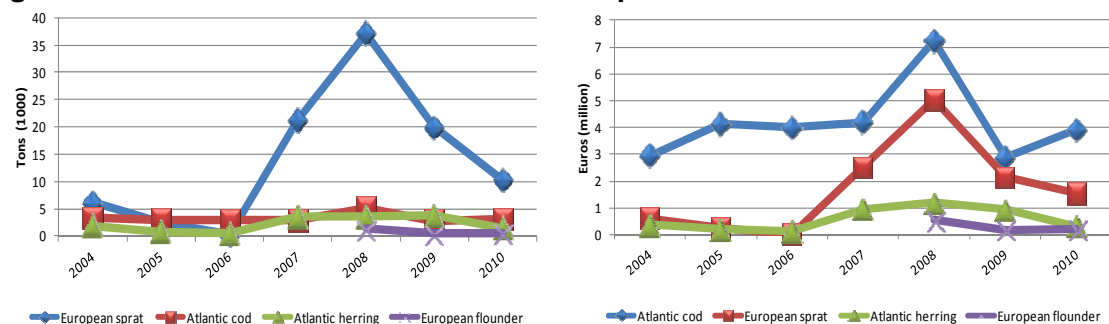
The total volume of landings by the Lithuanian fishing fleet in 2009 was 206.8 thousand tons of seafood. The total volume of landings increased by 16% between 2008 and 2009, see figure 7.13.2. The bulk of the catch in volume (87%) was landed by high sea vessels which mainly operate in the Atlantic and South Pacific oceans. The main species in terms of volume landed by Lithuanian fleet in 2009 were Chilean jack mackerel, horse mackerel, sprat, chub mackerel and sardinella. These five species represented 86% of the total Lithuanian fleet landings.

Figure 7.13.2 Lithuanian national fleet fishing effort and landings trends



In terms of landings composition, the analysis was more targeted on the Baltic Sea region, which is more important in terms of the higher number of enterprises (94% of total) involved in coastal and open sea fishing activity. In 2009 European sprat was the most common species landed in terms of tonnage (19.9 thousand tons), followed by Atlantic herring (3.7 thousand tons) and Atlantic cod (3.1 thousand tons), see figure 7.13.3. Projections concerning landings of European sprat and Atlantic herring are decreasing because of reduced quotas for 2010 and 2011. For Atlantic cod, quotes have increased, but the total volume of landings will not be significantly affected by this.

Figure 7.13.3 Lithuanian national fleet main species landed trends



7.13.3 National fleet economic performance

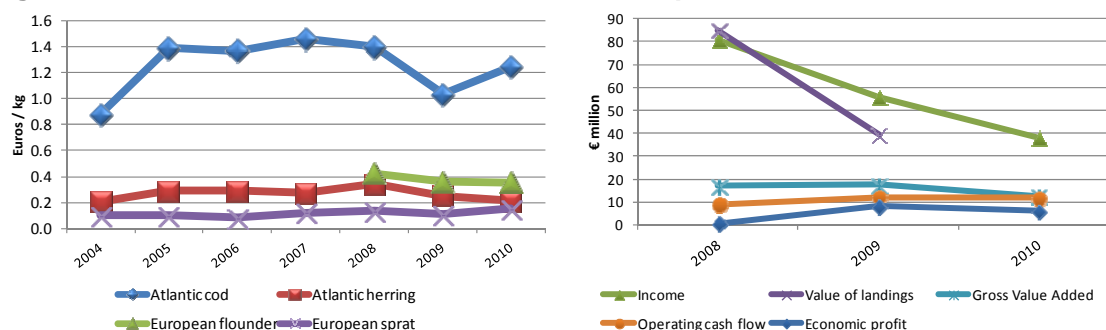
In 2009 Atlantic cod remained economically most important fish species for the Lithuanian fleet in the Baltic and accounted for the highest value of landings (€2.9 million), followed by European sprat (€2.1 million) and Atlantic herring (€0.93 million), see figure 7.13.3. The prices obtained for Atlantic cod and Atlantic herring decreased, whereas price for European sprat remained relatively stable between 2008 and 2009. In terms of prices, in 2009 Atlantic cod achieved the highest average price by the Lithuanian national fleet (€1.04 per kg), followed by European flounder (€0.36 per kg) and Atlantic herring (€0.25 per kg), see figure 7.13.4. During 2009-2010, prices for the main species in the Baltic Sea, such as European sprat and Atlantic cod increased by 36.4% and 20.2% respectively, whereas the price for Atlantic herring decreased 16%.

Table 7.13.2 Lithuanian national fleet economic performance indicators

	2008	2009	2010
Income (Million €)			
Landings	80.6	50.0	35.1
Direct subsidies	0.0	0.0	0.0
Other income	0.2	5.8	3.0
Fishing rights	0.0	0.0	0.0
Total income	80.9	55.7	38.1
Costs (Million €)			
Crew wages	8.1	5.4	0.6
Unpaid labour value		0.0	0.0
Energy costs	24.1	7.0	5.7
Repair costs	13.5	9.0	5.4
Variable costs	20.3	17.7	10.5
Fixed costs	5.9	4.4	3.9
Rights costs	0.0	0.0	0.0
Capital costs			
Depreciation costs	8.2	1.0	4.6
Opportunity cost	0.0	3.0	1.4
Profitability indicators (Million €)			
Gross Value added	17.0	17.6	12.5
Operating cash flow	8.9	12.2	11.9
Economic profit	0.7	8.2	6.0
Capital value (Million €)			
Total invested			
Tangible assets		31.7	
Fishing rights value		0.0	
In-years investments		0.1	

The total amount of income generated by the Lithuanian national fleet including long distance fisheries in 2009 was €55.7 million. This consisted of €50 million in landings value and €5.8 million in non fishing income, see table 7.13.2 and figure 7.13.4. The total income of the Lithuanian fleet decreased 31.1% between 2008 and 2009. The total amount of expenditure by the Lithuanian national fleet in 2009 was €43.6 million, see table 7.13.2. The largest expenditure items are variable costs (€17.7 million), repair costs (€9.0 million) and energy costs (€7.0 million). The total expenditure of the Lithuanian fleet decreased 39.4% between 2008 and 2009. In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Lithuanian national fleet in 2009 was €12.2 million, €17.6 million and €8.2 million respectively, see table 7.13.2 and figure 7.13.4. The decrease in energy costs between 2008 and 2009 was influenced by the fall in oil prices in the world market, and reduced Lithuanian fishing capacity. Repair costs were relatively high due to the high average age of vessels, especially vessels over 12m in length.

Figure 7.13.4 Lithuanian national fleet economic performance trends



7.13.4 Fleet composition

The Lithuanian national fleet consisted of five main segments in 2009. The fleet is highly diversified with a broad range of vessel types targeting different species in the Atlantic Ocean, Baltic Sea and coastal area. These segments consisted of 133 active vessels and 95 inactive vessels. These vessels are classed as inactive if they did not land any catch in 2009. All active segments made a profit during 2009. Table 7.13.3 provides a breakdown of the key performance indicators for all Lithuanian fleet segments in 2009.

Table 7.13.3 Fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	90	473	2,593	96	47	0.90		0.5	0.7	0.1	0.0	-0.2	1.9
VL0010	76	83	1,321										
VL0018				84	36				0.4	0.3	0.2	0.0	1.7
VL1012	8	71	525			0.29		0.1					
VL1218	3	64	285			0.13		0.0					
VL2440	3	255	462	12	11	0.49		0.4	0.3	-0.1	-0.2	-0.2	0.2
DTS	26	3,332	5,608			1.28		2.5					
VL2440	22	2,579	4,855			1.28		2.5					
VL40XX	4	753	753										
HOK						0.07		0.0					
VL1012						0.05		0.0					
VL1218						0.01		0.0					
INACTIVE	95	668	3,069										
VL0010	74	126	1,504										
VL1012	9	66	498										
VL1218	3	60	217										
VL2440	5	416	850										
VL40XX	4												
TM	17	15,455	16,507			9.09	77,569	203.8					
VL2440	2	695	769			0.75		15.0					
VL40XX	15	14,760	15,738			8.34	77,569	188.8					
TM-DTS				543	482								29.8
VL2440				223	164								3.3
VL40XX				320	318								26.5

A short description of the five most important segments in terms of total value of landings is given below:

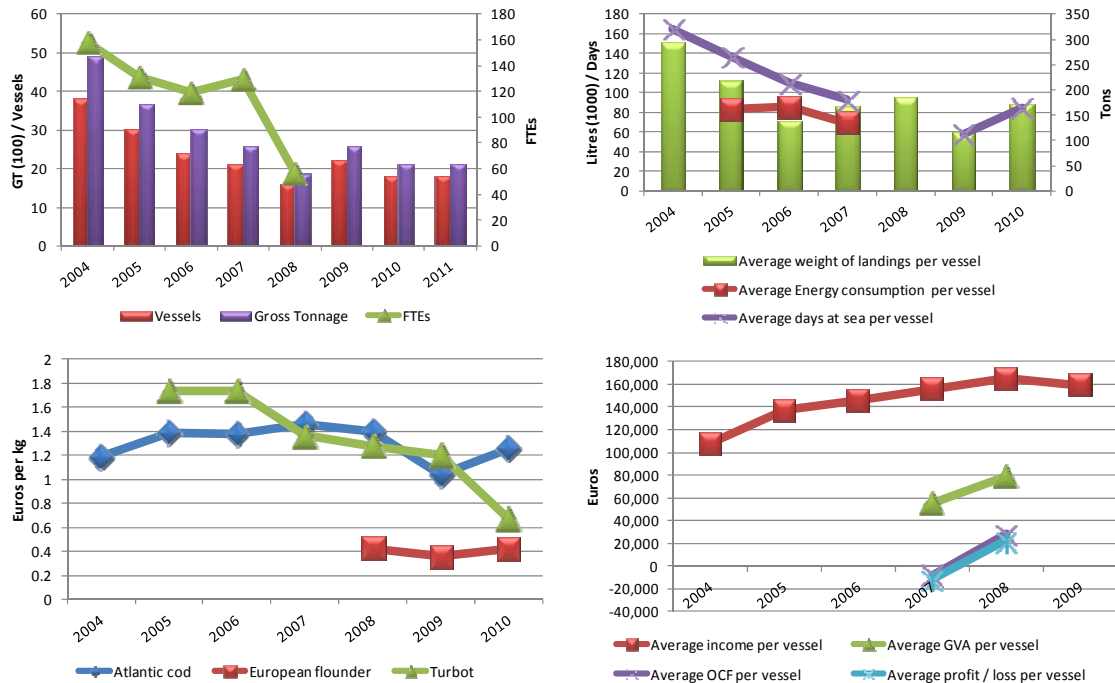
Demersal trawl 24-40m – The segment consist of 22 active vessels. Fishing operations are based in the Baltic Sea and vessels targeted mostly Atlantic cod. Their total value of landings was €2.9 million and 181 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009, GVA was €1.1 million (15.1% lower compared to 2008), while total cash flow reached €0.39 million (15.2% lower compare to 2008).

Drift and fixed nets <18m – 87 active vessels make up this segment and they are based in the coastal area of the Baltic Sea. These vessels target a variety of species, mostly Atlantic cod, smelt, Atlantic herring and European flounder. Their total value of landings was €0.4 million and 141 jobs were supported by this segment in 2009. This fleet segment was slightly profitable in 2009. GVA was €0.28 million (8.5% lower compared to 2008), while total cash flow reached €0.23 million.

Pelagic trawlers over 40m – this segment consist of long distance fishing vessels, mostly pelagic trawlers over 40m in length. The total number of active vessels in this segment was 9 and it mainly operates in the Atlantic and South Pacific oceans, targeting pelagic fish species (mackerels, sardinella, etc.). Their total value of landings was

€43.59 million and 314 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009. GVA was €15.18 million (0.18% higher compare to 2008), total cash flow reached €10.97 million (27.6% higher compare to 2008).

Figure 7.13.5 Lithuanian demersal trawl 24-40m key indicators



7.13.5 Assessment for 2010 and 2011

The value of landings for the demersal trawl 24-40m and drift and fixed net under 18m segments, which operate in the Baltic Sea and coastal areas, are likely to be higher in 2010 and 2011 compared to 2009. This is due to increased quotas and landings for the main target species of these segments and an improvement in cod prices, which decreased in 2009. Total cash flow and GVA could be negatively influenced by the increased energy costs due to the likely increase in fuel prices.

7.13.6 Data issues

Incomplete economic data analysis for Lithuanian fleet was influenced by the submission of effort and capacity data at disaggregated level, whereas income, expenditure and employment data were reported by clusters.

7.14 Malta

7.14.1 National fleet structure

In 2010 the Maltese fishing fleet consisted of 1,112 registered vessels (comprising both Full-time and part-time vessels), with a combined gross tonnage of 12,300 GT and total power of 85,500 kW, see table 7.14.1. The overall average age of vessels was 24.9 years. In terms of number of vessels the size of the Maltese fishing fleet has been decreasing since 2005 with a reduction of 307 vessels or 21.6% of the fleet, however the total GT increased by 59.7% and kW of the fleet decreased by 5.8% during that period, see figure 7.14.1. Out of these vessels only about 60 are considered as industrial vessels (i.e. over 15m in length). These industrial vessels are trawlers, longliners and netters. All vessels except the bottom otter trawlers are considered as multipurpose since they undertake all types of fishing with changes of gear from one season to the next. The remaining boats are owned by full-time, part-time and recreational fishermen. They differ substantially in shape, size, gear used and hours spent in fishing activities. Both professional and sport amateur fishermen fish in coastal and offshore waters.

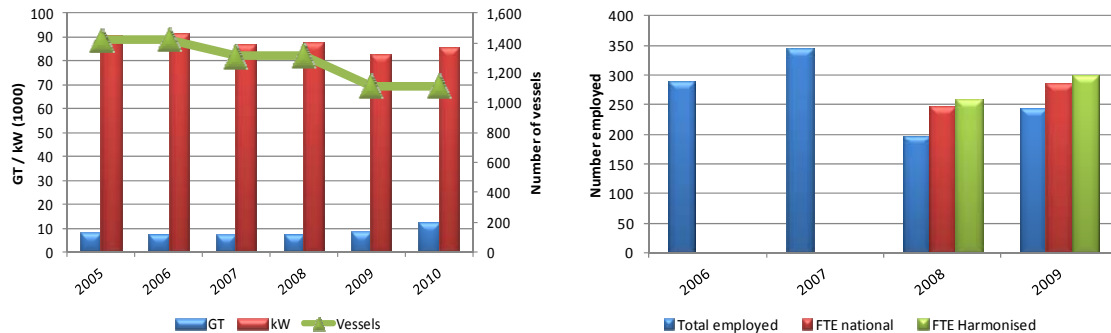
Table 7.14.1 Maltese national fleet key indicators

	2005	2006	2007	2008	2009	2010
Capacity						
Number of vessels	1,419	1,424	1,312	1,316	1,111	1,112
GT (1000)	7.7	7.6	7.4	7.5	8.3	12.3
kW (1000)	90.8	91.6	86.4	87.5	82.2	85.5
Average age	22.5	23.4	23.8	24.6	24.0	24.9
Employment						
Total employed		288	344	196	244	
FTEs				248	287	
Effort						
Days at sea (1000)	113.3	113.4	105.8	47.0	48.3	65.4
Energy consumption (Million litres)	3.8	24.6	6.6	4.4	4.9	
Landings						
Weight (1000 tons)	1.3	1.5	1.2	1.3	1.6	4.7
Value (Million €)	5.6	6.3	7.3	8.2	8.6	25.6
Profitability indicators (Million €)						
Gross Value Added	4.0	-4.1	2.0	-3.0	1.7	
Operating cash flow	2.9	-5.4	0.9	-4.3	0.3	
Economic profit	0.4		0.0	-8.4	-16.5	
Capital value (Million €)						
Tangible assets				46.8	39.5	
Fishing rights					1.7	

The total number of fishing enterprises in the Maltese fleet was 1073 in 2009. The vast majority of fishing enterprises, 96.6%, owned a single vessel and 3.4% of enterprises owned two to five fishing vessels. None of the fishing enterprises owned six or more fishing vessels. Total employment was 244 jobs and 287 FTEs in the Maltese fleet in 2009, see table 7.14.1. The level of employment in the Maltese fishing fleet has increased between 2008 and 2009. The total number employed increased by 24.5% between 2008 and 2009 while the number of FTEs increased by 15.7%, see figure 7.14.1. It must be pointed out that fishing in Malta is mainly seasonal and as a consequence some of the full-time fishermen own at least one small and one large

vessel which enables them to practice off-shore fishing during the milder seasons and coastal activities during the winter months. From an employment point of view, the average number of fishermen employed on each full-time boat is increased when undertaking trips of more than two days. Additionally, extra hands are sometimes recruited for bluefin tuna and common dolphinfish seasons.

Figure 7.14.1 Maltese national fleet capacity and employment trends

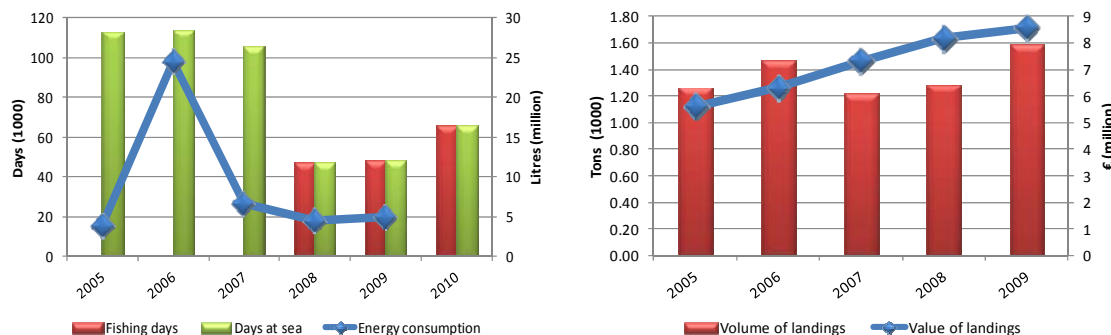


Fisheries in Malta are a relatively small industry where its social significance far outweighs its economic importance. It is in fact a traditional activity which operates on a small scale, producing small volumes of a very valuable product. The industry is mainly artisanal and fairly typical of the fisheries found in many Mediterranean countries. There are no inland fisheries in Malta.

7.14.2 National fleet fishing activity and output

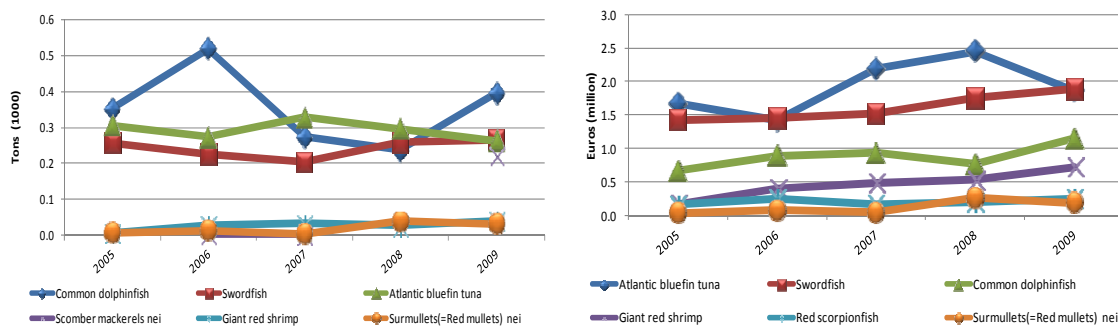
In 2009 the Maltese fishing fleet spent a total of 48.3 thousand days at sea, 99.8% of which were actual fishing days. The total number of days at sea increased between 2008 and 2009, see figure 7.14.2. The total quantity of fuel consumed by the Maltese fleet in 2009 was 4.9 million litres, an increase of around 10% from 2008, see figure 7.14.2. The total volume of landings achieved by the Maltese fishing fleet in 2009 was 1,600 tons of seafood. The total volume of landings increased by around 24% between 2008 and 2009, see figure 7.14.2.

Figure 7.14.2 Maltese national fleet fishing effort and landings trends



In 2009 common dolphin fish (*Coryphaena hippurus*) was the most common species landed (0.39 thousand tons), followed by swordfish (*Xiphias gladius*; 0.27 thousand tons) and Atlantic bluefin tuna (*Thunnus thynnus*; 0.26 thousand tons), see figure 7.14.3.

Figure 7.14.3 Maltese national fleet main species landed trends



7.14.3 National fleet economic performance

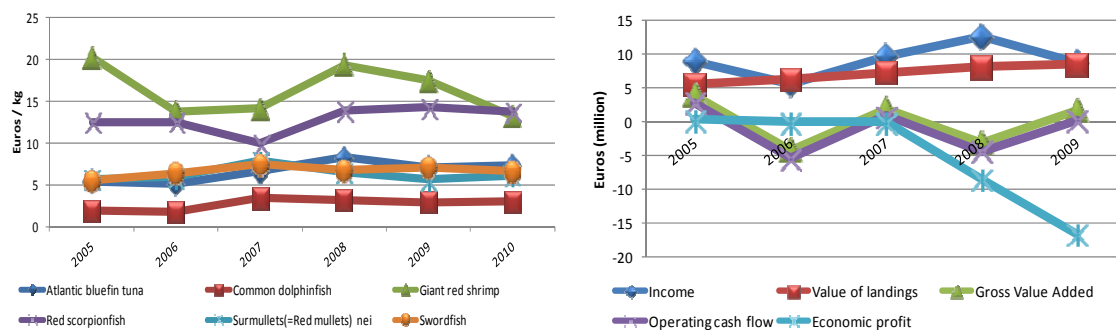
In 2009 swordfish accounted for the highest value of landings by the Maltese national fleet (€1.88 million), followed by Atlantic bluefin tuna (€1.86 million) and common dolphinfish (€1.15 million); see figure 7.14.3. In terms of prices, in 2009 Atlantic bluefin tuna and swordfish achieved the highest average price per kilo (€7.1 per kg) by the Maltese national fleet, followed by common dolphin fish (€2.9 per kg). The prices of most of the main species landed in terms of value were relatively stable from 2008-2010, with the exception of the giant red shrimp, the price of which decreased by around 25% during this period, see figure 7.14.4.

Table 7.14.2 Maltese national fleet economic performance indicators

	2005	2006	2007	2008	2009	2010
Income (Million €)						
Landings				12.25	8.08	25.57
Direct subsidies				0.07	0.02	0.04
Other income				0.27	0.58	0.42
Fishing rights					0.10	0.05
Total income	9.04	5.59	9.75	12.59	8.77	26.08
Costs (Million €)						
Crew wages	1.13	1.26	1.02	1.36	1.48	4.35
Unpaid labour value				3.07	10.77	21.16
Energy costs	1.71	5.16	3.55	2.38	2.33	4.32
Repair costs	0.90	1.25	1.41	1.98	1.17	1.58
Variable costs	2.14	3.05	2.55	10.78	3.24	4.39
Fixed costs	0.30	0.24	0.28	0.42	0.26	0.26
Rights costs					0.02	0.01
Capital costs	2.45					
Depreciation costs				0.91	4.97	2.94
Opportunity cost				0.05	1.06	1.85
Profitability indicators (Million €)						
Gross Value added	3.99	-4.11	1.96	-3.04	1.74	15.49
Operating cash flow	2.86	-5.37	0.94	-4.33	0.27	11.18
Economic profit	0.41			-8.36	-16.53	-14.77
Capital value (Million €)						
Total invested		2.14	1.66			
Tangible assets				46.77	39.53	43.15
Fishing rights value					1.72	
In-years investments				0.92	1.03	

The total amount of income generated by the Maltese national fleet in 2009 was € 8.78 million. This consisted of €8.08 million in landings, €0.10 million in fishing rights sales, €0.58 million in non fishing income, and €0.02 million in direct subsidies, see table 7.14.2. Between 2008 and 2009, the total income of the Maltese fleet decreased by 30%, see figure 7.14.4. The total amount of expenditure by the Maltese national fleet in 2009 was €8.5 million, see table 7.14.2. The largest expenditure items were variable costs (€3.24 million) and energy costs (€2.33 million). In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Maltese national fleet in 2009 was €0.26 million, €1.74 million and €-16.5 million respectively, see table 7.14.2. Despite moving from negative to positive GVA and OCF in 2009 compared to 2008, the total level of loss increased, due to a significant increase in depreciation and opportunity costs. In 2009 the Maltese fleet had an estimated capital value of €41.25 million and a return on investment of -15%.

Figure 7.14.4 Maltese national fleet economic performance trends



Atlantic bluefin tuna and swordfish attain the highest prices amongst all species landed by the Maltese fishing fleet. This is due to the fact that these species are characterised by a high demand both locally and abroad. In the latter case the main export markets for swordfish are Italy and Spain, while Japan is the main export market for Atlantic bluefin tuna. The decreasing fishing opportunities for bluefin tuna and swordfish could also support the fact that these two species on average are characterised by the highest prices on the market. The price of common dolphinfish and swordfish varies enormously, thus the importance attributed to them will therefore change in different time periods.

The total amount of income generated in 2009 by the Maltese national fleet should have in theory increased instead of decreasing by 30%. This is due to the fact that the volume as well as the value of landings increased and the total amount of expenditure decreased by 50%. This shows that the value for total income might be underestimated. The suspected reason for this difference lies in the fact that the data sources for the value and volume of landings are logbooks and sales vouchers while the data source for income are direct questionnaires with fishers. This could imply that due to confidentiality issues fishers might underestimate the true value of the income earned from landings.

7.14.4 Fleet composition

The Maltese national fleet consisted of 27 fleet segments in 2009. The Maltese fleet is highly diversified with a broad range of vessel types targeting different species in the GSA 15 area. There are five inactive segments consisting of 63 vessels. These vessels are classed as inactive if they did not land any catch in 2009. All of the active segments

made overall losses in 2009. Table 7.14.3 provides a breakdown of key performance indicators for all Maltese fleet segments in 2009.

Table 7.14.3 Maltese fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	4	17	357	0	0	0.03	22	0.0	0.0	0.0	0.0	-0.1	0.1
VL0006	2	3	84	0	0	0.02	3	0.0	0.0	0.0	0.0	0.0	0.1
VL0612	2	13	272	0	0	0.01	18	0.0	0.0	0.0	0.0	0.0	0.1
DTS	16	2,156	6,907	42	70	1.22	699	0.2	1.0	0.3	0.0	-0.8	4.1
VL1824	12	1,309	4,718	42	70	1.13	699	0.2	1.0	0.3	0.0	-0.8	4.1
VL2440	4	847	2,190			0.09		0.0					
FPO	15	19	634	0	0	0.13	37	0.0	0.0	0.0	0.0	-0.2	0.3
VL0006	11	10	207	0	0	0.07	23	0.0	0.0	0.0	0.0	-0.1	0.2
VL0612	4	9	427	0	0	0.06	14	0.0	0.0	0.0	0.0	0.0	0.1
HOK	198	1,838	20,215	80	92	5.17	1,607	0.6	4.0	1.3	0.6	-4.6	11.4
VL0006	41	46	1,317	0	0	0.22	56	0.0	0.1	0.0	0.0	-0.4	0.6
VL0612	121	560	11,573	17	36	2.57	669	0.2	1.1	0.1	0.0	-2.6	5.1
VL1218	22	443	3,339	19	21	1.47	368	0.2	0.9	0.4	0.4	-0.7	2.5
VL1824	12	633	3,341	44	35	0.79	514	0.2	1.8	0.8	0.2	-0.9	3.2
VL2440	2	156	645			0.13		0.0					
INACTIVE	63	2,257	11,195	46	65		332		0.5	-0.1	-0.3	-2.0	6.1
VL0006	1	1	12	0	0		0			0.0	0.0	0.0	0.0
VL0612	32	222	3,207	14	4		100		0.1	0.0	0.0	-0.8	2.4
VL1218	17	350	2,409	9	2		45		0.2	0.1	0.0	-0.3	1.0
VL1824	9	835	3,941	23	59		188		0.2	-0.1	-0.3	-0.7	2.0
VL2440	4	849	1,626	0	0		0			0.0	0.0	-0.2	0.7
MGO	34	367	4,602	46	50	0.89	437	0.4	0.9	0.4	0.3	-0.8	2.6
VL0006	2	2	34			0.01		0.0					
VL0612	22	121	2,259	21	22	0.27	164	0.1	0.3	0.2	0.1	-0.4	1.1
VL1218	10	243	2,309	25	28	0.61	273	0.3	0.5	0.3	0.2	-0.4	1.5
PGP	762	1,358	35,301	20	4	0.64	1,452	0.0	1.8	-0.5	-0.5	-7.5	13.8
VL0006	479	489	12,716	8	3	0.33	721	0.0	0.9	-0.3	-0.3	-4.1	6.8
VL0612	283	869	22,586	12	2	0.31	732	0.0	1.0	-0.2	-0.2	-3.4	7.0
PMP	16	164	2,091	10	6	40.18	278	0.3	0.5	0.2	0.1	-0.6	1.0
VL0006	2	2	25	0	0	26.14	3	0.0	0.0	0.0	0.0	0.0	0.0
VL0612	12	69	1,634	2	1	13.86	177	0.1	0.3	0.1	0.0	-0.4	0.7
VL1824	2	93	433	8	5	0.18	98	0.1	0.2	0.1	0.1	-0.2	0.3
PS	3	120	910			0.05		0.1					
VL0612	1	4	75			0.01		0.0					
VL1218	1	19	164			0.02		0.0					
VL2440	1	97	671			0.02		0.1					
Grand Total	1,111	8,295	82,212	244	287	48.30	4,863	1.6	8.8	1.7	0.3	-16.5	39.5

A short description of the two most important segments in terms of total value of landings is given below:

Gears using hooks 6-12m – 121 vessels make up this segment. These vessels mainly target species such as Atlantic bluefin tuna, swordfish and common dolphin fish. Their total value of landings was €1.1 million and 17 jobs/36 FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Gears using hooks 18-24m – 12 vessels make up this segment. These vessels mainly target species such as Atlantic bluefin tuna, swordfish and common dolphin fish. Their total value of landings was €1.8 million and 44 jobs/35 FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Figure 7.14.5 Maltese gears using hooks 6-12m key indicators

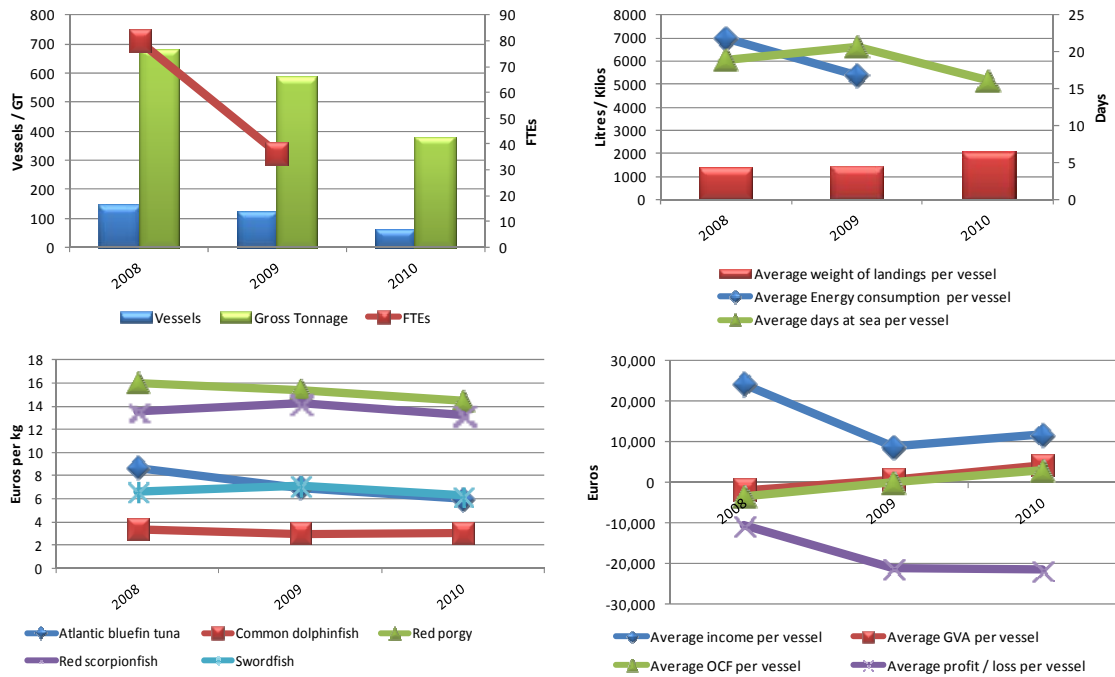
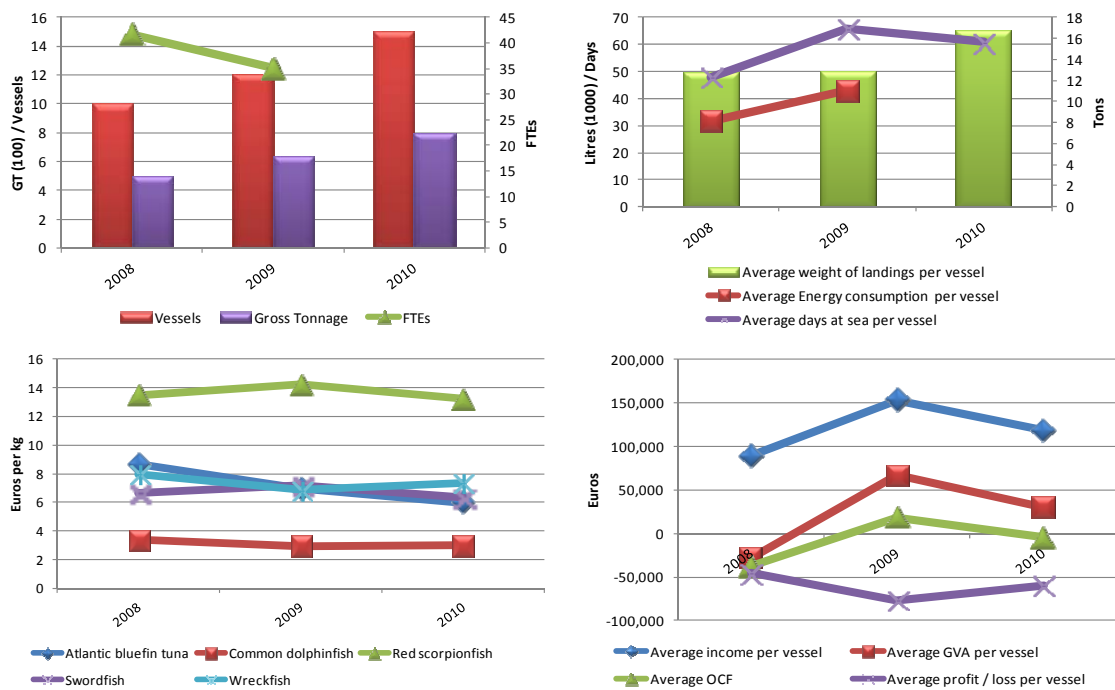


Figure 7.14.6 Maltese gears using hooks 18-24m key indicators



7.14.5 Assessment for 2010 and 2011

During 2010, the Maltese fleet landed about 70 species with total annual landings reaching approximately 1,303 tons. Common dolphinfish landings reached 430 tons, equivalent to about 33% of total landings and were mostly derived from the Fish

Aggregating Device (FAD) fishery between August and December. The swordfish surface long line fisheries contributed to about 25% of the total annual landings. In 2010, catches of frigate mackerels (*Scomber*) dropped considerably; landings of this species represented only 4% of the total annual landings. The contribution to the total annual landings of bluefin tuna continued to fall: in 2010 Bluefin tuna landings represented 10% of the total annual landings. Landings of Bluefin tuna amounted to 130.9 tons (gilled and gutted) in 2010.

During 2010, 8 fishing vessels ceased fishing activities through the permanent cessation aid scheme. All these vessels fished for bluefin tuna. An investment on board fishing vessels and selectivity scheme was introduced. The scheme was intended to improve the existing fishing fleet through modernisation i.e. safety on board, working conditions on board, enhancing hygiene, improvements to product quality, improvements to energy efficiency and increase selectivity of fishing gear etc and will not exceed existing fleet capacity ceilings.

In general, the seasonality and fishing patterns during 2010 remained the same as in previous years with no indication of an increase in fishing effort in any fishery. The catches of bluefin tuna vessels reached 153.2 tons (round weight), within the limit of the catch allocation set for Malta. The fishery is also based on ITQs for the artisanal fleet and vessels had to stop fishing as they landed all their allocation.

Most economic variables for the year 2010 are expected to provide similar values to those achieved in 2009, however fuel costs are expected to increase due to the substantial rise of fuel prices. As a consequence, profitability is expected to be negatively affected. Profitability is also expected to be negatively affected due to the decrease in tuna quotas and landings during the year 2010. This implies a decrease in landings income for certain segments with Atlantic bluefin tuna as the main target species. Although the supply of Atlantic bluefin tuna decreased, the price remained relatively unchanged due to the stocks of this species stored by the Japanese market.

