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The 2015 Annual Economic Report on the EU Fishing Fleet (STECF 15-07)

Scientific, Technical and Economic
Committee for Fisheries (STECF)

Edited by
Anton Paulrud
Natacha Carvalho
Alessandra Borrello
Arina Motova



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European Commission
Joint Research Centre (JRC)
Institute for the Protection and Security of the Citizen (IPSC)

Contact information

STECF secretariat
Address: Maritime Affairs Unit, Via Enrico Fermi 2749, 21027 Ispra VA, Italy
E-mail: stecf-secretariat@jrc.ec.europa.eu
Tel.: 0039 0332 789343
Fax: 0039 0332 789658

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Abstract

In 2013, the EU fishing fleet numbered 83,734 vessels with a combined gross tonnage (GT) of 1.6 million tonnes and engine power of 6.5 million kilowatts (kW). EU fleet capacity has continued to decrease steadily, with an average annual decrease of 2% in terms of vessel numbers and kW and 3% in terms of GT. Based on DCF data, there were 65,363 vessels active and 18,371 inactive vessels. Of the active vessels, 74% were small-scale, 26% were large-scale and less than 1% were distant-water vessels. Direct employment generated by the fleet amounted to just over 149,000 fishers, corresponding to 110,000 FTEs (excl. Cyprus). The total income earned by the EU fishing fleet in 2013 (excl. Bulgaria, Croatia, Cyprus, Greece and Malta) was estimated at €6.9 billion. As in previous years, the major cost items were labour and energy, representing 37% and 27% of total operating costs, respectively. The amount of Gross Value Added (GVA) and gross profit (all excl. subsidies) generated by the EU fishing fleet (excl. Bulgaria, Cyprus, Greece and Malta) in 2013 was €3.4 billion and €1.3 billion, respectively. GVA as a proportion of total revenue was estimated at 49% and gross profit margin at 20%. With a total net profit of €506 million for the EU fleet in 2013, 7.8% of the revenue was retained as net profit. This publication includes: 1) An structural and economic overview of the EU fishing fleet in 2013, with projections for 2014, and trend analyses for the years 2008-2013; 2) A regional analysis of the EU fishing fleet by major sea basin: Baltic Sea, North Sea, North East Atlantic, Mediterranean & Black Sea, as well as fleets operating in Other Fishing Regions, including the Northwest Atlantic, Eastern Arctic, Outermost regions and Other regions; 3) A detailed structural and economic overview of each EU Member State fishing fleet, including qualitative economic performance assessments for 2013 and projections for 2014 and 2015; 4) Projections for 2014, 2015 and a situation with stocks at MSY for North Atlantic fleets and projections for 2014 and 2015 for Mediterranean fleets using models for forecasting.

1. INTRODUCTION

The 2015 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 report covers a seven year time period and includes information on the EU fleet's fishing effort, landings, revenue, costs and employment for the years 2008 to 2013 and projected values for 2014. All monetary values in this report have been adjusted for inflation, to 2014 constant prices. The economic performance of the EU fishing fleet is also reported in terms of gross value added, profits, labour and capital productivity.

This publication includes:

- 1) An structural and economic overview of the EU fishing fleet in 2013, with projections for 2014, and trend analyses for the years 2008-2013;
- 2) A regional analysis of the EU fishing fleet by major sea basin: Baltic Sea, North Sea, North East Atlantic, Mediterranean & Black Sea, as well as fleets operating in Other Fishing Regions, including the Northwest Atlantic, Eastern Arctic, Outermost regions and Other regions;
- 3) A detailed structural and economic overview of each EU Member State fishing fleet, including qualitative economic performance assessments for 2013 and projections for 2014;
- 4) Projections for 2014, 2015 and a situation with stocks at MSY for North Atlantic fleets and projections for 2014 and 2015 for Mediterranean fleets using models for forecasting.

Terms of Reference for STECF EWG-15-03 & 15-07

1 - Background

Following the 2015 DCF call for economic data on the EU fishing fleet (Ref. Ares(2015)421690), EWG 15-03 and EWG 15-07 are requested to analyse and comment on the economic performance of the EU and national fishing fleets between 2008 and 2013; and 2014 where relevant.

The two main objectives for the 2015 Annual Economic Report (AER) are to increase qualitative interpretation of all data analyses and bring the report more "up to date".

- Quality of data remains essential. Data quality checks and data validation tools will be applied by the JRC. Experts will receive the data tables for the national and regional analyses, already validated where possible, on the first day of the meeting. Past experience suggests that some quality issues will remain (errors that can only be identified by those with specific knowledge of the data) and therefore experts are requested to check for further errors and report on these whilst carrying out the various tasks.
- Time saved as a result of not having to carry out specific quality checks on MS DCF data submissions will enable experts to focus more on the qualitative interpretation of the economic data analysed in the report. It is important to note that time should not be allocated to fixing specific MS data issues during the meeting. This implies that the data submitted should be final by the start of the first meeting and any outstanding data issues encountered during the course of the meeting will be addressed according to points 4 and 5 of the Data-handling procedure for STECF Expert Working Groups (Ref. Ares(2015)498884 - 06/02/2015).
- The 2015 AER will follow a more analytical approach and contain qualitative information on the drivers and trends in fleet economic performance and other aspects of policy relevance. For this, questions on the major drivers and issues affecting fleet performance, such as market prices, capacity imbalance (indicators for over-establishment and over-capitalisation), fleet structure, employment, profit, etc., should be asked consistently at all levels of analysis, i.e. fleet segment level, national level, regional level, and overall EU level.

In addition, questions on other major drivers and issues affecting fleet economic performance, such as decommissioning, discards/high-grading, poor stock recruitment/stock recovery situations, ITQs systems, certification, MPAs, etc., should be brought into the analysis through expert knowledge and other sources were possible.

- Trends will be based on longer data series: generally 6-7 years of DCF data, while also including DCR data for the years 2002-2007, prepared previously by the JRC, where applicable.

- Increased qualitative interpretation of the data outputs requires sufficient attendance of experts knowledgeable in Member State specific fleet economic performance issues, while a more 'up-to-date' report requires that MS provide the data necessary to successfully undertake the calculations.
- The regional analysis will be further improved, particularly in terms of the level of disaggregation. In some instances it may be necessary to make assumptions about the allocation of costs and earnings for fleet segments operating in two or more sea basin areas; the allocation of costs and earnings for fleet segments by region will take a more effort-based approach than in previous year's analyses.
- Another improvement will be bringing the report more 'up-to-date' by providing, where possible, forecast figures for 2014 and robust estimates on 2015 economic performance based on the latest available data (2015 agreed quota and effort restrictions).

2 - OUTLINE OF THE 2015 AER

STECF is requested to provide the Annual Economic Report on EU fishing fleets for 2015 including, the following sections:

- STECF OBSERVATIONS
- EXPERT WORKING GROUP REPORT
- EXECUTIVE SUMMARY
- EU FLEET OVERVIEW
 - EU fleet structure
 - EU fleet fishing activity and output
 - EU fleet employment and average salaries
 - EU fleet economic performance
 - Section on resource efficiency examining aspects such as energy use and labour productivity (key indicators)
 - Section on EU small-scale fleet segments (key socio-economic indicators)
 - Section on EU long distant water fleets (key socio-economic indicators)
 - Assessment for 2014
 - Main drivers and trends affecting the economic performance of the EU fleet
- REGIONAL ANALYSES
 - Baltic Sea
 - Mediterranean & Black Sea
 - North Atlantic
 - North Sea
 - Other Regions
- NATIONAL CHAPTERS
 - Section on small-scale fleet segments in each national fleet
 - Section on projections 2014, 2015 and a situation with stocks at MSY for North Atlantic fleets and projections for 2014 and 205 for Mediterranean fleets using models for forecasting.
 - Section on EU distant water fleets (key socio-economic indicators)
- ANNEX (METHODOLOGIES, GLOSSARY, ETC)

Data Source and coverage

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

The 2015 data call requested data for the years 2008 to 2014. Capacity data was requested up to and including 2014, while employment and economic parameters were requested up to and including 2013. Most effort and all landings data were requested up to and including 2014, as well as, income from landings (non-mandatory) to allow for economic performance projections to be estimated at fleet segment and national level for 2014.

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

For a full list of variables and reference years requested under the 2015 DCF call for economic data on the EU fishing fleet see the Methodology section.

In terms of the completeness of the Member States data submissions, most countries submitted the majority of parameters requested under the call. In many cases missing data relates to fleet segments with low vessel numbers for which data is hard to obtain. In terms of data quality, inevitably some 'abnormal' estimates for various parameters were detected by JRC or the experts and in many cases rectified by the Member States. However, some quality issues remain outstanding.

Again this year, Greece provided data but only for 2012 and 2013, and with substantial amount of missing data, in particular on effort, landings and income.

As a new Member State, Croatia provides data from 2012 onwards.

This year's submission from France and Spain continue to be incomplete and some data quality issues remain for several other Member States, such as Bulgaria, Cyprus and Malta.

Furthermore, due to the reduced number of vessels and/or enterprises, many Baltic States do not deliver sensitive data on their distant-water fleets, making coverage at the EU and regional levels incomplete.

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

The MS that were unable to deliver complete and reliable data on their fishing fleets for the years 2008-2012 were excluded from the trend analysis and include Bulgaria, Cyprus, France, Greece, Malta and Spain (Croatia excluded due to recent entry).

The National Chapters present all the DCF data provided by MS, highlighting some questionable data.

For more information on data coverage and limitations see the Methodology section.

ABBREVIATIONS

European Member States

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

Fishing Technologies – DCF categories

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

Fishing activity – scale of fishing vessel / activity

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

Fishing regions

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

2. EWGs AND LIST OF PARTICIPANTS

The report has been produced by two working groups of economic experts (expert working group 15-03 and 15-07) convened under the Scientific, Technical and Economic Committee for Fisheries (STECF), which took place from the 4 to 8 of May in Ispra, Italy and from the 8 to 12 June 2015 in Gothenburg, Sweden.

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

The full list of participants at EWG 15-03 and 15-07 is presented in section 8.

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THE 2015 ANNUAL ECONOMIC REPORT ON THE EU FISHING FLEET (STECF 15-07)

THIS REPORT WAS REVIEWED BY THE STECF PLENARY, 6-10 JULY 2015

Request to the STECF

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

Background

Following the 2015 DCF call for economic data on the EU fishing fleet, EWG 15-03 & 15-07 was requested to analyse the data and comment on the economic performance of the EU and Member State fishing fleets between 2008 and 2014.

STECF OBSERVATIONS

STECF acknowledges the extensive work undertaken by all personnel involved in the preparation of the 2015 AER, which represents the most comprehensive overview of the structure and economic performance of EU Member States' fishing fleets prepared to date. Nevertheless there are a number of important considerations that users of the report will need to be aware of in order to correctly interpret the findings presented in the report. These are listed below:

STECF notes that, although there are still some substantial shortfalls in the data submitted by Member States, data delivery requirements in response to the 2015 call for economic data on the EU fishing fleet were more complete than those submitted under previous economic data calls.

Nevertheless, STECF notes that the data submitted by eight Member States (Bulgaria, Cyprus, Estonia, Ireland, France, Greece, Malta, Spain) were identified by the Expert group as incomplete or unreliable and were not taken into account in the EU and regional trend analyses presented in the 2015 AER. Furthermore, data submitted by Croatia were also excluded from the time trend analyses because data from Croatia relate to 2013 and 2014 only, as Croatia joined the EU in July 2013.

In addition, the exclusion of all or some Member States' data from the EU and regional overviews has varied between AERs. This means that time trends shown in previously published AERs now appear different to those presented in the 2015 report. The absence of some data from some MS can change the direction of key trends for the overall EU fleet. For example, in the 2014 AER, EU fleet net profit **increased** from 2011 to 2012 (Figure 10, page 26). However in the 2015 AER, EU fleet net profit is shown to have **decreased** from 2011 to 2012 (Figure 3.3.16).

In view of the above arguments, the EU and regional trend analyses presented in the 2015 and earlier AERs may not reflect the true trends for the entire EU fishing fleet.

STECF notes that for a variety of reasons including incomplete information, the templates used by the EWG to summarise fleet economic information by Member State were not completed in a standardised way. In addition, there is scope to improve the format of such templates and therefore an alternative format for future AERs is proposed under STECF conclusions below.

STECF notes that for the first time in the AER, figures showing trends in monetary values presented in the report have been adjusted for inflation and are shown in equivalent 2014 EURO values. The adjustment may have contributed somewhat to some of the apparent differences in trend directions between those published in the 2014 and 2015 AERs, although any changes in the data provided by MS in response to the 2015 data call could also be a contributing factor.

While the need to respect the confidentiality of business owners is acknowledged, it does cause issues with reporting on the performance of MS fleet segments that are clustered together with other segments in the same MS. For such clusters, the total figures for all the individual vessels in the cluster are correctly presented but totals, averages and trends for individual fleet segments that make up the cluster are not presented.

STECF observes that there is discrepancy in how some MS interpret the regulation regarding which vessels should be included in the data for each reference year. The DCF regulation [No. 199/2008] states that all vessels on the MS fleet register at 1st January of the reference year should be included, and that economic variables should be for all vessels that are active during the year. However, some MS have interpreted this to mean all registered vessels that were active during the year, including vessels which were added to the fleet register after 1st January, while other MS have included economic variables only for those vessels that were both on the register at 1st January and were active during the reference year, thus missing out data for vessels that joined the register and were active during the year.

The 2015 AER presents the results of economic projections for fleets in the NE Atlantic for the years 2014, 2015 and for what is referred to as MSY using the Bio-Economic Model of European fleets (BEMEF)¹. The basis of the projections for 2014 and 2015 are the agreed TACs for those years. However the basis for the projections at MSY is unclear, but appears to be the aggregated expected landings of all species by fleet when fished at F_{MSY} . This definition assumes that (i) there is a MSY by fleet, which is not correct, since MSY is a combined characteristic of the stock and the fleets exploiting that stock; and (ii) it is possible to harvest all the stocks at MSY simultaneously, which in a mixed fishery is very unlikely to occur. Hence the results of the projections at MSY are likely to be unrealistic and should not be considered informative. Furthermore, it is important to note that because the uncertainties associated with the projections are not shown in the AER, the precision of the projected values appears overly-optimistic.

¹ Managing EU fisheries in the public interest. Results from the Bio-economic Model of European Fleets. Griffin Carpenter and Aniol Esteban. March 2015

STECF CONCLUSIONS

The conclusion of the STECF on the 2015 AER can be divided into those that are of policy relevance and are directed to DG MARE and those that are of a procedural nature and are directed to the future EWGs involved in the production of future AERs. These two categories are listed separately below.

Conclusions for DG MARE

The 2015 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides the most comprehensive overview of the structure and economic performance of EU Member States' fishing fleets prepared to date. The majority of the analyses regarding the performance of Member States' fleets are reliable and informative. However, because data from a number of Member States (Bulgaria, Croatia, Cyprus, Estonia, Ireland, France, Greece, Malta, and Spain i.e. including some of the EU's biggest fishing nations) were excluded from the regional and EU overviews, the trends reported in those overview sections may be wholly misleading and are not informative.

The issue of inconsistent clustering of fleet segments remains problematic in some cases. STECF suggests that DG MARE discuss with Member States whether a standardised set of criteria can be agreed on when fleet segments need to be clustered. At the same time it may be useful to discuss whether vessels in similar fleet segments from different member States operating in the same sea basins could be clustered so that a multi-MS cluster of similar vessels, e.g. Baltic Sea pelagic over 40m vessels, could be created when there may be too few vessels in each MS to show any national fleet segments for these vessels. Such a multi-MS cluster would still provide useful information about the performance of vessels engaged in the fishery.

Following the communication from DG MARE to Member States on the procedures for data submission in response to data calls under the DCF and the timing of EWGs, the data submission process for fleet economic data was much improved compared to previous years. All data submitted by Member States were assembled and checked ahead of the second AER EWG meeting. Nevertheless, the following comments from the report of the July 2014 STECF plenary meeting remain valid:

“STECF reiterates its comments from 2013, noting that the usefulness of future Annual Economic Reports on the performance of EU fishing fleets will remain less than optimal unless Member States submit complete, accurate and timely data submissions in response to annual economic data calls. STECF urges the Commission to take whatever action is necessary to ensure that future data submission from Member States are complete, accurate and are submitted within timescale specified in the annual data calls. Until such time that these issues are resolved, the ability to generate accurate and in-depth analysis of the performance of the EU fishing fleet at a regional and EU wide level is compromised.”

Notwithstanding the previous paragraph, STECF notes that some of the historical data that are currently missing from the fleet economic dataset are unlikely ever to appear and concludes that in future, there is therefore a need to focus on those time series that are currently more or less complete.

STECF concludes that the results from the BEMEF projections at MSY are based on inappropriate assumptions are likely to be unrealistic and should not be considered informative. Furthermore, it is important to note that because the uncertainties associated with the projections are not shown in the AER, the precision of the projected values appears overly-optimistic.

STECF concludes that in future, economic variables and fleet capacity variables submitted by Member States in response to the fleet economic data call should relate to all vessels that were active during each reference year, irrespective of whether they were on the fleet register on 1st January of the reference year.

Conclusions for EWGs preparing future AERs

STECF concludes that it would be useful if future AERs contained MS summaries that all follow the same structure and the following alternative template is proposed, noting that items 2 to 9 could be tabulated with use of small graphs (e.g. MS Excel sparklines) for trends:

1. Most important observed characteristic of the MS fleet (e.g. substantial change in fleet size or revenues)
2. Number of vessels: Total, SSF, LSF, DWF + trends
3. Gross Tonnage: Total, SSF, LSF, DWF + trends
4. Engine power (kW): Total, SSF, LSF, DWF + trends
5. Landings, top five species, quantity and value
6. Employment (jobs): Total, SSF, LSF, DWF + trends
7. Employment (FTE): Total, SSF, LSF, DWF + trends
8. Revenue (€): Total, SSF, LSF, DWF + trends
9. GVA (€): Total, SSF, LSF, DWF + trends
10. Other interesting features of each MS fleet e.g. any substantial recent changes in activity, physical characteristics of vessels included in the segment, etc.

STECF concludes that due to different opinions within the EWG regarding the adjustment of monetary values to account for inflation over the time series, and due to different views on the most appropriate index to use if adjustment is done, the issue of adjustment for inflation requires further investigation and discussion. It is imperative that the issue is resolved and a decision taken by the EWG on the most appropriate index to include in the next AER.

EXPERT WORKING GROUP REPORT

REPORT TO THE STECF

EXPERT WORKING GROUP OF THE 2015 ANNUAL ECONOMIC REPORT ON THE EU FISHING FLEET

EWG-15-03 & 15-07

ISPRA, ITALY, 4-8 MAY & GOTHENBURG, SWEDEN, 8-12 JUNE 2015

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.

Executive Summary

The 2015 Annual Economic Report (AER) on the European Union (EU) fishing fleet provides a comprehensive overview of the latest information available on the structure and economic performance of EU Member States fishing fleets. The results indicate that the profitability of the EU fishing fleet increased in 2013 compared to 2012.

The amount of Gross Value Added (GVA) and gross profit (all excl. subsidies) generated by the EU fishing fleet (excl. Bulgaria, Cyprus, Greece and Malta) in 2013 was €3.4 billion and €1.3 billion, respectively. GVA as a proportion of revenue was estimated at 49% and gross profit margin at 20%. With a total net profit of €506 million for the EU fleet in 2013, 7.8% of the revenue was retained as net profit. Sixteen out of nineteen member states (excludes Bulgaria, Cyprus, Greece and Malta) generated net profits in 2013; the remaining three MS (Belgium, Finland and Portugal) generated net losses.

Projection results for 2014 (not all MS are included) suggest that all MS analysed generated net profits in 2014, with the exclusion of the Netherlands, Belgium and Poland. In relative terms, all Member State fleets generated positive gross profit margins and the net profit margin was negative only for Belgium, the Netherlands and Poland. Although preliminary economic performance projections for most MS in 2014 suggest a positive performance, due to poor data quality and missing data for several MS fleets it was not possible to project an overall economic position for the EU fleet in 2014.

In 2013, the EU fishing fleet numbered 83,734 vessels with a combined gross tonnage (GT) of 1.6 million tonnes and engine power of 6.5 million kilowatts (kW). EU fleet capacity has continued to decrease steadily, with an average annual decrease of 2% in terms of vessel numbers and kW and 3% in terms of GT.

Based on DCF data, there were 65,363 active vessels and 18,371 inactive vessels in 2013. Of the active vessels, 74% were small-scale, 26% were large-scale and less than 1% distant-water vessels.

Direct employment generated by the fleet amounted to just over 149 thousand fishers, corresponding to 110 thousand FTEs (excl. Cyprus). Average annual wage per FTE was estimated at €23 thousand, ranging from €120 thousand for Belgian fishers to €8 thousand for Greek fishers. The EU fleet (excl. Greece) spent almost 5 million days at sea and consumed 2.4 billion litres of fuel (excl. Bulgaria and Cyprus). According to the DCF data, the EU fleet (excl. Greece) landed 4.7 million tonnes of seafood in 2013 while over €6.8 billion was reported in landed value.

In 2013, the fleet had an estimated (depreciated) replacement value of €4.6 billion (excl. Bulgaria, Croatia, Cyprus, Greece, Malta and the Netherlands) and in-year investments amounted to €400 million (excl. the same countries, as well as France).

This publication includes: 1) An structural and economic overview of the EU fishing fleet in 2013, with projections for 2014, and trend analyses for the years 2008-2013; 2) A regional analysis of the EU fishing fleet by major sea basin: Baltic Sea, North Sea, North East Atlantic, Mediterranean & Black Sea, as well as fleets operating in Other Fishing Regions, including the Northwest Atlantic, Eastern Arctic, Outermost regions and Other regions; 3) A detailed structural and economic overview of each EU Member State fishing fleet, including qualitative economic performance assessments for 2013 and projections for 2014 and 2015; 4) Projections for 2014, 2015 and a situation with stocks at MSY for North Atlantic fleets and projections for 2014 and 205 for Mediterranean fleets using models for forecasting.

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).

EU Member State Fleet Summary Reports

The main issues affecting the economic performance of each EU Member States' national fleet in 2013 and 2014 are summarised below:

Belgium

National Fleet

As has been the overall trend, capacity of the Belgian fleet decreased further, with 80 registered vessels in 2014. The Belgian fleet mainly consists of beam trawlers targeting demersal species such as common sole, European plaice and common shrimp. The vessels operate mainly in the North Sea and English Channel.

In 2013 the Belgian fleet landed a total of 23 thousand tonnes, with a landing value of €74 million. Of the Belgian harbours, Zeebrugge was the most important and received 63% of total landings. Most of the foreign landings occurred in the Netherlands, where the market for European plaice was more profitable. Sole remained more important in the Belgian market. Total employment decreased abruptly in 2013. Even though income for Belgian fishers is assured for each sea trip and is high compared to other MS, finding an appropriate crew remains a challenge for many vessel owners. Young potential fishermen prefer to work for dredging companies or in the tourism industry.

Main trends and developments

The deteriorating trend observed over the last few years continued into 2013. The net profit is expected to only slightly improve in 2014. The Belgian fleet has high operating costs, with crew and fuel costs alone accounting for 70% of revenue. Even though fuel costs decreased as a result of lower fuel prices and efforts were made to decrease consumption by renewing engines, these remain important. Furthermore, the low fish prices had a negative effect on the profitability of the sector.

Bulgaria

In 2014, the Bulgarian fishing fleet consisted of 2,011 registered vessels, of which 1,110 were active and the remaining 901 vessels were inactive. The active fleet had a combined gross tonnage of 4.7 thousand tonnes, total power of 36.3 thousand kW and an average age of 22 years. The overall size of the Bulgaria fishing fleet decreased 6% in number while inactive vessels increased 5%.

The total landed weight by the Bulgarian fleet in 2013 was 9.2 thousand tonnes of seafood, with a landed value of €4.4 million. The total weight and value of landing increased 14% and 1% respectively compared to 2012.

Regarding the top species in terms of value, the average first sale price for European sprat, Mediterranean horse mackerel and picked dogfish remained rather stable while for turbot and sea snails it increased between 2008 and 2014. Turbot achieved the highest average price per kilo in 2014 (€5.7 per kg), followed by picked dogfish (€1.8 per kg). However, the price of turbot has decreased since 2012 (-17%).

Socio-economic data submitted for the Bulgarian fleet were considered inconsistent/questionable.

Croatia

National Fleet

The national fleet consisted of 27 (DCF) fleet segments totalling 4,358 vessels in 2013. The total amount of income generated in 2013 was € 81.4 million, an increase of 21% compared to 2012. Total costs incurred by the fleet in 2013 equated to €78.2 million, amounting to 96% of total income. Crew cost and fuel costs, the two major fishing expenses, decreased 1% and 2% respectively. While the number of vessels remained stable, the number of employed increased 5% as well as the average wage per employed (6%). Landings in weight increased 25% while effort, in the number of fishing days, decreased 8%.

Main trends and developments

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Croatian fleet in 2013 were €38.9 million, €14.9 million and €3.2 million, respectively. All economic indicators increased significantly compared to 2012, which was caused mostly by improving fishing efficiency (catch per unit of effort) and continued investments.

While overall the fleet was profitable, there are considerable variations within the fleet segments, with the large-scale fleet segments performing better in general. Several small scale segments revealed very poor or no profitability, which may be due to the fact that a large number of small-scale vessel owners operate on a part-time basis as an additional source of food and/or income.

Small-scale fleet

Small scale fleet segments comprise 39% of the number of vessels but contribute only 1.6% of total landings. With an average of 7 meters in length and 30 years in age, fishing activity of these vessels are limited to fishing trips of a day and to fishing grounds near ports. Most of their catch is sold in local markets, and income is often used as the addition to the home budget.

Large-scale fleet

While effort has remained rather stable income has increased, and is reflected in the economic indicators estimated for the large-scale fleet. The increase in catch per unit effort is evident in the PS segment, but improved performance can also be a result of increased investments throughout the fleet.

As a new MS, only data for 2012 and 2013 were available for Croatia.

Cyprus

National Fleet

The majority of vessels in the Cypriot fleet use passive gears. The decrease in the value of landings between 2008 and 2013 follows the decrease in landed weight. Capacity, in number of vessels, reversed the decreasing trend and increased in 2013. Conversely, gross tonnage decreased in 2013 after an increasing trend over the period 2008-2012.

The small-scale fleet (defined as vessels below 12 meters using non-towed gears), represented more than 65% of the total active fleet. The amount of income generated by the small-scale fleet accounted for €4 million in 2013. The large-scale fleet comprised only 33 vessels in 2013, with €2.9 million landings income and 101 full time employees.

Socio-economic data submitted for the Cypriot fleet were considered inconsistent/questionable.

Denmark

National Fleet

In 2013, the Danish fishing fleet consisted of 2,049 registered vessels, with a combined gross tonnage of 65 thousand GT, engine power of 215 thousand kW and an average age of 31 years. The number of registered fishing vessels stabilised between 2012 and 2013 whereas a small increase was seen in terms of the vessel tonnage (4%) and vessel power (1%). This comes after a period with a significant decrease in fleet capacity between 2008 and 2012, partly due to a cleaning up of inactive vessels in the register.

The total weight landed by the Danish fleet was 665 thousand tonnes of seafood, with a landed value of €395 million. The total weight and value of landings increased from 2012 to 2013 by 33% and 4% respectively. The factor causing the weight and value to increase was a significant increment (around 80%) in the sandeel quota in 2013, which brought the landings back to a more normal level. Sandeel is an important species for the Danish industrial fisheries. This increase in sandeel was to some extent counterweighed by a decline in the landings of herring, sprat and Norway pout.

The total amount of income generated by the Danish fleet in 2013 was €401 million, an increase of 3% compared to 2012. Total operating costs incurred by the fleet equated to €259 million, amounting to 61% of total income. In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated in 2013 were €252 million, €142 million and €46 million, respectively. Gross Value Added (GVA) and gross profit increased 3% between 2012 and 2013, while net profit decreased 9%.

The national fleet consisted of 19 DCF fleet segments in 2013, consisting of 1,482 active vessels. Eleven of the active fleets made losses in 2013, while 8 made an overall profit. The most important segments in terms of total value of landings consist of larger and medium sized vessels that target pelagic or demersal species. Both the gross and the net profit show a significant trend towards larger profits if evaluated for the period 2008-2013. The gain is driven by the large scale fleet.

Small-scale fleet

The small scale fleet, vessels below 12 meters using static gears, operate mostly in the Baltic Sea, the sounds and Kattegat. In 2013, the small scale fishing fleet consisted of 1,026 registered vessels, with a combined gross tonnage of 3.9 thousand tonnes and engine power of 41 thousand kW. The size of the small scale fleet decreased between 2012 and 2013. The number of vessels and vessel tonnage (GT) both decreased 5% and vessel power (kW) decreased 4%.

The total amount of income generated by the small scale fleet accounted for €24 million in 2013, which is 6% of the national income for fisheries. The landings value generated by the Danish small scale fleet has decreased with 6% from 2012-2013. The small scale fleet made a loss in 2013 with gross profit and net profits of €-1.2 million and €-5.81 million respectively. The gross profit decreased 33% from 2012 to 2013, while the net profit decreased 13%. The increased loss is mainly due to lower income from landings.

Estonia

National Fleet

In 2014, the Estonian Baltic Sea fishing fleet consisted of 1,514 registered vessels, with a combined gross tonnage of 6 thousand GT, engine power of 32 thousand kW and an average age of 22 years. The size of the Estonian fishing fleet increased between 2008 and 2013. Total employment in 2013 was estimated at 2,046 jobs, corresponding to 514 FTEs.

Landings in weight by the Estonian Baltic Sea fleet in 2013 was 55 thousand tonnes of seafood, with a landed value of €15.4 million, from which European sprat generated the highest landed value (€6.6 million), followed by Atlantic herring (€4.7 million) and European perch (€2.3 million). The total weight of landings decreased over the period analysed (years 2008 – 2013) while the value of landings has remained rather stable, reflected in the increase in average price of key species.

Estonian fleet was profitable in 2013, with the amount of GVA, gross profit and net profit generated equating to €9.2 million, €4.2 million and €2.2 million, respectively. In 2013, the Estonian fleet had an estimated capital value of €18.3 million and an investment of €2.1 million.

The year 2013 was characterised by an increase in the sprat quota after two years of decline, when the quota decreased by as much as 42%. Also there was a decline in fishery-related operating expenses in 2013 and a slight rise in the first-sale prices of key fish species (sprat and herring). The decline in operating expenses was mainly due to lower fuel costs and the higher first sales prices were primarily due to good export conditions. However, at the end of 2013, Russia's restrictions on imports in Russian Customs Union countries caused concern for companies operating in the fisheries sector. Although a slight increase in quotas is expected, subsequent years will be particularly difficult to sell fish production because of problems on the eastern market. Therefore, efforts are being made to find alternative markets so as to diversify and reduce risk.

Small-scale fleet

The small scale fleet operates in the Estonian coastal waters using mainly passive gears and is divided into two size groups (0-10m and 10-12m). The number of vessels in the small scale fleet increased in 2013 as a result of fishermen getting additional possibilities to bring vessels into the fishing vessel register. In 2013, coastal fishermen caught a total of 9.6 thousand tonnes of fish, with a landed value of €5.6 million. The fleet has been profitable.

Finland

National Fleet

Finnish fishing fleet consisted of 3,241 registered vessels of which 1,509 were inactive in 2013; the active fleet consisted of 1,732 vessels, with a combined gross tonnage of 16 thousand GT and a total power of 171 thousand kW. The vast majority of the vessels were small scale. The number of active vessels decreased in 2013 by 60 vessels. In 2014 the number of active vessels increased again by 72 vessels.

Total employment in 2013 was estimated at 1,379 jobs. The majority of the jobs are created by the small scale fleet that is a seasonal fishery (often part-time). The Finnish fleet operates exclusively in the Baltic Sea and is based on two main fisheries: pelagic trawlers and small scale fleet.

Small-scale fleet

The coastal small scale fleet is the biggest Finnish fleet segment in terms of number of vessels with 1,674 vessels in 2013. This fleet segment consists of diversified vessels targeting mainly freshwater fish species; European whitefish, pike-perch and perch. In 2013, the total value of landings of small-scale fishery (including 10-12m vessels) was €12.6 million, generating €6.3 million in gross value added. Gross profit margin was 16% but it was not high enough to cover the estimated capital costs: the small scale fleet made losses of €5 million. The economic performance of small scale segment as a whole deteriorated in 2013.

Large-scale fleet

Pelagic trawlers are divided into three length group segments, with the 24-40m segment being the most important economically. The fleet targets Baltic herring and sprat and in 2013, these 21 vessels accounted for more than half of the total value landed by the Finnish fleet and employed 73 FTE. On average, these vessels generate a landings income of €1.3 million and employing 3.5 FTEs. The fleet segment generated €7.8 million in GVA or €107 thousand per FTE. In 2013 the Gross profit margin was 14% that was just not high enough to cover the estimated capital costs and the fleet suffered losses of €200 thousand with a net profit margin of -0.8%

Assessment and future trends

Baltic herring stocks are currently exceptionally strong especially in the most important fishing grounds in Botnian Bay. Catches of herring have been increasing and 2014 catches were a record high. The market situation has also been favourable with high demand in the fishmeal industry due to the cuts in sandeel quotas. Therefore the economic performance of the pelagic trawlers has been strong. However the Russian markets have been important for the pelagic fish and the Russian embargo for EU food stuff, already having implications in 2014, will continue to influence the pelagic market this year and most likely offset the positive development of the pelagic segment.

Increased seal populations have strongly influenced the Finnish coastal fishery for several years. Many fishermen have had to stop fishing in traditional grounds. There have been EFF funded subsidy scheme to support small scale coastal fishermen to continue fishing. Another EFF pilot project that subsidises intensive fishing for low value fish (mostly cyprinid fish) to remove nutrients from the water system has contributed to a new method of fishing and created new markets for non-commercial species.

France

National Fleet

The size of the French fishing fleet decreased between 2008 and 2013, with the number of vessels decreasing 10%, and GT and kW 17% and 7%, respectively. Due to a slight increase of the weight of landings combined with an overall price increase, the landings value rose slightly in 2013.

A 3.2% increase in operating costs (despite lower energy costs) was offset by the increase of the total landing incomes (increased 4%), augmenting gross profit generated in 2013. Nevertheless, the economic performance differs significantly between fleet segments and supra regions. Despite lower consumption per

vessel and per landed tonne, high fuel prices had a direct negative impact on vessel profitability, especially for demersal, pelagic trawlers and dredgers.

In the Atlantic area, situations differed by port, fishing gear used and target species. Economic situation in the Mediterranean Sea remained fragile due to the lack of abundance of pelagic species in 2013 (anchovy, pilchard) but landed weight stabilised compared to the year 2012. Due to a good level of fish stocks, 2013 was a good year for tuna seiners fishing in the Mediterranean Sea.

Small-scale fleet / Large-scale fleet

The total weight landed by the French small scale fleet in 2013 represented 16% of the total weight and 19% of the total value of the national fleet. The gross profit margin reached 19.3% for the national fleet in 2013, against 18.6% observed in 2012. The total weight landed by the French large scale fleet in 2013 represented 68% of the total weight and 69% of the total value of the national fleet. The gross profit margin reached 14.1% for the national fleet in 2013, against 11.9% observed in 2012.

Distant-water fleet

Total income decreased significantly between 2012 and 2013 (-8%), explained by lower average prices observed for some tuna species.

Complete time series (2008-2013) data for the French fleet was unavailable.

Germany

National Fleet

The German fishing fleet decreased further in size in 2013 and 2014 in terms of vessel numbers. One vessel from the high seas fleet was sold outside Germany. The number of cutters and small scale fishing vessels decreased, thus continuing the long term trend. Fleet segments were affected differently by price and quota developments.

The fishing industry expects future problems from a potential loss of fishing grounds due to area closures e.g. for Nature 2000 sites or wind farms. The industry has stated concerns about the implementation of discard bans beginning in 2015.

Small-scale and Cutter fleet

The most striking development for the cutter fleet was the revenues generated from brown shrimp landings which increased further compared to the already favourable situation in 2012; the price more than doubled in 2012 after the 2011 market-crash and basically remained at that level in 2013. Therefore, the economic situation became satisfactory again for the shrimp beam trawl fleet. As a consequence, owners increased investments. The North Sea plaice stock was assessed at another all-time high, and thus quota increased again as well. However, the benefit for the fleet was limited due to decreasing prices.

Saithe fisheries in the North Sea were satisfactory. The lower quota was fully exploited, but decreasing prices affected the profitability in 2013. The MSC certification of this fishery has been renewed in 2012 and again proven conducive for marketing. The Nephrops fishery has become increasingly important for the cutter fleet due to the possibility of international quota exchange.

The Cod fishery in the North Sea was regarded as satisfactory due to stock recovery but the Baltic cod quota was not fully exploited. The considerable stock increase led to a lack of food as the fish showed signs of malnutrition. This resulted in decreasing prices. Moreover, Baltic cod did not aggregate as usual, according to the fisheries, thus leading to lower hourly catches.

The coastal fishery on Baltic herring was satisfactory, and the considerably increased quota was fully exploited in a short time in 2013. Due to the still pending long-term management plan Baltic herring could not be MSC certified. As several buyers only accept certified herring, prices were not always at a satisfactory level.

The industry states unexpected problems due to decreased prices especially for species with increased TAC. The increasing age of vessels results in decreasing competitiveness. Investment in new cutters occurs

only within the smallest length classes. Another future problem becomes more evident, which is a lack of potential and qualified successors of elder fishermen close to retirement. Employment in fisheries has become less attractive for most candidates due to more suitable opportunities in other branches and the perception of the business as being uncertain.

Distant-water fleet

According to the German fishing industry, 2013 was a mediocre year for both pelagic and demersal high seas trawlers, particularly due to the unresolved dispute on Atlantic mackerel. One large demersal trawler exited the German fleet due to decreasing fishing opportunities in Greenland waters. On the other hand, considerable investment was undertaken for modernising the high seas fleet. This mainly applies to on-board processing facilities and cooling technology. In 2013 the construction of a new pelagic trawler initiated, which is expected to be operational in 2015.

The MSC certifications for the cod, saithe and haddock fisheries in the North Sea and in Norwegian waters were successfully renewed. The annual audit for fisheries on North Sea herring (including Norwegian waters) was passed successfully. Due to the ongoing uncertainties on quota allocation on Atlantic mackerel the certification was cancelled causing negative consequences for the participating industry.

Cod fisheries in the Svalbard, Barents Sea and Norwegian areas were efficient. However, decreasing prices had a negative impact on profitability. The saithe fishery in the North Sea did not entirely fulfil the expectations. The Greenland halibut fishery was efficient and led to positive results, even though the total quota had been considerably reduced. The Greenland cod quota was fully exploited.

Two demersal trawlers continued redfish fishery East of Greenland which had been re-opened in 2012.

The pelagic fleet experienced good results in the North Sea and North Atlantic fisheries on herring, jack mackerel and mackerel. The quota for blue whiting was unsatisfactory, but as in 2012 partial compensation could be achieved through fishery on argentine in combination with blue whiting. One pelagic trawler performed redfish fishery for several weeks. In 2013 no fishery took place in distant (African or Pacific) waters.

Audits on MSC certified fisheries were successful, thus all certificates were extended. Due to the dispute on Atlantic mackerel quota the related fishery could not be certified effective for 2014. Fishing activities and results of the high seas fleet were similar to 2013. However, saithe fisheries in Norwegian waters could not be performed as an agreement with Norway could only be achieved before the end of the fishing season.

In 2014 one pelagic trawler fished in Mauritanian waters but stopped activity after one month due to inefficiency. For the same reason the fishery in Moroccan waters was ceased after two months. One German trawler was involved in exploiting “pooled quota” in the Southern Pacific. The “pooled quota” is swapped annually amongst participating EU member states.

Greece

National Fleet

The Greek fishing fleet continues to fall steadily in terms of vessel numbers, gross tonnage and total power in 2013. Total employment was estimated at 24,486 jobs corresponding to 22,546 FTEs in 2013. The average wage per FTE and employed is very low (€7.5 and €8.1 thousand, respectively). The Greek fishing fleet spent an estimated 2.8 million days at sea and consumed around 114 million litres of fuel. The main costs items of the fishing vessels are energy costs and wages as well as the imputed value of unpaid labour.

Estimation of the Greek fleet's economic performance is limited, with the only available source/information is through research carried out by the Agricultural Economics Research Institute (AGRERI, 2015). This study shows that the income from landings covers all operating costs except for the imputed value of unpaid labour, and therefore, concludes that the activity produces a positive income for fishermen. However, it is important to emphasise that this figure is estimated as the opportunity cost of labour, using the average daily wage per fishermen. But in many cases, due to the lack of labour demand in local economies, which is even more intense due to the ongoing financial recession, the opportunity cost of labour is in fact lower or even zero.

In Greece, the majority of vessels (85.6%) are small-scale vessels. The small-scale fleet employs a total of 17,440 FTEs, contributing 77% of the total employment in the sector. The SSF mainly exploits the extensive Greek coastline using polyvalent passive gears (mainly nets, longlines, pots, and traps). Vessels in this

segment are mainly family-owned and characterised by low invested capital. Small scale vessels have higher energy costs when compared to large-scale vessels. Moreover, small-scale vessels do not have the opportunity to benefit from the reduced price of fuel due to cash flow limitations that prevent them from buying fuel in advance. Conversely, SSF landings generally attain higher market prices and undergo short supply-chains. Furthermore, SSF are very important for local economies, offering income and employment to poor and isolated areas with very few alternative economic activities. The bottom trawler segment comprised 287 vessels and employed 7.4% of the national FTEs. The purse seiner segment is a small segment (252 vessels), that represented 1.5% of the Greek fishing fleet and employed 9.2% of the national FTEs.

Ireland

National Fleet

In terms of the profitability and development trends the national fleet improved for net profit margin (%), RoFTA (%) and GVA per FTE (thousand €) in 2013. Running costs continue to be a key driver influencing the economic performance of the Irish national fleet, particularly those associated with the identification and retention of crew and the cost of fuel. Landing value increased from 2012 to 2013 by 3% with landings of mackerel contributing significantly to this increase. This trend continued for 2014.

The MS launched an internationally recognised, third party accredited; “Responsibly Sourced” standard for wild seafood in 2010. This programme is now fully accredited to ISO17065 and to date 85 vessels and 5 onshore facilities have achieved certification. A requirement in the achievement of this standard is the provision of economic data, by certified vessels, in compliance with the DCF regulation. The number of certified vessels shows a slight increase to that of previous years and is anticipated to increase in accordance with market demand.

Small-scale fleet

Although value of landings for the national fleet saw a slight drop from 2012 to 2013 the small scale fleet saw a 3% increase. Landings weight and value reported in this report is not complete. Data from logbooks is available for landing weight for vessels between 10-12m only. Landings income value includes data from logbooks and some estimates for vessels between 0-10m. However these figures are underestimates and the real figure could be much higher. Landings income for 2013 was estimated at €23 million.

The number of total registered vessels (under 10m) rose by 3% every year from 2009 and prior to 2011 increased by 8% and 5% between the years 2008/2009 and 2009/2010 respectively. Overall, this represents a 25% increase in the number of under 10m vessels between the years 2008 and 2013. The number of the small scale fleet demonstrates a similar trend (under 12m – passive gears). This segment consisted of 1,318 vessels in 2013, an increase from 1,279 vessels in 2012. The SSF also demonstrated a decrease in number in 2014 as with the under 10m fleet.

The increase in vessel number for the under 10m has been driven in part by the economic downturn in Ireland and the increase in unemployment which has attracted more entries into this sector. Re-entry into the segment after the decommissioning scheme in 2005-2008 may also have occurred. These new and re-entries into the fisheries often target lobster and crab and there are concerns that this could have an adverse effect on these stocks.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the small scale fleet in 2013 were €15.7 million, €12.6 million and €1.4 million respectively. All three indicators saw increases between 2012 and 2013. This increase in economic performances is dramatic but figures for 2013 are more consistent with 2011 and 2010.

Italy

National Fleet

The economic performance of the Italian fleet in 2013 was negative, with decreased income and profits when compared to the previous year. A clear declining trend in the economic performance of the national fleet is observed over the period 2009-2013. The main factors contributing to the reduced profits are: a) the reduced

biomass of many stocks, which impacted on productivity; b) a high fuel price even though reduced when compared to 2012; c) the market price of seafood affected by the economic crisis and the related decline in the purchasing power of consumers, which has further reduced landings income.

Projections for 2014 confirm the negative trend in the economic performance of the Italian fishing fleet. Landings income is expected to have reduced further as a consequence of a decline in the average market price of seafood. The expected decrease in operating costs is not sufficient to counterbalance the reduction in landings value. This will further reduce the RoFTA by an additional 3% in 2014.

Small-scale fleet

The small-scale fleet, which represents around two thirds of the Italian fishing fleet in terms of number of vessels, was unprofitable in 2013 with net losses equal to -€1.6 million, a negative net profit margin (-0.8%) and a negative RoFTA (-1.2%). Over the period 2009-2013, a clear declining trend in the economic performance is registered for the Italian small scale fleet. Small scale vessels were not able to further adapt their fishing strategies to reduce the negative impact of high fuel prices. An increase of 26% in energy costs from 2012 to 2013 together with a reduction of 20% in landings income determined a critical economic condition this segment.

Projections for 2014 show a 4% increase in both landings weight and value. The increase in landings income and an expected reduction of around 3% in operating costs would determine an increase in GVA, gross profits and net profits. In 2014, the fleet is expected to have posted a positive net profit, with an estimated RoFTA of 8%. Even though the economic situation of small scale fleet is expected to have improved in 2014, economic performance indicators would be still much lower than those observed for the period 2008-2012.

Large-scale fleet

This fleet includes trawlers, dredgers, purse seiners and pelagic trawlers. In 2013, the economic performance of this fleet was positive when compared to the previous year. Even though reductions in landings weight and value were registered also for large scale vessels, this fleet was able to reduce operating costs by adapting their fishing strategies. Indeed, in 2013 energy costs for this fleet decreased 18%, which allowed GVA and gross profits to be maintained at the level of the previous year. Net profits increased significantly as well as net profit margin and RoFTA.

Projections for 2014 suggest a further decrease in landings income. Even though large scale fleet is expected to have further reduced operating costs, this reduction seems to have been insufficient to offset lower revenues. When compared to 2013, the economic performance in 2014 is expected to have deteriorated, with net profit margin decreasing from 6% to 2.7% and RoFTA from 8.1% to 3.5%.

Latvia

National Fleet

In 2013, the Latvian Baltic Sea fishing fleet consisted of 351 registered vessels, with a combined gross tonnage of 8 thousand GT and total power of 21 thousand kW. The size of the Latvian fishing fleet has followed a decreasing trend between 2008 and 2013. The number of vessels declined by 59%, while the total GT and kW of the fleet declined by 40% and 38% during the same period. The main reason for these declines is connected to the vessel scrapping program according to the multi-annual management plan to achieve a better balance between fishing capacity and the available resources. Vessel scrapping between 2008 and 2013 and changes in the structure of fleet segments had a positive impact on incomes and minimised total costs. Fleet reduction schemes and the exclusion of subsistence-use fishermen from economic analysis has caused the number of days at sea, fishing days and employment to decrease 56%, 52% and 58%, respectively between 2008 and 2013.

The landed weight by the Latvian fleet in 2013 was 61 thousand tonnes of fish, with a landed value of €26 million. The total weight and value of landings increase 6% and 10% respectively between 2012 and 2013. In terms of economic performance, the amount for Gross Value Added (GVA), gross profit and net profit increased by 37%, 61% and 75% respectively between 2012 and 2013 but has still not reached the levels in 2008. The total amount of Gross Value Added (GVA), gross profit and net profit generated by the Latvian national fleet in 2013 was €11.7, €7.5 and €5.3 million respectively.

Small-scale fleet

The share of landings generated by small coastal vessels to total income is quite insignificant, around 7% in 2013. However the small-scale fishing fleet is important for employment in coastal regions and was estimated at 327 jobs, corresponding to 229 FTEs. The small-scale fleet supply Latvian markets with the rare and more expensive variety of species such as salmon, eel and trout etc. The coastal fleet segment was profitable in 2013 with a reported gross and net profit of around €1.6 million.

Distant-water fleet

There were six distance-water vessels in 2013. Two of the distant-water vessels are based predominantly in NAFO and NEAFC area. These vessels target species such as beaked redfish and northern prawn. There were four vessels operating in CECAF area Morocco and Mauritania economic zone. The weight landed by the fleet in 2013 was 55 thousand tonnes of fish, with a total landed value of €22.8 million. The total weight of landings has increase by 48% between 2012 and 2013, while landed value increased 33% during the same period. The main reason for increase in weight and value in 2013 was fishery recovering after the ban of the fishing activity for the EU fishing vessels in African waters in 2012. The distance-water fleet income increase 33% and was €11.2 million in 2013. This fleet segment was profitable, with a reported gross profit of around €7.7 million in 2013.

Lithuania

National Fleet

Number of vessels in the Lithuanian fleet register declined constantly over the 2008-2014 period. Despite the annual decline in number, capacity increase in 2014 was related to high sea vessels entering the fleet register after modernisation. Small scale fleet capacity has also declined since 2008, but according to recent data, increased landings of this segment with lower number of vessels indicate a withdrawal of less active vessels from business.

Employment figures for 2013 shows that number of person employed by fishing fleet increased 4% compared to 2012, but in terms of FTE, it decreased almost 13%. Working hours is closely related to fishing effort, so decline in FTE was related to respective decrease in days at sea, which was 19% lower in 2013 compare to 2012. On the same basis, regarding increase in effort, employment figures as for instance FTE is expected to go up by 9% in 2014. Changes in employment were mostly driven by the largest segment in national fleet operating in distant water fisheries.

Weight of landings in 2014 was the highest over the course of five years. Data shows that according to the recovery of the distant water fleet, national weight and value of landings has a tendency to grow. Total weight of landed fishery production in 2014 was 137 thousand tonnes, corresponding to €93.9 million in value.

Distant-water fleet

The distant water fleet in 2014 covered 76% of national total landed weight and 75% of income. Compared to 2013, weight of landings increased 54% and was 2.3 times higher compared to 2012. Record low landings in 2012 resulted from the prolonged endorsement of bilateral agreement between EU and West African countries. Related to this issue, in 2013 number of vessels fell 30%. Despite the complicated fishing conditions in CECAF area, the distant water fleet performed quite well during 2013. Net profit margin was estimated at 15.8% and improved from 11.8% compared to 2012. Labour productivity increased also significantly, achieving €32 thousands per FTE.

Large-scale fleet

From 2008 to 2011 the highest value of landings in the Baltic Sea was generated from Baltic cod catches, whereas from 2011 onwards, the most significant part of income was generated by European sprat. In 2014, the value of European sprat landings reached €2.23 million, whereas Baltic cod landings generated €1.17 million. The major factor for the focus on pelagic species was the increased demand by the processing industry and appropriate market price. Improved market for small pelagic species induced rearrangement of capacity between TM 24-40 and DTS 24-40 segments. In 2013 labour productivity for the large scale fleet

was around €11 thousand of GVA per FTE and compared to 2012 decreased 34%. Net profit margin was the lowest observed during the period 2008 to 2013 and reached a negative value (-1.2%) for the first time.

Small-scale fleet

In 2014, the largest part of income by the small-scale fleet was generated from the Baltic cod and European smelt fisheries, with almost equal importance, €98.22 thousand and €62.7 thousand respectively. For small scale fisheries, GVA/FTE significantly increased from 2012 to 2013. Figures show that GVA remained stable during the period analysed, whereas FTE decreased. Small scale fisheries have a sufficiently high net profit margin, compare to large scale fleet, which was 34% in 2013.

Netherlands

In 2014, 736 vessels were active in the Dutch fleet. The Dutch fleet landed a total of 382 thousand tonnes with a landing value of €367 million. The most important sectors in the Dutch fleet are:

Flatfish fishery in general (beam trawl 12-18m, 18-24m, 24-40m and over 40m segments)

The most important flatfish species for the Netherlands are sole, plaice, turbot and brill. The introduction of pulse technique as an alternative for tickler chains in beam trawl shows a reduction in fuel and costs (up to 50% per vessel), better wages for the crew, better profitability, less discards and less impact on the seabed to catch flatfish.

In 2011 the Ministry of Economic Affairs allowed some fishermen to invest in pulse technique, suitable for shrimp fishery. The economic performance of these shrimp vessels (on an experimental, but commercial basis) is promising and it is expected that results will improve in the future, compared to traditional beam trawl. At the end of 2014 most of the shrimp was still caught using tickler chains. Compared to 2013 the average price for common shrimp decreased. However, the net profit was still positive.

Distant-water fleet (pelagic trawl over 40m segment)

Since 2012 this fleet faced problems with effort in African waters and in the Pacific. A part of the capacity of the Dutch fleet was tied up. The distant-water fleet was then mainly focussed on European quota. As a result of that, effort and landings went down.

Small-scale fleet

This part of the fleet operates in the coastal zone and depends highly on sole catches. Other species of less importance include turbot, cod, mullet and seabass. The state of the sole stock is very important and (seasonal) effort and economic performance depends largely on that. The gill net fishery was profitable but because of lack of quota and high competition (high price quota) they are not able to lease quota from other fishermen.

Malta

National Fleet

The majority of Maltese fleet consists of small scale fishing vessels. The number of vessels continued to fall steadily from 1,316 in 2008 to 1,045 in 2014, but total gross tonnage increased (4% in the same period). The level of employment slightly increased between 2008 and 2014. However, this increase in employment may be related to different data collecting methodologies used over the time period, which should be harmonised over the time series.

The value of landings showed a sharp increase of 84% between 2008 and 2013; the main exploited species include swordfish, dolphin fish, bluefin tuna, and a number of additional species, some of which although caught in smaller quantities have a high commercial value such as red shrimps.

Profitability (in terms of net profit) increased in 2013, after a period of net losses. The national fleet consisted of 23 (DCF) fleet segments in 2012, with 5 inactive length classes consisting of 266 vessels. Five of the

active fleet segments made net losses in 2013 while seven made an overall profits (information lacking for 11 segments).

Small-scale fleet

The small-scale fleet (defined as vessels below 12 meters using non-towed gears), represented more than 90% of the total active fleet. The amount of income generated by the small-scale fleet accounted for €4.9 million in 2013. The economic performance increased in 2013.

Overall, the socio-economic data submitted for the Maltese fleet were considered inconsistent/questionable.

Poland

National Fleet

The number of vessels, capacity and engine power of the Polish fishing fleet remained stable between 2012 and 2013, yet fleet activity (number of days at sea) increased 6%. The total output of the Polish fleet in 2014 was estimated at 170 thousand tonnes (-13%), with the Baltic Sea fleet landings contributing 118 thousand tonnes and a landed value of €47.5 million.

Main trends and developments

Weight and value of the Baltic Sea fleet landings decreased 11% and 16% respectively between 2013 and 2014. The reason behind that deterioration was TAC cuts for sprat and the poor physical condition of Baltic cod, which negatively affected prices. The economic performance of the Polish fleet deteriorated in 2013 compared to 2012. Gross and net profit decreased 27% and 82%, respectively. Higher labour and repair costs were the main reason behind this deterioration.

Small-scale fleet

In 2014, the Polish small-scale fleet consisted of 595 registered vessels, which did not change remarkably compared to 2012. The fleet is heavily subsidised by the EFF (European Fisheries Fund) mainly in the form of compensation of fishing income losses caused by a voluntary reduction of fishing effort. In 2013 subsidies paid out to the SSF amounted to as much as €8.8 million, compared to €11.9 million landings income. The Polish small-scale fleet's gross profit decreased sharply in 2013 which can be explained by significant increase of labour costs. The other reason explaining the deteriorated condition of the fleet was lower income from landings.

Large-scale fleet

In 2014, the Polish large-scale fleet consisted of 199 registered vessels, which has also remained stable over the past years. GVA generated by the Polish large fleet increased 7%, while gross profit and net profit decreased 15% and 59% between 2012 and 2013, respectively. The major factor causing the deterioration in profit was the significant increase in labour costs, which may have been a consequence of higher crew salary expectations caused by good profits produced in 2012.

Outlook

Baltic fishing fleet landings income dropped in 2014 compared to 2013 despite a similar TAC available for Poland in the Baltic Sea for 2014. This was a result of the crisis in the cod fisheries (poor physical conditions of fish) and implementation of a new pelagic quota allocation system. The deteriorated condition of Baltic cod is negatively influencing the performance of the demersal fleet segments targeting cod. Cod prices continued its downward trend and were slightly lower (-3%) in the first quarter of 2015 compared to 2014. It is expected that increased oxygen and salt content caused by inflow of salty North Sea water into the Baltic should change hydrological situation in the Baltic and contribute to improved cod spawning condition as well as cod abundance in coming years.

Romania

In 2013, the Romanian fishing fleet consisted of 196 registered vessels, with a combined gross tonnage of 600 hundred GT, a total power of 6.2 thousand kW and an average age of 15 years. The size of the Romania fishing fleet decreased between 2008 and 2013, with the number of vessels falling 56% and GT and kW 74% and 29% respectively. Total employment in 2013 was estimated at 304 jobs, corresponding to 37 FTEs (note, these values are explained by the accentuated seasonality of the activity and the low qualification of fishermen). The level of employment decreased between 2008 and 2013, with total employed decreasing 65% and the number of FTEs decreasing around 11% over the period. The Romania fleet spent a total of around 2.8 thousand days at sea in 2013 a decreased of around 24% compared to 2008, similar with fishing days. The total weight landed by the Romanian fleet in 2013 was 1,620 tonnes of seafood, with a landed value of almost €1.5 million. Overall, the total weight and value of landings increased during the period 2008 to 2013. Thomas' rapa whelk generated the highest landed value by the national fleet with around €775 thousand, followed by turbot at €290 thousand.

The amount of income generated by the Romanian national fleet from landings in 2013 was €1.5 million. No information is available on non-fishing income, due to the unreported data by fishermen. The Romanian fleet's total income increased 49% between 2012 and 2013. Total operating costs incurred amounted to €1.4 million, equating to 93% of total income. Crew cost and fuel costs, the two major fishing expenses, were €0.6 and €0.4 million respectively. Between 2008 and 2013, total operating costs increased 40%.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the national fleet in 2013 were €0.8 million, €0.3 million and €0.1 million respectively. Gross Value Added (GVA), gross profit and net profit increased 40%, 4% and 11% respectively between 2012 and 2013.

Small-scale fleet

The Romanian small scale fleet represents the principal part of the national fleet. The total amount of income generated from landings in 2013 was €1 million, an increase of 42% compared to 2012 results. Total operating costs incurred by this segment equated to €0.81 million, amounting to approximately 81% of income. Crew cost and fuel costs, the two major fishing expenses, were €0.39 and €0.24 million respectively. In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated were €0.59 million, €0.19 million and €0.01 million respectively. Gross Value Added (GVA) increased 5% compared to 2012, while gross profit and net profit decreased 27%, and 38%, respectively, between 2012 and 2013.

Slovenia

National Fleet

In 2014, the Slovenian fishing fleet consisted of 170 registered vessels, with a combined gross tonnage of 598 GT, engine power of 8.5 thousand kW and an average age of 37 years. Fleet capacity decreased between 2008 and 2014; the number of vessels by 6% and GT and kW by 39% and 20%, respectively. The major factor causing the fleet to decrease was the scrapping of vessels, including two of the largest vessels.

The total weight of seafood landed in 2013 was around 240 tonnes, with a landed value of €1.24 million. The total weight and value of landings decreased 65% and 47%, respectively, over the period 2008-2013. The major cause for the decrease in landed weight and value, especially for European anchovy and sardine, was the scrapping of vessels, including the two of the largest vessels (pelagic trawlers 24-40m) in the last quarter of 2011. These two vessels mainly targeted sardine and anchovy and represented around 50% of the Slovenian landed weight.

The amount of income generated by the Slovenian national fleet in 2013 was €2.34 million. This consisted of €1.18 million in landings value and €1.16 million in non-fishing income. The Slovenian fleet's landings income decreased 21% between 2012 and 2013, while other income increased 33% during the same period. As a consequence, Slovenian fishermen look for alternative opportunities to generate earnings in other industries, such as tourism.

In terms of economic performance, the amount of Gross Value Added (GVA), gross profit and net profit generated by the Slovenian fleet in 2013 were €1.8 million, €0.5 million and €0.04 million, respectively. Between 2012 and 2013, GVA and gross profit increased 7% and 45% respectively. The major factors

causing the improvement in economic performance in 2013 included lower fuel and labour costs as well as increases in income from other sources.

Small-scale fleet

The same issues apply to the small-scale fleet. Approximately 20 fishermen have lost their jobs because of vessel scrapping. Around 69 vessels (83% of all active vessels) make up the SSF which operate in Slovenian coastal areas of the Adriatic. These vessels target demersal species, such as sole, mullets, European flounder and sea bream. The total value of landings was €0.51 million and around 50 FTEs were employed in 2013, contributing 22% and 67% of the total income from landings and FTEs generated by the national fleet respectively. This fleet made a loss in 2013.

Spain

In 2013, the Spanish fishing fleet consisted of 10,167 registered vessels, with a combined gross tonnage of 385 thousand tonnes, engine power of 874 thousand kW and an average age of 29 years. Of the total number of registered vessels, 1,372 (13% of the fleet) were inactive during 2013. The size of the fleet also decreased between 2012 and 2013; 4% in number and GT, 3% in kW.

The total weight landed by the Spanish fleet in 2013 was 898 thousand tonnes of seafood. The reported landed value was €2.0 billion. In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the national fleet in 2013 was €821 million, €225 million, and €105 million, respectively. Gross Value Added (GVA), gross profit and net profit decreased 3%, 15% and 12% respectively between 2012 and 2013. In accordance, net profit margin was 5.5% in 2013, and RoFTA was 23.8%; a 9% and 11% decrease from 2012, showing a decrease in profitability for 2013.

Total employment in the Spanish fleet for 2013 was estimated at 33,129 jobs, corresponding to 28,782 FTEs. The employment level has been decreasing since 2009, after the employment increase with the recovery from the high fuel prices, with the number of jobs and FTEs decreasing by 4% and 5% respectively. This reduction is in line with the declining trend in vessel numbers. During 2013, small scale fleet represented 29% of the total employment and 25% of the total FTEs, with 7,317 FTEs whereas large scale fleet represented the 57% and the 58% of the total employment and FTEs respectively, with 16,610 FTEs. Small-scale fleet, with 4,215 vessels, represented 48% of the national active fishing fleet whereas the distant-water fleet, with 240 vessels, represented 3%. Almost 2 out of 3 active vessels (5,453 vessels) operate in the North Atlantic (Area 27).

In 2013 the Spanish fleet spent a total of around 1,097 thousand days at sea, a decrease of 5% in effort, similar to the fleet reduction, with the number of fishing days per vessels remaining relatively constant. The quantity of fuel consumed in 2013 totalled around 695 million litres, a slight increase (2%) from 2012; however, the fuel consumption per vessel increased by more than 4%.

Outlook

The Spanish fishing fleet has significantly decreased in terms of number of vessels, engine power and gross tonnage in order to bring fishing capacity in balance with the fishing opportunities. This capacity reducing trend will continue in the near future (e.g. in 2014 there were 9,921 vessels, a 2% decrease from 2013), and may even accelerate if harsher management measures are taken in order to achieve MSY objectives.

Profitability of the Spanish fleet decreased in 2013, but profitability is expected to increase in 2014 and 2015, mainly because of fuel cost decreases, as well as improvements in fish prices. Fish prices for most species are expected to increase due to an increase in the demand for what seems to be the beginning of the Spanish economic recovery.

On the other hand, fishing fleets' economic performance is highly dependent on the fuel price. From that perspective, future expectations are not very encouraging; despite the recent oil price plummet to an historical low (December 2014), analysts expect oil prices to rebound in the next two years, rising to near \$100 a barrel.

Complete time series (2008-2013) data for the Spanish fleet was unavailable.

Sweden

Main trends and developments

The size of the Swedish fleet decreased 16% in number of vessels between 2008 and 2014. This is partly due to management efforts directed at decreasing fleet size in order to bring the fleet in balance with the available resources, such as decreased number of permits to fish European Eel, entry barriers, scrapping campaigns, and the introduction of transferable fishing rights. Other factors include natural wastage due to age and fishermen leaving the sector since they cannot make a living from fishing anymore (bad profitability).

The Swedish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea, Skagerrak, and Kattegat regions. Overall, the total weight landed decreased while the value of landings increased over the period analysed. The national fleet consisted of 10 clustered fleet segments over the period 2008-2014, with 3 clustered inactive length classes consisting of 290 vessels in 2014. One of the active fleet segments made losses in 2013, passive gears under 10 meters, while the remaining 6 made overall gross profits. All three segments under 12m made negative net profits in 2013. The profitability of the diminishing Swedish fleet is increasing perhaps not as fast as expected due to decreasing quotas and average fish prices (Baltic cod and prawn).

Towards the end of 2009, Sweden introduced a tradable fishing right system for pelagic quotas. The first transactions took place in the beginning of 2010 and the first effects, in terms of profitability, became visible in late 2010. The effects of the new system are more evident from 2011 onwards, once capacity had been removed. However, decreases in quotas for pelagic species (most importantly for herring and sprat) had a negative effect on the expected profitability increase resulting from the system. The pelagic vessels also partly target demersal species, such as cod and this fishery has not been profitable for the last years.

Small-scale fleet

Overall, the small-scale fleet was not profitable, generating a negative net profit margin of 40%. Gross value added was positive but relatively low per FTE at €22.3 thousand. As tangible assets are, in most cases, probably paid off, these vessels can afford to continue to fish. Low GVA estimates signal that there are other reasons for fishing than just profit, such as part-time employment or a way of life. Additionally, increased seal populations along the Swedish coastline are heavily affecting both income, by taking and eating fish directly from the gears, and costs, by destroying gears as well as creating extra work.

Large-scale fleet

The analysis of economic performance shows that all Swedish segments with vessels over 12 meters were making positive net profits. The large vessels over 12 meters fishing mainly for northern prawn and those fishing for cod were making losses. However, these negative results were offset by profits generated by the pelagic vessels since they are reported in the same segment. The increase in the value of landings for the large-scale vessels from 2008 to 2013 was considerably better than the development of the fleet as a whole. This is despite the fact that landings weight decreased substantially over the period due to reduced quotas. Overall the large-scale fleet seems to perform fairly well but the variation is large. Vessels fishing pelagic species and those that fish in the north Baltic for vendance rom were performing very well while those fishing for cod, northern prawn and Norwegian lobster were performing poorly. The large-scale fleet has been affected by high energy costs, higher labour and capital costs so the effect of higher landing values has been partly equalised. However, the increase in landing incomes together with the increase in other income exceeds the increase in costs, resulting in a higher net profit in 2013 compared to 2012.

United Kingdom

National Fleet

When adjusted for inflation, the value of landings of the UK fleet has slightly declined by 3% from 2008 to 2013. The recent decline in landings of mackerel has been compensated for by increases in herring and the other species important to the UK fleet. However the associated value has declined, mainly due to a drop in prices between 2011 and 2013, when five of the six major species in landed weight saw their price decreasing (mackerel -19%, herring -23%, haddock -11%), while the price of edible crab remained almost

stable over the period (+2% between 2011 and 2013). Preliminary data for 2014 indicate that the price for pelagic species continued to decrease (-15% for mackerel between 2013 and 2014, -28% for herring price), while important demersal species experienced better price (haddock +29%, Norway lobster +11%).

The number of vessels continues to fall steadily from 6,804 in 2008 to 6,428 in 2013 but the falling average age (29 year in 2008, 27 years in 2013) suggests that there has been little if any fall in capacity, newer boats being more effective than older ones. The fall in FTEs from 10,055 in 2009 – there was a decommissioning scheme in 2008 which distorts the impression for that year - to 7,333 in 2013 suggests that the cost of labour is continuing to cause substitution of capital for labour but the magnitude of the trend is not unduly strong.

While overall the fleet is profitable, with 22% of income being retained as net profit, there are considerable variations within the fleet segments. The large pelagic trawlers (Pelagic trawl > 40m) have generated most of this profit in 2013. For the rest of the segments, there is little indication of the cause of the variability.

The value of fishing rights showed a sharp decrease of 20% between 2012 and 2013. The large pelagic vessels generate three quarter of this drop, reflecting some concerns about the prospects of this part of the industry, notably in the context of inconclusive international negotiations on transboundary stocks (mackerel).

Energy efficiency of the fleet continued to improve, by 2%, between 2012 and 2013, a consequence of the decreasing average age of vessels in the UK fleet.

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

In addition, the UK government has recently re-allocated quota from the over 10m sector to the under 10m sector. This invoked a legal challenge that ultimately failed. The under 10m fleet segments may therefore benefit from access to this quota with vessels it was taken from possibly needing to access additional quota or reduce effort.

Small-scale fleet

The small scale fleet saw a 10% decrease in landings value from 2012 to 2013, which is almost identical to the evolution of the value of landings for the UK fleet (-10% over the same period). This is despite 30 Marine Protected Areas being implemented in England and a 5% decrease in the number of vessels making up the fleet.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the small scale fleet in 2013 were €55 million, €14 million and €5 million respectively. All three variables saw decreases from 10% (GVA), 15% (gross profit) to 35% (net profit) between 2012 and 2013. This decrease in economic performances comes in spite of declining costs and largely due to a 10% decrease in landings income and 22% decrease in other income. As 2013, 4% of income is retained as net profit.

Distant-water fleet

The UK distant water fleet consists of a few very large vessels fishing in Arctic waters and in the northern Atlantic near Greenland. The value of landings remained fairly steady at around €24 million between 2012 and 2013. Little other information can be separated from the aggregate because the size of the fleet is too small to protect the commercial sensitivity of the data.

3. EU FLEET OVERVIEW

KEY FINDINGS

The EU fishing fleet 2013

- In 2013, the EU fishing fleet numbered 83,734 vessels with a combined gross tonnage (GT) of 1.6 million tonnes and engine power of 6.5 million kilowatts (kW).
- EU fleet capacity has continued to decrease steadily, with an average annual decrease of 2% in terms of vessel numbers and kW and 3% in terms of GT.
- Based on DCF data, 78% of the fleet (or 65,363 vessels) were active, meaning there were 22% inactive vessels.
- Of the active vessels, 74% were small-scale, 26% were large-scale, and less than 1% were distant-water vessels.
- Direct employment generated by the fleet amounted to 149,195 fishers, corresponding to 110,095 FTEs (excl. Cyprus).
- Average annual wage (including crew wages and unpaid labour) per FTE was estimated at €23,000 and ranged from €120,000 for Belgian fishers to €8,000 for Greek fishers.
- The EU fleet (excl. Greece) spent almost 5 million days at sea and consumed 2.4 billion litres of fuel (excl. Bulgaria and Cyprus).
- According to the DCF data, the EU fleet (excl. Greece) landed almost 4.7 million tonnes of seafood in 2013. The total amount of landed value reported was just under €6.8 billion in value.
- In 2013, the fleet had an estimated (depreciated) replacement value of almost €4.6 billion (excl. Cyprus, Greece and Malta due to questionable data; Bulgaria and the Netherlands due to missing data) and in-year investments amounted to €400 million (excl. the same countries, as well as France due to missing data).
- Total revenue (income from landings + other income) earned by the covered EU fleet in 2013 was estimated at €6.9 billion.
- As in previous years, the major cost items were labour and energy, representing 37% and 27% of total operating costs, respectively.

Economic performance indicators (exclude Bulgaria, Cyprus, Greece and Malta)

- The amount of Gross Value Added (GVA) and gross profit (all excl. subsidies) generated by the covered EU fishing fleet in 2013 was just over €3.4 billion and €1.3 billion, respectively.
- GVA as a proportion of total revenue was estimated at 49% and gross profit margin at 20%.
- With a net profit of €506 million for the EU fleet (also excluding The Netherlands) covered in 2013, 7.4% of the revenue was retained as net profit.

Economic performance trends (including 16 Member States)

- Sixteen out of the 19 MS covered generated net profits in 2013; the remaining three MS (Belgium, Finland and Portugal) generated net losses.
- Projection results for 2014 suggest that all 16 MS included in trend analyses generated net profits, with the exception of the Netherlands, Belgium and Poland. In relative terms, all MS generated a positive Gross profit margin. Net profit margin was negative for Belgium, the Netherlands and Poland.

Assessment for 2014 (including 16 Member States)

- Projection results for 2014 suggest that all MS analysed generated net profits in 2014, except of the Netherlands, Belgium and Poland.
- In relative terms, all MS generated a positive Gross profit margin and the net profit margin was negative only for the Netherlands (-3%), Belgium (-4%) and Poland.

Main Drivers and Trends

- Factors that may have contributed to improved economic performance include, but are not limited to the following (in no specific order): Recovery of some stocks; research and innovation projects (more

selective fishing gears); capacity reduction; fuel price reductions; implementation of certification schemes and the growing demand for certified products; more fuel efficient fishing techniques and fishing behaviour.

- Factors that may have contributed to poor economic performance include, but not limited to, the following (in no specific order): lower average first sale prices; the effects of the global economic crisis that continues to affect internal and international markets for some species and limits access to credit; export embargos; reduced TACs and quotas for several key stocks; market saturation and poor marketing to place products on new markets; low abundance and/or low quality of some species; severe weather conditions; damage caused by marine mammals (e.g. seals); shortage of local crews and closed areas for stock recovery.

Background

This chapter provides an overview of the structure and economic performance of the EU fishing fleet in 2013 and highlights some key trends between 2008 and 2014 based on data obtained under the 2015 DCF fleet economic data call. All monetary values presented in the report have been adjusted for inflation to 2014 constant prices. Results are presented at EU level with additional analyses at MS level and main type of fishing activity. The three main types of fishing activity are defined as:

- Small-scale fleet (SSF) - includes all vessels under 12m using static gears. According to the DCF gear definitions these include: 'drift and/or fixed netters', 'pots and/or traps', 'hooks', 'passive gears only', 'other passive gears', 'polyvalent passive gears only', 'active and passive gears'.
- Large-scale fleet (LSF) - segment includes all vessels using towed gears. According to the DCF gear definitions these include: 'dredgers', 'demersal trawlers and/or demersal seiners', 'other active gears', 'polyvalent active gears only', 'purse seiners', 'beam trawlers', 'pelagic trawlers' and vessels over 12 metres using static gears operating in EU fishing regions.
- The distant-water fleet (DWF) - includes EU registered vessels over 24 metres operating in 'other fishing regions' including EU outermost regions.

Data on the EU fishing fleet held in the EU Fleet Register were used to complement the DCF capacity data. The EU fleet encompasses all fishing vessels registered in the 23 EU coastal Member States (MS), including Croatia. Croatia officially joined the EU in 2013 and was only in a position to provide DCF data for the years 2012 to 2014.

For this chapter, national level datasets were used for analyses at the EU and MS levels while fleet segment level data were used to compile results by main type of fishing activity. While in theory both national and fleet segment datasets submitted by MS should equate, this is not always the case and discrepancies may exist between the two sets of data. These discrepancies arise for several reasons, one being missing or incomplete datasets at the fleet segment level. In some cases, this occurs due to confidentiality issues, i.e. when fleet segments contain too few vessels that providing data may violate secrecy restrictions. To avoid breaching secrecy rules, MS may aggregate these fleet segments in "clusters" and provide data at a more aggregated level than at the fleet segment level. Nonetheless, in some cases sensitive data is not provided at the fleet segment level yet included at the MS level, resulting in inconsistencies between the two datasets.

Due to incomplete data submissions from a number of MS, it was not possible to produce a complete overview of the economic performance for the EU fleet (Table 3.6.1 presents an overview of the data submitted at MS level; more details on data availability are included in the chapter on quality and checking procedures).

This chapter is divided into 6 sections as follows:

Section 3.1 - provides a snapshot of the EU fleet in 2013 covering various aspects of the fleet (i.e. capacity, employment, average wage, effort, fuel consumption, landings, income, costs, capital value and investments).

Data for Bulgaria, Cyprus, Greece and Malta were excluded (due to inconsistencies or incomplete data submissions) from the overview analyses when concerning income and costs, capital value and investments, as well as from the estimation of all indicators that imply the use of economic variables (e.g. average wage).

Section 3.2 - this section provides an overview of the economic performance indicators of the EU fleet in 2013. Results include all MS fleets with the exception of Bulgaria, Cyprus, Greece and Malta. Results are presented at the EU level with additional analyses at MS level, and by main type of fishing activity level (i.e. small scale, large scale and distant-water fleet);

Section 3.3 – this section includes trend analyses of all capacity, effort, landings and economic performance for the years 2008-2013.

The analysis covers all MS except Bulgaria, Cyprus, Greece, Malta, Croatia, France and Spain. Given that France and Spain comprise two of the most important EU fishing fleets, this section serves mainly to provide insight on the development trend of the EU fleet, represented by the selected fleets and should not be considered as a complete trend analysis of EU fleets.

Results are presented at EU level and by main type of fishing activity (i.e. small-scale, large scale and distant-water fleet). Analyses by main type of fishing activity exclude Ireland, due to incomplete data for the under 10 metre vessels.

Section 3.4 - this section provides projections of economic performance indicators for 2014 (both at MS level and by fishing activity). The assessment covers 16 MS and is based on fleet segment level data (except for Belgium, Croatia and Estonia, for which the national level datasets were used).

Section 3.5 – provides a short description of the main drivers and trends that may have contributed to the economic performance of the EU fleet over recent years.

Section 3.5 – concludes with summary data tables by MS and main type of fishing activity.

3.1. Overview of the EU Fishing Fleet in 2013

The following section provides an overview of the EU fleet in 2013, aggregated at the EU level and by main type of fishing activity.

Fleet Capacity

According to the EU fishing fleet register, which includes information on all commercial fishing vessels from 23 coastal Member States (Croatia included), the total number of vessels in the EU fleet on 1 January 2014, totalled 86,612 vessels with a combined gross tonnage (GT) of 1.67 million tonnes and total engine power of 6.58 million kilowatts (kW).

The overall capacity of the EU fleet (excluding Croatia) decreased between 2008 and 2014 by: vessels -2%, GT -13% and kW -6% (Figure 3.1.1; left).

Relative to the data held in the EU fleet register, DCF data for 2013¹ covered 97% of the EU fleet in GT, 98% in kW and 95% in number (Figure 3.1.1, right). From 2008 to 2011, the fleet register and DCF data do not include Croatia. However, whereas the DCF includes data for Croatia in 2012, the fleet register does not. Therefore, the DCF coverage results are greater than 100% for 2012. The low coverage for 2014 can be explained by the fact that capacity data for France and Denmark was not reported under the DCF (number of vessels reported under the DCF in 2014 was 74,074). It should however be added that data from MS for 2014 only is submitted on voluntarily.



Data source: EU Fleet register and Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 3.1.1 Trends on the EU fishing fleet capacity: 2008-2014.

Left: Data held in the EU Fleet Register (including Croatia from 2013 onwards); Right: coverage of DCF capacity data relative to EU Fleet Register (FR); exceeds 100% in 2012 as Croatia is included in the DCF data but not in FR.

It is also possible that the fleet register may not be entirely updated, containing vessels that are no longer part of MS's fleets. Hence, the DCF coverage may in fact be higher than that presented in Figure 3.1.1.

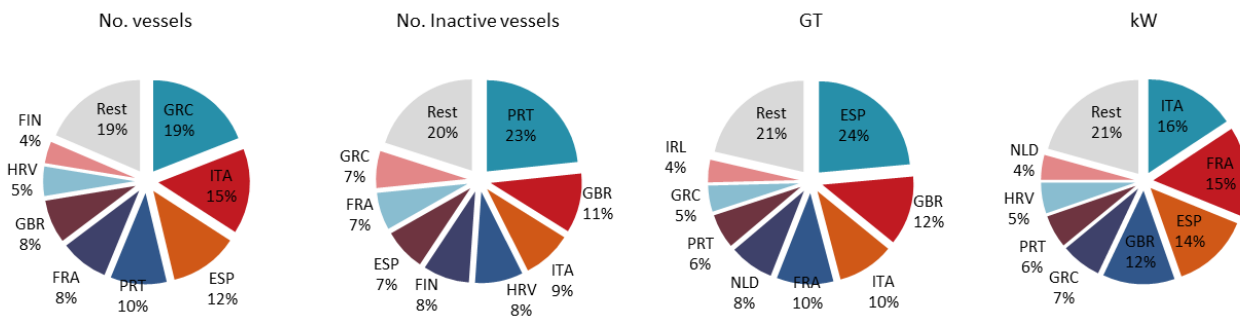
According to DCF data, the EU fleet comprised 65,362 active vessels and 18,371 inactive vessels in 2013. Greece possessed the largest fleet in terms of vessel number (15,954 vessels), encompassing 19% of the total EU fleet in 2013, followed by Italy with 12,635 vessels (15%) and then Spain with 10,167 vessels (12%).

The Spanish fishing fleet was the largest in terms of vessel tonnage (24% of the EU total), followed by the UK (12%) and Italian (10%) fleets.

In terms of engine power, the Italian fleet encompassed 16% of the total EU fleet kW, followed by France (15%) and Spain (14%).

¹ Data for Croatia were not in the EU fleet register on the 1st of January 2013. Data for the same year but available after the 1st of January have been included in the capacity figures to make them comparable with DCF data for 2013

Belgium, with 83 vessels, possessed the smallest fleet in number, Slovenia the lowest gross tonnage and Romania the lowest engine power (Figure 3.1.2).

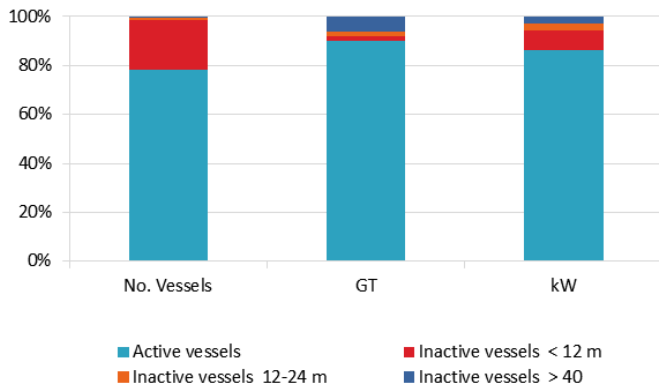


Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 3.1.2 MS fleet capacity as percentage of EU fleet in 2013

Inactive vessels represented 22% of the total fleet in number, 10% of the gross tonnage and 14% of the engine power, indicating that most of the inactive vessels are small-scale in nature. In fact, 93% of the inactive vessels were under 12m in length while vessels between 12 and 24m accounted for 6% and vessels over 24m less than 2% of the inactive fleet (Figure 3.1.3).

With 4,287 inactive vessels, Portugal possessed the largest inactive fleet (23%), followed by the UK with 1,939 vessels (11%) (Figure 3.1.2). In terms of gross tonnage, the Spanish fleet possessed the largest latent GT (21% of the EU total) while the French fleet held the most inactive part of the EU fleet measured in engine power (14% of the inactive kW).



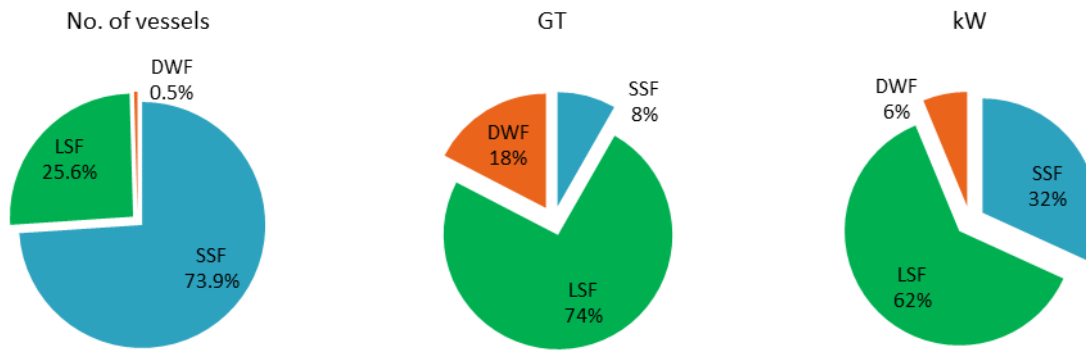
Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 3.1.3 Inactive versus active fleet: capacity in 2013

Analysing the active part of the fleet by fishing activity, the small-scale fleet comprised 48,337 vessels, 74% of the total EU fleet in number, 8% in gross tonnage (121,223 GT) and 32% in engine power (1.78 million kW).

The distant-water fleet, although comprising less than 1% of the number of vessels (n=298), represented 17% of the total gross tonnage (255,741 GT) and 6% of the engine power.

The large-scale fleet represented the remaining 26% of the fleet in number (16,751), 74% of the gross tonnage and 62% of the engine power (3.5 million kW) (Figure 3.3).

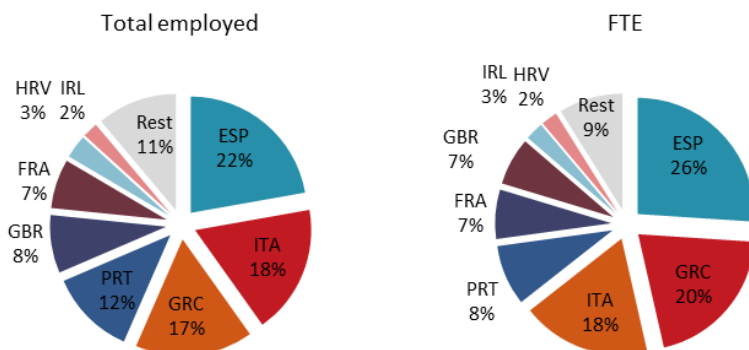


Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 3.1.4 Capacity by main fishing activity as percentage of EU fleet in 2013

Employment and average wage²

The EU fishing fleet directly employed 149,195 fishers in 2013, corresponding to 110,096 FTEs (both figures exclude Cyprus). Five MS fleets employed 77% of the total EU fishers, with the Spanish fleet employing 22%, followed by the Italian (18%), Greek (17%), Portuguese (12%), and UK (8%) fleets. In terms of FTEs, the same five MS fleets employed 80% of the EU total, with the Greek fleet surpassing the Italian fleet (Figure 3.1.5), indicating more part-time fishers in the Italian fleet in relation to the Greek fleet.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 3.1.5 Employment (total employed and FTE) by MS as a percentage of the EU fleet: 2013

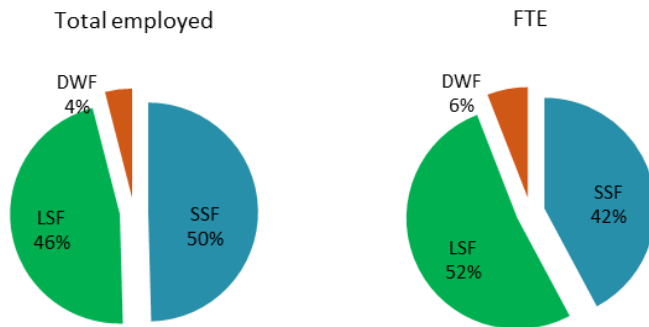
According to DCF data for 2013, the average wage per FTE, by definition including both crew wage and unpaid labour, was €23,000. Belgian (FTE) fishers earned the highest wages on average, €120,000, followed by the Danish fishers, €67,000. On the other hand, the Greek fishers received the lowest average wage at €8,100 followed by Croatian fishers at €9,600 (Table 3.6.1).

When analysed by fishing activity, the SSF employed 73,900 fishers, equating to 50% of the number of employees and corresponding to 46,400 FTEs (42% of total) in 2013. The LSF fleet employed 69,300 fishers, corresponding to 57,100 FTEs (52%), while the DWF employed 6,000 fishers, corresponding to 6,500 FTEs (or 6% of the total) (Figure 3.1.6). Higher FTE values are due to crewmembers usually having longer trips and/or extra shifts on-board distant-water fleets.

Average wage per FTE in 2013 for the SSF was estimated at €13,900. The same indicator for fishers operating in the LSF was €27,900 and €29,400 for fishers in the DWF (Table 3.6.1). According to the data, crew engaged in

² Average wage indicators at EU level (i.e. EU fleet as a whole, EU small-scale fleet, EU large scale fleet and EU distant-water fleet) are estimated excluding Bulgaria, Cyprus, Greece and Malta.

the French DWF received by far the highest salary, earning on average €97,838. Among those engaged in the LSF, Belgian fishers received on average the highest salary (€114,500), followed by Danish fishers (€68,000). Fishers engaged in the SSF received high wages if they were employed in the Danish and French fleets.

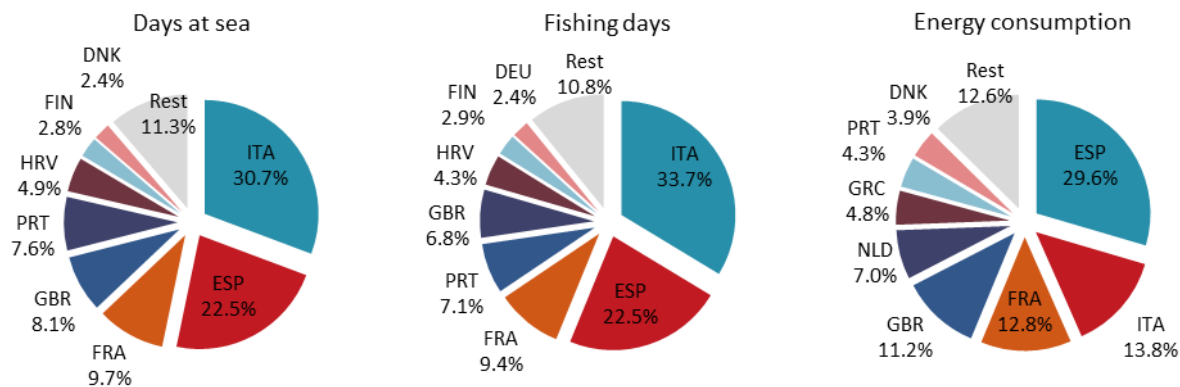


Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.1.6 Employment (total employed and FTE) by fishing activity as a percentage of the EU fleet: 2013

Effort and fuel consumption

The total number of days at sea reported for the EU fleet³ reached almost 4.8 million days in 2013. Italy reported by far the highest number of sea days, amounting to 1.5 million days (31% of the total), followed by Spain (22%), France (10%), the UK and Portugal (each 8%). Together, these five MS accounted for 79% of the total registered days at sea in 2013 (Figure 3.1.7) and the number of days at sea follows well the size of the MS's fleets.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

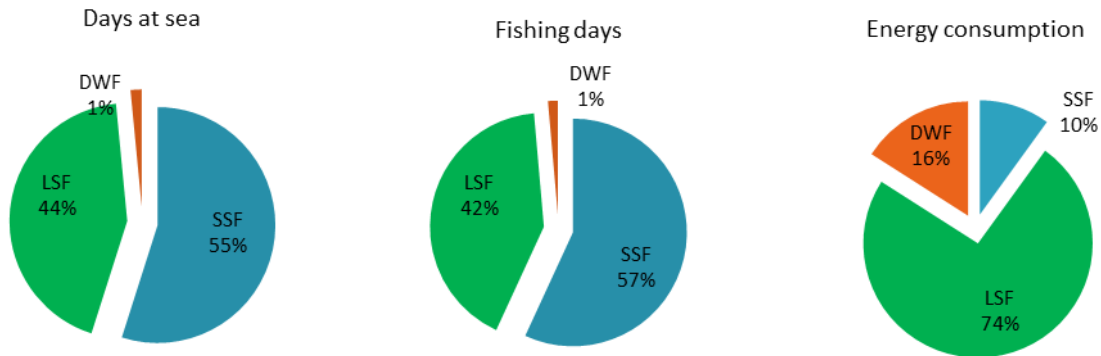
Figure 3.1.7 Effort and fuel consumption, expressed as a percentage of the EU fleet: 2013

Energy consumed by the EU fleet in 2013 was reported at 2.4 billion litres (excluding Bulgaria and Cyprus, due to missing data). According to the data available, the Spanish fleet consumed the most, accounting for almost 30% of total fleet fuel consumption, followed by the Italian (14%) and French (13%) fleets (Figure 3.1.7).

While the EU fleet operates in most fishing areas worldwide, effort is concentrated in the Mediterranean Sea and coastal Atlantic waters, owing to the high number of small-scale vessels operating in these regions.

³ excluding Greece due to missing data

By fishing activity, the small-scale fleet deployed more than half of the total fishing effort of the EU fleet in days at sea (55%) in 2013 but consumed less than a tenth of the fuel. Conversely, the distant-water fleet deployed 1% of the total effort but consumed 16% of the energy used by the fleet. The large-scale fleet consumed 74% of the fuel for 42% of the effort in sea days (Figure 3.1.8).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.1.8 Effort deployed and fuel consumption by fishing activity, expressed as a percentage of the EU fleet: 2013

Landings

According to DCF data, the EU fleet⁴ landed 4.7 million tonnes of seafood in 2013, while the amount of landed value reported corresponded to over €6.8 billion.

The Spanish fleet landed the most in weight, totalling 19% of the landings covered, followed by the Danish (14%), UK (13%) and French fleets (11%).

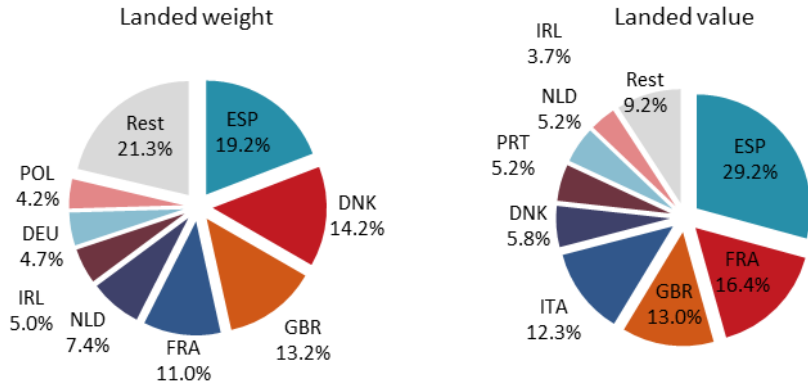
In terms of landed value same MS were dominating, the Spanish fleet landed the most (29% of the total), followed by France (16%), the UK (13%), Italy (12%) and Denmark (6%) (Figure 3.1.9).

At 727,000 tonnes, herring was the most important species in terms of weight landed in 2013, followed by Atlantic mackerel (350,000 tonnes) and then European sprat (331,000 tonnes).

At €331 million, landings of Atlantic mackerel generated the most landed value, followed by yellowfin tuna (€309 million), Atlantic herring (€293 million) and then European hake (€289 million) (Figure 3.11).

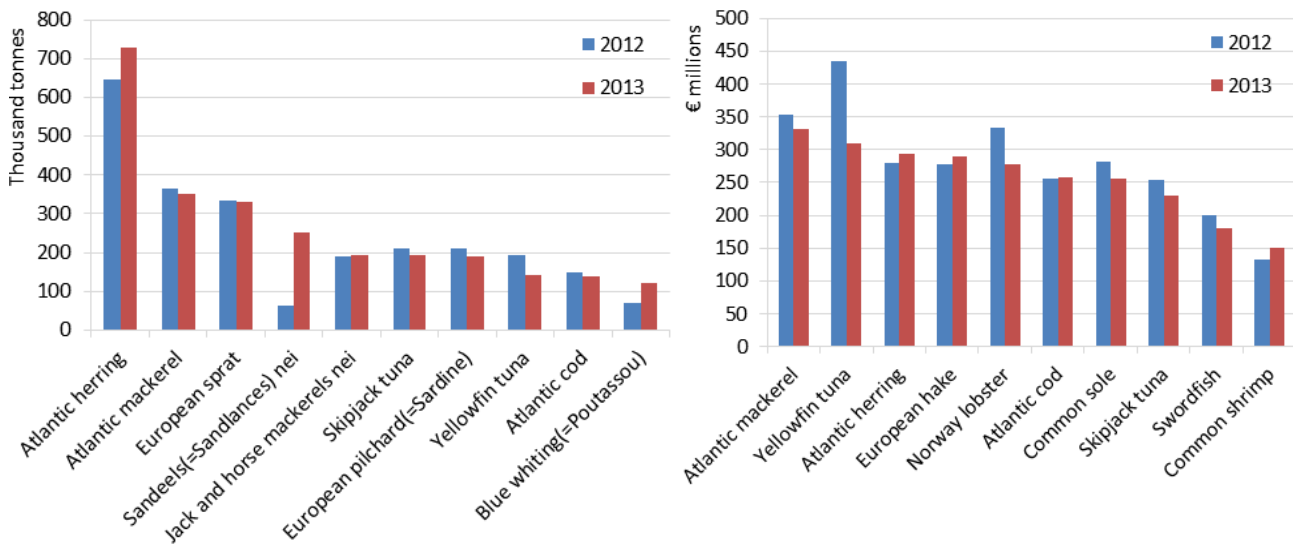
At €9.5 per kg, common sole achieved by far the highest average first-sale price in 2013, followed by Norway lobster at €5.7/kg, swordfish at €4.9/kg, common shrimp at €3.6/kg and European hake at €3.2/kg (Figure 3.12).

⁴ Excl. Greece due to missing landings data



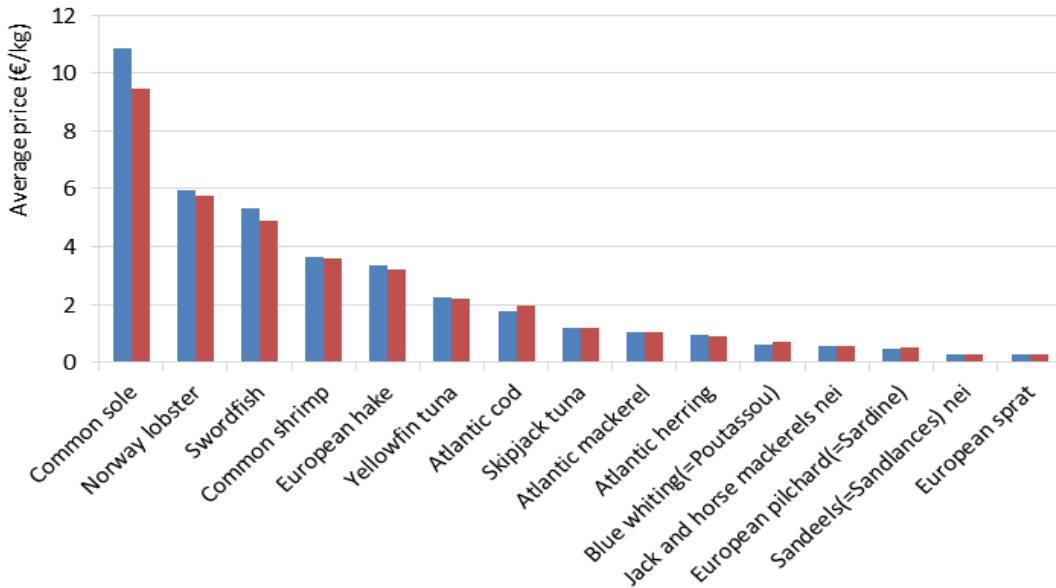
Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.1.9 Landings in weight and value by MS, expressed as a percentage of the EU fleet: 2013



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.1.10 Top ten species landed by the EU fleet in weight (left) and in value (right) in 2013 (2012 figures included).



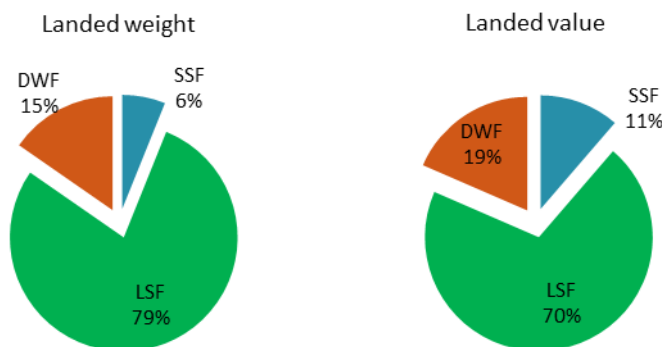
Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.1.11 Average price of the top species landed in terms of weight and/or value in 2013 (2012 figures included).

By fishing activity, the large-scale fleet contributed 79% to landings in weight and 70% to landings in value.

While the small-scale fleet (excluding Greece) landed 6% of the weight, it produced 11% of the landed value, indicating that when compared to its larger counterparts, the small-scale fleet on average obtains higher first sale prices (Figure 3.1.12). The reason can of course be different species caught but also how and to whom the landings were sold to.

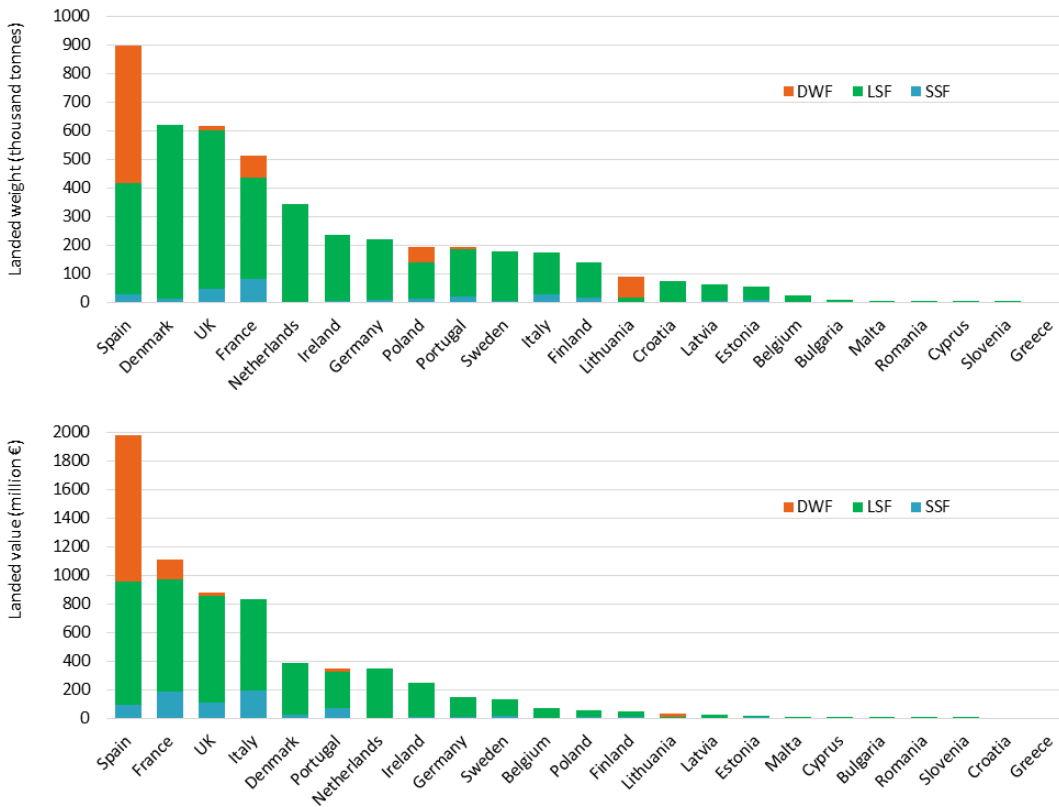
In general, vessels under 12m catch lower quantities mainly in the EU coastal and island regions. Higher SSF landings in value are obtained in the Mediterranean Sea and along the coasts of France and Portugal, while lower landings in weight and value occur in the Baltic and North Seas. Larger vessel landings in weight are taken mainly from the Baltic and North Sea, with the North Sea being more important in terms of landed value.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.1.12 Landings by fishing activity, expressed as a percentage of the EU fleet: 2013

According to the data submitted, the large-scale fleet contributed the most to landings, both in weight and value, for almost all MS fleets (Figure 3.1.13). For example, the UK LSF landed 90% of the seafood weight in 2013, corresponding to 85% in value; for France, 68% in weight and 71% in value; for Denmark, 98% in weight and 94% in value. The only exceptions were Spain, Lithuania and Romania. For Spain and Lithuania, the distant water fleet landed 54% and 82%, respectively, of the total amount of seafood in 2013, which for Lithuania corresponded to 78% of its overall value. Conversely, for Romania the largest part of landings derived were from the small-scale fleet, corresponding to 65% in weight and 68% in value (Figure 3.1.13). In Cyprus, where the LSF lands the highest quantities (56% of the total weight), it is the SSF that generates the most value (57% of total value).



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.1.13 Landings in weight (top) and value (bottom) by MS and fishing activity: 2013

Income and Costs

The available data suggest that the amount of revenue⁵ generated by the EU fishing fleet (excluding Greece due to no reported data; and excluding Bulgaria, Cyprus and Malta since data considered unreliable) in 2013 was €6.862 billion. This amount consisted of €6.736 billion in fish sales and €127 million in non-fishing income.

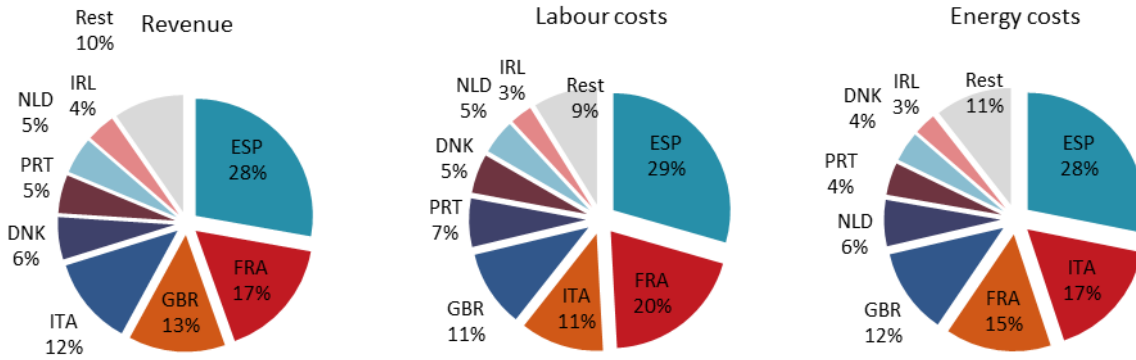
Costs incurred by the EU fishing fleet in 2013 amounted to 6.4 billion (with the exclusion of the same four countries as for revenue)⁶. The costs consisted by 13% of capital costs (€744 million in annual depreciation and €103 million in opportunity costs of capital) and 87% of operating costs⁷. The latter mainly consisted of labour costs (37% of total operating costs: €1.8 billion in crew wages and €248 million in unpaid labour) and fuel costs (€1.5 billion, 27% of total operating costs). Other costs linked to production amounted to €998 million; while other non-variable costs and repair costs amounted to €512 million and €520 million, respectively. Total costs amounted to 93% of the revenue generated by the fleet in 2013. When excluding the Netherlands, for which capital costs for 2013 were incomplete, total costs amounted to 92% of revenue.

The top four MS fleets in terms of revenue (Spain, France, the UK and Italy) accounted for over 70% of the revenue generated, as well as, the labour and energy costs incurred by the fleet in 2013 (Figure 3.1.14).

⁵ Direct income subsidies and income from leasing out fishing rights excluded from the economic analyses.

⁶ Fishing rights costs excluded for methodological reasons.

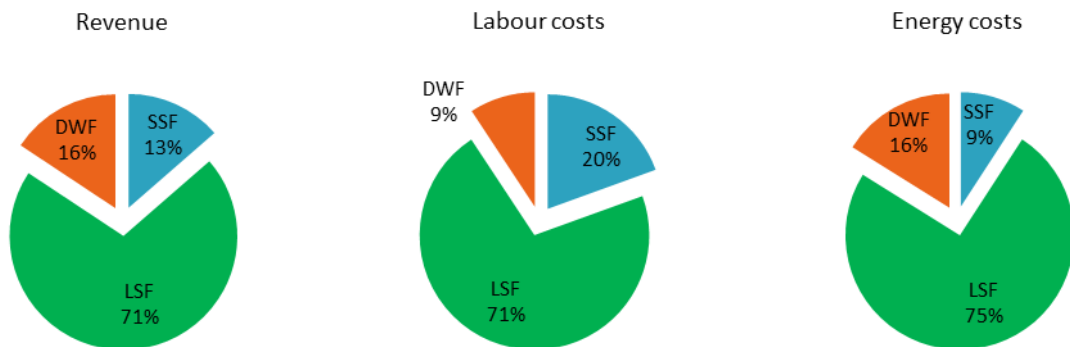
⁷ Total operating costs include: crew wage costs, unpaid labour, energy costs, other variable costs, repair costs, other non-variable costs



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.1.14 Revenue and main cost items by MS, expressed as a percentage of the total: 2013

Analysed by fishing activity, the large-scale fleet generated 71% of the revenue, accounting for 71% of the labour costs and 75% of the energy costs. Conversely, the small-scale fleet generated 13% of the revenue and accounted for 20% of the labour costs and 9% of the energy costs. The distant-water fleet generated 16% of the revenue and contributed 9% to labour costs (Figure 3.1.15).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.1.15 Revenue and main cost items by fishing activity, expressed as a percentage of the total: 2013

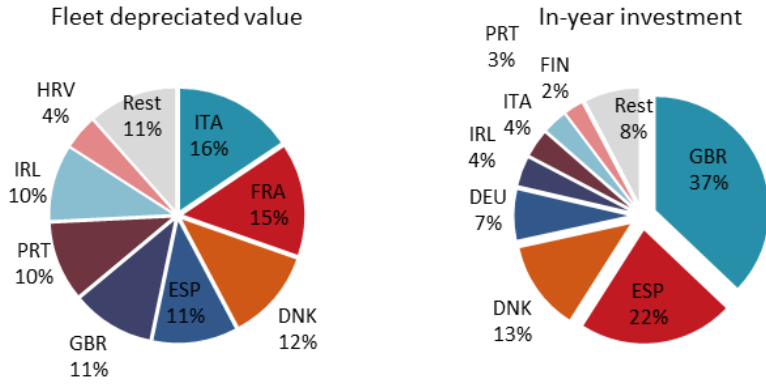
Capital value and investments

In 2013, the fleet had an estimated (depreciated) replacement value (excluding Greece and the Netherlands due to no reported data; and excluding Bulgaria, Cyprus and Malta since data considered unreliable) of €4.56 billion and in-year investments amounted to €400 million⁸. The Italian fleet was estimated to have the highest depreciated replacement value of €711 million, followed by the French fleet (€672 million) and the Danish fleet (€541 million). The Spanish and UK fleets were valued at €504 million and €487 million, respectively (Figure 3.19).

In terms of investment, the UK fleet invested €148 million in 2013, followed by the Spanish fleet (€88 million) and then the Danish fleet (€50 million) ((Figure 3.1.15). It should be noted that an investment in a new vessel that enters the fleet is not accounted for in data for investments as it is defined here as in-year investments. This invested value can instead be seen as an increase in capital value.

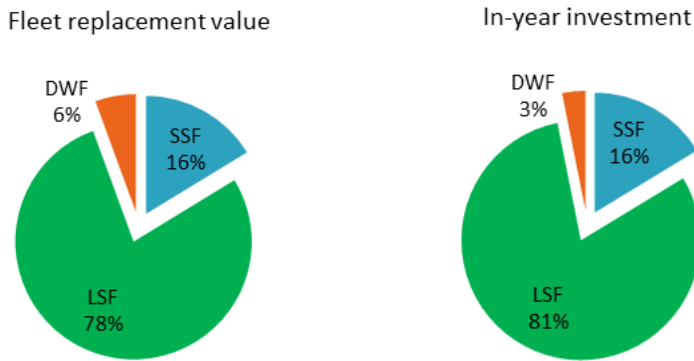
Analysed by fishing activity, the highest depreciated replacement value and in-year investments corresponded to the large-scale fleet (78% and 81% of the total, respectively).

⁸ Excluding the MS already mentioned, as well as France and the Netherlands due to missing data



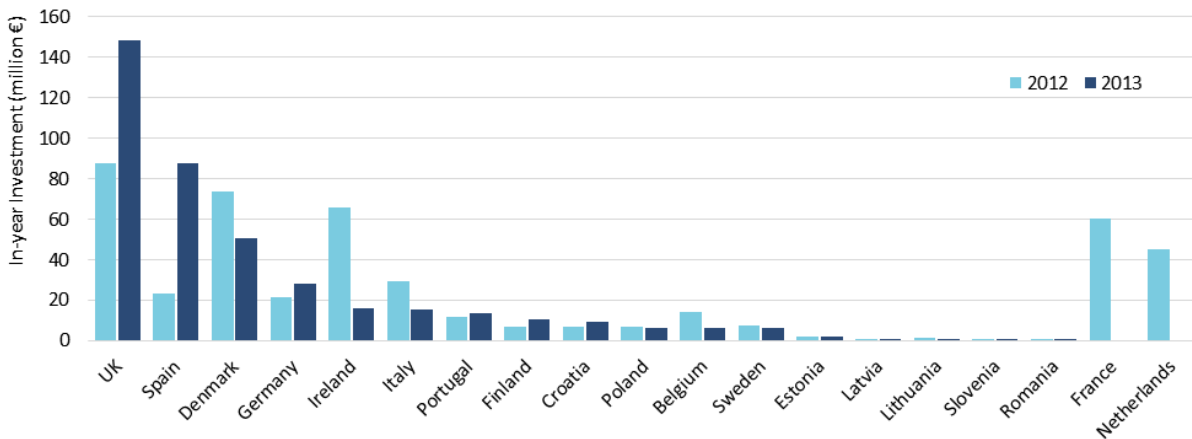
Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.1.16 Fleet replacement value and Investment, expressed as a percentage of the total: 2013



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.1.17 Fleet replacement value and Investment by fishing activity, expressed as a percentage of the total: 2013



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.1.18 In-year investments by EU Member in 2012 and 2013

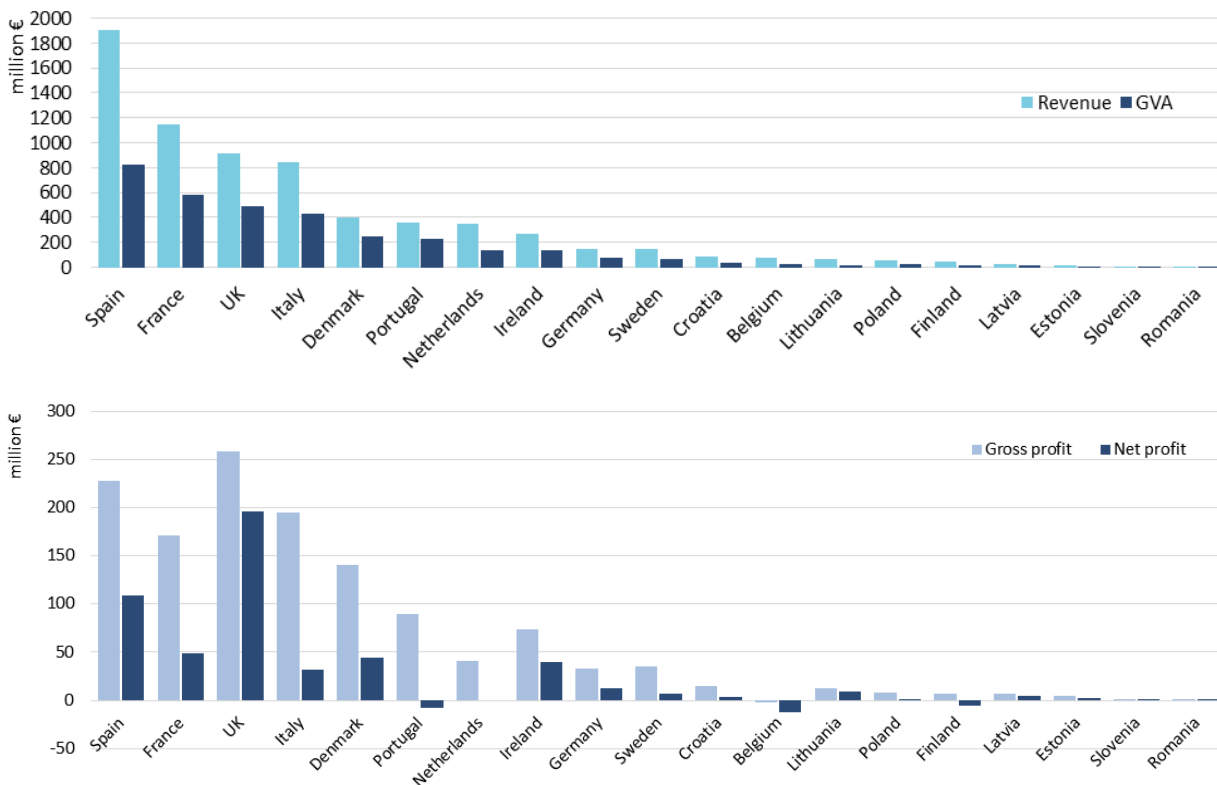
Note: Investment data not available for France and the Netherlands in 2013

3.2. Economic Performance indicators 2013

The amount of Gross Value Added (GVA), Gross profit and net profit (all excluding subsidies) generated by the EU fishing fleet (excluding Greece, Bulgaria, Cyprus and Malta⁹) in 2013 was €3.37 billion, €1.34 billion and €506 million, respectively.

In relative terms, GVA as a proportion of revenue was estimated at 49%, while 20% of revenue was retained as gross profit and after deducting for capital costs, 7.8% of revenue was retained as net profit in 2013. This latter value excludes the Dutch fleet for 2013 due to missing data on depreciated fleet replacement value.

Analysis of economic performance in 2013 by Member State revealed a mixed picture. The data suggests that 16 out of 18 Member States (18 MS due to missing data for net profit regarding the Netherlands) generated net profits while three Member States (Belgium, Finland and Portugal) generated net losses in 2013 (Figure 3.2.1). Results indicate that the Spanish fleet generated by far the highest revenue and GVA, followed by the French, UK and Italian fleets (Figure 3.2.1).



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014); Missing data for Net profit regarding the Netherlands.

Figure 3.2.1 Economic performance indicators by MS as Revenue, GVA, Gross profit and Net profit: 2013

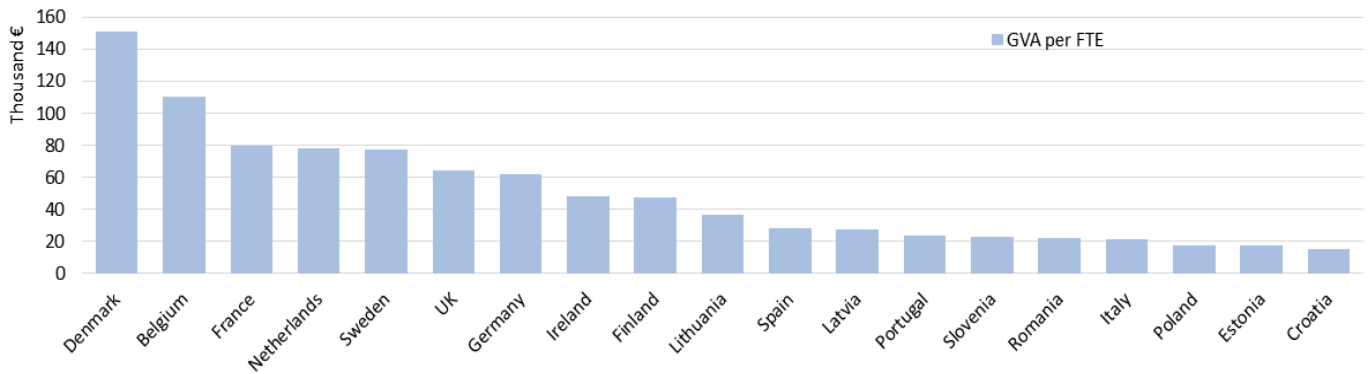
In relative terms, the Slovenian fleet generated the highest level of GVA relative to revenue (75%), followed by the Danish fleet (63%) and the Portuguese fleet (62%).

The Danish fleet generated the highest gross profit margin (35%), followed by the UK fleet (30%) and the Irish fleet (27%).

The UK fleet generated the highest net profit margin with 23% of revenue retained, followed by the Latvian (19%), Irish (15%) and Estonian (14%) fleets.

⁹ Data for Greece not reported; data for Bulgaria, Croatia, Cyprus and Malta considered unreliable.

The highest level of GVA relative to employment (FTE) corresponded to Denmark, followed by Belgium and France (Figure 3.2.2).



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.2.2 Labour productivity (as GVA per FTE) by MS: 2013

Economic performance data¹⁰ broken down by main fishing activity suggest that the EU LSF generated 73% of the total GVA produced by the fleet in 2013, 76% of the gross profit and 80% of net profits. The LSF generated net profits in 15 MS, net losses in Lithuania, Portugal, Belgium and Netherlands (Figure 3.2.4). Overall, net profit generated by this part of the fleet amounted to €324 million in 2013, 47% more than in 2012.

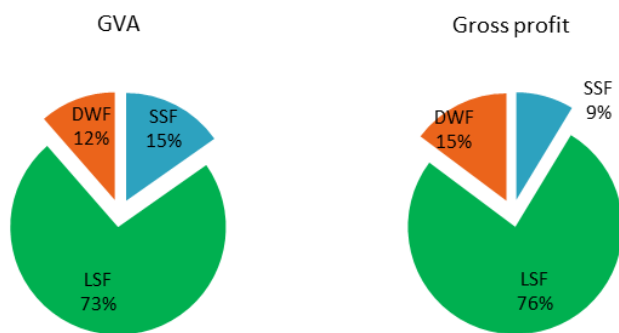
Conversely, the SSF generated net losses in 2013 (-€26 million), a significant decrease from the €40 million profit reported in 2012. This fleet generated net losses in 9 out of 19 MS assessed in 2013.

The DWF contributed 12% to GVA, 15% to gross profit and generated an overall net profit of €106 million in 2013, 1.5 times higher than the profit in 2012.

In relative terms, the SSF generated the highest GVA as a percentage of revenue (57%), while the LSF generated the highest gross profit margin (21%).

Labour productivity (GVA/FTE) in the EU fleet¹⁰ was estimated at €39,000 per FTE in 2013, with the Danish fishers being by far the most productive, generating on average €152,000 per FTE, followed by the Belgian (€112,000) and French (€81,000) fishers.

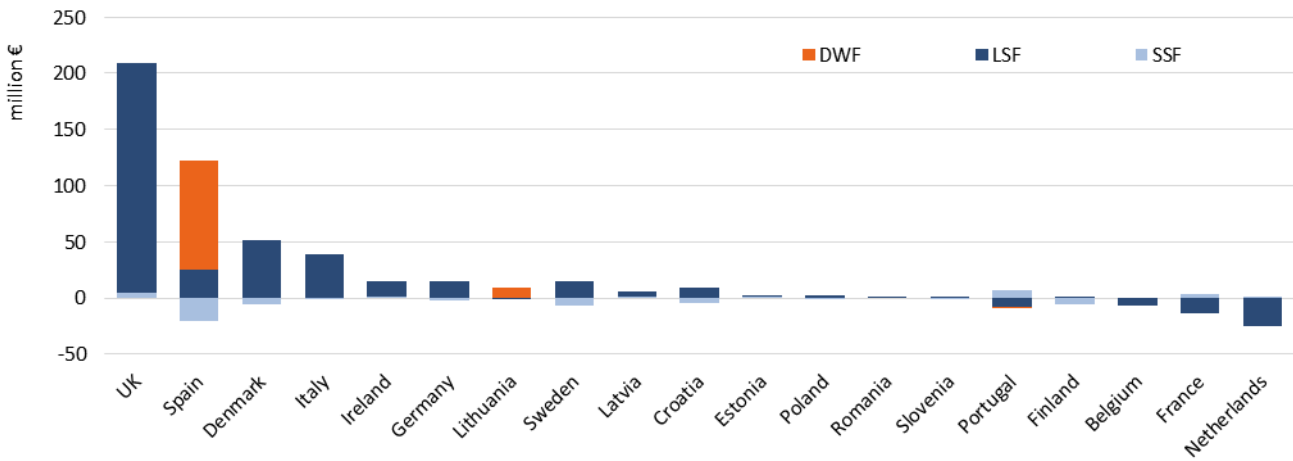
In terms of capital productivity, i.e. profits in relation to capital invested, the EU fleet generated a 13% return on fixed tangible assets (RoFTA) in 2013, a significant improvement on 2012 results (9%). The Latvian fleet obtained the highest rate of return in 2013, followed by the UK and Lithuanian fleets (Figure 3.2.5).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

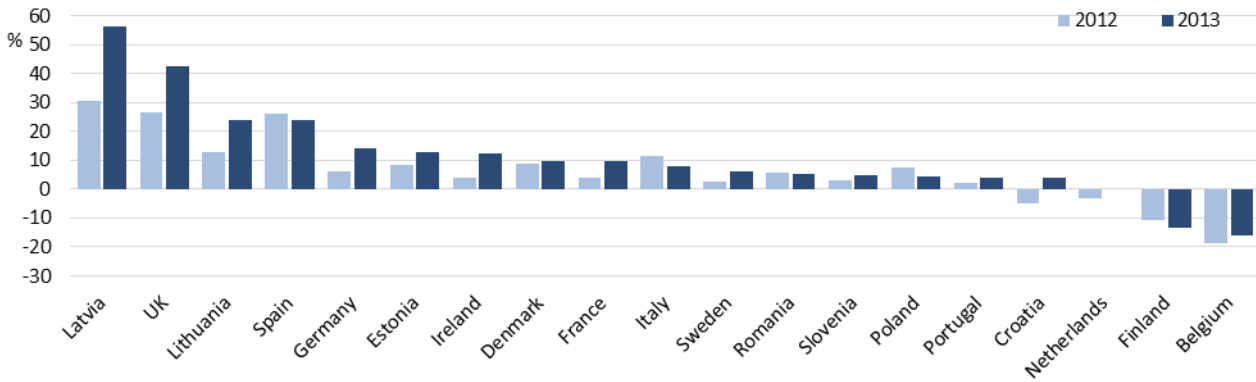
Figure 3.2.3 Performance indicators (GVA and Gross profit) by fishing activity, expressed as a percentage of the total: 2013

¹⁰ always excluding Greece, Bulgaria, Croatia, Cyprus and Malta



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.2.4 Net profit by EU Member State and fishing activity: 2013



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

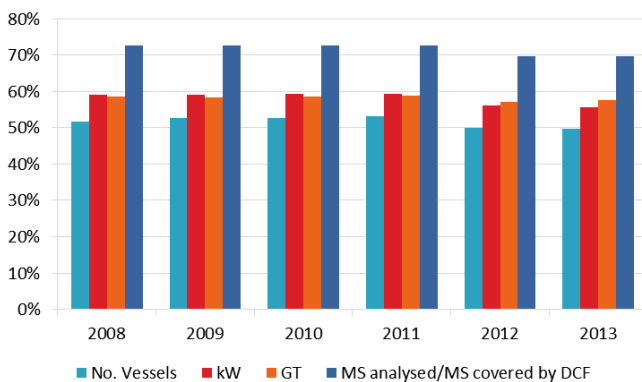
Figure 3.2.5 RoFTA by EU Member State in 2012 and 2013

3.3. Performance trends for 16 MS fleets (15 MS by activity level): 2008-2013

The following trend analysis covers 16 MS fleets for the years 2008-2013 and serves mainly to assess the main development trends of the EU fleet over this period. The selection of these 16 fleets was based on data availability and reliability for the years 2008 to 2013. Due to insufficient and/or unreliable data over the time series, MS excluded from the analysis were Bulgaria, Cyprus, Croatia, France, Greece, Malta and Spain.

Results are presented at MS total level and main type of fishing activity (i.e. SSF, LSF and DWF). For the analyses by type of fishing activity, an additional MS, Ireland, was excluded due to a significant amount of missing data in the under 10m segments. This reduces the data coverage measured in terms of number of vessels and kW by three percentage points and by four in terms of GT.

According to the DCF submissions, data coverage of the selected 16 MS fleets (or 15 MS fleets by fishing activity) over the period 2008-2013 ranged from 50% to 53% in terms of total number of vessels, 57% to 59% in GT and 56% to 59% in kW of the total EU fleet (by fleet register). The lower coverage in 2012 and 2013 reflects the availability of DCF data on Croatian fleet not previously covered by the DCF (Figure 3.3.1).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.3.1 Coverage of the 16 MS fleets according to the DCF data.

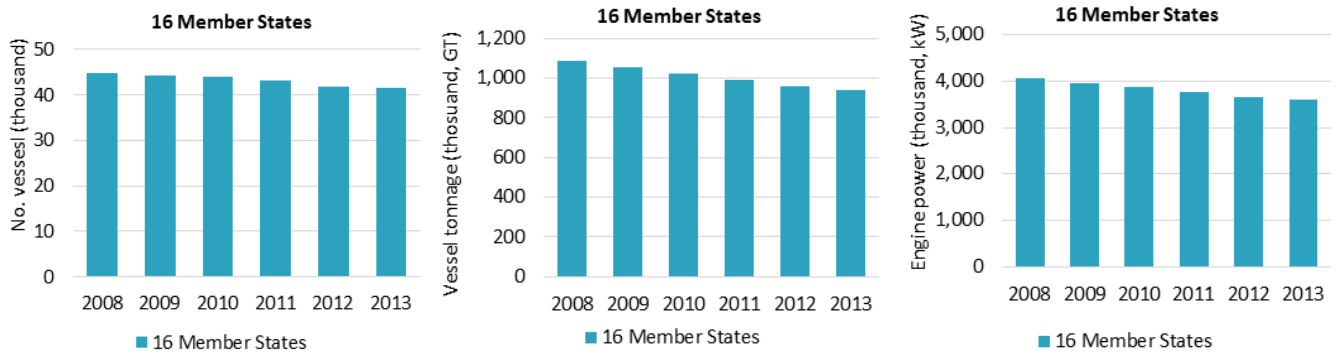
Fleet Structure

According to the data on the 16 MS fleets, the number of vessels decreased steadily between 2008 and 2013 (-1.5% p.a. on average) (Figure 3.3.2). While the number of SSF and LSF vessels respectively decreased on average 1.5% and 3% p.a., the decrease in DWF vessels was more pronounced (around 12% on average and 39% from 2012 to 2013) (Figure 3.3.2).

A similar trend was observed in terms of gross tonnage (GT) and engine power (kW), decreasing 2.9% and 2.3% on average, respectively (Figure 3.3.2). For the SSF, the decrease in GT was slightly lower at around 1.3% p.a. while for the LSF the declining trend was 2.4% p.a and the DWF decreased on average 4.3% p.a. In terms of engine power, between 2008 and 2013, SSF kW decreased on average 0.04% p.a., LSF kW 2.8% p.a. and DWF kW 8.8% p.a. (Figure 3.3.3).

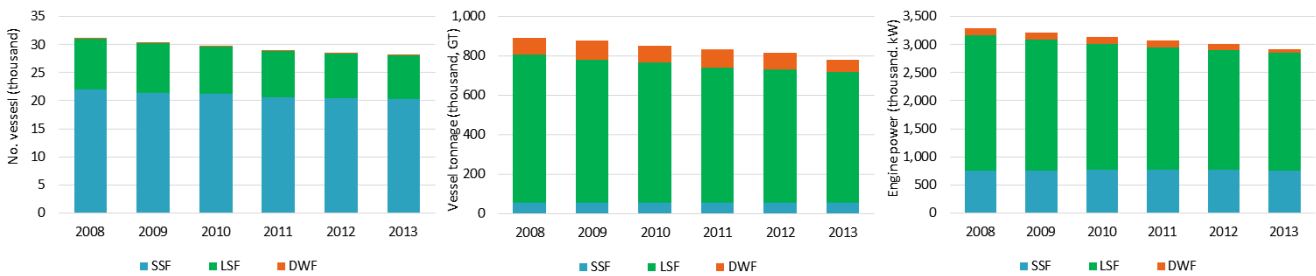
Inactive vessels in the 16 MS fleets (also excluding the Latvian fleet due to missing data for several years), represented on average 27% of the total number of vessels over the period 2008-2013, 11% of the gross tonnage and 15% of the engine power (Figure 3.3.4).

The capacity of the 16 MS inactive fleet fell over the 2008-2013 period, by 5.5% in number of vessels, 19% in GT and 12% in kW (Figure 3.3.5).



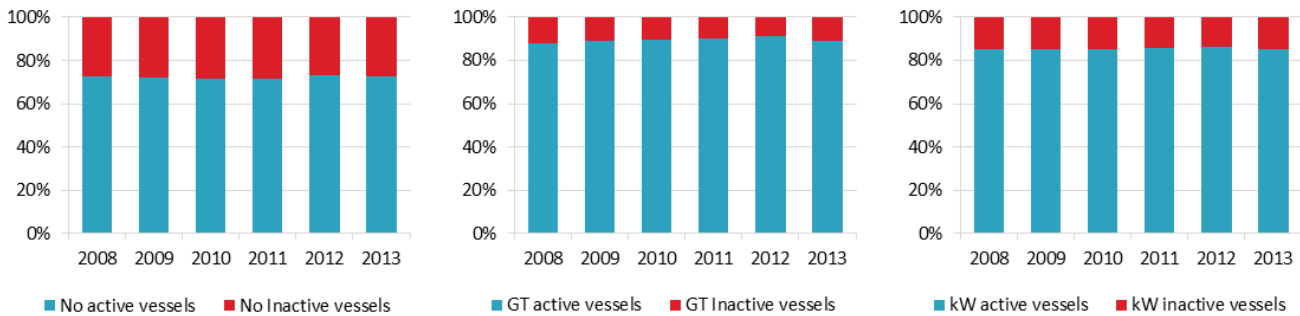
Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.3.2 Capacity trends in 16 MS fleets: 2008-2013.



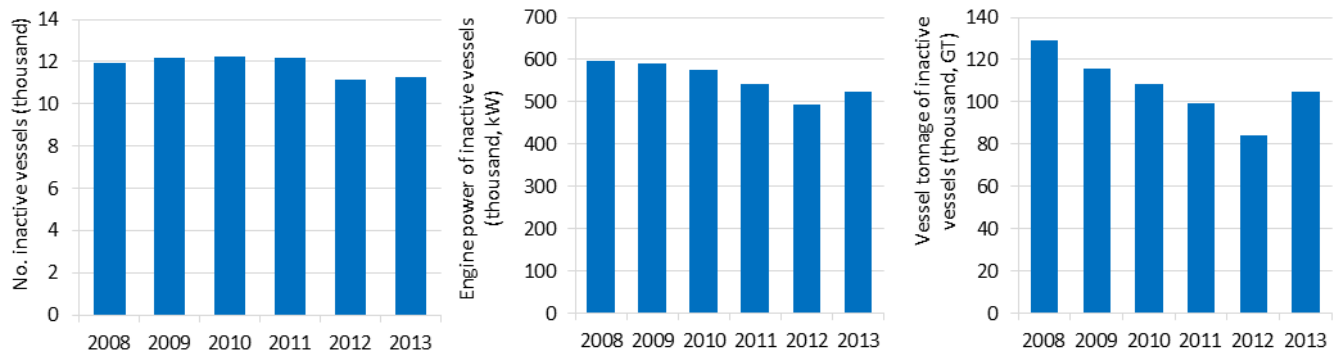
Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.3.3 Capacity trends in 15 MS fleets by main fishing activity: 2008-2013.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.3.4 Comparison in terms of capacity between 16 MS active and inactive fleets: 2008-2013



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

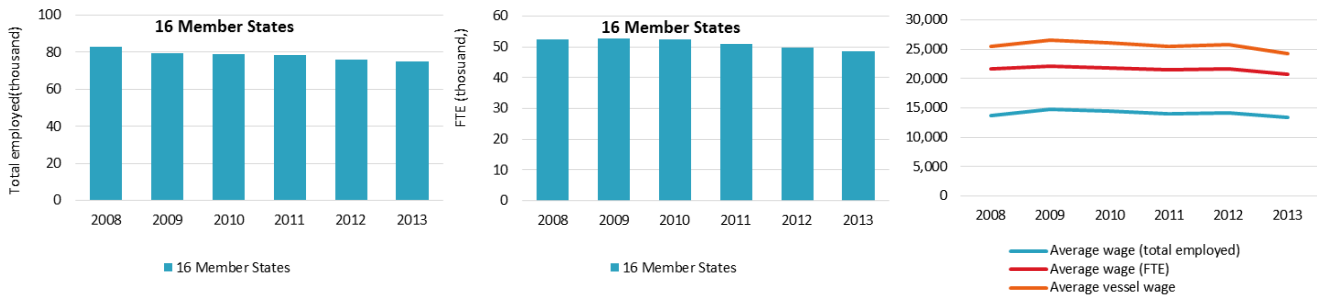
Figure 3.3.5 Capacity trends in 16 MS inactive fleets: 2008-2013.

Employment and Average crew wage

Employment decreased steadily between 2008 and 2013. Total employment and FTEs decreased on average 1.9% and 1.6% for the period 2008-2013 for the 16 MS fleets. There was a decrease in average wage per FTE and per employee by about 0.9 and 0.5% p.a. on average respectively (Figure 3.3.6).

The contribution to fleet employment by main fishing activity remained rather stable over the period 2008-2013: SSF contributing 50% to the total employed on average, the LSF 49% and the DWF 2%. The corresponding shares in FTEs were 36% (SSF), 62% (LSF) and 2% (DWF). The differences between the shares in terms of employees and FTEs indicate that the SSF tends to have more part-time jobs compared to the LSF (Figure 3.3.7).

In absolute terms, the LSF lost the highest number of FTEs over the period (3,408 FTEs between 2008 and 2013, against 180 FTEs and 392 FTEs for the SSF and the DWF, respectively).



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.6 Trends in fleet employment and average wage indicators for 15 MS fleets: 2008-2013

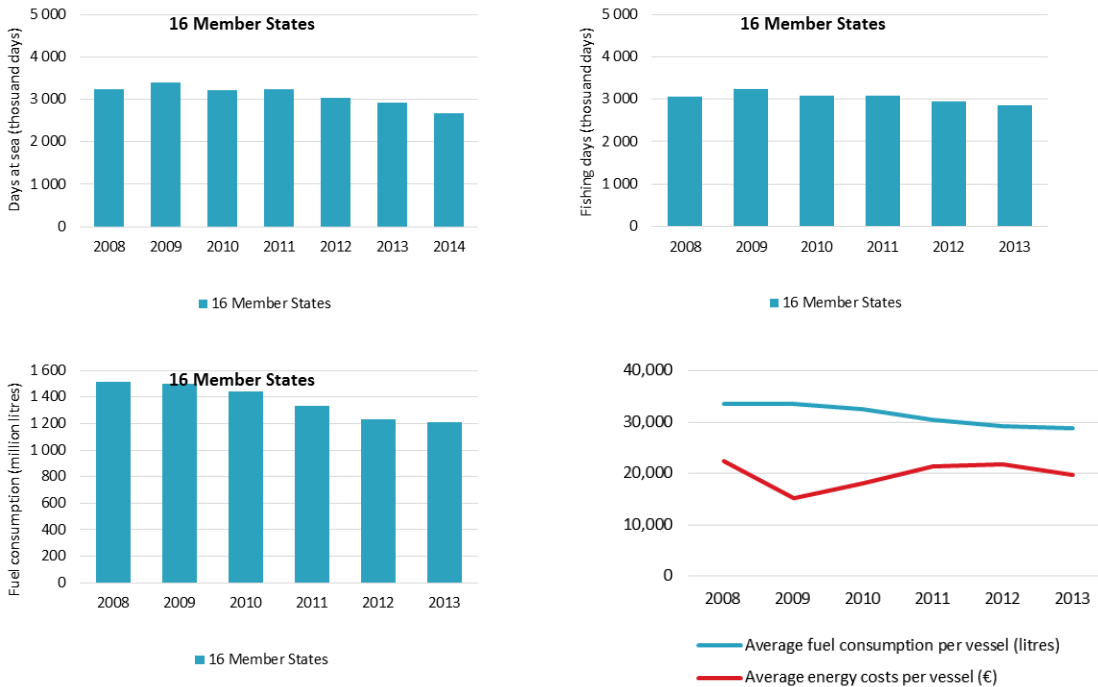


Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.7 Trends in 15 MS fleets employment and average wage indicators by fishing activity: 2008-2013

Fishing Effort

Data on the number of days at sea for the 16 MS fleets revealed a declining trend although with some variation (-2% p.a. on average over the period; -4% between 2012 and 2013). Energy consumption has decreased continuously since 2009 (-4.3% on average). Despite lower energy consumption, energy costs have increased sharply since 2009 (Figure 3.3.8), reached a plateau in 2012 and decreased in 2013 by 10%.



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.8 Trends in effort and fuel consumption for 16 MS fleets: 2008-2013

Analysed by fishing activity, the decrease in average energy consumption per day at sea between 2008 and 2012 appears to be largely attributed to the DWF and perhaps uncertainties in the data as average energy consumption in the SSF and LSF remained stable during this period (Figure 3.3.9). Average energy consumption for DWF more than doubled between 2012 and 2013, which seems unreliable.



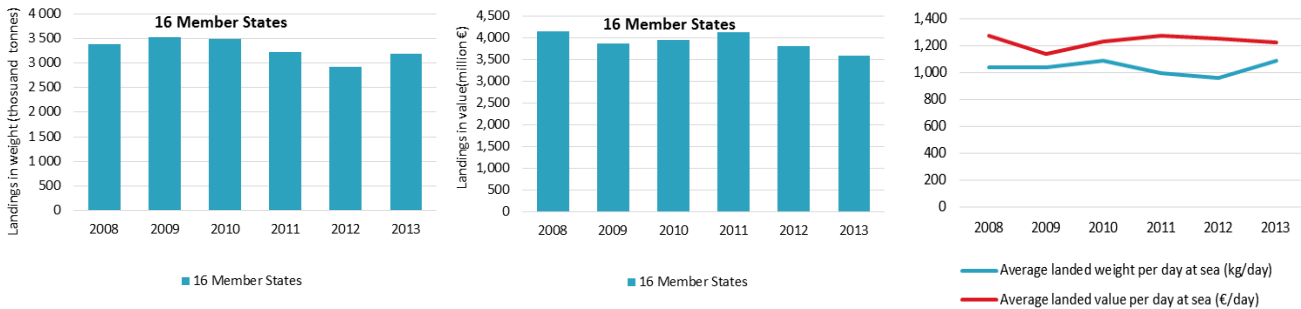
Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015))

Figure 3.3.9 Trends in fishing effort and fuel consumption by fishing activity for 15 MS fleets: 2008-2013

Landings

Landings in weight and value for the 16 MS fleets have continued to decline since 2009. However, while a 4% increase in value accompanied the decrease in weight in 2011, the decline in weight in 2012 (-9%) also

corresponded to a decrease in landed value (-8%). In 2013, the increase in landings weight by 9% was followed by a 7% decrease in value of landings (Figure 3.3.10). Analysed by day at sea, landed weight has declined over the last few years but increased again in 2013, while landed value per sea day has increased steadily since 2009, levelling off somewhat between 2011 and 2013 (Figure 3.3.10).

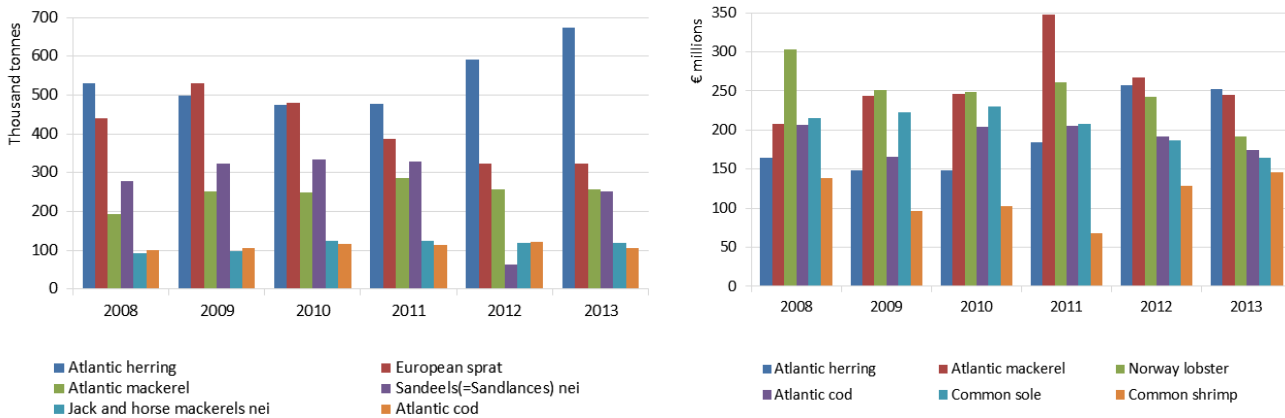


Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.10 Trends in fleet landings in weight and value for 16 MS fleets: 2008-2013

Data on landings by species for the 16 MS fleets reveal that Atlantic herring has remained the most landed species in terms of weight, over the 2008-2013 period, surpassed by sprat in 2009 and 2010. However, while landings of sprat declined steadily since 2009, reaching its lowest point in 2013, Atlantic herring landings peaked in 2013 (Figure 3.3.11).

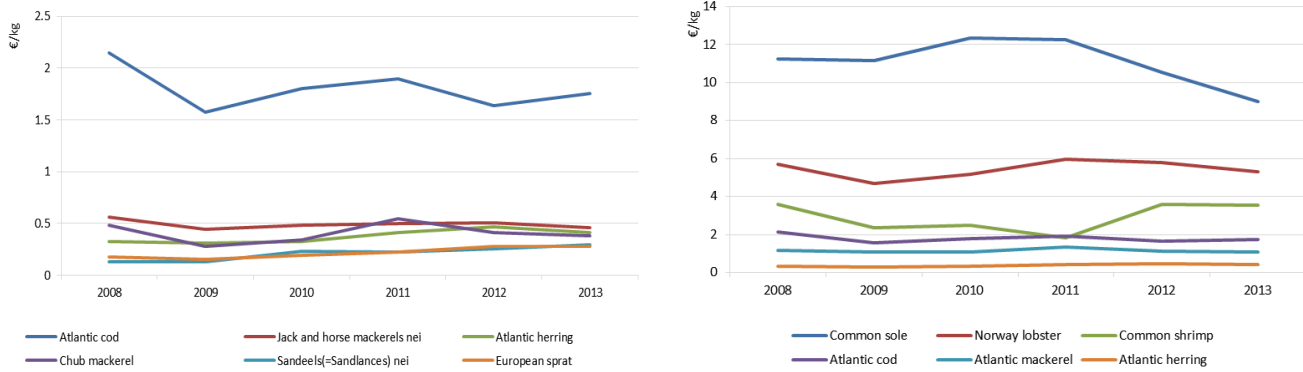
In terms of landed value, Atlantic mackerel was the top specie in 2013, having surpassed Atlantic mackerel, which was much more relevant in 2012.



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.11 Trends in landings by top species in terms of weight (left) and value (right) for 16 MS fleets: 2008 – 2013

Figure 3.3.12 contains the average real price of the top 6 species landed by the 16 MS fleets in terms of weight (left) and value (right) over the period 2008-2013. Data reveals a mixed picture for the selected species. From 2011 to 2012, the average first-sale price of common shrimp, Atlantic herring, jack and horse mackerels, sandeels and European sprat increased, while it decreased for all the others. In 2013 the average price fell for all the selected species, with the exceptions of Atlantic cod (+4%), sandeels (+13%) and European sprat (+1%).

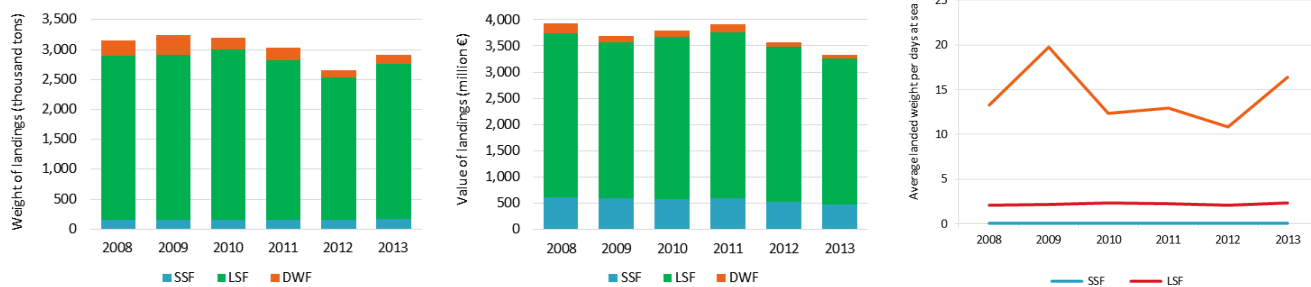


Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.12 Trends in average first sales price for key species for 16 MS fleets: 2008-2013

Left: top six species in terms of weight; Right: top six species in terms of landed value.

Landings in weight in 2013 increased for all fishing activity types when compared to 2012, while they decreased for all fishing activity in terms of value (Figure 3.3.13).



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.13 Trends in landings weight (left) and value (right) by main fishing operation for 15 MS fleets: 2008-2013

Income and Costs

After increasing in 2011, revenue generated by the fleet decreased in 2012 and 2013. Total costs¹¹ followed a similar pattern. For the 16 MS fleets total costs to revenue fell from 93% in 2012 to 91% in 2013 (Figure 3.3.14).

Figure 3.3.14 (bottom right) provides EU Gasoil and Brent prices for 2008-2014 and shows that average prices rose sharply in 2008, reaching a peak in July before declining rapidly in the following months. While fuel prices remained relatively low during 2009 and early 2010, they increased steadily throughout 2010 and 2011, peaking in early 2012. These fluctuations in fuel prices have a significant impact on the performance of the fleet. The data suggest that as fuel prices eased in 2009, energy costs of the 16 MS fleet fell significantly, both in absolute terms and in relation to revenue. Compared to 2009, energy costs of the selected fleets in 2013 were 21% higher.

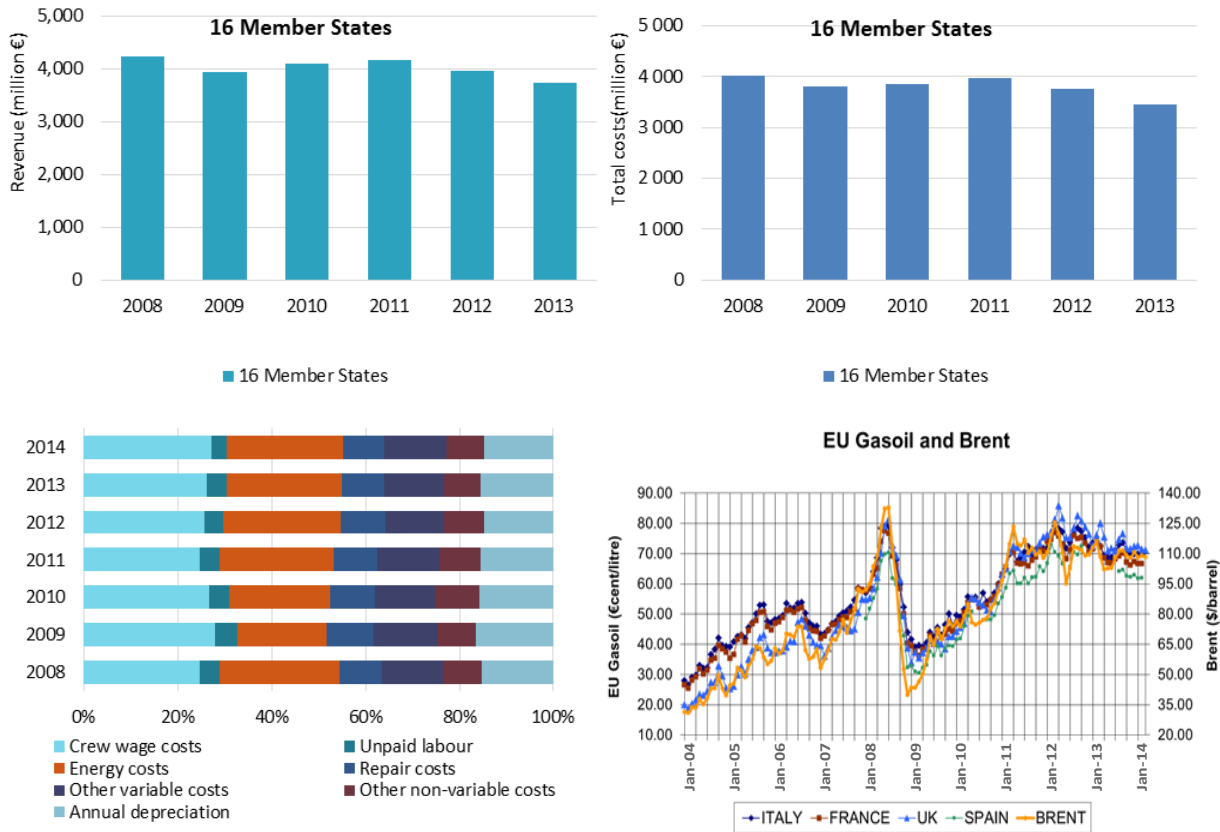
When analysing the 15 MS fleets by fishing activity (Figure 3.3.15), revenue generated by the SSF have had a significant negative trend except in 2011, when revenue increased 4%. Revenue fell by 10% in 2012 and 12% in 2013 compared to previous years. Operating costs for the fleet fell by 7% in 2012 and 4% in 2013 while total costs fell by 6% in 2012 and 4% in 2013. Therefore, over the last two years analysed, the SSF economic performance has suffered as revenue has declined more than operating and total costs. Total costs to revenue ranged from 84% in 2009 to nearly 100% in 2013. Overall revenue has fallen on average 5% from 2008 to 2013 while costs have fallen on average 2% over the same period.

For the LSF, revenue decreased on average 2% p.a. while total costs decreased by 3% p.a., over the period 2008-2013. Total costs to revenue decreased over the period, from 97% in 2008 to 90% in 2013, improving

¹¹ Total costs include crew wage costs, unpaid labour, energy costs, repair costs, other variable costs, other non-variable costs and annual depreciation

performance. While revenue fell 5% and 6% in 2012 and 2013, respectively, operating costs 4% and 11% and total costs fell 5% and 9% in 2012 and 2013, respectively.

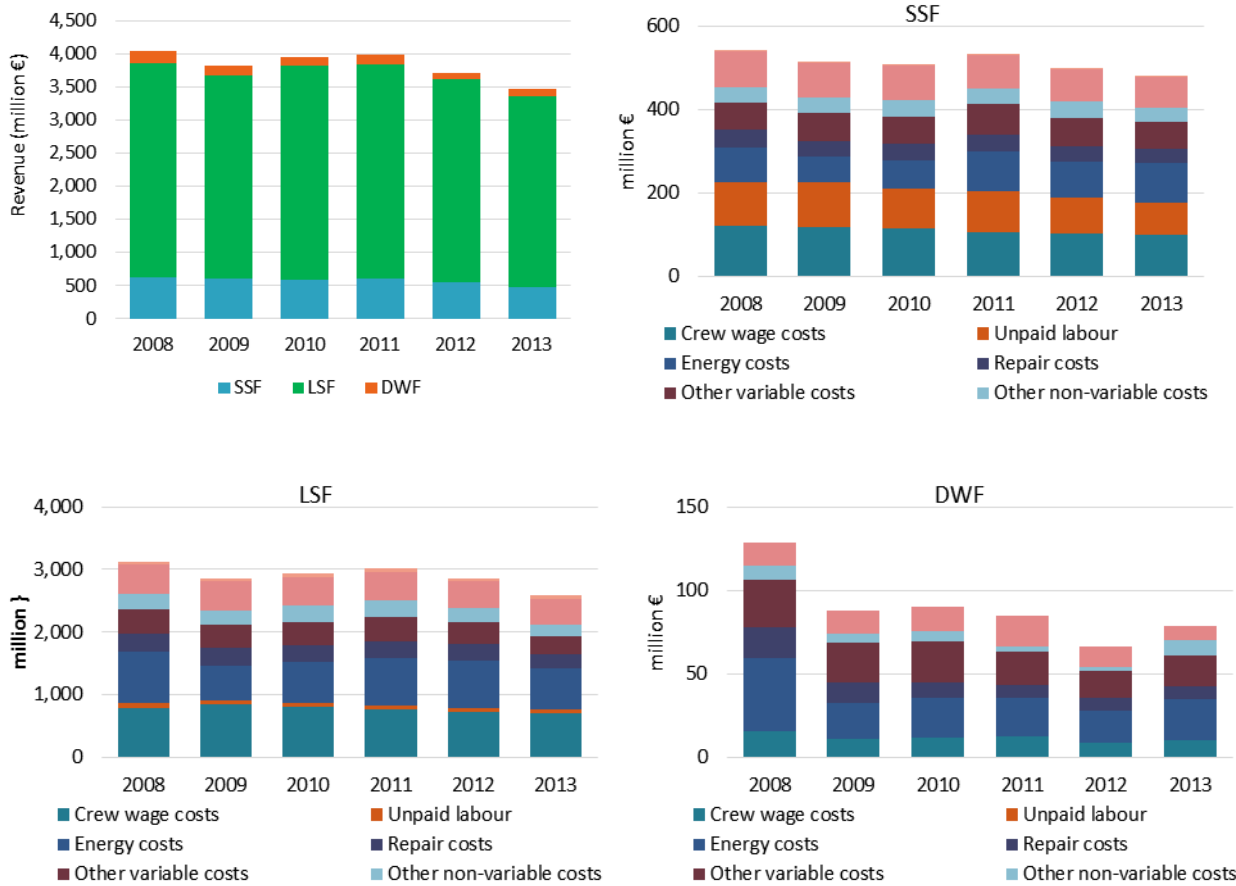
For the DWF, revenue decreased on average 7% p.a. but total costs decreased even more (8% p.a.). Total costs to revenue have fluctuated over the years, from 71% in 2008, dropping to 55% in 2009 and rising to 69% in 2013.



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); DG MARE (for the EU gasoil and Brent trend); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.14 Trends in revenue and cost structure for the 16 MS fleets: 2008 - 2013

Top left: revenue; top right: total costs; bottom left: breakdown of costs items as % of total costs; bottom right: average energy prices

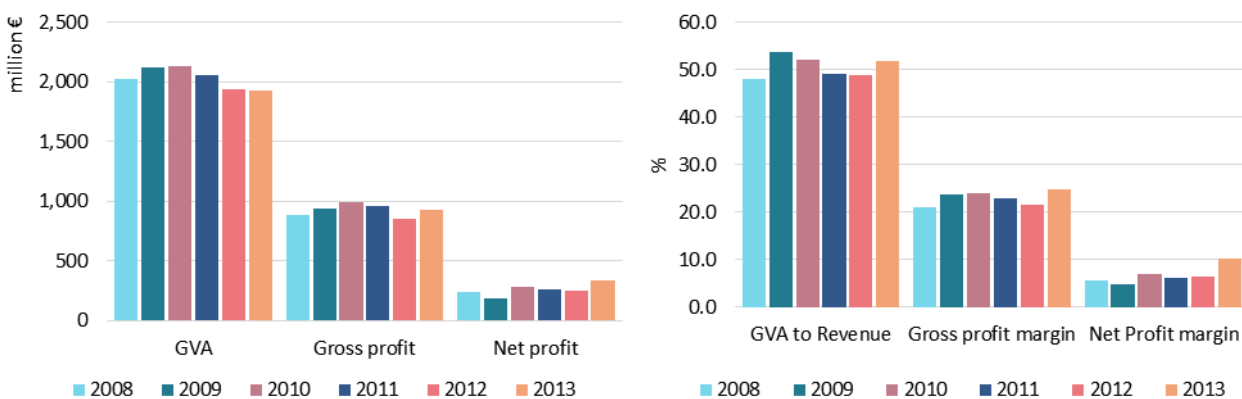


Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.15 Trends revenue and cost structure by fishing activity for 15 MS fleets: 2008 - 2013

Economic performance Indicators

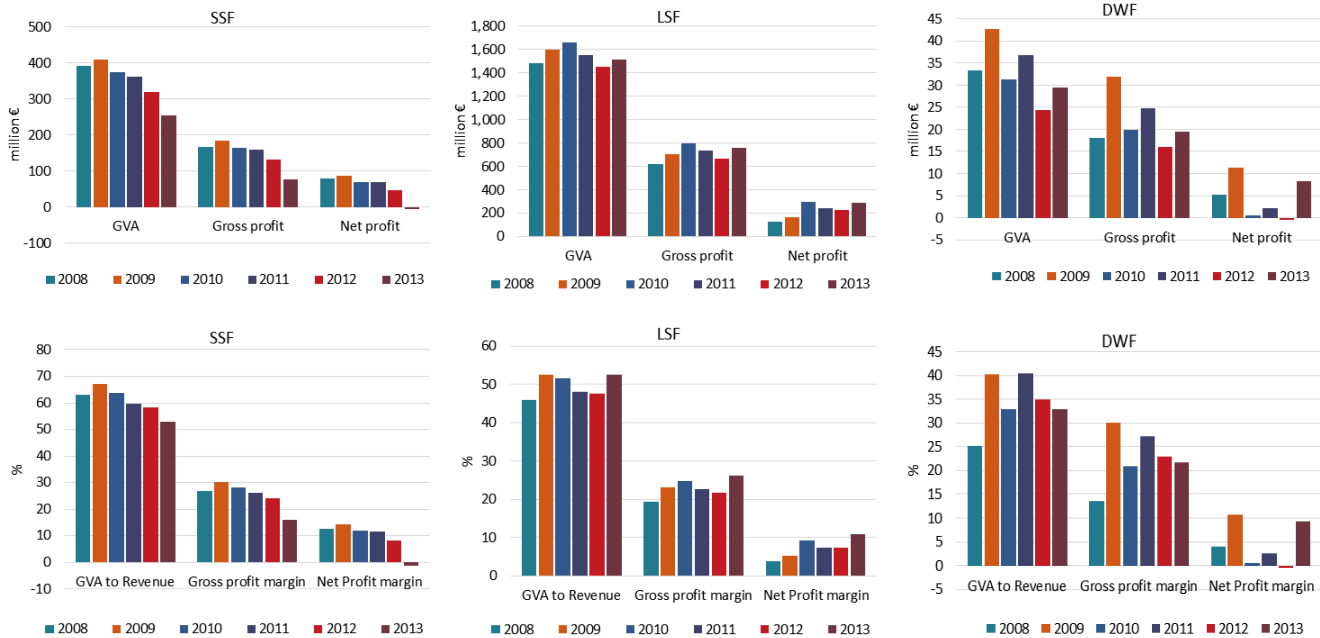
Figure 3.3.16 shows GVA, gross profit and net profit in absolute terms and as a proportion of revenue for the 16 MS fleets. The economic performance indicators for these fleets fluctuated slightly over the period 2008-2013. GVA to revenue was estimated at 54% in 2009, declining between 2010 and 2012, reaching again 54% in 2013. Gross profit margin fluctuated over the time, peaking in 2013 at 27%. Net profit margin also peaked in 2013, with 10% of revenue generated by the 16 MS fleets retained as profit.



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.16 Trends in fleet economic performance indicators for 16 MS fleets: 2008-2013

Economic performance analysed by fishing activity reveals that the development of the 15 MS small-scale fleets has deteriorated over the period. The development trend (percentage change from 2013 to average over the years 2008-2012) suggests that GVA decreased 32%, gross profit 52% and net profit 109%.



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.17 Trends in fleet economic performance indicators by fishing activity for the 15 MS fleets: 2008-2013

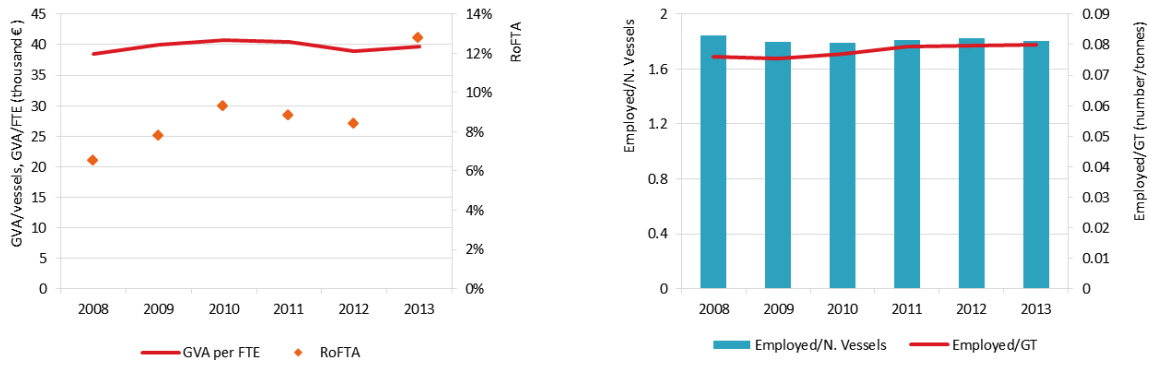
Conversely, the data on the 15 MS fleets suggests that the economic performance of the large-scale and distant-water fleets have improved, although the DWF suffered a significant decline in 2010 and 2012, the former possibly related to problems with the renewal of fisheries agreements with non-EU countries (e.g. Morocco). The development trend for the LSF suggests that GVA fell by 2% in 2013 over the average of 2008-2012 while gross profit and net profit increased 7% and 39%, respectively. The GVA generated by the LSF on average increased 0.6% p.a., gross profit 5% p.a. and net profit 23% p.a. This demonstrates the rationalisation of the fleet and is a sign of improved economic efficiency (declining economic inputs and increasing profit margins). Development trend for the DWF suggests that GVA decreased 13%, gross profit declined 12% yet net profit increased 117% (Figure 3.3.17).

Labour and Capital Productivity

Labour productivity, defined as gross value added per FTE (GVA/FTE), measures the amount of output produced by the amount of labour (input) and gives an indication of the economic growth in the sector. Labour productivity in the fishing fleet increased at the beginning of the period analysed, stabilising from 2010 onwards (Figure 3.3.18). Capital productivity, measured as return on fixed tangible assets (RoFTA¹²), declined between 2010 and 2012, to increase significantly in 2013.

The ratio between the number of jobs and vessel gross tonnage provides an indication of the labour and capital use aboard vessels: the higher the ratio, the more labour intensive the vessel is and the lower the ratio the more capital intensive or industrialised. Over the period, the number of jobs per vessel has remained quite stable while the number of jobs per GT increased between 2008 and 2013 (Figure 3.3.18).

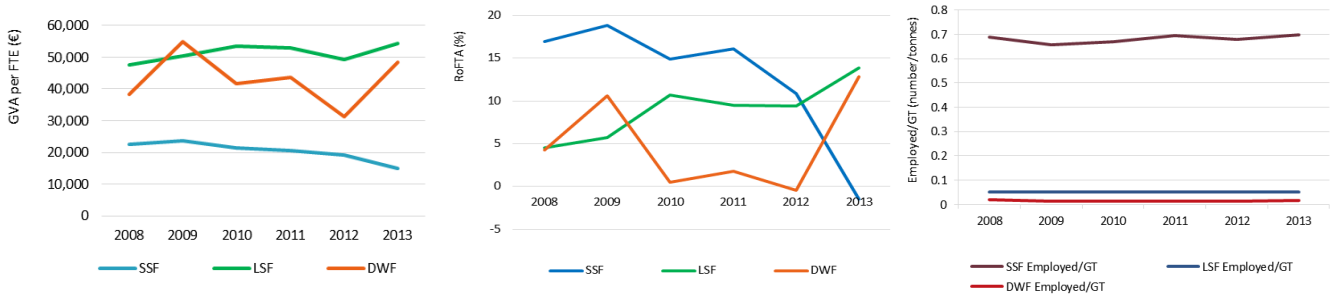
¹² RoFTA = (Net profit/tangible asset value)*100



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.18 Trends in labour productivity (GVA per FTE) and capital productivity (left); Trends in labour use (employed/N. vessels; employed/GT) (right) for 16 MS fleets: 2008 - 2013

Figure 3.3.19 shows that labour productivity (GVA/FTE) is low in the SSF and has decreased steadily over the period, a similar pattern appearing for the DWF up until 2012 before rebounding with a significant increase in 2013. The labour productivity for the LSF shows a stable positive trend over the period, this fleet being the most productive of the three. As expected, the SSF is more labour intensive, with a high number of jobs per GT (Figure 3.3.19). On the contrary, the LSF and the DWF are more capitalised (low number of jobs to GT ratio). Capital productivity increased significantly for the LSF and the DWF in 2013, explaining the rise from 8% to 13% observed for all 15 MS fleets. Contrarily, for the SSF it reduced every year since 2011.



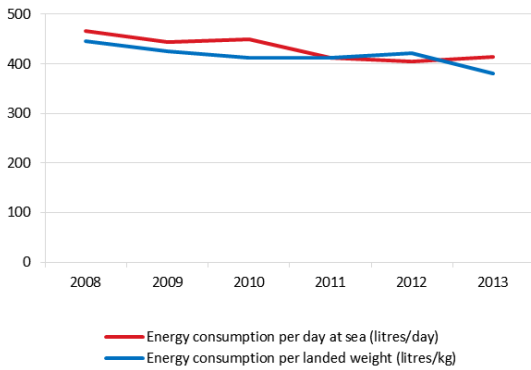
Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.19 Trends in labour productivity (GVA per FTE) and capital productivity by fishing activity (left); Trends in labour use (employed/N. vessels; employed/GT) by fishing activity (right): 2008 - 2013

Fuel use intensity

Fuel use intensity of the EU fleet was analysed as litres of fuel consumed per tonne of live weight landed and litres consumed per thousand € landed.

Fuel use intensity is influenced by a number of factors, such as type of fishing operation, fishing gear, fish targeted and CPUE (catch per unit of effort). Based on the data submitted by MS, the results indicate that average fuel use intensity per day at sea decreased between 2008 and 2011, remaining stable from then on. Fuel use intensity per tonne landed has also followed a similar pattern but with a slight drop in 2013 (Figure 3.3.20).

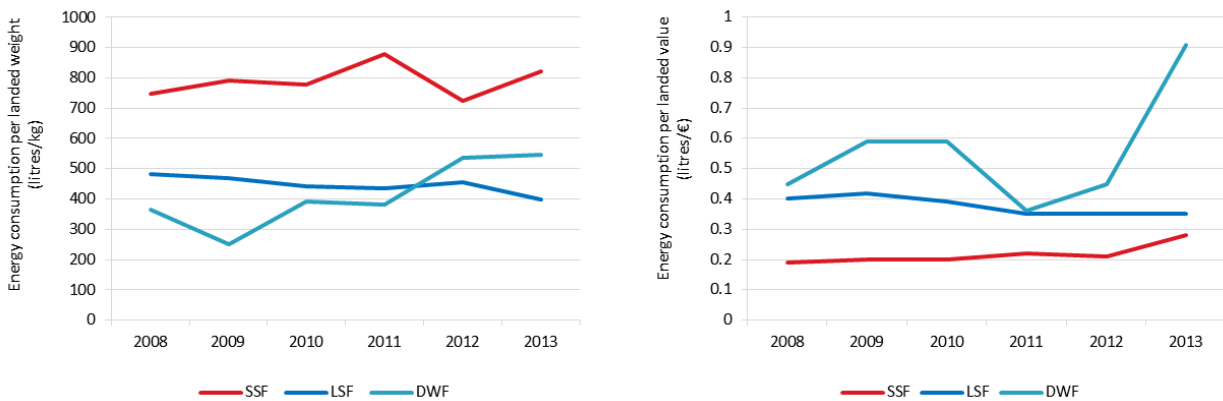


Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 3.3.20 Trends in average fuel consumption per tonne landed (litres/tonne) and day at sea (litres/day) for 15 MS fleets: 2008-2013

By fishing activity, results show that SSF are more fuel intensive, consuming more fuel per landed tonne while the DWF is less fuel intensive (Figure 3.3.21). Yet, significant variations occur from year to year and in 2012 and 2013, it surpassed the LSF for fuel consumed per landed tonne. Fuel consumption per landed tonne by the LSF remained quite stable over the period, albeit a slight downward trend.

A different picture emerges when fuel consumption is analysed by landed value. Here results indicate that the SSF is the most 'fuel-effective' but the ratio between energy consumed and value of landings has had an increasing trend. The LSF shows a steady decreasing trend for fuel consumed per landed value while the DWF shows high variability over the years, with a significant spike in 2013 that seems unreliable.



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.3.21 Trends in fuel consumption per tonne of live weight landed (litres/tonne) by fishing activity for 15 MS fleets: 2008-2013

3.4. Assessment for 2014

The 2015 call for economic data on the EU fishing fleet requested transversal data (effort, landings and capacity) from MS for 2014, as well as income from landings, to be used for projecting fleet economic performance indicators in 2014. As 2014 data are only preliminary, results should be considered with caution.

Projections (both at MS level and by fishing activity) were made for 16 MS and are based on fleet segment level data (except for Croatia, Belgium and Estonia, for which the national level dataset was used¹³). Greece, France, Spain and Denmark were excluded from the analyses due to missing data, while Bulgaria, Cyprus and Malta were also excluded due to questionable data quality.



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

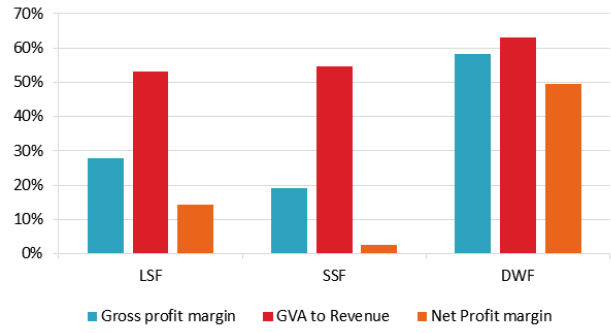
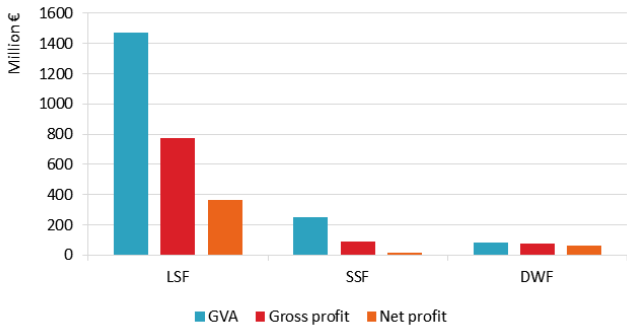
Figure 3.4.1 - Projection performance results for 2014 by MS

Projection results for 2014 suggest that all MS analysed generated net profits in 2014, with the exclusion of the Netherlands, Belgium and Poland. In relative terms, all MS generated a positive Gross profit margin and the net profit margin was negative only for the Netherlands (-3%), Belgium (-4%) and Poland (-14%) (Figure 3.4.1).

The Lithuanian fleet generated the highest gross profit margin (59%) followed by the Romanian fleet (50%), the UK fleet (36%) and the Slovenian fleet (28%). The Lithuanian fleet made also the highest net profit margin with 55% of revenue retained, followed by the Romanian (38%) and UK (36%) fleets.

Projection results by fishing activity suggest that the LSF contributed 82% of the GVA generated by the EU fleets covered and 83% of the gross profit in 2014. The SSF contributed 14% and 9% to GVA and gross profit, respectively. The DWF accounted for the remaining 4% and 8%. The highest net profit corresponded to the LSF (€366 million), followed by the DWF (€64 million) and the SSF (€13 million). In relative terms, the DWF was by far the most profitable, retaining 49% of the revenue as profit, against 14% for the LSF and only 3% for the SSF (Figure 3.4.2).

¹³ Data for Croatia not available



Data source: data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); All monetary values have been adjusted for inflation; constant prices (2014).

Figure 3.4.2 - Projection performance results for 2014 by fishing activity.

3.5. Main drivers and trends affecting the economic performance of the EU fleet

Overall, in 2013 there was an increase in the total weight and a fall in the total value of seafood landed by the EU fleet. Both revenue and costs decreased in 2013 compared to 2012. Costs, and in particular labour and energy costs, decreased more than revenue and the fleet was again profitable in 2013.

The economic performance of the EU fleet also showed improvements compared to the previous year, with 7.8% of income retained as net profit, up from 5.5% in 2012. However, as the EU fleet is very diverse, operating in many different fisheries using a wide variety of fishing techniques, this trend did not apply to all fleet segments. While overall the EU fleet was profitable in 2013, three national fleets made net losses.

In general, the performance of the large-scale fleet improved from 2008 to 2013, with relatively stable gross profits and increasing net profits. The economic performance of the distant-water fleet has fluctuated over the years but posted a net profit in 2013. The small-scale fleets' performance has deteriorated consistently over the years.

Economic performance projections for 2014 suggest that all MS analysed generated net profits in 2014, with the exclusion of three MS and only two MS had a negative net profit margin.

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

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

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

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

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

Table 3.6.1 Main variables and indicators by Member State and fishing activity, 2013 (all monetary values have been adjusted for inflation; constant prices, 2014).

	No. Vessels (number)	Vessel tonnage (thousand tonne)	Vessel power (thousand kW)	Total employed (number)	FTE (number)	Days at sea (thousand)	Energy consumption (million litre)	Landings weight (thousand tonne)	Landings value (million €)	Landings income (million €)	Other income (million €)	Crew wage costs (million €)	Unpaid labour (million €)	Energy costs (million €)	Repair costs (million €)	Other variable costs (million €)	Other non-variable costs (million €)	Annual depreciation (million €)	GVA (million €)	GVA to Revenue (%)	Gross profit (million €)	Gross profit margin (%)	Net profit (million €)	Net Profit margin (%)	GVA per FTE (thousand €)	Average wage (thousand €/FTE)
BEL	83	15.1	47.6	355	235	16.3	40.5	22.8	73.6	73.5	4.0	26.0	2.3	26.2	5.3	10.6	8.9	9.3	26.4	34.1	- 1.9	- 2.4	- 12.0	- 15.5	112.5	120.5
BGR	2,043	6.6	57.4	895	371	21.6	-	9.2	4.4	4.1	2.6	2.2	0.8	1.7	0.7	2.2	0.2	0.2	2.0	29.5	- 1.0	- 14.8	- 1.6	- 23.8	5.4	8.1
CYP	1,463	8.4	63.9	-	-	80.7	0.0	0.8	5.8	6.9	-	0.6	0.4	2.4	1.3	1.6	0.1	9.0	1.4	20.6	0.4	6.0	- 34.4	- 499.3	-	-
DEU	1,542	62.2	142.1	1,647	1,281	107.2	37.2	219.0	145.1	143.3	3.6	36.2	10.6	24.7	15.7	9.6	15.8	21.0	81.2	55.2	34.3	23.4	13.3	9.1	63.4	36.6
DNK	2,049	64.7	215.3	1,489	1,652	115.5	91.5	665.1	394.5	393.8	7.1	72.9	37.0	60.7	38.1	29.7	20.7	89.0	251.6	62.8	141.7	35.4	46.0	11.5	152.4	66.5
ESP	10,167	384.9	873.9	33,129	28,782	1,096.9	695.4	898.1	1,982.6	1,896.8	12.8	489.3	107.8	411.9	128.5	427.6	119.8	104.7	821.8	43.0	224.7	11.8	104.8	5.5	28.6	20.7
EST	1,343	6.1	30.6	2,046	514	3.3	2.2	54.6	15.4	15.4	0.2	4.1	1.0	2.1	2.2	1.3	0.8	1.8	9.2	58.9	4.2	26.6	2.2	14.3	17.9	9.8
FIN	3,241	16.4	170.7	1,817	361	137.8	16.2	138.4	47.1	41.6	1.9	4.9	5.0	12.1	4.9	3.3	5.5	12.9	17.7	40.7	7.8	17.9	- 5.0	- 11.5	49.0	27.4
FRA	7,125	164.2	999.9	10,262	7,150	470.6	302.3	514.1	1,111.3	1,126.2	22.5	398.6	-	213.9	91.2	136.1	130.5	114.5	576.9	50.2	178.3	15.5	55.9	4.9	80.7	55.7
GBR	6,428	200.9	806.1	12,022	7,333	394.1	263.0	618.4	882.4	882.4	34.5	205.7	9.3	173.4	59.2	136.9	61.3	64.8	486.1	53.0	271.2	29.6	209.1	22.8	66.3	29.3
GRC	15,954	75.6	452.7	24,486	22,546	-	113.7	-	-	66.5	-	104.0	78.9	106.7	42.6	76.5	6.7	57.9	- 165.9	- 249.3	- 348.8	- 524.2	- 433.1	- 650.9	- 7.4	8.1
HRV	4,358	46.0	346.2	4,872	2,496	237.5	24.8	74.9	71.4	71.3	10.1	19.8	4.2	20.1	6.2	10.4	5.8	7.1	38.9	47.8	14.9	18.3	3.2	4.0	15.6	9.6
IRL	2,246	65.0	197.2	3,169	2,804	53.6	59.6	235.7	249.6	269.3	3.8	60.6	1.2	44.5	27.4	38.2	26.5	19.5	136.6	50.0	74.8	27.4	40.6	14.9	48.7	22.1
ITA	12,635	164.2	1,019.4	26,758	19,855	1,493.7	325.9	172.6	833.7	833.7	7.6	194.0	39.5	245.0	37.2	97.5	30.8	142.1	430.7	51.2	197.2	23.4	33.9	4.0	21.7	11.8
LTU	152	44.0	52.4	763	491	8.9	36.5	89.3	31.4	66.3	0.5	5.9	0.0	20.1	6.3	14.0	8.4	1.8	18.1	27.1	12.2	18.3	9.3	13.9	36.9	12.0
LVA	351	7.8	21.3	680	415	19.4	5.3	60.9	25.8	25.8	1.6	4.2	0.0	4.4	1.1	4.2	6.0	1.8	11.7	42.7	7.5	27.2	5.3	19.3	28.2	10.2
MLT	1,040	7.8	76.1	389	160	28.4	6.2	2.4	12.3	7.5	2.4	1.2	0.8	0.2	1.1	2.0	0.3	2.4	6.3	64.0	4.3	43.9	1.1	11.2	39.6	12.4
NLD	739	128.7	276.2	2,123	1,766	50.8	164.4	345.1	350.6	344.9	1.9	87.7	8.5	93.3	47.1	27.7	40.0	53.3	138.7	40.0	42.5	12.3	-	-	78.5	54.5
POL	798	33.4	81.9	2,430	1,580	71.3	19.3	195.0	56.6	56.6	0.1	18.3	1.8	12.9	5.3	5.0	5.3	3.8	28.2	49.8	8.1	14.3	1.2	2.1	17.8	12.7
PRT	8,311	100.1	368.0	17,875	9,307	368.8	100.4	193.4	351.4	361.0	1.9	130.4	4.8	65.3	22.4	35.5	15.8	69.5	223.9	61.7	88.7	24.4	- 8.3	- 2.3	24.1	14.5
ROU	196	0.6	6.2	304	37	2.8	0.4	1.6	1.5	1.5	-	0.4	0.2	0.4	0.1	0.1	0.0	0.1	0.8	57.8	0.3	19.0	0.1	6.8	22.6	15.2
SVN	171	0.6	8.5	107	75	7.6	0.3	0.2	1.2	1.2	1.2	1.0	0.3	0.2	0.2	0.1	0.0	0.3	1.8	75.1	0.5	20.3	0.0	1.7	23.4	17.1
SWE	1,299	30.5	170.7	1,577	886	77.6	48.5	177.6	131.2	131.2	11.3	19.0	14.4	32.2	21.3	10.3	9.9	26.2	68.8	48.3	35.4	24.9	6.7	4.7	77.6	37.6
Tot. *	83,734	1,633.7	6,484.2	149,195	110,096	4,864.4	2,353.4	4,689.1	6,779.0	6,820.9	131.6	1,886.8	328.8	1,574.4	565.5	1,080.5	519.1	813.1	3,212.9	46.2	997.4	14.3	38.4	0.6	29.2	20.1
Tot. **	63,234	1,535.4	5,834.2	123,425	87,019	4,733.7	2,233.5	4,676.7	6,756.5	6,735.9	126.6	1,778.9	247.8	1,463.4	519.8	998.2	511.9	743.7	3,369.1	49.1	1,342.4	19.6	506.5	7.8	38.7	23.3
DWF ***	298	255.7	348.4	5,962	6,514	74.5	374.9	712.9	1,237.4	1,083.7	6.6	187.0	0.7	235.6	90.1	296.2	84.4	57.8	384.1	35.2	196.4	18.0	105.6	11.1	60.2	29.4
LSF ***	16,751	1,093.3	3,459.8	69,277	57,134	2,121.4	1,742.3	3,648.0	4,702.6	4,780.6	96.4	1,338.4	104.6	1,092.5	370.5	583.3	356.2	569.8	2,466.1	50.7	1,017.7	20.9	324.3	7.5	47.6	27.9
SSF ***	48,337	121.2	1,777.6	73,949	46,436	2,675.5	234.1	283.5	757.2	871.6	23.6	251.7	142.3	134.1	59.0	118.5	70.9	114.3	512.6	57.3	115.2	12.9	- 25.8	- 3.0	17.9	13.9

* All countries available

** Excl. BGR, CYP, MLT and GRC

*** All economic data exclude BGR, CYP, MLT and GRC

Note: Economic data for BGR, CYP, GRC and MLT were considered not reliable and are therefore reported in red, as well as totals, which include them. *all monetary values have been adjusted for inflation - constant prices 2014

Table 3.6.2 Number of vessels by MS and fishing activity, 2008-2014

	Small scale fleet						as% of MS fleet	% Δ 08-13	Trend	Large scale fleet						as% of MS fleet	% Δ 08-13	Trend	Distant water fleet						as% of fleet	% Δ 08-13	Trend			
	2008	2009	2010	2011	2012	2013				2014	2008	2009	2010	2011	2012				2013	2014	2008	2009	2010	2011				2012	2013	2014
Belgium	-	-	-	-	-	-	-			98	94	88	86	81	76	76	100%	-22%	■■■■■■■■	-	-	-	-	-	-	-				
Bulgaria	770	998	1,207	927	1,112	1,137	1,039	94%	48%	■■■■■■■■	84	120	176	83	80	67	71	6%	-20%	■■■■■■■■	-	-	-	-	-	-	-			
Croatia	-	-	-	-	1,701	1,715	1,616	61%		■■■■■■■■	-	-	-	-	1,101	1,080	1,036	39%		■■■■■■■■	-	-	-	-	-	-	-			
Cyprus	743	877	876	942	886	894	827	97%	20%	■■■■■■■■	42	42	33	32	33	32	35	3%	-24%	■■■■■■■■	-	-	-	-	-	-	-			
Denmark	1,228	1,203	1,118	1,102	1,075	1,026	-	69%	-16%	■■■■■■■■	582	566	521	501	462	456	-	31%	-22%	■■■■■■■■	-	-	-	-	-	-	-			
Estonia	880	884	881	876	872	1,300	1,475	97%	48%	■■■■■■■■	64	53	48	42	36	36	38	3%	-44%	■■■■■■■■	-	-	-	-	-	-	-			
Finland	1,486	1,465	1,559	1,589	1,735	1,674	1,674	97%	13%	■■■■■■■■	67	66	60	60	62	59	63	3%	-12%	■■■■■■■■	-	-	-	-	-	-	-			
France	4,589	4,629	4,371	4,471	4,373	4,326	-	73%	-6%	■■■■■■■■	2,011	1,826	1,889	1,696	1,621	1,565	-	26%	-22%	■■■■■■■■	5	20	21	17	18	17	-	0.3%	240%	■■■■■■■■
Germany	961	939	903	883	852	832	817	73%	-13%	■■■■■■■■	387	372	357	344	301	310	302	27%	-20%	■■■■■■■■	-	-	-	-	-	-	-			
Greece	15,834	15,761	15,635	15,268	13,439	13,671	14,642	93%	-14%	■■■■■■■■	1,414	1,407	1,412	1,274	1,093	1,081	1,127	7%	-24%	■■■■■■■■	-	-	-	-	-	-	-			
Ireland	1,297	1,157	1,187	1,224	1,279	1,318	1,296	64%	2%	■■■■■■■■	491	702	737	743	744	751	730	36%	53%	■■■■■■■■	-	-	-	-	-	-	-			
Italy	7,659	7,631	7,602	7,608	7,454	7,330	7,379	66%	-4%	■■■■■■■■	4,175	4,062	3,999	3,910	3,866	3,706	3,755	34%	-11%	■■■■■■■■	18	18	16	16	13	-	10			■■■■■■■■
Latvia	736	708	687	245	207	202	227	76%	-73%	■■■■■■■■	122	106	84	74	72	65	63	24%	-47%	■■■■■■■■	-	-	-	-	-	-	-			
Lithuania	89	91	74	69	69	65	60	67%	-27%	■■■■■■■■	24	22	22	24	25	25	24	26%	4%	■■■■■■■■	12	11	8	10	10	7	9	7.2%	-42%	■■■■■■■■
Malta	621	679	759	532	707	707	648	91%	14%	■■■■■■■■	82	100	89	102	77	67	61	9%	-18%	■■■■■■■■	-	-	-	-	-	-	-			
Netherlands	162	177	176	165	179	186	178	34%	15%	■■■■■■■■	407	403	397	386	371	361	360	66%	-11%	■■■■■■■■	-	-	-	-	-	-	-			
Poland	563	509	517	517	545	553	595	73%	-2%	■■■■■■■■	259	211	187	189	205	200	199	26%	-23%	■■■■■■■■	1	3	3	3	2	2	2	0.3%	100%	■■■■■■■■
Portugal	3,792	3,665	3,540	3,338	3,230	3,185	3,107	79%	-16%	■■■■■■■■	920	923	898	874	819	811	819	20%	-12%	■■■■■■■■	41	38	39	35	34	28	28	0.7%	-32%	■■■■■■■■
Romania	395	153	206	197	179	106	111	95%	-73%	■■■■■■■■	10	7	-	3	4	6	12	5%	-40%	■■■■■■■■	-	-	-	-	-	-	-			
Slovenia	60	62	67	62	67	69	77	83%	15%	■■■■■■■■	25	25	24	22	22	14	14	17%	-44%	■■■■■■■■	-	-	-	-	-	-	-			
Spain	6,420	6,315	7,102	4,214	4,188	4,215	4,156	48%	-34%	■■■■■■■■	3,089	3,101	2,956	4,622	4,486	4,340	4,307	49%	40%	■■■■■■■■	294	267	297	280	264	240	230	2.7%	-18%	■■■■■■■■
Sweden	819	818	776	754	754	729	730	74%	-11%	■■■■■■■■	329	314	288	277	265	255	247	26%	-22%	■■■■■■■■	-	-	-	-	-	-	-			
UK	3,123	3,123	3,127	3,229	3,199	3,097	3,027	69%	-1%	■■■■■■■■	1,593	1,555	1,471	1,430	1,406	1,388	1,368	31%	-13%	■■■■■■■■	12	9	8	8	8	4	4	0.1%	-67%	■■■■■■■■
Tot*	52,227	51,844	52,370	48,212	48,102	48,337	43,681	74%	-7%	■■■■■■■■	16,275	16,077	15,736	16,774	17,232	16,751	14,707	26%	3%	■■■■■■■■	383	366	392	369	349	298	283	0.5%	-22%	■■■■■■■■

* All countries available

Table 3.6.5 Average wage (thousand €), 2008-2014 (all monetary values have been adjusted for inflation; constant prices, 2014).

	Small scale fleet							%Δ 08-13	Trend	Large scale fleet							%Δ 08-13	Trend	Distant water fleet							%Δ 08-13	Trend						
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014								
Belgium	-	-	-	-	-	-	-			87.8	90.9	93.6	91.7	90.0	114.5	117.5	30%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bulgaria	0.2	1.0	0.6	0.6	0.3	8.6	5.6	4006%		3.4	1.6	3.9	3.1	1.8	6.7	12.1	96%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Croatia	-	-	-	-	8.6	7.8	8.1			-	-	-	-	10.5	10.4	10.6			-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cyprus	-	-	-	-	-	-	-			5.7	6.1	5.8	4.5	5.8	-	-			-	-	-	-	-	-	-	-	-	-	-	-	-		
Denmark	54.7	54.1	55.0	53.0	55.3	57.9	-	6%		66.9	64.5	73.1	74.8	70.7	68.0	-	2%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Estonia	-	-	3.7	3.8	3.8	4.6	-			18.2	18.2	19.2	18.0	21.2	19.9	16.8	9%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Finland	22.5	36.5	17.4	18.5	23.3	16.7	17.9	-26%		67.4	61.2	37.3	45.5	47.9	54.4	55.0	-19%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
France	43.1	40.1	41.2	42.9	42.0	42.7	-	-1%		56.7	50.9	50.7	58.1	54.9	58.4	-	3%		-	60.5	70.6	84.6	100.4	97.8	-	-	-	-	-	-	-	-	
Germany	4.1	7.7	3.7	4.2	4.4	5.3	4.5	31%		51.3	57.9	65.2	71.0	67.4	63.8	64.3	24%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Greece	-	-	-	-	5.7	7.5	-			-	-	-	-	11.3	10.3	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ireland	4.0	-	0.4	2.4	8.8	2.3	12.8	-42%		25.6	32.6	34.9	37.4	54.9	39.1	52.5	53%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Italy	8.6	10.7	9.4	8.8	6.7	6.3	6.8	-26%		17.4	23.8	21.0	19.3	15.2	17.0	16.5	-2%		12.2	13.9	14.4	14.0	13.5	-	-	-	-	-	-	-	-	-	-
Latvia	0.5	0.5	0.3	0.5	0.6	0.3	0.4	-51%		15.0	15.3	17.6	18.8	19.0	22.5	19.6	50%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lithuania	1.3	2.7	3.4	6.4	3.9	4.5	5.5	241%		17.6	6.7	7.0	6.7	6.6	8.1	7.9	-54%		23.4	14.8	11.7	11.7	9.0	15.0	8.0	-36%							
Malta	47.4	127.9	84.1	100.4	3.5	8.0	17.8	-83%		32.4	29.9	23.5	22.0	17.3	49.8	64.2	54%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Netherlands	18.9	15.0	7.2	11.8	14.0	12.3	11.9	-35%		63.5	59.9	60.9	52.8	60.8	57.1	52.2	-10%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Poland	7.1	5.9	8.7	9.8	11.8	13.0	12.0	83%		11.2	9.2	11.3	11.8	11.3	15.0	11.8	34%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Portugal	14.2	12.9	13.7	11.5	15.7	10.9	14.7	-24%		20.3	17.5	18.7	20.3	19.0	16.2	17.5	-20%		14.1	13.1	18.3	16.7	12.2	17.8	16.2	26%							
Romania	13.8	7.7	6.2	17.7	8.6	14.5	13.0	5%		16.2	11.8	-	15.2	8.7	17.1	17.2	6%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Slovenia	8.1	10.4	13.5	14.8	14.9	15.5	14.0	92%		24.8	26.7	27.6	29.0	35.3	20.3	18.9	-18%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Spain	16.6	19.9	16.5	15.4	13.3	15.8	-	-5%		19.0	24.8	22.7	20.2	19.8	21.5	-	13%		16.1	18.1	19.4	22.9	23.3	25.6	-	59%							
Sweden	22.9	22.4	25.2	27.1	28.7	30.7	29.2	34%		29.0	27.4	31.6	31.6	34.5	41.6	36.7	43%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	
UK	30.7	21.1	21.7	19.9	24.6	23.5	23.6	-23%		29.0	26.2	25.1	28.2	30.3	31.1	32.5	7%		36.5	-	-	-	-	-	-	-	-	-	-	-	-	-	

* Average wage is calculated as labour costs (including unpaid labour) per unit of FTE

4. EU FLEET REGIONAL ANALYSIS

KEY FINDINGS

BALTIC SEA FLEET

Eight Member State fleets operated in the region in 2013; the most important in terms of active vessel number was the Finnish fleet, followed by Estonia and Germany. The Finnish fleet also accounted for the most effort deployed, followed by the Danish and German fleets.

- In terms of production, the Finnish, Polish, Swedish, Danish and Latvian fleets were the most important, collectively responsible for about 85% of the value and weight landed in 2013.
- Overall the Baltic Sea fleet saw declines in capacity, effort deployed and landings in weight over the period 2009-2013 while landed value increased steadily between 2009 and 2013. Herring, sprat and cod remain the most important species landed.
- Revenue generated by the Baltic Sea fleet was estimated at around €267.5 million, with the Swedish and Polish fleets together contributing 43%. While overall the Baltic fleet was profitable (positive gross profit), two MS fleets, Denmark and Germany, reported gross losses in 2013.
- GVA produced by the fleet in 2013 was estimated at €121 million (+7%). After accounting for operating costs, the fleet made a gross profit of €40 million (+24%). The highest GVA were generated by the Swedish (€29 million) and Polish (€28 million) Baltic fleets followed by the Finnish (€17.9 million) and Danish (€16.5 million) fleets.

NORTHEAST ATLANTIC REGION FLEET

Ten Member State fleets operated in the region in 2013; the most important in terms of active vessel number was the Spanish fleet.

- In terms of production, the UK, French, Spanish and Irish fleets were the most important, collectively responsible for 80% of the landed weight. In terms of value, the same fleets together accounted for 85% of the value landed in 2013.
- Overall, capacity of the NE Atlantic region fleet remained stable with reduced effort and landed weight over the period 2010-2013, while landed value increased steadily between 2009 and 2012, decreasing in 2013.
- The main species landed included the small pelagics Atlantic mackerel, jack and horse mackerels, blue whiting and European pilchard (sardine) and demersal species, such as European hake and Norway lobster.
- Revenue generated by the NE Atlantic fleet was €2.4 billion, 86% distributed amongst four MS fleets: France (€681 million), Spain (€641 million), UK (€438 million) and Portugal (€271 million). GVA produced by the fleet in 2013 was estimated at €897.6 million and after accounting for operating costs, the fleet made €314 million in gross profit.
- The small-scale fleet generated €179 million in GVA and €58 million in gross profits. The large-scale fleet generated €716 million in GVA and €254 million in gross profit.
- Overall the NE Atlantic region fleet generated gross profits; only the Belgium fleet suffered net loss in 2013.

MEDITERRANEAN & BLACK SEA FLEET

Eleven Member State fleets operated in the region in 2013, with Bulgaria and Romania fishing exclusively in the Black Sea. The analysis is restricted to the available data by MS fleets operating in the region.

- The EU fleet fishing in the Mediterranean & Black Sea consisted of 35,497 vessels (including Greece). Greece comprised the largest fleet in number (14,700 vessels) while the Italian fleet was the largest in gross tonnage (143,000 GT).
- By fishing activity, and according to the available data, the small-scale fleet possessed 68% of the fleet in number and accounted for 34% of the effort but landed only 12% in weight (22% in value) and generated 16% of gross profit.
- Employment in 2013 was estimated at 67,800 jobs (excluding Cyprus), corresponding to 52,900 FTEs. The small-scale fleet represents almost 43% of the total employed in the Mediterranean & Black Sea fleet.
- In terms of production, landings (excluding Greece) amounted to approx. 360,000 tonnes, corresponding to €1.3 billion. Italy, Spain, France and Croatia were the leading countries, collectively

accounting for 93% of the landings recorded. European pilchard (sardine), anchovy and hake continue to be the most important species.

- The revenue (income from landings and other income) generated by the Mediterranean & Black Sea fleet (excluding Bulgaria, Cyprus, Greece and Malta) in 2013 was estimated at €1,4 billion, 59% of which was generated by the Italian fleet (€841 million).

NORTH SEA FLEET

Ten Member State fleet operated in the region in 2013; the most important in terms of active vessel number was the UK fleet, also accounting for the most effort deployed.

- In terms of production, the North Sea fleet landed 1,300 thousand tonnes of sea food in 2013,
- The Danish, UK, Dutch and French fleets were the most important fleets, collectively responsible for 89% of the landed weight and 84% of the value landed; and 84% of the revenue and 85% of the GVA.
- Overall the North Sea fleet saw declines in capacity and effort deployed over the period 2009-2013. Employment increased over the last two years. Landed value increased steadily from 2009 onwards while landed weight fluctuated in the same period.
- Atlantic herring, sandeel and Atlantic mackerel were the most important species in landings weight. In terms of landed value, the same species were also important, as well as common sole, common shrimp, European plaice and Norway lobster.
- Revenue generated by fleet was estimated at around €1.5 billion. GVA produced by the fleet in 2013 was estimated at €799 million and after accounting for operating costs, the fleet made €392 million in gross profit.
- In terms of gross profit, all the North Sea MS fleets were profitable in 2013 except for Lithuania. Several individual fleet segments from other MS show negative gross profits.
- The most important fleets in terms of weight of landings were the UK and Danish pelagic trawlers over 40 m and the Dutch beam trawlers over 40 m.

OTHER FISHING REGIONS FLEET

According to FAO fisheries statistics, there were 12 EU Member State fleets operating in Other Fishing Regions in 2013: Estonia, France, Germany, Greece, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, Spain and United Kingdom. DCF economic data on the EU OFR or distant-water fleet is limited and covers only 9 MS but DCF landings in weight data compared to corresponding FAO statistics had a good coverage in 2013. Fleets operating in OFR were further disaggregated to the following regions: Northwest Atlantic, Eastern Arctic, Outermost regions, Non-EU Mediterranean and Other regions.

- According to the DCF data submitted, Spain landed the most
- In terms of production, the EU OFR fleet landed 867,000 tonnes in 2013, the majority of 81% coming from *Other Regions*, and the remaining part caught from Eastern Arctic (12%), Northwest Atlantic (5%), Outermost regions (2%) and less than 1% for non-EU Mediterranean waters.
- The most important species were skipjack tuna (189,000 tonnes; €225 million), yellowfin tuna (140,600 tonnes; €308 million) and swordfish (€123 million).
- At fleet segment level, the Spanish pelagic seiners over 40m generated the highest landed value in 2013, amounting to €477 million, followed at a distance by the Spanish demersal trawler over 40m segment (€263 million) and then the French purse seiners over 40m (€137 million).

Background

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

To assess the economic performance of the EU fleet at regional sea basin level estimates on the structure and economic performance of fleet segments were produced by allocating FTEs, revenue and costs to the sea basin using the effort and landings data available at a higher disaggregation level (sub-region, FAO level 3 and level 4 for the Baltic Sea and Mediterranean).

As DCF economic data is collected at the supra region level, the economic data for fleet segments that operate in a specific region does not always relate exclusively to the fishing activity of those vessels in the region. For example, a Danish trawl segment that spends half of its time in the Baltic Sea and half of its time in the North Sea will only have economic performance data available at supra region level 27, which consists of the Baltic Sea, the North Sea and the North Atlantic fishing regions. Therefore, to assess the performance of the Danish North Sea fleet, economic data provided for the fleet segment at the supra-region (area 27) is disaggregated at the sub-region (North Sea) level by assuming several correlations with transversal data.

For this exercise, transversal and economic data by fleet segment were disaggregated at the region level using:

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

There are several limitations to this approach, which should be considered exploratory rather than a source of factual statements that are considered robust enough to be a basis for policy decisions. Apart from missing and/or questionable datasets, other limitations due to the nature of the DCF data and the methodology used may affect the quality (or viability) of the results to various extents.

One example of data/methodology limitation is when a fleet segment that is based in the Baltic Sea but operates predominately in the North Sea will have effort (sea days) in the Baltic region (steaming to and from fishing grounds) with little or no corresponding revenue (landings). This can introduce errors that will negatively affect the performance of the “Baltic fleet” while conversely “improve” the performance of the “North Sea fleet” by underestimating costs (since days spent steaming to get to the North Sea fishing areas will be attributed to the Baltic Sea). Therefore, estimates for fleet segments with less than 30% of effort and/or landings value/weight in a region should be considered with caution.

Complete estimates were not possible due to fleet segments with incomplete data sets submitted by MS (i.e. number of vessels by region, landings and efforts variables by sub-region).

Fleet segments for which days at sea or landings in value were not available at the sub-region level, could not be completely disaggregated. Information on these MS fleet segments is provided and used in the estimations when either the days at sea or landings values that were available occurred on only one region. In all other cases, only incomplete results could be provided. This affects the entire Spanish fleet as days at sea were not available. The Greek fleet is only partially represented due to missing DCF data on effort and landings, as well as income. Additional information to fill gaps is provided where possible.

See Methodology section for more details on the method used to disaggregate and allocate economic variables at the sea basin level.

Regional Overview

Table 4.1 provides an overview the EU fleet by main fishing region. Numbers and figures refer to 2013 and do not include the entire EU fleet due to insufficient data on all active fleet segments. In terms of landings, the analyses covered 98% of the reported landed value and 96% of the landed weight in 2013.

At the EU level, the Mediterranean & Black Sea and Northeast Atlantic fleets accounted for 54% and 25% of the vessels in number. In terms of total employed both regional fleets collectively accounted for 81%.

The Mediterranean & Black Sea fleet exerted more than half of the total effort deployed in days at sea (51%) but consumed only 31% of the energy consumption reported. Conversely, the North Sea fleet, deploying 13% of the effort, accounted for 27% of the energy consumption.

While the Mediterranean & Black Sea fleet landed 8% of the landings, it generated 18% of the landed value. Excluding Greece, the Mediterranean fleet contributed 20% of the revenue (€1.3 billion), 23% of the GVA (€644 million) and 21% to gross profit (€260 million). Overall, for the same fleet GVA to revenue was estimated at 48% and gross profit margin at 19%.

Table 4.1 Main capacity, effort, landings and performance indicators for the EU fleet at the regional level, 2013

MS	Estimated no. vessels in region	Estimated % of vessels in region	Estimated total employed #	Estimated FTE #	Days at sea in region days	Estimated energy consumption K litres	Landed weight by region tonne	Landings in value (thousand €)	Estimated revenue (thousand €)	Estimated GVA (thousand €)	GVA to Revenue %	Estimated Gross profit (thousand €)	Gross profit margin %	
BS	Baltic Sea	6,256	9.5%	9,287	4,256	387,659	78,741	586,214	260,043	267,481	120,644	45.1	39,736	14.9
MBS	Mediterranean Sea & Black Sea	35,497	53.8%	67,843	52,946	1,917,789	583,213	359,695	1,180,952	1,414,543	481,953	35.9	79,958	6.0
NA	Northeast Atlantic	16,182	24.5%	46,867	38,597	941,538	492,238	1,349,935	2,265,495	2,354,882	897,600	51.2	314,047	18.0
	North Atlantic (undetermined)	1,619	2.5%	1,215	1,122		1,295							
NS	North Sea	4,643	7.0%	11,031	8,606	468,846	483,489	1,344,306	1,471,975	1,528,769	798,697	52.2	391,759	25.6
	Eastern Arctic	39	0.1%	399	744	2,789	17,753	102,476	143,752	106,630	45,142	64.2	33,457	47.6
Other Fishing Regions	Northwest Atlantic	28	0.0%	461	723	2,458	14,966	42,812	92,033	80,964	25,773	59.1	12,649	29.0
	Other regions	1,124	1.7%	4,020	5,258	7,733	214,304	702,820	1,222,555	1,085,643	301,256	41.0	189,310	25.8
	Outermost regions	640	1.0%	1,775	1,488	8,742	3,138	14,345	26,869	53,560	11,724	66.9	3,359	19.2
	non EU Mediterranean Sea	5	0.01%			421	-	100	915	915	452	49.4	330	36.0
NONE	NONE							2,000	9,003					

Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)); Due to missing information, a further 2,000 tonnes and €9 million in landings could not be allocated to any region (NONE).

The NE Atlantic fleet¹, deploying 25% of the effort and consuming 26% of the energy, contributed 30% to the landed weight and 34% to the landed value. This fleet also generated 34% of the revenue (€2.4 billion), 31% of the GVA (€898 million) and 25% of the gross profit. Overall, with an estimated gross profit of over €314 million, the NE Atlantic posted an 18% gross profit margin.

The North Sea fleet, covering around 7% of the fleet in number and 8% of the total employed, deployed 13% of the effort and consumed 26% of the energy. The same fleet landed 30% of the catch in weight but generated only 22% of the landed value, contributing 28% to GVA (€799 million) but 31% to the overall gross profit (€392 million). Gross profit margin was estimated at 26%.

The Baltic Sea fleet, which comprised around 10% of the fleet in number but only 6% of the total employed, contributed 13% of the landings in weight but only 4% of the landed value, also contributing 4% to overall revenue (€267 million) and GVA (€121 million) and 3% to gross profit (€40 million). Gross profit margin was estimated at 15%. This fleet deployed about 10% of the effort and consumed only 4% of the energy consumption.

Vessels operating in Other Fishing Regions, including the Eastern Arctic, NW Atlantic and outermost regions, contributed to 19% of the landings in weight and 22% of the landed value. While displaying high variations within each region, collectively this fleet generated around 19% of the revenue (€1.3 billion), 13% of the GVA (€384 million) and 19% of the gross profit (€239 million).

The importance of each region for each MS is briefly presented below and in Figures 4.1 to 4.6.

The dependency of Member States on fishing in the Mediterranean and Black Sea

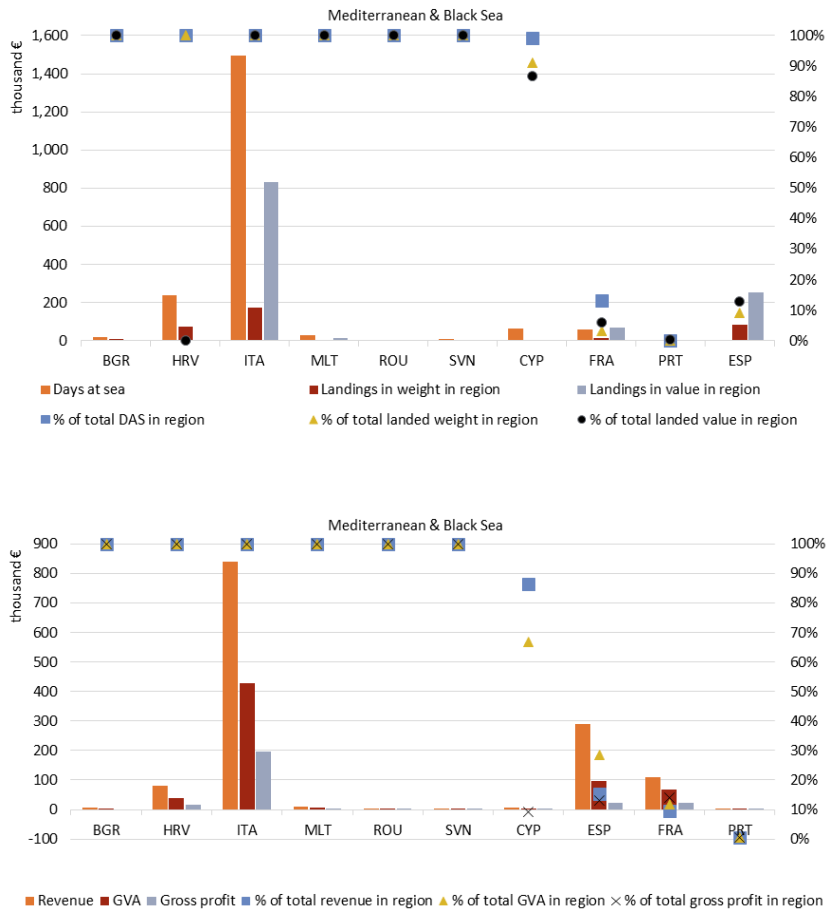
Most countries around the Mediterranean & Black Sea were highly dependent (i.e. 100% fishing activity) on this region for their fishing activities, with the exception of France and Spain and to a

¹ A significant portion of the North Atlantic fleet (n = 1,619 vessels) could not be disaggregated to a region (undetermined) due to insufficient data. Due to missing information, a further 2,000 tonnes and €9 million in landings could not be allocated to any region (NONE).

lesser extent Cyprus, which showed some activity (1% of effort, 9% landed weight, 13% of landed value) in non-EU Mediterranean waters.

Spain did not provide effort data and hence could only be partially assessed in the region. Some data submitted by Bulgaria, Cyprus and Malta were considered as questionable and should be considered with caution. On the other hand, only a limited number of Portuguese vessels (n=2) operate in the Mediterranean region and hence this region is not important for the Portuguese national fleet.

Italy was the major player in the Mediterranean in terms of landed weight and value of landings, generating 48% of the landed weight, followed by Spain (23%), Croatia (21% in weight), in the region. In terms of revenue, Italy remained the most important, generating 62% of the total revenue, followed by Spain (22%), France (8%) and Croatia (6%) (Figure 4.1).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.1 Importance of Mediterranean & Black Sea for Member States' fisheries in terms of effort (days at sea), landings (weight and value) and performance indicators: revenue, GVA and gross profit.

Dependency of Member States on fishing in the Baltic Sea

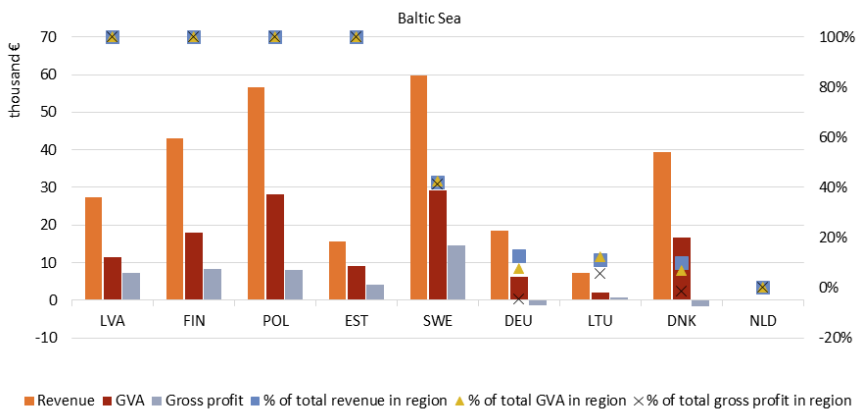
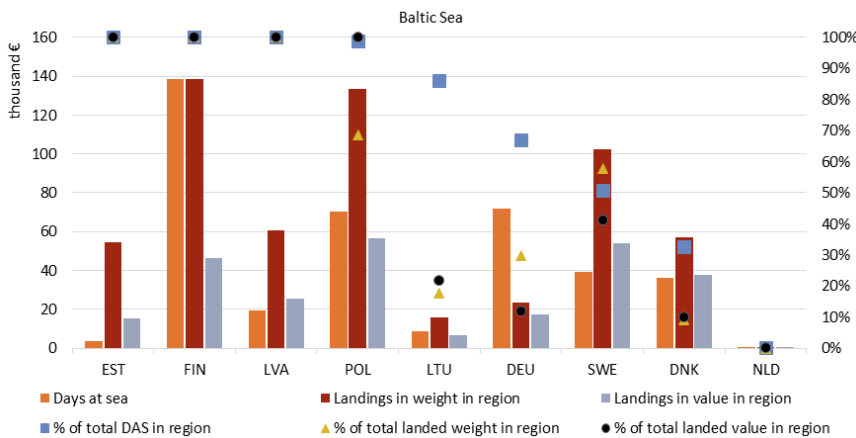
Contrary to the Mediterranean & Black Sea region, where most fishing fleets do not operate in other regions, there was some exchange between the North Atlantic and the North Sea and between the North Sea and the Baltic, in particular for Sweden, Lithuania, Germany, Denmark, the Netherlands, the UK, France and Belgium. According to the data provided, other MS fleets, such as Estonia, Finland and Latvia, depend entirely on the Baltic Sea². However, while this may be the case for Finland, it is not for the remaining MS fleets. Estonia and Latvia only provided data on their

² Data not provided on the Estonian and Latvian distant water fleets

Baltic Sea fleets in their DCF submissions. Hence, parts of these national fleets (DWF) are missing entirely from the analyses.

The most active MS fleets in the Baltic in terms of days at sea were Finland, deploying 36% of the total days at sea, Germany 19%, Poland 18%, Sweden 10% and Denmark 9%. Evidently, landings in terms of weight and value were also important for these countries. For Sweden, 58% of total landings in terms of weight are taken in the Baltic while in terms of landings value, the figure is 41%. Major players in terms of revenue were the Swedish (22% of the total revenue generated in the region), Polish (21%), Finnish (16%) and Danish (15%) fleets (Figure 4.2).

Energy costs as a percentage of revenue were found to be proportionally higher for Finland and Lithuania. In Finland, pelagic trawlers dominate the national fleet landings, in weight and value; accounting for over 90% of landings weight but under 80% of landings value. Prices of pelagic species are low resulting in lower value of landings and leading to a high share of energy costs to landings at the national level.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.2 Importance of the Baltic Sea for Member States' fisheries in terms of effort (days at sea), landings (weight and value) and performance indicators: revenue, GVA and gross profit.

Dependency of Member States on fishing in the Northeast Atlantic

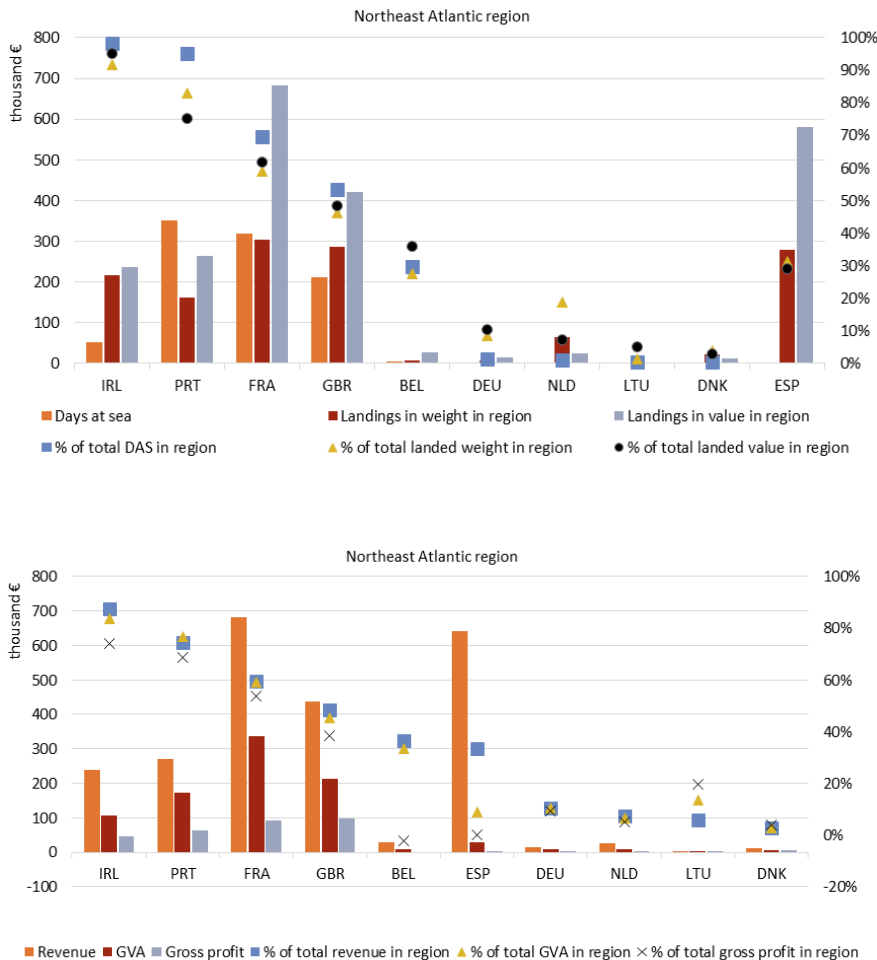
The Northeast Atlantic situation is represented in Figure 4.3. Again, only incomplete data was available for Spain. Furthermore, for certain German and Lithuanian fleet segments active in the region, data may be incomplete due to confidentiality issues.

The most active MS fleets in terms of days at sea were Portugal (37% of total), followed by France (34%) and the UK (22%). In terms of landings, the French (22.5%), UK (21.2%) and Spanish (20.7%) fleets are the major and equal players, while in terms of landed value the French fleet tops at 30% of the total landed value in the region, followed by the Spanish fleet with 25.6% and UK fleet with only 18.5%.

The Irish fleet is highly dependent on the NE Atlantic, with 98% of effort deployed, 92% of landed weight and 95% of landed value originating from the region.

The Portuguese fleet is also very dependent on the region for its fishing activity: 95% in effort, 83% in landings weight and 75% in landings value.

Landings in weight and value were also important for the other MS fleets: over 30-40% of total landings for Spain, France and the UK. This is not very surprising as these countries spatially enclose the North Atlantic. In terms of value of landings, the region is also important for the Belgian fleet (36%). The latter fleet targets mainly sole and anglerfish, which are high-valued species. Energy costs as a percentage of revenue were highest for Belgian and Dutch fleets, which may be related to the fact that large beam trawlers are used to target flatfish and other demersal fish and Dutch pelagic trawlers were operating in that area.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.3 Importance of the NE Atlantic region for Member States' fisheries in terms of effort (days at sea), landings (weight and value) and performance indicators: revenue, GVA and gross profit.

Dependency of Member States on fishing in the North Sea

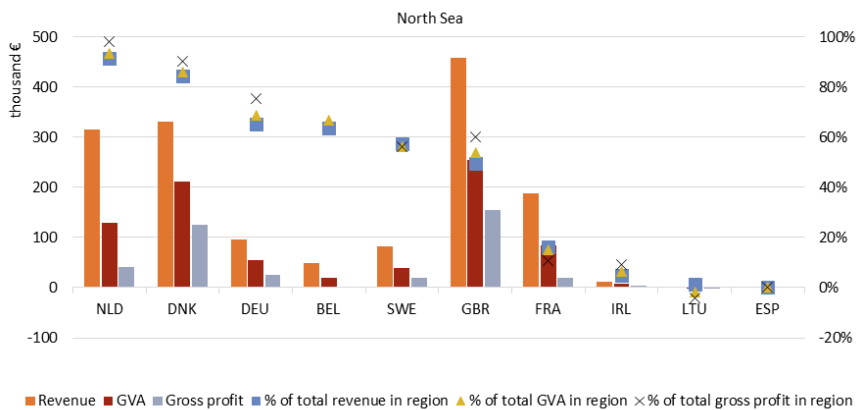
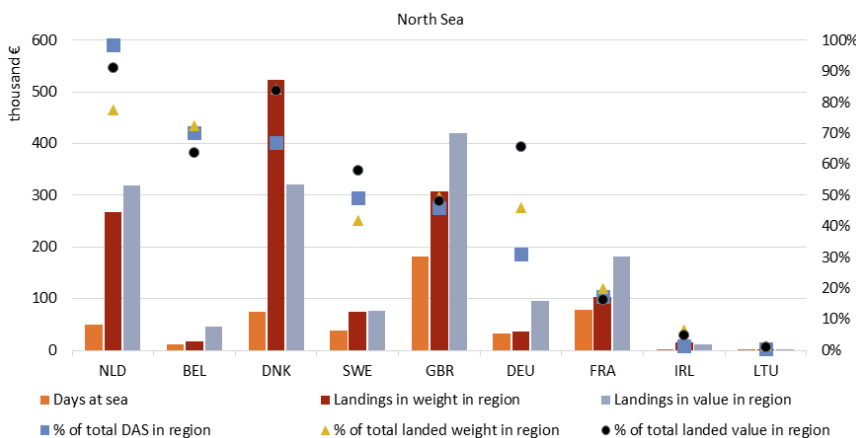
The situation in the North Sea is represented in Figure 4.4. Data is again incomplete for Spain.

The Dutch fisheries were very active in the North Sea, spending most of their time in this region: 99% of the fleets' days at sea. Belgium (70%) and Denmark (67%) spent over half of their days at sea in the North Sea, making them very dependent on this region, while Sweden spent close to 50%.

Based on the value of landings, the Netherlands (91%), Denmark (84%), Germany (66%), Belgium (64%) and Sweden (58%) rely heavily on the North Sea region. These MS fleets target high value species such as sole (Netherlands, Belgium and Germany), common shrimp (Netherlands, Germany, Denmark and Belgium) and Norway lobster (Denmark, Netherlands, Germany and to some extent

Belgium). In terms of landed weight, Denmark caught 84% of their landings in the North Sea, followed by the Netherlands (78%) and Belgium (73%). The pelagic fisheries influence these percentages. For example, the Netherlands target a significant part of their (horse and jack) mackerel and herring outside the North Sea, which lowers the percentage of landed weight compared to the proportion of effort (days at sea). Denmark on the other hand targeted sandeel and herring mainly in the North Sea area, which made it the most important player based on landed weight after the Dutch fleet.

Not considering Lithuania, representing only a minor part, the Dutch and Belgian fleet had the highest proportional energy costs compared to the other Member States in this region. These two member states target more or less the same (flat) fish species. The traditional beam trawl was used by the Belgian fleet where the pulse technique was mainly used by the Dutch in this region. The pulse technique significantly reduces energy costs and may explain the lower percentage of energy costs for the Netherlands (not shown in graph).



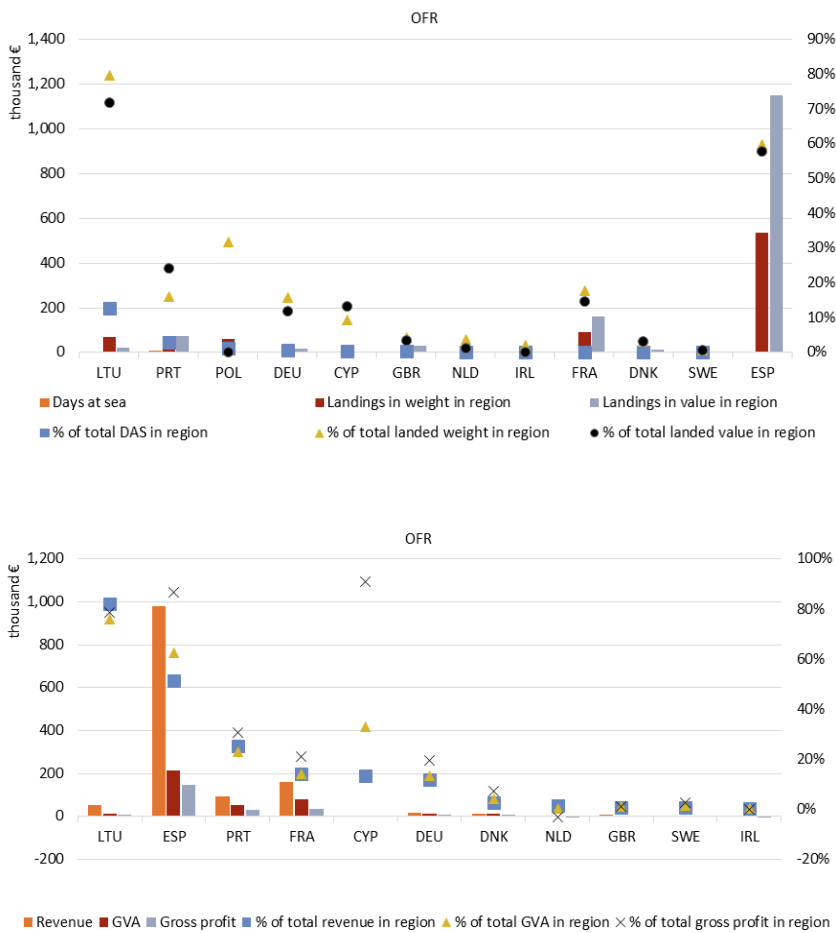
Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.4 Importance of the North Sea for Member States' fisheries in terms of effort (days at sea), landings (weight and value) and performance indicators: revenue, GVA and gross profit.

Dependency of Member States on fishing in Other Fishing Regions

The situation in Other fishing regions (OFR) is represented in Figure 4.5. The OFR was further disaggregated into the following regions: Eastern Arctic, Northwest Atlantic, Outermost regions and other regions, which are displayed in Figure 4.6. Data available for fleets operating in these regions are oftentimes incomplete due to confidentiality issues and missing data. In several situations, the activity level is also very low and results should be considered with caution.

The main fishing nations in the OFR as a whole, include Lithuania, Spain, Poland, France, Portugal, and to a lesser extent, Germany.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

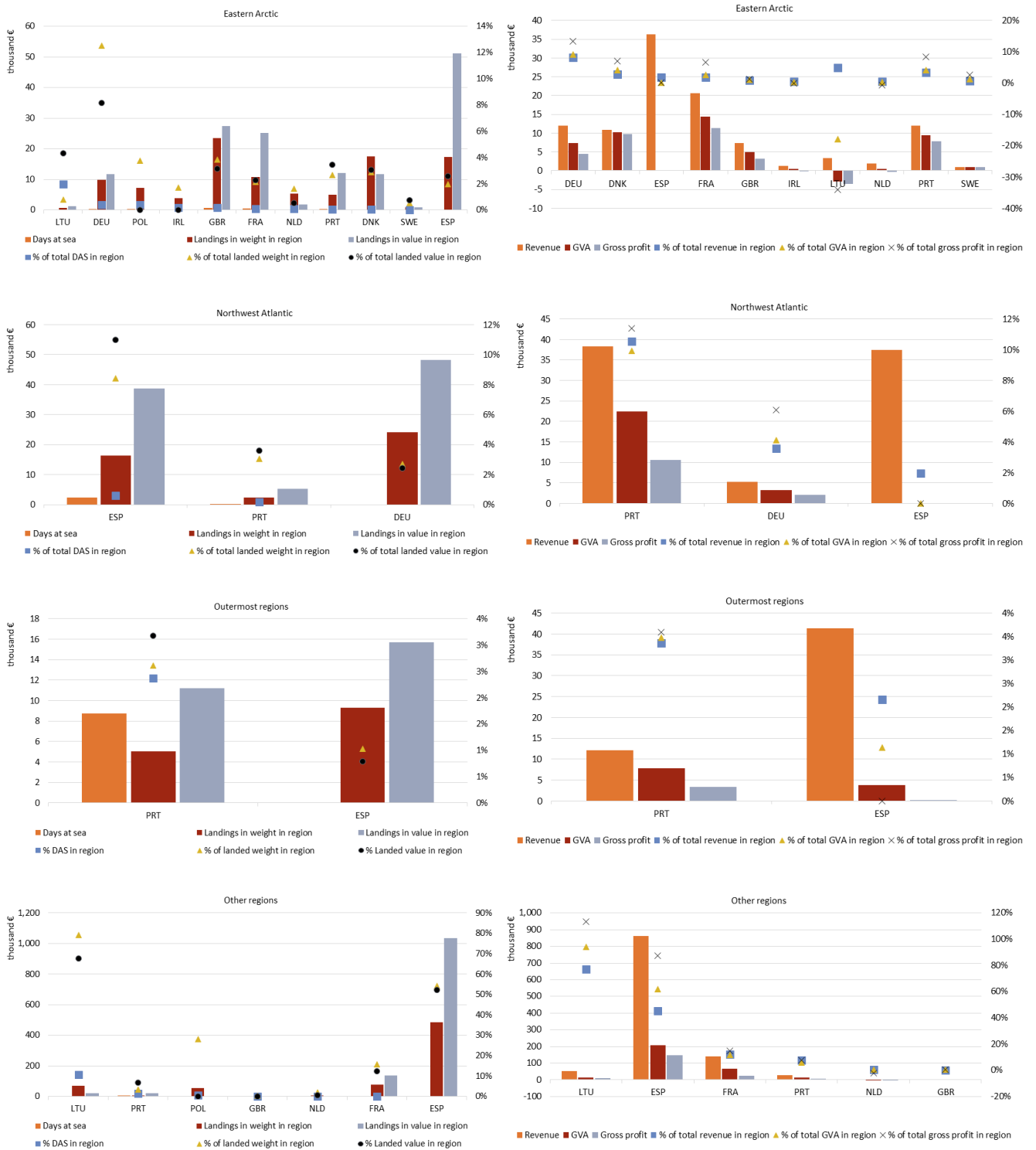
Figure 4.5 Importance of the OFR for Member States' fisheries in terms of effort (days at sea), landings (weight and value) and performance indicators: revenue, GVA and gross profit.

The major players in the NW Atlantic are Portugal, Spain and Germany. These fleets target Atlantic redfish, blue shark, Greenland halibut and Atlantic cod.

Germany is also a major player in the Eastern Arctic region although not very dependent on it in terms landings and revenue. Activity level is generally low for all MS fleets. The region contributes 10% or less to MS fleets' revenue. These fleets target mainly Atlantic cod and herring.

In the outermost regions, the main fishing nations are Spain and Portugal but clearly data on the French fleet operating in their outermost regions is missing. The Autonomous region of the Azores (Portugal), also considered an EU outermost region, is not included in the OFR region as it within the NE Atlantic region. Activity levels for the Spanish and Portuguese fleets are low and production in the region account less than 3% to the MS fleets overall landings. These fleets mainly target tuna species and black scabbardfish.

Lithuanian is a major player in other regions, with landings in weight and in value obtained from the region reaching 79% and 68%, respectively, of the MS fleets overall production. Spain is other major player, with landings from the region contributing around 54% to the total landings of the MS fleet. Although data is limited for the Polish fleet, around 28% of the landed value of the MS fleet is taken from these regions. The main species targets in other regions include tuna species (skipjack, yellowfin and bigeye) as well as blue shark, swordfish and Argentine hake.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.6 Importance of the Eastern Arctic, Northwest Atlantic, Outermost regions and Other regions for Member States' fisheries in terms of effort (days at sea), landings (weight and value) and economic performance.

4.1. EU Baltic Sea Fishing Fleet

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

Eight EU Member States were involved in Baltic Sea fisheries in 2013: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden (Figure 4.7).

Socio-economic results for the Baltic Sea fleet exclude the German pelagic trawl segment due to confidentiality issues. Effort and fuel consumption data were not available for two Estonian coastal segments (PG VL0010 and VL1012). Although some activity by a Dutch vessel was reported in the region, it has been excluded from further analysis due to the reduced amount.

For simplicity from this point on we will refer to the EU vessels operating in the aforementioned ICES areas as the EU Baltic Sea fleet.

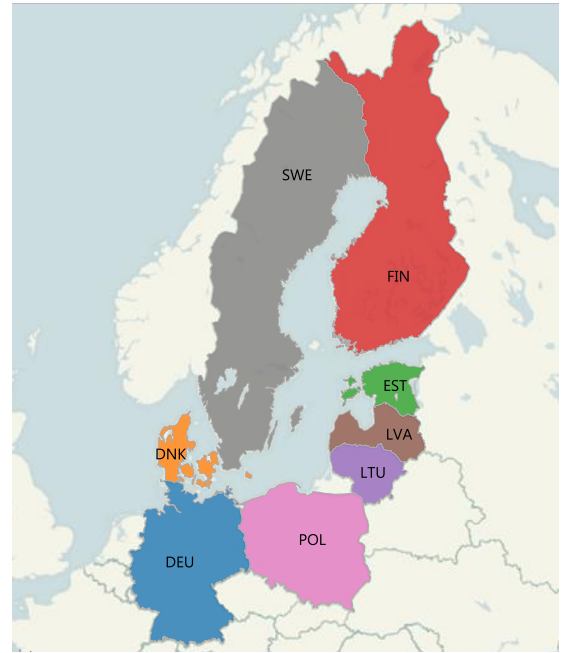


Figure 4.7 - Regional map, highlighting the Baltic Sea MS states.

Regional Fisheries management

The European Commission (EC) prepares proposals for measures and instruments for resource conservation including fishing quotas and fishing effort limitations after a certain consultative process. TACs (Total Allowable Catches) and quotas are annually defined for commercially important fish stocks in the Baltic. There are currently 5 species/ stocks under TAC management in the Baltic Sea: (1) Cod; (2) Herring; (3) Sprat; (4) Atlantic salmon and (5) Plaice (Table 4.2).

Table 4.2 - TAC for most important Baltic species in 2012-2014

Species	Area	2012	2013	2014	2013/ 12	2014/ 13
Atlantic cod	Sub Divisions 22 to 24	21,300	20,043	17,037	-6%	-15%
	Sub Divisions 25-32	67,850	61,565	65,934	-9%	7%
Atlantic cod Total		89,150	81,608	82,971	-8%	2%
European sprat	IIIb),c),d)	225,237	249,978	239,979	11%	-4%
European sprat Total		225,237	249,978	239,979	11%	-4%
Herring	Sub Divisions 25-27, 28.2, 29 and 32	78,417	90,180	112,725	15%	25%
	Sub Divisions 22 to 24	20,900	25,800	19,754	23%	-23%
	Sub-divisions 30 and 31	106,000	106,000	137,800	0%	30%
	Gulf of Riga	30,576	30,576	30,720	0%	0%
Herring Total		235,893	252,556	300,999	7%	19%

Source: FIDES

Cod is the only fish species for which a multi-annual plan exists (Council Regulation (EC) No 1098/2007). The plan defines targets for stock recovery (in terms of cod mortality for Eastern and Western cod stocks) and also maximum fishing effort and licensing system for vessels fishing cod in the Baltic. Compared to 2012, available cod quota decreased in 2013 (by 8%) while effort limitation remained stable (163 fishing days for Western cod (ICES subdivisions 22-24) and 160 fishing days for Eastern cod (ICES subdivision 25-28)).

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

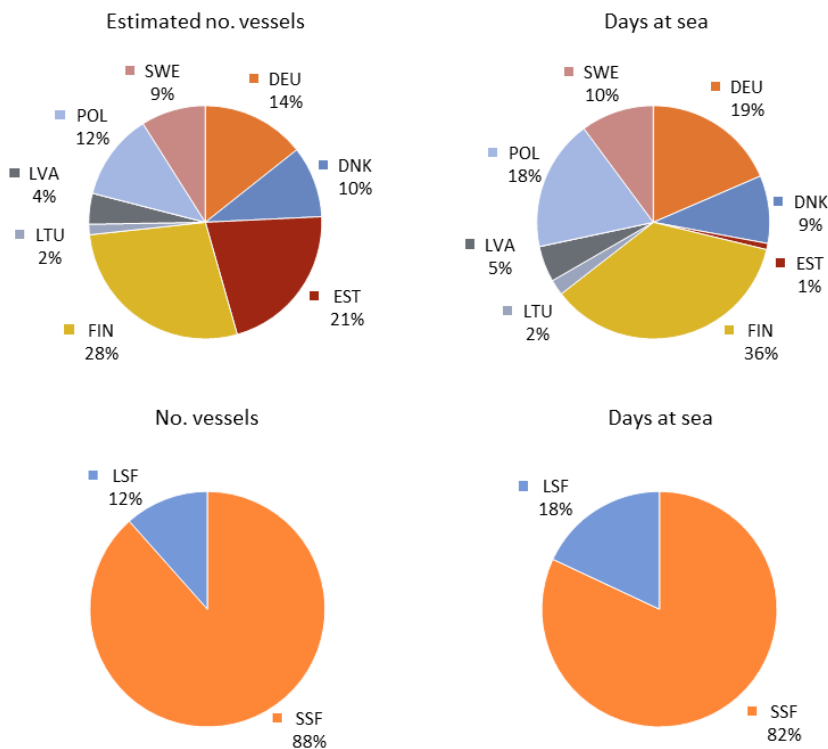
technical regulatory measures, such as mesh sizes, minimum landing sizes, by-catch limitations as well as periods and areas closed for fishing. Ban on driftnet fisheries was set after a three year transitional period in 2008. The Baltic Sea coastal and inland fisheries are mainly regulated by each MS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

Fleet structure and activity

According to the DCF data submitted by region, the MS fleets operating in the Baltic Sea collectively numbered 6,256 active vessels in 2013. The Finnish fleet comprised the largest fleet in number (1,733 vessels) and engine power (104,000 kW) while the Polish Baltic fleet was the largest in gross tonnage (15,600 GT) (Figure 4.8).

The latest official DCF data suggests that the EU Baltic Sea fleet spent over 384,000 days at sea in 2013, 36% of which were Finnish fishing days. The figure provided for Days at sea, as all other effort variables, for Estonia excludes two coastal, small scale segments, numbering 1,300 vessels in 2013. Collectively, vessels from Finland, Germany and Poland together accounted for around 73% of the total days at sea deployed (mostly generated by small scale vessels).

The weight and value of landings generated by the fleet amounted to approximately 586,000 tonnes and €260 million, respectively.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.8 - EU Baltic Sea fleet capacity and effort by MS and fishing activity: 2013.

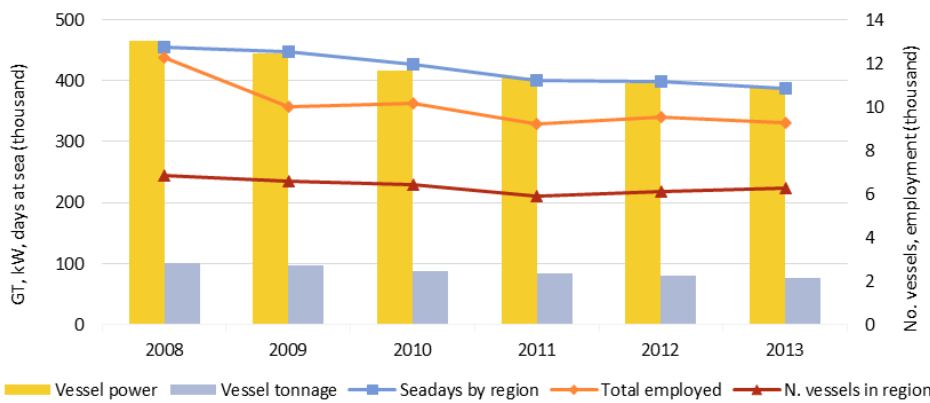
The estimated number of vessels operating in the Baltic Sea during the period 2008-2013 decreased 8%, while vessel tonnage and engine power saw a reduction of 16% and 23% respectively. The highest capacity reduction took place in the Latvian (-40%) and Swedish (-37%) fleets (Figure 4.9).

Reduction in capacity was mainly caused by a decommissioning program implemented in Latvia (after EU accession) and by an ITQ system introduced in Swedish pelagic fisheries in 2009 and entry restrictions on the Swedish Eel fishery. Effort deployed more or less followed the fleet capacity reduction. In 2013 total number of days at sea deployed by Baltic Sea fleets was 15% less compared to 2008. The highest effort reduction again took place in Latvian and Swedish Baltic Sea fleet (-56% and -24%).

In terms of landed weight, Finland (138,400 tonnes), Poland (133,600 tonnes) and Sweden (102,500 tonnes) were the leading MS fleets. Poland (€56.6 million), Sweden (€54 million), Finland (€46.6) and Denmark (€37.9 million), collectively accounted for around 75% of the total value of landings in the Baltic Sea in 2013 (Figure 4.10).

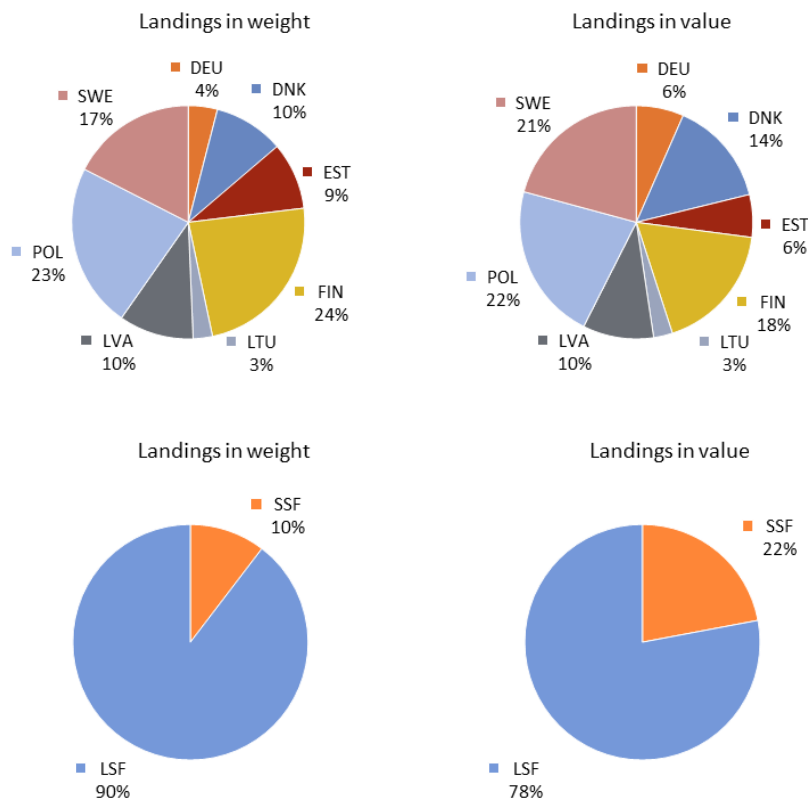
The small-scale fleet (SSF) accounted for 82% of the days at sea, while large-scale vessels (LSF) generated by far the highest landed weight, with 90% of the total. The difference between the two fishing activities was slightly less for landed value, with LSF accounting for 78% of the total and SSF vessels 22%, reflecting the lower value of pelagic species that are mainly targeted by the LSF (Figure 4.10).

While SSF covered 88% of the number of vessels, employment estimated for this group amounted to 2,301 FTE in 2013, representing around 54% of the total FTEs in the Baltic Sea fisheries, indicating the predominate part-time nature of this fleet segment.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

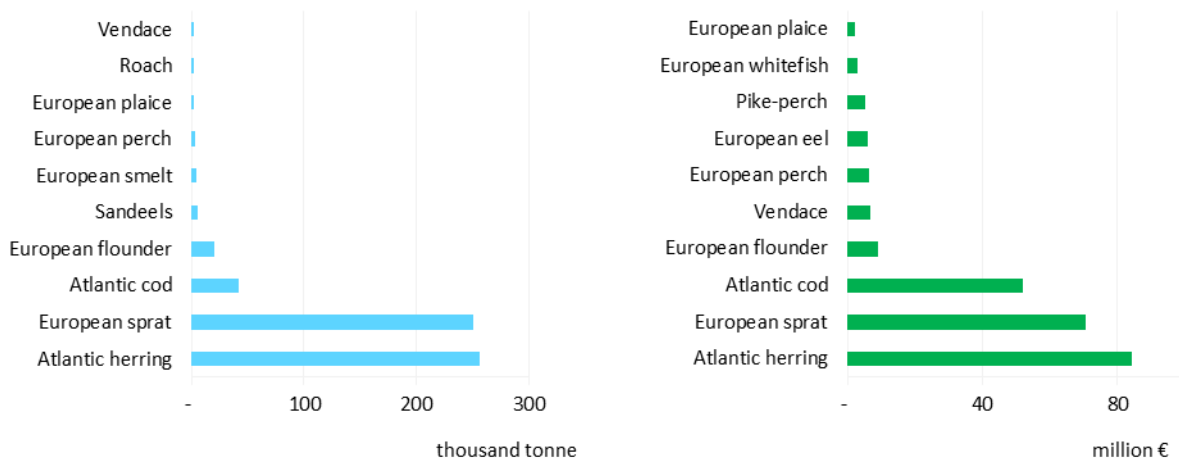
Figure 4.9 - Baltic Sea fleet main capacity, employment and effort trends for the period 2008-2013.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

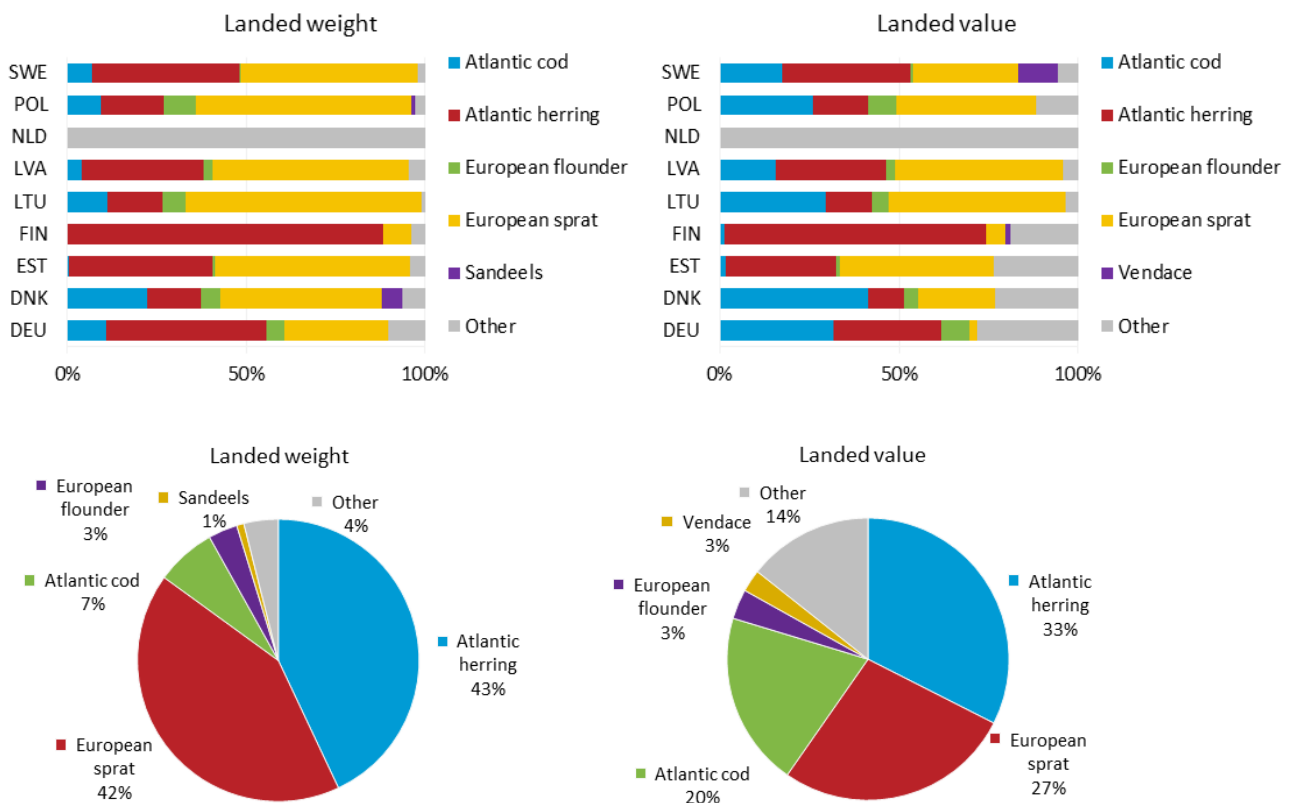
Figure 4.10 - EU Baltic Sea fleet landings and revenue by MS and fishing activity: 2013.

In 2013, the most important species landed in weight included herring (257,000 tonnes, representing 43% of the landed weight) and sprat (251,000 tonnes, 42% of the landed weight), followed by cod (41,000 tonnes) and then flounder (20,000 tonnes). Atlantic herring landings generated the highest value in 2013 (€84 million, representing 33% of the landed value), followed by European sprat (€71 million, 27% of the landed value) and then cod (€52 million) (Figure 4.11; Figure 4.12).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

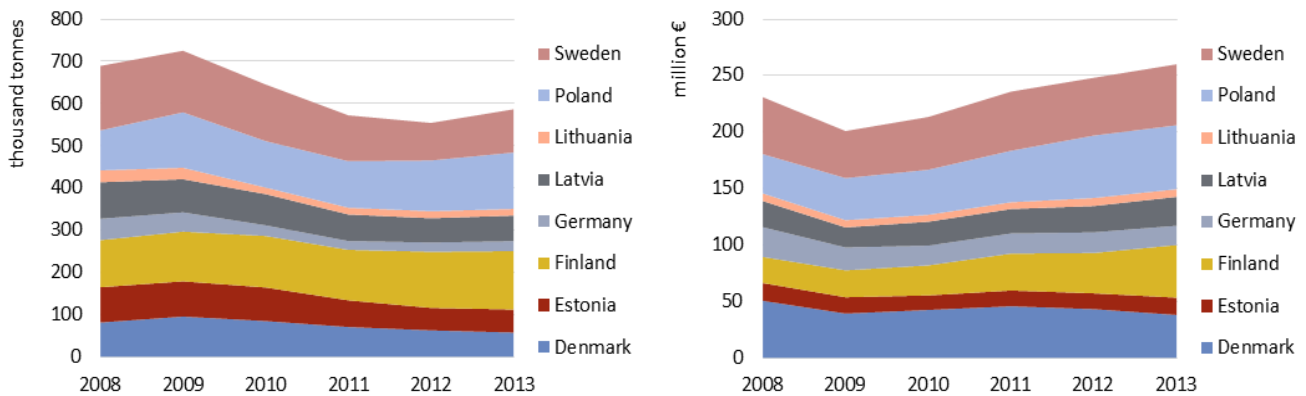
Figure 4.11 Top 10 species in terms of weight and value landed for MSfleets operating in the Baltic Sea, 2013



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.12 Top 5 species landed in terms of weight and value as a proportion of the total landings in the region by MS fleets operating in the Baltic Sea, 2013

Overall, the Baltic fleet saw declines in landed weight over the period 2009-2012, with a slight increase in 2013. On the other hand, landings in value have increased steadily since 2009 (Figure 4.13).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2014)).

Figure 4.13 Landings, in weight and value, by Baltic Sea MS fleet over the period 2008-2013.

Sprat landings, in weight and value, increased 15% and 29%, respectively, from 2012 to 2013. Baltic sprat quota (subdivisions 22-32) increased by 10% between 2012 and 2013, causing the increase in landed weight. Although the total landed weight of Baltic herring increased 7% between 2012 and 2013, value increased 19% over the same period. Cod landings decreased significantly in both weight and value (35% and 33%, respectively) between 2012 and 2013. Since the TAC decreased by only 8% during the same period, the deterioration can be a result of poor physical condition (skinny fish) of Baltic cod, negatively influencing the market value. As a consequence, the Eastern Baltic (ICES 25-32) cod quota was significantly underutilised in 2013. The SSF showed a high variety of targeted species and species/stocks under quota management in the Baltic Sea, such as cod, herring and salmon. Other targeted species included perch, eel (also under the management plan), pike-perch, flounder and whitefish.

Socio-economic performance

Tables 4.3 to 4.6 contain a summary of economic performance of the Baltic Sea fleet by Member State, fishing activity and fleet segment, respectively.

Performance by Member State

The revenue (income from landings and other income) generated by the Baltic Sea fleet in 2013 was estimated at €267.5 million, 74% of which was split between four Member States – Sweden (€59.7 million), Poland (€56.6 million), Finland (€43 million) and Denmark (€39.4 million) (Table 4.3). Revenue increased 3% compared to 2012, largely driven by increased revenue in the Swedish and Estonian fleets. Significant increase in pelagic species prices (sprat +21% and herring +14%) was the main reason why revenue increased despite the unfavourable situation of the cod fisheries (as mentioned earlier).

GVA produced by the Baltic Sea fleet in 2013 was estimated at €120.6 million. After accounting for operating costs, the fleet made €39.7 million in gross profit (Table 4.2). Both GVA and gross profit increased 9% and 27%, respectively in 2013 compared to 2012. The reason behind the increase was lower fuel consumption (-6%) and fuel costs (-10%), as well as a slight revenue increase. Several measures were undertaken by the EC in order to reduce the effects of the fuel crisis on EU fisheries in 2008 (e.g. investments in more fuel efficient on board equipment)³, which may have contributed to the observed fuel savings but main reason is decreased effort.

While overall the Baltic fleet was profitable, two MS fleets, Germany and Denmark, suffered gross losses in 2013 (Table 4.2). Gross losses for the German and Danish Baltic fleets were €1.45 million and €1.68 million, respectively. The Danish fleet is the only one in the region that has suffered long

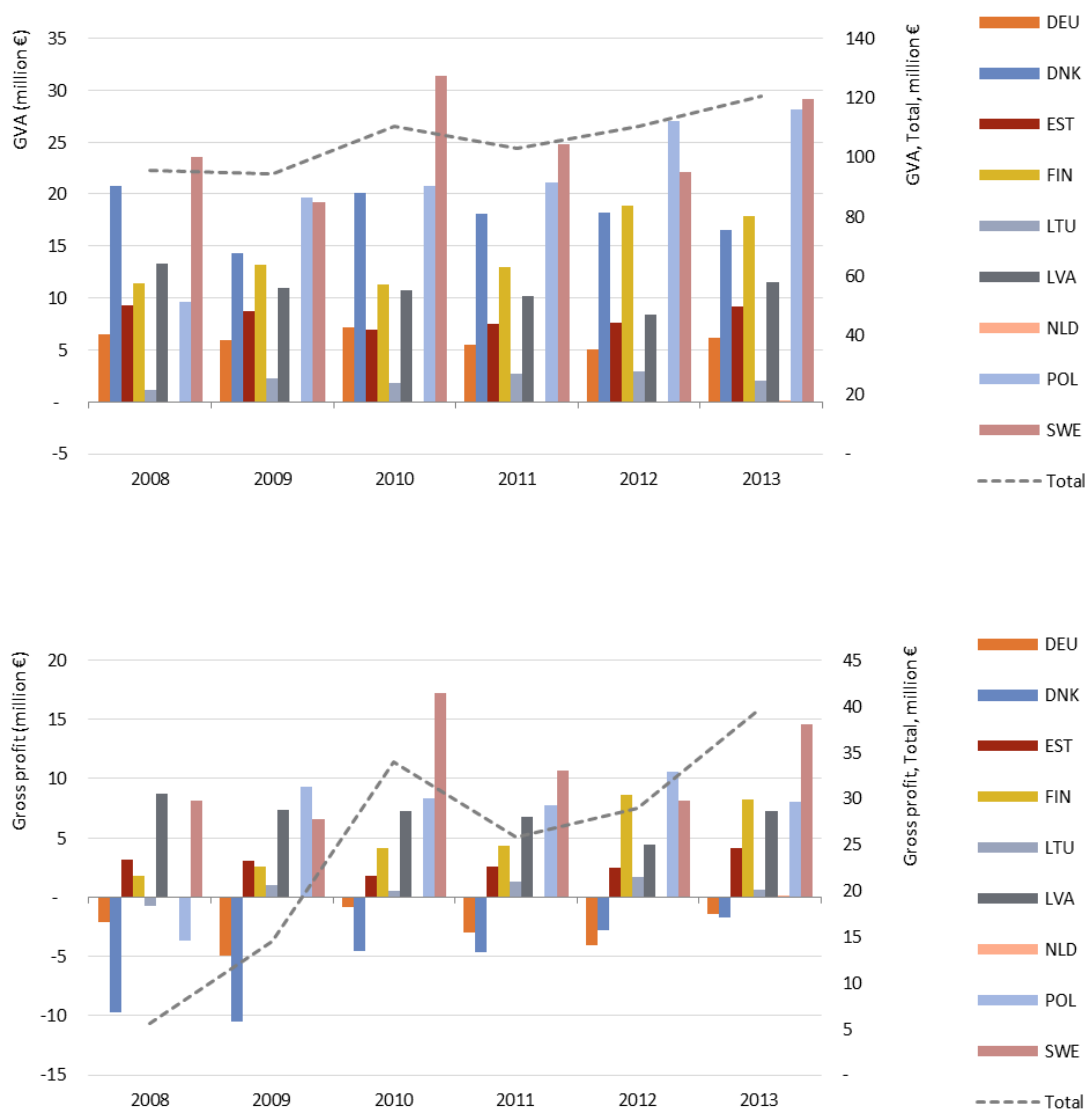
³ EU package to tackle the fuel crisis in the fisheries sector. MEMO/08/415 Brussels, 17 June 2008.

² http://www.rktl.fi/english/game/seals/seal_numbers/ (2015.06.11)

term (2008-2013) losses, while negative profits have been reported in some years for the German MS fleet. Gross profits for remaining Baltic MS fleets have been mostly positive over the analysed period, and particularly high for the Swedish and Polish fleets.

Trends in GVA, gross profit and net profit for the Baltic Sea fleet and by Member State are presented in Figures 4.14. Overall, GVA and gross profit generated by the Baltic Sea fleet have increased steadily since 2011.

As mentioned above, the major players in the region are Sweden and Poland. Poland has had a steady performance over the period, with revenue and GVA increasing while profits have been slightly more volatile, yet positive over the last 5 years. The Swedish fleet's performance has been less stable, but profitable throughout the period analysed.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2014)).

Figure 4.14 Trends in GVA and gross profit for the Baltic Sea region 2008-2013 (by MS).

Performance by fishing activity

Revenue generated by the Baltic small-scale (SSF) and large-scale (LSF) fleets in 2013 was estimated at €61.4 and €206 million, respectively. Revenue remained rather stable for the LSF but showed a slight decrease for the SSF compared to 2012. GVA produced by the Baltic LSF and SSF was estimated at €92 million and €28.5 million in 2013, respectively. Compared to 2012 the GVA increased for the LSF but decreased for the SSF in 2013 (Table 4.4).

Overall, the Baltic LSF segment was profitable in 2013, generating €41 million in gross profit, an improvement on 2012. In contrast to 2012, the Baltic SSF suffered gross losses (€1 million); in 2013 there were three MS small-scale fleets (Danish, Swedish and German) that generated losses (Table 4.5).

In sum, the performance of the Baltic LSF continued to improve in 2013 while the SSF deteriorated.

Growing seal populations continues to be a problem for the Baltic Sea fisheries, mainly affecting coastal fisheries. Increasing seal populations have augmented damages caused to fishing and fish farming. The most common type of damage due to seals is loss of catch (eaten and damaged fish) and broken traps. Another emerging problem related to growing Baltic seal populations is the increase of infection in fish (mainly cod) with parasites, for which seals are final hosts. Detection and removal of infected fish or flesh during the filleting process is also affecting the fish processing industry through higher labour and energy costs, as well as raw material waste.

Performance by fleet segment

In total, 56 MS fleet segments were identified operating in the Baltic Sea in 2013. Table 4.6 displays the basic capacity, effort and socio-economic indicators estimated for the top 35 MS fleet segments, based on the value of revenue. These 35 segments represented 89% of the effort deployed (356,000 days at sea), 90% of the landed weight (554,000 tonnes) and 89% of the revenue (€244 million) generated by the Baltic Sea fleet in 2013.

At fleet segment level, the Swedish demersal trawl and seine 24-40m segment operating in the Baltic region generated the highest revenue in 2013 (€33 million), followed by the Finnish pelagic trawl 24-40m segment (€25 million) and the Polish pelagic trawl 24-40m segment (€24 million). The most important fleets in terms of GVA were the Swedish demersal trawlers 24-40m and the Polish and Latvian pelagic trawlers 24-40m.

In relative terms, the Latvian passive gear segment under 10m generated the highest profit margins, followed by the Swedish demersal trawlers 10-12m and the Latvian fixed netters 24-40m. The Swedish demersal trawler 10-12m segment was estimated to have generated the highest GVA per FTE in 2013 (€237,000).

The Danish fleet in the Baltic Sea is dominated by vessels below 12m and the proportion of the fishery carried out by these small vessels is much higher than for the fishery in the North Sea. This is the main reason why the Danish fleet in the Baltic shows negative gross and net profits. The large scale fleet in the same area generates both positive gross and net profits.

One important reason for the negative gross profit of the smaller vessel is the calculation of the wage costs. For the fleet segments below 12 meters, and to a certain extent also the group of vessels in the length group 12-18m, the calculated remuneration for labour may be overestimated and represents such a high proportion of the catch value that the gross profit becomes negative. The fishing activities of these small vessels is managed and operated by the owner possibly periodically supplemented with an assistant. In these cases many vessel owners may settle with hourly earnings below the calculated wage level, hence the “calculated” negative gross profit does not lead to insolvency.

In addition to the above, the Danish fishery in the Baltic Sea has a large dependency on cod, and for this species the prices have been lower than for the North Sea.

Table 4.3 EU Baltic Sea fleet structure and economic performance estimates by MS in 2013

MS	Estimated no. vessels in region	Vessel power	Vessel tonnage	Estimated total employed	Estimated FTE	Days at sea in region	Estimated energy consumption	Landed weight by region	Landings in value	Estimated revenue	Estimated GVA	GVA to Revenue	GVA per FTE	Estimated Gross profit	Gross profit margin
		(kW)	(tonne)	#	#	days	K litres	tonne	(thousand €)	(thousand €)	%	(thousand €)	%		
DEU	897	34,896	5,809	880	664	71,799	4,343	23,642	17,130	18,577	6,153	33.3	9	1,450	7.8
DNK	619	49,881	12,168	406	304	36,412	9,866	56,990	37,920	39,369	16,565	42.1	54	1,684	4.3
EST	1,336	29,631	5,951	2,046	514	3,315*	2,202*	54,557	15,371	15,563	9,147	58.8	18	4,108	26.4
FIN	1,733	104,330	12,251	1,817	356	138,458	15,546	138,388	46,562	43,040	17,868	41.5	50	8,230	19.1
LTU	91	9,251	3,967	405	195	8,452	3,018	15,728	6,839	7,336	2,049	27.9	11	613	8.4
LVA	267	20,673	7,681	680	415	19,364	5,284	60,850	25,617	27,249	11,522	42.3	28	7,280	26.7
POL	752	64,203	15,584	2,213	1,406	70,515	19,277	133,563	56,556	56,632	28,151	49.7	20	8,075	14.3
SWE	561	76,623	14,117	840	401	39,343	19,203	102,494	54,044	59,711	29,187	48.9	73	14,564	24.4

* excludes two small scale fleet segments (PG VL0010 and PG VL1012)

Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Table 4.4 EU Baltic Sea fleet structure and economic performance estimates by fishing activity in 2013

		Estimated no. vessels in region	Vessel power (kW)	Vessel tonnage (GT)	Total employed (number)	Estimated FTE	Seadays by region (day)	Energy consumption (K litre)	Landings in weight (tonne)	Landings in value (thousand €)	Estimated Revenue (thousand €)	Estimated GVA (thousand €)	GVA to Revenue (%)	GVA per FTE (thousand €)	Estimated Gross profit (thousand €)	Gross profit margin (%)
Baltic Sea	SSF	5,533	192,614	15,179	6,763	2,301	317,765	8,748	60,894	57,298	61,424	28,478	46.4	12	1,060	1.7
Baltic Sea	LSF	723	196,876	62,349	2,524	1,955	69,894	69,993	525,320	202,745	206,057	92,165	44.8	47	40,796	19.8

Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Table 4.5 - EU Baltic Sea fleet structure and economic performance estimates by fishing activity and Member State in 2013

			Estimated no. vessels in region	Vessel power (kW)	Vessel tonnage (GT)	Total employed (number)	Estimated FTE	Seadays by region (day)	Energy consumption (K litre)	Landings in weight (tonne)	Landings in value (thousand €)	Estimated Revenue (thousand €)	Estimated GVA (thousand €)	GVA to Revenue (%)	GVA per FTE (thousand €)	Estimated Gross profit (thousand €)	Gross profit margin (%)
Baltic Sea	SSF	Denmark	480	19,135	1,826	169	135	25,153	1,680	5,178	10,491	11,866	4,680	39.4	35	3,069	25.9
	SSF	Estonia	1,300	19,564	1,993	1,865	339			9,614	5,589	5,781	3,353	58.0	10	1,791	31.0
	SSF	Finland	1,674	75,569	3,922	1,674	258	132,868	1,568	17,906	12,404	12,482	6,134	49.1	24	1,833	14.7
	SSF	Germany	821	21,538	2,163	765	592	65,698	1,049	8,087.5	8,647.3	8,974.7	2,838	31.6	5	250	2.8
	SSF	Latvia	202	2,158	345	327	229	11,348	19	3,562	1,727	1,734	1,681	96.9	7	1,622	93.6
	SSF	Lithuania	66	1,679	185	140	39	5,654	120	606	598	582	375	64.4	10	199	34.3
	SSF	UK	553	20,928	2,606	1,290	515	48,142	2,032	12,966	11,875	11,914	7,190	60.4	14	516	4.3
	SSF	Sweden	437	32,042	2,139	533	193	28,902	2,278	2,975	5,967	8,090	2,228	27.5	12	3,704	45.8
	LSF	Denmark	139	30,746	10,342	236	169	11,259	8,186	51,812	27,429	27,503	11,885	43.2	70	1,385	5.0
	LSF	Estonia	36	10,067	3,958	181	175	3,315	2,202	44,943	9,782	9,782	5,794	59.2	33	2,316	23.7
	LSF	Finland	59	28,761	8,329	143	98	5,590	13,978	120,482	34,158	30,558	11,734	38.4	119	6,397	20.9
	LSF	Germany	76	13,358	3,646	115	72	6,101	3,294	15,555	8,483	9,602	3,315	34.8	46	1,200	12.6
	LSF	Latvia	65	18,515	7,336	353	186	8,016	5,264	57,289	23,890	25,514	9,841	38.6	53	5,657	22.2
	LSF	Lithuania	25	7,572	3,782	265	156	2,798	2,898	15,122	6,241	6,754	1,674	24.8	11	414	6.1
	LSF	Netherlands		2	1	0	0	1	1	2	4	4	2	53.9	116	1	23.2
	LSF	UK	199	43,274	12,978	923	891	22,373	17,245	120,597	44,682	44,718	20,961	46.9	24	7,559	16.9
LSF	Sweden		44,581	11,978	307	208	10,441	16,925	99,519	48,077	51,621	26,959	52.2	130	18,268	35.4	

Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

* Estimates for the EU Baltic Sea SSF excludes two Estonian coastal fleet segments PG VL0010 and PG VL1012

* German pelagic trawlers excluded

Table 4.6 - EU Baltic Sea fleet structure and economic performance estimates of the top 35 MS Fleet Segments in terms of revenue in 2013

Fleet segment	Nofvessels	Estimated	Estimated	Estimated	Days at	As a % of	Landed	As a % of	Landed	As a % of	Estimated	Estimated	GVA to	GVA per FTE	Estimated	Gross									
	in the	total	FTE	energy	sea in		weight by		value								fleet	by region	fleet	revenue	GVA	revenue		Gross profit	profit
	region	employed	#	consumption	region		kg		€								segment	€	segment	€	€	%	€	€	%
SWE AREA27 DTS VL2440°	29	119.1	93.3	11,782,171	2,961	39%	79,988,436	54%	30,428,172	41%	33,141,436	17,849,151	53.9	191,289	13,148,194	39.7									
FIN AREA27 TM VL2440°	21	96.0	69.9	13,352,212	3,314	96%	96,630,319	100%	27,305,677	99%	25,278,131	8,153,547	32.3	116,579	4,261,001	16.9									
POL AREA27 TM VL2440°	42	268.0	268.0	9,219,407	5,067	100%	79,875,013	100%	24,095,007	100%	24,086,397	11,826,436	49.1	44,128	3,292,926	13.7									
LVA AREA27 TM VL2440	46	276.0	134.0	3,361,523	5,014	100%	46,935,968	100%	19,241,367	99%	19,271,982	8,329,282	43.2	62,159	5,506,290	28.6									
FIN AREA27 PG VL0010	1620	1620.0	247.0	1,398,064	131,574	100%	9,657,025	100%	10,065,013	99%	11,140,340	5,458,215	49.0	22,098	1,545,889	13.9									
EST AREA27 TM VL2440°	29	170.0	170.0	2,159,317	2,950	100%	44,010,904	100%	9,583,930	100%	9,583,930	5,681,056	59.3	33,418	2,292,432	23.9									
POL AREA27 DTS VL1218°	73	320.0	320.0	4,219,248	8,680	100%	16,388,294	100%	9,489,815	100%	9,499,925	4,319,130	45.5	13,497	1,655,957	17.4									
SWE AREA27 DTS VL1824°	30	77.0	67.4	3,165,222	3,398	47%	12,081,455	78%	8,420,102	43%	8,606,022	2,936,402	34.1	43,567	583,259	6.8									
POL AREA27 PG VL0010°	456	952.0	338.0	1,044,915	38,981	100%	8,452,712	100%	8,105,254	100%	8,114,207	5,448,989	67.2	16,121	564,858	7.0									
DNK AREA27 DTS VL1218	57	78.0	58.5	2,279,497	4,707	26%	11,721,760	39%	7,451,252	23%	7,912,761	3,615,452	45.7	61,834	236,167	3.0									
DNK AREA27 PGP VL0010	376	111.2	77.8	642,756	15,999	53%	2,493,178	48%	6,255,138	48%	7,276,107	3,646,782	50.1	46,856	992,495	13.6									
DEU AREA27 PG VL0010	760	715.5	551.5	779,162	59,778	100%	4,773,451	100%	6,041,981	99%	6,278,370	1,587,788	25.3	2,879	330,336	5.3									
SWE AREA27 DTS VL1218°	25	45.5	24.9	1,170,576	1,826	23%	5,419,628	84%	5,445,382	36%	5,660,111	3,490,005	61.7	140,217	2,560,687	45.2									
SWE AREA27 DFN VL0010°	337	401.0	150.3	1,379,491	23,271	61%	1,489,177	68%	4,062,000	49%	5,293,404	1,550,979	29.3	10,321	3,065,920	57.9									
POL AREA27 DTS VL1824°	32	130.0	115.0	1,801,419	3,174	100%	10,121,760	100%	5,083,340	100%	5,083,340	1,886,328	37.1	16,403	975,172	19.2									
DNK AREA27 TM VL40XX	4	17.9	12.6	1,597,439	208	7%	14,743,880	5%	4,776,451	4%	4,660,601	2,307,607	49.5	183,727	1,096,109	23.5									
POL AREA27 TM VL1824°	18	69.0	68.0	1,541,212	2,246	100%	12,704,079	100%	4,389,683	100%	4,424,553	2,195,977	49.6	32,294	1,717,793	38.8									
DNK AREA27 DTS VL1824°	21	48.4	32.3	1,376,964	1,529	14%	4,457,703	10%	4,004,084	10%	4,134,501	1,345,970	32.6	41,671	546,353	13.2									
EST AREA27 PG VL0010	1222	1545.0	217.0				2,902,535	100%	3,911,029	100%	4,077,356	2,076,440	50.9	9,569	1,017,519	25.0									
LVA AREA27 TM VL1218	11	33.0	25.0	1,297,189	1,893	100%	9,598,994	100%	3,483,337	99%	3,948,529	177,471	4.5	7,099	981,746	24.9									
POL AREA27 PG VL1012	97	338.0	177.0	987,365	9,161	100%	4,513,776	100%	3,769,277	100%	3,799,758	1,741,072	45.8	9,837	48,585	1.3									
LTU AREA27 TM VL2440°	6	76.0	34.7	1,268,903	836	100%	12,735,850	100%	4,251,337	100%	3,404,052	1,449,501	42.6	41,821	934,596	27.5									
LTU AREA27 DTS VL2440	19	189.0	120.9	1,628,716	1,962	100%	2,385,696	100%	1,989,229	100%	3,349,593	224,022	6.7	1,853	520,700	15.6									
DEU AREA27 DTS VL1824	12	34.4	20.6	966,225	1,299	41%	5,461,677	59%	3,086,481	29%	3,162,851	1,755,672	55.5	85,434	276,569	8.7									
DEU AREA27 DTS VL1218	30	22.5	19.7	837,030	2,517	99%	4,707,446	100%	2,678,912	98%	3,136,009	1,517,244	48.4	76,900	336,282	10.7									
DNK AREA27 TM VL1218	12	18.4	11.8	520,239	783	46%	10,099,176	45%	3,478,395	48%	3,043,193	1,824,759	60.0	154,118	928,153	30.5									
DNK AREA27 DTS VL2440°	9	28.3	12.6	957,765	558	5%	4,252,115	7%	3,029,887	5%	2,958,154	1,331,079	45.0	105,557	582,368	19.7									
SWE AREA27 DTS VL1012°	27	40.4	8.8	314,130	781	16%	1,264,558	75%	2,485,623	38%	2,812,379	2,082,830	74.1	237,766	1,798,277	63.9									
SWE AREA27 DFN VL1012°	100	131.9	42.8	898,728	5,631	58%	1,485,767	65%	1,905,289	36%	2,796,914	676,884	24.2	15,815	637,974	22.8									
FIN AREA27 TM VL1824	14	24.0	14.5	305,667	1,090	91%	17,466,195	100%	4,803,576	99%	2,750,622	2,018,084	73.4	139,274	1,091,550	39.7									
DNK AREA27 PGP VL1012	36	31.5	33.1	446,047	4,840	73%	1,388,987	60%	2,574,258	55%	2,710,472	968,199	35.7	29,286	721,237	26.6									
DEU AREA27 PG VL1012	61	49.0	41.0	269,846	5,920	93%	3,314,054	99%	2,605,295	97%	2,696,292	1,249,941	46.4	30,516	80,708	3.0									
DNK AREA27 PMP VL1218	21	23.7	21.6	841,336	1,953	38%	3,350,861	41%	2,692,043	31%	2,629,914	979,117	37.2	45,435	175,150	6.7									
FIN AREA27 TM VL1218°	24	23.0	14.0	320,133	1,186	100%	6,385,296	100%	2,048,397	99%	2,529,194	1,562,784	61.8	111,627	1,044,565	41.3									
LVA AREA27 DFN VL2440	8	44.0	27.0	605,546	1,109	100%	753,955	100%	1,164,878	99%	2,293,896	1,334,441	58.2	49,424	1,132,522	49.4									

Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

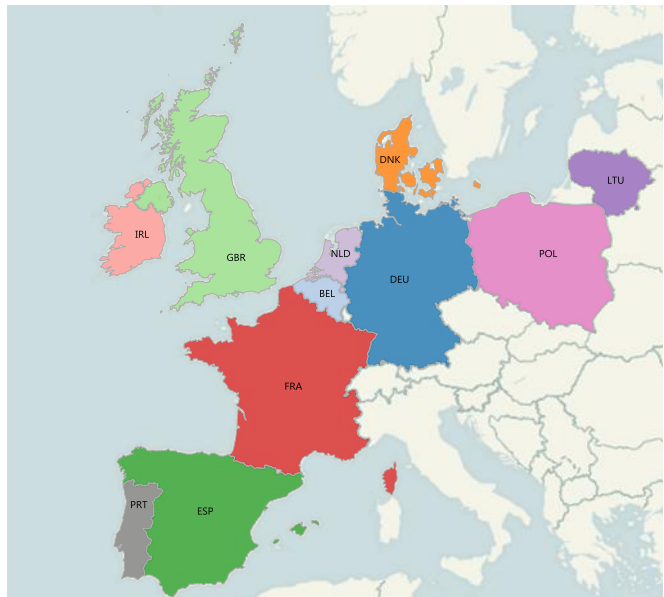
4.2. EU North East Atlantic Fishing Fleet

The North East Atlantic region covers ICES subdivisions V, VI, VII (except VIIId) and VIII, IX, X, XII.

Ten Member State fleets operated in the NE Atlantic region in 2013; Belgium, Denmark, France, Germany, Ireland, Lithuania, the Netherlands, Portugal, Spain and the United Kingdom (Figure 4.15).

Estimates provided for the Danish, Dutch, German and Lithuanian fleets should be considered with caution due to the limited fishing activity in the region (effort and landings shares in the region were less than 30%). Therefore, according to the available data, the main fleets operating in the NE Atlantic region in 2013 were the Spanish, French, Irish, Portuguese and UK fleets. Only partial data for several Spanish fleet segments was available.

For simplicity from this point on we will refer to the EU vessels operating in the aforementioned ICES areas as the EU Northeast (NE) Atlantic Sea fleet.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.15 - Regional map, highlighting MS fleets active in the Northeast Atlantic region.

Fisheries management

The management plans that impact on North East Atlantic region fleets include:

- Long-term plan for cod stocks and the fisheries exploiting those stocks (Council Regulation (EC) No 1342/2008)

The long term plan for cod has an impact on North-eastern countries. The French, Belgian, German, UK, Irish, Dutch, Spanish and Portuguese fleets all have quota for cod and thus interact with the cod fisheries. As days at sea restrictions are becoming more constraining, it may have an effect on the economic performance of the fleets. In 2013, the weight landed in France represented 63% of the total landings in weight for the Northeast Atlantic (98% of these landings came from the French demersal trawler fleet), followed by Ireland with 23% of the landings. Together, the volumes landed by France, UK and Ireland reached 97%.

- Council Regulation (EC) No 388/2006 established a multiannual plan for the sustainable exploitation of the stock of sole in the Bay of Biscay covering ICES areas VIIIa and VIIIb

Of the sole catches in the Bay of Biscay, the French and Spanish fleets landed 96% and 29% of the weight respectively. The Belgium and UK shares reached 34.5% of the total landings, while the Dutch fleet had a minor impact on the resource in 2013. The French DTS segment is the most important fleet in term of sole landings in weight in the Northeast Atlantic with 28,000 tonnes (20%). Spanish purse seiners represented 67% of sole landings by Spain in weight, which represented 20% of the total sole landings in weight.

- Council Regulation (EC) No 509/2007 established a multi-annual plan for the sustainable exploitation of the stock of sole in the Western Channel (ICES VIIe)

The UK landed 60% in weight of sole catches in the Bay of Biscay, followed by France with 39% of the total landings. The Belgian fleet only had a minor impact on the resource in 2013. UK beam trawlers over 18 m (TBBs) was the most important fleet segment in terms of the value of landings for sole in the Northeast Atlantic. This segment landed 410 tonnes, an increase of 11% compared to 2012.

- Council Regulation (EC) No 2166/2005 established measures for the recovery of the Southern hake and Norway lobster stocks in the Cantabrian Sea and Western Iberian

Peninsula and amending Regulation (EC) No 850/98 for the conservation of fishery resources through technical measures for the protection of juveniles of marine organisms.

In 2013, Portuguese and Spanish fleets mainly shared the Norway lobster catches in the Cantabrian Sea and Western Iberian Peninsula, with respectively 78% and 21% of total landings in weight.

- Council Regulation (EC) No 1300/2008 established a multi-annual plan for the herring stock distributed to the west of Scotland and the fisheries exploiting that stock in international and EU waters in ICES zones Vb and VIb, and the northern part of ICES zone VIa excluding the Clyde.

Landings from the UK pelagic trawl over 40m amounted to €98 million, being the most important fleet segment for this fishery in these ICES areas. The Irish pelagic trawlers over 40m followed with €59 million. France, Germany, Denmark, Spain and the Netherlands also targeted this species with large vessels of more than 24 meters.

- Council Regulation (EU) No 713/2013 establishing the fishing opportunities for anchovy in the Bay of Biscay for the 2013/14 fishing season

This management plan concerns mainly Spanish and French fleets.

- Measures for the recovery of eel - Area covered includes EU estuaries and rivers that flow into seas in ICES areas III, IV, VI, VII, VIII, IX and the Mediterranean (Council Regulation (EC) No 1100/2007 of 18 September 2007).

In the region, this management plan applies mainly to France.

- Council Regulation (EC) No 302/2009-500/2012 Measures concerning a multiannual recovery plan for Bluefin tuna in the eastern Atlantic and Mediterranean

According to STECF data, in 2013, France represented 94% of the total of landings in weight in the Northeast Atlantic (62% by pelagic trawlers and purse seiners).

- Council Regulation (EC) No 811/2004 to increase the quantities of mature fish in the Northern hake stock to at least 140,000 tonnes.

This management plan concerns Spanish, French, Portuguese, Irish, UK, Dutch and Belgian fleets.

In 2013, there were quotas for 27 fish species defined for the region (see Table 4.7)

Other management measures that may affect economic performance of the fleets operating in the North Atlantic East include marine protected areas and other legislation that has a multispecies impact.

In 2016, the landings obligation for demersal fisheries in the North Sea and the Atlantic European Union (EU) waters comes into force, bringing an important part of the EU fleet in the North East Atlantic under the obligation to bring and retain on board, and to land all catches. Fishing opportunities for stocks falling under the landing obligation are to be fixed taking into account catches rather than landings, based on biological advice and in the understanding that this should not jeopardise the MSY objective or increase the fishing mortality.

Fishing has generally progressed towards MSY (fishing at or below MSY) in all areas of the Northeast Atlantic, since 2006. For the NE Atlantic pelagic stocks, most herring stocks (North Sea, west of Scotland, Irish Sea and Celtic Sea) are fished in correspondence with MSY. For 2015, TACs for these stocks have been set in line with MSY. The situation is also positive for southern horse mackerel and the TAC continues to allow fishing at levels corresponding to MSY in 2015. For some stocks the situation has improved, for instance western horse mackerel (it was fished above MSY but the 2015 TAC is in line with MSY). Herring is fished above MSY in the northwest of Ireland and there are indications of horse mackerel being fished above MSY in the North Sea and eastern Channel

Based on the recent agreement among the Faroe Islands, Norway, and the EU for sustainable management of mackerel, the EU has advocated a 2015 TAC in line with MSY but Norway could not agree to a TAC lower than that corresponding to FPA (fishing mortality at precautionary approach level). For the blue whiting stocks the Coastal States agreed on a TAC below MSY, but no agreement was reached on a revised quota sharing arrangement. Subsequently the EU fixed its

2015 TAC share based on a hypothetical TAC figure that is below MSY, and based on its 2014 share of the stock.

Table 4.7 - List of species under quotas for North East Atlantic, Fishing TACs and Quotas, EC, 2013

Species	Zone	BE	DK	DE	IE	FR	LT	ND	PT	SP	UK
Anchovy	VIII, IX, X					x			x	x	
Anglerfish	V,VI,VII,VIII, IX, X	x	x	x	x	x		x	x	x	x
Bleu whiting	V,VI,VII,VIII,IX,X,XII		x	x	x	x		x	x	x	x
Blue fin tuna	East of longitude 45W					x			x	x	
Blue ling	V,VI,VII,XII			x	x	x	x			x	x
Boarfish	VI,VII,VIII		x		x						x
Cod	VI,VII,VIII, IX, X	x		x	x	x		x			x
Greenland Halibut	V,VI		x	x	x	x	x			x	x
haddock	V,VI,VII,VIII,IX,X,XII	x		x	x	x					x
Hake	V,VI,VII,VIII, IX, X	x			x	x		x	x	x	x
Herring	V,VI,VII			x	x	x		x			x
Horse mackerel	V,VI,VII,VIII,IX,X,XII	x	x	x	x	x		x	x	x	x
Ling	V,VI,VII,VIII,IX,X,XII	x	x	x	x	x			x	x	x
Mackerel	V,VI,VII,VIII,IX,X,XII			x	x	x	x	x	x	x	x
Megrim	VI,VII,VIII,IX,X	x			x	x			x	x	x
Northern prawn	V		x			x					
Norway lobster	V,VI,VII,VIII, IX, X				x	x			x	x	x
Plaice	V,VI,VII,VIII,IX,X,XII	x			x			x	x	x	x
Pollack	V,VI,VII,VIII, IX, X	x			x	x			x	x	x
Red fish	V,XII			x	x	x			x	x	x
Roundnose grenadier	VI,VII,VIII,IX,X,XII			x	x	x	x			x	x
Saithe	V,VI,VII,VIII,IX,X,XII	x		x	x	x					x
Skates and rays	VI,VII,VIII	x		x	x	x	x	x	x	x	x
Sole	V,VI,VII,VIII,IX,X,XII	x			x	x		x	x	x	x
Sprat*	VII	x	x	x		x		x			x
Tusk	V,VI,VII			x	x	x				x	x
Whiting	V,VI,VII,VIII,IX,X,XII	x			x	x		x		x	x

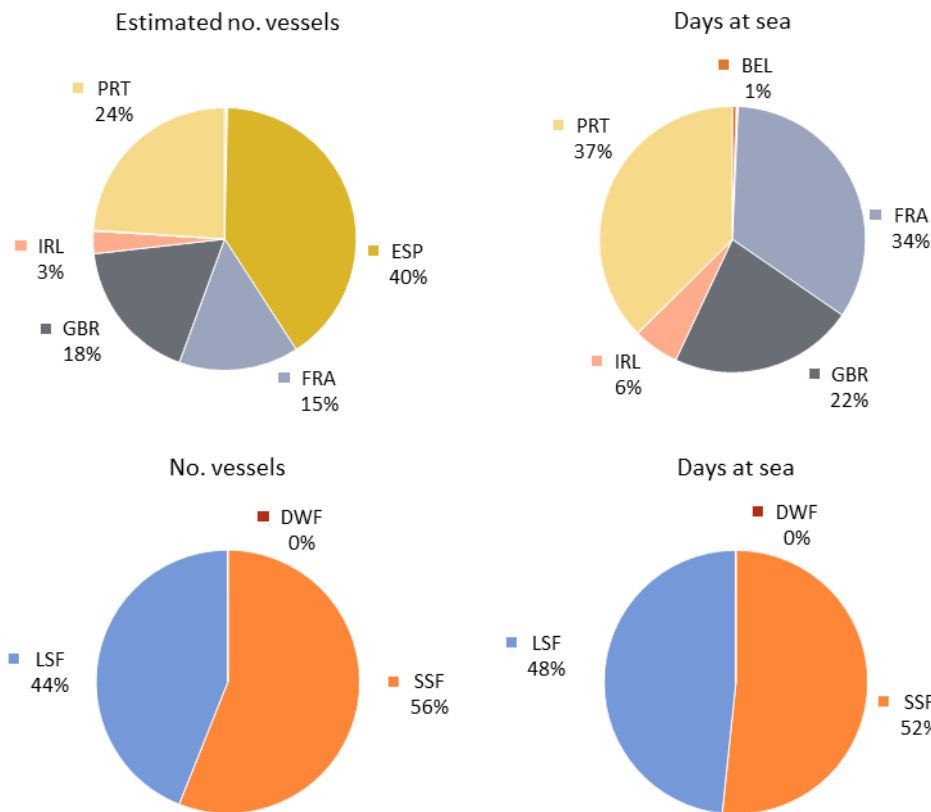
* includes VIId,e

North Atlantic fishing fleet, effort and landings

According to the figures estimated at the regional level, MS fleets operating in the NE Atlantic region numbered over 16,180 vessels in 2013. The pie charts presented in Figure 4.17 indicate the proportion of days at sea, landings weight and value by MSfleets operating in the region in 2013.

With 6,557 estimated vessels, the Spanish fleet comprised the largest fleet in number. Data on fishing effort by FAO fishing area (i.e. days at sea) was unavailable for Spain and hence, complete disaggregation to the NE Atlantic region was not possible.

Collectively, the Portuguese, French and UK that fish in NE Atlantic region were estimated to account for 93% of the days at sea (Figure 4.16) but this is not the real picture as it excludes the Spanish fleet due to missing data. If data were available, the Spanish fleet would account for a large majority of the total days at sea in the region.

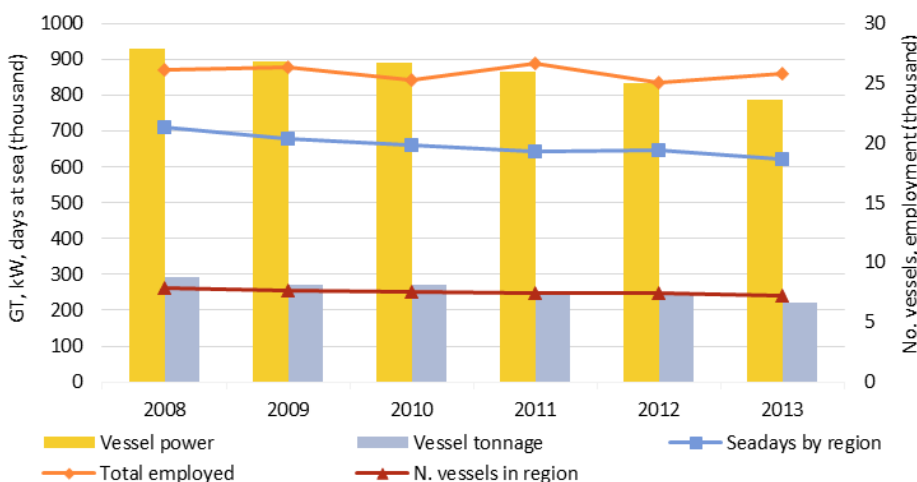


Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.16 - NE Atlantic fleet capacity and effort by MS and fishing activity: 2013

Note: Effort and landings data for IRL do not include <10m; effort data missing for Spain; MS fleets with less than 1% are not shown

Trends in fleet capacity, employment and effort (in days at sea) of the MS fleets operating in the region has remained relatively stable over the period analysed, apart from some decrease in vessel tonnage and engine power (Figure 4.17). These figures exclude France and Spain due to incomplete time series data.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.17 – NE Atlantic fleet main capacity, employment and effort trends for the period 2008-2013.

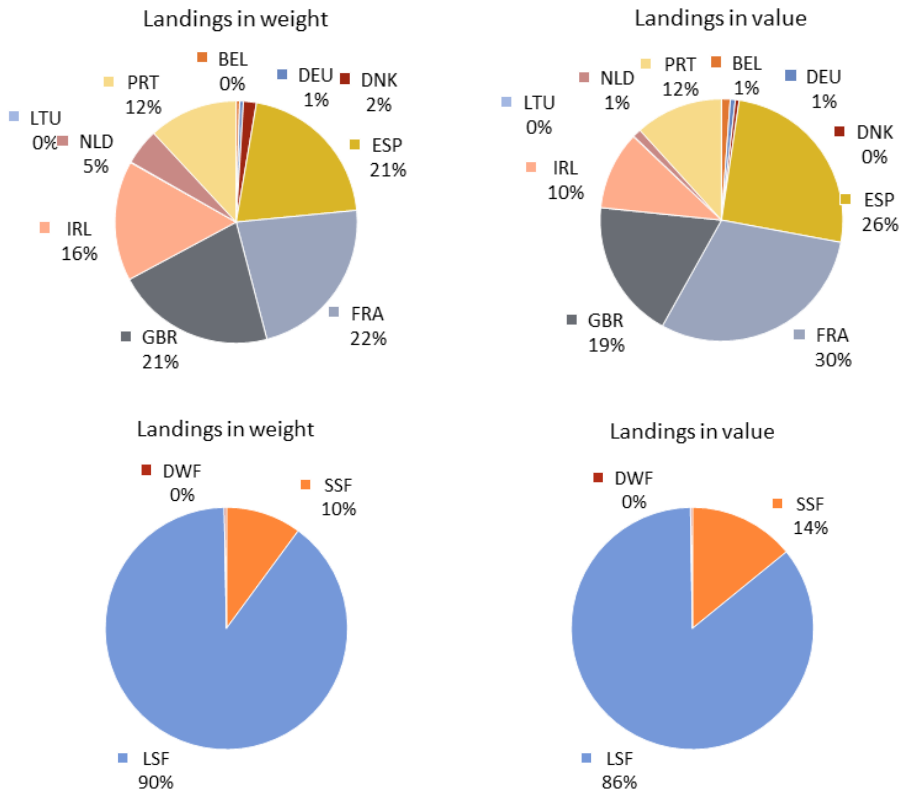
Note: figures exclude France and Spain due to missing time series data

The weight and value of landings generated by the EU NE Atlantic fleet in 2013 amounted to over 1.35 million tonnes and €2.3 billion, respectively. Data is present for all MS in the region, but may not necessarily be complete, i.e. landings in weight without corresponding landed value.

In terms of landed weight, the French (303,200 tonnes), UK (286,800 tonnes), Spanish (280,000 tonnes), Irish (216,400 tonnes) and Portuguese (160,600 tonnes) were the leading national fleets, together accounting for 92% of the total weight landed.

The French (€683 million), Spanish (€580 million), UK (€420 million), Portuguese (€265 million) and Irish (€236 million) fleets together accounted for around 96% of the total value of landings in 2013 (Figure 4.18).

SSF vessels accounted for 52% of the total number of days at sea in the North Atlantic area but only 10% of the landed weight and 14% of the landed value share. It should be noted that these values exclude days at sea figures for the Spanish fleet fishing in the NE Atlantic and for the under 10m Irish fleet (Figure 4.18).



Data source: Member State data submissions under the DCF 2014 Fleet Economic (MARE/A3/AC(2014)).

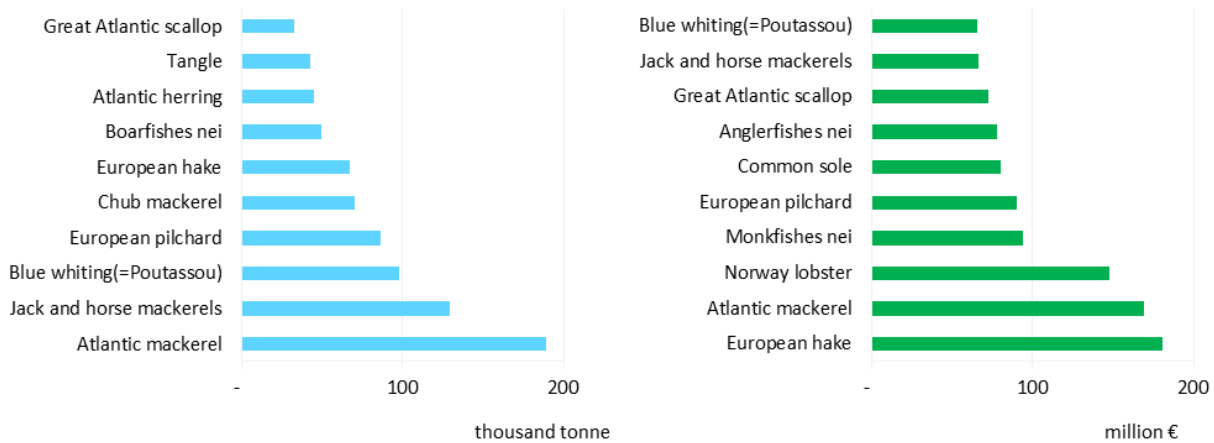
Figure 4.18 – NE Atlantic fleet landings in weight and value by MS and fishing activity: 2013

In 2013, the main species landed by the NE Atlantic fleet in terms of weight were small pelagic species, including Atlantic mackerel (189,600 tonnes), jack and horse mackerels (129,000 tonnes) and blue whiting (97,600 tonnes) (Figure 4.19 and 4.20).

In terms of value, European hake was the most important species in 2013 (€180.5 million), followed by Atlantic mackerel (€169 million) and Norway lobster (€147.7 million). Boarfish is landed predominantly by Ireland, figures presented here are for boarfish nei (BOR) only but landings of boarfish are also reported under the name boarfish (BOC), so the figure is actually higher than indicated here.

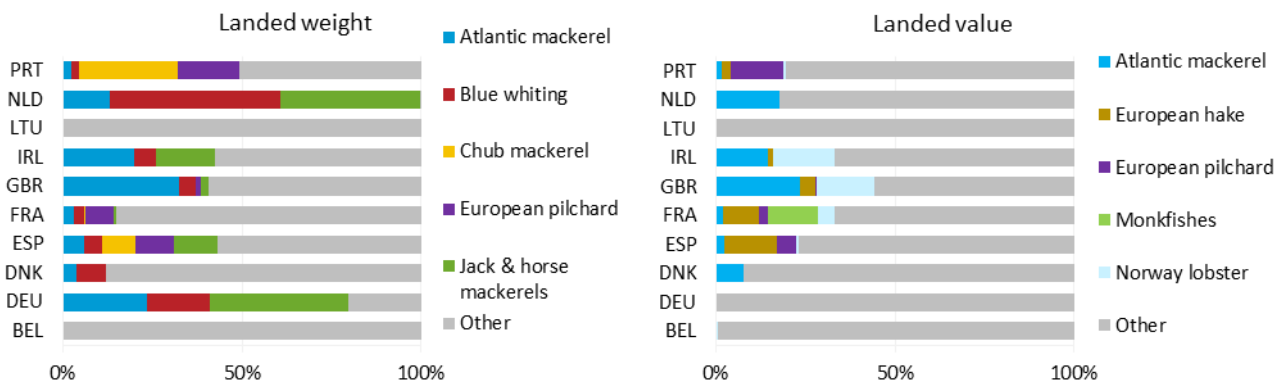
The top landed species by weight were dominated by pelagic species. France is unique in its inclusion of seaweed in the landings figures and 'Tangle' appears in the top ten species by weight as a result. Tangle (*Laminaria digitata* and *Laminaria hyperborea*) collection is a very specific fishery in NE Atlantic, in zone VIIe, where vessels classified in the DRB or MPG fleet harvest wild seaweed with some vessels using "scoubidou". Lanildut, in Brittany (western of France), is the most important harbour in Europe for kelp landings. Fishery organisations manage around 40 licences. In terms of landed weight, it was most prevalent for France in 2013 (43,000 tonnes) fetching a value of €1.8 million.

Figure 4.21 provides landings in weight and value by MS fleets operating in the region over the period 2008-2013. Overall, landed weight has fluctuated over the period while landed value increased steadily from 2009 to 2012, suffering a decline in 2013.



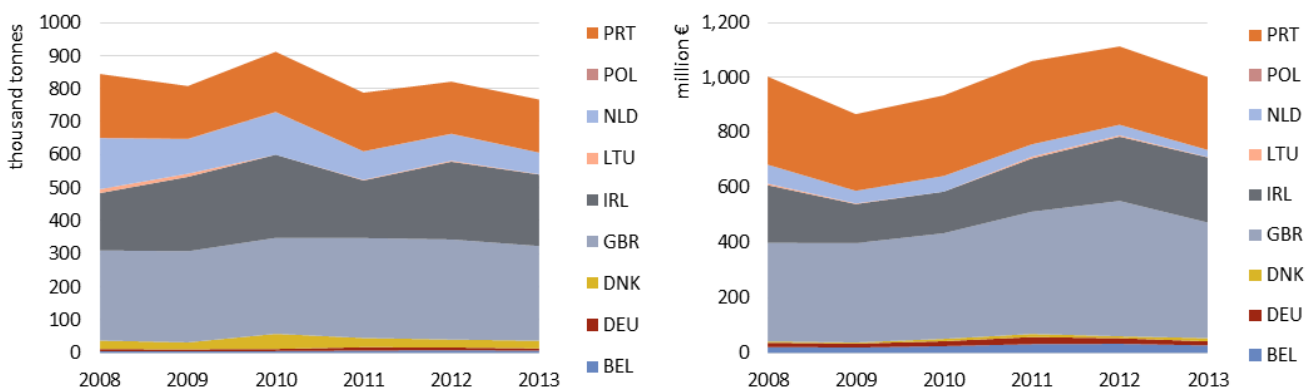
Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.19 Top 10 species in terms of weight and value landed for MS fleets operating in the NE Atlantic region, 2013



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.20 Top 5 species landed in terms of weight and value as a proportion of the total landings in the region by MS fleets operating in the NE Atlantic, 2013



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.21 Landings, in weight and value, by the NE Atlantic fishing fleets over the period 2008-2013.