7.14.6 Data issues

The fleet decreased by 204 vessels during 2008 to 2010. One reason for this decrease was the introduction of the 'Permanent Cessation Aid Scheme. The main objective of this measure is to reduce the fishing capacity of the Maltese registered fishing fleet as well as to manage the fishing effort in accordance with the aims of the Common Fisheries Policy. This measure, as a priority, targets long-line vessels that fish for highly migratory fish stocks, taking into account in particular the recovery plan for Bluefin tuna. Another reason for the decrease in the number of vessels (full-time and part-time license holders) could be related to the vessel licensing system in place. This system makes sure that full-time and part-time license holders land at least the minimum amount obliged (according to the vessel length) to hold their professional license. If the vessel does not land at least that minimum amount for a period of 3 years, the vessel is automatically removed from the full-time or part-time category and given a recreational fishing license.

Data with regards to income from leasing out quota or other fishing rights, lease/rental payments for quota or other fishing rights and the value of quota and other fishing rights was collected for the first time for the year 2009. This is partly due to the fact that total allowable catch (TAC) for bluefin tuna was introduced in 2009.

7.15 Netherlands

7.15.1 National fleet structure

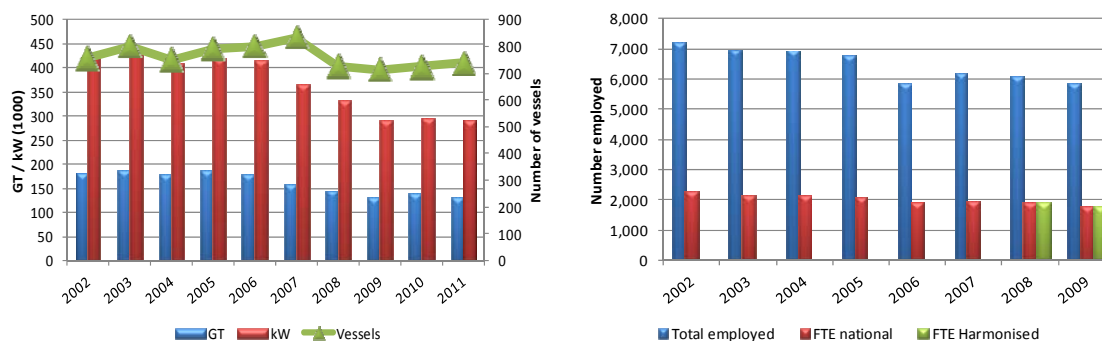
In the beginning of 2011 the Dutch fishing fleet consisted of 738 registered vessels, with a combined gross tonnage of 131 GT and total power of 290 kW, see Table 7.15.1. The overall average age of vessels was 33.5 years in 2011. The total size of the Dutch fishing fleet has been fairly stable between 2007 and 2011. This size however includes both commercially active vessels and commercially less active vessels.

Table 7.15.1 Dutch national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capacity										
Number of vessels	758	801	751	791	802	834	726	712	725	738
GT (1000)	180.9	186.3	179.3	185.5	179.3	158.7	145.9	129.4	137.2	130.5
kW (1000)	427.7	440.7	409.7	420.5	414.9	362.9	332.2	288.6	293.8	290.1
Average age	30.8	25.4	26.0	28.5	27.3	27.9	31.9	31.2	32.6	33.5
Employment										
Total employed	7,196	6,967	6,927	6,754	5,837	6,188	6,114	5,847		
FTEs	2,280	2,160	2,139	2,067	1,895	1,966	1,891	1,805		
Effort										
Days at sea (1000)	60.4	62.3	60.8	60.1	57.0	55.9	50.5	49.2	50.8	
Energy consumption (Million litres)	352.3	394.7	376.6	336.9	266.9	262.8	261.8	233.9		
Landings										
Weight (1000 tons)	451.5	519.2	521.6	545.3	431.5	472.5	386.1	332.1	381.5	
Value (Million €)	385.5	396.0	374.7	381.7	357.5	411.4	358.0	309.5	354.5	
Profitability indicators (Million €)										
Gross Value Added	162.0	178.0	150.7	151.0	146.5	165.5	106.8	127.6	117.0	
Operating cash flow	57.3	68.8	48.9	50.6	52.0	60.2	16.8	47.1	26.4	
Economic profit	-14.9	-3.7	-16.6	-14.5	-1.7	14.1	-31.0	4.6	-22.5	
Capital value (Million €)										
Tangible assets							204.6	165.7	185.2	
Fishing rights							260.1	267.4		

The numbers of commercially active vessels, which catch more than 98% of the total landings, have been steadily decreasing in the period 2002-2011. Two decommissioning schemes, one in 2005 and one in 2008 played a big role in the reduction of capacity of the commercially active vessels.

Figure 7.15.1 Dutch national fleet capacity and employment trends



The number of vessels in the Dutch fleet increased by 2% or 13 vessels in 2011 compared to 2010 and the total GT and kW of the fleet decreased by 5% and 1% respectively during that period. The decrease in GT and kW indicate that some bigger vessels have left the fleet and that the smaller non-commercial vessels have increased.

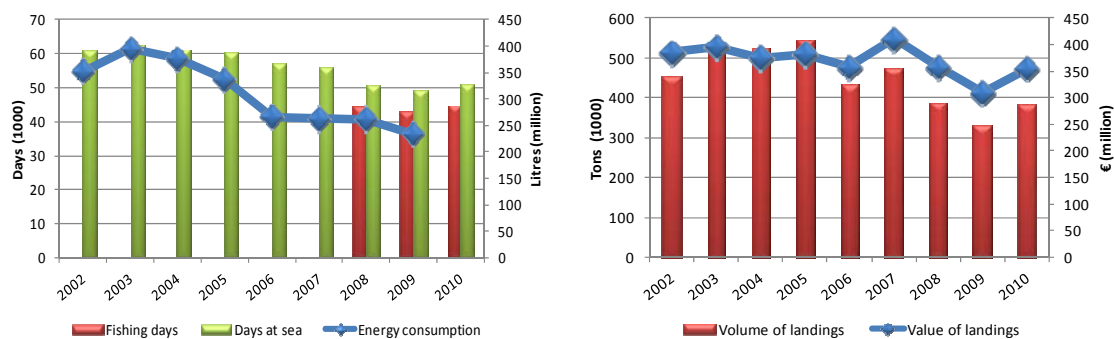
The total number of fishing enterprises in the Dutch fleet was 513 in 2010. The vast majority of fishing enterprises, about 78%, owned a single vessel and 21% of enterprises owned two to five fishing vessels. Only 2 fishing enterprises owned six or more fishing vessels.

Total employment was 5850 jobs and 1805 FTEs in the Dutch fleet in 2009, see figure 7.15.1. The level of employment in the Dutch fishing fleet has remained relatively stable between 2002 and 2009. The total number employed decreased by 15% between 2002 and 2009 while the number of FTEs decreased by 10%. The biggest decrease in employment took place in the year 2005 when a big decommissioning scheme was implemented.

7.15.2 National fleet fishing activity and output

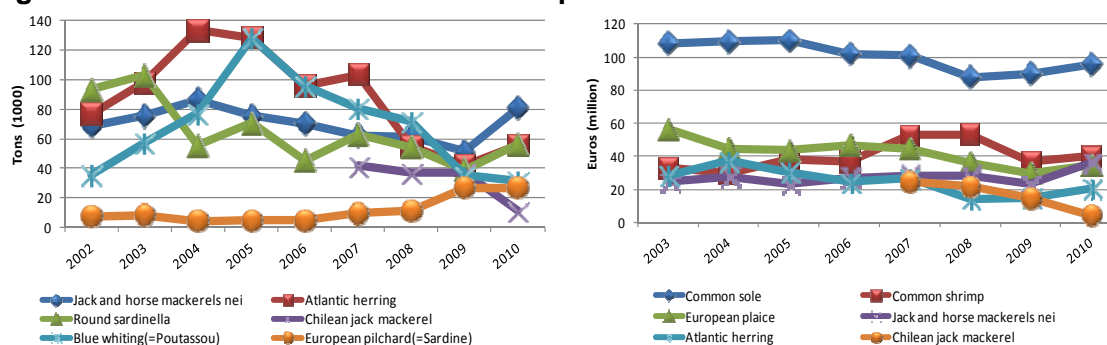
In 2009 the Dutch fishing fleet spent a total of 50 thousand days at sea, 88% of which were actual fishing days. The total number of days at sea decreased in 2005 and 2008 due to the introduction of decommissioning schemes in those years, see figure 7.15.2 (left). The total quantity of fuel consumed by the Dutch fleet in 2009 was 234 million litres. The total quantity of fuel consumed decreased between 2003 and 2009.

Figure 7.15.2 Dutch national fleet fishing effort and landings trends



The total volume of landings by the Dutch fishing fleet in 2009 was 310 thousand tons of seafood. The total volume of landings decreased between 2007 and 2009 (see figure 7.15.2 (right)) mostly because of decreasing quota and decreased capacity. In terms of landings composition, in 2009 horse mackerel was the most common species landed in terms of tonnage (52 thousand tons), followed by herring (42 thousand tons) and sardinella (39 thousand tons), see figure 7.15.3 (left).

Figure 7.15.3 Dutch national fleet main species landed trends



7.15.3 National fleet economic performance

Sole accounted for the highest value of landings (€90 million) by the Dutch national fleet in 2009, followed by shrimps (€37 million) and plaice (€30 million), see figure 7.15.3 (right). In terms of prices of the most important species in terms of landing value, in 2009 sole achieved the highest average price by the Dutch national fleet (€9.60 per kg), followed by shrimps (€2.20 per kg) and plaice (€1.30 per kg), see figure 7.15.4 (left). The prices obtained for plaice and shrimp generally decreased quite severely in 2009. The average price of shrimp declined by about 40%, and about 27% for plaice.

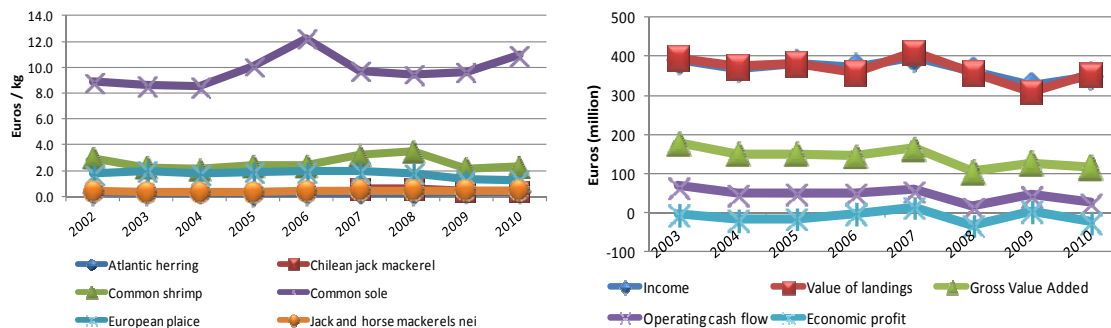
Table 7.15.2 Dutch national fleet economic performance indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)									
Landings						358.0	323.3	345.5	
Direct subsidies						0.0	0.0	0.0	
Other income						2.2	0.8	1.5	
Fishing rights						1.8	2.5	2.2	
Total income	370.8	390.3	369.0	383.1	372.8	397.9	362.0	326.6	349.2
Costs (Million €)									
Crew wages	104.7	109.2	101.8	100.5	94.5	105.3	90.0	80.5	90.5
Unpaid labour value							8.7	8.0	8.6
Energy costs	75.0	74.1	81.4	106.4	108.5	108.1	119.4	72.0	101.8
Repair costs	53.4	51.3	52.3	47.7	44.9	49.6	51.8	54.3	56.2
Variable costs	33.5	36.3	35.8	33.7	31.3	33.0	33.5	28.8	29.7
Fixed costs	46.9	50.5	48.8	44.3	41.7	41.8	45.4	38.8	39.5
Rights costs							5.0	5.0	5.0
Capital costs	72.2	72.5	65.5	65.0	53.7	46.1			
Depreciation costs							35.2	30.1	32.6
Opportunity cost							4.1	4.4	7.7
Profitability indicators (Million €)									
Gross Value added	162.0	178.0	150.7	151.0	146.5	165.5	106.8	127.6	117.0
Operating cash flow	57.3	68.8	48.9	50.6	52.0	60.2	16.8	47.1	26.4
Economic profit	-14.9	-3.7	-16.6	-14.5	-1.7	14.1	-31.0	4.6	-22.5
Capital value (Million €)									
Total invested	422.9	390.4	376.0	346.7	312.0	316.5			
Tangible assets							204.6	165.7	185.2
Fishing rights value							260.1	267.4	
In-years investments							12.9	61.7	

The total amount of income generated by the Dutch national fleet in 2009 was €327 million. This consists of €323 million in landings values, €2,5 million in fishing rights sales and €0.8 million in non fishing income, see table 7.15.2. Between 2002 and 2009 the total income of the Dutch fleet decreased 12%. The total income in 2009 was quite low compared to the total income in 2008 mainly because low prices for shrimps and plaice negatively affected the beam trawl and demersal segments. Besides that a decrease in quota for most main species for the pelagic fleet decreased the total landings of the pelagic fleet significantly. In 2010 the income is estimated to be slightly higher mostly because of an increase in the sole price, the quota in 2010 is also expected to increase slightly leading to an increase in income of about 10%.

The total amount of expenditure by the Dutch national fleet in 2009 was €332 million, see table 7.15.2. The largest expenditure items are crew costs (€88 million) and energy costs (€72 million). The total expenditure in 2009 was significantly lower than in 2008 because of the decrease in fuel price. The fuel price decreased nearly 40% in this year. Between 2002 and 2009 the total expenditure of the Dutch fleet decreased 15% mostly because of a decrease in capacity. In 2010 the fuel price increased quite significantly about 33% compared to 2009 thus the expenditure is expected to increase as well. Table 7.15.2 shows the estimated total expenditure for 2010.

Figure 7.15.4 Dutch national fleet economic performance trends



In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Dutch national fleet in 2009 was €47 million, €128 million and €5 million respectively, see table 7.15.2 and figure 7.15.4 (right). The expected profit of the fleet in 2010 is slightly positive. The beam trawl and demersal segments are expected to make a slight profit (about €10 million). The pelagic fleet is still expected to make a slight loss but due to increased quota the loss will not be as severe as in 2009. In 2009, the Dutch fleet had an estimated capital value of €166 million.

7.15.4 Fleet composition

The Dutch national fleet consisted of 17 fleet segments in 2009. The Dutch fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North Sea. There are six inactive segments consisting of 143 vessels. These vessels are classed as inactive if they did not land any catch in 2009. Six of the active segments made overall losses in 2009 and 4 made an overall profit.

Table 7.15.3 provides a breakdown of key performance indicators for all Dutch fleet segments in 2009. A short description of the five most important segments in terms of total value of landings is given below:

Beam trawl over 40m – 64 vessels make up this segment and are based predominantly in the North Sea. These vessels target mainly sole and plaice. Their total value of landings was €112 million and 392 FTEs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Pelagic trawl over 40m – 13 vessels make up this segment and are based predominantly in the North Sea and North Atlantic. These vessels target a variety of species. Their total value of landings was €108 million and 502 jobs/FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Table 7.15.3 Fleet composition and key indicators in 2009

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DRB	16	1,048	3,622	14	3	0.73	24			0.0	0.0	-0.1	0.6
VL0010	16	1,048	3,622	14	3	0.73	24			0.0	0.0	-0.1	0.6
DTS	51	7,453	20,023	226	133	4.86	9,819	7.7	22.8	11.1	6.0	2.8	16.9
VL0010	12	109	776					0.0	0.0	0.0	0.0	0.0	
VL1824	15	2,009	3,135	60	34	1.56	1,879	2.0	4.9	2.8	1.8	1.0	3.4
VL2440	24	5,335	16,112	166	99	3.31	7,940	5.7	17.9	8.3	4.2	1.8	13.5
INACTIVE	143	5,819	19,684										
VL0010	86	153	2,479										
VL1012	7	62	528										
VL1218	14	216	1,578										
VL1824	7	371	1,148										
VL2440	17	2,070	5,716										
VL40XX	12	2,947	8,235										
PG	202	1,372	15,878	277	110	2.27	2,803	1.2	5.2	1.8	1.0	-0.8	13.2
VL0010	184	1,091	13,784	277	110	2.05	2,803	1.1	4.5	1.1	0.3	-1.4	13.2
VL1012	18	281	2,094			0.22		0.2	0.7	0.7	0.7	0.7	
PGP	9	215	918			0.32							
VL1218	9	215	918			0.32							
TBB	278	48,730	156,075	1,976	1,057	38.22	134,408	60.8	190.5	86.1	42.1	14.3	148.8
VL1218	10	287	1,456	72	34	1.14	1,514	1.1	2.6	0.6	-0.3	-1.1	3.3
VL1824	173	11,200	34,584	783	453	19.36	23,213	18.9	47.9	21.7	9.2	-0.8	44.4
VL2440	31	6,567	24,276	335	177	5.29	22,873	8.4	27.2	7.9	0.6	-3.8	24.0
VL40XX	64	30,676	95,759	786	392	12.43	86,809	32.4	112.7	56.0	32.5	20.0	77.2
TM	13	65,134	72,372	3,354	502	2.74	86,809	262.3	108.0	28.6	-2.0	-18.7	253.7
VL40XX	13	65,134	72,372	3,354	502	2.74	86,809	262.3	108.0	28.6	-2.0	-18.7	253.7
Grand Total	712	129,771	288,572	5,847	1,805	49.14	233,862	332.1	326.6	127.6	47.1	-2.5	433.1

Beam trawl 18-24m – 173 vessels make up this segment and are based predominantly in the North Sea. These vessels target mainly shrimps, while about 20% of this segment targets mainly plaice and sole. Their total value of landings was €48 million and 453 FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Beam trawl 24-40m – 31 vessels make up this segment and are based predominantly in the North Sea. These vessels target mainly plaice and sole. Their total value of landings was €27 million and 335 FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Demersal trawl 24-40m – 24 vessels make up this segment and are based predominantly in the North Sea. These vessels target a variety of species. Their total

value of landings was €18 million and 99 FTEs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Figure 7.15.5 Dutch pelagic over 40m key indicators

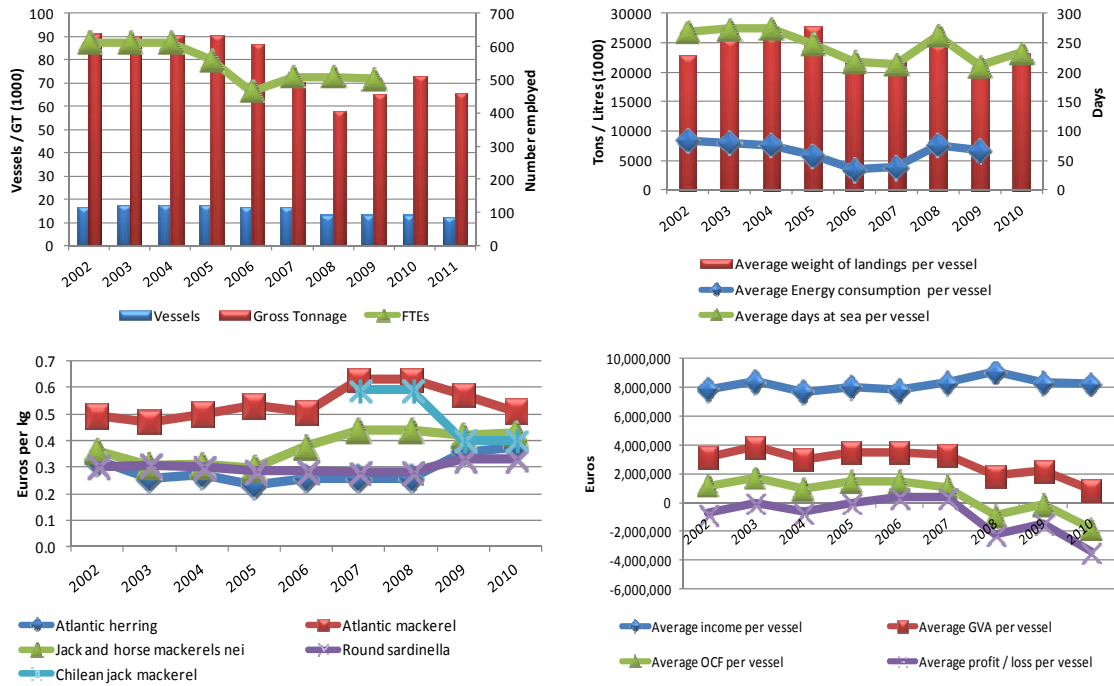
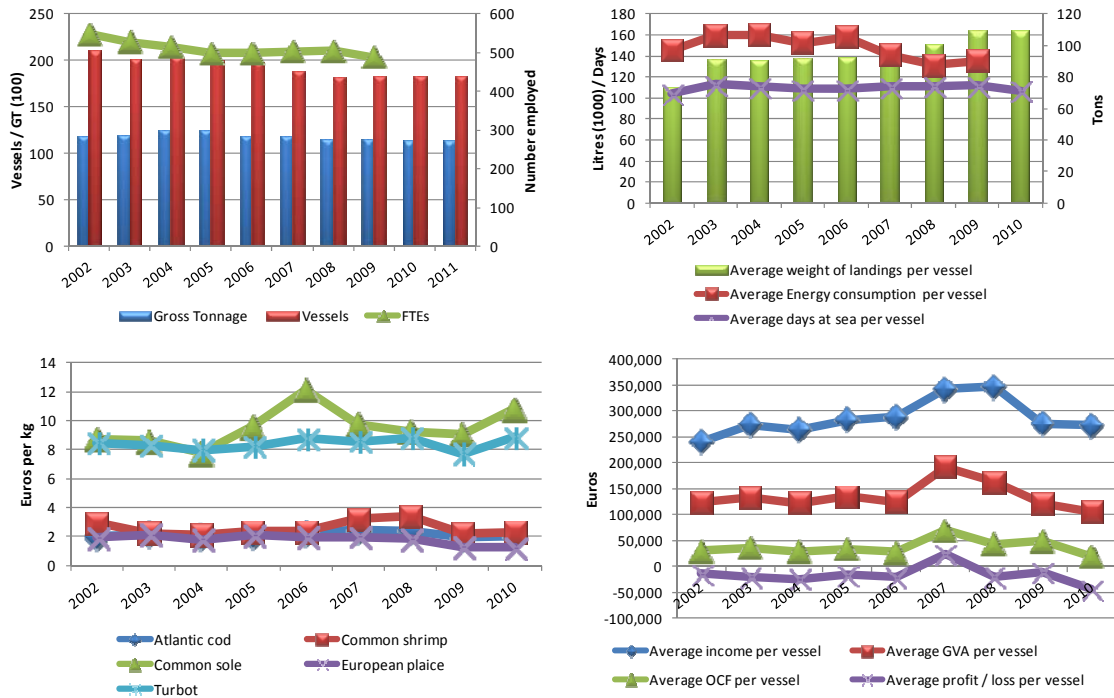


Figure 7.15.6 Dutch beam trawl 12-24m key indicators



7.15.5 Assessment for 2010 and 2011

The structure of the Dutch fleet and effort in 2010 remained about the same compared to 2009. Total effort of the fleet is estimated to be at the same level in 2010, except effort of the pelagic fishing fleet which decreased about 10-15%. In 2011 the structure of the Dutch cutter fleet will change compared to 2010. Some vessels are laid up, some vessels are sold to the offshore industry and other vessels are changing gear (replacing beam trawl in pulse gear).

In 2010 quota for the important species sole increased by just 1% while the quota for plaice was approximately 12% higher compared to 2009. Quota for herring, horse mackerel and blue whiting increased in 2010, but mackerel quotas were lower than the year before. Overall we can say that total quota for the most important demersal fish species rose by 8% while total quota for the main pelagic species rose by 20% in 2010. In 2011 sole quota decreased 1% while plaice quota increased 14%. Quota for all important pelagic species decreased in 2011, for instance blue whiting decreased by more than 85% and other species by 10-25%.

Total revenues for the cutter fleet in 2010 are expected to be 10% higher compared to 2009. Revenues rose due to higher landings and also because of on average higher prices (all species together). Costs however are also expected to be higher, mainly because of increased fuel prices (by 33%). The net result for the cutter fleet is expected to reach the level of €5-10 million. Revenues of the pelagic fleet will be at a higher level (+€15 million) but due to higher costs the net result is expected to be a loss of €5-10 million.

In 2011 revenues are expected to be at the same level of 2010 but costs are expected to be higher due to higher fuel prices. Effort in the cutter fishery is expected to decrease by around 10% compared to 2010. Beam trawl fishery will partly be replaced by sumwing and pulswing fishery and as a result, fuel consumption will decrease. Prices for fuel will increase substantially so total costs will be higher for most fisheries. Landings of fish are expected to be at the same level as 2010 but prices for shrimp and fish (except sole) are expected to be lower (-10%). Revenues of the pelagic fleet seem to be at a lower level but also costs because of a smaller fleet. The net result is expected to be at the zero level.

7.15.6 Data issues

Landings revenue this year was based on official logbook data instead of revenue estimations based on panel results. As the logbook data uses live weight and average monthly prices the total revenues differs from results of the LEI panel. Thus the profits calculated in national reports differ from the profits calculated in this report. The data for the major fishing segments is collected with the use of a panel. The data quality for these segments is good to very good. The data quality of data collected for the passive gears, polyvalent gears and dredges is poor. However these segments are only of minor economic importance and effort has been put into finding reasonable estimates.

7.16 Poland

7.16.1 National fleet structure

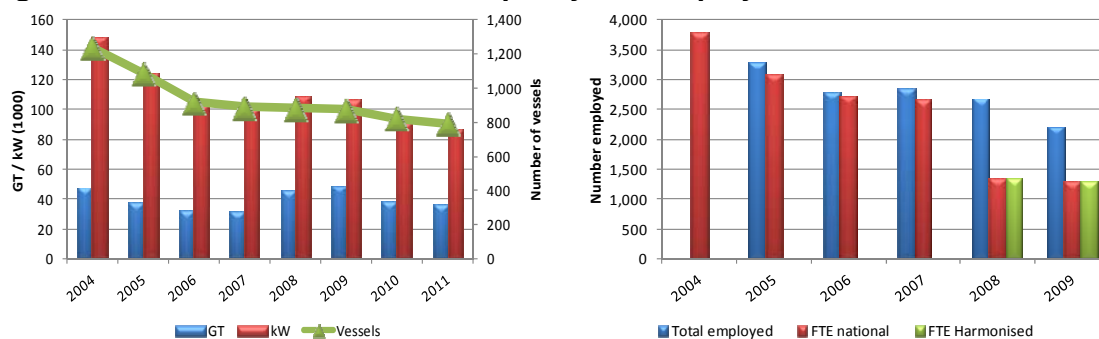
In 2011 the Polish fishing fleet consisted of 792 registered vessels, with a combined gross tonnage of 36,800 GT and total power of 86,200 kW, see Table 7.16.1. The overall average age of vessels was 28.1 years in 2011. The size of the Polish fishing fleet has followed a downward trend between 2004 and 2011. The number of vessels in the Polish fleet declined by 36% or 448 vessels and the total GT and kW of the fleet decreased by 22% and 42% respectively during that period.

Table 7.16.1 Polish national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capacity										
Number of vessels			1,240	1,086	918	889	883	877	823	792
GT (1000)			46.9	37.7	32.7	31.3	45.7	49.1	38.4	36.8
kW (1000)			148.1	123.9	102.8	100.7	108.6	106.4	91.7	86.2
Average age			26.3	26.9	26.4	26.8	27.4	27.6	27.4	28.1
Employment										
Total employed				3,302	2,790	2,848	2,675	2,202		
FTEs			3,795	3,079	2,715	2,664	1,351	1,307		
Effort										
Days at sea (1000)			140.1	110.4	91.2	78.4	70.4	67.3	62.5	
Energy consumption (Million litres)			46.5	35.1	27.7	22.6	16.0	12.5		
Landings										
Weight (1000 tons)			153.9	124.3	104.9	107.8	126.2	212.1	170.8	
Value (Million €)			39.6	38.2	42.2	42.9	34.8	37.3	40.0	
Profitability indicators (Million €)										
Gross Value Added		0.0	0.0	14.5	13.5	19.2	22.3	13.1	21.3	23.0
Operating cash flow		0.0	0.0	5.9	4.8	10.6	12.9	23.4	35.0	33.8
Economic profit		0.0	0.0	0.7	-2.4	6.9	9.7	19.9	30.9	25.3
Capital value (Million €)										
Tangible assets							104.8	130.7	117.8	

The total number of fishing enterprises in the Polish fleet was 698 in 2010. The vast majority of fishing enterprises, 88%, owned a single vessel and 11% of enterprises owned two to five fishing vessels. Only 3 fishing enterprises owned six or more fishing vessels.

Figure 7.16.1 Polish national fleet capacity and employment trends

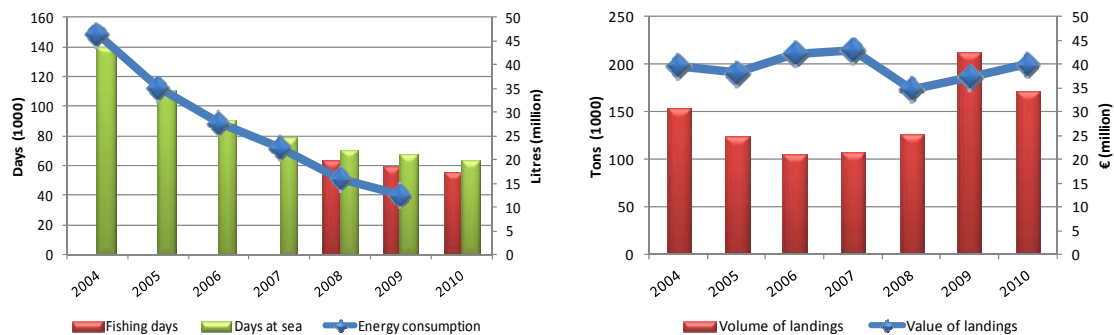


Total employment was 2202 jobs and 1307 FTEs in the Polish fleet in 2009, see Figure 7.16.1. The level of employment in the Polish fishing fleet has decreased between 2004 and 2009. The total number employed decreased by 46% between 2004 and 2009.

7.16.2 National fleet fishing activity and output

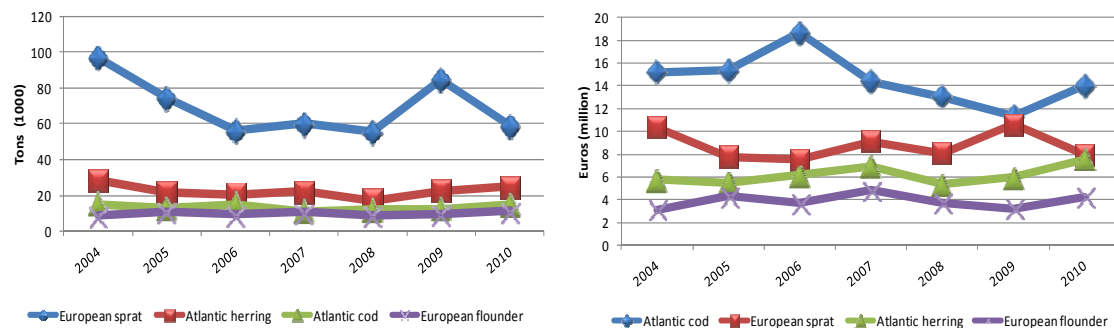
In 2010 the Polish fishing fleet spent a total of 62 thousand days at sea, 90% of which were actual fishing days. The total number of days at sea decreased between 2004 and 2009, see Figure 7.16.2. The total quantity of fuel consumed by the Polish Baltic fleet in 2009 was 12.5 million litres. The total quantity of fuel consumed decreased between 2004 and 2009, see Figure 7.16.2.

Figure 7.16.2 Polish national fleet fishing effort and landings trends



The total volume of landings by the Polish fishing fleet in 2010 was 170.8 thousand tons of which 110 thousand tons of fish constituted Baltic Sea production. The total volume of landings decreased between 2009 and 2010, see Figure 7.16.3. In terms of Baltic Sea landings composition, in 2010 sprat was the most common species landed in terms of tonnage (58.8 thousand tons), followed by herring (24.7 thousand tons) and cod (12.2 thousand tons), see Figure 7.16.3. The recent changes in landings volume were mainly due to high sprat catches which were largely influenced by cooperation between Polish and Swedish companies that commenced in 2008. Polish vessels involved in the business transshipped fish onto Swedish fishing vessels which then landed sprats in Swedish or Danish harbors.

Figure 7.16.3 Polish national fleet main species landed trends



7.16.3 National fleet economic performance

In terms of Baltic Sea landings composition, in 2010 cod accounted for the highest value of landings (€14 million) by the Polish national fleet, followed by sprat (€7.9 million) and herring (€7.6 million), see Figure 7.16.3. The prices obtained for these key species generally increased between 2009 and 2010. In terms of prices, in 2010 cod achieved the highest average price (€0.94 per kg) by the Polish national fleet, followed by herring (€0.30 per kg) and sprat (€0.13 per kg), see Figure 7.16.4.

Table 7.16.2 Polish national fleet economic performance indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)									
Landings							34.8	37.5	40.0
Direct subsidies							21.8	22.9	22.3
Other income							0.7		0.4
Fishing rights									0.0
Total income			39.7	38.9	42.2	43.8	57.3	60.4	62.7
Costs (Million €)									
Crew wages			8.6	8.6	8.6	9.4	11.5	9.2	11.5
Unpaid labour value									0.0
Energy costs			12.9	13.5	11.9	10.8	10.0	6.6	8.3
Repair costs			2.5	2.7	2.5	3.4	3.5	2.8	2.6
Variable costs			6.0	4.6	4.5	4.3	4.1	3.4	3.1
Fixed costs			3.9	4.6	4.1	3.0	4.8	3.5	3.3
Rights costs									0.0
Capital costs			5.2	7.2	3.6	3.2			
Depreciation costs							1.6	1.4	1.5
Opportunity cost							1.9	2.7	7.1
Profitability indicators (Million €)									
Gross Value added	0.0	0.0	14.5	13.5	19.2	22.3	13.1	21.3	23.0
Operating cash flow	0.0	0.0	5.9	4.8	10.6	12.9	23.4	35.0	33.8
Economic profit	0.0	0.0	0.7	-2.4	6.9	9.7	19.9	30.9	25.3
Capital value (Million €)									
Total invested			174.2	154.0	114.0	104.8			
Tangible assets							104.8	130.7	117.8
In-years investments							7.5	2.0	

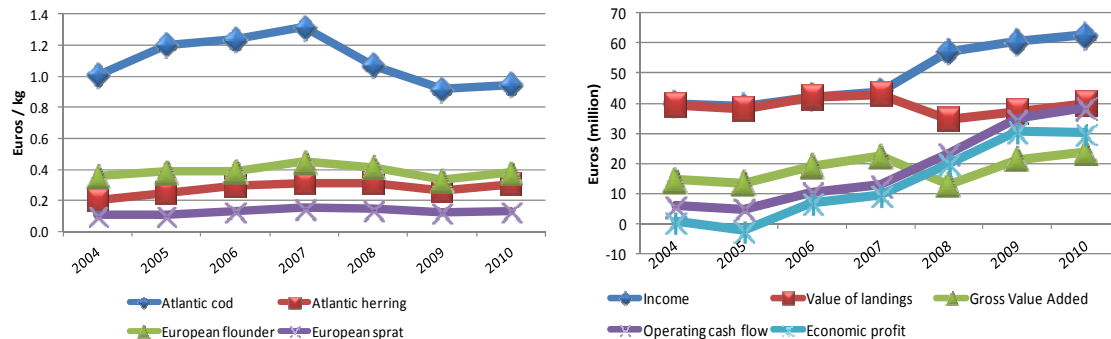
The total amount of income generated by the Polish national fleet in 2009 was €60.4 million. This consisted of €37.5 million in landings values, and €22.9 million in direct subsidies. Direct subsidies consist of money paid out for temporary cessation of fishing activities, according to CR 1198/2006 (art. 24) and CR 744/2008 (article 6). See Table 7.16.2 and Figure 7.16.4. Between 2004 and 2009 the total income of the Polish fleet increased by 52%, however landings value remained relatively stable.

The total amount of expenditure by the Polish national fleet in 2009 was €25.5 million, see Table 7.16.2. The largest expenditure items were crew wages (€9.2 million) and energy costs (€6.6 million). Between 2004 and 2009 the total expenditure of the Polish fleet decreased 25%.

In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Polish national fleet in 2009 was €35.0 million, €21.3 million and €30.9 million respectively, see Table 7.16.2 and Figure 7.16.4. If there were no subsidies, economic profit would be significantly lower, amounting to €12.1 million. In 2009, the

Polish fleet had an estimated capital value of €132.7 million and a return on investment of 25%.

Figure 7.16.4 Polish national fleet economic performance trends



A new cod quota allocation system implemented in Poland in 2009 had influenced economic situation of the fleet significantly. According to the new quota allocation scheme only 1/3 of the cod vessels got permission to fish cod in 2009, the remaining vessels were authorised to receive a financial compensation for temporary ceasing fishing activity (up to 120 days) and suspending cod license. As a consequence of the new system fishing effort and consequently fuel costs (also influenced by lower fuel prices) as well as other variable costs of the fleet decreased. On the other hand, income supported by governmental subsidies increased. This all lead to high profit achieved by the fleet.

7.16.4 Fleet composition

The Polish national fleet consisted of 10 fleet segments in 2009. The Polish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea. There are five inactive segments consisting of 109 vessels. These vessels are classed as inactive if they did not land any catch in 2009. All active segments made overall profit in 2009. Table 7.16.3 provides a breakdown of key performance indicators for all Polish fleet segments in 2009. A short description of the five most important segments in terms of total value of landings is also provided.