Note: figures exclude France and Spain due to incomplete time series data; landing values missing for Poland

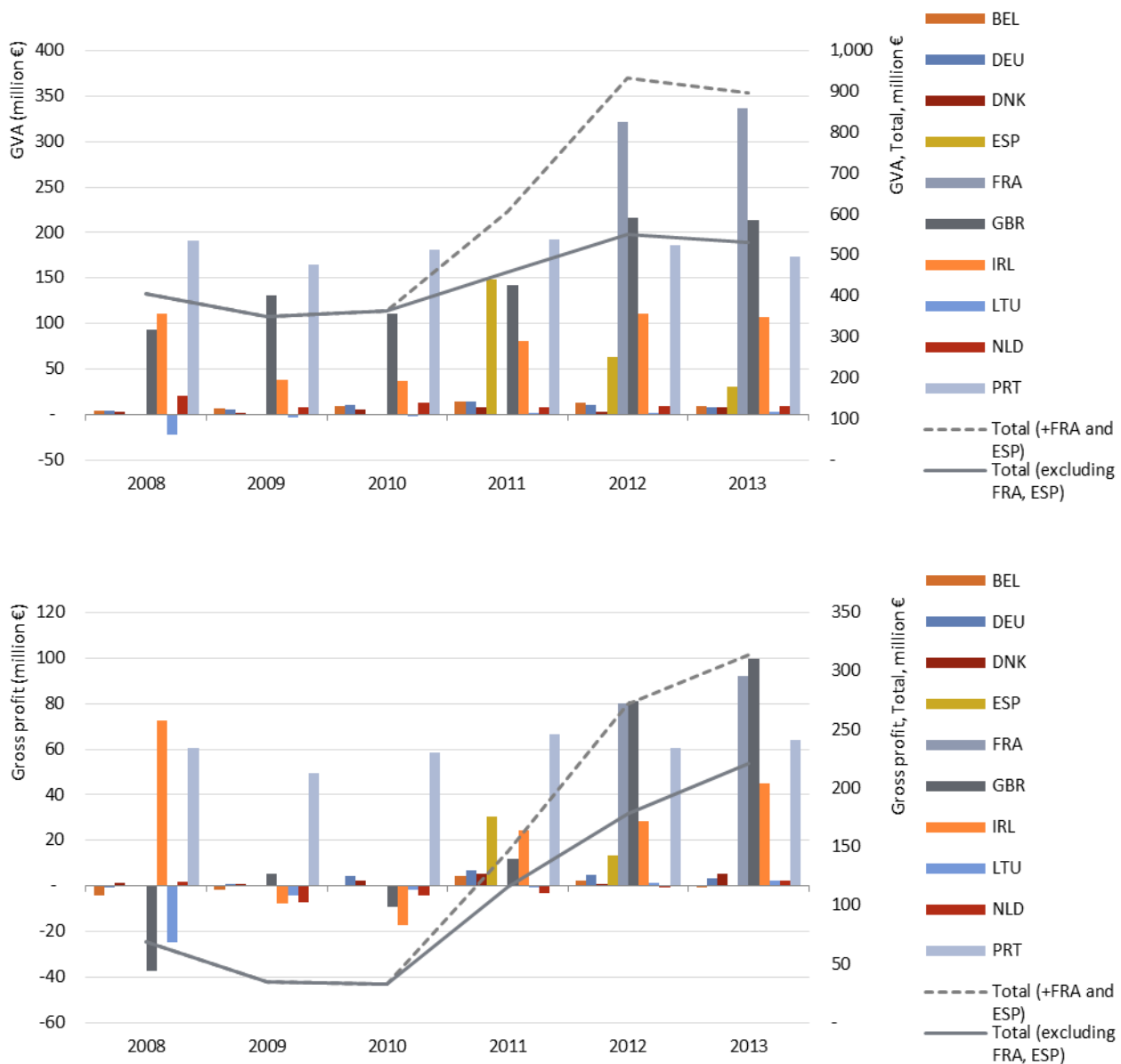
Socio-Economic performance

Table 4.8 to Table 4.11 contain a summary of economic performance of the NE Atlantic region fleet by MS, fishing activity and fleet segment, respectively

Performance by Member State

Revenue (income from landings and other income) generated by the EU Northeast Atlantic fleet covered in the analysis in 2013 was estimated at €2.35 billion, 96% of which was shared between five MS: France (€681 million); Spain (€641), UK (€438 million), Portugal (€270 million) and Ireland (€240 million). GVA in 2013 decreased compared to 2012: apart from the Danish, French and Lithuanian fleets, which saw increases in 2013, all other MS fleets fishing in the NE Atlantic regions saw reductions in revenue (Figure 4.22).

GVA produced by the NE Atlantic fleet but excluding several fleet segments, mainly Spanish due to insufficient data, in 2013 was estimated at €898 million, and after accounting for operating costs, €314 million in gross profit. All MS fleets operating in the NE Atlantic region, apart from Belgium (-€39,000) generated gross profits (Table 4.8).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2014)).

Figure 4.22 Trends in GVA and Gross profit for the NE Atlantic region 2008-2013 (by MS).

Note: Data for France only available in 2012 and 2013, data for Spain only available in 2011-2013

Performance by fishing activity

By fishing activity, the NE Atlantic small-scale fleet generated almost €371.7 million in revenue, while the LSF generated around €1.98 billion in revenue. Again, several fleet segments are not included in these values due to insufficient data.

The NE Atlantic SSF generated €179 million in GVA and €58 million in gross profit. Overall, all MS SSF operating in the region were profitable in 2013 apart from the Spanish SSF, which suffered a gross loss estimated at €989,000.

The French Northeast Atlantic small-scale fleet, consisting of 1,284 vessels and generating 2,114 jobs, generated the highest revenue (€141 million), followed by the Spanish (€90 million), Portuguese (€74.5 million) and the UK (€59.5 million) SSF.

The Spanish NE Atlantic LSF, consisting of over 4,000 vessels and generating 15,400 FTEs, generated the highest revenue (€549 million), followed by France (€540 million), the UK (€378 million) and Irish (€233 million) LSF.

Collectively, the LSF generated €716 million in GVA and a gross profit of €254 million in 2013 (Table 4.9). Additionally, four DWF (Lithuanian, Portuguese, Spanish and UK fleets) were also active in the region in 2013, reporting an estimated €6.2 million in revenue (Table 4.10).

Note: Data on the EU DWF operating in the region is limited.

Performance by fleet segment

Table 4.11 provides results for the top 35 MS fleet segments in terms of landed value operating in the NE Atlantic region in 2013. These 35 MS fleet segments, of the 181 fleet segments identified in the region, represented over 57% of the vessels (9,275 vessels), 70% of the landed weight (947,000 tonnes) and 69% of the landed value (€1.56 billion) generated by the NE Atlantic fleet in 2013.

At fleet segment level, the Spanish demersal trawler/seiner between 24 and 40m operating in the region generated the most revenue in 2013 (€174 million), amounting to 7.4% of the total, followed by the UK pelagic trawler over 40m segment (€116 million) and the French demersal trawler/seiner 18-24m segment (€109 million) (Table 4.11).

The UK pelagic trawler over 40m segment also generated one of the highest GVA per FTE, estimated at €1.7 million (incomplete data available for the Spanish demersal trawler/seiner between 24 - 40m). This fleet segment posted an estimated gross profit of €72.4 million.

Table 4.8 - EU NE Atlantic region fleet structure and economic performance estimates by MS in 2013

MS	Estimated no. vessles	Vessel power	Vessel tonnage	Estimated total employed	Estimated FTE	Days at sea in region	Estimated energy consumption	Landed weight by region	Landings in value	Estimated revenue	Estimated GVA	GVA to Revenue	GVA per FTE	Estimated Gross profit	Gross profit margin		
	in region	(kW)	(tonne)	#	#	days	K litres	tonne	(thousand €)	(thousand €)	(thousand €)	%	(thousand €)	(thousand €)	%		
BEL	39	18,567	5,896	119	70	4,844	14,933	6,264	26,450	27,979	9,365	33.5	134	-	39	-	0.1
DEU	8	5,092	3,226	100	79	1,341	4,334	6,792	15,091	15,058	8,292	55.1	106	3,139			20.9
DNK	8	11,393	5,776	35	21	367	2,666	23,422	11,512	11,431	7,309	63.9	346	5,262			46.0
ESP	6,557	217,675	49,760	15,161	19,895		11,667	280,040	579,972	640,925	29,809	64.3	16	292			0.6
FRA	2,386	356,886	71,694	5,883	4,541	319,194	184,454	303,178	683,243	681,328	336,376	49.4	74	92,377			13.6
GBR	2,849	365,888	83,831	7,314	4,017	210,990	134,739	286,807	420,231	438,197	214,125	48.9	53	99,471			22.7
IRL	451	131,855	51,965	1,954	1,634	52,343	55,703	216,353	236,634	239,736	107,454	46.3	69	45,191			20.0
LTU		1,162	1,150	13	11	50	1,246	1,163	1,584	3,841	2,224	57.9	202	2,059			53.6
NLD	12	30,737	28,671	202	110	576	13,083	65,313	25,620	25,508	8,879	34.8	81	2,089			8.2
PRT	3,871	223,500	41,077	16,087	8,220	351,833	69,415	160,603	265,158	270,878	173,767	64.2	21	64,205			23.7

Table 4.9 - EU NE Atlantic region fleet structure and economic performance estimates by fishing activity in 2013

	Estimated no. vessels in region	Vessel power (kW)	Vessel tonnage (GT)	Total employed (number)	FTE (national)	Seadays by region (day)	Energy consumption (K litre)	Landings in weight (tonne)	Landings in value	Estimated Revenue (thousand €)	Estimated GVA	GVA to Revenue (%)	GVA per FTE (thousand €)	Estimated Gross profit	Gross profit margin (%)
NE Atlantic SSF	9,067	403,560	29,198	21,344	9,798	486,429	43,211	136,181	319,674	371,745	179,463	61.8	31	58,424	20.1
NE Atlantic LSF	7,112	956,198	311,668	25,479	28,778	454,822	447,460	1,209,871	1,940,211	1,976,924	715,881	49.1	49	253,642	17.5
NE Atlantic DWF	4	2,996	2,179	45	21	287	1,568	3,883	5,610	6,214	2,256	51.3	106	1,981	45.0

Table 4.10 - EU NE Atlantic region fleet structure and economic performance estimates by fishing activity and Member State in 2013

		Estimated no. vessels in region	Vessel power (kW)	Vessel tonnage (GT)	Total employed (number)	Estimated FTE (national)	Seadays by region (day)	Energy consumption (K litre)	Landings in weight (tonne)	Landings in value (thousand €)	Estimated Revenue (thousand €)	Estimated GVA	GVA to Revenue %	GVA per FTE (thousand €)	Estimated Gross profit	Gross profit margin %	
Northeast Atlantic	SSF	France	1,284	115,466	6,636	2,114	1,284	140,809	15,900	70,295	128,773	141,134	85,710	60.7	67	25,537	18.1
	SSF	Ireland	98	8,235	1,070	225	182	7,473	1,320	4,440	6,249	6,504	3,330	51.2	18	1,637	25.2
	SSF	Portugal	3,102	99,283	7,248	9,659	2,981	234,110	10,650	21,248	73,283	74,531	56,940	76.4	19	24,270	32.6
	SSF	Spain	2,549	56,666	6,373	5,608	4,494	2,005	14,998	54,791	90,087	5,143	59.4	9	989	11.4	
	SSF	UK	2,034	123,910	7,871	3,737	856	104,037	13,336	25,201	56,580	59,490	28,339	47.6	33	7,970	13.4
	LSF	Belgium	39	18,567	5,896	119	70	4,844	14,933	6,264	26,450	27,979	9,365	33.5	134	39	0.1
	LSF	Denmark	8	11,393	5,776	35	21	367	2,666	23,422	11,512	11,431	7,309	63.9	346	5,262	46.0
	LSF	France	1,103	241,420	65,058	3,768	3,256	178,386	168,554	232,883	554,471	540,195	250,666	46.4	77	66,840	12.4
	LSF	Germany	8	5,092	3,226	100	79	1,341	4,334	6,792	15,091	15,058	8,292	55.1	106	3,139	20.9
	LSF	Ireland	353	123,621	50,895	1,729	1,451	44,870	54,383	211,914	230,385	233,233	104,123	46.2	76	43,554	19.8
	LSF	Netherlands	12	30,737	28,671	202	110	576	13,083	65,313	25,620	25,508	8,879	34.8	81	2,089	8.2
	LSF	Portugal	766	122,725	33,038	6,396	5,229	117,520	58,443	139,262	191,482	195,781	116,795	59.7	22	40,014	20.5
	LSF	Spain	4,008	161,008	43,387	9,553	15,401	9,662	263,378	522,766	549,031	24,665	65.4	19	1,281	3.4	
	LSF	UK	815	241,635	75,721	3,576	3,161	106,919	121,403	260,643	362,433	378,707	185,787	49.1	59	91,502	24.2
	DWF	Lithuania		1,162	1,150	13	11	50	1,246	1,163	1,584	3,841	2,224	57.9	202	2,059	53.6
	DWF	Portugal	3	1,492	790	31	10	203	322	93	393	566	31	5.6	3	78	14.0
	DWF	Spain								1,664	2,415	1,807					
	DWF	UK		342	239			34		963	1,218						

4.2 Mediterranean & Black Sea

The Mediterranean & Black Sea region covers FAO fishing areas 37.1, 37.2, 37.3 and 37.4. Nine EU Member States were involved in Mediterranean fisheries in 2013: Croatia, Cyprus, France, Greece, Italy, Malta, Portugal, Slovenia and Spain. Two EU MS fish in Black Sea: Bulgaria and Romania (Figure 4.25).

A fully comprehensive and realistic economic analysis, including all 11 coastal MS fishing fleets operating in the Mediterranean & Black Sea, was not possible. Data on the fishing fleet are presented for all the eleven involved MS; data on effort and landings do not include Greece, while economic performance indicators have been excluded for Bulgaria, Cyprus, Greece and Malta due to incomplete and/or unreliable datasets. A trend analysis is not provided because consistent datasets for the period 2008-2013 were only available for 3 MS fleets.



Figure 4.23 - Regional map, highlighting MSfleets operating in the Mediterranean & Black Sea.

Fisheries Management in the Region

Fisheries management in the Mediterranean Sea is primarily based on effort control, minimum conservation reference sizes, closed areas (to protect sensitive habitats) or closed seasons (to protect juveniles or spawning stocks) and restrictions on gear construction (mesh size, gear dimensions, etc.).

The Mediterranean & Black Sea fisheries are regulated by the EU and by the General Fisheries Commission for the Mediterranean (GFCM) through its recommendations. In addition, coastal fisheries are mainly regulated by each MS in the region through their national legislation and national management plans.

So far MS have adopted 34 national management plans in the Mediterranean under Article 19 of the MEDREG, for fisheries conducted with trawl nets, purse seiners, shore seines, boat seines and dredges within their territorial waters. The European Commission has carried out a review of national management plans to assess if they adequately reflect the MSY objective of the new Common Fisheries Policy (CFP). Approximately half of the national plans are based on a (proxy) MSY objective – mainly those adopted in 2013 and 2014. Plans without MSY parameter were mainly adopted on the basis of the precautionary approach.

Article 18 of the MEDREG allows for EU management plans for specific fisheries, in areas totally or partially beyond the territorial waters of MS. There are currently no EU plans in force in the Mediterranean. In 2013, at the initiative of the EU, the GFCM adopted a recommendation for a multiannual management plan for fisheries on small pelagic stocks in the Northern Adriatic Sea (Recommendation GFCM 37/2013/1). The recommendation also foresees transitional conservation measures for fisheries on small pelagic stocks in the Southern Adriatic Sea. The GFCM multiannual plan mainly applies to EU fisheries since both small pelagic species are primarily exploited by EU fishing vessels.

It is also noteworthy that the landing obligation for small pelagic stocks in the Mediterranean already entered into force on 1 January 2015. Its implementation is currently regulated by a discard plan on a temporary basis of three years (Commission Delegated Regulation (EU) No 1392/2014 of 20 October 2014 establishing a discard plan for certain small pelagic fisheries in the Mediterranean Sea; OJ L370 of 30.12.2014, p.21.). The introduction of the landing obligation may affect the economic performance of fleets in the near future.

In the Mediterranean, a TAC is defined only for bluefin tuna. The Bluefin tuna fishery is regulated by the International Commission for the Conservation of Atlantic Tunas (ICCAT) to which the EU is a contracting party. Eight EU MS are involved in the Bluefin Tuna fishery (Cyprus, France, Greece,

Croatia, Italy, Malta, Portugal and Spain). In November 2012, the ICCAT Recovery plan was amended with a slight increase of the overall TAC to 13.400t as of 2013, with an EU quota of 7.548t compared to 5.756t in 2011 and 2012. Further measures were adopted to strengthen a set of control aspects and the one month fishing season for purse seiners in the Mediterranean was postponed by ten days.

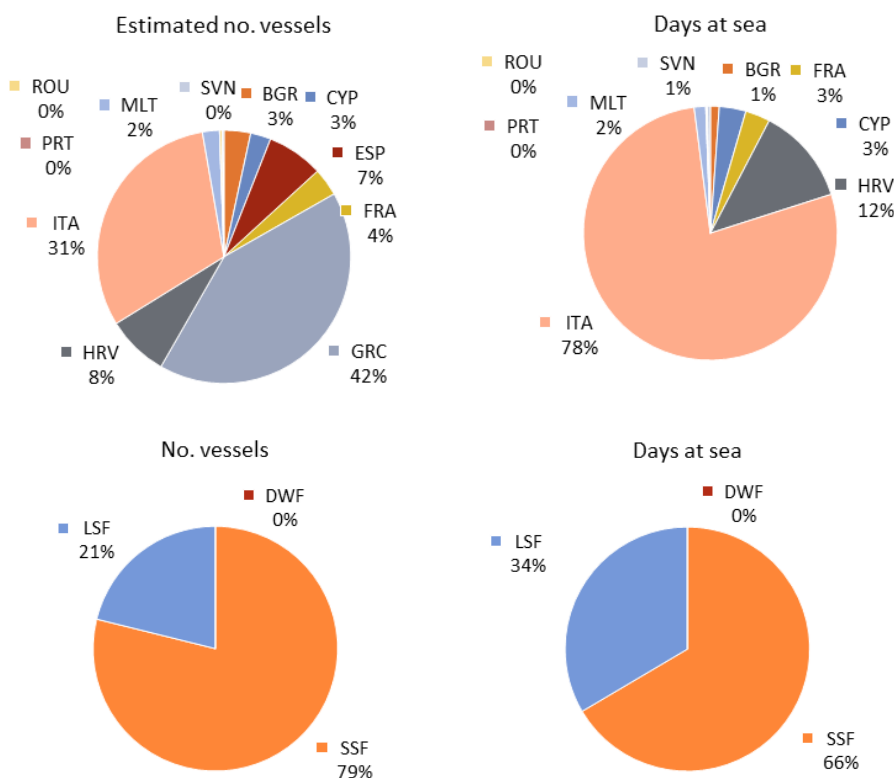
There are 2 species under TAC management in the Black Sea: turbot and sprat. The EU quota for turbot decreased by 15% in 2013 compared to 2012, while the quota for sprat was unchanged. The EU quota for turbot is divided evenly between Bulgaria and Romania. For sprat, Bulgaria and Romania's national quotas are set at 70 and 30 % of the total EU quota, respectively.

Mediterranean & Black Sea fishing fleet, effort and landings

The EU fleet fishing in the Mediterranean & Black Sea consisted of 35,497 active vessels when including the Greek fleet. Greece comprised the largest fleet in number (15,900 vessels) while the Italian Mediterranean fleet was the largest in gross tonnage (143,000 GT) and engine power (898,000 kW) (Figure 4.24).

Total employment in 2013 was estimated at 67,843 jobs (excluding Cyprus due to incomplete data), corresponding to 54,405 FTEs. In terms of FTEs, Greece (22,546), Italy (19,855) and Spain (6,505) were the leading countries, together accounting for 92% of the total FTEs by the EU Mediterranean & Black Sea fleet (excluding Cyprus).

The Mediterranean & Black Sea fleet (excluding Greece and Spain due to incomplete effort data) spent more than an estimated 1.9 million days at sea in 2013.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

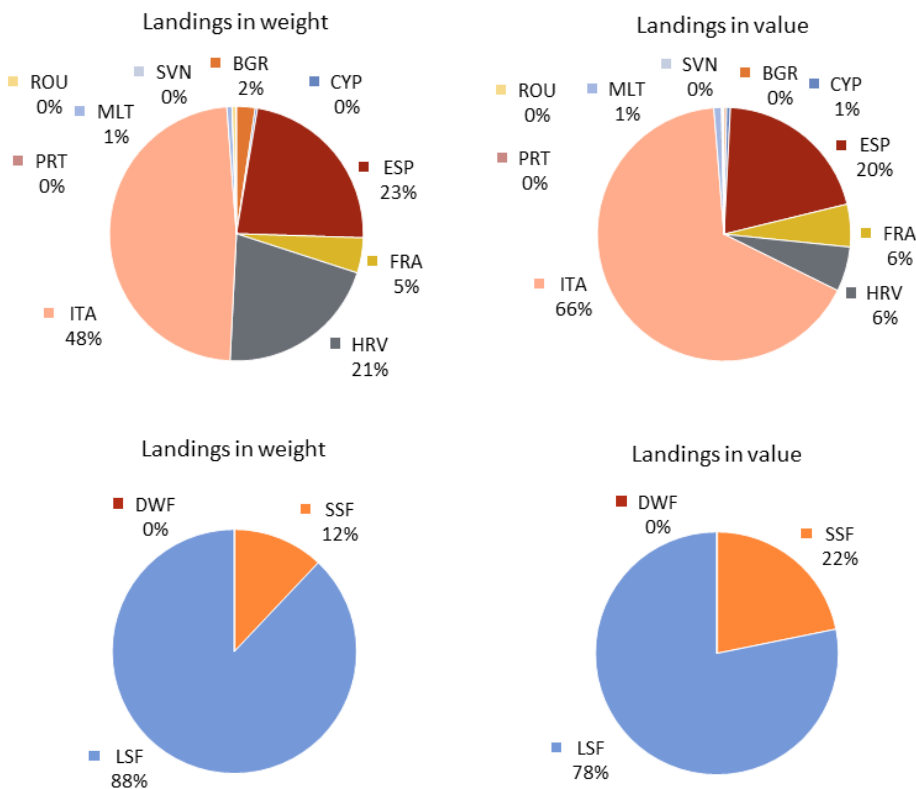
Figure 4.24 Mediterranean & Black Sea fleet capacity and effort by MS and fishing activity: 2013

Note: No. of vessels includes the Greek fleet while effort data (days at sea) exclude the Spanish and Greek fleets

The weight and value of landings generated by the regional fleet (excluding Greece) in 2013 amounted to approximately 360,000 tonnes and €1.25 billion, respectively. It should again be emphasised that the lack of complete data for all MS fleets operating in the region does not allow for a very realistic overall analysis of the EU Mediterranean fleet production, as seen in Figure 4.24, where according to the available data, which excludes Greece and Spain, the Italian fleet accounted for 78% of the total number of days, followed at some distance by Croatia (10%).

In terms of landed weight, Italy (173,000 tonnes), Spain (82,000 tonnes) and Croatia (75,000 tonnes) were again the leading countries of those who provided data, together accounting for over 90% of the total weight of landings by the EU Mediterranean & Black Sea fleet (excluding Greece).

LSF generated by the far the highest landed weight with 88% of the total estimated landed weight. LSF generated around 78% of the value landed. Although over 34% of the effort was deployed by the SSF, these vessels landed only 12% of weight and 22% of the value in the region (Figure 4.25). This fleet segment is more important from a social point of view as it represents almost 32% (48% including the Greek fleet) of the FTE employment in the Mediterranean & Black Sea fleet.



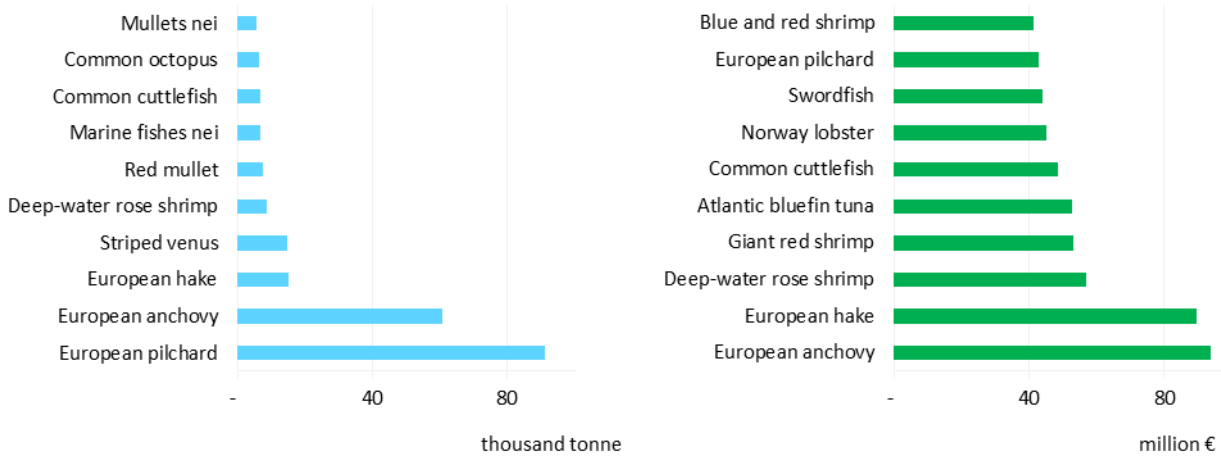
Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.25 EU Mediterranean & Black Sea fleet landings by MS and fishing activity: 2013.

Note: data missing for Greece.

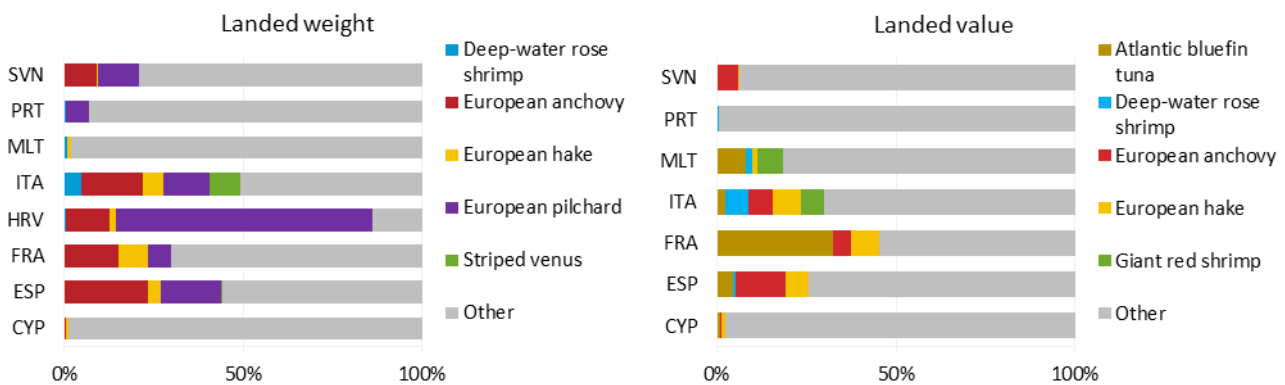
The main species for the EU Mediterranean fleet (excluding Greece) in 2013, in terms of weight was European pilchard (=sardine) (91,400 tonnes), followed by European anchovy (60,700 tonnes), European hake (€15,200 tonnes) and then striped Venus (14,600 tonnes). Around 84% of European pilchards are mainly landed in the Adriatic Sea by Croatian (59%) and Italian (25%) fleets.

The most landed species in value was European anchovy (€94 million), followed by European hake (€90 million) (excluding Greece and Croatia) (Figure 4.26 and 4.27).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

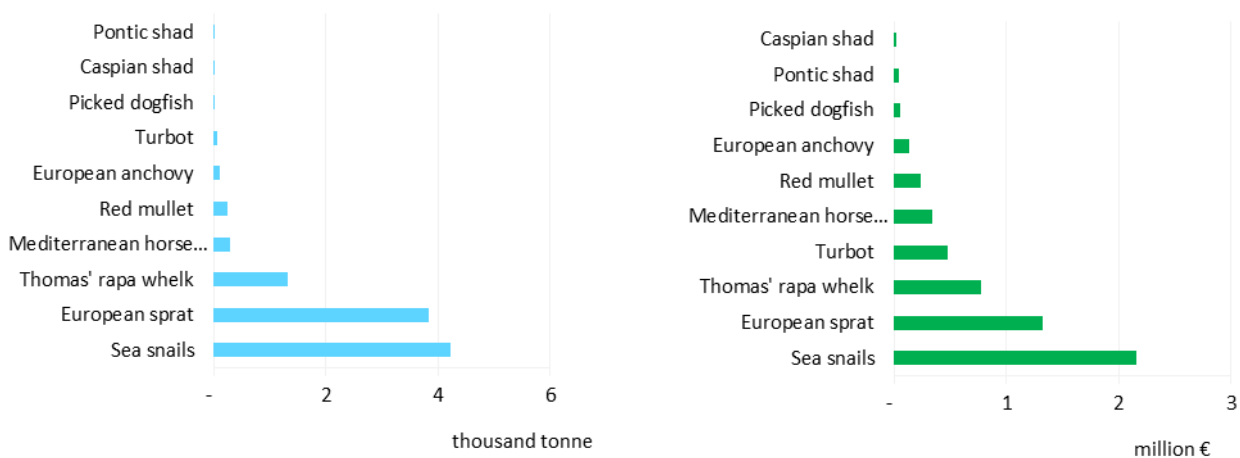
Figure 4.26 List of the top 10 species in terms of weight and value landed for MS fleets operating in the Mediterranean & Black Sea, 2013



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

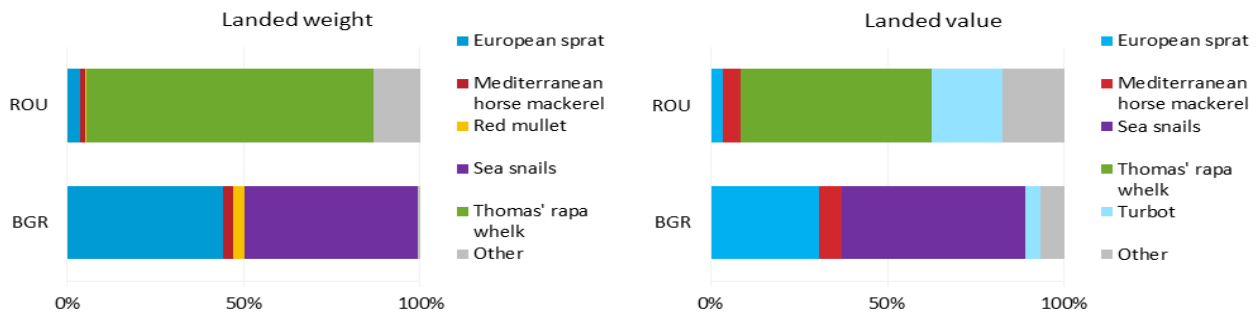
Figure 4.27 Proportion of top 5 species in terms of weight and value of the total landings in the region by fleets operating in the Mediterranean & Black Sea, 2013

The main species for the EU Black Sea fleet in 2013, in terms of weight was sea snails (4,200 tonnes), followed by European sprat (3,800 tonnes) and then rapa whelk (1,300 tonnes) (Figure 4.28 and 4.29).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.28 List of the top 10 species in terms of weight and value landed for MS fleets operating in the Mediterranean & Black Sea, 2013



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.29 Proportion of main species landed by MS fleets operating in the Black Sea, 2013

Socio-economic performance

Tables 4.12 to 4.15 contain a summary of economic performance of the Mediterranean & Black Sea fleet by MS, fishing activity and fleet segment, respectively. Due to data quality issues, results for the Bulgaria, Cyprus and Malta should be considered with caution and data was not available for the Greek fleet.

Performance by Member State

Revenue (income from landings and other income) generated by the Mediterranean & Black Sea fleet in 2013 was an estimated €1,348 million (excluding Greece), 62% of which was generated by the Italian fleet (€839 million). Gross profit was estimated at €260 million, of which €195 million was generated by the Italian fleet (Table 4.12).

Data provided for the Bulgarian, Cypriot and Maltese fleets were considered questionable and should be considered with caution.

Performance by fishing activity

By fishing activity, and according to the available data, the Mediterranean & Black Sea fleet appears somewhat unevenly distributed between the two main types of fishing activity. The SSF possessed 79% of the fleet in number (28,000 vessels) and accounted for 67% of the effort (1.5 million days) and 59% of the employment. In terms of production, the SSF landed only 23% in weight (133,700 tonnes). Due to incomplete and questionable data for some MS, further analyses at the fishing activity level were not performed (Table 4.13).

According to the available data, three MS SSF (Bulgaria, Cyprus and Slovenia) generated gross losses while all LSF generated gross profits in 2013 with the exception of Bulgaria and Cyprus (Table 4.14).

Performance by fleet segment

Table 4.15 provides results for the top 35 MS fleet segments (out of 155 active fleet segment recorded) in terms of value of landings operating in the region in 2013. These fleets represented 78% of the population, covering 81% of the effort deployed (1.55 million days) and generating 89% of the revenue (€1.26 billion), 92% of the GVA (€581 million) and 94% of the gross profit (€249 million) (economic indicators exclude Bulgaria, Cyprus, Greece and Malta).

At fleet segment level, the Italian demersal trawls and seines 12-18m segment generated the most revenue from the Mediterranean & Black Sea region in 2013 (€184 million), followed by the Italian demersal trawls and seines 18-24m segment (€156 million) and then the Italian polyvalent passive gear 06-12m segment (€153 million). The same fleet segments also generated the highest GVA and gross profit in 2013. One of the top 35 fleet segments made losses (Spanish demersal trawlers between 24-40m) (Table 4.15).

Table 4.12 EU Mediterranean & Black Sea fleet structure and economic performance estimates by MS in 2013

MS	Estimated no. vessels in region	Vessel power	Vessel tonnage	Estimated total employed	Estimated FTE	Days at sea in region	Estimated energy consumption	Landed weight by region	Landings in value	Estimated revenue	Estimated GVA	GVA to Revenue	GVA per FTE	Estimated Gross profit	Gross profit margin	
		(kW)	(tonne)	#	#	days	K litres	tonne	(thousand €)	%	(thousand €)	%				
Mediterranean Sea and Black Sea	BGR	1,204	38,807	4,997	895	371	21,635	6	8,584	4,170	6,806	2,055	30.2	5.5	- 932	- 13.7
	CYP	921	38,755	3,380			65,046	0.01	1,021	5,991	5,912	914	15.5		33	0.6
	ESP	2,559	224,661	57,311	8,029	6,505		93,113.25	82,148	255,128	290,747	97,083	44.1	25.7	22,005	10.0
	FRA	1,259	123,219	14,157	1,973	877	60,439	18,385.43	16,086	68,037	108,955	67,007	61.5	76.4	24,160	22.2
	GRC	14,752	428,378	72,496	24,486	22,546		113,673.41								
	HRV	2,795	245,373	32,314	4,872	2,496	237,477	24,782.74	74,902	71,390	81,433	38,896	47.8	15.6	14,923	18.3
	ITA	11,036	898,144	142,735	26,758	19,855	1,493,757	325,909.60	172,624	831,558	839,140	428,569	51.1	21.6	195,114	23.3
	MLT	774	60,094	6,252	389	155	28,385	6,168.78	2,345	12,165	9,821	6,061	64.7	40.7	3,744	41.9
	PRT	2	972	412	30	30	571	534.55	129	1,234	1,417	838	59.1	28.2	357	25.2
	ROU	112	5,286	518	304	37	2,833	360.88	1,617	1,438	1,438	822	57.2	22.1	256	17.8
SVN	83	5,922	394	107	75	7,646	278.74	238	1,231	2,337	1,755	75.1	23.4	472	20.2	

* Incomplete data for Cyprus and Greece

Table 4.13 EU Mediterranean & Black Sea fleet structure and economic performance estimates by fishing activity in 2013

rofif margin	Estimated no. vessels in region	Vessel tonnage	Total employed	FTE	Seadays by region	Days at sea	Landings in weight	Landings in value	Estimated Revenue	
		(GT)	(number)	(national)	(day)	(K litre)	housand litre (tonne)			
Mediterranean Sea & Black Sea	SSF	28,000	58,592	40,015	31,009	1,275,229	1,492,144	133,698	43,280	77,837
Mediterranean Sea & Black Sea	LSF	7,495	276,274	27,823	21,909	642,560	951,903	449,515	316,413	436,461
Mediterranean Sea & Black Sea	DWF	2	101	5	29		27,406		2	61,113

Note: value of landings missing for Croatia; Greek effort and income data missing; employment data missing for Cyprus

Table 4.14 EU Mediterranean & Black Sea fleet structure and economic performance estimates by fishing activity and Member State in 2013

		Estimated no. vessels in region	Vessel power	Vessel tonnage	Estimated FTE (national)	FTE (national)	Seadays by region	Landings in weight	Landings in value	Estimated Revenue	Estimated GVA	GVA	GVA to Revenue	Estimated Gross profit	Gross profit	
			(GT)	(tonne)	(number)	(K litre)	housand litre	(tonne)	%	(%)	%					
Mediterranean Sea and Black Sea	SSF	BGR	1,137	25,758	2,210	769	269	15,184.0	4	2,161	1,235	3,147	1,728.6	54.9	6	581
	SSF	CYP	894	33,755	2,148			63,044	-	491	3,968	3,967	617.7	15.6		175
	SSF	ESP	1,266	39,848	3,815	2,714	1,991			7,393	33,421	46,732				
	SSF	FRA	1,105	81,029	2,927	1,401	652	46,493	3,597	3,061	18,122	38,892	27,654.1	71.1	42	7,608
	SSF	GRC	13,671	252,405	26,500	19,263	17,440		47,547			37,998	85,031.5	223.8	5	215,121
	SSF	HRV	1,715	94,656	4,989	2,059	747	133,068	2,776	1,216		10,191	3,098.0	30.4	4	2,760
	SSF	ITA	7,330	208,446	13,920	13,275	9,706	985,943	77,899	27,180	195,558	199,256	96,077.9	48.2	10	34,753
	SSF	MLT	707	41,283	1,720	186	127	22,631	1,565	679	3,642	4,862	3,717.3	77.4	30	2,822
	SSF	ROU	106	3,198	166	278	27	2,470	237	1,044	984	984	571.9	58.1	21	180
	SSF	SVN	69	3,994	198	71	50	6,396	74	55	549					
	LSF	BGR	67	13,049	2,788	126	102	6,451	1	6,423	2,935	3,660	326.4	8.9	3	351
	LSF	CYP	27	5,000	1,232			2,002	-	530	2,023	1,946	296.1	15.2		142
	LSF	ESP	1,291	184,668	53,395	5,310	4,486		93,113	74,753	221,702	244,011	97,083.4	44.1	26	22,005
	LSF	FRA	154	42,190	11,230	572	225	13,946	14,789	13,025	49,915	70,063	39,352.5	56.2	175	16,552
	LSF	GRC	1,081	175,973	45,996	5,223	5,106		66,127			28,538	77,014.0	269.9	17	124,968
	LSF	HRV	1,080	150,717	27,326	2,814	1,749	104,409	22,006	73,686		71,242	35,797.5	50.3	20	17,682
	LSF	ITA	3,706	689,699	128,815	13,483	10,149	507,814	248,011	145,445	636,000	639,885	332,491.1	52.0	33	160,361
	LSF	MLT	67	18,812	4,532	203	28	5,754	4,604	1,666	8,523	4,960	2,343.5	51.4	102	921
	LSF	PRT	2	972	412	30	30	571	535	129	1,234	1,417	837.9	59.1	28	357
	LSF	ROU	6	2,088	353	26	10	363	124	573	454	454	249.9	55.1	25	77
LSF	SVN	14	1,928	196	36	25	1,250	205	183	682						
DWF	ESP	2	146	101	5	29			2	5	4					

Table 4.15 EU Mediterranean & Black Sea fleet structure and economic performance estimates of the top 35 MS Fleet Segments in terms of revenue in 2013

Fleet segment	N of vessels in the region	Estimated total employed	Estimated FTE	Estimated energy consumption	Days at sea in region	As a % of fleet segment	Landed weight by region	As a % of fleet segment	Landed value by region	As a % of fleet segment	Estimated revenue	Estimated GVA	GVA to revenue	GVA per FTE	Estimated Gross profit	Gross profit margin
	#	#	#	Litres	Days		kg		€		€	€	%	€	€	%
ITA AREA37 DTS VL1218	1164	3506	3147	77,315,222	189,098	100%	26,086,296	100%	183,121,689	100%	183,897,183	95,185,059	51.8	30,246	50,710,092	27.6
ITA AREA37 DTS VL1824	608	2413	2124	69,727,034	100,786	100%	28,474,965	100%	156,285,991	100%	156,360,583	77,673,452	49.7	36,569	38,658,814	24.7
ITA AREA37 PGP VL0612	5116	9801	7158	70,284,675	699,670	100%	21,084,041	100%	149,681,349	100%	152,551,069	64,757,436	42.5	9,047	20,164,519	13.2
ITA AREA37 DTS VL2440	175	1230	1176	44,629,076	32,801	100%	9,669,527	100%	80,209,339	100%	81,999,033	31,536,043	38.5	26,816	9,529,540	11.6
ESP AREA37 DTS VL1824	366	996	865	44,972,720			10,554,058	100%	53,450,675	100%	62,908,754	19,223,371	30.6	22,224	5,381,657	8.6
ITA AREA37 PGP VL0006	2199	3427	2519	7,373,318	285,384	100%	6,048,982	100%	45,599,832	100%	46,423,123	31,354,891	67.5	12,447	14,701,087	31.7
ITA AREA37 DRB VL1218°	655	1519	384	8,556,521	46,869	100%	16,500,825	100%	43,433,699	100%	43,673,042	30,034,304	68.8	78,214	15,628,548	35.8
ESP AREA37 DTS VL2440	172	625	523	27,894,720			6,524,304	100%	37,462,228	100%	43,219,449	5,318,958	12.3	10,164	6,412,611	14.8
ESP AREA37 PGP VL0612	972	2204	1658				5,492,862	99%	25,010,878	99%	35,456,330					
FRA AREA37 PS VL2440°	17	172	4	668,726	122	100%	1,860,001	100%	19,972,487	99%	31,481,256	21,173,930	67.3	5,631,364	8,993,819	28.6
ESP AREA37 PS VL1824	104	910	745	5,176,399			23,656,968	100%	39,509,677	100%	31,106,371	23,337,647	75.0	31,318	9,360,386	30.1
GRC AREA37 PGP VL0612°	8310	12133	12133	37,253,730							27,763,903					
ITA AREA37 PGP VL1218°	352	1092	822	5,110,769	46,821	100%	3,123,754	100%	26,839,252	100%	27,127,601	16,408,169	60.5	19,961	8,281,180	30.5
HRV AREA37 PS VL2440°	68	648	529	5,314,193	12,909	100%	41,810,212	100%			27,119,641	15,947,146	58.8	30,124	9,339,854	34.4
ITA AREA37 TM VL2440	73	445	309	10,448,419	10,711	100%	22,020,828	100%	26,090,198	100%	26,120,471	11,220,069	43.0	36,311	4,296,460	16.5
ESP AREA37 PS VL1218	96	774	680	2,936,820			17,418,419	100%	28,307,954	100%	26,106,302	18,491,227	70.8	27,206	6,279,968	24.1
ESP AREA37 PS VL2440°	29	305	132	1,667,311			5,883,973	100%	18,461,656	100%	25,603,960	14,731,337	57.5	111,491	5,876,243	23.0
ESP AREA37 DTS VL1218	176	604	568	8,432,375			4,006,439	100%	15,878,512	100%	22,562,214	10,975,338	48.6	19,309	487,488	2.2
FRA AREA37 DFN VL0612	504	656	310	2,027,230	19,867	100%	1,025,889	100%	6,496,270	99%	18,854,352	13,264,783	70.4	42,819	3,437,180	18.2
FRA AREA37 DTS VL2440°	29	131	104	9,285,891	5,223	100%	5,516,680	100%	15,112,655	99%	18,091,293	6,648,481	36.8	63,842	1,695,003	9.4
ITA AREA37 PS VL2440	41	454	249	2,708,783	4,244	100%	7,036,675	100%	16,950,833	100%	16,966,409	12,457,393	73.4	50,030	6,238,593	36.8
GRC AREA37 DTS VL2440°	167	1007	1007	32,416,537							14,580,499					
ITA AREA37 PS VL40XX	10	141	53	300,890	116	100%	1,229,371	100%	14,152,672	100%	14,152,672	12,664,984	89.5	238,962	6,470,469	45.7
ITA AREA37 HOK VL1218°	121	451	459	3,189,816	12,375	100%	1,621,627	100%	13,729,814	100%	13,850,647	7,052,377	50.9	15,365	3,186,944	23.0
HRV AREA37 PS VL1824	54	438	330	2,278,497	9,176	100%	19,795,239	100%			12,898,256	7,650,385	59.3	23,196	4,790,856	37.1
ITA AREA37 DTS VL0612	161	333	293	3,278,781	19,822	100%	1,819,909	100%	11,382,296	100%	11,389,897	6,831,217	60.0	23,315	3,840,857	33.7
ITA AREA37 HOK VL1824°	43	238	199	2,514,106	7,431	100%	1,458,134	100%	10,994,510	100%	11,307,291	4,653,150	41.2	23,383	1,964,415	17.4
ITA AREA37 PS VL1218	92	618	277	5,081,843	10,910	100%	3,877,258	100%	10,921,845	100%	10,945,462	4,324,744	39.5	15,613	1,024,131	9.4
FRA AREA37 DTS VL1824°	32	100	62	4,326,006	4,712	98%	2,644,232	99%	9,327,138	98%	10,725,759	3,944,426	36.8	63,425	1,159,464	10.8
GRC AREA37 PGP VL0006°	5361	7130	5307	10,293,120							10,233,727					
HRV AREA37 DTS VL1218	203	326	220	4,763,336	18,439	100%	2,121,517	100%			9,335,648	3,304,960	35.4	15,014	1,330,803	14.3
ESP AREA37 HOK VL1824°	41	106	231				1,119,223	85%	6,057,763	87%	8,909,760					
ITA AREA37 PS VL1824	34	256	93	2,171,332	4,045	100%	5,276,588	100%	8,789,840	100%	8,805,972	5,131,774	58.3	55,180	2,182,949	24.8
ITA AREA37 TBB VL1824	29	132	119	4,546,888	4,293	100%	1,213,015	100%	7,964,580	100%	7,974,728	2,692,549	33.8	22,626	780,354	9.8
ITA AREA37 TM VL1824	40	202	135	3,756,323	6,057	100%	7,411,539	100%	7,567,230	100%	7,661,887	3,443,198	44.9	25,505	1,799,601	23.5

4.3. North Sea

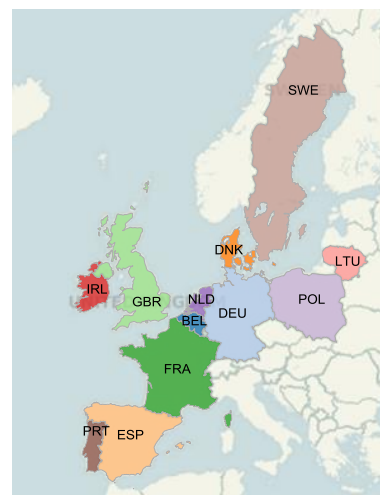
The North Sea area includes ICES areas IIIa, IV, and VIId. The analysis includes reported landings from 10 MS fleets: Belgium, Denmark, Germany, France, Ireland, Lithuania, The Netherlands, Spain, Sweden and the UK (Figure 4.33).

Spanish and French data were incomplete with respect to time series and thus are only included in the analysis of 2012 and 2013. In addition, for confidentiality reasons, data on the German pelagic trawl segment was not available. Trends should therefore be interpreted with care.

For simplicity from this point on we will refer to the EU vessels operating in the aforementioned ICES areas as the EU North Sea fleet.

Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.30 - Regional map, highlighting the North Sea MS fleets and FAO fishing areas.



Fisheries management in the region

The management plans in force in 2013 that impacted on the North Sea included:

- Long-term plan for cod stocks and the fisheries exploiting those stocks (Council Regulation (EC) No 1342/2008).
- Multiannual plan for fisheries exploiting stocks of plaice and sole in the North Sea (Council Regulation (EC) No 676/2007).
- Recovery plan for the Northern hake stock covering the areas Kattogat, Skagerrak, North Sea, the Channel, West of Scotland, all around Ireland and Bay of Biscay (Council Regulation (EC) No 811/2004).
- Fishing opportunities available in EU waters and, to EU vessels, in certain non- EU waters (Council Regulation (EU) No 40/2013 of Jan 21, 2013), including EU and Norway bilateral fisheries arrangements.

In spite of the cod management plan being effective for several years the stock has not yet recovered to MSY level. The long term plan for cod impacts on all fleets that have quota for cod and that interact with the cod fisheries. Days at sea restrictions are becoming more constraining. This also affects mixed fisheries.

The plaice stock has developed favourably under the management plan. Thus the only effect of the plan was the limitation of quota increase to an annual 15%. TAC on both sole and plaice had not been fully utilised in recent years (see NS plaice and sole LTMP evaluation 2014). The LTMP has not yet limited the fishing activities while the stocks are in favourable state. The increased supplies of plaice led to a decline in prices. For the first time ever the sales prices temporarily dropped below the intervention price on Dutch auctions in 2014.

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

Other management measures that may affect economic performance of the fleets operating in the North Sea include marine protected areas and other national legislation.

North Sea fishing fleet, effort and landings

MS fleets operating in the North Sea region in 2013, for which data was available, numbered 4,642 vessels. The UK North Sea fleet comprised the largest fleet in number (1,634 vessels), accounting for 35% of the total reported (Figure 4.31). The latest official DCF data suggests that the EU North

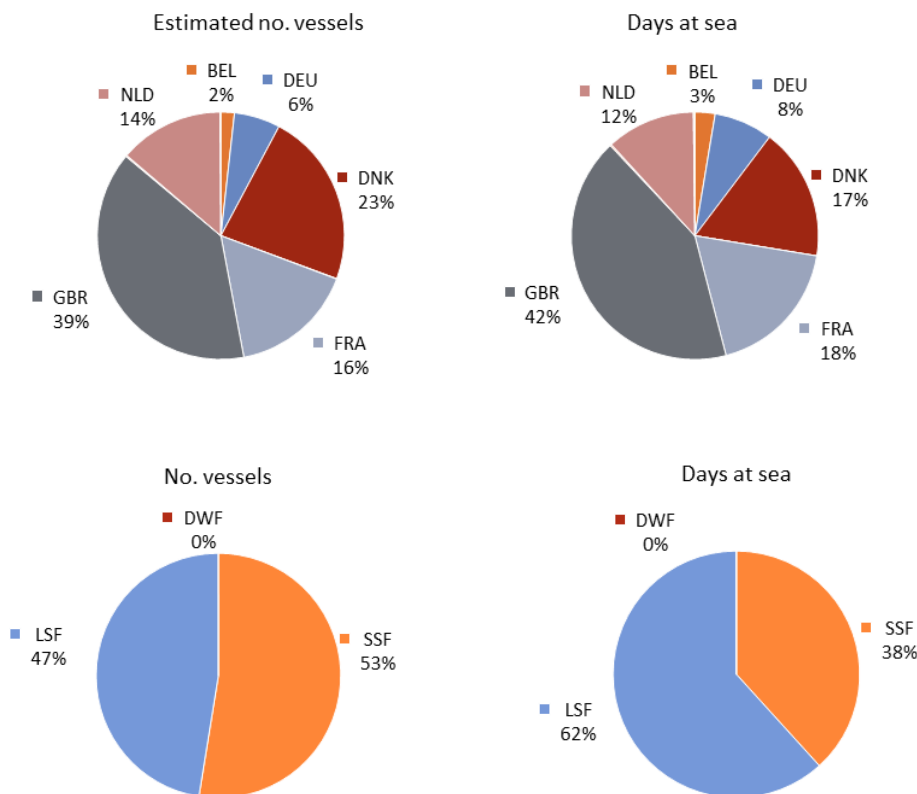
Sea fleet spent over 469,000 days at sea in 2013. The weight and value of landings generated by the fleet amounted to approximately 1,340 tonnes and almost €1.47 billion, respectively.

Overall the North Sea fleet saw declines in capacity and effort deployed over the period 2009-2013. Landed value increased steadily from 2009 onwards while landed weight fluctuated during the same period. Compared to 2012 landing increased in 2013 (Figure 4.32).

The pie charts presented in Figure 4.31 and 4.33 also indicate the proportion of days at sea, landings weight and value attributable to each North Sea MS fleet and by fishing activity in 2013. Denmark, France and UK together accounted for around 78% of the total days at sea (mostly generated by large-scale fisheries).

In terms of landed weight, Denmark (522,700 tonnes), UK (307,200 tonnes), The Netherlands (268,000 tonnes) and France (102,700 tonnes) were the leading MS fleets, together accounting for 89% of the total reported landings. The same MS fleets: UK (€419.8 million); Denmark (€321 million); The Netherlands (€319.3 million) and France (€181.9 million), also collectively accounted for 84% of the total value of landings in the North Sea in 2013. These figures suggest that the Danish fleet landings, to a large extent, are composed of low valued species (Figure 4.33).

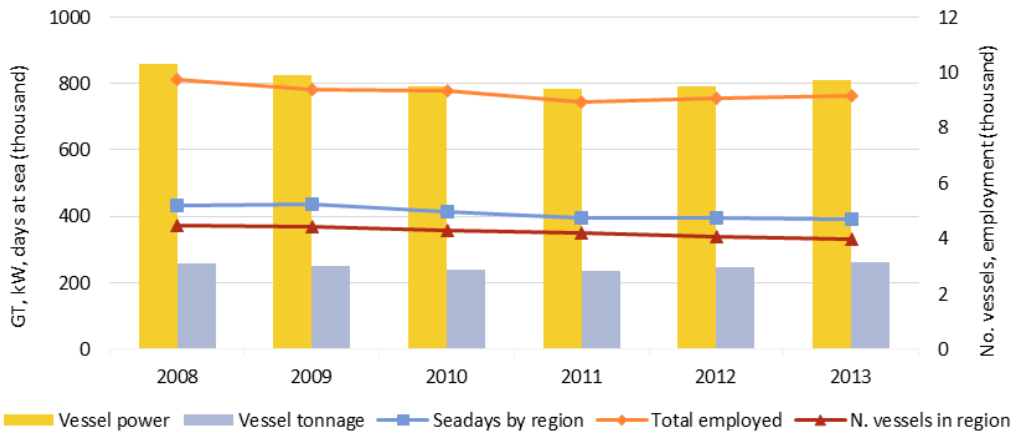
According to the data reported, the North Sea fishery is dominated by large-scale vessels. Although accounting for only 47% of the number, LSF vessels deployed 62% of the effort, consumed 95% of the energy consumption and landed 97% of the weight and 93% of the value (Figures 4.31 and 4.33).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.31 North Sea fleet capacity and effort by MS and fishing activity: 2013.

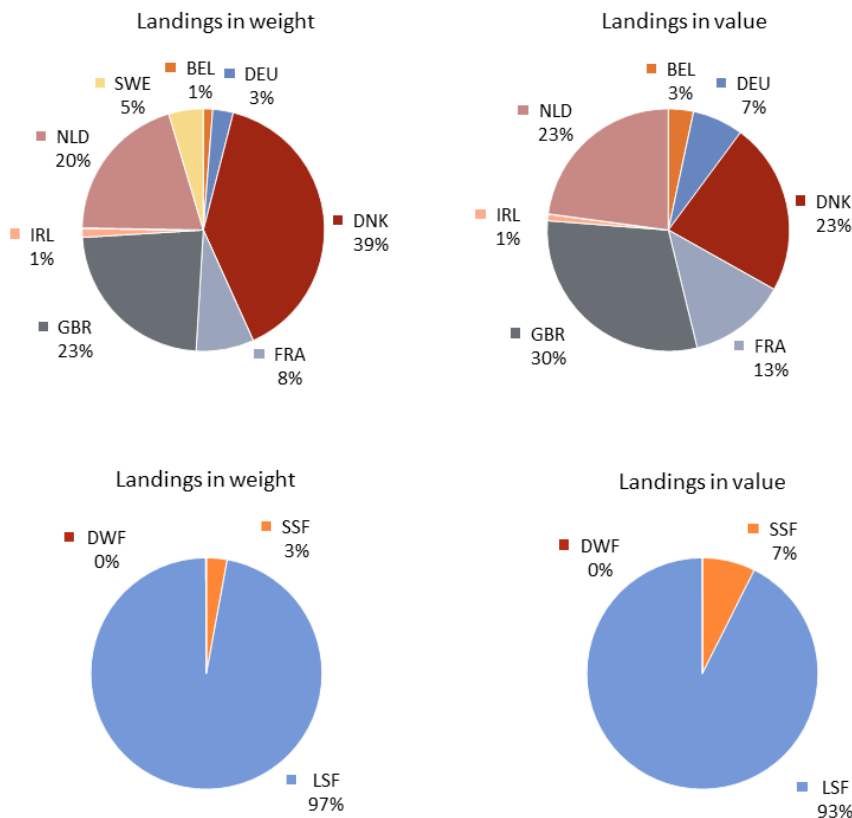
Note: Days at sea missing for Spain, MS fleets with less than 1% share are not shown



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.32 North Sea fleet main capacity, employment and effort trends for the period 2008-2013.

Note: Figures exclude France and Spain due to missing time series data



Data source: Member State data submissions under the DCF 2014 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.33 North Sea fleet landings in weight and value by MS and fishing activity: 2013.

Note: Days at sea missing for Spain; MSfleets with less than 1% share are not shown

Based on the data provided in 2013, Atlantic herring (386,400 tonnes) was the most important species in terms of weight. Landings of sandeel (245,600 tonnes) were the second most important species in terms of weight. The landings of this species decreased in 2012 due to significant cuts in the TAC. Atlantic mackerel (146,900 tonnes) was the third most important species in terms of weight. In terms of demersal species, plaice (88,200 tonnes) and common shrimp (41,000 tonnes) were the most prevalent in terms of weight landed (Figure 4.34 and 4.35).

In terms of value, the five most important species in 2013 were: Atlantic herring (€151.5 million), followed by Atlantic mackerel (€149.5 million), common sole (€148.8 million), common shrimp (€145.5 million) and European plaice (€109.9 million) (Figure 4.35).

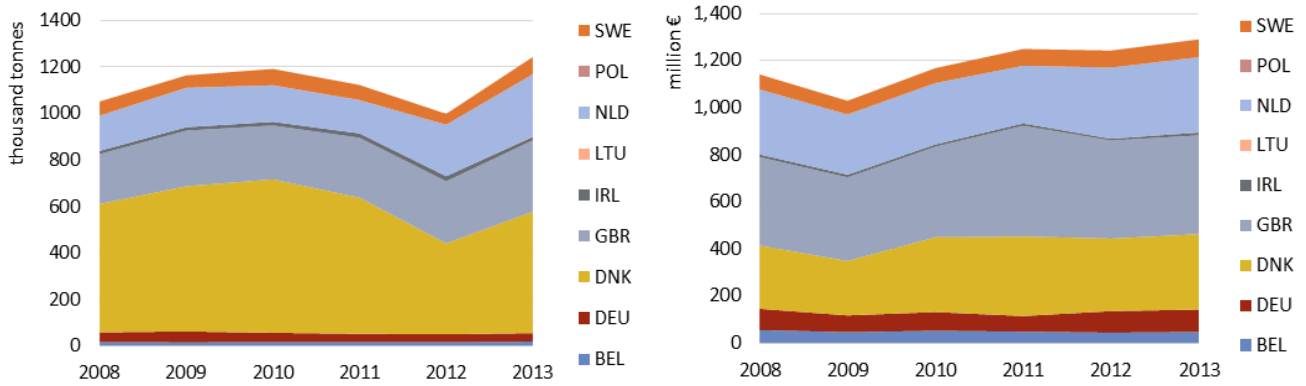


Figure 4.34 North Sea fishing fleet landings in weight and value for the period 2008-2013.

Note: Incomplete time series for France and Spain; landings value missing for Poland

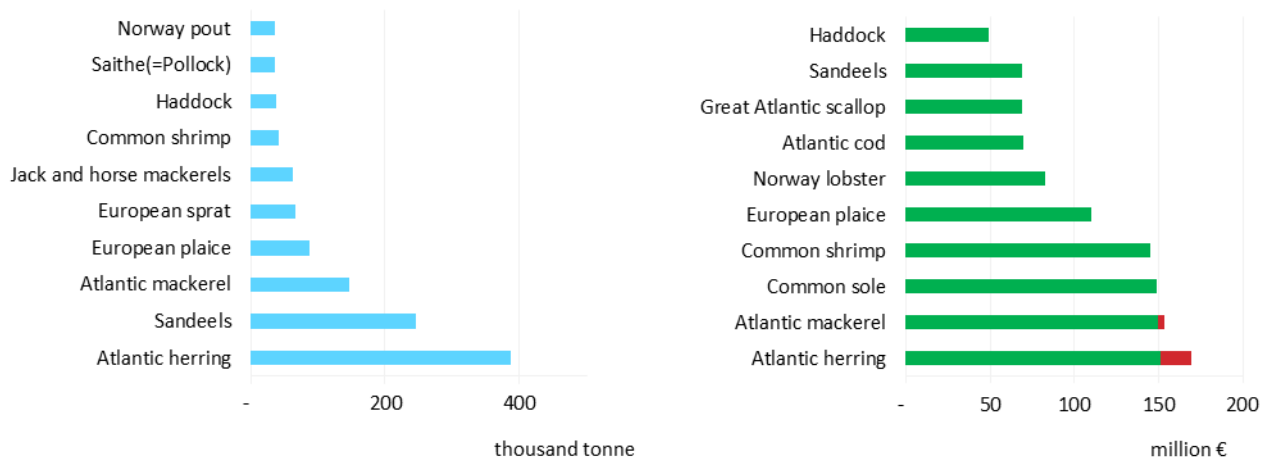
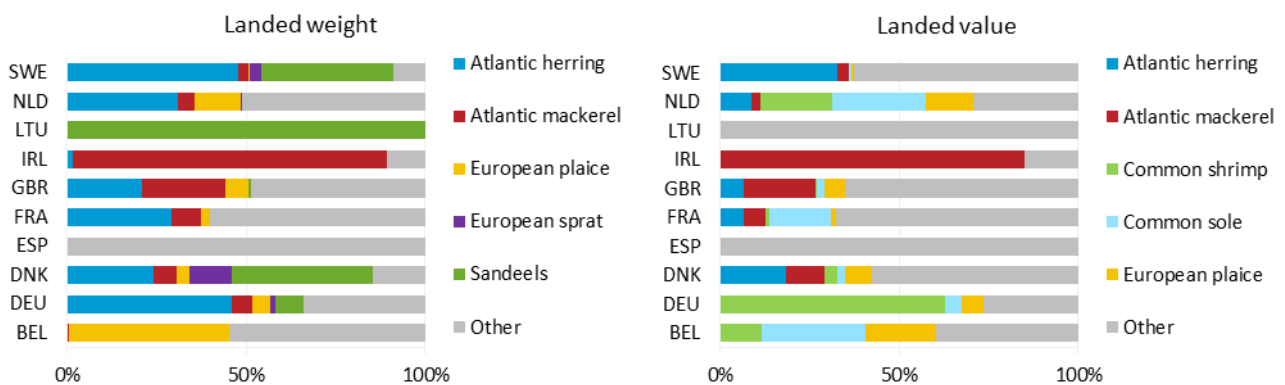


Figure 4.35 List of the top 10 species in terms of value of MS fleets operating in the North Sea in 2013.

Note: The fractions in red are estimates for the German large pelagic fleet.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.36 - Top 5 species in terms of weight and value as a percentage of the total landings in the region by fleets operating in the North Sea, 2013

TAC development of main species

Figure 4.37 displays TACs for 2010 to 2015. It should be noted that in some cases the TAC area not only includes the North Sea but adjacent waters as well (i.e. IIa).

Even though the time span is rather short it can be stated that on average quotas have been stable or slightly increased over time. Haddock, plaice, saithe, herring and sprat are managed at FMSY levels, while desired levels have not yet been reached for cod and sole. One of the most economically important species is brown shrimp (*Crangon crangon*). This species is currently not under a TAC regime.

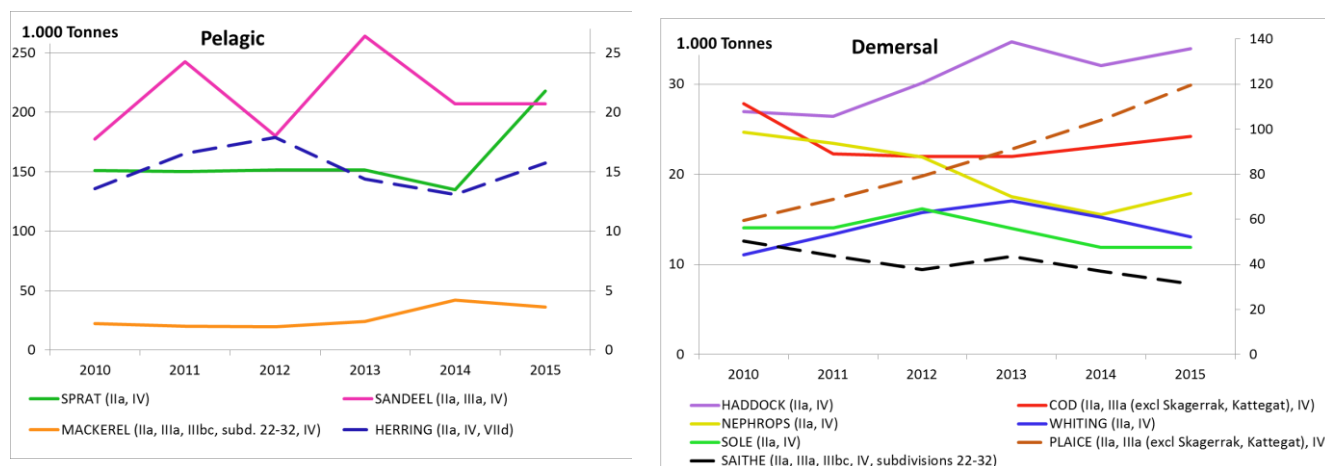


Figure 4.37 TAC for major species in the North Sea. (Dotted line -> secondary axis)

Socio-Economic performance

Table 4.16 to Table 4.19 contain a summary of economic performance of the North Sea fleet by MS, fishing activity and fleet segment, respectively.

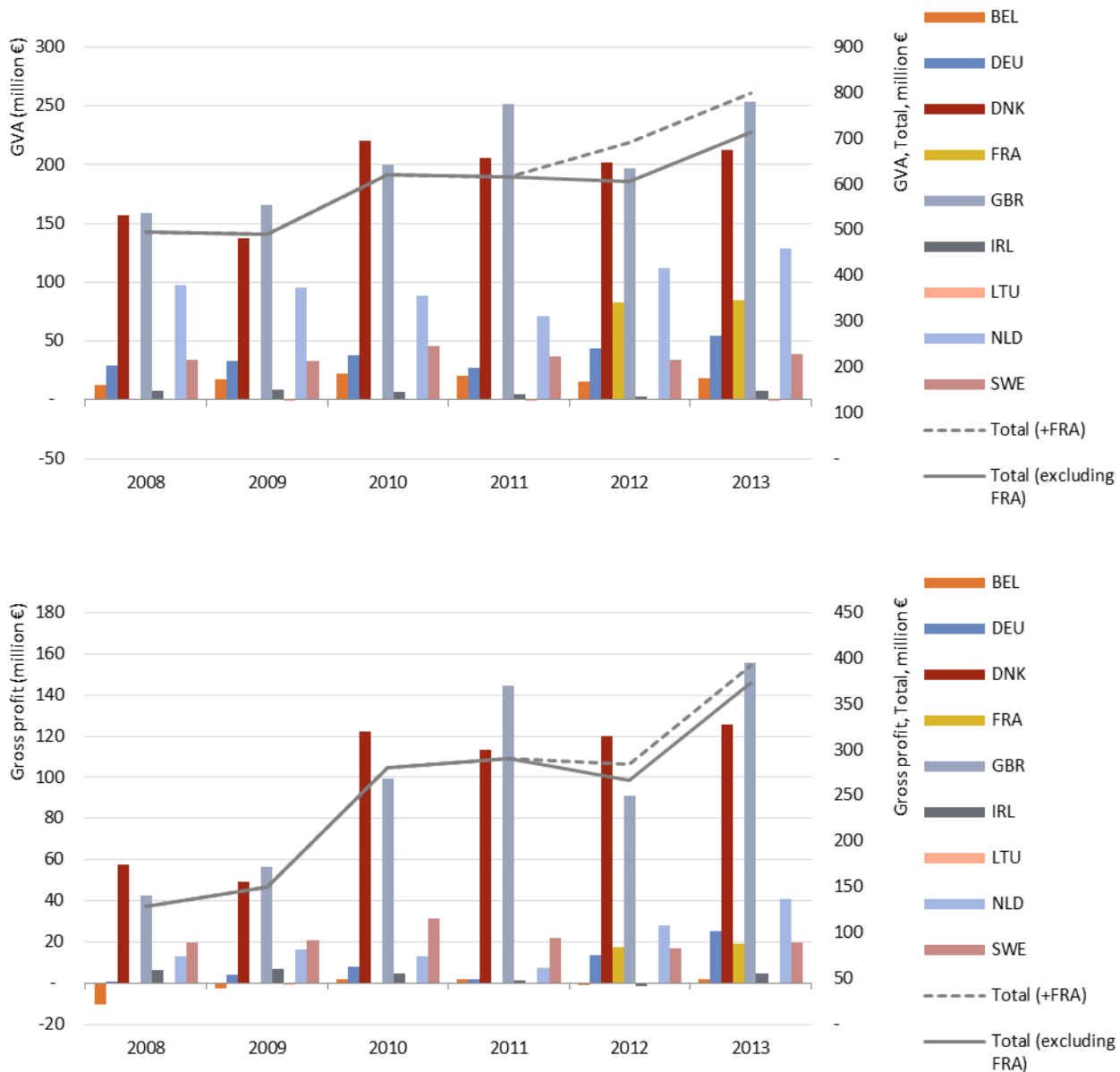
Data on the Spanish fleet is incomplete due to missing effort data.

Performance by Member State

The revenue (income from landings and other income) generated by the North Sea fleet in 2013 was estimated at €1.53 billion, 91% of which was split between five MS - UK (€458 million), Denmark (€332 million), The Netherlands (€316 million), France (€185 million) and Germany (€95 million) (Table 4.16).

Revenue increased 3% compared to 2012. All countries except for France (-€1.3 million) and Spain (-€3,000) saw their revenues increase in 2013. The Danish fleet had the largest increase in absolute figures (€18.7 million) mainly due to the recovery of the sandeel fishery, which had been at a very low level in 2012 in terms of both weight and value. Data on the Spanish fleet is incomplete due to missing data.

GVA produced by the North Sea fleet covered in the analysis was estimated at €799 million in 2013. After accounting for operating costs, the fleet made €392 million in gross profit (Table 4.16). Figure 4.38 provide results over the period 2008-2013.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.38 Trends in GVA and Gross profit for the North Sea fleet 2008-2013 (by MS).

Performance by fishing activity

By fishing activity, the North Sea SSF generated €119.5 million in revenue, a 4% decrease on 2012 results, while the LSF generated €1.4 billion in revenue, a 2% increase compared to 2012 (Table 4.17).

There were six MS SSF operating in the North Sea region (Irish SSF excluded due to low levels of activity reported and insufficient data). Of the SSF, the UK fleet, consisting of 1,063 vessels and employing 864 FTEs (indicating high part-time activity), generated the highest revenue (€53 million). Additionally, the UK North Sea LSF, consisting of 571 vessels, generated the highest revenue (€405 million) in the segment, followed by the Danish (€318 million) and Dutch (€311 million) LSF (Table 4.18).

Overall the SSF segment was profitable in 2013; six of the seven MS with a SSF made profits, totalling €64 million in GVA and €16.6 million in gross profit. All North Sea MS LSF generated gross profits in 2013 while only one SSF suffered gross losses (German SSF, €151,000) (Table 4.18).

Only a limited amount of activity by DWF (Lithuanian and Spanish) was reported for the North Sea region.

Performance by fleet segment

Table 4.19 provides results for the top 35 MS fleet segments in terms of landed value operating in the North Sea in 2013. These 35 MS fleet segments represented 73% of the FTE, 63% of the effort (295,000 days at sea), 90% of the landed weight (1.205 million tonnes) and 84% of the landed value (€1,230 million) generated by the regional fleet in 2013. Collectively these fleets generated almost €1.3 billion in revenue, €681 million in GVA and €361 million in gross profit, representing 83%, 85% and 92% respectively of the total estimates for the NS fleet. Net profit for these fleets was estimated at €192 million but this figure is not complete as it excludes one French and four Dutch fleet segments due to insufficient data.

At fleet segment level, the UK pelagic trawlers over 40m (€112 million) operating in the North Sea region generated the most landed value in 2013, followed by Danish pelagic trawl over 40m segment (€107 million) and the Dutch beam trawlers over 40m (€106 million) (Table 4.19).

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

Trends

Overall the number of vessels of the North Sea fleet shows a decreasing trend in the years 2008-2013. However capacity first decreased, then increased again towards the latter part of the period when measured in engine power and vessel tonnage. The employment, measured in terms of Full Time Equivalents (FTE) showed a clear decreasing trend over the period. Landings in weight and value remained at a stable level throughout the period, with the exception of a considerable drop in landed value in 2009 due to falling prices. Gross profit and GVA generated by the fleet showed a slight upward tendency whereas the net profit saw a considerable improvement over the 6-year period. The Danish and the UK fleets are the main contributors to the upward trends in gross and net profit, both showing major increases after 2009.

The overall changes are mostly driven by the LSF, whereas the trends for the SSF in the North Sea are less clear and points towards the status quo. However, the number of vessels and the employment show a slightly decreasing trend.

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

- Higher average prices for some of the main species, e.g. Atlantic cod, Atlantic mackerel and Norway lobster
- Decreasing fuel prices and other operating costs
- Higher total landings in part due to increased TAC and quotas following recovery of some stocks, such as European plaice, haddock and sandeels
- Capacity reduction (with or without public support)
- ITQ and other right-based management systems that reduce capacity, and hence capital and operating costs

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

- Lower average prices the total catch, and for many commercially important species, such as: European plaice, Atlantic herring and several species used for industrial purposes
- Reduced TACs and quotas for several key stocks, such as Atlantic herring, common sole and Norway lobster.

Description of major fisheries in the region by Member State

Pelagic fishery

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

The UK pelagic fishery is mainly performed by vessels using pelagic trawls, targeting Atlantic herring and Atlantic mackerel in the Northern North Sea (4a). Moreover some fishery on sandeel

and Norway pout is performed. These fisheries are executed mostly by Scottish large pelagic trawlers (>50m).

The Dutch pelagic fleet in the North Sea consists of 12 large trawlers (60 – over 100m). These vessels target herring, jack and horse mackerel and Atlantic mackerel. There is no fishery directed for industrial purposes.

The Swedish pelagic fishery is performed by vessels mostly fishing pelagic species but seasonal switch to demersal fisheries occurs. About 10% of the sandeel quota is fished as well as some Norway pout and sprat. All industrial catches are landed in Denmark. Major amounts of herring and mackerel were in 2013 landed in the UK due to better prices.

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

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

Demersal roundfish and nephrops fishery

The British fishery is the most important demersal fishery on roundfish in the North Sea. British vessels took the bulk of the quota of haddock which is caught in the North West and central North Sea. It is targeted by vessels of about 40m length and landed almost entirely in the UK. The same vessels exploit the major part of saithe, mainly in the Northern North Sea. A great deal of Saithe is landed fresh in Denmark as the market in the UK is limited. UK vessels catch more than half of the nephrops national total and almost half the Atlantic cod national total in the North Sea.

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

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

The French fleet also participates in the saithe fishery in 4a as well as some amount of cod.

The Dutch demersal roundfish fishery targets cod and nephrops, but these fisheries are of minor importance in the national context.

Swedish vessels catch some major amount of nephrops, moreover cod, saithe and haddock. Overall, these fisheries are not of major importance on a regional scale.

Belgium has very small demersal fishery on roundfish/nephrops.

Flatfish fishery (plaice and sole)

The Netherlands exert by far the most activity in flatfish fishery. It is performed mainly by large beam trawlers in the Southern North Sea (4c). Recently the pulse technology has been introduced, resulting in considerable fuel savings. As a result this fishery is profitable. Although the plaice stock is at an all-time high, the fishery only partly profited as prices decreased. Thus, the quota was not fully exploited. Sole is very important due to high prices.

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

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

Flatfish is a major species for the Belgian fishery. It is performed by large beam trawlers in the Southern North Sea. As opposed to the Dutch vessels, the Belgian beam trawlers are still using

traditional gear with heavy tickler chains which impose a high towing resistance and thus result in high fuel consumption. Therefore, the fleet is less profitable in comparison with the Dutch fleet.

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

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

Sweden has on a regional scale only negligible flatfish fisheries in the North Sea.

Brown Shrimp Fishery

Brown shrimp is a fishery without quota. Considerable catches are being made in coastal areas of the Southern North Sea. The fishery is performed by smaller beam trawlers (mainly below 24m). Catches of the Dutch and German fleet account for about 90% of the total catch. Moreover, the Danish and the Belgian fleet contribute to the total. France and Great Britain report only negligible amounts of landings.

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

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

Great Atlantic scallop fishery

The most important specie in terms of landings values in this sub-region were great Atlantic scallop in 2013 (represents 26% of French landings values). Many different fleet segments are fishing in 7d area: netters or trawlers targeting sole, seabass or squids, vessels using pots targeting whelk, etc. But economic activity in this area is also significantly influenced by the French dredgers targeting great Atlantic scallop in Seine bay. Economic situation of vessels is each year directly related to the good management of the resource and market stability also. This fishery was indeed highly regulated because of the presence of a protected deposit that authorizes fishing during a short part of the year only.

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http://ec.europa.eu/fisheries/documentation/publications/cfp_factsheets/fisheries_partnership_agreements_en.pdf

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<http://www.fao.org/fishery/statistics/software/fishstat>

Table 4.16 EU North Sea region fleet structure and economic performance estimates by MS in 2013

MS	Estimated no. vessels	Vessel power	Vessel tonnage	Estimated total employed	Estimated FTE	Days at sea in region	Estimated energy consumption	Landed weight by region	Landings in value	Estimated revenue	Estimated GVA	GVA to Revenue	GVA per FTE	Estimated Gross profit	Gross profit margin
	in region	(kW)	(tonne)	#	#	days	K litres	tonne		(thousand €)		%	(thousand €)		%
BEL	74	27,075	8,479	226	160	11,412	23,529	16,552	46,780	48,840	18,789	38.5	117.7	1,908	3.9
DEU	252	55,721	16,558	598	489	33,140	23,985	36,579	94,837	94,994	54,875	57.8	112.1	24,982	26.3
DNK	956	131,396	42,694	990	1,282	74,577	77,705	522,651	320,989	331,914	212,203	63.9	165.5	125,886	37.9
ESP	2	113	61	5	18			4	12	12					
FRA	682	120,666	27,883	1,865	1,201	79,019	51,910	102,719	181,933	184,554	85,032	46.1	70.8	18,846	10.2
GBR	1,634	306,765	89,355	4,694	3,299	181,564	126,403	307,155	419,781	458,183	254,053	55.5	77.0	155,610	34.0
IRL	7	4,491	2,181	38	35	823	1,803	15,389	12,076	12,193	7,226	59.3	204.8	4,515	37.3
LTU		860	851	10	8	37	922	1,320	363	881					
NLD	573	211,460	85,811	1,870	1,630	50,088	148,074	267,693	319,325	315,703	128,359	40.7	78.8	40,631	12.9
SWE	463	73,922	14,716	736	483	38,186	29,159	74,242	75,878	81,495	38,474	47.2	79.6	19,818	24.3

Table 4.17 EU North Sea region fleet structure and economic performance estimates by fishing activity in 2013

	Estimated no. vessels in region	Vessel power (kW)	Vessel tonnage (GT)	Total employed (number)	Estimated FTE	Seadays by region (day)	Energy consumption (K litre)	Landings in weight (tonne)	Landings in value	Estimated Revenue (thousand €)	Estimated GVA	GVA to Revenue (%)	GVA per FTE (thousand €)	Estimated Gross profit (thousand €)	Gross profit margin (%)
North Sea SSF	2,440	155,986	10,008	3,459	1,518	179,420	21,029	38,820	109,112	119,509	63,959	53.5	42	16,633	13.9
North Sea LSF	2,201	775,550	277,679	7,560	7,066	289,388	461,538	1,304,163	1,362,491	1,408,372	735,052	52.2	104	375,563	26.7
North Sea DWF	1	932	902	12	22	37	922	1,323	371						

Table 4.18 EU North Sea fleet structure and economic performance estimates by fishing activity in 2013

		Estimated no. vessels in region	Vessel power (kW)	Vessel tonnage (GT)	Total employed (number)	Estimated FTE	Seadays by region (day)	Energy consumption (K litre)	Landings in weight (tonne)	Landings in value (thousand €)	Estimated Revenue (thousand €)	Estimated GVA (thousand €)	GVA to Revenue (%)	GVA per FTE (thousand €)	Estimated Gross profit (thousand €)	Gross profit margin (%)	
North Sea	SSF	Denmark	577	22,100	2,077	193	104	20,058	1,280	5,840	12,197	13,951	7,884	56.5	76	1,814	13.0
	SSF	France	281	28,555	1,764	535	313	30,011	4,082	9,142	34,534	38,375	23,733	61.8	76	7,916	20.6
	SSF	Germany	14	624	72	12	5	600	22	35	60	77	59	77.0	13	151	197.1
	SSF	Netherlands	200	17,543	512	384	105	2,817	818	490	3,348	5,079	2,665	52.5	25	1,376	27.1
	SSF	Sweden	305	20,614	1,322	369	128	19,075	1,538	1,498	7,438	8,805	4,911	55.8	38	984	11.2
	SSF	UK	1,063	66,551	4,261	1,966	864	106,859	13,289	21,815	51,534	53,220	24,826	46.7	29	4,693	8.8
	LSF	Belgium	74	27,075	8,479	226	160	11,412	23,529	16,552	46,780	48,840	18,789	38.5	118	1,908	3.9
	LSF	Denmark	379	109,296	40,616	798	1,179	54,519	76,426	516,810	308,792	317,963	204,319	64.3	173	124,072	39.0
	LSF	France	402	92,111	26,118	1,330	888	49,008	47,828	93,577	147,399	146,179	61,299	41.9	69	10,929	7.5
	LSF	Germany	238	55,097	16,486	585	485	32,540	23,962	36,544	94,777	94,918	54,934	57.9	113	25,133	26.5
	LSF	Ireland	7	4,491	2,181	38	35	823	1,803	15,389	12,074	12,191	7,226	59.3	205	4,515	37.3
	LSF	Netherlands	373	193,918	85,299	1,486	1,525	47,271	147,256	267,203	315,977	310,624	125,695	40.5	82	39,254	12.6
	LSF	Spain	1	40	10	2	4			1	4	5					
	LSF	Sweden		53,308	13,394	367	355	19,111	27,621	72,745	68,440	72,690	33,563	46.2	94	18,834	25.9
	LSF	UK	571	240,214	85,094	2,728	2,435	74,705	113,113	285,340	368,247	404,963	229,226	56.6	94	150,917	37.3
	DWF	Lithuania		860	851	10	8	37	922	1,320	363	881					

Table 4.19 EU North Sea region fleet structure and economic performance estimates of the top 35 MS Fleet Segments in terms of revenue in 2013

Fleet segment	N of vessels in the region	Estimated total employed	Estimated FTE	Estimated energy consumption	Days at sea in region	As a % of fleet segment	Landed weight by region	As a % of fleet segment	Landed value by region	As a % of fleet segment	Estimated revenue	Estimated GVA	GVA to revenue	GVA per FTE	Estimated Gross profit	Gross profit margin
	#	#	#	Litres	Days		kg		€		€	€	%	€	€	%
GBR AREA27 TM VL40XX°	18	182	52	20,293,047	922	48%	141,395,091	49%	112,173,235	48%	114,123,871	88,671,279	77.7	1,693,493	68,704,625	60.2
DNK AREA27 TM VL40XX	13	57	153	19,447,056	2,532	81%	229,631,941	82%	106,775,767	80%	97,705,580	74,629,790	76.4	488,064	59,881,138	61.3
NLD AREA27 TBB VL40XX°	56	367	367	53,414,548	11,018	100%	35,344,006	100%	106,042,932	100%	96,666,343	33,997,440	35.2	92,750	12,235,226	12.7
GBR AREA27 DTS VL2440°	65	524	575	27,545,067	10,926	66%	51,785,265	76%	86,503,785	69%	92,070,869	43,389,583	47.1	75,467	24,903,306	27.1
NLD AREA27 TBB VL1824°	160	425	429	23,749,290	21,860	100%	21,628,643	100%	72,931,797	99%	74,380,761	36,440,427	49.0	84,899	11,149,436	15.0
NLD AREA27 TM VL40XX°	11	230	340	40,986,857	1,483	72%	180,707,293	70%	69,461,731	70%	69,111,300	26,320,329	38.1	77,385	5,249,656	7.6
GBR AREA27 DTS VL1824°	101	615	590	19,046,574	15,377	55%	33,619,479	73%	63,927,903	68%	68,964,616	37,102,991	53.8	62,870	25,333,694	36.7
DNK AREA27 DTS VL40XX	17	66	113	13,410,397	2,769	96%	133,277,068	96%	44,530,210	93%	53,884,580	35,042,647	65.0	310,469	23,510,820	43.6
DNK AREA27 DTS VL2440°	34	107	228	17,335,987	10,102	95%	59,580,565	93%	53,820,606	94%	50,298,134	27,466,235	54.6	120,381	13,914,216	27.7
SWE AREA27 DTS VL2440°	33	135	145	18,256,198	4,588	61%	67,917,363	46%	43,448,864	58%	46,523,638	23,621,891	50.8	163,372	16,337,868	35.1
NLD AREA27 TBB VL2440°	34	151	151	17,968,302	5,290	100%	11,818,679	100%	31,980,323	100%	35,724,311	13,597,167	38.1	90,305	4,677,462	13.1
DNK AREA27 DTS VL1824°	58	134	198	8,459,699	9,391	86%	42,184,299	90%	34,514,846	89%	34,882,615	19,640,808	56.3	98,991	8,014,882	23.0
FRA AREA27 DRB VL1218°	80	295	230	7,299,277	11,567	85%	10,865,416	78%	26,968,179	86%	34,422,685	18,191,895	52.9	79,092	5,009,816	14.6
GBR AREA27 FPO VL0010°	742	1336	523	8,910,493	71,454	53%	13,467,974	50%	32,203,527	50%	33,393,546	15,464,313	46.3	29,554	2,034,160	6.1
GBR AREA27 DTS VL40XX°	6	113	138	12,480,899	1,165	93%	7,868,866	91%	11,173,947	91%	31,808,273	16,382,270	51.5	118,335	11,033,157	34.7
DEU AREA27 TBB VL1218	119	182	156	5,075,533	15,218	100%	8,792,495	100%	31,522,259	99%	31,132,816	20,667,049	66.4	132,736	11,078,323	35.6
BEL AREA27 TBB VL2440	30	96	62	13,835,269	4,219	50%	10,468,959	65%	27,520,930	53%	28,582,122	11,652,874	40.8	189,139	3,104,775	10.9
DNK AREA27 DTS VL1218	114	156	166	6,486,430	13,395	74%	18,712,453	61%	24,437,769	76%	25,758,108	14,232,190	55.3	85,545	4,616,255	17.9
DEU AREA27 TBB VL1824	67	148	130	5,595,666	9,457	99%	6,383,184	98%	24,365,923	99%	24,146,407	14,918,633	61.8	114,821	7,156,188	29.6
FRA AREA27 DTS VL1824°	44	188	137	11,015,669	6,948	19%	13,508,571	26%	22,999,330	17%	22,638,163	5,841,855	25.8	42,632	1,356,132	6.0
FRA AREA27 DFN VL1012	73	223	162	2,301,423	11,723	41%	4,111,587	36%	20,217,630	41%	21,093,183	13,130,988	62.3	80,811	4,037,037	19.1
NLD AREA27 DTS VL2440°	19	97	97	6,501,905	3,419	100%	9,812,353	100%	18,922,578	100%	19,442,509	7,547,604	38.8	77,555	2,560,882	13.2
GBR AREA27 TBB VL2440°	10	94	41	9,608,495	2,446	37%	11,251,115	68%	19,149,018	54%	19,254,434	8,662,557	45.0	210,819	6,433,686	33.4
DNK AREA27 PMP VL1824°	16	59	97	4,110,375	2,351	100%	3,718,994	100%	9,871,699	100%	17,681,728	10,354,544	58.6	106,309	4,505,653	25.5
FRA AREA27 DTS VL1218	33	100	60	3,207,300	4,660	12%	7,792,243	29%	19,318,389	21%	16,753,313	11,074,593	66.1	186,096	7,757,524	46.3
GBR AREA27 DTS VL1218°	71	279	219	5,004,081	8,818	26%	7,012,861	28%	14,845,374	28%	15,740,924	7,034,373	44.7	32,190	3,608,522	22.9
DEU AREA27 DTS VL2440	9	48	41	3,498,676	1,651	75%	8,776,575	72%	14,162,443	90%	14,703,786	8,908,315	60.6	219,039	5,371,160	36.5
BEL AREA27 TBB VL1824	25	76	55	5,618,564	4,175	99%	3,189,166	99%	10,987,211	97%	11,370,648	3,905,069	34.3	70,565	970,627	8.5
SWE AREA27 DTS VL1824°	26	67	77	3,597,436	3,862	53%	3,324,315	22%	11,051,403	57%	11,212,533	4,989,225	44.5	65,133	2,314,758	20.6
GBR AREA27 DRB VL2440°	8	54	101	3,657,115	2,664	45%	5,453,438	39%	11,019,451	45%	11,097,102	4,732,733	42.7	46,970	2,152,804	19.4
DNK AREA27 PGP VL1218	33	68	75	1,064,080	4,408	87%	4,197,674	94%	10,972,723	95%	11,084,717	7,048,640	63.6	93,957	2,842,119	25.6
SWE AREA27 DTS VL1218°	49	89	85	4,017,525	6,267	77%	1,026,040	16%	9,574,407	64%	9,995,278	3,271,148	32.7	38,295	81,644	0.8
FRA AREA27 TM VL40XX	3	60	60	3,413,604	283	51%	28,632,709	62%	15,441,704	37%	9,907,700	2,946,586	29.7	48,793	841,299	8.5
GBR AREA27 FPO VL1218°	29	127	130	2,602,174	4,420	39%	4,888,160	39%	9,187,577	39%	9,760,150	4,407,450	45.2	33,857	1,519,758	15.6
FRA AREA27 DRB VL1012	38	83	60	1,892,636	4,528	44%	3,066,422	41%	8,138,171	53%	9,739,005	6,061,026	62.2	100,732	3,175,260	32.6

4.4. OTHER FISHING REGIONS (OFR) - EU DISTANT WATER FLEET AND EU OUTERMOST REGION FLEET

Although the main fishing grounds for the EU fishing fleet are the Baltic Sea, North Sea, Northeast Atlantic and Mediterranean Sea, parts of the EU fleet operate much further afield. This analysis is concentrated on all the other fishing regions where the EU fleets are present and operational.

These regions, collectively termed "Other Fishing Regions" (or OFR) encompass all fishing areas outside the North East Atlantic (FAO AREA 27) and Mediterranean & Black Sea (FAO AREA 37), including EU-waters in outermost regions (except for the Azores region, which is included in the NE Atlantic) and non-EU waters (international waters/high seas and EEZs of non-EU countries, including Northwest Atlantic (FAO AREA 21), non-EU FAO AREA 37 and the Eastern Arctic region).

While the majority of the production in 'Other Fishing Regions' is the result of Member States high seas fleets (usually over 40m), EU Member States also have a substantial fleet, consisting mainly of small to large-scale coastal vessels, operating in the various EU outermost regions.

EU outermost Region fleet - There are seven "EU outermost regions": Guadeloupe, French Guyana, Martinique, Réunion, Saint Martin and Saint-Barthélemy (the French overseas departments), the Canaries (autonomous community belonging to Spain), and the Azores and Madeira (autonomous regions of Portugal). Their respective geographical locations (Atlantic, Caribbean and Indian Ocean) enable the EU to have the world's largest maritime territory with an exclusive economic zone covering 25 million km². For this analysis, the Portuguese Azores region is not included in Other Fishing Regions as it is located in the Northeast Atlantic (AREA 27).

EU high seas or distant-water fleet - According to the definition applied in the AER, the EU distant-water fleet is defined as vessels over 24 m operating predominately in Other Fishing Regions.

The EU distant-water fleet operates in international waters (high seas) and through bilateral agreements with countries outside the EU. These include fishing areas in the North, South and Central Atlantic, Indian, Pacific and Antarctic (or Southern) Oceans.

The EU has 2 types of fishing agreements with non-EU countries: (1) fisheries partnership agreements (FPA) – the EU gives financial and technical support in exchange for fishing rights, generally with southern partner countries and (2) the "northern agreements" – these are excluded from the Other Fishing Regions analysis and instead included, by definition, in either the North Atlantic or the North Sea & Eastern Arctic Regions.

Due to the limited data provided for many EU fleet segment operating in Other Fishing Regions, this analysis is complemented with FAO statistics.

Fisheries management

Outermost regions/national regional fisheries regulations – Apart from TACs for all main species/stocks, EU regulations comprise specific fishery technical regulatory measures, such as mesh sizes, minimum landing sizes, by-catch limitations as well as periods and areas closed for fishing. Coastal and offshore fisheries are mainly regulated by each MS country through their national legislation (France, Spain and Portugal).

Regional Fisheries Management Organisations (RFMOs) - Fishing in international waters outside the EEZ is regulated by RFMOs and their member countries. These members include bordering states as well as countries that are heavily involved in fishing in a given marine region. EU Member States are represented in numerous RFMOs through the European Commission. Annual

negotiations are held to determine which countries are allowed to catch how much of a species. Almost all commercially relevant fish species are covered by the RFMOs. There are specific RFMOs for the management of certain fish species, for example, tuna, salmon and Pollock.

RFMOs that manage fish stocks by region include: North Atlantic Salmon Conservation Organization (NASCO); South East Atlantic Fisheries Organisation (SEAFO); South Indian Ocean Fisheries Agreement (SIOFA); South Pacific Regional Fisheries Management Organisation (SPRFMO); Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), etc.

RFMOs that manage highly migratory fish species, mainly tuna include: International Commission for the Conservation of Atlantic Tunas (ICCAT); Indian Ocean Tuna Commission (IOTC); Western and Central Pacific Fisheries Commission (WCPFC); Inter-American Tropical Tuna Commission (IATTC); Commission for the Conservation of Southern Bluefin Tuna (CCSBT), etc.

EU long distance fishing fleet, effort and landings in Other Fishing Regions

According to DCF data, there were 12 EU MS distant water (or outermost region) fleets operating in Other Fishing Regions (OFR) in 2013: Spain, France, Lithuania, Portugal, Poland, Latvia, UK, Germany, Netherlands, Denmark, Estonia and Ireland. Fishing activity for Italian distant water fleet has been suspended since 2013.

Despite the quite sufficient extent of data provided for landings weight, only nine EU MS were able to submit value of landings. Due to confidentiality issues, Poland and Germany have not reported economic data. For the similar reasons data (landings in weight and value) were unavailable for Estonia and Latvia. Furthermore, due to missing or incomplete data submitted for some Member State fleets operating in Other Fishing Regions, the results presented does not convey the full extent of the EU fisheries in the region.

In 2013, landings in weight generated by the EU distant water fleet covered (excludes Estonia and Latvia) was around 867,000 tonnes with the majority of 81% coming from Other Regions, and the remaining part caught from Eastern Arctic (12%), Northwest Atlantic (5%), Outermost regions (2%) and less than 1% for non-EU Mediterranean waters.

In terms of landed weight, Spain (536,000 tonnes), France (90,100 tonnes), Lithuania (71,100 tonnes), and Poland (61,400 tonnes) were the leading distant water fleets, together accounting for 87% of the total weight landed. Compared to 2012, landed weight increased for several of the major MS fleets. For instance in 2013, Spanish distant water fleet landed weight increased 8%, Lithuania 86% and Poland 5%. Landings for the French fleet increased more than 10 times compared to 2012. However, other MS fleet saw significant decreases, for example, the landed weight for the German distant water fleet fell 35%, for the Dutch fleet 71% and Danish fleet 19%. These declines were mainly a result of issues related to fishing agreements and in fact, the Italian fleet saw a reduction of 100% as fishing activity in other fishing regions ceased in 2013.

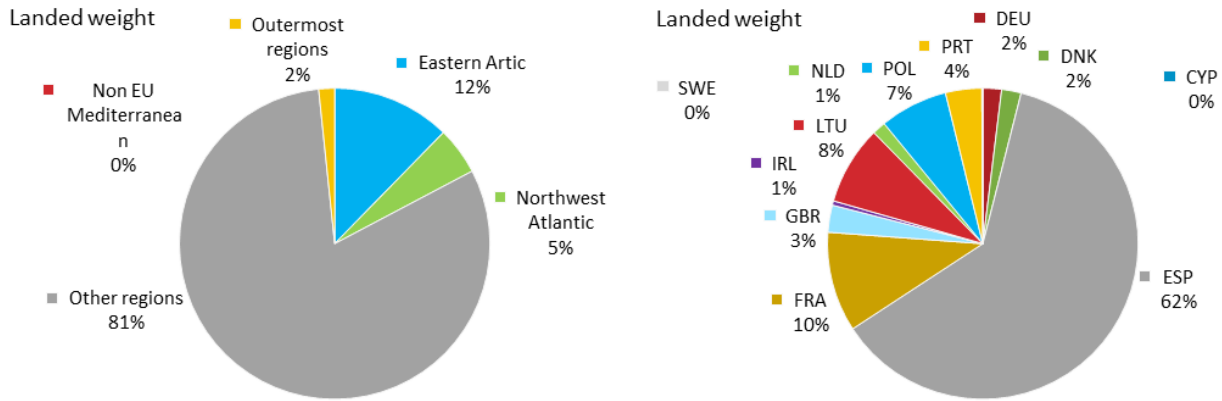
The two most important distant water fleet segments in terms of revenue were the Spanish purse seiners over 40m (€447.8 million) and demersal trawlers over 40m (€163.7 million), accounting for 36% and 12% of the revenue generated, respectively. The French purse seiners over 40 m were the third most important fleet segment, generating €140 million in revenue.

In the Northwest Atlantic region, the Portuguese demersal trawler over 40m segment generated the most revenue in this region (€38 million), followed by the Spanish homologous segment (€24.7 million).

In the Eastern Arctic region, the most important fleet in terms of revenue was again the Spanish demersal trawler over 40m segment (registered in Area27) at €36.3 million, followed by the French and Polish homologous segments.

For the outermost regions, the Spanish polyvalent passive gear under 10m segment generated the most revenue in this region (€19.7 million), followed at a distance by the same MS's polyvalent passive gear between 24 and 40 m segment (€7.5 million).

In other regions, the Spanish purse seiners over 40m (registered in OFR) (€477.8 million), followed by the same MSs demersal trawlers (€161.5 million).

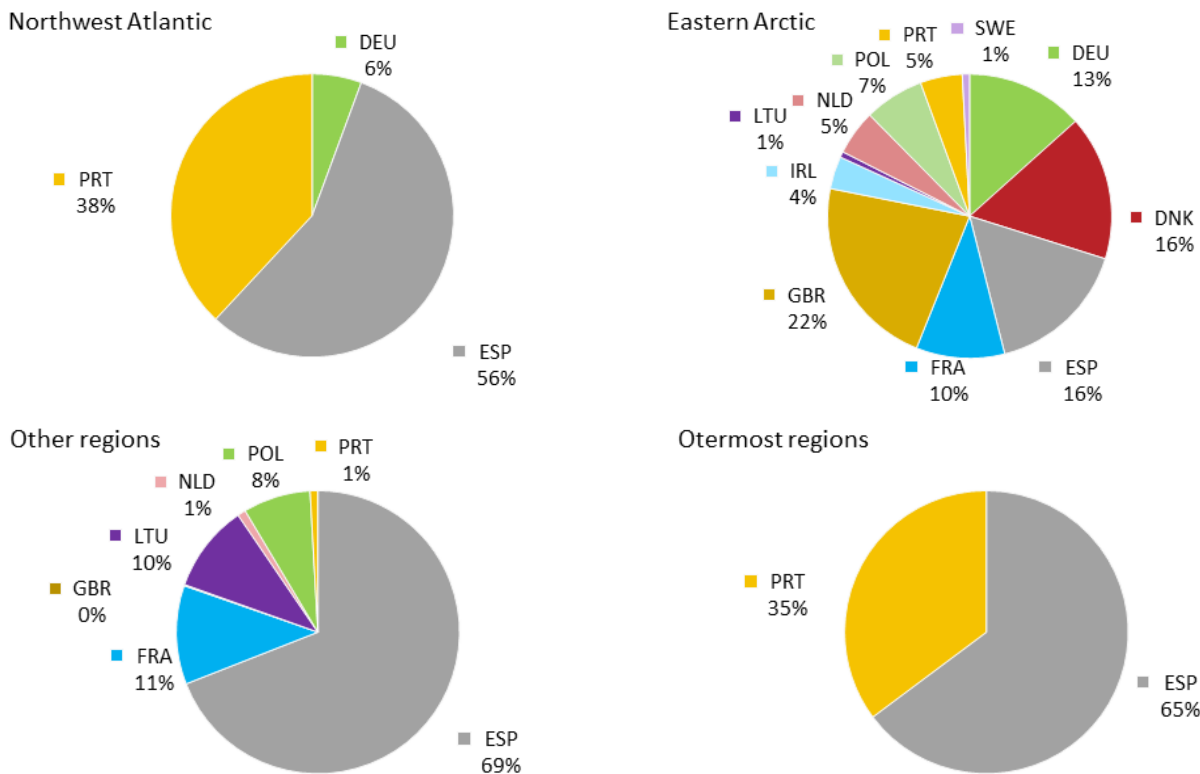


Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.39 Share of landings in weight by the EU distant water fleet by region (left) in Other Fishing Regions and by Member State (right), 2013

Note: excludes Estonia and Latvia; according to FAO data, the Estonia fleet would contribute to about 1% of the landed weight and the Latvian fleet a further 6%.

The share of landed weight by each MS fleet operating in OFR by region is presented below in Figure 4.41.

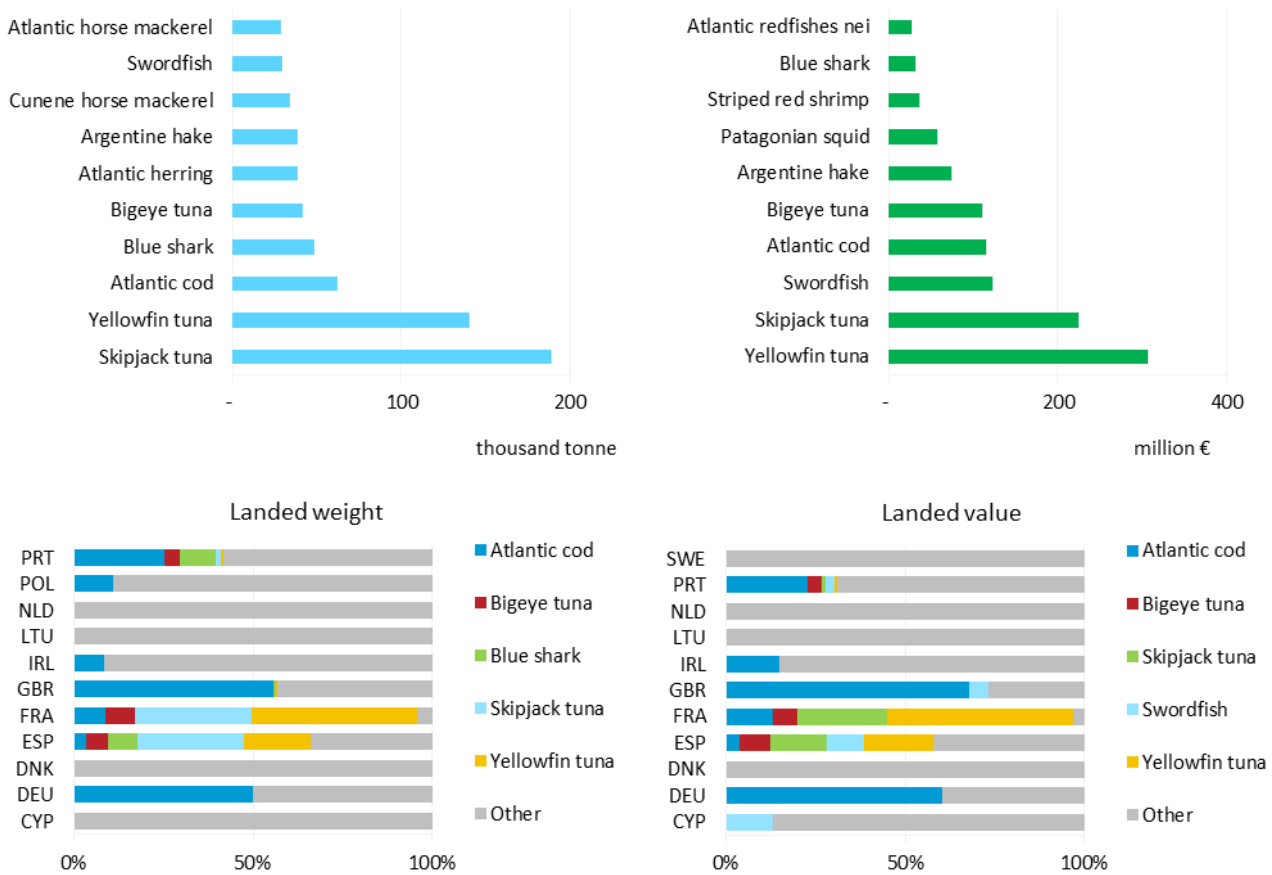


Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.40 Share of landings in weight by MS by region in Other Fishing Regions, 2013

Based on the data available, in 2013 skipjack tuna (189,300 tonnes) was the most important species in terms of weight landed by MS fleets operating in OFR, followed by yellowfin tuna (140,400 tonnes) and Atlantic cod (62,500 tonnes) (Figure 4.42). In terms of value, the 5 most important species in 2013

were: yellowfin tuna (€307.8 million), followed by skipjack tuna (€224.7 million), swordfish (€122.8 million), Atlantic cod (€114.9 million) and bigeye tuna (€110 million) (Figure 4.42).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.41 Top: List of the top 10 species in terms of weight and value and Bottom: Proportion of the top 5 species in terms of weight and value landed by MS fleets operating in the OFR in 2013.

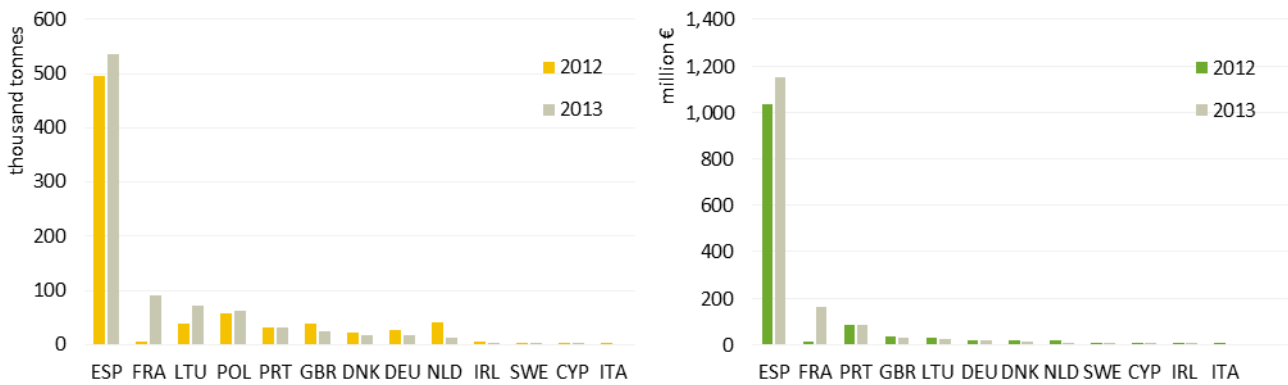
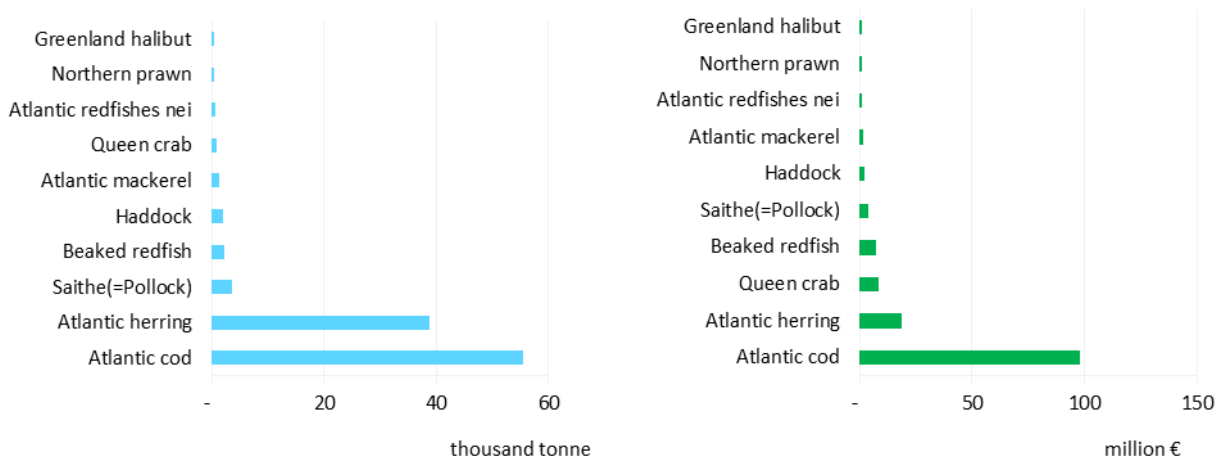


Figure 4.42 Value (million €) and weight of landings (thousand tonnes) by MS, generated by distant water fleet in OFR in 2012-2013

Eastern Arctic

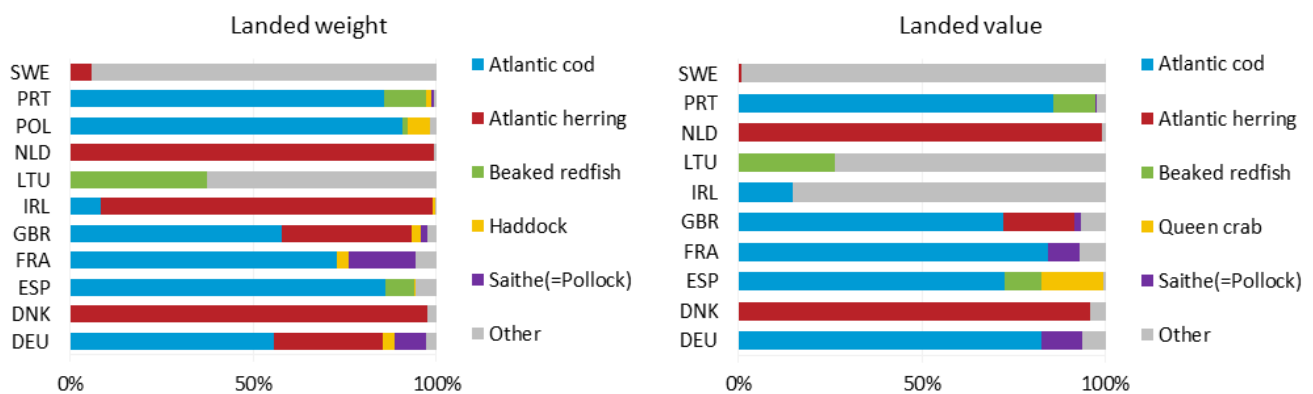
Based on the data available, in 2013 Atlantic cod (55,600 tonnes) was the most important species in terms of weight, followed by Atlantic herring (38,800 tonnes) and saithe (3,600 tonnes) (Figure 4.45).

In terms of value, the 5 most important species in 2013 were: Atlantic cod (€98.3 million), followed by Atlantic herring (€18.4 million), queen crab (€8.6 million), beaked redfish (€6.9 million) and saithe (€4 million) (Figure 4.45).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.43 List of the top 10 species in terms of value of MS fleets operating in the Eastern Arctic region in 2013.



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

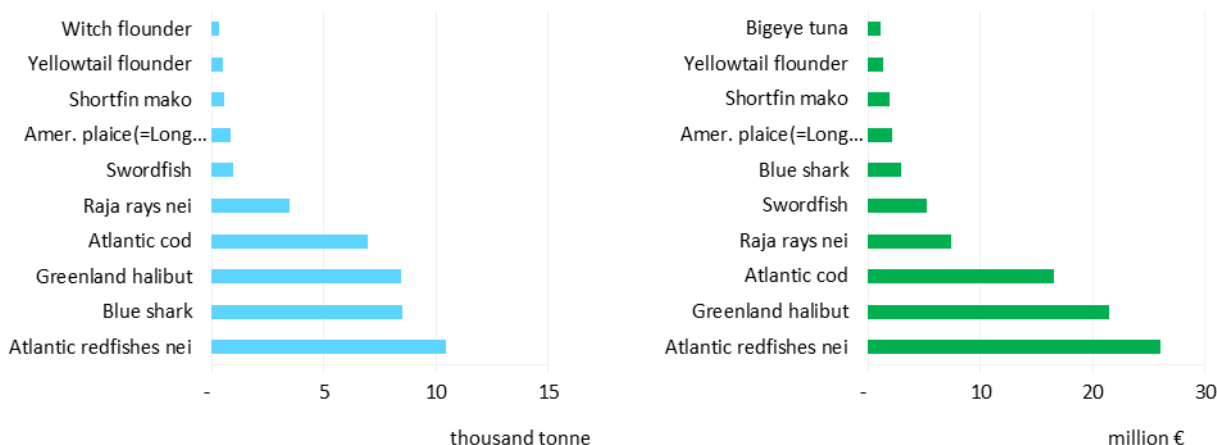
Figure 4.44 Proportion of the top 5 species in terms of weight and value landed by MS fleets operating in the Eastern Arctic region, 2013

Note: value of landings missing for Poland

NW Atlantic

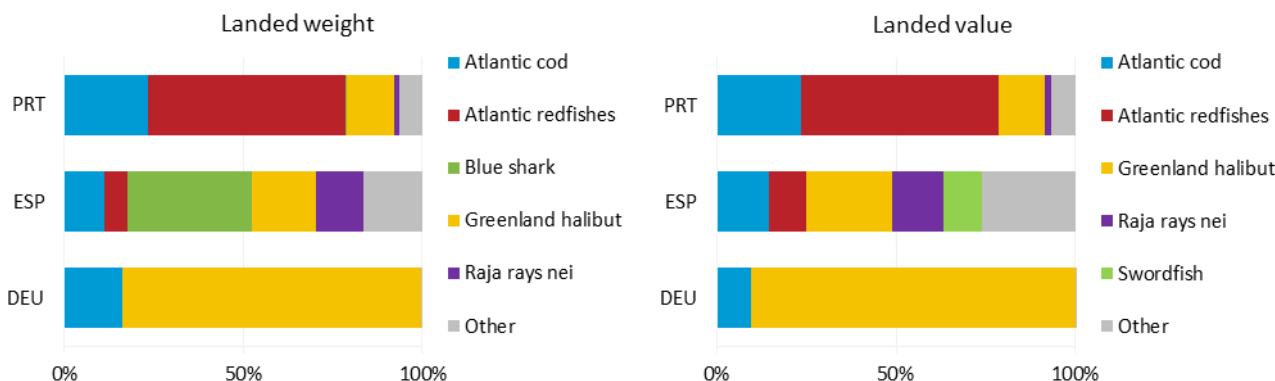
Based on the data available, in 2013 Atlantic redfish (10,500 tonnes) was the most important species in terms of weight, followed by blue shark (8,500 tonnes) and Greenland halibut (8,400 tonnes) (Figure 4.47).

In terms of value, the 5 most important species in 2013 were: Atlantic redfish (€26 million), followed by Greenland halibut (€21.5 million), Atlantic cod (€16.6 million), raja rays (€7.4 million) and swordfish (€5.3 million) (Figure 4.47).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.45 List of the top 10 species in terms of value of MS fleets operating in the NW Atlantic region in 2013.



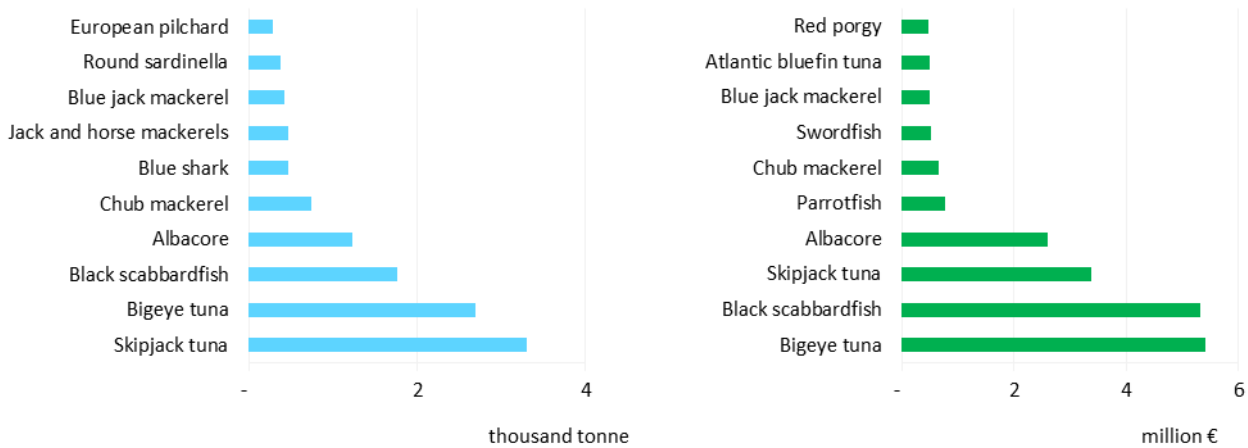
Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.46 – Proportion of the top 5 species in terms of weight and value landed by MS fleets operating in the NW Atlantic region, 2013

Outermost regions

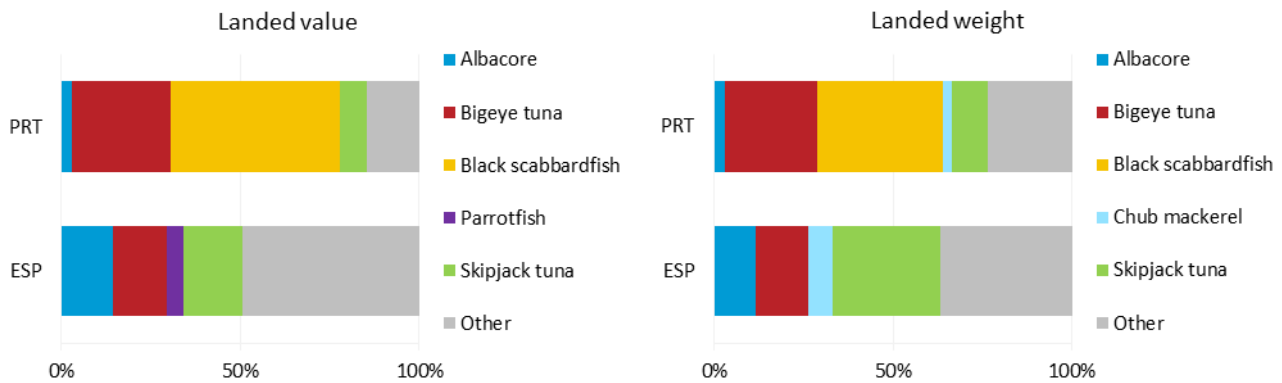
Based on the data available, in 2013 skipjack tuna (3,300 tonnes) was the most important species in terms of weight, followed by bigeye (2,700 tonnes) and black scabbardfish (1,800 tonnes) (Figure 4.49).

In terms of value, the 5 most important species in 2013 were: bigeye tuna (€5.4 million), followed by black scabbardfish (€5.3 million), skipjack tuna (€3.4 million), albacore (€2.6 million) and parrotfish (€0.8 million) (Figure 4.49).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.47 Proportion of the top 4 species in terms of weight and value landed by MS fleets operating in the EU Outermost regions, 2013



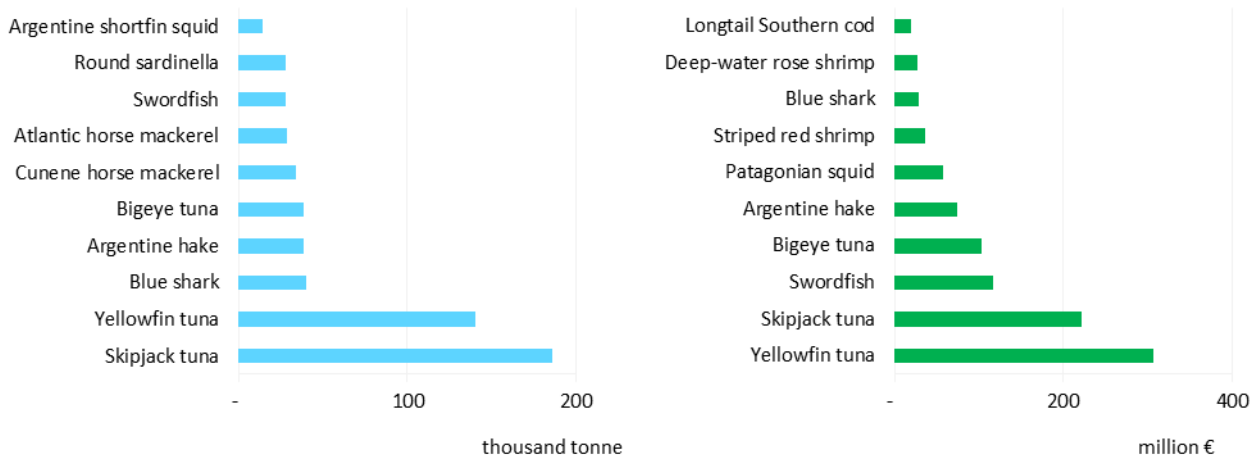
Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.48 - Proportion of the top 4 species in terms of weight and value landed by MS fleets operating in the EU Outermost regions, 2013

Other regions

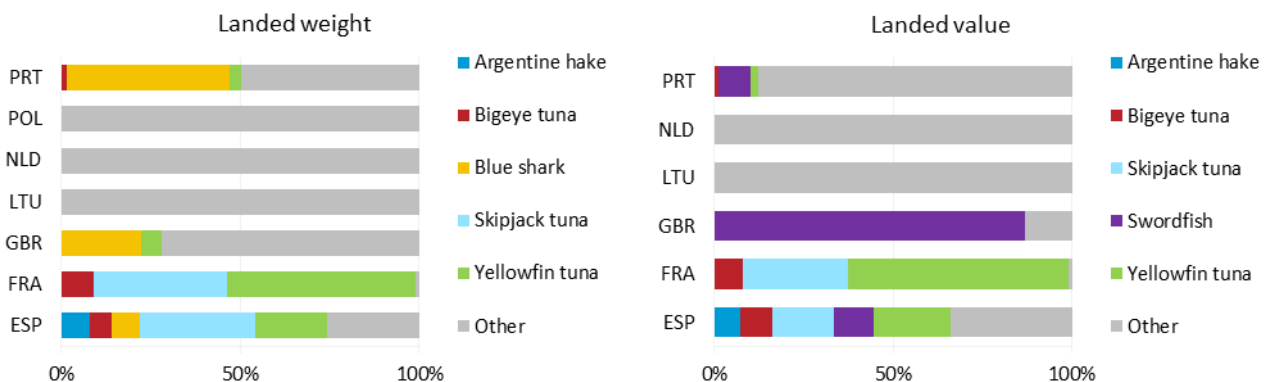
Based on the data available, in 2013 skipjack tuna (186,000 tonnes) was the most important species in terms of weight, followed by yellowfin tuna (140,200 tonnes) and blue shark (39,800 tonnes) (Figure 4.51).

In terms of value, the 5 most important species in 2013 were: yellowfin tuna (€307 million), followed by skipjack tuna (€221 million), swordfish (€116.9 million), bigeye (€103.6 million) and Argentine hake (€74.4 million) (Figure 4.51).



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.49 Proportion of the top 4 species in terms of weight and value landed by MS fleets operating in the Other regions, 2013



Data source: Member State data submissions under the DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Figure 4.50 - Proportion of the top 4 species in terms of weight and value landed by MS fleets operating in the Other regions, 2013

Note: landings value missing for Poland

Summary of some major MS long distance fleet segments operating in OFR

SPAIN⁴

In 2013 Spanish “Other Fishing Regions” (OFR) fleet was composed by a total of 2,724 vessels (this figure includes 110 long-distance vessels over 40 meters) with a total capacity of 286,253 tonnes (the majority of this capacity, 148,107 tons, belongs to the long-distance fleet over 40 meters). The total full time employment (FTE) of this fleet was 16,406 employees in 2013 (an average of 6 people by vessel although in the case of the Spanish long-distance fleet over 40 meters the average crew is 29 people explained by the large size and capacity of the vessels compounding this segment).

The total weight landed by the Spanish fleet operating in the ‘Other Fishing Regions’ in 2013 was over 753,000 tonnes of fish with an approximated total value of €1,600 million (an average value of 2.12 €/kg). This fleet was very profitable with a gross profit around €206 million (the majority of this profit corresponds to the Spanish long-distance fleet segment which had almost €162 million in 2013. The gross margin on revenues was 13.85% but it was better for the long-distance fleet with 21.19% since in the OFR fleet there are small vessels fishing in the Canary Islands (outermost region) what reduces the overall gross margin of this fleet. In the case of the long-distance fleet, the revenues and profits have increased significantly in the last three years (2011, 2012, and 2013) except for the Spanish vessels fishing with hooks (longliners).

The Spanish long-distance fleet (vessels over 40 meters) is highly diversified with a broad range of vessel types targeting different species predominantly from West Africa and the Indian Ocean. The fleet targets a variety of species but in particular large pelagic fishes, such as blue shark, bigeye tuna and swordfish. By type of gear, the Spanish Long-Distance fleet is composed of demersal trawlers (DTS), longliners (HOK) and Purse Seiners (PS) with 50, 28 and 32 vessels respectively in 2013.

Demersal trawlers (DTS) over 40m – This segment of the fleet operates in different distant regions as Eastern Arctic, Northwest Atlantic, West Africa and Indian Ocean. It is composed by 50 vessels which fished in 2013 around 140,000 tons with a landing value of €357 million in total and employed, in total, around 2,000 FTEs. This segment of the fleet is profitable since reported a gross profit around €31.1 million in 2013 with a gross margin on revenues between 6 and 18% depending on the fishing region. This positive trend has been maintained during the last three years (2011, 2012, and 2013).

Longliners (HOK) over 40m – This segment of the fleet only operates in other regions. It is composed by 28 vessels which fished in 2013 around 22,000 tons with a landing value around €56 million and employed 560.5 FTEs (an average of 20 FTE by vessel). This fleet segment was not profitable since it reported losses with a negative gross profit around €5.4 million in 2013 probably motivated by the low productivity (although most environmental responsible) of this type of gear since the ratio of landings or the value of landings to effort (days at sea) is the lowest for this type of gear. This negative trend has been maintained during the last three years (2011, 2012, and 2013).

Purse seiners (PS) over 40m – The Spanish fleet of purse seiners consisted of 32 vessels in 2013, operating in the Indian Ocean and Western Africa (other regions). The average full time employment (FTE) is almost 39 employees by vessel in 2013. The total landings by this fleet segment was over 275,785 tonnes and the income generated by these landings was almost €478 million. This fleet segment was profitable and reported a gross profit of almost €152 million in 2013 with a gross margin on revenues around 32%. This positive trend has been maintained during the last three years (2011, 2012, and 2013).

FRANCE

The French industrial fleet of Purse Seiners consisted of 17 vessels in 2013. The overwhelming majority of this fleet is made of freezer tuna seiners operating in the Indian Ocean and Atlantic Ocean. The average age of the vessels in this fleet segment was 18.5 years in 2013 and average length was 75.2 meters. The average full time employment is around 24 employees by vessel in 2013 (fishermen employees come both from France and foreign countries (mostly African).

⁴ Includes data not captured by the methodology due to incomplete relevant data and other information not provided under the DCF.

In 2013, total volumes of landings of tropical tuna amounted more than 79 000 tons, (a slight increase of almost 1% compared to year 2012). Fish catches are almost equal between seiners operating in the Indian Ocean and Atlantic Ocean (respectively 49% and 51% in terms of volumes). Tuna species caught are yellowfin tuna (YFT – 52.4% of the total volumes of landings), skipjack tuna (SKJ – 37.3%), bigeye tuna (BET – 9.2%) and albacore (ALB – 0.4%).

Total values of landings for the whole 17 vessels reached €136.4 million in 2013. It is important to notice that according economic data, total income of this fleet segment reached €139,2 million in 2013 (there is indeed a gap that is observed between total values of landings and total income because collected data come from 2 different sources).

According to economic data collected, total income decreased between 2012 and 2013 (-7.2%), partly explained by lower average prices observed for some tuna species. The two main cost items are crew wage and energy and represent respectively 29% and 21% of the income in 2013. The ratio gross profit / turnover reached 17.8% in 2013 for this fleet segment (against 20.4% in 2012).

Moreover, it should be noted that since 1 January 2014, 5 vessels with Mayotte flag have integrated the Community fleet. From 2014, this will have an impact on the economic data for this segment fleet.

LITHUANIA

Lithuanian long distance fleet is represented mainly by pelagic trawlers (TM) over 40m operating in Other Fishing regions, predominantly in CECAF (area 34) with almost 68% of total landings in volume by segment. The rest part of effort was in SPRFMO (area 87) and NEAFC (area 27) with 14% and 4.3% of total landings by segment respectively. In CECAF region fleet was targeting mainly small pelagic species, such as Cunene horse mackerel (HMZ, 11,400 tonnes), Chub mackerel (MAS, 3,490 tonnes), in SPRFMO region Chilean jack mackerel (CJM, 9,700 tonnes), whereas in NEAFC main species were Northern prawn (PRA, 430 tonnes) and redfishes (REB, 1,400 tonnes). Almost all catches from CECAF is landed in African countries.

In 2013 number of vessels in long distance fleet was reduced by 30%. Significant decline in capacity and record low volume of landings was related with problematic conditions when from 2012 part of fleet was obliged to suspend activity due prolonged endorsement of bilateral agreement between EU and Mauritania. The fishing effort was mainly driven by individual purchase and exchange of quotas from third countries, operating in the respective region.

Despite the limitation of fishing activity in 2013, the total income was almost €59.3 million and around 296 FTEs were employed in this fleet segment, contributing to 90% and 60% of the total income from landings and FTEs generated by the Lithuanian fishing fleet, respectively. This fleet segment was profitable, with a reported gross profit of around €11.6million and net profit of €9.4 million in 2013. Net profit margin was 15.8% and improved from 11.8% compare to 2012. Labour productivity increased also significantly, achieving €32,000 of GVA/ FTE.

In the course of 2014, Long distance fleet segment was significantly extended, 5 modernized vessels were included to fleet register. In terms of environmental sustainability, renovated vessels decreased kW/GT ratio from 1 to 0.68. New investments are expected to raise profitability and improvement in competitiveness. In 2014 volume of landings by this fleet increased 46.4% compare to 2013 and considering the changes of the segment, further increase in landings is expected for 2015.

LATVIA

Latvian long distance fleet consisted from 6 vessels in 2013. Two of the vessels with the average length 61 metres were based predominantly in NAFO and NEAFC areas. These vessels target species such as beaked redfish and Northern prawn. There were four vessels with the average length 100 metres operating in CECAF area Morocco and Mauritania economic zone. The weight landed by the fleet in 2013 was 55,000 tonnes of fish, with a total landed value of €22.8 million. The total weight of landings has increase by 48% between 2012 and 2013 while landed value increased 55% during the same period. The main reason for increase in weight and value in 2013 was fishery recovering after the ban of the fishing activity for the EU fishing vessels in African waters in 2012. The total Latvian

distant-water fleet income from landings in EU increased by 33% and was €11.2 million in 2013 and it corresponded to around €7.7 million of gross profit.

The total weight landed by the Latvian fleet operating in the 'Other Regions' in 2013 was 53,000 tonnes of fish. weight landed in the Mauritanian fishing zone 3.31 was 43,000 tonnes. The main landed species were Jack and horse mackerels (25,000 tonnes) Atlantic chub mackerel (10,000 tonnes), Madeiran sardinella (5,000 tonnes) and sardine (1,600 tonnes). The total landed weight in the Mauritanian fishing zone 3.11 was 4,000 tonnes. The main landed species were Atlantic chub mackerel (1,000 tonnes). The total landed weight in the Guinea Conacri fishing zone 3.13 was around 3,000 tonnes. The main landed species were Madeiran sardinella and Anchovies (around 2,000 tonnes). In 2012 Mauritania and Morocco did not define quotas for their fishing area. There is no official agreement between Latvia and Mauritanian and Guinea. However, it was possible to buy permission from the Mauritania and Guinea governments for fishing in their territorial waters. To obtain the permits it is necessary to arrangement a job on-board for local people but the largest part of crew on board is usually Latvian citizens. The salary is higher than Latvian national average and average salary in the fishery sector. There were no landings from 'Other Regions' into the Latvian ports. The catches from Latvian vessels are usually landed in the ports of Mauritania or Morocco. Thus for previous years information on days at sea, catches and value of landings were received directly from the vessel owners.

ESTONIA

There were five vessels in the Estonian distant-water fishing fleet in 2013. The fleet was composed of trawlers on board where fish or shrimps undergo primary or final processing. The average length of the vessels was 60 m; the average age was 27 years; the combined power of the vessels main engines was 13,174 kW and the combined gross tonnage (GT) was 7697 tonnes. In general, demersal trawlers were used. However, pelagic trawls were occasionally used as well. A crew typically consisted of around 20 people. The vessels were owned by three companies. In 2013, the fleet only fished in the northern part of Atlantic Ocean (North West Atlantic and North East Atlantic). Total catch for the Estonian distant-water fishing fleet was 11,956 tonnes seafood. The shrimp produced the biggest catches, followed by redfish and mackerel. Catches are usually landed in ports of Canada, Iceland, Spain and Norway.

POLAND

The Polish distant-water fleet operated in North East Atlantic (1 vessel), African (Mauritania, Angola) waters (2 vessels) in 2013. The amount of landings by the Polish distant-water fleet totalled 52,000 tonnes in 2014 out of which 45,300 tonnes were caught in OFR (Other Fishing Region) the remaining one (6,800 tonnes) in NEAFC and NAFO areas. In 2014 similarly to 2013, Atlantic horse mackerel generated the highest landed weight (34,900 tonnes), followed by Atlantic cod (6,300 tonnes), Atlantic mackerel (5,700 tonnes) and round sardinella (2,700 tonnes).

PORTUGAL

The Portuguese fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Portuguese Exclusive Economic Zone (27.9.a for the mainland fleet, 27.10 for the Azores's fleet and CECAF 34.1.2 for the Madeira's fleet). 18 vessels make up the hooks 24-40m segment which operates in the Africa Coast and Indian Ocean (FAO 34, 41, 51, 57). The fleet targets a variety of species but in particular large pelagic fishes, such as blue shark, bigeye tuna and swordfish.

ITALY

At 1st of January 2013, 11 vessels are included in the Italian vessel register as vessels operating outside the Mediterranean Sea. None of these vessels actually operated in 2013. Therefore these vessels have been classified as inactive and only capital costs and capital value have been reported.

Until 2012, the Italian fleet operating in the outside community waters (CECAF Region), was composed of around 5 vessels fishing around Mauritania waters (FAO Area 34.1) and targeting shrimps and cephalopods. In 2013, no fishing activity has operated in this Region, whereas in 2014 only one vessel has been active.