Pelagic trawl and seine 24-40m – 61 vessels make up this segment and are based in the Baltic Sea. These vessels target a variety of pelagic species, mainly sprat and herring. Their total value of landings was €16.5 million and 452 jobs/FTEs were supported by this segment in 2009. This fleet segment was profitable in 2009. The pelagic trawl and seine segment is the most important in Polish fisheries in term of produced output. In 2009 this segment accounted for 77% of the Baltic Sea volume of landings and 44% of the value of landed fish. The economic performance of the segment has improved in 2010 compared to 2008 when the vessels were hit by high fuel prices and unexpected earlier closure of cod catches. It is expected that an average income produced by vessels belonging to the pelagic trawl and seine segments will increase by 32% compared to 2009. This may be a result of historically high levels of fish meal prices observed in 2010 and, consequently, an increase in prices for fish caught for reduction.

Table 7. 16.3 Polish fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	25	757	3,010	120	88	2.19	289	1.9	2.4	1.2	1.5	1.3	5.7
VL1218	25	757	3,010	120	88	2.19	289	1.9	2.4	1.2	1.5	1.3	5.7
DTS	85	5,869	20,316	345	260	8.49	3,074	20.9	11.1	4.4	5.4	4.5	25.8
VL1218	52	1,521	7,888	193	138	4.79	1,417	7.0	6.3	2.8	3.5	3.0	11.5
VL1824	22	1,409	5,967	95	62	2.08	725	4.8	2.9	0.8	1.1	0.8	8.4
VL2440	10	1,134	3,085	57	60	1.17	932	4.9	2.0	0.8	0.8	0.6	5.9
VL40XX	1	1,805	3,375			0.46		4.3					
HOK	37	1,339	6,206	160	82	2.24	325	0.3	4.0	0.8	2.6	2.4	9.5
VL1218	37	1,339	6,206	160	82	2.24	325	0.3	4.0	0.8	2.6	2.4	9.5
INACTIVE	109	2,694	10,516						4.9		4.9	4.5	18.9
VL0010	48	207	1,552						0.0		0.0	0.0	2.5
VL0012	10	117	852						1.5		1.5	1.4	1.3
VL1218	38	1,137	4,474									-0.2	8.6
VL1224									2.7		2.7	2.7	
VL1824	4	198	716									0.0	1.3
VL2440	9	1,034	2,923						0.8		0.8	0.6	5.3
PG	556	2,529	21,842	1,154	425	43.94	1,475	11.5	17.9	6.7	12.7	11.8	29.6
VL0010	490	1,758	17,028	919	331	38.63	1,111	8.3	14.0	5.3	10.5	9.9	21.2
VL1012	66	771	4,815	235	93	5.30	364	3.2	3.9	1.4	2.2	2.0	8.5
TM	65	35,956	44,461	423	452	10.48	7,355	177.5	20.0	8.2	7.9	6.4	41.1
VL2440	61	8,720	24,125	423	452	8.29	7,355	101.0	20.0	8.2	7.9	6.4	41.1
VL40XX	4	27,236	20,336			2.20		76.5					
Grand Total	877	49,143	106,350	2,202	1,307	67.35	12,518	212.1	60.4	21.3	35.0	30.9	130.7

Demersal trawl / seine 12m-18m – 52 vessels make up this segment and are based exclusively in the Baltic Sea. These vessels target demersal species - cod and flatfish. Their total value of landings was €4.4 million and 193 jobs were supported by this segment in 2009. This fleet segment was profitable 2009. This is one of the most important segments in Poland due to the fact that it is mostly involved in the Baltic cod fisheries.

Passive gears 0-10m – 490 vessels make up this segment and are based predominantly in the Baltic Sea open waters as well as peninsula areas. These vessels target a variety of salt and fresh water species, cod, herring, flatfish, freshwater bream, roach, European perch. Their total value of landings was €7.3 million and 919 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Gears using hooks 12m-18m – 37 vessels make up this segment and are based exclusively in the Baltic Sea. These vessels target sea trout and salmon. Their total value of landings was €1.4 million and 160 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009, however if it had not received subsidies it would report losses.

Passive gears 10-12m – 66 vessels make up this segment and they are based exclusively in Baltic Sea. These vessels target cod and flatfish. Their total value of landings was €2.3 million and 235 jobs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Figure 7.16.5 Polish pelagic trawl 24-40m key indicators

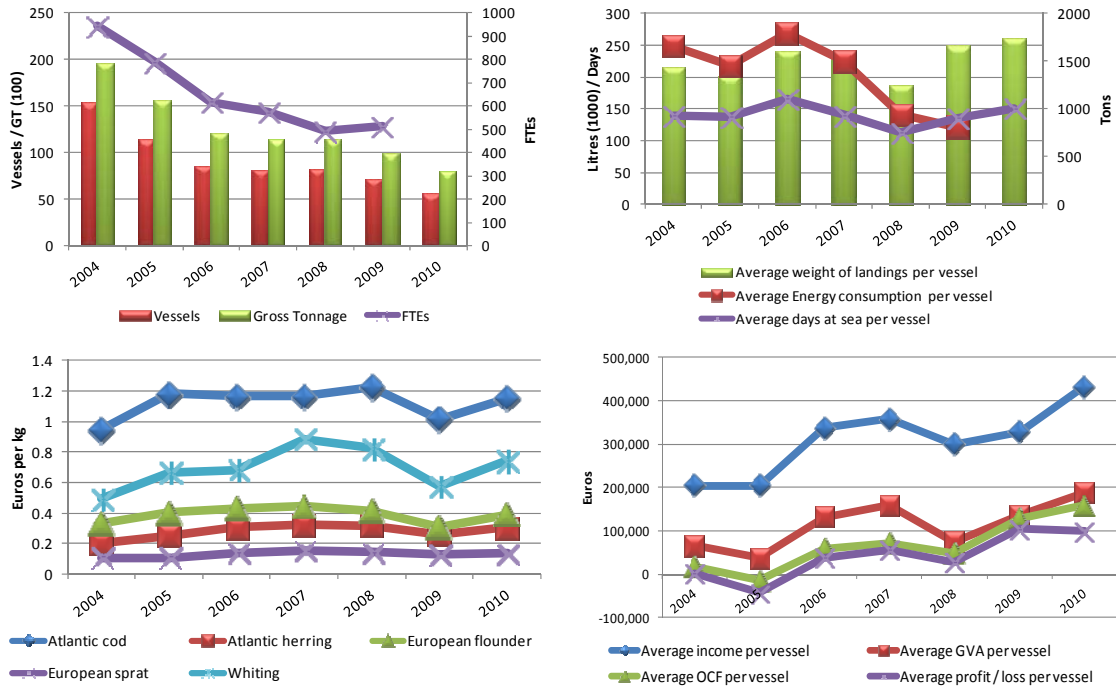
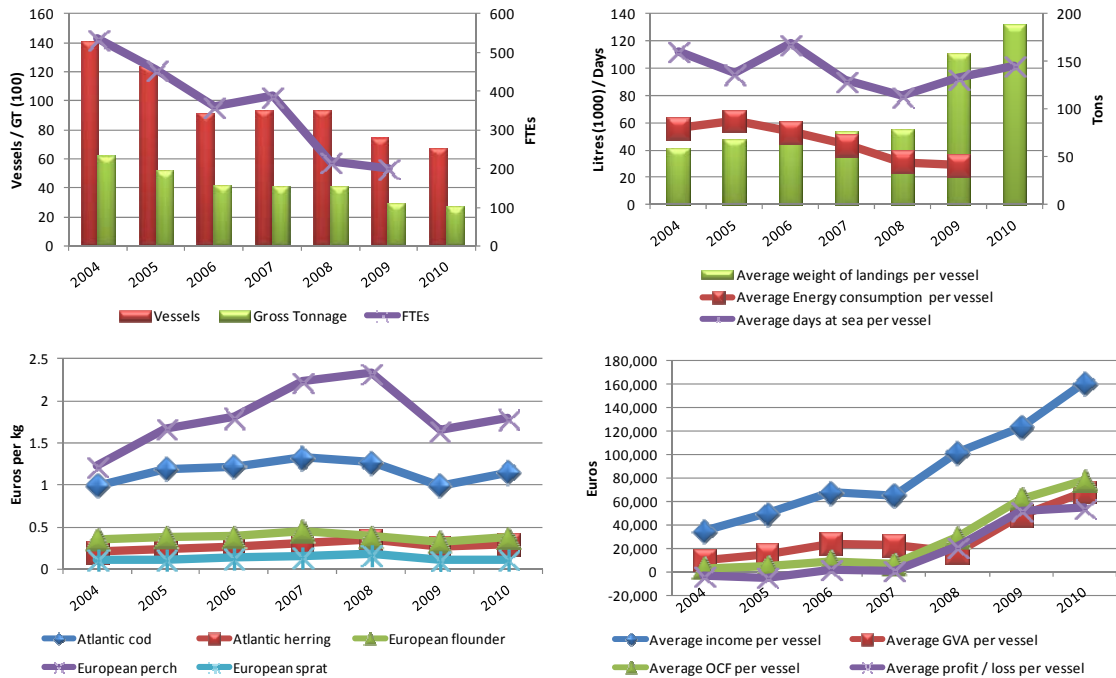


Figure 7.16.6 Polish demersal trawl 12-24m key indicators



7.16.5 Assessment for 2010 and 2011

Provisional data indicates that economic performance of the Polish fleet has improved in 2010 compared to 2009. This is a result of increased value of fish landed what was a consequence of higher cod TAC and generally higher fish prices. Expected landings value for 2010 is 6.5% higher than in 2009. No significant changes in fleet composition took place in 2010, the total number of vessels was slightly (3.8%) lower than in 2009 also effort (sea days) declined slightly – by 7%.

The new cod quota allocating system of rotating suspension of 1/3 of the cod fleet was continued in 2010 and will be in use in 2011. It is expected that similarly to 2009 significant amount of money will be transferred to cod vessels as a financial compensation for suspending cod license and temporary stopping of fishing activity.

TACs for pelagic species (especially sprats) are lower in 2011 than in 2010, however due to low quota utilization in recent years this shouldn't have a negative impact on the economic performance of the pelagic fleet. On the other hand fish meal prices remained close to their historically highest level in the beginning of 2011, which should be another incentive for vessels that are engaged in industrial catches. Since only 50% of the salmon quota has been utilised in recent years, a 15% cut in salmon quota should not deteriorate the economic situation of vessels targeting anadromous species (mainly gears using hooks 12m-18m).

In 2011 TAC for Baltic cod has again increased which should positively influence economic performance of segments targeting demersal species. The main disincentive, negatively influencing economic outcome of the fleet in 2011, will be high fuel prices. It shouldn't however impact profitability of the fleet significantly.

7.16.6 Data issues

Due to confidentiality reasons some data for deep-sea segment could not be provided, only capacity, effort and landings (volume data) have been reported.

7.17 Portugal

7.17.1 National fleet structure

In 2009 the Portuguese fishing fleet consisted of 8,641 registered vessels (total of 5,129 licensed, representing 4,352 vessels from the mainland, 660 from the autonomous region of Azores and 117 from the autonomous region of Madeira), with a combined gross tonnage of 105.7 thousand GT and total power of 368.1 thousand kW, see table see table 7.17.1. The overall average age of vessels was 27 years in 2009. The size of the Portuguese fishing fleet has followed a decreasing trend between 2003 and 2010. The number of vessels between 2003 and 2007 including only the licensed vessels from the mainland, decreased 10% or 451 vessels and a total of 6.8 thousand GT and 20.5 thousand KW of the fleet decreased 8.2% and 7.4% respectively during this period. The number of vessels in the Portuguese fishing fleet between 2008 and 2010 includes vessels licensed and not licensed from mainland, autonomous regions of Azores and Madeira and declined 1.2% or 102 vessels and the total 2.1 thousand GT and 2.4 thousand kW of the fleet decreased by 2% and 0.6% respectively during that period.

Table 7.17.1 Portuguese national fleet key indicators

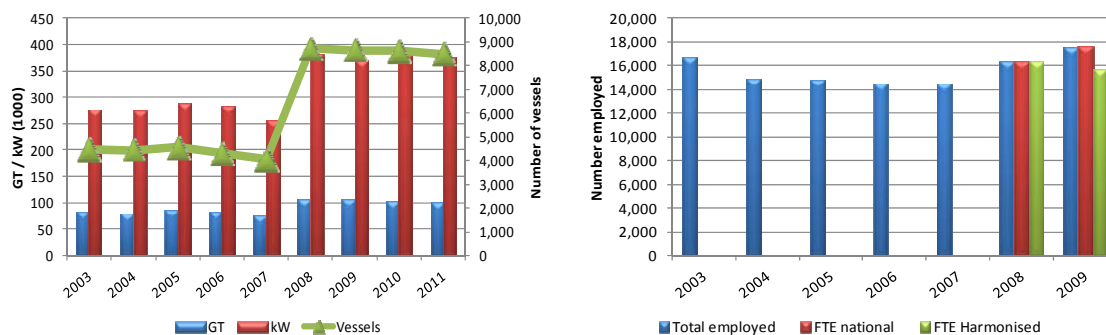
	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capacity									
Number of vessels	4,490	4,434	4,569	4,312	4,039	8,706	8,641	8,604	8,487
GT (1000)	82.5	79.3	86.4	82.9	75.7	104.8	105.7	102.7	100.1
kW (1000)	275.2	274.1	288.8	283.1	254.7	382.0	368.1	379.6	372.7
Average age	19.9	19.0	19.1	21.0	18.3	27.0	27.0	27.8	28.6
Employment									
Total employed	16,605	14,862	14,750	14,445	14,481	16,326	17,511		
FTEs						16,326	17,613		
Effort									
Days at sea (1000)	288.2	309.5	333.0	321.2	290.3	411.0	392.2	309.5	
Energy consumption (Million litres)						120.2	122.8		
Landings									
Weight (1000 tons)	179.3	161.4	164.6	172.2	177.1	201.2	181.0	205.5	
Value (Million €)	304.6	257.8	269.4	315.1	384.4	402.0	356.1	381.0	
Profitability indicators (Million €)									
Gross Value Added	229.8	228.7	232.0	220.5	185.9	256.4	223.4	251.1	
Operating cash flow	102.4	117.8	129.2	121.2	66.7	101.1	99.4	110.7	
Economic profit	44.4	51.2	34.8	50.2	0.7	7.1	-38.0	-52.3	
Capital value (Million €)									
Tangible assets						1,103.1	996.3	1,050	
Fishing rights						0.0	0.0		

Between 2003 and 2007 the data is only from licensed mainland fleet.

The total number of fishing enterprises in the licensed Portuguese fleet was 4,731 in 2009. The vast majority of fishing enterprises, 89.5%, owned a single vessel and 10.4% of enterprises owned two to five fishing vessels. Only 3 fishing enterprises owned six or more fishing vessels.

Total employment was 17,511 jobs and 17,613 FTEs in the Portuguese fleet in 2009, see Figure 7.17.1. Total employment in the Portuguese fishing fleet increased 5.5% between 2003 and 2009.

Figure 7.17.1 Portuguese national fleet capacity and employment trends

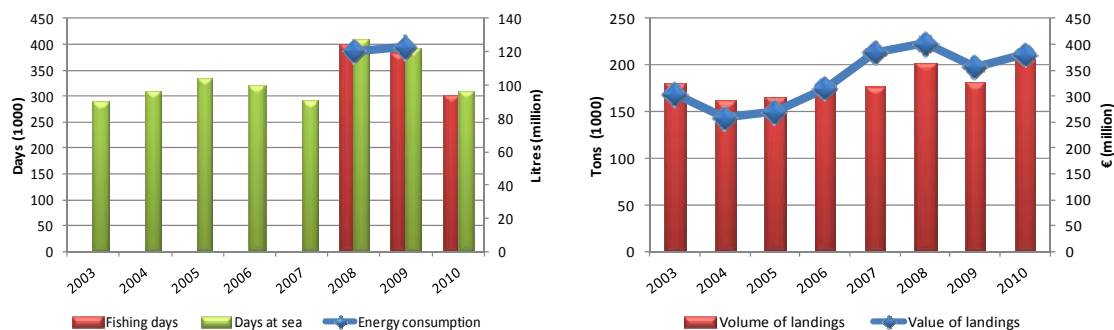


Between 2003 and 2007 the data is only from licensed mainland fleet.

7.17.2 National fleet fishing activity and output

In 2009 the Portuguese fishing fleet spent a total of 392.2 thousand days at sea, 97.4% of which were actual fishing days. The total number of days at sea decreased since 2005 with exception of 2008, see Figure 7.17.2. The total quantity of fuel consumed by the Portuguese fleet in 2009 was 122.8 million litres. The total quantity of fuel consumed increased between 2008 and 2009, see Figure 7.17.2.

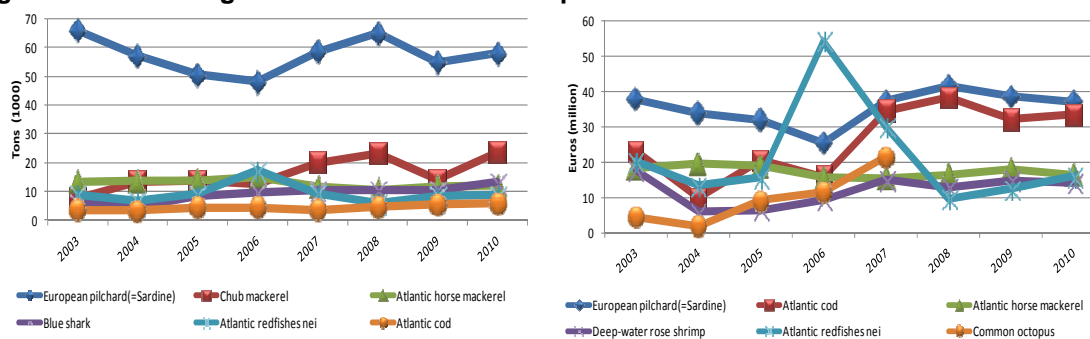
Figure 7.17.2 Portuguese national fleet fishing effort and landings trends



Between 2003 and 2007 the data is only from licensed mainland fleet.

The total volume of landings by the Portuguese fishing fleet in 2009 was 181 thousand tons of seafood. The total volume of landings remained relatively stable between 2003 and 2010 with a slight decrease in 2009, see figure 7.17.2 (right). The Portuguese coast is a multi specific area with a large diversity of species, in terms of landings composition in 2009 European pilchard (sardine), was the most common species landed in terms of tonnage (54.9 thousand tons), followed by chub mackerel (13.9 thousand tons) and Atlantic horse mackerel (11.8 thousand tons), see figure 7.17.3. Landings recorded from 2003 to 2009 of some species remained stable over the period. In the case of European pilchard (sardine) and chub mackerel there was a decrease between 2008 and 2009 rising again to normal levels. The main species landed, European pilchard (sardine), represents 31% of the total volume landed, its catch in ICES Division IXa mostly from the purse-seine fleet but also by trawlers.

Figure 7.17.3 Portuguese national fleet main species landed trends



Between 2003 and 2007 the data is only from licensed mainland fleet.

7.17.3 National fleet economic performance

In 2009 European pilchard (sardine) accounted for the highest value of landings (€37.5 million) by the Portuguese national fleet, followed by Atlantic cod (€32.3 million) and common octopus (€24.7 million), see figure 7.17.3 (right). In terms of prices, in 2009 Deep-water rose shrimp achieved the highest average price by the Portuguese national fleet (€8.5 per kg), followed by Atlantic cod (€6.1 per kg) and common octopus (€3.6 per kg), see figure 7.17.4 (left). The prices obtained for these key species have generally decreased since 2007.

Table 7.17.2 Portuguese national fleet economic performance indicators

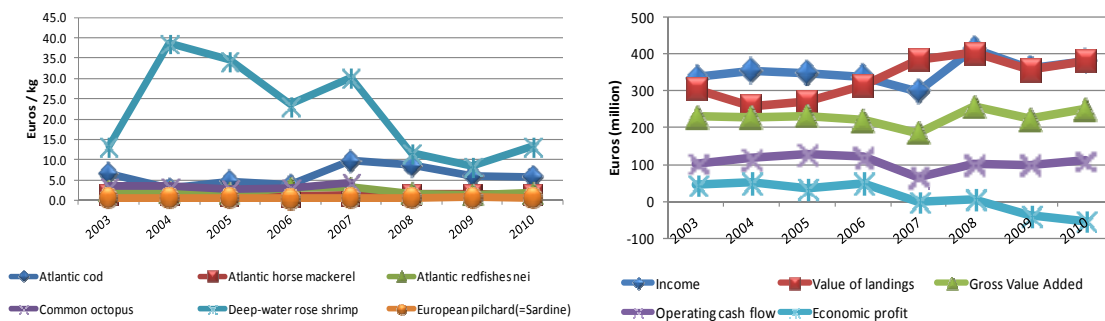
	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)								
Landings						414.7	361.5	381.0
Direct subsidies						0.0	0.0	0.0
Other income						0.0	0.0	0.0
Fishing rights						0.0	0.0	0.0
Total income	335.9	354.0	348.4	338.5	298.1	414.7	361.5	381.0
Costs (Million €)								
Crew wages	127.4	110.9	102.8	99.3	119.2	155.4	123.9	140.4
Unpaid labour value						0.0	0.0	0.0
Energy costs	44.7	44.2	43.8	48.7	53.7	72.7	57.9	62.4
Repair costs	28.0	36.2	37.9	38.1	21.4	24.1	22.7	17.9
Variable costs	33.4	44.9	34.7	31.2	37.1	35.8	37.4	29.5
Fixed costs						25.6	20.2	20.1
Rights costs						0.0	0.0	0.0
Capital costs	58.0	66.6	94.4	71.0	66.0			
Depreciation costs						74.4	86.1	80.2
Opportunity cost						19.5	51.4	82.8
Profitability indicators (Million €)								
Gross Value added	229.8	228.7	232.0	220.5	185.9	256.4	223.4	251.1
Operating cash flow	102.4	117.8	129.2	121.2	66.7	101.1	99.4	110.7
Economic profit	44.4	51.2	34.8	50.2	0.7	7.1	-38.0	-52.3
Capital value (Million €)								
Tangible assets						1,103.1	996.3	1,049.7
Fishing rights value						0.0	0.0	
In-years investments						20.8	20.3	

Between 2003 and 2007 the data is only from licensed mainland fleet.

The total amount of income generated by the Portuguese national fleet in 2009 was around €361.5 million. This consisted of landings values; there is no income from fishing

rights sales. Data on income direct subsidies was not available at the time, see table 7.17.2 and figure 7.17.4 (left). Between 2003 and 2007 the total income of the Portuguese fleet remained relatively stable and increased in 2008, rising again to normal. The total amount of expenditure by the Portuguese national fleet in 2009 was €262.1 million, see table 7.17.2. The largest expenditure items are crew wages (€123.9 million) and energy costs (€57.9 million). Between 2003 and 2010 the total expenditure of the Portuguese fleet followed the trend as the total amount of income. In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Portuguese national fleet in 2009 was €99.4 million, €223.4 million and €-38 million respectively, see table 7.17.2 and figure 7.17.4 (right). In 2009, the Portuguese fleet had an estimated capital value of €996.3 million and a return on investment of 2%.

Figure 7.17.4 Portuguese national fleet economic performance trends



Between 2003 and 2007 the data is only from licensed mainland fleet.

The decrease in economic profit mainly derives from the impact of increased fuel prices that occurred in 2008, which ran into 2010.

7.17.4 Fleet composition

The Portuguese national fleet (mainland and Autonomous Region of Azores and Madeira) consisted of 48 fleet segments in 2009. The Portuguese fleet is highly diversified with a broad range of vessel types (9 type of gears with different vessel length) targeting different species predominantly in the Portuguese Exclusive Economic Zone. There are six inactive segments consisting of 3,512 vessels. These vessels are classed as inactive if they did not have any day of activity or annual permit to operate in 2009. 23 of the active segments made overall losses in 2009 and 21 made an overall profit.

The Azorean fishing fleets are all included in the polyvalent passive and active gear segments. The Area 27 polyvalent passive and active gear 24-40m segment is exclusively from the Azores and targets skipjack tuna, bigeye tuna, blue jack mackerel and blackspot and seabream.

The Madeiran fishing fleet belongs exclusively to the following segments: Polyvalent mobile and passive 0-18m and hooks 0-12m, polyvalent mobile gears 0-10m and purse seine 12-24m operating in other fishing regions. These segments fish mostly around the islands of Madeira, Porto Santo, Desertas e Selvagens and seamounts located in the Madeiran Economic Exclusive Zone (CECAF 34.1.2.), targeting black scabbardfish, big eye tuna, blue jack mackerel and blue shark.

Table 7.17.3 provides a breakdown of key performance indicators for all Portuguese fleet segments in 2009.

Table 7.17.3 Portuguese fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	749	5,622	30,846	2,021	1,666	41.43	5,604	7.3	28.7	20.7	10.7	-0.1	84.4
VL0010	609	784	9,750	910	543	19.59	644	0.8	7.3	5.6	3.7	1.5	16.3
VL1012	24	209	1,746	83	77	3.01	245	0.4	2.4	1.9	1.2	0.7	4.2
VL1218	86	2,097	11,519	661	670	13.53	2,472	3.7	11.8	8.5	4.0	-0.7	35.4
VL18XX	30	2,532	7,831	367	376	5.30	2,244	2.3	7.2	4.7	1.8	-1.6	28.5
DRB	70	525	4,532	198	156	7.50	1,303	1.4	2.2	1.3	-1.2	-2.5	10.3
VL0010	32	111	1,550	68	59	3.17	337	0.3	0.5	0.3	0.1	-0.2	2.2
VL1012	22	187	1,534	69	46	2.69	583	0.6	0.9	0.6	0.3	-0.2	3.7
VL1218	16	227	1,448	61	52	1.64	383	0.5	0.8	0.4	-1.6	-2.1	4.4
DTS	207	43,898	79,684	1,532	1,557	30.52	58,832	41.0	105.8	58.0	23.2	-13.8	299.2
VL0010	81	212	2,797	280	303	7.95	2,706	0.4	7.9	5.3	1.4	0.9	2.2
VL1012	9	78	426	29	38	0.85	94	0.1	0.3	0.2	0.1	-0.1	1.6
VL1218	12	416	2,059	62	62	1.84	1,028	0.8	2.4	1.6	0.8	0.1	5.2
VL1824	10	1,160	3,571	62	65	1.66	2,366	0.6	5.6	3.5	1.4	-0.1	10.2
VL1840	8	1,876	4,875	73	64	0.99	4,758	1.2	5.6	0.6	-0.4	-2.0	13.6
VL2440	74	15,067	38,276	562	538	14.25	27,051	17.7	43.3	21.7	9.5	-6.1	131.2
VL40XX	13	25,089	27,680	465	487	2.99	20,829	20.1	40.7	25.1	10.4	-6.5	135.3
FPO	474	2,473	22,021	1,091	982	44.74	2,942	6.0	18.2	13.4	7.9	2.1	43.5
VL0010	369	795	11,809	514	407	31.07	511	2.7	5.6	4.4	3.4	1.4	15.9
VL1012	54	471	3,782	182	177	6.58	512	1.2	3.9	2.8	1.6	0.4	9.4
VL1224	51	1,207	6,430	396	398	7.10	1,919	2.1	8.7	6.2	2.9	0.3	18.1
HOK	474	17,214	49,018	1,731	1,750	43.26	21,370	26.7	68.6	38.5	19.0	-5.1	164.4
VL0010	269	257	5,174	361	346	16.82	530	0.7	5.5	4.5	2.7	2.0	5.2
VL0012	59	174	1,910	127	112	0.70	145	0.2	2.0	1.7	0.2	0.0	1.9
VL1012	16	143	1,295	55	55	1.56	184	0.3	1.3	0.9	0.6	0.3	2.9
VL1218	50	1,317	7,475	477	546	8.71	2,579	5.0	13.3	9.0	2.7	0.3	18.1
VL1824	34	3,033	9,138	321	319	5.69	4,719	5.5	14.8	8.5	3.3	-1.3	33.6
VL24XX	46	12,291	24,026	391	373	9.77	13,214	15.0	31.7	13.9	9.5	-6.4	102.8
INACTIVE	3,512	17,582	64,150									-26.6	207.3
VL0010	3,299	2,705	21,133									-7.9	65.7
VL1012	56	551	3,273									-1.1	8.4
VL1218	77	1,507	8,226									-3.3	25.9
VL1824	36	1,846	8,438									-3.5	23.2
VL2440	38	6,702	17,697									-7.3	57.7
VL40XX	6	4,271	5,384									-3.5	26.3
MGP	24	24	248	41	30	0.94	11	0.1	0.4	0.7	0.2	0.1	0.1
VL0010	24	24	248	41	30	0.94	11	0.1	0.4	0.7	0.2	0.1	0.1
PGP	1,693	4,563	53,474	4,208	3,510	104.69	9,730	7.7	35.9	25.1	15.6	2.9	98.3
VL0010	1,618	2,908	45,270	3,763	3,084	97.68	8,087	6.1	28.3	19.5	12.7	5.0	58.3
VL1012	24	216	1,714	107	102	1.98	398	0.4	2.0	1.5	0.8	0.3	4.2
VL12XX	51	1,438	6,491	338	324	5.04	1,245	1.3	5.6	4.1	2.1	-2.4	35.8
PMP	1,236	7,067	48,359	4,277	3,761	98.20	13,773	16.0	46.4	24.3	12.5	-0.3	102.1
VL0010	1,085	1,872	25,063	3,175	2,740	77.91	5,556	6.3	22.3	14.0	8.1	3.3	37.9
VL0018	7	66	707	33	33	1.20	163	0.1	0.8	0.5	0.2	0.1	1.0
VL1012	71	627	6,594	401	321	9.21	1,577	1.8	1.6	-0.7	-1.1	-2.5	10.8
VL1224	50	964	6,035	380	380	7.50	1,478	2.2	3.2	2.0	0.5	-1.4	14.9
VL2440	23	3,538	9,960	288	288	2.39	4,999	5.6	18.5	8.5	4.8	0.2	37.5
PS	202	5,783	31,128	2,413	2,219	22.05	9,224	74.9	55.4	41.7	11.4	-0.1	93.2
VL0010	57	187	2,122	486	292	3.67	296	2.3	2.3	1.8	-0.7	-1.2	3.8
VL1012	34	298	2,520	273	285	3.69	612	4.8	5.3	4.1	2.2	1.5	5.7
VL1218	37	762	5,041	352	352	4.30	896	10.5	8.4	6.3	2.4	1.1	11.0
VL1224	5	208	1,180	65	65	1.03	163	0.9	0.8	0.6	0.0	-0.2	2.3
VL1824	52	2,897	14,460	865	867	6.84	5,024	38.1	24.4	18.2	3.7	-1.5	41.8
VL2440	17	1,431	5,805	372	357	2.51	2,233	18.4	14.2	10.7	3.8	0.2	28.7

A short description of the five most important segments in terms of total value of landings is given below:

Demersal trawl and seine 24-40m – 74 vessels make up this segment and are based predominantly in the Portuguese Economic Exclusive Zone. These vessels target a variety of species. Their total value of landings was €43.3 million and 562 jobs/FTEs were supported by this segment in 2009. This fleet segment made losses in 2009. This segment is the most important segment fleet of Portuguese National in landings value. Operate mainly in Portuguese or Spanish Economic Exclusive Zone.

Figure 7.17.5 Portuguese demersal trawl 24-40m key indicators



Demersal trawl and seine over 40m – 13 vessels make up this segment and are based predominantly in NAFO, Irminger sea, Norway and Svalbard. These vessels target a variety of species, predominantly cod and Atlantic Red Fish. Their total value of landings was €40.7 million and 465 jobs/FTEs were supported by this segment in 2009. This fleet made losses in 2009.

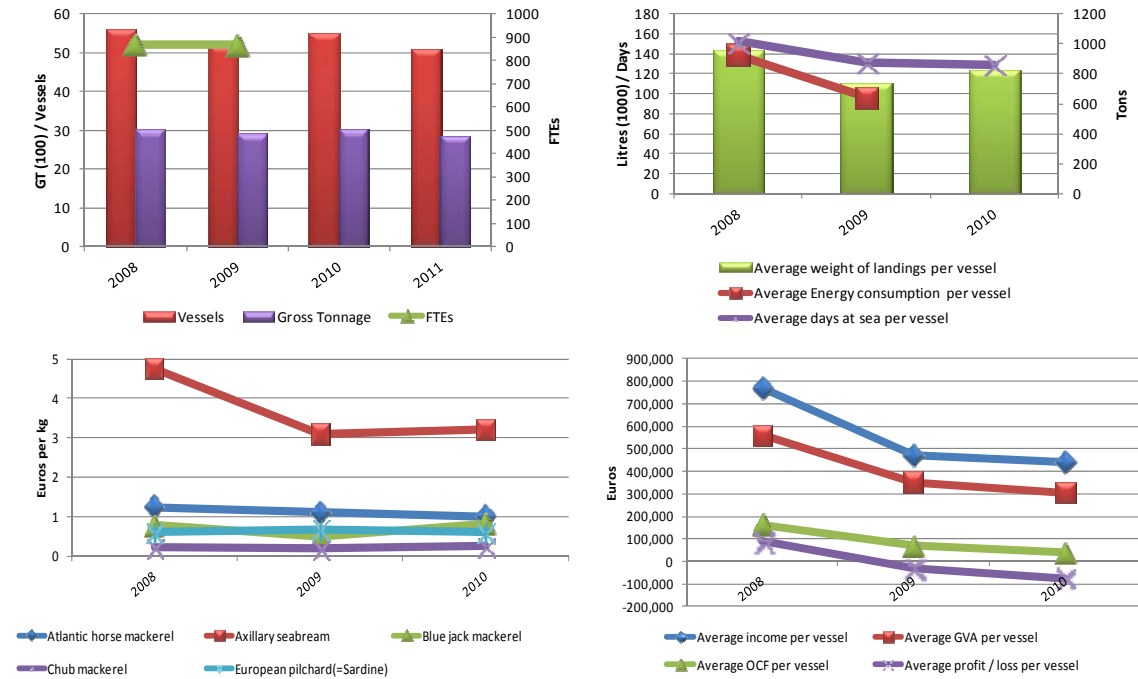
Hooks over 24m – 46 vessels make up this segment and are based predominantly in the Atlantic Ocean. These vessels operate in drifting pelagic longline fisheries, targeting swordfish but catching a considerable amount of other highly migratory species such as blue sharks and tuna, and also in a deep water longline fishery targeting black scabbard. Their total value of landings was €31.7 million and 391 jobs/FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Polyvalent passive gears 0-10m – 1618 vessels make up this segment and they are based predominantly in the exclusively in Portuguese Economic Exclusive Zone. These vessels often use several gears during the same trip, depending on the species availability. This fishery also uses different gears by season, targeting mainly hake, cuttlefish, conger, octopus, mackerel, sole and seabream. Their total value of landings

was €28.3 million and 3763 jobs/FTEs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Purse seine 18-24m – 52 vessels make up this segment and are based predominantly in the ICES division IXa. These vessels target mainly European pilchard (sardine) and other pelagic species. Their total value of landings was €24.4 million and 865 jobs/FTEs were supported by this segment in 2009. This fleet segment made losses in 2009. This segment is a very important segment for the Portuguese national fleet, because it produces the highest landings volume.

Figure 7.17.6 Portuguese purse seine 18-24m key indicators



7.17.5 Assessment for 2010 and 2011

In 2010 and 2011 there were no significant changes in structure of the fleet. There is an overall decreasing trend in vessel numbers and capacity, both in tonnage (GT) and power (KW). There was also a slight decrease in the number of licensed vessels, as result of no permission/license for operating in these years or for the withdrawal of some vessels, measures implemented as part of the plan to adjust fishing effort. Portuguese landings are expected to increase. Provisional data gives an overall landing value of 206 thousand tons for 2010.

7.17.6 Data issues

The Portuguese national fleet is dominated by small scale artisanal fishing vessels, which are the most difficult to obtain accurate data, due to their activity characteristics: polyvalent vessels with many gears, owners without organized legal accounting and a wide variety of species landed.

7.18 Romania

7.18.1 National fleet structure

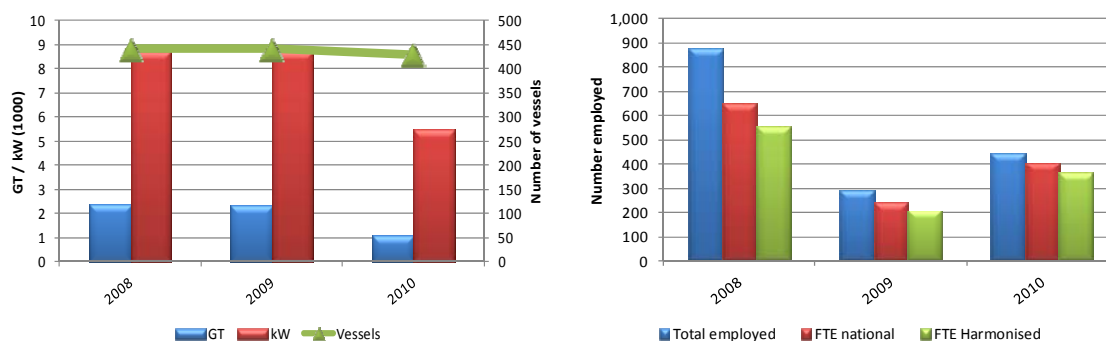
In 2010 the Romanian fishing fleet consisted of 430 registered vessels, with a combined gross tonnage of one thousand GT and total power of 5.4 thousand kW, see table 7.18.1. The overall average age of vessels was 20.7 years in 2010. The size of the Romanian fishing fleet decreased between 2009 and 2010. The number of vessels decreased by 11, while the total GT and kW decreased by 55% and 37% respectively during that period, see figure 7.18.1 (left).