Table 4.20 EU *Other Fishing Region* fleet structure and economic performance estimates by MS in 2013

MS	Estimated no. vessels in region	Vessel power	Vessel tonnage	Estimated total employed	Estimated FTE	Days at sea in region	Estimated energy consumption	Landed weight by region	Landings in value	Estimated revenue	Estimated GVA	GVA to Revenue	GVA per FTE	Estimated Gross profit	Gross profit margin
		(kW)	(tonne)	#	#	days	K litres	tonne	(thousand €)	%	(thousand €)	%			
CYP	5	1,211	373			421	-	100	915	915	452	49.4		330	36.0
DEU	4	4,936	3,420	70	49	637	4,524	12,314	16,957	17,181	10,636	124.3	440	6,439	75.5
DNK		563	289	2	4	75	549	17,607	11,746	10,868	10,207	93.9	2,352	9,785	90.0
ESP	1,007	188,440	133,822	3,791	6,200		134,374	535,952	1,151,251	977,951	212,045	112.6	135	146,574	28.7
FRA	623	116,663	35,952	450	455	562	45,668	90,068	162,367	160,722	79,787	116.4	497	36,313	72.7
GBR	6	11,911	6,604	21	15	1,424	1,763	24,392	29,245	7,422	4,943	107.9	372	3,162	57.8
IRL	1	778	377	5	5	109	344	3,960	3	1,320	402	30.5	81	79	6.0
LTU	8	35,734	35,384	409	277	1,258	31,345	71,117	22,532	54,662	12,413	59.3	4	8,262	85.4
NLD	2	7,874	7,435	51	27	120	3,251	12,079	4,549	4,526	389	21.9	36	1,283	52.3
POL	3	15,215	17,415	217	174	799		61,399							
PRT	177	58,368	36,246	1,638	1,006	16,719	28,267	32,685	85,562	91,135	52,158	245.0	397	28,718	144.3
SWE		105	35	1	1	19	76	882	997	1,009	914	90.6	1,524	884	87.6

Table 4.21 EU *Other Fishing Region* fleet structure and economic performance estimates by region and MS in 2013

	MS	Estimated no. vessles in region	Vessel power (kW)	Vessel tonnage (tonne)	Estimated total employed #	Estimated FTE #	Days at sea in region days	Estimated energy consumption K litres	Landed weight by region tonne	Landings in value	Estimated revenue (thousand €)	Estimated GVA	GVA to Revenue %	GVA per FTE (thousand €)	Estimated Gross profit	Gross profit margin %	Estimated Net profit k €	Net profit margin %
Other regions	ESP	430	164,262	122,453	2,382	4,171		133,724	485,271	1,036,165	862,943	208,210	40.6	115	146,566	28.6	79	0.0
Other regions	FRA	619	113,151	33,929	413	413		41,838	79,290	137,127	140,064	65,384	46.7	158	24,977	17.8		
Other regions	GBR	2	1,437	827	0	0	673	10	865	1,759	30	13	41.2	38	5	15.1	3	8.7
Other regions	LTU	7	31,250	30,944	358	234	1,065	26,536	70,418	21,174	51,364	15,354	29.9	65	11,840	23.1	9,650	18.8
Other regions	NLD	2	6,699	6,329	43	16	69	1,904	6,611	2,702	2,689	39	1.5	3	1,018	37.9	4,039	150.2
Other regions	POL	2	11,840	15,610	180	137	518		54,137									
Other regions	PRT	62	24,840	13,028	643	286	5,409	10,293	6,227	23,628	28,554	12,336	43.2	43	6,942	24.3	4,736	16.6
Eastern Arctic	DEU	3	3,583	2,482	51	34	444	3,153	9,898	11,783	11,945	7,353	61.6	217	4,428	37.1	2,274	19.0
Eastern Arctic	DNK		563	289	2	4	75	549	17,607	11,746	10,868	10,207	93.9	2,352	9,785	90.0	9,201	84.7
Eastern Arctic	ESP	21	4,547	4,231	103	515			17,282	51,168	36,274							
Eastern Arctic	FRA	4	3,512	2,023	37	42	562	3,830	10,777	25,240	20,658	14,403	69.7	339	11,336	54.9	4	31.0
Eastern Arctic	GBR	4	10,473	5,777	20	15	751	1,753	23,527	27,485	7,391	4,931	66.7	334	3,158	42.7	2,364	32.0
Eastern Arctic	IRL	1	778	377	5	5	109	344	3,960	3	1,320	402	30.5	81	79	6.0	416	31.5
Eastern Arctic	LTU	1	4,484	4,440	51	42	193	4,809	698	1,358	3,299	2,941	89.2	69	3,578	108.5	3,892	118.0
Eastern Arctic	NLD		1,175	1,106	8	11	51	1,348	5,468	1,846	1,837	429	23.3	38	265	14.4	790	43.2
Eastern Arctic	POL	1	3,375	1,805	37	37	281		7,261									
Eastern Arctic	PRT	4	5,571	5,133	84	37	303	1,892	5,116	12,125	12,027	9,444	78.5	252	7,788	64.8	4,878	40.6
Eastern Arctic	SWE		105	35	1	1	19	76	882	997	1,009	914	90.6	1,524	884	87.6	848	84.0
Northwest Atlantic	DEU	1	1,353	938	19	15	193	1,371	2,416	5,174	5,236	3,283	62.7	223	2,012	38.4	1,198	22.9
Northwest Atlantic	ESP	14	6,720	5,764	181	436			24,107	48,245	37,382							
Northwest Atlantic	PRT	13	17,051	15,575	261	272	2,265	13,595	16,289	38,614	38,346	22,490	58.7	83	10,638	27.7	1,739	4.5
Outermost regions	ESP	542	12,911	1,374	1,125	1,078		650	9,292	15,674	41,353	3,835	72.0	19	8	0.2	375	10.2
Outermost regions	PRT	98	10,906	2,510	649	410	8,742	2,488	5,053	11,195	12,207	7,888	64.6	19	3,351	27.5	143	1.2
non EU Mediterranean Sea	CYP	5	1,211	373			421	-	100	915	915	452	49.4		330	36.0	1,425	155.7

Table 4.22 EU *Other Fishing Region* fleet structure and economic performance estimates by fishing activity and region in 2013

			Estimated no. vessels in region	Vessel power (kW)	Vessel tonnage (GT)	Total employed (number)	Estimated FTE	Seadays by region (day)	Energy consumption (K litre)	Landings in weight (tonne)	Landings in value	Estimated Revenue (thousand €)	Estimated GVA (thousand €)	GVA to Revenue (%)	GVA per FTE (thousand €)	Estimated Gross profit (thousand €)	Gross profit margin (%)
OFR	SSF	Other regions	579	55,680	1,464	10	8			17	71	109					
OFR	SSF	Outermost regions	584	13,445	1,336	1,228	1,025	2,310	520	3,862	8,229	24,302	1,708	64.0	11	270	10.1
OFR	LSF	Eastern Arctic	36	28,962	19,970	348	702	2,123	12,943	87,361	121,584	103,318	48,073	71.7	321	37,029	55.2
OFR	LSF	Other regions	105	24,804	13,809	564	560	1,019	2,774	17,944	23,560	21,270	109	2.1	2	1,566	29.8
OFR	LSF	Northwest Atlantic	13	18,147	16,376	274	285	2,423	14,910	38,727	86,694	76,124	25,751	59.2	90	12,646	29.1
OFR	LSF	Outermost regions	50	7,026	1,387	471	405	5,331	1,891	6,893	12,878	17,960	8,424	72.4	21	2,146	18.4
OFR	LSF	non EU Mediterranean Sea	5	1,211	373			421	-	100	915	915	452	49.4		330	36.0
OFR	DWF	Eastern Arctic	3	9,197	7,729	51	42	661	4,809	15,112	22,157	3,299	2,941	89.2	69	3,578	108.5
OFR	DWF	Other regions	440	272,995	207,847	3,446	4,690	6,714	211,530	684,859	1,198,924	1,064,264	301,147	41.3	112	190,876	26.2
OFR	DWF	Northwest Atlantic	15	6,977	5,900	186	437	35	56	4,085	5,338	4,840	22	19.3	12	3	2.5
OFR	DWF	Outermost regions	6	3,347	1,162	76	58	1,101	726	3,590	5,762	11,298	1,592	49.3	28	943	29.2

Table 4.23 EU *Other Fishing Region* fleet structure and economic performance estimates by fleet segment and region (Northwest Atlantic) 2013

Fleet segment		Estimated total employed	Estimated FTE	Estimated energy consumption	Days at sea in region	As a % of fleet segment	Landed weight by region	As a % of fleet segment	Landed value by region	As a % of fleet segment	Estimated revenue	Estimated GVA	GVA to revenue	GVA per FTE	Estimated Gross profit	Gross profit margin
		#	#	Litres	Days		kg		€		€	€	%	€	€	%
Northwest Atlantic	PRT AREA27 DTS VL40XX	252.7	266.8	13,467,616	2,157	78%	16,180,577	76%	38,347,973	76%	38,037,587	22,399,329	58.9	83,959	10,608,293	27.9
Northwest Atlantic	ESP AREA27 DTS VL40XX						13,065,638	31%	35,047,691	29%	24,708,696					
Northwest Atlantic	ESP AREA27 HOK VL2440						6,987,732	45%	7,911,982	38%	7,909,140					
Northwest Atlantic	DEU AREA27 DTS VL40XX	19.1	14.7	1,370,678	193	10%	2,416,302	10%	5,174,343	15%	5,235,582	3,283,078	62.7	223,187	2,011,627	38.4
Northwest Atlantic	ESP OFR HOK VL2440°						3,308,436	5%	3,464,623	3%	2,592,152					
Northwest Atlantic	ESP OFR DTS VL40XX	181.1	435.5				737,527	1%	1,795,430	1%	2,135,017					
Northwest Atlantic	PRT AREA27 HOK VL2440	2.7	3.9	71,805	73	2%	69,437	2%	187,557	2%	195,990	68,972	35.2	17,868	26,520	13.5
Northwest Atlantic	PRT OFR HOK VL2440	5.4	1.8	55,564	35	1%	38,678	1%	78,129	1%	112,748	21,707	19.3	12,127	2,769	2.5
Northwest Atlantic	ESP AREA27 PGP VL2440						5,027	0%	17,118	0%	26,114					
Northwest Atlantic	ESP AREA27 PGP VL1824						1,834	0%	5,667	0%	8,184					
Northwest Atlantic	ESP AREA27 DTS VL2440						794	0%	2,094	0%	2,364					

Table 4.24 EU *Other Fishing Region* fleet structure and economic performance estimates by fleet segment and region (Other regions) 2013

Fleet segment	Estimated total employed	Estimated FTE	Estimated energy consumption	Days at sea in region	As a % of fleet segment	Landed weight by region	As a % of fleet segment	Landed value by region	As a % of fleet segment	Estimated revenue	Estimated GVA	GVA to revenue	GVA per FTE	Estimated Gross profit	Gross profit margin	
	#	#	Litres	Days		kg		€		€	%	€	€	%	€	€
Other regions	998.7	1243.7	114,022,881			275,785,859	100%	477,613,896	100%	477,843,468	208,228,318	43.6	167,429	151,993,986	31.8	
Other regions	776.0	1866.5				106,061,284	99%	261,806,932	100%	161,519,709						
Other regions	413.0	413.0	41,838,427			79,290,100	100%	137,127,094	99%	140,063,895	65,383,827	46.7	158,314	24,976,563	17.8	
Other regions						14,161,568	100%	109,356,225	100%	86,327,403						
Other regions						55,814,591	91%	111,266,359	95%	83,246,945						
Other regions	358.0	234.5	26,535,864	1,065	79%	70,418,494	96%	21,173,643	86%	51,363,827	15,354,079	29.9	65,487	11,839,813	23.1	
Other regions	180.0	137.0		518	100%	54,137,233	100%									
Other regions	476.0	560.5	19,700,739			22,008,681	100%	56,384,066	100%	34,753,835	18,809	0.1	34	5,428,415	15.6	
Other regions	59.0	53.0	3,081,712	1,020	100%	1,090,791	100%	9,877,410	100%	9,903,492	6,316,885	63.8	119,187	3,814,568	38.5	
Other regions	109.5	108.0	3,360,822	2,117	85%	2,840,226	95%	5,923,608	92%	8,444,465	3,513,350	41.6	32,537	2,367,881	28.0	
Other regions	76.0	73.7	2,989,435	1,330	97%	1,670,311	100%	5,545,416	100%	7,670,901	2,369,681	30.9	32,140	1,311,996	17.1	
Other regions						4,457,641	29%	6,001,433	29%	5,999,277						
Other regions	9.9	51.0				2,668,258	6%	7,047,639	6%	4,987,729						
Other regions	74.7	340.4				3,205,824	6%	4,476,893	7%	3,592,024						
Other regions						723,219	31%	1,119,560	29%	3,126,536						
Other regions	43.2	15.8	1,903,730	69	3%	6,611,195	3%	2,702,158	3%	2,688,526	39,463	1.5	2,498	1,018,140	37.9	
Other regions				664	100%	856,442	100%	1,729,947	99%							
Other regions	88.4	32.3	601,001	611	13%	338,812	11%	1,585,815	14%	1,674,790	471,599	28.2	14,587	116,281	6.9	
Other regions	83.7	15.0	104,544	240	5%	127,598	4%	516,983	5%	625,829	247,537	39.6	16,470	1,147	0.2	
Other regions						165,477	5%	310,935	4%	331,795						
Other regions						91,043	6%	137,742	6%	286,522						
Other regions						41,601	3%	200,238	3%	265,864						
Other regions						16,444	10%	149,456	12%	192,243						
Other regions	39.6	2.8	144,074	76	1%	143,407	0%	162,215	0%	177,905	158,283	89.0	57,142	225,881	127.0	
Other regions	3.8	2.1				8,113	3%	47,529	4%	100,735						
Other regions						15,848	0%	49,165	1%	91,828						
Other regions						13,167	1%	54,359	2%	63,786						
Other regions	2.9	2.9				7,630	0%	37,018	1%	54,439						
Other regions						8,865	1%	28,175	2%	46,758						
Other regions	6.1	39.7				6,066	0%	29,704	0%	45,935						
Other regions	9.0	25.2				6,416	0%	31,750	0%	40,077						
Other regions	103.2	0.5	2,967	5	0%	12,416	0%	8,940	0%	34,461	64,187	186.3	139,537	72,404	210.1	
Other regions	26.0	0.3	1,352	5	0%	1,413	0%	3,348	0%	13,921	13,588	97.6	54,352	16,929	121.6	
Other regions	4.4	9.4				1,514	0%	6,260	0%	12,475						
Other regions	0.1	0.1	1,545	2	0%	4,293	0%	9,248	0%	9,729	5,632	57.9	56,317	3,181	32.7	
Other regions	0.0	0.0	1,239	1	0%	1,767	0%	7,935	0%	8,254	6,189	75.0	154,716	5,423	65.7	
Other regions	6.8	5.1				693	0%	5,592	0%	7,927						
Other regions	0.1	0.1	1,476	2	0%	907	0%	6,888	0%	6,890	1,691	24.5	24,155	1,542	22.4	
Other regions	42.1	0.1	6,244	1	0%	1,756	0%	4,162	0%	6,752	333,735	4,943.0	2,781,128	339,202	5,024.0	
Other regions	1.1	8.9				742	0%	3,534	0%	5,105						
Other regions	0.0	0.0	3,928	1	0%	847	0%	2,482	0%	2,530	1,825	72.1	91,269	2,737	108.2	
Other regions	0.0	0.0	284	1	0%	492	0%	1,936	0%	1,980	1,497	75.6	149,711	1,303	65.8	
Other regions	15.7	0.2	644	4	0%	11	0%	36	0%	1,639	13,603	829.8	80,017	15,395	939.1	
Other regions	0.1	0.1	1,419	2	0%	451	0%	942	0%	1,020	656	64.3	7,292	1,037	101.6	
Other regions	1.6	8.5				116	0%	181	0%	210						

Table 4.25 EU *Other Fishing Region* fleet structure and economic performance estimates by fleet segment and region (Eastern Arctic) 2013

Fleet segment	Estimated total employed	Estimated FTE	Estimated energy consumption	Days at sea in region	As a % of fleet segment	Landed weight by region	As a % of fleet segment	Landed value by region	As a % of fleet segment	Estimated revenue	Estimated GVA	GVA to revenue	GVA per FTE	Estimated Gross profit	Gross profit margin	Estimated Net profit	Net profit margin
	#	#	Litres	Days		kg		€		€	€	%	€	€	%	€	%
Eastern Arctic GBR OFR DTS VL40XX*				468	83%	14,413,908	94%	20,798,863	93%								
Eastern Arctic ESP AREA27 DTS VL40XX	99.0	510.0				17,280,020	40%	51,159,873	42%	36,259,103							
Eastern Arctic FRA AREA27 DTS VL40XX	37.3	42.4	3,828,786	557	23%	10,774,216	36%	25,229,660	46%	20,645,198	14,394,034	69.7	339,322	11,330,108	54.9		
Eastern Arctic POL AREA27 DTS VL40XX	37.0	37.0		281	100%	7,261,398	100%										
Eastern Arctic PRT AREA27 DTS VL40XX	84.2	37.5	1,891,835	303	11%	5,116,087	24%	12,125,136	24%	12,027,266	9,443,830	78.5	251,970	7,787,509	64.8	4,877,977	40.6
Eastern Arctic DEU AREA27 DTS VL40XX	50.6	33.8	3,153,270	444	24%	9,897,631	43%	11,783,143	34%	11,945,417	7,352,640	61.6	217,277	4,427,644	37.1	2,273,780	19.0
Eastern Arctic DNK AREA27 TM VL40XX	1.5	3.9	500,352	65	2%	16,387,081	6%	11,029,189	8%	10,009,293	9,415,578	94.1	2,395,821	9,036,111	90.3	8,488,976	84.8
Eastern Arctic GBR AREA27 TM VL40XX*	11.2	3.2	1,251,075	57	3%	8,344,393	3%	5,356,771	2%	5,477,108	3,907,944	71.4	1,209,890	2,676,991	48.9	1,995,425	36.4
Eastern Arctic LTU OFR TM VL40XX*	51.4	42.5	4,808,847	193	14%	698,139	1%	1,358,176	6%	3,298,517	- 2,940,740	- 89.2	- 69,210	- 3,577,598	- 108.5	- 3,891,835	- 118.0
Eastern Arctic NLD AREA27 TM VL40XX*	7.5	11.1	1,342,671	49	2%	5,464,748	2%	1,838,766	2%	1,829,490	427,718	23.4	38,395	- 262,528	- 14.4	- 789,513	- 43.2
Eastern Arctic IRL AREA27 TM VL40XX	3.2	3.1	265,907	31	1%	3,056,812	2%			1,315,538	560,463	42.6	179,062	155,537	11.8	- 157,755	- 12.0
Eastern Arctic SWE AREA27 DTS VL2440*	0.6	0.6	75,603	19	0%	882,263	1%	996,545	1%	1,009,279	914,437	90.6	1,524,062	884,272	87.6	848,110	84.0
Eastern Arctic DNK AREA27 DTS VL40XX	0.2	0.4	48,430	10	0%	1,220,063	1%	716,664	2%	859,042	790,997	92.1	1,929,261	749,352	87.2	711,531	82.8
Eastern Arctic GBR AREA27 DTS VL40XX*	1.7	2.0	183,475	17	1%	290,350	3%	290,196	2%	822,095	595,326	72.4	291,826	516,691	62.9	471,895	57.4
Eastern Arctic GBR AREA27 DTS VL2440*	3.1	3.4	161,093	64	0%	325,639	0%	526,903	0%	559,466	274,760	49.1	81,774	166,646	29.8	141,279	25.3
Eastern Arctic GBR AREA27 DFN VL2440*	2.6	2.8	55,460	93	3%	121,148	3%	370,904	3%	371,007	181,611	49.0	65,328	60,180	16.2	41,909	11.3
Eastern Arctic GBR AREA27 HOK VL2440*	1.9	3.4	102,227	53	2%	31,316	1%	141,494	1%	161,546	- 29,046	- 18.0	- 8,645	- 262,868	- 162.7	- 286,914	- 177.6
Eastern Arctic ESP AREA27 PGP VL2440			1,957			1,957	0%	7,585	0%	11,572							
Eastern Arctic FRA AREA27 FPO VL1012	0.1	0.0	711	3	0%	2,620	0%	7,395	0%	9,913	7,102	71.6	177,545	4,768	48.1	3,327	33.6
Eastern Arctic NLD AREA27 TBB VL1824*	0.0	0.0	1,956	2	0%	2,726	0%	6,681	0%	6,807	3,683	54.1	92,069	1,600	23.5		
Eastern Arctic IRL AREA27 DTS VL1824	1.9	1.8	77,944	78	1%	902,745	4%	3,456	0%	4,347	- 158,567	- 3,647.6	- 87,606	- 234,569	- 5,396.0	- 258,385	- 5,943.8
Eastern Arctic ESP AREA27 DTS VL1824	4.1	5.0				65	0%	595	0%	3,297							
Eastern Arctic FRA AREA27 DFN VL1012	0.0	0.0	294	2	0%	599	0%	3,158	0%	3,291	2,272	69.0	113,609	1,109	33.7	762	23.1
Eastern Arctic NLD AREA27 TBB VL2440*	0.0	0.0	2,887	1	0%	211	0%	925	0%	1,052	- 2,504	- 238.1	- 125,195	- 3,937	- 374.3		

Table 4.26 EU *Other Fishing Region* fleet structure and economic performance estimates by fleet segment and region (EU Outermost regions) 2013

Fleet segment	Estimated total employed	Estimated FTE	Estimated energy consumption	Days at sea in region	As a % of fleet segment	Landed weight by region	As a % of fleet segment	Landed value by region	As a % of fleet segment	Estimated revenue	Estimated GVA	GVA to revenue	GVA per FTE	Estimated Gross profit	Gross profit margin
	#	#	Litres	Days		kg		€		€	€	%	€	€	%
Outermost regions	936.9	873.0				2,378,089	100%	5,512,263	100%	19,706,572					
Outermost regions						1,596,694	69%	2,697,259	71%	7,532,489					
Outermost regions	189.0	181.0	1,108,599	3,370	100%	1,872,736	100%	5,472,226	100%	5,516,505	4,061,019	73.6	22,437	1,420,593	25.8
Outermost regions						1,424,828	94%	2,115,010	94%	4,399,513					
Outermost regions	84.5	93.1	309,023			1,252,009	100%	1,302,665	100%	3,681,994	2,881,366	78.3	30,939	205,939	5.6
Outermost regions	75.0	57.0	702,097	1,086	100%	1,658,155	100%	2,292,283	100%	3,151,400	1,551,948	49.3	27,227	911,335	28.9
Outermost regions						850,858	98%	1,162,153	96%	1,928,620					
Outermost regions	97.5	107.0	341,308			316,472	100%	542,649	100%	1,646,205	954,045	58.0	8,916	198,003	12.0
Outermost regions						976,033	80%	1,148,000	51%	1,347,075					
Outermost regions	46.0	46.0	211,281	594	100%	446,679	100%	1,082,915	100%	1,082,915	720,704	66.6	15,667	439,048	40.5
Outermost regions	194.0	45.0	179,166	2,310	100%	316,802	100%	1,011,465	100%	1,020,247	753,663	73.9	16,748	467,920	45.9
Outermost regions	52.0	50.0	103,241	558	100%	588,879	100%	703,168	100%	736,628	519,594	70.5	10,392	123,757	16.8
Outermost regions						321,846	1%	705,399	1%	527,763					
Outermost regions	32.0	20.0	36,933	629	100%	98,928	100%	340,523	100%	341,089	280,267	82.2	14,013	142,728	41.8
Outermost regions						56,490	4%	249,738	4%	331,588					
Outermost regions						113,249	3%	221,313	3%	236,160					
Outermost regions	33.8	6.1	42,253	97	2%	38,022	1%	145,242	1%	179,694	26,801	14.9	4,415	72,782	40.5
Outermost regions	11.7	4.3	79,674	81	2%	21,262	1%	86,383	1%	93,090	66,417	71.4	15,482	113,521	122.0
Outermost regions	0.8	0.8	23,813	15	1%	9,691	0%	52,618	1%	74,942	40,003	53.4	51,952	31,886	42.6
Outermost regions						3,614	0%	14,738	0%	11,634					
Outermost regions	15.2	0.1	456	2	0%	2,011	0%	8,005	0%	10,805	766	7.1	8,514	113	1.0
Outermost regions						1,073	0%	2,543	0%	2,542					
Outermost regions						560	0%	370	0%	691					
Outermost regions	6.4	4.9				112	0%	102	0%	79					

5. NATIONAL CHAPTERS

KEY FINDINGS

Facts and Figures for EU Member State fleets:

- **Belgium:** 83 vessels of which 7 inactive; employed 325 FTE fishers and generated €26.4 million in GVA. Although improved performance in 2013, the fleet suffered gross losses of -€1.9 million and profit margin of -15.5%; further improvement is expected in 2014.
- **Bulgaria:** 2,043 vessels of which 862 inactive; generated €8 million in landings and €2 million in GVA. Quality of the data for Bulgaria was considered questionable.
- **Croatia:** 4,358 vessels of which 1,409 inactive; employed 2,496 FTE fishers and generated €38.9 million in GVA, €14.9 million in gross profit and a 4% net profit margin.
- **Denmark:** 2,049 vessels of which 567 inactive; employed 1,652 FTE fishers and generated €251.6 million in GVA, €141.7 million in gross profit and a net profit margin of 11.5%.
- **Estonia:** 1,343 vessels of which 7 inactive; employed 514 FTE and generated €9.2 million in GVA, €4.2 million in gross profit and a net profit margin of 14.3%; improved performance on 2013.
- **Finland:** 3,241 vessels of which 1,509 inactive; employed 361 FTE fishers and generated €17.7 million in GVA, €7.8 million in gross profit and a net loss of €5 million; deteriorated performance compared to 2012 but improvement expected in 2014.
- **France:** 7,125 vessels, of which 1,217 were inactive, employed 7,150 FTE and generated €576.9 million in GVA, €178.3 million in gross profit and a profit margin of 4.9%; improved economic performance expected in 2014.
- **Germany:** 1,542 vessels of which 399 inactive, employed 1,281 FTE and generated €81.2 million in GVA, gross profit of €34.3 million and a net profit margin of 9.1%; improved economic performance.
- **Greece:** 15,954 vessels, of which 1,202 were inactive, employed 22,546 FTE. Economic performance could not be calculated due to missing data.
- **Ireland:** 2,246 vessels of which 177 inactive, employed 2,804 FTE and generated €136.6 million in GVA, a €74.8 million gross profit and a net profit margin of 14.9%; improved economic trend expected to have continued in 2014.
- **Italy:** 12,635 vessels of which 1,599 inactive; employed 19,855 FTEs and generated €430.7 million in GVA, €197.2 million gross profit and a net profit margin of 4%; some deterioration is expected in 2014.
- **Latvia:** 351 vessels of which 84 inactive; employed 415 FTE fishers and generated €11.7 million in GVA, €7.5 million in gross profit and a net profit margin of 19.3%; development trend improving but expected to deteriorate in 2014.
- **Lithuania:** 151 vessels of which 55 inactive; employed 491 FTE and generated €18.1 million in GVA, €12.2 million in gross profit and a net profit margin of 13.9%; development trend improving and expected to continue in 2014.
- **Malta:** 1,040 vessels of which 266 inactive; employed 389 FTE fishers and generated €6.3 million in GVA and a gross profit of €4.3 million; capital cost data were considered unreliable.
- **Netherlands:** 739 vessels of which 192 inactive; employed 1,766 FTE and generated €137.6 million in GVA and €41.4 million in gross profit.
- **Poland:** 798 vessels of which 43 inactive; employed 1,580 FTE fishers and generated €28.2 million in GVA, €8.1 million in gross profit and a profit margin of 2.1%; deterioration on 2012 results and expected to continue in 2014.
- **Portugal:** 8,311 vessels of which 4,287 inactive; employed 9,307 FTE fishers, generated €223.9 million in GVA, €88.7 million gross profit and net loss of €8.3 million; improved performance expected in 2014.
- **Romania:** 196 active vessels employed 37 FTE fishers and generated €0.8 million in GVA, a €0.3 million gross profit and a net profit margin of 6.8%; improved performance expected in 2014.
- **Slovenia:** 171 vessels of which 88 inactive; employed 75 FTE fishers and generated €1.8 million in GVA, a €0.5 million gross profit and a net margin of 1.7%; economic development trend improving expected to continue 2014.
- **Spain:** 10,167 vessels of which 1,372 inactive, employed 28,782 FTE, and generated €821.8 million in GVA, €224.7 million in gross profit and a net profit margin of 5.5%.

- **Sweden:** 1,299 vessels of which 315 inactive, employed 886 FTE fishers, generated €68.8 million in GVA, €35.4 million gross profit and net profit margin of 4.7%; economic development trend improving but a slight decrease expected in 2014.
- **United Kingdom:** 6,428 vessels of which 1,939 inactive; employed 7,333 FTE, generated €486 million in GVA, €271.2 million in gross profit and a net profit margin of 22.8%; development trend improving and expected to continue in 2014.

This chapter provides an overview of the structure and economic performance of the EU fishing fleet by Member State and highlights some key trends between 2008 and 2013, based on data obtained from the latest DCF fleet economic data call.

5.1 BELGIUM

Fleet Structure, Fishing Activity and Production

In 2014, the Belgian fishing fleet consisted of 80 registered vessels with a combined gross tonnage (GT) of 14.6 thousand tonnes, a total engine power of 46.5 thousand kilowatts (kW) and an average age of 27 years (Table 5.1.1). The size of the Belgian fleet decreased continuously over the years. Between 2012 and 2013, the number of vessels decreased 6%, GT 5% and kW 7%. Overall, the number of vessels decreased 19% between 2008 and 2013. In 2014, three vessels stopped their fishing activities and no new vessels were introduced. The Belgian fleet consisted of 79 fishing enterprises in 2014, with the vast majority owning a single vessel. Most were allocated to Zeebrugge and Ostend as their homeports.

Table 5.1.1 Belgian national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend	
Structure	Total No. Vessels (#)	102	102	91	90	88	83	80	-6%	↘	-19%	
	No. of Inactive vessels (#)	4	8	3	4	7	7	4	0%	↔	75%	
	Average vessel age (year)	22	23	23	24	25	26	27	4%	↗	18%	
	Vessel tonnage (thousand GT)	19.3	19.5	16.1	15.8	15.8	15.1	14.7	-5%	↘	-22%	
	Vessel power (thousand kW)	62.2	63.1	52.3	51.3	51.1	47.6	46.5	-7%	↘	-23%	
No. of Enterprises (#)		97	92	83	88	80	80	79	0%	↔	-18%	
Employment	Total employed (#)	485	414	397	389	385	355	342	-8%	↘	-27%	
	FTE (#)	357	312	322	318	317	235	235	-26%	↘	-34%	
	Average wage per employed (thousand €)	67.5	65.5	77.4	78.6	77.8	79.6	83.8	2%	↗	18%	
	Average wage per FTE (thousand €)	91.7	86.9	95.3	96.2	94.5	120.5	121.9	27%	↗	31%	
Fishing Effort	Days at sea (thousand days)	19.5	19.3	18.1	17.4	16.8	16.3	16.3	-3%	↘	-16%	
	Fishing days (thousand days)	19.6	19.6	18.6	17.6	17.2	17.0	16.9	-1%	↘	-13%	
	Energy consumption (million litres)	65.2	54.6	47.7	42.8	42.7	40.5	40.6	-5%	↘	-38%	
	Energy consumption per landed tonne (l/T)	3,281	3,081	2,435	2,126	1,954	1,775	1,683	-9%	↘	-46%	
Output	Landings weight (thousand tonnes)	19.9	17.7	19.6	20.1	21.8	22.8	24.1	5%	↗	15%	
	Landings value (million €)	83.8	71.4	81.8	82.8	77.5	73.6	80.9	-5%	↘	-12%	

*all monetary values have been adjusted for inflation - constant prices 2014

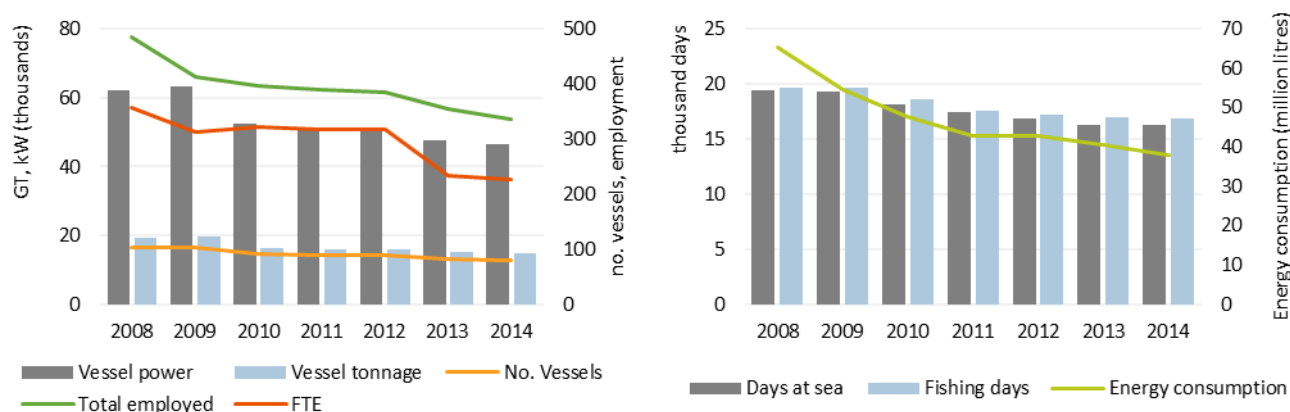
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

In 2014, the Belgian fleet spent 16.3 thousand days at sea, a slight decrease on 2012 but in line with the reduction in vessel number (see Table 5.1.1). Nationally restrictions have been set on the maximum days at sea (24 hour period at sea) that a vessel may achieve within a year. In 2013, this maximum was set at 270 days for all vessels, regardless of the area and fishing stock. Exchanges of sea days for catch possibilities were allowed, except for sole, plaice and cod. Beam trawlers targeting shrimp as well as dredges targeting scallops were not bound by these restrictions. Given these restrictions and the decrease in number of active vessels, the total number of days at sea will probably decrease further in the future.

The quantity of fuel consumed in 2013 amounted to 41 million litres, a decrease of 5% compared to 2012. The decrease in number of vessels and consequently a decline in the number of days at sea, resulted in an associated decrease in fuel consumption. In 2012, the total number of days at sea amounted one thousand days less than in 2013 (Table 5.1.1, Figure 5.1.1 and 5.1.2.). Fuel costs decreased as result of the lower fuel prices in 2013, but also due to effort made to decrease consumption by replacing engines. The fuel costs have a tendency to follow the evolution of the fuel prices. The average fuel price in 2013 (€0.70 per litre) was 5% lower than in 2012. However, this was still high when compared to the average price in 2009 (€0.41 per litre).

Total employment in 2013 was estimated at 355 jobs, corresponding to 235 FTEs, which was a decrease of -26% in comparison to 2012. Employment levels and FTEs decreased gradually over the

period 2008 and 2013, respectively by 27% and 34% (see Table 5.1.1 and Figure 5.1.1). According to the Social Secretariat of the Coast, 24% of the fishermen were over 50 years in 2013. In 2012, 75% of fishermen were Belgian nationals and 23% Dutch nationals. The remaining 2% were mostly French. In comparison with other member states, Belgian fishermen receive a high income. Since 2003, a law on employment ended the “No catch, no pay” era, assuring income security for each sea trip. The fact that this has been set legally for all vessels is unique in Europe and might contribute to the fight against illegal fishing. However, finding appropriate staff for fisheries remains a challenge. Young people who graduate from the Maritime Institute prefer to work for dredging companies or in the tourism industry.

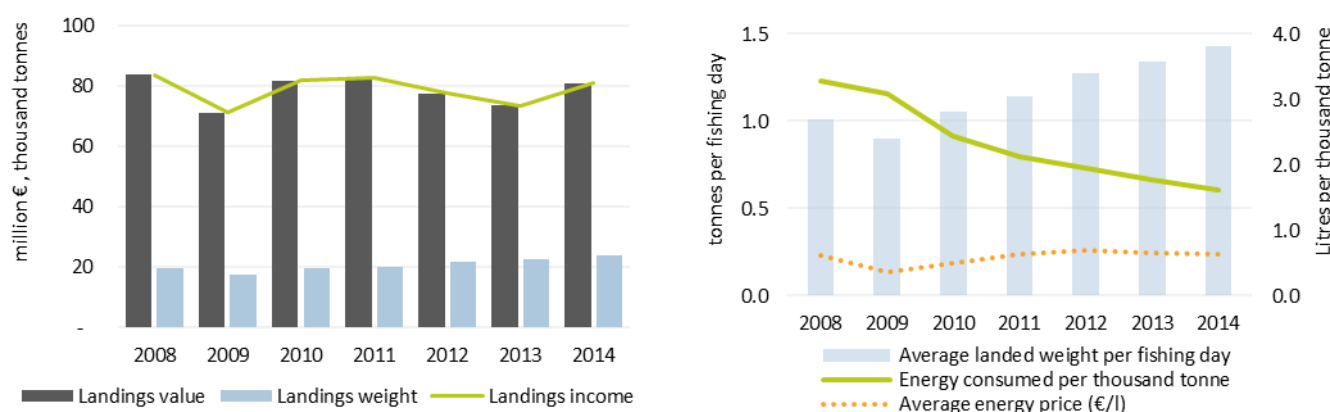


Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.1.1 Belgian fleet main capacity and effort trends for the period 2008-2014.

The total weight of landed seafood by the Belgian fleet in 2014 was 24 thousand tonnes with a landed value of €81 million. Total landed weight increased 5% while the value of landings decreased 5% over the period 2008-2013. However, landings increased both in weight and in value compared to 2013 (Table 5.1.1). Overall, landing values fluctuate annually, indicating unstable average first sale prices (Figure 5.1.2 and 5.1.3).

In 2013, about 72% of the weight was landed in one of the four Belgian harbours and 28% in foreign harbours. Of the Belgian harbours, Zeebrugge was the most important and received 63% of total landings. In 2014, the landings in Belgian harbours increased with 20% to 19.6 thousand tonnes with Zeebrugge remaining at the top. Landings in Nieuwpoort were negligible; however this harbour remained important in terms of coastal tourism.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

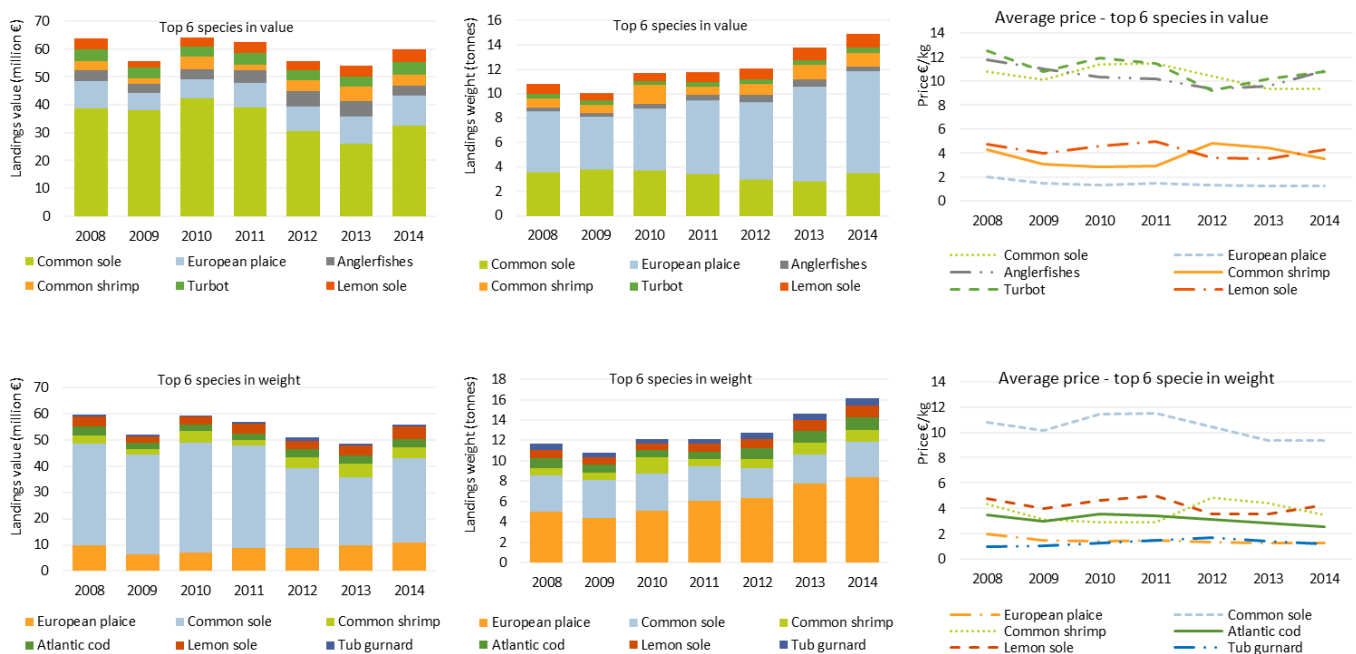
Figure 5.1.2 Landings in value and weight (and corresponding income from landings) by the Belgian national fleet and some efficiency indicators for the period 2008-2014.

In 2010, the auctions of Zeebrugge and Ostend merged as one private company. The Nieuwpoort harbour auction is still owned by the government and is mostly equipped for landings of smaller vessels as the larger vessels are technically unable to enter the harbour. In 2013, 305 tonnes of fishery products destined for human consumption were withdrawn from the market as prices fell

below the minimum price. Plaice was the main species. An explanation as to why no buyers could be found for these fish was that a number of Dutch processing companies closed temporarily. In 2014, the amount of fish withdrawn from the market was less than 1% of total landings in Belgian harbours.

In 2013, an estimated 97% of landings in foreign harbours occurred in the Netherlands, 2% in France and 1% in the UK. Of the total amounts landed in foreign harbours in 2013, close to half consisted of European plaice and 10% of common shrimp. This can partly be explained by the fact that important fishing grounds for these economically important species were situated north of the Netherlands. Furthermore, a third of the fleet was owned by Dutch skippers who prefer to land in their home markets and where the price for plaice is generally higher than in Belgium (7 cent per kg higher in 2013). In addition, landed cod caught as by-catch in the plaice fishery was sold at the same average market price as in Belgium. Sole on the other hand remained more valuable in the home market. In 2014, the amount landed in foreign harbours decreased 28%, but still remained important especially in the Netherlands (83%) where plaice was still the most important species. Scallops were mainly destined for the French and British market.

Belgian vessels mostly landed demersal species. Sole remains a dominant species for Belgian fisheries. Between 2010 and 2013, its importance was declining, but this trend was reversed in 2014 and common sole generated the highest landed value (€32 million), representing about 40% of landings in terms of value. It only represented 35% in 2013. Sole was followed by European plaice (€10.7 million), remaining at a stable 13.3% of total landings for both 2013 and 2014. The next highest species by value were lemon sole (€4.8 million), turbot (€4.3 million), common shrimp (€4 million) and anglerfishes (€3.7 million). Compared to 2013, the landed value of common sole, plaice, lemon sole, and turbot increased 20%, 9%, 24% and 13%, respectively in 2014. On the other hand, landed value of common shrimp and anglerfish decreased 30% and 46%, respectively. In terms of the landed weight, the picture is slightly different: European plaice (8.4 thousand tonnes) is the highest landed species by weight, followed by common sole (3.46 thousand tonnes), Atlantic cod (1.26 thousand tonnes), Great Atlantic scallop (1.22 thousand tonnes), common shrimp (1.15 thousand tonnes) and lemon sole (1.13 thousand tonnes) (Figure 5.1.3).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.1.3 Belgian fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (top) and top 6 species in terms of landed weight (bottom).

Since 2011, prices for common sole and plaice have decreased. For anglerfish prices seem to have increased, while for common shrimp prices were especially high in 2012 and 2013. Anglerfish had the highest on average price in 2014, amounting to €10.9 per kg followed by turbot (€10.8 per kg). Common sole achieved an average price of €9.4 per kg in 2014, which was low compared to €11.5 per kg in 2011. The average price of plaice, anglerfish, common shrimp, turbot and lemon sole increased

between 2013 and 2014 (2.5%, 11.7%, 5.5% and 16.2% respectively). The average shrimp prices remained similar. Only common sole prices decreased by 26% between 2013 and 2014 (Figure 5.1.3).

Total initial available quota for the Belgian fleet in 2013 was 32 thousand tonnes. Quota for sole were especially important for the profitability of the Belgian fleet and were considerably different compared to 2012. A decrease of 14% in the North Sea, 73% in the Irish Sea, 6% in the Celtic Sea and 4% in the Bay of Biscay was observed. However, quota for sole increased in other areas: 6% in the Eastern Channel, 19% in the Western Channel and 4% in the Bristol Channel. Ultimately, the global quota for sole decreased 4% to 3,592 tonnes. The global quota for European plaice on the other hand increased 16% to 6,813 tonnes in 2013. For anglerfish, the total quota decreased 5% to 3,223 tonnes.

Belgium conducted 54 quota trades in 2013 with other member states. This, together with the transferable quota from 2012 to 2013, given the decrease in fleet size, allowed for a sufficient amount of quota for the important species. Even so, four early closings of the fishing grounds were necessary. Despite closing these fishing grounds a number of quota exceeds were reported for haddock and ray. Trading with other member states allowed for an increase in 26% of sole quota, amounting to a total of 4,517 tonnes. For European plaice this amounted to a total of 8,467 tonnes (+24 %).

In 2014, strong quota limitations for sole occurred in the Irish Sea decreasing landings from this area with 41%. A decrease in landings from the Western Channel was also observed. The most important areas of origin were the North Sea (45%) and the Eastern Channel (30%). However, in terms of prices, the Bay of Biscay was the most important with on average €7.55 per kg and represented only 5% of total landings. On average €2.45 (- €3.29 per kg) was received for fish originating from the North Sea. These differences reflect the sole catches: highest in the Bay of Biscay and lowest in the North Sea. Furthermore, a large amount of anglerfish were caught in the Bay of Biscay.

National Fleet Economic performance

The amount of revenue generated by the Belgian national fleet in 2013 was €77.5 million. This consisted of €73.5 million of income from landings and €4 million of non-fishing income and was 5% lower than in 2012. Including direct subsidies, total income amounted to €79.3 million (Table 5.1.2 and Figure 5.1.4).

Total operating costs generated by the Belgian national fleet in 2013 was €79.3 million, exceeding total income. Total costs amounted to €89.5 million euro. Between 2012 and 2013, total operating costs decreased 7% due to lower fishing effort in 2013 combined with lower fuel prices. Crew cost and fuel costs, the two major expenses, amounted to €28.3 and €26.2 million, respectively. The proportion of capital costs, other variable costs and other non-variable costs to total costs, remained relatively constant over the years as did the proportion of labour costs and energy costs to total costs (Figure 5.1.4).

Overall, the decreasing average prices of demersal species led to a decrease in income and had a negative impact on profitability. In 2013, the average price of sole decreased 9% and the average fish price in all Belgian harbours decreased 8%. These lower prices had a negative impact on the profitability of the fishery. In 2013, the Belgian fleet moved, once again, into a net loss making position (Figure 5.1.5) however it improved compared to 2012. This situation is expected to improve in 2014 as fuel prices decreased in this year.

The total amount of Gross Value Added (GVA), gross profit and net profit generated by the Belgium fleet in 2013 was €26.4 million, -€1.9 million and -€12.0 million, respectively (Table 5.1.2. and Figure 5.1.5). Gross Value Added (GVA) decreased 3%, while gross profit and net profit increased 31% and 8%, respectively, between 2012 and 2013. These results indicate a weak, yet improved economic performance in comparison to the previous year. The net profit margin in 2013 was -15.5%, indicating a low operating efficiency of the sector. The Rate of Return on Fixed Tangible Assets (RoFTA) improved in comparison with the value in 2012. In 2013, the (depreciated) replacement value of the Belgian fleet was estimated at €70.5 million and investments amounted to €6.2 million, a decrease of 55% compared to 2012.

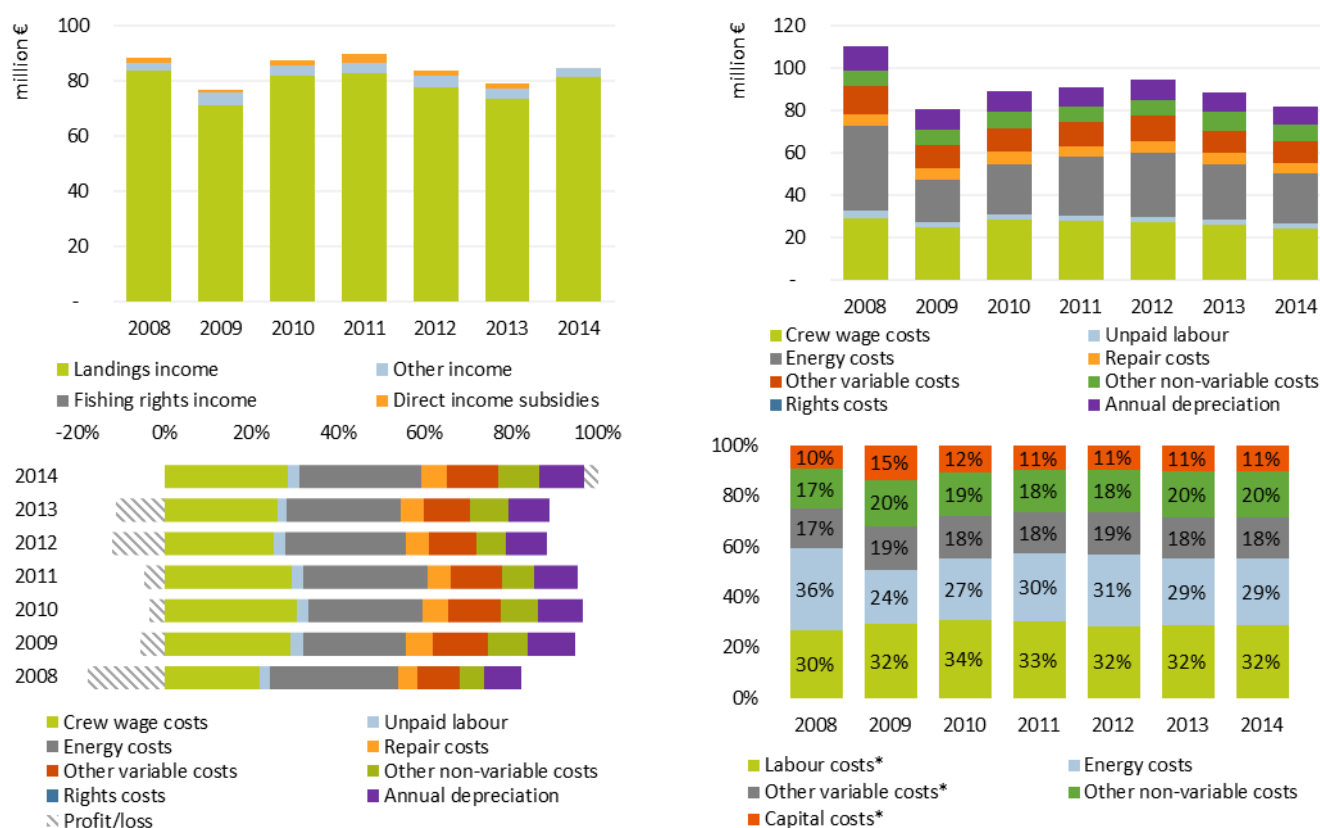
Table 5.1.2 Belgian national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	83.8	71.3	81.8	82.9	77.7	73.5	81.3	-5%	↘	-12%
	Other income	2.8	4.5	4.0	3.8	4.3	4.0	3.8	-8%	↘	42%
Costs	Labour costs	32.8	27.1	30.7	30.6	30.0	28.3	28.7	-6%	↘	-14%
	Energy costs	39.8	20.2	24.2	27.5	29.9	26.2	25.7	-12%	↘	-34%
	Repair costs	5.8	5.3	5.5	5.3	5.9	5.3	5.3	-11%	↘	-9%
	Other variable costs	13.1	10.8	11.0	11.4	11.7	10.6	10.7	-9%	↘	-19%
	Other non-variable costs	7.4	7.8	7.9	7.1	7.3	8.9	8.6	23%	↗	20%
	Capital costs	11.5	12.6	10.5	10.0	10.3	10.2	9.8	-2%	↘	-12%
Economic Indicators	GVA	20.4	31.7	37.1	35.5	27.2	26.4	34.9	-3%	↘	29%
	Gross profit	-12.3	4.6	6.4	5.0	-2.7	-1.9	6.2	31%	↗	85%
	Net profit	-23.8	-8.0	-4.1	-5.1	-13.0	-12.0	-3.6	8%	↗	50%
Capital value	Depreciated replacement value	63.7	88.6	78.7	67.3	68.0	70.5	68.0	4%	↗	11%
	Investments	4.7	12.1	13.6	16.4	13.8	6.2		-55%	↘	31%
Profitability and development trends	Net profit margin (%)	-27.5	-10.6	-4.7	-5.9	-15.9	-15.5	-4.2	2%	↗	44%
	<i>development trend</i>								-20%	↘	
	RoFTA (%)	-37.5	-5.2	-4.0	-6.8	-18.8	-15.9	-4.05	16%	↗	58%
	<i>development trend</i>								-10%	↘	
	GVA per FTE (thousand €)	57.2	101.7	115.2	111.8	86.0	112.5	148.4	31%	↗	97%
	<i>development trend</i>								19%	↗	

*all monetary values have been adjusted for inflation; constant prices (2014)

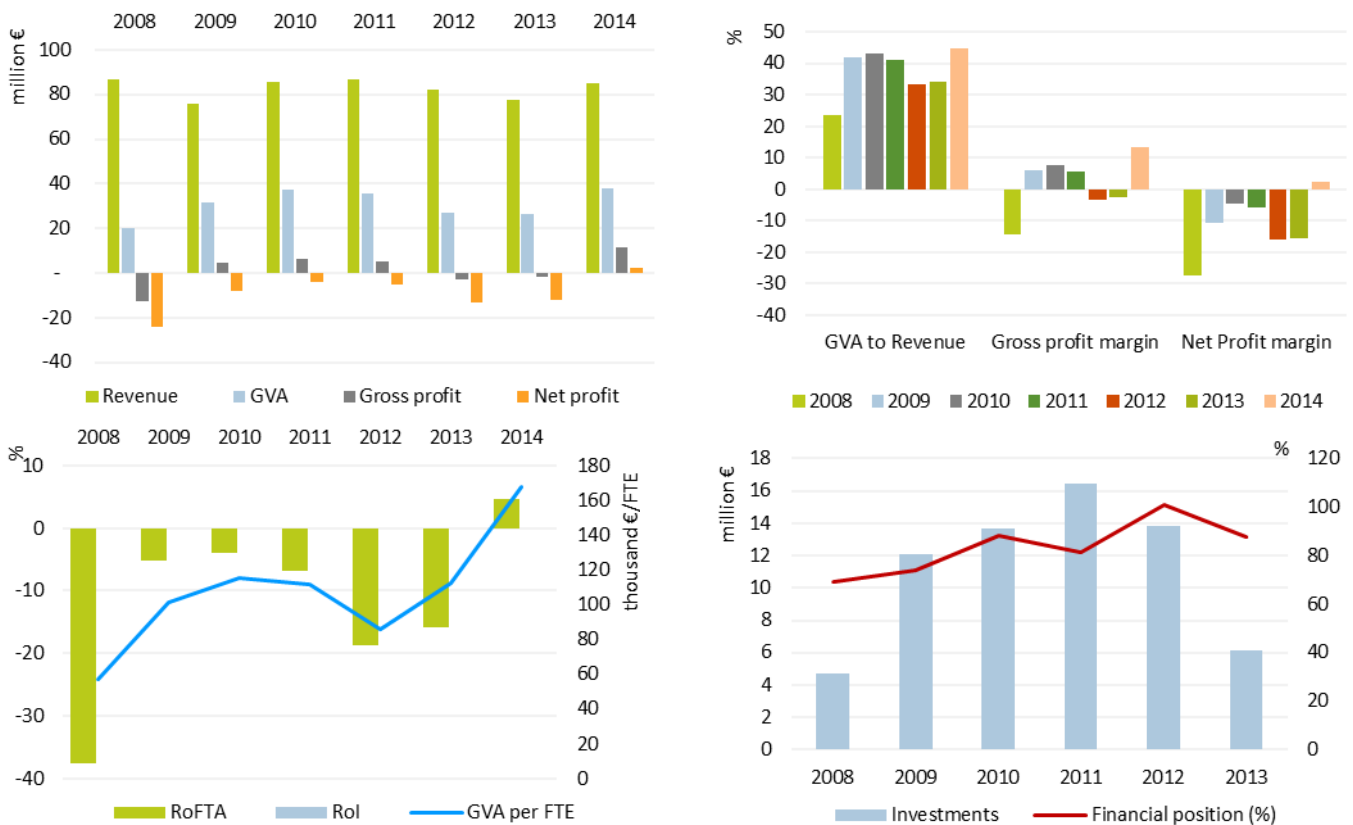
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.1.4 Income and cost structure trends for the Belgian fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.1.5 Main economic performance indicator trends for the Belgian fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

The labour productivity (GVA/FTE) increased 31% between 2013 and 2012, with an overall improved development trend since 2008. The GVA only slightly decreased between 2013 and 2012; however the number of FTE strongly decreased over the same period allowing for an increase in output with less input of labour (Figure 5.1.5). Assuming that increases in productivity are matched by higher wages, this indicates good living standards within the sector. Average crew wages increased between 2012 and 2013.

Fleet Segment Level Economic performance

Nationally defined fleet-segments

The Belgian fishing fleet is nationally divided into a large-fleet segment (46% in 2013) with a motor engine of kW>221 and a small-fleet segment (54% in 2013) with a motor engine of kW≤221. In the former, beam trawlers are responsible for the most important part of annual landed revenue and employment. These highly specialised vessels target demersal fish species, with sole, plaice and anglerfish as most important species in terms of revenue. With fishing rights in the distant North Sea and the Western waters, many vessels fish in campaigns. In between two fishing trips, the vessels do not return home, but land fish in foreign harbours. Other vessels of the large-fleet segment use fishing gear such as seines and otter trawls. They exploit fishing grounds in the North Sea and the Western waters, but target a wide range of species. Fuel costs for the large beam trawls remained similar to previous years.

The small-fleet segment (motor engine kW≤221) can be classified in three groups. Coastal fishermen usually have fishing trips of less than 24 hours. The second group contains the vessels that use other fishing gear (dredge, seines, trammel – and gillnets) and target different species in the North Sea and English Channel. A last group, the *Eurokotters*, possess beam trawlers constructed after 1980, with a length of maximum 24 meter. These vessels are mainly active in the Southern and Central part

of the North Sea, the English Channel and Bristol Channel and make fishing trips of approximately five days. *Eurokotters* target demersal fish species (sole, plaice, anglerfish), but a part targets nephrops during the summer with demersal otter trawls in the Central part of the North Sea. Some *Eurokotters* target shrimp after the summer. In 2013, there was only one active vessel belonging to the “small-scale fisheries” according to the European definition (vessel size 10-12m).

The labour costs for this small-fleet segment remained rather stable with regards to the landings. Fuel costs on the other hand decreased considerably for the coastal fishermen and the *Eurokotters* despite an increase the days at sea. The small-fleet segment was profitable in 2013 and improved compared to 2012, where it was also profitable. In both years, shrimp prices were sky high compared to 2011 and previous years explaining this favourable situation.

Fleet segments in this report

Contrary to the national divisions described above, in this report, fleet segments were identified according to the combination of fishing gear and vessel size. Therefore, figures here consider seven fleet segments operating in the North Sea, English Channel and other areas of the North Atlantic. Beam trawlers dominate the fleet, representing 79% of the active vessels in 2013.

Table 5.1.3 and Table 5.1.4 contain economic performance indicators for each of the main Belgian fleet segments in 2013, and highlights low profitability in most of the segments. The fleet segments consisting of dredgers and passive gear were left out of these tables for confidentiality reasons, as there were only a few vessels in these segments. However, these segments were doing very reasonably in terms of profitability.

The data available in 2013 show a sensitive improvement of economical results of the coastal fisheries and *Eurokotters*. The large beam trawlers, which generated a reasonable €4 million profit in 2011, performed at a loss in 2012 and in 2013 (Table 5.1.3). For these large beam trawlers a downward trend is observed. Hereunder six of the seven identified fleet segments are described in more detail:

Dredgers – Over the years, there have been 2 active dredgers in Belgium operating in Area 27.7 (English Channel) and 27.4 (North Sea). These vessels mainly target scallops and have been profitable.

Beam Trawl 10-18m – In 2013, there were four active vessels operating in the Southern North Sea (Area 27.4.c). The total value of landings consisted mainly of common shrimp (62%) and common sole (30%).

Beam trawl 18-24m – In 2013, 25 vessels made up this segment and operated predominantly in Area 27.7. Their number decreased 17% compared to 2012 when there were 30 vessels in this segment. This decrease was accompanied by a reduction in energy consumption of 23% (and energy costs 32%). However, revenue decreased 18%, mainly due to the lower value of the landings and associated low fish prices. Total value of landings for this fleet segment amounted to €11 million, 9% of total national landings. It targets a variety of species including common sole (€3.5 million), common shrimp (€4.7 million), European plaice (€0.9 million) and turbot (€0.4 million). This segment employed 24% of total FTE, spent 4,232 days at sea, and had an energy consumption of 5,695 thousand litres and energy costs of €3.7 million. This segment consumed close to 1,346 litres per day at sea and spent on average €0.15 million on energy per vessel. It reported a negative gross profit of €0.9 million and a net loss of €2.5 million in 2013.

Beam Trawl 24-40m – There were 31 vessels registered in this segment in 2013 operating predominantly in Area 27.7 and 27.8. This fleet segment landed €52 million in 2013, representing 70% of total landings. These vessels target a variety of species, particularly common sole (38%), European plaice (15%), anglerfish (10%) and lemon sole (6%). This segment employed 53% of total FTE, spent 8,487 days at sea, and had an energy consumption of 27,831 thousand litres and energy costs of €18 million. The segment consumed close to 3,280 litres per day at sea and spent on average €0.58 million on energy per vessel. It reported a positive gross profit of €3.1 million, but a net loss of €3.3 million in 2013, a comparable situation to 2012. Crew wages were higher in this fleet segment compared to other fleet segments. Labour productivity was also highest.

Demersal trawlers 18-24m – 8 vessels made up this segment in 2013 operating in Area 27.7 and 27.4. This fleet segment landed €4.5 million in 2013. Profitability was weak with a net loss of €1 million and only contributing to 8% of total FTE. This fleet segment spent 1,571 days at sea. Energy consumption was much lower than for the beam trawlers and energy costs amounted to €1.5 million. On average €0.2 million was spent on energy per vessel and 1,604 litres per day at sea were consumed.

Demersal trawl and seine 24-40m – 5 vessels made up this segment in 2013 operating in Area 27.7 and 27.4. This fleet segment landed €4.3 million in 2013. Profitability was reasonable with a negligible

net profit. This fleet segment spent 1,033 days at sea. Energy consumption was much lower than for the beam trawlers and energy costs amounted to €1.2 million. On average €0.2 million was spent per vessel and 1,701 litres per day at sea were consumed.

Assessment and Future Trends

General trend: The economic performance of the Belgian fleet has deteriorated. Even with fleet segments continuing to limit energy consumption, the low fish prices make it difficult to improve profitability. The profitability of the beam trawlers in 2013 was weak and the economic development trend suggests little improvement. The net profit margin for this segment decreased with a considerable amount in comparison to the average of the previous years. Two major external factors in 2012 and 2013 had an influence on this outcome: a decrease in fish price especially for sole, a key species for this segment combined with high fuel prices.

The profitability of passive gear fishing and demersal trawling was reasonable in 2013. However, the net profit margin decreased 54% in 2013 in comparison to previous years. Prices for common shrimp were lower in 2013, but were still considerably high. The bottom dredgers had a high profitability in 2013. For confidentiality reasons, figures on the latter as well as figures for the passive gears were not published in this report.

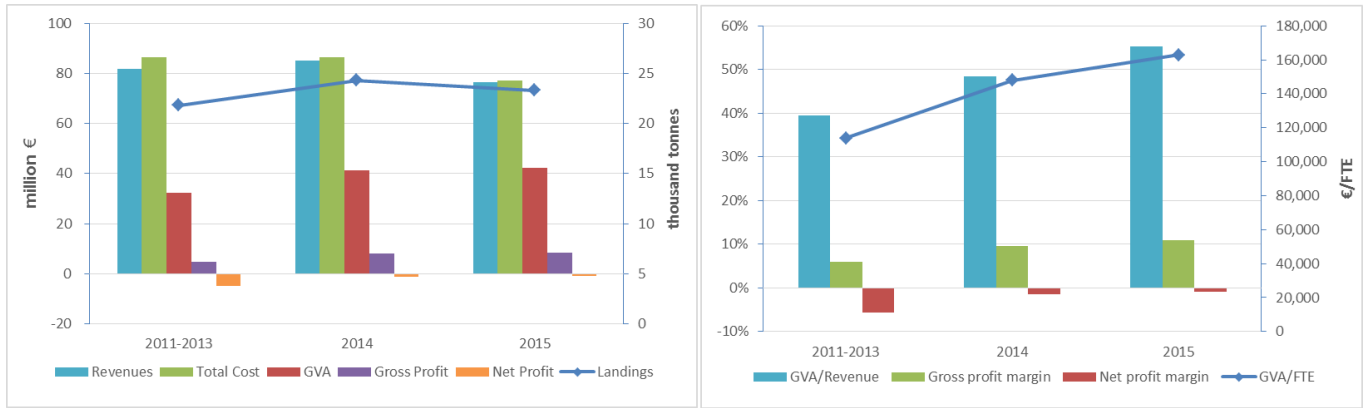
Development in flatfish fishery: Research on technical innovation as an alternative for the beam trawl in the flatfish fishery in Belgium is on-going. However, such research is time consuming and difficult to assess. Contrary to the Dutch fleet, only one Belgian commercial vessel is currently using the pulse trawl technique as an alternative for the conventional beam trawl. The Flemish government issued three permits to apply the pulse technique. However, the other two have not been implemented. One of the reasons behind this may be that the reduced quota for sole in the North Sea (the only area where pulse is partly permitted) does not justify such an investment. Quota for sole in other areas cannot be targeted using the pulse technique as it is currently prohibited. Most enterprises only own one vessel and therefore the high investments could have important consequences if it does not increase revenue. Contrary to the Dutch enterprises owning more than one vessel, there is little room to explore new options and compare innovative techniques. The risk of bankruptcy when making a wrong decision is much higher and therefore most enterprise owners are reluctant to make large changes.

Development in shrimp fishery: Also in this fishery research for new and more sustainable fishing techniques is on-going. In general, transition towards the implementation of these new techniques in the sector is slow. Fishermen are hesitant due to high investments, the uncertainty of the impact of the techniques and the possible market effects.

Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.



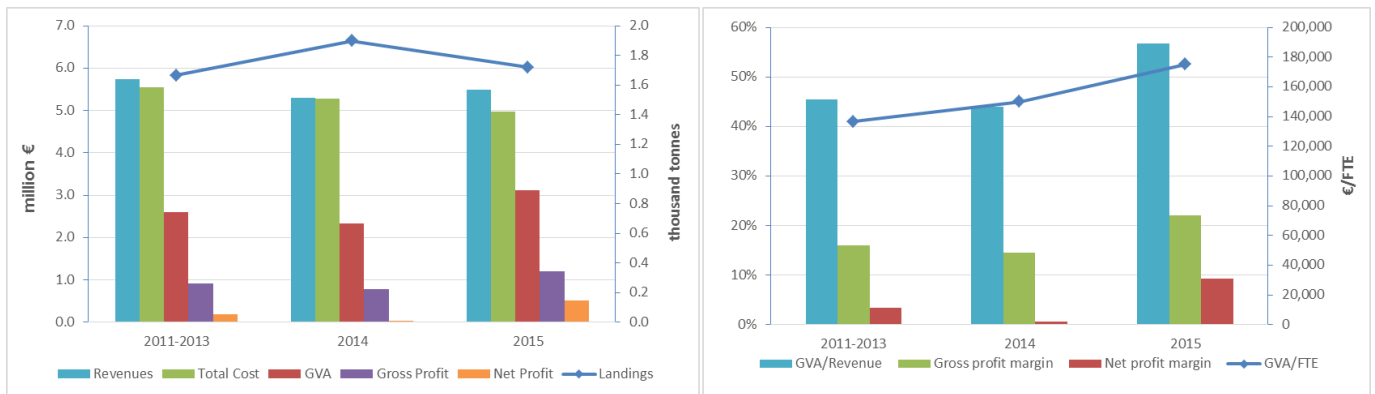
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.1.6 Belgium: Projections on 2014 and 2015 on the main socio-economic indicators.

According to the BEMEF projections, in 2014 the Belgian fleet sees an increase in landings of 11% but this is only matched by a 4% increase in revenue due to lower prices for key species including sole and plaice. Still, with fishing costs remaining unchanged (0%) as a result of lower energy costs, there are large increases in gross profit (+66%) and net profit (+74%). Positive economic developments can also be seen in the relative measures of GVA as a percentage of revenue (+23%), GVA per employee (+30% to €148,000) and large increases of gross and net profit margins.

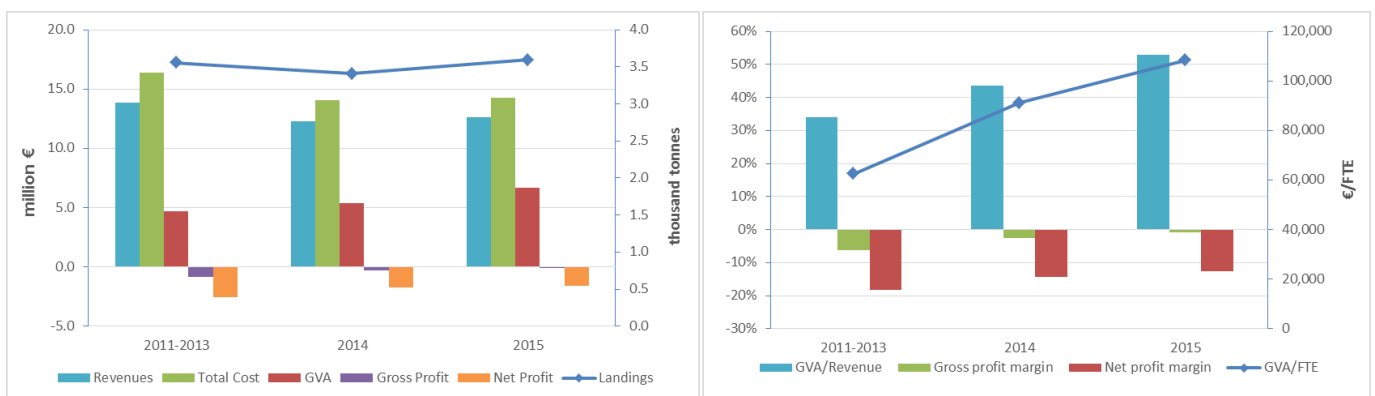
The 2014 gains are offset slightly in 2015 as a slight decrease in landings (-4%) is compounded by low prices for a 10% decrease in revenue. With costs also declining (-11%) there is little change in profit. Normalising the data shows increases in GVA/Revenue, GVA/FTE, the gross profit margin and the net profit margin.

The following graphs provide results for the top 3 Belgian fleets by gross earnings.



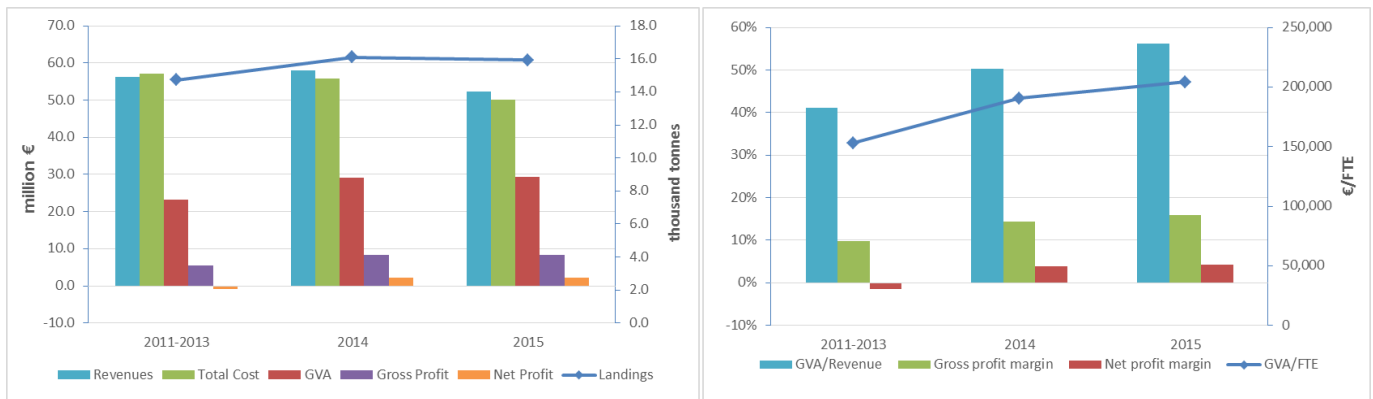
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.1.7 BEL AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

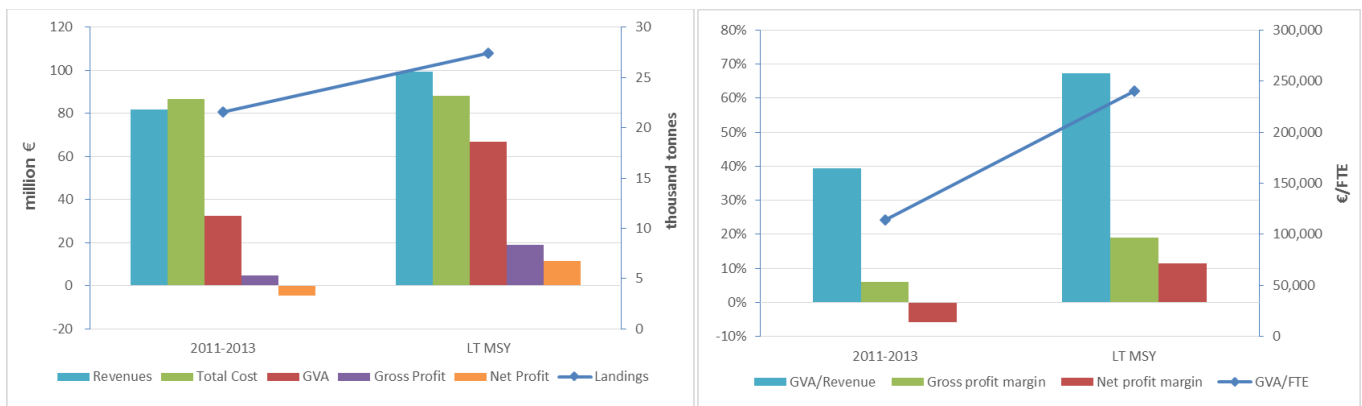
Figure 5.1.8 BEL AREA27 TBB VL1824: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.1.9 BEL AREA27 TBB VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, a state of long-term MSY results in improved economic performance for the Belgian fishing fleet. A 27% increase in landings to 27,000 tonnes is associated with a 22% increase in revenue and only a 2% increase in total costs. Gross profit and net profit improve to €19 million and €11 million respectively and GVA/ FTE, already high in Belgium, reaches €240,000 (Figure 5.1.10).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.1.10 Belgium: MSY projections for the main socio-economic indicators.

Data issues

No major issues detected. Values and figures may differ somewhat from those in previous annual economic reports. This is due to a conversion of data storage: from manually adjusted queries to an automated database. However, no major differences were found for trends and conclusions remain the same. This is reassuring, as the data source remains the same. The data comes from the Department of Agriculture and Fisheries of the Flemish Government who conduct the data collection. The overall response for economical values of 2013 represented 85% of the fleet. Furthermore of the non-respondents, 75% represented vessels with limited activity (less than 100 days at sea). Therefore the overall coverage of the national fleet was very adequate.

Table 5.1.3 Main socio-economic performance indicators by fleet segment in the Belgian national fishing fleet in 2013

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	N	% Δ	N	% Δ	Days	% Δ	litres	% Δ	thousand €	% Δ	thousand tonnes	% Δ	thousand €	% Δ	€/FTE	% Δ	thousand €	% Δ	thousand €	% Δ	%	% Δ			
BEL AREA27 DTS VL1824*	8	-11%	19	-8%	1,571	23%	2,520	13%	4,512	14%	1,362	12%	1,562	75%	81.0	90%	389	55%	1,080	26%	-22.7	33%	Weak	53%	Improved
BEL AREA27 DTS VL2440	5	0%	14	-34%	1,033	-9%	1,757	1%	4,307	-18%	1,729	1%	2,175	-20%	154.2	21%	740	-23%	6	-98%	0.1	-97%	Reasonable	115%	Improved
BEL AREA27 TBB VL1218*	4	33%	12	33%	538	4%	393	25%	524	-5%	167	-15%	157	-1057%	-13.1	-770%	502	-65%	582	-54%	-102.9	-55%	Weak	-7%	Deteriorated
BEL AREA27 TBB VL1824	25	-17%	56	-33%	4,232	-20%	5,695	-19%	11,273	-14%	3,237	-9%	4,039	-4%	72.0	42%	904	24%	2,502	7%	-21.4	-9%	Weak	-5%	Deteriorated
BEL AREA27 TBB VL2440	31	0%	124	-25%	8,487	4%	27,831	-2%	51,987	-2%	16,065	9%	20,281	-5%	163.7	27%	3,085	-11%	3,280	-6%	-6.1	-10%	Weak	-14%	Deteriorated

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Table 5.1.4 Main socio-economic performance indicators by fleet segment in the Belgian national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		consumed per landed tonne		Energy costs		Operating costs		GVA		Net profit		%Δ 2013 to average (2008-12)	Economic development trend
	FTE	% Δ	Days	% Δ	weight	% Δ	weight	% Δ	per vessel	% Δ	per FTE	% Δ	per employed	% Δ	consumed	% Δ	per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ		
BEL AREA27 DTS VL1824*	2.4	3%	196	38%	867	-9%	966	-9%	243,927	25%	95,218	62%	59,219	54%	1,851	0%	191,470	6%	643,819	6%	643,819	12%	195,297	97%	-134,981	17%	31%	Improved
BEL AREA27 DTS VL2440	2.8	-34%	207	-9%	1,674	12%	1,855	11%	287,061	-19%	91,804	28%	49,821	-10%	1,016	0%	231,731	-13%	865,489	-13%	865,489	-13%	435,040	-20%	1,133	-98%	137%	Improved
BEL AREA27 TBB VL1218*	3.0	0%	135	-22%	309	-18%	184	-22%	86,212	-11%	25,470	-15%	25,470	-15%	2,359	46%	66,534	-8%	266,852	-8%	266,852	-8%	39,162	-768%	-145,518	-15%	-11%	Deteriorated
BEL AREA27 TBB VL1824	2.2	-19%	169	-4%	765	14%	563	5%	197,691	10%	85,265	35%	58,334	20%	1,760	-11%	149,373	-10%	503,751	-10%	503,751	1%	161,541	15%	-100,086	-11%	-7%	Deteriorated
BEL AREA27 TBB VL2440	4.0	-25%	274	4%	1,893	4%	2,116	3%	554,693	-4%	125,842	28%	85,222	-4%	1,732	-10%	582,355	-8%	1,642,525	-8%	1,642,525	-3%	654,224	-5%	-105,812	-6%	-57%	Deteriorated

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

5.2 BULGARIA¹

Fleet Structure, Fishing Activity and Production

In 2014, the Bulgarian fishing fleet consisted of 2,011 registered vessels, of which 1,110 were active and the remaining 901 vessels were inactive. The active fleet had a combined gross tonnage of 4.7 thousand tonnes, total power of 36.3 thousand kW and an average age of 22 years. The overall size of the Bulgaria fishing fleet decreased between 2013 and 2014; the active fleet decreased by 6% while inactive vessels increased by 5%. In the active fleet, GT and kW decreased by 5% and 6%, respectively between 2013 and 2014 (Table 5.2.1). Over the period, the active fleet has increased by 30%;

In 2014 there were 2011 fishing enterprises (value provided at MS level and therefore not shown in the table below, which contains only fleet segment level data), a significant increase compared to 2008, due to the fact that in 2012 all Bulgarian fishermen were obliged to become 'enterprises'.

Table 5.2.1 Bulgarian national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	854	1,118	1,383	1,010	1,192	2,043	2,011	71%	↗	139%
	No. of Inactive vessels (#)	1,826	1,303	1,309	1,335	1,195	862	901	-28%	↘	-53%
	Average vessel age (year)	14	15	20	22	24	20	20	-18%	↘	41%
	Vessel tonnage (thousand GT)	5.4	8.0	7.5	5.0	5.1	6.6	6.4	29%	↗	22%
	Vessel power (thousand kW)	31.8	50.9	48.4	33.7	37.6	57.4	56.6	53%	↗	80%
	No. of Enterprises (#)	56	69	77	99	184	1,955	2,011	963%	↗	3391%
Employment	Total employed (#)	1,433	1,732	3,933	3,276	5,638	895	836	-84%	↘	-38%
	FTE (#)	1,507	1,430	2,889	1,668	2,872	371	358	-87%	↘	-75%
	Average wage per employed (thousand €)	0.7	0.9	0.7	0.5	0.3	3.3	3.2	1236%	↗	377%
	Average wage per FTE (thousand €)	0.7	1.1	0.9	1.0	0.5	8.1	7.5	1510%	↗	1120%
Fishing Effort	Days at sea (thousand days)	10.8	12.8	16.0	16.1	25.1	21.6	21.3	-14%	↘	100%
	Fishing days (thousand days)	10.8	12.8	16.0	16.1	25.1					
	Energy consumption (million litres)	1.4	1.4	1.6	1.1			0.01			
	Energy consumption per landed tonne (l/T)	185	193	170	140			0.7			
Output	Landings weight (thousand tonnes)	7.5	7.1	9.3	7.6	8.1	9.2	7.9	14%	↗	23%
	Landings value (million €)	3.5	3.0	2.4	2.7	4.4	4.4	4.4	1%	↗	28%
	Recreational catches of selected species (T)	7,514	7,113	9,276	8,000	8,075	9,212	7,897	14%	↗	23%

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

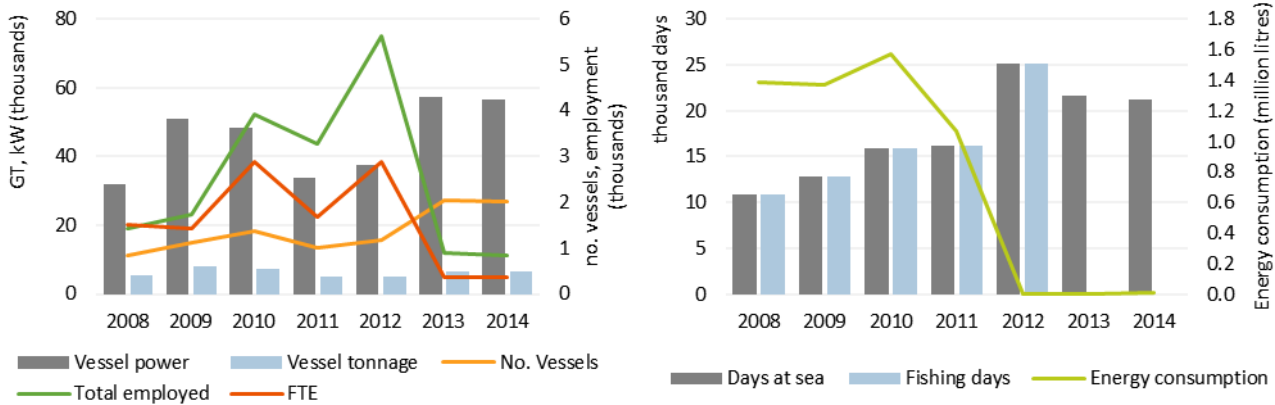
The Bulgarian fleet spent just over 21 thousand days at sea in 2014, a 91% increase compared to 2008 but a slow decrease since 2012. Data on fuel consumption is missing for 2012 and for 2013. The value for 2014 does not seem reliable.

The total landed weight by the Bulgarian fleet in 2014 was 7.9 thousand tonnes of seafood, with a landed value of €4.4 million. The total volume and value of landing increased by 5% and 27% respectively over the period analysed (2008-2014).

Regarding the top species in terms of value, the average first sale price for European sprat, Mediterranean horse mackerel and picked dogfish remained rather stable while for turbot and sea snails it increased between 2008 and 2014. Turbot achieved the highest average price per kilo in 2014

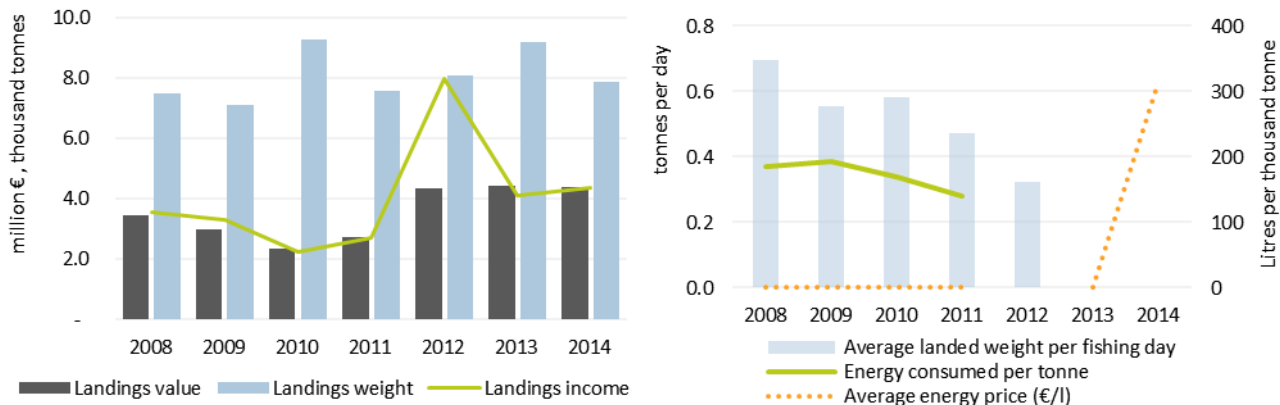
¹ This National Chapter is built on data, the quality of which has been judged questionable by experts. Data coverage is also an issue. Results should therefore be treated carefully.

(€5.7 per kg), followed by picked dogfish (€1.8 per kg) (Figure 5.2.1). However, the price of turbot has decreased since 2012 (-17%).



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.2.1 Bulgarian fleet main capacity and effort trends for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.2.2 Landings in value and weight (and corresponding income from landings) by the Bulgarian national fleet and some efficiency indicators for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.2.3 Bulgarian fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

National Fleet Economic performance

The amount of income generated by the Bulgaria national fleet in 2013 was €4,4 million. This consisted of €2.6 million in non-fishing income. The trend between 2012 and 2013 could not be commented because of inconsistent data for 2012 (some fleet segments were double counted, with different amount of landings income).

Costs increased between 2008 and 2013, except 'repair costs' and 'other non-variable costs'. Increasing of 111% for labours costs combined with an increase of energy costs (+37%) and other variable costs (+44%) could be an issue for the Bulgarian fleet. However, the quality of economic data is questionable, also considering that operational costs result higher than total income in almost all years of the reference period. For example, in 2013 operational costs reached €7.7 million, while total income was €6.7 million. Figures for labour costs and employment seem contradictory, as labour costs increased by 111% in 2013 while employment fell dramatically (-84%).

In 2013, the economic performance of the Bulgarian fleet was negative with a negative profit margin of €23.8 million. The value of this indicator varied significantly over the reference period and has increased in average. However, as mentioned before, according to the EWG the figures do not reveal the real economic situation as the data seem not reliable and it is not clear the reason for the substantial inter-annual variations.

Table 5.2.2 Bulgarian national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	3.6	3.3	2.3	2.7	8.0	4.1	4.4	-49% ↘	15%	
	Other income	1.2	0.1	1.7		0.6	2.6	2.5	370% ↗	112%	
Costs	Labour costs	1.0	1.6	2.6	1.7	1.4	3.0	2.7	111% ↗	199%	
	Energy costs	1.5	0.8	1.9	1.5	1.3	1.7	1.8	37% ↗	12%	
	Repair costs	0.7	0.7	1.0	0.6	0.4	0.7	0.7	84% ↗	-3%	
	Other variable costs	0.3	1.9	2.1	1.9	1.5	2.2	2.2	44% ↗	594%	
	Other non-variable costs	0.3	0.2	0.8	0.3	0.2	0.2	0.2	12% ↗	-30%	
	Capital costs	-0.1	0.3	1.2	0.1	0.4	0.6	0.7	71% ↗	645%	
Economic Indicators	GVA	2.0	-0.2	-1.8	-1.5	5.3	2.0	2.0	-62% ↘	2%	
	Gross profit	1.0	-1.8	-4.4	-3.2	3.9	-1.0	-0.7	-126% ↘	-203%	
	Net profit	1.1	-2.1	-5.6	-3.3	3.5	-1.6	-1.3	-146% ↘	-250%	
Capital value	Depreciated replacement value	2.7	2.7	17.2	0.1						
	Investments	3.5	1.5	3.5	8.0	11.2	7.9		-30% ↘	125%	
Profitability and development trends	Net profit margin (%)	22.3	-63.4	-141.0	-120.7	40.9	-23.8	-24.1	-158% ↘	-206%	
	<i>development trend</i>				Improved				55% ↗		
	RoFTA (%)	34.4	-75.2	-29.7	-2750.9	48.3	-7.9	-12.84	-116% ↘	-123%	
<i>development trend</i>				Improved				99% ↗			
GVA per FTE (thousand €)	1.3	-0.2	-0.6	-0.9	1.8	5.4	5.7	193% ↗	312%		
<i>development trend</i>				Improved				1774% ↗			

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

The distribution of the fleet has not changed over time. SSF are the main fleet in Bulgaria, with 1,039 vessels in 2014. They spent 14.3 thousand days at sea and landed for €2.4 million of fish. The LSF spent 7 thousand days at sea and landed for €5.45 million of fish. Figures for labour costs and employment seem contradictory also at scale level, data for energy consumption are missing and trends seem not reliable as for the entire fleet.

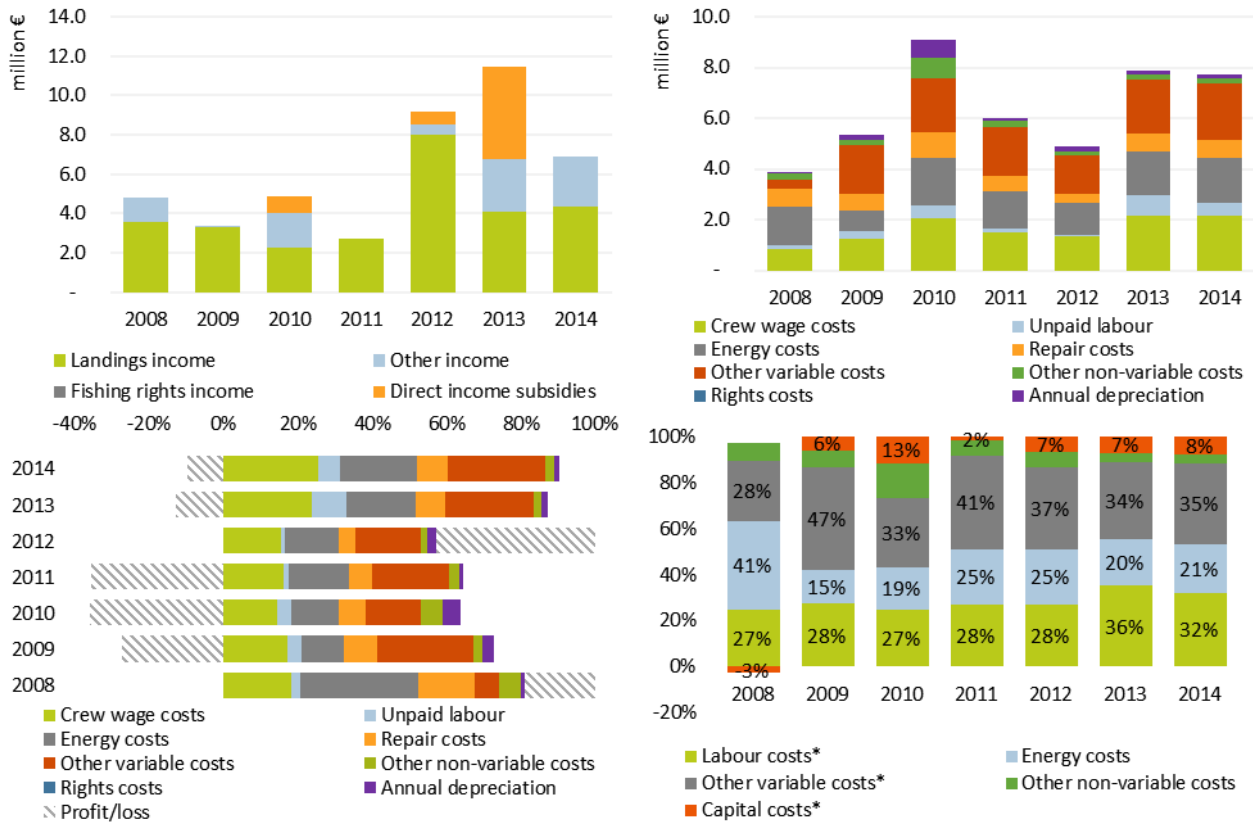
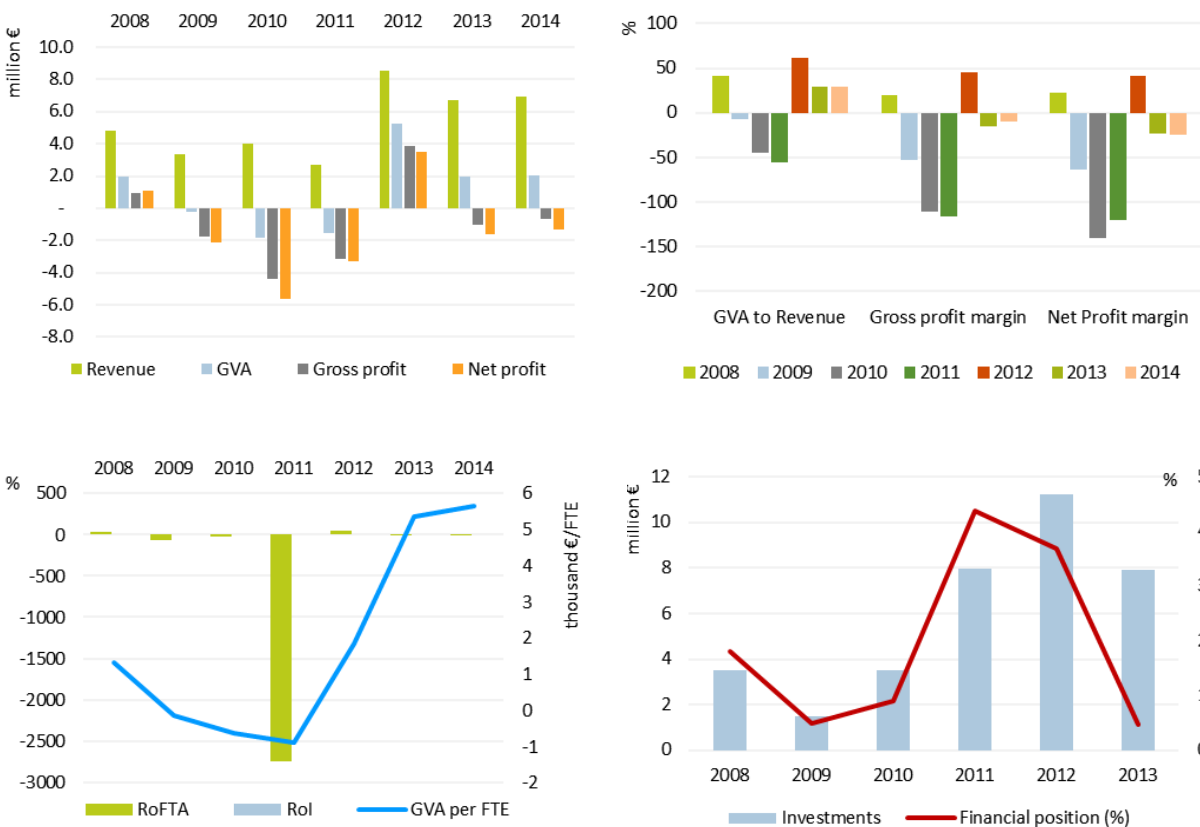


Figure 5.2.4 Income and cost structure trends for the Bulgarian fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.2.5 Main economic performance indicator trends for the Bulgarian fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014)

Assessment and Future Trends

Bulgaria has a 378 km coastline, a continental shelf of 10,886 km² and an Exclusive Economic Zone in the Black Sea of about 25,699 km². Most of the fishing activities are carried out in territorial waters up to 12 nm. There are quotas for two species in Bulgaria, turbot and sprat.

The Black Sea TAC (quota regime) was introduced in 2008, following the accession of Bulgaria and Romania to the European Union (EU). A decreasing trend in turbot biomass indices has been observed since 2008, despite the presence of the quotas regime for turbot in community waters. For this reason, implementation of additional and more effective management measures for restricting turbot exploitation are necessary.

In compliance with the Operational Program for the development of the Bulgarian fisheries sector for Programming period 2007-2013, priority axis 1 (Measures for adaptation of the fishing fleet), Measure 1.1. (Public aid for permanent cessation of fishing activities) states that "the decrease of capacity will be achieved, based on the national plans for adjustment of the fishing effort in direction of restructuring of the fishing fleet and conservation of its sustainable management, in compliance with the principles of the Common Fisheries Policy." Bulgaria has therefore made significant efforts in withdrawing vessels from the fleet, particularly in the 6-12m, 12-18m and 18-24m length classes.

Data issues

There was no National expert to provide any information on data issues for Bulgarian fleet during the two EWGs in Ispra and in Goteborg. However, some mistakes in the data were corrected after the first meeting. Trends are not reliable. More assumptions cannot be made based on the data transmitted by the MS and strong actions should be taken as to ensure that the MS submits reliable, sound and complete data as per EU Decision 93/2010 and Regulation 199/2008 requirements.

Table 5.2.5 Main socio-economic performance indicators by fleet segment in the Bulgarian national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	No.	%Δ	No.	%Δ	Days	%Δ	Energy	%Δ	Value	%Δ	Weight	%Δ	GVA	%Δ	GVA	%Δ	Gross	%Δ	Net	%Δ	Net	%Δ			
BGR AREA37 DFN VL0612*	1137	81%	269	-60%	15,184	47%	4		1,215	203%	2,161	1172%	1,707	177%	6.3	604%	603	-264%	921	-376%	-29.5	-181%	Weak	90%	Improved
BGR AREA37 PMP VL1218*	49	206%	42	-88%	3,823	160%	1		1,630	66%	2,935	31%	12	-101%	-0.3	-109%	375	-161%	531	-241%	-27.0	-298%	Weak	88%	Improved
BGR AREA37 TM VL1824*	18	-18%	60	-3%	2,628	-17%	0		1,257	-14%	3,488	22%	293	-82%	4.9	-81%	21	-102%							

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.2.6 Main socio-economic performance indicators by fleet segment in the Bulgarian national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		consumed per landed tonne		Energy costs		Operating costs		GVA		Net profit		%Δ 2013 to average (2008-12)	Economic development trend
	FTE	%Δ	Days	%Δ	Weight	%Δ	Landings	%Δ	Wage	%Δ	Wage	%Δ	Wage	%Δ	fuel	%Δ	Consumed	%Δ	Energy	%Δ	Operating	%Δ	GVA	%Δ	Net	%Δ		
BGR AREA37 DFN VL0612*	0.2	-78%	13	-19%	142	767%			2,031	415%	5,827	1692%	2,040	1148%	1.9		336	134%	3,278	134%	3,278	277%	1,501	53%	810	-252%	92%	Improved
BGR AREA37 PMP VL1218*	0.9	-96%	78	-15%	768	-49%			7,420	-78%	7,956	470%	5,590	670%	0.4		16,327	-60%	47,822	-60%	47,822	-64%	241	-100%	10,830	-146%	-2%	Stable
BGR AREA37 TM VL1824*	3.3	19%	146	2%	1,327	46%			17,440	93%	4,463	38%	4,023	52%	0.1		29,250	96%	92,637	96%	92,637	102%	16,275	-78%				

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.3 CROATIA

Fleet Structure, Fishing Activity and Production

In 2013, the Croatian fishing fleet consisted of 4,358 registered commercial vessels of which 2795 were active, with a combined gross tonnage of 46,034 GT, a total power of 346,247 kW and an average age of 32 years. The size of the Croatian fishing fleet increased between 2012 and 2014. The number of vessels increased by 4%, GT and kW remained steady (Table 5.3.1; Figure 5.3.1). At the date of accession (1st July 2013), the total number of vessels registered in the fleet register was 7,770. This figure contains 3500 small vessels that were, pursuant to the accession negotiations, transferred into the category of commercial fleet from the previous category of non-commercial small-scale fisheries (whereby the name implied a non-commercial restricted category in national legislation). All analysis in this report is based on the vessels that have been registered as commercial prior to accession or have been active in the observed period in the commercial fleet, as per relevant provisions of the DCF.

In 2014, the majority of the Croatian fleet was composed of vessels with length of less than 12 meters (85 %). The fleet contained in total 4,385 vessels; 400 vessels, or 9% with length between 12 and 18m, 128 vessels, or 3 % with length between 18m and 24m and 129 vessels, or 3 % with length over 24m. In 2013, the number of fishing enterprises in the Croatian fleet totalled 3,009, with the majority owning a single vessel (77%).

Total employment in 2013 was estimated at 4,872 jobs, corresponding to 2,496 FTEs. The level of employment decreased between 2012 and 2013, with total employed decreasing by just 5% and the number of FTEs remaining steady. The decrease in the number of employed corresponds to the fall in the number of active vessels.

Table 5.3.1 Croatian national fleet structure, fishing activity and production trends: 2012-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

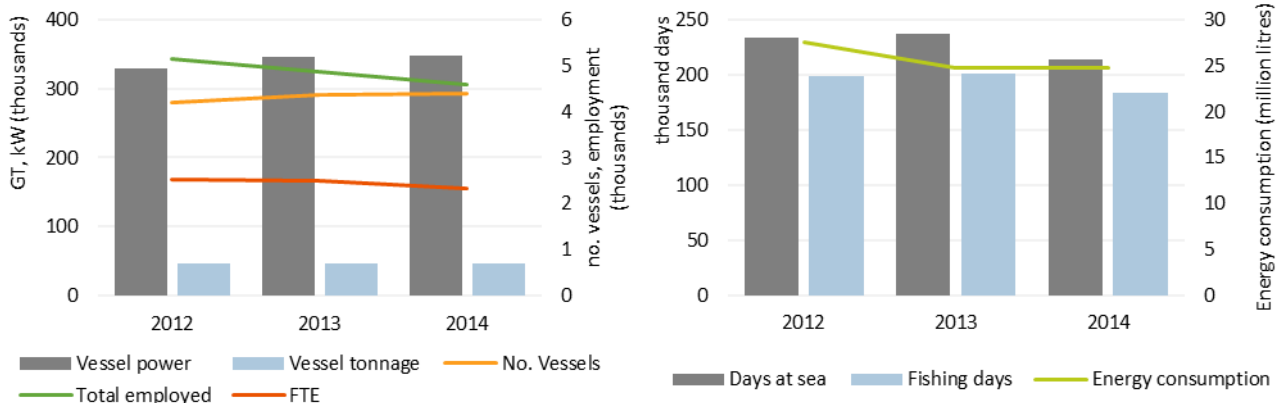
VARIABLE		2012	2013	2014	%Δ 2014-13	%Δ 2008	Trend
Structure	Total No. Vessels (#)	4,211	4,358	4,385	1%	↔	4%
	No. of Inactive vessels (#)	1,409	1,563	1,733	11%	↗	23%
	Average vessel age (year)	32	32	33	3%	↗	5%
	Vessel tonnage (thousand GT)	45.2	46.0	46.1	0%	↔	2%
	Vessel power (thousand kW)	330	346	348	0%	↔	6%
	No. of Enterprises (#)	3,076	3,009	2,959	-2%	↘	-4%
Employment	Total employed (#)	5,151	4,872	4,589	-6%	↘	-11%
	FTE (#)	2,532	2,496	2,323	-7%	↘	-8%
	Average wage per employed (thousand €)	4.7	4.9	5.1	3%	↗	8%
	Average wage per FTE (thousand €)	9.6	9.6	10.0	4%	↗	4%
Fishing Effort	Days at sea (thousand days)	234	237	214	-10%	↘	-8%
	Fishing days (thousand days)	199	202	183	-9%	↘	-8%
	Energy consumption (million litres)	27.5	24.8	24.8	0%	↔	-10%
	Energy consumption per landed tonne (l/T)	436.3	330.9	313.3	-5%	↘	-28%
Output	Landings weight (thousand tonnes)	63	75	79	6%	↗	25%
	Landings value (million €)	59	71	72	1%	↗	22%
	Recreational catches of selected species (T)	1.0	1.4	1.8	31%	↗	71%

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

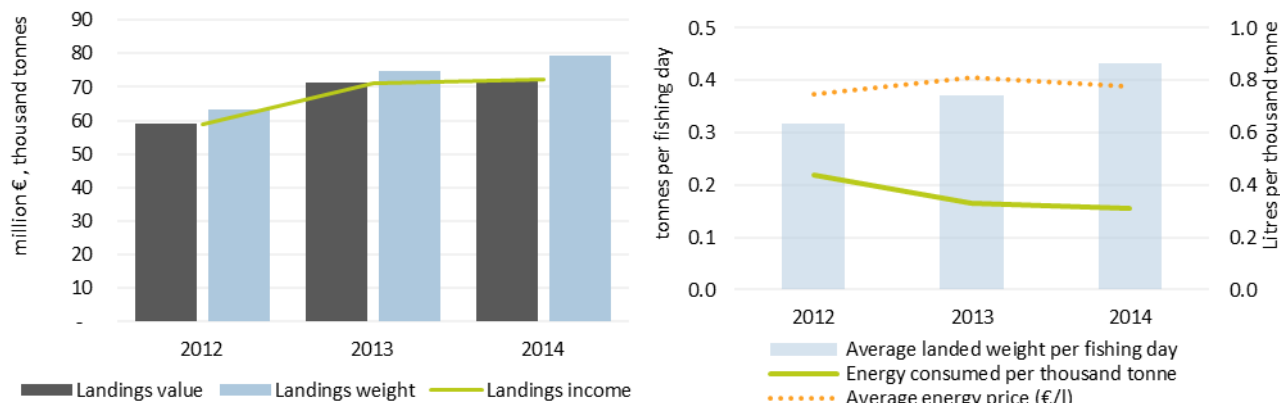
The Croatian fleet spent a total of around 237 thousand days at sea in 2013. The total number of days at sea decreased slightly between 2012 and 2013. That trend continued in 2014 according to preliminary data. The quantity of fuel consumed in 2012 totalled 27.5 million litres, decreasing by

26% in 2013, totalling 24.8 million litres. According to preliminary data the declining trend continued in 2014, to 24.2 million litres. The major factors causing the decrease in fuel consumption include increasing fuel efficiency of newer engines, the rising cost of fuel and decreasing activity. Overall however the fleet is working more efficiently with a positive trend in landings weight, value and income, and declining trend in total sea days.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.3.1 Croatian fleet main capacity and effort trends for the period 2012-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.3.2 Landings in value and weight (and corresponding income from landings) by the Croatian national fleet and average price trends of top species in price for the period 2012-2014.

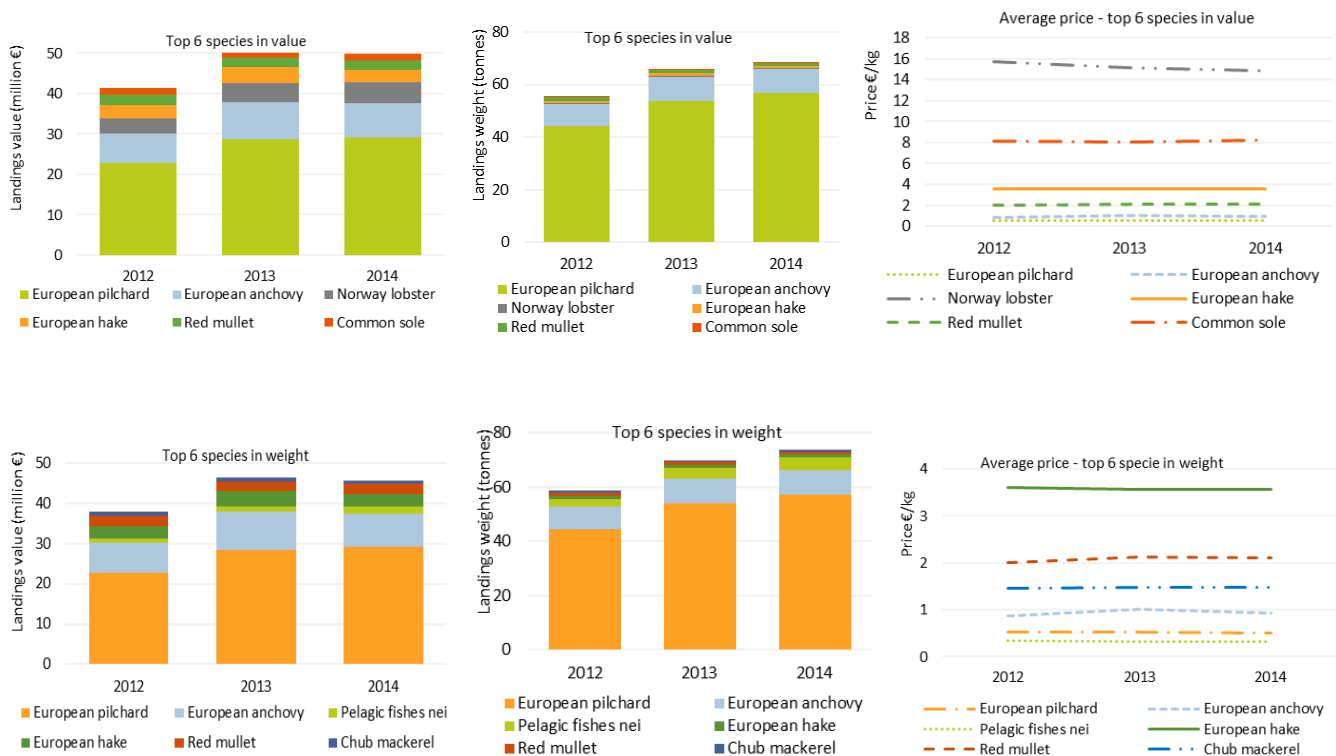
The total weight landed by the Croatian fleet in 2013 was 74,902 tonnes of seafood, with a landed value of €71.234 million. According to preliminary data in 2014, although the amount of seafood landed increased 6%, the value increased only 1% between 2013 and 2014 (79,163 tonnes and €72.150 million, respectively), consistent with large quantities of low value small pelagic species being landed.

A total of 109 different species were landed in 2014. The most important ones in terms of quantity and value are listed in the figure above. The trends in terms of quantities landed have been stable over time, with the share of small pelagic species by far dominating the overall structure. Small pelagic species also constituted the most important species in terms of value, accounting for over 53% of total value. On the other hand, Norway lobster accounts for less than 0.43% in landings, but accounts for over 7% of the value. Hake accounts for 1.12% of quantity landed, and 4.38% of value.

The most important fleet segment in terms of contribution to total landings is purse seiners 24 to 40m LoA. This fleet segment accounted for almost 55% of landings in 2014. Overall, purse seiner segments, excluding the ones above 40m LoA and less than 12m LoA make up almost 90% of Croatian landings. This is in accordance with the structure of overall total landings. These fleet segments target sardines and anchovies, and as of October 2013 fall under the provisions of a multiannual management plan for small pelagics in GSA 17.

In terms of active fleet segments active, the majority used driftnets and fixed nets. However, as mentioned above, their share in total landings is small. The most important segment in this gear class was the one between 6 and 12m LoA, with 673 vessels, representing over 25% of the fleet. It should be pointed out that only fixed nets are used in Croatia (trammel and gill nets), and that these operate inshore in coastal waters, in limited areas and during limited periods.

The species that constituted the majority of landings of the most important fleet segments are shown in the table below. As can be seen, the majority of the landings of purse seiners in the segment from 24 to 40m LoA included sardine (78%) and anchovies (11%). In the purse seine fleet segment from 18 to 24m LoA, the species included mainly sardine (80%) and anchovies (14%). More or less the same structure can be observed (in similar shares) in all purse seine segments.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.3.3 Croatian fleet landings and average prices trends for the period 2012-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

On the other hand, the fixed nets segment from 6 m to 12m LoA, which represents the largest number of vessels active in the fleet, landed sole (21%) and a mixture of other demersal species (hake 8%, cuttlefish 5%, sea bream 5%, common octopus 5% and spinous spider crab 4%).

For demersal trawls, the composition in segments from 24m to 40m and from 18m to 24m LoA mainly includes hake (around 16%), deep-water rose shrimp (17% and 14% respectively), Norway lobster (19% and 9%) and red mullet (10% and 20%). The segments from 24m to 40m LoA and from 18m to 24m LoA landed also squid (11% and 6% respectively) and horned and musky octopuses (5% and 6%). In the demersal trawl segments from 12m to 18m LoA and 6m to 12m LoA the main species landed were red mullet (30% and 20%), with hake (15% and 14%) and musky octopus (15% and 20%) as two other main species in both segments. The differences between different segments of the same gear groups can be explained by the fishing grounds exploited (smaller segments tend to stay closer to shore, use gears other than bottom trawl nets and exploit different fishing grounds, whereas larger segments tend to operate in areas a bit further from the shore).

National Fleet Economic performance

In 2014, the most important fleet segment in terms of landing percentage was purse seiners (PS, over 91% of total landings), whereas the largest number of vessels were active in drift net and fixed nets segment (DFN, in Croatia fixed nets – gill nets and trammel nets, 999 active vessels or 37% of the fleet). Although hook and line gears (HOK) and miscellaneous active gears (MGO) constitute some 25% of active fleet, their share in landings is negligible (less than 1%). This is primarily due to the fact that these fleet segments are composed almost entirely of small vessels less than 6m LoA whose activity is largely seasonal and which operate on a local basis. Very often these activities are not the main source of income for the vessel owner.

Total labour costs incurred by the Croatian fleet in 2013 equated to €24.2 million, amounting to 34% of the value of landings. Labour cost and fuel costs, the two major fishing expenses, were €24m and €20.1m respectively. Between 2012 and 2013, all major cost items decreased with the exception of other variable costs (Table 5.3.2, Figure 5.3.2).

The Croatian fleet had an estimated (depreciated) replacement value of €198.4m in 2013. Investments by the fleet amounted to €9.1m in 2013, an increase of 35% when compared to 2012 (Table 5.3.2, Figure 5.3.2).

Table 5.3.2 Croatian national fishing fleet economic performance in 2012-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2012	2013	2014	%Δ 2013-12	Trend
Income	Landings income	58.9	71.3		21%	↗
	Other income	5.5	10.1	9.8	83%	↗
Costs	Labour costs	24.2	24.0	23.2	-1%	↘
	Energy costs	20.5	20.1	19.3	-2%	↘
	Repair costs	6.9	6.2	6.0	-9%	↘
	Other variable costs	8.3	10.4	10.2	26%	↗
	Other non-variable costs	6.7	5.9	5.7	-12%	↘
	Capital costs	12.2	11.7	12.2	-4%	↘
	Economic Indicators	GVA	22.1	38.9		76%
Gross profit		-2.1	14.9		807%	↗
Net profit		-14.3	3.2		123%	↗
Capital value	Depreciated replacement value	190.5	198.4	197.0	4%	↗
	Investments	6.7	9.1		35%	↗
Profitability and development trends	Net profit margin (%)	-22.2	4.0		118%	↗
	<i>development trend</i>		Improved			
	RoFTA (%)	-4.9	4.0		182%	↗
	<i>development trend</i>		Improved			
	GVA per FTE (thousand €)	8.7	15.6		79%	↗
	<i>development trend</i>		Improved			

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete

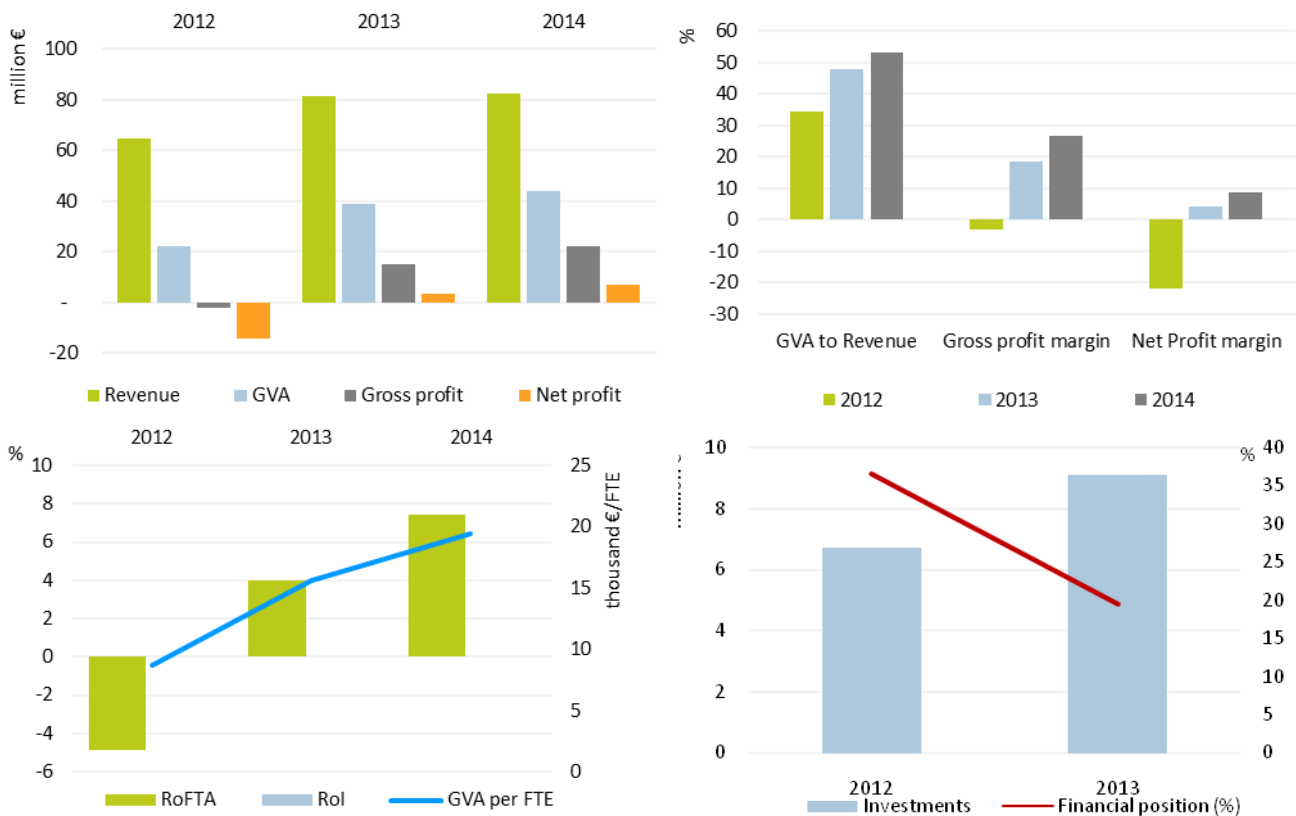
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.3.2 Income and cost structure trends for the Croatian fleet: 2012-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.3.3 Main economic performance indicator trends for the Croatian fleet: 2012-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Table 5.3.3 Croatiannational fleet structure, activity and production trends by operational scale: 2012-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet			%Δ 2013-12	Trend	Large scale fleet			%Δ 2013-12	Trend
	2012	2013	2014			2012	2013	2014		
Total No. Vessels (#)	1,701	1,715	1,616	1%	↔	1,101	1,080	1,036	-2%	↘
Average vessel age (year)	29.7	30.1	31.0	2%	↗	32.7	32.9	33.9	1%	↔
Average vessel length (m)	7.0	7.0	7.1	0%	↔	12.1	12.0	12.2	-1%	↔
Vessel tonnage (thousand GT)	5.0	5.0	4.8	1%	↔	28.2	27.3	27.2	-3%	↘
Vessel power (thousand kW)	89.9	94.7	91.3	5%	↗	152.6	150.7	149.4	-1%	↘
Total employed (#)	2,493	2,059	1,869	-17%	↘	2,658	2,814	2,720	6%	↗
FTE (#)	853	747	574	-12%	↘	1,679	1,749	1,749	4%	↗
Average wage per employed (thousand €)	2.8	2.9	2.5	2%	↗	6.6	6.4	6.8	-3%	↘
Average wage per FTE (thousand €)	8.6	7.8	8.2	-8%	↘	10.5	10.4	10.6	-1%	↘
Days at sea (thousand days)	133.8	133.1	113.1	-1%	↔	99.9	104.4	101.1	5%	↗
Fishing days (thousand days)	114.0	112.5	96.8	-1%	↘	85.5	89.3	86.6	4%	↗
Energy consumption (million litres)	5.7	2.8	2.5	-51%	↘	21.8	22.0	22.4	1%	↔
Energy consumption per landed tonne (l/T)	4,980	2,284	2,145	-54%	↘	352	299	286	-15%	↘
Landings weight (thousand tonnes)	1.2	1.2	1.1	6%	↗	62.0	73.7	78.0	19%	↗
Landings value (million €)	-	-	-	-	↔	-	-	-	-	↔

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Table 5.3.4 Economic performance of the Croatian national fishing fleet by operational scale: 2012-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet			%Δ 2013-12	Trend	Small scale fleet			%Δ 2013-12	Trend	
	2012	2013	2014			2012	2013	2014			
Income	Landings income	6.7	7.6	13%	↗	52.2	63.8	22%	↗		
	Other income	2.2	2.6	2.5	22%	↗	3.4	7.5	7.4	122%	↗
	Direct income subsidies	1.1	0.3		-74%	↘	8.7	2.4		-72%	↘
	Fishing rights income		0.01				0.59	0.40		-32%	↘
Costs	Labour costs	6.6	5.9	4.7	-12%	↘	17.6	18.1	18.5	3%	↗
	Energy costs	2.1	2.1	1.6	-3%	↘	18.4	18.0	17.7	-2%	↘
	Repair costs	1.6	1.4	1.1	-17%	↘	5.3	4.9	4.9	-7%	↘
	Other variable costs	2.4	2.3	2.0	-3%	↘	5.8	8.1	8.2	38%	↗
	Other non-variable costs	1.5	1.3	1.2	-12%	↘	5.2	4.5	4.4	-13%	↘
	Capital costs	1.4	1.4	1.5	-4%	↘	9.4	9.0	10.7	-5%	↘
Capital value	Depreciated replacement value	19.0	19.8	17.4	4%	↗	121.5	120.8	120.1	-1%	↔
	Investments	2.2	2.9		36%	↗	4.6	6.2		35%	↗
Economic indicators	GVA	1.2	3.1		167%	↗	21.0	35.8		71%	↗
	Gross profit	-4.8	-2.8		42%	↗	3.4	17.7		423%	↗
	Gross profit margin	-55.1	-27.1		51%	↗	6.1	24.8		308%	↗
	Net profit	-6.2	-4.1		33%	↗	-6.1	8.7		244%	↗
Profitability and development trends	Net Profit margin	-71.2	-40.6		43%	↗	-10.9	12.2		212%	↗
	<i>development trend</i>		Improved								
	RoFTA (%)	-30.4	-18.6		39%	↗	-2.3	9.5		508%	↗
<i>development trend</i>		Improved									
GVA per FTE (thousand €)	1.4	4.2		205%	↗	12.5	20.5		64%	↗	
<i>development trend</i>		Improved									

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Fleet Segment Level Economic performance

The Croatian fleet is highly diversified with a broad range of vessel types targeting around 110 different species almost exclusively in the Adriatic Sea. Table 5.3.3 and Table 5.3.4 provide a breakdown of the key performance indicators for the Croatian fleet by main fishing activity (small and large-scale).

The Croatian fishing fleet is consisting of 23 active segments, constant through the observed period, with a large variety in gears and fishing techniques used across the Croatian Adriatic coast. Although, they are all part of a commercial fishing fleet, many vessels are being used only for additional sources of income, or even in some cases for personal consumption. This can be particularly noticed in the small fleet segments using fixed nets, traps and longlines.

As can be seen in the Tables 5.3.3 and 5.3.4., small scale fleet segments cover 39% of vessels in the fleet and only 1.1% of total landings by volume. The average length of these vessels is only 7m with an average age of 30 years (Table 5.3.3.), which limits their fishing activities to fishing grounds near port and one day fishing trips. Most of their catch is sold on the local market, and income is often used as the addition to the home budget. This is the main reason for negative economic indicators in these segments, but as was mentioned earlier, for some of the fisherman's in these segments commercial benefit is not the priority since they have other sources of income. This can also be noticed from the difference between the total number of jobs and FTEs, generating a lower FTE than the number of vessels.

On the other hand, fishing segments in the large scale fleet are fully commercial. Regarding economic performance, it can be noticed that effort is rather stable but income has increased. This had a positive influence on the economic indicators which improved across the observed time period. This can be caused by an increase in catch per unit of effort which can be observed in the PS segment, but it could also be the result of investment throughout the segments.

Data issues

During 2012 and the first half of 2013 the Fleet Register in the Fisheries Information System in Croatia underwent a revision, which resulted in an increase of the number of vessels in the Fleet Register. Given the specific situation of Croatia, it should also be taken into account that at the date of accession the total number of vessels registered was 7,770, while the figures listed in this report indicate 4385 vessels registered in 2014. This discrepancy is the consequence of inclusion of 3,500 vessels in the fleet register, as per accession negotiations. The ceiling limit set in Annex II of the Regulation (EU) 1380/2013 includes however all 7,770 vessels.

As Croatia has been a member of the EU since July 1st 2013, fleet capacity measures under the applicable rules of the common fisheries policy have only been in place for a short time. The capacity ceiling has been fixed by way of Regulation (EU) 1380/2013. Under these circumstances, there are no data currently at our disposal to compare with relevant provisions or trends.

Analysing performances through the segments, it can be noticed that larger length classes (over 18m) have better net profit values, while the segments with smaller vessels have mostly negative result. This can be caused by the efficiency of larger vessels, but also with data quality, since larger vessels are being operated by companies that have better accounting, while small vessels are often run on a family level with no professional accounting.

Table 5.3.5 Main socio-economic performance indicators by fleet segment in the Croatian national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2012-2013.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)
	No.	% Δ	FTE	% Δ	Days	% Δ	Energy	% Δ	Value	% Δ	Weight	% Δ	GVA	% Δ	GVA	% Δ	Gross	% Δ	Net	% Δ	Net	% Δ	
HRV AREA37 DFN VL0612	735	-3%	316	-30%	64,223	-6%	1400	-68%			600	6%	2,226	61%	7	128%	31	103%	585	63%	11	69%	Weak
HRV AREA37 DFN VL0006	326	1%	75	-26%	25,914	1%	105	-13%			150	-1%	561	79%	7	143%	332	117%	226	111%	26	109%	High
HRV AREA37 HOK VL0612°	265	14%	120	18%	15,421	10%	716	11%			227	31%	101	124%	1	121%	974	-18%	1,361	-18%	60	2%	Weak
HRV AREA37 DTS VL1218	203	-4%	220	19%	18,439	-1%	4763	-5%			2,122	0%	3,305	326%	15	257%	1,331	192%	173	107%	2	105%	Reasonable
HRV AREA37 DTS VL0612°	203	-4%	133	31%	15,656	-5%	1740	-10%			992	2%	1,244	84%	9	41%	152	68%	604	35%	16	47%	Weak
HRV AREA37 FPO VL0612°	117	-2%	61	23%	10,338	4%	203	-9%			71	12%	242	89%	4	54%	1,076	-449%	1,184	-284%	197	-245%	Weak
HRV AREA37 HOK VL0006	103	21%	21	62%	4,045	10%	28	-10%			23	27%	76	99%	4	22%	487	1%	519	0%	404	21%	Weak
HRV AREA37 PS VL2440°	68	-6%	529	-3%	12,909	6%	5314	1%			41,810	22%	15,947	40%	30	43%	9,340	78%	5,942	267%	22	192%	High
HRV AREA37 PS VL1824	54	-5%	330	0%	9,176	-1%	2279	-8%			19,795	14%	7,650	44%	23	45%	4,791	91%	3,417	224%	26	162%	High
HRV AREA37 PMP VL0612°	48	-19%	38	11%	4,732	3%	202	23%			84	-33%	181	-154%	5	-148%	439	-187%	498	-109%	127	-205%	Weak
HRV AREA37 PS VL1218	45	7%	130	-2%	6,448	8%	794	4%			6,095	20%	2,804	139%	22	145%	1,478	702%	1,110	297%	25	253%	High
HRV AREA37 FPO VL0006	41	0%	12	12%	2,815	2%	28	-29%			21	73%	68	-18%	5	-27%	27		12		8		Reasonable
HRV AREA37 DTS VL1824	41	-5%	116	7%	6,474	19%	3131	17%			976	22%	924	176%	8	157%	118	125%	634	51%	14	63%	Weak
HRV AREA37 PS VL0612°	40	-2%	48	-2%	4,313	22%	187	18%			425	106%	578	912%	12	933%	306	59%	384	54%	46	79%	Weak
HRV AREA37 PMP VL0006	38	-14%	57	-14%	2,543	5%	14	34%			17	-29%	13	102%	0	102%	16		27		30		Weak
HRV AREA37 PGP VL0612°	25	0%	32	79%	2,019	6%	51	15%			16	17%	33	-45%	1	-69%	80	61%	111	52%	66	64%	Weak
HRV AREA37 DFN VL1218°	23	-21%	12	-62%	1,185	-24%	129	-44%			38	-28%	220	2424%	18	6173%	73	128%	40	91%	9	92%	Weak
HRV AREA37 DRB VL1218°	19	73%	18	-7%	1,932	75%	367	63%			202	373%	292	534%	16	569%	155	173%	6	98%	1	99%	Weak
HRV AREA37 PGP VL0006°	17	21%	15	62%	1,018	45%	29	337%			8	82%	41		3		78		85		125		Weak
HRV AREA37 DTS VL2440°	16	-20%	90	48%	3,250	6%	2933	12%			747	19%	1,146	62%	13	9%	121	-243%	1,042	-7%	24	8%	Weak
HRV AREA37 DRB VL0612°	13	30%	13	-15%	1,196	16%	139	8%			116	36%	303	55%	23	82%	157	12%	124	9%	24	-19%	High

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Table 5.3.6 Main socio-economic performance indicators by fleet segment in the Croatian national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2012-2013

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		consumed per landed		Energy costs		Operating costs		GVA		Net profit	
	FTE	% Δ	Days at sea	% Δ	per DAS	% Δ	per fishing day	% Δ	per vessel	% Δ	per FTE	% Δ	per employed	% Δ	consumed	% Δ	tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ
HRV AREA37 DFN VL0612	0.4	-27%	87.4	-3%	9.3	13%	11.9	12%	2,987	-1%	4,265	3%	1,829	-5%	1,905	-68%	2,334	-70%	1,482	-5%	7,372	1%	3,029	66%	796	62%
HRV AREA37 DFN VL0006	0.2	-28%	79.5	1%	5.8	-2%	7.5	-3%	702	-90%	2,980	-78%	671	-76%	322	-14%	701	-13%	126	-15%	1,622	-81%	1,721	78%	692	111%
HRV AREA37 HOK VL0612*	0.5	2%	58.2	-3%	14.7	19%	19.8	17%	4,058	131%	6,583	99%	2,408	116%	2,702	-2%	3,160	-15%	2,127	-6%	12,288	5%	381	121%	5,137	-3%
HRV AREA37 FPO VL0612*	0.5	24%	88.4	6%	6.8	7%	4.7	21%	11,268	314%	10,062	55%	4,503	145%	1,732	-8%	2,871	-19%	1,352	-10%	14,332	132%	2,072	93%	10,120	-290%
HRV AREA37 HOK VL0006	0.2	33%	39.3	-10%	5.7	16%	6.9	17%	5,470	-12%	14,653	-34%	2,682	141%	270	-25%	1,200	-29%	35	-71%	5,976	-14%	741	64%	5,041	18%
HRV AREA37 PS VL2440*	7.8	3%	189.8	13%	3238.8	14%	3673.7	13%	97,166	13%	12,481	10%	10,193	9%	78,150	7%	127	-17%	63,889	2%	261,467	15%	234,517	48%	87,383	288%
HRV AREA37 PS VL1824	6.1	5%	169.9	5%	2157.3	15%	2527.5	13%	52,954	8%	8,670	3%	6,528	-6%	42,194	-3%	115	-19%	33,333	-10%	150,137	8%	141,674	53%	63,285	242%
HRV AREA37 PMP VL0612*	0.8	37%	98.6	27%	17.7	-35%	21.5	-37%	5,364	-36%	3,616	-58%	599	-74%	4,201	51%	2,415	84%	3,225	42%	17,289	41%	3,774	-166%	10,380	-157%
HRV AREA37 PS VL1218	2.9	-9%	143.3	1%	945.3	11%	1144.4	16%	29,463	-13%	9,162	-2%	4,623	-25%	17,652	-3%	130	-13%	14,527	-6%	65,602	-26%	62,314	123%	24,657	283%
HRV AREA37 DTS VL1824	2.8	13%	157.9	25%	150.7	2%	183.8	8%	19,645	4%	5,793	3%	4,008	-6%	76,358	23%	3,209	-4%	63,637	20%	106,586	18%	22,530	189%	15,457	48%
HRV AREA37 PS VL0612*	1.2	0%	107.8	25%	98.5	68%	119.6	70%	22,081	12%	16,548	15%	9,615	23%	4,683	21%	441	-43%	3,824	22%	28,583	5%	14,441	937%	9,593	52%
HRV AREA37 PMP VL0006	1.5	0%	66.9	22%	6.5	-32%	8.2	-34%	763		507		500		361	55%	829	88%	77	28%	2,860	-86%	343	102%	722	
HRV AREA37 DRB VL1218*	1.0	-46%	101.7	1%	104.7	170%	109.5	170%	7,244	-45%	7,562	11%	4,875	-7%	19,328	-6%	1,815	-66%	16,037	-8%	33,073	-16%	15,391	352%	330	99%
HRV AREA37 PGP VL0006*	0.9	34%	59.9	20%	7.9	26%	9.8	47%	2,164	-30%	2,525	-47%	1,923	-38%	1,733	260%	3,655	139%	401	354%	8,590	171%	2,431		4,999	
HRV AREA37 DTS VL2440*	5.6	85%	203.1	33%	229.7	12%	249.9	13%	79,192	154%	10,255	11%	9,152	50%	183,331	40%	3,929	-6%	152,115	36%	278,901	54%	71,622	103%	65,133	-34%
HRV AREA37 DRB VL0612*	1.0	-35%	92.0	-11%	97.0	18%	98.2	18%	11,196	105%	8,136	135%	4,244	82%	10,659	-17%	1,195	-21%	8,704	-21%	28,510	14%	23,302	19%	9,549	-16%

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

5.4 CYPRUS¹

Fleet Structure, Fishing Activity and Production

In 2013, the Cypriot fishing fleet consisted of 1,463 registered vessels, with a combined gross tonnage of around 8 thousand GT, a total engine power of 64 thousand kW and an average age of 24 years. The number of vessels of the Cypriot fishing fleet decreased between 2008 and 2013 by 3%, but remained stable between 2011 and 2012, increasing again in 2013. Although the fleet remained stable in terms of number between 2011 and 2012, it increased in GT by 38% and engine power by 5% over the same period. The number of inactive vessels increased 25% between 2011 and 2012, and a further 2% in 2013.

In 2013, the number of fishing enterprises in the Cypriot fleet totalled 920, with the majority owning a single vessel. Total employment in 2013 was not reported neither was FTEs and wages.

Table 5.4.1 Cypriot national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	1,414	1,785	1,317	1,393	1,385	1,463	1,426	6%	↗	3%
	No. of Inactive vessels (#)	629	866	408	419	524	537	564	2%	↗	-15%
	Average vessel age (year)	21	21	22	23	24	24	25	1%	↔	16%
	Vessel tonnage (thousand GT)	6	7	7	8	11	8	9	-27%	↘	35%
	Vessel power (thousand kW)	55	71	61	62	64	64	64	-1%	↔	15%
	No. of Enterprises (#)	531	533	911	962	849	920	857	8%	↗	73%
Employment	Total employed (#)	992	937	1,421	1,351	1,290					
	FTE (#)	828	1,086	911	818	817					
	Average wage per employed (thousand €)	1.5	1.5	1.2	0.7	1.3					
	Average wage per FTE (thousand €)	1.7	1.3	1.8	1.2	2.1					
Fishing Effort	Days at sea (thousand days)	100	81	76	59	73	81		11%	↗	-19%
	Fishing days (thousand days)	100	81	76	59	73	80		10%	↗	-20%
	Energy consumption (million litres)	3	4	3							
	Energy consumption per landed tonne (l/T)	1,727	3,069	2,336							
Output	Landings weight (thousand tonnes)	2.0	1.4	1.4	1.2	1.1	0.9		-19%	↘	-57%
	Landings value (million €)	13.9	9.7	10.9	8.2	6.7	5.8		-14%	↘	-59%

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

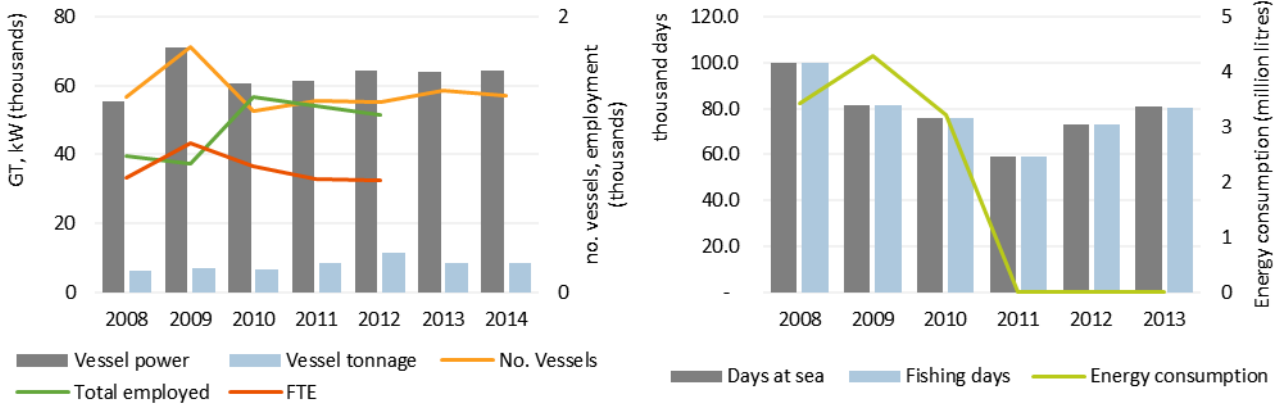
Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

In 2013 the Cypriot fishing fleet spent a total of around 81 thousand days at sea. The total number of sea days has decreased between 2008 and 2013 by about 19%.

The total volume of landings achieved by the Cypriot fleet in 2013 was around 0.85 thousand tonnes of seafood, a fall of around 57% compared to 2008. The total value of seafood landed by the Cypriot fleet in 2013 was €5.8 million, a decrease of around 59% compared to 2008 results.

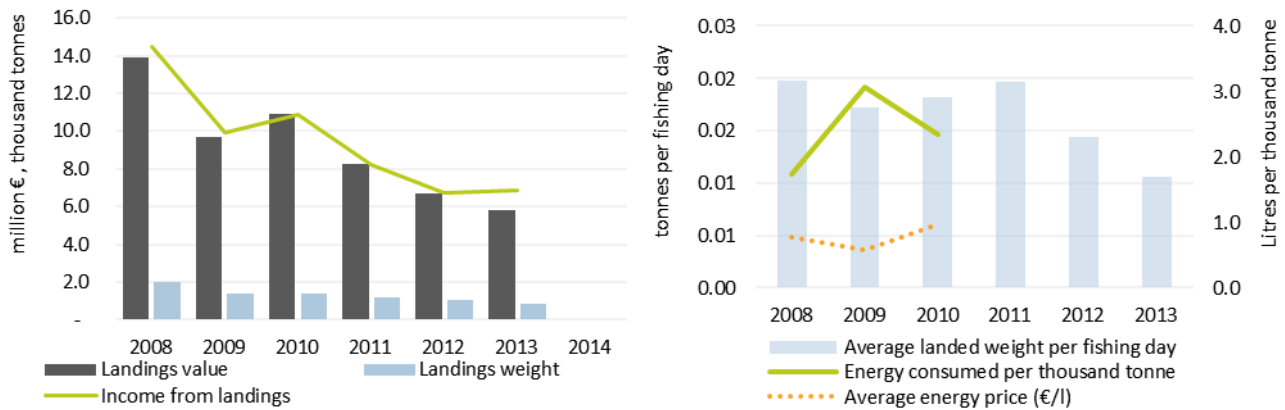
In 2013, albacore obtained the highest landed value (€0.87 million), followed by surmullets (€0.86 million), and bogue (€0.58 million). In terms of volume, in 2013 albacore was the most common species landed in terms of weight (353 tonnes), followed by bogue (74 tonnes) and swordfish (47 tonnes).

¹ No national expert was present at both EWG meetings to assess the final data and to provide insight on the development trends of the Cypriot fishing fleet. Furthermore, this National Chapter is based on data, the quality of which has been judged questionable by the EWGs. Data coverage is also an issue. Results should therefore be treated carefully.



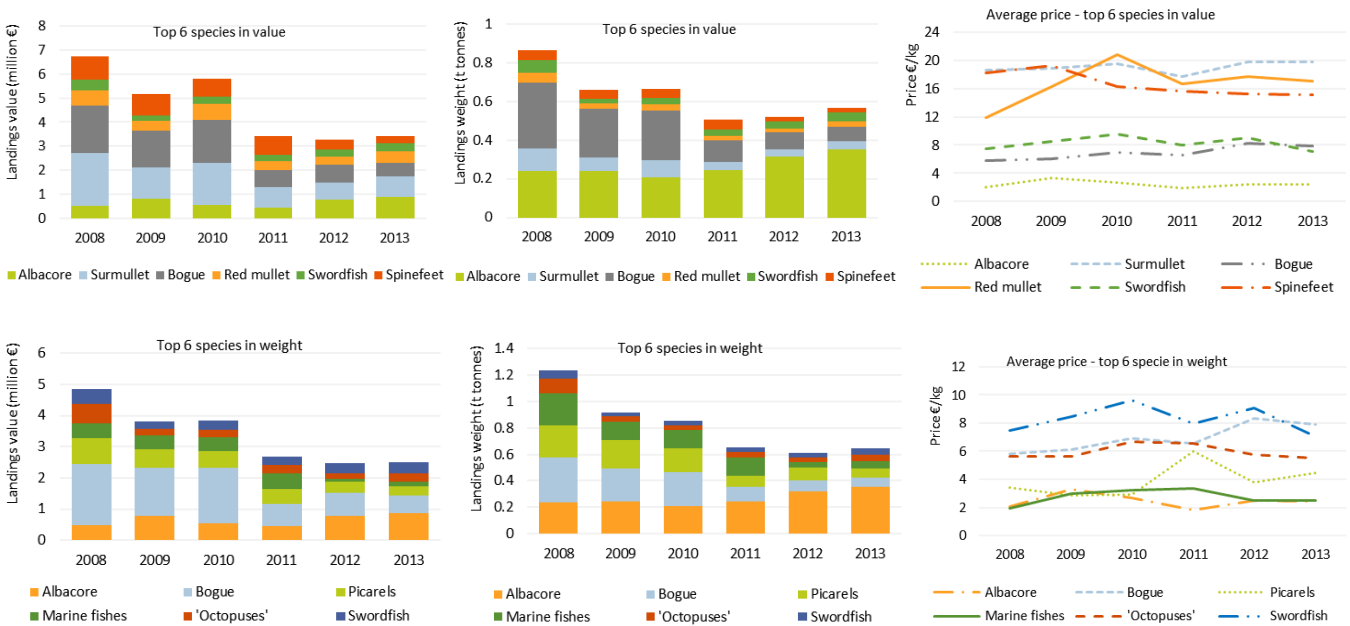
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.4.1 Cypriot fleet main capacity and effort trends for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.4.2 Landings in value and weight (and corresponding income from landings) by the Cypriot national fleet and some efficiency indicators for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.4.3 Cypriot fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

The average first sale price of the key value species landed by the Cypriot fleet remained relatively stable in 2013 compared to 2012. Surmullet and red mullet attained the highest average prices, around €20 and €17 per kilo in 2013, respectively.

National Fleet Economic performance

The total amount of income generated by the Cypriot national fleet in 2013 was €6.9 million. The total income of the Cypriot fleet decreased 52% between 2008 and 2013. Total operating costs amounted to €6.5 million in 2013. The largest expenditure items were energy costs (€2.4 million) and other variable costs (€1.6 million). In 2013 the total operating costs of the Cypriot fleet decreased from 2012 to 2013 essentially due to a significant decrease in other variable costs and labour costs.

In terms of profitability, the Cypriot national fleet in 2013 generated a positive GVA of €1.4 million. The data indicates that the profitability of the Cypriot fleet has significantly deteriorated since 2008 but shows signs of recovery. However, this deterioration coincides with a sharp increase in capital costs, which increased by 16% between 2012 and 2013. Furthermore, estimates provided on the replacement value of the Cypriot fleet also appear to be overestimated. These data inconsistencies do not confer data reliability, especially in regards to the estimate of net profit.

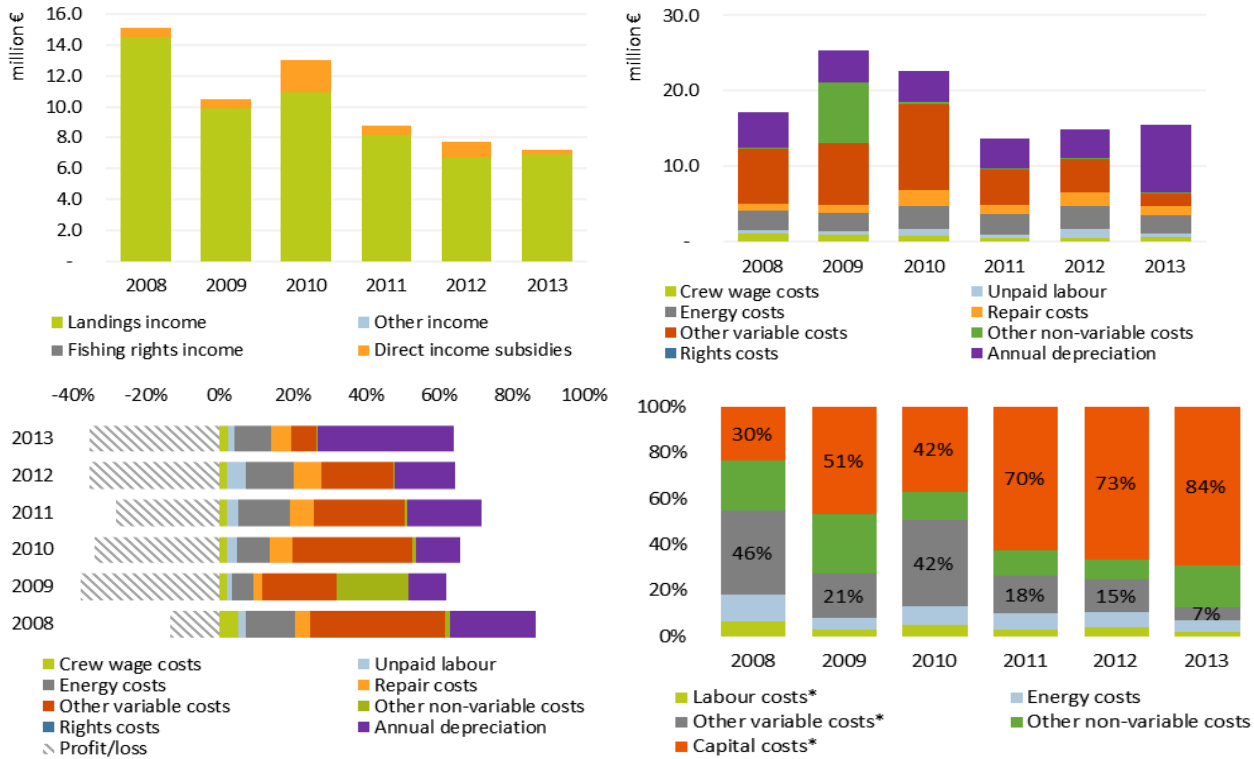
Table 5.4.2 Cypriot national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend	
Income	Landings income	14.5	9.9	10.9	8.2	6.7	6.9		3%	↗	-52%	
	Other income	0.0	0.0	0.0	0.0	0.0	0.0					
Costs	Labour costs	1.4	1.4	1.7	1.0	1.7	1.0		-40%	↘	-30%	
	Energy costs	2.6	2.4	3.1	2.7	3.0	2.4		-20%	↘	-7%	
	Repair costs	0.9	1.0	2.1	1.2	1.7	1.3		-24%	↘	52%	
	Other variable costs	7.3	8.3	11.3	4.7	4.5	1.6		-65%	↘	-78%	
	Other non-variable costs	0.2	8.0	0.4	0.1	0.1	0.1	0.1	-21%	↘	-50%	
	Capital costs	5.3	22.3	13.2	22.8	29.9	34.8	17.0	16%	↗	560%	
Economic Indicators	GVA	3.5	-9.8	-6.0	-0.6	-2.7	1.4		152%	↗	-59%	
	Gross profit	2.0	-11.1	-7.6	-1.5	-4.4	0.4		109%	↗	-80%	
	Net profit	-3.2	-33.5	-20.9	-24.3	-34.3	-34.4		0%	↔	-965%	
Capital value	Depreciated replacement value	316	412	468	858	691	425	445	-39%	↘	34%	
	Investments	1.0	0.2	1.4	1.6	0.6	0.2		-60%	↘	-78%	
Profitability and development trends	Net profit margin (%)	-22	-337	-191	-296	-511	-499		2%	↗	-2142%	
	<i>development trend</i>				Deteriorated				-84%	↘		
	RoFTA (%)	-0.8	-3.7	-2.5	-0.6	-1.2	-2.0		-70%	↘	-143%	
<i>development trend</i>				Deteriorated				-14%	↘			
	GVA per FTE (thousand €)	4.2	-9.0	-6.5	-0.7	-3.4						
<i>development trend</i>												

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

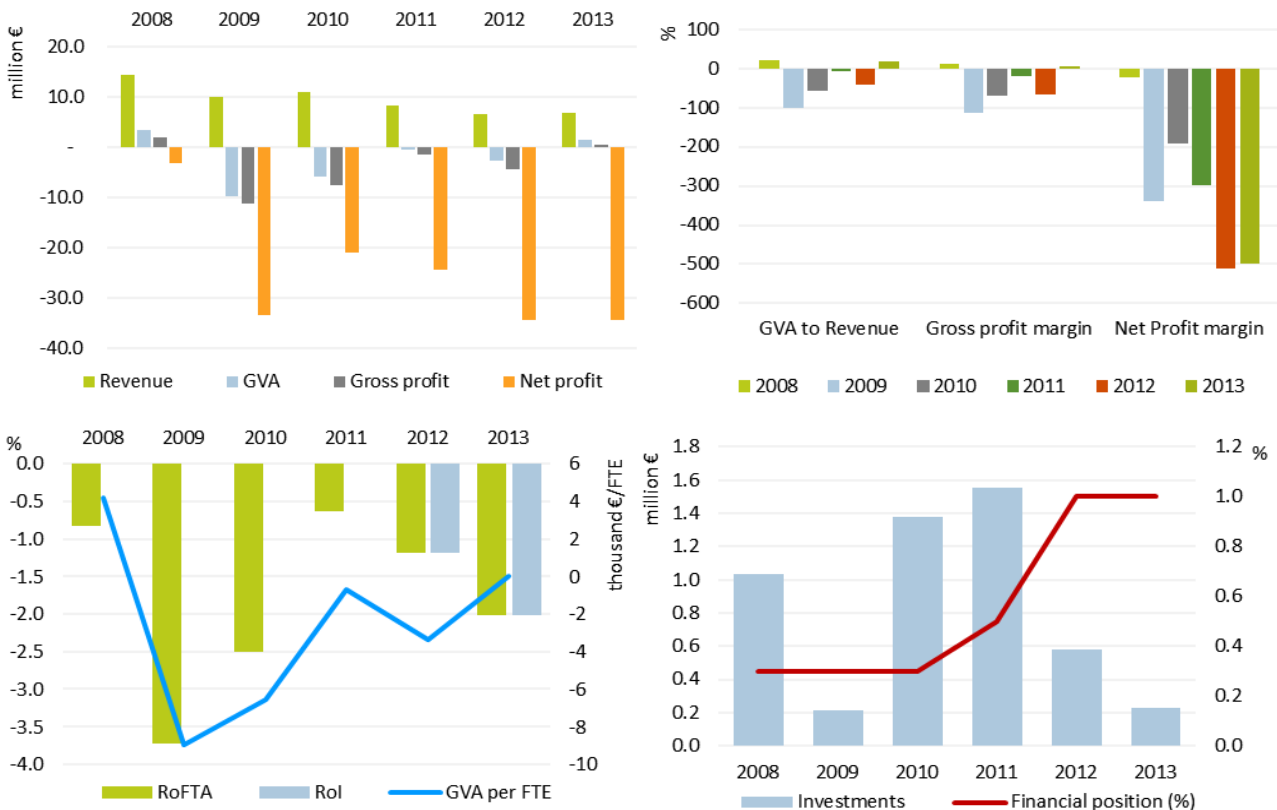
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.4 Income and cost structure trends for the Cypriot fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of revenue (income from landings + other income); bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.5 Main economic performance indicator trends for the Cypriot fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Fleet Segment Level Economic performance

The Cypriot national fleet consisted of 5 (DCF, clustered) fleet segments in 2013, targeting different species predominantly in the Mediterranean Sea. A breakdown of the key performance indicators for 2013 by main fishing activity is provided in Table 5.4.4, while Table 5.4.5 and Table 5.4.6 provide a breakdown of key performance indicators for each fleet segment in 2013.

Table 5.4.3 Cypriot national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
No. Vessels	743	877	876	942	886	894	827	1%	↔	42	42	33	32	33	32	35	-3%	↘
Average vessel age	19.4	20.1	20.5	21.4	22.9	22.9	23.3	0%	↔	24.9	25.6	27.4	29.2	27.8	28.8	30.9	3%	↗
Average vessel length	7.1	7.2	7.1	7.0	6.7	7.0	6.8	5%	↗	19.0	18.2	19.4	18.6	17.2	17.7	18.1	3%	↗
Vessel tonnage	1.9	2.2	2.2	2.3	2.1	2.2	1.9	4%	↗	2.6	2.2	2.1	1.8	1.6	1.6	1.8	0%	↔
Vessel power	25.7	32.0	33.8	35.2	31.2	33.8	31.9	8%	↗	10.5	9.3	7.7	6.7	6.2	6.2	7.1	0%	↔
Total employed	1,604	789	1,288	1,266	1,205					190	148	133	85	85				
FTE	1,300	643	778	733	732					178	148	133	85	85				
Average wage (total employed)	0.3	0.6	0.7	0.5	1.0					5.3	6.1	5.8	4.6	5.8				
Average wage (FTE)										5.7	6.1	5.8	4.6	5.8				
Days at sea	96.7	78.6	72.9	56.6	82.8	77.8		-6%	↘	3.5	2.7	2.7	2.5	0.4	2.9		633%	↗
Fishing days	96.7	78.6	72.9	56.6	82.8	77.8		-6%	↘	3.5	2.7	2.7	1.9	0.4	2.4		518%	↗
Energy consumption	1.1	1.9	1.6							2.3	2.4	1.4						
Energy consumption per landed tonne	975	2,129	1,728							1,098	4,186	2,571						
Landings weight	1.2	0.8	0.9	0.7	0.5	0.5		-9%	↘	0.9	0.6	0.5	0.4	0.5	0.6		24%	↗
Landings value	9.4	6.9	7.5	6.3	4.4	4.0		-10%	↘	4.5	3.0	3.4	1.9	2.3	2.9		26%	↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Table 5.4.4 Economic performance of the Cypriot national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2008			2009	2010	2011	2012	2013				
Income	Landings income	10.0	6.9	7.5	6.3	4.4	4.0	-10%	↘	4.5	3.0	3.4	1.9	2.3	2.9	22%	↗	
	Other income																	
	Direct income subsidies	0.5	0.5	2.0	0.5	1.0	0.3	-72%	↘	0.1	0.0	0.1	0.0	0.0				
	Fishing rights income																	
Costs	Labour costs	0.4	0.5	0.9	0.6	1.2	0.4	-63%	↘	1.0	0.9	0.8	0.4	0.5	0.6	14%	↗	
	Energy costs	1.0	1.1	1.8	1.7	2.1	1.5	-29%	↘	1.6	1.4	1.3	1.0	0.9	0.9	2%	↗	
	Repair costs	0.5	0.7	1.4	1.0	1.3	0.9	-32%	↘	0.3	0.3	0.6	0.3	0.5	0.5	-2%	↘	
	Other variable costs	3.5	5.4	8.1	3.8	3.7	1.0	-74%	↘	3.8	2.9	3.2	0.9	0.9	0.6	-28%	↘	
	Other non-variable costs	0.0	0.0	0.0	0.0	0.0	0.0	0%	↔	0.2	0.1	0.4	0.1	0.1	0.1	-29%	↘	
	Capital costs	2.1	3.7	3.2	3.0	2.8	10.9	295%	↗	2.7	4.2	3.8	5.4	6.7	6.9	2%	↗	
Capital value	Depreciated replacement value	42.8	41.1	78.9	66.3	34.2	90.8	166%	↗	47.6	41.7	68.5	138.2	117.1	53.8	-54%	↘	
	Investments	0.1	0.1	0.1	0.1	0.1	0.1	-33%	↘	0.2	0.1	0.3	0.4	0.4	0.2	-56%	↘	
Economic indicators	GVA	4.9	-0.1	-2.2	0.7	-0.5	0.6	233%	↗	-1.4	-1.8	-2.2	-0.4	-0.1	0.7	1157%	↗	
	Gross profit	4.5	-0.6	-3.0	0.2	-1.5	0.2	112%	↗	-2.4	-2.7	-2.9	-0.8	-0.6	0.2	132%	↗	
	Gross profit margin	44.7	-8.6	-39.7	2.6	-33.2	4.2	113%	↗	-52.5	-90.3	-86.3	-41.2	-24.1	6.3	126%	↗	
	Net profit	2.4	-4.3	-6.1	-2.8	-4.2	-10.8	-155%	↘	-5.1	-6.9	-6.8	-6.2	-7.3	-6.7	9%	↗	
Profitability and development trends	Net Profit margin	23.6	-62.5	-81.8	-44.4	-96.5	-272.1	-182%	↘	-113.0	-229.2	-199.0	-322.8	-313.4	-233.7	25%	↗	
	<i>development trend</i>							-420%	↘							1%	↔	
	RoFTA (%)	5.7	-6.2	-5.8	-2.0	-8.6	-5.8	33%	↗	-10.5	-12.1	-7.9	-2.3	-2.5	-6.3	-157%	↘	
<i>development trend</i>							-71%	↘								11%	↗	
GVA per FTE (thousand €)	3.8	-0.2	-3.1	1.1	-0.7					-7.7	-12.2	-16.3	-4.8	-0.8				
<i>development trend</i>																		

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

A short description of the two most important is provided below.

Passive gears 6-12m – 432 vessels make up this segment and are based in the Mediterranean Sea. These vessels usually target species such as bogue, surmullet and parrotfish. The total value of landings in 2013 was approximately 4 m. This segment made weak profits in 2013, generating a positive GVA of €0.9 million and a net loss of €7.5 million.

PGP VL1218 – 24 vessels based in the Mediterranean Sea make up this segment and target species such as sargo breems, albacore and swordfish. The total value of landings was around €1.4 million. This segment although generated a positive GVA of €0.5 million, made losses in 2013, generating a net loss of €3.2 million.

Assessment and Future Trends

There was no national expert present at EWG Part 1 meeting to comment on and provide insight on the development trends of the Cypriot fishing fleet over the time series analysed.

Data issues

Data quality and completeness is questionable. However, there was no national expert present at EWG Part 1 meeting to assess the quality of the final data submitted and to provide insight on the development trends of the Cypriot fishing fleet.

Table 5.4.5 Main socio-economic performance indicators by fleet segment in the Cypriot national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ2013 - average (2008-12)	Economic development trend	
	N	% Δ	N	% Δ	Days	% Δ	litres	% Δ	thousand €	% Δ	thousand tonnes	% Δ	thousand €	% Δ	€/FTE	% Δ	thousand €	% Δ	thousand €	% Δ	%	% Δ				
CYP AREA37 DTS VL2440°	7	0%			761	113%	-		1,418	36%	185	50%	506	739%			267	191%	-	3,465	19%	-244.4	41%	Weak	7%	Improved
CYP AREA37 PGP VL1218°	24	-4%			2,037	6471%	-		1,435	11%	427	11%	234	1817%			- 86	68%	-	3,203	-6%	-223.2	5%	Weak	-2%	Stable
CYP AREA37 PG VL0006	41	21%			4,898	-22%	-						122	640%			88	193%	-	74	62%	-22.2	62%	Weak	11%	Improved
CYP AREA37 PG VL0612	432	-1%			60,648	-6%	-		3,868	-12%	481	-11%	895	303%			502	137%	-	7,508	-86%	-212.5	-113%	Weak	-287%	Deteriorated
CYP AREA37 PS VL1824	1	0%			61				77		19															

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Table 5.4.6 Main socio-economic performance indicators by fleet segment in the Cypriot national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		consumed per landed tonne		Energy costs		Operating costs		GVA		Net profit		%Δ2013 to average (2008-12)	Economic development trend	
	FTE	% Δ	Days	% Δ	per DAS	% Δ	weight	% Δ	per vessel	% Δ	per FTE	% Δ	per employed	% Δ	tonne	% Δ	tonne	% Δ	€	% Δ	€	% Δ	€	% Δ	€	% Δ			
CYP AREA37 DTS VL2440°			109	113%	244	-30%	257	-26%	34,180	12%					0	0%	87,569	4%	164,482	4%	164,482	-14%	72,255	739%	-	495,032	19%	-9%	Deteriorated
CYP AREA37 PGP VL1218°			85	6745%	209	-98%	260	-98%	13,357	19%					-		13,300	4%	63,390	4%	63,390	2%	9,762	1896%	-	133,450	-11%	-37%	Deteriorated
CYP AREA37 PG VL0006			119	-36%					839	-60%							3,161	-4%	6,042	-4%	6,042	-53%	2,974	548%	-	1,812	69%	29%	Improved
CYP AREA37 PG VL0612			140	-5%	8	-5%	8	-5%	908	-57%							2,789	-4%	7,014	-4%	7,014	-43%	2,071	305%	-	17,379	-88%	-169%	Deteriorated
CYP AREA37 PS VL1824			61		306		366		-								-												

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

5.5 DENMARK

Fleet Structure, Fishing Activity and Production

In 2013, the Danish fishing fleet consisted of 2,049 registered vessels, with a combined gross tonnage of 65 thousand GT, engine power of 215 thousand kW and an average age of 31 years. The 2,049 vessels represent production units, which may be active or inactive. In 2013, there were 1,482 active and 567 inactive units. Some of the 1,482 active production units include more than one vessel, for which reason the total number of vessel will differ from the figures shown in Table 5.5.1. The number of registered fishing vessels stabilized between 2012 and 2013, whereas a small increase was seen in terms of the vessel tonnage (4%) and vessel power (1%). This comes about after a large decrease in fleet capacity between 2008 and 2012, where vessel numbers have decreased 27% and tonnage (GT) and vessel power (kW) decreased 18% and 24% respectively, mostly due to a cleaning up of inactive vessels in the register. The measure that initiated this process was the introduction of a yearly fee for registering.