Table 7.18.1 Romanian national fleet key indicators

	2008	2009	2010
Capacity			
Number of vessels	441	441	430
GT (1000)	2.3	2.3	1.0
kW (1000)	8.7	8.7	5.4
Average age	18.5	20.8	20.7
Employment			
Total employed	875	289	444
FTEs	649	244	403
Effort			
Days at sea (1000)	3.73	6.32	6.53
Energy consumption (Million litres)	0.11	0.27	0.21
Landings			
Weight (1000 tons)	0.44	0.29	0.23
Value (Million €)	0.72	0.59	0.49
Profitability indicators (Million €)			
Gross Value Added	0.49	0.48	0.36
Operating cash flow	0.02	0.27	0.10
Economic profit	-0.03	0.26	0.07

The total number of fishing enterprises in the Romanian fleet was 43 in 2010. Only 42% of enterprises owned a single vessel; a further 42% owned two to five fishing vessels, while 7 fishing enterprises owned six or more fishing vessels.

Figure 7.18.1 Romanian national fleet capacity and employment trends

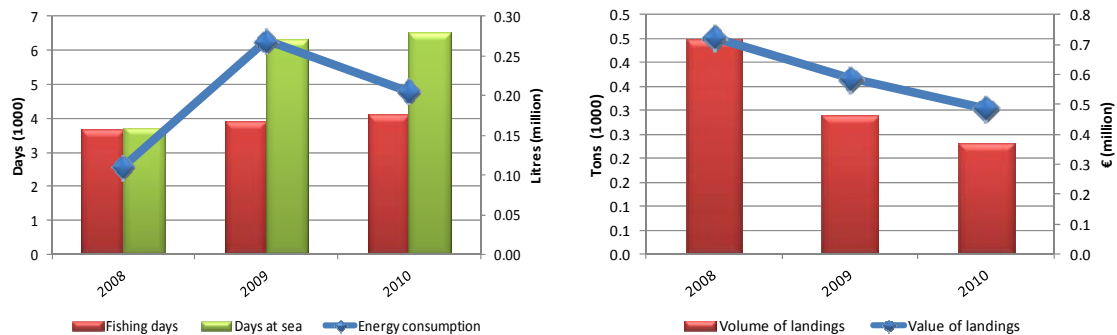


Total employment was 444 jobs and 403 FTEs in the Romanian fleet in 2010, see table 7.18.1. The level of employment in the Romanian fishing fleet decreased significantly from 2008 to 2009 and then increased again in 2010, see figure 7.18.1 (right).

7.18.2 National fleet fishing activity and output

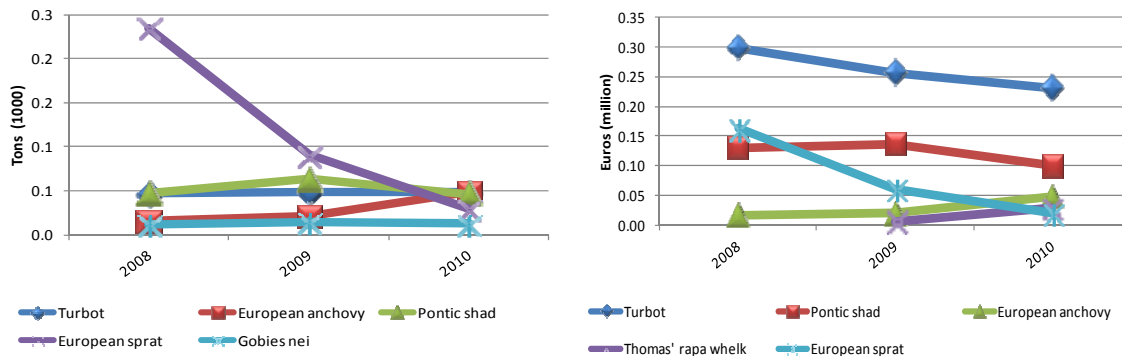
In 2008 the Romanian fishing fleet spent a total of 6.5 thousand days at sea, 63% of which were actual fishing days. The total number of days at sea remained relatively stable between 2009 and 2010, after an apparent significant increase from 2008 to 2009, see figure 7.18.2 (left). The total quantity of fuel consumed by the Romanian fleet in 2010 was 200 thousand litres, a decrease of around 20% compared to 2009.

Figure 7.18.2 Romanian national fleet fishing effort and landings trends



The total volume of landings by the Romanian fishing fleet in 2010 was 230 tons of seafood. The total volume of landings decreased by 48% between 2008 and 2010, see figure 7.18.2 (right). In 2010 turbot was the most common species landed in terms of volume (48 tons), followed by anchovy (48 tons) and then Pontic shad (5 tons), see figure 7.18.3 (left).

Figure 7.18.3 Romanian national fleet main species landed trends



7.18.3 National fleet economic performance

In 2010 Turbot accounted for the highest value of landings by the Romanian national fleet (€231 thousand), followed by pontic shad (€99 thousand) and then European anchovy (€47 thousand); see figure 7.18.3 (right). In terms of prices, in 2010 turbot achieved the highest average price per kilo by the Romanian national fleet (€4.8 per kg),

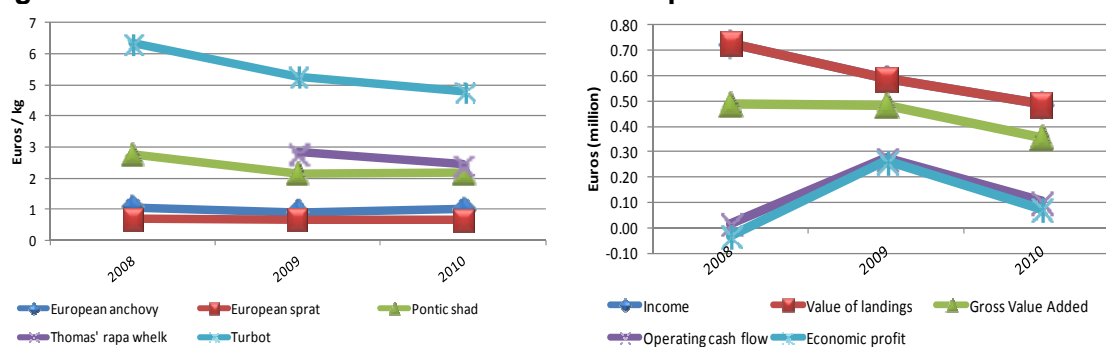
followed by Thomas rapa whelk (€2.5 per kg) and Pontic shad (€2.2 per kg), see figure 7.18.4 (left).

Table 7.18.2 Romanian national fleet economic performance indicators

	2008	2009	2010
Income (Million €)			
Landings	0.72	0.59	0.49
Direct subsidies	0.00	0.00	0.00
Oter income	0.00	0.00	0.00
Fishing rights	0.00	0.00	0.00
Total income	0.72	0.59	0.49
Cost (Million €)			
Crew wages	0.47	0.21	0.20
Unpaid labour value	0.00	0.00	0.00
Energy costs	0.13	0.06	0.21
Repair costs	0.05	0.03	0.03
Variable costs	0.05	0.02	0.01
Fixed costs	0.00	0.00	0.00
Depreciacion costs	0.05	0.01	0.01
Opportunity cost	0.00	0.00	0.00
Profitabilit indicators (Million €)			
Gross Value added	0.49	0.48	0.24
Operating cash flow	0.02	0.27	0.04
Economic profit	-0.03	0.26	0.03

The total amount of income generated by the Romanian national fleet in 2010 was €490 thousand, which consisted solely of income from landings, see table 7.18.2. The total income of the Romanian fleet decreased 19% between 2008 and 2009 and a further 17% between 2009 and 2010. The total costs incurred by the Romanian national fleet were €450 thousand in 2010. The largest expenditure items were fuel costs (€210 thousand) and the crew wages (€200 thousand). Between 2008 and 2009 the total expenditure of the Romanian fleet decreased 54% and then increased 41% in 2010 compared to 2009. In terms of profitability, the total amount of GVA, OCF and economic profit generated by the Romanian national fleet in 2010 was €240 thousand, €40 thousand and €30 thousand respectively. There was an economic growth in 2009 compared to 2008 but followed by a decrease in 2010.

Figure 7.18.4 Romanian national fleet economic performance trends



7.18.4 Fleet composition

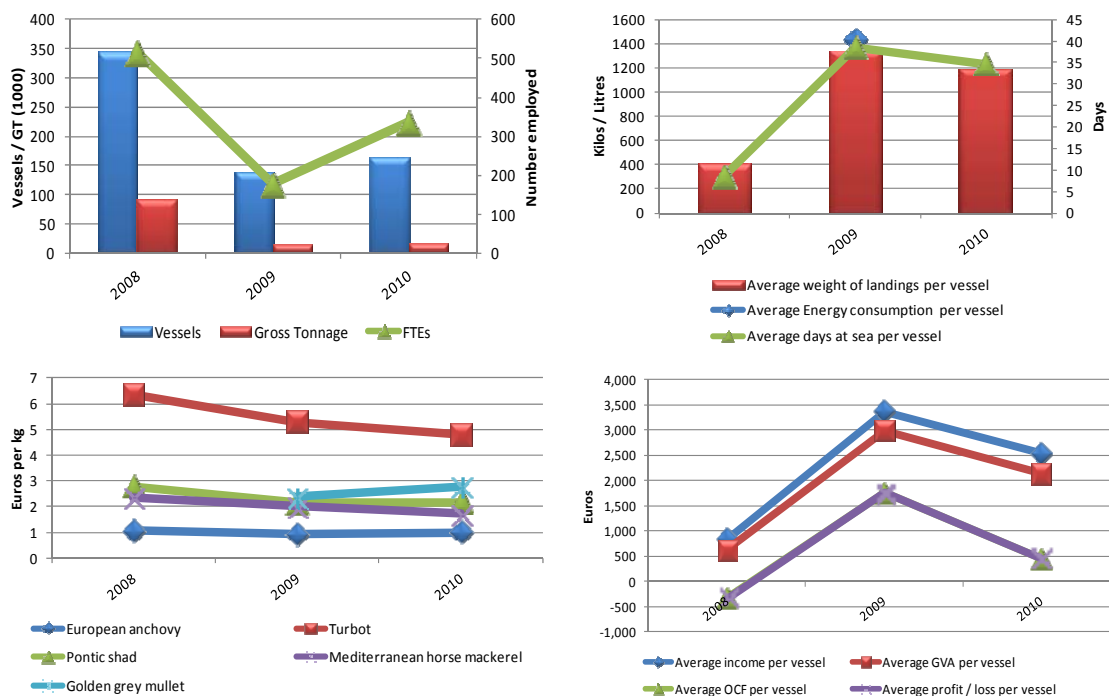
In 2010 the Romanian national fleet consisted of two main fleet active segments in 2010: 0-6m and 6-12m. Table 7.18.3 provides a breakdown of key performance indicators for all Romanian fleet segments that were active in 2010. As we can see in 2010 430 vessels were active and 224 ships were inactive.

Fleet segments: 0-6m and 6-12m vessels practice coastal fishing with passive gears (gill net, trap net, long line and hend). The target species were: anchovy, mackerel, turbot, Atlantic horse mackerel, mullets and gobies. The total income realized by these two fleet segments in 2010 was €490 thousand, insuring a total of 436 jobs and a profit of €30 thousand.

Table 7.18.3 Romanian fleet composition and key indicators in 2010

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)
INACTIVE	224	711	3,389									
VL0006	14	11	189									
VL0612	202	218	1,412									
VL1218	3	46	411									
VL1824	4	300	1,046									
VL2440	1	136	331									
PG	198	195	1,708	408	384	6.51	204	0.22	0.46	0.23	0.03	0.03
VL0006	35	28	429	58	49	0.86	16	0.20	0.04	0.02	0.02	0.02
VL0612	163	167	1,279	350	335	5	188	0.02	0.42	0.21	0.01	0.01
PMP	7	5	19	28	14	0.01	1	0.01	0.03	0.01	0.01	0.00
VL0006	1	1	4	4	2	0.00	0	0.00	0.00	0.01	0.01	0.00
VL0612	6	4	15	24	12	0.01	1	0.01	0.03	0.00	0.00	0.00
TM	1	136	331	8	5	0.00	0	0.00	0.00	0.00	0.00	0.00
VL2440	1	136	331	8	5	0.00	0	0.00	0.00	0.00	0.00	0.00
Grand Total	430	1,047	5,447	444	403	6.52	205	0.23	0.49	0.24	0.04	0.03

Figure 7.18.5 Romanian passive gears 6-12m fleet segment key indicators



7.18.5 Assessment for 2010 and 2011

In 2010, Romania adopted a Fishing Effort Adjustment Plan (FEAP) according with the Operational Programme for Fisheries 2007-2013 to adapt the fishing fleet to available

quotas and implement the common fishery policy guidelines of reducing fishing capacity. The objective of this plan is to reach, by the end of 2013, a reduction in fleet capacity by at least 520 tons and 1300 kW. This will be achieved by reducing the number of vessels over 12m by providing state grants for the permanent cessation of fishing activities by dismantling or reassignment to other activities.

The restructuring action of the fleet illustrates a slight improvement of the economic performances in 2010. The application of measures adopted under FEAP will continue in 2011. The final goal is to ensure a minimum level of 12–13 vessels over 12m, equipped with modern amenities, and a number of small boats fishing for small-scale fishery modernised, providing greater reliability and upper usage of landings and better conditions for an efficient activity.

As a perspective for 2011 data looks to be similar; we should mention that the income for turbot species is decreasing due to a lower quota adopted by the European Commission and will extend the economic crisis effects. Fishery data for 2011 are in process, a final economic performance statement obtained in 2011 will be ready in 2012.

7.18.6 Data issues

The fishing data used to determine transversal and economic variables were provided by the NAFA (National Agency for Fishing and Aquaculture) Constanța branch. Data are achieved through questionnaires for economic variables, and from log book and sale notes for transversal ones; the control, cross-checking operations are done by local fishery inspectors and up-loaded in local database, afterwards transferred to the local marine research institute (National Institute for Marine Research and Development – part in the design and implementation of National Data Collection Programme) for compilation and centralisation in the fishing data base, as part of the national data base for DCF requests.

7.19 Slovenia

7.19.1 National fleet structure

In 2011 the Slovenian fishing fleet consisted of 186 registered vessels, with a combined gross tonnage of one thousand GT and total power of 11 thousand kW, see table 7.19.1. A significant characteristic of the Slovenian fleet is age. The overall average age of vessels was 37.6 years in 2011. The oldest age category remain vessels from 12 to 18 metres length overall. The size of the Slovenian fishing fleet has followed a decreasing trend between 2008 and 2011. The number of vessels in the Slovenian fleet declined by 4.5% or 8 vessels and the total kW of the fleet decreased by 2.7% respectively during that period.

Table 7.19.1 Slovenian national fleet key indicators

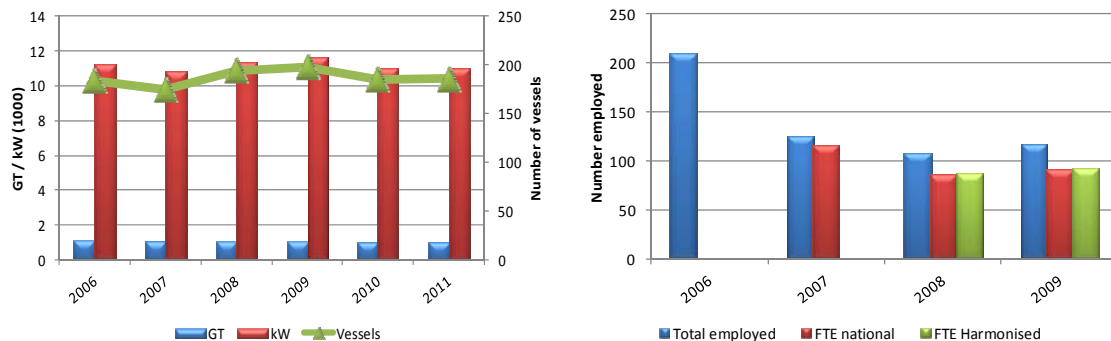
	2006	2007	2008	2009	2010	2011
Capacity						
Number of vessels	184	175	194	198	185	186
GT (1000)	1.1	1.1	1.0	1.0	1.0	1.0
kW (1000)	11.2	10.8	11.3	11.6	11.0	11.0
Average age	34.3	36.8	33.5	34.2	35.1	37.6
Employment						
Total employed	210	125	109	117		
FTEs		116	85	90		
Effort						
Days at sea (1000)	4.6	5.8	6.9	6.9	7.7	
Energy consumption (Million litres)		0.7	0.4	0.5		
Landings						
Weight (1000 tons)	1.0	0.9	0.5	0.9	0.8	
Value (Million €)	1.7	1.8	2.1	2.2	1.4	
Profitability indicators (Million €)						
Gross Value Added		0.9	1.2	1.0	-0.1	
Operating cash flow		0.2	0.6	0.0	-0.6	
Economic profit		0.0	0.4	-0.5	-1.0	
Capital value (Million €)						
Tangible assets			2.8	3.3	3.0	
Fishing rights			0.0	0.0		

The Slovenian national economy is insignificantly influenced by the Slovenian marine fisheries sector. However, the sector has a special social impact on employment within the fishing industry. The break point period of Slovenian marine fisheries began with Slovenian independency in the year 1991. This period marked a decrease in the extent of fishing regions and a substantial loss of market for fish products. A large number of poorly equipped small scale fisherman, inadaptability of large scale fisherman, along with discordance among fishing, producing and marketing capabilities brought the sector into crisis. Landings of almost 6.000 tons in year 1990, decreased to 865 tons in year 2009.

In 2009 the Slovenian fisheries sector continues to be affected by the reduced size of its sea fishing area. The existence of two sea fishery reserves where all fishing activities are banned (Portorož and Strunjan fishery reserves) significantly limit the Slovenian fishing area. This has a negative impact especially on those sea fishermen who are engaged only in small-scale coastal fishing.

The total number of fishing enterprises in the Slovenian fleet was 138 in 2009. The vast majority of fishing enterprises, 61%, owned a single vessel and 38% of enterprises owned two to five fishing vessels. Only 2 fishing enterprises owned six or more fishing vessels. The Slovenian fishing fleet consists predominantly of small vessels of less than 12m (mainly vessels of 6m). Self-employed fishermen who own one fishing vessel about six meters long represent a typical Slovenian fishing enterprise.

Figure 7.19.1 Slovenian national fleet capacity and employment trends

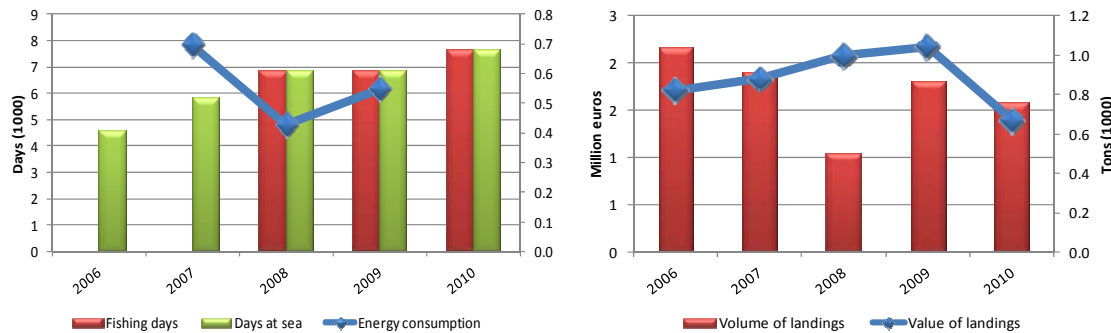


Total employment was 117 jobs and 90 FTEs in the Slovenian fleet in 2009, see table 7.19.1. The level of employment in the Slovenian fishing fleet has decreased between 2007 and 2009. The total number employed decreased by 6.4% between 2007 and 2009 while the number of FTEs decreased by 22.4%. The reduction of fishing capacity, volume and value of landings has also had a negative impact in terms of employment of those who live from fisheries.

7.19.2 National fleet fishing activity and output

In 2009 the Slovenian fishing fleet spent a total of 6.9 thousand days at sea, 100% of which were actual fishing days. The total number of days at sea increased between 2007 and 2009, see table 7.19.1. The total quantity of fuel consumed by the Slovenian fleet in 2009 was 0, 5 million litres. The total quantity of fuel decreased between 2007 and 2009, see table 7.19.1.

Figure 7.19.2 Slovenian national fleet fishing effort and landings trends



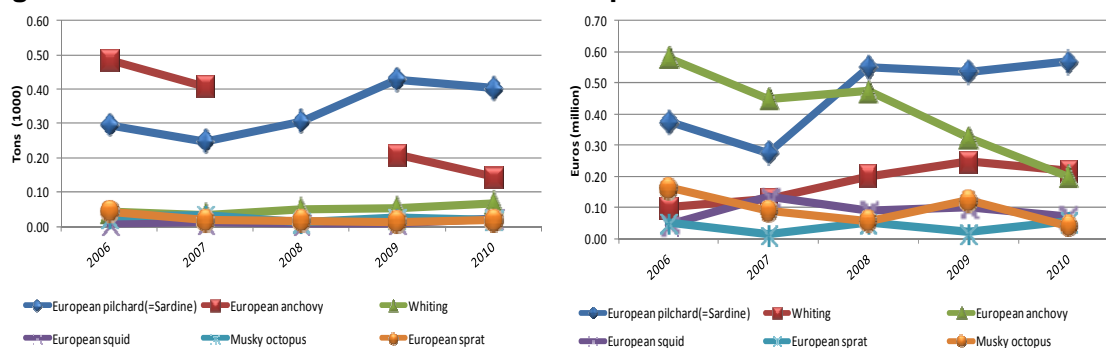
The total volume of landings by the Slovenian fishing fleet in 2010 was 0, 75 thousand tons of seafood. The total volume of landings decreased between 2006 and 2010, see

Table 7.19.1. Although increased number of days at sea, volume of landings and fuel consumption have decreased between 2006 and 2009.

The Slovenian fisheries sector is affected by the small size of sea fishing area. For this reason most fish stocks in Slovenian fisheries sector are overexploited, resulting in the reduced volume of landings. Most of the fishing fleet is poorly equipped and they cannot fish in international waters. High prices of fuel lead to reduced fuel consumption.

In terms of landings composition, in 2009 European pilchard (sardine) was the most common species landed in terms of tonnage (0.43 thousand tons), followed by European anchovy (0.21 thousand tons) and Whiting (0.05 thousand tons), see figure 7.19.3.

Figure 7.19.3 Slovenian national fleet main species landed trends



7.19.3 National fleet economic performance

In 2009 European pilchard (Sardine) accounted for the highest value of landings (€0.54 million) by the Slovenian national fleet, followed by European anchovy (€0.32 million) and whiting (€0.25 million), see figure 7.19.3. The prices obtained for these key species generally increased between 2007 and 2009. In 2009 European lobster achieved the highest average price per kilo by the Slovenian national fleet (€35.74 per kg), followed by turbot (€19.63 per kg) and John Dory and seabass (€17 per kg).

Reduced landing volumes of European anchovy are the reason for its higher price. European anchovy and European pilchard (sardine) have the same market, so the reduced volume of landings of anchovy is also the reason for higher price of European pilchard (sardine). Because of the global crisis the price of fish, in particular the more expensive species has reduced. The crisis is also the reason for increased prices of cheaper species of fish (European pilchard, European anchovy and whiting) because consumers change buying habits.

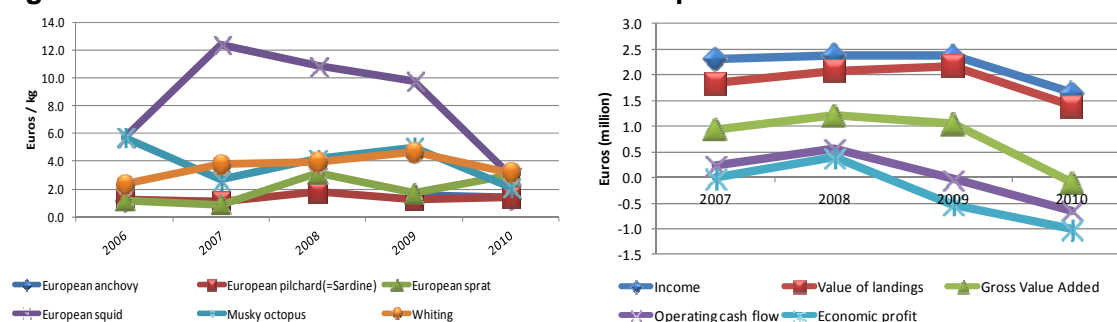
The total amount of income generated by the Slovenian national fleet in 2009 was €2.4 million. This consists of €2.2 million in landings value and €0.2 million in non fishing income. See table 7.19.2 and figure 7.19.4. Other income consists essentially of income from touristic activities, such as vessel renting for sport fishing or transporting tourists in the summer. Between 2007 and 2009 the total income of the Slovenian fleet increased 4.3%. The total amount of expenditure by the Slovenian national fleet in 2009 was €2.4 million, see table 1.2. The largest expenditure items are crew wages (€1.1 million) and energy cost (€0.6 million). Between 2007 and 2009 the total expenditure of the Slovenian fleet increased 14.3%.

Table 7.19.2 Slovenian national fleet economic performance indicators

	2007	2008	2009	2010
Income (Million €)				
Landings		2.1	2.2	1.4
Direct subsidies		0.1	0.0	0.0
Other income		0.2	0.2	0.2
Fishing rights		0.0	0.0	0.0
Total income	2.3	2.4	2.4	1.7
Costs (Million €)				
Crew wages	0.7	0.7	1.1	0.6
Unpaid labour value		0.0	0.2	0.1
Energy costs	0.6	0.5	0.6	0.9
Repair costs	0.2	0.4	0.3	0.3
Variable costs	0.3	0.2	0.4	0.5
Fixed costs	0.3	0.0	0.0	0.0
Rights costs		0.0	0.0	0.0
Depreciation costs		0.2	0.2	0.2
Opportunity cost		0.0	0.1	0.1
Profitability indicators (Million €)				
Gross Value added	0.9	1.2	1.0	-0.1
Operating cash flow	0.2	0.6	0.0	-0.6
Economic profit	0.0	0.4	-0.5	-1.0
Capital value (Million €)				
Tangible assets		2.8	3.3	3.0
Fishing rights value		0.0	0.0	
In-years investments		0.1	0.2	

In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Slovenian national fleet in 2009 was €0.0 million, €1.0 million and €-0.5 million respectively, see table 7.19.2 and figure 7.19.4. In 2009, the Slovenian fleet had an estimated capital value of €3.3 million.

Figure 7.19.4 Slovenian national fleet economic performance trends



7.19.4 Fleet composition

The Slovenian national fleet consisted of 17 fleet segments in 2009. The Slovenian fleet is highly diversified with a broad range of vessel types targeting different species, predominantly in the Adriatic Sea in the Mediterranean area. There were four inactive segments consisting of 111 vessels. These vessels are classed as inactive if they did not land any catch in 2009. Eight of the active segments made overall losses in 2009 and five made an overall profit.

In 2009 there were 87 active vessels of which around 68 are classified in the small scale fishery segment. The fleet is characterised by a strong multi-specify and multi-gear activity. The majority of vessels operate in coastal waters around Slovenia. Table 7.19.3 provides a breakdown of key performance indicators for all Slovenian fleet segments in 2009.

Table 7.19.3 Slovenian fleet composition and key indicators

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	54	128	2,272	55	54	4.30	44.69	0.05	0.46	0.27	0.06	-0.01	0.57
VL0006	22	22	269	22	21	1.73	4.92	0.01	0.12	0.08	0.02	0.02	0.03
VL0612	32	106	2,003	33	33	2.57	39.77	0.04	0.35	0.19	0.04	-0.02	0.55
DTS	18	254	2,708	23	22	1.30	172.92	0.12	0.67	0.32	0.12	-0.05	1.12
VL0612	6	43	740	6	5	0.30	8.52	0.02	0.13	0.08	0.02	0.00	0.21
VL1218	12	211	1,968	17	17	1.00	164.40	0.11	0.55	0.24	0.10	-0.04	0.92
FPO	4	15	139	5	3	0.30	1.50	0.00	0.02	0.01	0.00	-0.01	0.06
VL0006	3	3	29	3	2	0.17	0.50	0.00	0.01	0.00	-0.01	-0.01	0.01
VL1218	1	12	110	2	1	0.13	1.00	0.00	0.01	0.01	0.00	0.00	0.05
HOK	2	3	15	2	0	0.00	0.23	0.00	0.04	-0.06	-0.22	-0.27	0.08
VL0006	1	1	3	1	0	0.00		0.00	0.02	-0.01	-0.02	-0.02	0.03
VL0612	1	2	12	1	0	0.00	0.23		0.02	-0.05	-0.20	-0.24	0.05
INACTIVE	111	274	4,756	0	0	0.00	0.00			-0.05	-0.05	-0.07	0.60
VL0006	62	55	642	0			0.00			-0.02	-0.02	-0.02	0.06
VL0612	44	144	2,742	0			0.00			-0.02	-0.02	-0.03	0.37
VL1218	4	44	1,174	0			0.00			0.00	0.00	-0.01	0.08
VL1824	1	31	199	0						0.00	0.00	-0.01	0.08
PMP	2	3	46	2	0	0.05	1.69	0.00	0.10	0.08	0.02	-0.04	0.03
VL0006	1	0	3	1	0	0.00	0.37	0.00	0.00	-0.01	-0.03	-0.07	0.00
VL0612	1	3	43	1	0	0.05	1.32	0.00	0.09	0.09	0.06	0.03	0.03
PS	5	48	480	16	9	0.51	38.89	0.23	0.53	0.42	0.24	0.15	0.43
VL0006	1	1	7	1	0	0.00		0.00	0.01	-0.02	-0.03	-0.05	0.21
VL1218	4	47	473	15	9	0.51	38.89	0.23	0.52	0.44	0.27	0.20	0.22
TM	2	312	1,200	14	2	0.39	286.92	0.45	0.55	0.06	-0.20	-0.24	0.48
VL2440	2	312	1,200	14	2	0.39	286.92	0.45	0.55	0.06	-0.20	-0.24	0.48
Grand Total	198	1,037	11,616	117	90	6.86	546.83	0.87	2.38	1.05	-0.03	-0.52	3.37

A short description of the five most important segments in terms of total value of landings is given below:

Pelagic trawl 24-40m – 2 vessels make up this segment and are based predominantly in the Adriatic Sea. These vessels target a variety of species, the most important being European pilchard (sardine) and anchovy. Their total value of landings was €0.55 million and 2 jobs/FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Demersal trawl/seine 12-18m – 12 vessels make up this segment and are based predominantly in the Adriatic Sea. These vessels target a variety of species, the most important being whiting, musky octopus and European squid. Their total value of landings was €0.55 million and 17 jobs/FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Purse seine 12-18m – 4 vessels make up this segment and are based predominantly in the Adriatic Sea. These vessels target a variety of species, the most important being European pilchard (sardine) and anchovy. Their total value of landings was €0.52 million

and 9 jobs/FTEs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Figure 7.19.5 Slovenian drift and fixed nets 0-12m key indicators

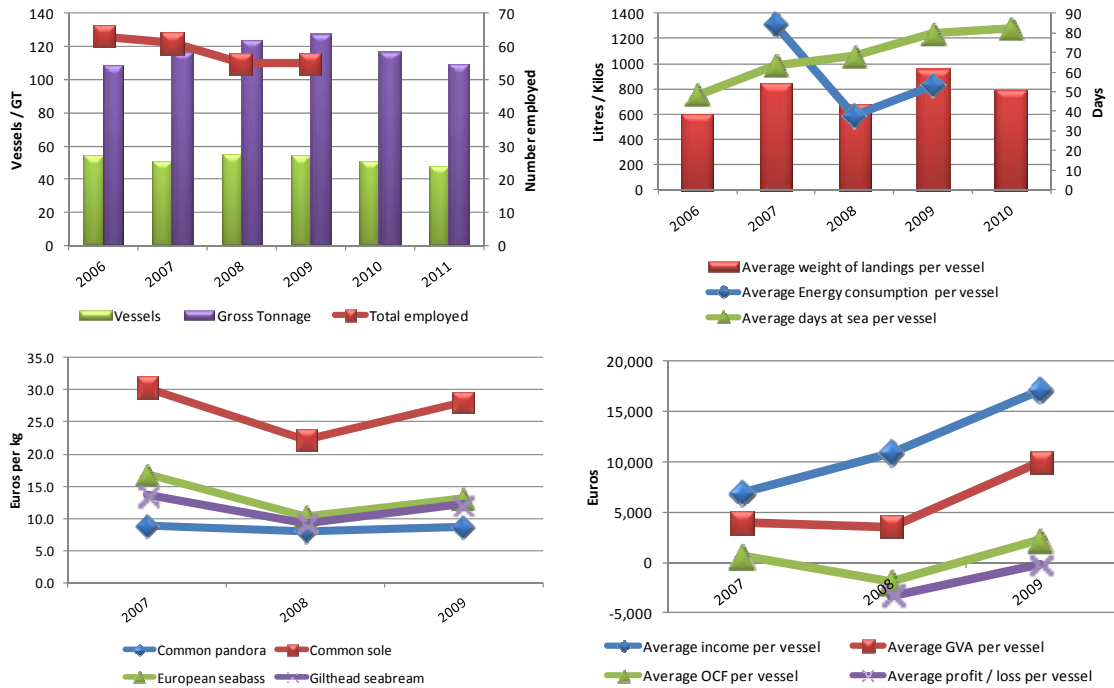
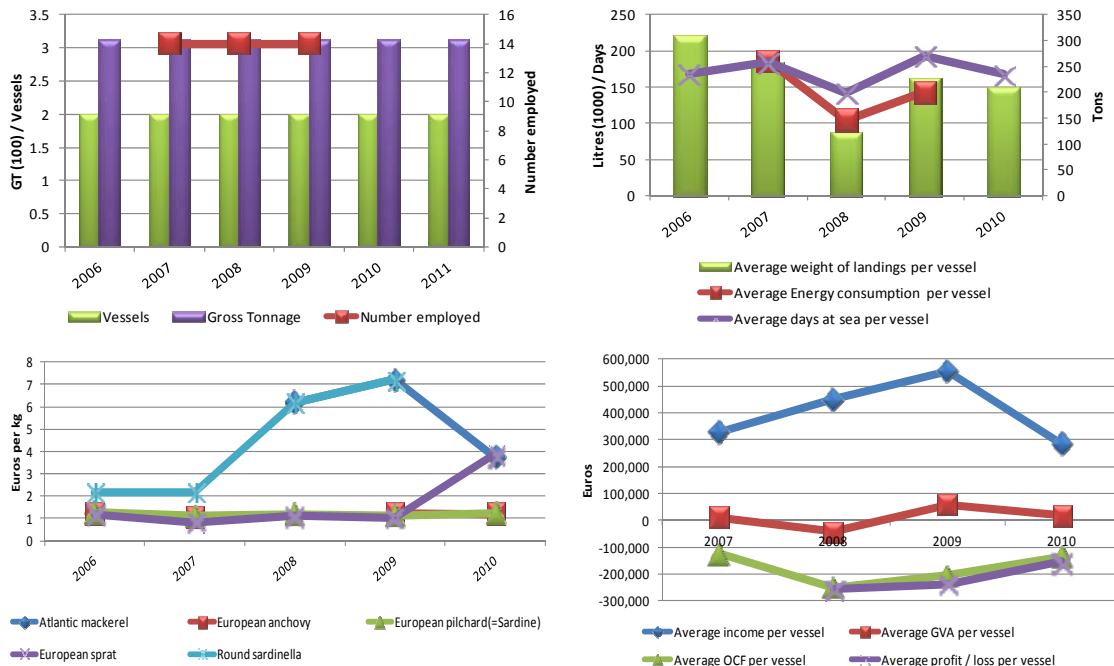


Figure 7.19.6 Slovenian pelagic trawl 24-40m key indicators



Drift and fixed nets 6-12m – 32 vessels make up this segment and they are based predominantly in the Adriatic Sea. These vessels target a variety of species, the most important being sole, common pandora and seabream. Their total value of landings was

€0.35 million and 35 jobs/FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Demersal trawl / seine 6-12m – 6 vessels make up this segment and are based predominantly in the Adriatic Sea. These vessels target a variety of species, the most important being whiting, musky octopus and European squid. Their total value of landings was €0.13 million and 5 jobs/FTEs were supported by this segment in 2009. This fleet segment was stable in 2009.

7.19.5 Assessment for 2010 and 2011

The future development of the Slovenian fishing fleet is delineated in the Operational Program for Fisheries Development in the Republic of Slovenia 2007-2013 (OP). The OP foresees the following measures related to the fishing fleet within its priority axes:

Priority axis 1: Adaptation of the fishing fleet (the goal of this axis is to achieve a balance between the capacity of the Slovenian fishing fleet and the available fisheries resources): permanent cessation of fishing activities; measures on board fishing vessels (in order to improve the working conditions and safety of fishermen) and improving the selectivity of fishing gear; measures focused on small-scale coastal fishing.