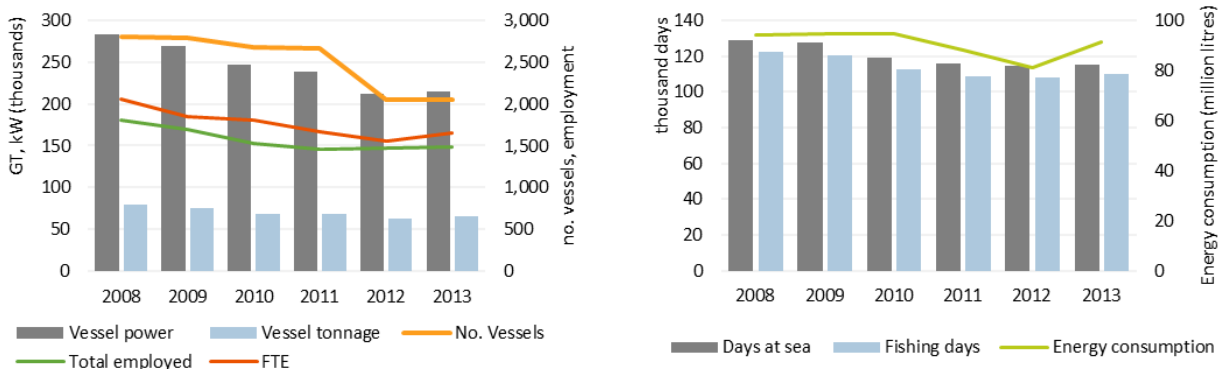
Table 5.5.1 Danish national fleet structure, fishing activity and production trends: 2008-2013.

Arrows indicate change (Δ) 2014 to 2013: (\nearrow) increase; (\searrow) decrease and (\leftrightarrow) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	% Δ 2013-12	% Δ 2008	Trend
Structure	Total No. Vessels (#)	2,813	2,786	2,682	2,663	2,052	2,049	0%	\leftrightarrow	-27%
	No. of Inactive vessels (#)	1,003	1,017	1,043	1,060	515	567	10%	\nearrow	-43%
	Average vessel age (year)	29	29	29	30	30	31	3%	\nearrow	8%
	Vessel tonnage (thousand GT)	79	74	68	68	62	65	4%	\nearrow	-18%
	Vessel power (thousand kW)	283	269	247	239	213	215	1%	\nearrow	-24%
	No. of Enterprises (#)	1,721	1,655	1,574	1,553	1,492	1,450	-3%	\searrow	-16%
Employment	Total employed (#)	1,801	1,694	1,528	1,460	1,472	1,489	1%	\nearrow	-17%
	FTE (#)	2,061	1,854	1,804	1,661	1,558	1,652	6%	\nearrow	-20%
	Average wage per employed (thousand €)	73.9	68.6	82.9	81.0	72.2	73.8	2%	\nearrow	0%
	Average wage per FTE (thousand €)	64.5	62.7	70.2	71.2	68.2	66.5	-3%	\searrow	3%
Fishing Effort	Days at sea (thousand days)	129	128	119	116	114	116	1%	\leftrightarrow	-11%
	Fishing days (thousand days)	123	121	113	109	108	110	2%	\nearrow	-10%
	Energy consumption (million litres)	94	95	95	88	81	92	13%	\nearrow	-3%
	Energy consumption per landed tonne (l/T)	136	122	115	124	162	138	-15%	\searrow	1%
Output	Landings weight (thousand tonnes)	690	773	822	711	499	665	33%	\nearrow	-4%
	Landings value (million €)	366	310	407	426	381	395	4%	\nearrow	8%

*all monetary values have been adjusted for inflation - constant prices 2014; figures for 2014 could not be projected due to missing relevant data.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).



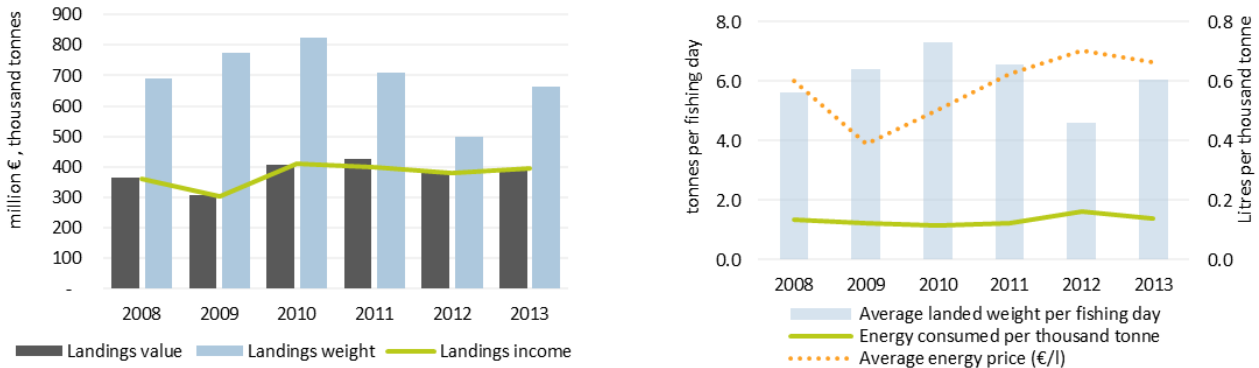
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.5.1 Danish fleet main capacity and effort trends for the period 2008-2013.

In 2013, the number of fishing enterprises in the Danish fleet was in total 1,450 with the vast majority (95%), owning a single vessel. Total employment in 2013 was estimated at 1,489 jobs, corresponding to 1,652 FTEs. The reason that the FTE is higher than the number of jobs is that the FTE's is estimated based on the DK-standard that a full working year consists of 1,665 working hours. However, in reality yearly working hours in the Danish fishing fleet are more likely to be around 2000

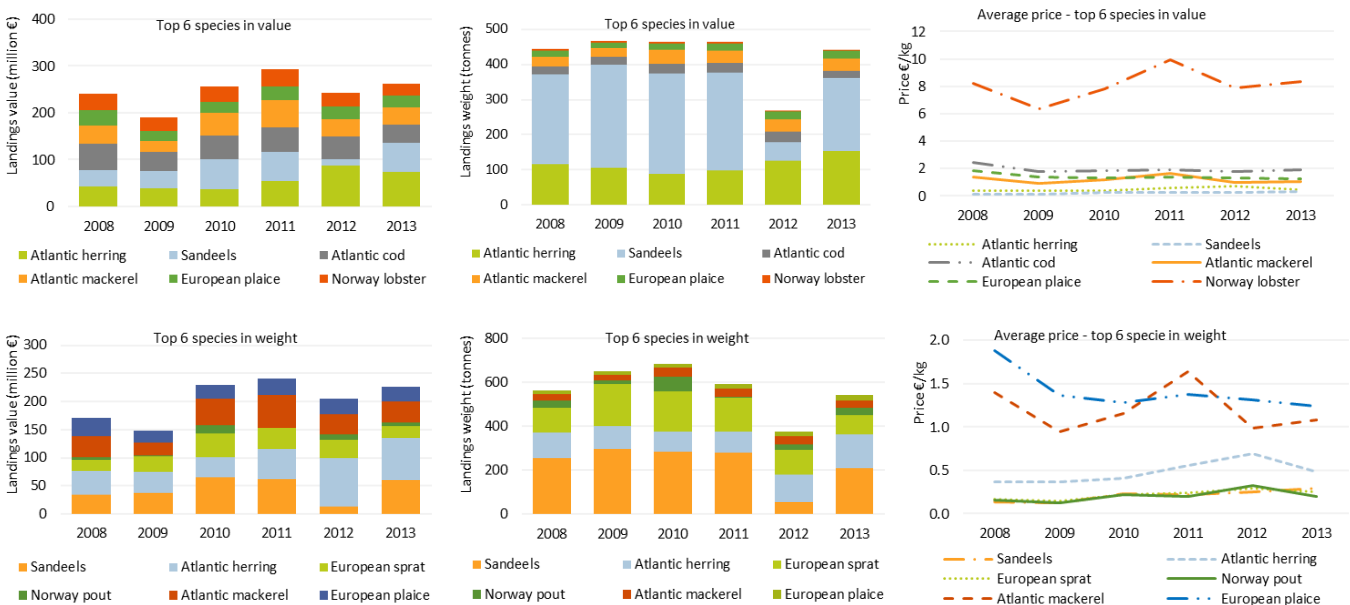
hours. The total employed increased by 1% between 2012 and 2013 and the number of FTEs decreased by 6%, although the long term trend has been downwards.

In 2013, the Danish fleet spent a total of around 116 thousand days at sea. The total number of days at sea decreased 1% between 2012 and 2013. In 2013, the total volume landed by the Danish fleet was 665 thousand tonnes of seafood, with a landed value of €395m. The total volume and value of landings increased from 2012 to 2013 by 33% and 4% respectively. The factor causing the volume and value to increase was a significant increment (around 80%) in the sandeel quota in 2013, which brought the landings back to a more normal level. Sandeel is an important species for the Danish industrial fisheries. This increase in sandeel was to some extent counterweighted by a decline in the landings of herring, sprat and Norway pout.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ2015).

Figure 5.5.2 Landings in value and weight (and corresponding income from landings) by the Danish national fleet and average price trends of top species in price for the period 2008-2013.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ2015).

Figure 5.5.3 Danish fleet landings and average prices trends for the period 2008-2013 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

In 2013, Atlantic herring generated the highest landed value (€74m) by the national fleet, followed by sandeels (€61m), Atlantic cod (€39m), Atlantic mackerel (€37m) and European plaice (€27m). In terms of landings weight in 2013, sandeels accounted for 209 thousand tonnes, Atlantic herring for 153 thousand tonnes and European sprat for 87 thousand tonnes.

The prices of cod (9%), mackerel (9%), lobster (6%) and sandeel (18%) increased between 2012 and 2013, while prices for European plaice, Atlantic herring, European sprat and Norway pout decreased by 6%, 30%, 15% and 39% respectively. The latter 3 species, which experienced large price falls, all had high prices that peaked in 2012. Norway lobster achieved the highest average price per kilo in 2013 (€8.3 per kg), followed by Atlantic cod (€1.9 per kg).

National Fleet Economic performance

The total amount of income generated by the Danish fleet in 2013 was €401m. This consisted of €394m in landings value and €7m in non-fishing income. The Danish fleet's total income increased 3% between 2012 and 2013. Total operating costs incurred by the Danish national fleet in 2013 equated to €259m, amounting to 61% of total income. Labour cost and fuel costs, the two major fishing expenses, accounted for €110m and €61m respectively. Between 2012 and 2013, total operating costs increased by 4%, to a large extent due to increased labour and energy costs.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Danish national fleet in 2013 were €252m, €142m and €46m, respectively. Gross Value Added (GVA) gross profit increased 3% between 2012 and 2013, while net profit decreased 9% in the same period.

In 2013, the Danish fleet had an estimated (depreciated) replacement value of €541m and an estimated value of fishing rights of €1.2 billion. Investments by the fleet amounted to €50m in 2013. Factors causing a change in the capital value of the fleet include variation in investments from year to year and the variation in the value of fishing rights.

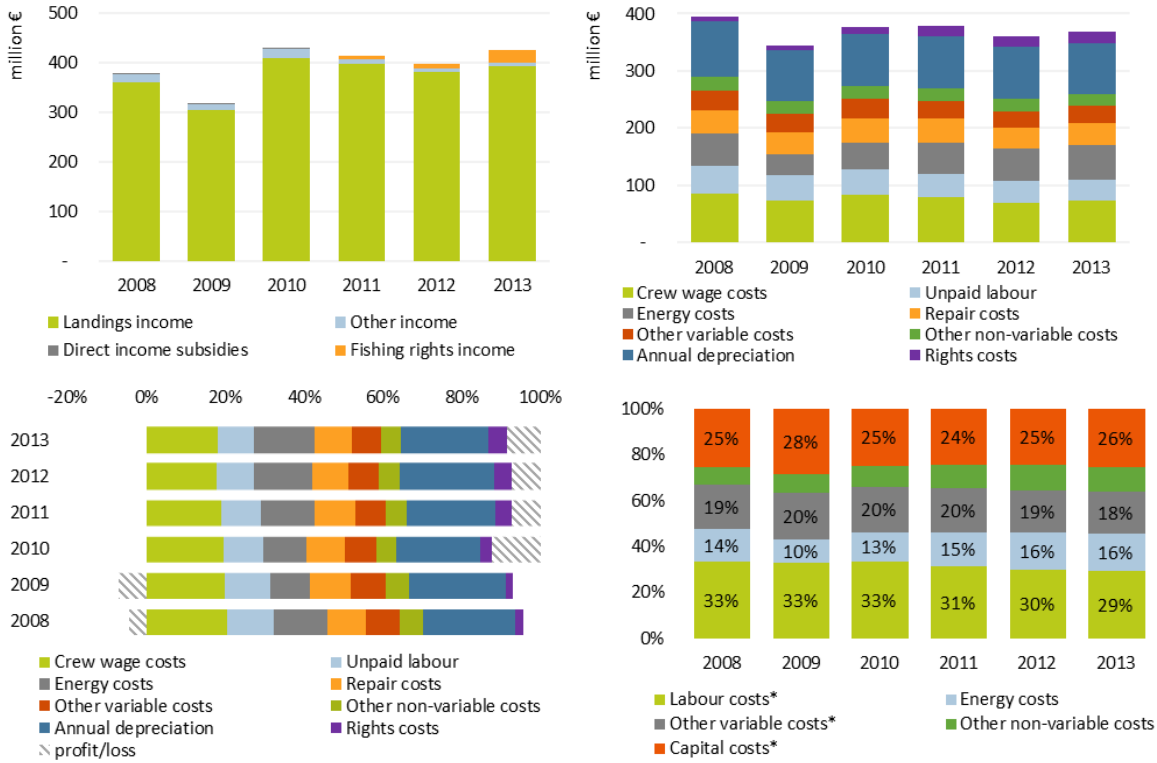
Table 5.5.2 Danish national fishing fleet economic performance in 2008-2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	%Δ 2013-12	%Δ 2008	Trend	
Income	Landings income	361.2	305.3	410.3	398.1	380.6	393.9	3%	↗	9%	
	Other income	14.6	11.7	18.4	8.5	7.5	7.1	-6%	↘	-51%	
Costs	Labour costs	133.0	116.2	126.7	118.2	106.3	109.9	3%	↗	-17%	
	Energy costs	56.6	36.7	47.8	54.9	56.9	60.7	7%	↗	7%	
	Repair costs	40.6	38.7	41.4	42.2	36.5	38.2	5%	↗	-6%	
	Other variable costs	35.4	32.4	33.9	31.7	29.6	29.7	0%	↔	-16%	
	Other non-variable costs	23.8	22.3	22.6	21.2	20.9	20.7	-1%	↔	-13%	
	Capital costs	100.2	100.8	93.9	91.5	87.3	95.7	10%	↗	-5%	
Economic Indicators	GVA	219.3	187.0	282.9	256.6	244.4	251.6	3%	↗	15%	
	Gross profit	86.4	70.8	156.3	138.4	138.0	141.7	3%	↗	64%	
	Net profit	-13.9	-30.0	62.4	46.8	50.7	46.0	-9%	↘	431%	
Capital value	Depreciated replacement value	474.1	457.1	468.0	419.3	517.9	541.4	5%	↗	14%	
	Investments	63.3	75.7	24.6	20.3	73.9	50.3	-32%	↘	-21%	
Profitability and development trends	Net profit margin (%)	-3.7	-9.5	14.6	11.5	13.1	11.5	-12%	↘	410%	
	<i>development trend</i>			Improved				121%	↗		
	RoFTA (%)	-2.3	-4.1	14.0	11.2	8.8	9.7	11%	↗	531%	
<i>development trend</i>			Improved				76%	↗			
GVA per FTE (thousand €)	106.4	100.9	156.8	154.5	156.8	152.4	-3%	↘	43%		
<i>development trend</i>			Improved				13%	↗			

*all monetary values have been adjusted for inflation - constant prices 2014; figures for 2014 could not be projected due to missing relevant data.

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.5.4 Income and cost structure trends for the Danish fleet: 2008-2013.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014). Labour costs* include crew wages and unpaid labour; Other variable costs* includes other variable costs and repair costs and Capital costs* include annual depreciation and opportunity cost of capital



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.5.5 Main economic performance indicator trends for the Danish fleet: 2008-2013.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Table 5.5.3 Danish national fleet structure, activity and production trends by operational scale: 2008-2013.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet						%Δ 2013-12	Trend	Large scale fleet						%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013			2008	2009	2010	2011	2012	2013		
Total No. Vessels (#)	1,228	1,203	1,118	1,102	1,075	1,026	-5%	↘	582	566	521	501	462	456	-1%	↘
Average vessel age (year)	26.6	26.5	28.1	28.9	29.8	30.5	3%	↗	31	31	31	31	31	32	2%	↗
Average vessel length (m)	7.2	7.1	7.4	7.4	7.4	7.4	0%	↔	19	19	19	19	19	19	1%	↔
Vessel tonnage (thousand GT)	4.4	4.3	4.2	4.2	4.1	3.9	-5%	↘	59	60	59	59	56	58	3%	↗
Vessel power (thousand kW)	44.9	44.1	44.0	43.7	42.9	41.2	-4%	↘	181	178	171	167	154	156	1%	↗
Total employed (#)	420	378	333	342	345	362	5%	↗	1,380	1,317	1,195	1,119	1,127	1,127	0%	↔
FTE (#)	379	319	281	276	252	239	-5%	↘	1,682	1,535	1,523	1,385	1,307	1,413	8%	↗
Average wage per employed (thousand €)	49.2	45.7	46.4	42.8	40.3	38.2	-5%	↘	81	75	93	93	82	85	4%	↗
Average wage per FTE (thousand €)	54.7	54.1	55.0	53.0	55.3	57.9	5%	↗	67	65	73	75	71	68	-4%	↘
Days at sea (thousand days)	58.1	53.5	49.3	50.6	47.9	45.6	-5%	↘	73	74	70	65	67	70	5%	↗
Fishing days (thousand days)	55.8	53.0	48.8	50.3	47.6	45.3	-5%	↘	67	68	64	58	61	64	6%	↗
Energy consumption (million litres)	3.7	3.7	3.2	3.2	3.1	3.0	-5%	↘	90	88	91	85	78	89	14%	↗
Energy consumption per landed tonne (l/T)	284	310	283	262	277	269	-3%	↘	134	116	113	121	160	144	-10%	↘
Landings weight (thousand tonnes)	12.9	11.9	11.2	12.3	11.3	11.0	-3%	↘	678	761	811	699	488	610	25%	↗
Landings value (million €)	32.0	24.7	24.5	26.8	24.4	22.8	-7%	↘	334	285	383	399	356	361	1%	↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.5.4 Economic performance of the Danish national fishing fleet by operational scale: 2008-2013.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet						%Δ 2013-12	Trend	Large scale fleet						%Δ 2013-12	Trend	
	2008	2009	2010	2011	2012	2013			2008	2009	2010	2011	2012	2013			
Income	Landings income	31.1	23.2	22.8	24.5	25.2	23.5	-6%	↘	330.0	282.1	387.5	373.6	355.5	370.3	4%	↗
	Other income	1.6	1.9	3.4	1.2	2.0	2.4	19%	↗	13.0	9.8	15.0	7.7	6.1	5.0	-18%	↘
	Direct income subsidies	0.0	0.0	0.0	0.01	0.0	0.0			0.2	0.1	0.1	0.2	0.5	0.1	-91%	↘
	Fishing rights income	0.0	0.0	0.0	1.63	0.61	1.11	82%	↗	0.0	0.0	0.0	6.7	8.5	24.7	191%	↗
Costs	Labour costs	20.7	17.3	15.5	14.6	13.9	13.8	-1%	↔	112.3	98.9	111.2	103.6	92.4	96.1	4%	↗
	Energy costs	2.4	1.7	1.8	2.3	2.5	2.2	-10%	↘	54.2	35.0	46.0	52.6	54.4	58.5	8%	↗
	Repair costs	5.3	4.2	3.8	4.2	3.8	3.9	1%	↔	35.3	34.5	37.6	38.0	32.6	34.3	5%	↗
	Other variable costs	4.5	3.3	3.2	3.1	4.2	3.9	-7%	↘	30.9	29.0	30.8	29.0	26.1	26.1	0%	↔
	Other non-variable costs	3.9	3.5	3.5	3.4	3.7	3.3	-10%	↘	19.8	18.8	19.2	17.8	17.2	17.4	1%	↗
	Capital costs	7.3	6.6	4.9	4.3	4.3	4.6	8%	↗	92.9	94.2	89.0	87.2	83.0	91.1	10%	↗
Capital value	Depreciated replacement value	42.2	34.2	32.3	28.7	37.0	44.0	19%	↗	431.9	422.9	435.7	390.6	480.9	497.4	3%	↗
	Investments	5.0	3.0	3.0	2.3	4.2	1.0	-76%	↘	58.3	72.9	22.2	20.7	101.8	81.7	-20%	↘
Economic indicators	GVA	16.6	12.3	14.0	12.8	13.0	12.6	-3%	↘	202.7	174.7	268.9	243.9	231.3	239.0	3%	↗
	Gross profit	-4.1	-5.0	-1.4	-1.9	-0.9	-1.2	-33%	↘	90.4	75.7	157.7	140.2	138.9	142.9	3%	↗
	Gross profit margin	-12.5	-19.8	-5.5	-7.3	-3.3	-4.5	-40%	↘	26.4	25.9	39.2	36.8	38.4	38.1	-1%	↔
	Net profit	-11.4	-11.5	-6.3	-6.2	-5.2	-5.8	-13%	↘	-2.5	-18.5	68.7	53.0	55.9	51.8	-7%	↘
Profitability and development trends	Net Profit margin	-34.9	-46.0	-24.1	-24.1	-19.0	-22.4	-18%	↘	-0.7	-6.3	17.1	13.9	15.5	13.8	-11%	↘
	development trend			Improved				24%	↗			Improved				75%	↗
	RoFTA (%)	-27.1	-33.8	-19.6	-21.6	-13.9	-13.2	5%	↗	-0.6	-4.4	15.8	13.6	11.6	10.4	-10%	↘
	development trend			Improved				43%	↗			Improved				45%	↗
GVA per FTE (thousand €)	43.9	38.6	49.9	46.2	51.8	53.0	2%	↗	120.5	113.8	176.5	176.0	177.1	169.1	-4%	↘	
development trend			Improved				15%	↗			Improved				11%	↗	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Fleet Segment Level Economic performance

The Danish fleet is highly diversified with a broad range of vessel types operating and targeting different species predominantly in the North Sea, Baltic Sea and North Atlantic. The national fleet consisted of 19 DCF fleet segments in 2013, consisting of 1,482 active vessels. 11 fleets made losses in 2013, while 8 made an overall profit. A breakdown of the key performance indicators by main fishing activity is provided in Table 5.5.5 for all 19 fleet segments in 2013. A short description of the three most important segments in terms of total value of landings is provided below.

Demersal trawl / seine 24-40m – 34 vessels make up this segment which operates predominantly in the North Sea and Skagerrak. The fleet targets a variety of species but in particular cod, plaice, saithe and Northern Prawn. In 2013, the total value of landings was around €57m and 241 FTEs were employed in this fleet segment, contributing to 15% of the total income from landings as well as FTEs generated by the Danish fishing fleet. This fleet had a gross profit of €14.7m and net profit of

€2.4m in 2013. The gross profit of the fleet decreased by 6% from 2012-2013, while the net profit went from negative to positive.

Demersal trawl / seine > 40m – 17 vessels make up this segment which operates predominantly in the North Sea and Skagerrak. The fleet targets a variety of species but in particular species for human consumption such as herring and mackerel and reduction species such as sandeel and sprat. In 2013, the total value of landings was around €48m and 118 FTEs were employed in this fleet segment, contributing to 12% of the total income generated from landings and 7% of FTEs in the Danish fishing fleet. This fleet had a gross profit of €26m and net profit of €13m in 2013. The gross profit of the fleet increased by 59% from 2012-2013

Pelagic trawl >40m – 13 vessels make up this segment which operates predominantly in the North Sea and in the Norwegian Sea. The fleet targets pelagic species for consumption (mackerel and herring) as well as reduction species such as sandeel, sprat and blue whiting. In 2013, the total value of landings was around €133m and 188 FTEs were employed in this fleet segment, contributing to 35% of the total income from landings and 11% of FTEs generated by the Danish fishing fleet. This fleet segment reported a total gross profit of around €75m and total net profit of €36m in 2013.

Small scale / large scale fleet

The small scale fleet, which is defined as vessels below 12 meters using static gears, operate mostly in the Baltic Sea, the Sounds and the Kattegat. In 2013, the small scale fishing fleet consisted of 1,026 registered vessels, with a combined gross tonnage of 3.91 thousand tonnes and engine power of 41 thousand kW. The size of the small scale fleet decreased between 2012 and 2013. The number of vessels and vessel tonnage (GT) both decreased 5% and vessel power (kW) decreased 4%.

The total amount of income generated by the small scale fleet accounted for €24m in 2013, which is 6% of the national income for fisheries. The landings value generated by the Danish small scale fleet decreased by 6% from 2012-2013. Total operating costs incurred by the small scale fleet in 2013 equated to €27m, amounting for more than the total income. Crew costs are a major fishing expense for the small scale fleet and accounted for €14m in 2013. Between 2012 and 2013, total operating costs decreased by 3%, due to a decrease in all cost elements except repairs. The small scale fleet made a loss in 2013 with gross profit and net profit of €-1.2m and €-5.81m respectively. The gross profit decreased 33% from 2012 to 2013, while the net profit decreased 13%. The increased loss is mainly due to lower income from landings.

The Danish large scale fleet targets a large variety of species including codfish, flatfish, Norway lobster, herring, mackerel, sprat and sandeel in the Baltic Sea, the Sounds, Kattegat, Skagerrak, the North Sea and the Norwegian Sea. In 2013, the large scale fishing fleet consisted of 456 registered vessels, with a combined gross tonnage of 58.1 thousand GT and engine power of 156.1 thousand kW. The size of the large scale fleet decreased between 2012 and 2013 in terms of number of vessels (1%) but increased with respect to vessel tonnage and vessel power by 3% and 1% respectively.

The total amount of income generated by the large scale fleet accounted for €370m in 2013, which is 94% of the national income for fisheries. The landings value generated by the Danish large scale fleet has increased by 4% from 2012 to 2013. Total operating costs incurred by the small scale fleet in 2013 equated to €232m. Of these, crew costs and energy costs are the major fishing expenses for the large scale fleet and accounted for €96m and €59m in 2013. Likewise, capital costs are a major expense for the large scale fleet and amount to €91m. Between 2012 and 2013, total operating costs increased by 4%, while capital costs increased by 10%. The large scale fleet has in 2013 increased its gross profit by €4.0m, but net profit declined by €4.1m, corresponding to an increase in gross profit of 3% and a decrease in net profit of 7%. A major reason for the improved gross profit is the increased landings of sandeels. An important reason for the decrease in net profit was the significant increase in capital costs.

Assessment and Future Trends

Overall, the Danish fleet consists of 19 fleet segments, covering both static and active gears and targeting both demersal and pelagic species. The capacity of the Danish fleet has stabilized in terms of number of active vessels from 2012-2013, but increased slightly when measured as total gross tonnage or total kilowatts power. Similarly, employment, measured in terms of Full Time Equivalents (FTE) increased. Thus, the trend of decreasing FTE from 2008-2011 has reversed between 2012 and 2013.

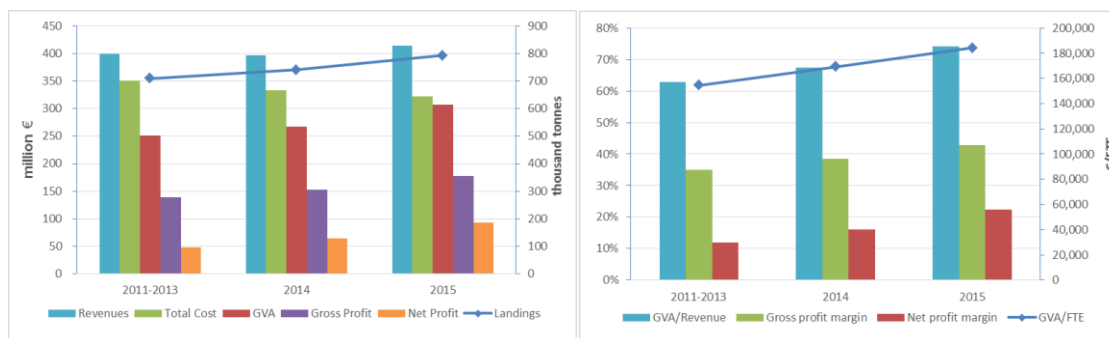
In economic terms, the gross profit has increased by 3% whereas the net profit decreased by 9% 2012-2013. Both the gross and the net profit show a significant positive trend if evaluated for the period 2008-2013. The gain is driven by the large scale fleet, whereas the small scale fleet is experiencing a minor loss. However, the profitability of the small scale fleet has improved during the last 5 years. The same positive trend of increasing profitability is the case for the large scale fisheries and could be the effect of the Vessel Quota Share (VQS) system that was introduced in 1st January 2007.

Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections. **The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.**

According to the BEMEF projections, in 2014 the Danish fleet experiences an increase in landings to 740,000 tonnes (+4%) and level revenue at €397 million (+0%). Decreasing costs (-5%) due to lower fuel prices translate into increased gross profit (+10%) and net profit (+34%). Profit margins remain very high for the Danish fleet (39% gross and 16% net) and GVA/FTE reaches an increase of 9% to €169,000.

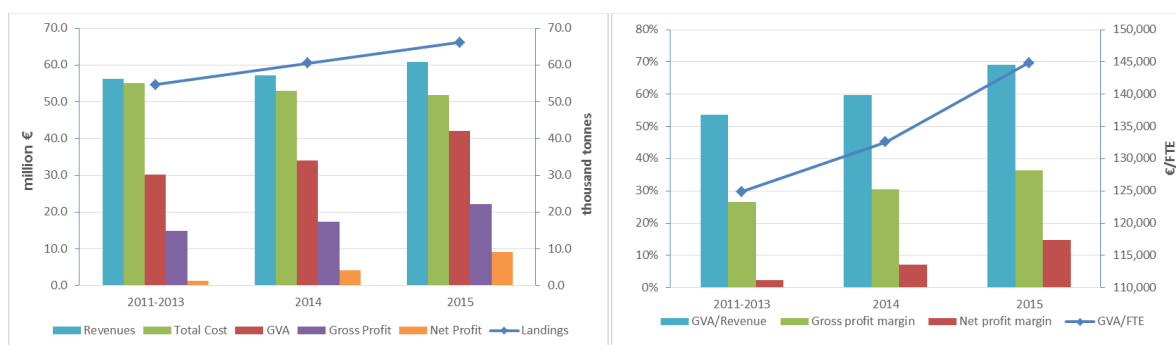
These projected trends also continue in 2015 for the Danish fleet. Landings increase another 7% to 793,000 and revenue increases 4% to €414 million as TACs are increased for key North Sea and Baltic species. These gains largely accrue to profit with gross profit increasing 16% to €178 million and net profit increasing 44% to €93 million.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

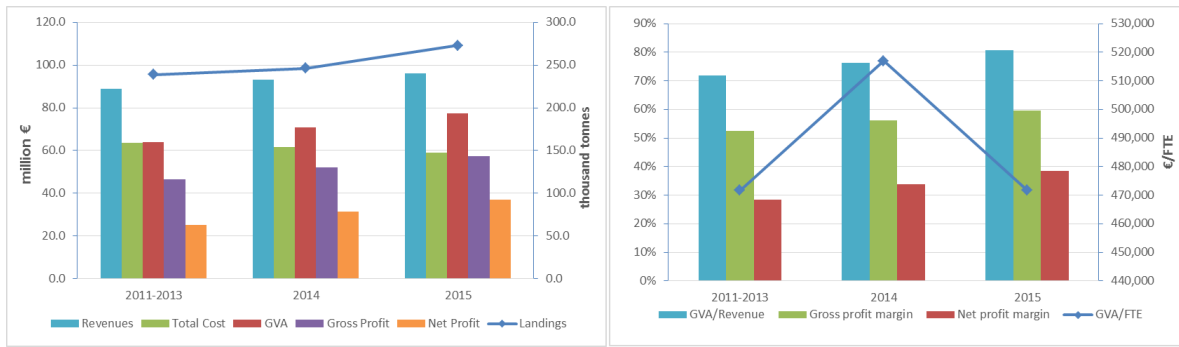
Figure 5.5.6 Denmark: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 Danish fleets by gross earnings.



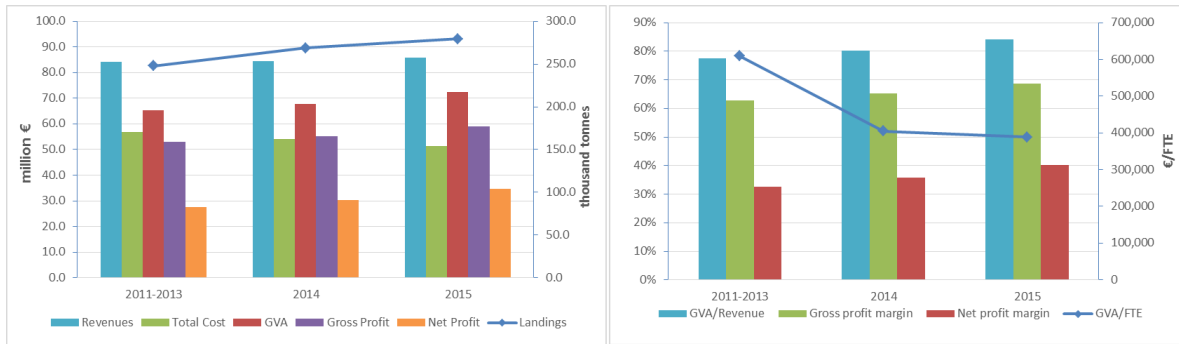
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.5.7 DNK AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

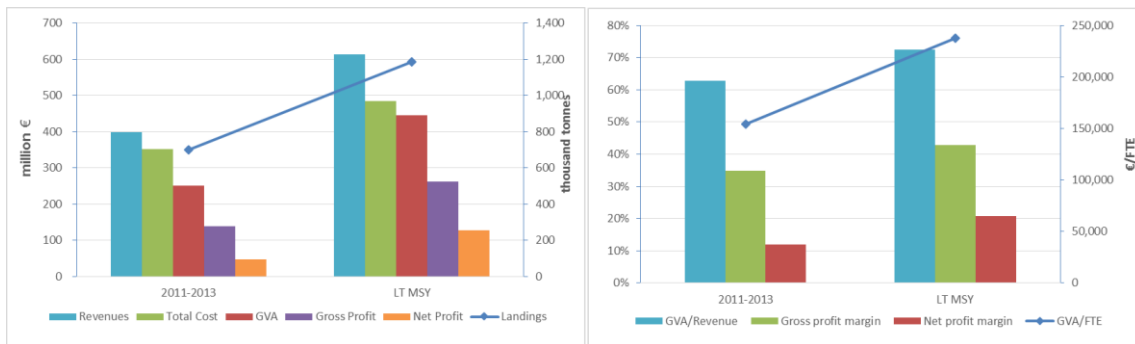
Figure 5.5.8DNK AREA27 DTS VL40XX: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.5.9DNK AREA27 TM VL40XX: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, a state of long-term MSY sees a significant increase (70%) in landings for Denmark to 1.2 million tonnes. Revenue increase 54% and total costs increase 38%, leading to improvements in gross profit and net profit to €262 million and €128 million respectively. High profit margins also increase to 43% (gross) and 21% (net).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.5.10Denmark: MSY projections for the main socio-economic indicators.

Data issues

For 2012 and 2013, the value of fishing rights has been calculated based on all registered privately owned quota shares. Previously the calculation had been based on a sample. The comprehensive data give a much better coverage of the quota value, and have changed the level from €761m to €1.3billion from 2011 to 2013. It has now stabilized at €1.2billion. But the result has to be seen as preliminary, as the shadow prices used in the estimations are based on the calculated gain in profit at the individual level instead of the macro level.

A factor of uncertainty in the coming years is the implementation of the landing obligation, which is being implemented as part of the EU's reform of the Common Fishery Policy. The landing obligation may reduce the profitability by inducing higher operating costs and lower catches depending on the related regulation. It could however, also be a source of innovation in the longer term that brings about a more efficient use of the resources.

Table 5.5.5 Main socio-economic performance indicators by fleet segment in the Danish national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %? 2013 - average (2008-12)	Economic development trend
	% ?	FTE (N)	% ?	Days at sea (days)	% ?	Energy consumption (litres)	% ?	Value of landings (thousand €)	% ?	Weight of landings (thousand tonnes)	% ?	GVA (thousand €)	% ?	GVA per FTE (€/FTE)	% ?	Gross profit (thousand €)	% ?	Net profit (thousand €)	% ?	Net profit margin (%)	% ?				
DNK AREA27 DRB VL1012	24	14%	14	-9%	1,326	-20%	334	-21%	43	-98%	61	-100%	2,013	48%	145.6	64%	1,205	151%	534	2079%	16.7	1717%	High	335%	Improved
DNK AREA27 DRB VL1218	25	-7%	40	32%	2,131	-7%	713	-16%					4,049	46%	102.2	11%	1,199	46%	370	20%	-5.9	32%	Weak	73%	Improved
DNK AREA27 DTS VL0010	11	10%	4	33%	549	-1%	91	12%	284	-5%	115	-10%	114	-15%	32.7	-36%	87	-256%	205	-132%	-49.6	-110%	Weak	-8%	Deteriorated
DNK AREA27 DTS VL1012°	9	0%	9	-10%	1,100	8%	251	-9%	1,422	15%	2,214	14%	495	1%	55.2	12%	3	-128%	290	-40%	-24.0	-48%	Weak		
DNK AREA27 DTS VL1218	128	1%	225	-4%	18,173	-3%	8,766	5%	31,998	-10%	30,434	18%	17,961	5%	79.9	9%	4,966	29%	848	16%	-2.5	17%	Weak		
DNK AREA27 DTS VL1824°	61	-5%	231	-9%	10,920	-2%	9,837	-12%	38,651	-8%	46,642	18%	21,119	-8%	91.5	1%	7,600	-2%	252	-477%	-0.6	-540%	Weak	-229%	Deteriorated
DNK AREA27 DTS VL2440°	34	-11%	241	-1%	10,660	25%	18,294	-9%	57,045	3%	63,833	51%	28,977	-6%	120.4	-6%	14,676	-6%	2,460	1385%	4.6	1494%	Reasonable	155%	Improved
DNK AREA27 DTS VL40XX	17	42%	118	90%	2,889	56%	13,992	112%	47,678	26%	139,423	61%	37,713	60%	320.3	-16%	25,682	59%	12,698	20%	22.0	-29%	High		
DNK AREA27 PGP VL0010	824	-4%	147	-2%	30,539	-6%	1,218	1%	13,016	-8%	5,197	-6%	8,103	3%	55.0	5%	687	19%	3,146	-11%	-20.6	-10%	Weak		
DNK AREA27 PGP VL1012	56	12%	45	16%	6,670	0%	608	44%	4,655	-6%	2,325	1%	2,415	10%	53.6	-4%	112	-22%	762	-37%	-15.6	-24%	Weak	17%	Improved
DNK AREA27 PGP VL1218	37	6%	86	6%	5,054	-1%	1,220	-1%	11,563	2%	4,465	5%	7,071	16%	82.2	9%	2,248	36%	448	29%	-3.8	37%	Weak	48%	Improved
DNK AREA27 PMP VL0010	116	-8%	28	-23%	5,796	-3%	620	-18%	2,872	-7%	1,291	-9%	1,228	-22%	44.4	1%	383	-109%	1,163	-15%	-37.8	-47%	Weak		
DNK AREA27 PMP VL1012	30	-32%	19	-32%	2,559	-3%	514	-32%	2,223	0%	2,206	5%	898	-36%	48.5	-7%	217	-3204%	732	2%	-27.7	-34%	Weak		
DNK AREA27 PMP VL1218	38	-17%	57	-10%	5,144	13%	2,216	-25%	8,640	4%	8,183	47%	4,094	-18%	72.1	-9%	1,054	5%	425	8%	-5.1	-19%	Weak	35%	Improved
DNK AREA27 PMP VL1824°	16	33%	97	48%	2,351	-3%	4,110	100%	9,905	-1%	3,719	7%	10,383	70%	106.6	15%	4,534	94%	1,335	248%	7.5	98%	Reasonable	834%	Improved
DNK AREA27 TBB VL1218	11	0%	28	-6%	1,752	-1%	1,329	-7%	4,726	-4%	1,860	-31%	3,014	-2%	108.1	4%	1,143	-11%	300	-40%	6.2	-38%	Reasonable	148%	Improved
DNK AREA27 TBB VL1824	18	6%	51	-8%	2,806	-2%	2,301	-10%	8,374	-4%	4,687	7%	5,301	-3%	104.5	5%	2,141	-10%	423	-55%	4.9	-52%	Reasonable	140%	Improved
DNK AREA27 TM VL1218	14	-13%	26	-11%	1,711	14%	1,133	-9%	7,307	17%	22,399	18%	3,864	17%	150.0	32%	1,912	65%	853	3833%	13.4	4072%	High		
DNK AREA27 TM VL40XX	13	-24%	188	42%	3,119	25%	23,954	29%	133,071	5%	281,616	32%	92,810	-10%	492.8	-36%	74,643	-12%	36,052	-23%	29.5	-17%	High		

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.6 Main socio-economic performance indicators by fleet segment in the Danish national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend
DNK AREA27 DRB VL1012	0.6	-21%	55	-30%	46	-99%	43	-99%	33,675	-20%	34,267	44%	18,506	26%	5,453	15966%	9,712	-36%	83,439	-36%	83,439	-18%	83,866	30%	22,250	1831%	347%	Improved
DNK AREA27 DRB VL1218	1.6	43%	85	0%					114,012	58%	43,851	-8%	33,053	-9%			20,992	-8%	203,891	-8%	203,891	22%	161,964	58%	14,786	13%	42%	Improved
DNK AREA27 DTS VL0010	0.3	23%	50	-10%	209	-9%	208	-9%	18,270	15%	-		-		797	25%	6,235	-6%	45,493	-6%	45,493	14%	10,397	-23%	18,651	-111%	-3%	Stable
DNK AREA27 DTS VL1012*	1.0	-10%	122	8%	2,013	5%	1,953	8%	55,326	4%	3,303	1%	3,410	15%	113	-20%	19,480	-15%	134,483	-15%	134,483	-5%	54,998	1%	32,183	-40%	-114%	Deteriorated
DNK AREA27 DTS VL1218	1.8	-5%	142	-4%	1,675	22%	1,663	19%	101,525	-3%	31,115	8%	29,893	10%	288	-11%	46,478	-2%	225,144	-2%	225,144	-3%	140,323	4%	6,628	16%	16%	Improved
DNK AREA27 DTS VL1824*	3.8	-5%	179	3%	4,271	20%	4,856	21%	221,611	-7%	40,744	-3%	51,643	-6%	211	-25%	108,982	-11%	517,190	-11%	517,190	-7%	346,207	-4%	4,129	-505%	-174%	Deteriorated
DNK AREA27 DTS VL2440*	7.1	11%	314	40%	5,988	21%	7,162	20%	420,610	4%	48,521	-5%	86,331	2%	287	-40%	351,198	-2%	1,139,991	-2%	1,139,991	2%	852,262	5%	72,339	1536%	147%	Improved
DNK AREA27 DTS VL40XX	6.9	34%	170	10%	48,258	3%	68,227	-1%	707,749	14%	76,610	-17%	110,141	4%	100	32%	541,098	39%	1,889,589	39%	1,889,589	24%	2,218,437	13%	746,947	-15%	-15%	Deteriorated
DNK AREA27 PGP VL0010	0.2	0%	37	-3%	170	1%	170	0%	10,667	5%	14,253	10%	8,490	-7%	234	7%	1,188	7%	19,375	7%	19,375	4%	9,834	7%	3,818	-15%	30%	Improved
DNK AREA27 PGP VL1012	0.8	3%	119	-11%	349	1%	356	1%	41,133	1%	15,762	43%	13,110	45%	262	43%	7,838	15%	85,440	15%	85,440	-1%	43,129	-1%	13,616	-22%	29%	Improved
DNK AREA27 PGP VL1218	2.3	0%	137	-6%	884	6%	979	3%	130,353	3%	35,966	1%	40,580	-1%	273	-6%	23,889	-11%	255,056	-11%	255,056	2%	191,120	10%	12,112	33%	32%	Improved
DNK AREA27 PMP VL0010	0.2	-14%	50	5%	223	-6%	223	-5%	13,887	-1%	5,357	282%	4,226	274%	480	-10%	3,821	-19%	29,832	-19%	29,832	-9%	10,587	-15%	10,024	-25%	28%	Improved
DNK AREA27 PMP VL1012	0.6	0%	85	42%	862	9%	870	9%	37,156	17%	5,869	15%	4,291	26%	233	-35%	12,082	-6%	95,426	-6%	95,426	16%	29,924	-7%	24,415	-43%	21%	Improved
DNK AREA27 PMP VL1218	1.5	9%	135	37%	1,591	29%	1,679	33%	80,014	-8%	28,513	-14%	27,086	6%	271	-49%	40,853	-11%	193,785	-11%	193,785	-10%	107,744	-1%	11,189	-11%	24%	Improved
DNK AREA27 PMP VL1824*	6.1	11%	147	-27%	1,582	10%	1,828	4%	365,556	17%	47,449	4%	73,520	13%	1,105	87%	171,335	45%	826,164	45%	826,164	27%	648,920	28%	83,419	161%	15377%	Improved
DNK AREA27 TBB VL1218	2.5	-6%	159	-1%	1,062	-30%	880	-38%	170,076	5%	47,726	10%	57,652	12%	714	34%	83,280	-7%	334,636	-7%	334,636	-1%	273,964	-2%	27,314	-40%	294%	Improved
DNK AREA27 TBB VL1824	2.8	-13%	156	-8%	1,671	9%	1,453	-2%	175,577	-3%	43,741	0%	51,321	-9%	491	-16%	87,188	-17%	357,049	-17%	357,049	-9%	294,501	-9%	23,516	-57%	169%	Improved
DNK AREA27 TM VL1218	1.8	1%	122	30%	13,089	4%	15,232	2%	139,447	4%	50,651	6%	40,536	18%	51	-23%	57,129	6%	320,049	6%	320,049	-8%	276,016	34%	60,941	4395%	4395%	Improved
DNK AREA27 TM VL40XX	14.5	85%	240	64%	90,291	5%	149,995	-14%	1,397,430	28%	86,614	-30%	158,125	-6%	85	-2%	1,176,721	54%	3,671,731	54%	3,671,731	35%	7,139,221	18%	2,773,225	1%	1%	Stable

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

5.6 ESTONIA¹

Fleet Structure, Fishing Activity and Production

In 2014, the Estonian Baltic Sea fishing fleet consisted of 1,514 registered vessels, with a combined gross tonnage of 6 thousand GT, engine power of 32 thousand kW and an average age of 22 years. The size of the Estonian fishing fleet increased between 2008 and 2013; the number of vessels and kW increased by 41% and 1%, respectively, but GT decreased by 19% (Table 5.6.1; Figure 5.6.1). The main reason for the decrease in the fleet size between 2008 and 2012 was capacity reduction due to a decommissioning programme aimed at achieving a balance between the size of the fishing fleet and available fishing opportunities. The decrease mainly took place among trawlers, explaining why the percentage decrease in total fleet GT and kW was greater than that of the total number of vessels. The number of vessels started to increase in 2013, but this trend was related to the small scale fleet. Due to fishing capacity had been released in large scale segments, the Ministry of Agriculture have decided to use that capacity to meet the additional need of small scale fishing boat entry into the register.

In 2014, the number of fishing enterprises in the Estonian Baltic Sea fleet totalled 1,117, with the vast majority (79%) owning a single vessel. Around 20% of the enterprises owned two to five fishing vessels. Total employment in 2013 was estimated at 2,046 jobs, corresponding to 514 FTEs. The level of employment decreased between 2008 and 2013, with total employed decreasing by 32%. There was a significant drop in the total number employed between 2008 and 2009. The decline occurred mainly in the small scale coastal sector, due to the fact that it became compulsory for all fishermen dealing with commercial fishing to hold a professional certificate. However, the number employed shows a slight increase since 2009 (Table 5.6.1; Figure 5.6.1).

Table 5.6.1 Estonian national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

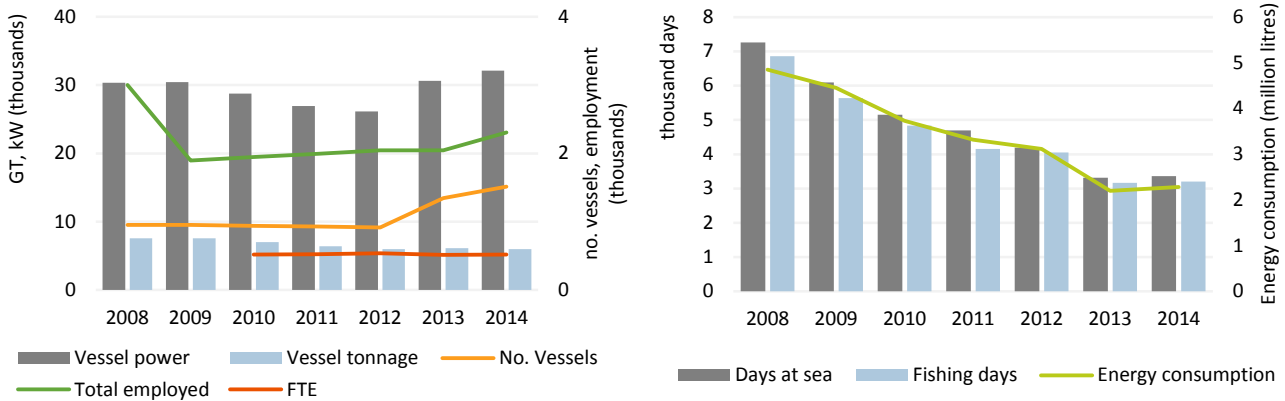
VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	954	955	939	928	917	1,343	1,514	46% ↗	41%	
	No. of Inactive vessels (#)	10	18	10	10	9	7	1	-22% ↘	-30%	
	Average vessel age (year)	19	20	21	22	23	21	22	-9% ↘	11%	
	Vessel tonnage (thousand GT)	7.6	7.6	7.0	6.4	6.0	6.1	6.0	2% ↗	-19%	
	Vessel power (thousand kW)	30.4	30.4	28.7	26.9	26.1	30.6	32.1	17% ↗	1%	
No. of Enterprises (#)		687	686	662	659	658	1,050	1,117	60% ↗	53%	
Employment	Total employed (#)	3,002	1,895	1,948	1,993	2,046	2,046	2,307	0% ↔	-32%	
	FTE (#)			521	524	540	514	521	-5% ↘		
	Average wage per employed (thousand €)	2.0	2.9	2.7	2.5	2.5	2.5	1.8	-2% ↘	21%	
	Average wage per FTE (thousand €)			10.0	9.4	9.5	9.8	8.0	3% ↗		
Fishing Effort	Days at sea (thousand days)	7.3	6.1	5.2	4.7	4.2	3.3	3.4	-21% ↘	-54%	
	Fishing days (thousand days)	6.9	5.6	4.8	4.2	4.1	3.2	3.2	-22% ↘	-54%	
	Energy consumption (million litres)	4.9	4.5	3.7	3.3	3.1	2.2	2.2	-29% ↘	-55%	
	Energy consumption per landed tonne (l/T)	58.0	53.3	46.9	52.4	58.5	40.4	40.8	-31% ↘	-30%	
Output	Landings weight (thousand tonnes)	83.6	83.5	79.6	63.3	53.3	54.6	54.8	2% ↗	-35%	
	Landings value (million €)	18.2	16.9	14.7	14.9	14.6	15.4	14.5	6% ↗	-15%	
	Recreational catches of selected species (T)	2.9	3.5	3.4	3.2	3.0	2.5	3.4	-16% ↘	-13%	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

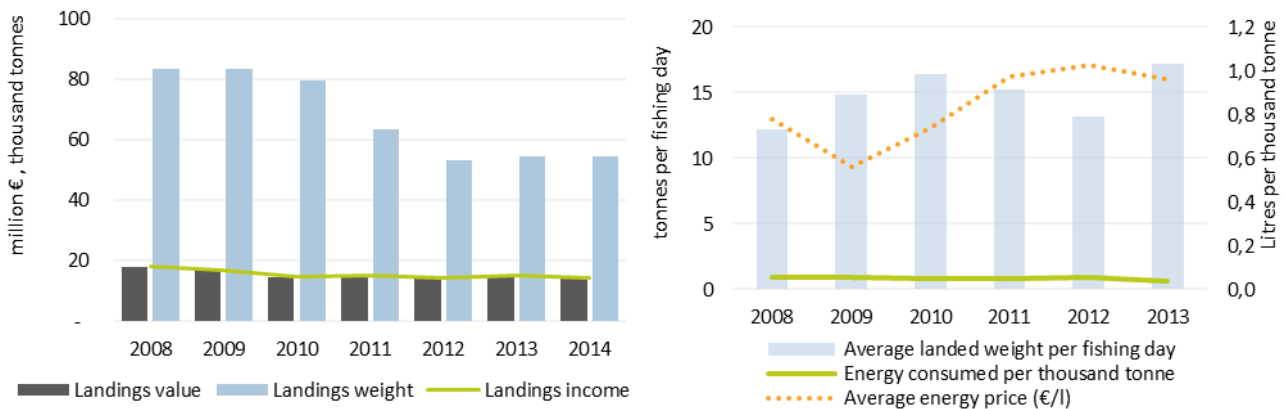
¹ This National Chapter is built on data that has been judged, at least in part, as questionable by experts regarding both coverage and quality. Results should therefore be treated carefully!

The weight landed by the Estonian Baltic Sea fleet in 2013 was 55 thousand tonnes of seafood, with a landed value of €15.4m. The total weight of landings decreased over the period analysed. However, the total value of landings has been rather stable compared in recent years.



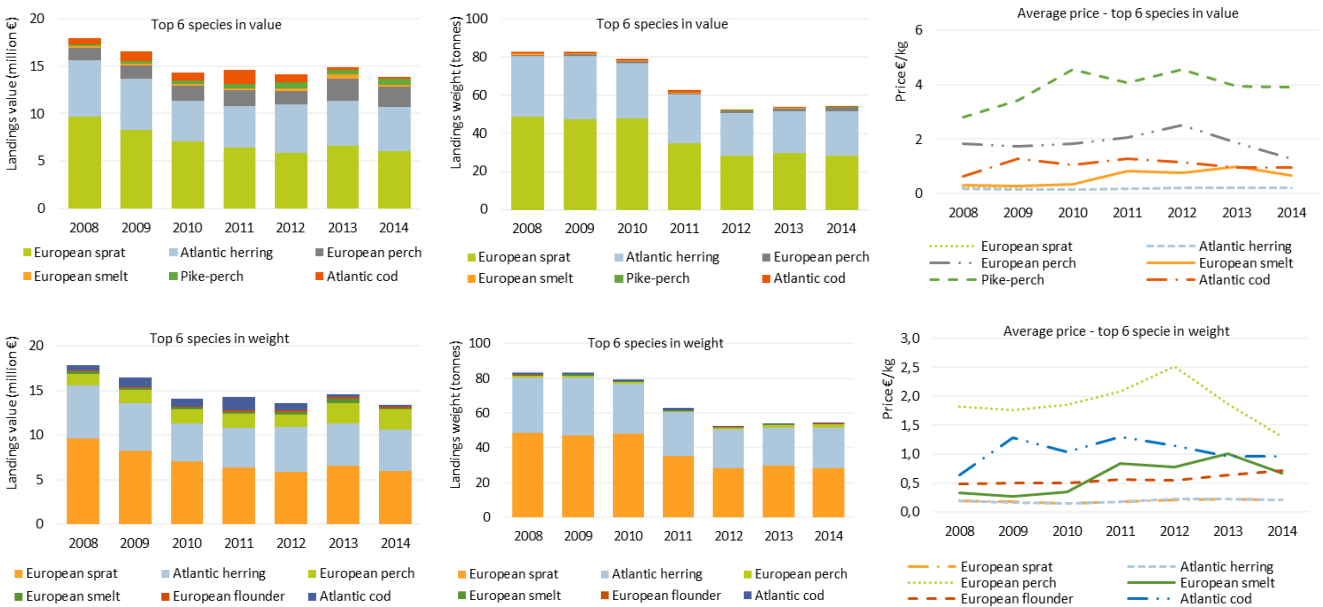
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.6.1 Estonian fleet main capacity and effort trends for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.6.2 Landings in value and weight (and corresponding income from landings) by the Estonian national fleet and average price trends of top species in price for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.6.3 Estonian fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

In 2013, European sprat generated the highest value (€6.6m) landed by the national fleet, followed by Atlantic herring (€4.7m) and European perch (€2.3m). In terms of landings weight, European sprat landings were 29.8 thousand tonnes, Atlantic herring 21.9 thousand tonnes and European perch 1.2 thousand tonnes. The decrease in quotas for the internationally TAC regulated species (European sprat and Atlantic herring) was the main reason for decreases in total weight landed in 2012. In 2013, the European sprat quota increased again and also the continued slight rise in the first-sale prices for two key species (European sprat and Atlantic herring).

National Fleet Economic performance

The total amount of income generated by the Estonian national fleet in 2013 was €15.6m. This consisted of €15.4m in landings value and €0.2m in non-fishing income (Table 5.6.2). The total income of the Estonian fleet decreased 15% between 2008 and 2013. Decreases in landing volumes were the main reason for this trend.

Total expenditure by the Estonian national fleet in 2013 was €13.3m, amounting to 85% of total income. The largest expenditure item was labour costs (€5m) (Table 5.6.2). Between 2008 and 2013, the total expenditure of the Estonian fleet remained relatively stable.

In terms of profitability, the total amount of GVA, gross profit and net profit generated by the Estonian national fleet in 2013 was €9.2m, €4.2m and €2.2m, respectively (Table 5.6.2). Compared to 2008, the total amount of GVA and net profit decreased 19% and 46%. In 2013, the Estonian fleet had an estimated capital value of €18.3m and an investment of €2.1m.

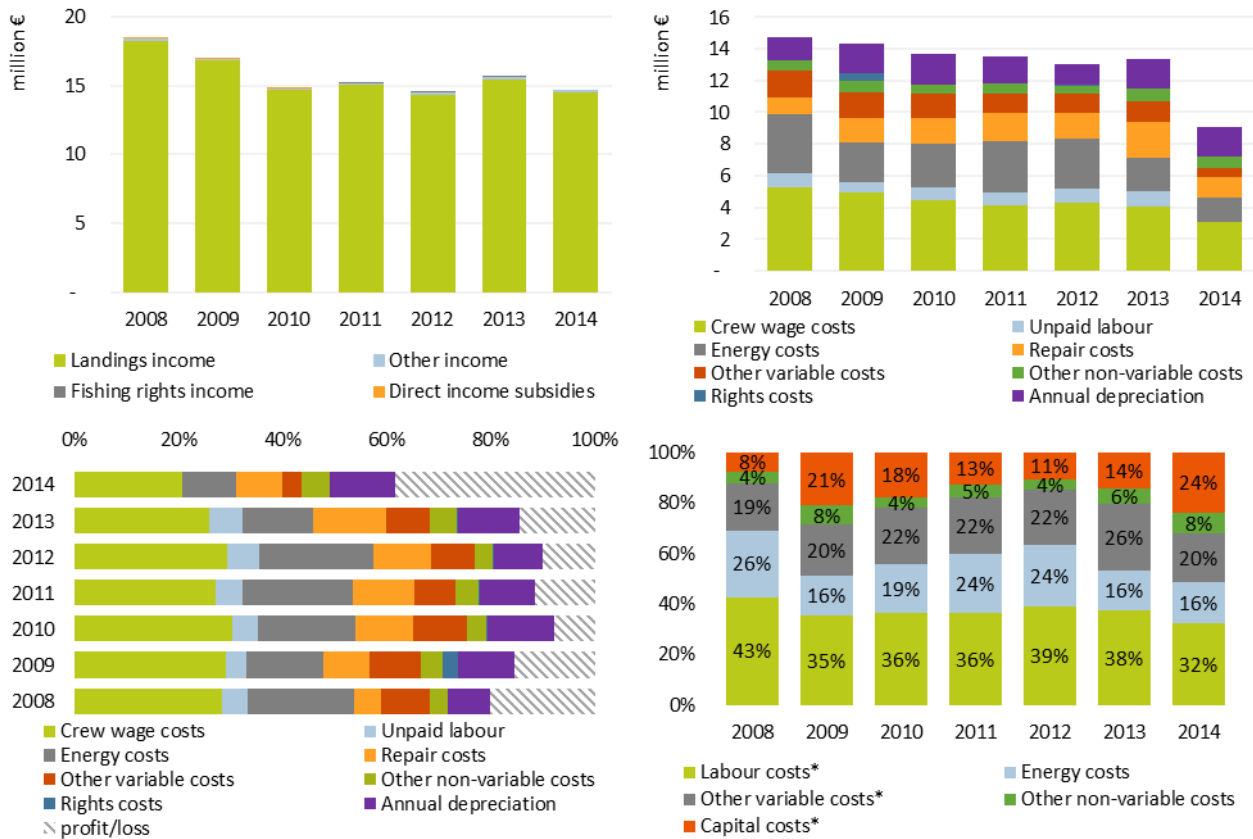
Table 5.6.2 Estonian national fishing fleet economic performance in 2008-2013 and projections for 2014.

There are no Estonian sovereign debt securities that comply with the definition of long-term (LT) interest rates for 2011-2014. Therefore, the averages calculated on the basis of the Latvian and Lithuanian LT interest rates were used in calculations of capital costs, net profit and net profit margin. The trend in development is based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend	
Income	Landings income	18.3	16.8	14.7	15.1	14.4	15.4	14.5	8%	↗	-15%	
	Other income	0.2	0.1	0.1	0.1	0.1	0.2	0.2	33%	↗	-6%	
Costs	Labour costs	6.1	5.6	5.2	4.9	5.1	5.0	4.2	-2%	↘	-18%	
	Energy costs	3.8	2.5	2.8	3.2	3.2	2.1	2.1	-34%	↘	-44%	
	Repair costs	1.0	1.5	1.6	1.8	1.6	2.2	2.2	36%	↗	126%	
	Other variable costs	1.7	1.7	1.6	1.2	1.2	1.3	1.3	9%	↗	-23%	
	Other non-variable costs	0.6	0.7	0.6	0.7	0.5	0.8	0.9	56%	↗	24%	
	Capital costs	1.1	3.3	2.6	1.7	1.4	1.9	2.5	35%	↗	78%	
Economic Indicators	GVA	11.3	10.5	8.3	8.3	7.9	9.2	8.2	16%	↗	-19%	
	Gross profit	5.2	4.9	3.1	3.4	2.8	4.2	4.0	48%	↗	-20%	
	Net profit	4.1	1.6	0.5	1.7	1.4	2.2	1.5	61%	↗	-46%	
Capital value	Depreciated replacement value	18.9	19.5	20.6	18.9	17.2	18.3	20.7	6%	↗	-3%	
	Investments	1.0	1.1	1.9	2.4	1.6	2.1		29%	↗	115%	
Profitability and development trends	Net profit margin (%)	22.4	9.4	3.4	11.0	9.6	14.3	10.2	49%	↗	-36%	
	<i>development trend</i>				Improved				28%	↗		
	RoFTA (%)	19.6	15.9	5.6	9.3	8.6	12.6	9.4	47%	↗	-36%	
	<i>development trend</i>				Improved				7%	↗		
GVA per FTE (thousand €)				15.9	15.8	14.7	17.9	15.7	22%	↗		
	<i>development trend</i>				Improved				16%	↗		

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

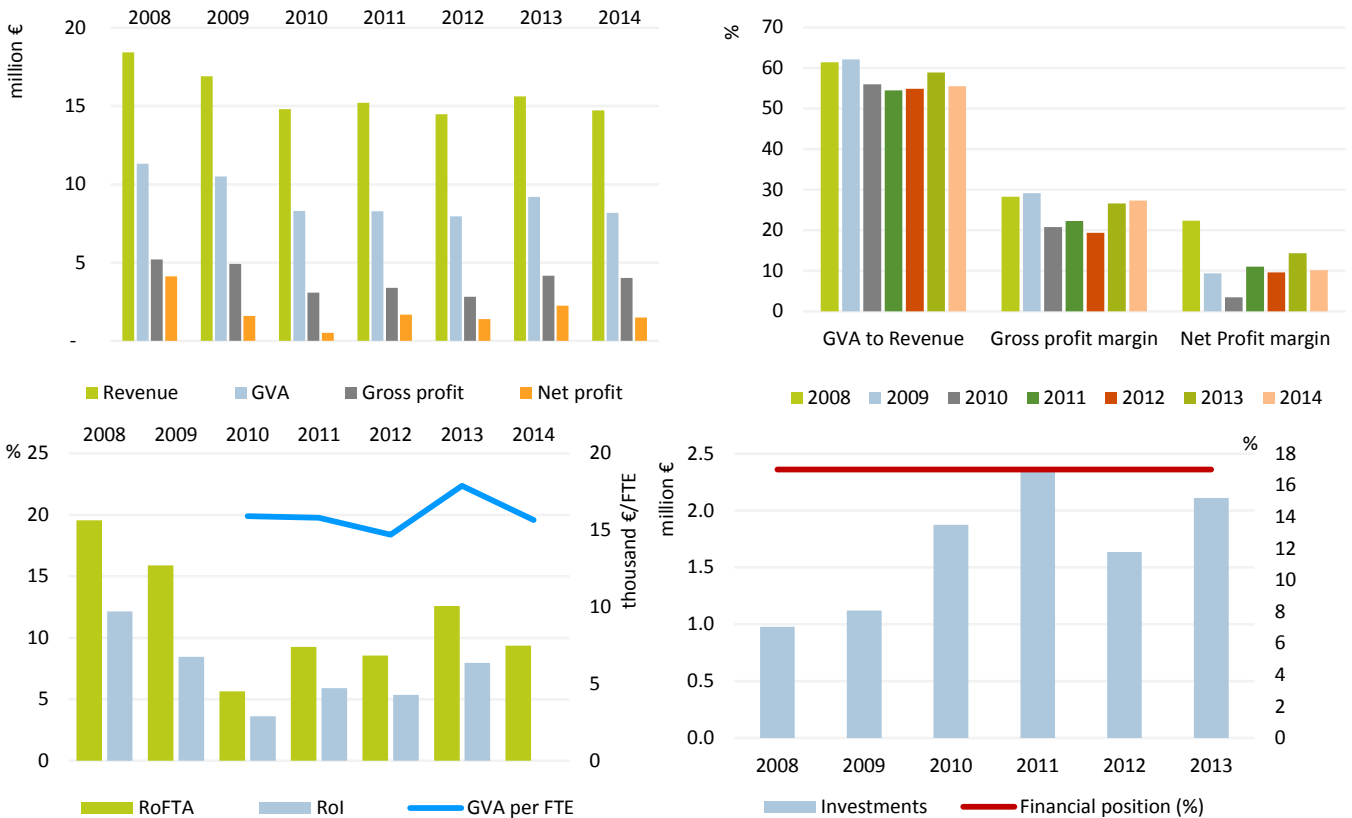
Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.6.4 Income and cost structure trends for the Estonian fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.6.5 Main economic performance indicator trends for the Estonian fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Table 5.6.3 and Table 5.6.4 provide a breakdown of the main performance indicators by small and large-scale fleet segments.

Table 5.6.3 Estonian national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	880	884	881	876	872	1,300	1,475	49%	↗	64	53	48	42	36	36	38	0%	↔
Average vessel age (year)	18.9	19.9	20.9	22.9	22.0	22.1	21.2	1%	↔	25.4	27.9	25.8	26.0	25.7	26.9	27.8	4%	↗
Average vessel length (m)	6.5	6.5	6.5	6.5	6.5	6.4	5.9	-2%	↘	22.0	23.4	23.4	23.2	23.8	23.6	22.4	-1%	↔
Vessel tonnage (thousand GT)	1.8	1.8	1.8	1.7	1.7	2.0	2.2	15%	↗	5.6	5.4	5.0	4.4	4.0	4.0	3.8	0%	↔
Vessel power (thousand kW)	14.6	14.6	14.5	14.4	14.6	19.6	22.2	34%	↗	15.0	13.7	12.9	11.2	10.3	10.1	9.8	-3%	↘
Total employed (#)	2,727	1,646	1,721	1,777	1,858	1,865	2,100	0%	↔	275	253	227	216	188	181	180	-4%	↘
FTE (#)			309	320	362	339		-6%	↘	255	240	212	204	178	175	181	-2%	↘
Average wage per employed (thousand €)	0.5	0.7	0.7	0.7	0.7	0.8		14%	↗	16.9	17.2	17.9	17.0	20.0	19.2	16.9	-4%	↘
Average wage per FTE (thousand €)			3.7	3.8	3.8	4.6		22%	↗	18.2	18.2	19.2	18.0	21.2	19.9	16.8	-6%	↘
Days at sea (thousand days)									↔	7.3	6.1	5.2	4.7	4.2	3.3	3.4	-21%	↘
Fishing days (thousand days)									↔	6.9	5.6	4.8	4.2	4.1	3.2	3.2	-22%	↘
Energy consumption (million litres)									↔	4.9	4.5	3.7	3.3	3.1	2.2	2.3	-29%	↘
Energy consumption per landed tonne (l/T)									↔	68.4	64.1	54.6	62.6	70.0	51.5	51.5	-30%	↘
Landings weight (thousand tonnes)	12.6	14.2	11.2	10.4	8.7	9.6	10.4	10%	↗	70.9	69.5	68.3	53.0	44.5	44.9	44.4	1%	↔
Landings value (million €)	4.1	4.1	3.9	4.2	4.8	5.6	5.1	16%	↗	14.3	12.8	10.8	10.9	9.7	9.8	9.5	1%	↗

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Table 5.6.4 Economic performance of the Estonian national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			
Income	Landings income	4.0	4.1	3.9	4.2	4.8	5.6	5.1	16%	↗	14.3	12.7	10.8	10.9	9.5	9.8	9.5	3%	↗
	Other income	0.1	0.1	0.1	0.1	0.1	0.2	0.2	60%	↗	0.09	0.02	0.05	0.01	0.02				
	Direct income subsidies	0.01	0.01	0.01															
	Fishing rights income										0.01	0.01	0.02	0.04	0.01			-75%	↘
Costs	Labour costs	1.5	1.2	1.2	1.2	1.4	1.6		14%	↗	4.7	4.4	4.1	3.7	3.8	3.5	3.0	-8%	↘
	Energy costs	0.7	0.5	0.7	0.7	0.7	0.6		-18%	↘	3.1	2.0	2.1	2.5	2.5	1.5	1.5	-38%	↘
	Repair costs	0.6	0.6	0.6	0.6	0.6	1.0		52%	↗	0.4	0.9	1.0	1.2	1.0	1.2	1.3	25%	↗
	Other variable costs	0.4	0.5	0.4	0.4	0.4	0.8		88%	↗	1.3	1.2	1.1	0.8	0.8	0.5	0.6	-32%	↘
	Other non-variable costs	0.0	0.0	0.0	0.0	0.0	0.1	0.1	150%	↗	0.6	0.7	0.5	0.6	0.5	0.7	0.7	48%	↗
	Capital costs	0.2	1.0	0.6	0.4	0.4	0.5	0.7	21%	↗	0.9	2.3	1.9	1.3	1.0	1.4	1.6	41%	↗
Capital value	Depreciated replacement value	8.2	7.9	7.6	7.1	6.6	7.2	8.1	10%	↗	10.6	10.9	12.6	11.4	10.3	10.9	10.6	6%	↗
	Investments	0.4	0.2	0.3	0.3	0.3	1.0		278%	↗	0.6	0.9	1.6	2.1	1.4	1.1		-20%	↘
Economic indicators	GVA	2.4	2.5	2.1	2.4	3.1	3.4		7%	↗	9.0	8.0	6.2	5.8	4.8	5.8	5.4	21%	↗
	Gross profit	0.9	1.3	1.0	1.2	1.8	1.8		2%	↗	4.3	3.6	2.1	2.2	1.1	2.4	2.4	125%	↗
	Gross profit margin	21.9	31.1	25.2	28.5	35.5	31.0		-13%	↘	30.1	28.5	19.2	19.8	11.1	24.0	25.2	117%	↗
	Net profit	0.7	0.3	0.4	0.8	1.3	1.3		-4%	↘	3.4	1.4	0.2	0.9	0.1	1.0	0.9	1500%	↗
Profitability and development trends	Net Profit margin	17.0	6.9	9.0	19.0	27.0	22.2		-18%	↘	23.9	10.7	1.5	7.9	0.6	9.7	8.9	1469%	↗
	development trend				Improved				41%	↗				Improved				9%	↗
	RoFTA (%)	6.2	11.4	7.9	11.8	20.8	18.1		-13%	↘	30.1	20.2	4.5	8.0	1.1	9.1	10.1	770%	↗
	development trend				Improved				56%	↗				Deteriorated				-28%	↘
GVA per FTE (thousand €)			6.9	7.6	8.6	9.9		15%	↗	35.1	33.3	29.0	28.7	27.1	33.4	30.0	23%	↗	
development trend				Improved				28%	↗				Improved				9%	↗	

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Fleet Segment Level Economic performance

The Estonian Baltic Sea fleet is highly diversified with a broad range of vessel types operating and targeting different species. There are two main fisheries - large scale pelagic trawlers and the small scale coastal fishery. A short description of both main fishing activities is provided below. The fleet consisted of 4 active fleet segments in 2013. Table 5.6.5 provides a further breakdown of the key performance indicators for all the Estonian fleet segments in 2013.

Small scale fleet

The small scale fleet operates in Estonian coastal waters using mainly passive gears and is divided into two size groups (0-10m and 10-12m). The largest catches taken in 2013 were of herring, followed by perch, smelt, flounder, pikeperch, roach and pike. The number of vessels in the small scale fleet remained stable between 2008 and 2012 (around 880 vessels), but increased 50% in 2013 (1,300 vessels). This was a result of fishermen getting additional possibilities to bring vessels into the fishing vessel register. There was a significant drop in the total number employed in 2008 (from 2,727 to 1,646). The decline occurred because it became mandatory for all fishermen to hold a professional certificate. The number of employed has demonstrated increases since 2009. Coastal fishermen caught a total of 9.6 thousand tonnes of fish in 2013. Generally the total weight of landings has decreased over the period, but the value of landings increased. This shows a rise in average prices of key species. The fleet has been profitable (Table 5.6.3; Table 5.6.4).

Large scale fleet

The large scale fleet operates outside the coastal zone. The fleet is using mainly pelagic trawls and is divided into two size groups (12-18m and 24-40m). The fleet targets pelagic species such as sprat and herring, but also cod to a lesser extent. The size of the fleet decreased 44% between 2008 and 2013 (from 64 to 36 vessels). The main reason for that change was capacity reduction to achieve balance between the size of the fishing fleet and fishing opportunities. The decrease in quotas for the internationally regulated species (European sprat and Atlantic herring) was the main reason for decreases in total weight landed. Compared to the previous year economic indicators showed an increasing trend in 2013. The fleet has been profitable (Table 5.6.3; Table 5.6.4).

A short description of the two most important fleet segments in the Baltic Sea is provided below.

The **24-40m pelagic trawlers** are the most important segment in the Estonian fishing fleet in the Baltic Sea. In 2013 this fleet segment consisted of 29 active vessels accounting for a total of 3,845 GT and 9,352 kW. The number of vessels remained the same compared to 2012. Employment in 2013 was estimated at 170 jobs, corresponding to 170 FTEs. The segment targets pelagic species such as European sprat and Atlantic herring. The total value of landings was €9.6m in 2013. The fleet segment reported a gross profit of around €2.3m and a net profit of €940 thousand in 2013.

The segment with the highest number of vessels and employment in the Estonian fleet is the **0-10m passive gears** segment that operates in the coastal fishery. In 2013 this segment consisted of 1,222 vessels accounting for a total 1,448 GT and 15,062 kW. The number of vessels in this segment increased between 2012 and 2013. The employment in 2013 was estimated at 1,545 jobs, corresponding to 217 FTEs. The fleet targets mostly freshwater species, such as pikeperch, perch, but also marine species such as flounder and herring. The total value of landings was €3.9m in 2013. This fleet segment reported a gross profit of around €1m and a net profit of €651 thousand in 2013.

Assessment and Future Trends

The main management measures in Estonia are volume quotas (ITQs) in the open water fisheries (both Baltic and Atlantic trawling) and gear usage quotas (ITE; individual transferable effort) in the Baltic coastal fisheries. The Estonian experience shows that ITQs can be considered an effective method for increasing the allocation of fishing rights to the most efficient enterprises and speeding the process of reducing excessive fleet capacity. The number of trawlers has decreased significantly since the introduction of ITQs in 2001. There were 189 vessels in the trawling sector in 2000, and after 14 years this number decreased to 38 and is likely to decrease even further. However, the total number of vessels in the Estonian national fleet increased in 2013. The increase took place in the small scale fleet. As an amount of fishing capacity was released in other fleet segments the Ministry of Agriculture decided to use that in order to meet the additional need for the entry of small scale fishing vessels into the register.

The year 2013 was characterised by an increase in the sprat quota after two years decline, when the quota decreased by as much as 42%. Also there was a decline in fishery-related operating expenses in 2013 and a slight rise in the first-sale prices of key fish species (sprat and herring). The decline in operating expenses was mainly due to lower fuel costs and the higher first sales prices were primarily due to good export conditions. To increase sales and profits and alleviate the shortage of raw material, several Estonian fishing companies acquired subsidiaries in Finland and Lithuania. In Finland the fishing vessels owned by Estonians caught nearly a third of the sprat and herring quota of Finland. Fisheries subsidies paid in 2013 to fishing companies for investments in fishing vessels

amounted to €119 thousand. At the end of 2013, Russia's restrictions on imports in Russian Customs Union countries caused concern for companies operating in the fisheries sector. Although a slight increase in quotas is expected, in the coming years it will be particularly difficult to sell fish production because of the problems on the eastern market. Therefore, efforts are being made to find additional markets so as to diversify risks.

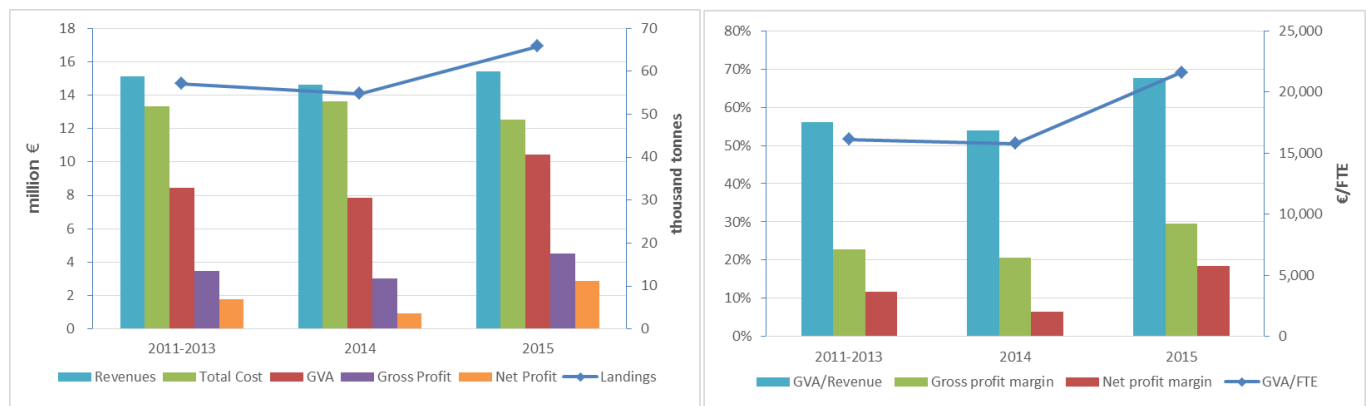
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According to BEMEF projections, the Estonian fishing fleet sees worsening economic performance in 2014 with landings falling by 4% and revenue falling by 3%. A slight increase in total costs (+2%) compounds the change and gross profit and net profit fall 12% and 46% respectively, although both values remain positive. The profit margins for the Estonian fleet also fall in 2014 (9% for gross profit and 44% for net profit) but remain in good shape at 21% and 7%.

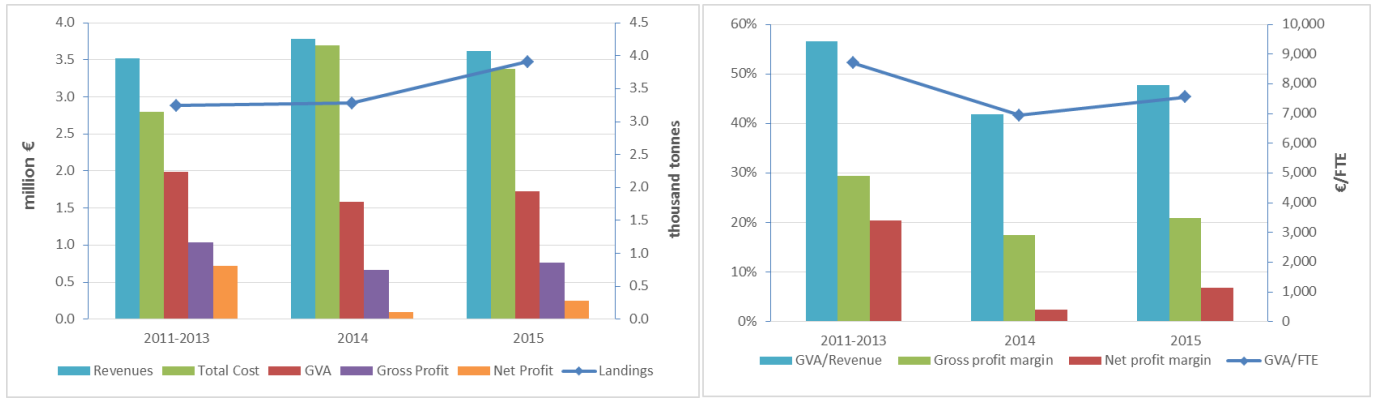
A large increase in herring TACs in 2015 leads to an increase in landings by 20%. While low herring prices only lift revenue by 5%, a drop in fuel prices and total costs (-8%) results in large gains for both gross profit (+50%) and net profit (+199%). GVA/Revenue rises to 68% and GVA/FTE rises 37% to €21,602 – a comparatively low level.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

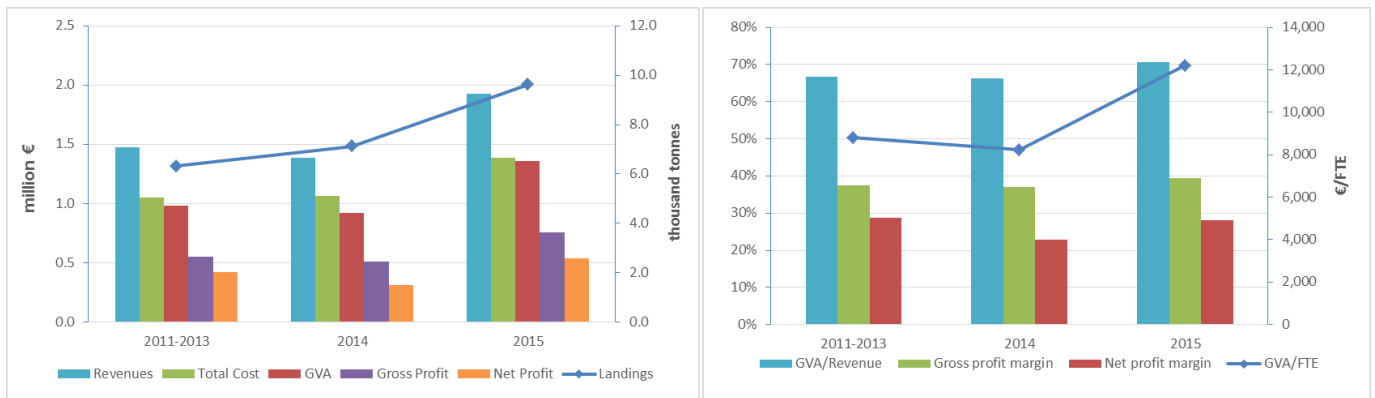
Figure 5.6.6 Estonia: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 Estonian fleets by gross earnings.



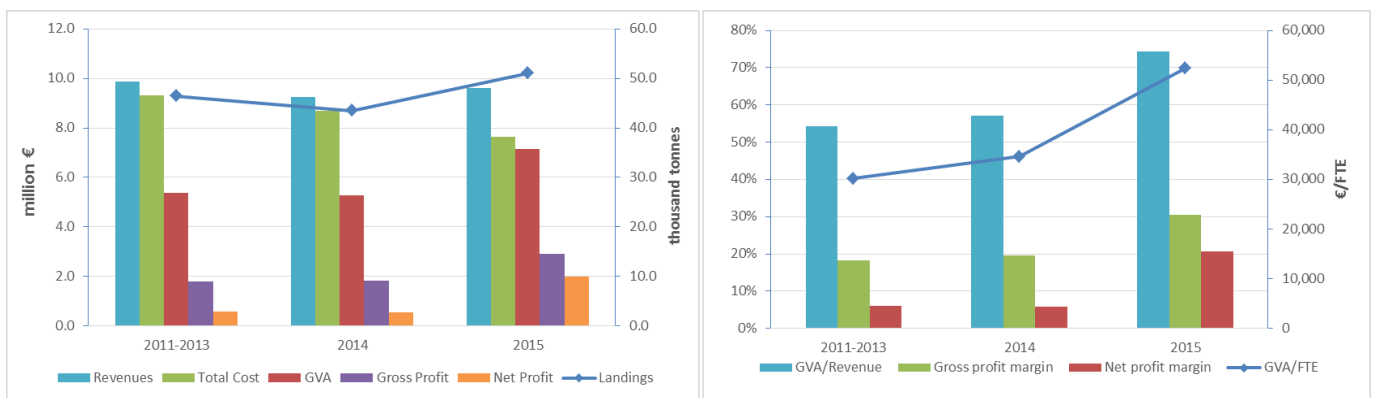
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.6.7 EST AREA27 PG VL0010: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

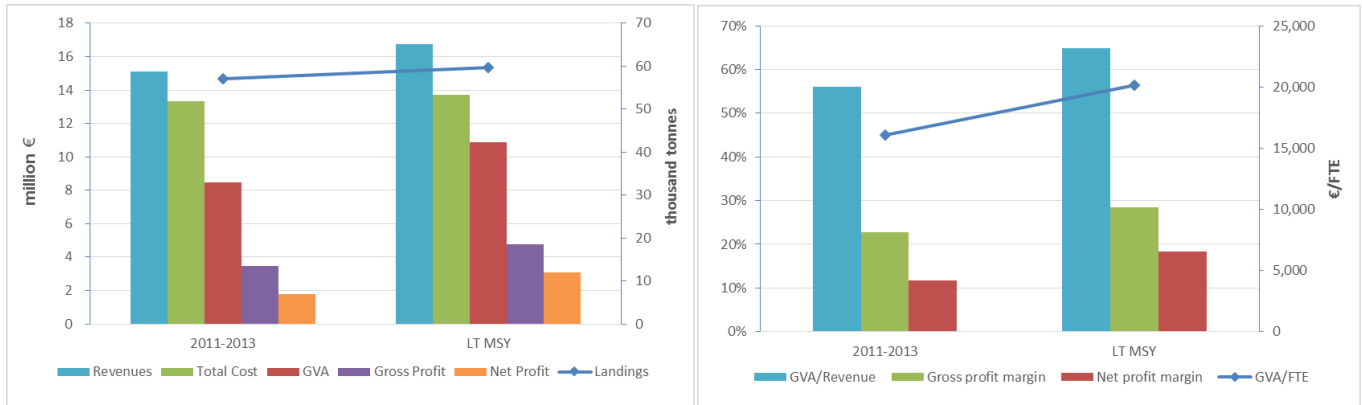
Figure 5.6.8 EST AREA27 PG VL1012: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.6.9 EST AREA27 TM VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, a state of long-term MSY sees a small improvement in the economic performance of the Estonian fleet. A 3% increase in total costs to €14 million is offset by an 11% increase in revenue to €17 million. Changes to profit are much larger, increasing 38% and 73% for gross and net profit respectively.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.6.10 Estonia: MSY projections for the main socio-economic indicators.

Data issues

There are no Estonian sovereign debt securities that comply with the definition of long-term (LT) interest rates for 2011-2014. Therefore, the averages calculated on the basis of the Latvian and Lithuanian LT interest rates were used in calculations of capital costs, net profit and net profit margin.

Due to confidentiality issues, the data for the deep-sea fleet (DTS VL40XX) are not reported. There were only three companies operating with 6 vessels in this segment. The effort data are missing for the coastal fisheries segments (PG VL0010 and PG VL1012) because they were not available.

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

Table 5.6.5 Main socio-economic performance indicators by fleet segment in the Estonian national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	% Δ	FTE (N)	% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ				
EST AREA27 PG VL0010	1222	55%	217	-15%					3,930	16%	2,903	-22%	2,076	-5%	9.6	12%	1,018	-18%	651	-30%	16.0	-40%	High	-6%	Deteriorated
EST AREA27 PG VL1012	78	-9%	122	15%					1,686	16%	6,711	34%	1,277	36%	10.5	18%	774	49%	632	57%	37.1	35%	High	186%	Improved
EST AREA27 TM VL1218*	7	0%	5	-44%	365	-7%	43	17%	199	-8%	932	-12%	114	-17%	22.8	50%	25	-66%	16	-73%	8.3	-70%	Reasonable	-4%	Stable
EST AREA27 TM VL2440*	29	0%	170	1%	2,950	-22%	2,159	-30%	9,630	1%	44,011	1%	5,727	22%	33.7	22%	2,338	138%	940	42241%	9.8	48900%	Reasonable	4%	Stable

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.6.6 Main socio-economic performance indicators by fleet segment in the Estonian national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		consumed per landed tonne		Energy costs		Operating costs		GVA		Net profit		%Δ 2013 to average (2008-12)	Economic development trend
	% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ	% Δ		% Δ				
EST AREA27 PG VL0010	0.2	-45%							867	-28%	643	24%	90	5%			325	-50%	2,504	-50%	2,504	-12%	1,699	-39%	533	-55%	-20%	Deteriorated
EST AREA27 PG VL1012	1.6	27%							6,449	31%	3,579	-10%	1,364	3%			2,453	-1%	11,915	-1%	11,915	9%	16,370	50%	8,099	73%	310%	Improved
EST AREA27 TM VL1218*	0.7	-45%	52	-7%	2,555	-6%	2,657	-2%	12,771	37%	17,557	170%	7,980	91%	46	34%	5,895	-19%	24,918	-19%	24,918	17%	16,299	-17%	2,347	-73%	-22%	Deteriorated
EST AREA27 TM VL2440*	5.9	1%	102	-22%	14,919	30%	15,623	31%	116,849	-8%	19,933	-8%	19,933	-5%	49	-31%	51,164	-39%	251,431	-39%	251,431	-12%	197,486	22%	32,405	42255%	4%	Stable

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.7 FINLAND

Fleet Structure, Fishing Activity and Production

The Finnish fishing fleet consisted of 3,241 registered vessels of which 1,509 were inactive in 2013; the active fleet consisted of 1,732 vessels, with a combined gross tonnage of 16 thousand GT and a total power of 171 thousand kW. The vast majority of the vessels were small scale. The number of active vessels decreased in 2013 by 60 vessels. In 2014 the number of active vessels increased again by 72 vessels.

The number of fishing enterprises in 2013 totalled 1,464, with the vast majority owning a single vessel. Only 22% of the enterprises owned two to five fishing vessels. Total employment in 2013 was estimated at 1,379 jobs. The majority of the jobs are created by the small scale fleet that is a seasonal fishery. Therefore, the employment in that sector is usually only part-time and in terms of FTE the total fleet added up to 361 FTEs (Table 5.7.1).

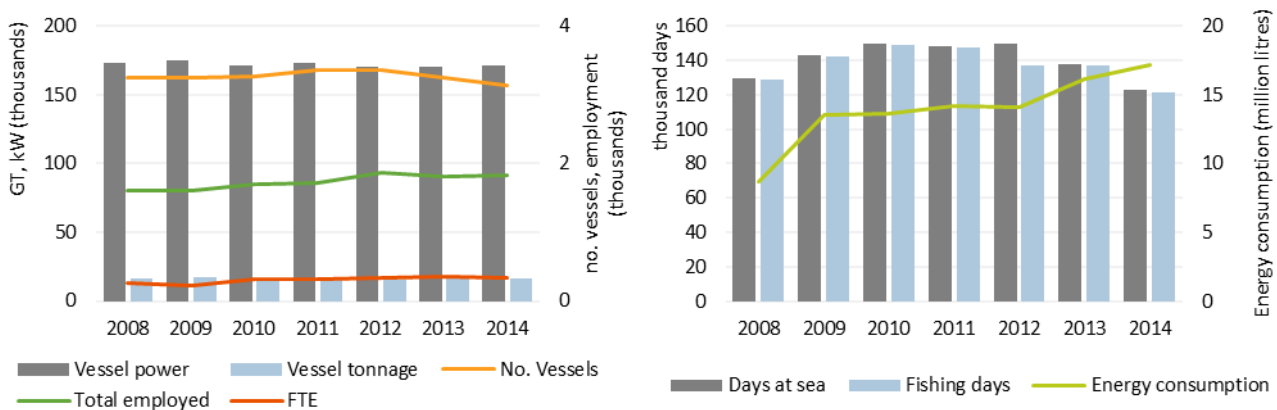
Table 5.7.1 Finnish national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	3,240	3,240	3,270	3,365	3,359	3,241	3,143	-4%	↘	0%
	No. of Inactive vessels (#)	1,687	1,709	1,662	1,716	1,567	1,509	1,406	-4%	↘	-11%
	Average vessel age (year)	24	24	24	25	25	26	27	2%	↗	10%
	Vessel tonnage (thousand GT)	16	17	16	17	16	16	16	5%	↗	0%
	Vessel power (thousand kW)	173	175	171	173	170	171	171	0%	↔	-2%
	No. of Enterprises (#)	1,492	1,467	1,543	1,599	1,441	1,464	1,352	2%	↗	-2%
Employment	Total employed (#)	1,613	1,609	1,703	1,722	1,865	1,817	1,822	-3%	↘	13%
	FTE (#)	264	229	313	324	346	361	345	4%	↗	37%
	Average wage per employed (thousand €)	6.0	6.7	4.3	5.2	5.8	5.5	5.7	-5%	↘	-9%
	Average wage per FTE (thousand €)	36.7	46.8	23.3	27.5	31.0	27.4	30.1	-11%	↘	-25%
Fishing Effort	Days at sea (thousand days)	130	143	150	148	149	138	123	-8%	↘	6%
	Fishing days (thousand days)	129	142	149	147	137	137	121	0%	↔	6%
	Energy consumption (million litres)	9	13	14	14	14	16	17	15%	↗	86%
	Energy consumption per landed tonne (l/T)	78	115	112	118	106	117	116	10%	↗	50%
Output	Landings weight (thousand tonnes)	112	118	122	120	133	138	148	4%	↗	24%
	Landings value (million €)	26	27	29	35	37	47	49	28%	↗	79%
	Recreational catches of selected species (T)	68	68	32	32	41	41	41	0%	↔	-40%

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.



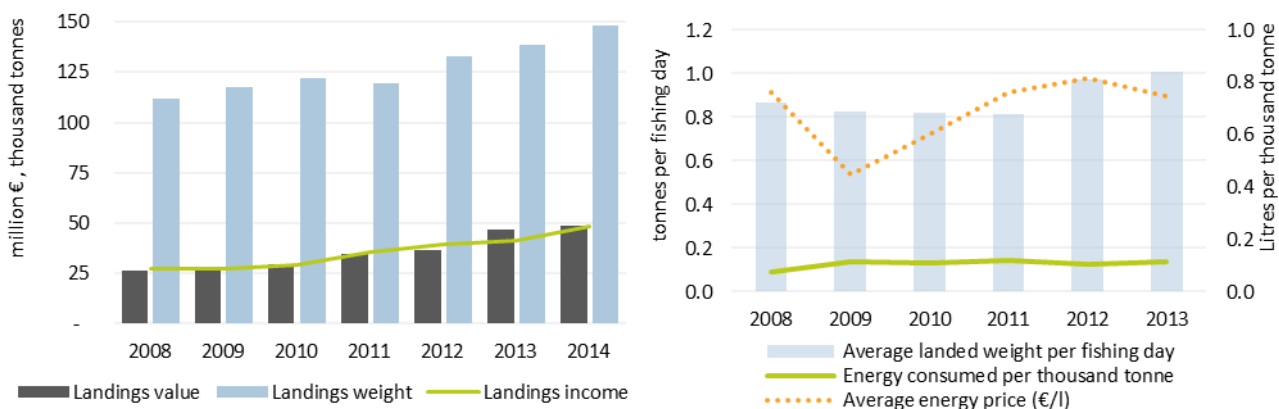
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.7.1 Finnish fleet main capacity and effort trends for the period 2008-2014.

The total effort in 2013 remained the same as the previous year, 13 thousand fishing days. The small scale fleet accounted for 96% of the total effort. The total weight landed by the Finnish fleet in 2013 was 138 thousand tonnes of seafood, with a landed value of €47m. The total value increased by 28% compared to 2012, while the weight of landings increased only by 4%. One reason for the increase in the volume of landings was an EFF project to remove nutrients from fish through intensive fishing on non-commercial species.

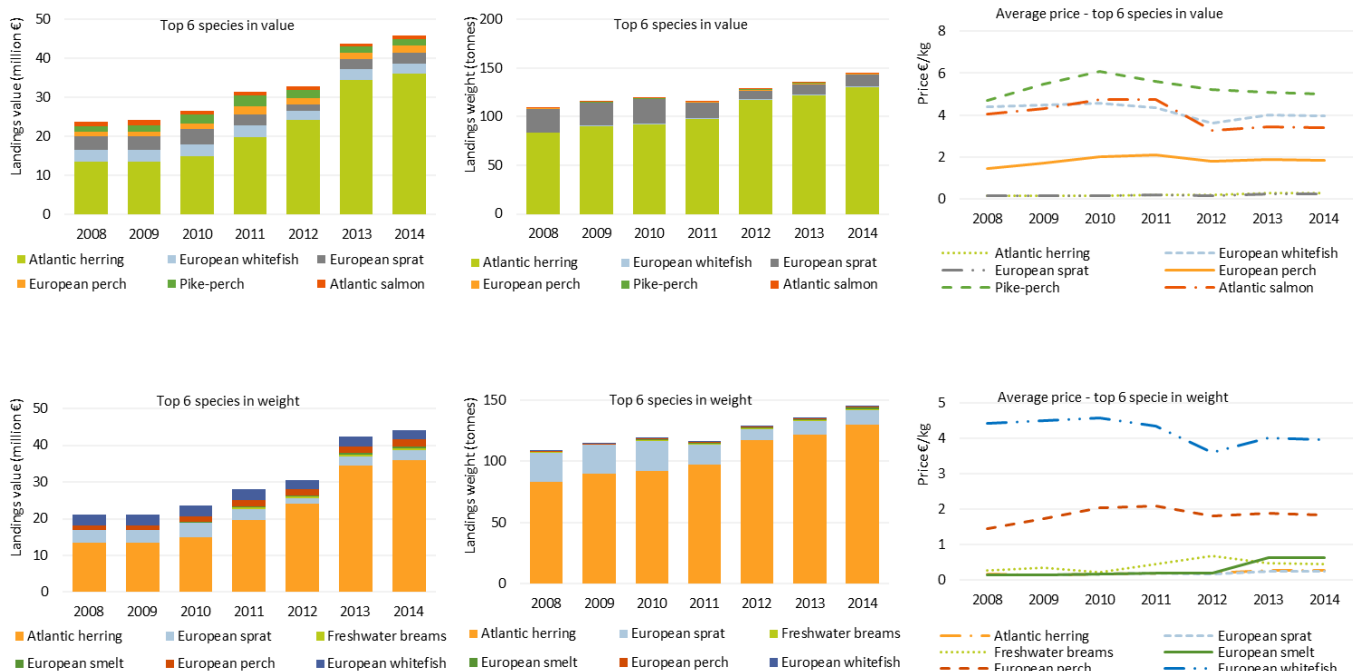
Pelagic species are the most important species for Finnish fisheries in terms of landing weight and value. In 2014 the value of pelagic species landed increased with increased prices due to a high demand for fishmeal: Baltic herring accounted for the highest landed value (€36.1m), followed by European sprat (€2.7m). European whitefish and pike-perch were the most important species for the small scale fleet (Figure 5.7.3).

The market situation for pelagic species improved in 2013 and the prices for Baltic herring and sprat increased. The development in prices of the main small scale fleet species varied. Prices have mostly showed a decreasing trend since 2010 but the price per kilo of the most valuable species, pikeperch, decreased since 2010.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.7.2 Landings in value and weight (and corresponding income from landings) by the Finnish national fleet and average price trends of top species in price for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.7.3 Finnish fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

National Fleet Economic performance

The total amount of income generated by the Finnish national fleet in 2013 was €43.6m; a marked improvement from the previous year. Income consisted of €41.6m in landings income and €2.0m in other income. Profitability decreased although the income increased; gross value added was €17.7m, 8% less than the year before. Gross profit decreased as well resulting in a negative net profit of €5.9m (Table 5.7.2; Figure 5.7.4). The economic performance decreased in both the small scale and the large scale fleet even though only the small scale fishing showed negative profits (Table 5.7.4); in that segment a large number of low activity vessels turned the overall net profit negative. However, fleet economic performance has been improving during the last few years.

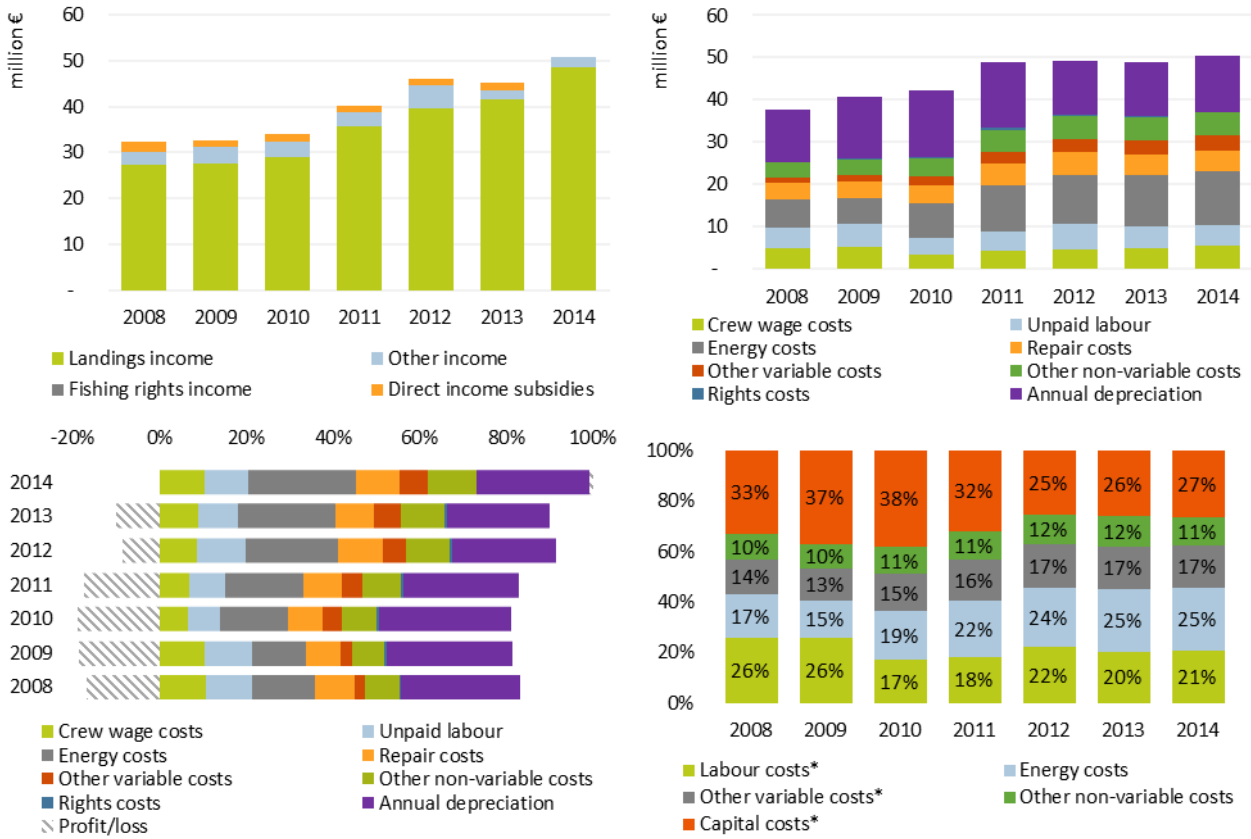
Table 5.7.2 Finnish national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	27.3	27.6	29.1	35.7	39.7	41.6	48.7	5%	↗	52%
	Other income	2.7	3.7	3.3	3.0	4.9	2.0	2.0	-60%	↘	-28%
Costs	Labour costs	9.7	10.7	7.3	8.9	10.7	9.9	10.4	-8%	↘	2%
	Energy costs	6.6	6.1	8.2	10.8	11.5	12.1	12.5	5%	↗	83%
	Repair costs	4.1	4.0	4.1	5.1	5.4	4.9	5.1	-9%	↘	20%
	Other variable costs	1.1	1.4	2.3	2.9	3.0	3.3	3.4	11%	↗	197%
	Other non-variable costs	3.6	3.8	4.2	5.2	5.3	5.5	5.6	4%	↗	53%
	Capital costs	12.6	15.4	16.4	15.5	12.4	12.8	13.4	3%	↗	2%
Economic Indicators	GVA	14.6	16.1	13.6	14.7	19.3	17.7	24.0	-8%	↘	21%
	Gross profit	4.9	5.4	6.4	5.8	8.6	7.8	13.7	-10%	↘	58%
	Net profit	-7.6	-9.9	-10.1	-9.7	-3.7	-5.0	0.3	-34%	↘	35%
Capital value	Depreciated replacement value	38.4	43.1	46.6	46.3	38.7	38.5	39.6	-1%	↔	0%
	Investments	9.4	14.5	15.2	9.5	6.8	10.3		52%	↗	10%
Profitability and development trends	Net profit margin (%)	-25.4	-31.8	-31.0	-25.1	-8.4	-11.5	0.5	-37%	↘	55%
	<i>development trend</i>								53%	↗	
	RoFTA (%)	-19.5	-20.9	-20.3	-21.2	-10.9	-13.3	0.67	-22%	↘	32%
	<i>development trend</i>								28%	↗	
Profitability and development trends	GVA per FTE (thousand €)	55.4	70.4	43.6	45.4	55.9	49.0	69.7	-12%	↘	-11%
	<i>development trend</i>								-9%	↘	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

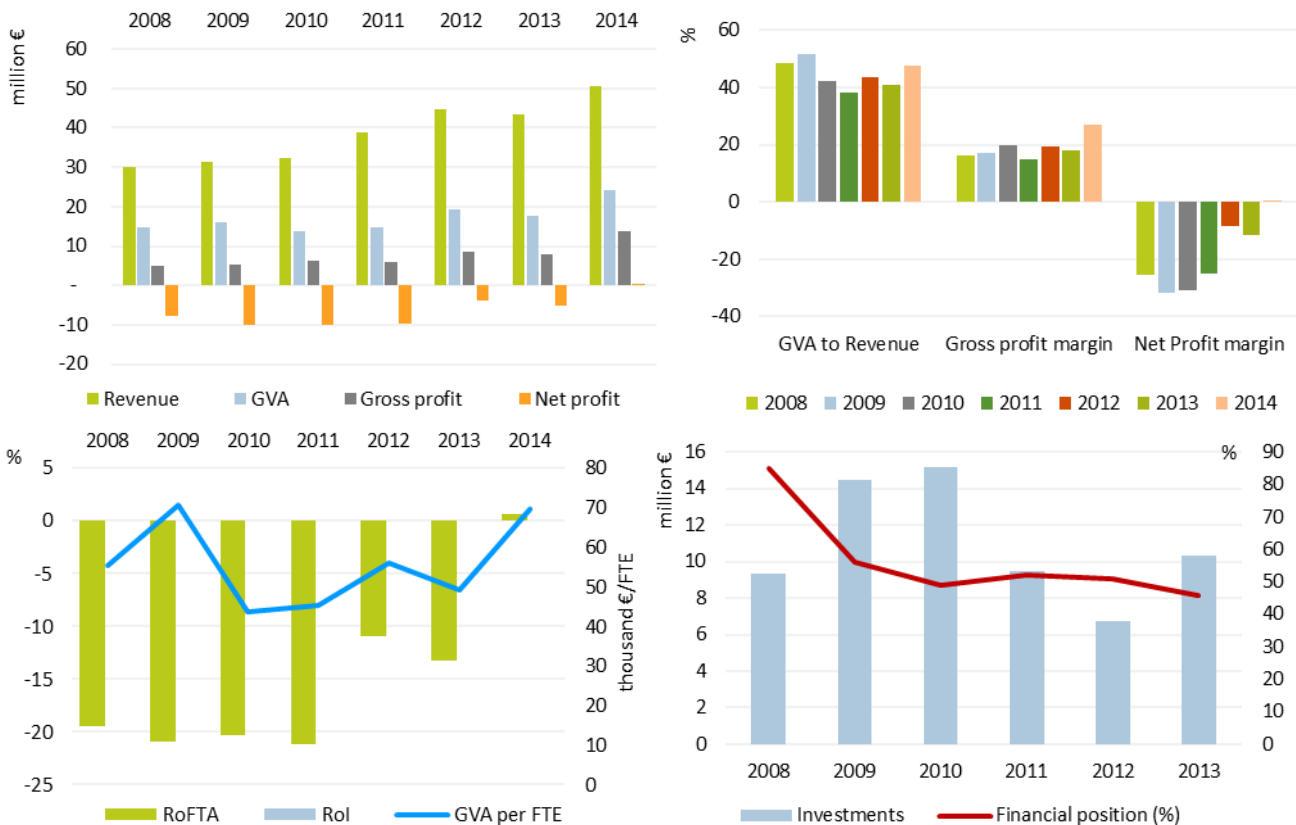
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Figure 5.7.4 Income and cost structure trends for the Finnish fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Figure 5.7.5 Main economic performance indicator trends for the Finnish fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Table 5.7.3 Finnish national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	1,486	1,465	1,559	1,589	1,735	1,674	1,674	-4%	↘	67	66	60	60	62	59	63	-5%	↘
Average vessel age (year)	21.7	22.0	22.8	23.4	23.1	23.6	24.1	2%	↗	33.0	35.1	36.4	34.7	34.9	36.8	36.9	6%	↗
Average vessel length (m)	6.8	6.7	6.8	6.8	6.4	6.4	6.4	0%	↔	20.7	21.0	22.0	23.5	22.5	23.0	22.4	2%	↗
Vessel tonnage (thousand GT)	4.1	3.8	4.1	4.2	4.0	3.9	4.1	-1%	↘	7.1	7.5	7.6	9.2	8.6	8.3	8.6	-3%	↘
Vessel power (thousand kW)	71.9	68.8	74.9	75.8	76.5	75.6	77.9	-1%	↘	27.2	27.7	27.1	31.3	30.3	28.8	30.3	-5%	↘
Total employed (#)	1,486	1,465	1,560	1,589	1,729	1,674	1,674	-3%	↘	127	144	143	133	136	143	148	5%	↗
FTE (#)	178	135	220	216	238	258	231	8%	↗	86	94	93	108	108	103	114	-5%	↘
Average wage per employed (thousand €)	2.7	3.4	2.5	2.5	3.2	2.6	2.5	-20%	↘	44.8	40.2	24.2	37.0	38.0	39.2	42.4	3%	↗
Average wage per FTE (thousand €)	22.5	36.5	17.4	18.5	23.3	16.7	17.9	-29%	↘	67.4	61.2	37.3	45.5	47.9	54.4	55.0	14%	↗
Days at sea (thousand days)	124.0	138.0	145.1	142.8	131.6	131.8	115.9	0%	↔	5.6	5.0	4.6	5.4	6.0	6.1	6.8	1%	↗
Fishing days (thousand days)	123.9	137.8	144.8	142.5	131.2	131.5	115.5	0%	↔	4.8	4.6	4.1	4.8	5.5	5.5	6.0	-1%	↔
Energy consumption (million litres)	1.7	2.6	2.3	2.0	1.7	1.6	1.5	-7%	↘	6.9	10.9	11.3	12.1	12.4	14.6	15.8	18%	↗
Energy consumption per landed tonne (l/T)	206	278	230	202	128	88	76	-32%	↘	67.2	100.5	100.9	110.7	103.4	121.1	122.3	17%	↗
Landings weight (thousand tonnes)	8.4	9.4	10.2	10.1	13.1	17.9	19.2	36%	↗	103.1	108.1	111.9	109.6	119.8	120.5	128.8	1%	↔
Landings value (million €)	8.4	9.2	9.9	11.5	10.8	12.6	12.6	17%	↗	18.0	17.5	19.4	23.4	26.1	34.6	36.1	32%	↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Table 5.7.4 Economic performance of the Finnish national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			
Income	Landings income	10.0	10.2	10.6	11.6	12.3	11.5	11.4	-6%	↘	17.4	17.4	18.5	24.1	27.6	30.1	37.2	9%	↗
	Other income	2.4	3.1	2.1	2.0	2.8	1.1	1.1	-60%	↘	0.3	0.6	1.2	0.9	2.0	0.8	0.9	-60%	↘
	Direct income subsidies	2.4	1.5	1.5	1.5	1.5	1.8		19%	↗	0.0	0.01	0.01	0.02	0.02	0.0			
	Fishing rights income																		
Costs	Labour costs	4.0	4.9	3.8	4.0	5.6	4.3	4.1	-23%	↘	5.7	5.8	3.5	4.9	5.2	5.6	6.3	8%	↗
	Energy costs	1.9	1.1	1.4	1.6	1.7	1.3	1.2	-22%	↘	4.8	4.9	6.8	9.2	9.8	10.8	11.3	10%	↗
	Repair costs	1.9	1.7	1.9	2.1	2.3	1.7	1.6	-26%	↘	2.2	2.3	2.2	3.0	3.2	3.2	3.5	3%	↗
	Other variable costs	0.5	0.8	1.0	1.1	1.2	1.2	1.1	7%	↗	0.6	0.6	1.3	1.8	1.9	2.1	2.3	13%	↗
	Other non-variable costs	2.0	2.1	2.1	2.4	2.3	2.1	2.2	-8%	↘	1.6	1.6	2.1	2.8	3.0	3.4	3.5	13%	↗
	Capital costs	7.5	7.4	8.3	7.1	6.6	7.1	7.4	7%	↗	5.1	8.0	8.1	8.4	5.8	5.7	6.0	0%	↔
Capital value	Depreciated replacement value	23.4	21.7	24.9	22.5	21.3	22.3	23.0	5%	↗	15.0	21.4	21.6	23.8	17.4	16.1	16.6	-8%	↘
	Investments	6.7	6.1	8.3	4.4	4.7	6.4		38%	↗	2.6	8.4	6.9	5.1	2.1	3.9		83%	↗
Economic indicators	GVA	6.1	7.6	6.3	6.4	7.6	6.3	6.5	-18%	↘	8.5	8.6	7.4	8.3	11.7	11.4	17.5	-2%	↘
	Gross profit	2.1	2.6	2.5	2.4	2.1	2.0	2.4	-6%	↘	2.8	2.8	3.9	3.4	6.5	5.8	11.3	-11%	↘
	Gross profit margin	17.2	19.7	19.3	17.9	13.9	15.6	18.8	12%	↗	15.9	15.6	19.8	13.4	22.1	18.8	29.6	-15%	↘
	Net profit	-5.4	-4.8	-5.8	-4.6	-4.5	-5.1	-5.0	-13%	↘	-2.3	-5.2	-4.2	-5.1	0.8	0.1	5.3	-88%	↘
Profitability and development trends	Net Profit margin	-43.3	-35.8	-45.9	-33.9	-29.9	-40.3	-40.0	-35%	↘	-12.8	-28.8	-21.5	-20.3	2.6	0.3	13.9	-89%	↘
	development trend				Deteriorated				-7%	↘				Improved				102%	↗
	RoFTA (%)	-22.6	-19.8	-22.2	-20.8	-22.4	-23.1	-21.6	-3%	↘	-14.7	-22.1	-18.3	-21.6	3.3	0.2	32.2	-93%	↘
	development trend				Deteriorated				-7%	↘				Improved				102%	↗
GVA per FTE (thousand €)		34.4	55.9	28.5	29.8	32.1	24.3	28.2	-24%	↘	98.8	91.3	79.2	76.6	108.3	110.9	154.2	2%	↗
	development trend				Deteriorated				-33%	↘				Improved				22%	↗

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Fleet Segment Level Economic performance

The Finnish fleet operates exclusively in the Baltic Sea and is based on two main fisheries: pelagic trawlers and the small scale fleet. Pelagic trawlers are divided into three segments. The small scale fleet is highly diversified with a range of vessel types targeting species in waters along the Finnish coastline (Table 5.7.3).

Passive gears 0-10m and 10-12m – The coastal small scale fleet is the biggest Finnish fleet segment in terms of number of boats with 1,674 vessels in 2013. The small scale fleet consists of diversified vessels targeting mainly freshwater fish species; European whitefish, pike-perch and perch. In 2013,

the total value of landings of the **small-scale fishery** (including 10-12m vessels) was €12.6m making a positive gross value added of €6.3m. Gross profit margin was 16% but it was not high enough to cover the estimated capital costs: the small scale fleet made losses of €5m.

The coastal fleet is highly seasonal, and there is also a high variation in the activity of the vessels; the 500 most active fishing units make up around 90% of the total landings. The average vessel landings value is only €7,500 while the 500 most active vessels have an average landing value of €17,000. Evidently the economic performance of the most active part of the segment is quite different than that of the remainder. The economic performance of the small scale segment as a whole deteriorated from 2013 and the profitability was highly negative (Table 5.7.3; Table 5.7.4; Table 5.7.5).

Pelagic trawlers 24-40m – This fleet is economically the most important. It targets herring and sprat in the Baltic Sea. In 2013 these 21 vessels accounted for more than half of the total value landed by the Finnish fleet and employed 73 FTE. On average these vessels landing income is €1.3m, employing 3.5 FTEs. The fleet segment generated Gross Value Added of €7.8m: €107 thousand per FTE. In 2013 the Gross profit margin was 14% which was not quite high enough to cover the estimated capital costs and the fleet was making losses totalling €200 thousand with a net profit margin of -0.8%

Pelagic trawlers 18-24m – This fleet segment consisted of 16 vessels in 2013. They also target Baltic herring and sprat. The average vessel landings value was €347 thousand, second highest in the Finnish fleet and average on-board employment is 1.1 FTE. The segment generated €2m of Gross Value Added: €126m per FTE but was making losses totalling €120 thousand.

Pelagic trawlers 12-18m – This is the smallest pelagic trawler segment in terms of individual vessel size and consists of 24 vessels. The average vessel landings value was significantly lower than that of the bigger vessels, only €86,000. An average vessel employed less than one FTE. The Gross Value added per FTE was similar to that in the bigger vessels: €113 thousand. Never the less, this fleet segment was making profits totalling €421 thousand with a decent net profit margin of 16.5%.

Assessment and future trends

Baltic herring stocks are currently exceptionally strong especially in the most important fishing grounds in Botnian Bay. Catches of herring have been increasing and 2014 catches were the highest recorded. The market situation has also been favourable with high demand in the fishmeal industry due to the cuts in sandeel quotas. Therefore the economic performance of the pelagic trawlers has been strong. However the Russian markets have been important for the pelagic fish and the Russian embargo on EU food stuff as a countermeasure to EU sanctions due to the Ukraine crisis already had implications in 2014. These will influence the pelagic market this year and will most likely turn down the positive development of the pelagic segment.

Increased seal populations have strongly influenced the Finnish coastal fishery for several years. Many fishermen have had to stop fishing in traditional grounds. There has been EFF funding to support small scale coastal fishermen to continue fishing. Also there has been another EFF pilot project to subsidise intensive fishing for low value fish (mostly cyprinid fish) to remove nutrients from the water system. This has contributed to a new method of fishing and created new markets for non-commercial species.

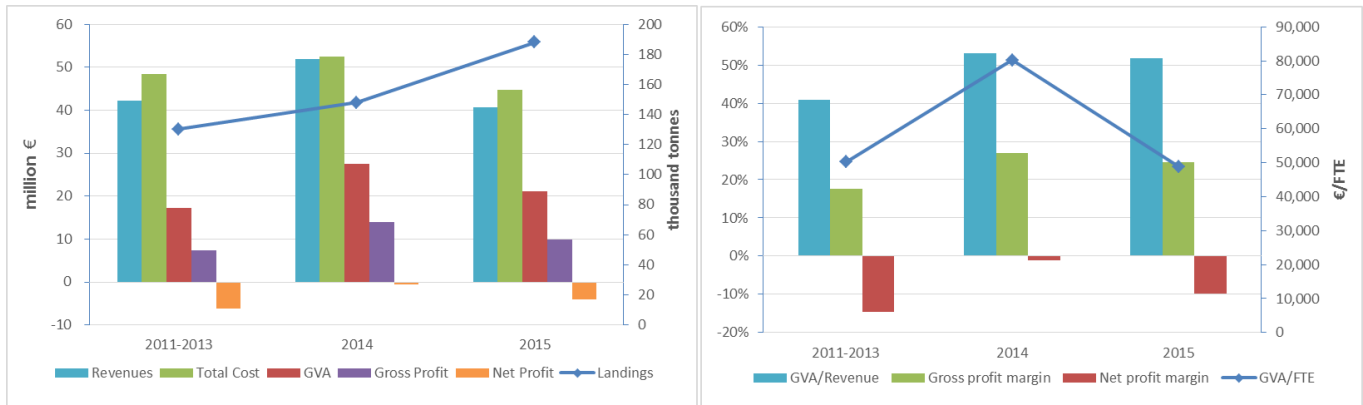
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According to BEMEF projections, the Finnish fishing fleet sees improved economic performance in 2014 with landings increasing by 14% and revenue increasing by 23%. GVA increases by 60% to €28 million and with stable employment GVA/FTE also increases 60% to €80,000.

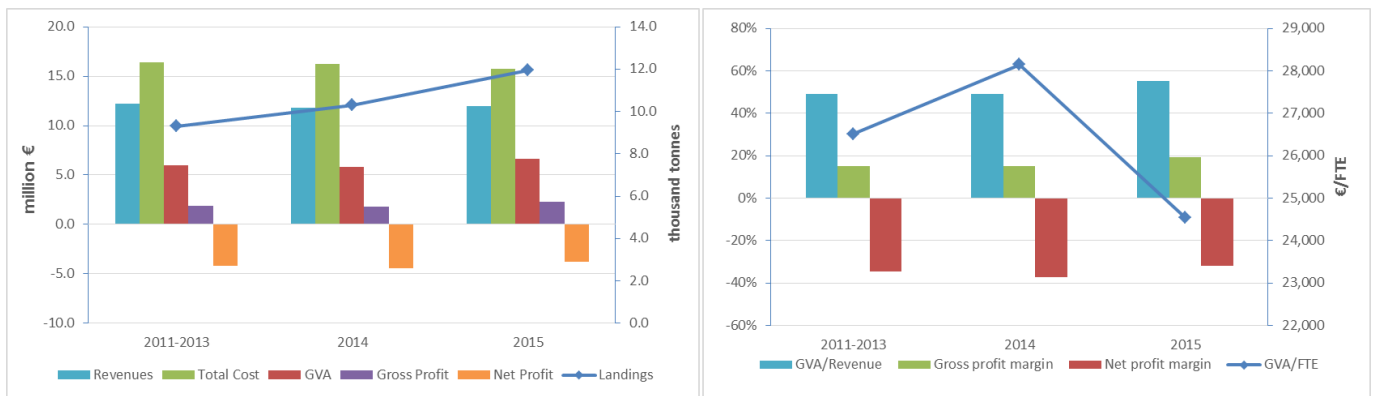
Low herring prices in 2015, particularly so in Finland, mean that a dramatic increase in landings (27%) still results in a fall in revenue (-22%). Net profit fall by -627% to -€4 million will a net profit margin of -10%.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

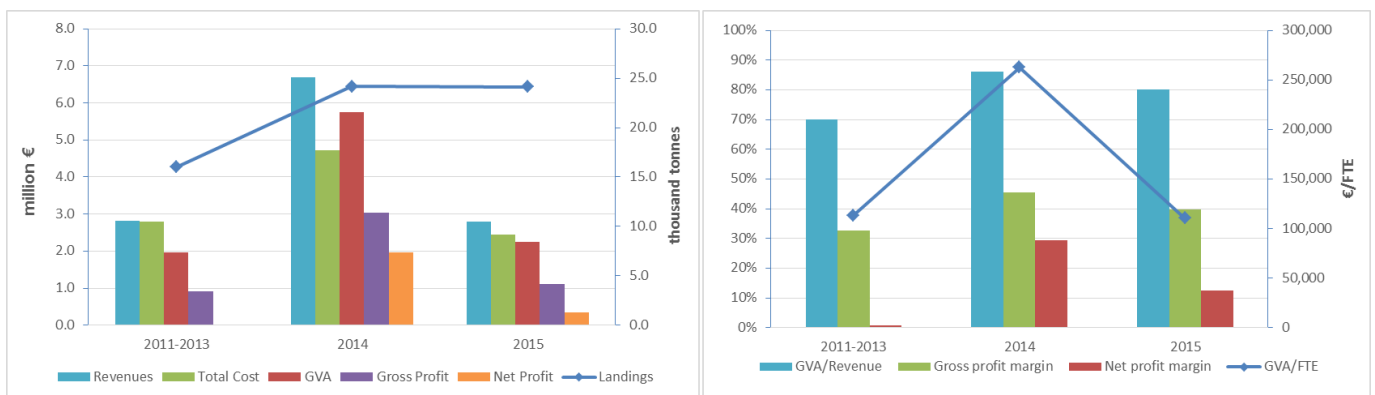
Figure 5.7.6 Finland: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 Finnish fleets by gross earnings



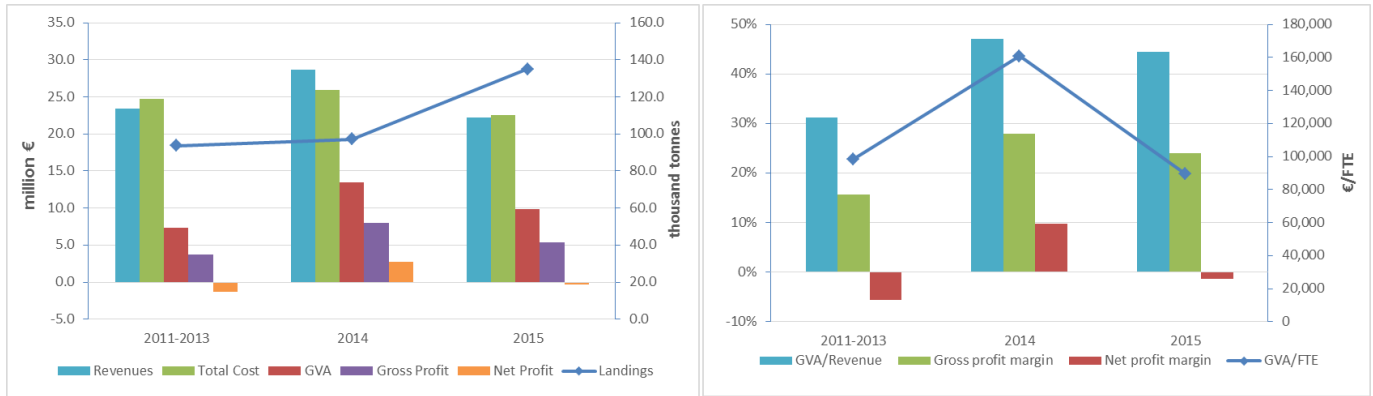
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.7.7 FIN AREA27 PG VL0010: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

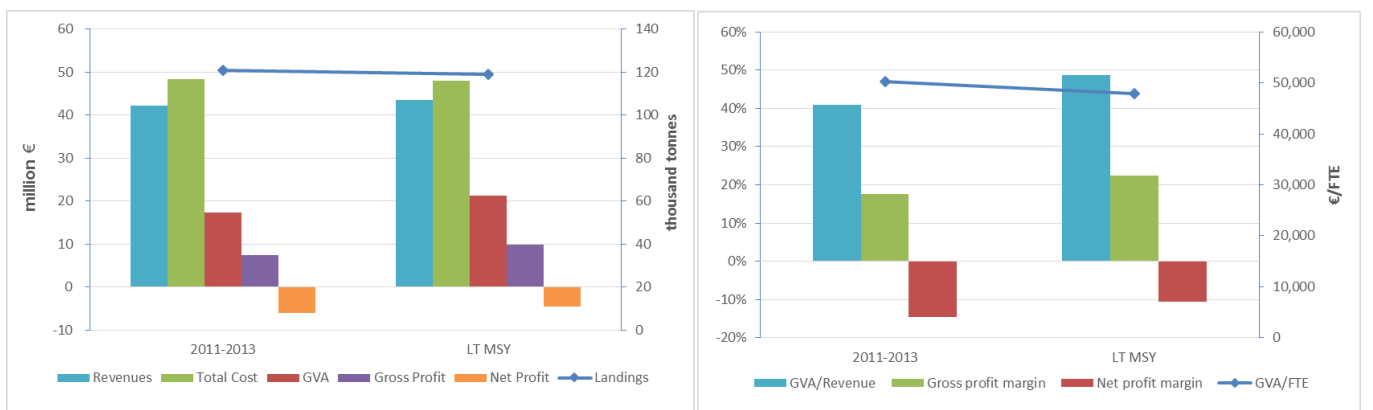
Figure 5.7.8 FIN AREA27 TM VL1824: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.7.9 FIN AREA27 TM VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, the Finnish fishing fleet is the only Member State to see a decrease in landings at a state of long-term MSY. Still, an increase in revenue (3%) and decrease in total costs (-1%) results in improved economic performance with gross profit increasing 32% to €10 million and net profit increasing 25%, although still in the red at -€5 million.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.7.10 Finland: MSY projections for the main socio-economic indicators.

Data issues

Capacity, logbook and landings data are derived from sources which are covered by different legislation. All these data are available exhaustively. The bigger vessels are covered by log-books and smaller vessels are covered by the coastal fishing report.

Economic data collection is based on a hierarchical multi-stage survey that combines information from different data sources. The main sources were the central control register on the commercial fishery (includes landings data, the vessel register, and first hand sales of quota species), the financial database in Statistics Finland (SF) and an additional account survey. Starting in 2009, new account data became available for the coastal fishermen collected by the Ministry of Agriculture and Forestry in connection to seal damage compensation applications.

Due to the good coverage of the data collection and an efficient estimation method the achieved precision of the economic variables is satisfactory. However there is a break in the time series of the number of active vessels in small scale fishing in 2012 when the recording of active vessels was re-specified. This increased the number of active vessels in the fleet.

Finland has modified the assumptions used in the Perpetual Inventory Method (PIM) regarding service life of each asset, depreciation rates and share of each asset in total value as well as the price per capacity used. These updates have greatly affected depreciated replacement values and the depreciation reported for 2008-2013 affecting also the net profits of the sector.

Table 5.7.5 Main socio-economic performance indicators by fleet segment in the Finnish national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ				
FIN AREA27 PG VL0010	1620	-4%	247	11%	130,517	1%	1,398	6%	10,187	3%	9,657	-4%	5,580	-12%	22.6	-21%	1,668	10%	4,585	-12%	-40.7	-26%	Weak	-13%	Deteriorated
FIN AREA27 PG VL1012*	54	-2%	11	-27%	1,280	-36%	170	-53%	2,367	170%	8,249	170%	691	-47%	62.9	-27%	303	-48%	497	-24%	-36.6	-118%	Weak	49%	Improved
FIN AREA27 TM VL1218*	24	0%	14	0%	1,177	-10%	320	18%	2,073	7%	6,385	-21%	1,587	71%	113.4	71%	1,069	178%	421	216%	16.5	192%	High	147%	Improved
FIN AREA27 TM VL1824	14	8%	16	-11%	1,328	18%	338	-35%	4,862	45%	17,466	12%	2,014	-16%	125.9	-6%	990	-19%	123	-131%	-4.4	-137%	Weak	65%	Improved
FIN AREA27 TM VL2440*	21	5%	73	-4%	3,545	5%	13,936	21%	27,637	33%	96,630	1%	7,826	-6%	107.2	-3%	3,763	-23%	208	-128%	-0.8	-126%	Weak	94%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AÇ(2015)).

Table 5.7.6 Main socio-economic performance indicators by fleet segment in the Finnish national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		consumed per landed tonne		Energy costs		Operating costs		GVA		Net profit		%Δ 2013 to average (2008-12)	Economic development trend
	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ			
FIN AREA27 PG VL0010	0.2	15%	81	4%	74	-5%	74	-5%	2,415	-16%	2,534	-18%	386	-6%	145	11%	737	-12%	5,923	-12%	5,923	-11%	3,444	-9%	2,830	-16%	1%	Stable
FIN AREA27 PG VL1012*	0.2	-26%	24	-35%	6,445	322%	8,111	313%	7,199	-45%	8,782	-20%	1,789	-47%	21	-83%	2,447	-56%	19,526	-56%	19,526	-40%	12,804	-46%	9,199	-27%	37%	Improved
FIN AREA27 TM VL1218*	0.6	0%	49	-10%	5,425	-12%	5,425	-12%	21,592	-5%	10,388	563%	6,323	476%	50	49%	9,842	-5%	61,860	-5%	61,860	-9%	66,130	71%	17,529	216%	190%	Improved
FIN AREA27 TM VL1824	1.1	-17%	95	9%	13,152	-5%	14,954	7%	73,103	-19%	50,851	0%	33,901	-26%	19	-42%	17,794	-44%	128,075	-44%	128,075	-23%	143,843	-22%	8,756	-128%	51%	Improved
FIN AREA27 TM VL2440*	3.5	-8%	169	0%	27,258	-5%	31,131	-6%	193,469	12%	44,629	18%	33,937	13%	144	20%	489,659	8%	1,038,978	8%	1,038,978	8%	372,664	-11%	9,889	-127%	93%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AÇ(2015)).

5.8 FRANCE

Fleet Structure, Fishing Activity and Production

On 1st January 2014, the French fishing fleet consisted of 7,121 vessels (including non-active vessels) against 7,125 vessels on 1st January 2013, with a total power of 1,022 MW, against 1,000 MW in 2013. It is an aging fleet with an average age of 24 years against 23 in 2013 and 20 in 2008.

On 1st January 2013, the distribution of the French fleet was as follows: (a) 4,495 vessels in metropolitan France - 3,019 in the Atlantic area, including vessels less than 12 meters such as netters, trawlers, vessels using pots, vessels using hooks, dredgers and polyvalent vessels, and vessels more than 12 meters consisting of mainly trawlers, netters and dredgers and 1,476 in the Mediterranean area, mainly small scale fleet (almost 90% of active vessels) including netters and polyvalent vessels and vessels more than 12 meters were trawlers and purse seiners and (b) 2,630 vessels in overseas territories (French West Indies: Martinique & Guadeloupe, French Guyana and Reunion), mainly small scale fleets (95% of active vessels) such as polyvalent vessels, vessels using hooks or pots, netters, some purse seiners less than 12 meters, and some vessels more than 12 meters such as demersal trawlers, tropical purse seiners targeting tuna in South Atlantic and Ocean India and vessels using hooks (Reunion island). Among these vessels, 5,908 were active in 2013, with a combined gross tonnage of 156 thousand GT, a total power of 876 MW and an average age of 23 years.

The size of the French fleet decreased between 2008 and 2014, with the number of vessels decreasing 10% (or 794 vessels), and GT and engine power decreasing 11% and 5%, respectively. The major factors causing the fleet to decrease in size were vessel decommissioning schemes, entry barriers and natural wastage due to age.

In 2013, the number of fishing enterprises totalled 6,059, with the vast majority (more than 80%) owning a single vessel. The percentage of individual companies decreased slightly over the years.

Total employment in 2013 was estimated at 10,262 jobs, corresponding to 7,150 FTEs. The level of employment decreased between 2009 and 2013, with total number of employed persons decreasing 14% (1,698 jobs) and FTEs decreasing 21% (1,908 FTEs) over the period (Table 5.8.1; Figure 5.8.1). The major factor causing employment to decrease was the reduction of the number of vessels. The small-scale fleet represented 31% of national fleet in terms of FTEs (2,250 FTEs) in 2013 against 33% in 2009.

Table 5.8.1 French national fleet structure, fishing activity and production trends: 2008-2013/ 14

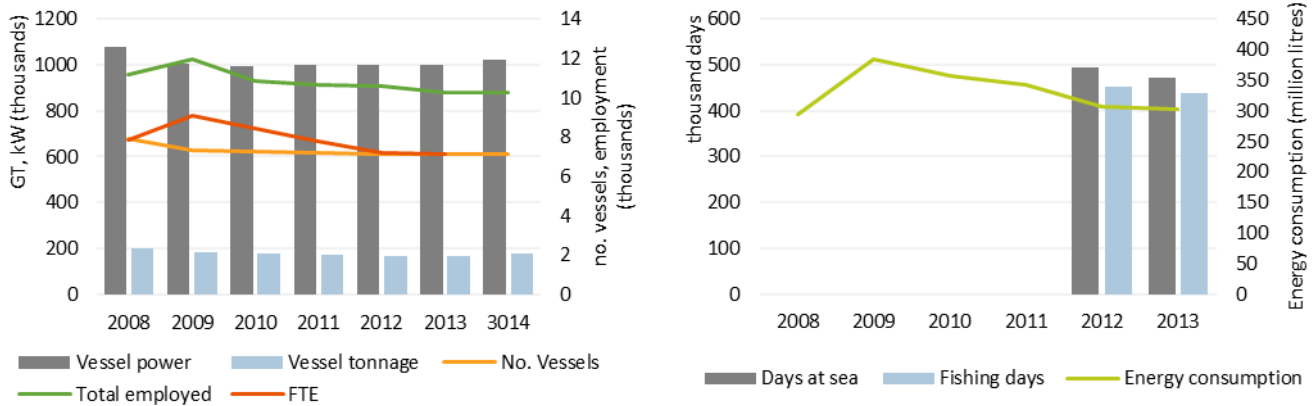
Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend	
Structure	Total No. Vessels (#)	7,919	7,290	7,234	7,211	7,144	7,125	7,121	0%	↔	-10%	
	No. of Inactive vessels (#)	1,314	815	953	1,027	1,132	1,217		8%	↗		
	Average vessel age (year)	20	21	21	22	22	23	24	3%	↗	18%	
	Vessel tonnage (thousand GT)	197	185	174	171	168	164	175	-2%	↘	-11%	
	Vessel power (thousand kW)	1,076	1,008	995	1,002	999	1,000	1,022	0%	↔	-5%	
	No. of Enterprises (#)	6,111	6,389	6,323	6,276	6,171	6,120	6,059	-1%	↔	-1%	
Employment	Total employed (#)	11,140	11,960	10,872	10,657	10,578	10,262	10,256	-3%	↘	-8%	
	FTE (#)	7,841	9,058	8,403	7,750	7,180	7,150		0%	↔	-9%	
	Average wage per employed (thousand €)	38.2	36.4	37.7	39.5	36.3	38.8		7%	↗	2%	
	Average wage per FTE (thousand €)	54.2	48.1	48.8	54.2	53.5	55.7		4%	↗	3%	
Fishing Effort	Days at sea (thousand days)					494.8	470.6		-5%	↘		
	Fishing days (thousand days)					452.0	437.3		-3%	↘		
	Energy consumption (million litres)	294.6	383.5	357.3	341.6	306.2	302.3		-1%	↘	3%	
	Energy consumption per landed tonne (l/T)	679.0	888.9	798.5	736.7	605.4	588.1		-3%	↘	-13%	
Output	Landings weight (thousand tonnes)	434	431	447	464	506	514		2%	↗	18%	
	Landings value (million €)	978	947	982	1,091	1,088	1,111		2%	↗	14%	
	Recreational catches of selected species (T)	27.2	78.2	3,315	44.8							

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

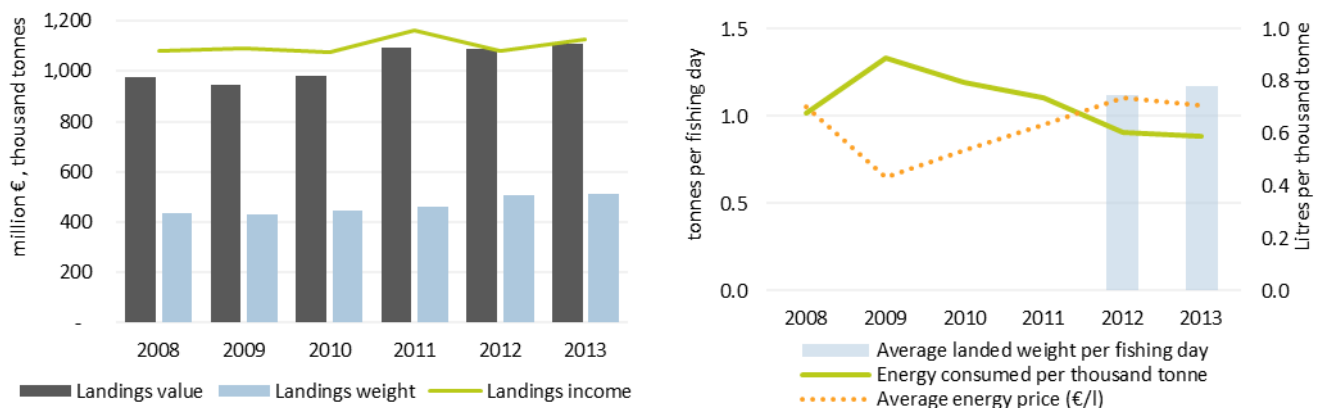
In 2013, the French fleet spent a total of around 471 thousand days at sea; 48% of those were attributable to the small-scale fleet, which represented 73% of active vessels. The quantity of fuel consumed in 2013 totalled around 302 million litres, a reduction of around 1% compared to 2012, and 21% compared to 2009. The major factors causing the decrease in fuel consumption included the decrease in vessel number and the increase in fuel price. Lower fuel prices may explain why the decrease in fuel consumption was slightly less in 2013. Average fuel consumption in 2013 decreased 14% compared to 2009 but increased slightly (0.5%) compared to 2012. On the other hand, energy consumption per landed tonne decreased 3% compared to 2012.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.8.1 French fleet main capacity and effort trends for the period 2008-2013/14

The total weight landed by the French fleet in 2013 was 514 thousand tonnes, with a landings value of €1,111 million. Total landings in weight increased slightly between 2012 and 2013 (+2%), as did landings in value (+2%), showing a stable average price for all species during the period.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Figure 5.8.2 Landings in value and weight (and corresponding income from landings) by the French national fleet and some efficiency indicators for the period 2008-2013

In 2013, 'monkfish' landings generated the highest value by the national fleet (€97 million), followed by 'common sole' (€86.5 million), 'yellowfin tuna' (€85.9 million), 'European hake' (€75.4 million), Great Atlantic scallop (€71.6 million) and European seabass (€57 million).

In terms of landed weight of fish species, 'yellowfin tuna' generated the highest value (41.8 thousand tonnes) in 2013, followed by 'European hake' (32 thousand tonnes) and 'Atlantic herring' (30.1 thousand tonnes).

The overall price stability between 2012 and 2013 in fact conceals different trends depending on the species: for example, - 9% for common sole, - 4% for yellowfin tuna, + 3% for European seabass.

The total weight landed by the French small-scale fleet in 2013 was 83 thousand tonnes with a landed value of €184.5 million, representing 16% of the total weight and 16.6% of the total value of the national fleet. In terms of species, 'sole' generated the highest landed value by the small-scale fleet (€31 million), followed by 'bass' (€25 million), 'whelk' (€19 million).

The total weight landed by the French large-scale fleet in 2013 was 351.8 thousand tonnes, with a landed value of €788.9 million, and represented respectively 68.5% and 71% of the total landings weight and values of the national fleet.

The total weight landed by the French distant-water fleet in 2013 (the purse seiners in Reunion island) was 79.3 thousand tonnes with a landed value of €137.9 million (including €85 million for yellowfin tuna and €41 million for skipjack tuna), representing 15.4% of the total weight and 12.4% of the total value of the national fleet.

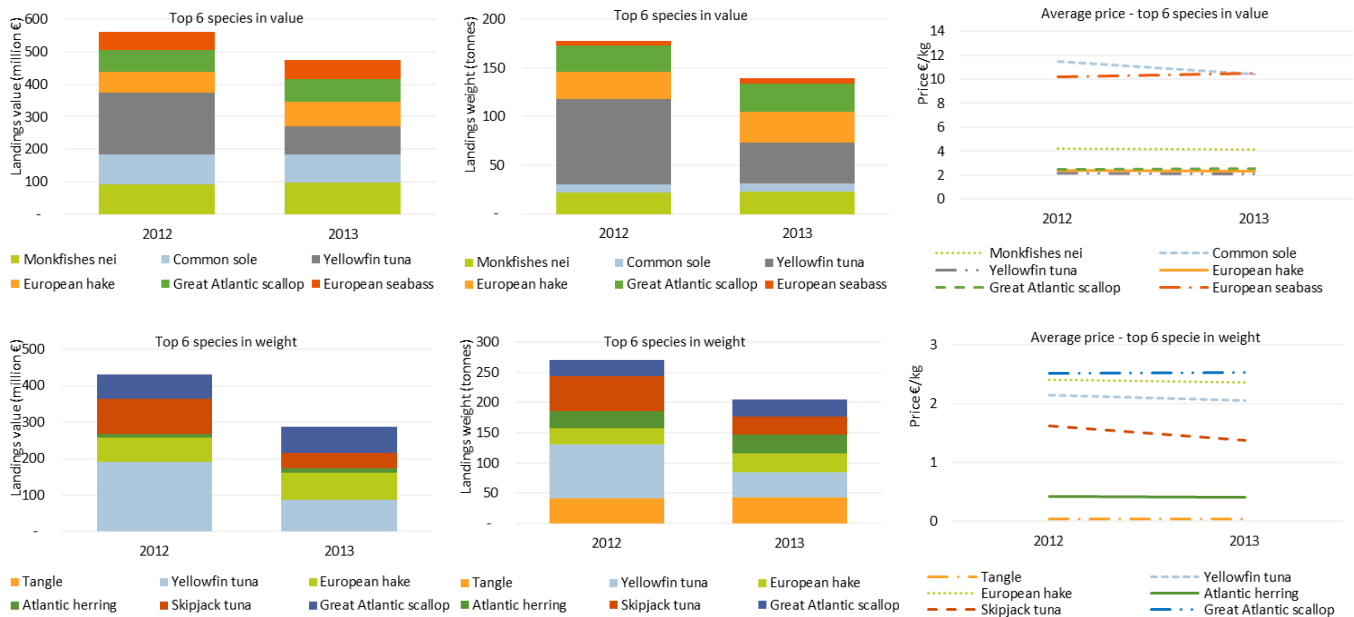


Figure 5.8.3 French fleet landings and average prices trends for the period 2008-2013 of the top 6 species in terms of landed value (top) and top 6 species in terms of landed weight (bottom).

National Fleet Economic performance

The total amount of income generated by the French fleet in 2013 was €1,149 million. This consisted of €1,126 million in landings value and €22.5 million in non-fishing income. Income from landings increased 4% while other income increased 32% between 2012 and 2013.

Total operating costs incurred by the fleet in 2013 equated to €970 million, amounting to 84% of total income. These increased 3.2% compared to 2012. Crew cost and fuel costs, the two major fishing expenses, were €399 and €214 million respectively, see Table 5.8.2 and Figure 5.8.4. The share of the different costs remained broadly stable between 2012 and 2013, except for energy costs, which decreased during the period (fuel costs represented 18.6% of the total income in 2013 against 20.5% in 2012).

The landings income generated by the French small-scale fleet in 2013 was €218 million, around 19% of national landings income. It increased 1.7% between 2012 and 2013. Total operating costs incurred by the small-scale fleet in 2013 equated to €177 million, amounting to 80% of the total income of the small-scale fleet, representing 18% of total operating costs at national level. Between 2012 and 2013, total operating costs increased 2.3%. The fuel cost for the French small-scale fleet was €17.4 million and represented only 8% of national fuel cost. Fuel cost represented 8% of total income of the small-scale fleet in 2012 and decreased 6% between 2012 and 2013, against only 1% for the national fleet.

The landings income generated by the French large-scale fleet in 2013 was €779 million, around 69% of national landings income. Income increased 8% between 2012 and 2013. Total operating costs incurred by the large-scale fleet in 2013 equated to €678 million, amounting to 84% of the total income of the large-scale fleet, representing 70% of total operating costs at national level.

In terms of economic performance, the total amount of Gross Value Added (GVA) and gross profit generated by the national fleet in 2013 were €577 million and €178 million, respectively. Gross Value Added (GVA) and gross profit increased 7% and 13%, respectively between 2012 and 2013. Indeed, increases in some operating costs were offset by the increase in total income.

Table 5.8.2 French national fishing fleet economic performance in 2008-2013

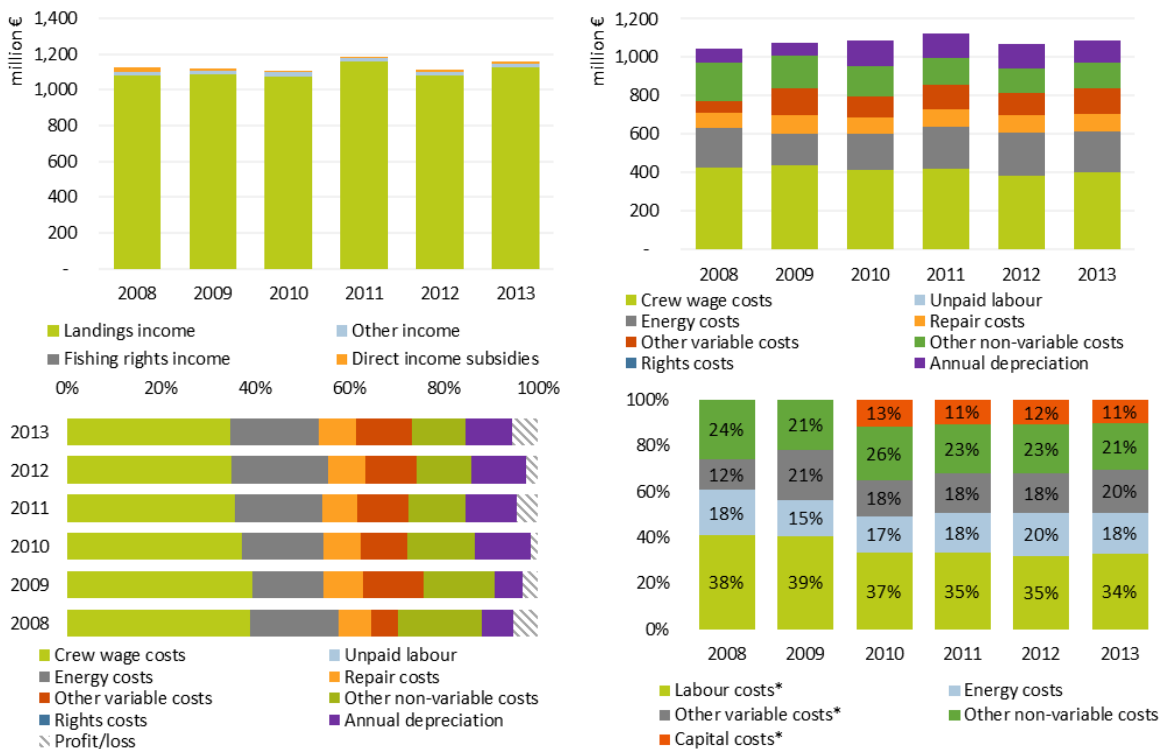
Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	1,082	1,089	1,074	1,160	1,082	1,126	4%	↗	4%
	Other income	17.0	19.7	28.8	17.9	15.5	22.5	45%	↗	32%
Costs	Labour costs	425.2	435.7	410.3	420.4	383.8	398.6	4%	↗	-6%
	Energy costs	207.1	167.2	190.9	216.6	225.2	214.0	-5%	↘	3%
	Repair costs	77.0	92.6	85.6	89.1	86.6	91.2	5%	↗	18%
	Other variable costs	60.8	143.3	110.7	127.0	117.6	136.1	16%	↗	124%
	Other non-variable costs	197.6	167.5	156.3	142.6	127.1	130.6	3%	↗	-34%
	Capital costs			142.5	135.7	131.3	122.5	-7%	↘	
	Economic Indicators	GVA	556.1	538.3	559.8	602.8	541.2	576.9	7%	↗
	Gross profit	131.0	102.6	149.6	182.5	157.4	178.3	13%	↗	36%
	Net profit			7.1	46.8	26.1	55.9	114%	↗	
Capital value	Depreciated replacement value			791.1	757.4	754.1	672.3	-11%	↘	
	Investments			113.0	76.2	60.0				
Profitability and development trends	Net profit margin (%)			0.6	4.0	2.4	4.9	104%	↗	
	<i>development trend</i>							109%	↗	
	RoFTA (%)			2.3	7.2	3.8	9.5	151%	↗	
	<i>development trend</i>							115%	↗	
	GVA per FTE (thousand €)	70.9	59.4	66.6	77.8	75.4	80.7	7%	↗	14%
	<i>development trend</i>							15%	↗	

*all monetary values have been adjusted for inflation; constant prices (2014)

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Note: capital costs for 2008 and 2009 excluded opportunity costs of capital



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.8.4 Income and cost structure trends for the French fleet: 2008-2013

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of revenue (income from landings + other income); bottom right – main costs items as a % of total costs.



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Figure 5.8.5 Main economic performance indicator trends for the French fleet: 2008-2013

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position.

For the small-scale fleet, the amount of Gross Value Added (GVA) and gross profit generated in 2013 were €138.5 million and €42.5 million respectively, amounting to 24% of the total national fleet. Economic indicators improved slightly for the small-scale fleet between 2012 and 2013.

For the large-scale fleet, the Gross Value Added (GVA) and gross profit generated in 2013 were €373 million and €110.9 million respectively, amounting to 65% and 62% of the total national fleet. Economic indicators improved for the large-scale fleet between 2012 and 2013.

Fleet Segment Level Economic performance

The French fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North East Atlantic, but also in the Mediterranean and in more distant fisheries. Indeed, the national fleet consisted of 103 (DCF) fleet segments in 2013 (DCF gear*length class). Of the 103 fleet segments, 31 with too few vessels to publish data were clustered. There were 1,217 inactive vessels in 2013.

Table 5.8.5 contains a breakdown of key performance indicators for the active fleet segments in 2013. A short description of 5 important segments in terms of total landings value and employment is provided below. Some of these segments include one or two clustered small segments and economic indicators refer to these combined segments. Generally, these smaller segments only have a marginal impact on the indicators. Other segments are important to the economy of the sector: the "tropical" purse seiners are discussed in the chapter dealing with long distant fisheries, some segments contain too few vessels, such as pelagic trawlers and demersal trawlers or seiners over 40 meters, others are very heterogeneous such as trawlers and seiners from 24 to 40 m.

Drift and fixed nets 10-12m – 183 vessels make up this segment which operates predominantly in the NE Atlantic (excluding overseas). The fleet targets a variety of species but in particular common sole, monkfish and European sea bass (respectively 47.3%, 8.0% and 5.0% of the total value of landings of this fleet segment). Common sole also represents almost ¼ of the volume landed by this fleet segment in 2013 (22.1%). Total income was €51.5 million (landings income and other income)

and around 395 FTEs were employed in this fleet segment, contributing 4.5% to the total income generated from landings and 5.6% of the FTEs in the national fishing fleet. Total operating costs represented almost 83% of income generated by this fleet segment in 2013. This fleet segment produced a gross profit of around €9.2 million in 2013, an increase of 4% on 2012.

Drift and fixed nets 12-18m – 83 vessels, plus one vessel using polyvalent passive gears only, make up this segment (75 in the NE Atlantic and 9 in the Mediterranean excluding overseas). The fleet targets a variety of species but in particular common sole (44% and 30% of the total values of landings of this fleet segment respectively in the NE Atlantic and the Mediterranean Sea), anglerfish and turbot in the NE Atlantic and also Atlantic blue fin tuna and European hake in the Mediterranean Sea. In 2013, total landings value was €38.5 million and around 273 FTEs were employed in this fleet segment, contributing to 3.4% and 3.9% of the total income from landings generated and FTEs in the national fishing fleet, respectively. The NE Atlantic fleet generated a gross profit of around €5.9 million in 2013, and remained relatively stable between 2012 and 2013. Total operating costs represented 86% and 76% of income in the NE Atlantic fleet and the Mediterranean Sea fleet, respectively.

Demersal trawlers / seiners 12-18m – 179 vessels make up this segment and they are all based in the NE Atlantic. These vessels target a variety of species. The top three species in terms of value landed in 2013 were Norway lobster, Great Atlantic scallop and anglerfish (respectively 22%, 19% and 10% of the total value of landings of this fleet segment). Total value of landings was almost €78.2 million and 498 FTEs were supported by this segment in 2013, accounting for 7.0% and 7.1% of the national fleet income and national fleet FTEs respectively. This fleet segment generated a gross profit of around €9.2 million in 2013, remaining stable between 2012 and 2013. Total operating costs amounted to 90% of the fleet's income in 2013.

Demersal trawlers / seiners 18-24m – 188 vessels, plus 2 vessels using polyvalent active gears only, made up this segment in 2013. The vast majority (76%) of these vessels operate in the Atlantic, North Sea and Channel, 14% of the vessels operate in the Mediterranean Sea and 10% in French Guyana (no data available for this region). Depending on the supra region, vessels have different fishing activities in terms of target species or number of days at sea. The vessels operating in the Atlantic, North Sea and the Channel target a variety of species, such as anglerfish (24% of the total values of landings of this fleet segment), squids and cod. In the Mediterranean Sea, vessels target hake (18% of the total values of landings of this fleet segment), common octopus and squids. In 2013, total landings value was €139.5 million and around 780 FTEs were employed, contributing to 12.5% and 11.1% of the total income from landings generated and FTEs in the national fishing fleet, respectively. In 2013 turnover decreased 13% in the Atlantic area but increased 9% in the Mediterranean Sea. This fleet segment produced a gross profit of around €11.4 million in the Atlantic area and €1.2 million in the Mediterranean in 2013. Total operating costs represented 91% and 89% of the income generated by this fleet segment in 2013, in the Atlantic area and Mediterranean Sea, respectively.

Dredgers 12-18m – 82 vessels, plus 7 dredgers between 18 and 24 m and 1 vessel between 24 and 40 m, made up this segment in 2013, which operates exclusively in the North Atlantic. The fleet mainly targets great Atlantic scallop (71% of the total value of landings of this fleet segment in 2013) but also a variety of species as sole, mussel or cuttlefish. Total income from landings was around €38 million in 2013, remaining stable, and around 272 FTEs were employed in this fleet segment, accounting for 3.5% and 3.9% of national fleet and national FTEs respectively. This fleet segment generated gross profit of around €4.8 million in 2013. Total of operating costs represents 88% of income generated by this fleet segment in 2013.

Assessment and Future Trends

In terms of economic activity, 2013 was slightly better than 2012 considering landed value, even if economic performance differs significantly between fleet segments and supra regions.

In the Atlantic area, situations differ between ports, fishing gear and target species. Weight of landings was generally correct in 2013, however resulting in a reduction in average prices for some species (sole, hake, great Atlantic scallop for ports on the north coast, etc.). Volume of landings of species such as albacore or European pilchard increased significantly in the Atlantic region. While species such as anchovy, squid and common cuttlefish showed a reverse trend over the same period.

The economic situation in the Mediterranean Sea remains fragile due to the lack of abundance of pelagic species (anchovy, pilchard). However, the volume of fish landed remained stable between 2012 and 2013. Due to a good level of fish stocks, tuna seiners in the Mediterranean meanwhile had a good year in 2013, with quotas being reached in just a few days by most of the vessels.

The number of vessels in the French fleet continues to decrease each year. In 2013, fuel costs decreased slightly and had a direct positive impact on vessel profitability, especially for demersal and pelagic trawlers and dredgers. However, and at the same time, average age of vessels in the fleet grows every year, and maintenance and repair costs can attain high levels, which may have a negative impact on vessel profitability. Investment in new fuel-efficient vessels becomes a key element for the fisheries sector to ensure the economic sustainability of the fishing fleet. 2014 also showed a variety of economic situations between fishing ports. The beginning of 2014 was notably marked by exceptional storms that forced ships to remain in port. Fishing activity has been disrupted for almost 2 months. However, abundance of some species (such as squid between Eastern Channel and North Sea) during the end of the year helped to compensate these exceptional events.

Another important element: with the new regulation on fish landing obligation brings fishermen to test new gears to improve their selectivity. These new obligations are often difficult to implement and the economic impact of these new requirements has not yet been measured at a global level.

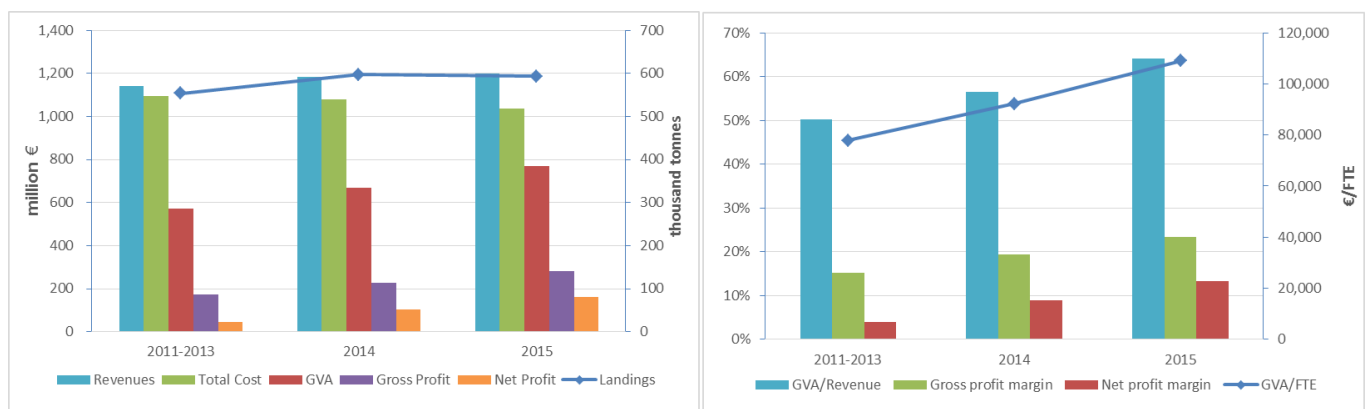
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According to BEMEF projections, the French fishing fleet improves in economic performance across the indicators reported here. Landings increase by 8% to 597,000 tonnes, revenue increase by 4% to €1.2 billion and gross and net profit margins increase to 19% and 9% respectively.

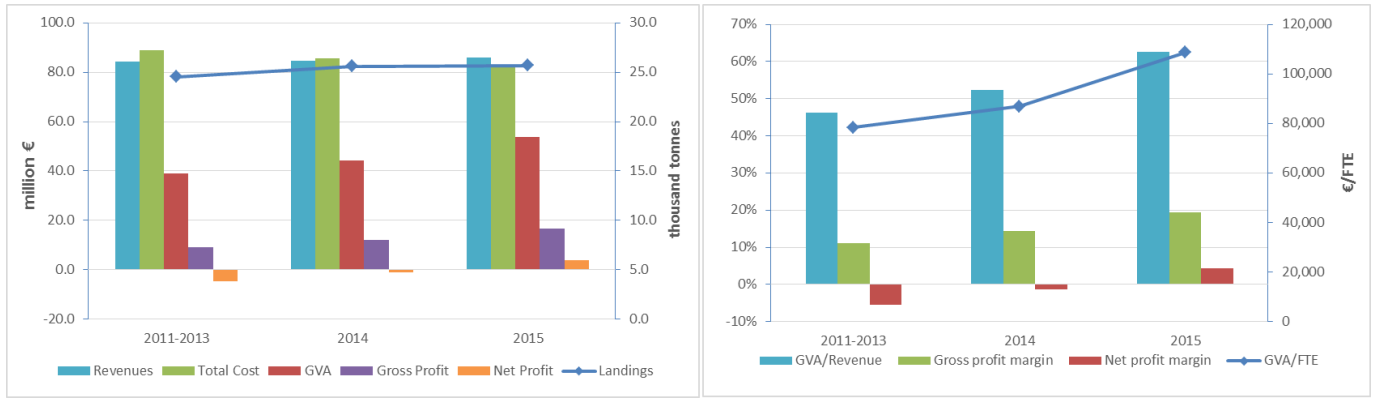
Even with a small decrease in landings in 2015 (1%), economic performance is expected to improve even further. GVA/Revenue reaches 64% and GVA/FTE increases 18% for the second year to reach €109,000.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

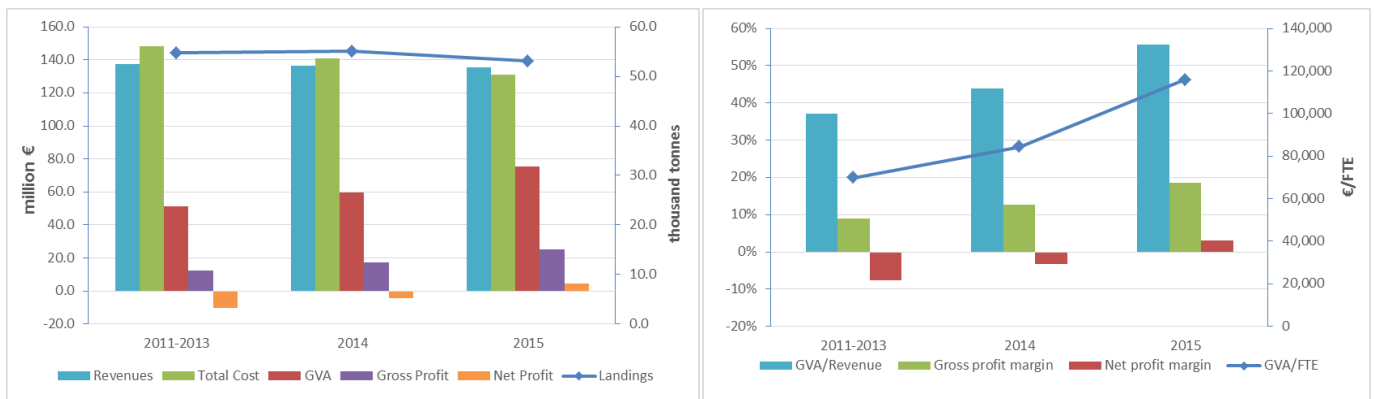
Figure 5.8.6 France: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 French fleets by gross earnings.



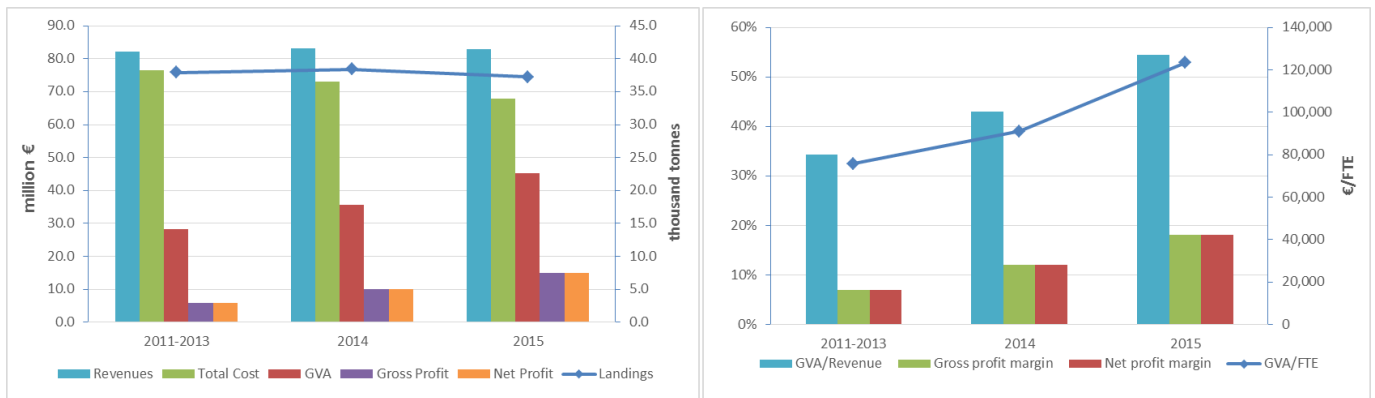
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.8.7 FRA AREA27 DTS VL1218: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

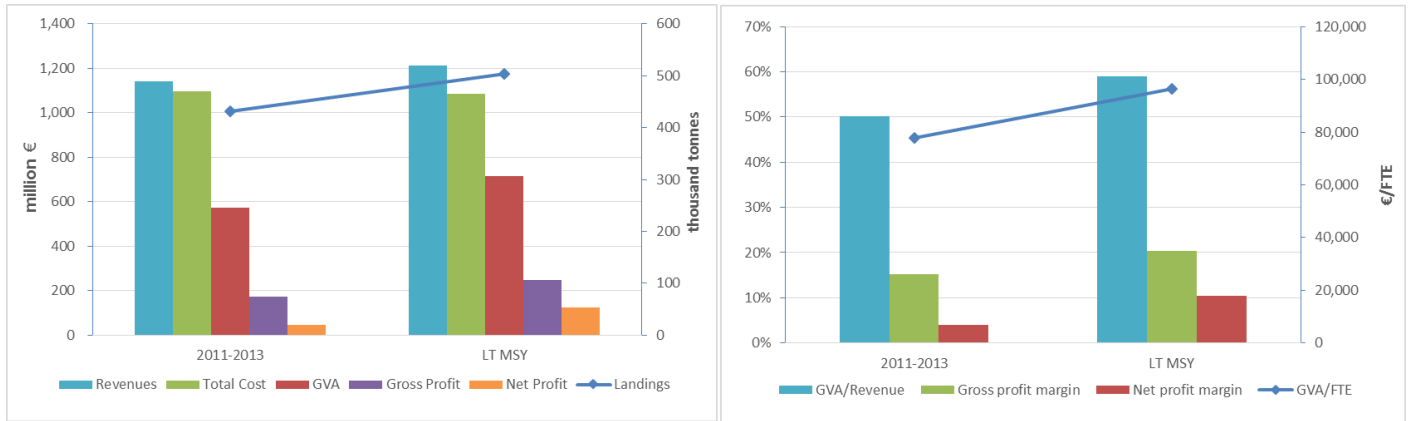
Figure 5.8.8 FRA AREA27 DTS VL1824: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.8.9 FRA AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, a state of long-term MSY results in improved economic performance for the French fishing fleet. A 17% increase in landings to 504,000 tonnes increases profit to €247 million (gross) and €125 million (net) and GVA increases 25% to €716 million. Similar improvements are also seen on the relative economic performance measures of GVA/revenue, GVA/FTE and gross and net profit margins.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.8.10 France: MSY projections for the main socio-economic indicators.

Data issues

A method of probability sampling has been applied to the 2013 data, as it was for the first time to the 2012 data: vessels have been selected by systematic random sampling, the fleet having been classified inside each segment by size and maritime quartier, to assure a good representativeness of the overall diversity of the French fleet.

Not all data have been collected because of total or partial non-responses: concerning the total non-responses, a statistical method was used to know the criteria (explanatory variables) that could explain the response rate and then to increase the weight of vessels for which data have been collected; concerning the partial non-responses, imputations have been made.

It was undertaken for the first time this year to establish the same clusters (same name and composition) for the years 2011 to 2013. Next year, the same clusters will be established for each of the years 2010 to 2014.

The 18 over 40m purse seiners operating in other fishing regions are based and registered in a French metropolitan port but they operate in the Indian ocean. Only economic data for these purse seiners and those of French hooks 12-18m and 18-24m in the Indian Ocean are available for 2011 to 2013 in other fishing regions. Data are not exhaustive either for the small scale fleet in Mediterranean Sea (including Corsican ships). For example, it is considered in this chapter that there is a total of 10,262 employed, but according to official figures, there are 17,887 fishermen who sailed at least one day in the year: the difference is due of course to the definition used (10,262 is a total of the average employment in 2013 in each vessel) but also to the incompleteness of data. Next year, some estimates will be made to complete the landings and effort data. The existing small-scale fleet definition could be extended in the French case to include all vessels less than 12 meters even if they use active gears as trawls, dredges or various active gears because they concern small vessels fishing in coastal areas with trips during less than 24 hours (598 French vessels are concerned in North Atlantic and 41 vessels in Mediterranean Sea in 2013).

The capital value and depreciation parameters have been calculated with the recommended (PIM) method. For some segments, these data have not been published: it has been considered they were not relevant. The implementation of this method needs to be improved so data should be used with caution.

Two different sources of information have been used to calculate fishing revenues. In the tables, landings value comes from logbooks, sales notes and satellite monitoring system whereas landings income comes from accounts and responses to a survey. The totals are similar but there may be significant differences for some segments.

Table 5.8.3 French national fleet structure, activity and production trends by operational scale: 2008-2013

Arrows indicate change (Δ) 2013 to 2012: (▲) increase; (▼) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	Distant water fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2008			2009	2010	2011	2012	2013	2008	2009			2010	2011	2012	2013					
Total No. Vessels (#)	4,589	4,629	4,371	4,471	4,373	4,326	-1%	▼	2,011	1,826	1,889	1,696	1,621	1,565	-3%	▼	5.0	20.0	21.0	17.0	18.0	17.0	-6%	▼			
Average vessel age (year)	18.6	19.5	19.6	20.5	21.3	21.9	3%	▲	22.7	23.3	24.3	24.6	25.4	26.2	3%	▲	12.8	19.1	18.6	19.4	17.5	18.5	6%	▲			
Average vessel length (m)	7.7	7.7	7.7	7.8	7.8	7.8	0%	↔	16.0	15.5	14.8	15.3	15.3	15.5	1%	↔	35.1	69.4	62.5	69.3	73.3	75.2	3%	▲			
Vessel tonnage (thousand GT)	16.1	16.2	15.4	15.9	15.7	15.6	-1%	↔	168.9	126.5	118.9	113.8	109.8	108.1	-2%	▼	3.2	33.6	30.6	28.1	32.7	32.4	-1%	↔			
Vessel power (thousand kW)	405.8	418.0	410.4	430.8	426.7	426.4	0%	↔	547.9	453.6	440.4	412.8	400.7	395.0	-1%	▼	4.6	57.8	53.0	49.5	55.4	54.4	-2%	▼			
Total employed (#)	4,307	4,270	3,828	4,086	4,184	4,048	-3%	▼	6,833	7,201	6,628	6,132	5,981	5,802	-3%	▼	488	415	438	413	413	413	0%	↔			
FTE (#)	2,931	3,015	2,743	2,726	2,254	2,250	0%	↔	4,910	5,555	5,245	4,586	4,512	4,488	-1%	↔	488	415	438	413	413	413	0%	↔			
Average wage per employed (thousand €)	29.3	28.3	29.5	28.6	22.6	23.7	5%	▲	41.2	39.6	40.4	43.4	41.4	45.2	9%	▲	61	71	85	100	98	98	-3%	▼			
Average wage per FTE (thousand €)	43.1	40.1	41.2	42.9	42.0	42.7	2%	▲	56.7	50.9	50.7	58.1	54.9	58.4	6%	▲	61	71	85	100	98	98	-3%	▼			
Days at sea (thousand days)			217	221	225	225	0%	↔			283	271	269	246	-9%	▼			4.9		0.1						
Fishing days (thousand days)			214	218	222	223	1%	↔			244	236	230	214	-7%	▼			4.4		0.0						
Energy consumption (million litres)	29	33	31	31	25	24	-6%	▼	266	297	278	264	235	237	1%	↔	53	48	47	46	42	42	-9%	▼			
Energy consumption per landed tonne (l/T)					349	286	-18%	▼					668	677	1%	↔					293	528	80%	▲			
Landings weight (thousand tonnes)					72.7	83.0	14%	▲					356.4	351.8	-1%	▼					157.1	79.3	-50%	▼			
Landings value (million €)	-	-	-	-	185.9	184.6	-1%	↔					751.6	788.8	5%	▲					301.0	138.0	-54%	▼			

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/A3/ AQ(2015))

Table 5.8.4 Economic performance of the French national fishing fleet by operational scale: 2008-2013

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet						%Δ 2013-12	Trend	Large scale fleet						%Δ 2013-12	Trend	Distant water fleet						%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013			2008	2009	2010	2011	2012	2013			2008	2009	2010	2011	2012	2013		
Income	Landings income	251.7	250.9	239.7	259.5	214.7	218.4	2%	↗	766.1	747.8	739.7	774.1	718.3	779.3	8%	↗	90.3	95.1	126.5	152.4	140.1	-8%	↘
	Other income	3.7	8.4	14.4	6.8	1.5	3.4	128%	↗	13.3	11.4	14.4	11.2	14.0	19.1	36%	↗							
	Direct income subsidies	5.9	0.6	0.2	2.1	0.7	1.0	38%	↗	23.8	10.9	6.1	6.9	13.4	12.3	-8%	↘							
	Fishing rights income																							
Costs	Labour costs	126.2	121.0	113.1	116.9	94.7	96.0	1%	↗	275.5	285.2	267.9	266.4	247.6	262.1	6%	↗	29.5	29.3	37.1	41.5	40.4	-3%	↘
	Energy costs	20.5	15.9	17.4	21.3	18.8	17.4	-8%	↘	173.7	128.6	149.9	165.7	174.3	166.7	-4%	↘	22.7	23.6	29.6	32.1	29.9	-7%	↘
	Repair costs	13.2	13.5	13.1	12.5	10.6	11.5	8%	↗	56.3	59.8	56.9	57.3	52.8	58.3	10%	↗	19.2	15.6	19.2	23.2	21.4	-8%	↘
	Other variable costs	11.2	20.6	23.2	25.6	22.0	25.3	15%	↗	49.7	94.4	84.4	99.2	90.9	105.5	16%	↗	28.4	3.1	2.3	4.8	5.3	10%	↗
	Other non-variable costs	45.9	36.7	34.8	34.0	27.2	27.1	0%	↔	141.3	112.1	105.2	91.4	79.7	85.4	7%	↗	18.7	16.3	17.3	20.1	18.1	-10%	↘
	Capital costs			35.8	37.4	34.7	36.3	5%	↗			96.8	96.9	96.6	86.2	-11%	↘				0.9			
Capital value	Depreciated replacement value			222.3	218.4	207.0	204.5	-1%	↘			568.8	534.6	547.1	467.8	-14%	↘			4.4				
	Investments			56.6	31.8	18.3						56.4	44.4	41.7										
Economic indicators	GVA	164.6	172.6	165.6	172.9	134.3	138.5	3%	↗	358.5	364.3	356.5	371.8	334.7	373.0	11%	↗	1.4	36.6	58.2	72.1	65.4	-9%	↘
	Gross profit	38.4	51.6	52.5	56.0	39.6	42.5	7%	↗	83.0	79.1	88.6	105.4	87.1	110.9	27%	↗	-28.1	7.3	21.1	30.7	25.0	-18%	↘
	Gross profit margin	15.0	19.9	20.7	21.0	18.6	19.3	4%	↗	10.7	10.4	11.8	13.4	11.9	14.1	18%	↗	-31.1	7.6	16.7	20.1	17.8	-11%	↘
	Net profit			0.4	3.8	2.1	3.7	81%	↗			-19.6	-7.7	-30.4	-14.0	54%	↗							
Profitability and development trends	Net Profit margin			0.2	1.7	1.0	1.8	73%	↗			-3.6	-1.4	-5.8	-2.7	54%	↗							
	<i>development trend</i>			Improved				81%	↗			Improved				25%	↗							
	RoFTA (%)			1.6	2.7	1.3	3.0	128%	↗			-2.1	-0.5	-5.4	-1.9	65%	↗							
<i>development trend</i>			Improved				61%	↗			Improved				29%	↗								
GVA per FTE (thousand €)	56.2	57.2	60.4	63.4	59.6	61.6	3%	↗	73.7	65.0	67.2	81.1	74.2	83.1	12%	↗	3.0	88.1	132.8	174.7	158.3	-9%	↘	
<i>development trend</i>			Stable				4%	↗			Improved				15%	↗		Improved				59%	↗	

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Table 5.8.5 Main socio-economic performance indicators by fleet segment in the French national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ	Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	FRA AREA27 DFN VL0010	346	6%	264	17%	35,236	-5%	2,353	-5%	22,345	1%	4,580	-1%	15,386	5%	58.2	-10%	4,200	-5%	938	-487%	-3.7	-453%	Weak	-98%
FRA AREA27 DFN VL1012	183	-5%	395	-3%	28,536	-2%	5,601	-19%	49,324	-5%	11,298	1%	31,363	-4%	79.3	-2%	9,232	4%	1,877	92%	3.6	107%	Reasonable	49%	Improved
FRA AREA27 DFN VL1218°	75	1%	263	-5%	15,670	1%	4,654	5%	40,678	5%	8,086	7%	22,132	5%	84.1	10%	5,613	4%	291	130%	0.8	128%	Reasonable	152%	Improved
FRA AREA27 DFN VL1824	34	-3%	239	4%	7,936	0%	4,626	-10%	28,239	-4%	7,113	1%	16,970	-27%	71.0	-30%	4,026	-30%	380	-127%	-1.3	-135%	Weak	-3075%	Deteriorated
FRA AREA27 DFN VL2440°	20	-5%	244	-11%	4,530	-4%	5,316	-13%	31,980	5%	13,083	3%	24,446	-4%	100.2	8%	10,593	-1%	3,831	52%	10.1	59%	High	200%	Improved
FRA AREA27 DRB VL0010	69	1%	41	-22%	5,538	7%	879	65%	5,916	18%	6,844	-25%	4,392	17%	107.2	49%	1,585	14%	519	7%	7.6		Reasonable		
FRA AREA27 DRB VL1012	92	6%	135	3%	10,182	-4%	4,255	12%	15,404	-9%	7,553	-36%	9,843	10%	72.8	7%	3,356	18%	156	78%	-0.8	80%	Weak	-138%	Deteriorated
FRA AREA27 DRB VL1218°	90	-1%	272	-2%	13,685	-14%	8,636	-30%	31,206	-14%	14,001	-16%	20,464	14%	75.2	17%	4,869	12%	1,741	50%	-4.4	51%	Weak	32%	Improved
FRA AREA27 DTS VL0010°	100	-4%	74	-16%	10,515	-7%	2,137	-5%	7,817	-23%	1,399	-32%	5,147	-16%	69.5	0%	1,360	-32%	263	-149%	-2.7	-153%	Weak	-301%	Deteriorated
FRA AREA27 DTS VL1012°	170	-6%	259	-14%	26,412	-11%	9,838	-11%	36,422	-8%	10,352	-15%	19,474	8%	75.3	26%	6,356	21%	112	106%	0.3	106%	Reasonable	121%	Improved
FRA AREA27 DTS VL1218	179	-1%	498	-6%	39,002	2%	26,845	-5%	91,474	13%	26,484	17%	35,411	-7%	71.1	-2%	7,647	-17%	5,042	12%	-6.3	10%	Weak	-45%	Deteriorated
FRA AREA27 DTS VL1824°	144	-7%	716	-3%	36,330	-5%	57,595	-1%	137,019	-7%	51,998	-10%	49,036	14%	68.5	17%	11,402	65%	8,934	42%	-6.7	44%	Weak	18%	Improved
FRA AREA27 DTS VL2440°	61	-6%	434	18%	17,697	-4%	44,261	14%	95,892	-2%	36,300	-8%	30,452	9%	70.2	-8%	4,656	-16%							
FRA AREA27 DTS VL40XX	9	-10%	183	-8%	2,405	-2%	16,518	8%	54,752	20%	29,726	15%	16,792	20%	91.8	31%	3,574	59%							
FRA AREA27 FPO VL0010	268	-7%	278	-2%	29,715	-13%	2,720	-7%	19,158	-15%	7,492	-6%	15,570	-13%	56.0	-12%	4,679	-17%	678	-66%	2.7	-63%	Reasonable	-43%	Deteriorated
FRA AREA27 FPO VL1012	58	2%	158	38%	10,580	0%	2,506	41%	14,144	-1%	7,425	9%	10,562	46%	66.9	6%	2,329	22%	21	97%	-0.1	98%	Weak	91%	Improved
FRA AREA27 FPO VL1824°	15	-17%	53	-32%	2,881	-17%	1,235	-11%	9,622	-4%	3,814	-11%	3,335	-32%	62.7	0%	718	-54%							
FRA AREA27 HOK VL0010	250	-5%	140	-26%	25,969	-19%	2,832	1%	21,316	3%	3,095	-1%	13,875	1%	98.8	36%	5,513	23%	1,778	66%	8.1	63%	Reasonable	676%	Improved
FRA AREA27 HOK VL1012	42	-2%	65	-17%	6,654	-7%	922	-38%	9,378	-1%	1,828	-15%	5,215	-5%	80.4	15%	1,618	-11%	47	228%	0.5	235%	Reasonable	151%	Improved
FRA AREA27 HOK VL2440°	12	0%	141	903%	3,215	27%	3,850		15,986	57%	6,963	52%	10,179	1310%	72.3	41%	3,665	2444%	407	115%	2.0	101%	Reasonable		
FRA AREA27 MGO VL0010°	114	-16%	39	-42%	5,722	-65%	379	-35%	1,888	-30%	403	8%	3,303	-21%	84.1	36%	1,011	-31%	570	-119%	-11.8	-165%	Weak	-8038%	Deteriorated
FRA AREA27 MGP VL0010	16	-6%	14	58%	1,486	-76%	231	105%	996	10%	4,776	38%	907	3%	67.1	-34%	331	-7%	70		5.1		Reasonable		
FRA AREA27 MGP VL1012°	32	-18%	74	-1%	5,036	-14%	2,003	-5%	8,813	-3%	12,490	-14%	7,828	42%	105.3	44%	3,381	61%							
FRA AREA27 MGP VL1218°	23	-15%	55	-20%	4,039	-17%	2,545	-11%	7,755	-20%	3,170	-8%	4,034	-2%	73.9	22%	1,381	17%	128	88%	-1.6	86%	Weak	76%	Improved
FRA AREA27 PGO VL0010°	102	-6%	68	-4%	7,155	4%	323	15%	3,986	19%	22,419	474%	3,334	-6%	49.0	-2%	1,122	-3%	238	-233%	-5.3	-242%	Weak	-492%	Deteriorated
FRA AREA27 PGP VL0010	83	5%	62	3%	8,718	4%	404	-30%	4,313	4%	904	4%	2,831	-9%	45.5	-12%	746	-18%	445	-267%	-10.3	-321%	Weak	-154%	Deteriorated
FRA AREA27 PGP VL1012	11	120%	22	149%	1,841	122%	328	211%	2,476	116%	620	104%	2,059	250%	92.5	41%	1,034	711%							

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.8.2 Continued

Fleet segment	No. of vessels (N)	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ	Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	FRA AREA27 PMP VL0010	69	-12%	51	-27%	7,389	-9%	672	23%	6,769	19%	3,563	23%	3,833	8%	74.9	47%	1,509	73%	443	1237%	7.1	1157%	Reasonable	107%
FRA AREA27 PMP VL1012	59	-5%	93	-18%	9,130	-13%	1,327	-27%	11,186	-10%	16,233	-37%	6,580	-19%	70.5	-2%	2,613	-3%	529	92%	5.1	150%	Reasonable	95%	Improved
FRA AREA27 PMP VL1218	6	-33%	12	-61%	964	-39%	390	-44%	1,499	-61%	526	-61%	502	-69%	42.3	-21%	28	-108%							
FRA AREA27 PS VL1218°	28	4%	121	-7%	3,856	-3%	1,742	30%	19,024	-7%	21,625	9%	13,752	-5%	113.9	2%	3,592	-29%	1,340		6.3		Reasonable		
FRA AREA27 TM VL1218	13	18%	62	24%	2,879	21%	3,018	2%	10,854	19%	5,684	20%	5,062	9%	81.6	-12%	1,822	30%							
FRA AREA27 TM VL1824	28		137		5,845		9,429		30,485		14,061		14,184		103.7		6,996								
FRA AREA27 TM VL40XX	3	0%	119	4%	558	4%	6,727	-9%	41,790	159%	45,955	-3%	13,047	-20%	109.6	-23%	5,582	-30%							
FRA AREA37 DFN VL0006	100	9%	54	37%	2,720	24%	166	19%	767	-30%	148	1%	1,763	-8%	32.6	-33%	556	-23%	175		7.5		Reasonable		
FRA AREA37 DFN VL0612	504	-5%	310	13%	19,867	28%	2,027	31%	6,536	37%	1,026	40%	13,380	42%	43.2	26%	3,552	43%	139	90%	-0.7	93%	Weak		
FRA AREA37 DFN VL1218°	17	-11%	10	-26%	998	-13%	54	-61%	506	-28%	63	-27%	508	-9%	50.0	23%	158	768%							
FRA AREA37 DRB VL0612°	12	33%	7	129%	298	103%	102	1837%	167	239%	52	615%	247	182%	34.3	23%	31	5%							
FRA AREA37 DTS VL1824°	32	-6%	63	33%	4,809	3%	4,413	-28%	9,518	2%	2,676	13%	4,037	16%	63.6	-13%	1,196	78%	482	67%	-4.4	68%	Weak		
FRA AREA37 DTS VL2440°	29	-22%	104	2%	5,226	-13%	9,286	-2%	15,221	-5%	5,525	-7%	6,772	73%	65.0	70%	1,819	357%	2,732		-15.0		Weak		
FRA AREA37 FPO VL0006	88	7%	44	-34%	3,893	18%	134	49%	1,508	10%	254	15%	1,873	-35%	42.7	0%	582	-39%	196		7.8		Reasonable		
FRA AREA37 FPO VL0612	54	8%	45	43%	4,343	81%	316	15%	2,309	31%	470	48%	1,945	21%	43.5	-16%	477	-14%	72	-230%	-2.4	-201%	Weak		
FRA AREA37 HOK VL0612°	73	22%	36	53%	2,453	65%	211	41%	1,651	127%	193	102%	1,587	76%	43.5	15%	482	96%	92		-4.0		Weak		
FRA AREA37 MGO VL0612°	15	0%	10	13%	567	31%	70	-12%	164	47%	47	3%	573	49%	56.8	31%	213	88%							
FRA AREA37 PGO VL0006	57	19%	28	35%	1,896	370%	77	53%	542	41%	120	96%	1,166	39%	41.2	4%	407	36%							
FRA AREA37 PGO VL0612	61	-3%	34	12%	988	51%	108	10%	263	72%	84	318%	863	0%	25.1	-11%	245	2%							
FRA AREA37 PGP VL0006	49	-20%	35	-27%	2,560	13%	95	-22%	913	-33%	143	-34%	1,392	-5%	40.2	29%	444	-2%							
FRA AREA37 PGP VL0612	104	0%	56	-28%	6,347	37%	349	-39%	3,030	18%	508	4%	2,914	-7%	52.0	30%	783	20%	64	63%	-1.5	60%	Weak	-189%	Deteriorated
FRA AREA37 PMP VL0612	14		9		1,391		111		677		107		997		106.9		323								
FRA AREA37 PS VL0612	14	27%	21	-4%	814	17%	138	8%	590	-29%	249	0%	1,356	20%	65.4	25%	506	46%							
FRA AREA37 PS VL1218°	14	17%	7	-73%	377	-43%	145	14%	758	-52%	531	-38%	4,969	299%	693.0	1375%	3,863	1230%							
FRA AREA37 PS VL2440°	17	70%	4	-51%	123	-45%	669	12%	20,094	112%	1,860	159%	21,327	292%	5672.0	702%	9,147	1146%							
FRA OFR HOK VL1218	15	0%	58	24%	2,916	26%	1,351	24%	5,444	-36%	1,146	-34%	2,120	49%	36.6	20%	462	309%	171	71%	-3.0	77%	Weak		
FRA OFR PS VL40XX	17	-6%	413	0%			41,838	-9%	137,963	-54%	79,290	-50%	65,384	-9%	158.3	-9%	24,977	-19%							

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Table 5.8.6 Main socio-economic performance indicators by fleet segment in the French national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend	
FRA AREA27 PS VL1218*	4.3	-10%	138	-6%	5,609	12%	6,075	4%	362,860	4%	84,155	16%	56,964	3%	81	19%	45,244	24%	629,434	24%	629,434	16%	491,147	-8%	47,860				
FRA AREA27 DFN VL1218*	3.5	-6%	209	0%	516	5%	580	0%	220,248	4%	62,787	11%	49,287	3%	576	-2%	45,435	1%	434,618	1%	434,618	5%	295,089	4%	3,877	130%	154%	Improved	
FRA AREA27 DFN VL2440*	12.2	-7%	226	0%	2,888	8%	4,065	1%	692,657	-2%	56,775	6%	51,247	-5%	406	-15%	188,317	0%	1,370,779	0%	1,370,779	-1%	1,222,319	1%	191,563	60%	205%	Improved	
FRA AREA27 DRB VL1218*	3.0	-1%	152	-13%	1,023	-2%	1,244	0%	173,284	16%	57,311	17%	41,870	17%	617	-17%	67,847	-36%	389,620	-36%	389,620	0%	227,383	15%	19,342	50%	33%	Improved	
FRA AREA27 DTS VL0010*	0.7	-13%	105	-3%	133	-27%	133	-27%	37,868	-4%	51,132	9%	26,321	6%	1,528	39%	15,311	-5%	83,947	-5%	83,947	2%	51,471	-12%	2,632	-151%	-323%	Deteriorated	
FRA AREA27 DTS VL1012*	1.5	-9%	155	-5%	392	-5%	402	-7%	77,162	10%	50,688	20%	34,075	11%	950	5%	43,858	-2%	185,167	-2%	185,167	4%	114,551	15%	660	107%	128%	Improved	
FRA AREA27 DTS VL1824*	5.0	5%	252	3%	1,431	-5%	1,765	-9%	261,349	12%	52,530	7%	52,292	12%	1,108	9%	286,165	2%	842,528	2%	842,528	6%	340,530	22%	62,042	38%	14%	Improved	
FRA AREA27 DTS VL2440*	7.1	26%	290	2%	2,051	-4%	2,447	-12%	422,898	23%	59,425	-2%	59,296	22%	1,219	24%	480,930	9%	1,441,313	9%	1,441,313	18%	499,221	16%					
FRA AREA27 FPO VL1824*	3.6	-18%	192	0%	1,324	7%	1,658	7%	174,468	-6%	49,164	15%	30,311	-14%	324	0%	54,565	-6%	385,347	-6%	385,347	-2%	222,329	-18%					
FRA AREA27 HOK VL2440*	11.7	903%	268	27%	2,166	20%	2,819	7%	542,870	1028%	46,248	12%	39,978	789%	553		223,906	2088%	1,414,309	2088%	1,414,309	1345%	848,268	1310%	33,882	115%			
FRA AREA27 MGO VL0010*	0.3	-32%	50	-59%	70	211%	71	211%	20,105	0%	58,351	45%	18,066	4%	941	-40%	2,401	-26%	33,489	-26%	33,489	4%	28,974	-6%	4,997	-161%	-691%	Deteriorated	
FRA AREA27 MGP VL1012*	2.3	20%	157	5%	2,480	0%	2,611	-4%	138,970	59%	59,812	32%	45,846	25%	160	10%	51,301	1%	264,511	1%	264,511	34%	244,614	74%					
FRA AREA27 MGP VL1218*	2.4	-6%	176	-2%	785	11%	942	12%	115,356	6%	48,584	12%	34,125	9%	803	-4%	81,728	-16%	291,684	-16%	291,684	-1%	175,412	15%	5,578	85%	77%	Improved	
FRA AREA27 MGP VL0010*	0.7	2%	70	10%	3,133	452%	3,152	452%	21,689	-2%	32,519	-4%	14,136	-6%	14	-80%	2,372	20%	33,251	20%	33,251	3%	32,688	-1%	2,334	-252%	-472%	Deteriorated	
FRA AREA27 TM VL1824	4.9		209		2,406		3,707		256,709		52,543		42,532		671		274,039		816,444		816,444		506,563						
FRA AREA27 DFN VL0010	0.8	10%	102	-11%	130	4%	130	4%	32,329	4%	42,330	-6%	23,135	7%	514	-5%	5,013	-14%	60,897	-14%	60,897	7%	44,467	-1%	2,712	-464%	-67%	Deteriorated	
FRA AREA27 DFN VL1012	2.2	3%	156	3%	396	3%	405	2%	120,936	-2%	55,965	-5%	36,568	-2%	496	-20%	22,384	-17%	230,979	-17%	230,979	-5%	171,382	1%	10,258	102%	47%	Improved	
FRA AREA27 DFN VL1824	7.0	7%	233	3%	896	1%	1,120	-5%	380,712	-23%	54,119	-29%	57,035	-21%	650	-11%	86,536	-19%	762,608	-19%	762,608	-19%	499,127	-24%	11,186	-128%	-353%	Deteriorated	
FRA AREA27 DRB VL0010	0.6	-23%	80	6%	1,236	-31%	1,239	-33%	40,672	17%	68,499	52%	21,158	8%	128	122%	8,800	52%	76,329	52%	76,329	22%	63,648	15%	7,520				
FRA AREA27 DRB VL1012	1.5	-3%	111	-9%	742	-34%	768	-36%	70,513	0%	47,957	3%	28,587	5%	563	76%	32,372	-4%	164,737	-4%	164,737	2%	106,994	4%	1,691	79%	-904%	Deteriorated	
FRA AREA27 DTS VL1218	2.8	-5%	218	3%	679	15%	790	15%	155,106	-3%	55,740	2%	47,377	-3%	1,014	-19%	111,692	-2%	401,919	-2%	401,919	1%	197,825	-6%	28,167	11%	-35%	Deteriorated	
FRA AREA27 DTS VL40XX	20.3	2%	267	8%	12,361	17%	14,913	-3%	1,468,658	25%	72,229	23%	72,229	23%	556	-6%	1,172,459	12%	4,580,955	12%	4,580,955	21%	1,865,782	34%					
FRA AREA27 FPO VL0010	1.0	5%	111	-6%	252	7%	252	7%	40,637	-6%	39,133	-11%	25,509	-6%	363	0%	7,454	-5%	78,173	-5%	78,173	1%	58,095	-7%	2,532	-64%	-48%	Deteriorated	
FRA AREA27 FPO VL1012	2.7	35%	182	-2%	702	9%	708	8%	141,936	52%	52,152	13%	44,914	51%	337	29%	30,278	29%	286,093	29%	286,093	50%	182,097	44%	358	97%	85%	Improved	
FRA AREA27 HOK VL0010	0.6	-23%	104	-15%	119	22%	119	22%	33,446	-6%	59,560	22%	27,047	-5%	915	2%	8,110	2%	66,108	2%	66,108	1%	55,500	6%	7,114	74%	889%	Improved	
FRA AREA27 HOK VL1012	1.5	-15%	158	-4%	275	-9%	279	-12%	85,649	1%	55,479	18%	38,163	9%	504	-26%	18,210	-19%	167,624	-19%	167,624	-1%	124,168	-2%	1,119	231%	150%	Improved	
FRA AREA27 MGP VL0010	0.9	70%	93	-74%	3,214	472%	3,234	475%	36,012	17%	42,617	-30%	23,480	21%	48	49%	9,914	95%	64,865	95%	64,865	33%	56,715	10%	4,394				
FRA AREA27 PGP VL0010	0.8	-3%	105	-1%	104	0%	104	0%	25,122	-10%	33,480	-8%	19,314	-7%	446	-33%	3,512	-36%	42,942	-36%	42,942	-16%	34,104	-14%	5,360	-250%	-71%	Deteriorated	
FRA AREA27 PGP VL1012	2.0	13%	167	1%	337	-8%	338	-8%	93,236	1%	46,053	-11%	29,573	5%	528	52%	22,907	90%	202,298	90%	202,298	12%	187,220	59%					
FRA AREA27 PMP VL0010	0.7	-18%	107	3%	482	35%	482	35%	33,682	-2%	45,400	18%	20,799	-2%	189	0%	6,830	29%	68,825	29%	68,825	9%	55,550	22%	6,419	1385%	58%	Improved	
FRA AREA27 PMP VL1012	1.6	-14%	155	-9%	1,778	-27%	1,789	-30%	67,227	-23%	42,471	-11%	29,335	-22%	82	16%	16,003	-25%	130,598	-25%	130,598	-25%	111,519	-15%	8,974	101%	40%	Improved	
FRA AREA27 PMP VL1218	2.0	-41%	161	-9%	545	-35%	573	-40%	88,245	-39%	44,606	5%	26,986	-36%	741	42%	44,195	-25%	246,033	-25%	246,033	-24%	83,661	-53%					
FRA AREA27 TM VL1218	4.8	5%	221	2%	1,974	-1%	2,536	-8%	249,189	-15%	52,190	-19%	58,728	-9%	531	-15%	172,851	-16%	618,219	-16%	618,219	-17%	389,376	-8%					
FRA AREA27 TM VL40XX	39.7	4%	186	4%	82,357	-7%	107,876	-51%	2,488,245	-10%	62,729	-14%	62,729	-14%	146	-6%	1,441,831	-18%	7,077,117	-18%	7,077,117	-8%	4,348,854	-20%					
FRA OFR HOK VL1824*	4.4		161		462		639		100,233		22,976		19,001		1,782		90,458		341,471		341,471		104,497						
FRA OFR HOK VL1218	3.9	24%	194	26%	393	-47%	587	-63%	110,516	26%	28,606	1%	22,103	26%	1,178	88%	65,877	12%	346,751	12%	346,751	17%	141,346	49%	11,381	71%			

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 6.8.6 continued

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend	
FRA OFR PS VL40XX	24.3	6%							2,376,898	3%	97,838	-3%	97,838	-3%	528	80%	1,758,833	-1%	6,769,843	-1%	6,769,843	0%	3,846,107	-4%					
FRA AREA37 DFN VL1218*	0.6	-17%	59	-3%	63	-16%	89	-11%	20,598	-28%	34,499	-12%	10,299	-12%	858	-46%	2,307	-58%	29,337	-58%	29,337	-37%	29,872	2%					
FRA AREA37 DRB VL0612*	0.6	71%	25	52%	173	252%	173	252%	17,973	180%	29,954	63%	15,361	213%	1,966	171%	6,506	1351%	36,475	1351%	36,475	327%	20,568	111%					
FRA AREA37 DTS VL1824*	2.0	41%	150	9%	556	10%	597	15%	88,785	8%	44,784	-24%	28,335	16%	1,649	-37%	137,516	1%	304,461	1%	304,461	5%	126,166	23%	15,050	65%			
FRA AREA37 DTS VL2440*	3.6	30%	180	11%	1,057	7%	1,078	5%	170,810	36%	47,566	5%	37,813	34%	1,681	5%	238,395	23%	565,389	23%	565,389	31%	233,528	120%	94,195				
FRA AREA37 HOK VL0612*	0.5	25%	34	36%	79	22%	80	20%	15,130	38%	30,302	10%	10,949	31%	1,090	-30%	2,241	17%	24,874	17%	24,874	39%	21,737	45%	1,257				
FRA AREA37 MGO VL0612*	0.7	14%	38	31%	82	-21%	82	-22%	24,014	33%	35,665	17%	12,486	24%	1,496	-14%	3,549	-18%	30,921	-18%	30,921	9%	38,215	49%					
FRA AREA37 PMP VL0612	0.7		99		77		79		48,113		72,195		28,302		1,034		5,943		74,880		74,880		71,213						
FRA AREA37 PS VL1218*	0.5	-77%	27	-52%	1,407	10%	1,634	9%	78,959	-1%	154,173	328%	18,607	49%	272	84%	7,687	-3%	171,584	-3%	171,584	21%	354,917	242%					
FRA AREA37 PS VL2440*	0.2	-71%	7	-68%	15,122	371%	27,761	58%	716,477	52%	3,239,391	430%	70,638	50%	360	-57%	29,287	-35%	1,322,790	-35%	1,322,790	101%	1,254,519	130%					
FRA AREA37 PGP VL0006	0.7	-8%	52	41%	56	-41%	56	-41%	19,343	16%	27,409	27%	18,160	18%	661	17%	1,585	-1%	26,147	-1%	26,147	14%	28,399	18%					
FRA AREA37 DFN VL0006	0.5	26%	27	14%	54	-18%	55	-18%	12,071	-8%	22,346	-27%	10,906	2%	1,120	18%	1,383	10%	17,742	10%	17,742	0%	17,634	-16%	1,750				
FRA AREA37 DFN VL0612	0.6	17%	39	34%	52	9%	53	8%	19,499	49%	31,723	26%	14,989	55%	1,976	-6%	3,084	33%	30,590	33%	30,590	43%	26,547	49%	276	89%			
FRA AREA37 FPO VL0006	0.5	-39%	44	10%	65	-2%	65	-2%	14,664	-37%	29,443	3%	14,114	-38%	527	30%	1,216	54%	21,898	54%	21,898	-30%	21,283	-39%	2,229				
FRA AREA37 FPO VL0612	0.8	34%	80	67%	108	-18%	109	-24%	27,182	29%	32,823	-3%	20,441	25%	672	-23%	4,570	3%	46,781	3%	46,781	32%	36,023	12%	1,335	-220%			
FRA AREA37 PGO VL0006	0.5	14%	33	296%	63	-58%	63	-58%	13,324	19%	26,835	5%	11,002	19%	644	-22%	1,120	33%	18,079	33%	18,079	23%	20,460	17%					
FRA AREA37 PGO VL0612	0.6	14%	16	56%	85	177%	88	182%	10,147	3%	17,961	-11%	7,543	9%	1,293	-74%	1,448	18%	14,246	18%	14,246	3%	14,156	4%					
FRA AREA37 PGP VL0612	0.5	-28%	61	37%	80	-24%	81	-26%	20,485	-14%	38,009	20%	15,037	-11%	687	-41%	2,713	-33%	34,176	-33%	34,176	-12%	28,015	-7%	620	63%	-191%	Deteriorated	
FRA AREA37 PS VL0612	1.5	-24%	58	-8%	306	-14%	378	-7%	60,739	-14%	41,000	13%	26,573	8%	553	8%	7,250	-16%	89,886	-16%	89,886	-18%	96,866	-5%					

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

5.9 GERMANY

Fleet Structure, Fishing Activity and Production

On January 1st, 2014 the German fishing fleet consisted of 1,521 registered vessels, with a combined gross tonnage of 59 thousand GT, a total power of 138 thousand kW and an average age of 30 years. The size of the German fishing fleet decreased between 2008 and 2013, with the number of vessels decreasing by 17% and GT and kW by 7% and 8%, respectively (Table 5.9.1). The major factors causing the fleet to decrease include low profitability of certain fisheries coinciding with a high number of fishermen close to the age of retirement with no successors to the business. A 'one off' special arrangement occurred in 2011, actuating some additional decommissioning: a time limited option to permanently transfer quota from one vessel to another if the vessel then left the fleet.

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

Table 5.9.1 German national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	1,861	1,817	1,759	1,664	1,564	1,542	1,521	-1%	↘	-17%
	No. of Inactive vessels (#)	512	506	497	437	410	399	402	-3%	↘	-22%
	Average vessel age (year)	27	28	28	29	29	30	30	3%	↗	11%
	Vessel tonnage (thousand GT)	66.6	67.9	65.9	64.6	62.1	62.2	59	0%	↔	-7%
	Vessel power (thousand kW)	155	158	156	151	142	142	138	0%	↔	-8%
No. of Enterprises (#)		1,293	1,245	1,198	1,128	1,053	1,037	1,016	-2%	↘	-20%
Employment	Total employed (#)	2,068	1,529	1,744	1,639	1,752	1,647	1,637	-6%	↘	-20%
	FTE (#)	1,615	1,238	1,365	1,258	1,372	1,281	1,285	-7%	↘	-21%
	Average wage per employed (thousand €)	22.0	31.7	28.0	27.4	28.8	28.4	27.6	-1%	↘	29%
	Average wage per FTE (thousand €)	28.2	39.1	35.7	35.8	36.7	36.6	35.1	0%	↔	30%
Fishing Effort	Days at sea (thousand days)	138	128	115	109	119	107	110	-10%	↘	-23%
	Fishing days (thousand days)	143	133	113	113	124	112	114	-9%	↘	-22%
	Energy consumption (million litres)	48.3	46.1	47.1	41.6	46.6	37.2	35	-20%	↘	-23%
	Energy consumption per landed tonne (l/T)	187	202	214	200	254	170	494	-33%	↘	-9%
Output	Landings weight (thousand tonnes)	258	228	221	208	184	219	216	19%	↗	-15%
	Landings value (million €)	167	134	147	131	153	145	134	-5%	↘	-13%
	Recreational catches of selected species (T)	2,540	2,158	2,974	2,862	3,824	2,931	3,003	-23%	↘	15%

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

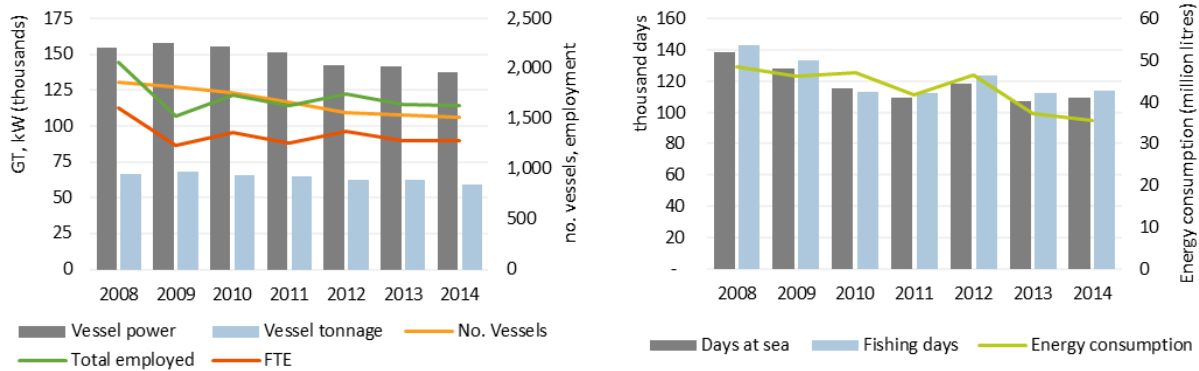
For data protection reasons, figures on the pelagic trawlers can only be provided for 'Structure' and 'Landings weight'

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

In 2013, the number of fishing enterprises in the German national fleet totalled 1,037, with the vast majority (71%), owning a single vessel. Only 28% of enterprises owned two to five fishing vessels. Total employment in 2013 was estimated at 1,647 jobs, corresponding to 1,281 FTEs. The level of employment decreased between 2008 and 2013 by about 20%. The major factors causing employment to decrease are the same as for the decrease in fleet size.

In 2013 the German fleet spent a total of around 107 thousand days at sea, a decrease of around 23% between 2008 and 2013. The major factor causing the decrease in days at sea was the decrease in capacity. It has to be born in mind that 67 thousand days at sea (=62%) were assigned to the small-scale fleet. The quantity of fuel consumed in 2013 totalled around 37 million litres, a considerable decrease of around 23% from 2008. The major factors causing the decrease in fuel consumption were the reduction in total effort and the increase in both the fuel price (basis=2008) and fuel efficiency (Table 5.9.1 and Figure 5.9.1) Most of the decrease related to demersal trawlers and seiners

as well as beam trawlers. One large high seas demersal trawler left the German fleet, thus also lowering the overall energy figures.

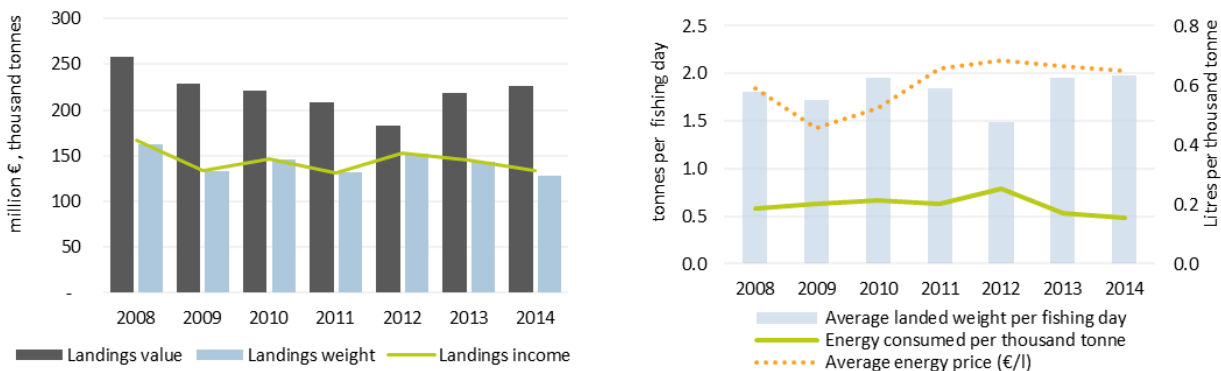


Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.9.1 German fleet main capacity and effort trends for the period 2008-2014

Note: Data on Pelagic trawlers provided only for power, tonnage and number.

The total weight landed by the German fleet in 2014 was 227 thousand tonnes of seafood (when excluding the pelagic trawlers, 216 thousand tonnes), the landed value of the non-pelagic fleet was €134 million. Total landings, in weight and value, show no clear trend over the period analysed. In 2014, common shrimp generated the highest landed value by the non-pelagic national fleet (€59.9 million), followed by cod (€21.9 million), Greenland halibut (€14.7 million), saithe (€11.2 million) and then plaice (€6.2 million). In terms of landings weight, in 2014 the total amount of common shrimp landed was 16.1 thousand tonnes, cod was 14.5 thousand tonnes, and saithe was 10.9 thousand tonnes.



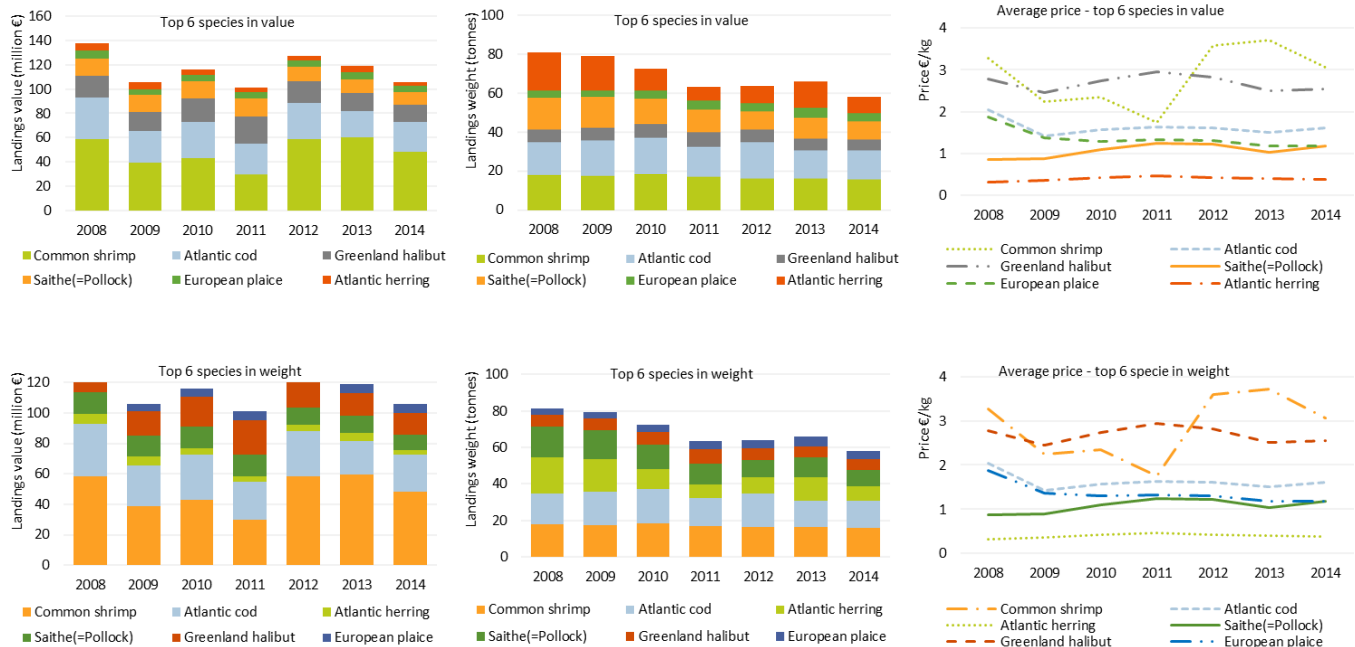
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.9.2 Landings in value and weight (and corresponding income from landings) by the German national fleet and some efficiency indicators for the period 2008-2014

Note: Data on Pelagic trawlers provided only for power, tonnage and number.

The major factor influencing the value of landings of common shrimp is the price: while prices decreased considerably in 2011, they increased remarkably in 2012 and 2013 and returned to a more average level in 2014. This is thought to be due to the formation of a producer organisation which took over most of the first sale of catches, achieving a much stronger position against the first buyers. The buyer market is dominated by two companies (Figures 5.9.3). One of these two dominant wholesale companies was taken over by the same company that dominates the German pelagic fishery. This has been regarded as stabilising event from the fisheries' perspective.

Average prices obtained for the other key species varied slightly between 2008 and 2013. Common shrimp achieved the highest average price per kilo in 2013 (€3.71 per kg), followed by Greenland halibut (€2.51 per kg). Common shrimp accounted for 38% of the total landings value obtained by the German non-pelagic fleet in 2012, increasing to 41% of total income in 2013, while the Greenland halibut share decreased from 12% in 2012 to 11% in 2013.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.9.3 German fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (top) and top 6 species in terms of landed weight (bottom)

Note: Data on Pelagic trawlers provided only for power, tonnage and number.

National Fleet Economic performance

The total amount of income generated by the German national (non-pelagic) fleet in 2013 was €146.9 million. This consisted of €143.3 million in landings value and €3.6 million in non-fishing income. The German (non-pelagic) fleets' total income decreased by 12% between 2008 and 2013, regarding figures adjusted for inflation. Total operating costs incurred by the German national (non-pelagic) fleet in 2013 equated to €112.6 million, 77% of total income. Labour cost and fuel costs, the two major fishing expenses, were €47 and €25 million, respectively (Table 5.9.2). Between 2012 and 2013, total operating costs decreased by about 13%.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the German (non-pelagic) fishing fleet in 2013 were €81 million, €34 million and €13 million, respectively. Gross Value Added (GVA) and gross profit increased by 7% and 36% from 2012 to 2013 while net profit more than doubled even though income from landings decreased during that period. However, for the overall (non-pelagic) German fleet operating costs could be further lowered. In 2013, the German non-pelagic fishing fleet had an estimated (depreciated) replacement value of €94 million.

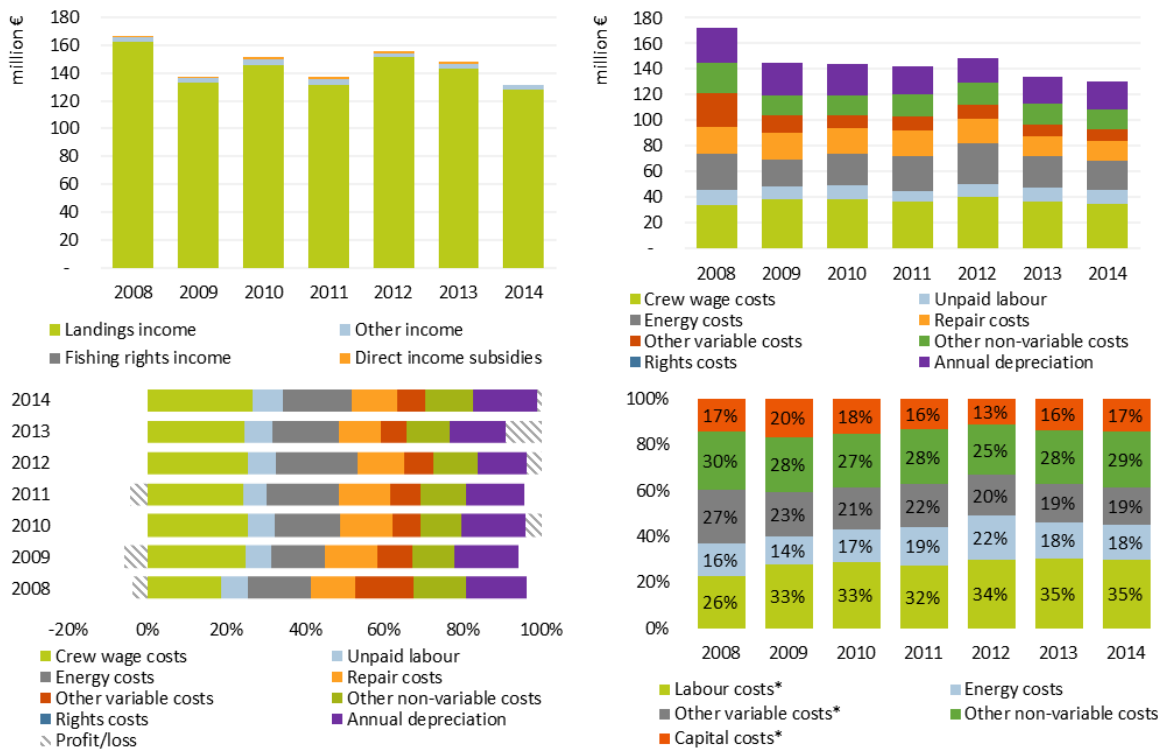
Investments by the fleet amounted to €28 million in 2013 (Table 5.9.2). There was no major activity in building new vessels, and investments refer mainly to replacement of worn or written off assets. However, due to favourable revenues in 2012 and 2013 as compared to preceding years, a considerable increase in investment took place particularly within the shrimp beam trawler fleet. High seas trawlers also underwent considerable refurbishing activities, e.g. for environmentally friendly coolants and cooling systems. Two high seas trawlers left the fleet, one in 2013 and another in 2014. One of those is scheduled to be replaced by a newly built vessel in 2015.

Table 5.9.2 German national fishing fleet economic performance in 2008-2013 (without pelagic fleet) and projections for 2014. Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	162.6	132.7	145.4	131.7	151.7	143.3	127.8	-6%	-12%	↘
	Other income	2.9	3.4	4.9	3.9	2.6	3.6	3.6	37%	25%	↗
Costs	Labour costs	45.6	48.4	48.8	45.0	50.4	46.9	45.1	-7%	3%	↘
	Energy costs	28.6	21.1	24.6	27.2	31.9	24.7	23.0	-23%	-14%	↘
	Repair costs	20.4	20.3	20.0	19.4	18.2	15.7	15.3	-14%	-23%	↘
	Other variable costs	26.4	13.5	10.7	11.4	11.6	9.6	9.1	-17%	-64%	↘
	Other non-variable costs	24.0	16.3	15.3	17.2	17.1	15.8	16.0	-7%	-34%	↘
	Capital costs	28.7	29.0	26.1	22.1	19.1	21.0	21.5	10%	-27%	↗
Economic Indicators	GVA	66.1	65.0	79.5	60.4	75.6	81.2	67.9	7%	23%	↗
	Gross profit	20.6	16.6	30.7	15.4	25.2	34.3	22.8	36%	67%	↗
	Net profit	-8.2	-12.4	4.6	-6.7	6.2	13.3	1.3	117%	263%	↗
Capital value	Depreciated replacement value	120.4	119.7	106.6	102.4	90.9	94.2	95.3	4%	-22%	↗
	Investments	20.0	26.9	23.3	25.9	21.5	28.2		31%	41%	↗
Profitability and development trends	Net profit margin (%)	-5.0	-9.1	3.1	-4.9	4.0	9.1	1.0	128%	283%	↗
	<i>development trend</i>			Improved					479%		↗
	RoFTA (%)	-5.7	-7.4	5.8	-6.4	6.2	14.1	1.45	129%	350%	↗
	<i>development trend</i>			Improved					1051%		↗
Profitability and development trends	GVA per FTE (thousand €)	40.9	52.5	58.2	48.0	55.1	63.4	52.9	15%	55%	↗
	<i>development trend</i>			Improved					24%		↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete. For data protection reasons, figures on the Pelagic trawlers can only be provided for 'Structure' and 'Landings weight'

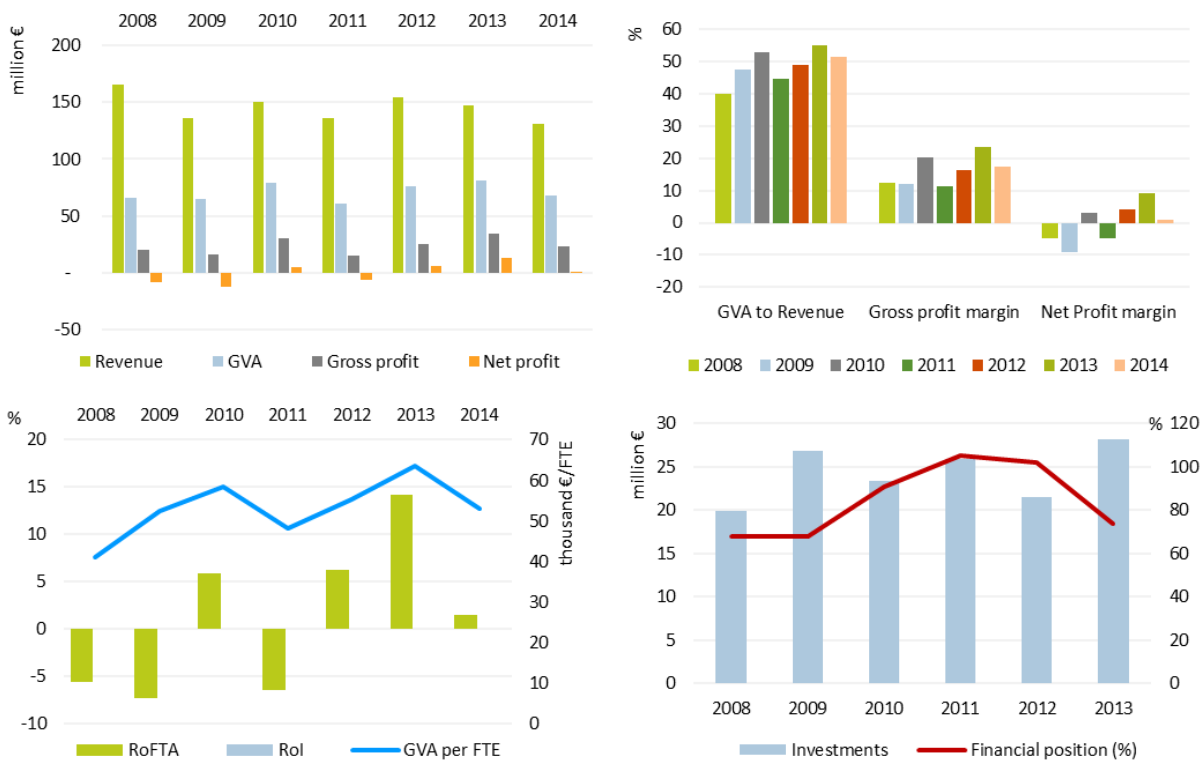
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.9.4 Income and cost structure trends for the German non-pelagic fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.9.5 Main economic performance indicator trends for the German non-pelagic fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Fleet Segment Level Economic performance

The German fishing fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North Sea, Eastern Arctic, the Baltic Sea and the Western Atlantic. In contrast to previous years, the high seas pelagic fleet no longer operated in the Pacific and in Mauritanian and Moroccan waters. Beam trawlers operate exclusively in the coastal North Sea, whereas almost all smaller vessels using fixed gear operate in the Baltic Sea. Smaller demersal trawlers mainly fish in the Baltic Sea, while larger ones (>30m) fish in the North Sea, Eastern Arctic and Greenland waters. Few larger drift netters fish in Western Atlantic waters (Figure 5.9.3).

The small scale fleet of vessels < 12m operates almost exclusively in the Baltic Sea using passive gear. In previous years economic performance remained relatively stable, but at a very low level. The segment is dominated by sideline fishermen who often do not run the business for the purpose of generating the main income of the household. Thus, the income per fisherman is rather low. The average weight of landings has remained stable at around 8,000 tonnes/a. The price per kg was about or slightly above 1€/kg. The number of vessels decreased, but the gross tonnage remained rather stable (Table 5.9.3 and Table 5.9.4).

The economic performance of non-pelagic vessels >12m has varied over the years. Both number and tonnage of all vessels has decreased, the total weight of landings also showed a decreasing trend. However, the value of landings was quite variable. This is to a large extent due to the price development for brown shrimp prices (Table 5.9.3 and Table 5.9.4).

The national fleet consisted of 21 active (DCF) fleet segments in 2013, with about 400 inactive vessels mainly in the shortest length class (2013 and 2014). Several of the segments contain too few vessels to be presented individually and have therefore been clustered. This, Table 5.9.5 contains economic data for 13 vessel groups, excluding most of the data on the pelagic segments for confidentiality reasons. Nine of the active fleet segment clusters made an overall gross profit in 2013 while four made losses.

In 2013, the increase in prices for common shrimp continued, affecting the segments **Beam trawler 12-18m** and **18-24m** – 181 vessels made up these two segments in 2013, operating exclusively in coastal areas of the North Sea, targeting mainly brown shrimp and employing around 300 FTEs. In 2013 the total value landed by these vessels was about €56 million, accounting for approximately

39% of the total landings income generated by the German non-pelagic fishing fleet. These fleet segments were profitable in 2013, with a reported gross profit of around €18.5 million and an estimated net profit of around €13.6 million. These segments were significantly affected by a doubling in price compared to 2011 when the prices had dropped considerably. In 2014 prices reduced by about 20% compared to the 2013 level.

Table 5.9.3 Non-pelagic German national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ	Trend	Large scale fleet							%Δ	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	961	939	903	883	852	832	817	-2%	↘	387	372	357	344	301	310	302	3%	↗
Average vessel age (year)	23.9	23.9	24.9	24.9	25.8	25.8	26.9	0%	↔	33.2	33.9	34.4	34.8	35.0	36.4	36.8	4%	↗
Average vessel length (m)	6.4	6.4	6.4	6.4	6.4	6.4	6.4	0%	↔	19.7	19.9	20.2	20.2	20.7	20.3	20.5	-2%	↘
Vessel tonnage (thousand GT)	2.6	2.6	2.5	2.4	2.3	2.2	2.2	-4%	↘	61.2	60.9	60.1	59.6	56.8	54.2	54.4	-5%	↘
Vessel power (thousand kW)	23.8	23.9	23.4	22.6	22.7	22.2	22.4	-2%	↘	118.8	119.5	117.9	114.8	105.5	103.0	103.8	-2%	↘
Total employed (#)	1,031	559	847	869	876	777	763	-11%	↘	1,037	970	897	770	876	870	875	-1%	↔
FTE (#)	790	464	654	664	668	597	626	-11%	↘	825	774	711	594	704	684	659	-3%	↘
Average wage per employed (thousand €)	3.1	6.4	2.9	3.2	3.4	4.1	3.7	21%	↗	40.8	46.2	51.7	54.8	54.2	50.2	48.4	-7%	↘
Average wage per FTE (thousand €)	4.1	7.7	3.7	4.2	4.4	5.3	4.5	20%	↗	51.3	57.9	65.2	71.0	67.4	63.8	64.3	-5%	↘
Days at sea (thousand days)	88.6	79.1	70.4	73.3	75.6	66.5	69.6	-12%	↘	49.6	48.8	44.6	35.9	42.7	40.6	40.2	-5%	↘
Fishing days (thousand days)	93.6	84.4	69.6	78.1	81.3	71.3	74.3	-12%	↘	49.1	48.4	43.0	34.5	42.1	40.0	39.4	-5%	↘
Energy consumption (million litres)	1.7	1.5	1.1	1.2	1.4	1.1	1.1	-21%	↘	46.6	44.6	46.0	40.4	45.2	36.1	34.3	-20%	↘
Energy consumption per landed tonne (l/T)	136	155	141	190	170	132	152	-22%	↘	475.6	428.9	578.9	563.9	647.0	507.2	532.1	-22%	↘
Landings weight (thousand tonnes)	12.2	9.6	7.9	6.5	8.0	8.1	7.2	2%	↗	195.2	185.3	199.5	201.5	175.5	210.9	208.8	20%	↗
Landings value (million €)	11.8	8.4	8.3	7.8	9.0	8.8	8.1	-3%	↘	155.3	125.3	138.6	123.4	144.3	136.4	126.2	-6%	↘

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Table 5.9.4 Economic performance of the German national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ	Trend	Large scale fleet							%Δ	Trend		
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014				
Income	Landings income	11.6	8.3	8.2	7.7	9.0	8.6	7.0	-5%	↘	151.1	124.5	137.1	124.0	142.7	134.7	120.8	-6%	↘	
	Other income	0.5	0.8	0.9	1.4	0.8	0.5	0.5	-40%	↘	2.4	2.7	4.0	2.6	1.8	3.1	3.07	75%	↗	
	Direct income subsidies	0.1	0.2	0.3	0.6	0.3	0.5			67%	↗	0.7	1.0	1.0	1.2	1.1	0.7		-37%	↘
	Fishing rights income																			
Costs	Labour costs	3.2	3.6	2.4	2.8	3.0	3.2	2.8	7%	↗	42.3	44.8	46.3	42.2	47.4	43.7	42.3	-8%	↘	
	Energy costs	1.3	0.9	0.9	0.9	1.2	1.0	1.0	-17%	↘	27.3	20.2	23.7	26.3	30.8	23.7	22.1	-23%	↘	
	Repair costs	2.0	2.1	1.3	1.7	1.3	1.3	1.3	0%	↔	18.4	18.2	18.8	17.7	17.0	14.4	14.1	-15%	↘	
	Other variable costs	1.5	1.5	1.4	1.1	1.6	2.2	2.3	43%	↗	24.9	12.0	9.3	10.3	10.0	7.4	6.8	-26%	↘	
	Other non-variable costs	2.4	2.0	1.7	2.2	2.4	1.8	1.8	-24%	↘	21.7	14.3	13.7	15.0	14.7	14.0	14.2	-5%	↘	
	Capital costs	1.9	2.0	2.1	1.7	1.5	1.5	1.5	-3%	↘	26.8	26.6	24.0	20.4	17.6	19.5	20.0	11%	↗	
Capital value	Depreciated replacement value	8.5	8.3	8.1	7.7	7.1	6.7	6.7	-5%	↘	105.2	98.2	92.6	88.5	78.0	83.3	83.9	7%	↗	
	Investments	2.9	4.4	3.6	2.8	2.4	2.5		5%	↗	17.0	22.5	19.7	23.1	19.2	25.7		34%	↗	
Economic Indicators	GVA	4.9	2.5	3.9	3.1	3.5	2.9	1.2	-19%	↘	61.2	62.5	75.6	57.4	72.1	78.3	66.8	9%	↗	
	Gross profit	1.7	-1.1	1.5	0.3	0.6	-0.3	-1.6	-160%	↘	18.8	17.7	29.3	15.2	24.7	34.6	24.4	40%	↗	
	Gross profit margin	14.1	-12.3	16.0	3.0	5.5	-3.7	-21.8	-166%	↘	12.3	13.9	20.7	12.0	17.1	25.1	19.7	47%	↗	
	Net profit	-0.2	-3.1	-0.6	-1.5	-1.0	-1.8	-3.1	-85%	↘	-7.9	-8.9	5.3	-5.2	7.1	15.1	4.4	113%	↗	
Profitability and development trends	Net Profit margin	-1.4	-34.6	-6.8	-16.3	-9.8	-19.7	-41.5	-101%	↘	-5.2	-7.0	3.8	-4.1	4.9	11.0	3.6	124%	↗	
	development trend				Deteriorated				-43%	↘				Improved				818%	↗	
	RoFTA (%)	-0.8	-34.6	-6.1	-18.9	-14.2	-26.7	-46.3	-87%	↘	-6.4	-6.0	7.3	-5.8	8.5	18.1	5.6	114%	↗	
	development trend				Deteriorated				-79%	↘				Improved				3739%	↗	
GVA per FTE (thousand €)	6.2	5.3	5.9	4.6	5.2	4.8	1.8	-9%	↘	74.2	80.8	106.3	96.5	102.4	114.5	101.3	12%	↗		
development trend				Deteriorated				-13%	↘				Improved				24%	↗		

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Assessment and Future Trends

National Fleet

The German fishing fleet decreased further in size in 2013 and 2014 in terms of vessel numbers. One vessel from the high seas fleet was sold outside Germany in 2013. The number of cutters and small

scale fishing vessels decreased, thus continuing the long term trend. Fleet segments were affected differently by price and quota developments (see Table 5.9.3 and Table 5.9.4).

Small scale and cutter Fleet

The most striking development for the cutter fleet was the development of revenues from brown shrimp landings which could even be increased compared to the already favourable situation in 2012; the price more than doubled in 2012 after the 2011 market-crash and basically remained at that level in 2013. Therefore, the economic situation became satisfactory again for the shrimp beam trawl fleet. As a consequence, owners increased investments. The North Sea plaice stock was assessed at another all-time high, and thus quota increased again as well. However, the benefit for the fleet was limited due to decreasing prices. Temporarily it even dropped to the intervention price which is has never occurred with any species before.

Saithe fisheries in the North Sea were satisfactory. The lower quota was fully exploited but decreasing prices affected the profitability in 2013. The MSC certification of this fishery was renewed in 2012 and again proven conducive for marketing. The Nephrops fishery has become increasingly important for the German cutter fleet due to the possibility of international quota exchange. Quota for haddock, saithe, ling, dab, sole and others were swapped.

The Cod fishery in the North Sea was regarded satisfactory due to stock recovery. Baltic cod quota was not fully exploited, either for the Western or the Eastern stock. The considerable stock increase led to a lack of food as the fish showed signs of malnutrition, resulting in lower market prices. Moreover, Baltic cod did not aggregate as usual, according to the fisheries, thus leading to lower hourly catches.

The coastal fishery on Baltic herring was satisfactory, and the considerably increased quota could be fully exploited in a short time in 2013. Due to the still pending long-term management plan Baltic herring could not be MSC certified. As several buyers only accept certified herring, prices were not always at a satisfactory level.

The industry states unexpected problems due to decreased prices especially for species with increased TAC. The increasing age of vessels results in decreasing competitiveness. Investment in new cutters occurs only within the smallest length classes. Another future problem becomes more evident, which is a lack of potential and qualified successors of elder fishermen close to retirement. Employment in fisheries has become less attractive for most candidates due to more suitable opportunities in other branches and the perception of the business as being uncertain.

High Seas Fleet

According to the German fishing industry, 2013 was a mediocre year for both pelagic and demersal high seas trawlers, particularly due to the unresolved dispute on Atlantic mackerel. One large demersal trawler exited the German fleet due to decreasing fishing opportunities in Greenland waters, according to information from the sector. On the other hand, considerable investment has been undertaken for modernising the high seas fleet. This mainly applies to on-board processing facilities and cooling technology. In 2013 the construction of a new pelagic trawler has been initiated which is expected to be operational in 2015.

The MSC certifications for the cod, saithe and haddock fisheries in the North Sea and in Norwegian waters were successfully renewed. The annual audit for fisheries on North Sea herring (including Norwegian waters) passed successfully. Due to the ongoing uncertainties on quota allocation on Atlantic mackerel the certification was cancelled causing negative consequences for the participating industry.

Cod fisheries in the Svalbard, Barents Sea and Norwegian areas were efficient. However, decreasing prices had a negative impact on profitability. The saithe fishery in the North Sea did not entirely fulfil the expectations. The Greenland halibut fishery was efficient and led to positive results, even though the total quota had been considerably reduced. The Greenland cod quota was fully exploited. The demersal high seas fleet did not perform any fishing activities on whitefish in the North Sea. Quota was exchanged with the cutter fleet.

Two demersal trawlers continued in the redfish fishery East of Greenland which had been re-opened in 2012.

The pelagic fleet experienced good results in the North Sea and North Atlantic fisheries on herring, jack mackerel and mackerel. The quota for blue whiting was unsatisfactory but as in 2012 partial compensation could be achieved through fisheries on argentine in combination with blue whiting.

One pelagic trawler performed redfish fishery for several weeks.

In 2013 no fishery took place in distant (African or Pacific) waters.

Development in 2014

The year 2014 was also regarded economically mediocre by the industry. One high seas demersal trawler left the German fleet and will be replaced by a newly constructed trawler in 2015. Modernisation of on-board equipment was continued as in preceding years.

Audits on MSC certified fisheries were successful, thus all certificates were extended. Due to the dispute on Atlantic mackerel quota the related fishery could not be certified effective for 2014. Fishing activities and results of the high seas fleet were similar to 2013. However, saithe fisheries in Norwegian waters could not be performed according to the industry as an agreement with Norway could only be achieved when the fishing season had ended.

In 2014 one pelagic trawler fished in Mauritanian waters but stopped that activity after one month due to inefficiency. For the same reason the fishery in Moroccan waters ceased after two months. One German trawler was involved in exploiting “pooled quota” in the Southern Pacific. The “pooled quota” is swapped annually amongst participating EU member states. Thus in 2015 no German vessel is involved.

The cutter fleet faced increased problems with plaice sales. Due to high supplies the sales prices temporarily dropped below the intervention price in Dutch auctions, which was a unique event in EU fisheries. The sole fishery is being dominated by vessels using the pulse technology which is more efficient with respect to both catch rates and fuel consumption than the traditional gear. The North Sea saithe fishery suffered from decreased quota while prices remained stable.

Fisheries on Baltic cod were not satisfactory. The Eastern quota was exploited at less than 15%. As in previous years the quality of Baltic cod was low due to low weights. Baltic herring fisheries were successful. The quota was almost fully exploited. Due to the lack of a management plan Baltic herring did not qualify for the MSC certificate, which hampered sales.

The brown shrimp fishery was satisfactory in 2014. The total catch remained stable while prices decreased compared to the high levels in 2012 and 2013.

The fishing industry expects future problems from a potential loss of fishing grounds due to area closures e.g. for Nature 2000 sites or wind farms. The industry has stated concerns about the implementation of discard bans beginning in 2015.

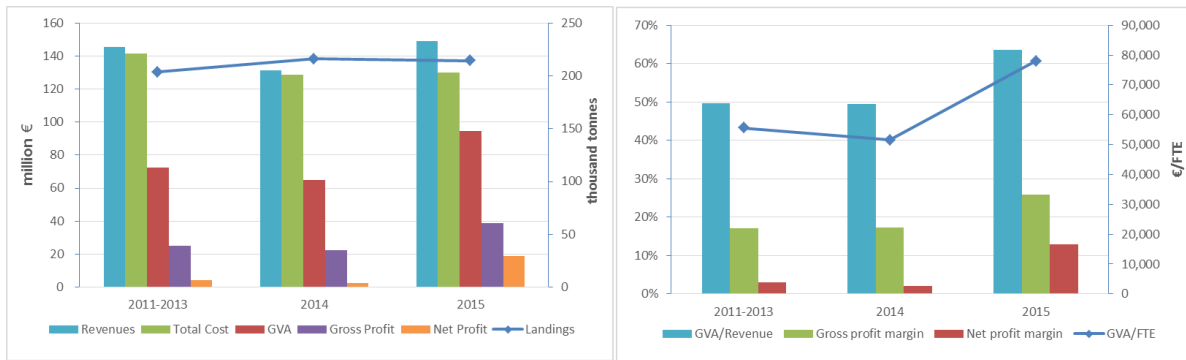
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According to the BEMEF projections, the decline in fish prices for some species offsets a 6% increase in landings and leads to a worse economic performance for the German fleet. Gross profit decline 2% and net profit decline 2%, although the respective profit margins increase 6% and 9% due to the lower revenue.

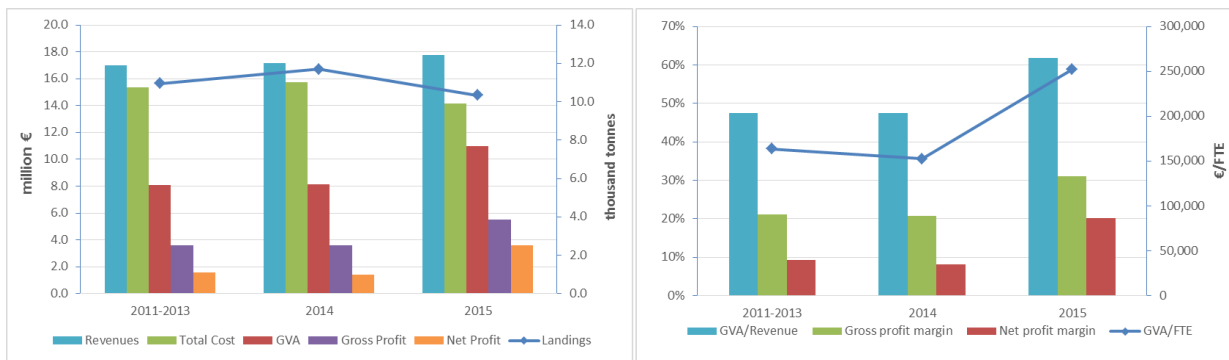
This negative trend is reversed in 2015 for the German fleet, with reported prices increasing and large increases in gross profit and especially net profit as the interest rate and the opportunity cost of capital continue to decline. A large shift is also seen in GVA/FTE with a 48% increase to €78,000 (Figure 5.9.6).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

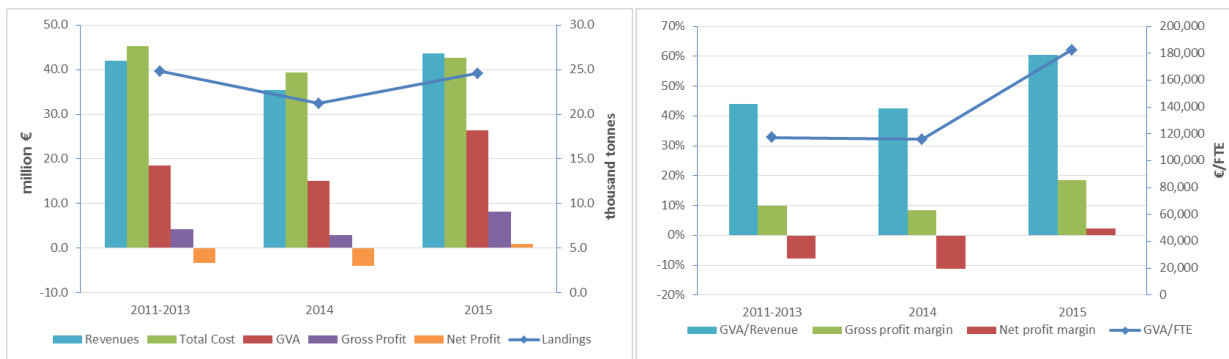
Figure 5.9.6 Germany: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 German fleets by gross earnings.



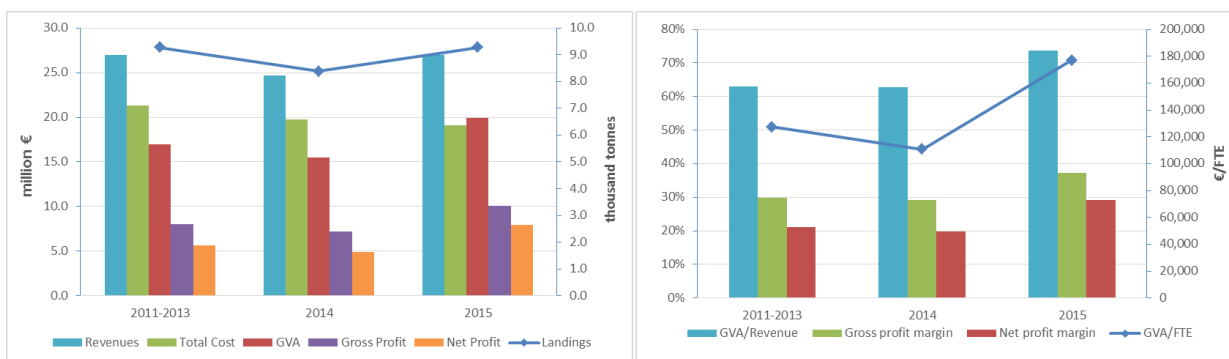
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.9.7 DEU AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

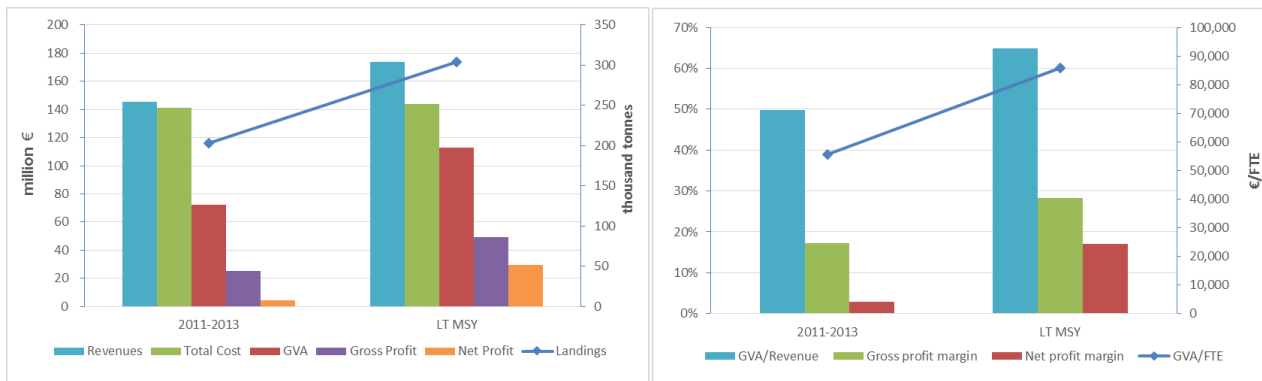
Figure 5.9.8 DEU AREA27 DTS VL40XX: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.9.9 DEU AREA27 TBB VL1218: Projections on 2014 and 2015 on the main socio-economic indicators.

According to the BEMEF projections, a state of long-term MSY sees a significant increase in landings (50%) for the German fleet due to increased yield from North Sea stocks. Revenue increase substantially less (19%) due to price changes, but the increase is enough for gross and net profit to reach high levels of €49 million and €30 million respectively. Gross and net profit margins also increase to 28% and 17% (Figure 5.9.10).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.9.10 Germany: MSY projections for the main socio-economic indicators.

Data issues

Capacity, logbook and landings data are derived from sources which are covered by different legislations. All these data are available exhaustively. That means that all capacity, landings and effort data are represented at 100%. The only exception is the group of vessels <8m without logbook obligation. These vessels are sampled for effort data. The remaining variables (cost, employment, fuel consumption) are estimated based on results from an accountants' network and from surveys with questionnaires.

All data on the high seas fleet were collected exhaustively (100%).

The data basis for fleet segment level estimations has become broad over the years. All fleet segments with major contribution to the total catches of the German fleet have been sampled with satisfactory response rates. As segments are not necessarily homogeneous, the results can be quite variable which is reflected in higher coefficients of variation. Some leaps in time series might be due to an improvement in data coverage, with the latest data being most reliable as the raising procedure is based on more comprehensive information. The improvement of the estimation procedure is an on-going process.

For the first time the population of small vessels below 12m was sampled using stratified random sampling for 2013 data. Around two-thirds of the sampling activity was assigned to owners with income from landings of more than €10 thousand, 1/3 to the owners below that value.

Except for capacity and weight of landings no data for the pelagic fleet could be published due to confidentiality issues. However, all data have been collected. As in previous years, this affects regional analyses. The pelagic fleet mainly operates in the North Sea and North Atlantic (herring, mackerel, blue whiting), temporary activities in the Pacific as in previous years have been ceased. Data on pelagic fisheries in the Baltic are hardly affected, as they are performed on a seasonal basis, and vessels are assigned to the DTS segment, which reflects their major activity during the year.

The German fishing fleet contains a small number of pelagic vessels which are owned mainly by one company and therefore, for confidentiality reasons, it is impossible to publish this data by segment. Clustering the pelagic vessels with other vessels is not feasible as the pelagic vessels have unique characteristics that would completely bias "pure" segments when clustered. Therefore, the only pelagic fleet data in this report is capacity and weight of landings data, which is public, so please consider this when interpreting national totals; the German pelagic fleet accounts for a substantial part of the national fleets' costs and earnings.

Vessels which targeted blue mussels were excluded from the analysis because they are defined as operating in the aquaculture sector. Not all of the participating vessels can be identified by the first gear entry in the fleet register as some vessels are using beam trawls. Instead, the relative catch of blue mussel was used.

Table 5.9.5 Main socio-economic performance indicators by fleet segment in the German national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	No.	%Δ	FTE	%Δ	Days	%Δ	Energy	%Δ	Value	%Δ	Weight	%Δ	GVA	%Δ	GVA	%Δ	Gross	%Δ	Net	%Δ	Net	%Δ			
DEU AREA27 DFN VL1218	11	57%	15	7%	1,136	-1%	57	62%	1,489	-7%	838	21%	1,331	-11%	88.8	-17%	851	-28%	702	-33%	45.1	-32%	High	99%	Improved
DEU AREA27 DFN VL2440*	6	-33%	63	0%	1,345	4%	829	-56%	4,595	18%	1,351	11%	1,953	219%	31.0	219%	726	67%	1,247	57%	-29.5	60%	Weak	0%	Stable
DEU AREA27 DTS VL1012*	13	30%	7	40%	882	19%	250	28%	648	4%	962	4%	286	-12%	40.9	-37%	8	26%	129	-1%	-13.1	14%	Weak	17%	Improved
DEU AREA27 DTS VL1218	30	11%	20	-17%	2,551	-16%	848	-16%	2,744	-13%	4,712	-4%	1,555	-18%	77.8	-2%	358	-37%	181	-9166%	-5.6	-11120%	Weak	31%	Improved
DEU AREA27 DTS VL1824	18	-10%	50	-9%	3,117	-3%	2,351	-29%	10,642	5%	9,315	15%	7,488	23%	149.8	36%	3,888	758%	2,794	364%	25.9	369%	High	817%	Improved
DEU AREA27 DTS VL2440	11	10%	54	32%	2,192	5%	4,645	-14%	15,665	-5%	12,175	22%	8,573	41%	158.8	7%	3,877	147%	1,492	481%	9.1	487%	Reasonable	309%	Improved
DEU AREA27 DTS VL40XX	7	-13%	141	-15%	1,850	0%	13,139	-21%	34,592	-22%	23,265	-9%	16,264	-18%	115.4	-3%	4,076	-20%	4,431	-73%	-12.6	-119%	Weak	-18%	Deteriorated
DEU AREA27 PG VL0010	766	-2%	553	-10%	60,182	-12%	781	-11%	6,103	-3%	4,780	1%	1,627	-34%	2.9	-27%	297	-158%	1,303	-146%	-20.6	-163%	Weak	-91%	Deteriorated
DEU AREA27 PG VL1012	66	-3%	44	-17%	6,360	-12%	290	-38%	2,673	-2%	3,343	3%	1,219	18%	27.7	42%	37	-209%	489	-12%	-17.6	-25%	Weak	14%	Improved
DEU AREA27 TBB VL1012*	13	0%	9	-18%	1,086	-19%	121	63%	997	20%	247	10%	661	15%	73.4	41%	333	-15%	289	-13%	29.2	-26%	High	928%	Improved
DEU AREA27 TBB VL1218	119	1%	156	-4%	15,247	-9%	5,085	-17%	31,802	0%	8,830	-3%	20,858	3%	133.7	7%	11,251	10%	8,999	10%	28.6	10%	High	145%	Improved
DEU AREA27 TBB VL1824	67	6%	131	4%	9,535	-2%	5,642	-5%	24,712	2%	6,531	-3%	15,107	16%	115.3	11%	7,281	17%	4,588	17%	18.7	10%	High	659%	Improved
DEU AREA27 TBB VL2440*	8	0%	38	3%	1,631	14%	3,147	-32%	8,477	22%	2,979	21%	4,231	118%	111.3	112%	3,460	190%	2,230	113877%	26.3	87733%	High	785%	Improved
DEU AREA27 TM VL40XX*	7	-13%									139,660	32%													

*all monetary values have been adjusted for inflation - constant prices 2014

Table 5.9.6 Main socio-economic performance indicators by fleet segment in the German national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		consumed per landed tonne		Energy costs		Operating costs		GVA		Net profit		%Δ 2013 to average (2008-12)	Economic development trend
	FTE	%Δ	Days	%Δ	Weight	%Δ	Weight	%Δ	Wage	%Δ	Wage	%Δ	Wage	%Δ	fuel	%Δ	consumed	%Δ	Energy	%Δ	Operating	%Δ	GVA	%Δ	Net	%Δ		
DEU AREA27 DFN VL1218	1.4	-32%	103	-37%	738	23%	673	27%	43,650	-3%	21,150	84%	16,697	66%	68	33%	3,591	-8%	63,965	-8%	63,965	11%	121,021	-43%	63,799	-57%	43%	Improved
DEU AREA27 DFN VL2440*	10.5	50%	224	57%	1,004	6%	1,266	18%	446,635	42%	40,087	-4%	30,427	-11%	613	-60%	69,917	-42%	825,430	-42%	825,430	20%	325,578	379%	-207,860	36%	-36%	Deteriorated
DEU AREA27 DTS VL1012*	0.5	8%	68	-8%	1,091	-13%	1,168	-6%	22,665	-33%	27,393	-40%	23,969	-37%	260	24%	13,855	-1%	76,408	-1%	76,408	-10%	22,029	-33%	9,938	22%	20%	Improved
DEU AREA27 DTS VL1218	0.7	-25%	85	-25%	1,847	14%	1,849	9%	39,897	-19%	33,981	13%	28,317	14%	180	-12%	18,658	-29%	95,391	-29%	95,391	-15%	51,837	-26%	6,023	-8243%	32%	Improved
DEU AREA27 DTS VL1824	2.8	1%	173	8%	2,988	18%	3,325	17%	199,959	-29%	57,787	-34%	45,863	-34%	252	-38%	86,269	-26%	382,480	-26%	382,480	-28%	415,974	37%	155,247	393%	1137%	Improved
DEU AREA27 DTS VL2440	4.9	20%	199	-5%	5,554	17%	6,187	13%	426,928	-5%	82,140	-22%	64,284	-18%	382	-29%	284,699	-21%	1,139,076	-21%	1,139,076	-24%	779,375	28%	135,654	428%	239%	Improved
DEU AREA27 DTS VL40XX	20.1	-3%	264	15%	12,575	-10%	15,366	-10%	1,741,069	-5%	86,436	-2%	60,937	-10%	565	-13%	1,188,640	-9%	4,451,011	-9%	4,451,011	-10%	2,323,425	-6%	632,980	-98%	-13%	Deteriorated
DEU AREA27 PG VL0010	0.7	-8%	79	-10%	79	15%	75	16%	2,511	1%	2,175	9%	1,662	10%	163	-12%	957	-1%	8,666	-1%	8,666	9%	2,124	-33%	1,701	-152%	-115%	Deteriorated
DEU AREA27 PG VL1012	0.7	-14%	96	-9%	526	17%	420	14%	19,032	30%	13,934	106%	11,568	107%	87	-40%	3,371	-42%	42,627	-42%	42,627	-6%	18,468	22%	7,415	-15%	12%	Improved
DEU AREA27 TBB VL1012*	0.7	-19%	84	-19%	228	35%	394	27%	25,247	83%	17,605	572%	14,404	550%	490	49%	7,504	25%	50,587	25%	50,587	46%	50,844	15%	22,256	-13%	1240%	Improved
DEU AREA27 TBB VL1218	1.3	-4%	128	-10%	579	7%	559	7%	80,731	-5%	33,971	-3%	28,339	-3%	576	-15%	29,904	-29%	169,511	-29%	169,511	-6%	175,276	2%	75,619	9%	186%	Improved
DEU AREA27 TBB VL1824	2.0	-2%	142	-8%	685	0%	650	0%	116,813	8%	38,983	19%	32,527	21%	864	-2%	58,840	-20%	257,123	-20%	257,123	-4%	225,484	9%	68,479	10%	381%	Improved
DEU AREA27 TBB VL2440*	4.8	3%	204	13%	1,827	7%	1,887	4%	96,282	3%	16,209	-1%	12,570	-7%	1,056	-44%	237,561	-33%	627,792	-33%	627,792	-14%	528,834	118%	278,752	113988%	724%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

5.10 GREECE

Fleet Structure, Fishing Activity and Production

In 2013, the Greek fishing fleet consisted of 15,954 registered vessels (of which, 14,752 are active), with a combined gross tonnage of 76 thousand GT and a total power of 453 thousand kW. The average age of the vessels is 28 years (Table 5.10.1). The overall capacity of the Greek fleet has a falling trend between 2008 and 2013, with the number of vessels falling by 9% and total tonnage and power both by 10%. The main factor causing the fleet to decrease was the implementation of the fisheries policy to reduce the number and capacity of vessels, according to the Multiyear Orientation Programs for the Greek fishing fleet.

In 2013, 13,871 enterprises operated in Greece, the vast majority (88.2%) of which owned a single vessel. There are also few enterprises with two to five vessels (11.8%) while a minor 0.1% of the enterprises owned more than five vessels. Total employment in 2013 is estimated at 24,486 jobs that correspond to 22,546 FTEs. According to the data (Table 5.10.1), the average wage per FTE and employed is very low (€7.5 and €8.1 thousand, respectively). The total number of days at sea for the Greek national fleet in year 2013 was 2,843,714 (AGRERI, 2015¹), whereas its energy consumption is estimated at 114 million lt.

Table 5.10.1 Greek national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013(structure) and 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	17,248	17,168	17,047	16,542	16,063	15,954	15,769	-1%	↔	↘
	No. of Inactive vessels (#)					1,531	1,202		-21%	↘	↘
	Average vessel age (year)	25	26	27	27	27	28	28	3%	↗	↗
	Vessel tonnage (thousand GT)	83	83	83	80	80	76	75	-5%	↘	↘
	Vessel power (thousand kW)	497	495	494	474	462	453	449	-2%	↘	↘
	No. of Enterprises (#)					13,918	13,871		0%	↔	↔
Employment	Total employed (#)					27,558	24,486	25,972	-11%	↘	↘
	FTE (#)					23,944	22,546		-6%	↘	↘
	Average wage per employed (thousand €)					5.8	7.5		28%	↗	↗
	Average wage per FTE (thousand €)					6.7	8.1		21%	↗	↗
Fishing Effort	Energy consumption (million litres)					115	114		-1%	↘	↘

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

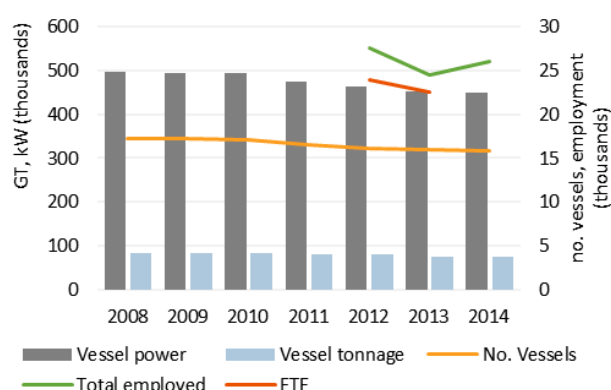


Figure 5.10.1 Main capacity and effort trends for the Greek fleet: 2008-2014.

¹ Agricultural Economics Research Institute (AGRERI), 2015. Greek Socio Economic Survey for the Greek Fishing Fleet, (year 2014: under the Greek National Program). It is important to mention that in 2013, the transversal variables were collected only for the last three months of the year. For this reason, the annual figures were estimated using the data from the socio-economic questionnaires rather than applying the standards methodologies described in the Greek National program and in the European Commission decision 2010/93.

National Fleet Economic performance

The main source of income for the Greek fishing vessels is the income from landings while, in few segments, there are also direct subsidies, stemming from fuel duties refunds. Moreover, there is no income from other activities other than fishing since that requires a special permit (e.g. fishing rights, recreational fisheries). If not taking into account imputed value of unpaid labour, the income generated from landings in 2013 was enough to cover all expenses and, hence, the activity produced a positive income for fishermen (AGRERI, 2015). As the majority of the Greek fishing vessels are mainly based on family labor, this figure provides a clear picture of the financial position of the owner and therefore it is very important for the estimation of household economic sustainability.

Costs incurred by the Greek fleet in 2013 totalled €499 million. The main cost items were energy costs and wages (Table 5.10.2). Energy costs accounted for 21% of total expenses and were around €107 million (in real values) both in 2012 and 2013. Other variable costs, including lubricants and marketing costs, are also important (Figure 5.10.2). These costs are estimated at €76.5 million. The non-variable costs are significantly lower (€6.7 million), representing only 1% of total expenses, while repairs and maintenance costs reached €42 million. Finally, the annual depreciation costs accounted for 17% of total costs (€84 million).

Imputed value of unpaid labour also results rather high, however it may have been overestimated. This figure is estimated as the opportunity cost of labour, using the average daily wage per fishermen; however in many cases, due to the lack of labour demand in local economies, which is even more intense due to the ongoing financial recession, the opportunity cost of labour is in fact lower or even zero.

As far as the value of physical capital (depreciated replacement value) is concerned, it is equal to €239 million. The financial position (debt to asset ratio) of the national fleet is estimated at 1.54% while total investments in physical capital in 2013 are €24 million.

Table 5.10.2 Greek national fishing fleet in 2012-2013

VARIABLE (million €)		2012	2013	%Δ 2013-12	Trend
Costs	Labour costs	160.8	182.9	14%	↗
	Energy costs	106.6	106.7	0%	↔
	Repair costs	39.3	42.6	8%	↗
	Other variable costs	82.0	76.5	-7%	↘
	Other non-variable costs	7.6	6.7	-12%	↘
	Capital costs	99.4	84.3	-15%	↘
Capital value	Depreciated replacement value	221.0	239.3	8%	↗
	Investments	29.5	23.8	-19%	↘
Profitability and development trends	Net profit margin (%)		-650.9		■
	<i>development trend</i>				
	RoFTA (%)		-170.0		■
	<i>development trend</i>				
	GVA per FTE (thousand €)		-7.4		■
	<i>development trend</i>				

*all monetary values have been adjusted for inflation; constant prices (2014)

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2014));

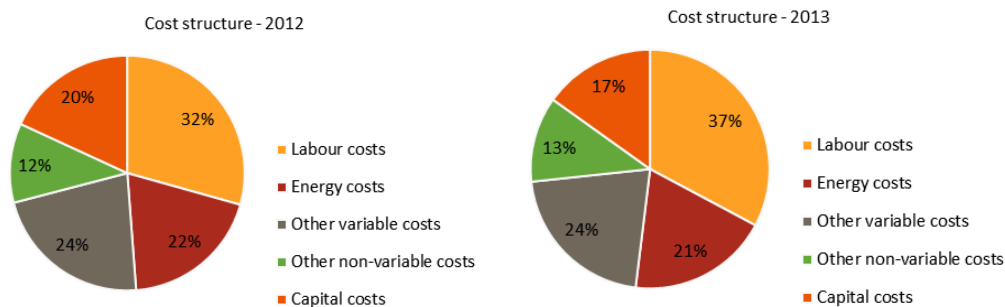


Figure 5.10.2 Cost structure in 2012 and 2013

Fleet Segment Level Economic performance

The Greek fleet is highly diversified with a broad range of vessel types targeting different species. The national fleet consisted of 11 (DCF) fleet segments and 14,752 vessels in 2013. Variables related to employment, effort, expenses and capital value per segment are presented in Table 5.10.5.

Bottom trawlers 18-24m (DTS 18-24): This fleet segment includes 120 active vessels with a total employment that corresponds to 682 FTEs. The share of this fleet segment in total employment (FTEs) is 3%. Bottom trawlers have multi-species characteristics, captures numerous fish species, such as red mullets, hake and shrimps. Management regulations include seasonal (June 1-September 30) and spatial closures, as well as a minimum landing size. Energy cost is the main cost element (33% of total costs) followed by wages and salaries costs as well as other variable costs (24% and 21% share of total costs, respectively). Finally, it should be noted that this fleet segment represents 6% of the total value of physical capital and less than 3% of total investments in 2013.

Bottom trawlers 24-40m (DTS 24-40): There are 167 vessels in this fleet segment with a total tonnage of 21,710 and total power of 52,040. The average age of these vessels is very low (19.74 years), which is an indication of increased welfare. The total FTEs are 1,007, representing the 4% of the national FTEs. As in the case of smaller bottom trawlers, the main cost is energy cost that represents 36% of the total costs of the vessels. Other important expenses are wages and salaries (17%) as well as other variable costs (22%). As far as the value of physical capital is concerned, it represents 16% of the total national value of physical capital while it represents 6% of total national investment for 2013. Finally, it should be noted that, according to AGRERI (2015), this segment appears an exceptional economic performance.

Polyvalent passive gears 0-6m (PGP 0-6): This fleet segment includes 5,361 small vessels. Moreover, it employs 5,307 FTEs, which corresponds to about one FTE per vessel. Taking into consideration that the majority of these vessels are family owned, they normally utilize only one full-time employment, which is supporting from family labor. The share of the segment in the national FTEs (23.54%) indicates its high importance for the Greek fishing sector. Unlike large-scale fisheries, the main cost element is the imputed value of unpaid labor (34%), followed by energy costs (21% of total expenses). According to AGRERI (2015), whereas this segment includes very small vessels, it highly contributes to the national economy.

Polyvalent passive gears 6-12m (PGP 0-6): This is the largest fleet segment of the Greek fishing fleet, containing 8,310 vessels. The total FTEs employed in this fleet segment is 12,133 (54% of the Greek fishing fleet respectively). The imputed value of unpaid labor is the main type of cost (22% of total expenses), and as in the previous segment, represents the family contribution to the labor. Taking into consideration that the majority of these vessels are active in poor and isolated areas, with very few or no alternative economic activities, the contribution of this sector to the local economies and to the household well-being is very important and substantial.

Polyvalent passive gears 12-18m (PGP 12-18): There are 163 vessels in this fleet segment, representing 386 FTEs. In this segment, the primary fishing gears are nets. Wages and salaries of the crew are the most important type of costs in this segment (28% of total costs), followed by the energy costs, other variable costs and annual depreciation costs.

Longliners 12-18m (HOK 12-18): The total number of active vessels that fall in this group is 137 while employment corresponds to 399 FTEs (2% of the national FTEs). Other variable costs appeared to be very significant for this fleet segment representing 25% of the total expenses. Salaries and wages of the crew are also important since they represent 23% of total costs.

Purse seiners 12-18m (PS 12-18): There are 87 vessels in this segment that employ a total of 532 FTEs (2% contribution to the total employment in the fishing sector). The purse seiner fleet captures exclusively fish species like anchovy (*Engraulis encrasicolus*) and sardine (*Sardina pilchardus*) in the Aegean Sea. Regarding the regulations enforced they concern a closed period from the mid-December till the end of February and technical measures such as minimum distance from shore, gear and mesh size, vessel capacity and power of engine. The main costs in this sector are stemming from the wages and salaries as well as the other variable costs that represent 39% and 28% of total costs, respectively. It is also important to notice that the average salary per fishermen in this segment is very high, while, according to AGRERI (2015), it appears an exceptional economic performance. These figures indicate the prosperity of this segment.

Purse seiners 18-24m (PS 18-24): This segment includes 134 vessels and employs a total of 1,171 FTEs, (5% of the national total). Wages and salaries, as well as other variable costs, are the most important cost elements of this segment, as they together represent the 58% of the total cost.

Purse seiners 24-40m (PS 24-40): There are 31 vessels in this segment that employ a total of 365 FTEs (2% contribution to the national total FTEs). The main costs of the vessels in this segment are the other variable costs (35% of total costs) and the wages and salaries of the crew (25% of total costs).

Seiners 6-12m (DTS 6-12): The total number of active vessels in this category is 208, with a total gross tonnage of 1,069 GT and a total power of 10,872 kW. The average age of the vessels in this sector is very high (48.3 years). Seiners represent a very characteristic fleet segment in Greece, which is continuously eliminated due to a special policy regime. This segment employs 445 FTEs, which represents 2% of total FTEs engaged in the fishing sector. The main cost of this fleet segment is the wages and salaries that represent the 41% of total expenses. Additionally, energy costs represent 15% of the total expenses.

Seiners 12-18 m (DTS 12-18): This fleet segment includes only 34 active vessels, with a total tonnage of 515 GT and a total power of 3,597 kW. The average age of the vessels is (as in the previous sector) very high (44.85 years). This segment employs 119 FTEs, contributing with just 0.5% to the country's total.

Assessment and Future Trends

National Fleet

The number of vessels continues to fall steadily from 17,248 in 2008 to 15,954 in 2013, but the average age increases. Total jobs decreased from 27,558 in 2012 to 24,486 in 2013. The general trend is a decrease in capacity, i.e. in the number of vessels that also reflects a reduction of total engine power and gross tonnage. The main factor causing the fleet to decrease was the implementation of the fisheries policy to reduce the number and capacity of vessels, according to the Multiyear Orientation Programs for the Greek fishing fleet. It is important to mention that the majority of the Greek fishing vessels are mainly based on family labor. The main expenses of the fishing vessels are wages and the imputed value of unpaid labour as well as the energy costs.

Small and Large Scale Fleet

In Greece, the majority of vessels (93%) are small-scale vessels. Specifically, there are 13,671 small scale vessels with a combined gross tonnage of 26.5 thousand GT and a total power of 252.4 thousand kW in 2013. The small-scale fleet employs a total of 17,440 FTEs, thus contributing to 77% of the total national employment of the sector. The small-scale fleet mainly exploits the extensive Greek coastline, using polyvalent passive gears (mainly nets, longlines, pots and traps). The vessels in this segment are mainly family-owned, and they are characterised by low invested capital. Moreover, their landings are sold at higher prices compared to the large scale fleet, and they are mainly directed to the market through very short supply-chains. Despite the fact that the vessels of this segment are small, they are very important for the local economies. They usually offer income and employment to poor and isolated areas with very few alternative economic activities. Therefore, this segment highly contributes to the maintenance of the social and economic sustainability of the coastal communities (AGRERI, 2015).

The large scale contains 1,081 vessels with a combined gross tonnage of 46.4 thousand GT and a total power of 176 thousand kW. These vessels mainly use active gears (bottom trawlers and purse seiners) and are characterized by high operating costs.

The small scale vessels consume 47.6 million litres while the large scale vessels consume 66.1 million litres of fuel and consequently, energy costs are higher for small scale vessels (58.2%) than large scale vessels (48.5%). It is also important to emphasize that large scale vessels benefit from the reduced price of fuel while the small-scale fisheries do not have the flexibility to buy their fuel in advance; instead they buy a limited amount to cover very short-term needs (Table 5.10.3 and 5.10.4).

Table.5.10.3 Greek national fleet structure, employment and activity trends by fishing activity: 2013.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Large scale fleet							%Δ 2013-12		
	2008	2009	2010	2011	2012	2013	2014		2008	2009	2010	2011	2012	2013	2014			
No. Vessels	15,834	15,761	15,635	15,268	13,439	13,671	14,642	2%	↗	1,414	1,407	1,412	1,274	1,093	1,081	1,127	-1%	↘
Average vessel age	25.0	25.7	26.2	26.8	26.6	27.5	28.1	3%	↗	30.6	31.4	32.1	32.0	28.5	29.6	30.5	4%	↗
Average vessel length	6.8	6.8	6.8	6.8	6.6	6.7	6.7	0%	↔	15.6	15.6	15.6	16.2	17.7	17.4	17.2	-1%	↘
Vessel tonnage	30.9	30.8	30.8	29.9	26.0	26.5	28.7	2%	↗	52.5	52.3	52.3	50.1	46.5	46.0	46.4	-1%	↘
Vessel power	290.6	289.4	288.2	280.6	247.6	252.4	272.6	2%	↗	206.6	205.3	205.8	193.2	175.6	176.0	176.9	0%	↔
Total employed					21,780	19,263	20,642	-12%	↘					5,779	5,223	5,330	-10%	↘
FTE					19,396	17,440		-10%	↘					4,549	5,106		12%	↗
Average wage (total employed)					5.0	6.8		34%	↗					8.9	10.1		14%	↗
Average wage (FTE)					5.7	7.5		32%	↗					11.3	10.3		-8%	↘
Energy consumption					49.5	47.6		-4%	↘					65.7	66.1		1%	↔

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Table.5.10.4 Costs and the capital value of the Greek national fishing fleet by fishing activity: 2013.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet			%Δ 2013-12	Large scale fleet			%Δ 2013-12			
	2012	2013	2014		2012	2013	2014				
Costs	Labour costs	109.6	130.1		19%	↗	51.2	52.8	3%	↗	
	Energy costs	55.4	58.2		5%	↗	51.2	48.5	-5%	↘	
	Repair costs	25.3	29.3		16%	↗	14.0	13.3	-5%	↘	
	Other variable costs	33.4	31.4		-6%	↘	48.6	45.1	-7%	↘	
	Other non-variable costs	3.7	4.1	4.4	11%	↗	3.9	2.6	2.6	-34%	↘
	Capital costs	55.0	46.9	46.9	-15%	↘	41.2	35.9	33.9	-13%	↘
Capital value	Depreciated replacement value	117.7	127.8	137.7	9%	↗	88.3	98.1	99.4	11%	↗
	Investments	23.8	18.6		-22%	↘	5.7	5.2		-10%	↘

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)).

Data issues

There have been significant data issues in producing this chapter. The implementation of the National Programme has faced some difficulties during the last years which resulted in interrupted time series on the economic data. The lack of data and time series has created many shortfalls in the presentation of the fleet economic performance. The figures for costs come from a survey based on probability sampling, and the response rate was satisfied for 2013.

Table 5.10.5 Main socio-economic performance indicators by fleet segment in the Greek national fishing fleet in 2013

Fleet segment	No. of vessels (N)		FTE (N)		Energy consumption (litres)	
	No. of vessels (N)	% Δ	FTE (N)	% Δ	Energy consumption (litres)	% Δ
GRC AREA37 DTS VL0612°	208	-2%	445	36%	1,159	39%
GRC AREA37 DTS VL1218°	34	21%	119	11800%	483	
GRC AREA37 DTS VL1824°	120	0%	682	7%	13,818	-1%
GRC AREA37 DTS VL2440°	167	-9%	1,007	34%	32,417	1%
GRC AREA37 HOK VL1218°	137	1%	399	-10%	3,022	14%
GRC AREA37 PGP VL0006°	5361	1%	5,307	-10%	10,293	-8%
GRC AREA37 PGP VL0612°	8310	2%	12,133	-10%	37,254	-3%
GRC AREA37 PGP VL1218°	163	1%	386	13%	1,920	33%
GRC AREA37 PS VL1218°	87	-4%	532	-7%	1,895	-42%
GRC AREA37 PS VL1824°	134	2%	1,171	-4%	7,773	-8%
GRC AREA37 PS VL2440°	31	3%	365	42%	3,641	22%

Fleet segment		FTE	Wage per vessel	Wage per FTE	Wage per employed	fuel consumed per landed tonne	Energy costs	Operating costs
AREA37	GRC AREA37 DTS VL0612°	2.1	18,894	7,055	7,055	5,647	31,939	31,939
AREA37	GRC AREA37 DTS VL1218°	3.5	27,248	5,953	5,953	11,195	60,678	60,678
AREA37	GRC AREA37 DTS VL1824°	5.7	65,827	10,513	10,349	83,535	224,935	224,935
AREA37	GRC AREA37 DTS VL2440°	6.0	72,060	10,685	10,685	136,266	321,128	321,128
AREA37	GRC AREA37 HOK VL1218°	2.9	32,923	8,307	8,307	17,859	85,297	85,297
AREA37	GRC AREA37 PGP VL0006°	1.0	7,616	2,774	2,065	3,014	13,505	13,505
AREA37	GRC AREA37 PGP VL0612°	1.5	10,742	3,530	3,530	5,064	21,747	21,747
AREA37	GRC AREA37 PGP VL1218°	2.4	19,395	6,688	6,688	9,787	44,246	44,246
AREA37	GRC AREA37 PS VL1218°	6.1	69,051	10,293	9,858	16,424	146,403	146,403
AREA37	GRC AREA37 PS VL1824°	8.7	81,917	8,548	8,423	44,540	221,806	221,806
AREA37	GRC AREA37 PS VL2440°	11.8	108,529	8,908	7,555	86,298	371,893	371,893

5.11 IRELAND

Fleet Structure, Fishing Activity and Production

In 2014 the Irish fishing fleet consisted of 2,202 registered vessels (as of 01/01/2014), with a combined gross tonnage of 64.2 thousand GT, a total power of 194.7 thousand kW and an average age of 26.7 years. The size of the registered Irish fishing fleet decreased between 2013 and 2014. In this period, the number of vessels decreased by around 2% (or 44 vessels) and total GT and kW of the fleet maintained relatively stable during the same period (Table 5.11.1)

While there was a decrease between 2013 and 2014, vessel numbers have shown consistent growth since 2008 with the fleet increasing from 1,972 to 2,246 in 2013. The major factors causing the fleet to increase during this period was the introduction of smaller vessels into the national fleet following the decommissioning scheme in 2008 and new entries into the industry. However, overall tonnage and power has decreased in the same period.

In 2013, the number of fishing enterprises in the Irish fleet totalled 2,217, with the vast majority (83%), owning a single vessel and 16.5% of the enterprises owned two to five fishing vessels. Less than 1% of fishing enterprises owned six or more fishing vessels. However, it is possible, that individuals can own multiple vessels, which are registered under different company names so there may be, in reality, more multiple vessel enterprises.

Total employment in 2013 was estimated at 3,169 jobs, corresponding to 2,804 FTEs. The level of employment increased between 2012 and 2013, with total employed increasing by 1% and the number of FTEs increased by 4% over the same period. The decreasing employment trend indicated from 2009 to 2012 mirrors reports from the fishers that crew sizes were limited in an effort to reduce labour costs. The overall decline in FTE over the same period can be explained by the increase in total jobs in the SSF as these jobs are usually part time and do not equate to full time jobs. This trend mirrors reports from the fishers that crew are needed but are hard to find and that those hired are part time which has an impact on the FTE figures. Even though there was an increase in vessel numbers there was not an equal and related increase in employment due to the fact the employment estimates account for inactivity in the total fleet.

Table 5.11.1 Irish national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

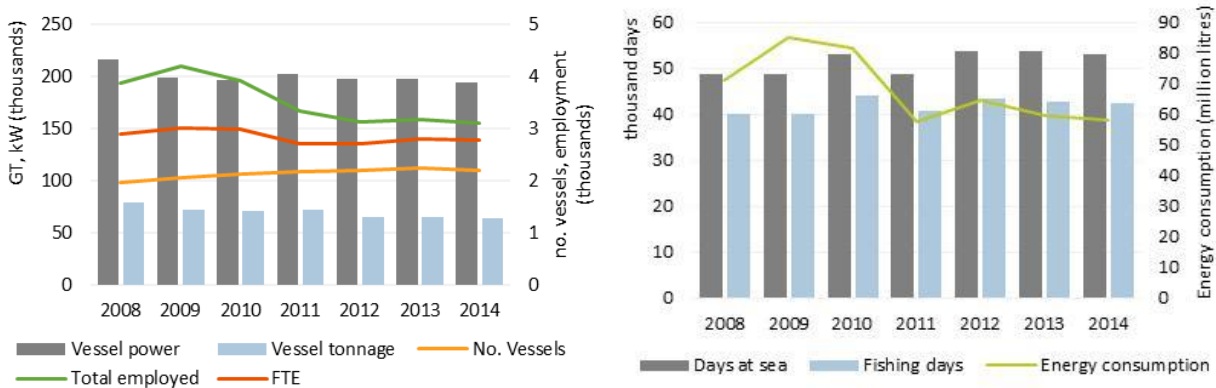
VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	1,972	2,044	2,119	2,161	2,202	2,246	2,202	2%	↗	14%
	No. of Inactive vessels (#)	184	185	195	194	179	177	176	-1%	↘	-4%
	Average vessel age (year)	24	25	25	25	26	26	27	2%	↗	7%
	Vessel tonnage (thousand GT)	78	72	71	72	65	65	64	0%	↔	-17%
	Vessel power (thousand kW)	216	198	197	202	197	197	195	0%	↔	-9%
No. of Enterprises (#)		1,833	1,866	1,929	1,846	1,901	2,217	2,190	17%	↗	21%
Employment	Total employed (#)	3,866	4,207	3,926	3,340	3,124	3,169	3,107	1%	↗	-18%
	FTE (#)	2,905	3,021	2,995	2,719	2,698	2,804	2,771	4%	↗	-3%
	Average wage per employed (thousand €)	10.4	11.0	14.5	18.3	29.5	19.5	23.5	-34%	↘	87%
	Average wage per FTE (thousand €)	13.9	15.3	19.0	22.5	34.2	22.1	26.4	-35%	↘	59%
Fishing Effort	Days at sea (thousand days)	48.8	48.6	52.9	48.8	53.6	53.6	53.0	0%	↔	10%
	Fishing days (thousand days)	40.0	40.0	44.0	40.6	43.3	42.8	42.3	-1%	↘	7%
	Energy consumption (million litres)	71.1	85.3	81.5	57.8	64.5	59.6	58.9	-8%	↘	-16%
	Energy consumption per landed tonne (l/T)	363	340	291	290	246	253	221	3%	↗	-30%
Output	Landings weight (thousand tonnes)	196	250	280	199	263	236	267	-10%	↘	21%
	Landings value (million €)	223	160	170	210	243	250	279	3%	↗	12%
	Recreational catches of selected species (T)	89	68	99	87	88	103		17%	↗	16%

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Note: energy consumption estimated from energy costs

In 2013 the Irish over 10m fleet spent a total of 53.6 thousand days at sea and are the only days at sea that are reported (table 5.11.1). The total number of days at sea remained stable between 2012 and 2014. Estimates of total days at sea for vessels less than 10m LOA are around 100 thousand days and 101 thousand days for 2013 and 2014, respectively. These totals are estimated from a very small sample size of the less than 10m fleet and compensate for inactivity in the fleet by using an estimate of inactivity by segment (which equals the inactivity of the 10-12m segments). The lack of logbook data from the under 10m fleet means that the reporting of transversal, landings, activity and true economic performance of this segment (which makes up a large proportion of the Irish fleet) is based solely on this limited results from the sentinel vessel survey (Table 5.11.1; Figure 5.11.1). The quantity of fuel consumed in 2013 totalled 60 million litres, a decrease of 8% from 2012.

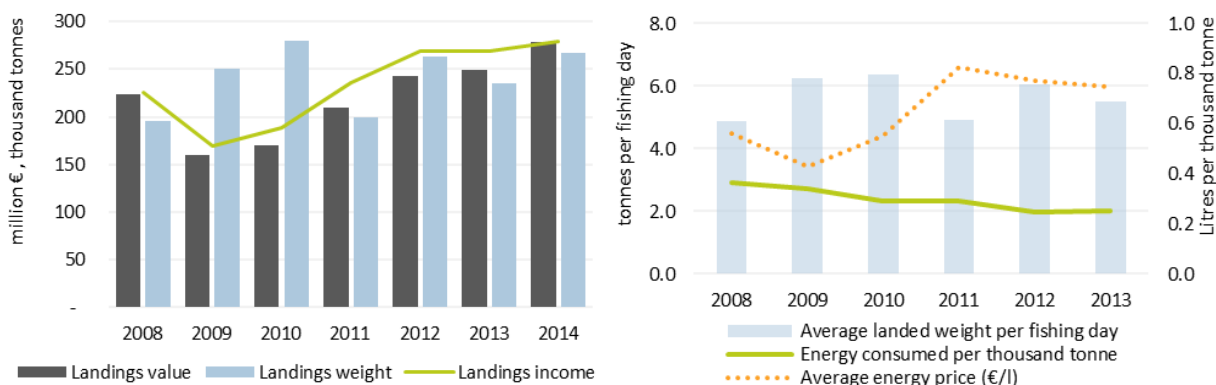


Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Figure 5.11.1 Irish fleet main capacity and effort trends for the period 2008-2014.

The total declared weight landed by the Irish fleet in 2013 was 236 thousand tonnes of seafood, with a landed value of €250 million. The total weight of landings decreased between 2012 and 2013 by 10% with an increase in landed value of 3%. The increase in total weight of landings from 2008 to 2010 can be explained by the increase in pelagic catches, especially boarfish which increased by over 66 thousand tonnes in the same period. The catches of boarfish reduced dramatically between 2010 and 2011 by 63 thousand tonnes and count predominantly for the reduction in overall landings between these years. Landing weight rose again in the provisional 2014 figures to 267 thousand tonnes and can be accounted for by an increase in Mackerel landings which rose by 83%. The 2014 mackerel quota (104 thousand tonnes) was set at a high level, above scientific advice, due to the outcome of the March 2014 agreement which lead to a resolution of the international mackerel sharing discussions.

The majority of pelagic species are landed into Killybegs fishery harbour with 76% of pelagic species being landed there in 2013. Castletownbere is the next largest port for pelagic landings but only makes up 7% of total pelagic landings. Landings for demersal species is not as regionally focused, as with the pelagic species, with the top six ports for 2013 being Castletownbere (18%), Dunmore East (16%), Union Hall (8%), Ros A Mhil (8%), Kilmore Quay (8%) and Greencastle (8%). The total percentage of demersal landings, by port, has remained temporally consistent over the time series.



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Figure 5.11.2 Landings in value and weight (and corresponding income from landings) by the Irish national fleet and some efficiency indicators for the period 2008-2014.

The average prices obtained for the 3 key pelagic species landed by volume (mackerel, horse mackerel and herring), showed increasing or stable trends between 2012 and 2013: Atlantic mackerel (0.71 to 0.78 €/kg), horse mackerel (0.52 to 0.60 €/kg) and Atlantic Herring (0.40 to 1.44 €/kg). Boarfish (BOR) was the second largest landed species by weight and received prices of 0.08 €/kg in 2012 and 2013. Prices for boarfish decreased in 2014 to 0.05 €/kg.

Overall the most important species by landings weight and value remains the pelagic species and *Nephrops*. Mackerel, and horse mackerel accounted for 44% of the total landings value in 2014 and 50% of total volume. *Nephrops*, while only accounting for 3% of the total volume of landings made up 16% of the total value in 2014 with a value of €45 million.

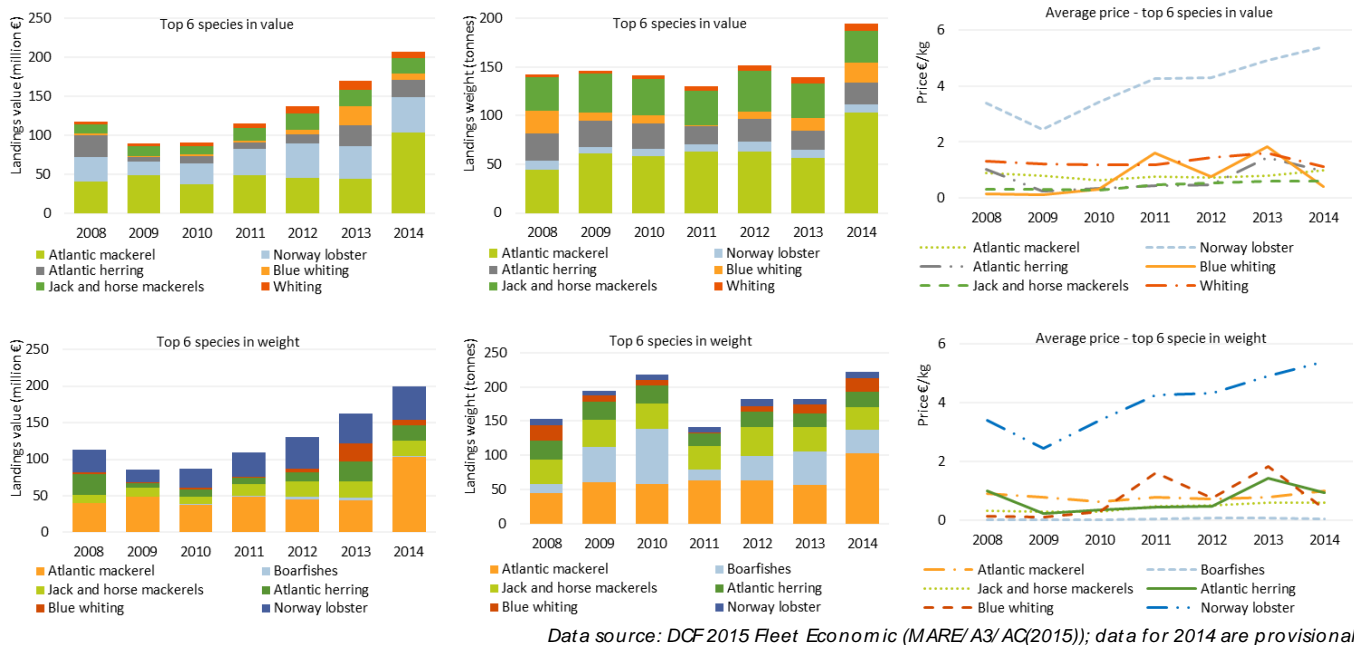


Figure 5.11.3 Irish fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

National Fleet Economic performance

The total amount of income generated by the Irish national fleet in 2013 was €273 million. This consisted of €269 million in landings value and €3.8 million in non-fishing income. The Irish fleet's total landings income remained stable between 2011 and 2012. Total fishing income is composed of the total value of landings from logbooks and estimated totals on other income taken from financial statements completed by accountants on behalf of a sample of fishermen.

Total landing income also estimates, where possible, income for vessels under 10m in length where data is available. This introduces data for vessels under 10m and as such results in a higher estimate of income value compared to landings values. As sample data are raised to population level variability in the data can, in some cases, inflate or reduce the overall landings income estimate for the under 10m fleet.

Total operating costs incurred by the Irish national fleet in 2013 amounted to €230 million, or more than 90% of total income. Crew cost and fuel costs, the two major fishing expenses, were €61 and €44 million respectively. Between 2013 and 2012, total operating costs decreased by 14%. The share of total income represented by each operating cost is relatively stable except for labour costs which demonstrated an increase in 2012. This may be an artefact of the sampling for this year as the figures for all other years demonstrate relatively stable figures.

In terms of economic performance, the total Gross Value Added (GVA), gross profit and net profit generated by the Irish national fleet in 2013 were €136.6 million, €74.8 million and €40.6 million, respectively. Gross Value Added (GVA) decreased by 4% between 2012 and 2013 and gross profit increased by 48%. The major factor driving this overall increase in economic performance was the lower estimate of total labour costs from 2012, along with reductions in repair costs and capital costs. In 2013, the Irish fleet had an estimated (depreciated) replacement value of €450 million.

Table 5.11.2 Irish national fishing fleet economic performance in 2008-2013 and projections for 2014.

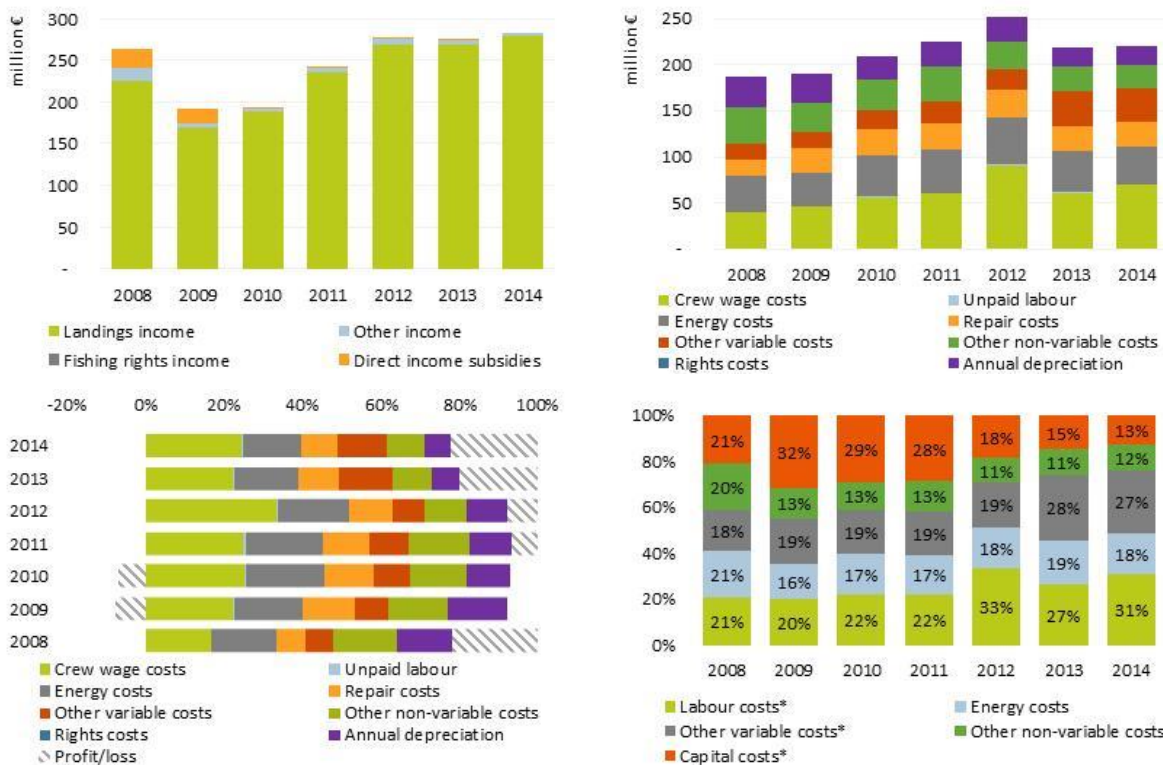
Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	225.5	169.2	188.9	236.3	268.8	269.3	279.1	0%	↔	19%
	Other income	15.2	4.7	3.4	4.5	6.2	3.8	3.8	-39%	↘	-75%
Costs	Labour costs	40.3	46.2	57.0	61.1	92.2	61.8	73.1	-33%	↘	54%
	Energy costs	39.9	36.4	45.0	47.6	49.9	44.5	42.9	-11%	↘	11%
	Repair costs	17.5	27.1	28.7	28.0	30.5	27.4	27.1	-10%	↘	56%
	Other variable costs	17.4	17.8	20.2	24.1	23.0	38.2	37.8	67%	↗	120%
	Other non-variable costs	39.1	31.1	32.4	37.1	29.3	26.5	26.0	-10%	↘	-32%
	Capital costs	40.6	72.9	74.1	78.6	50.7	34.2	28.2	-32%	↘	-16%
Economic indicators	GVA	126.8	61.5	66.0	103.9	142.5	136.6	149.1	-4%	↘	8%
	Gross profit	86.5	15.3	9.0	42.8	50.3	74.8	76.1	48%	↗	-14%
	Net profit	45.9	-57.6	-65.1	-35.8	-0.3	40.6	47.9	13184%	↗	-12%
Capital value	Depreciated replacement value	525.7	585.2	654.9	632.3	539.7	450.2	441.4	-17%	↘	-14%
	Investments	24.7	8.4	38.3	10.7	66.0	16.2		-76%	↘	-34%
Profitability and development trends	Net profit margin (%)	19.1	-33.1	-33.9	-14.9	-0.1	14.9	16.9	13600%	↗	-22%
	<i>development trend</i>				Improved				218%	↗	
	RoFTA (%)	10.1	-2.8	-2.5	2.6	4.1	12.3	12.91	197%	↗	21%
<i>development trend</i>				Improved				429%	↗		
GVA per FTE (thousand €)	43.6	20.4	22.0	38.2	52.8	48.7	53.8	-8%	↘	12%	
<i>development trend</i>				Improved				38%	↗		

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Note: Capital value (replacement value and investment) estimated for active vessels only.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.11.4 Income and cost structure trends for the Irish fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of revenue (income from landings + other income); bottom right – main costs items as a % of total costs (projected figures for 2014).