Priority axis 2: Measures of common interest: collective actions for the improvement of safety and working conditions for the fishermen; measures to improve existing ports and landing sites.

Priority axis 3: Sustainable development of fisheries areas: opportunities for the diversification of fishing activities (e.g. into fishing tourism).

The number of vessels, GT and KW will continue to decrease in 2010 and 2011. Because the fleet is old and poorly equipped, we expect fleet structure parameters to continue to decrease in 2010 and 2011.

Effort will probably increase in 2010 and 2011, because of low fish stocks in the Adriatic Sea. If fishermen want to hold the volume of landings at the current levels, they will have to increase the number of fishing days. Landing volume has been decreasing since 1990, thus the volume of landings can be expected to decrease also in 2010 and 2011 as well. Fuel consumption depends on the price of the fuel. If no major changes in fuel prices occur, higher fuel consumption can be expected due to an increased number of fishing days.

When the global crisis ends, we can expect an increase in fish prices. This will also affect income, which will increase, assuming that the catch volume remains unchanged. Level of expenditure depends mostly on crew wages and fuel costs. We can expect that the fuel cost will increase in 2010 and 2011 - on the other hand crew wages will probably decrease, due to a decrease in the number of fishing vessels. Because of an ageing fleet, reduced catches and increased costs, it may be expected that profits will decline in 2010 and 2011. Due to poor condition and profitability of Slovenian fishing fleet, we can expect that the ROI will not increase.

7.20 Spain

7.20.1 National fleet structure

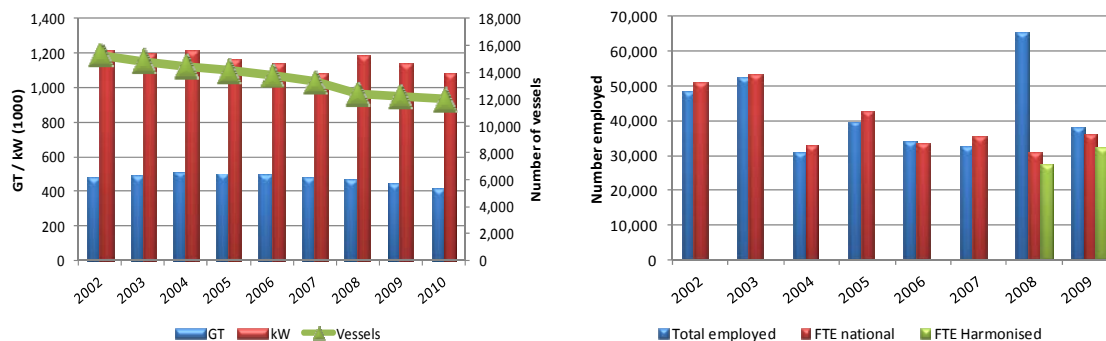
In 2009 the Spanish fishing fleet consisted of 12,240 registered vessels, with a combined gross tonnage of 445,700 GT and total power of 1,137,800 kW, see table 7.20.1. The overall average age of vessels was 23 years in 2009. The size of the Spanish fishing fleet has followed a decreasing trend between 2002 and 2009, see figure 7.20.1 (left). The number of vessels in the Spanish fleet declined by 20% or 3,023 vessels and the total GT and kW of the fleet decreased by 7% and 6% respectively during that period.

Table 7.20.1 Spanish national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Capacity									
Number of vessels	15,263	14,831	14,439	14,118	13,748	13,310	12,391	12,240	11,986
GT (1000)	478.0	484.6	511.1	496.5	495.2	478.4	460.2	445.7	412.3
kW (1000)	1,211.7	1,197.0	1,209.2	1,160.1	1,136.5	1,085.7	1,180.7	1,137.8	1,084.4
Average age	28.0	28.0	28.0	28.0	28.0	28.0	23.0	23.0	24.0
Employment									
Total employed	48,329	52,489	30,788	39,810	33,898	32,515	65,359	38,045	
FTEs	50,866	52,943	32,888	42,735	33,397	35,274	30,695	35,844	
Effort									
Days at sea (1000)	497.0	502.8	538.5	531.5	528.6	518.0	844.7	892.4	
Energy consumption (Million litres)							674.9	745.9	
Landings									
Weight (1000 tons)	243.1	264.2	302.9	325.8	321.8	265.9			
Profitability indicators (Million €)									
Gross Value Added	768.6	646.1	543.9	694.8	572.4	489.6	437.8	704.1	
Operating cash flow	184.8	56.6	51.4	105.5	73.3	-15.9	68.9	168.3	
Economic profit	49.1	-92.8	-89.7	-56.9	-64.6	-194.7	-118.6	-250.2	

The total number of fishing enterprises in the Spanish fleet was 8,950 in 2009. The vast majority of fishing enterprises, 94%, owned a single vessel and 6% of enterprises owned two to five fishing vessels. Only 4 fishing enterprises owned six or more fishing vessels.

Figure 7.20.1 Spanish national fleet capacity and employment trends

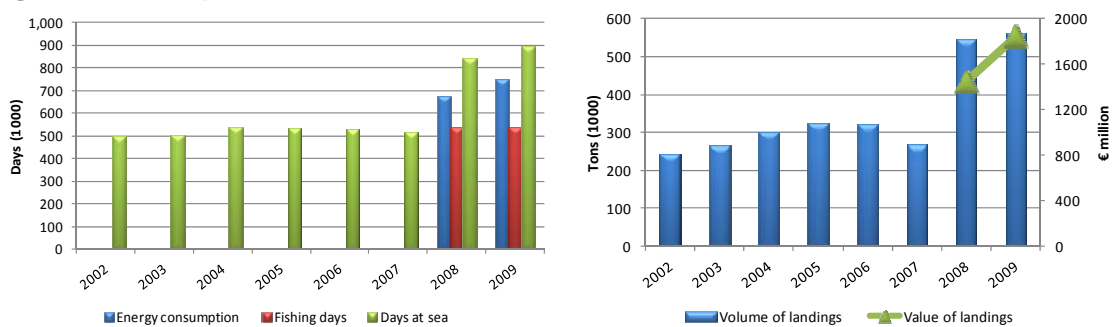


Total employment was 38,045 jobs and 35,844 FTEs in the Spanish fleet in 2009, see table 7.20.1. The level of employment in the Spanish fishing fleet has decreased between 2002 and 2009, see figure 7.20.1. The total number employed decreased by 21% between 2002 and 2009 while the number of FTEs decreased by 30%. (The value for total employment in 2008 cannot be explained).

7.20.2 National fleet fishing activity and output

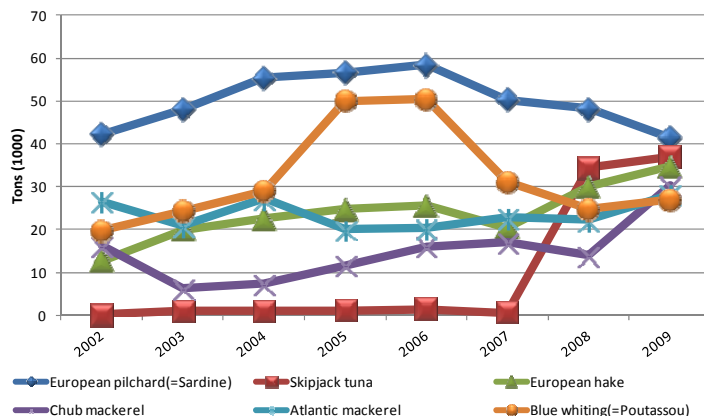
In 2009 the Spanish fishing fleet spent a total of 892 thousand days at sea. The total number of days at sea increased significant between 2007 and 2008, suggesting incomplete data was submitted for the years 2002-2007, see figure 7.20.2. The total volume of landings by the Spanish fishing fleet in 2009 was 560 thousand tons of seafood. The total volume of landings also increased significantly between 2007 and 2008 suggesting incomplete data was submitted for the years 2002-2007, see figure 7.20.2 (right). The total value of landings by the Spanish fishing fleet in 2009 was €1,846 million, an increase of 28% from 2008, see figure 7.20.2 (right). No data on value of landings was provided for the years 2002-2007.

Figure 7.20.2 Spanish national fleet fishing effort and landings trends



In terms of landings composition, in 2009 sardine was the most common species landed in terms of volume (41.4 thousand tons), followed by skipjack tuna (37 thousand tons) and then European hake (35 thousand tons), see figure 7.20.3. No data was provided on value of landings by species in any year.

Figure 7.20.3 Spanish national fleet main species landed trends



7.20.3 National fleet economic performance

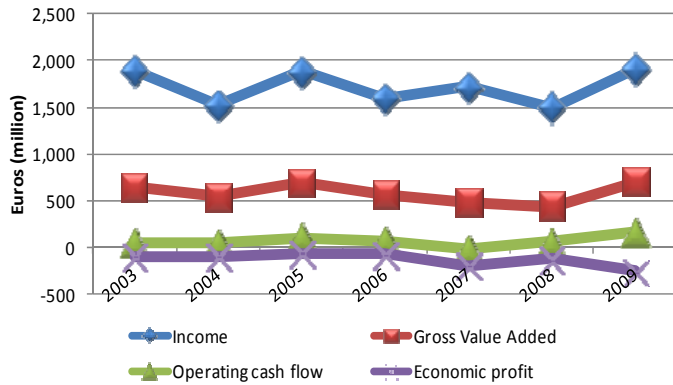
The total amount of income generated by the Spanish national fleet in 2009 was €1909 million. This consisted of €1,846 million in landings value and €69 million in direct subsidies. See table 7.20.2 and figure 7.20.4. Between 2002 and 2009 the total income of the Spanish fleet fluctuated between 1,500 million and 2,000 million. Between 2008 and 2009 the total income of the Spanish fleet increased 28%.

Table 7.20.2 Spanish national fleet economic performance indicators

Row Labels	2002	2003	2004	2005	2006	2007	2008	2009
Income (Million €)								
Landings							1,445.2	1,846.5
Direct subsidies							56.3	62.8
Other income							0.0	0.0
Total income	1,774.1	1,897.5	1,520.3	1,884.5	1,600.0	1,720.1	1,501.4	1,909.2
Costs (Million €)								
Crew wages	583.7	589.5	492.5	589.3	499.0	505.5	425.2	598.6
Unpaid labour value							83.0	137.1
Energy costs	221.7	238.9	222.0	362.3	337.9	361.7	380.0	346.4
Repair costs	150.1	148.8	127.3	159.7	136.8	144.1	109.1	141.3
Variable costs	574.4	543.5	429.7	429.8	375.4	446.1	174.5	201.9
Fixed costs	59.4	320.2	197.4	237.9	177.6	278.7	343.8	452.8
Capital costs	135.8	149.3	141.1	162.4	138.0	178.9		
Depreciation costs							99.3	156.0
Opportunity cost							5.2	125.4
Profitability indicators (Million €)								
Gross Value added	768.6	646.1	543.9	694.8	572.4	489.6	437.8	704.1
Operating cash flow	184.8	56.6	51.4	105.5	73.3	-15.9	68.9	168.3
Economic profit	49.1	-92.8	-89.7	-56.9	-64.6	-194.7	-118.6	-250.2
Capital value (Million €)								
Total invested	2,852.2	4,932.1	4,093.0	4,146.6	4,392.5	4,823.6		
In-years investments							97.1	26.9

The total costs incurred by the Spanish national fleet in 2009 was €1142 million, see table 7.20.2. The largest expenditure items are fixed costs (€453 million) and energy costs (€346 million). Between 2002 and 2009 the total expenditure of the Spanish fleet decreased 14%. In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Spanish national fleet in 2009 was €168 million, €704 million and €-250 million respectively, see table 7.20.2 and figure 7.20.4.

Figure 7.20.4 Spanish national fleet economic performance trends

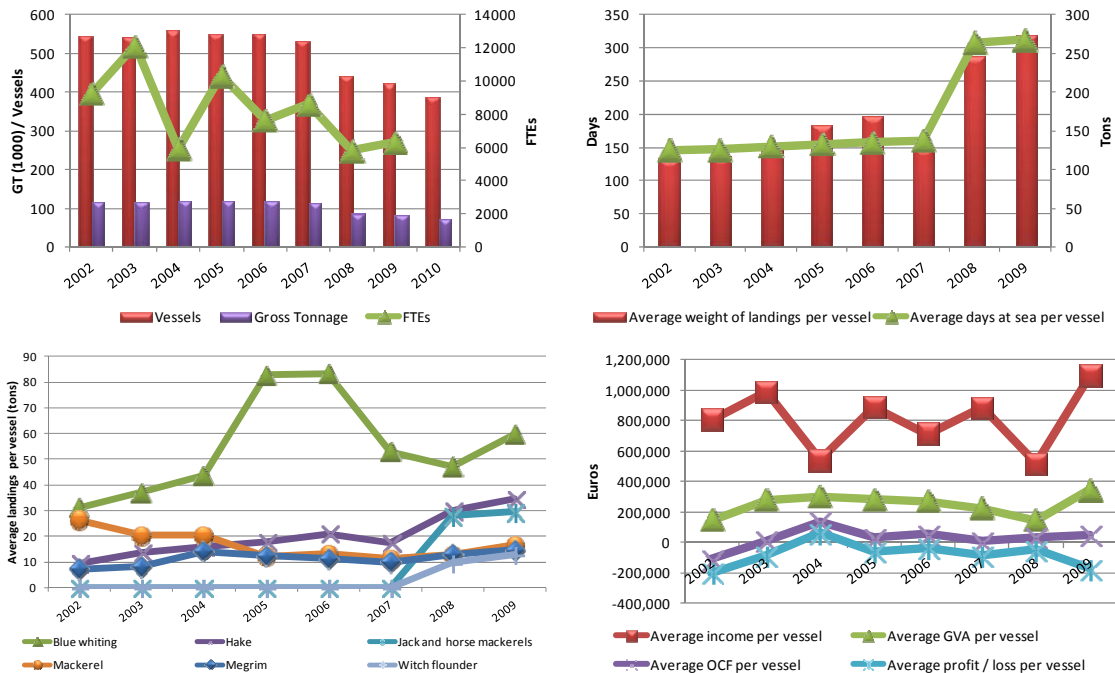


7.20.4 Fleet composition

The Spanish national fleet consisted of 64 fleet segments in 2009. The Spanish fleet is highly diversified with a broad range of vessel types targeting different species in all areas. There were no inactive vessels reported. Table 7.20.3 provides a breakdown of key performance indicators for all Spanish fleet segments in 2009. A short description of the five most important segments in terms of total value of landings is given below:

Demersal trawl / seine 24-40m – 420 vessels make up this segment and are based predominantly in areas 27 and 37. These vessels target a variety of species. Their total value of landings was €459 million and 6,295 FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Figure 7.20.5 Spanish demersal trawl 24-40m key indicators



Demersal trawl / seine over 40m – 59 vessels make up this segment and are based predominantly in area 27 and other regions. These vessels target a variety of species. Their total value of landings was €181 million and 1,527 FTEs were supported by this segment in 2009. This fleet segment was made losses in 2009.

Gears using hooks 24-40m – 380 vessels make up this segment and are based predominantly in area 27. These vessels target a variety of species. Their total value of landings was €168 million and 2,790 FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Demersal trawl / seine 18-24m– 572 vessels make up this segment and are based predominantly in areas 27 and 37. These vessels target a variety of species. Their total

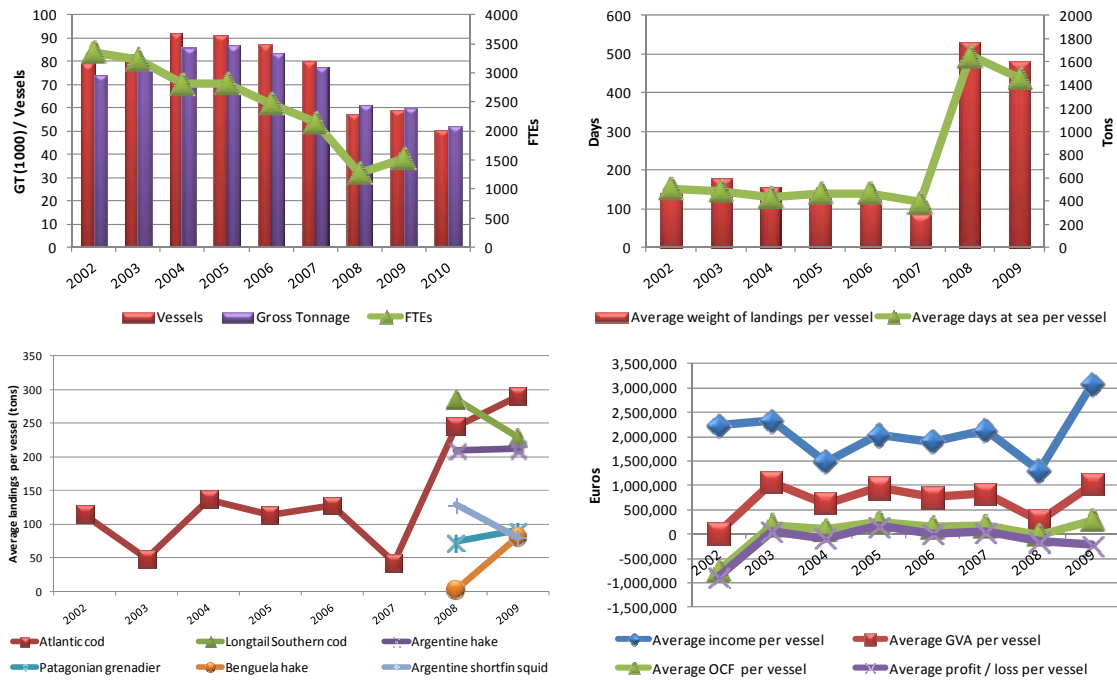
Table 7.20.3 Spanish fleet composition and key indicators in 2009

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea	Income (Million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)
DFN										
VL0006	125	117	1,242			126				
VL0010	4,022	5,442	58,545	42	19	4,391	1.2	0.6	0.1	-0.9
VL0612	1,080	3,449	36,812			18,891				
VL1012	241	1,674	11,204	42	31	26,976	1.2	0.7	0.3	-0.3
VL1218	421	7,180	32,757	329	401	56,059	35.2	20.6	5.5	-1.6
VL1824	85	6,003	15,188	218	242	8,688	20.2	13.5	5.8	0.0
VL2440	53	8,958	16,965	160	188	5,982	19.5	8.8	2.4	-2.4
VL40XX	3	1,731	2,314			180				
DRB										
VL0010	1	4	33			95				
VL0612	25	153	1,494			1,361				
VL1012	25	174	1,350			3,284				
VL1218	122	1,747	10,316			13,976				
VL1824	14	731	2,805			32				
VL2440	2	219	379			8				
DTS										
VL0006	4	2	15			54				
VL0010	5	19	211			15				
VL0612	67	452	3,158			2,903				
VL1012	20	158	1,094	54	48	456	5.3	3.3	2.3	-0.1
VL1218	359	8,927	33,954	891	837	43,106	81.6	44.4	18.3	-1.5
VL1824	572	34,976	108,998	2,488	2,440	120,600	269.7	133.2	53.2	-18.1
VL2440	420	81,631	146,695	5,294	6,295	131,306	918.6	290.1	42.5	-144.0
VL40XX	59	59,662	70,813	1,603	1,527	25,902	362.7	120.0	32.5	-26.1
FPO										
VL0006	1	1	16			1				
VL0010	22	61	631			30				
VL0612	60	295	2,677			1,402				
VL1012	183	1,302	8,794			16,083				
VL1218	169	2,402	11,284			12,618				
VL1824	13	911	2,873			1,041				
VL2440	22	3,613	6,441			3,046				
HOK										
VL0006	6	6	83							
VL0010	561	1,163	11,598	281	267	680	8.5	5.7	3.2	-0.7
VL0612	260	1,118	11,148			7,286				
VL1012	166	1,155	8,611	826	591	5,801	46.7	27.6	14.3	5.4
VL1218	373	7,287	32,375	926	799	33,146	61.6	37.0	13.2	-3.0
VL1824	159	12,255	29,289	745	872	26,024	81.8	38.4	9.1	-6.5
VL2440	380	77,319	136,051	2,374	2,790	133,677	336.4	97.6	21.9	-19.5
VL40XX	31	18,743	22,074	767	989	21,294	109.0	33.7	16.6	-10.0
MGO										
VL1012	1	7	33			1				
VL1218	1	10	85			1				
VL1824	1	64	196			1				
VL2440	3	1,065	1,172			967				
VL40XX	1	489	875			585				
PMP										
VL0006	6	6	83			6				
VL0010	22	81	755	7,366	4,388	278	200.7	130.7	87.7	-99.8
VL0612	209	942	8,709			4,339				
VL1012	231	1,603	11,829	3,242	1,965	10,800	111.2	69.5	39.9	-4.2
VL1218	412	7,647	34,528	1,456	1,363	14,374	131.9	58.5	19.4	-15.9
VL1824	160	9,936	31,450			2,338				
VL2440	139	22,411	45,201	923	1,021	3,557	147.2	55.2	12.4	-24.4
VL40XX	4	3,792	4,524			1,425				
PS										
VL0010	69	177	1,925	105	94	162	2.7	2.1	0.8	-0.6
VL0612	48	286	2,334			3,260				
VL1012	46	335	2,499	250	214	3,431	10.3	6.9	2.3	0.7
VL1218	319	6,698	34,664	2,255	1,998	45,544	129.0	94.7	32.3	20.6
VL1824	251	13,421	52,921	2,185	2,054	46,187	132.7	89.3	25.6	-4.5
VL2440	157	21,463	56,947	1,978	2,443	26,309	162.7	87.8	13.0	-25.4
VL40XX	2	700	2,384	1,247	1,968	318	431.1	30.1	-46.3	-118.3
TBB										
VL1012	12	74	379			556				
VL1218	3	33	125			63				
VL1824	1	66	265							
TM										
VL0612	1	4	51			1				
VL1218	7	128	348			28				
VL2440	1	101	316			1				
VL40XX	2	3,076	2,936			1,395				

value of landings was €134 million and 2,440 FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Purse Seine 24-40m – 157 vessels make up this segment and are based predominantly in area 27. These vessels target a variety of species. Their total value of landings was €81 million and 2443 FTEs were supported by this segment in 2009. This fleet segment made losses in 2009.

Figure 7.20.6 Spanish demersal trawl over 40m key indicators



7.20.5 Assessment for 2010 and 2011

The current profitability of all the fleet segments implies that the trend of the reduction in the fleet size and overall capacity is not going to change. Furthermore energy costs will rise again to 2008 levels which will create a worsening of the profitability. An exception to this trend could be the small (in length) segments for which in 2009 were stable in their profitability.

7.20.6 Data issues

Some segments have no data for several variables such as income or FTEs, which implies that the overall values could be underestimated. Some other segments, such as over 40m purse seiners or 0-10m polyvalent vessels are not well characterised, so the data for these segments should be revised.

7.21 Sweden

7.21.1 National fleet structure

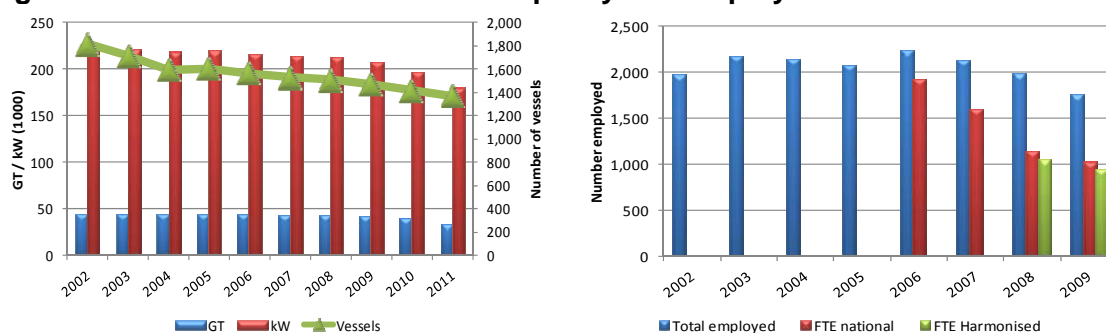
In 2011 the Swedish fishing fleet consisted of 1368 registered vessels, with a combined gross tonnage of 33 thousand GT and total power of 179 thousand kW, see table 7.21.1. The overall average age of vessels was 31 years in 2011. The size of the Swedish fishing fleet has followed a negative trend between 2002 and 2011. The number of vessels in the Swedish fleet declined by 25% or 450 vessels and the total GT and kW of the fleet decreased by 26% and 20% respectively during that period, see figure 7.21.1 (left).

Table 7.21.1 Swedish national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capacity										
Number of vessels	1,818	1,715	1,597	1,603	1,564	1,527	1,509	1,471	1,417	1,368
GT (1000)	44.9	43.9	44.3	44.3	43.9	43.3	43.2	41.7	38.6	33.1
kW (1000)	224.6	220.6	217.1	218.7	216.5	213.7	212.4	207.8	196.6	179.0
Average age	26.1	26.6	26.0	27.8	28.5	28.8	29.9	30.3	30.7	31.0
Employment										
Total employed	1,969	2,172	2,140	2,073	2,231	2,122	1,980	1,758		
FTEs					1,916	1,603	1,133	1,019		
Effort										
Days at sea (1000)	122.3	120.0	111.5	107.4	96.3	96.0	102.7	96.2	84.3	
Energy consumption (Million litres)	64.7	63.7	71.5	55.8	60.2	47.9	41.4	33.0		
Landings										
Weight (1000 tons)	282.2	280.7	259.7	274.4	284.7	222.3	213.2	199.3	175.7	
Value (Million €)	118.9	98.1	97.9	104.9	117.0	121.2	113.1	101.1	103.3	
Profitability indicators (Million €)										
Gross Value Added	62.8	62.1	48.7	41.6	50.8	66.4	52.8	59.0	49.1	
Operating cash flow	37.2	41.9	18.6	30.0	37.8	52.2	42.4	48.5	39.1	
Economic profit	30.4	34.0	12.0	22.2	-9.4	14.0	-17.1	-1.5	-18.9	
Capital value (Million €)										
Tangible assets							165.4	163.3	164.3	

The total number of fishing enterprises in the Swedish fleet was 1241 in 2010. The vast majority of fishing enterprises, 73%, owned a single vessel and 26% of enterprises owned two to five fishing vessels. Only 9 fishing enterprises owned six or more fishing vessels.

Figure 7.21.1 Swedish national fleet capacity and employment trends

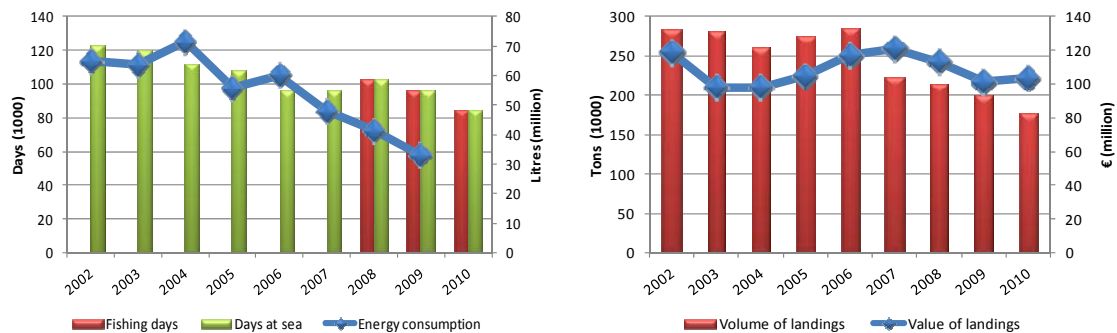


Total employment was 1758 jobs and 1019 FTEs in the Swedish fleet in 2009, see table 7.21.1. The level of employment in the Swedish fishing fleet has decreased between 2006 and 2009. The total number employed decreased by 21% between 2006 and 2009 while the number of FTEs decreased by 46%, see figure 7.21.1 (right). The large decrease in FTE partly stems from changes in methodology between 2007 and 2008.

7.21.2 National fleet fishing activity and output

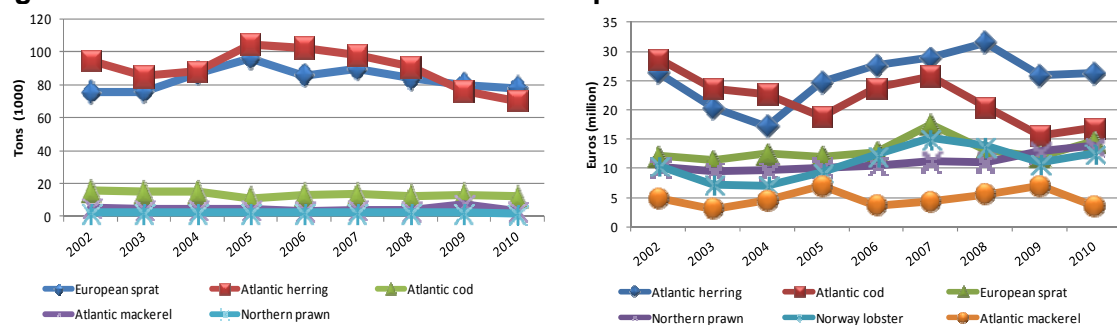
In 2010 the Swedish fishing fleet spent a total of 84,306 thousand days at sea, 100% of which were actual fishing days. The total number of days at sea decreased between 2002 and 2010, see figure 7.21.2. The total quantity of fuel consumed by the Swedish fleet in 2009 was 33 million litres. The total quantity of fuel consumed decreased between 2006 and 2009, see figure 7.21.2 (left) The decrease in fuel consumption is partly due to the decrease in total number of vessels in the fleet but also stems from changes in fishing patterns and behaviour along with investments in more fuel efficient technology.

Figure 7.21.2 Swedish national fleet fishing effort and landings trends



The total volume of landings by the Swedish fishing fleet in 2010 was 176 thousand tons of seafood. The total volume of landings decreased between 2006 and 2010, see figure 7.21.2 (right). The total value of landings by the Swedish fishing fleet in 2010 was €103.3 millions. The total value of landings decreased between 2007 and 2009 and increased slightly in 2010. The increase in total value of landings in 2010 is due to increases in the price levels for certain species which have had a positive effect on the total value of landings although the total volume of landings decreased.

Figure 7.21.3 Swedish national fleet main species landed trends



In terms of landings composition, in 2010 European sprat was the most common species landed in terms of tonnage (78 thousand tons), followed by Atlantic herring (70 thousand tons) and Atlantic cod (12 thousand tons), see figure 7.21.3 (left).

7.21.3 National fleet economic performance

In 2010 Atlantic herring accounted for the highest value of landings (€26.2 million) by the Swedish national fleet, followed by Atlantic cod (€16.9 million) and European sprat (€14.6 million), see figure 7.21.3 (right). The prices obtained for these key species generally have been fluctuating but increased between 2009 and 2010. In 2010 Norway lobster achieved the highest average price per kilo by the Swedish national fleet (€10.3 per kg), followed by Northern prawn (€8.6 per kg) and Atlantic cod (€1.4 per kg), see figure 7.21.4 (left). A regionally important high priced fish is vendace which is harvested in the Bay of Bothnia in northern parts of the Baltic Sea. vendace is almost exclusively harvested for its roe which have seen a high rise in prices since the trade restrictions on sturgeon roe were put in place. The average price for vendace roe in 2010 was approximately €73 per kg, corresponding to €3.4 per kg of vendace.

Table 7.21.2 Swedish national fleet economic performance indicators

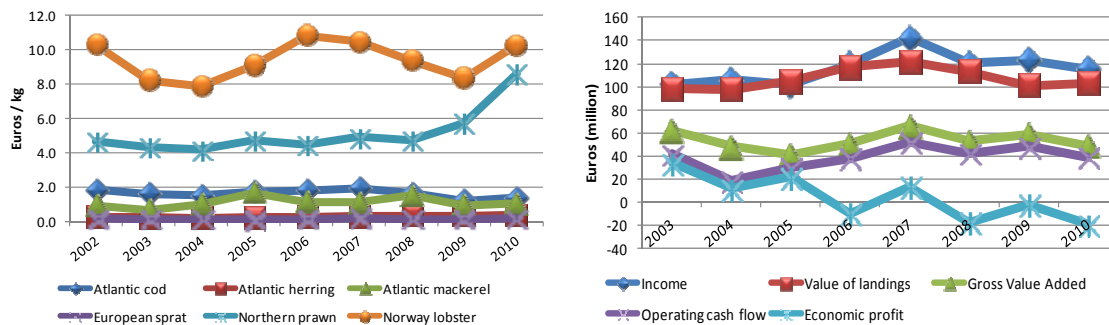
	2002	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)									
Landings							114.0	106.2	103.3
Direct subsidies							1.7	0.0	0.8
Other income							4.9	17.1	11.0
Fishing rights							0.0	0.0	0.0
Total income	107.3	102.2	105.9	101.3	119.7	142.3	120.5	123.3	115.2
Costs (Million €)									
Crew wages	25.5	20.2	30.2	11.5	12.9	14.2	12.1	10.5	10.9
Unpaid labour value							18.9	14.3	16.0
Energy costs	14.6	16.5	20.7	21.3	25.9	21.4	28.9	24.8	29.7
Repair costs	15.0	13.1	19.2	18.7	20.8	20.9	22.4	23.3	20.4
Variable costs	12.6	8.6	14.2	16.5	18.6	28.1	6.1	6.6	5.8
Fixed costs	2.4	1.9	3.1	3.2	3.7	5.6	8.6	9.7	9.3
Capital costs	6.8	7.9	6.6	7.8	47.3	38.2			
Depreciation costs							40.6	34.0	37.3
Opportunity cost							0.0	1.6	4.7
Profitability indicators (Million €)									
Gross Value added	62.8	62.1	48.7	41.6	50.8	66.4	52.8	59.0	49.1
Operating cash flow	37.2	41.9	18.6	30.0	37.8	52.2	42.4	48.5	39.1
Economic profit	30.4	34.0	12.0	22.2	-9.4	14.0	-17.1	-1.5	-18.9
Capital value (Million €)									
Total invested	227.3	264.0	280.7	259.9	259.0	218.4			
Tangible assets							165.4	163.3	164.3
In-years investments							10.2	4.5	

The total amount of income generated by the Swedish national fleet in 2009 was €123.3 million. This consists of €106.2 million in landings values, €0 million in fishing rights sales, €17.1 million in non fishing income, and €0 million in direct subsidies. In 2010 the landings values was €103.3 millions which is a decrease compared to 2009. The projected total income for 2010 displays a decrease by €8 millions compared to 2009. See table 7.21.2 and figure 7.21.4 (right). Between 2007 and 2009 the total income of the Swedish fleet decreased 13%.

The total amount of expenditure by the Swedish national fleet in 2009 was €74.8 million, see table 7.21.2. The largest expenditure items were energy costs (€24.8 million) and repair costs (€23.3 million). Between 2007 and 2009 the total expenditure of the Swedish fleet decreased 17%. The projected costs display a decrease in costs for most cost items, which follows from the decrease in effort. However the increase in fuel prices in 2010 projects an increase in fuel costs in 2010.

In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the Swedish national fleet in 2009 was €48.5 million, €59.0 million and €-1.5 million respectively, see table 7.21.2 and figure 7.21.4 (right). In 2009, the Swedish fleet had an estimated capital value of €165 million. The projected profitability for 2010 is even more negative than the profitability for 2009. This stems from decreases in landings values and increases in the fuel price.

Figure 7.21.4 Swedish national fleet economic performance trends



7.21.4 Fleet composition

The Swedish national fleet consisted of 13 fleet segments in 2009. The Swedish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North and Baltic Sea. There are five inactive segments consisting of 356 vessels. These vessels are classed as inactive if they did not land any catch in 2009. Three of the active segments made overall losses in 2009 and five made an overall profit.

Table 7.21.3 provides a breakdown of key performance indicators for all Swedish fleet segments in 2009. A short description of the five most important segments in terms of total value of landings is given below:

Demersal trawl / purse seine 12-18m – 102 vessels make up this segment and are based predominantly in the North and Baltic Sea. These vessels target a variety of species e.g. nephrops, prawns and cod. Their total value of landings was €14.1 million and 223 jobs and 158 FTEs were supported by this segment in 2009.

Demersal trawl 18-24m – 58 vessels make up this segment and are based predominantly in the North and the Baltic Sea. These vessels target a variety of species e.g. nephrops, prawns and cod. Their total value of landings was €15.9 million and 172 jobs and 138 FTEs were supported by this segment in 2009. This fleet segment was profitable in 2009.