Investments by the fleet amounted to €16.2 million in 2013 (Table 5.11.2; Figure 5.11.2). The investment figures for 2013 differ greatly from other years and may be an artefact of sampling size on the estimates.

In terms of the profitability and development trends the national fleet improved for net profit margin (%), RoFTA (%) and reduced by 8% for GVA per FTE (thousand €). However, the dramatic trends for net profit margin (%) and RoFTA (%) presented in Table 5.11.2 are most likely not realistic. These high increases are due, in part, to the decrease in estimates of total costs from 2011 to 2012 and the associated estimate of net profit.



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Figure 5.11.5 Main economic performance indicator trends for the Irish fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Fleet Segment Level Economic performance

The Irish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in areas VIIa, VIIb, VIIg and VIIj. The national fleet in 2013 consisted of 25 (DCF) fleet segments, some clustered, with inactive vessel across five length classes consisting of 177 vessels for segments over 10m in length. For the ten segments that have sufficient data to calculate profitability six have high profitability, one reasonable and three weak profitability classifications.

A short description of the 3 most important segments in terms of total value of landings is provided below.

Pelagic Trawl over 40m – 21 vessels made up this segment in 2013 which operates predominantly in VIIa and VIIj. The fleet targets a variety of species but in particular pelagic species, including mackerel, horse mackerel and Atlantic herring. In 2013, the total value of landings was €88.2 million and around 213 FTEs were employed in this fleet segment, contributing 35% and 8% of the total income from landings (over 10m) and overall FTEs generated by the Irish fishing fleet, respectively. This fleet segment was profitable, with a reported gross profit of around €10.5 million but a negative net profit of €10.7 million in 2013. There is weak profitability for 2013 with an improved economic development trend.

Boarfish landings initially were very small and typically fluctuated between 100 and 700 t per year from 2001 to 2009. As the demand for fishmeal raw material grew and fishermen perfected their

ability to target and pump boarfish ashore, the volumes increased, peaking at 89 thousand tonnes in 2010. In 2011 a precautionary Total Allowable Catch of 33 thousand tonnes was set for the first time. This was subsequently raised to 88 thousand tonnes in 2012 and 2013 and rose again in 2014 to 127,509 tonnes of which Ireland has the majority of this TAC share with 88,115 tonnes representing 69% of the total TAC. The Atlantic Mackerel TAC peaked in 2014 at 104 thousand tonnes, this falling to 89 thousand tonnes in 2015.

This segment of the Irish fleet is generally considered one of the best performing segments landing high quantities of pelagic fish. Reasons for a negative net profit may be due, in part, to landing of high quantities in foreign countries where a landing value has not been assigned and results in an underestimate of total income from the landings declarations. Crew costs have risen sharply in the most recent years with crew costs doubling from 2010 to 2012 for the 40XX segment on average per vessel. In 2013 landing value fell for the 40XX segment. This segment has a depreciated capital value well above the national average which will influence the opportunity cost of capital and the RoFTA to a high degree.

Demersal Trawl 18m-24m – 63 vessels make up this segment which operates predominantly in VIa, VIIb and VIIg. The fleet targets a variety of species but in particular demersal species, such as Norway lobster, anglerfish and whiting. In 2013, the total value of landings was almost €47.6 million and around 299 FTEs were employed in this fleet segment, contributing to 19% (over 10m vessels) and 11% of the total income from landings and FTEs generated by the Irish fishing fleet, respectively. This fleet segment presented a gross profit of around €8.4 million and net profit of €4.5 million in 2013. This indicates reasonable profitability for 2013 with an improved economic development trend evident also in the GVA and Gross profit.

Demersal Trawl 24m-40m – 38 vessels make up this segment which operates predominantly in VIa, VIIb and VIIg. The fleet targets a variety of species, such as Norway lobster, anglerfish and mackerel. In 2013, the total value of landings was almost €41.5 million and around 378 FTEs were employed in this fleet segment, contributing to 17% and 13% of the total income (over 10m vessels) from landings and FTEs generated by the Irish fishing fleet, respectively. This fleet segment generated a gross profit of around €12 million and net profit of €9 million in 2013. This indicates high profitability for 2013 with an improved economic development trend.

Small Scale Fleet

The number of vessels (under 10m) rose by 3% every year from 2009 and prior to 2011 increased by 8% and 5% between the years 2008/2009 and 2009/2010 respectively. Overall, this represents a 25% increase in the number of under 10m vessels from 1337 to 1677 between the years 2008 and 2013. In 2014 the vessel register indicated a reduction in numbers of 2%.

The number of the small scale fleet demonstrates a similar trend (under 12m – passive gears). This segment consisted of 1318 vessels in 2013, an increase from 1279 vessels in 2012 (Table 5.9.3 and Table 5.9.4). The SSF also demonstrated a decrease in number in 2014 as with the under 10m fleet.

The increase in vessels numbers under 10m has been driven in part by the economic downturn in Ireland and the increase in unemployment which has attracted more entries into this sector, re-entry into the segment after the decommissioning scheme in (2005-2008) may also have occurred. These new and re-entries into the fisheries often target lobster and crab and there are concerns that this could have an adverse effect on these stocks.

In 2014 The Inshore Fisheries Forums was founded to act as consultative forums at which members will be representative of 'the inshore sector', fishermen using fishing boats of less than 12m overall length. The National Inshore Fisheries Forum (NIFF) provides a national platform on which each of the regional forums can interact with each other and with the Department and the marine agencies. The Regional Inshore Fisheries Forums (RIF) provide formal engagement opportunities between inshore fishermen and other marine stakeholders.

The forum engagements are aimed at providing the inshore sector with effective opportunities to:

- develop and facilitate implementation of policies and initiatives relating to the sustainable management of inshore fisheries within six nautical miles, consistent with national and EU policies concerning fisheries management, sustainable development and protection of the marine environment;

- develop and facilitate implementation of measures designed to enable local fishermen, other fishermen who rely on local waters for their livelihood, and other persons with an interest to contribute to inshore fisheries management policies; and
- provide input to the development of national policies or positions which concern or affect inshore fisheries management.

Table 5.11.3 Irish national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	1,297	1,157	1,187	1,224	1,279	1,318	1,296	3%	↗	491	702	737	743	744	751	730	1%	↔
Average vessel age (year)	23.1	23.1	23.3	23.7	24.3	24.6	25.2	2%	↗	24.2	24.3	24.3	24.8	25.8	26.7	27.2	4%	↗
Average vessel length (m)	7.2	7.1	7.0	7.0	7.0	6.9	6.9	-1%	↔	17.2	13.2	13.0	12.7	12.7	12.7	12.9	0%	↔
Vessel tonnage (thousand GT)	4.4	4.0	3.4	3.4	3.6	3.5	3.5	0%	↔	63.5	57.1	58.6	51.9	51.9	52.0	52.3	0%	↔
Vessel power (thousand kW)	37.2	33.3	31.8	32.2	33.0	33.0	32.7	0%	↔	144.1	130.7	134.4	130.4	133.6	134.5	135.2	1%	↔
Total employed (#)	1,939	1,925	1,945	1,420	1,284	1,236	1,210	-4%	↘	1,928	2,282	1,981	1,921	1,840	1,934	1,916	5%	↗
FTE (#)	1,245	1,262	1,325	1,090	1,068	1,115	160	4%	↗	1,660	1,759	1,670	1,629	1,629	1,689	1,493	4%	↗
Average wage per employed (thousand €)	2.9	0.2	1.8	7.3	2.1	9.9	-72%	↘	21.9	26.5	29.3	31.8	47.6	33.2	43.9	-30%	↘	
Average wage per FTE (thousand €)	4.0	0.4	2.4	8.8	2.3	12.8	-74%	↘	25.6	32.6	34.9	37.4	54.9	39.1	52.5	-29%	↘	
Days at sea (thousand days)	6.9	8.0	8.6	7.6	8.4	7.5	6.4	-11%	↘	41.9	40.6	44.3	41.2	45.3	45.9	46.4	2%	↗
Fishing days (thousand days)	6.3	7.5	8.2	7.2	7.9	6.9	5.8	-13%	↘	33.7	32.5	35.8	33.5	35.4	35.8	36.3	1%	↗
Energy consumption (million litres)	2.4	4.1	2.6	2.1	2.3	2.2	1.1	-5%	↘	68.6	81.2	78.9	55.7	62.2	57.4	56.9	-8%	↘
Energy consumption per landed tonne (l/T)	453	515	301	199	236	297	260	26%	↗	358.9	332.4	286.0	295.1	243.4	249.2	219.0	2%	↗
Landings weight (thousand tonnes)	3.1	4.1	4.8	4.6	5.1	4.4	4.3	-13%	↘	192.4	246.3	275.2	194.8	257.6	231.3	262.5	-10%	↘
Landings value (million €)	7.2	5.9	7.0	7.0	5.8	6.3	6.4	8%	↗	215.9	153.7	162.6	202.8	237.5	243.4	272.7	2%	↗

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Table 5.11.4 Economic performance of the Irish national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend		
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014				
Income	Landings income	12.7	15.0	24.3	29.9	25.7	23.3	6.4	-9%	↘	215.9	154.2	164.6	206.4	243.2	246.0	272.7	1%	↗	
	Other income	0.2		0.1	0.1	0.7	0.8	0.8	17%	↗	15.0	4.7	3.3	4.4	5.5	3.0	3.0	-45%	↘	
	Direct income subsidies	0.1	1.1	0.1	0.1	0.1	0.1			-25%	↘	22.1	16.3	1.0	0.6	0.2	0.5		109%	↗
	Fishing rights income																			
Costs	Labour costs	0.9		0.5	2.1	9.4	2.5	2.0	-74%	↘	39.4	46.2	56.5	59.1	82.8	59.4	68.4	-28%	↘	
	Energy costs	1.4	2.0	1.9	4.8	2.7	2.6	0.8	-3%	↘	38.5	34.4	43.1	42.8	47.2	41.9	40.6	-11%	↘	
	Repair costs	0.5	1.2	1.0	2.1	1.6	1.8	0.7	14%	↗	17.0	25.9	27.6	25.9	28.9	25.6	25.2	-11%	↘	
	Other variable costs	0.6	1.4	1.1	3.3	2.9	2.2	0.7	-23%	↘	16.8	16.3	19.2	20.8	20.1	36.0	35.4	79%	↗	
	Other non-variable costs	1.2	1.3	1.8	8.5	2.7	1.8	1.8	-34%	↘	37.9	29.8	30.6	28.6	26.6	24.7	24.7	-7%	↘	
Capital value	Capital costs	0.4		0.9	0.6	0.3	0.2	0.2	-55%	↘	39.4	68.1	63.0	65.1	47.9	31.4	27.0	-35%	↘	
	Depreciated replacement value	4.8	43.9	31.9	6.6	3.6	3.4	3.4	-46%	↘	455.2	516.3	511.0	476.4	482.3	370.3	369.8	-23%	↘	
Economic indicators	Investments	1.0	2.1	2.4	3.4	3.3	2.1	2.1	-35%	↘	23.7	6.3	36.0	7.3	62.7	14.0		-78%	↘	
	GVA	9.1	8.9	18.4	11.3	16.5	15.7	4.0	-5%	↘	116.7	48.1	47.4	89.6	117.5	112.5	142.7	-4%	↘	
	Gross profit	4.1		18.0	13.7	3.7	12.6	1.9	239%	↗	76.9	2.0	-9.3	30.5	34.7	47.7	73.4	37%	↗	
	Gross profit margin	56.1		74.1	53.8	16.4	54.6	28.9	233%	↗	34.1	1.3	-5.6	14.7	14.5	20.3	27.5	41%	↗	
Profitability and development trends	Net profit	3.8		2.3	-3.1	1.4	1.6	1.6	145%	↗	37.6	-66.1	-72.8	-37.2	-16.6	13.3	42.8	180%	↗	
	Net Profit margin	51.4		33.1	-52.0	21.8	25.2	25.2	101%	↗	16.7	-42.9	-44.2	-18.3	-7.1	5.8	16.4	182%	↗	
	RoFTA (%)	80.9		35.5	-43.4	43.1	50.0	50.0	199%	↗	9.7	-5.8	-6.9	0.4	0.8	6.9	13.7	815%	↗	
	GVA per FTE (thousand €)	7.6	9.9	14.3	10.4	12.3	14.1	24.7	15%	↗	73.5	30.0	29.1	56.2	76.4	70.5	103.0	-8%	↘	

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Assessment and Future Trends

Standards and accreditation

The MS launched an internationally recognised, third party accredited; “Responsibly Sourced” standard for wild seafood in 2010. This programme is now fully accredited to ISO17065 and to date 85 vessels and 5 onshore facilities have achieved certification. A requirement in the achievement of this standard is the provision of economic data, by certified vessels, in compliance with the DCF regulation. The number of certified vessels shows a slight increase to that of previous years and is

anticipated to increase in accordance with market demand. An associated increase in DCF survey returns is expected as the numbers of vessels holding certification rise.

Simulation of the Landing Obligation

In 2014 Ireland carried out at sea simulations of the Landing Obligation (LO) on Irish Vessels¹. The study aimed to carry out a detailed real-time simulation of the operational and economic impacts of the LO with a particular focus on the impacts of choke species. Furthermore, the utility of technical and tactical changes in fishing practices as well as increased catch allowances in offsetting such impacts was assessed.

Two vessels were chartered to undertake the trial in the Celtic Sea: Vessel 1, a 24 m quad-rig trawler targeting *Nephrops*; Vessel 2, a 25 m single-rig demersal trawler targeting mixed whitefish species. Vessels were required to retain and land all catches of demersal species specified in Article 15.1.C (ii) of EU regulation 1380/2013, namely cod, haddock, whiting, saithe, Norway lobster, hake, common sole and plaice.

Vessels fished their standard monthly quota allocation as normal, but were required not to discard the species listed above. Fishing was permitted to continue until the quota for the target stock(s) had been taken or where any by-catch quota allocations had been exhausted, provided a quota allocation for the target stock(s) remained.

Catches of all other TAC species were fully documented during the trials, but discarding of undersize and over quota catches was permitted. This provided full information on the catch retained and facilitated detailed economic assessment of documented fishing activities under different scenarios.

The study was split into two phases: Phase 1, where vessels were expected to operate as usual; Phase 2, where skippers were requested to choose from a range of existing technical measures and/or adjust their fishing behaviour and tactics, and challenged to reduce the levels of unwanted catch as much as practically possible.

Vessel 1 suffered major reductions in profitability under the LO scenario. Fishing operations conducted by Vessel 1 in phase 1 were of little use in determining the economic impacts of the LO as the vessel was operating at an economic loss and would likely have changed fishing grounds if not engaged in this study. Fishing operations and economic conditions experienced by Vessel 1 in phase 2 were likely more typical of normal conditions due to substantially higher catch rates of *Nephrops*, catch values per haul, and profitability under the Business As Usual (BAU) scenario compared with the previous month. Despite these improvements, profits were reduced by 73% from € 23,183, under BAU, to € 6,373 under the LO scenario. Little difference in catch values per haul were observed between LO and BAU scenarios so this reduction in profitability was caused by a reduction in fishing effort under the LO as opposed to economic losses associated with improved selectivity.

Vessel 2 managed to achieve substantial reductions in Minimum Conservation Reference Size (MCRS) fish in Phase 2. However, the reductions were almost twice as high for whiting, the high quota species, compared with haddock, the low quota species, and the vessel ended up choking at roughly the same time on haddock in both study Phases. Also, attempts to avoid juvenile fish may have been a major factor contributing to reduced catches of cod and profitability under the BAU scenario for Phase 2.

The results show how the LO impacts the profitability of both vessels, in most instances negatively, through the curtailing of effort from a choke species. While the quota uplift (QUP) scenario has only a slight positive impact in phase 1 of the trials for both vessels in phase 2 the combination of technical or tactical changes in fishing activity along with QUP leads to improved profitability for both vessels over the BAU and LO scenarios. It remains to be seen what the exact quota uplift will be for the main species exploited by the Irish fleet however given the varying nature of the distinct Irish mixed fisheries and the whitefish fleets' selectivity patterns upon these, it is highly likely that fleet activity will be impacted economically to a significant degree in many if not all of these fisheries under the new legislation.

National Fleet

The composition, by segment, of the Irish national fleet (i.e. >10m and <10m LOA) in 2013 and 2014 reflects that reported for 2012. No significant removals or additions to the national fleet occurred,

¹ Cosgrove, R. et al., (2015) At Sea Simulation of the Operational and Economic Impacts of the Landing Obligation on Irish Demersal Fisheries. Irish Sea Fisheries Board (BIM) and the Marine Institute, Ireland.

other than adjustments due to accidental loss and damage. Running costs continue to be a key driver influencing the economic performance of the Irish national fleet in 2013, particularly those associated with the identification and retention of crew and the cost of fuel and oils. Although marine gas oil prices throughout 2013 and into 2014 have shown some volatility they have maintained a slow annual increase in average price, which is consistent with the 5 year trend in the prices of crude, bunker and marine gas oil.

While there has been a general improvement in the economic performance of the Irish fleet there is concern that these could be offset by reduced profits and increased costs resulting from the landing obligation under the new CFP (Article 15).

Based on the findings of the preliminary Annual Report on the Irish Fleet for 2014 (on the balance between capacity and opportunities), there has been a positive evolution of the demersal trawl and seiners (DTS) segment since 2008. However, the segment of DTS VL1824 fails both short term and long term economic indicators in 2013 thereby demonstrating signs of overcapitalisation. The DTS VL1218 length class and DTS VL2440 length class pass the short and long term indicators in the last two years of the analysis; however the DTS VL1218 length class was very close to failing the long term indicator in 2013.

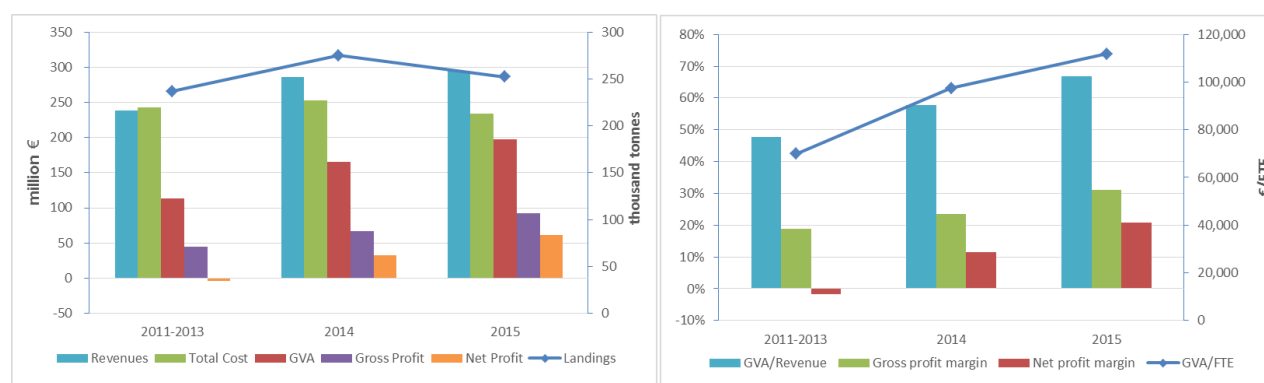
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According to BEMEF projections, 2014 is a particularly good year for the Irish fishing fleet, driven by large landings of mackerel and blue whiting by the large pelagic trawlers. A 16% increase in landings overall is matched by a 20% increase in revenue which lower fuel prices keep total costs rising at only 4%. The result is a net profit margin increasing from -2% to +12%.

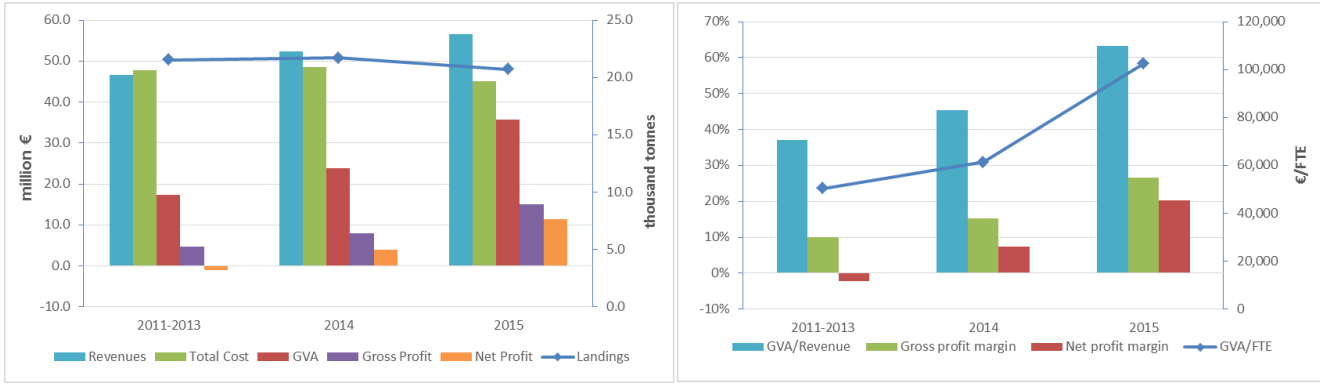
Landings decrease slightly in 2015 but a slight increase in revenue (3%) and falling costs (-8%) result in high gross and net profit. There is also an increase in GVA/FTE by 15% to €112,000.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

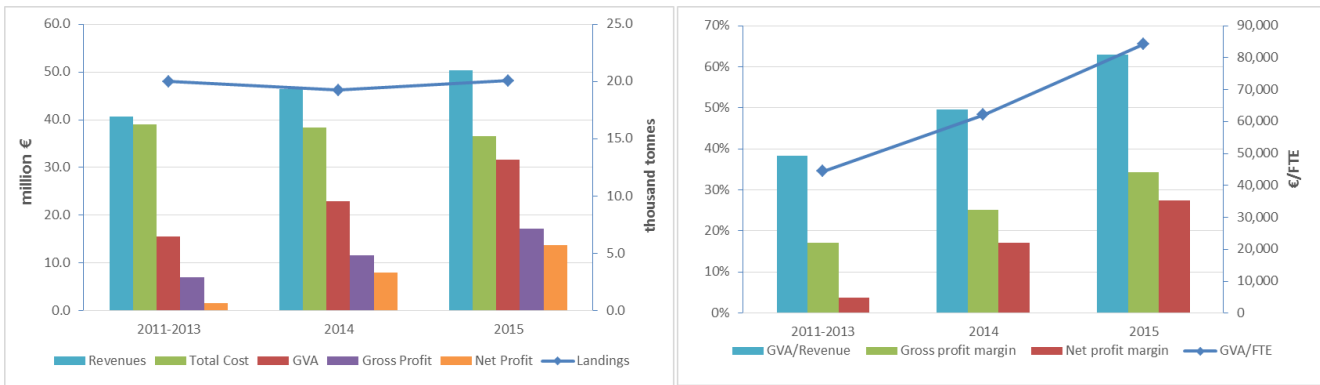
Figure 5.11.6 Ireland: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 Irish fleets by gross earnings.



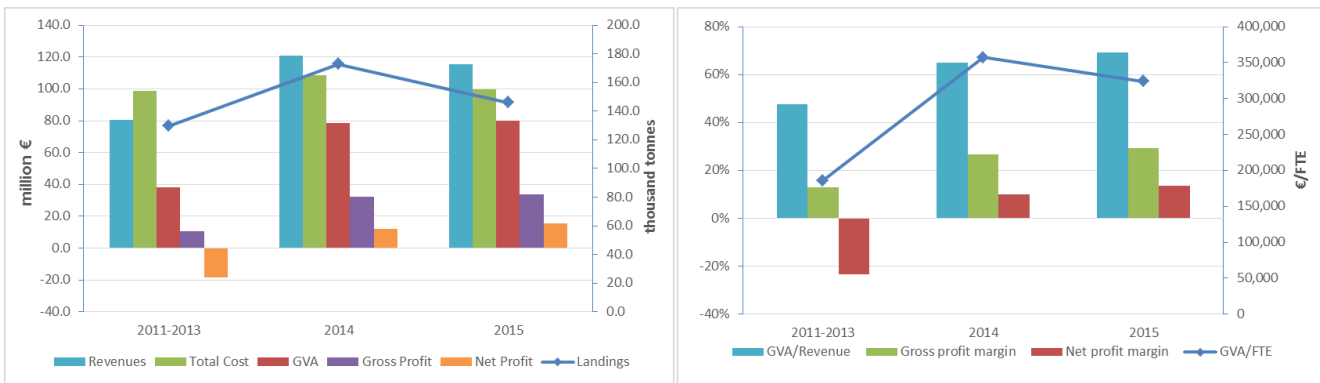
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.11.7 IRL AREA27 DTS VL1824: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

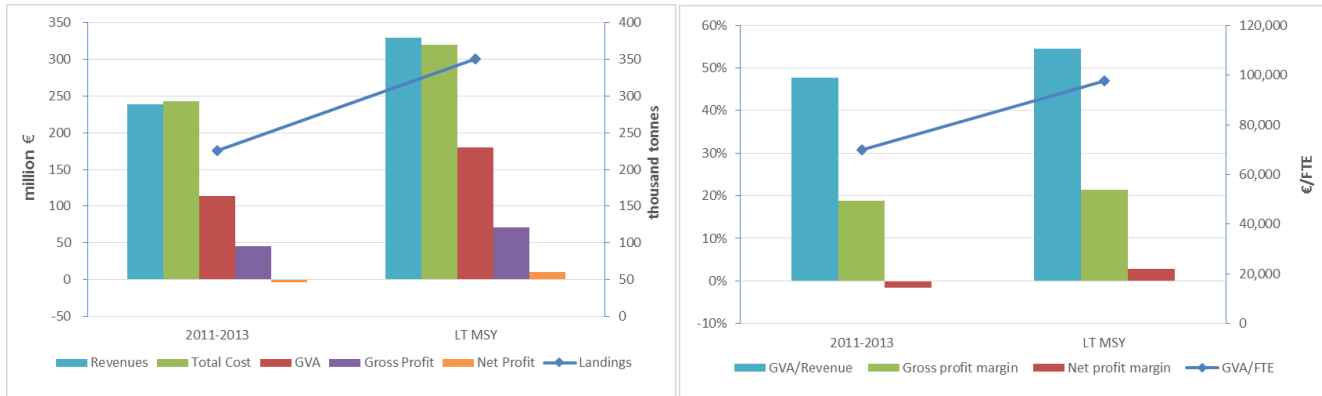
Figure 5.11.8 IRL AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.11.9 IRL AREA27 TM VL40XX: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, a state of long-term MSY results in an improved economic performance for the Irish fishing fleet. While landings and revenue for the Irish fleet are expected to increase by 55% and 38% respectively, an increase in effort is also required, leading to total costs increasing by 32%. All economic performance indicators improve from the base period, with net profit changing from -€4 million to €9 million, but these improvements are smaller than those expected in 2015 (Figure 5.11.10).



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Figure 5.11.10 Ireland: MSY projections for the main socio-economic indicators.

Data issues

Values and figures may differ somewhat from those in previous annual economic reports as more survey returns since last year's AER have changed total national estimates.

The effort data in the tables and graphs is not complete. The figures for days at sea and fishing days reported are those for vessels over 10m only for which there is logbook declaration data. The exclusion of the less than 10m fleet was due to the fact that this segment is not mandated to carry and complete logbooks for fishing operations. Estimates of days at sea for this segment have been calculated from a small sample of this fleet but have not been included in the data call due to the uncertainty surrounding these data.

The MS sampling rates have improved through increased effort in data collection. However, survey target rates vary between fleet segments with a high achievement of sampling targets in a number of segments and an under-achievement of targets in other segments.

The operational division of the fleet into 'small scale' and 'large scale' fisheries is not a satisfactory aggregation for the Irish Fleet. The exclusion of active gears from the small scale fishery definition means that many segments for which there is data, for <10m vessels, are eschewed from this segment. Specifically, Table 5.9.4 shows some data gaps for the SSF, for 2009, but in reality there is data for active gears that have been excluded due to the definition of SSF. There are some segments for which there is missing data for the <10m fleet which is compounded by the fact that these vessels are not obliged to complete logbooks. Therefore, the definition of SSF defined in this report excludes a large part of the Irish fleet in vessel numbers as they are below 12m in length and use active gears and thereby excludes important economic data and information currently being collected on this fleet. The definition of SSF used in this report corresponds with the EMFF legislation therefore it is felt that in future AER reports the term 'small-scale fleet SSF' should be changed to an alternative that includes all vessels under 12m.

Work is currently being carried out on the inshore (<10m) and small scale (<12m) fleets in order to estimate the total value they generate. Under EU legislation inshore fishers do not have to declare landings in logbooks so there is a paucity of data for this fleet. Therefore for the small scale fleet only those vessels between 10-12m declare landings and provide a landing value. Current works involve the analysis of distinct data sources such as logbooks, sales notes, sentinel surveys and global trade databases to formulate a total value. Planned future work in this regard will aim to estimate the importance of direct selling of landings at the quayside.

Table 5.11.5 Main socio-economic performance indicators by fleet segment in the Irish national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend		
	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ						
IRL AREA27 DFN VL0010	403	3%	170	-14%		185	56%						2,444	183%	14.4	230%	2,249	216%									
IRL AREA27 DFN VL1012	12	-25%	20	-19%	1,018	160	-20%	755	-40%	484	-46%	498	-45%	25.5	-32%	331	-54%	254	-54%	32.0	-24%	High	-7%	Deteriorated			
IRL AREA27 DFN VL1824°	10	-9%	33	-25%	1,608	105	-25%	3,186	-3%	2,195	-5%	2,986	3%	90.5	38%	2,800	2%										
IRL AREA27 DRB VL0010	372	1%	173	16%		433	107%					883	-79%	5.1	-82%	608	-80%										
IRL AREA27 DRB VL1012°	25	0%	47	40%	2,523	767	-1%	551	474%	710	13%	324	76%	-6.9	83%	348	88%										
IRL AREA27 DRB VL2440°	7	0%	40	31%	1,808	832	2792%	7,521	464%	2,787	-5%	6,159	425%	154.0	300%	5,475	367%	5,261	425%	70.0	-7%	High	30%	Improved			
IRL AREA27 DTS VL1012	21	-16%	44	59%	1,845	282	-22%	1,680	-22%	1,418	-19%	1,172	-14%	26.8	-46%	747	-34%	729	-32%	43.4	-13%	High	87%	Improved			
IRL AREA27 DTS VL1218	48	2%	173	35%	6,378	3,223	18%	10,378	-12%	6,334	-16%	4,163	-34%	24.0	-51%	774	-58%	124	-123%	-1.2	-126%	Weak	-109%	Deteriorated			
IRL AREA27 DTS VL1824	63	0%	299	-24%	12,851	12,842	-29%	47,698	-3%	20,792	-11%	21,004	-10%	70.3	19%	8,482	-30%	4,558	-39%	9.5	-36%	Reasonable	178%	Improved			
IRL AREA27 DTS VL2440	38	3%	378	27%	9,328	16,018	-2%	41,557	1%	18,019	-18%	18,273	7%	48.3	-16%	12,452	112%	9,149	3052%	21.5	3066%	High	342%	Improved			
IRL AREA27 FPO VL0010	752	3%	716	0%		588	-39%					9,272	-5%	13.0	-5%	8,690	57%										
IRL AREA27 FPO VL1012	83	0%	157	23%	6,398	1,146	17%	5,484	22%	3,931	-6%	2,825	73%	18.0	40%	1,335	142%	1,152	132%	20.3	127%	High	306%	Improved			
IRL AREA27 FPO VL1218°	23	10%	59	-29%	2,368	454	-63%	5,377	45%	3,626	9%	4,743	1508%	80.9	2178%	4,646	919%	4,604	580%	85.2	433%	High	1092%	Improved			
IRL AREA27 HOK VL0010	65	25%	47			90	10095%					651	-81%	13.9													
IRL AREA27 HOK VL1012°	3	-25%	6	13%	59	14	-52%	35	30%	25	-34%	31	184%	5.2	174%	6	89%										
IRL AREA27 TBB VL2440°	13	8%	73	-5%	3,178			7,743	-9%	2,671	-6%																
IRL AREA27 TM VL0010°	65	-2%	28	-1%	80	45	-70%	121	-3%	391	-11%	125	-133%	-4.6	-134%												
IRL AREA27 TM VL1218°	6	50%	21	182%	355	70	-70%	5,823	256%	2,890	-8%	5,702	375%	271.5	68%												
IRL AREA27 TM VL2440	12	9%	90	7%	1,470	4,250	50%	23,460	19%	31,950	-5%	9,839	29%	109.3	21%	1,535	115%	188	99%	-0.8	99%	Weak	98%	Improved			
IRL AREA27 TM VL40XX	21	0%	213	0%	2,105	18,056	2%	88,217	-5%	137,353	-9%	38,057	-28%	179.0	-28%	10,561	-48%	10,712	-24%	-12.0	-32%	Weak	78%	Improved			

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.11.6 Main socio-economic performance indicators by fleet segment in the Irish national fishing fleet: average by vessel for 2013.
Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend
IRL AREA27 DFN VL0010	0.4	-18%							484	25%	1,146	50%	1,050	55%			696	-11%	2,841	-11%	2,841	-4%	6,064	175%				
IRL AREA27 DFN VL1012	1.6	9%	85	-5%	475	-24%	567	-21%	13,920	16%	7,047	-7%	6,543	1%	331	49%	9,764	4%	38,784	4%	38,784	6%	41,476	-27%	21,194	-38%	-34%	Deteriorated
IRL AREA27 DFN VL1824*	3.3	-18%	161	-2%	1,365	7%	1,887	10%	18,591	48%	5,634	106%	4,892	107%	48	-21%	7,665	-20%	42,145	-20%	42,145	-16%	298,610	14%				
IRL AREA27 DRB VL0010	0.5	15%							737	-78%	1,586	-81%	1,450	-78%			575	-36%	4,321	-36%	4,321	-28%	2,373	-80%				
IRL AREA27 DRB VL1012*	1.9	40%	101	48%	282	-24%	336	-19%	952	-98%	-	-	-	-	1,080	-13%	22,452	-4%	36,965	-4%	36,965	-69%	12,970	76%				
IRL AREA27 DRB VL2440*	5.7	31%	258	12%	1,542	-15%	1,863	-14%	97,739	80850%	16,800	16,800	16,800	298	2946%	86,963	2701%	292,367	2701%	292,367	1173%	879,844	425%	751,596	425%	-10%	Deteriorated	
IRL AREA27 DTS VL0010	0.8	-16%							7,235		8,613		8,613				-		9,399		9,399							
IRL AREA27 DTS VL1012	2.1	89%	88	7%	769	-9%	865	-11%	20,261	124%	5,127	-24%	4,265	-31%	199	-4%	9,822	-10%	44,459	-10%	44,459	8%	55,829	3%	34,716	-19%	99%	Improved
IRL AREA27 DTS VL1218	3.6	32%	133	-3%	993	-14%	1,155	-12%	70,593	-25%	18,668	-43%	13,470	-52%	509	40%	49,126	12%	200,074	12%	200,074	-5%	86,722	-35%	2,574	-122%	-109%	Deteriorated
IRL AREA27 DTS VL1824	4.7	-24%	204	-4%	1,618	-7%	2,060	-6%	198,759	12%	40,345	46%	39,117	52%	618	-21%	149,141	-31%	624,808	-31%	624,808	4%	333,394	-10%	72,352	-39%	209%	Improved
IRL AREA27 DTS VL2440	10.0	24%	245	16%	1,932	-31%	2,447	-32%	153,169	-49%	15,097	-59%	12,127	-65%	889	20%	308,428	-8%	790,433	-8%	790,433	-21%	480,857	4%	240,756	2969%	505%	Improved
IRL AREA27 FPO VL0010	1.0	-2%							774	-87%	813	-86%	748	-85%			1,583	-19%	5,948	-19%	5,948	-53%	12,330	-8%				
IRL AREA27 FPO VL1012	1.9	23%	77	-6%	614	1%	659	4%	17,953	-69%	8,613	-77%	6,802	-74%	292	25%	10,107	14%	52,233	14%	52,233	-45%	34,034	73%	13,878	132%	233%	Improved
IRL AREA27 FPO VL1218*	2.6	-36%	103	-9%	1,531	10%	1,633	7%	4,198	-90%	1,579	-84%	1,304	-84%	125	-66%	14,450	-67%	32,908	-67%	32,908	-84%	206,202	1368%	200,193	538%	5821%	Improved
IRL AREA27 HOK VL1012*	2.0	50%	20	-21%	426	11%	433	13%	12,305	229%	5,778	119%	5,778	119%	551	-26%	3,378	-37%	22,572	-37%	22,572	-5%	10,408	211%				
IRL AREA27 PMP VL1218*	3.0	-21%	32	-76%	3,906	-25%	5,681	-27%	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
IRL AREA27 TBB VL2440*	5.6	-12%	244	-6%	841	-7%	1,083	-7%	-	-	-	-	-	-			-	-	-	-	-	-	-	-	-	-	-	-
IRL AREA27 TM VL0010*	0.4	0%	1	43%	4,892	-37%	5,218	-35%	-	-	-	-	-	-	114	-66%	848	-54%	4,029	-54%	4,029	-2%	1,926	-134%				
IRL AREA27 TM VL1218*	3.5	88%	59	-45%	8,141	11%	15,455	65%	-	-	-	-	-	-	24	-67%	8,551	-81%	20,791	-81%	20,791	-86%	950,349	217%				
IRL AREA27 TM VL2440	7.5	-2%	123	-11%	21,735	-3%	56,250	-1%	692,001	-58%	92,010	-57%	88,471	-57%	133	58%	259,140	33%	1,872,980	33%	1,872,980	-32%	819,938	18%	15,700	99%	97%	Improved
IRL AREA27 TM VL40XX	10.1	0%	100	-5%	65,251	-4%	159,343	-7%	1,309,321	-16%	129,057	-16%	127,486	-9%	131	11%	629,096	-2%	3,750,847	-2%	3,750,847	5%	1,812,248	-28%	510,098	-24%	66%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.12 ITALY

Fleet Structure, Fishing Activity and Production

In 2013, the Italian fishing fleet consisted of 12,635 registered vessels, with a combined gross tonnage of 164 thousand GT, a total power of 1,019 thousand kW and an average age of 31 years. The size of the Italian fishing fleet decreased between 2008 and 2013, with the number of vessels decreasing 6% and kW 10%. Over the same period total employed decreased 10%.

The largest part of the fleet is the small scale fleet, which is composed of vessels under 12m using passive gears only. They mainly use set nets, long-lines, pots and traps and are managed on a family and artisanal basis. This part contains more than two thirds of all active Italian fishing vessels (7,330), but due to their small size – on average around 2 GT per vessel - they only account for 10% of the total tonnage of the national fleet. In terms of gross tonnage, the 2108 demersal trawlers and seiners registered in 2013 represent the main fleet accounting for almost 60% of the total active Italian GT.

In 2013, 8,297 fishing enterprises were registered in the Italian fleet. The vast majority of them (87%) owned a single vessel, while only 11% of the enterprises owned between two and five fishing vessels and 3% owned more than five vessels (most of them represented by fishing cooperatives). Total employment in 2013 was estimated at 26,758 jobs, corresponding to 19,855 FTEs (Table 5.12.1, Figure 5.12.1)

Table 5.12.1 Italian national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (▲) increase; (▼) decrease and (↔) stable/no change (Δ between -1 and +1%).

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels(#)	13,470	13,374	13,311	13,194	12,919	12,635	12,691	-2% ▼	-6%	
	No. of Inactive vessels(#)	1,618	1,663	1,694	1,660	1,586	1,599	1,547	1% ↔	-1%	
	Average vessel age(year)	27	27	28	29	30	31	31	2% ▲	15%	
	Vessel tonnage(thousand GT)	194	193	191	176	173	164	164	-5% ▼	-15%	
	Vessel power(thousand kW)	1,129	1,120	1,116	1,070	1,050	1,019	1,024	-3% ▼	-10%	
	No. of Enterprises(#)	9,960	8,663	8,782	9,274	9,142	8,297	8,132	-9% ▼	-17%	
Employment	Total employed(#)	29,604	29,222	29,222	28,966	28,292	26,758	27,043	-5% ▼	-10%	
	FTE(#)	21,817	22,242	21,838	20,665	20,716	19,855	19,197	-4% ▼	-9%	
	Average wage per employed(thousand €)	9.9	13.5	11.7	10.1	8.2	8.7	8.5	6% ▲	-12%	
	Average wage per FTE(thousand €)	13.4	17.8	15.7	14.2	11.2	11.8	11.9	5% ▲	-13%	
Fishing Effort	Days at sea(thousand days)	1,600	1,782	1,668	1,748	1,556	1,494	1,432	-4% ▼	-7%	
	Fishing days(thousand days)	1,568	1,796	1,701	1,743	1,597	1,569	1,530	-2% ▼	0%	
	Energy consumption(million litres)	433	438	403	408	336	326	316	-3% ▼	-25%	
	Energy consumption per landed tonne(l/T)	1,907	1,805	1,792	1,922	1,708	1,888	1,803	11% ▲	-1%	
Output	Landings weight(thousand tonnes)	227	242	225	212	197	173	175	-12% ▼	-24%	
	Landings value(million €)	1,221	1,318	1,203	1,154	944	834	796	-12% ▼	-32%	
	Recreational catches of selected species(T)	16.6	58.2	161.3	66.1	7.6	9.7		28% ▲	-41%	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

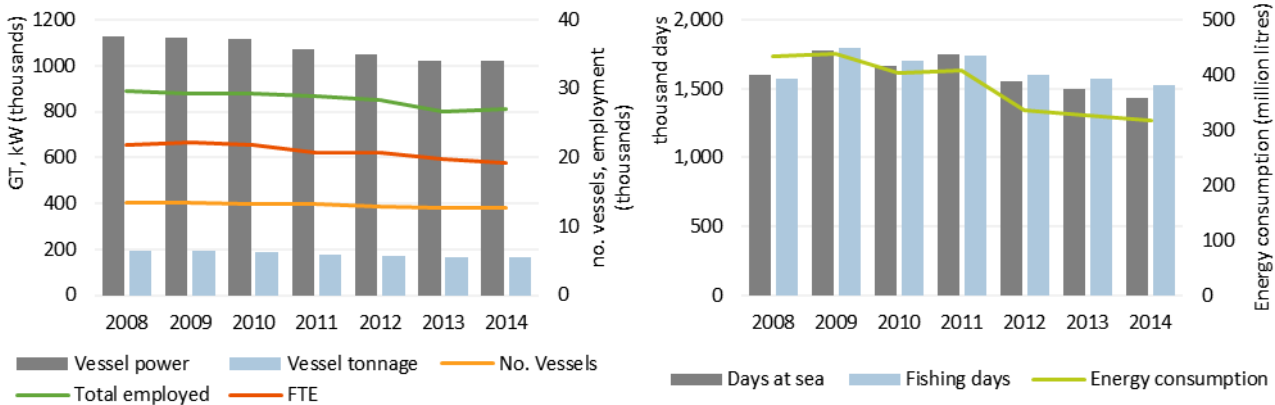
Capacity data refers to the average fleet over the reference year (2008-2013); capacity data for 2014 includes fleet at 1st January.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

In 2013, the Italian fleet spent a total of around 1,494 thousand days at sea, a decrease of 4% from 2012 and a decrease of 7% from 2008. One of the main factors causing the decrease in effort was the reduction in capacity. Furthermore, in the last years large scale vessels adopted strategies to optimise time spent at sea, for commercial reasons and in order to face the high price of fuel and cut energy costs. Even though fuel price decreased by 7% between 2012 and 2013 achieving an average of 0.75€/l, it is still very high compared with a price of 0.51€/l registered in 2009. The quantity of fuel consumed in 2013 totalled around 326 million litres, a decrease of 25% from 2008.

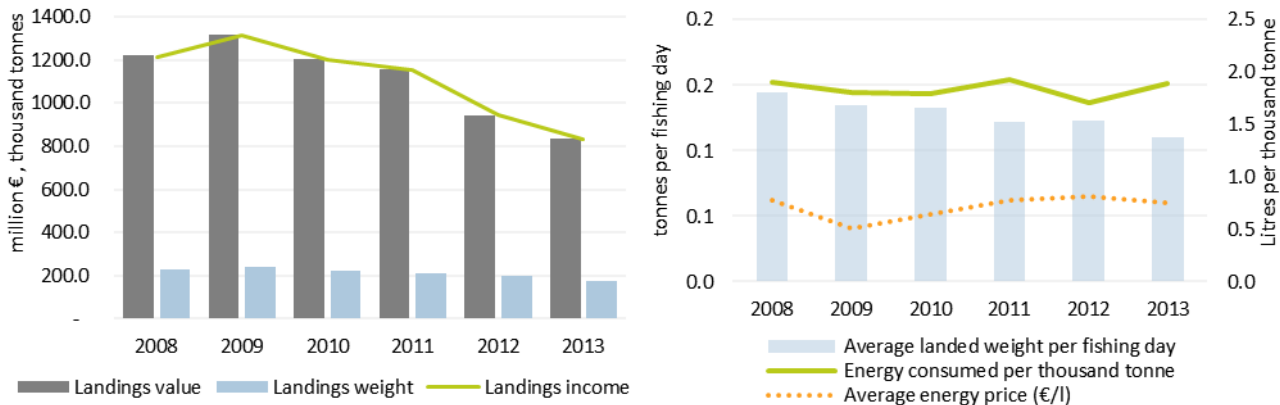
The major factor causing the decrease in fuel consumption was the reduction in total effort, see Figure 5.15.

The total weight landed by the Italian fleet in 2013 was around 173 thousand tonnes of seafood, with a landed value of €834 million. The total value of landings decreased 32% between 2008 and 2013. Over the same period the total weight of landings decreased 24%.



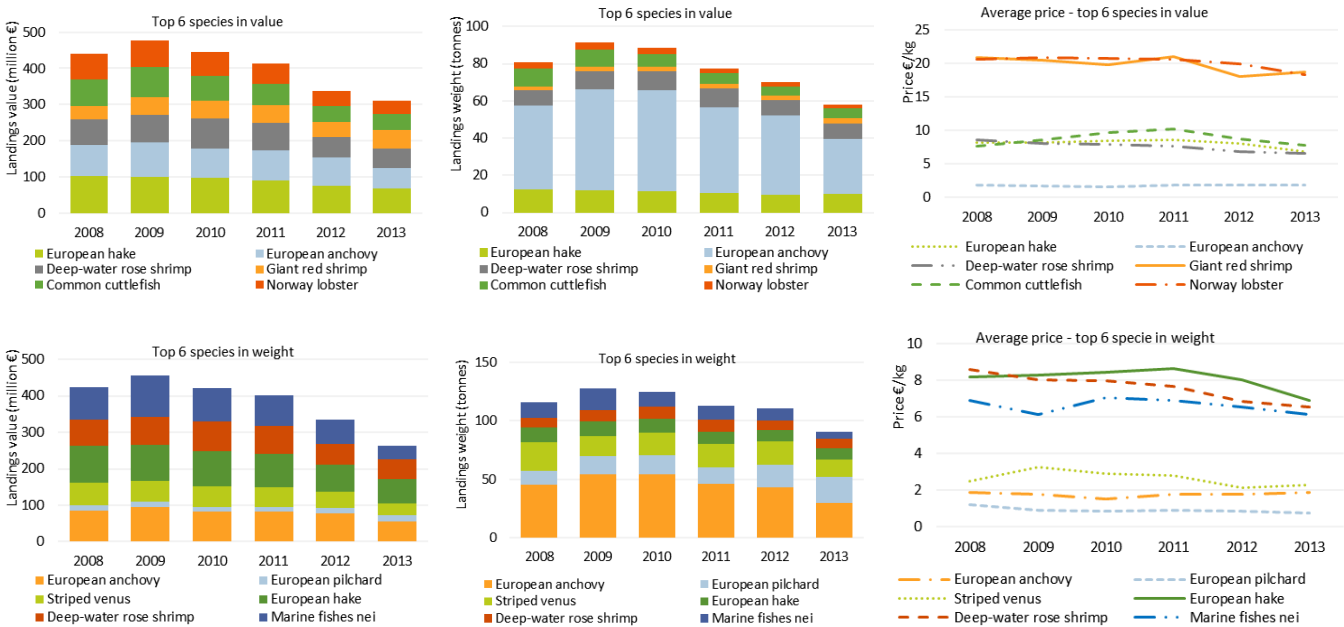
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.12.1 Italian fleet main capacity and effort trends for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.12.2 Landings in value and weight (and corresponding income from landings) by the Italian national fleet and some efficiency indicators for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.12.3 Italian fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

In 2013, European hake generated the highest landed values (€67 million), followed by European anchovy and deep-water rose shrimp (€55 million and €54 million respectively), giant red shrimp (€52 million), common cuttlefish (€44 million) and Norway lobster (€37 million). In terms of landings weight, in 2013, the quantity of European hake landed amounted to 10 thousand tonnes, European anchovy 30 thousand tonnes, deep water rose shrimp 8 thousand tonnes, giant red shrimp 3 thousand tonnes, common cuttlefish 6 thousand tonnes and Norway lobster 2 thousand tonnes.

Between 2012 and 2013, landed weight for the group of top species shows a decreasing trend due to significant reductions in landings for European anchovy and striped venus (31% and 27% respectively). On the contrary, all top demersal species show stable or increasing trends in the same period. Prices in 2013 show an opposite trend, increasing for European anchovy and striped venus and declining for the demersal species, with only one exception being the average price of giant red shrimp, which increased by 4%. Landings in value show declining trends for all top species with exceptions for giant red shrimp and European pilchard.

Between 2008 and 2013, landings in weight declined for almost all top species. Increasing trends are registered only for giant red shrimp and European pilchard. In the same period all top species show decreasing trends in landings value, with exceptions for giant red shrimp and European pilchard, increased by 40% and 16% respectively.

National Fleet Economic performance

The total amount of landings income generated by the Italian national fleet in 2013 was around €834 million, a decrease of 12% from 2012. Total operating costs incurred by the Italian national fleet in 2013 amounted to €644 million, decreased by around 8% from 2012. Crew cost and fuel costs, the two major cost items, were €233 and €245 million, respectively. The reduction in the total operational costs from 2012 to 2013 was largely due to a decrease by 11% in the energy costs. The declining trend in fuel costs started in 2012 and confirmed in 2013 was partly due to the reduction in fishing capacity, a decrease of around 7% in fuel price in 2013, and partially to changes in fishing strategies which are reducing the number of fishing days per vessel. Notwithstanding the decline in fishing activity, labour costs in 2013 remained close to the levels registered in 2012.

Table 5.12.2 Italian national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend	
Income	Landings income	1,212.1	1,313.0	1,202.6	1,154.2	943.7	833.7	795.9	-12%	↘	-31%	
	Other income	12.4	10.3	9.1	8.7	8.9	7.6	7.6	-15%	↘	-39%	
Costs	Labour costs	293.3	395.5	342.4	293.3	231.6	233.5	227.7	1%	↔	-20%	
	Energy costs	334.4	223.6	257.2	316.6	274.3	245.0	232.0	-11%	↘	-27%	
	Repair costs	52.0	51.6	49.9	46.7	42.7	37.2	36.4	-13%	↘	-29%	
	Other variable costs	146.2	157.2	145.9	137.2	111.2	97.5	95.0	-12%	↘	-33%	
	Other non-variable costs	48.4	48.9	45.2	42.6	38.4	30.8	31.2	-20%	↘	-36%	
	Capital costs	201	228	214	214	179	163	160	-9%	↘	-19%	
Economic Indicators	GVA	643.4	842.0	713.4	619.7	486.1	430.7	409.9	-11%	↘	-33%	
	Gross profit	350.1	446.5	370.9	326.5	254.5	197.2	182.2	-23%	↘	-44%	
	Net profit	148.8	218.0	156.8	112.5	75.1	33.9	26.9	-55%	↘	-77%	
Capital value	Depreciated replacement value	957	953	953	939	786	711	685	-10%	↘	-26%	
	Investments	76.3	76.9	54.2	36.9	29.5	15.0		-49%	↘	-80%	
Profitability and development trends	Net profit margin (%)	12.2	16.5	12.9	9.7	7.9	4.0	3.4	-49%	↘	-67%	
	<i>development trend</i>								-66%	↘		Deteriorated
	RoFTA (%)	16.7	26.4	18.9	14.4	11.7	7.7	4.52	-34%	↘	-54%	
	<i>development trend</i>								-56%	↘		Deteriorated
Profitability and development trends	GVA per FTE (thousand €)	29.5	37.9	32.7	30.0	23.5	21.7	21.4	-8%	↘	-26%	
	<i>development trend</i>								-29%	↘		Deteriorated

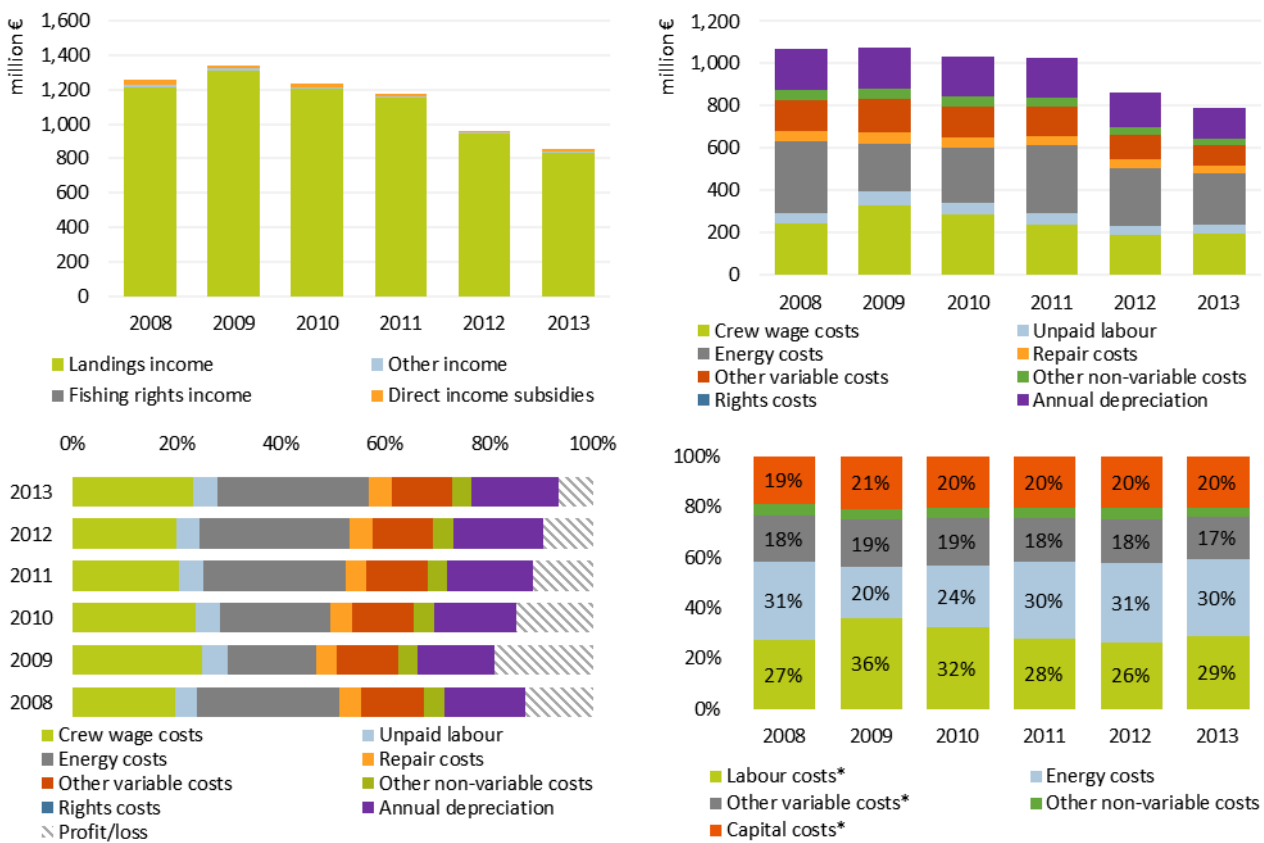
*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Since 2008, income from landings shows a reduction higher than 30%. The significant decline in income is partially compensated by a reduction by 26% in operating costs. This is mainly due to the reduced labour costs (-20%) and energy costs (-27%).

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Italian national fleet in 2013 were €431 million, €197 million and €34 million, respectively. Gross Value Added (GVA), gross profit and net profit decreased by 11%, 23% and 55% respectively, between 2012 and 2013. The negative performance of the sector is mainly due to the decline in landings income. Even though fishermen tried to reduce operating costs by changing their fishing strategies and optimizing the time spent at sea, this was not sufficient to compensate the decline in landings volume and value. The negative performance in the Italian fishing sector is confirmed by the trends registered for the profitability indicators. In 2013 the net profit margin and the RoFTA decreased considerably. From 2012 to 2013, the net profit margin reduced by an half reaching 4% and the RoFTA shows a reduction by 34%.

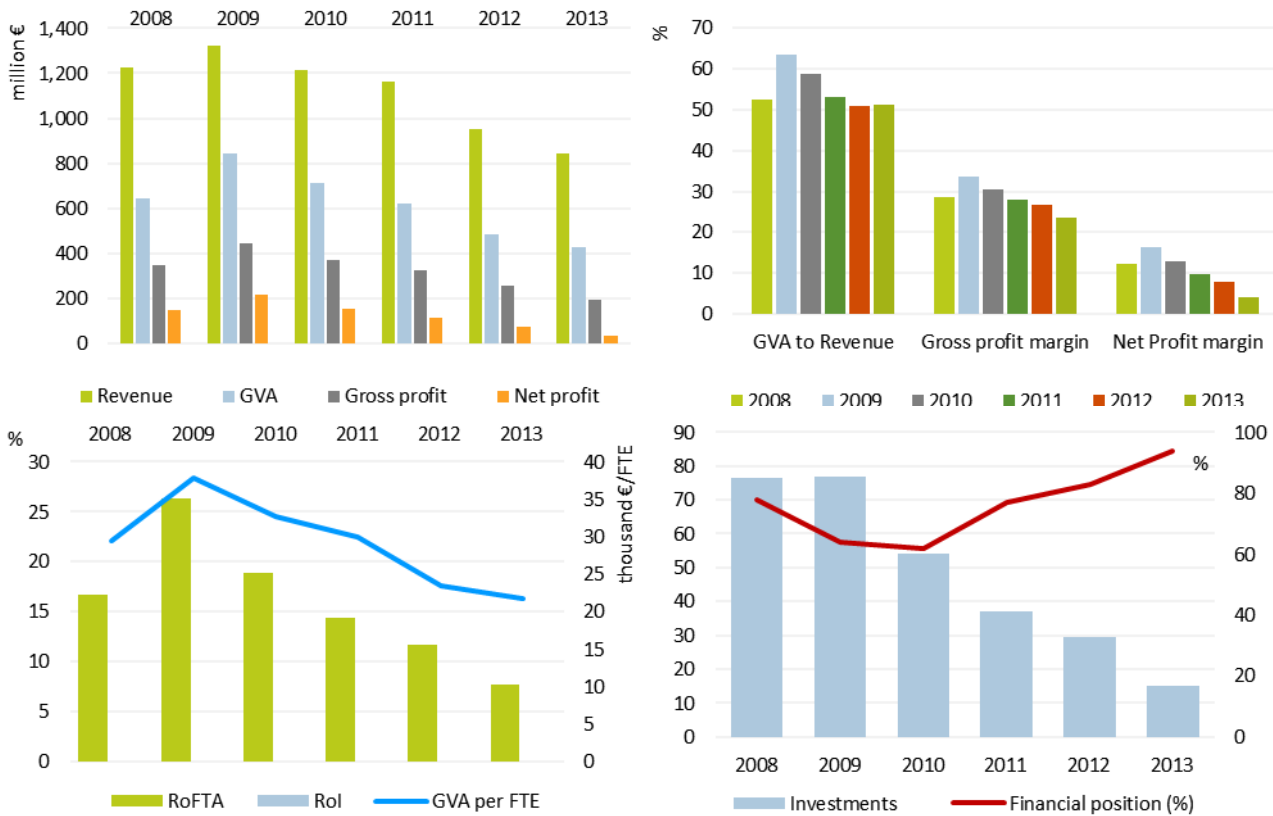
In 2013, all profitability indicators show the lowest values over the last six years. From 2008 to 2013, net profit margin, RoFTA and GVA per FTA registered reductions by 67%, 54% and 26% respectively. Since 2008, all economic performance and profitability indicators trends are negative.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.12.4 Income and cost structure trends for the Italian fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Figure 5.12.5 Main economic performance indicator trends for the Italian fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Fleet Segment Level Economic performance

The Italian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Adriatic and Southern Tyrrhenian Seas. The national fleet consisted of 24 (DCF) fleet segments in 2013 and six inactive length classes consisting of around 1,600 vessels. Nine of the active fleet segments made losses in 2013, while 14 made overall net profits.

As reported above, small scale fleet represents around two third of the Italian fishing fleet in terms of number of vessels. The negative performance registered in 2013 for the Italian sector is mainly due to the small scale fleet. Indeed, small scale and large scale Italian fleets show different performance in 2013 and over the period 2008-2013. Even though between 2012 and 2013 a similar reduction in landings weight is registered for both fleets, the related decrease in landings value is much stronger for small vessels (-20%) than large ones (-8%). Furthermore, small scale fleet shows augmented operating costs due to a significant increase in energy costs (26%), while energy costs for the large scale fleet registered a reduction by 18%. The different trends in fuel costs are due to a different reaction to the declining productivity by large and small vessels. Large vessels reduced operating costs by changing their fishing strategies and optimizing the time spent at sea, while vessels lower than 12m held an almost constant number of days at sea per vessel. The effects of these different behaviours between 2012 and 2013 is well described by the “energy consumption per landed tonne” indicator, which shows an increase by 57% for small scale vessels and a constant value for large scale vessels.

Even though both small scale and large scale fleets registered a negative economic performance in 2013, the increasing cost per landed tonne determined a situation of crisis for small scale vessels with negative values for net profits (-1.6 million Euro), net profit margin (-0.8%) and RoFTA (-1.2%).

Italian vessels generally operating in distant-water were inactive in 2013 as a consequence of a lack of international agreements. Those vessels are included in the inactive fleet for 2013.

The tables below provide a breakdown of key performance indicators for all Italian fleet segments in 2013. A short description of the five most important segments in terms of total value of landings is provided below.

Passive gears polyvalent 6-12m: In 2013, the landings of passive gears 6-12m amounted to 18% of total national landings in value and 12% in volume. Landings from this segment amounted to 21,084 tonnes, corresponding to around €150 million. This fleet segment is the most relevant from a social and job-related point of view, with 5,116 vessels employing 7,158 FTEs. In 2013, each vessel was active for 137 days at sea on average, a decrease of 8% compared to 2012. Landings are dominated by cuttlefish, which amounted to 1,864 tonnes (9% of total fleet segment landings), equivalent to €15 million in value (10% of total fleet segment revenues). The second most important species is common octopus accounted for 7% of landings in weight and 8% in value. European hake is the third most important species, accounting for 5% of total volume and 6% of total revenues of the fleet segment. The fleet segment was unprofitable in 2013, with a reported gross profit of around €20 million and a negative net profit of almost €12 million, equivalent to a net profit margin of -7.7%.

Demersal trawl / seine 12-18m: The most productive fleet in terms of landings value consists of 1,164 vessels operating mostly with bottom trawls and beam trawls. These vessels represent 11% of the entire Italian fleet in terms of vessels number, contributing 15% of the volume and 22% of the overall revenues. Between 2012 and 2013, landings generated by this segment were almost stable in weight and increased 7% in value. The level of activity decreased 4% in 2013, achieving an average of 138 days at sea per vessel. From 2012 to 2013, gross profit and net profit increased 34% and 80% respectively. The main species for this fleet segment is European hake with 2,882 tonnes landed and a value of almost €19 million in 2013. The second most important species in terms of landed value is deep-water rose shrimp, with 2,417 tonnes and a value of €17 million. The spottail mantis squillid is the third most important species, with a value of €15.5 million and 2,890 tonnes of landings, equivalent to 11% of the total fleet segment landings in weight.

Demersal trawl / seine 18-24m: In 2013, this fleet segment consisted of 608 vessels, a 3% less than the previous year. These vessels target both demersal species (European hake, deep water rose shrimp, red mullet, etc.) and pelagic species (European pilchard and European anchovy). The total value of landings, decreased by 7% from 2012, amounted to €157 million and contributed to 19% of the total Italian landings income. In 2013, around 2,100 FTEs were employed in the fleet segment, contributing for 11% to the total national FTEs. In the same year, the fleet segment registered a net profit of €5 million, inverting the negative trend registered in the previous two years.

Demersal trawl / seine 24-40m: In 2013, this fleet segment represented 1.6% of the total Italian fleet in number, but accounted for 6% of the total Italian landing weight and 10% of total Italian revenues. The target species mainly consist of giant red shrimp, deep water rose shrimp, Norway lobster, European hake and blue and red shrimp, which accounted respectively for 40%, 21%, 10% and 7% of the total landings value of the fleet segment. In 2013, the fleet segment employed 1,176 FTEs, reduced by 9% compared to 2012. In the same year, the fleet segment registered a loss of €14.5 million, confirming the negative trend registered in the previous six years. Over the last years vessels above 24 meters have been suffering a deep crisis due mostly to high fuel costs and substantial reductions in landings, which decreased also in 2013 by 2% in weight and 9% in value.

Dredges 12-18m: In 2013, there were 655 vessels operating predominantly around the Central-Northern Adriatic coast (GSA 17), employing 384 FTEs. This fishery targets almost exclusively clams and is co-managed at compartment level by local consortia. In 2013, total landings amounted to 16,500 tonnes, corresponding to €43.5 million. The performance of this fleet is highly variable due to cyclic abundance of clams. In 2013, hydraulic dredges operated for 72 days on average, 12% lower than the average activity registered in 2012. Between 2012 and 2013, production levels decreased significantly both in weight (-25%) and in value (-18%). The fleet segment was profitable in 2013, with a gross profit of €15.7 million and a net profit of around €6 million, equivalent to a net profit margin of 14%. However, net profit shows a negative trend with a reduction of almost 30% from 2012 and a reduction of 65% from 2008.

lower than the reductions registered in the previous years. The negative trend in the economic performance of the national fishing sector is mainly due to the overexploitation status of many Mediterranean stocks, the decrease in the average price of seafood and a still high fuel price.

Small scale Fleet

Provisional 2014 data on the small scale fishing fleet capacity shows a trend similar to that registered for the whole national fleet. Between 2013 and 2014 the number and the gross tonnage of small scale vessels do not show significant changes. Also the number of employees was estimated almost constant with an increase of just 2%.

In 2014 landings in weight and value for small scale fleet show increases by 4% compared to 2013, achieving 28 thousand tonnes of seafood, equivalent to €203 million.

Projections on operating costs for 2014 show a reduction of around 3%. The expected decrease in operating costs and the increase in landings income would determine an increase in GVA, gross profits and net profits. Net profits, which registered a negative value in 2013, would become positive in 2014. Also the economic performance indicators are expected to move from negative values in 2013 to positive values in 2014, with a RoFTA equal to 8%.

Even though the economic situation of small scale fleets is expected to improve in 2014, economic performance indicators would be still lower than those registered in the period 2008-2012.

Projections by the HDA0.2 model – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

In 2013 the economic performance of the Italian fleet was negative, with decreased income and profits when compared to the previous year. A clear declining trend in the economic performance of the national fleet is registered in the period 2009-2013. The main factors contributing to the reduced profits are: a) the reduced biomass of many stocks, which impacted on productivity; b) a high fuel price even though reduced if compared to 2012; c) the market price of seafood affected by the economic crisis and the related decline in the purchasing power of consumers, which has further reduced landings income.

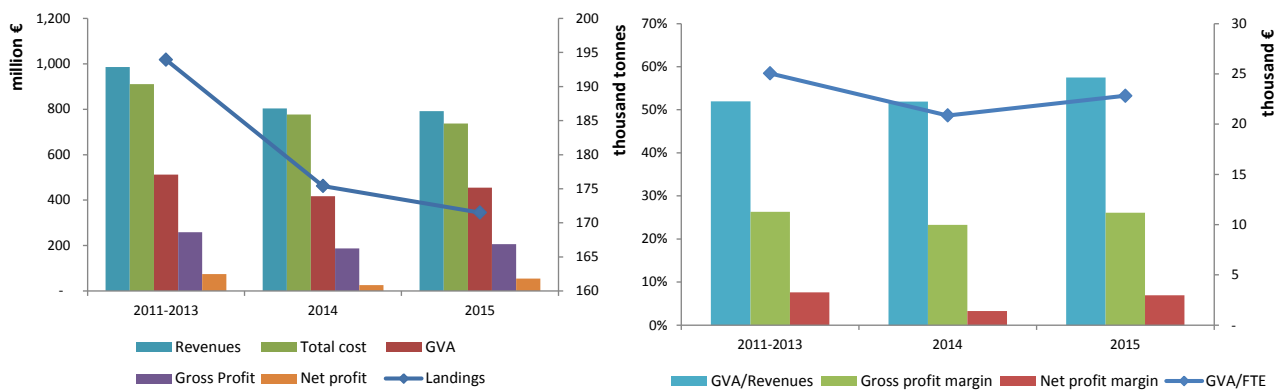
Projections for 2014 and 2015 were produced using the HDA0.2 model and based on the following assumptions:

- The measure of fishing effort selected is days at sea.
- Labour cost is estimated assuming the prevalence of the crew share contract for all fleet segments, with the exception of PMP VL0612 where the crew share parameter estimated on 2013 data were too high. Labour cost for that fleet segment is estimated assuming a fixed salary (this is estimated on 2013 data).
- Projections regarding the consistency of the Italian fleet in 2015 were based on the last available information (fleet registered at 31/12/2014). The number of vessels for each fleet segment was adapted to take into account the number of inactive vessels. Inactive vessels were estimated assuming the same percentage of inactivity registered in 2014.
- Average days at sea were estimated by a linear trend on years 2012-2014.
- Given the lack of specific information on the future levels of productivity, landings per unit of effort in 2015 is assumed to be the same as in 2014.
- Regarding the average landings price by fleet segment, it was assumed a price elasticity of -0.2 for all Italian fleet segments.

- Fuel prices in 2014 and 2015 were sourced from the official statistics of the Italian Ministry of Economic Development with reference to the Italian annual average prices for diesel car. The average fuel price highlights a slight decrease from 2013 to 2014, with a reduction from 0.75 € to 0.70 € per litre, and a strong reduction in the first months of 2015, when it fell down to 0.56 € per litre.
- The values of interest and inflation rates have been sourced from official statistics of the Italian National Statistical Institute (ISTAT).

According to projected data for 2015, landings are expected to continue a declining trend, with a slight decrease of 2% compared to 2014. Given the reduction in landings weight, also revenues are expected to reduce. The reduction in revenues is expected by just 1.5%, given an increase in landings price. Economic variables in 2014 are expected to show a negative performance if compared with the previous three years average. The negative trend seems to be interrupted in 2015, when an increase is expected for GVA, gross profit and net profit. Even though revenues are reducing also in 2015, total costs show a stronger reduction by about 5%. This would determine an expected increase for GVA and gross profit by around 10% in 2015 compared with 2014. The positive performance expected for 2015 is mainly due to the reduction in fuel price and then in energy cost.

Gross profit margin and net profit margin show reductions from 2011-2013 to 2014, while in 2015 these indicators are expected to increase at the same levels of the period 2011-2013. Also GVA/FTE is expected to increase in 2015 after a significant reduction in 2014.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.12.6 Projections on 2014 and 2015 on the main socio-economic indicators.

Data issues

There were no significant data issues in producing this chapter, and the coverage and quality appear to be good. Data for the distant-water fleet is not reported in because those vessels were inactive in 2013.

Table 5.12.5 Main socio-economic performance indicators by fleet segment in the Italian national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ				
ITA AREA37 DRB VL1218*	655	-3%	384	16%	46,869	-15%	8,557	-32%	43,543	-18%	16,501	-25%	30,144	-17%	78.5	-28%	15,738	-20%	6,127	-29%	14.0	-14%	High	-36%	Deteriorated
ITA AREA37 DTS VL0612	161	-16%	293	21%	19,822	-6%	3,279	-27%	11,411	8%	1,820	14%	6,860	74%	23.4	44%	3,870	271%	2,633	731%	23.1	682%	High	100%	Improved
ITA AREA37 DTS VL1218	1164	0%	3,147	4%	189,098	4%	77,315	1%	183,582	7%	26,086	0%	95,646	23%	30.4	19%	51,171	34%	33,077	80%	17.9	69%	High	17%	Improved
ITA AREA37 DTS VL1824	608	-3%	2,124	-14%	100,786	-4%	69,727	-13%	156,679	-7%	28,475	17%	78,067	13%	36.8	30%	39,052	17%	5,112	263%	3.3	275%	Reasonable	-6%	Deteriorated
ITA AREA37 DTS VL2440	175	-6%	1,176	-9%	32,801	-3%	44,629	14%	80,411	-9%	9,670	-2%	31,738	-23%	27.0	-15%	9,731	-61%	14,478	-2319%	-17.6	-2568%	Weak	-214%	Deteriorated
ITA AREA37 HOK VL1218*	121	-6%	459	8%	12,375	-17%	3,190	-50%	13,764	-32%	1,622	-27%	7,087	-31%	15.4	-36%	3,221	-29%	741	-60%	5.3	-40%	Reasonable	-68%	Deteriorated
ITA AREA37 HOK VL1824*	43	0%	199	-4%	7,431	36%	2,514	2%	11,022	-2%	1,458	-1%	4,681	-7%	23.5	-3%	1,992	-25%	1,279	-67%	-11.3	-69%	Weak	-361%	Deteriorated
ITA AREA37 PGP VL0006	2199	-5%	2,519	4%	285,384	6%	7,373	-8%	45,715	1%	6,049	10%	31,470	5%	12.5	1%	14,816	-6%	10,466	-7%	22.5	-8%	High	-27%	Deteriorated
ITA AREA37 PGP VL0612	5116	0%	7,158	-2%	699,670	-8%	70,285	46%	150,058	-25%	21,084	-17%	65,134	-47%	9.1	-46%	20,541	-72%	11,803	-132%	-7.7	-142%	Weak	-137%	Deteriorated
ITA AREA37 PGP VL1218*	352	-11%	822	-24%	46,821	-4%	5,111	-63%	26,907	-25%	3,124	-29%	16,476	23%	20.0	61%	8,349	21%	1,106	171%	4.1	196%	Reasonable	-78%	Deteriorated
ITA AREA37 PMP VL0612	15	2%	29	-36%	889	-61%	241	-66%	278	-53%	47	-44%	34	88%	-1.2	82%	112	-	238	-84.5	-	-	Weak	-	-
ITA AREA37 PMP VL1218*	32	-2%	72	21%	2,285	-8%	537	-46%	1,606	-32%	234	-13%	753	-29%	10.5	-41%	394	-32%	75	-65%	4.6	-49%	Reasonable	-70%	Deteriorated
ITA AREA37 PS VL0612	13	-2%	24	20%	1,368	23%	484	-19%	1,482	-15%	744	-13%	685	-8%	28.6	-23%	56	65%	233	35%	-15.7	24%	Weak	24%	Improved
ITA AREA37 PS VL1218	92	0%	277	-23%	10,910	-3%	5,082	-20%	10,949	-24%	3,877	-29%	4,352	-29%	15.7	-7%	1,052	-59%	705	-183%	-6.4	-210%	Weak	-210%	Deteriorated
ITA AREA37 PS VL1218*																									
ITA AREA37 PS VL1824	34	-2%	93	-40%	4,045	5%	2,171	-11%	8,812	-19%	5,277	-14%	5,154	-24%	55.4	27%	2,205	-28%	400	-63%	4.5	-54%	Reasonable	-73%	Deteriorated
ITA AREA37 PS VL2440	41	-4%	249	-4%	4,216	-22%	2,709	-31%	16,993	-21%	7,037	-36%	12,500	-8%	50.2	-4%	6,281	-1%	2,210	12%	13.0	41%	High	779%	Improved
ITA AREA37 PS VL40XX	10	0%	53	162%	116	-38%	301	-42%	14,188	-7%	1,229	5%	12,701	-7%	239.6	-64%	6,506	-9%	3,024	252%	21.3	279%	High	127%	Improved
ITA AREA37 TBB VL1218	11	-2%	42	18%	1,578	4%	704	-29%	2,566	-3%	622	-13%	1,734	20%	41.3	2%	1,006	57%	752	103%	29.1	109%	High	389%	Improved
ITA AREA37 TBB VL1824	29	20%	119	1%	4,293	17%	4,547	38%	7,985	55%	1,213	36%	2,713	189%	22.8	185%	800	748%	867	19%	-10.8	48%	Weak	-4%	Stable
ITA AREA37 TBB VL2440	18	-33%	84	-44%	1,913	-45%	1,553	-63%	5,899	-31%	1,762	-26%	4,076	16%	48.5	108%	2,640	52%	1,303	418%	22.0	563%	High	1414%	Improved
ITA AREA37 TM VL1218*	35	-26%	88	-25%	4,293	-18%	1,398	-46%	6,057	-17%	5,262	-31%	3,979	2%	45.2	36%	1,829	28%	1,365	42%	22.5	71%	High	71%	Improved
ITA AREA37 TM VL1824	40	-11%	135	-20%	6,057	-22%	3,756	8%	7,586	-35%	7,412	-35%	3,462	-48%	25.7	-35%	1,819	-53%	323	-119%	-4.2	-129%	Weak	-181%	Deteriorated
ITA AREA37 TM VL2440	73	-10%	309	-15%	10,711	-8%	10,448	-23%	26,156	-18%	22,021	-13%	11,286	-19%	36.5	-5%	4,362	-19%	1,530	-344%	-5.8	-441%	Weak	-411%	Deteriorated

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.12.6 Main socio-economic performance indicators by fleet segment in the Italian national fishing fleet: average by vessel for 2013.
Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend
ITA AREA37 DRB VL1218*	0.6	20%	72	-12%	352	-12%	354	-12%	21,994	-10%	37,515	-25%	9,484	-16%	519	-9%	9,822	-35%	42,816	-35%	42,816	-14%	46,021	-14%	9,354	-27%	-57%	Deteriorated
ITA AREA37 DTS VL0612	1.8	43%	123	12%	92	21%	96	22%	18,547	22%	5,232	4%	4,603	53%	1,802	-36%	15,289	-20%	46,822	-20%	46,822	-6%	42,547	106%	16,333	850%	28%	Improved
ITA AREA37 DTS VL1218	2.7	3%	162	4%	138	-4%	138	-9%	38,208	12%	14,133	8%	12,685	12%	2,964	1%	49,938	-7%	114,421	-7%	114,421	-1%	82,169	23%	28,417	80%	-1%	Stable
ITA AREA37 DTS VL1824	3.5	-11%	166	-1%	283	22%	285	21%	64,218	12%	18,368	26%	16,169	14%	2,449	-25%	86,289	-17%	193,738	-17%	193,738	-10%	128,499	16%	8,415	268%	-25%	Deteriorated
ITA AREA37 DTS VL2440	6.7	-4%	187	3%	295	1%	317	6%	125,579	43%	18,713	49%	17,891	46%	4,615	16%	191,473	11%	413,544	11%	413,544	17%	181,111	-18%	82,617	-2462%	-168%	Deteriorated
ITA AREA37 HOK VL1218*	3.8	15%	102	-12%	131	-12%	131	-13%	31,817	-29%	8,421	-38%	8,571	-25%	1,967	-32%	19,740	-51%	87,774	-51%	87,774	-30%	58,333	-27%	6,100	-57%	-80%	Deteriorated
ITA AREA37 HOK VL1824*	4.7	-5%	174	35%	196	-27%	196	-27%	62,894	12%	13,511	17%	11,297	3%	1,724	3%	44,215	-6%	218,547	-6%	218,547	6%	109,493	-7%	29,918	-67%	-269%	Deteriorated
ITA AREA37 PGP VL0006	1.2	10%	130	11%	21	4%	20	-1%	7,573	24%	1,495	-1%	1,099	14%	1,219	-16%	2,521	-10%	14,425	-10%	14,425	11%	14,310	10%	4,759	-2%	-45%	Deteriorated
ITA AREA37 PGP VL0612	1.4	-1%	137	-8%	30	-10%	27	-19%	8,716	-13%	2,742	-12%	2,003	-12%	3,334	76%	10,329	34%	25,877	34%	25,877	1%	12,732	-47%	2,307	-132%	-125%	Deteriorated
ITA AREA37 PGP VL1218*	2.3	-14%	133	7%	67	-26%	64	-30%	23,106	40%	9,887	63%	7,442	56%	1,636	-49%	10,924	-62%	53,582	-62%	53,582	-28%	46,842	38%	3,144	180%	-89%	Deteriorated
ITA AREA37 PMP VL0612	2.0	-37%	61	-62%	52	44%	82	125%	5,394	1,907	1,176	3,119	-34%	2,298	-38%	12,514	-49%	38,991	-49%	38,991	-30%	23,353	-27%	2,336	-64%	-86%	Deteriorated	
ITA AREA37 PMP VL1218*	2.2	24%	71	-6%	102	-6%	101	-7%	11,121	-24%	4,981	-38%	3,119	-34%	2,298	-38%	12,514	-49%	38,991	-49%	38,991	-30%	23,353	-27%	2,336	-64%	-86%	Deteriorated
ITA AREA37 PS VL0612	1.9	23%	105	25%	544	-29%	578	-35%	57,032	-17%	25,795	36%	8,366	86%	650	-7%	27,994	-24%	118,743	-24%	118,743	-18%	52,724	-6%	17,946	34%	34%	Improved
ITA AREA37 PS VL1218	3.0	-24%	119	-3%	355	-27%	352	-28%	36,017	-8%	11,916	21%	5,341	-7%	1,311	12%	41,693	-27%	108,264	-27%	108,264	-17%	47,493	-29%	7,698	-183%	-183%	Deteriorated
ITA AREA37 PS VL1218*	2.7	-39%	119	7%	1,305	-18%	1,327	-17%	86,807	-19%	31,708	33%	11,519	4%	412	4%	48,057	-16%	194,967	-16%	194,967	-13%	151,719	-22%	11,783	-62%	-83%	Deteriorated
ITA AREA37 PS VL1824	6.2	0%	104	-19%	1,669	-17%	1,723	-21%	153,513	-11%	24,975	-11%	13,698	-8%	385	7%	50,273	-34%	264,819	-34%	264,819	-27%	308,567	-4%	54,552	16%	1148%	Improved
ITA AREA37 PS VL40XX	5.3	161%	12	-38%	10,598	70%	10,598	70%	619,452	-4%	116,878	-63%	43,933	-4%	245	-45%	22,622	-46%	768,220	-46%	768,220	-5%	1,270,060	-7%	302,399	252%	179%	Improved
ITA AREA37 TBB VL1218	3.9	21%	147	6%	394	-16%	398	-17%	67,729	-7%	17,335	-23%	15,491	-12%	1,131	-19%	49,208	-33%	146,776	-33%	146,776	-20%	161,276	23%	69,936	107%	392%	Improved
ITA AREA37 TBB VL1824	4.1	-16%	147	-3%	283	17%	283	16%	65,553	50%	16,069	78%	14,486	60%	3,748	1%	117,193	6%	246,636	6%	246,636	13%	92,992	140%	29,710	32%	-18%	Deteriorated
ITA AREA37 TBB VL2440	4.6	-17%	105	-18%	921	34%	971	38%	78,702	21%	17,099	45%	15,444	33%	881	-50%	63,975	-49%	179,198	-49%	179,198	-28%	223,334	74%	71,379	578%	649%	Improved
ITA AREA37 TM VL1218*	2.5	2%	123	11%	1,226	-16%	1,396	-6%	61,431	18%	24,433	16%	17,340	20%	266	-21%	30,021	-33%	120,979	-33%	120,979	-3%	113,679	38%	39,010	91%	27%	Improved
ITA AREA37 TM VL1824	3.4	-11%	153	-12%	1,224	-17%	1,385	-7%	41,610	-34%	12,175	-26%	8,137	-26%	507	66%	71,497	12%	148,412	12%	148,412	-17%	87,652	-42%	8,171	-121%	-151%	Deteriorated
ITA AREA37 TM VL2440	4.2	-5%	147	2%	2,056	-5%	2,172	-16%	94,844	-10%	22,407	-5%	15,559	-5%	474	-11%	107,610	-21%	298,959	-21%	298,959	-9%	154,599	-10%	20,957	-393%	-317%	Deteriorated

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.13 LATVIA¹

Fleet Structure, Fishing Activity and Production

In 2013, the Latvian Baltic Sea fishing fleet consisted of 351 registered vessels including 84 inactive vessels, with a combined gross tonnage of 8,000 GT, a total power of 21,000 kW and an average age of 29 years (Table 5.13.1). The size of the Latvian fleet followed a decreasing trend between 2012 and 2013. The number of vessels declined only by 1% (or 5 vessels), while the total GT and kW of the fleet declined by 7% and 6% respectively during the same period. The reason for the change during the analysed periods from 2008 to 2013 is connected to vessel scrapping which according to the multi-annual management plan aims to achieve a better balance between fishing capacity and the available resources. The fishing vessels were “reassigned for activities outside fishing (by scrapping or selling)”. Vessel scrapping between 2008 and 2013, as well as other structural changes in fleet segments, had a positive impact on incomes and minimised total costs resulting in an increase in profitability and overall improvement in the economic effectiveness of several fishing firms.

Significant differences in the number of vessels and in other related variables were observed between 2010 and 2011. The fleet size decreased by 364 vessels or 53%. Fleet GT and kW were relatively stable and were 10 and 27 respectively (Table 5.13.1; Figure 5.13.1). The major factor causing the fleet to decrease is that the small coastal zone vessels less than 10m, were excluded from the statistics. These vessels have a licence and obligation to fill coastal logbooks but only fish for family consumption and are not involved in commercial fishing activity. This type of fishing activity in Latvia has a long historical tradition. The small-scale fleet targets Atlantic cod, Atlantic salmon, European flounder, European smelt, Atlantic herring, European sprat and other coastal species.

Table 5.13.1 Latvian national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	858	814	771	407	356	351	369	-1%	↘	-59%
	No. of Inactive vessels (#)				88	77	84	79	9%	↗	
	Average vessel age (year)	27	27	29	27	29	29	26	0%	↔	7%
	Vessel tonnage (thousand GT)	13	12	10	10	8	8	8	-7%	↘	-40%
	Vessel power (thousand kW)	34	33	27	27	23	21	21	-6%	↘	-38%
	No. of Enterprises (#)	149	153	151	147	123	127	119	3%	↗	-15%
Employment	Total employed (#)	1,621	1,666	1,619	712	643	680	706	6%	↗	-58%
	FTE (#)	664	548	521	378	353	415	425	18%	↗	-38%
	Average wage per employed (thousand €)	2.8	2.1	2.2	4.8	6.0	6.2	4.9	4%	↗	122%
	Average wage per FTE (thousand €)	6.9	6.4	6.7	9.0	11.0	10.2	8.1	-7%	↘	49%
Fishing Effort	Days at sea (thousand days)	44	48	44	20	19	19	20	-1%	↔	-56%
	Fishing days (thousand days)	36	38	36	17	17	17	18	-1%	↔	-52%
	Energy consumption (million litres)	8.3	6.6	6.5	6.5	6.6	5.3	5	-20%	↘	-37%
	Energy consumption per landed tonne (l/T)	96	84	88	103	115	87	87	-25%	↘	-10%
Output	Landings weight (thousand tonnes)	86	78	74	63	57	61	56	6%	↗	-30%
	Landings value (million €)	25	19	23	22	24	26	20	10%	↗	2%
	Recreational catches of selected species (T)	2.5	3.4	3.7	2.3	2.6	4.2	4	63%	↗	73%

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

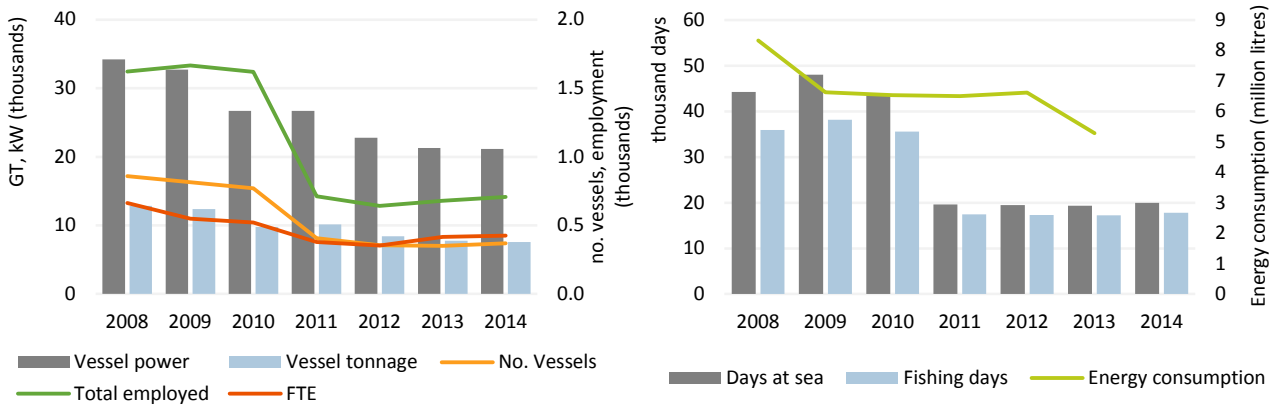
Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

¹ Note: This National Chapter does not cover the entire Latvian fleet

Note: total number of vessels in 2011-2013 includes active and inactive vessels; average vessel age and length excludes the PGP fleet segment.

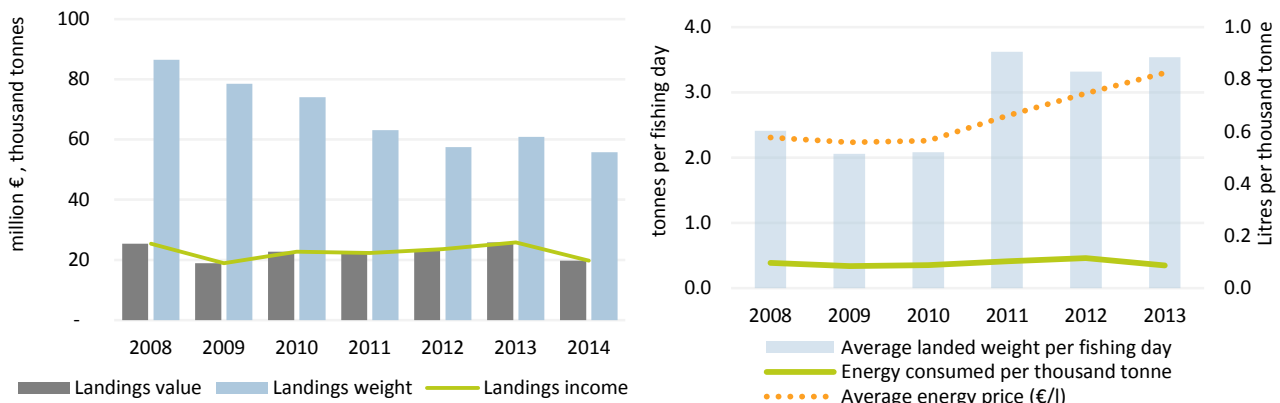
In 2013, the number of fishing enterprises totalled 127, with the majority (55%), owning a single vessel. Only 3% of the enterprises owned six or more fishing vessels (Table 5.13.1).

Employment was around 680 jobs and 415 FTEs in 2013 (Table 5.13.1; Figure 5.13.1). The level of total employment and FTE increased 6% and 18%, respectively between 2012 and 2013. While the average wage per FTE increased during the same period by 4%.



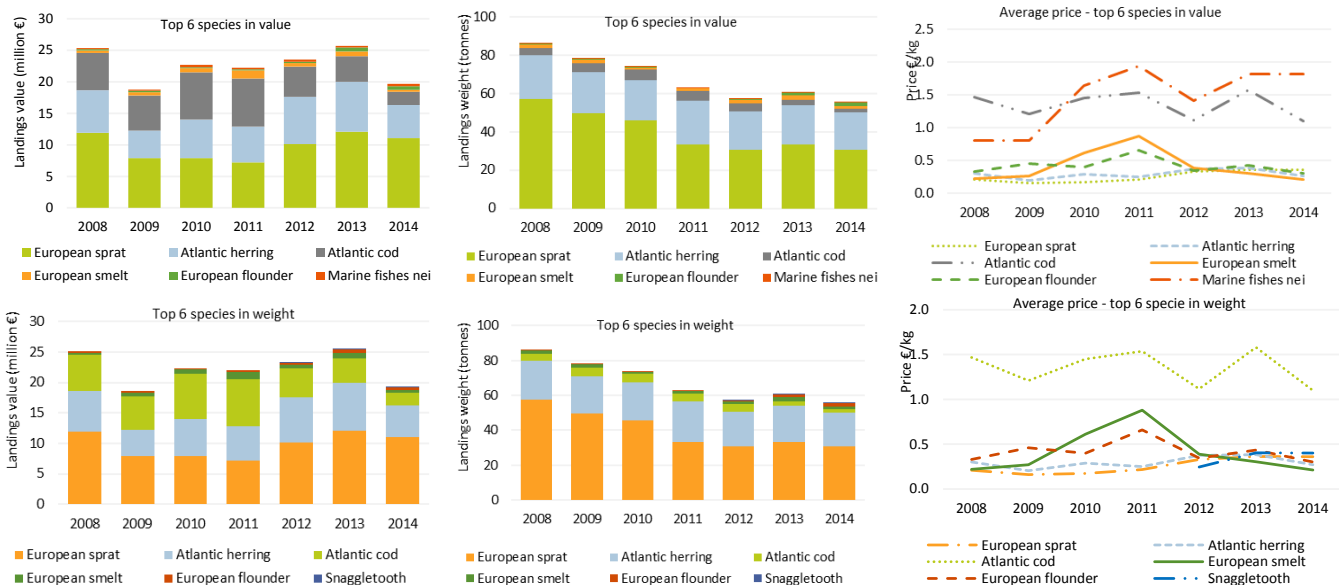
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.13.1 Latvian fleet main capacity and effort trends for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.13.2 Landings in value and weight (and corresponding income from landings) by the Latvian national fleet and average price trends of top species in price for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.13.3 Latvian fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

In 2013 the Latvian Baltic Sea fishing fleet spent a total of around 19,000 days at sea (Table 5.13.1; Figure 5.13.1), 17,000 of which were fishing days. The total number of days at sea and fishing days remained relatively stable with only a decrease of 1% between 2012 and 2013. The total quantity of fuel consumed in 2013 was 5.3 million litres and decrease of 20% compared to the previous year. Fuel consumption per kg landed also decreased significantly, by 25%.

The weight landed by the fleet in 2013 was 61 thousand tonnes of fish, with a landed value of €26m (Table 5.13.1; Figure 5.13.2). The total weight of landings has increase by 6% between 2012 and 2013 while landed value increased 10% during the same period. The main reason for increase in weight was slight increase for landings of European sprat in the Baltic.

In terms of landings composition, in 2013 European sprat was the most common species landed in terms of weight (33,000 tonnes), followed by Atlantic herring (21,000 tonnes) and Atlantic cod (around 3,000 tonnes) (Figure 5.13.3). In 2013, European sprat achieved the highest landed value (€12m) for the national fleet, followed by Atlantic herring (€8m) and then Atlantic cod (€4m) (Figure 5.13.3).

European sprat, Atlantic herring and Atlantic cod, accounted for 47%, 31% and 16% respectively of the total landings value in 2013 and contributed to 53%, 34% and 4%, to total landed weight. The total landing value has remained relatively stable over the years, while total weight declined by 30% between 2008 and 2013 (Figure 5.13.3). The major factor causing the decrease in weight and significant increase in prices was the reduction of Latvian quota for European sprat by 50% in the Baltic Sea between 2008 and 2012.

The prices obtained for the two key species (Atlantic herring and European sprat) increased insignificantly between 2012 and 2013. Atlantic salmon and coastal zone species which are included in "Marine fishes nei" achieved the highest average price per kilo by the Latvian fleet (€5.85 and €1.82 per kg respectively), followed by Atlantic cod and Eelpout (€1.58 per kg and €1.05 per kg). Despite the high prices for coastal species and a high salmon price, these species are negligible in the total landings composition and does not influence the total value of Latvian landings.

National Fleet Economic performance

The amount of income generated by the Latvian national fleet in 2013 was €27.4m, including €25.8m in revenue from fish sales and €1.6m in non-fishing income. The landed income of the Latvian fleet increased 10% between 2012 and 2013. Expenditure by the Latvian fleet in 2013 was €22m, amounting to 81% of income (Figure 5.13.4). The largest expenditure items were non-variable costs and energy costs (€6.0 and €4.4m respectively). Between 2012 and 2013, repair costs, energy costs and non-variable costs decreased significant by 17%, 12% and 6% and labour costs increased by 10% in the same period. The variables groups non - variable costs, variable costs and energy costs, accounted for 27%, 24% and 20% of the total expenditure value in 2013 (Table 5.13.2; Figure 5.13.4).

Towards the end of 2008 and during 2009 the Latvian fishery sector was negatively affected by the global economic crisis, which led to a significant increase of total costs and decrease of profit levels. Economic efficiency of the fleet continued to improve and in terms of profitability, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Latvian national fleet in 2013 was €11.7m, €7.5m and €5.3m, (Table 5.13.2; Figure 5.13.5). Sharp increases of 37%, 61% and 75% were observed for the GVA, gross profit and net profit between 2012 and 2013. However the landings income in 2013 was approximately the same as in 2008.

In 2013, the Latvian fleet had an estimated depreciated replacement value of €10.0m. Investment in the fleet amounted to €0.7m (Table 5.13.2; Figure 5.13.5). The depreciated replacement value is very low, the major factor being a long service life of vessels (around 30 years) and obsolete equipment. Investment increased significantly, by 97% between 2008 and 2013. However the invested amount remains less than €1m per year. The observed difference between 2010 and 2011 for the depreciated replacement value is caused by the necessary changes regarding data collection methodology implemented for the more reliable data collection in 2010. The first data collected by the new approach were received for 2011. The data for 2008 and 2010 were imputed, based on formulas for vessel scrapping. More reliable data were obtained by questionnaire for 2011- 2013.

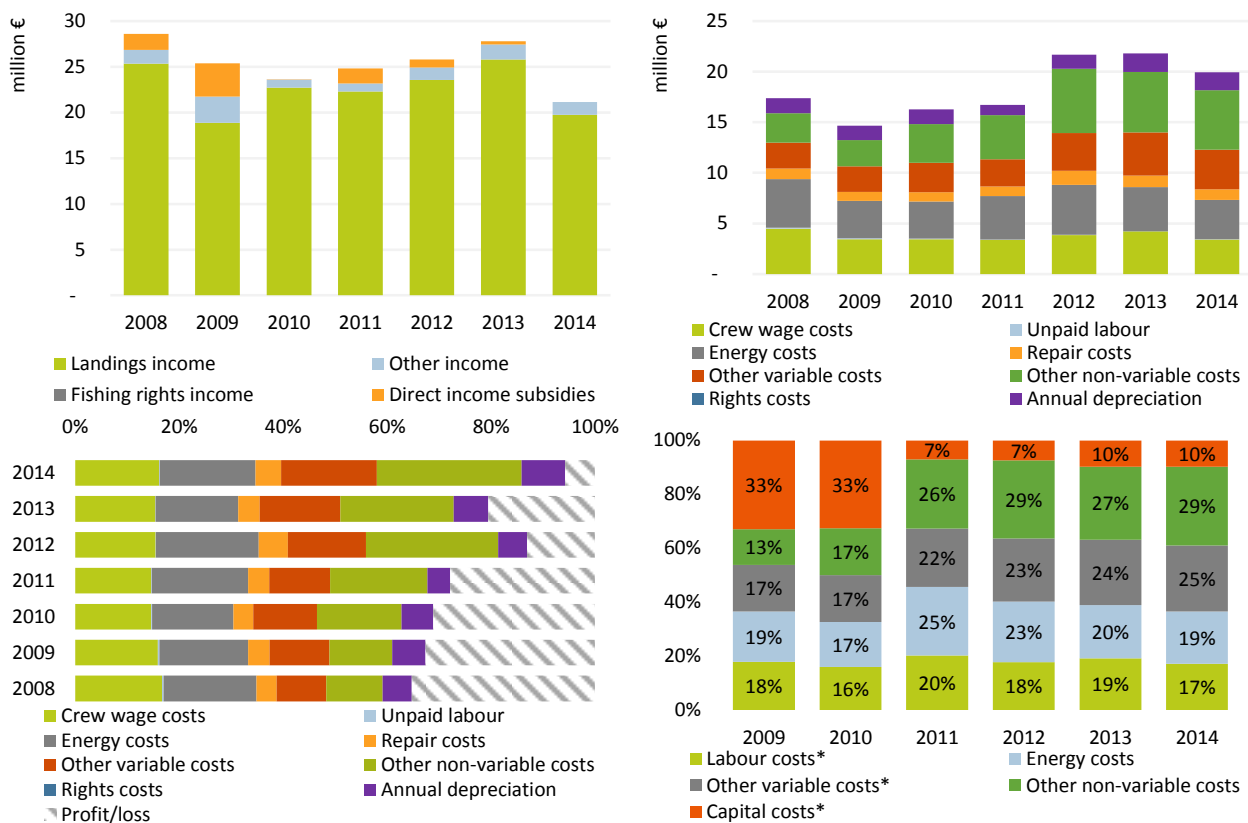
Table 5.13.2 Latvian national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	25.3	18.9	22.7	22.3	23.5	25.8	19.8	10%	↗	2%
	Other income	1.5	2.9	0.9	0.9	1.4	1.6	1.4	18%	↗	9%
Costs	Labour costs	4.6	3.5	3.5	3.4	3.9	4.2	3.4	10%	↗	-7%
	Energy costs	4.8	3.7	3.7	4.3	4.9	4.4	3.9	-12%	↘	-9%
	Repair costs	1.0	0.9	0.9	1.0	1.4	1.1	1.1	-17%	↘	10%
	Other variable costs	2.6	2.5	2.9	2.7	3.8	4.2	3.9	13%	↗	66%
	Other non-variable costs	2.9	2.6	3.8	4.3	6.3	6.0	5.9	-6%	↘	105%
	Capital costs		6.5	7.2	1.2	1.6	2.2	2.0	33%	↗	159%
	Economic Indicators	GVA	15.5	12.0	12.3	10.9	8.5	11.7	6.4	37%	↗
	Gross profit	11.0	8.5	8.8	7.5	4.6	7.5	3.0	61%	↗	-32%
	Net profit	14.7	2.0	1.6	6.3	3.0	5.3	1.0	75%	↗	-64%
Capital value	Depreciated replacement value	67.4	58.1	48.9	10.0	10.6	10.0	9.8	-6%	↘	-85%
	Investments	0.4	0.3	0.4	0.4	0.5	0.7		33%	↗	97%
Profitability and development trends	Net profit margin (%)		9.1	6.9	27.1	12.1	19.3	4.9	60%	↗	
	<i>development trend</i>				Improved				40%	↗	
	RoFTA (%)	14.0	12.2	15.0	64.7	30.7	56.3	10.68	84%	↗	301%
	<i>development trend</i>				Improved				106%	↗	
	GVA per FTE (thousand €)	23.4	21.9	23.6	28.8	24.1	28.2	15.1	17%	↗	21%
	<i>development trend</i>				Improved				16%	↗	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

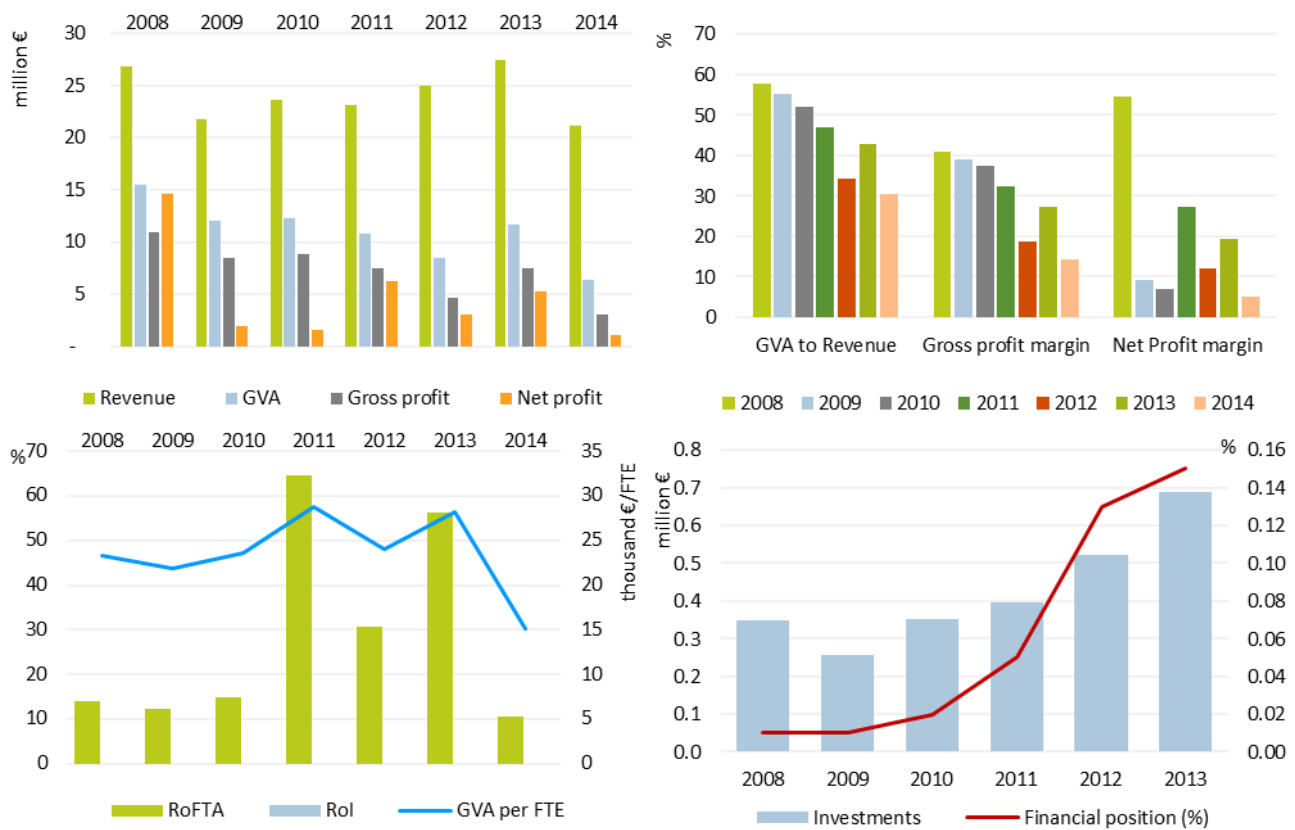
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.13.4 Income and cost structure trends for the Latvian fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.13.5 Main economic performance indicator trends for the Latvian fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Table 5.13.3 Latvian national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	736	708	687	245	207	202	227	-2%	↘	122	106	84	74	72	65	63	-10%	↘
Average vessel age (year)	22.0	22.0	24.0	23.0	24.0	26.0	25.0	8%	↗	27.6	27.6	27.7	26.8	29.2	26.6	27.6	-9%	↘
Average vessel length (m)	6.0	6.0	5.0	6.0	6.0	7.0	6.0	17%	↗	24.0	24.6	24.2	24.9	25.1	24.5	24.4	-2%	↘
Vessel tonnage (thousand GT)	1.2	1.1	1.0	0.5	0.4	0.4	0.4	0%	↔	11.6	11.3	8.8	8.0	8.0	7.3	7.1	-8%	↘
Vessel power (thousand kW)	7.3	6.5	5.9	2.8	2.2	2.2	2.6	-1%	↘	27.0	26.2	20.8	19.5	19.8	18.5	17.9	-6%	↘
Total employed (#)	992	1,110	1,175	321	258	327	367	27%	↗	629	556	444	391	385	353	339	-8%	↘
FTE (#)	373	329	329	202	154	229	255	49%	↗	291	219	192	176	199	186	170	-7%	↘
Average wage per employed (thousand €)	0.2	0.2	0.1	0.3	0.4	0.2	0.3	-51%	↘	7.0	6.0	7.6	8.5	9.8	11.9	9.9	21%	↗
Average wage per FTE (thousand €)	0.5	0.5	0.3	0.5	0.6	0.3	0.4	-60%	↘	15.0	15.3	17.6	18.8	19.0	22.5	19.6	19%	↗
Days at sea (thousand days)	30.4	37.3	34.2	10.8	10.9	11.4	12.6	4%	↗	13.8	10.7	9.4	8.8	8.6	8.0	7.3	-7%	↘
Fishing days (thousand days)	23.7	28.6	27.0	9.4	9.4	9.7	10.8	3%	↗	12.2	9.6	8.5	8.1	8.0	7.5	7.0	-5%	↘
Energy consumption (million litres)	0.11	0.05	0.04	0.04	0.03	0.02	0.0	-33%	↘	8.2	6.6	6.5	6.5	6.6	5.3	4.8	-20%	↘
Energy consumption per landed tonne (l/T)	39.3	18.0	15.4	12.1	11.7	5.4	4.9	-54%	↘	98.3	86.9	90.8	108.0	120.5	91.9	87.2	-24%	↘
Landings weight (thousand tonnes)	2.8	2.7	2.6	3.3	2.9	3.6	0.4	25%	↗	83.6	75.8	71.5	59.8	54.6	57.3	55.3	5%	↗
Landings value (million €)	0.9	0.8	1.3	1.3	1.5	1.7	0.5	20%	↗	24.5	18.0	21.4	21.0	22.1	24.1	19.3	9%	↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Table 5.13.4 Economic performance of the Latvian national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			
Income	Landings income	0.86	0.84	1.32	1.26	1.45	1.74	0.49	20%	↗	24.5	18.0	21.4	21.0	22.1	24.1	19.3	9%	↗
	Other income	0.04	0.02	0.04	0.05	0.01	0.01	0.01	0%	↔	1.5	2.9	0.9	0.8	1.4	1.6	1.4	18%	↗
	Direct income subsidies		0.17		0.11	0.03					1.7	3.5	0.0	1.5	0.9	0.4		-59%	↘
	Fishing rights income																		
Costs	Labour costs	0.19	0.16	0.11	0.09	0.10	0.06	0.10	-40%	↘	4.4	3.4	3.4	3.3	3.8	4.2	3.3	11%	↗
	Energy costs	0.06	0.03	0.02	0.03	0.02	0.02	0.02	0%	↔	4.7	3.7	3.7	4.3	4.9	4.3	3.9	-12%	↘
	Repair costs	0.06	0.02		0.01	0.01					1.0	0.9	0.9	0.9	1.4	1.1	1.0	-17%	↘
	Other variable costs	0.04	0.04	0.14	0.05	0.04	0.03	0.03	-25%	↘	2.5	2.5	2.8	2.7	3.7	4.2	3.9	13%	↗
	Other non-variable costs	0.05	0.03	0.01	0.01	0.08					2.9	2.6	3.8	4.3	6.3	6.0	5.9	-4%	↘
	Capital costs	-0.93	1.19	1.42	0.04	0.04	0.02	0.02	0.02	-50%	↘	-2.8	5.3	5.7	1.1	1.6	2.1	1.9	35%
Capital value	Depreciated replacement value	12.48	13.24	12.09	0.13	0.19	0.04	0.05	-79%	↘	54.9	44.9	36.9	9.8	10.4	10.0	9.7	-4%	↘
	Investments	0.01		0.01	0.02	0.01	0.01		0%	↔	0.3	0.3	0.4	0.4	0.5	0.7		31%	↗
Economic indicators	GVA	0.69	0.75	1.18	1.20	1.30	1.69	0.44	30%	↗	14.8	11.3	11.1	9.7	7.2	10.0	6.0	39%	↗
	Gross profit	0.50	0.58	1.07	1.11	1.20	1.63	0.34	36%	↗	10.5	7.9	7.7	6.4	3.4	5.8	2.7	70%	↗
	Gross profit margin	55.2	67.9	78.9	84.8	82.6	93.6	68.8	13%	↗	40.3	37.8	34.7	29.1	14.6	22.7	12.8	55%	↗
	Net profit	1.4	-0.6	-0.4	1.1	1.2	1.6	0.3	38%	↗	13.2	2.6	2.0	5.2	1.9	3.7	0.7	99%	↗
Profitability and development trends	Net Profit margin	159	-70	-26	82	80	92	64	16%	↗	50.9	12.4	8.9	23.9	7.9	14.4	3.5	82%	↗
	<i>development trend</i>			Improved					106%	↗			Deteriorated					-31%	↘
	RoFTA (%)	3.8	4.2	8.8	832	622	3605	634	480%	↗	16.4	14.5	17.1	54.7	20.0	40.4	9.3	102%	↗
	<i>development trend</i>			Improved					1126%	↗			Improved					64%	↗
GVA per FTE (thousand €)		1.9	2.3	3.6	5.9	8.4	7.4	1.7	-12%	↘	51.0	51.4	57.8	54.9	36.2	53.8	35.2	49%	↗
	<i>development trend</i>			Improved					67%	↗			Improved					7%	↗

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Fleet Segment Level Economic performance

The Latvian national fleet in 2013 operated in the Baltic Sea, Atlantic CECAF (Morocco and Mauritania EZZ) and North Atlantic NAFO, NEAFC areas. However only fleet operating in the Baltic Sea were taken into consideration in the analysis, this were because there were only two vessels fishing in the NAFO and NEAFC areas and four vessels fishing in the CECAF area. These vessels belong to three fishing firms. Their data were excluded from the economic analysis for confidentiality reasons, as with the landings and capacity data, cannot be combined with that of the Baltic Sea vessels, because it could misrepresent the true economic situation in the Latvian fishery.

The Baltic Sea fleet consisted of 4 active fleet segments in 2013. A breakdown of the key performance indicators for 2013 by main fishing activity is provided in Table 5.13.3 and Table 5.13.4.

Table 5.13.5 and Table 5.13.6 provide a breakdown of key performance indicators for each fleet segment in total and in average by vessel for 2013. A short description for the main segments is provided below.

Small-scale fleet

The number of vessels in the small-scale fleet was relatively stable between 2012 and 2013. Landings weight increased 25% while the value of landings increased by 20% between 2012 and 2013 and is around €1.7m. The small-scale fishing fleet is important for employment in coastal regions and was estimated at 327 jobs, corresponding to 229 FTEs. Total employment and FTEs for the small-scale fleet increased 27% and 49% respectively over the observed period (Table 5.13.3). While total costs decreased 45%, net profit increased during the same period by 38%. Gross Value Added (GVA) and gross profit increased by 30% and 36% respectively, between 2012 and 2013. Nevertheless the share of landings generated by small coastal vessels in total income is relatively insignificant (about 7%) (Table 5.13.4).

Large-scale fleet

The opposite trend was observed for the large-scale fleet. The total number of vessels, GT and kW decreased by 10%, 8% and 6% between 2012 and 2013. Employment in the large scale fleet was estimated at 353 jobs in 2013, corresponding to 186 FTEs (Table 5.13.3). The number of FTEs decreased between 2012 and 2013 by 7% (Table 5.13.3). The economic indicators show an increasing trend between 2012 and 2013. In terms of profitability, the total amount of GVA, gross profit and net profit generated for the large scale fleet in 2013 was €10.0m, €5.8m and €3.7m, respectively. Gross Value Added (GVA) and gross profit increased significant by 39% and 70%. Net profit doubled in 2013 compared to 2012 (Table 5.13.4).

Pelagic trawl 24-40m – 46 vessels made up this segment in 2013 and are based predominantly in the Baltic Sea. These vessels target species such as European Sprat and Atlantic Herring. The total value of landings was €19.4m and around 134 FTEs were employed in this fleet segment in 2013, contributing 75% and 32% of the total income from landings generated and FTEs in the national fleet. This fleet segment was highly profitable, with a reported gross profit of around €5.6m and a net profit of around €4.5m in 2013.

Fixed netters 24-40m – 8 vessels made up this segment in 2013 operating predominantly in the Baltic Sea. The fleet targets a variety of species, such as Atlantic cod and European flounder. The total value of landings was €1.2m but only around 27 FTEs were employed in 2013, contributing to 7% and 5% respectively of the total income generated from landings and FTEs in the national fleet. This fleet segment has reported gross profit of around €1.1m and net profit of around €0.8m in 2013 instead of €1.4m losses the previous year. The main reason for the losses in 2012 was that the variety of species targeted, such as Atlantic Cod, was not sufficiently concentrated to maintain a profitable fishery for that segment. Although the landings volume and value followed decreasing trends between 2012 and 2013 and declined by 38% and 13% respectively, and the Cod price was around €1.58 per kg in 2013, decreasing non-variable costs, variable costs and repair and maintenance costs, by 82%, 24% and 11% led to a profit in 2013.

Small scale fleet with polyvalent passive gears 00-10m – 202 vessels make up this segment and these vessels are based predominantly in the Baltic Sea and the Gulf of Riga in the coastal zone. These vessels target a variety of Atlantic cod, Atlantic salmon, European flounder, European smelt, Atlantic herring, European sprat and others coastal species. The total value of landings was €1.7m and 229 FTEs were supported by this segment in 2013. This fleet segment was profitable in 2013 with a reported gross and net profit each of around €1.6m.

Pelagic trawl 12-18 – 11 vessels make up this segment and they are operating 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 €3.5m and 25 FTEs were supported in 2013. The reported gross profit and net profit was around €0.9 and €-1.5m respectively in 2013.

Distance –water fleet

Pelagic trawl over 40 metres – 6 vessels made up this segment in 2013. Two of the distant-sea vessels with the average length 61 metres were based predominantly in NAFO and NEAFC areas. These vessels target species such as Beaked Redfish and Northern prawn. There were four vessels with the average length 100 metres operating in CECAF area Morocco and Mauritania economic zone. The weight landed by the fleet in 2013 was 55,000 tonnes of fish, with a total landed value of €22.8m. The total weight of landings has increase by 48% between 2012 and 2013 while landed value increased 55% during the same period. The main reason for the increase in weight and value in 2013 was that the fishery was recovering after the ban on fishing activity for EU fishing vessels in African waters in 2012. The target species for the distant-water vessels are jack and horse mackerels, 39,000 tonnes, Sardine and Sardinellas 2,000 and 8,000 tonnes respectively, Beaked Redfish 2,000 tonnes and Anchovies around 1,000 tonnes. The total distant-water fleet income attributed to Latvia increase by 33% and was €11.2m in 2013. This fleet segment was profitable, with a reported gross profit of around €7.7m in 2013.

Assessment and Future Trends

The changes for the Latvian fishing fleet in the Baltic Sea from 2008 to 2012 for economic performance and costs structure in most of the cases showed negative tendencies. However it should be taken into account that 2008 was the most profitable year. Between 2008 and 2013, the number of vessels reduced significantly as well as Latvian quota in the Baltic Sea for sprat, which is the most common species for the Latvian fishing fleet. After the negative impact of the global economic crisis in 2009 Latvian fishery sector economic efficiency continued to improve and in 2013 in terms of profitability, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Latvian national fleet in 2013 were €11.7m, €7.5m and €5.3m, respectively. Based on the indicator results, which show economic performance for 2014 it is possible to conclude that the number of vessels, vessels GT and kW were relatively stable between 2013 and 2014. The landings weight for Latvia followed a decreasing trend between 2008 and 2014. The fishing days and days at sea has increased by 6% and 5% between 2013 and 2014, while landing weight decreased by 9% and

the landings value decreased significantly by 23% in the same period. It should be taken into account that the value of landings was calculated based on provisional price data for 2014 and could have changes after final economic data is received for 2014.

At the end of 2014 and in the beginning of 2015 important structural changes were observed for the distant –water fleet segment. Six new vessels started to operate with the target species of Queen Crab in the NEAFC area. Also in the Baltic Sea there is a high probability that the netter segment VL2440 metres are going to reorient from cod and flounder to herring fishing. Under the influence of changes in the population of cod, cod fishing quotas have been used by less than 40% over the past few years. The salmon fishing quota is used on a very small scale. However, the remaining share is used in the international quota exchange for sprat.

The Latvian fishing fleet's economic effectiveness is largely dependent on the quota received for the main species. The sprat fishing quota reduced by 11% (3,652 tonnes) and for Latvia is 29,548 tonnes. The Baltic herring fishing quota in the Gulf of Riga as compared to 2014 and in the central region of the Baltic Sea enjoyed an increases of 26% (1,407 tonnes) and 45% respectively. The Baltic herring fishing quota in the Gulf of Riga and in the central region of the Baltic Sea are 20,872 and 4,532 tonnes. The fishing quota for salmon in the Baltic Sea reduced by 10% and is 12,644 salmons. The cod fishing quotas in the western part of the Baltic Sea are reduced by 6%, whereas the reduction in the eastern part is 22%. Cod quotas in the western and eastern part are 574 and 4,393 tonnes respectively. The number of fishing days for cod in the Baltic Sea is defined as 146 days in the eastern part of the Baltic Sea. However, the elasticity for transferring fishing days between fishing vessels, as may be required in case a certain vessel experiences a shortage of fishing days whereas the other one does not use the allotted number of days to a certain limit, is kept at the level of 15% Latvia fulfils the sprat and Baltic herring fishing quotas assigned thereto almost completely.

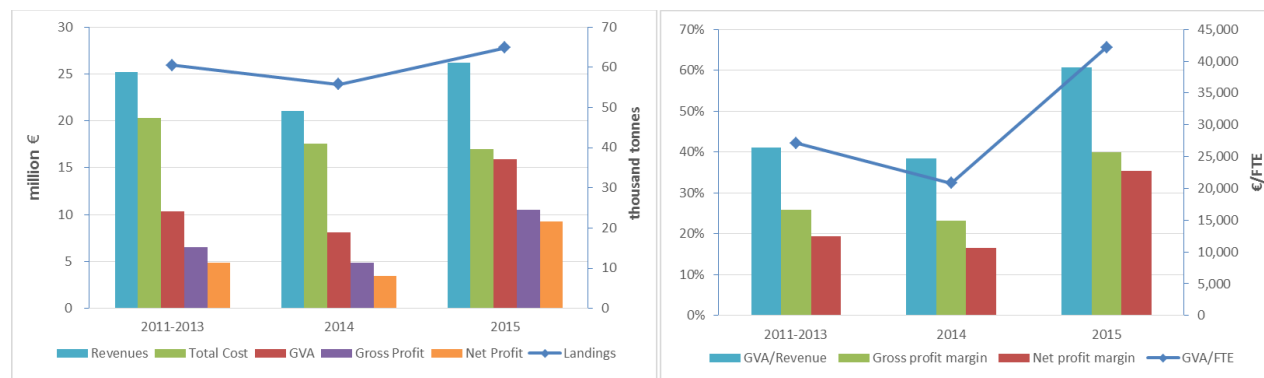
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According to BEMEF projections, the Latvian fishing fleet sees a worsening of economic performance in 2014 with a decrease in landings (-8%) compounded by falling fish prices (revenue -16%). As a result GVA/FTE drops to a comparatively low level of €21,000.

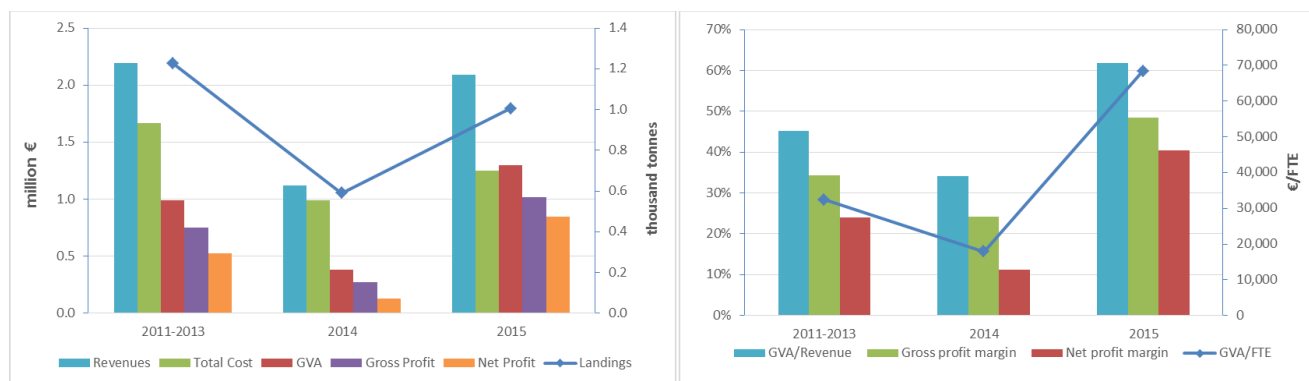
This negative trend is reversed in 2015 across the Latvian fleets with landings and revenue increasing (+16% and +25% respectively) while total costs drop by 3% with as a result of falling fuel costs. Gross and net profit margins increase to comparatively high levels of 40% and 35% respectively.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

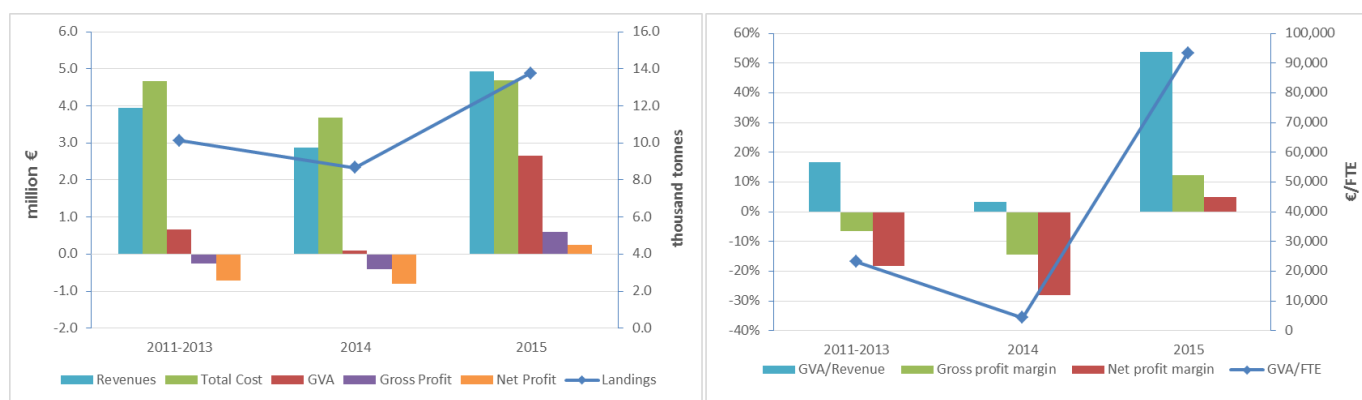
Figure 5.13.6 Latvia: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 Latvian fleets by gross earnings



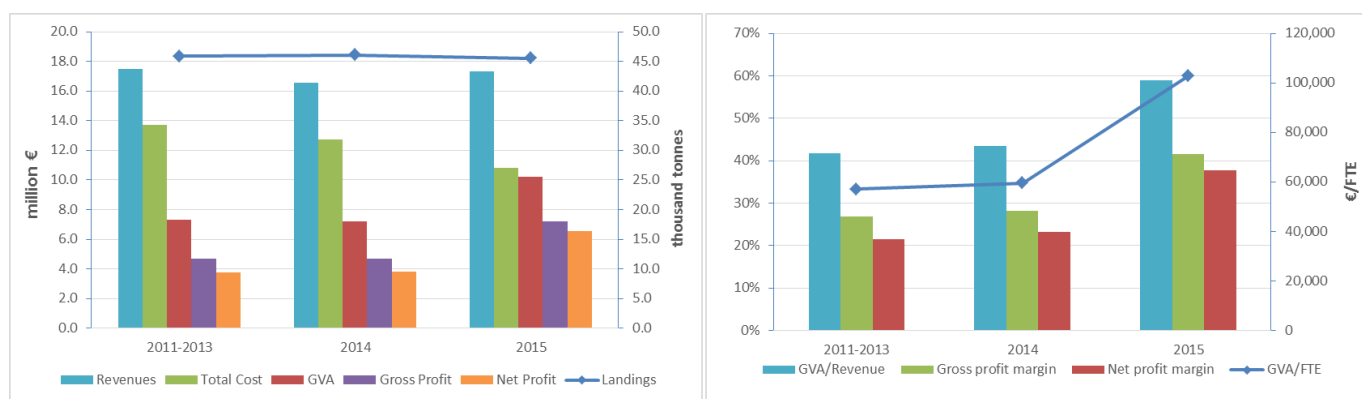
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.13.7 LVA AREA27 DFN VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

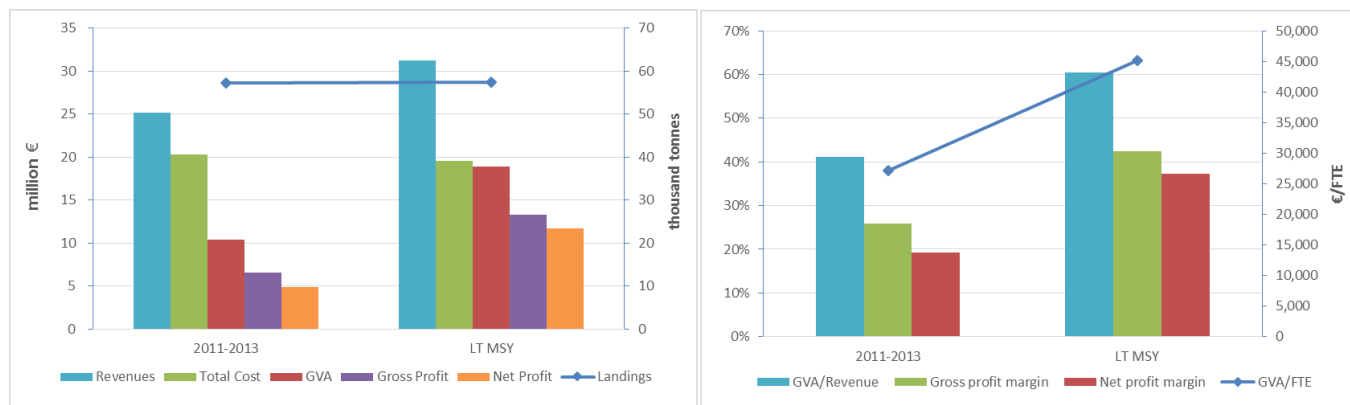
Figure 5.13.8 LVA AREA27 TM VL1218: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.13.9 LVA AREA27 TM VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, stable landings (0%) for Latvia in a state of long-term MSY result in improved economic performance due to a changing species composition. As lower effort decreases total costs (-4%), gross and net profit improve and reach €13 million and €12 million respectively. GVA/revenue also increases from 41% to 60%.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.13.10 Latvia: MSY projections for the main socio-economic indicators.

Data issues

All transversal data for 2008 to 2014 were obtained from the 'Integrated Control and Information System' for Latvian fisheries, which includes logbook data and technical parameters of fishing vessels from the Latvian vessel register. The data are reported on a monthly basis and cover all members of the Latvian fishing vessel population. All economic variables for 2008 to 2013 were received from Central Statistical Bureau of Latvia (CSB) state statistical questionnaire form '1-Fisheries' and other statistical sources of economic information based on the annual balance sheet. Primary economic information from the state statistical questionnaire "1-Fisheries" was received annually from owners of fishing firms. In questionnaire form information is aggregated by fleet segments. Economic data covers all the members of population. Despite that economic data collection is based on questionnaire forms, participation of the respondents is obligatory according to the Latvian legislation. The achieved sample rate was 100%. The calculations were made for 2008-2013 based on data received from questionnaires and vessel logbooks for the FTEs, financial position and income from landings.

Table 5.13.5 Main socio-economic performance indicators by fleet segment in the Latvian national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	N	% Δ	N	% Δ	Days	% Δ	litres	% Δ	thousand €	% Δ	thousand tonnes	% Δ	thousand €	% Δ	thousand €	% Δ	thousand €	% Δ	thousand €	% Δ	thousand €	% Δ			
LVA AREA27 DFN VL2440	8	-20%	27	-21%	1,109	-21%	606	-10%	1,173	-13%	754	-38%	1,343	1307%	49.7	1669%	1,141	928%	780	336%	33.9	259%	High	428%	Improved
LVA AREA27 PGP VL0010	202	-2%	229	49%	11,348	4%	19	-42%	1,739	20%	3,562	25%	1,693	30%	7.4	-12%	1,634	36%	1,614	38%	92.4	16%	High	106%	Improved
LVA AREA27 TM VL1218	11	-21%	25	-7%	1,893	-7%	1,297	-11%	3,508	8%	9,599	-1%	202	-36%	8.1	-31%	958	-44%	1,563	-25%	-39.3	-36%	Weak	-340%	Deteriorated
LVA AREA27 TM VL2440	46	-4%	134	-3%	5,014	-3%	3,362	-24%	19,375	11%	46,936	7%	8,463	25%	63.2	28%	5,640	33%	4,467	30%	23.0	18%	High	-20%	Deteriorated

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.13.6 Main socio-economic performance indicators by fleet segment in the Latvian national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		consumed per landed tonne		Energy costs		Operating costs		GVA		Net profit		%Δ 2013 to average (2008-12)	Economic development trend
	FTE	% Δ	Days	% Δ	per DAS	% Δ	per fishing day	% Δ	per vessel	% Δ	per FTE	% Δ	per employed	% Δ	consumed	% Δ	per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ		
LVA AREA27 DFN VL2440	3.4	-1%	139	-1%	680	-22%	1,004	-21%	25,240	8%	7,478	9%	4,589	8%	803	45%	62,409	24%	145,172	24%	145,172	-14%	167,815	1659%	97,553	394%	358%	Improved
LVA AREA27 PGP VL0010	1.1	53%	56	7%	314	20%	368	21%	288	-38%	196	-59%	137	-52%	5	-54%	79	-34%	554	-34%	554	-55%	8,380	33%	7,989	42%	279%	Improved
LVA AREA27 TM VL1218	2.3	18%	172	19%	5,071	6%	5,128	7%	105,383	51%	46,369	28%	35,128	51%	135	-10%	97,230	25%	448,207	25%	448,207	26%	18,331	-19%	142,045	-60%	-667%	Deteriorated
LVA AREA27 TM VL2440	2.9	1%	109	1%	9,361	10%	9,551	9%	61,369	15%	21,067	13%	10,228	15%	72	-30%	60,252	-13%	299,254	-13%	299,254	7%	183,973	30%	97,116	36%	12%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.14 LITHUANIA

Fleet Structure, Fishing Activity and Production

During 2014 the Lithuanian fishing fleet consisted of 149 registered vessels, of which 93 were active. The fleet had a combined gross tonnage of 48.6 thousand GT and engine power of 50.5 thousand kW. The average age of the fleet is worsening and in 2014 reached 33 years. Despite the annual decline in the number of vessels, a capacity increase compared to 2013 was related to new high seas vessels entering the fleet register after modernization. The increase in capacity was related to GT, whereas power in kW decreased by 3% due to lower kW/GT ratio for the new high seas vessels, which was 0.68 compared to 1 in the previous fleet. In 2014 capacity alterations were determined in the 24-40 m demersal trawlers segment where a declining trend of GT was observed. Capacity reduction of this segment was related to mixed fisheries vessels, which in terms of effort were shifting from cod fishing to pelagic species.

The number of vessels in 2014 declined slightly and over the longer term period shows signs of stabilization. The rate of vessel reduction in the small scale fisheries segment has decreased since 2008. Increased landings of this segment with a lower number of vessels indicate a withdrawal of less active vessels from business. Coastal fishing for such companies was either regarded as a secondary activity or undertaken predominately as inland water fisheries in the Curonian lagoon (Table 5.14.1, Figure 5.14.1).

In 2014, the number of fishing enterprises in the Lithuanian fleet totaled 73 and was a slight increase from 2013 and 2012. New enterprises were formed in the large scale fleet segments. New establishments followed after bankruptcy of inefficient companies with a demersal fishing pattern, whereas new units focused on pelagic species in the Baltic Sea. The majority of enterprises, almost 59%, operated with one active vessel, whereas only 2 companies had more than six vessels. The trend of a reducing number of vessels per owner and more intensively exploiting reduced capacity was observed.

Table 5.14.1 Lithuanian national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	250	219	193	171	151	152	149	1%	↔	-39%
	No. of Inactive vessels (#)	125	95	89	68	47	55	56	17%	↗	-56%
	Average vessel age (year)	30	31	31	32	32	33	30	3%	↗	10%
	Vessel tonnage (thousand GT)	61	50	49	46	45	44	49	-2%	↘	-28%
	Vessel power (thousand kW)	69	60	56	54	54	52	51	-3%	↘	-24%
	No. of Enterprises (#)	99	95	77	70	69	70	73	1%	↗	-29%
Employment	Total employed (#)	1,046	712	706	768	732	763	852	4%	↗	-27%
	FTE (#)	617	544	512	574	566	491	356	-13%	↘	-20%
	Average wage per employed (thousand €)	8.9	8.4	6.9	7.4	6.1	7.7	3.2	26%	↗	-14%
	Average wage per FTE (thousand €)	15.1	11.0	9.5	9.9	7.9	12.0	7.6	52%	↗	-21%
Fishing Effort	Days at sea (thousand days)	12.0	10.2	9.0	10.0	11.0	8.9	9.7	-19%	↘	-26%
	Fishing days (thousand days)	7.9	7.9	7.5	8.1	8.8	8.8	8.4	0%	↔	11%
	Energy consumption (million litres)	40.3	31.4	24.5	26.4	17.4	36.5	24.1	110%	↗	-9%
	Energy consumption per landed tonne (l/T)	229	150	226	231	298	409	163	37%	↗	79%
Output	Landings weight (thousand tonnes)	176	209	108	114	59	89	148	53%	↗	-49%
	Landings value (million €)	97	44	27	77	41	31	96	-24%	↘	-68%
	Recreational catches of selected species (T)							13.5			

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

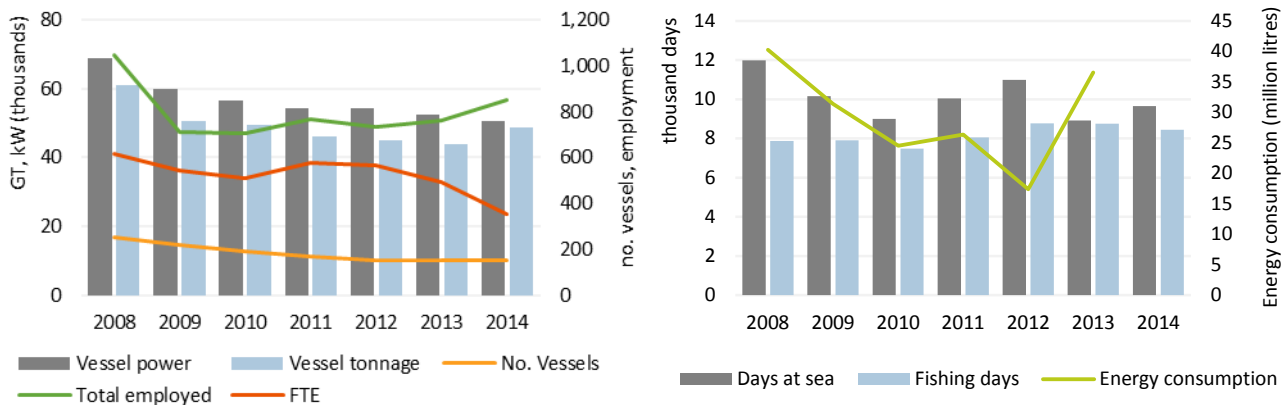
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Employment figures for 2013 shows that the number of persons employed by the fishing fleet increased by 4%, compared to 2012, but in terms of full time equivalent at national level, it

decreased almost 13%. Working hours are closely related to fishing effort, so the decline in FTE was related to the respective decrease in days at sea, which were 19% lower in 2013 compared to 2012. On the same basis, regarding the increase in effort, employment figures as for instance FTE, are expected to go up by 9% in 2014. Alterations of employment were mostly driven by the largest segment in the national fleet operating in long distance fisheries. New vessels and foreseen increased effort will result in positive expectations for employment at national level. Coastal communities are expected to enjoy relatively stable employment levels.

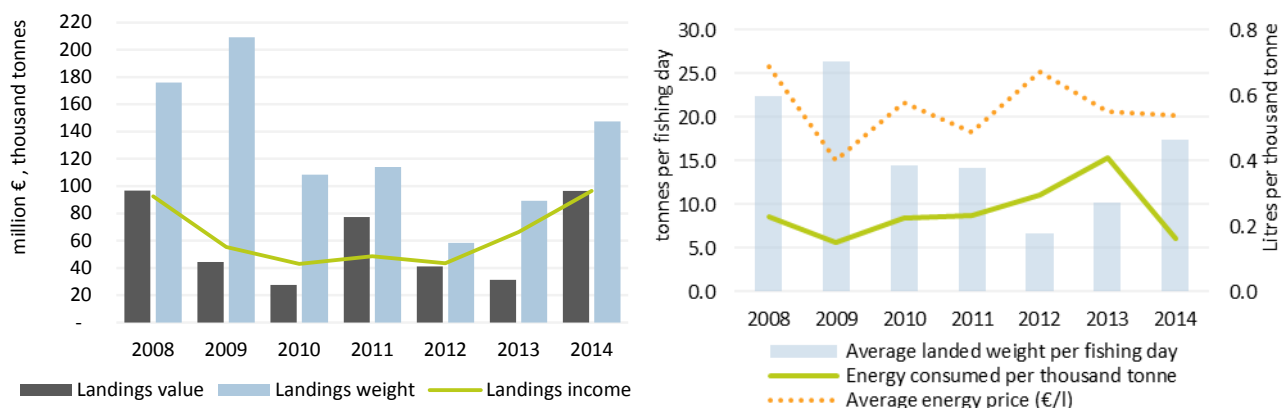
The 2014 weight of landings were the highest in the course of five years. The data shows that in accordance with the recovery of the long distance fleet in Lithuania, national level weight and value of landings has tended to grow. The total weight of landed fishery production in 2014 was 137 thousand tonnes with a corresponding value of €93.9m. The long distance fleet in 2014 covered 76% on national total landed weight and 75% of turnover. Compared to 2013, the weight of landings increased by 54% and was 2.3 times higher compared to 2012. Record low landings in 2012 for the long distance fleet were the result of termination and prolonged endorsement of the bilateral agreement between EU and West African countries.

Effort data shows fishing days were sufficiently stable whereas days at sea had higher volatility. Energy consumption in 2013 significantly increased compared to 2012. These alterations were reasons why the long distance fleet reported relatively high volume of fuel consumed in 2013 and accordingly boosted energy costs. In 2013 the long distance fleet, owing to complicated fishing conditions as a result of the delayed bilateral agreements between the EU and West African countries, were forced to suspend activity and move to closer ports. Such reallocation of vessels, considering also the rearrangement of fishing areas in 2013 with lower stock populations, had a significant impact on increased fuel consumption. After an improvement of the situation in 2014, fuel consumption is expected to reach the previous levels.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.14.1 Lithuanian fleet main capacity and effort trends for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

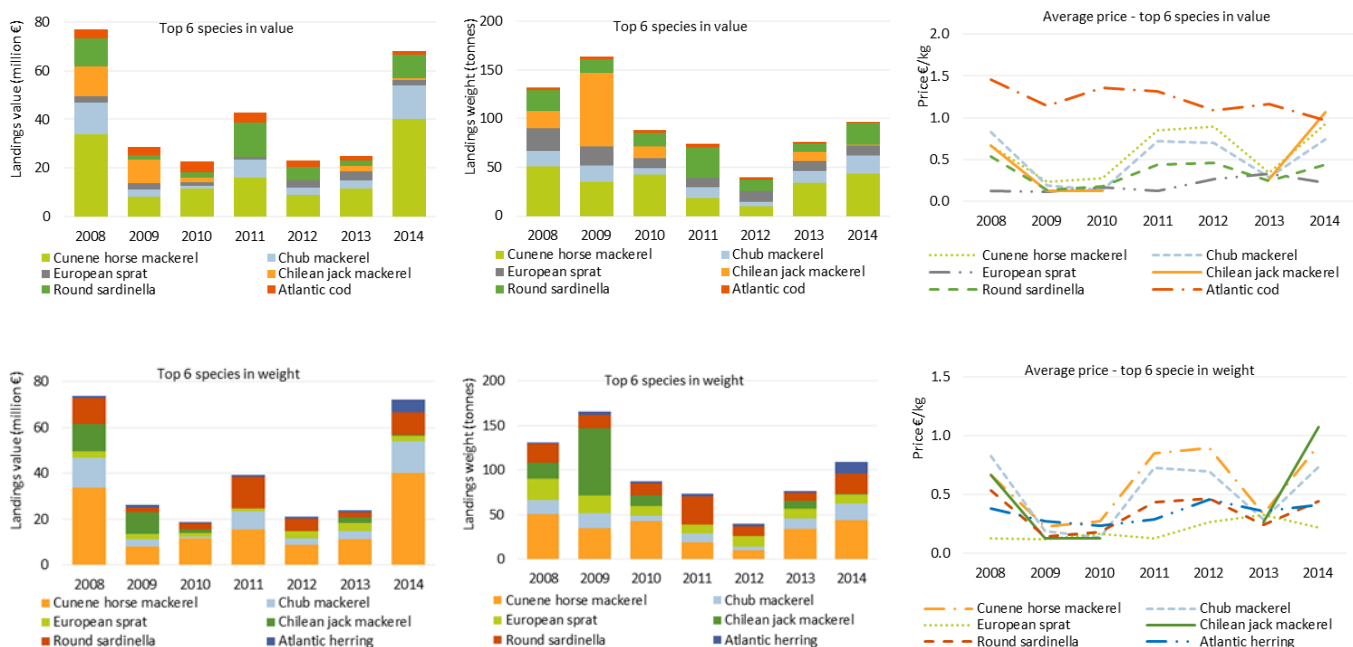
Figure 5.14.2 Landings in value and weight (and corresponding income from landings) by the Lithuanian national fleet and efficiency indicators for the period 2008-2014.

In 2014 the most important species for the long distance fleet in terms of value was Cunene horse mackerel (HMZ), with the landed value of €40.19m, Chub mackerel (MAS) with €13.9m and round

sardinella (SAA) €10m. The average price for HMZ in 2014 was 0.92 €/kg and compared to 2012 it increased by 4.5% and by 5.5% compared to 2013 (according to income data). Average price for MAS and SAA in 2014 were 0.74 €/kg and 0.44 €/kg respectively. Compared to 2012 the MAS price increased 8.8% whereas SAA remained at the same level.

Concerning fisheries in the Baltic Sea and the coastal area, the values of landings decreased by 4.8% over the period 2013-2014. From 2008 to 2011 the highest value of landings in the Baltic Sea was generated from Baltic cod catches, whereas from 2011 onwards, the most significant part of income has been generated by European sprat. In 2014, European sprat landings from the Baltic Sea were worth €2.23m, whereas Baltic cod landings generated €1.17m. In terms of landings weight, European sprat landings amounted to 10.14 thousand tonnes, Baltic herring 2.82 thousand tonnes and Baltic cod 1.2 thousand tonnes. The major factor for the focus on pelagic species was the current demand by the processing industry and an appropriate market price. European sprat landings in the course of 2008-2014 had two main trends; first a constant decline from 2008 to 2011 and then a rapid increase from 2011 to 2014. The increase in value resulted from higher prices driven by increased demand for pelagic species. Consequently, a considerable part of the Baltic Sea fleet increased its effort in the small pelagic fishery. Landed weight of European sprat similarly decreased between 2008 and 2010 but in contrast to Baltic cod, it remained steady between 2010 and 2014. The landed value of Baltic cod between 2008 and 2014 shows a downward trend with an overall 63.8% decline over the period. The decline in landings weight of Baltic cod was mostly influenced by effort and capacity reduction within the segment. The main reason for reduced effort was decreased profitability of the Baltic cod fishery. Weaknesses were an increase in fuel prices causing higher energy costs for an already inefficient fleet, requirements to deliver the major part of landings to auction in a national port while distances between trawling areas and landing sites are increasing, as well as a decreased marketing size of fish with a negative effect on Cod prices.

In 2014, the largest part of the income of the small-scale fleet was generated from the Baltic cod and European smelt fisheries, with almost equal importance, €98.22 thousand and €62.7 thousand respectively. During 2008-2014 income from Baltic cod increased by 49% with respectively higher weight, whereas income from European smelt decreased by 37.5%.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.14.3 Lithuanian fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

Table 5.14.2 Lithuanian national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend	
Income	Landings income	92.6	55.4	43.0	48.7	43.4	66.3	96.5	53%	↗	-28%	
	Other income	0.3	6.3	3.3	0.5	0.7	0.5	0.5	-22%	↘	104%	
Costs	Labour costs	9.3	6.0	4.9	5.7	4.5	5.9	2.7	32%	↗	-37%	
	Energy costs	27.7	12.6	14.2	12.9	11.7	20.1	13.0	72%	↗	-28%	
	Repair costs	15.5	9.9	6.3	6.4	6.2	6.3	4.3	1%	↗	-59%	
	Other variable costs	23.4	19.5	16.5	13.3	11.2	14.0	9.2	25%	↗	-40%	
	Other non-variable costs	6.8	4.8	4.3	3.2	1.9	8.4	10.6	356%	↗	24%	
	Capital costs	-1.0	7.3	4.8	2.9	3.1	2.9	3.4	-5%	↘	379%	
Economic Indicators	GVA	19.5	14.8	5.1	13.5	13.1	18.1	59.9	38%	↗	-7%	
	Gross profit	10.2	8.9	0.3	7.8	8.6	12.2	57.2	42%	↗	20%	
	Net profit	11.2	1.5	-4.5	4.9	5.6	9.3	53.8	67%	↗	-17%	
Capital value	Depreciated replacement value	62.7	55.4	54.2	55.7	49.6	43.5	49.7	-12%	↘	-31%	
	Investments	0.6	0.1	22.2	21.0	1.2	0.4		-72%	↘	-36%	
Profitability and development trends	Net profit margin (%)	12.1	2.5	-9.7	10.0	12.7	13.9	55.5	10%	↗	15%	
	<i>development trend</i>				Improved				154%	↗		
	RoFTA (%)	12.9	12.2	-4.0	9.8	12.9	24.0	119.05	87%	↗	86%	
<i>development trend</i>				Improved				175%	↗			
GVA per FTE (thousand €)	31.6	27.2	10.0	23.5	23.1	36.9	168.3	59%	↗	17%		
<i>development trend</i>				Improved				60%	↗			

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

National Fleet Economic performance

The total amount of income generated by the Lithuanian national fleet in 2013 was €66.3m, which was 53% higher than in 2012. Total revenues consisted of 99% fishing income and less than 1% of other income.