Table 7.21. 1 Swedish fleet composition and key indicators in 2009

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN-FPO-HOK													
VL1224	22	612	4,080	42	20	2.24	300	1.2					2.2
DTS													
VL1824	58	6,136	22,356	172	138	6.28	5,254	15.6	16.5	7.8	5.5	1.2	17.9
VL2440	31	6,493	20,187	106	86	3.80	5,378	9.3	18.2	8.1	6.6	1.8	19.4
DTS-DRB-PMP-PS													
VL0012	64	764	9,955	86	39	3.70	1,043	1.6					9.2
DTS-PS													
VL1218	102	3,768	24,624	223	158	9.46	3,954	8.5					17.7
INACTIVE													
VL0010	297	624	11,492									-1.5	6.9
VL1012	28	272	3,909									-0.5	2.5
VL1218	9	271	1,610									-0.2	0.7
VL1824	4	302	1,298									-0.1	0.4
VL2440	18	4,096	11,751									-1.1	5.2
PG													
VL0010	653	2,034	33,203	707	291	50.67	1,577	3.2	9.5	4.5	4.2	-6.6	23.4
VL1012	156	1,742	20,596	227	93	13.29	1,190	3.5	5.9	2.7	2.5	-2.3	14.5
TM													
VL1840	16	6,061	17,859	96	93	3.30	4,717	63.9	22.9	11.6	8.8	5.9	13.7
VL40XX	13	8,533	24,927	99	99	3.43	9,543	92.3	30.0	13.8	12.3	2.2	29.3

Pelagic trawl 18-40m – 16 vessels make up this segment and are based predominantly in the North and Baltic Sea. These vessels target a variety of species mostly herring and sprat. Their total value of landings was €16.9 million and 96 jobs and 93 FTEs were supported by this segment in 2009. This fleet segment was profitable 2009.

Demersal trawl / seine 24-40m – 31 vessels make up this segment and are based predominantly in the North and Baltic Sea. These vessels target a variety of species e.g. cod and prawns. Their total value of landings was €16.1 million and 106 jobs and 86 FTEs were supported by this segment in 2009. This fleet segment was profitable in 2009. This is one of the important segments in Sweden due to the fact that it is an important segment in the Baltic Cod fisheries. Although the gross tonnage increased after 2007 compared with the years before the number of FTEs decreased. This is an effect of methodological changes in the estimations of FTEs and should be analysed with precaution.

The main species for this segment are cod and prawns. Vessels operating in the Baltic Sea targets mainly cod and vessels operating in the North Sea targets mainly prawn. The average income per vessel increased from 2003 to 2009. The changes in GVA approximately follows from the changes in income but the increases in fuel price can be seen in the graph of GVA when comparing it to average income. Operational cash flow follows the same pattern as GVA. The average profit per vessel varies highly and this is probably an effect of the uncertainties associated with the estimation of capital costs.

The average days at sea varies but approximately follows weight of landings except for the kink between 2005 and 2006. The average weight of landings has varied from 200 to 300 tons and seems to have increased in 2008 and 2009 compared to previous years. The average energy consumption per vessel displays a negative trend from 2005 onwards which is negatively correlated with the increase in fuel price for the same period, as expected. The anomaly in 2006 most likely is due to the fact that the 2006 Swedish data collection was somewhat problematic.

Figure 7.21.5 Swedish demersal trawl / seine 24-40m key indicators

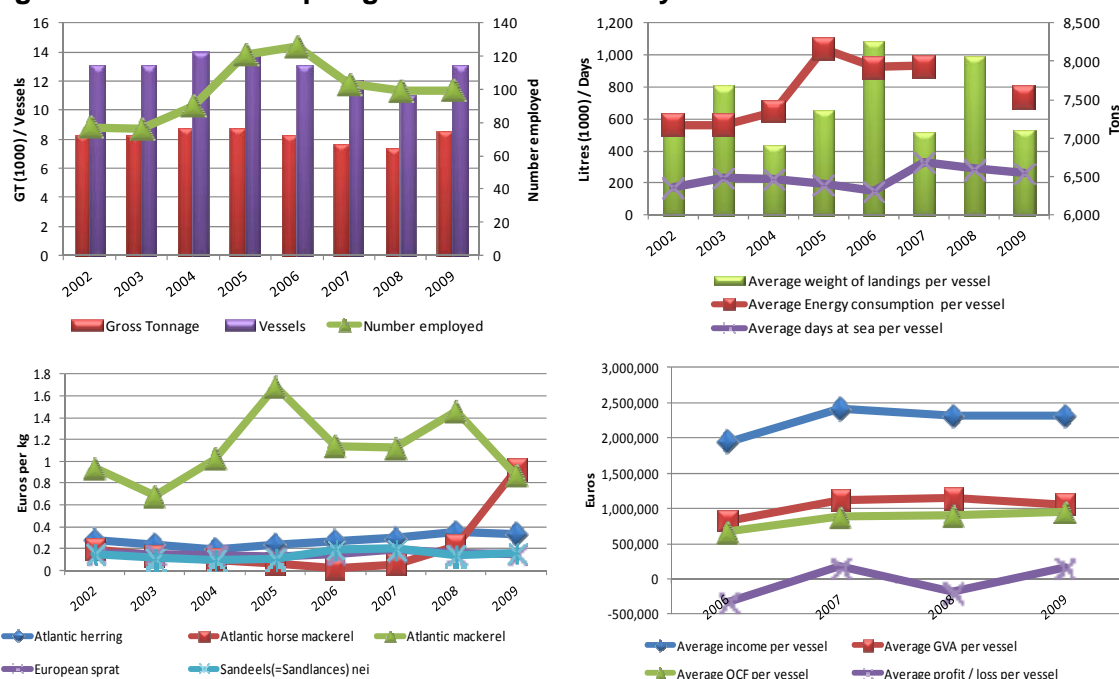


Pelagic trawl over 40m – 13 vessels make up this segment and are based predominantly in the North and Baltic Seas. These vessels target a variety of species mostly herring and sprat. Their total value of landings was €25.0 million and 99 jobs and 99FTEs were supported by this segment in 2009. This fleet segment was profitable in 2009. This is one of the important segments in Sweden due to the fact that it is the largest segment in both total value and volume of landings, although the number of vessels is rather small (13 in 2009). The increase in gross tonnage between 2008 and 2009 is due to the fact that the segment increased with 2 vessels from 11 to 13 vessels. Increase in FTEs in 2009 is for the same reason.

The average income per vessel increased from 2004 to 2007 and somewhat decreased in both 2008 and 2009. The changes in GVA follow the changes in income. Operational cash flow follows the same pattern as income and GVA although it increased somewhat in 2009 which is an effect from a decrease in total crew wages per vessel. The average profit per vessel varies highly and is probably an effect of the uncertainties associated with the estimation of capital costs.

The average days at sea varies considerably and displays an increase in 2007, this is probably an anomaly that stems from manual effort calculations. From 2008 a new data base for handling effort calculations was implemented which will assure consistency in effort calculations over time.

Figure 7.21.6 Swedish pelagic trawl over 40m key indicators



The average weight of landings varies somewhat around 7,000 tons but not enough to comment upon. The average energy consumption per vessel displays a negative trend from 2005 and onwards which is negatively correlated with the increase in the fuel price for the same period, as expected. The main species for this segment is sprat, herring and mackerel. The vessels operate in both the Baltic and the North Sea.

7.21.5 Assessment for 2010 and 2011

Towards the end of 2009 Sweden introduced an ITR system for pelagic quotas. The first transactions took place in the beginning of 2010. The effects of these transactions may be significant in terms of profitability for the pelagic fisheries. However decreases in quotas for pelagic species (most importantly for herring and sprat) may have a negative effect on the profitability of the pelagic segments.

Fuel prices have increased during 2010 and 2011 which will have an effect on all fisheries. The increase will have the most effect on the segments fishing with active gears (e.g. trawls and seiners). The total fuel consumption has been decreasing over the previous years, in part due to decreases in capacity and in part due to changes in fishing patterns and fishermen behaviour. The question is however, how much further this rationalisation can occur without significant investments in new technologies and newer vessels.

The general trend since the beginning of the 2000s is a decrease in capacity, i.e. the number of vessels which is also reflected in the decrease of total engine power and gross tonnage. This is partly due to management efforts in decreasing the fleet size in order bring it in balance with the resources. But that is not the whole truth since a part of the decrease due to the fact that many fishermen leave the trade since they can not make a living from fishing anymore. There is also a recruitment problem to the fisheries

since it is not an attractive way of living for younger people due to the low profitability and high entrance costs. The low recruitment is reflected in the increasing average age of the Swedish fisherman. The development with a decreasing fleet size and increasing average age is expected to continue for some time.

7.21.6 Data issues

Since 2005 the Swedish data collection is mostly based on census data mixed with a survey in order distinguish specific cost items. In the Swedish part of the data collection data issues is not a main problem. The main problems stem from changes in certain methodologies over time which interrupts time series mostly on the expenditure side of the economic data.

There is however issues with the estimation of capital cost. Since few, if any, new vessels have been built or even entered the Swedish fleet in recent years, reliable observations on price per capacity unit to use as input in PIM-model is impossible to find. Sweden tries to work around this issue by estimating insurance values for each vessel from a survey. The insurance values are later used as a base for estimating the price per capacity unit used in the model. However there are issues connected with using insurance values since they may include or exclude certain values.

7.22 United Kingdom

7.22.1 National fleet structure

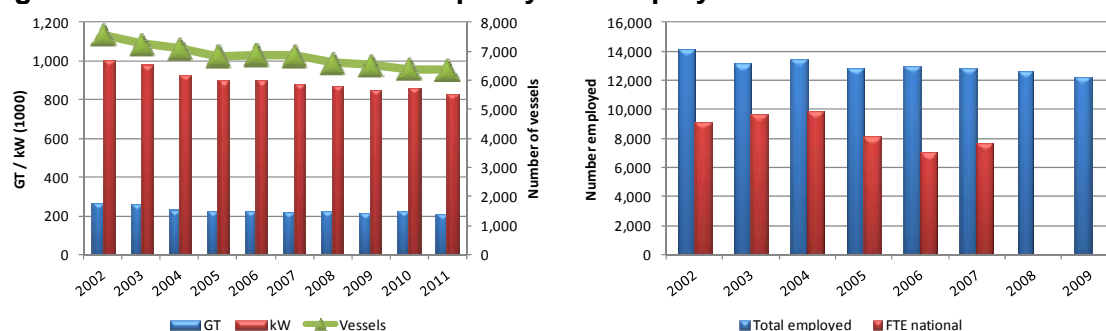
In 2011 the UK fishing fleet consisted of 6,360 registered vessels, with a combined gross tonnage of 208 thousand GT and total power of 823 thousand kW, see table 7.22.1. The overall average age of vessels was 24.6 years in 2011. The size of the UK fishing fleet has decreased each year between 2002 and 2011. The total number of vessels decreased by around 16% (around 1200 vessels) while the total GT and kW of the fleet decreased by 20% and 17.5% respectively during that period, see figure 7.22.1 (left).

Table 7.22.1 UK national fleet key indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Capacity										
Number of vessels	7,567	7,259	7,093	6,830	6,873	6,853	6,601	6,525	6,381	6,360
GT (1000)	260.8	256.7	231.8	222.8	225.1	217.8	223.4	215.6	226.9	208.4
kW (1000)	999.3	978.9	921.5	894.2	897.4	878.4	875.2	850.3	857.9	823.5
Average age	20.1	20.5	20.8	20.9	21.2	21.6	22.8	23.1	23.5	24.6
Employment										
Total employed	14,205	13,122	13,453	12,831	12,934	12,871	12,614	12,212		
FTEs	9,117	9,693	9,790	8,067	7,058	7,656				
Effort										
Days at sea (1000)	401.7	389.8	366.6	352.0	437.9	471.4	455.9	432.0	418.5	
Energy consumption (Million litres)	359.3	276.3	332.0	344.9	300.2	378.7	294.6	296.0		
Landings										
Weight (1000 tons)	654.6	598.2	626.9	688.4	600.7	600.1	575.0	576.6	601.3	
Value (Million €)	830.4	706.9	714.4	808.9	820.3	929.6	792.2	754.4	832.0	
Profitability indicators (Million €)										
Gross Value Added	478.3	493.0	400.6	419.1	388.1	373.0	364.4	344.8	422.6	
Operating cash flow	330.9	391.3	264.3	234.4	180.5	118.9	209.3	191.6	254.1	
Economic profit	0.0	344.5	224.1	160.4	117.3	32.6	48.4	74.6	119.7	
Capital value (Million €)										
Tangible assets							756.9	555.5		
Fishing rights							771.8	832.7		

The total number of fishing enterprises in the UK fleet was 517 in 2010. The vast majority of fishing enterprises, 78%, owned a single vessel and 22% of enterprises owned two to five fishing vessels. Only 2 fishing enterprises owned six or more fishing vessels.

Figure 7.22.1 UK national fleet capacity and employment trends

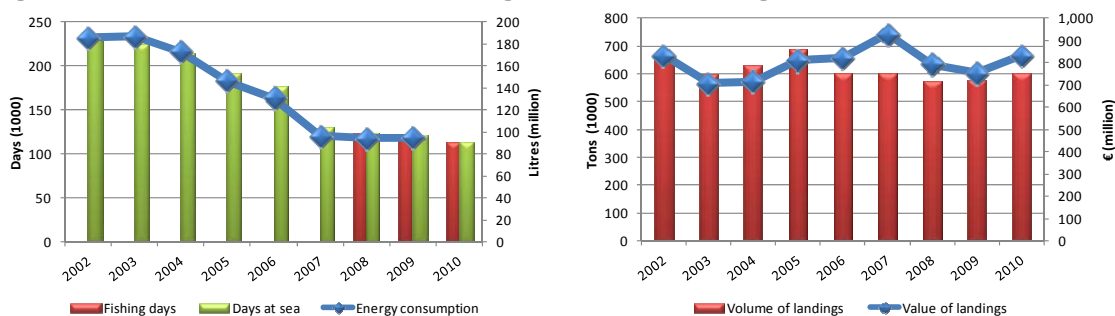


Total employment was around 12,200 jobs in the UK fleet in 2009, see table 7.22.1. The level of employment in the UK fishing fleet decreased 14% between 2002 and 2009, see figure 7.22.1 (right).

7.22.2 National fleet fishing activity and output

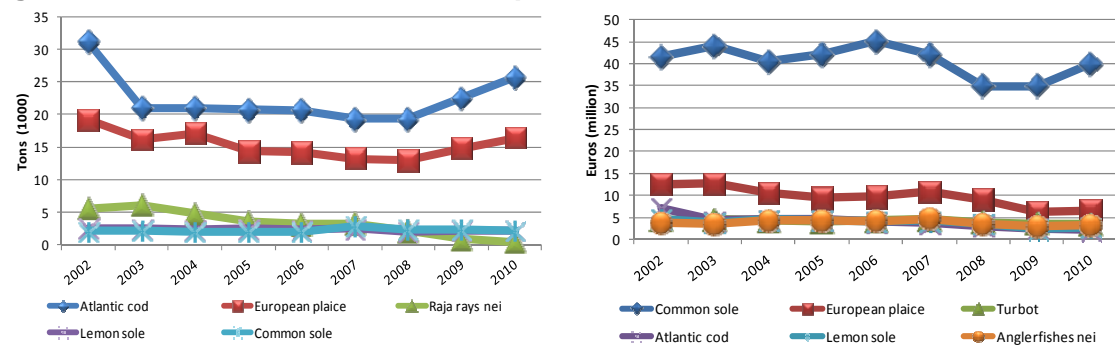
In 2010 the UK fishing fleet spent a total of around 419 thousand days at sea (see table 7.22.1), 80% of which were actual fishing days. The total number of days at sea decreased by around 11% between 2007 and 2010, see figure 7.22.2 (left). The total quantity of fuel consumed by the UK fleet in 2009 was 296 million litres. The total quantity of fuel consumed decreased by around 21% between 2007 and 2009, see figure 7.22.2.

Figure 7.22.2 UK national fleet fishing effort and landings trends



The total volume of landings by the UK fishing fleet in 2010 was 600 thousand tons of seafood. The total volume of landings achieved by the UK fleet has remained relatively stable between 2002 and 2010, see figure 7.22.2. In terms of landings composition, in 2010 Atlantic mackerel was the most common species landed in terms of tonnage (160 thousand tons), followed by Atlantic herring (67 thousand tons) and then Norway lobster (38.5 thousand tons), see figure 7.22.3 (left).

Figure 7.22.3 UK national fleet main species landed trends



7.22.3 National fleet economic performance

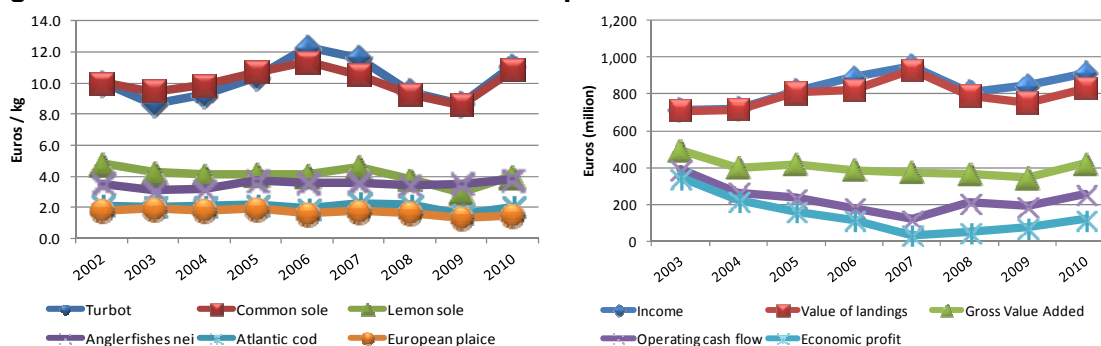
In 2010 Atlantic mackerel accounted for the highest value of landings (€157 million) by the UK national fleet, followed by Norway lobster (€113 million) and then scallops (€57 million). Between 2006 and 2008 Norway lobster was the species that achieved the highest value of landings, see figure 7.22.3 (right).

Table 7.22.2 UK national fleet economic performance indicators

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Income (Million €)									
Landings							735.8	755.2	832.0
Direct subsidies							32.7	35.9	34.3
Other income							30.8	22.1	26.4
Fishing rights							10.4	33.8	22.1
Total income	855.8	713.5	721.2	818.3	892.1	952.5	809.7	847.0	914.9
Costs (Million €)									
Crew wages	147.3	101.8	136.3	184.7	207.7	254.2	187.9	189.1	202.8
Unpaid labour value							19.3	11.9	16.8
Energy costs	83.3	67.2	93.4	134.6	149.6	168.3	153.5	117.5	155.4
Repair costs	67.3	46.9	72.8	77.9	82.8	98.9	61.4	89.1	86.3
Variable costs	163.4	66.1	97.9	108.5	170.0	192.8	89.7	89.6	86.8
Fixed costs	63.5	40.3	56.5	78.1	101.5	119.5	97.4	82.0	80.2
Rights costs							10.4	88.1	49.3
Capital costs		46.8	40.2	74.1	63.2	86.3			
Depreciation costs							135.0	98.8	116.9
Interest							6.6	6.3	0.8
Profitability indicators (Million €)									
Gross Value added	478.3	493.0	400.6	419.1	388.1	373.0	364.4	344.8	422.6
Operating cash flow	330.9	391.3	264.3	234.4	180.5	118.9	209.3	191.6	254.1
Economic profit	0.0	344.5	224.1	160.4	117.3	32.6	48.4	74.6	119.7
Capital value (Million €)									
Total invested				513.7	1,771.8	3,394.2			
Tangible assets							756.9	555.5	656.2
Fishing rights value							771.8	832.7	
In-years investments							44.7	32.6	

The total amount of income generated by the UK national fleet in 2009 was €847 million euros. This consisted of €755 million in landings values, €34 million in fishing rights sales, €22 million in non-fishing income, and €36 million in direct subsidies, see table 7.22.2. Between 2008 and 2009 the total income of the UK fleet increased 4.6%, see figure 7.22.4 (right). The total amount of expenditure (excluding depreciation, interest and unpaid labour values) by the UK national fleet in 2009 was €655 million, see table 7.22.2. The largest expenditure items were crew wages (€189 million) and fuel (€118 million). Between 2006 and 2009 the total expenditure of the UK fleet fluctuated between €600 million and €850 million, largely due to changes in fuel and fish prices.

Figure 7.22.4 UK national fleet economic performance trends



In terms of profitability, the total amount of operating cash flow, GVA and economic profit generated by the UK national fleet in 2009 was €345 million, €192 million and €75 million respectively, see table 7.22.2. Profits increased between 2008 and 2010, see figure 7.22.4 (right). In 2009, the UK fleet had an estimated capital value of €1.38 billion, of which 60% relates to fishing rights.

7.22.4 Fleet composition

The UK national fleet consisted of 30 fleet segments in 2009. The UK fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North Sea and North Atlantic. There were 6 inactive length classes consisting of 1742 vessels. These vessels are classed as inactive if they did not land any catch in 2009. Ten of the active segments made losses overall in 2009 while 20 made an overall profit.

Table 7.22.3 provides a breakdown of key performance indicators for all UK fleet segments in 2009. A short description of the five most important segments in terms of total value of landings is given below:

Pelagic trawl over 40m – 31 vessels make up this segment and they are based predominantly in the North east of Scotland. These vessels target pelagic species such as mackerel, herring and horse mackerel. Their total value of landings was €213 million and around 230 FTEs were working in this segment in 2009. This fleet segment is highly profitable, with reported profits of around 62 million euros in 2009.

Demersal trawl 12-24m – Around 500 vessels make up this segment and they predominantly operate in the North sea and West coast of Scotland. These vessels target nephrops and a mixture of demersal species, such as cod, haddock and monkfish. Their total income was around €160 million euros and 1800 FTEs were employed in this segment in 2009. This fleet segment made a modest profit in 2009.

Demersal trawl 24-40m – 106 vessels make up this segment and they are based predominantly in the Northern North sea and the West coast of Scotland. These vessels target a variety of demersal species, such as cod, haddock and monkfish. Their total income was €116 million and 765 FTEs were supported by this segment in 2009. The economic performance of this fleet segment was stable in 2009.

Beam trawl 24-40m and over 40m – 34 vessels make up these two segments and they are based predominantly on the South and Southwest coast of England. These vessels target a variety of species, such as sole and plaice in the English channel. The combined income from these two segments was €47 million and 240 FTEs were employed in this segment in 2009. Due to a combination of high fuel prices, low fuel efficiency and strict regulations on target species, these segments make significant losses.

Pots and traps 0-10m – 1800 vessels make up this segment and they are based all around the UK coastline. These vessels target a variety of shellfish species, such as nephrops, crabs and lobsters. Their total income was around €60 million and over 2500 fishermen were working in this segment in 2009. This fleet segment was profitable in 2009, and produced a significant amount of value added in relation to the total income of the segment (62%).

Table 7.22.3 United Kingdom fleet composition and key indicators in 2009

	Vessels	Gross Tonnage (GT)	Kilowatts (kW)	Number employed	FTEs	Days at sea (1000)	Energy Consumption (1000 Litres)	Weight of landings (1000 tons)	Income (million Euros)	Gross Value Added (GVA) (Million Euros)	Operating Cash Flow (OCF) (Million Euros)	Profit / Loss (Million Euros)	Depreciated replacement value (Million Euros)
DFN	697	5,958	45,193	1,198	418	35.12	5,626	11.0	29.4	16.3	8.5	1.6	22.5
VL0010	657	2,175	35,264	999	249	29.23	2,892	5.6	13.3	8.2	4.8	-0.4	16.0
VL1012	14	189	1,942	44	27	1.37	456	0.8	1.9	0.7	0.3	0.1	0.7
VL1218	15	876	2,803	60	50	2.06	846	1.6	4.3	2.1	1.0	0.7	1.3
VL1824	3	239	593	15	12	0.43	213	0.3	0.9	0.4	0.2	0.1	0.4
VL2440	8	2,478	4,592	80	80	2.03	1,219	2.7	8.9	4.7	2.3	1.1	4.1
DRB	249	10,559	47,356	738	478	27.37	19,496	35.9	65.0	32.2	17.7	11.4	25.8
VL0010	116	729	8,765	215	57	6.62	1,441	2.2	5.2	2.5	0.6	0.1	2.3
VL1012	26	476	3,833	75	51	3.26	1,391	1.7	4.0	1.8	1.0	0.7	1.5
VL1218	62	2,381	12,838	207	153	8.37	5,363	9.5	20.4	10.5	6.0	4.7	5.6
VL1824	20	2,165	7,720	85	79	3.75	4,039	10.0	13.2	6.6	3.9	2.9	5.3
VL2440	24	4,420	13,663	140	132	5.36	6,890	12.4	21.7	10.5	6.0	3.2	9.9
VL40XX	1	388	537	16	6	0.01	372		0.5	0.1	0.1	-0.2	1.3
DTS	1,039	84,620	268,171	4,122	3,501	142.17	159,063	172.7	339.8	121.0	64.5	22.5	175.7
VL0010	334	3,082	33,791	720	331	23.61	4,529	6.0	15.7	8.8	5.7	2.6	11.2
VL1012	97	1,693	12,275	306	246	12.98	4,535	3.7	10.2	3.1	1.5	-0.2	7.0
VL1218	270	12,511	53,405	992	894	41.30	24,600	23.9	53.8	20.7	11.9	7.2	19.0
VL1824	221	29,142	81,888	1,191	1,143	39.61	50,671	53.7	108.4	38.9	21.2	7.6	56.5
VL2440	106	28,823	66,936	779	765	22.25	58,535	63.5	116.5	34.8	16.2	0.5	68.2
VL40XX	11	9,369	19,876	134	123	2.43	16,194	21.9	35.2	14.7	7.9	4.8	13.9
FPO	2,057	13,224	145,424	3,571	1,751	183.03	30,202	43.0	106.0	60.3	38.0	18.3	52.2
VL0010	1,791	6,320	104,267	2,649	1,013	139.54	16,908	19.0	58.3	36.4	24.8	9.5	33.3
VL1012	181	2,228	22,596	543	410	28.78	4,164	7.9	19.6	10.5	5.9	4.1	7.6
VL1218	72	2,778	14,111	292	243	11.30	6,565	10.6	18.6	8.6	4.7	3.1	7.2
VL1824	10	1,234	2,962	62	59	2.57	1,934	3.9	6.8	3.3	1.8	1.3	2.4
VL2440	3	663	1,488	25	25	0.84	631	1.6	2.7	1.4	0.8	0.4	1.7
HOK	505	5,955	33,714	859	279	20.54	8,634	9.2	23.6	10.3	4.5	-0.3	14.6
VL0010	473	1,092	21,635	669	113	15.02	964	2.0	5.3	-1.4	-2.6	-5.5	7.4
VL1012	11	106	1,360	29	18	0.94	702	0.2	0.6	-0.4	-0.5	-0.7	0.7
VL1218	2	96	373	8	8	0.27	200	0.2	0.6	0.4	0.3	0.2	0.2
VL1824	2	176	525	11	7	0.15	225	0.1	0.3	0.1	0.1	0.0	0.3
VL2440	15	3,664	8,401	120	110	3.48	5,351	6.0	15.0	10.8	6.9	5.5	5.1
VL40XX	2	821	1,420	22	22	0.68	1,192	0.8	1.9	0.8	0.4	0.2	0.8
INACTIVE	1,742	23,577	122,844									-0.8	70.8
VL0010	1,560	3,789	64,411									-0.3	22.7
VL1012	59	783	7,585									-0.1	4.5
VL1218	68	1,737	12,378									-0.1	5.6
VL1824	19	1,684	5,663									-0.1	4.6
VL2440	30	5,879	17,851									-0.2	15.0
VL40XX	6	9,705	14,957									-0.2	18.3
MGP	15	248	2,297			2.04		1.4					
VL0010	8	77	943			0.68		0.2					
VL1012	4	70	783			0.80		0.5					
VL1218	3	102	571			0.56		0.7					
PGP	86	245	3,764	5	5	2.60	111	0.4	0.1	0.0	0.0	0.0	0.0
VL0010	85	233	3,675			2.59		0.4					
VL1012	1	12	89	5	5	0.01	111	0.0	0.1	0.0	0.0	0.0	0.0
PMP	6	17	361			0.03		0.0					
VL0010	6	17	361			0.03		0.0					
PS	40	60,832	142,012			3.47		285.6					
VL0010	4	45	426			0.34		0.2					
VL1218	5	233	1,126			0.94		3.0					
VL40XX	31	60,553	140,461			2.19		282.4					
TBB	125	10,951	40,897	516	399	15.67	29,667	17.4	66.7	-28.2	-32.5	-40.1	30.4
VL0010	29	209	2,126	52	5	0.64	137	0.4	1.1	-0.4	-0.7	-1.0	1.0
VL1012	15	241	1,877	37	12	0.80	575	0.2	1.0	-0.8	-0.9	-1.1	1.0
VL1218	30	840	5,744	99	71	3.39	3,255	1.3	5.5	-3.1	-3.5	-4.4	4.2
VL1824	17	1,891	3,880	86	73	3.43	4,450	2.4	12.2	-5.4	-6.8	-7.7	4.3
VL2440	27	4,463	17,046	150	145	5.82	11,199	6.3	26.9	-11.5	-14.1	-17.5	11.8
VL40XX	7	3,307	10,225	92	92	1.59	10,051	6.7	19.9	-7.0	-6.6	-8.4	8.1
TM				531	272		43,209		216.5	133.1	91.0	62.1	163.4
VL0010				7	4		80		0.1	0.0	0.0	0.0	0.1
VL1218				13	10		230		1.4	0.9	0.5	0.4	0.3
VL1824				26	22		1,170		1.4	0.4	0.2	-0.3	1.7
VL2440				5	5		228		0.3	0.1	0.0	-0.1	0.5
VL40XX				480	231		41,502		213.3	131.7	90.3	62.0	160.9

Figure 7.22.5 UK demersal trawl 12-24m key indicators

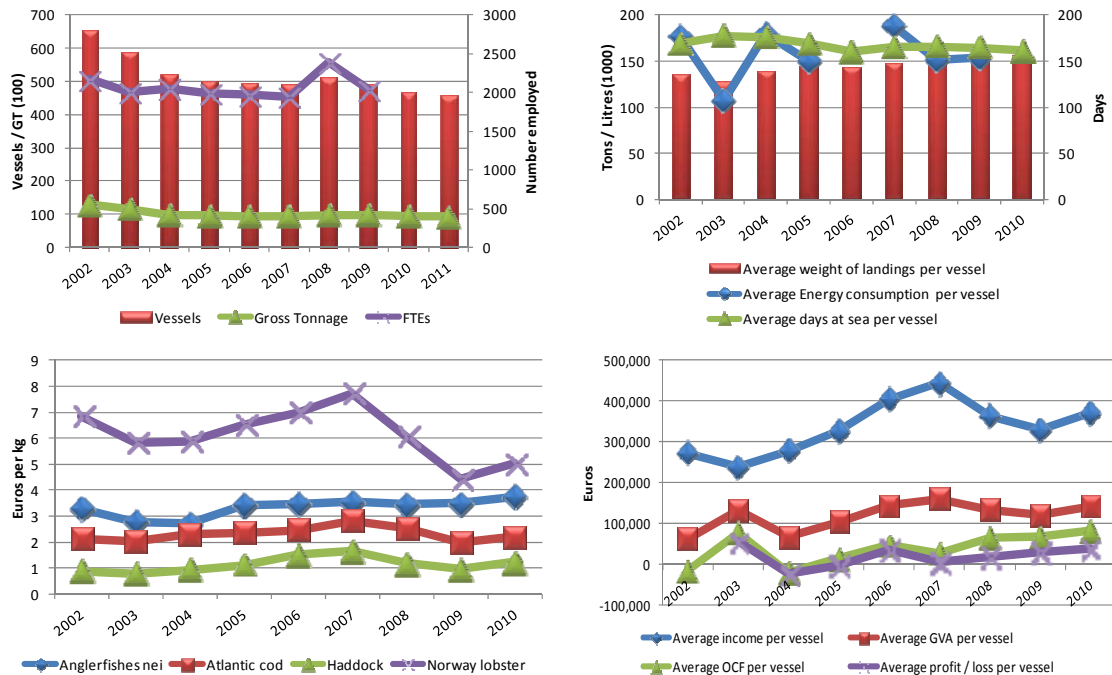
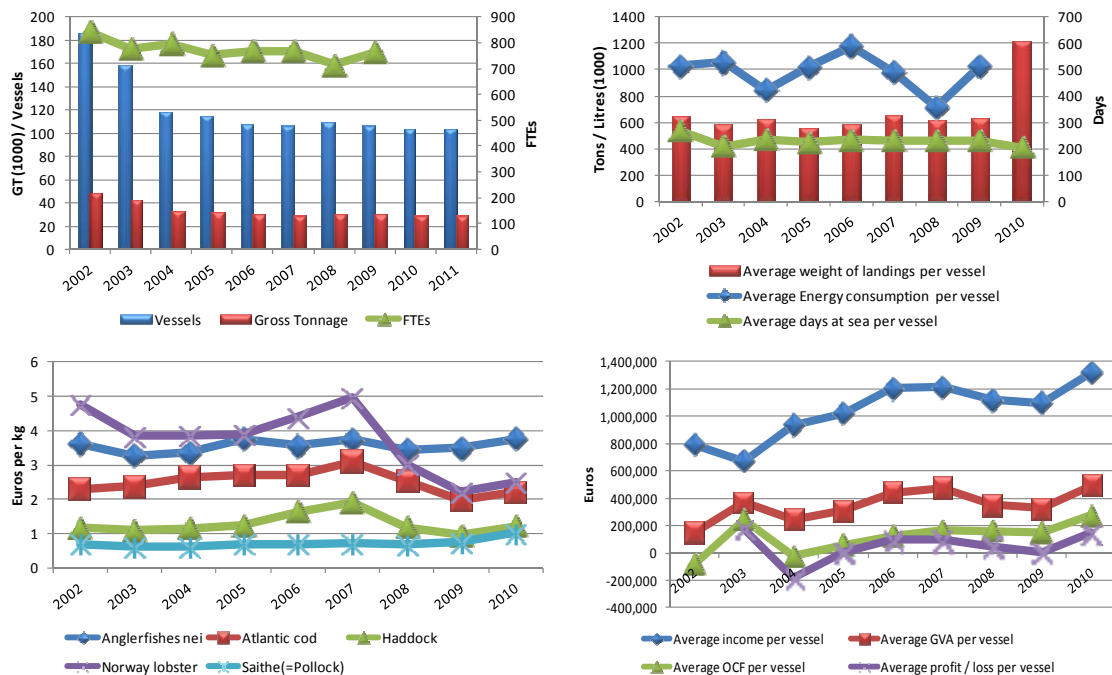


Figure 7.22.6 UK demersal trawl 24-40m key indicators



7.22.5 Assessment for 2010 and 2011

In 2010, the Scottish fisheries administration introduced a scheme to enable vessel owners to combine vessel licences from a number of vessels onto a smaller number of vessels, for instance, two licences could be combined onto one vessel. This is known as licence parking. The days at sea allocated to the donor vessel(s) could then be shared

among the recipient vessel(s). For example if the licences of three vessels were parked on two vessels, according to the commercial arrangements made between owners, then the days at sea entitlement of the donor vessel would be shared among the two recipient vessels. This scheme was in recognition of the fact that further reduction in days at sea allocations under the terms of the cod recovery plan meant that some vessels could not operate enough days at sea to allow them to generate an acceptable return on capital invested in the vessel. A large, expensive vessel needs to be active all year to pay its way. Also, there is risk of losing crew members if not enough activity and income can be offered to them. For donor vessels whose licence had been parked on other vessels, they no longer had the ability to be active in the fishery. There was a government- and EFF-funded decommissioning scheme for such vessels and around 40 vessels were scrapped under this scheme.

In principle, this scheme should allow the available fishing opportunity to be shared between fewer vessels and should improve the profit and return on investment for the remaining vessels compared to the profit they would have generated without the consolidation. However, many of the owners of remaining vessels compare one year's business performance more readily to the previous year's performance and find it wanting, rather than comparing it to a hypothetical alternative current year performance.

The licence parking scheme remains in place but the decommissioning scheme was brought to a close at the end of March 2011.

Further complicating the story for business performance in 2010 and 2011 was the introduction of a substantial trial of catch (rather than landings) quotas for cod only. Some vessels joined the scheme half way through 2010 and received an uplift on their cod quota (of no more than a fixed percentage of the vessel's recent average landings) on the basis that they would land all cod caught and all would count against their quota, including any that was below minimum landing size. Of course, they were exempt from the MLS and instead required to land all cod. Vessels on the trial would not be allowed to leave port when they no longer had access to cod quota, even if they still had access to quota for other species. This of course increased the value of cod quota to these vessel owners, even above the value of the cod they landed. Vessels on the trial were not subject to any limits of days at sea and therefore the market demand for purchasing days at sea decreased substantially, and some vessel owners who were parking licences found they were unable to sell their days at sea entitlements.

In 2011, the cod catch-quota trial was extended to a more vessels until around 26 vessels are on the trial this year. This has further reduced market demand for days at sea and further increased demand for and prices for cod quota leasing (or purchase of current allocation in tonnes). Prices for cod quota leasing had reached the market sale value of cod during the first half of 2011. Vessel owners not in the catch quota trial complained that they could not justify leasing-in cod quota at more than the sales value of the cod and so were discarding more cod than previously.

These major adjustments to fleet capacity and business incentive make it impossible to estimate likely business outcomes for the fleets affected. Vessel owners in the catch quota trial also reported that they were not able to predict their financial outcome for the year as they did not know how things would work out for them.

In England, a major restructuring of the under 10m fleet is proposed after an extensive programme to consider and evaluate options. There was an acknowledgement by vessel owners and government that the catch allowance of quota species was insufficient for vessels to be profitable and for owners to make a living. A temporary allowance was made that under 10m vessels could lease-in quota allocated via POs to over 10m vessels and this opportunity was taken up. In 2011 there is a proposal to allocated to under 10m vessels Fixed Quota Allocation units based on their recent annual average landings record and remove the separation of over and under 10m vessels. It is acknowledged that for many vessels, the share of the catch that is allocated to them will not be enough to keep the vessel active and that owners may decide to sell their fishing rights and leave the fleet. There are around 1,600 inactive vessels under 10m in the UK so the market for second hand vessels is unlikely to be strong enough that owners leaving the industry could achieve a good sale value for their vessels. Under the pool system they would have had no fishing rights to sell, whereas at least under the proposed new system, they will be able to sell their newly-allocated quota units.

7.22.6 Data issues

There are some data issues that result in an unlikely step change in capital values between 2007 (under the DCR) and 2008 (under the DCF methods). There was not time to identify the exact cause or source of the data issue, but it is considered likely to be related to the change in method of estimation.

It should also be noted that there is no data available to make truly robust estimate of the market value of fishing rights. It should also be noted that the sum of market value of all fishing rights, in theory, could change from day to day during any calendar year, as new information becomes available to purchasers and therefore affects their valuation of the rights. A single value to reflect the market value of fishing rights in reference to a single calendar year is not defined in the DCF and so this value for the UK, and for all MS, should be treated with caution.

8 EU FISH PRICES & MARKETS ANALYSIS

In this chapter the main trends in EU landing prices of seafood products are analysed for the period 2002 to 2010. This analysis investigates the first-sale (ex-vessel) price evolution of 14 key species and total catch by fishing gear (mobile or passive), vessel length and fishing region.

These 14 key species are: anchovy (European anchovy), monkfish, tuna (Atlantic bluefin tuna), cod (Atlantic cod), shrimps (deep-water rose shrimp), herring (Atlantic herring), hake (European hake), mackerel (Atlantic mackerel), nephrops (Norway lobster), sardine (European pilchard), salmon (Atlantic salmon), sole (Common sole), swordfish and turbot.

Asche & Guillen (2012) showed that fishing gear and origin play an important role in the price formation of seafood products. Increasingly, fishing gear and origin are becoming quality attributes for different fish stocks, influencing the price determination process. Traditionally, fishing gear has been important mainly because it was perceived to influence product quality (Kristofersson & Rickertsen, 2004; McConnell & Strand, 2000). But progressively, fishing gear becomes more important because of perceived environmental impacts.

When fish markets were primarily regional, and so demand was supplied by local production, origin was less important. However, with globalisation one can increasingly find fish from all the world's oceans in any well stocked seafood counter as global seafood trade has exploded (Anderson & Fong, 1997; Guillotreau & Peridy, 2000; Guillotreau, 2004), and products are increasingly being differentiated by origin (Guillotreau, 2004; Asche & Sebulonsen, 1998; Asche, 2008; Wessells, 2002).

In fact, studies indicate that prices for fish species in different EU countries are not formed just in the national market, but in a wider scale. Nielsen et al., (2009) reported the existence of market integration at the European level in first-sale landings for fresh whitefish, fresh pelagic fish and frozen whitefish. When markets are integrated, prices of different fish products follow each other over time and can thus be considered as being formed within the same market. Results showed that the fresh whitefish market would be composed by cod, sole, hake, monkfish, whiting and lemon sole; the fresh pelagic fish market would be composed of herring, mackerel, swordfish and anchovies; while the frozen whitefish market would be composed by cod, hake, Pollack, plaice and haddock.

For this analysis around 350,000 landing value and weight data observations by country, fleet segment, vessel length and fishing area, reported by the Member States were considered. Some other value and weight data observations have been excluded from the analysis because of inconsistencies (landing weights reported with not the corresponding landing values, or vice versa, repeated observations, etc.).

This chapter enables better insights to the price evolutions for each species and the EU seafood markets.

8.1 The fish species analysed

First of all, it should be noted that this analysis is carried out for 14 key species. However, there are more than 4,000 species of aquatic organisms and plants that are harvested worldwide, and more than 800 of these species are considered commercially important. In contrast there are only 10-15 species of commercially active birds and mammals, the other important source of animal protein (Anderson, 2003). These 14 key species represented 36% in weight and the 42% in value of the total EU Member States landings provided for the production of this report. Overall, data on 770 species (FAO codes) were supplied.

The total weight of EU landings used in this analysis for 2009 equals to 3,645 thousand tons of seafood products; while Eurostat provides a total production (landings + discards) of 5,067 thousand tons. Thus, the data used for the analysis covers 72% of the Eurostat figures for 2009. This divergence is because i) discards have not been considered in this analysis (since we are looking at first-sale prices), ii) not all Member States submitted landings data for 2009 (as it has been already explained in this report), iii) in this analysis we only considered fleet segments with matching weight and value of landings observations. However, we do not expect any significant divergences in the analysis, because the coverage is significant and prices are constructed as a ratio, so they should be quite stable. Table 4.1 presents the top 10 species in terms of value and volume of landings for 2009.

Table 8.1 Top 10 species in terms of value and volume of landings for 2009

Top 10 species by value	Value (€million)	Weight (1000 tons)	Price (€/per kg)	Top 10 species by weight	Weight (1000 tons)	Value (€million)	Price (€/per kg)
Common Sole	297	29	10.18	European sprat	529	74	0.14
Norway lobster	288	66	4.34	Atlantic herring	509	143	0.28
Atlantic mackerel	271	301	0.9	Sandeels(=Sandlances)	317	38	0.12
Atlantic cod	190	113	1.68	Atlantic mackerel	301	271	0.9
European hake	168	47	3.61	European pilchard (=Sardine)	155	88	0.57
Atlantic herring	143	509	0.28	Jack and horse mackerels nei	113	42	0.37
Great Atlantic scallop	122	56	2.18	Atlantic cod	113	190	1.68
Common cuttlefish	101	18	5.49	Chilean jack mackerel	112	24	0.21
European anchovy	97	60	1.6	Round sardinella	72	20	0.28
European pilchard (=Sardine)	88	155	0.57	Norway lobster	66	288	4.34
Average Total	4339	3645	1.19	Average Total	3645	4339	1.19

Table 8.1 contains the main species by volume and value for 2009, since the coverage for 2010 is lower than previous years. Reported data in terms of volume and value for 2010 is 26% and 27% less than 2009 data respectively. It should be noted that this is the first time that previous year's landings data have been requested to obtain economic performance estimations for 2010.

The analysis of seafood prices will focus on 14 key species, as well as the mean price for the total EU landings. These species have been chosen by the experts as the most representative of the EU harvesting and consumption sectors.

Table 8.2 Common name, scientific name and FAO codes of species analysed

3 Digit code	Common Name	Scientific name
ANE	European anchovy	(<i>Engraulis encrasicolus</i>)
ANF	Anglerfishes (=Monkfish)	(<i>Lophiidae</i> spp.)
BFT	Atlantic bluefin tuna	(<i>Thunnus thynnus</i>)
COD	Atlantic cod	(<i>Gadus morhua</i>)
DPS	Deep-water rose shrimp	(<i>Parapenaeus longirostris</i>)
HER	Atlantic herring	(<i>Clupea harengus</i>)
HKE	European hake	(<i>Merluccius merluccius</i>)
MAC	Atlantic mackerel	(<i>Scomber scombrus</i>)
NEP	Norway lobster	(<i>Nephrops norvegicus</i>)
PIL	European pilchard (=Sardine)	(<i>Sardina pilchardus</i>)
SAL	Atlantic salmon	(<i>Salmo salar</i>)
SOL	Common sole	(<i>Solea solea</i>)
SWO	Swordfish	(<i>Xiphias gladius</i>)
TUR	Turbot	(<i>Psetta maxima</i>)

These 14 key species can be grouped as follows: 4 small pelagic species (anchovy, herring, mackerel and sardine), 2 large pelagic species (tuna and swordfish), 5 demersal species (monkfish, cod, hake, sole and turbot), 1 anadromous species (salmon) and 2 shellfish species (shrimps and nephrops). The common and scientific names, and the FAO code of the 14 species analysed are shown in table 8.2.

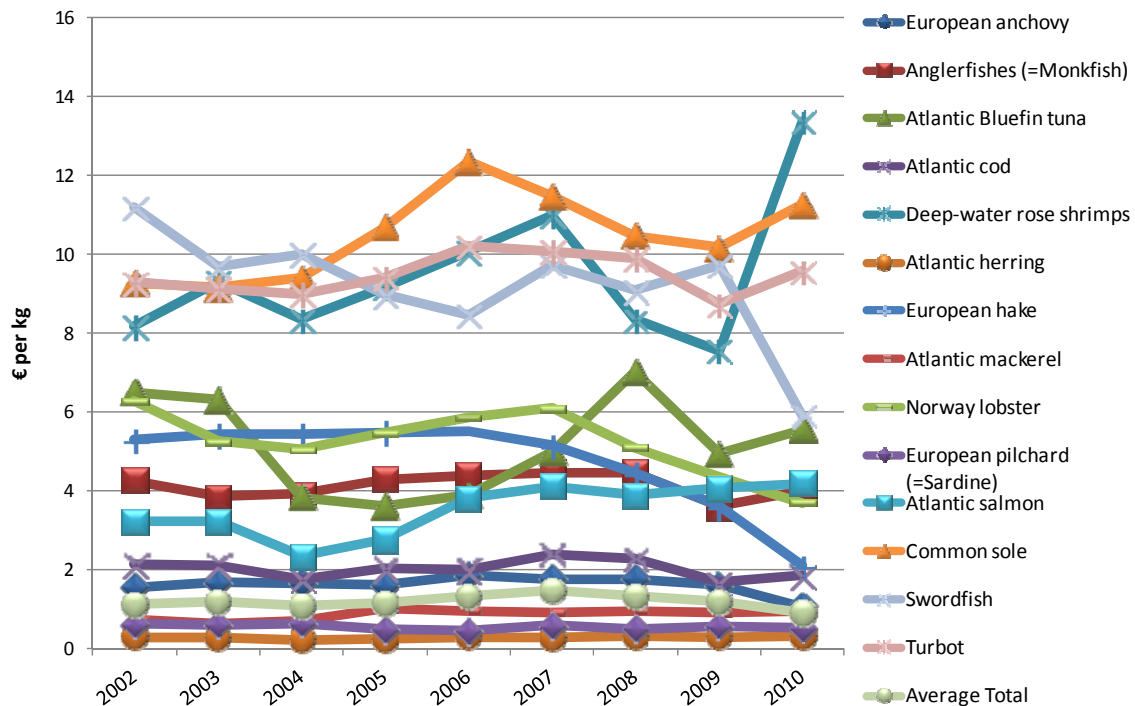
Table 8.3 EU fish price evolution 2002-2010 (€ per kg)

Species	2002	2003	2004	2005	2006	2007	2008	2009	2010
European anchovy	1.55	1.67	1.65	1.61	1.85	1.76	1.76	1.60	1.07
Anglerfishes (=Monkfish)	4.26	3.85	3.93	4.30	4.39	4.46	4.47	3.61	4.01
Atlantic Bluefin tuna	6.51	6.30	3.83	3.61	3.89	4.97	7.01	4.94	5.55
Atlantic cod	2.13	2.11	1.76	2.02	2.00	2.40	2.29	1.68	1.85
Deep-water rose shrimps	8.17	9.32	8.34	9.17	10.07	11.00	8.34	7.55	13.38
Atlantic herring	0.29	0.27	0.22	0.24	0.29	0.28	0.31	0.28	0.31
European hake	5.29	5.43	5.43	5.49	5.51	5.15	4.44	3.61	2.09
Atlantic mackerel	0.74	0.64	0.70	1.01	0.95	0.92	0.96	0.90	0.95
Norway lobster	6.28	5.25	5.05	5.46	5.86	6.10	5.10	4.34	3.69
European pilchard (=Sardine)	0.63	0.60	0.64	0.48	0.44	0.59	0.50	0.57	0.52
Atlantic salmon	3.22	3.22	2.34	2.77	3.81	4.12	3.89	4.06	4.19
Common sole	9.28	9.15	9.40	10.67	12.35	11.46	10.46	10.18	11.25
Swordfish	11.21	9.70	10.01	8.97	8.46	9.74	9.08	9.74	5.90
Turbot	9.29	9.13	8.99	9.42	10.22	10.08	9.90	8.72	9.57
TOTAL	1.50	1.40	1.26	1.38	1.56	1.64	1.52	1.19	0.89

Table 8.3 contains the price evolution (ex-vessel prices) for the 14 key species and for the total landings of seafood species fished by EU countries. The overall landing prices show an important volatility for the 2002 – 2010 period, with an important price decrease since 2008. However, the price evolutions for the different species show very different patterns, as can be seen in table 8.3 and figure 8.1.

The price decrease from 2008 onwards is related to the economic crisis that has reduced the purchasing power of many consumers and has worsened future expectations. Therefore, demand for seafood products, as well as in general, has been reduced (or shifted to cheaper products).

Figure 8.1 EU fish price evolution 2002-2010



8.2 The fish species and markets

In this section the main price trends for each species, as well as their sources and markets are reviewed. The ranking in value and weight terms is done based on the data reported for this report. Because of the lack of landings reported by significant fishing Member States, the ranking reported here could not exactly match with the real EU landings.

European anchovy

European anchovy (*Engraulis encrasicolus*) is a small pelagic fish species. It is the 13th fish species most fished in volume and the 9th in value terms (from the reported data) during 2010. The main production sources in the EU reported are Italy and Lithuania. Spain and Greece are also important sources of European anchovy, but landings data was not submitted or incomplete.

In the first years of the analysed period there was an increase in the price of anchovy. This must have been mainly caused by the closure of the fishery of the Bay of Biscay which reduced the supply. It implied that the transforming industry had move towards the supply coming, especially from the Mediterranean (and some other markets outside the EU) increasing the anchovy prices. However, prices have been decreasing since 2007-2008, this could be due to the increase of imports that have lower prices, the lower size of the anchovy that would be not so suitable for the processing industries, and the adaptation of these industries to other anchovy sources or practices.

Anglerfishes (=Monkfish)

Commercialised as monkfish (*Lophiidae spp.*), there are some demersal fish species of the Lophiidae family. EU fleets mainly target the species *Lophius piscatorius* and *Lophius budegassa*. It is the 19th fish species most fished in value terms during 2010. This low position can be explained by the use of different FAO codes assigned to different species commercially known as monkfish. The main reported sources in the EU are France and the UK.

Atlantic bluefin tuna

Atlantic bluefin tuna (*Thunnus thynnus*) is a large pelagic species. It is only above the 40th species in value and volume terms reported during 2010. But it is analysed here because of its importance and management implications. The main reported sources in the EU are France, Italy. Spain and Greece are also other important fishing sources of bluefin tuna, but Spanish and Greek landings data are missing from the analysis.

The market for Atlantic bluefin tuna was characterised in the past by a growing demand. This brought the development of tuna fattening in cages all over the Mediterranean that supplied the Japanese sushi/sashimi market. The Atlantic bluefin tuna price decreased significantly between 2004 and 2005; after which the price stabilised and recovered to pre 2004 levels. This trend correlates to the large expansion of bluefin tuna cages in the Mediterranean that increased the supply of this species and tuna stocking in Japan.

However, the 11th of March 2011 earthquake and following tsunami that affected Japan had (and may continue to have) an important impact on the world markets for seafood products, especially for tuna, where Japan is the main importer. Despite lower expected Japanese landings (FAO, 2011), a higher uncertainty and lower prices for tuna could be foreseen in the near future.

Atlantic cod

Atlantic cod (*Gadus morhua*) is a demersal fish species. It is the 4th species more landed in terms of value and the 7th in terms of volume during 2010. The main EU producers are Denmark, UK, Germany, Sweden, Poland, France and Portugal.

The market for cod is characterised by being part of a larger whitefish market consisting of several whitefish species including hake and haddock. EU is a large net importer of both cod and other whitefish, where Norway and Iceland are the main suppliers of cod.

It is expected that Atlantic cod catches will exceed 1 million tons in 2011, for the first time in more than a decade (FAO, 2011). This increase in the supply together with the

competence from imports of other cheaper whitefish products may keep cod prices down.

Deep-water rose shrimp

Deep-water rose shrimp (*Parapenaeus longirostris*) is a demersal shellfish species. It was the 13th most landed species in the EU in value terms during 2008. The main production takes place in the Mediterranean, with Italy and Portugal being the main EU producers. Again data from Greece and Spain is lacking for this analysis.

In 2010 international prices of shrimp increased by almost 35%, while EU imports increased by a 3% (FQO, 2011).

Atlantic herring

Herring (*Clupea harengus*) is a small pelagic fish species. It is the second largest species landed in volume during 2008 and the 6th in value. The main EU producers are Denmark, Sweden, Finland, UK and The Netherlands.

Herring is a relatively cheap, and so it behaves either as a necessary or inferior product. Herring is mainly consumed in northern Europe including EU and Russia north of a line drawn through Paris and Moscow. Germany and Russia are the largest consuming countries with processed herring (mainly pickled) sold in Germany and frozen herring sold in Russia. Norway is the largest supplier. Norwegian herring originates mainly from the Atlantoscandic stock. Denmark is the second largest supplier and the largest processing country.

The EU as a whole is a net exporter of herring, exporting it among others to African countries and China. Atlantic herring landings for 2011 are expected to decrease (FAO, 2011).

European hake

European hake (*Merluccius merluccius*) is a demersal whitefish species similar to cod. It was the 5th largest species landed in terms of value and the 18th in terms of volume during 2010. Spain is the main hake producer, but Spanish value of landings data have not been reported, and so, no data has been included in the analysis. Data from another main producer, Greece, is missing. Thus the other main producers are Italy and France. With Spanish and Greek data, hake would be far above in both landing value and weight rankings.

European hake is widely distributed in all EU waters. However, various other species are commercialised under the name of hake, some of them originating from distant fishing grounds.

Hake is one of the most important groups of groundfish sold in international seafood markets (Anderson, 2003). Hake's key position is especially notable in southern European markets. Spain accounts for half of the total hake consumption in Europe. The large range of products sold as hake (considering species, size, fishing gear, origin, freshness, etc.) means that hake products can be characterised from inferior to luxury goods. (Guillen, 2009).

Atlantic mackerel

Atlantic mackerel (*Scomber scombrus*) is a small pelagic. It is the 3rd largest species landed in terms of value and the 4th in volume during 2010. The main EU producers are UK, Ireland, Denmark, The Netherlands and France.

As a result of the European countries failing to reach a multilateral agreement on mackerel quotas, the projected unilateral 2011 quotas are almost 50% higher than the quota recommended by ICES. An increased supply from Europe will be balanced with the expected lower supply coming from the South Pacific and the North Atlantic (FAO, 2011).

Norway lobster

Norway lobster (*Nephrops norvegicus*) is a demersal shellfish species. It has been the second species most landed in the EU in value terms, and the 10th in volume during 2010. The main EU producers are UK, Ireland, France, Denmark and Italy.

European pilchard (=Sardine)

European pilchard or commonly known as sardine (*Sardina pilchardus*) is a small pelagic fish species. It is the 10th species landed in terms of value and the 5th in volume during 2010. The main EU producers are Portugal, France, UK, Italy, The Netherlands and Lithuania. Spain and Greece may also be an important source of sardines, but Spanish landings data was not available.

Atlantic salmon

Atlantic salmon (*Salmo salar*) is an anadromous species (they spend part of their lives in the sea and in freshwater). Its inclusion on this analysis is not because of the important EU catches of this species (landings are above the 100th in both value and volume terms), but because is an important species in terms of consumption. Most of the production comes from aquaculture. World largest salmon producers are Norway and Chile. The main EU producers of wild Atlantic salmon are Finland, Sweden, Poland and Denmark.

Salmon prices are determined at the international salmon market. For European market Norway is the largest exporter. Between 2006 and 2008 salmon prices have been turbulent. Norwegian salmon prices have varied between 2.35 and 5.46 euro. (www.eurofish.dk).

Between 2007 and 2010, salmon prices on average have been higher than 4 Euros; prices were not so high for many years. In 2011, the recovery of Chilean salmon will increase overall market supply; whilst Norwegian salmon exports to the USA and China have fallen momentarily. This, in conjunction with the availability of frozen salmon from China, could bring, at least for the short term, a reduction in salmon prices in Europe.

Common sole

Common sole (*Solea solea*) is a demersal fish species. It is the most important species in value terms, and the 25th in volume terms for 2010.

The North Sea sole stock is the most important supply source, and the Netherlands is the largest supplier, followed by France and Belgium. In the years 2006 and 2007 prices for sole were rather high compared to the years before. Data from 2008 show lower

average prices (approximately -10%) than in 2007 and in the beginning of 2009 prices of sole were even lower (than usual for the season). Prices in 2010 increased. The EU market for sole, which is a luxury fishery product, is characterised by being self-sufficient with a limited export to countries outside the EU.

Swordfish

Swordfish (*Xiphias gladius*) is a large pelagic species. It is the 16th most important species in reported value terms. The main EU producers reported are Italy and Portugal. However, Greece and Spain are also very important sources of swordfish, probably the first and the second in terms of landings, but data was not submitted.

Turbot

Turbot (*Psetta maxima*) is a demersal fish species. Its inclusion on this analysis is not because of the important EU catches of this species, since is the 26th specie in terms of value, but because it's increasing importance in the market, and because is one of the main species in the Black sea, together with sprat. Turbot is considered a luxury fish species that it has started to be produced from aquaculture during the last years. The main EU producer of wild turbot is the Netherlands.

8.3 Price evolution by fishing technique

In this section, the price of the different 14 key species is analysed according to fishing technique. The 13 fishing techniques that are used to report the data for the Data Collection Regulation (2002-07) and Data Collection Framework (2008-9) are classified between mobile and passive gears, according to appendix III of the Commission Regulation 1639/2001.

Mobile gears:

- Beam trawl (TBB)
- Demersal trawl and demersal seiner (DTS)
- Pelagic trawls and seiners (PTS)
- Dredges (DRB)
- Polyvalent mobile gears (MGP)
- Other mobile gears (MGO)
- Purse seiners (PS)
- Pelagic trawlers (TM)

Passive gears:

- Passive gears for vessels smaller than 12 meters (PG)
- Gears using hooks (HOK)
- Drift nets and fixed nets (DFN)
- Pots and traps (FPO)
- Polyvalent passive gears (PGP)
- Other passive gears (PGO)

Using Passive and Active gears (which is not included in this analysis)

- Combining mobile and passive gears (PMP)

Table 8.4 (see Excel data annexes that accompany this chapter) contains the fish price evolution for the analysed species by type of fishing gear (mobile and passive). Table 8.4 shows that the passive gear segments receive higher prices than the mobile gear segments. This result is because the passive gears tend to preserve the fish better during fishing operations so a higher quality product is landed.

8.4 Price evolution by vessel length

In this section, the price of the different 14 species is analysed depending on vessel length of the fleet segment.

Data from the Data Collection Regulation (2002-2007) is reported using 4 different length classes:

- VL0012: contains vessels less than 12 metres in length (includes VL0010, VL0006, VL0612 and VL1012 from the new DCF)
- VL1224: contains vessels between 12 metres and 24 metres in length (includes VL1218 and VL1824 from the new DCF)
- VL2440: contains vessels between 24 metres and 40 metres in length
- VL40XX: contains vessels greater than 40 metres in length

However, from 2008, data has been collected under the Data Collection Framework, with a higher level of disaggregation. In order to provide time series, the DCR length classes have also been used as following:

- VL0012: contains vessels less than 12 metres in length, including the DCF categories: VL0010, VL0006, VL0612 and VL1012.
- VL1224: contains vessels between 12 metres and 24 metres in length, including the DCF categories: VL1218 and VL1824.
- VL2440: contains vessels between 24 metres and 40 metres in length, same category for the DCF
- VL40XX: contains vessels greater than 40 metres in length, same category for the DCF.

Table 8.5 (see Excel data annexes that accompany this chapter), contains the fish price evolution for the analysed species by vessel length. Table 8.5 shows that the smaller vessels tend to receive higher prices, and the prices decrease as the length class increases. This may be due to the fact that larger vessels spend more time at sea, thus when their products arrive in port for first sale they are unlikely to be as fresh as equivalent products from smaller artisanal vessels that usually land daily. Moreover, in general larger vessels tend to use more active gears, and as it has already been shown, passive gears tend to produce fish products with a higher quality which obtain higher prices. This trend is not exactly followed by all species. One explanation for this could be that larger vessels are capturing larger individuals, and so they receive a larger price (Asche & Guillen, 2012).

8.5 Regional Price evolution

The regional analysis was carried out according to the Commission Regulation (EC) No 665/2008 of 14 July 2008 that establishes the following regions for the collection,

management and use of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy:

- Baltic Sea (ICES areas III b-d),
- Mediterranean Sea and the Black Sea,
- North Sea (ICES areas IIIa, IV and VIId) and the Eastern Arctic (ICES areas I and II),
- North Atlantic (ICES areas V-XIV and NAFO areas),
- Other fishing regions (comprises all other fishing grounds).

Table 8.6 (see Excel data annexes that accompany this chapter), contains the fish price evolution for the analysed species by fishing region. Table 8.6 shows that the average prices in the Mediterranean are higher than other regions; while the average price by species in 'other regions' tends to be the lowest. This can be explained in part because of the freshness of the products when arrives to the consumer, that allows them to obtain a higher price.

It can also be seen that the overall average price is lower for the Baltic Sea, in part due to its own catch composition. Moreover, in the table it can be seen that the average price of fish in the Baltic region dropped sharply in 2004. The reason for this was the new Member States joining the EU where the price of fish is generally lower. During 2002 to 2006 the price of herring fluctuated around €0.18 per kg. In 2007 there was a significant increase in the price by nearly 40%. This is explained by an increased demand for herring for human consumption and at the same time an increased demand for industrial use was observed. The price of cod from the Baltic Sea increased in 2007. One reason for this was the closing of the Polish cod fishery by the Commission. For the Baltic region another valuable species is sprat. In 2007 the price of sprat went up due to an increased demand for fish meal and fish oil on the world market. Nearly all landings of sprat are used for industrial purposes.

However, it should be noted that French data made no distinction within area 27 (North East Atlantic), so French data could only be disaggregated between Mediterranean and 'other regions'. This, together with the lack of data for Spain and Greece has handicapped this study, leading to several inconsistencies. First, most of the Mediterranean prices are driven by Italian prices. In addition, some species mainly fished by Spain and/or Greece (or the non Mediterranean part of France) have not been included in the analysis, so some "marginal" landings could have somewhat biased the price information in the analysis. For example, the average price of hake is driven mainly by Mediterranean landings, while in fact the average price may have been higher if the Spanish data were available.

Tables 8.7 to 8.21 in the Excel data annexes that accompany this chapter contain the price evolution by sea region, gear and vessel length for the 14 key species analysed and total EU landings reported for the period 2002-2009.

8.6 Conclusions

EU fish prices have decreased since 2008 due to the economic crisis that has reduced the purchasing power of many consumers and worsened future expectations. This has

resulted in a reduction (or a shift to cheaper seafood products) in the demand for seafood products, as well as for all kinds of products.

However, it is expected that in the next years' seafood per capita will continue to increase in the EU, especially due to the increase in consumption of the countries with the lowest seafood consumptions per capita, although this will probably be based on relatively cheap seafood products.

There has been a worldwide recovery of seafood demand in 2010 and 2011, with new records in international fish trade. However the EU may be lagging behind because of the recent economic crisis within the Euro zone.

Moreover, the earthquake and following tsunami that affected Japan on the 11th of March 2011, had (and may continue to have) an important impact on the world markets for seafood products, especially for tuna, where Japan is the main importer. Despite lower expected Japanese seafood landings, it could be foreseen a higher uncertainty in seafood prices in the near future.

Another important factor that can affect worldwide seafood markets is the recovery of Chilean salmon that will increase overall supply, together with the production of frozen salmon from China and the fall of Norwegian exports to the USA and China that could add pressure on the EU salmon market and reduce salmon prices.

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9 SUBSIDIES

9.1 Introduction

This chapter of the 2011 Annual Economic Report contains an analysis of subsidies data obtained from the latest DCF fleet economic data call issued to EU Member States, and also provides some general background information on subsidies in EU fisheries.

The use of subsidies in fisheries, as in most sectors, are restricted by EU and World Trade Organization (WTO) rules, so that subsidies paid by governments to private companies do not contradict the general rules of the common market and distort competition.

According to the WTO (see <http://www.wto.org>), subsidies exist when there is some form of financial contribution by a government or any public body within the territory of that government or public body. This could involve:

- Direct transfer of funds (e.g. grants, loans, and equity infusion), potential direct transfers of funds or liabilities (e.g. loan guarantees);
- Foregone or not collected government revenue that is otherwise due (e.g. fiscal incentives such as tax credits);
- Provision of goods or services other than general infrastructure
- Any form of income or price support

There are two main categories of subsidies in European fisheries:

- "*De minimis aid*" subsidies, which are deemed small enough not to have any significant impact on competition
- "*Block exemptions*" that are considered not to distort competition whatever the sum involved.

"De minimis aid" (Commission Regulation (EC) No 1998/2006 of 15 December 2006) is allocated by Member States and from 2007 should not exceed the payment of 30,000 euros to a single fishing enterprise over a 3 fiscal year period. "Block exemptions" are defined in accordance with the requirements of European Fisheries Fund (Council Regulation (EC) No 1198/2006 of 27 July 2006). In addition, tax exemptions are defined in accordance with Council Directive 2003/96/EC of 27 October 2003.

Subsidies data requested under the economic component of the DCF is part of the income variable group. According to the DCF definition, the subsidies data reported by Member States should include "*direct payments, e.g. compensation for stopping fishing, refunds of fuel duty or similar lump sum compensation payments. Excludes social benefit payments, indirect subsidies, e.g. reduced duty on inputs such as fuel, investment subsidies.*" As the direct subsidies data (and all fleet economic data) requested under the DCF relates to the active fleet only, it follows that amounts paid for permanent cessation of fishing activities (decommissioning) should not be included, and '*compensation for stopping fishing*' should refer to temporary measures only, however some direct subsidies data was submitted for inactive vessels during the latest data call. Also, according to the wording of the legislation, capital investment subsidies such as vessel modernisation should also not be included in the data submitted.

An interesting aspect is the situation surrounding the price of fuel for fishing vessels. Most if not all EU fleets pay a reduced duty on fuel. However some fishing enterprises (generally smaller operations) initially pay the full amount (including tax) and then reclaim the tax at the end of the financial year, while others pay the reduced rate from the outset. According to the definition of subsidies in the DCF, data should be reported for those who receive refunds of fuel duty, while no data should be reported for those who simply pay a reduced duty.

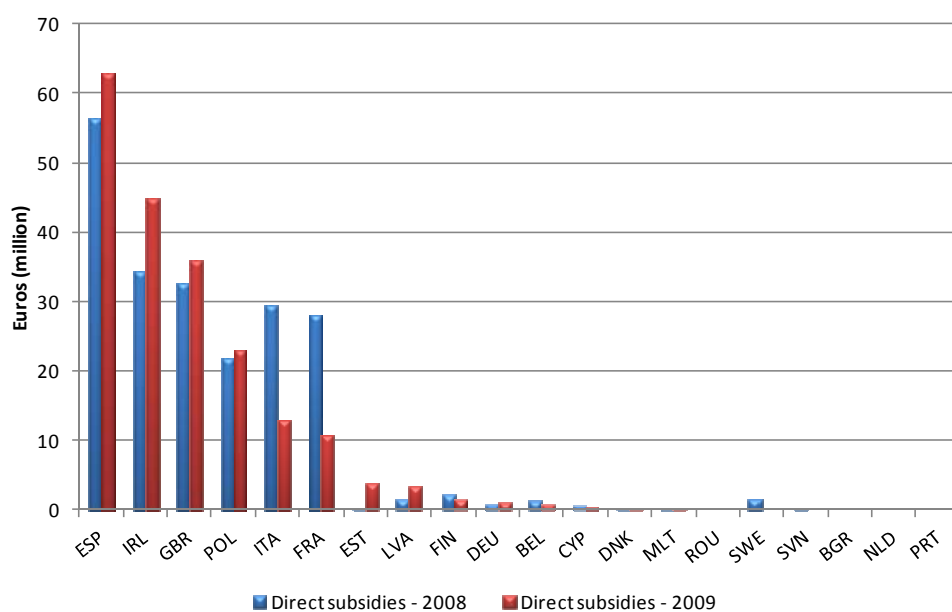
The broader understanding of direct subsidies in fisheries could be defined as any *actual* payments provided to fishing enterprises by governments. For example, the maintenance of fishing communities to prevent increases in unemployment in highly fishery dependent areas or the provision of transitional or short-term support in the face of unexpected declines in fish stocks could also be classified as direct subsidies because direct cash transfers are involved.

It is also worth noting that additional funding is available to the fisheries sector through other EFF measures, such as modernisation of port facilities, collective actions and support of fisheries dependent areas, however as these are not directly related to fishing vessels they are not considered in this analysis.

9.2 Direct subsidies paid to EU Member States fleets

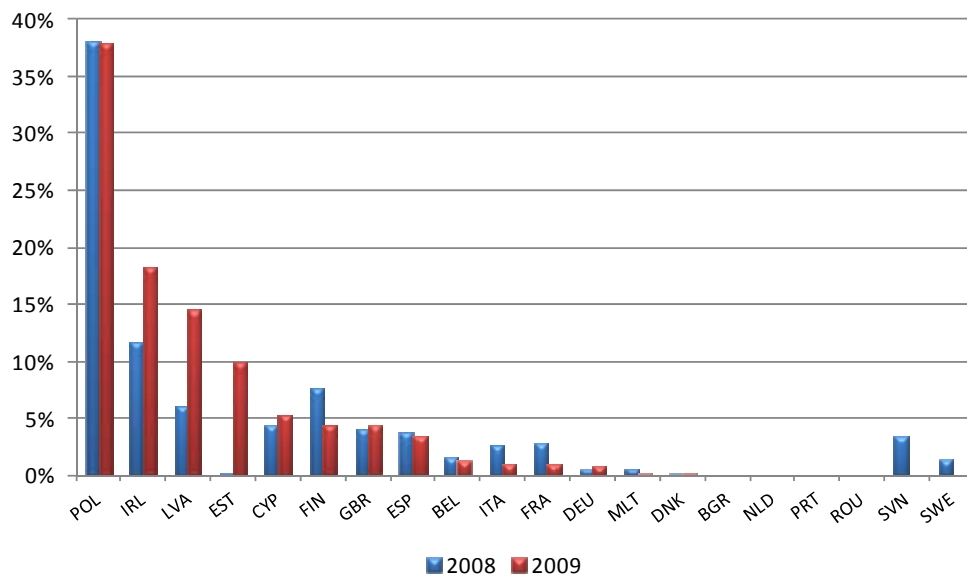
Based on the data submitted, the total value of direct subsidies granted by EU Member States to active fishing vessels in 2009 was €201.2 million, accounting for around 3% of the total income of the EU fishing fleet. Compared to 2008 data, direct subsidies decreased by almost 5%. About 95% of the total amount of direct subsidies paid by all EU Member States in 2009 was split between 6 countries: Spain (31%), Ireland (22%), UK (18%), Poland (11%), Italy (6%) and France (5%). The value of direct subsidies paid by country in 2008–2009 is provided in figure 9.1.

Figure 9.1 Direct subsidies paid to EU Member States fishing fleets 2008-2009



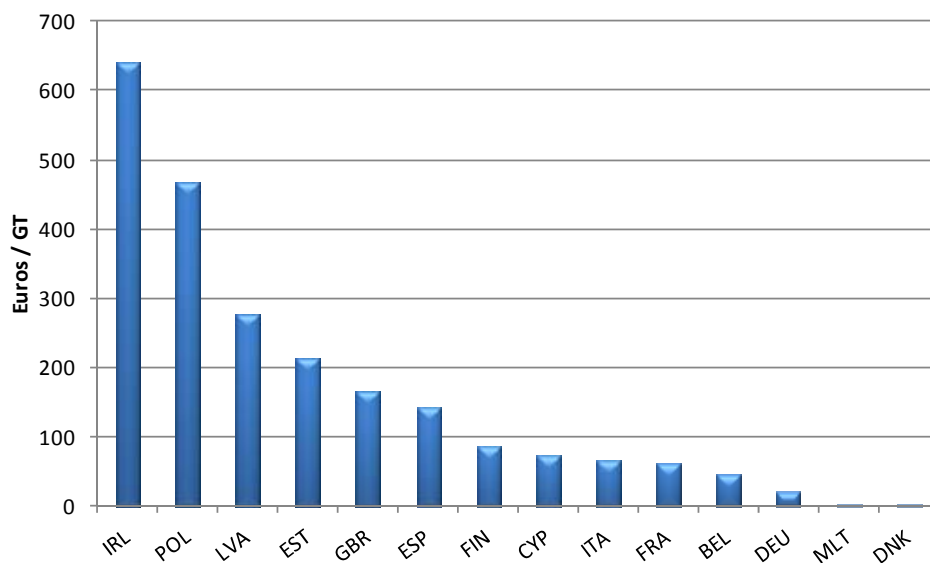
The relative importance of direct subsidies (in relation to total income) in each Member State is presented in figure 9.2. Direct subsidies paid by the Polish government accounted for 38% of the total income of the Polish fleet in 2009. In this case the most significant measure used by the Polish government was funding for temporary cessation of fishing activities. Fishermen were paid to stop fishing for cod in certain areas of the Baltic Sea. In the case of Latvia and Estonia, the direct subsidies data provided under the DCF included funding for permanent cessation of fishing activities and investments, despite the fact that these types of subsidies should not be included according to the legislation. Intensity of direct support to the Irish fleet in 2009 was also significant (18%), while intensity of direct support in Spanish and UK fleets were 3.3% and 4.2% of income accordingly.

Figure 9.2 Direct subsidies as % of total income by EU Member State 2008-2009



The average direct subsidy per capacity unit in 2009 was €117 per gross ton (GT). However a maximum of €641 per GT is observed in Ireland, see figure 9.3.

Figure 9.3 Direct subsidies per GT in EU Member States in 2009



The influence of direct subsidies on the economic performance of EU fishing fleets in 2009 is presented in the table 9.1, based on the data submitted under the DCF. For some countries, such as Ireland, Spain, Belgium and Cyprus, direct subsidies are not covering economic losses, however they are reducing the size of the losses (by 135%, 25%, 11% and 2% respectively), improving overall profitability and, with the exception of Cyprus, maintaining a positive cash flow. However in most countries direct subsidies if used increase economic profits.

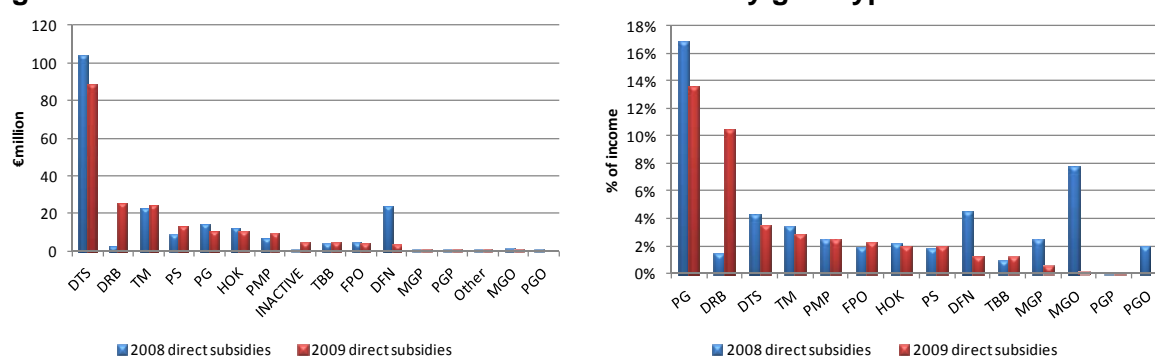
Table 9.1 Direct subsidies influence on MS fleet economic performance in 2009

EU Member State	Economic profit			Economic profit as % of income		Operating cash flow (OCF)			OCF as % of income	
	With subsidies	Without subsidies	% change	With subsidies	Without subsidies	With subsidies	Without subsidies	% change	With subsidies	Without subsidies
Spain	-250.6	-313.4	-25%	-13%	-16%	214.2	151.4	-29%	11%	8%
United Kingdom	74.6	38.8	-48%	9%	5%	191.6	155.7	-19%	23%	18%
Poland	30.9	8.0	-74%	51%	13%	35.0	12.1	-65%	58%	20%
France	113.0	102.4	-9%	11%	10%	125.1	114.4	-9%	12%	11%
Estonia	8.1	4.3	-47%	21%	11%	13.4	9.6	-29%	35%	25%
Ireland	-33.4	-78.3	-135%	-14%	-32%	73.5	28.6	-61%	30%	12%
Latvia	4.5	1.1	-76%	19%	5%	11.2	7.7	-31%	47%	33%
Finland	1.2	-0.3	-122%	4%	-1%	12.2	10.7	-12%	36%	32%
Germany	2.7	1.5	-44%	2%	1%	28.9	27.7	-4%	24%	23%
Belgium	-8.2	-9.0	-11%	-12%	-13%	5.4	4.5	-16%	8%	7%
Cyprus	-22.9	-23.4	-2%	-240%	-245%	-2.1	-2.6	-24%	-22%	-27%
Denmark	-34.1	-34.2	0%	-12%	-12%	98.7	98.6	0%	34%	34%
Malta	-16.5	-16.5	0%	-188%	-189%	0.3	0.3	-6%	3%	3%
Bulgaria	0.5	0.5	0%	15%	15%	0.7	0.7	0%	23%	23%
Italy	173.3	160.5	-7%	14%	13%	401.8	388.9	-3%	33%	32%
Lithuania	-0.2	-0.2	0%	-34%	-34%	0.0	0.0	0%	3%	3%
Netherlands	-1.3	-1.3	0%	0%	0%	47.1	47.1	0%	14%	14%
Portugal	-28.3	-28.3	0%	-9%	-9%	89.4	89.4	0%	28%	28%
Romania	0.3	0.3	0%	45%	45%	0.3	0.3	0%	47%	47%
Slovenia	-0.5	-0.5	0%	-22%	-22%	0.0	0.0	0%	-1%	-1%
Sweden	-1.2	-1.2	0%	-1%	-1%	40.0	40.0	0%	39%	39%
EU total	11.9	-189.4	-1698%	0%	-3%	1386.5	1185.2	-15%	21%	18%

9.3 Impact of direct subsidies on fleet profitability at segment level

Analysis of the data by gear type reveals that demersal trawl and seine vessels received the most direct subsidies in 2008 and 2009 (€104 million in 2008 and €89 million in 2009), see figure 9.4 (left). More than 45% of the total direct subsidies at EU level were allocated to vessels using these gears in 2009. Other gear types that received a significant proportion of direct subsidies in 2009 were dredges, pelagic trawlers and purse seiners, where a further 32% of total direct subsidies at EU level were spent. In relative terms, passive gears received the most direct subsidies in relation to income in 2008 and 2009, followed by dredges (for 2009) and then demersal trawl and seine vessels, see figure 9.4 (right).

Figure 9.4 Distribution of direct subsidies at EU level by gear type 2008-2009



Analysis of the data by length category reveals that, in absolute terms 24-40m vessels received the largest share of the direct subsidies in 2009, significantly more than all the other length classes (around €100 million, half the total amount). The other length classes received around €20 million each in 2009, see figure 9.5 (left). In relative terms the picture is similar, with direct subsidies as a proportion of total income of 6% for 24-40m vessels in 2009, while the other length classes received direct subsidies as a proportion of total income of between 1% and 2.5%, see figure 9.5 (right). Notably, the distribution of direct subsidies between the

length classes was much more evenly spread in 2008 compared to 2009, both in relative and absolute terms.

Figure 9.5 Distribution of direct subsidies at EU level by length class 2008-2009

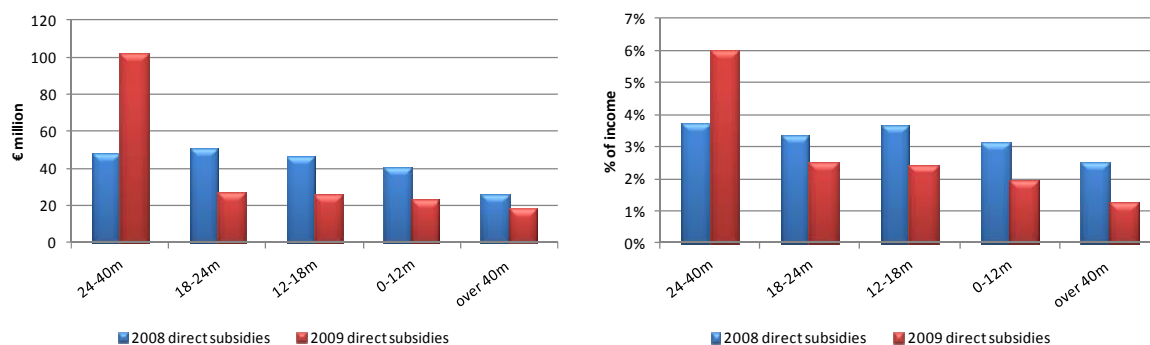


Table 9.2 indicates the influence of direct subsidies on fleet economic performance by gear type in 2009. In particular the table shows operating cash flow (OCF) and profit / loss with and without direct subsidies. The data suggests that all gear types generated an overall positive cash flow in 2009, regardless of whether direct subsidies were included in the calculation of OCF or not (normally subsidies should be included in the OCF calculation as we are looking at monetary flow, regardless of origin). The data also suggests that, in terms of profit / loss, the payment of direct subsidies did not move any gear type from an overall loss making position to an overall profit making position. Generally, removing direct subsidies from the profit calculation either decreased the total amount of profit generated or increased the extent of the losses incurred. The one exception to this is the drift and fixed nets gear type, which generated a small profit (€0.3 million, just above break even) when subsidies were taken into account, however when subsidies were removed from the equation this gear typed incurred a loss of €3.1 million overall.

Table 9.2 Direct subsidies influence on economic performance by gear type in 2009

Gear type						Operating cash flow (OCF)			OCF as % of income		Profit / loss			Profit / loss as % of income	
	Number of fleet segments	Number of vessels	Gross Tonnage (1000 GT)	Direct subsidies (€ million)	Total income (€ million)	With direct subsidies	Without direct subsidies	% change	With subsidies	Without subsidies	With direct subsidies	Without direct subsidies	% change	With direct subsidies	Without direct subsidies
						(€ million)	(€ million)	(€ million)	(€ million)	(€ million)	(€ million)	(€ million)	(€ million)		
Demersal trawl / seine	49	6,113	516.1	82.0	2,182.6	438.4	356.4	-19%	20%	16%	-47.7	-129.7	-172%	-2%	-6%
Beam trawl	24	826	94.4	4.8	399.5	36.4	31.6	-13%	9%	8%	-32.1	-36.9	-15%	-8%	-9%
Pelagic trawl	26	610	293.6	23.2	811.0	301.0	277.8	-8%	37%	34%	123.6	100.4	-19%	15%	12%
Dredges	15	1,130	26.6	25.1	184.4	72.1	47.0	-35%	39%	26%	35.8	10.7	-70%	19%	6%
Purse seine	18	1,366	70.4	12.4	564.5	49.7	37.3	-25%	9%	7%	-60.4	-72.8	-21%	-11%	-13%
Drift and fixed nets	24	6,493	44.9	3.4	105.5	29.9	26.6	-11%	28%	25%	0.3	-3.1	-	0%	-3%
Fixed pots and traps	15	2,577	17.4	4.1	131.8	47.3	43.1	-9%	36%	33%	18.8	14.6	-22%	14%	11%
Gears using hooks	27	3,085	150.6	10.1	459.5	75.6	65.5	-13%	16%	14%	-23.3	-33.4	-43%	-5%	-7%
Passive gears	15	5,883	18.4	10.5	75.7	38.3	27.8	-27%	51%	37%	12.5	2.0	-84%	17%	3%
Polyvalent passive gears	12	13,289	34.5	0.2	434.6	170.4	170.2	0%	39%	39%	76.6	76.4	0%	18%	18%
Passive and mobile polyvalent	22	2,354	44.8	9.6	369.9	99.8	90.2	-10%	27%	24%	-77.7	-87.2	-12%	-21%	-24%
Inactive vessels	83	13,714	105.8	4.9	-	-	-	-	-	-	-	-	-	-	-
All selected gears*	330	57,440	1,417.2	190.3	5,718.9	1,358.9	1,168.6				26.3	-164.0			

* Some segments excluded due to incomplete datasets - does not represent entire EU fleet

Excludes Greece due to non provision of data

Excludes French fleets due to no provision of depreciation data at segment level for 2009

10 FISHING RIGHTS

10.1 Introduction

The CFP sets quotas for how much of each species can be caught by each Member States fishing fleet. Each country is given a quota based upon the total available and their traditional share of the catch (Total Allowable Catch, TAC). Exchange of quotas between vessels from different EU countries can be made. The quota exchanges are only temporarily valid for the current year. Pelagic quota can for example be exchanged between a Swedish vessel and a Danish vessel.

Different countries distribute the available stock using different systems. One of the systems chosen can be individual transferable quotas (ITQs). In this case companies/vessels can buy or sell quota providing an average price for the fish quota. In this chapter information about transferable quota in the EU is presented.

10.2 Inventory of existence of fishing rights in EU Member States

Table 10.1 shows whether member states use the transferable quota system. Only six of the member states introduced ITQs. If no ITQs are introduced the value of fishing rights is not easily estimated.

Table 10.1 Inventory of fishing rights by EU Member state

	Do fishing rights exist?	Is an ITQ system in place?	Is data available (if yes which year?)	Estimation method
Belgium	-	-	-	-
Bulgaria	-	-	-	-
Cyprus	-	-	-	-
Germany	Yes	No		No trade so value can't be estimated
Denmark	Yes	Yes	2008	
Spain	-	-	-	-
Estonia	Yes	Yes	2009	Questionnaire
Finland	No	No	-	-
France	No	No	-	-
United Kingdom	Yes	Yes	2008	Accounts
Greece	-	-	-	-
Ireland	-	-	-	-
Italy	-	-	-	-
Lithuania	Yes	No	-	No trade so value can't be estimated
Latvia	No	No	-	-
Malta	Yes	Yes	2009	Questionnaire
Netherlands	Yes	Yes	2008	
Poland	No	No	-	-
Portugal	No	No	-	-
Romania	-	-	-	-
Slovenia	No	No	-	-
Sweden	Yes, Pelagic fleet from 2010	Yes	2010	Not known yet

#

10.3 Analysis of DCF data on fishing rights

Figure 10.1 shows the value of the fishing rights compared to the value of the depreciated replacement value for 2009. Five countries provided the value of the fishing rights for 2009:

Denmark, UK, Netherlands, Estonia, and Malta. For Denmark, United Kingdom and The Netherlands, the value of fishing rights is quite substantial compared to the depreciated replacement value of the fleet. For Estonia and Malta the value of fishing rights is relatively small.

Figure 10.1 Fishing rights value and tangible asset value by Member State in 2009

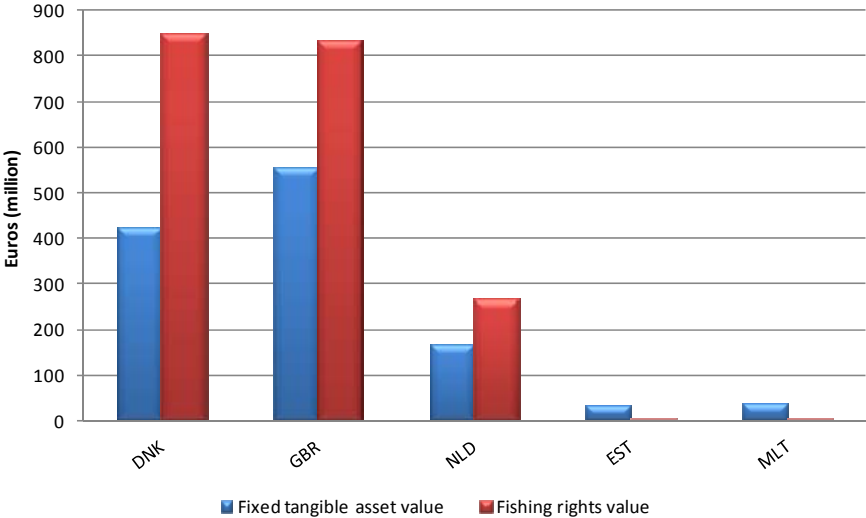
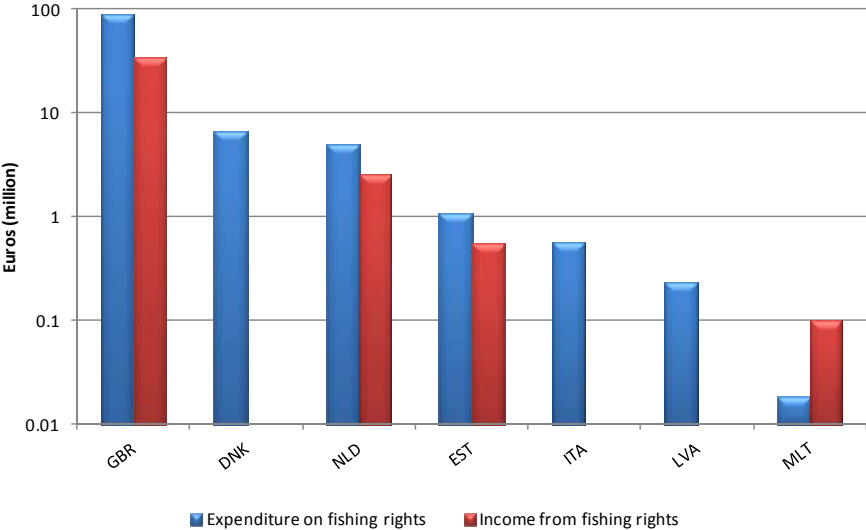


Figure 10.2 Rights leasing costs and income by Member State 2009 (logarithmic scale)



Several member states submitted data of trade in fishing rights. Overall the trade in fishing rights is relatively small. Compared to the total income, for example, the income from fishing right trade is on average less than 1%. Most member states report a higher value for buying fishing rights than for selling it. This may indicate that fishing rights are bought from inactive vessels. It may also indicate the existence of the so called “slipper-skippers”. These are skippers that left the fishing profession but still own quota which they can sell to the active fleet. Two member states, Italy and Latvia reported costs for trading in quota with other member states. These member states do not have an ITQ system and do not trade quota within their member state.

Figure 10.3 Total value of fishing rights at EU level by gear type in 2009

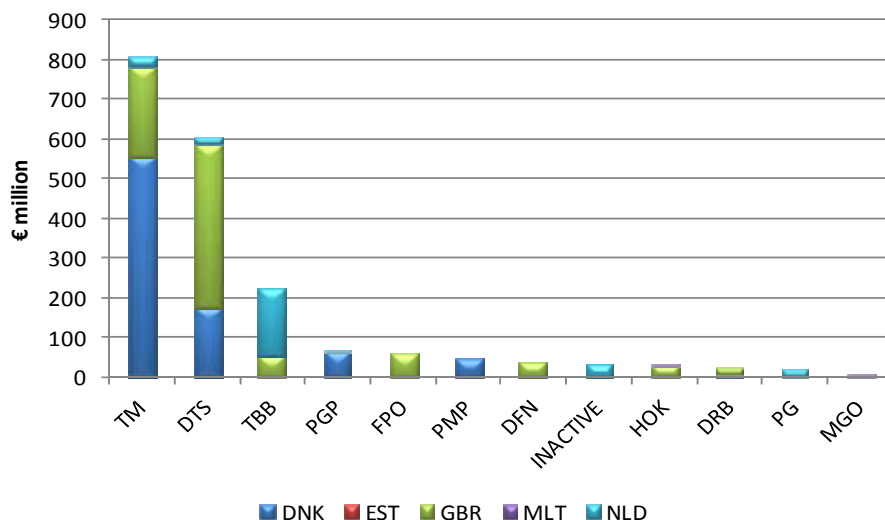


Figure 10.3 shows the total value of the fishing rights split by gear type and member state. Pelagic trawls and seines have the highest percentage of the total value of the fishing rights (40%). Demersal trawls and seines own 30% of the fishing right, beam trawls 11%. Denmark and UK reported relatively high values for fishing rights in pelagic segments and demersal segments. The Netherlands reported high values for fishing rights in beam trawl segments.

Figure 10.4 Trade in fishing rights at EU level by gear type in 2009

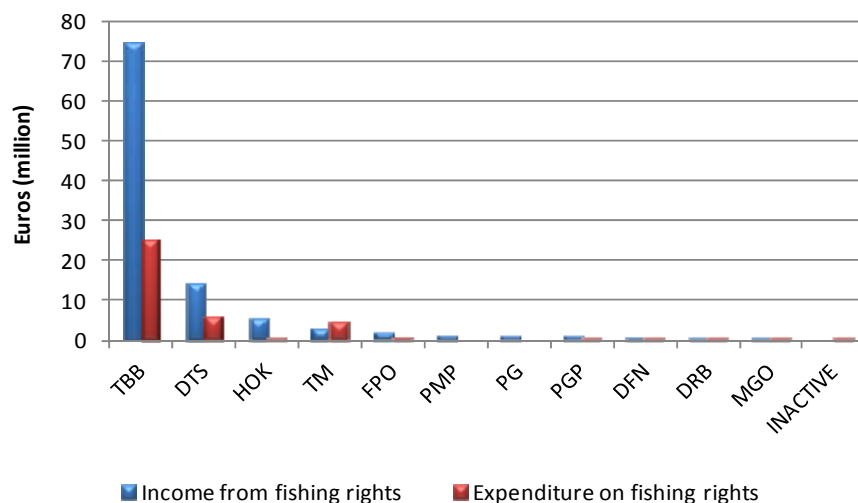


Figure 10.4 shows the trade in fishing rights by gear type for the year 2009. Most of the trade in fishing right takes place in the beam trawl segments. Although the fishing rights of pelagic segments and demersal segments were quite high, they are hardly traded. Anecdotal evidence suggests that pelagic fishing rights are traded between species, vessels or countries, but not bought or sold.

Figure 10.5 Trade in fishing rights at EU level in under and over 12m fleets in 2009

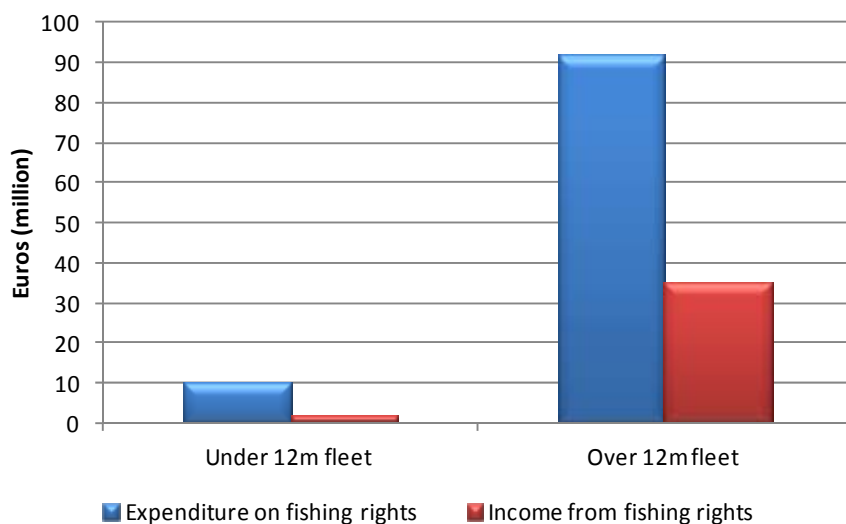


Figure 10.5 distinguishes between the trade in fishing rights in 2009 in the over and under 12m sectors of the EU fishing fleet. As can be seen, the majority of trade takes place in the over 12m sector. In addition, there is far more expenditure on rights than income from trading rights in both categories, which indicates that a significant amount of fishing rights are being held out-with the active fleet.

11 2011 AER REPORT METHODOLOGY

11.1 Introduction

The 2011 Annual Economic Report (AER) on the European Union (EU) fishing fleet was produced by fisheries economists from the JRC and a working group of economic experts (expert working group 11-04) convened under the Scientific, Technical and Economic Committee for Fisheries (STECF). The data used to compile all the various analyses contained within the report were collected under the frameworks of the Data Collection Regulation (DCR); cf. Council Regulation (European Commission (EC)) No 1543/2000 of 29 June 2000 and the Data Collection Framework (DCF); cf. Council Regulation (European Commission (EC)) No 665/2008 of 14 July 2008. The data call requested economic data for the years 2002 to 2011.

The data call was issued by DG MARE on the 25th of January with a 20 working day deadline. For most MS this meant the deadline was the 22nd of February 2010. The official data call letter can be found in on the following link:

<https://datacollection.jrc.ec.europa.eu/data-calls>

Table 11.1 outlines all the DCF economic and transversal variables to be submitted for the years 2008-2011, along with their uploading acronyms and corresponding aggregation levels. Table 11.2 outlines all the economic and transversal variables to be submitted for the years 2002-2007. Data relating to these years (collected under the old DCR legislation) took the same form as the previous data call for simplicity.

You can find all the various definitions for variables, aggregation levels, gear types, length classes, DCF supra regions, FAO sub regions, species, sampling strategies and precision levels by navigating through the data collection website. See <https://datacollection.jrc.ec.europa.eu/home>

Although the quality and coverage of the data reported under the DCF are the responsibility of the Member States, JRC undertakes quality and coverage checking procedures on the data submitted. These checks were carried out both during the uploading procedure (ensuring codes and values corresponded with those specified in the data call) and afterwards (fleet capacity and landings volume checks with other official data sources, coverage checks, double entry checks, time series checks, etc).

The methodologies, indicators and format of the 2011 AER were agreed by the STECF EWG 11-04 which took place in Athens in March 2011. The report of this working group can be found on the following link: <https://stecf.jrc.ec.europa.eu/48>

From the data submitted by Member States, indicators were calculated in order to assess the economic performance of fleet segments, national fleets, regional fleets and the EU fleet as a whole. These indicators and calculation methods are described in section 11.2.

Economic performance forecasts for 2010 were carried for Member States fleets who submitted the necessary data. The formulas used to produce those forecasts are described in section 11.3.

Table 11.1 2011 Fleet economic data call contents for years 2008-2011

Data Type	Variable group	Variable	Years	Acronym	Aggregation level	Other requested fields
Economic	Fishing Enterprises	Enterprises consisting of 1 vessel	2008, 2009, 2010	OneVes	Yearly, by 1) Fleet segment, 2) National totals	Precision Level, Sampling Strategy, Achieved Sample Rate
		Enterprises consisting of 2-5 vessels	2008, 2009, 2010	TwoFiveVes		
		Enterprises consisting of more than 5 vessels	2008, 2009, 2010	SixMoreVes		
	Employment	Number of engaged crew	2008, 2009	totJOB	Yearly, by 1) Fleet segment, Supra Region, 2) National totals	
		FTE national	2008, 2009	totNatFTE		
		FTE harmonised	2008, 2009	totHarmFTE		
	Income	Value of landings	2008, 2009, 2010	totLandgInc		
		Income from fishing rights	2008, 2009	totRightsInc		
		Direct subsidies	2008, 2009	totDirSub		
		Other income	2008, 2009	totOtherInc		
	Expenditure	Crew wages	2008, 2009	totCrew Wage		
		Value of unpaid labour	2008, 2009	totUnpaidLab		
		Energy costs	2008, 2009	totEnerCost		
		Repair costs	2008, 2009	totRepCost		
		Variable costs	2008, 2009	totVarCost		
		Non variable costs	2008, 2009	totNoVarCost		
		Rights costs	2008, 2009	totRightsCost		
	Capital and Investments	Depreciation	2008, 2009	totDepCost		
		Vessel historical value	2008, 2009	totDepHist		
		Vessel replacement value	2008, 2009	totDepRep		
Value of fishing rights		2008, 2009	totRights			
In-year investments		2008, 2009	totInvest			
Financial position	2008, 2009	FinPos				
Transversal	Capacity	Number of vessels	2008, 2009, 2010, 2011	totVes	Yearly, Fleet segment, by 1) FAO Area level 4 (Baltic), FAO Area level 3 (All other regions), 2) National totals	
		Mean length overall	2008, 2009, 2010, 2011	avgLOA		
		Total GT	2008, 2009, 2010, 2011	totGT		
		Total kW	2008, 2009, 2010, 2011	totKw		
		Mean age	2008, 2009, 2010, 2011	avgAge		
	Effort	Days at Sea	2008, 2009, 2010	totSeaDays		
		Fishing days	2008, 2009, 2010	totFishDays		
		kW fishing days	2008, 2009, 2010	totKw FishDays		
		GT fishing days	2008, 2009, 2010	totGTFishDays		
		Number of fishing operations	2008, 2009, 2010	totFishOpr		
		Number of pots and traps	2008, 2009, 2010	totTraps		
		Number of nets	2008, 2009, 2010	totNets		
		Length of nets	2008, 2009, 2010	lngNets		
		Number of hooks	2008, 2009, 2010	totHooks		
		Soaking time	2008, 2009, 2010	totSoakTime		
	Energy Consumption	2008, 2009	totEnerCons			
	Number of trips	2008, 2009, 2010	totTrips			
	Landings	Weight of landings per species	2008, 2009, 2010	totWghtLandg		
		Value of landings per species	2008, 2009, 2010	totValLandg		
	Recreational	Catches	Total weight of catches per species (Species are region specific, see Appendix 4, 949/2008)	2008, 2009, 2010		totWghtCatch

Table 11.2 2011 Fleet economic data call contents for years 2002-2007

Variable groups	Variables	Years	Aggregation levels	Other requested fields
Capacity	Number of vessels, gross tonnage, engine power, average age	2002, 2003, 2004, 2005, 2006, 2007	Yearly, by 1) fleet segment of Appendix III, 2) National fleet level, National totals	Precision Level
Landings	Weight, Value	2002, 2003, 2004, 2005, 2006, 2007	Yearly, by 1) species, area (minimum level 2 of Appendix I), fleet segment of Appendix III, 2) National totals	
Effort	Days, kWdays, GTdays	2002, 2003, 2004, 2005, 2006, 2007	Yearly, by 1) area (minimum level 2 of Appendix I), fleet segment of Appendix III, 2) National totals	
Employment	Total, full-time, part-time, full-time equivalents	2002, 2003, 2004, 2005, 2006, 2007	Yearly, by 1) fleet segment of Appendix III, 2) National totals	
Costs and fuel consumption	Income, cost (crew, fuel, operational, capital, repair and maintenance, fixed), fuel (volume)	2002, 2003, 2004, 2005, 2006, 2007	Yearly, by 1) fleet segment of Appendix III, 2) National totals	
Financial position	Borrowing and investment	2002, 2003, 2004, 2005, 2006, 2007	Yearly, by 1) fleet segment of Appendix III, 2) National totals	

11.2 Economic performance indicator calculations

For economic performance calculations relating to the years 2002-2007, the following formulas were used:

Gross Value Added (GVA):

Income – fuel costs – repair costs – variable costs – fixed costs

Operating Cash Flow (OCF):

Income – crew costs - fuel costs – repair costs – variable costs – fixed costs

Profit / Loss:

Income – crew costs - fuel costs – repair costs – variable costs – fixed costs – capital costs

For economic performance calculations relating to the years 2008-2010, the following formulas were used:

Gross Value Added (GVA):

Income from landings + income from fishing rights + other income – energy costs – repair costs – other variable costs – non variable costs – expenditure on fishing rights

Operating Cash Flow (OCF):

Income from landings + direct subsidies + income from fishing rights + other income – crew costs - energy costs – repair costs – other variable costs – non variable costs – expenditure on fishing rights

Profit / Loss:

Income from landings + direct subsidies + income from fishing rights + other income – crew costs – unpaid labour value - energy costs – repair costs – other variable costs – non variable costs – expenditure on fishing rights – depreciation cost – opportunity cost (interest)

Where opportunity cost (interest) = fixed tangible asset value * real interest

Where real interest (r) = $[(1 + i) / (1 + \pi)] - 1$.

Where i is the nominal interest rate of the Member State in the year concerned and π is the inflation rate of the Member State in the year concerned. See table 11.3.

Note that direct subsidies have generally been included in the calculation of profit throughout the report however in certain sections such as the EU overview and chapter on direct subsidies the profit calculation was conducted with and without direct subsidies for comparison.

Table 11.3 Inflations and nominal LT interest rates by EU Member State 2008-2010

EU Member State	Inflation rates			LT (nominal) interest rates		
	2008	2009	2010	2008	2009	2010
Belgium	4.5%	0.0%	2.3%	4.4%	3.9%	3.5%
Bulgaria	12.0%	2.5%	3.0%	5.4%	7.2%	6.0%
Cyprus	4.4%	0.2%	2.6%	4.6%	4.6%	4.6%
Denmark	3.6%	1.1%	2.2%	4.3%	3.6%	2.9%
Estonia	10.6%	0.2%	2.7%	8.2%	8.0%	6.0%
Finland	3.9%	1.6%	1.7%	4.3%	3.7%	3.0%
France	3.2%	0.1%	1.7%	4.2%	3.7%	3.1%
Germany	2.8%	0.2%	1.2%	4.0%	3.2%	2.7%
Greece	4.2%	1.3%	4.7%	4.8%	5.2%	9.1%
Ireland	3.1%	-1.7%	-1.6%	4.5%	5.2%	5.7%
Italy	3.5%	0.8%	1.6%	4.7%	4.3%	4.0%
Latvia	15.3%	3.3%	-1.2%	6.4%	12.4%	10.3%
Lithuania	11.1%	4.2%	1.2%	5.6%	14.0%	5.6%
Malta	4.7%	1.8%	2.0%	4.8%	4.5%	4.2%
Netherlands	2.2%	1.0%	0.9%	4.2%	3.7%	3.0%
Poland	4.2%	4.0%	2.7%	6.1%	6.1%	5.8%
Portugal	2.7%	-0.9%	1.4%	4.5%	4.2%	5.4%
Romania	7.9%	5.6%	6.1%	7.7%	9.7%	7.3%
Slovenia	5.5%	0.9%	2.1%	4.6%	4.4%	3.8%
Spain	4.1%	-0.2%	2.0%	4.4%	4.0%	4.3%
Sweden	3.3%	1.9%	1.9%	3.9%	3.3%	2.9%
United Kingdom	3.6%	2.2%	3.3%	4.5%	3.4%	3.4%

Source: ECB

<http://www.ecb.int/stats/money/long/html/index.en.html>

Source: Eurostat

11.3 Economic performance projections

For economic performance forecasts at fleet segment and national level, the following formulas were used:

Crew wages (CW) were estimated as an average proportion of the value of landing (VaL) during the three previous years:

$$CW_t = \frac{\sum_{t-3}^{t-1} CW}{\sum_{t-3}^{t-1} VaL} \times VaL_t$$

Non-variable costs (NVC) were estimated using the change in capacity i.e. number of vessels (N):

$$NVC_t = \frac{N_t}{N_{t-1}} \times NVC_{t-1}$$

Variable costs (VC) are projected using changes in effort, i.e. Days at Sea (DAS):

$$VC_t = \frac{DAS_t}{DAS_{t-1}} \times VC_{t-1}$$

The same method is to be applied on variable costs is applied at repair and maintenance.

Fuel costs (FC) are projected using changes in effort (DAS) and change in average fuel price (P):

$$FC_t = \frac{DAS_t}{DAS_{t-1}} \times \frac{P_t}{P_{t-1}} \times FC_{t-1}$$

12 EWG-11-04 LIST OF PARTICIPANTS

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13 LIST OF BACKGROUND DOCUMENTS

Background documents are published on the meeting's web site on:
<https://stecf.jrc.ec.europa.eu/meetings/2011>

List of background documents:

1. EWG-11-04 – Doc 1 - Declarations of invited and JRC experts.

European Commission

EUR 25106 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen

Title: Scientific, Technical and Economic Committee for Fisheries. 2011 Annual Economic Report on the EU fishing fleet (STECF-11-16).

EWG-11-04 members: Anderson, J., Advic, E., Bartelings, H., Bengtberg, R., Berkenhagen, J., Carvahlo, L., Davidjuka, I., Guillen, J., Kaslauskas, E., Kuzebski, E., Lees, J., Miguez, M., Motova, A., Pinello, D., Pokki, H., Prellezo, R., Souffez, A., Traguany, J., Vassallo, D., Virtanen, J. Motova, A., Prelezzo, R

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Abstract

The 2011 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides a comprehensive overview of the latest information available on the structure and economic performance of EU Member States fishing fleets. Results suggest that the total amount of income generated by the EU fishing fleet in 2009 (excluding Greece) was €6.8 billion. This amount consisted of just below €6.5 billion in fish sales, €36.9 million in fishing rights transactions, €99.8 million in non-fishing income, and €201.2 million in direct income subsidies. The total costs incurred by the EU fishing fleet in 2009 (excluding Greece) were €6.9 billion. This amount consisted of just below €2 billion in crew wages, €1.1 billion in fuel costs, €580 million in repair costs, €761 million in other variable costs, €898 million in fixed costs, €102 million in fishing rights costs, €243 million in unpaid labour, €854 million in depreciation costs and €353 million in opportunity costs (interest). The total amount of Gross Value Added (GVA), Operating cash flow (OCF) and economic profit/loss generated by the EU fishing fleet (excluding Greece) in 2009 was €3.13 billion (a 13% increase from 2008), €1.35 billion (a 12% increase from 2008) and €-99.5 million (a decrease of €207 million from 2008) respectively. Between 2002 and 2008, GVA as a proportion of total income steadily decreased from around 54% in 2002 to 42% in 2008, while between 2002 and 2007, OCF as a proportion of total income steadily decreased from around 22% in 2002 to 18% in 2007. Data for 2009 appears to have bucked these trends, with an increase in GVA as a proportion of total income from 42% in 2008 to 46% in 2009, and an increase in OCF as a proportion of total income from 18% in 2008 to 20% in 2009. Despite the increases in the GVA and OCF, the EU fleet as a whole moved into a loss making position once capital costs had been accounted for. When we remove direct income subsidies from the profit equation to calculate profits without direct income subsidies, the overall loss position is greater in 2009, from €-99.5 million (-1.5% of total income) to €-301 million (-4.6% of total income), while the EU fleet moves from an overall economic profit position to a loss making position in 2008, from €109 million (1.7% of total income) to €-103 million (-1.6% of total income).

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The Scientific, Technical and Economic Committee for Fisheries (STECF) has been established by the European Commission. The STECF is being consulted at regular intervals on matters pertaining to the conservation and management of living aquatic resources, including biological, economic, environmental, social and technical considerations.



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