Total operating costs incurred by the Lithuanian national fleet in 2013 equated to €54.7m and were 54.4% higher compared to the previous year. In 2013, 37% of total operating costs were spent on fuel. For the fleet fishing in the Baltic Sea, energy costs declined by 6.48% compared to 2012, mainly in the demersal trawler segment. Reduction of energy costs was related to a decrease in effort measured as days at sea. The highest increase in energy costs was observed in the distant-water fishery. Other variable costs and energy costs, as the two major fishing expenses for total fleet, were €20.1m and €14.0m, respectively (**Error! Reference source not found.; Error! Reference source not found.**).

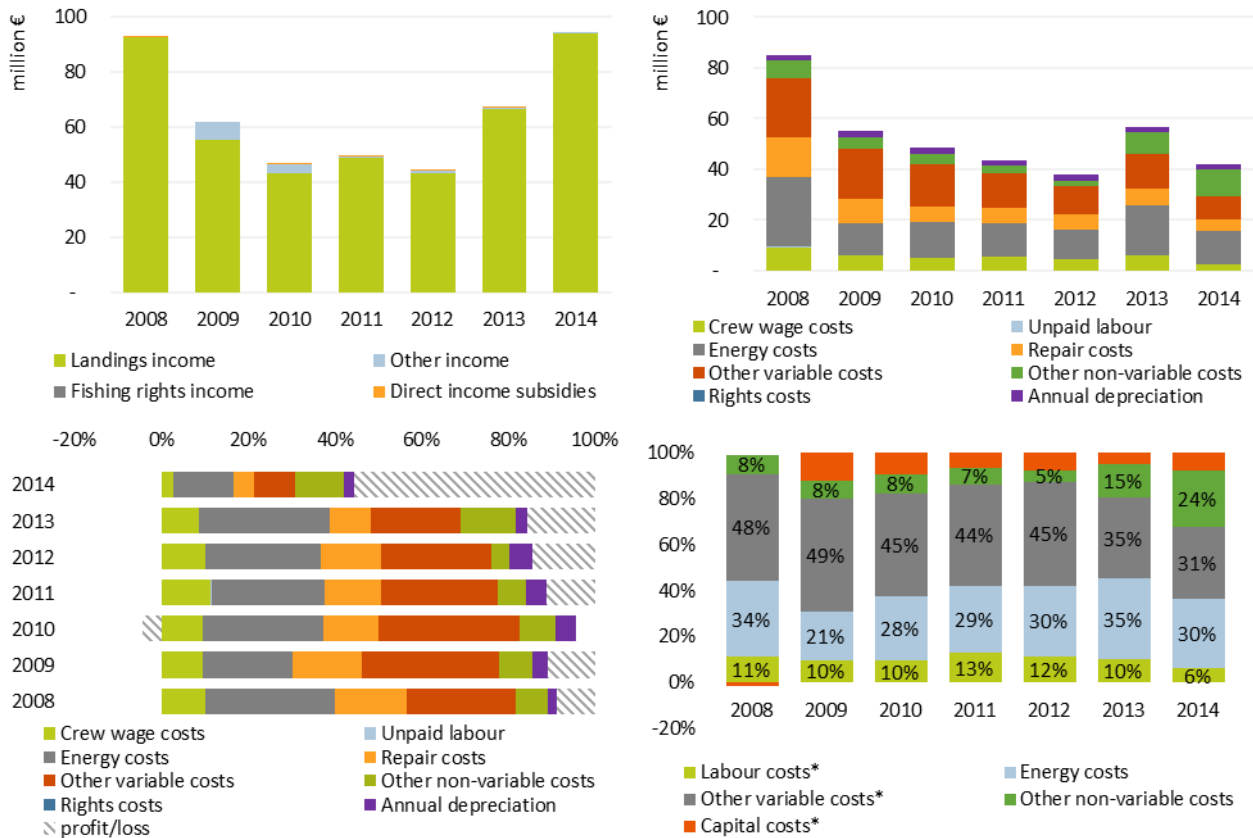
Gross Value Added (GVA), gross profit and net profit generated by the Lithuanian national fleet in 2013 were €18.1m, €12.2m and €9.3m, respectively. According to reported data, income from landings of the national fleet has changed significantly since 2012. As the economic indicators of the national fleet are highly dependent on the performance of the distant-water fishery, factors that affect the performance of other fleet segments have minor impact at national level.

For small scale fisheries, labor productivity measured as GVA/FTE significantly increased from 2012 to 2013. Figures show that GVA remained stable during the analyzed period, whereas FTE decreased. The small scale segment has quite volatile trends in employment, which is specific to this type of fishery. The relatively high labor share compared to the large scale fleet, is taken partly on shore, usually under a seasonal pattern. Furthermore, the FTE ratio to number of employees is also very low in relation to the rest of the fishery segments. In 2013 small scale fisheries had a sufficiently high net profit margin, achieving 34%. Passive gear fisheries has a different cost structure and given that production is sold at higher prices for the same species compared to the large scale fleet, higher profitability is easier to achieve.

Profitability indicators for the large scale fleet were driven down by demersal trawlers, targeting Baltic cod as predominant species, with a part of the segment catching pelagic species with a second gear. In 2013 labor productivity for the large scale fleet was around €11 thousand per FTE and compared to 2012 decreased by 34%. The net profit margin was the lowest since 2008 and for the first time became negative, -1.2% of revenue.

Long distance fisheries during 2013 performed quite well, as was mentioned before. Net profit margin was 15.8%, improved from 11.8% compared to 2012. Labor productivity increased also significantly, achieving €32 thousands of GVA/ FTE.

In 2013, the Lithuanian fleet had an estimated depreciated replacement value of €43.5m, a 12% annual decrease. Change in investment per year by the national fleet dropped significantly from €1.2m in 2012 to €0.4m in 2013. This tendency suggests an unfavorable outlook as the large-scale and distant-water fleets demand investment for the highly depreciated fleet with relatively high costs per effort.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.14.4 Income and cost structure trends for the Lithuanian fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).

Labour costs* include crew wage and unpaid labour costs; Other variable costs include repair and maintenance costs; Capital costs* include annual depreciation and opportunity cost of capital.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.14.5 Main economic performance indicator trends for the Lithuanian fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Fleet Segment Level Economic performance

The Lithuanian fleet is highly diversified with a broad range of vessel types targeting different species predominantly in other fishing regions, particularly in CECAF Area 34.

The national fleet is divided into 5 segments. Due to a reduction in capacity, a lower number of vessels per segment create confidentially sensitive data; and only the three most important segments are presented. In fact, these represent the different types of fisheries in Lithuania: (1) the small scale segment, which operates in the Baltic Sea coastal area, (2) the large-scale fishery represented by demersal trawlers, which are fishing in the Baltic Sea and (3) the distant-water fleet segment, characterized by completely distinct characteristics compared to local fisheries. **Error! Reference source not found.**¹ provides a breakdown of key performance indicators for all fleet segments in 2013.

Demersal Trawlers and Seiners (DTS) 24-40 – 18 vessels make up this segment, which operates predominantly in the Baltic Sea. The main target species is Baltic cod, though a certain part of the fleet performs mixed fisheries using second gear for pelagic species. The catches of Baltic cod have had a tendency to decrease despite the increasing quotas and relatively stable prices in the local market. Around 84% of catches are landed in a national port according to legal obligations. This segment is energy demanding and expenditure for fuel amounted 28% of total operating costs. The landing obligation, mentioned above from one point of view adversely affected profitability for an already inefficient old fleet. Net loss for the demersal trawlers segment was €24m and it was the only segment in the fleet generating losses. In 2013, total income was almost €2.87m corresponding to 86% of income from landings and 14% from other income. This segment employed 121 FTEs contributing 24.6% of the total FTEs generated by the Lithuanian fishing fleet. GVA had a similar declining tendency.

¹ Some data have been excluded from the table to guarantee data confidentiality.

Passive Gears (PG) 00-10m – 76 vessels make up this segment which operates predominantly in coastal area of the Baltic Sea with passive gears. The fleet targets a variety of species but in particular Baltic cod, European smelt and Baltic herring. In terms of value of landings the main part of income comes from Baltic cod and European smelt, with a very marginal difference between them. In 2013, the total income was almost €0.32m and around 25 FTEs were employed. This fleet segment was profitable, with a reported gross profit of around €0.111m and net profit of €0.104m in 2013. The major expenses were crew costs (46% of total operating costs) with relatively high unpaid labor as well as energy expenditures (28% of total operational costs). This segment had a different cost structure compared to the remaining fleet segments, mainly trawlers, and therefore fuel costs were not the main factor affecting profitability. Increased quotas for Baltic cod, high demand in the local market for European smelt with a reasonable price had a major impact on higher profits. Capacity reduction policy resulted in an improved socioeconomic indicator, GVA/FTE. Decreased yearly investments did not affect profitability, because the small scale fishery segment using mainly drift or fixed nets does not demand so much investment compared to high capital value trawlers with complex gear. Regarding the fleet population in that segment a modest decrease in the number of vessels was observed, which was mostly related to companies with low economic activity.

Pelagic Trawlers (TM) 40XX, Long distance fleet – In 2013 the number of vessels in the long distance fleet reduced by 30%. A significant decline in capacity was related to problematic conditions when from 2012 a part of the fleet was obliged to suspend activity owing to prolonged re-negotiation of the bilateral agreement between EU and Mauritania. Lithuanian high sea vessels predominantly operate in CECAF Area 34 and some fish in the North Atlantic Area 27. In the CECAF region the fleet was targeting mainly small pelagic species, such as Cunene horse mackerel and round sardinella, In 2013, the total income was almost €59.3m and around 296 FTEs were employed in this fleet segment, contributing to 90% and 60% of the total income from landings and FTEs generated by the Lithuanian fishing fleet, respectively. This fleet segment was profitable, with a reported gross profit of around €11.6million and net profit of €9.4m in 2013.

Table 5.14.3 Lithuanian national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%).

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	Distant water fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	89	91	74	69	69	65	60	-6%	↘	24	22	22	24	25	25	24	0%	↔	12.0	11.0	8.0	10.0	10.0	7.0	9.0	-30%	↘
Average vessel age (year)	23.2	24.1	25.1	23.9	25.1	25.8	27.0	3%	↗	26.8	27.9	29.0	30.3	31.3	31.6	34.1	1%	↔	28.7	27.7	28.8	29.0	30.8	29.6	30.6	-4%	↘
Average vessel length (m)	6.8	6.8	6.8	6.8	6.3	6.0	6.3	-4%	↘	27.0	27.1	27.2	27.0	26.9	27.0	27.3	0%	↔	69.5	80.8	74.2	76.5	83.6	94.1	90.0	13%	↗
Vessel tonnage (thousand GT)	0.5	0.5	0.4	0.4	0.2	0.2	0.2	-10%	↘	3.5	3.3	3.2	3.4	3.5	3.8	3.7	7%	↗	39.5	38.7	36.5	39.7	38.8	30.9	42.9	-20%	↘
Vessel power (thousand kW)	2.6	2.7	2.2	2.0	1.7	1.7	1.7	-1%	↘	7.5	7.0	6.5	6.9	7.1	7.6	7.4	7%	↗	40.6	39.0	35.2	40.0	40.3	31.3	37.3	-23%	↘
Total employed (#)	370	158	152	154	149	140	134	-6%	↘	132	240	228	231	228	265	258	16%	↗	544.0	314.0	326.0	383.0	355.0	358.0	460.3	1%	↔
FTE (#)	208	55	49	37	49	39	44	-19%	↘	87	175	155	169	162	156	123	-4%	↘	322.0	314.0	307.8	368.4	355.5	296.1	188.9	-17%	↘
Average wage per employed (thousand €)	0.7	0.9	1.1	1.5	1.3	1.3	1.8	-2%	↘	11.6	4.9	4.7	4.9	4.7	4.8	3.8	0%	↔	13.8	14.8	11.1	11.2	9.0	12.4	3.3	38%	↗
Average wage per FTE (thousand €)	1.3	2.7	3.4	6.4	3.9	4.5	5.5	14%	↗	17.6	6.7	7.0	6.7	6.7	8.1	7.9	22%	↗	23.4	14.8	11.7	11.7	9.0	15.0	8.0	67%	↗
Days at sea (thousand days)	4.7	4.9	4.8	4.3	5.6	5.7	6.5	1%	↔	1.9	1.8	2.5	2.7	3.0	2.8	2.3	-6%	↘	3.2	3.0	1.7	3.0	2.4	1.4	0.9	-44%	↘
Fishing days (thousand days)	4.5	4.8	4.6	4.2	5.6	5.6	6.3	1%	↗	1.5	1.5	1.6	2.3	2.0	1.9	1.4	-2%	↘	1.7	1.7	1.3	1.6	1.2	1.2	0.8	-3%	↘
Energy consumption (million litres)	0.3	0.2	0.2	0.2	0.2	0.1	0.1	-40%	↘	3.2	2.6	2.1	2.7	2.8	2.9	2.6	5%	↗	37	29	22	24	14	34	21	132%	↗
Energy consumption per landed tonne (l/T)	443	270	274	287	356	199	248	-44%	↘	114.6	97.3	140.0	175.4	169.1	191.6	179.6	13%	↗	242	159	242	244	351	455	161	30%	↗
Landings weight (thousand tonnes)	0.6	0.8	0.7	0.6	0.6	0.6	0.5	9%	↗	27.8	26.4	14.8	15.4	16.3	15.1	14.4	-7%	↘	152.5	180.0	92.0	96.2	41.2	73.6	132.6	79%	↗
Landings value (million €)	0.8	0.8	0.8	0.6	0.6	0.6	0.5	5%	↗	7.1	6.2	5.8	5.7	6.6	6.3	4.3	-6%	↘	89.0	32.4	20.6	70.3	33.7	24.5	91.7	-27%	↘

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Table 5.14.4 Economic performance of the Lithuanian national fishing fleet by operational scale: 2008-2014.Arrows indicate change (Δ) 2013 to 2012: (\nearrow) increase; (\searrow) decrease and (\leftrightarrow) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet								% Δ 2013-12	Trend	Large scale fleet								% Δ 2013-12	Trend	Distant water fleet								% Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014	2008			2009	2010	2011	2012	2013	2014	2008	2009			2010	2011	2012	2013	2014					
Income	Landings income	0.8	0.9	0.8	0.6	0.6	0.6	0.5	-9%	\searrow	6.9	6.5	6.0	7.4	6.6	6.3	4.3	-5%	\searrow	84.9	48.0	36.3	40.8	36.1	59.5	91.7	65%	\nearrow		
	Other income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-67%	\searrow	0.3	1.2	1.1	0.4	0.4	0.5	0.4	33%	\nearrow	0.0	5.1	2.2	0.1	0.3	0.1	0.1	-83%	\searrow		
	Direct income subsidies	0.01	0.0	0.08	0.0	0.01	0.0				0.0	0.0	0.03	0.0	0.0	0.0				0.0	0.0	0.0	0.3	0.0	0.0					
	Fishing rights income	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0					
Costs	Labour costs	0.27	0.15	0.16	0.24	0.19	0.18	0.24	-5%	\searrow	1.5	1.2	1.1	1.1	1.1	1.3	1.0	17%	\nearrow	7.5	4.7	3.6	4.3	3.2	4.4	1.5	40%	\nearrow		
	Energy costs	0.18	0.08	0.12	0.14	0.16	0.11	0.11	-31%	\searrow	1.3	1.0	1.2	1.8	2.0	1.9	1.7	-5%	\searrow	26.2	11.6	12.9	10.9	9.5	18.1	11.2	89%	\nearrow		
	Repair costs	0.07	0.03	0.08	0.08	0.03	0.02	0.02	-33%	\searrow	0.8	0.6	0.7	1.2	0.7	1.0	1.0	39%	\nearrow	14.7	9.3	5.5	5.1	5.5	5.3	3.4	-4%	\searrow		
	Other variable costs	0.13	0.18	0.17	0.06	0.05	0.04	0.04	-20%	\searrow	2.0	2.1	1.5	0.9	0.8	1.4	1.1	69%	\nearrow	21.3	17.2	14.8	12.3	10.3	12.6	8.0	22%	\nearrow		
	Other non-variable costs	0.14	0.10	0.08	0.03	0.06	0.04	0.04	-33%	\searrow	1.3	1.4	1.7	1.1	0.8	0.8	0.8	5%	\nearrow	5.3	3.2	2.5	2.1	1.0	7.6	9.8	630%	\nearrow		
	Capital costs		0.09	0.07	0.04	0.03	0.03	0.03	0%	\leftrightarrow		0.9	0.5	0.4	0.4	0.5	0.5	28%	\nearrow	-0.1	5.4	4.0	2.5	2.6	2.2	2.8	-16%	\searrow		
Capital value	Depreciated replacement value	0.6	0.6	0.8	0.6	0.5	0.3	0.3	-38%	\searrow	7.0	6.3	6.0	6.5	6.4	6.9	7.0	9%	\nearrow	36.3	38.7	44.4	45.5	41.6	29.4	37.8	-29%	\searrow		
	Investments	0.03	0.02	0.01	0.03	0.04	0.02				0.5	0.1	0.2	0.6	1.0	0.3						21.9	20.3	0.2	0.1			-69%	\searrow	
Economic indicators	GVA	0.3	0.5	0.4	0.3	0.4	0.4	0.3	3%	\nearrow	1.8	2.5	2.0	2.7	2.7	1.7	0.2	-37%	\searrow	17.4	11.8	2.8	10.5	10.0	16.0	59.4	60%	\nearrow		
	Gross profit	0.1	0.4	0.2	0.1	0.2	0.2	0.1	11%	\nearrow	0.2	1.3	0.9	1.6	1.6	0.4	-0.8	-73%	\searrow	9.9	7.2	-0.8	6.2	6.9	11.6	57.9	69%	\nearrow		
	Gross profit margin	7.6	41.0	24.2	9.8	26.4	34.4	11.0	30%	\nearrow	3.3	17.1	12.7	20.7	23.0	6.3	-16.8	-73%	\searrow	11.6	13.5	-2.1	15.1	18.8	19.5	63.1	3%	\nearrow		
	Net profit	0.1	0.3	0.1	0.0	0.1	0.2	0.0	21%	\nearrow	0.2	0.4	0.4	1.2	1.2	-0.1	-1.3	-107%	\searrow	10.0	1.8	-4.9	3.7	4.3	9.4	55.1	121%	\nearrow		
Profitability and development trends	Net Profit margin	7.6	31.6	15.7	4.0	21.4	29.9	5.6	40%	\nearrow	3.2	5.2	5.1	16.0	17.4	-1.2	-27.8	-107%	\searrow	11.8	3.3	-12.6	9.0	11.7	15.8	60.0	35%	\nearrow		
	<i>development trend</i>				Improved				87%	\nearrow				Deteriorated				-113%	\searrow				Improved				242%	\nearrow		
	RoFTA (%)	5.3	57.2	21.2	5.1	30.6	58.5	11.1	91%	\nearrow	-1.7	15.7	10.4	20.1	20.6	1.5	-15.9	-93%	\searrow	22.6	14.0	-6.6	9.1	11.8	34.6	148.2	193%	\nearrow		
	<i>development trend</i>				Improved				145%	\nearrow				Deteriorated				-89%	\searrow				Improved				240%	\nearrow		
GVA per FTE (thousand €)		1.6	9.4	7.4	8.1	7.6	9.6	6.8	26%	\nearrow	20.3	14.1	12.7	16.1	16.5	10.9	1.5	-34%	\searrow	54.0	37.7	9.1	28.4	28.3	54.2	314.4	92%	\nearrow		
	<i>development trend</i>				Improved				40%	\nearrow				Deteriorated				-32%	\searrow				Improved				72%	\nearrow		

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Assessment and Future Trends

The Lithuanian fishing fleet in terms of increased profitability during 2012-2013, was mainly driven by the long distance fleet, which performed fairly well in 2013 considering constraints in fishing activity during 2012 and 2013 period when bilateral agreements between the West African countries and EU were delayed. Improved results were achieved due to the exchange of quota with other countries. In the course of 2014, the long distance fleet segment expanded significantly. Five modernised vessels were added to the fleet register and replaced older, more depreciated ones. The renovated vessels will operate in a more sustainable manner and are expected to raise profitability as a result of improved competitiveness. In 2014 the volume of landings by this fleet increased 46.4% compared to 2013 and considering the changes in the segment, a further increase in landings is expected for 2015.

Large scale fishing segments operating in the Baltic Sea showed different trends in terms of economic performance. As was expected, demersal trawlers 24-40 m had a continuing downtrend of profits. Compared to 2012, GVA declined by 78% to €230 thousand in 2013 and obtained around €800 thousand net loss. Slightly declined revenues compared to significantly increased costs were a key driver of the downtrend of the biggest fleet segment by capacity, operating in the Baltic Sea. Energy and other variable costs were the main items in their cost structure. The economic underperformance of this segment does not attract investment vital to ensure economic efficiency. Certain market limitations as the obligation to land 80% of cod catches in a local port also were unfavorable for development of this segment. Under 2013 Regulations independently from trawling subregion, the vast majority of landings were obliged to be brought to a local port, thus increasing operating costs and selling for a quite limited local price in the auction considering the reduced production quality in terms of lower fish size. In 2014, the cod targeting segment is expected to continue a declining trend until all limiting factors will be at least optimized. In the beginning of 2015, after political pressure, the limitations of the landing obligations were removed and at least one factor of deterioration was eliminated. Current conditions will provide access to other markets, closer to the fishing area and a greater range of prices. Despite low cod quota uptake by the demersal trawler segment, for 2015 the east and west cod quotas were reduced by 22% to 2894 tonnes and by 6.8% to 372 tonnes respectively.

There is currently high market demand for the pelagic species, Baltic herring and especially sprat, and constantly increasing profits were slightly stabilized in 2013. Slowly recovering stocks compared to effort resulted in a reduction of quota by 4% in 2014 to 12,010 tonnes and a significant decrease of 11% in 2015, consisting of 10,689 tonnes. The improved market for small pelagic species induced an increase in capacity for the TM 24-40 segment, when part of the fleet moved from the demersal trawler segment to pelagics. Rearrangement of capacity in the national fleet operating in the Baltic Sea was unfavorable for Lithuanian fishermen, when newly established companies which share national quota were based on foreign capital, mainly from Estonia.

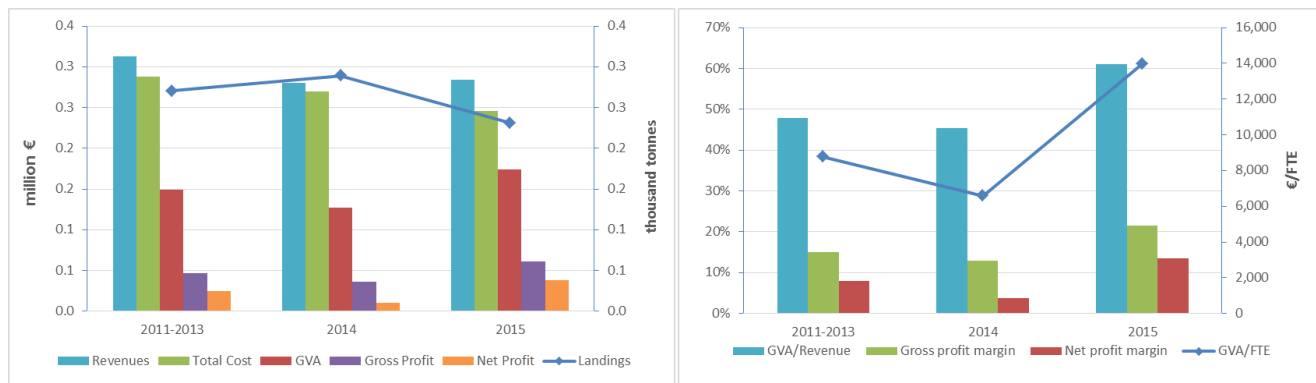
At the beginning of 2015 an Individual quota trade system (ITQ) was implemented in the Lithuanian fishing fleet. Participation in quota auctions is limited only to the units which own vessels on the Lithuanian fleet register, whereas exchange of quota could be done within different EU member states. For one part this system will allow the benefits from selling of quota, if the fleet is not enough efficient under particular conditions, whereas, more competitive units will have an advantage to uptake additional amounts of allowable catches.

Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections. **The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.**

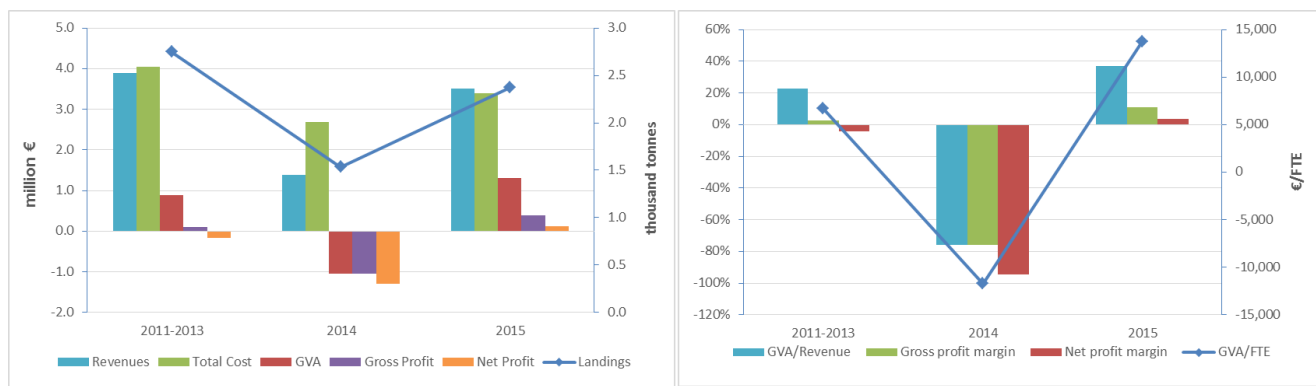
A Member State overview is not provided for Lithuania as only 14% of its landings occur in the Northeast Atlantic. The general economic trend for the fleets covered by BEMEF is one of decreased profitability in 2014 and significantly increased profitability in 2015.

The following graphs provide results for the top 3 Lithuanian fleets by gross earnings



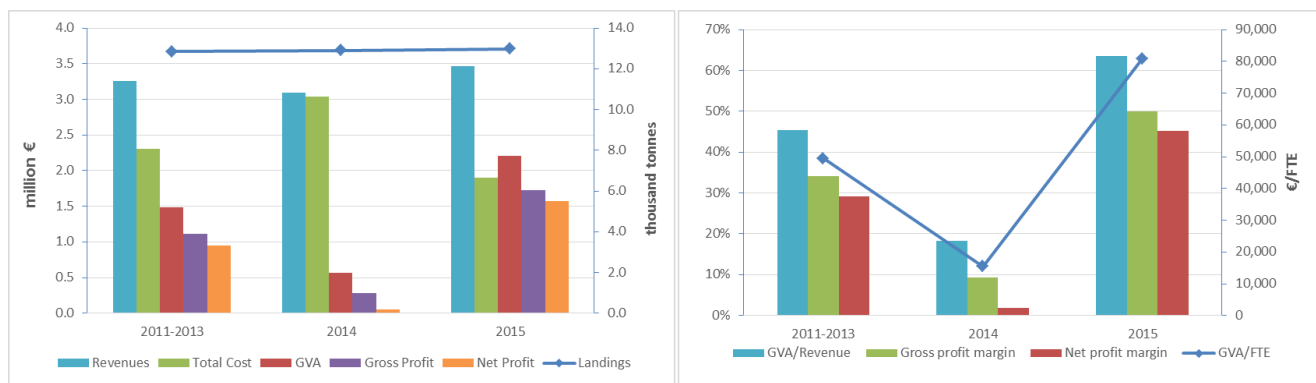
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.14.6 LTU AREA27 DFN VL1012: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.14.7 LTU AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.14.8 LTU AREA27 TM VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.

A Member State overview is not provided for Lithuania as only 14% of its landings occur in the Northeast Atlantic. The general economic trend for the fleets covered by BEMEF is one of increased profitability in a state of long-term MSY.

Data issues

Under DCF, revenues from landings reported from two distinct data sources (total value of landings as transversal variable and total income from landings as economic indicator). In Lithuania, income from landings together with other socio-economic indicators, such as expenditure, employment and capital value are collected through census with a one year lag whereas transversal variables are collected one year prior to economic data.

Table 5.14.5 Main socio-economic performance indicators by fleet segment in the Lithuanian national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ			
LTU AREA27 DFN VL1012*	7	-13%	15	-19%	936	31%	58	-61%	281	19%	261	18%	162	19%	11.0	47%	90	118%	71	274%	27.3	343%	High	89%	Improved
LTU AREA27 DTS VL2440	19	-10%	121	-12%	1,962	-11%	1,629	-6%	1,994	-23%	2,386	-14%	231	-79%	1.9	-76%	514	-276%	806	-2553%	-24.0	-2893%	Weak	-527%	Deteriorated
LTU AREA27 PG VL0010	58	-5%	25	-19%	4,718	-3%	63	22%	318	-4%	345	0%	215	-7%	8.7	14%	111	-18%	104	-17%	32.1	-7%	High	161%	Improved
LTU AREA27 TM VL2440*	6	50%	35	39%	836	9%	1,269	24%	24,537	5%	12,736	-5%	16,034	-9%	54.2	-35%	11,596	-28%	9,406	-38%	15.8	-43%	High	242%	Improved
LTU OFR TM VL40XX*	7	-30%	296	-17%	1,345	-45%	33,512	132%	24,537	-27%	73,600	79%	16,034	60%	54.2	92%	11,596	69%	9,406	121%	15.8	35%	High	242%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.14.6 Main socio-economic performance indicators by fleet segment in the Lithuanian national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		fuel consumed per landed tonne		Energy costs		Operating costs		GVA		Net profit		%Δ 2013 to average (2008-12)	Economic development trend
		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		
LTU AREA27 DFN VL1012*	2.1	-8%	134	50%	279	-10%	292	-11%	10,279	-13%	4,618	-11%	2,061	-35%	222	-67%	6,676	-50%	6,676	-50%	24,313	-27%	23,078	36%	10,122	328%	50%	Improved
LTU AREA27 DTS VL2440	6.4	-3%	103	-2%	1,216	-4%	1,666	-11%	39,196	5%	6,160	8%	3,940	-6%	683	10%	57,170	-7%	57,170	-7%	203,700	21%	12,148	-76%	42,434	-2811%	-506%	Deteriorated
LTU AREA27 PG VL0010	0.4	-16%	81	2%	73	4%	73	4%	1,787	14%	4,015	41%	922	27%	181	22%	1,016	24%	1,016	24%	3,667	-1%	3,704	-3%	1,791	-12%	182%	Improved
LTU AREA27 TM VL2440*	5.8	-8%	139	-27%	15,234	-14%	25,220	-12%	634,029	99%	14,989	67%	12,397	38%	455	30%	2,578,456	170%	2,578,456	170%	6,845,577	132%	2,290,548	128%	1,343,677	216%	471%	Stable
LTU OFR TM VL40XX*	42.3	19%	192	-21%	54,721	223%	61,384	85%	634,029	99%	14,989	67%	12,397	38%	455	30%	2,578,456	170%	2,578,456	170%	6,845,577	132%	2,290,548	128%	1,343,677	216%	471%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.15 MALTA

Fleet Structure, Fishing Activity and Production

In 2014, the Maltese fishing fleet consisted of 1,045 registered vessels, with a combined gross tonnage of 7.7 thousand GT, engine power of 75 thousand kW and an average age of 28 years. The number of registered fishing vessels decreased 2% between 2012 and 2013, with GT and kW decreasing 3% and 2% respectively (Table 5.15.1, Figure 5.15.1). The size of the Maltese fishing fleet decreased between 2008 and 2013, with the number of vessels falling by 21%; the fishing capacity, in terms of GT, increased (4% in the same period) and it is related with the entry of new vessels into the fleet with varying GT and power. The major factor causing the number of vessels to decrease was the compensations given to vessel owners for decommissioning.

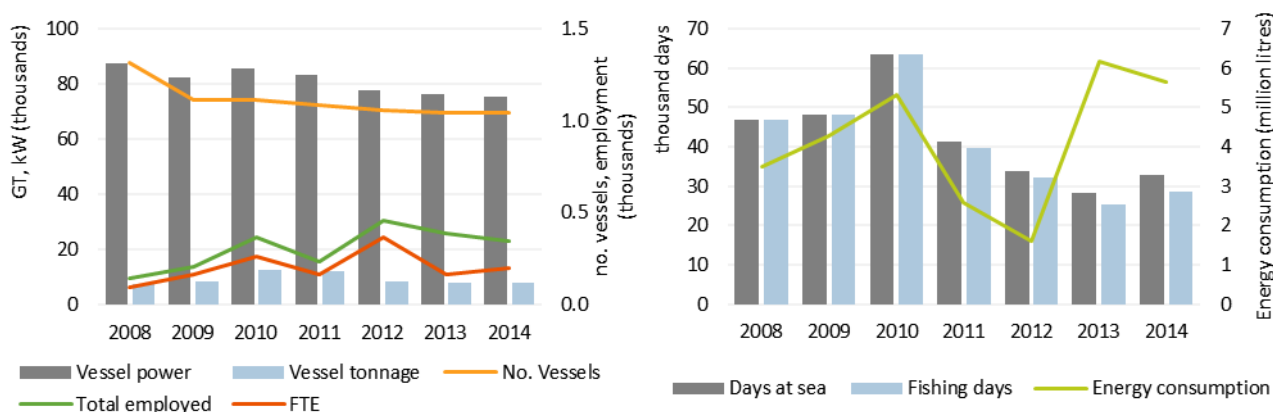
Table 5.15.1 Maltese national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	1,316	1,111	1,112	1,087	1,060	1,040	1,045	-2%	↘	-21%
	No. of Inactive vessels (#)	613	332	264	453	276	266	336	-4%	↘	-57%
	Average vessel age (year)	25	24	25	26	26	28	28	6%	↗	14%
	Vessel tonnage (thousand GT)	7	8	12	12	8	8	8	-3%	↘	4%
	Vessel power (thousand kW)	88	82	85	83	78	76	75	-2%	↘	-13%
No. of Enterprises (#)		1,297	1,081	1,076	1,060	1,028	1,040	1,016	1%	↗	-20%
Employment	Total employed (#)	141	203	366	231	454	389	342	-14%	↘	176%
	FTE (#)	95	161	261	161	368	160	194	-57%	↘	68%
	Average wage per employed (thousand €)	26.7	56.4	29.7	34.5	9.2	5.1	12.5	-45%	↘	-81%
	Average wage per FTE (thousand €)	39.7	71.0	41.6	49.5	11.3	12.4	26.4	9%	↗	-69%
Fishing Effort	Days at sea (thousand days)	47.0	48.3	63.5	41.3	33.7	28.4	32.9	-16%	↘	-40%
	Fishing days (thousand days)	47.0	48.2	63.5	39.6	32.4	25.3	28.6	-22%	↘	-46%
	Energy consumption (million litres)	3.5	4.3	5.3	2.6	1.6	6.2	5.6	286%	↗	76%
	Energy consumption per landed tonne (l/T)	2,732	2,697	2,901	1,349	726	2,619	3,942	261%	↗	-4%
Output	Landings weight (thousand tonnes)	1.3	1.6	1.8	1.9	2.2	2.4	2.4	7%	↗	84%
	Landings value (million €)	8.7	9.2	10.3	11.9	12.9	12.4	15.4	-4%	↘	42%
	Recreational catches of selected species (T)				0.1		0.5	1.0			

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.15.1 Maltese fleet main capacity and effort trends for the period 2008-2014.

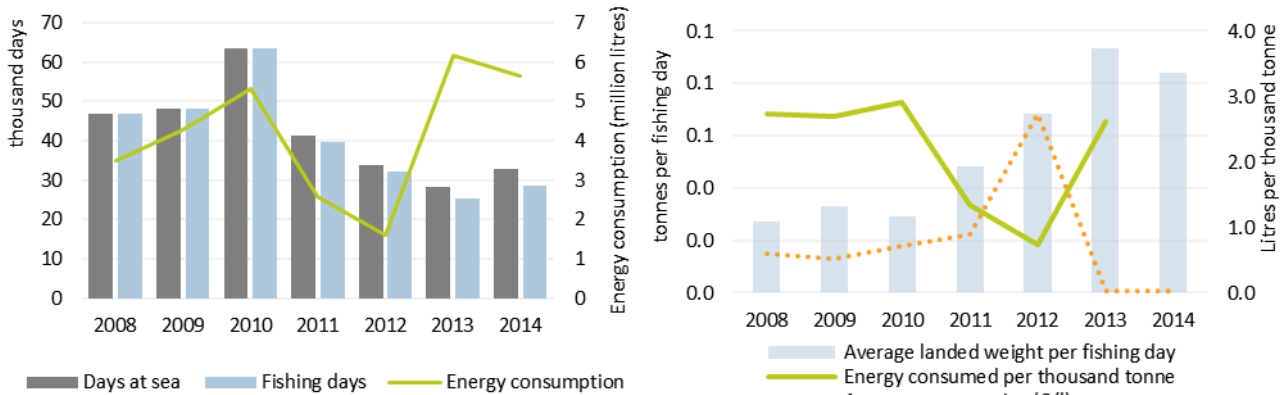
In 2014, the number of fishing enterprises totaled 1,016, with the vast majority owning a single vessel. The number of enterprises decreased between 2008 and 2013 by 20%. Total employment in

2014 was estimated at 342 jobs, corresponding to 194 FTEs. The level of employment increased between 2008 and 2014. This increase in employment may be related to different data collecting methodologies used over the time period. The employments figures are very low and appear unreliable (for example, only 342 employed corresponds to 1,045 vessels in 2014).

The Maltese fleet spent a total of around 33 thousand days at sea in 2014. The total number of days at sea increased 16% between 2013 and 2014.

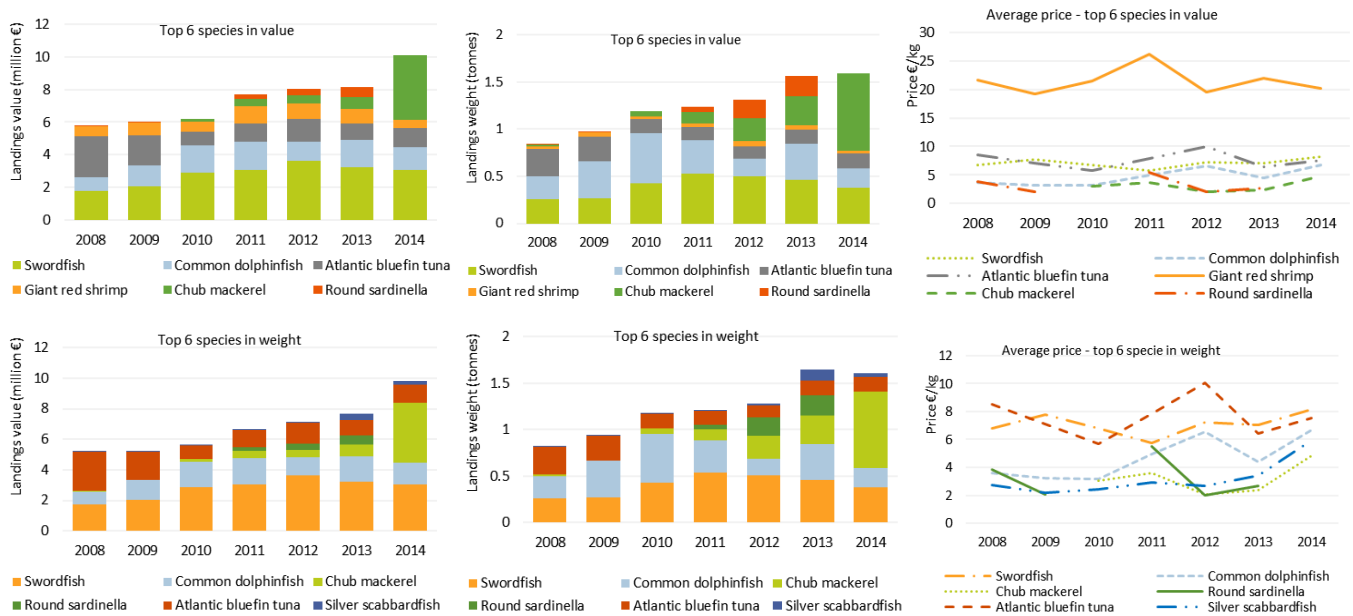
The quantity of fuel consumed in 2013 totalled around 6.17 million litres, 76% higher than in 2008 (Table 5.15.1; Figure 5.15.1).

The total weight landed by the Maltese fleet in 2014 was 2.4 thousand tonnes of seafood, with a landed value of €15.4 million. The total weight of landings and value of landings increased over the period analysed.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.15.2 Landings in value and weight (and corresponding income from landings) by the Maltese national fleet and some efficiency indicators for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.15.3 Maltese fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

The main exploited species include swordfish, dolphinfish, bluefin tuna, demersal and small pelagic species and a number of additional species some of which although caught in smaller quantities have a high commercial value such as the red shrimps. Other species such as bogue, horse mackerel, mackerel, dogfish, skate and similar species, which are less valuable commercially, are also caught in fairly large quantities.

In 2013, swordfish catches produced the highest landed value (€3.2 million) by the national fleet, followed by common dolphinfish (€1.7 million), Atlantic bluefin tuna (€1.0 million), giant red shrimp (€0.9 million), chub mackerel (€0.7 million). In terms of landings weight, swordfish landings amounted to 460 tonnes, common dolphinfish 382 tonnes, chub mackerel 308 tonnes and round sardinella 219 tonnes.

The prices obtained for these key species in general increased between 2008 and 2013. Giant red shrimp achieved the highest average price per kilo in 2013 (€20.03 per kg), followed by swordfish (€7.05 per kg). Swordfish accounted for 26% of the total value of landings in 2013, stable respect to 2012; compared to 2012, the landed value of common dolphinfish increased in 2013, while the landed value of Atlantic bluefin tuna decreased.

National Fleet Economic performance

The total amount of income generated by the Maltese national fleet in 2013 was around €9.9 million, a decrease of 26% from 2012. Income from landings equated to 7.5 million.

According to the data submitted, the amount of income (income from landings and non-fishing income) generated by Maltese national fleet in 2013 appears grossly underestimated when compared to the declared landings value.

Total operating costs incurred by the Maltese national fleet in 2013 amounted to €5.5 million. Crew cost and other variable costs were the two major cost items, were €1.98 and €2.03 million, respectively (Table 5.15.2). Between 2012 and 2013, total operational costs decreased (-57%).

Table 5.15.2 Maltese national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	10.9	8.3	9.9	11.9	12.9	7.5	8.2	-42%	↘	-31%
	Other income	0.3	0.6	0.0	0.0	0.5	2.4	2.0	420%	↗	785%
Costs	Labour costs	3.8	11.4	10.9	8.0	4.2	2.0	3.9	-53%	↘	-47%
	Energy costs	2.1	2.3	3.8	2.3	4.4	0.2	0.2	-96%	↘	-92%
	Repair costs	1.4	1.0	1.1	0.9	1.2	1.1	1.0	-9%	↘	-22%
	Other variable costs	3.4	2.6	3.0	2.2	2.8	2.0	2.0	-29%	↘	-39%
	Other non-variable costs	0.2	0.2	0.5	0.2	0.3	0.3	0.3	12%	↗	22%
	Capital costs	5.8	5.0	8.7	46.1	5.1	3.2	2.4	-36%	↘	-45%
Economic Indicators	GVA	4.1	2.7	1.4	6.4	4.7	6.3	5.4	34%	↗	56%
	Gross profit	0.3	-8.7	-9.4	-1.6	0.6	4.3	1.7	689%	↗	1347%
	Net profit	-5.5	-13.8	-18.2	-47.6	-4.5	1.1	-0.2	125%	↗	120%
Capital value	Depreciated replacement value	42.4	43.8	63.9	85.7	41.7	34.3	34.9	-18%	↘	-19%
	Investments	1.0	1.0	1.5	1.7	2.3	1.5		-38%	↘	49%
Profitability and development trends	Net profit margin (%)	-49.6	-156.4	-183.8	-398.8	-33.7	11.2	-1.8	133%	↗	123%
	<i>development trend</i>								107%	↗	Improved
	RoFTA (%)	-12.9	-28.7	-26.3	-53.6	-9.9	5.6	-0.93	156%	↗	143%
<i>development trend</i>								121%	↗	Improved	
GVA per FTE (thousand €)	42.8	16.9	5.4	39.9	12.8	39.6	28.4	208%	↗	-8%	
<i>development trend</i>								68%	↗	Improved	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

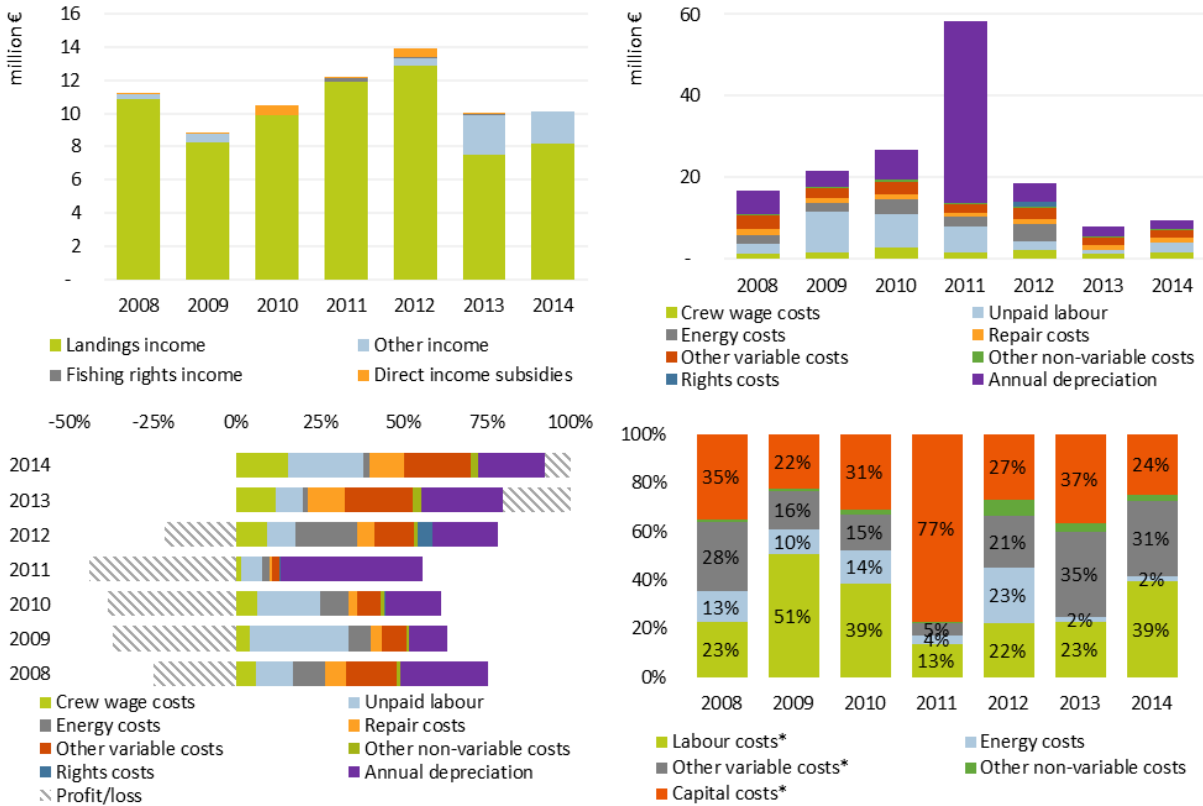
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

In terms of economic performance, the total amount of Gross Value Added (GVA) and gross profit generated by the Maltese national fleet in 2013 were €6.3 million and €4.3 million, respectively. Net

profit was positive (1.1 million €) after years of losses as a consequence of the low level of capital costs (€3.2 million €).

The profitability indicators, net profit margin and RoFTA have deteriorated over the years at national level with negative values for all the years except for 2013.

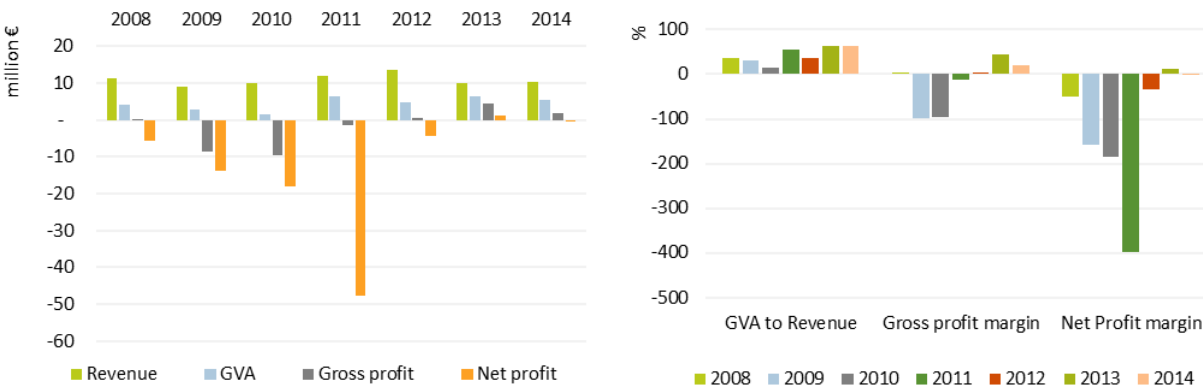
In 2013, the Maltese fleet had an estimated (depreciated) replacement value of €34.3 million, a decrease of 18% compared to the previous year, a reduction which is mainly due to the decline in vessel number. The calculation methodology of the capital value and depreciation costs changed since 2010, using the Perpetual Inventory Method (PIM).

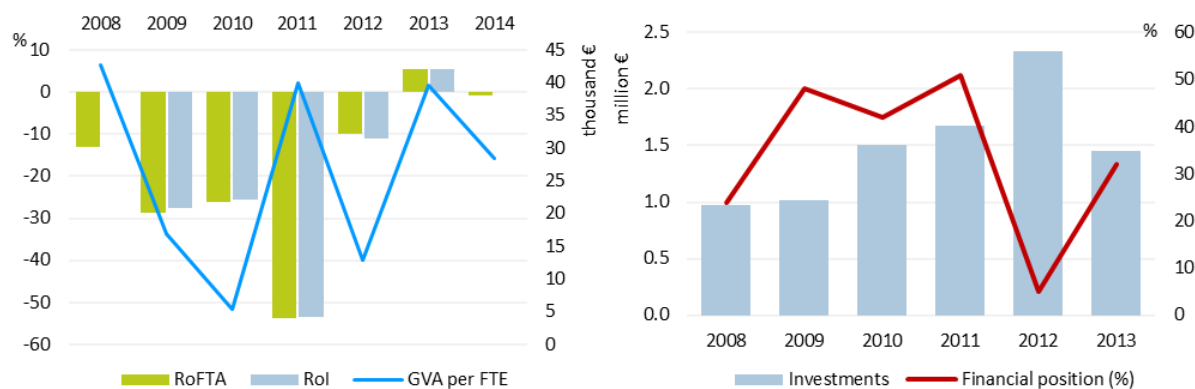


Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.15.4 Income and cost structure trends for the Maltese fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).





Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.15.5 Main economic performance indicator trends for the Maltese fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Fleet Segment Level Economic performance

The Maltese fleet is highly diversified with a broad range of vessel types targeting different species in the Mediterranean. The national fleet consisted of 23 active (DCF) fleet segments in 2013, with 5 inactive fleet segments consisting of 266 vessels. Five of the active fleet segments made net losses in 2013 while seven made an overall profits (information lacking for 11 segments).

A large proportion (90%) of the fleet consists of small-scale vessels under 12m and the entire fleet operates solely in the Mediterranean Sea. The small-scale fleet decreased in terms of vessel numbers, tonnage and power between 2013 and 2014; the number of vessels, tonnage and power decreasing by 8%, 13% and 12%, respectively.

Table 5.15.3 and Table 5.15.4 provide a breakdown of key performance indicators by fishing activity (small, large and distant-water fleets). Table 5.15.5 provides a breakdown of key performance indicators for all Maltese fleet segments in 2013 and table 5.15.6 provides average values by vessels. A short description of three important segments in terms of total value of landings is provided below.

Vessels using hooks 6–12m – 49 vessels make up this segment and are based in the Mediterranean Sea. These vessels usually target mainly large pelagic species such as Atlantic bluefin tuna (*Thunnus, thynnus*), swordfish (*Xiphias gladius*), and common dolphinfish (*Coryphaena hippurus*) while bottom long-liners target demersal species such as longnose spurdog (*squalus blainvillei*), red scorpion fish (*Scorpaena scrofa*) and red porgy (*Pagrus pagrus*) amongst others. The total value of landings in 2013 was about €1.2 million; the level of activity was very low with an average of 40 days at sea per vessel. This leet segment was profitable, with a reported gross profit of around €0.7 million and net profit of €0.5 million in 2013.

Vessels using hooks 18–24m - 15 vessels made up this segment in 2013, which operates predominantly in the Mediterranean. The fleet targets a variety of species mainly by using surface and bottom long-liners. Surface long-liners target mainly large pelagic species such as Atlantic bluefin tuna(*Thunnus, thynnus*), swordfish (*Xiphias gladius*), and common dolphinfish (*Coryphaena hippurus*) while bottom long-liners target demersal species such as bluntnose sixgill shark (*Hexanchus griseus*), red scorpion fish (*Scorpaena scrofa*) and longnose spurdog (*Squalus blainvillei*) species amongst others. In 2013, the total value of landings was about €1.9 million. This segment made losses in 2013, generating a net loss of €0.3 million.

Demersal trawlers 18-24m – 13 vessels make up this segment in 2013, which operates predominantly in the Mediterranean. The fleet targets a variety of species but in particular demersal and deep water species, such as deep-water rose shrimp (*Parapenaeus longirostris*), giant red shrimp (*Aristeomorpha foliacea*) and surmullets (*Mullus surmuletus*). In 2013, the total value of landings was almost €2.0 million. This fleet segment was not particularly profitable, with a reported gross profit of around €0.07 million and a net loss of €0.6 million in 2013.

Table 5.15.3 Maltese national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	621	679	759	532	707	707	648	0%	↔	82	100	89	102	77	67	61	-13%	↘
Average vessel age (year)	23.5	24.2	24.2	24.7	25.7	25.9	27.0	1%	↔	28.8	28.3	26.6	27.5	27.6	25.8	26.3	-7%	↘
Average vessel length (m)	6.5	6.4	6.4	6.5	6.3	6.4	6.2	0%	↔	16.6	16.0	17.6	16.4	18.3	19.5	18.1	7%	↗
Vessel tonnage (thousand GT)	1.6	1.7	1.8	1.4	1.7	1.7	1.5	2%	↗	3.5	4.3	4.8	5.1	4.4	4.5	3.6	2%	↗
Vessel power (thousand kW)	35.9	38.3	43.3	30.5	40.4	41.3	36.2	2%	↗	18.8	21.5	22.3	24.6	20.4	18.8	16.7	-8%	↘
Total employed (#)	70	37	137	71	246	186	165	-24%	↘	70	166	229	160	208	203	177	-3%	↘
FTE (#)	48	30	79	43	236	127	168	-46%	↘	47	131	182	117	132	28	26	-79%	↘
Average wage per employed (thousand €)	32.2	202.0	48.0	76.1	7.6	4.8	15.1	-37%	↘	21.4	23.5	18.7	16.0	11.0	6.3	9.6	-43%	↘
Average wage per FTE (thousand €)	47.4	127.9	84.1	100.4	3.5	8.0	17.8	125%	↗	32.4	29.9	23.5	22.0	17.3	49.8	64.2	188%	↗
Days at sea (thousand days)	43.1	43.6	59.9	35.9	28.3	22.6	27.6	-20%	↘	3.9	4.7	3.6	5.3	5.4	5.8	5.4	6%	↗
Fishing days (thousand days)	43.1	43.6	59.9	35.7	28.0	21.4	26.1	-24%	↘	3.9	4.6	3.6	3.9	4.3	3.8	2.4	-11%	↘
Energy consumption (million litres)	1.4	2.1	1.7	1.1	1.1	1.6	1.8	49%	↗	2.1	2.2	3.7	1.5	0.6	4.6	3.8	736%	↗
Energy consumption per landed tonne (l/T)	3,205	6,008	2,177	1,346	1,460	2,356	3,015	61%	↗	2,996.9	1,982.8	4,025.6	1,732.4	502.2	4,833.7	4,616.7	862%	↗
Landings weight (thousand tonnes)	0.4	0.4	0.8	0.8	0.7	0.7	0.6	-6%	↘	0.9	1.2	1.1	1.1	1.5	1.7	1.8	13%	↗
Landings value (million €)	2.8	2.2	4.4	4.6	4.4	3.7	4.5	-17%	↘	5.9	7.0	6.0	7.4	8.5	8.6	10.9	2%	↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Table 5.15.4 Economic performance of the Maltese national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			
Income	Landings income	4.3	3.4	4.2	4.6	4.4	3.5	3.8	-22%	↘	7.8	5.9	6.3	7.4	9.0	4.5	4.4	-50%	↘
	Other income	0.0	0.0	0.0	0.0	0.1	1.4	1.3	1182%	↗	0.3	0.6	0.0	0.0	0.4	1.0	0.7	172%	↗
	Direct income subsidies	0.04	0.0	0.0	0.0	0.04	0.04			↔	0.0	0.0	0.6	0.0	0.5				
	Fishing rights income			0.03		0.02						0.01		0.2	0.04	0.1		150%	↗
Costs	Labour costs	2.3	7.6	6.6	5.4	1.9	0.9	2.5	-52%	↘	1.5	3.9	4.3	2.5	2.3	1.1	1.4	-52%	↘
	Energy costs	0.8	1.1	1.3	1.0	1.3	0.1	0.1	-93%	↘	1.3	1.2	2.5	1.3	2.6	0.1	0.1	-98%	↘
	Repair costs	0.5	0.5	0.5	0.4	0.6	0.3	0.4	-48%	↘	0.9	0.5	0.6	0.5	0.6	0.8	0.6	28%	↗
	Other variable costs	1.5	1.3	1.3	0.9	1.2	0.6	0.7	-51%	↘	1.9	1.3	1.7	1.3	1.1	1.4	1.3	27%	↗
	Other non-variable costs	0.1	0.1	0.2	0.1	0.1	0.1	0.1	-8%	↘	0.1	0.1	0.4	0.1	0.1	0.2	0.1	33%	↗
	Capital costs	3.0	2.5	2.1	10.1	0.7	1.0	0.8	31%	↗	2.8	2.3	6.0	35.2	4.2	2.1	1.6	-50%	↘
Capital value	Depreciated replacement value	12.8	18.0	8.8	10.0	5.2	6.2	5.2	19%	↗	17.8	14.8	25.8	38.1	30.1	20.6	17.5	-32%	↘
	Investments	0.3	0.5	0.9	1.0	1.4	0.8		-43%	↘	0.7	0.5	0.7	0.7	0.8	0.7		-12%	↘
Economic indicators	GVA	1.4	0.3	0.9	2.2	1.3	3.7	3.7	192%	↗	3.3	2.4	0.7	1.7	4.6	2.4	1.7	-48%	↘
	Gross profit	-0.9	-7.2	-5.7	-3.3	-0.6	2.9	1.2	583%	↗	2.0	-1.5	-2.7	-0.8	2.5	1.0	0.5	-61%	↘
	Gross profit margin	-21.2	-214.3	-134.7	-72.1	-13.1	59.1	24.2	550%	↗	28.8	-27.3	-47.3	-16.3	27.8	22.7	14.1	-18%	↘
	Net profit	-3.9	-9.7	-7.8	-13.3	-1.3	1.9	0.4	243%	↗	-0.7	-3.8	-8.2	-23.5	-1.5	-0.4	-0.6	72%	↗
Profitability and development trends	Net Profit margin	-91.4	-287.2	-183.9	-292.7	-29.4	39.4	8.4	234%	↗	-10.6	-69.3	-145.4	-495.4	-17.3	-10.0	-15.8	42%	↗
	<i>development trend</i>				Improved				122%	↗			Improved					93%	↗
	RoFTA (%)	-30.6	-51.3	-86.3	-133.5	-25.2	34.0	10.0	235%	↗	-4.3	-22.7	-31.9	-96.2	-4.4	-0.6	-3.1	86%	↗
	<i>development trend</i>				Improved				152%	↗			Improved					98%	↗
GVA per FTE (thousand €)	28.9	10.2	11.3	49.7	5.4	29.7	22.0		449%	↗	73.2	18.4	4.3	14.3	35.0	103.6	74.0	196%	↗
<i>development trend</i>				Improved					41%	↗			Improved					257%	↗

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Assessment and Future Trends

There was no national expert present at first EWG meeting to comment on and provide insight on the development trends of the Maltese fishing fleet over the time series analysed.

Data Issues

There are some questionable data, in particular related to employment and effort. Number of employees and days at sea appear to be underestimated in particular when compared with the number of vessels. The data related to income values are not consistent with landing values for some years (in particular in 2013).

There was no national expert present at first EWG meeting to assess the quality of the final data submitted and to provide insight on the development trends of the Maltese fishing fleet.

Table 5.15.5 Main socio-economic performance indicators by fleet segment in the Maltese national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend		
	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ						
MLT AREA37 DFN VL0006	11	22%	1	42%	339	-56%	9	158%	13	-51%	3	-57%	2	103%	1.9	102%	-	7	90%	-	12	85%	-122.1	59%	Weak	39%	Improved
MLT AREA37 DFN VL0612	3	50%	1		131	212%	-		80	316%	16	454%															
MLT AREA37 DTS VL1824	13	-7%	5	-82%	1,369	-14%	2,986	2594%	2,026	-12%	192	-31%	575	-56%	115.0	148%		72	-90%	-	591	13%	-35.5	-32%	Weak	38%	Improved
MLT AREA37 DTS VL2440	5	0%	1	-81%	315	-11%	212	324%	257	-22%	35	-43%															
MLT AREA37 FPO VL0006	1	-75%	0		4		0		1		1		1		36.9												
MLT AREA37 FPO VL0612	2	100%	1	1500%	1		1						8		8.4												
MLT AREA37 HOK VL0006	15	25%	1	1329%	854	347%	6	402%	30	574%	5	566%	4	107%	3.7	-86%	1	100%	-	8	99%	-63.6	100%	Weak	99%	Improved	
MLT AREA37 HOK VL0612	49	23%	12	-76%	1,937	22%	338	5%	1,249	-5%	207	17%	851	32%	70.9	448%	711	49%		505	96%	48.9	151%	High	140%	Improved	
MLT AREA37 HOK VL1218	10	0%	4	-81%	1,022	33%	426	1049%	918	-20%	148	0%	716	-5%	178.9	395%	570	114%		432	381%	40.3	417%	High	142%	Improved	
MLT AREA37 HOK VL1824	15	-6%	9	-82%	1,614	-5%	774	577%	1,937	-27%	316	-12%	540	-63%	60.0	106%	135	-86%	-	349	-1965%	-29.4	-4238%	Weak	73%	Improved	
MLT AREA37 MGO VL0612	5	-55%	1	-90%	193	-25%	59	18%	149	-35%	29	-17%	100	-21%	113.8	728%											
MLT AREA37 MGO VL1218	6	-45%	3	-77%	375	-10%	57	-51%	537	-21%	135	-10%	208	-49%	69.3	123%	169	-38%		93	25%	38.5	248%	High	143%	Improved	
MLT AREA37 PGP VL0006	306	-6%	32	-52%	8,579	-34%	346	150%	822	-12%	182	20%	390	13%	12.2	137%	241	3080%		59	200%	8.7	243%	Reasonable	104%	Improved	
MLT AREA37 PGP VL0612	157	-16%	23	-66%	3,960	-54%	276	-3%	411	-67%	71	-69%	1,706	1386%	74.2	4237%	1,454	4545%		1,159	587%	58.1	407%	High	124%	Improved	
MLT AREA37 PGP VL1218	1								149		21																
MLT AREA37 PGP VL1824	1								113		16																
MLT AREA37 PMP VL0006	23	53%	2	-50%	1,098	165%	26	819%	66	298%	10	164%	20	-61%	9.8	-23%	4	105%	-	6	94%	-16.5	89%	Weak	94%	Improved	
MLT AREA37 PMP VL0612	140	26%	54	15%	5,729	55%	562	91%	998	15%	185	26%	764	310%	14.1	257%	445	1878%		202	199%	19.1	182%	High	111%	Improved	
MLT AREA37 PMP VL1218	3	50%	2	100%	188		-		252		43																
MLT AREA37 PMP VL1824	3		1		282		90		409		98		233		232.5												
MLT AREA37 PS VL1218	2		1		115		-		264		103																
MLT AREA37 PS VL2440	2	100%	1	127%	202	166%	-		1,320	141%	454	59%															
MLT AREA37 TM VL2440	1				79		-		258		76																

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Table 5.15.6 Main socio-economic performance indicators by fleet segment in the Maltese national fishing fleet: average by vessel for 2013.
Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend	
MLT AREA37 DFN VL0006	0.1	13%	31	-64%	9	-1%	9	-1%	831	46%	-	-	-	-	2,855	494%	45	-92%	1,527	-92%	1,527	-86%	170	102%	-	1,057	88%	87%	Improved
MLT AREA37 DFN VL0612	0.3		44	108%	118	78%	182	109%	-	-	-	-	-	-	-	-	-	-	7,088		7,088								
MLT AREA37 DTS VL1824	0.4	-81%	105	-7%	141	-21%	210	5%	38,721	-10%	76,219	254%	5,523	-44%	15,522	3830%	2,939	-96%	122,478	-96%	122,478	-6%	44,237	-52%	-	45,491	6%	32%	Improved
MLT AREA37 DTS VL2440	0.2	-81%	63	-11%	111	-36%	199	-21%	202	-100%	1,050	-97%	67	-100%	6,089	646%	-	-	45,764	-63%	45,764	-63%							
MLT AREA37 FPO VL0006	0.0		4		124		124		202		-		-		403		40		490		490		1,107		600				
MLT AREA37 FPO VL0612	0.5	700%	1						-	-	-	-	-	-	-	101	-93%	249	-93%	249	-92%	4,033							
MLT AREA37 HOK VL0006	0.1	600%	57	257%	6	49%	6	49%	168	-100%	-	-	-	-	1,249	-25%	33	-81%	759	-81%	759	-99%	246	66%	-	532	99%	98%	Improved
MLT AREA37 HOK VL0612	0.2	-81%	40	-1%	107	-4%	141	13%	2,858	-33%	4,429	68%	1,968	-22%	1,634	-10%	349	-95%	6,570	-95%	6,570	-69%	17,358	7%	10,298	60%	156%	Improved	
MLT AREA37 HOK VL1218	0.4	-81%	102	33%	145	-25%	208	-12%	14,507	-70%	36,268	408%	3,454	-40%	2,880	1043%	715	-91%	50,240	-91%	50,240	-43%	71,553	-5%	43,191	381%	172%	Improved	
MLT AREA37 HOK VL1824	0.6	-81%	108	2%	196	-8%	288	-3%	27,043	-18%	45,072	328%	11,590	14%	2,453	669%	860	-97%	70,298	-97%	70,298	-35%	36,015	-60%	-	23,289	-2090%	78%	Improved
MLT AREA37 MGO VL0612	0.2	-78%	39	66%	153	10%	240	50%	-	-	-	-	-	-	2,005	42%	396	-93%	6,179	-93%	6,179	-69%	20,027	75%					
MLT AREA37 MGO VL1218	0.5	-58%	63	66%	360	0%	589	31%	6,450	-47%	12,899	158%	3,225	16%	422	-45%	269	-98%	12,091	-98%	12,091	-67%	34,629	-6%	15,494	128%	132%	Improved	
MLT AREA37 PGP VL0006	0.1	-52%	28	-30%	21	81%	21	82%	489	-53%	-	-	-	-	1,900	109%	96	-88%	1,416	-88%	1,416	-52%	1,276	20%	191	206%	103%	Improved	
MLT AREA37 PGP VL0612	0.2	-58%	25	-45%	18	-32%	19	-29%	1,602	104%	3,773	74%	3,773	79%	3,860	212%	166	-93%	3,439	-93%	3,439	-50%	10,864	1679%	7,384	684%	155%	Improved	
MLT AREA37 PMP VL0006	0.1	-67%	48	73%	9	0%	9	0%	672	-93%	-	-	-	-	2,621	248%	80	-78%	1,500	-78%	1,500	-86%	854	-75%	-	278	96%	95%	Improved
MLT AREA37 PMP VL0612	0.4	-7%	41	23%	32	-19%	35	-13%	2,276	54%	1,000	-71%	831	-75%	3,044	52%	175	-94%	4,408	-94%	4,408	-43%	5,455	225%	1,446	178%	105%	Improved	
MLT AREA37 PMP VL1218	0.7	34%	63		230		316		-	-	-	-	-	-	-	-	-	509		509	-99%								
MLT AREA37 PMP VL1824	0.3		94		346		453		-	-	-	-	-	-	923		605		19,468		19,468		77,501						
MLT AREA37 PS VL1218	0.5		58		892		1,709		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MLT AREA37 PS VL2440	0.5	14%	101	33%	2,249	-40%	4,207	9%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MLT AREA37 TM VL2440			79		965		1,292		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.16 THE NETHERLANDS

Fleet Structure, Fishing Activity and Production

In 2014, the Dutch fishing fleet consisted of 736 registered vessels, with a combined gross tonnage of 134 thousand GT, a total power of 280 thousand kW and an average age of 39 years. The size of the fishing fleet remained stable between 2011 and 2014. In 2014, the number of fishing enterprises totalled 707, with the vast majority (84%), owning a single vessel. Around 16% of the enterprises owned two to five fishing vessels and only a few enterprises owned more than 5 vessels.

Total employment in 2014 was estimated at 1,747 FTEs. The level of employment decreased between 2008 and 2014 and the number of FTEs dropped by 6% over the same period. The major reasons for the reduction in total and FTE employment figures can be explained by the decrease in the number of active vessel in the >24m segments and a reduction in average crew numbers. Average crew numbers have decreased due to declining earnings which has deterred crew retention on vessels (Table 5.16.1; Figure 5.16.1).

Table 5.16.1 Dutch national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	730	713	725	737	735	739	736	1%	↔	1%
	No. of Inactive vessels (#)	161	133	152	186	185	192	198	4%	↗	19%
	Average vessel age (year)	40	41	41	39	43	39	30	-9%	↘	-2%
	Vessel tonnage (thousand GT)	156	139	137	131	135	129	134	-5%	↘	-17%
	Vessel power (thousand kW)	339	296	294	289	288	276	280	-4%	↘	-19%
	No. of Enterprises (#)	687	696	711	703	713	711	—	0%	↔	3%
Employment	Total employed (#)	2,211	2,089	2,093	2,054	2,034	2,123	2,064	4%	↗	-4%
	FTE (#)	1,883	1,752	1,791	1,705	1,720	1,766	1,747	3%	↗	-6%
	Average wage per employed (thousand €)	51.4	48.2	48.9	42.4	49.0	45.3	42.1	-8%	↘	-12%
	Average wage per FTE (thousand €)	60.4	57.5	57.1	51.0	57.9	54.5	49.7	-6%	↘	-10%
Fishing Effort	Days at sea (thousand days)	50.9	53.9	51.3	47.1	51.8	50.8	48.7	-2%	↘	0%
	Fishing days (thousand days)	44.6	47.4	45.0	41.2	45.6	44.7	42.9	-2%	↘	0%
	Energy consumption (million litres)	263	236	240	193	175	164	162	-6%	↘	-37%
	Energy consumption per landed tonne (l/T)	631	664	620	547	508	476	423	-6%	↘	-25%
Output	Landings weight (thousand tonnes)	416	356	387	353	344	345	382	0%	↔	-17%
	Landings value (million €)	420	365	386	361	367	351	367	-4%	↘	-16%
	Recreational catches of selected species (T)			742		796					

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

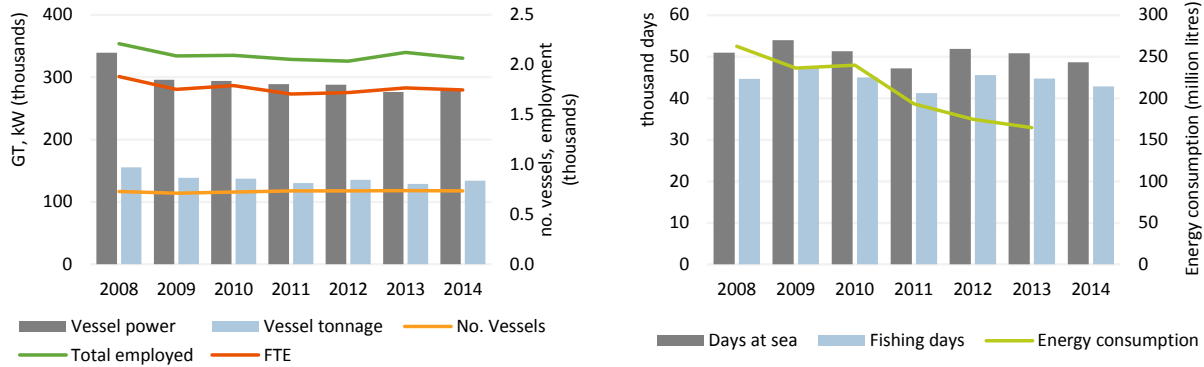
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

In 2014, the Dutch fleet spent a total of around 49 thousand days at sea. The number of days at sea decreased slightly compared to 2013. The major factor causing this decrease in days at sea was the shrinking of the Dutch active fleet.

The quantity of fuel consumed in 2013 totalled around 164 million litres, a decrease of around 6% from 2012 and 37% from 2008. The major factors causing the decrease in fuel consumption include the results of innovation programmes (introduction of new technics in fishing gear) that commenced in 2008 and the decrease of effort in kW-days. For 2014, a further reduction in fuel consumption was expected due to a further introduction of 42 extra EU-allowances for use of pulse technique. The 2 million litres decrease in fuel consumption in the provisional data is probably underestimated.

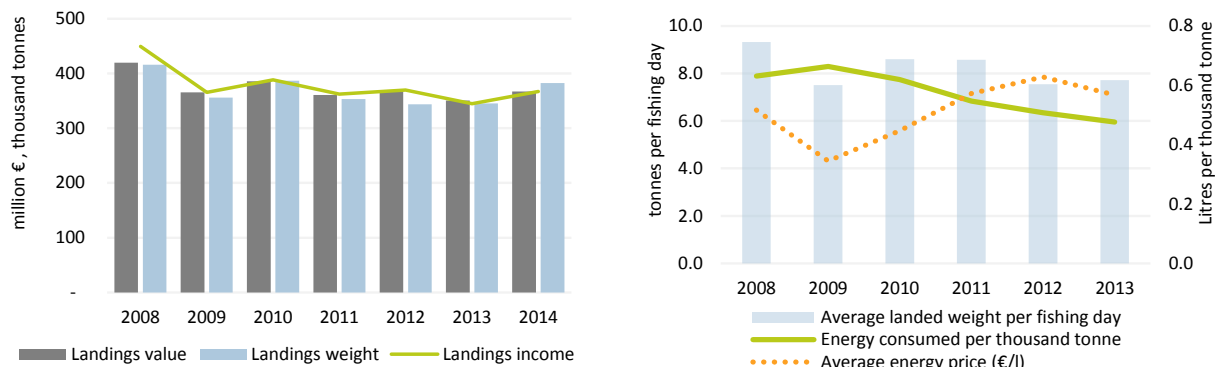
Transition to sustainable fisheries is an ongoing process. In 2014, almost all new 42 EU allowances for pulse technique were in effect in the Netherlands. This resulted in 40 to 60% less fuel consumption and lower fuel costs per vessel per day at sea. In 2015 a new innovative fuel efficient vessel (MDV-vessel) was introduced in the flatfish fleet. The estimated fuel use for this vessel is less than 1,500 litres per fishing day (24 hours). Figure 5.16.2 shows an average fuel use of around 3,700 litres per

fishing day. It is estimated that fuel consumption will decrease again in the next few years, depending on the size of the vessels.



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Figure 5.16.1 Dutch fleet main capacity and effort trends for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

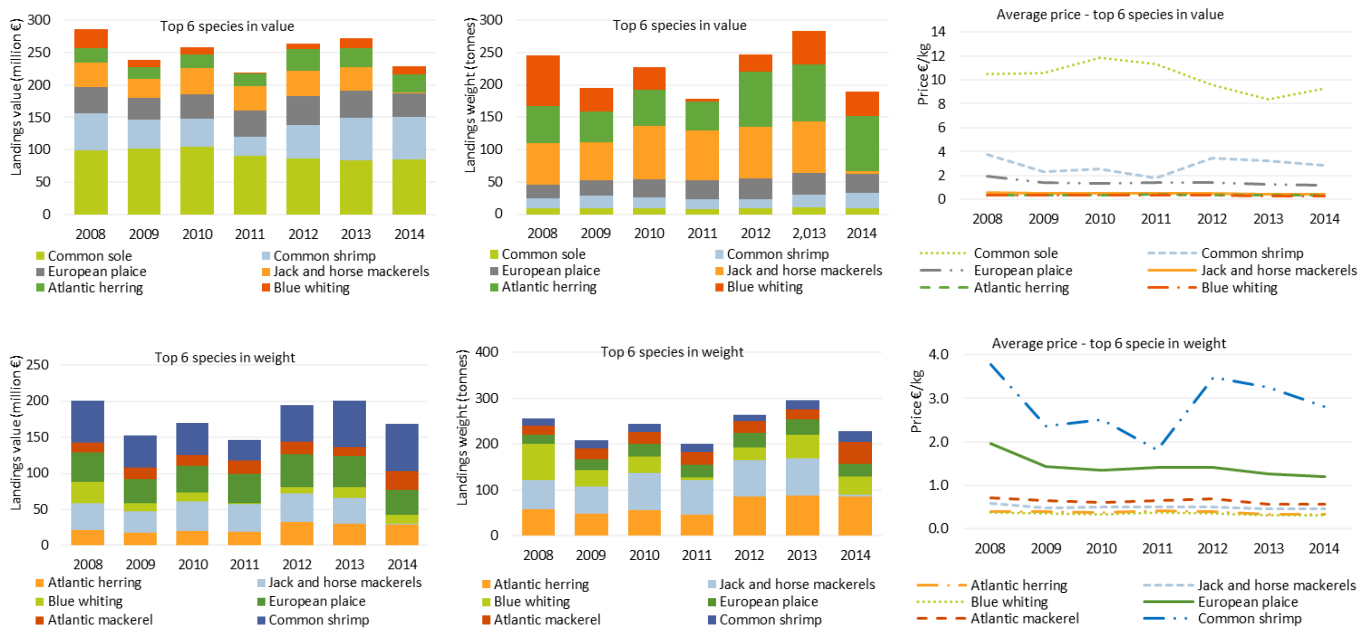
Figure 5.16.2 Landings in value and weight (and corresponding income from landings) by the Dutch national fleet and some efficiency indicators for the period 2008-2014.

The total weight of fish and shellfish landed by the Dutch fleet in 2013 was 345 thousand tonnes, with a value of €351 million. The total weight of landings was comparable to 2012 while the total value of landings decreased 4%. For 2014, both landing weight and value increased again. The fleet achieved the highest value (416 thousand tonnes) in 2008 followed by the years 2010 (387 thousand tonnes), 2014 (382 thousand tonnes), 2009 (356 thousand tonnes), 2011 (353 thousand tonnes), 2013 (345 thousand tonnes) and 2012 (344 thousand tonnes). The total landings of flatfish increased slightly in time; the total landings of pelagic fish fluctuated from year to year.

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Most of the prices for the key species presented in Figure 5.16.3 decreased since 2010. Prices for plaice and sole decreased in 2013, respectively by 36% and 20% compared to 2008. The price of shrimp increased in 2012 to almost €3.50 per kg because of rather low landings. In 2013, prices decreased slightly to €3.24 per kg (-6%). These prices for shrimp were high compared to previous years. The highest (auction) prices were paid for common sole (€8.38 per kg in 2013), followed by common shrimp (€3.23 per kg in 2013) and European plaice (€1.26 per kg in 2013). Prices (direct sales) for jack and horse mackerels remained stable. It should be noted that these are internal transaction prices within the integrated fishing and trading enterprises. In 2014, prices for shrimp and plaice decreased again, while the average price of sole increased 11%. Common sole accounted for around 25% of the total value of landings obtained by the Dutch fleet during the period 2008-2013, shrimp accounted for around 14%. In 2013 total employment (+4%) increased in the same proportion as the

number of FTE's (+3%). The increased effort of the Dutch shrimp vessels had an important role in this change.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.16.3 Dutch fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

National Fleet Economic performance

The total amount of income generated by the Dutch national fleet in 2013 was €347 million. This consisted of €345 million landings value and around €2 million in non-fishing income. Total income decreased between 2012 and 2013 but is expected to have increased in 2014. Total costs in 2013 were €344 million, consisting of €304 million in operating costs and a further €40 million in capital costs. Total costs for 2013 decreased. Labour and energy costs, the two major fishing expenses, amounted to €96 and €93 million, respectively in 2013 (Table 5.16.2). Saving fuel is one of the most important goals of the Dutch fleet. Energy costs decreased 15% between 2012 and 2013 (31% since 2008). Energy costs are likely to decrease further in 2014 and 2015, due to decreasing fuel prices and increased number of pulse vessels.

In terms of economic performance, the total amount of Gross Value Added (GVA) and gross profit generated by the Dutch national fleet in 2013 was €139 million and €43 million, respectively. All indicators are expected to further increase in 2014, with the Dutch fleet moving from making a loss to posting a net profit. The major factors causing the improvement in economic performance include higher landings of more valuable species, recovering fish prices and lower costs mainly because of decreasing fuel prices and fuel saving (e.g. pulse) techniques in the flatfish fleet. Total investment increased from 2011 to 2012, but this increase was mainly due to investments in the large pelagic trawler segment (€13 million increase). For the pelagic fleet in 2014 fishing opportunities were further limited. Fishery licenses for African waters had still not been prolonged and fishing in Pacific waters was not successful due to poor catches. Therefore, some vessels were tied up temporarily, which meant that effort decreased significantly.

In 2012, the Dutch fleet had a (depreciated) replacement value of €391 million, which was lower than the year before, and a value of fishing rights of €240 million. Fishing rights and quota are transferable in the Netherlands. Selling/buying and leasing these rights are quite common and prices fluctuate substantially from year to year, depending on market availability (e.g. quota for sole or plaice available or not). Since the introduction of the pulse (high selectivity for sole) sole prices grew substantially (lease prices of around €2.50 in 2013 and €4.00 in 2015). Investments amounted to €45 million in 2012 and did not change significantly in 2013. The major factor causing the change in the capital value of the fleet was attributed to the higher cost of building new vessels in case of replacement.

Table 5.16.2 Dutch national fishing fleet economic performance in 2008-2013 and projections for 2014.

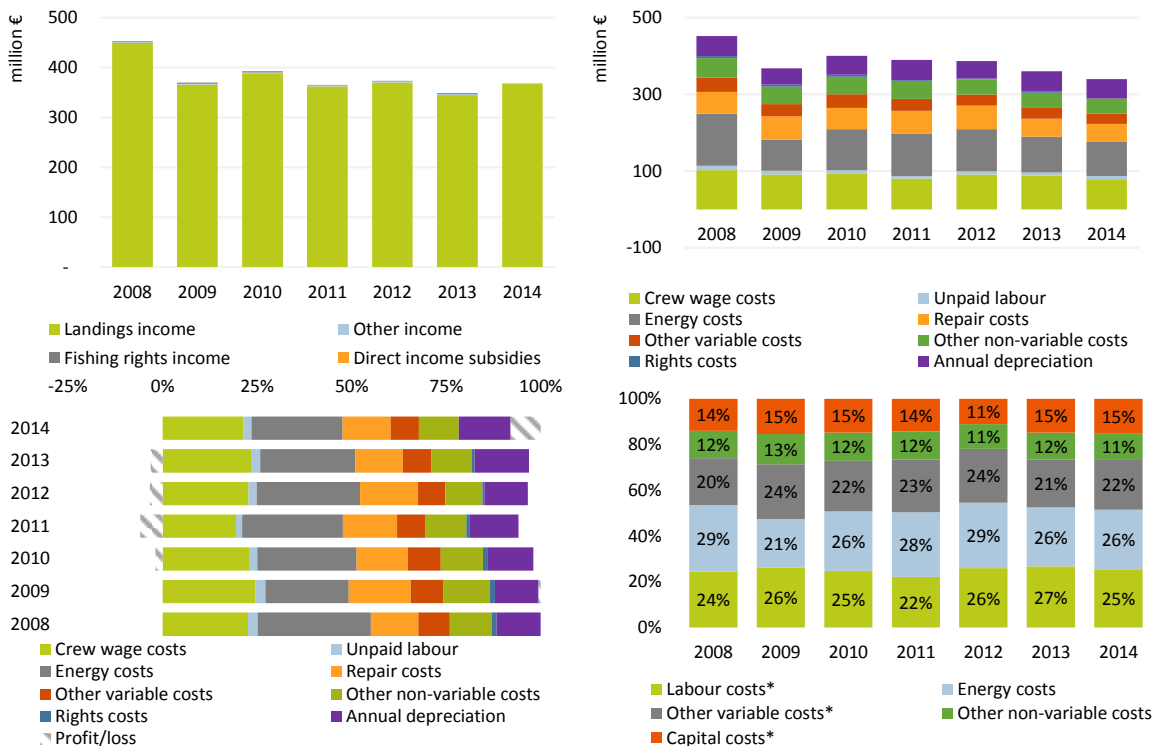
Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2013. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	406.8	334.0	358.1	342.2	359.3	343.8	366.8	-4%	↘	-15%
	Other income	1.6	1.7	1.9	1.7	2.6	1.9	2.0	-26%	↘	22%
Costs	Labour costs	113.7	100.7	102.3	87.1	99.7	96.2	86.8	-4%	↘	-15%
	Energy costs	135.6	81.5	107.1	110.5	109.6	93.3	88.9	-15%	↘	-31%
	Repair costs	57.0	60.6	55.5	59.2	61.4	47.2	46.9	-23%	↘	-17%
	Other variable costs	37.6	31.5	35.6	31.3	29.0	27.7	27.4	-4%	↘	-26%
	Other non-variable costs	50.1	45.6	45.5	44.8	39.3	40.0	39.0	2%	↗	-20%
	Capital costs	65.0	59.2	61.2	55.9	42.7	53.3	34.3	25%	↗	-18%
	Economic Indicators	GVA	128.0	116.6	116.3	98.2	122.7	137.6	166.6	12%	↗
	Gross profit	14.4	15.9	14.0	11.2	23.0	41.4	79.8	80%	↗	189%
	Net profit	-50.6	-43.4	-47.1	-44.7	-19.6	-11.9	-4.3	39%	↗	
Capital value	Depreciated replacement value	634.5	621.1	585.7	519.3	391.0		146.4			
	Investments	38.1	83.2	52.3	31.9	45.2					
Profitability and development trends	Net profit margin (%)	-12.4	-12.9	-13.1	-13.0	-5.4		-3.3			
	<i>development trend</i>										
	RoFTA (%)	-6.0	-4.3	-6.0	-8.1	-5.9		-3.17			
	<i>development trend</i>										
	GVA per FTE (thousand €)	68.0	66.6	64.9	57.6	71.3	77.9	95.3	9%	↗	15%
<i>development trend</i>											

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Highlighted capital costs and Net profit exclude opportunity cost of capital.

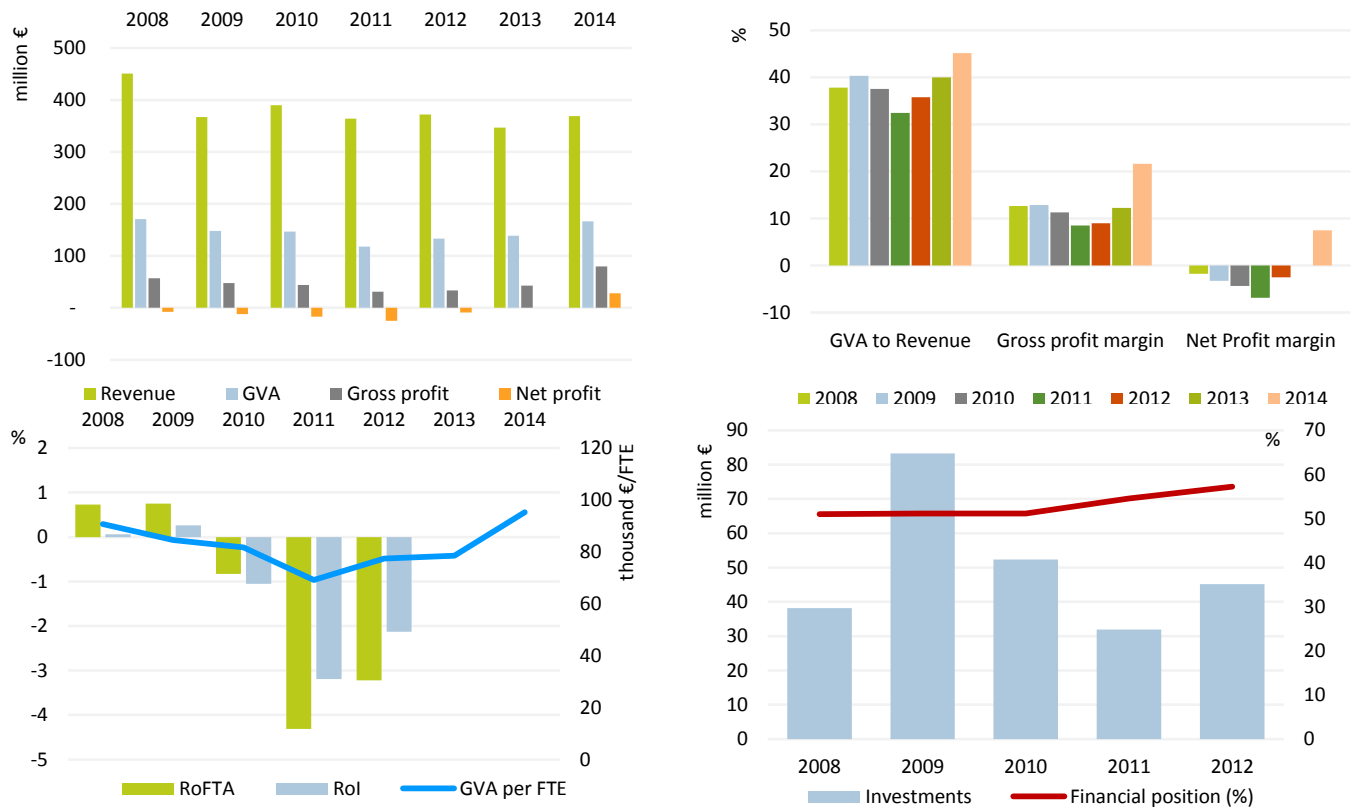
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.16.4 Income and cost structure trends for the Dutch fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.16.5 Main economic performance indicator trends for the Dutch fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Table 5.16.3 Dutch national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	162	177	176	165	179	186	178	4%	↗	407	403	397	386	371	361	360	-3%	↘
No. of Inactive vessels (#)	18.2	18.6	18.8	20.0	19.2	18.9	19.4	-2%	↘	30.4	30.9	31.5	32.4	34.0	34.3	34.7	1%	↔
Average vessel age (year)	7.0	7.2	7.2	7.3	7.4	7.4	7.4	-1%	↔	28.7	27.3	27.4	27.6	28.0	27.4	27.3	-2%	↘
Vessel tonnage (thousand GT)	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0%	↔	145.7	132.3	130.6	123.4	128.9	121.4	124.9	-6%	↘
Vessel power (thousand kW)	9.6	12.3	13.0	13.6	16.6	17.5	16.9	6%	↗	297.1	264.1	260.4	250.7	248.1	232.5	231.8	-6%	↘
Total employed (#)	350	301	324	301	333	384	368	15%	↗	1,861	1,788	1,769	1,753	1,701	1,739	1,696	2%	↗
FTE (#)	132	94	125	73	106	105	108	-1%	↔	1,751	1,658	1,666	1,633	1,615	1,662	1,639	3%	↗
Average wage per employed (thousand €)	7.1	4.7	2.8	2.9	4.5	3.4	3.5	-25%	↘	59.7	55.6	57.3	49.2	57.7	54.6	50.4	-5%	↘
Average wage per FTE (thousand €)	18.9	15.0	7.2	11.8	14.1	12.3	11.9	-13%	↘	63.5	59.9	60.9	52.8	60.8	57.1	52.2	-6%	↘
Days at sea (thousand days)	2.6	2.6	2.7	2.5	2.9	2.8	2.9	-2%	↘	48.4	51.3	48.6	44.6	49.0	48.0	45.8	-2%	↘
Fishing days (thousand days)	2.4	2.5	2.5	2.4	2.7	2.6	2.7	-2%	↘	42.3	44.9	42.5	38.9	42.9	42.1	40.1	-2%	↘
Energy consumption (million litres)	0.9	0.6	0.8	1.2	0.7	0.8	0.9	19%	↗	261.6	235.5	238.8	192.1	173.9	163.6	160.9	-6%	↘
Energy consumption per landed tonne (l/T)	1,879	1,137	1,640	2,709	1,352	1,670	2,071	24%	↗	629.6	662.9	618.3	544.4	506.6	474.7	421.1	-6%	↘
Landings weight (thousand tonnes)	0.5	0.5	0.5	0.4	0.5	0.5	0.4	-4%	↘	415.5	355.3	386.3	352.8	343.2	344.6	382.0	0%	↔
Landings value (million €)	3.4	3.2	3.6	3.7	3.9	3.4	2.1	-14%	↘	416.3	362.2	382.2	356.9	363.0	347.3	364.7	-4%	↘

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Table 5.16.4 Economic performance of the Dutch national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			
Income	Landings income	8.9	5.5	4.8	4.5	5.2	5.0	2.1	-5%	↘	440.6	360.0	383.4	357.6	364.5	340.0	364.7	-7%	↘
	Other income	0.0	0.0	0.0	0.0	0.2	0.1	0.1	-41%	↘	1.6	1.7	1.9	1.7	2.4	1.8	1.9	-25%	↘
	Direct income subsidies	0.0	0.0	0.0	0.0	0.0	0.0												
	Fishing rights income	0.0	0.0	0.0	0.0	0.0	0.16				1.7	2.6	2.5	1.6	1.3	1.9		49%	↗
Costs	Labour costs	2.5	1.4	0.9	0.9	1.5	1.3	1.3	-13%	↘	111.2	99.3	101.4	86.2	98.2	94.9	85.5	-3%	↘
	Energy costs	0.8	0.4	0.6	0.5	0.6	0.6	0.6	11%	↗	134.8	81.1	106.5	110.0	109.1	92.7	88.3	-15%	↘
	Repair costs	1.2	0.6	0.8	0.6	0.6	1.1	1.1	79%	↗	55.8	60.0	54.7	58.6	60.7	46.1	45.7	-24%	↘
	Other variable costs	0.7	0.4	0.6	0.2	0.3	0.3	0.3	23%	↗	36.9	31.1	35.0	31.1	28.7	27.4	27.1	-5%	↘
	Other non-variable costs	0.7	0.4	0.6	0.3	0.4	0.4	0.4	-14%	↘	49.5	45.2	44.9	44.5	38.8	39.6	38.7	2%	↗
	Capital costs	2.1	1.3	1.7	1.0	0.9	0.8	1.0	-6%	↘	60.8	55.8	57.8	54.5	42.3	33.9	33.4	-20%	↘
Capital value	Depreciated replacement value	20.7	12.1	14.3	11.9	11.6	11.0	10.5	-5%	↘	505.5	526.6	491.0	435.6	322.6	135.7	125.1	-58%	↘
	Investments										38.1	83.2	52.3	31.9	45.2	0.8		-98%	↘
Economic indicators	GVA	5.6	3.7	2.2	2.9	3.6	2.7	-0.2	-25%	↘	165.1	144.4	144.2	115.1	129.5	136.0	166.8	5%	↗
	Gross profit	3.1	2.3	1.3	2.1	2.1	1.4	-1.5	-33%	↘	53.9	45.1	42.9	28.9	31.3	41.1	81.3	31%	↗
	Gross profit margin	34.8	41.0	26.9	45.7	38.1	27.3	-67.5	-28%	↘	12.2	12.5	11.1	8.1	8.5	12.0	22.2	41%	↗
	Net profit	1.0	1.0	-0.4	1.1	1.2	0.6	-2.5	-53%	↘	-6.8	-10.7	-14.9	-25.6	-11.0	-25.4	-1.8	-132%	↘
Profitability and development trends	Net Profit margin	11.5	17.5	-9.0	23.5	22.2	11.3	-110.8	-49%	↘	-1.6	-3.0	-3.9	-7.1	-3.0	-23.9	-1.4	-698%	↘
	<i>development trend</i>				Deteriorated				-14%	↘				Deteriorated				-545%	↘
	RoFTA (%)	6.9	10.6	-0.9	9.4	9.6	4.6	-22.4	-52%	↘	0.6	0.6	-1.0	-5.4	-4.3	-19.4	-0.3	-356%	↘
	<i>development trend</i>				Deteriorated				-35%	↘				Deteriorated				-936%	↘
GVA per FTE (thousand €)		42.4	39.1	17.5	40.0	33.7	25.6	-2.0	-24%	↘	94.3	87.1	86.6	70.5	80.2	81.9	101.8	2%	↗
	<i>development trend</i>				Deteriorated				-26%	↘				Stable				-2%	↘

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Fleet Segment Level Economic performance

The Dutch fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the North Sea (demersal fleet) and North East Atlantic Ocean (pelagic fleet), around the UK and Ireland. Besides that, a part of the pelagic fleet operates in African waters and in the Pacific.

The economic performance of the fleet relies heavily on innovation and technical/structural development. The Dutch government and the EU supported the fisheries sector to produce fish in a more sustainable way with economic perspectives. Projects started a few years ago (e.g. 'knowledge networks') helped to improve entrepreneurship in fisheries so that fishermen will be able to compete in international fish business in future.

The national fleet consisted of 14 (DCF) fleet segments in 2013. Almost all of the larger active fleet segments made profits in 2013. Table 5.16.3 and Table 5.16.4 provide a breakdown of key performance indicators by fishing activity (small and large-scale fleets).

Table 5.16.5 provides a breakdown of key performance indicators for all 14 fleet segments in 2013. A short description of the four most important segments in terms of total value of landings is provided below.

Beam trawl over 40m – 55 vessels make up this segment which operates predominantly in the North Sea. The fleet targets a variety of species but in particular flatfish, such as sole, plaice and turbot. In 2013, the total value of landings was over €106 million and around 370 FTEs were employed in this fleet segment, contributing to 30% and 21% of the total income from landings and FTEs generated by the Dutch fishing fleet, respectively. This fleet segment was profitable, with a reported gross profit of around €13 million in 2013.

The total number of vessels in this fleet segment decreased 8%. Rising fuel prices have started a transition in the segment structure. The most important development was the change in flatfish fishing methods. In 2011 and 2012 vessels invested in replacement of beam trawl by some other newly developed fishing methods. Replacement of the beam with the 'SumWing' (an aquadynamic wing) showed fuel savings (up to 15%) and fishing with pulse techniques combined with the SumWing showed even larger fuel saving results compared to the conventional beam trawl (up to 60%).

Conventional beam trawl vessels generally made losses in 2013, SumWing vessels made a small profit whereas vessels fishing with pulse techniques made a reasonable profit. Research pilots concerning pulse techniques show significantly less impact on the seabed and less unwanted by-catches (non-commercial fish/discards). Generally it can be said that flatfish (especially sole) can be caught cheaper by using pulse technique despite rather high investments. Compared to the beam trawl fishery, the pulse trawl fishery is more sustainable at least with regards to energy consumption and species selectivity. However, vessels fishing with the pulse technique only have a permit on a temporary basis. It is still not known if the pulse technique will be allowed permanently in the future.

In 2013, an increased amount of sole was landed due to the increased selectivity for this species by fishing with pulse technique. Landings of other individual species did not change very much. The total landings decreased by 7% and the value of landings decreased by 6%, mainly due to the decreasing number of vessels. Employment decreased by 6% and fuel consumption dropped by 10% in this segment. As a result, total costs decreased and Gross Value Added increased by 2% compared to 2012.

Pelagic trawl over 40m – 12 vessels made up this segment which operated predominantly in the North East Atlantic Ocean and to a lesser extent in the North Sea. The fleet targeted pelagic species, particularly herring, mackerel, horse mackerel, blue whiting and sardines. The total value of landings dropped to €100 million and around 475 FTEs were employed in this fleet segment, contributing to 28% and 27% of the total income from landings and FTEs generated by the Dutch fishing fleet, respectively. This fleet segment was not profitable. Effort in terms of days at sea decreased by 19% and mainly as a result of that the use of energy decreased. Lower landings weight (-1%) and lower fish prices resulted in a lower value of landings (-14%). Net results of this segment were still negative, but slightly improving (+3%). It should be noted that the prices obtained from the pelagic sector are internal prices used to calculate the wage of the crew of the fishing vessel. The integrated companies cover the whole production chain from fishing to the consumer and there are no real market prices to compare with. Information about the economic performance of the overall companies is not available, so it is hard to evaluate whether the profits presented here resemble reality.

Beam trawl 18-24m – 156 vessels made up this segment which operated predominantly in the North Sea and in the coastal zone. The fleet mainly targeted common shrimp and some vessels targeted langoustines (seasonally) and flatfish, such as sole, plaice and turbot. In 2013, the total value of landings was over €73 million and around 430 FTEs were employed in this fleet segment, contributing to 21% and 24% of the total income from landings and FTEs generated by the Dutch fishing fleet, respectively.

This fleet segment was profitable, mainly because of high average price for shrimp, with a reported gross profit of around €11 million in 2013. Effort in terms of days at sea increased by 4% compared to 2012 and energy consumption increased by 11%. Landings weight increased 28%.

In this segment a growing number of vessels started to invest in pulse technique, targeting flatfish (mainly sole). Some vessels started to implement pulse technique targeting shrimp. The first results provide a perspective for the future because of the more sustainable character of the gear compared to traditional beam trawl for shrimp. Economic results look promising (apart from high costs of investments). First results show up to 25% fuel saving compared to (shrimp) beam trawl. However, fishing with pulse technique is only temporary allowed and it remains unclear whether this technique will be allowed permanently in future.

Beam trawl 24-40m – 32 vessels made up this segment which operated predominantly in the North Sea. The fleet targeted a variety of species like mullet, gurnard, squid and sea bass (mainly fly shoot method) but in particular flatfish, such as sole, plaice and turbot. In 2013, the total value of landings was over €32 million and around 150 FTEs were employed in this fleet segment, contributed to 9% of both the total income from landings and FTEs generated by the Dutch fishing fleet.

This fleet segment was profitable, with a reported gross profit of around €5 million in 2013. Vessels in this segment also started using pulse techniques on a temporary basis with positive economic results, whereas the economic performance of the conventional beam trawl was generally quite negative.

Assessment and Future Trends

The most important issues in the Dutch fishery sector are:

Fisheries in general

Closed areas: Demersal trawl fisheries are facing many closed areas because of Natura 2000. Beside that other activities in the North Sea other than fisheries claim more and more space. As a result, fisheries are forced to move to other areas.

Landing obligation: The fisheries sector is preparing to meet the requirements with respect to landing obligation which started in January 2015 for the pelagic fisheries and will start in January 2016 for the demersal fisheries. Fishermen started projects (supported by the Dutch government and EU) to decrease unwanted bycatch and to develop markets for landed unwanted catch. Generally fishermen share ideas (within knowledge networks) about designs of gear to diminish discards. Besides that, ideas about fishing behaviour are exchanged so that the impact of fisheries will be minimised.

Vessel Innovation: Figures in this report show an ongoing ageing of the fleet. As a result, the fleet will depreciate and become outdated in the near future. Fishermen, in cooperation with suppliers and ship builders, now develop a new vessel concept so that fisheries can be operating in a more sustainable and fuel saving way in the future (improvement of competitiveness).

Finance: Entrepreneurs in fisheries face problems with finding finance for investment in innovation to get a better economic position and to make fisheries more sustainable.

Fish prices: The general trend in lower prices for most fish species stopped in 2013. In 2014 most fish prices increased again.

Flatfish fishery in general (the beam trawl 12-18m, 24-40m and over 40m segments)

Increase of EU allowances for pulse technique: In March 2014 another 42 permits became available for the flatfish fleet. By this action almost all conventional beam trawl vessels (>24 meter) replaced their fishing gear with the pulse technique during this year. As a consequence it is expected that total energy consumption will continue to decrease significantly for these segments.

Quota for sole: Since the pulse technique has a high selectivity for sole, it can be expected that quota for this specie will be fully exploited. This contrasts to past years where sole quota was not fully exploited. The increasing plaice quota will most probably only be exploited partly because of low pricing and the shift to pulse fishing.

Shrimp fishery in general (the beam trawl 18-24m segment)

Pulse technique for shrimp: Further introduction of pulse techniques in the shrimp fisheries has been put on hold due to a general demand (fishermen, NGO's) to collect more and better information and to assess the impact on shrimps and other species induced by this new technique.

Landing prices: Low landings in the first half of 2015 resulted in reasonable average prices for shrimp.

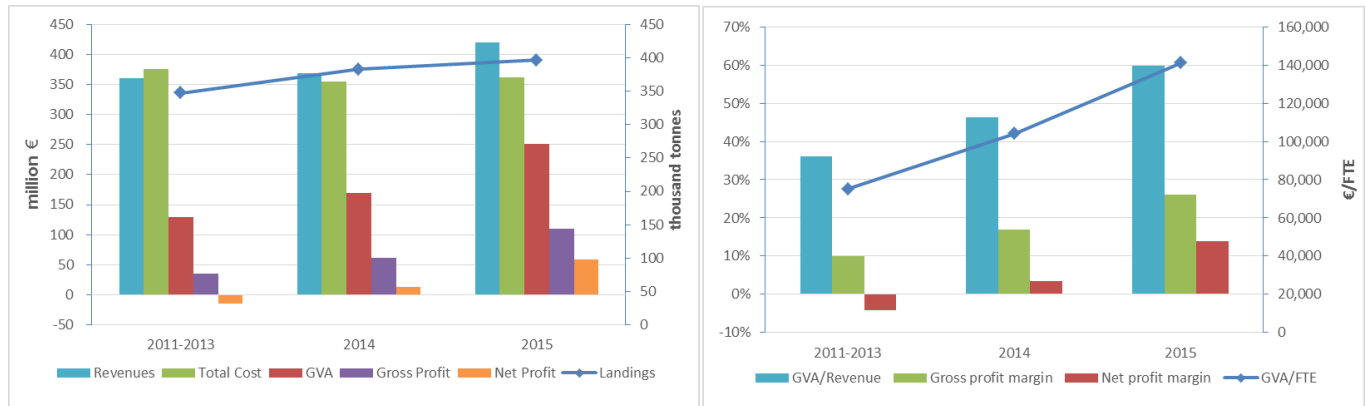
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According to BEMEF projections, the Dutch fishing fleet sees improved economic performance in 2014 with an increase in landings (+10%) offsetting a decrease in fish prices to raise revenue by 2%. With total costs falling 5% there is a dramatic reversal in net profit from -€15 million to €13 million.

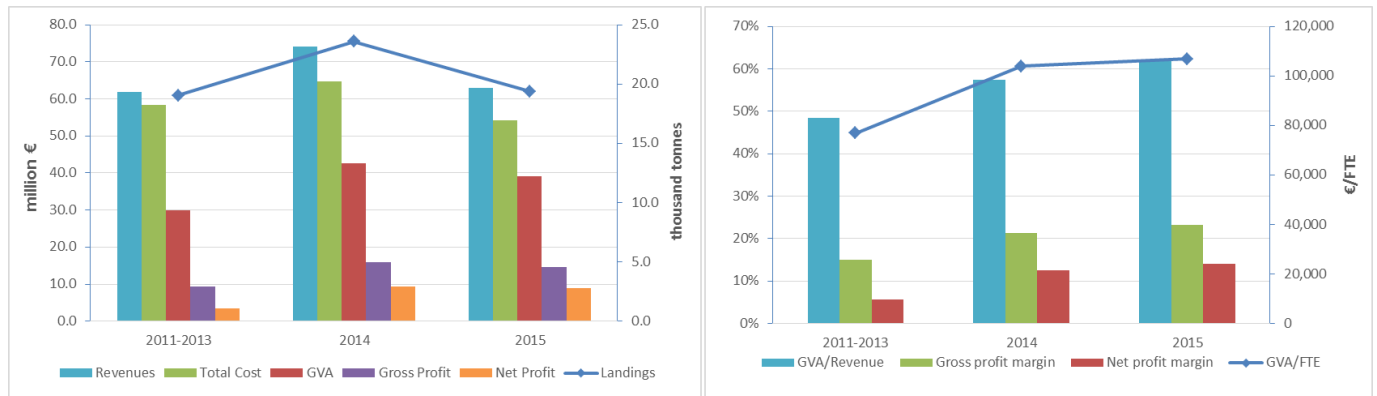
Economic performance continues to improve in 2015 for the Dutch fleet with a 14% increase in revenue and stable costs leading to improvements in measures of profitability. Net profit continues to grow, increasing from €13 million to €59 million and GVA/ FTE increases from €104,000 to €141,000.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

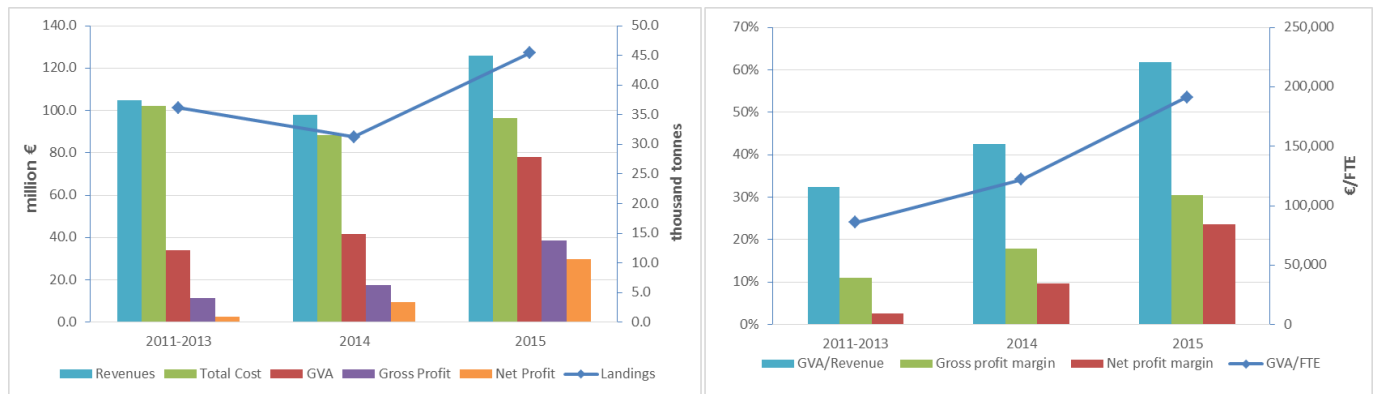
Figure 5.16.6 Netherlands: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results on the top 3 Dutch fleets by gross earnings.



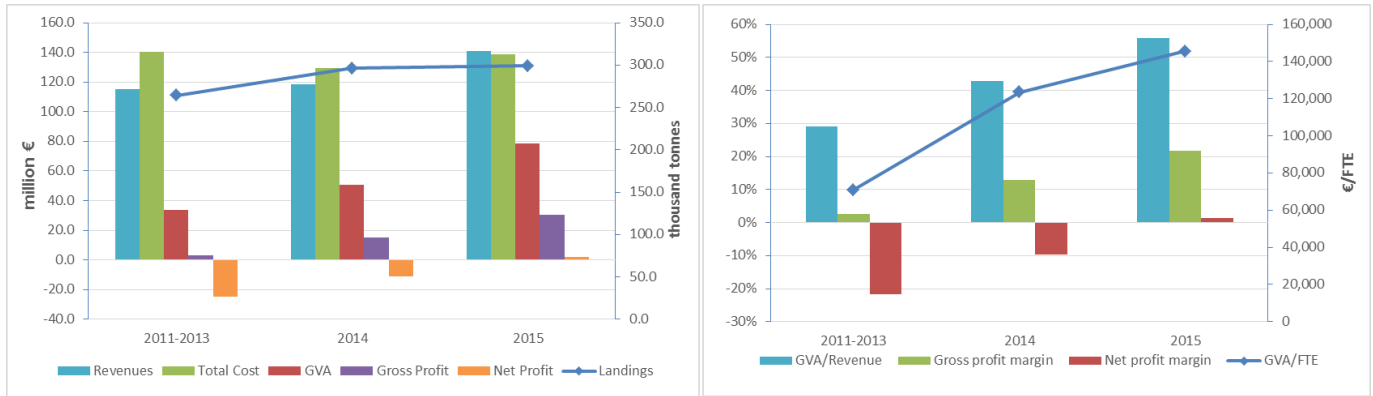
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.16.7 NLD AREA27 TBB VL1824: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

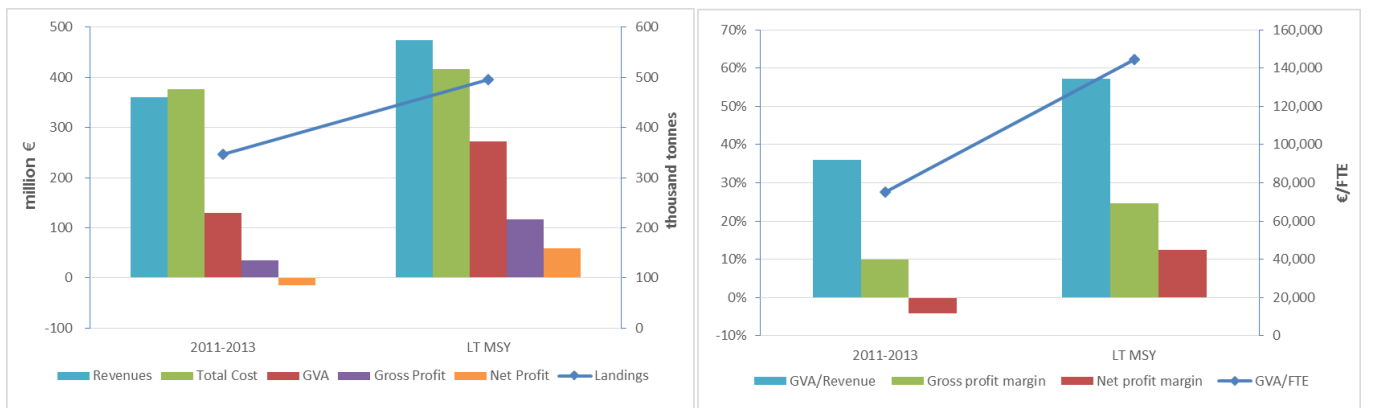
Figure 5.16.8 NLD AREA27 TBB VL40XX: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.16.9 NLD AREA27 TM VL40XX: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, a state of long-term MSY results in improved economic performance for the Dutch fishing fleet. Landings increase by 43% to 495,000 tonnes and revenue increase 31% to €474 million while total costs increased by only 11% to €416 million. Improvements are also seen in GVA/FTE (+93% to €145,000) and GVA/revenue, which increases from a low level of 36% to 57%.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.16.10 The Netherlands: MSY projections for the main socio-economic indicators.

Data issues

Most of the segments in the Dutch fishing fleet were well covered. In some of the smaller segments (DRB 0-10 m, DTS 0-10 m and TBB 12-18 m) variation in activity levels was high resulting in high uncertainty in the economic indicators estimates and large fluctuations from year to year. Moreover the smaller fleet segments are clusters of vessels using different fishing techniques:

- Drift and/or fixed netters 12-< 18 m include drift and/or fixed netters 12-< 18 m and vessels using pots and/or traps 12-< 18 m
- Drift and/or fixed netters 18-< 24 m include drift and/or fixed netters 18-< 24 m, vessels using pots and/or traps 18-< 24 m and vessel using other active gears 18-< 24 m
- Dredgers 24-< 40 m include drift and/or fixed netters 24-< 40 m, dredgers 24-< 40 m and dredgers 40 m or larger
- Beam trawlers 0-< 10 m include Demersal trawlers and/or demersal seiners 10-12m, purse seiners 0-< 10 m, beam trawlers 0-< 10 m, beam trawlers 10-< 12 m, pelagic trawlers 0-< 10 m and pelagic trawlers 10-< 12 m.
- Beam trawlers 12-< 18 m include demersal trawlers and/or demersal seiners 12-18m, beam trawlers 12-< 18 m and pelagic trawlers 12-< 18 m.

Therefore, these figures should be viewed as indicative for the size of the sector rather than describing the exact trends. Currently work is being carried out to improve the estimation procedures.

Table 5.16.5 Main socio-economic performance indicators by fleet segment in the Dutch national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend	
	No.	% Δ	FTE	% Δ	Days	% Δ	Energy	% Δ	Value	% Δ	Weight	% Δ	GVA	% Δ	GVA per FTE	% Δ	Gross	% Δ	Net	% Δ	Net	% Δ				
NLD AREA27 DFN VL1218*	14	17%	7	11%	535	-9%	57	33%	1,184	-2%	249	36%	188	-16%	25.6	-24%	97	-25%	40	-47%	11.3	-49%	High	-14%	Deteriorated	
NLD AREA27 DFN VL1824*	11	-21%	23	50%	641	45%	95	-84%	1,603	96%	465	269%	786	-44%	34.1	-63%	478	66%	396	4844%	34.5	12221%	High	377%	Improved	
NLD AREA27 DRB VL2440*	7	-13%	25	96%	486	-2%	95	-85%	4,378	-1%	3,461	3%	851	-37%	34.7	-68%	526	93%	469	875%	39.2	2181%	High	185%	Improved	
NLD AREA27 DTS VL0010*	14	8%	8	174%	55	125%	54	106%	52	117%	18	77%	126	546%	16.5	263%	84	317%	32	129%	13.2	108%	High	109%	Improved	
NLD AREA27 DTS VL1824*	8	-43%	46	-21%	1,609	-29%	3,042	-32%	7,050	-21%	2,998	-15%	3,721	-11%	81.7	12%	1,528	19%	687							
NLD AREA27 DTS VL2440*	18	-18%	97	-15%	3,419	-16%	6,502	-37%	18,983	-28%	9,812	-14%	7,608	-28%	78.2	-15%	2,621	-30%	1,781							
NLD AREA27 PG VL0010*	173	4%	98	0%	2,540	2%	761	20%	2,867	-11%	399	-1%	2,493	-24%	25.6	-24%	1,295	-32%	534	-52%	11.3	-49%	High	-14%	Deteriorated	
NLD AREA27 PG VL1012*	13	0%	7	-11%	277	-28%	57	6%	491	-29%	91	-12%	188	-33%	25.6	-24%	97	-40%	40	-58%	11.3	-49%	High	-14%	Deteriorated	
NLD AREA27 TBB VL0010*	19	12%	8	-24%	190	-15%	56	-21%	386	-7%	86	14%	225	-61%	27.8	-48%	108	-11%	26	69%	-5.3	40%	Weak	94%	Improved	
NLD AREA27 TBB VL1218*	15	-12%	25	-4%	686	-13%	1,236	6%	2,038	-15%	615	-3%	1,943	-15%	78.3	-12%	607	-27%	287	-35%	7.2	-31%	Reasonable	287%	Improved	
NLD AREA27 TBB VL1824*	156	3%	431	15%	21,970	4%	23,868	11%	73,384	19%	21,689	28%	36,585	-2%	84.8	-15%	11,168	-23%	10,327							
NLD AREA27 TBB VL2440*	32	14%	151	24%	5,290	15%	17,971	21%	32,083	17%	11,819	29%	13,708	25%	91.0	1%	4,787	24%	3,946							
NLD AREA27 TBB VL40XX*	55	-8%	367	-6%	11,018	-6%	53,415	-10%	106,380	-6%	35,344	-7%	34,304	2%	93.6	8%	12,542	11%	11,701							
NLD AREA27 TM VL40XX*	12	-14%	475	-2%	2,070	-19%	57,201	-6%	99,730	-14%	258,040	-1%	35,998	32%	75.8	35%	6,592	234%	26,636	3%	-26.8	-12%	Weak	-100%	Deteriorated	

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Table 5.16.6 Main socio-economic performance indicators by fleet segment in the Dutch national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		Energy costs		Operating costs		GVA		Net profit		%Δ 2013 to average (2008-12)	Economic development trend		
	FTE	% Δ	Days	% Δ	Weight	% Δ	Landings	% Δ	Wage	% Δ	Wage	% Δ	Wage	% Δ	consumed	% Δ	Energy	% Δ	Operating	% Δ	GVA	% Δ	Net	% Δ				
NLD AREA27 DFN VL1218*	0.5	-5%	38	-22%	466	49%	518	49%	6,440	-17%	5,308	-25%	1,443	-35%	230	-2%	3,143	5%	18,513	5%	18,513	5%	13,401	-28%	2,869	-55%	-32%	Deteriorated
NLD AREA27 DFN VL1824*	2.1	92%	58	85%	725	153%	814	152%	27,926	-65%	10,289	-80%	8,462	-68%	205	-96%	6,704	-76%	60,854	-76%	60,854	-67%	71,410	-29%	36,001	6189%	722%	Improved
NLD AREA27 DRB VL2440*	3.5	124%	69	12%	7,128	6%	8,361	7%	46,322	-65%	10,287	-84%	10,081	-73%	27	-86%	10,584	-80%	95,728	-80%	95,728	-70%	121,535	-28%	67,070	1014%	362%	Improved
NLD AREA27 DTS VL0010*	0.6	150%	4	109%	326	-22%	343	-22%	2,990	267%	1	-100%	0	-99%	3,000	17%	2,421	101%	11,346	101%	11,346	38%	9,013	514%	2,291	127%	147%	Improved
NLD AREA27 DTS VL1824*	5.7	38%	201	24%	1,863	20%	2,099	21%	274,228	32%	44,917	-11%	44,467	-11%	1,015	-20%	228,085	8%	800,212	8%	800,212	13%	465,184	55%				
NLD AREA27 DTS VL2440*	5.4	4%	190	3%	2,870	2%	3,358	3%	277,040	-10%	46,404	-16%	46,557	-16%	663	-27%	230,785	-28%	937,868	-28%	937,868	-10%	422,677	-12%				
NLD AREA27 PG VL0010*	0.6	-5%	15	-3%	157	-3%	167	-3%	6,924	-16%	5,307	-25%	1,450	-35%	1,906	22%	3,379	6%	19,905	6%	19,905	7%	14,408	-27%	3,084	-54%	-31%	Deteriorated
NLD AREA27 PG VL1012*	0.6	-13%	21	-28%	327	22%	365	22%	6,936	-23%	5,308	-25%	1,443	-36%	632	21%	3,384	-2%	19,938	-2%	19,938	-2%	14,432	-33%	3,089	-58%	-30%	Deteriorated
NLD AREA27 TBB VL0010*	0.4	-32%	10	-24%	451	34%	479	35%	6,159	-77%	10,319	-51%	2,989	-65%	650	-31%	2,156	-27%	20,006	-27%	20,006	-59%	11,853	-65%	1,349	72%	87%	Improved
NLD AREA27 TBB VL1218*	1.7	8%	46	-1%	897	11%	997	11%	89,074	3%	42,298	2%	32,808	6%	2,009	9%	51,518	8%	225,205	8%	225,205	13%	129,536	-4%	19,142	-26%	699%	Improved
NLD AREA27 TBB VL1824*	2.8	13%	141	1%	987	23%	1,097	23%	162,932	8%	46,430	-3%	46,255	-4%	1,100	-13%	95,412	-2%	408,229	-2%	408,229	13%	234,521	-4%				
NLD AREA27 TBB VL2440*	4.7	9%	165	0%	2,234	12%	2,561	13%	278,786	10%	54,619	2%	54,471	2%	1,521	-6%	345,090	-4%	970,370	-4%	970,370	6%	428,370	10%				
NLD AREA27 TBB VL40XX*	6.7	3%	200	2%	3,208	-1%	3,774	-1%	395,677	7%	57,993	4%	57,922	4%	1,511	-2%	595,377	-10%	1,535,111	-10%	1,535,111	-2%	623,712	12%				
NLD AREA27 TM VL40XX*	39.6	14%	172	-6%	124,679	23%	155,850	23%	2,450,516	7%	61,951	-6%	61,951	-6%	222	-6%	2,247,504	-4%	7,719,594	-4%	7,719,594	-9%	2,999,855	54%	-2,219,649	-13%	-74%	Deteriorated

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

5.17 POLAND

Fleet Structure, Fishing Activity and Production

In 2013, the Polish fishing fleet consisted of 798 registered vessels, including 43 inactive vessels, with a combined gross tonnage of 33 thousand GT, a total engine power of 82 thousand kW and an average age of 29 years. The number of vessels, capacity and engine power remained stable between 2013 and 2012. According to preliminary figures the fleet continued development in 2014. The number of vessels has increased by 5% with almost unchanged capacity and engine power figures.

In 2013, the number of fishing enterprises totalled 699, with the vast majority (91%), owning a single vessel. Only 9% of the enterprises owned two to five fishing vessels. Total employment in 2013 was estimated at 2,430 jobs, corresponding to 1,580 FTEs. The level of employment decreased slightly between 2012 and 2013, with total employment falling by 3% and the number of FTEs falling by 4% over the period. The major factor causing employment to decrease was the deteriorating economic condition of the Baltic Sea fleet.

Table 5.17.1 Polish national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	864	832	806	793	790	798	838	1%	↗	-8%
	No. of Inactive vessels (#)	41	109	99	84	38	43	42	13%	↗	5%
	Average vessel age (year)	28	28	28	28	29	29	28	0%	↔	3%
	Vessel tonnage (thousand GT)	30	41	38	37	33	33	34	0%	↔	11%
	Vessel power (thousand kW)	97	99	91	87	83	82	81	-1%	↘	-15%
	No. of Enterprises (#)	803	765	726	713	702	699		0%	↔	-13%
Employment	Total employed (#)	3,026	2,512	2,434	2,411	2,504	2,430	2,474	-3%	↘	-20%
	FTE (#)	1,701	1,572	1,504	1,511	1,652	1,580	1,533	-4%	↘	-7%
	Average wage per employed (thousand €)	4.4	4.1	5.1	5.5	6.6	8.3	7.1	26%	↗	87%
	Average wage per FTE (thousand €)	7.8	6.5	8.2	8.8	10.0	12.7	11.9	28%	↗	62%
Fishing Effort	Days at sea (thousand days)	66	62	58	59	67	71	75	6%	↗	7%
	Fishing days (thousand days)	63	60	55	57	64	68	71	6%	↗	9%
	Energy consumption (million litres)	16	13	17	18	20	19	17	-5%	↘	21%
	Energy consumption per landed tonne (l/T)	127	59	100	98	113	99	164	-12%	↘	-22%
Output	Landings weight (thousand tonnes)	126	212	171	180	179	195	170	9%	↗	55%
	Landings value (million €)	40	42	43	48	56	57	47	1%	↗	40%
	Recreational catches of selected species (T)	1,042	1,703	1,106	1,059	718	877		22%	↗	-16%

*all monetary values have been adjusted for inflation; constant prices (2014)

Landed value under-reported in respect of landed weight; values exclude the DTS and TM fleet segments over 40 meters

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

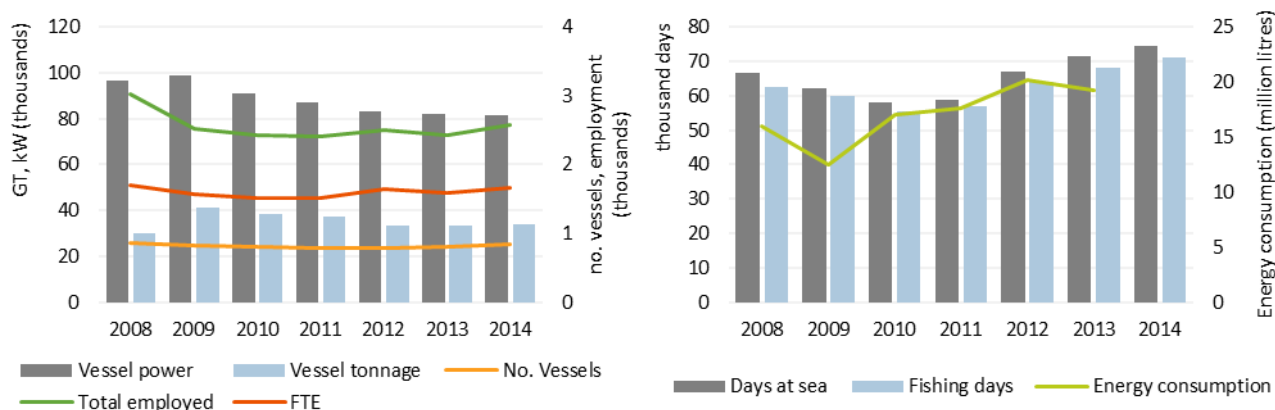
Note: Distant water fleet excluded from wages, energy consumption and landings value.

The Polish fleet spent a total of around 67 thousand days at sea in 2012. The total number of days at sea in 2013 amounted to 71 thousand days, 6% higher than in 2012. The upward trend was continued in 2014. The increase can be explained by greater effort deployed by the demersal fleet targeting mostly cod and flatfish but that has reallocated their effort towards pelagic species (sprat and herring), attracted by prices increases. On the other hand deteriorated cod CPUE (caused by the poor condition of stocks) made the fleet spend more time at sea in order to keep the revenues at an acceptable level. A significant increase of small scale vessels' (PG VL0010) effort also contributed to a growth in the total number of days at sea. In addition to the above-mentioned unfavourable cod condition, this was also a consequence of a growing number of vessels in the segment.

The quantity of fuel consumed in 2013 totalled 19 million litres, a decrease of 5% from 2012. The decreased energy consumption and increased number of days at sea can seemingly look unlikely but may be caused by a change in the effort pattern (decreased activity of large scale fleets like TM VL2440, DTS1824 or DFN1218).

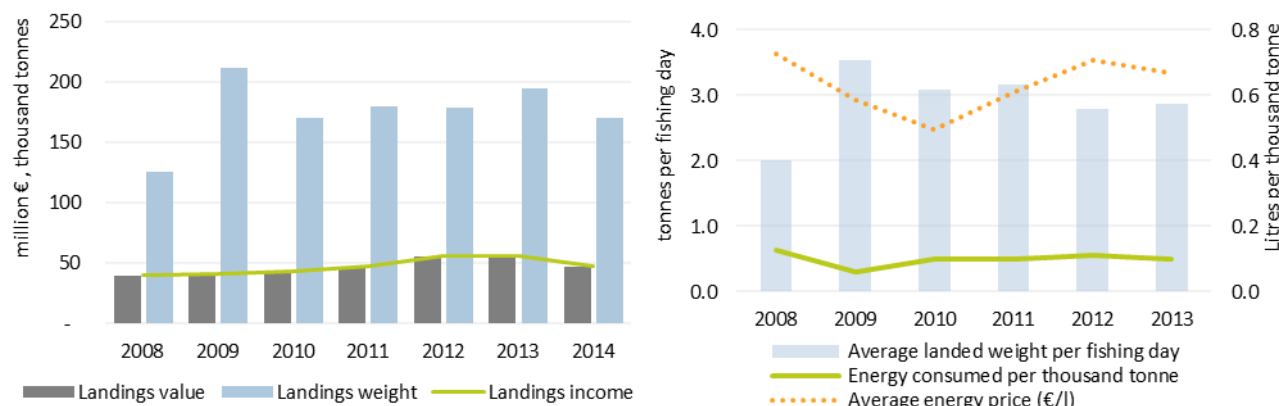
The total weight of seafood landed by the Polish fleet in 2014 was 170 thousand tonnes (-13%). The total amount of the Polish Baltic Sea fleet landings was 118 thousand tonnes, with a landed value of €47.5m. The total landings weight and value of the Baltic Sea fleet decreased by 11% and 16% respectively between 2014 and 2013. The reason behind that deterioration was a TAC cut for sprat (-11%) and again by the poor physical condition of Baltic cod influencing prices obtained by fishermen for that fish.

In 2014 European sprat generated the highest landed value in the Baltic fisheries (€14.5m), followed by Atlantic cod (€13m), Atlantic herring (€10m), and European flounder (€4m). In terms of landings weight, in 2014 European sprat landings were 58.4 thousand tonnes, Atlantic cod 11.9 thousand tonnes and Atlantic herring 28.3 thousand tonnes. The major factor causing the changes in landings weight and value in 2014 compared to 2013 was the decreased TAC for sprat and cod and the increased TAC for herring, as well as lower prices for all these species.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

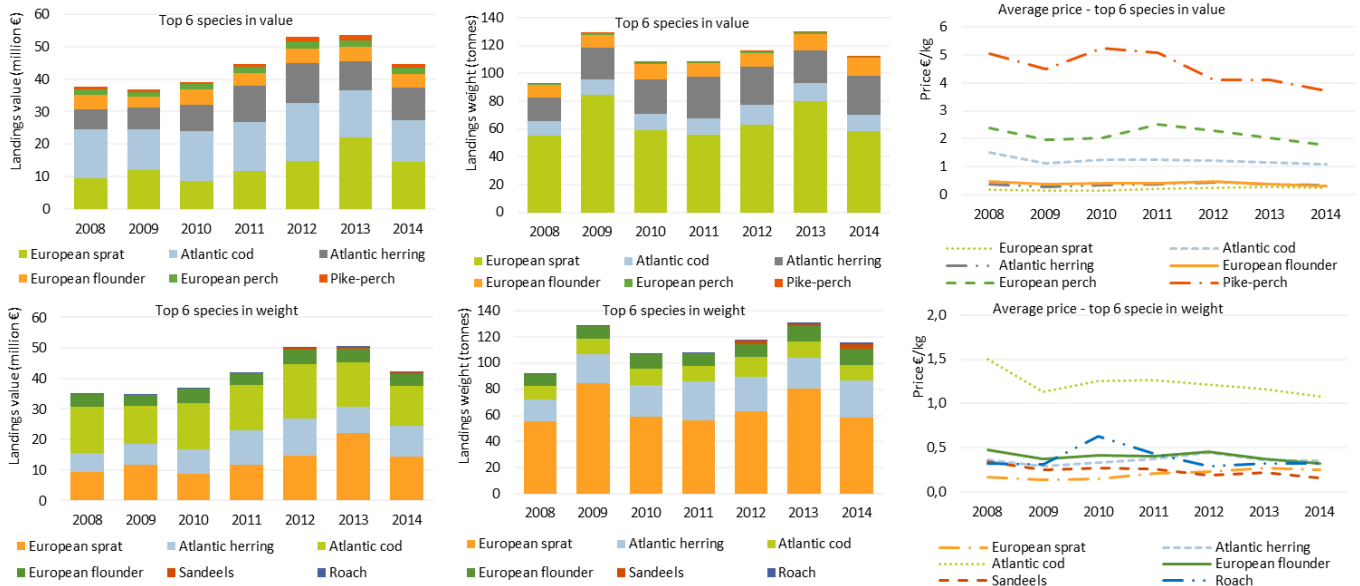
Figure 5.17.1 Polish fleet main capacity and effort trends for the period 2008-2014.



Note: Distant water fleet (DTS and TM fleet segments over 40 meters) excluded from energy consumption and landings value.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.17.2 Landings in value and weight (and corresponding income from landings) by the Polish national fleet, landings weight per day, fuel price and energy consumption for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Note: Distant water fleet (DTS and TM fleet segments over 40 meters) excluded from landings value and prices.

Figure 5.17.3 Polish fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

National Fleet Economic performance

The total amount of income generated by the Polish Baltic¹ fleet in 2013 was €56.7m (excluding subsidies). This consisted of €56.6m in landings value (€55.8m in 2012) and €0.1m in non-fishing income. The Polish Baltic fleet's landings income increased 1% between 2012 and 2013. The record outcome of the Polish fleet in 2013 was caused by a high pelagic fish prices and landings. Total estimated costs incurred by the Polish Baltic fleet in 2013 equated to €55.5 million, amounting to 98% of total income. Crew cost and fuel costs, the two major fishing expenses, were €20.1 (+36%) and €12.9 (+23%) million respectively (Table 5.17.2; Figure 5.17.2).

European sprat accounted for 39% of the total landings value obtained by the Polish fleet in 2013, decreasing to 30.5% of total income in 2014, while Atlantic cod increased from 26% in 2013 to 27% in 2014. This was mainly due to deteriorated prices of sprat (10% decrease compared to 2013 prices) and smaller landings. At the same time, Atlantic cod prices decreased by 6.5% as a result of the deteriorating physical condition of individual fish. Increased supply of imported cod in the Polish market was another reason for price decreases.

¹ Due to confidentiality reasons a distant water fleet was excluded from an economic performance analysis.

Table 5.17.2 Polish national fishing fleet economic performance in 2008-2013 and projections for 2014.

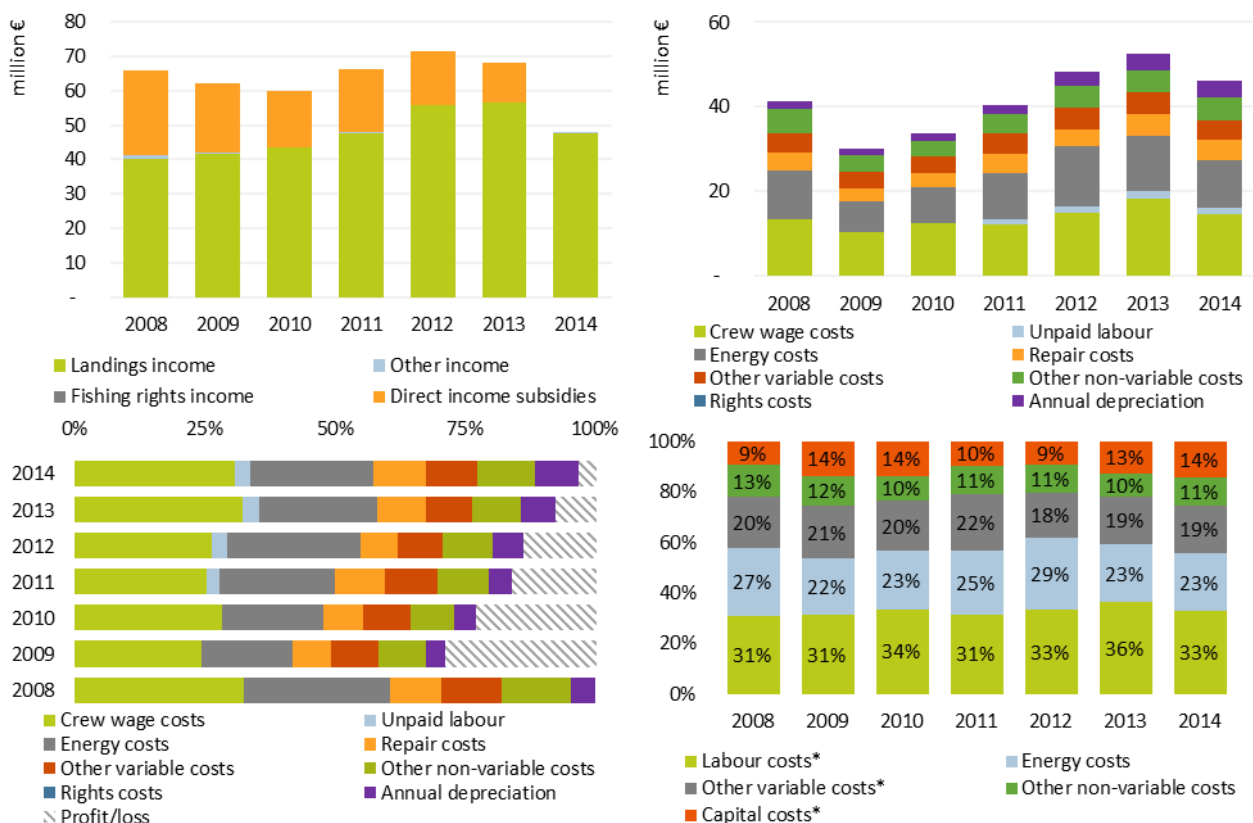
Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	VARIABLE (million €)	2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	40.3	41.6	43.5	47.7	55.8	56.6	47.5	1%	↗	40%
	Other income	0.9	0.5	0.2	0.4	0.2	0.1	0.1	-50%	↘	-89%
Costs	Labour costs	13.3	10.3	12.4	13.3	16.5	20.1	16.1	22%	↗	51%
	Energy costs	11.6	7.3	8.5	10.8	14.3	12.9	11.3	-10%	↘	11%
	Repair costs	4.0	3.1	3.3	4.6	4.0	5.3	4.7	33%	↗	31%
	Other variable costs	4.8	3.8	4.0	4.9	4.9	5.0	4.7	2%	↗	5%
	Other non-variable costs	5.5	3.9	3.6	4.7	5.3	5.3	5.3	0%	↔	-4%
	Capital costs	4.0	4.6	5.1	4.1	4.7	7.0	7.1	49%	↗	73%
Economic Indicators	GVA	15.2	24.0	24.2	23.2	27.5	28.2	17.0	3%	↗	86%
	Gross profit	1.9	13.7	11.8	9.9	11.1	8.1	0.9	-27%	↘	337%
	Net profit	-2.2	9.1	6.8	5.7	6.4	1.2	-6.2	-82%	↘	154%
Capital value	Depreciated replacement value	122.2	145.8	107.6	95.2	100.3	97.7	95.5	-3%	↘	-20%
	Investments	8.8	2.2	3.8	8.7	7.0	6.2		-11%	↘	-30%
Profitability and development trends	Net profit margin (%)	-5.3	21.7	15.6	11.9	11.4	2.1	-14.4	-82%	↘	139%
	<i>development trend</i>								-81%	↘	
	RoFTA (%)	0.0	8.3	9.3	8.0	7.6	4.4	-6.72	-42%	↘	21900%
	<i>development trend</i>								-34%	↘	
	GVA per FTE (thousand €)	8.9	15.2	16.1	15.4	16.7	17.9	12.6	7%	↗	100%
	<i>development trend</i>								23%	↗	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

All values exclude the DTS and TM fleet segments over 40 meters

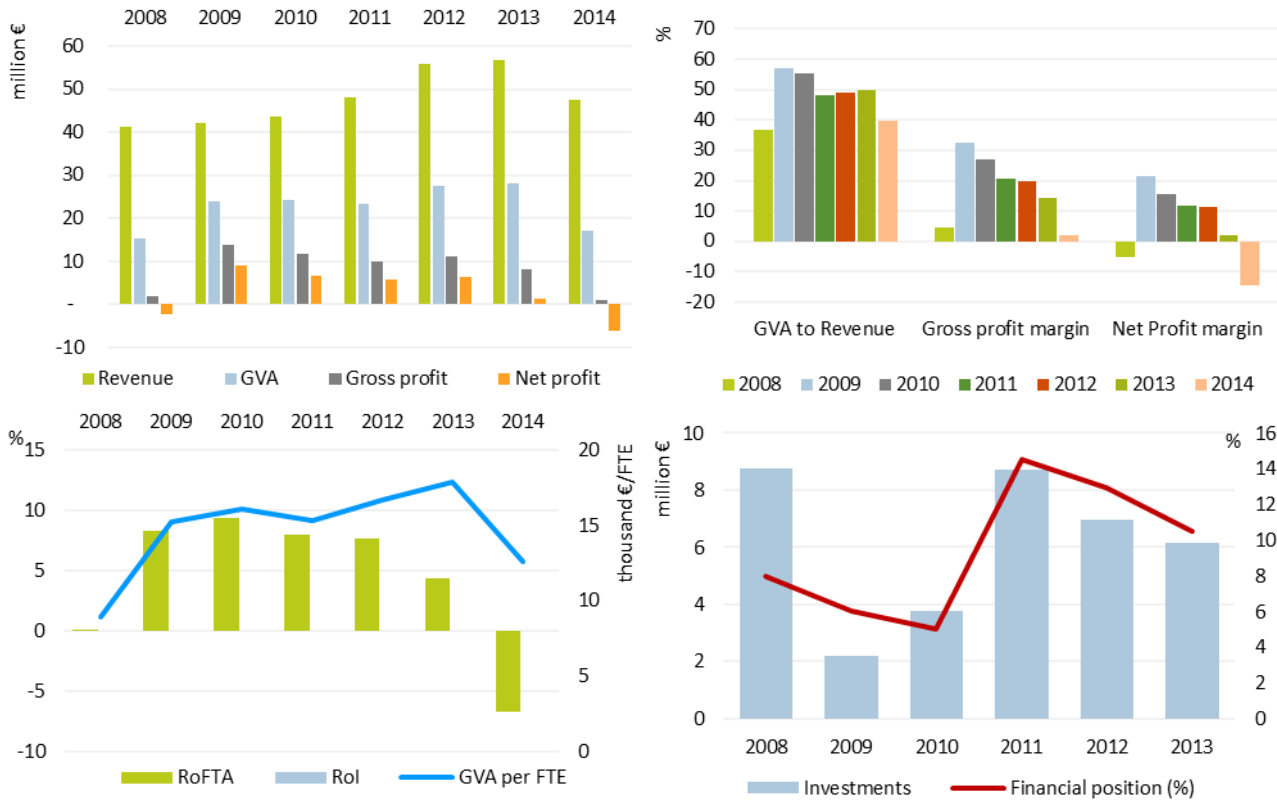
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.17.4 Income and cost structure trends for the Polish fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.17.5 Main economic performance indicator trends for the Polish fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Table 5.17.3 Polish national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ	Trend	Large scale fleet							%Δ	Trend	Distant water fleet							%Δ	Trend	
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			
Total No. Vessels (#)	563	509	517	517	545	553	595	1%	↗	259	211	187	189	205	200	199	-2%	↘	1.0	3.0	3.0	3.0	2.0	2.0	2.0	0%	↔	
Average vessel age (year)	23.5	24.2	23.8	24.5	25.5	25.6	25.4	0%	↔	37.2	34.8	35.3	34.8	36.3	36.8	37.0	1%	↗	22.0	19.3	18.7	19.7	18.0	19.0	23.5	6%	↗	
Average vessel length (m)	8.2	8.0	8.0	8.0	8.2	8.1	7.9	-1%	↔	20.3	19.8	19.4	18.9	18.8	19.1	19.3	1%	↗	94.0	106.6	101.3	101.3	105.0	105.0	112.7	0%	↔	
Vessel tonnage (thousand GT)	2.7	2.3	2.3	2.4	2.6	2.6	2.7	0%	↔	22.8	16.6	14.2	13.8	14.6	14.8	15.4	1%	↗	3.9	19.4	19.5	19.5	15.6	15.6	15.5	0%	↔	
Vessel power (thousand kW)	23.9	20.3	19.8	19.6	21.1	20.9	21.3	-1%	↔	67.0	53.7	46.5	44.8	47.5	46.7	46.8	-2%	↘	3.2	14.4	15.0	15.0	11.8	11.8	11.2	0%	↔	
Total employed (#)	1,379	1,154	1,121	1,163	1,271	1,290	1,390	1%	↗	1,377	1,088	1,043	978	1,053	960	903	-9%	↘	270	270	270	270	180	180	180	0%	↔	
FTE (#)	436	424	419	449	482	515	542	7%	↗	995	890	815	792	990	928	841	-6%	↘	270	258	270	270	180	137	150	-24%	↘	
Average wage per employed (thousand €)	2.2	2.2	3.3	3.8	4.5	5.2	4.7	16%	↗	7.9	7.4	8.7	9.5	10.6	14.5	11.1	37%	↗										
Average wage per FTE (thousand €)	7.1	5.9	8.7	9.8	11.8	13.0	12.0	10%	↗	11.2	9.2	11.3	11.8	11.3	15.0	11.8	33%	↗										
Days at sea (thousand days)	45.6	42.8	39.5	40.0	43.5	48.1	51.2	11%	↗	20.3	18.4	17.8	17.9	23.3	22.7	22.8	-3%	↘	0.5	0.9	0.9	0.7	0.5	0.5	0.6	16%	↗	
Fishing days (thousand days)	45.0	42.4	38.7	39.5	42.6	47.4	50.5	11%	↗	17.3	16.8	16.3	16.7	21.1	20.3	20.3	-4%	↘	0.3	0.7	0.5	0.7	0.4	0.5	0.5	24%	↗	
Energy consumption (million litres)	2.1	1.5	1.9	1.7	1.8	2.0	2.1	16%	↗	13.8	11.0	15.2	15.9	18.5	17.2	15.1	-7%	↘										
Energy consumption per landed tonne (l/T)	215	128	174	151	139	157	166	13%	↗	163.4	92.1	153.0	160.6	171.7	143.0	164.1	-17%	↘										
Landings weight (thousand tonnes)	9.9	11.5	11.0	11.4	12.6	13.0	12.8	3%	↗	90.2	124.1	104.5	104.2	112.9	127.9	112.4	13%	↗	26.1	76.5	55.4	63.9	53.8	54.1	45.3	1%	↔	
Landings value (million €)	10.5	10.7	10.5	11.4	12.1	11.9	11.0	-2%	↘	29.8	30.9	32.9	36.3	43.7	44.7	36.5	2%	↗										

*All monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Table 5.17.4 Economic performance of the Polish national fishing fleet by operational scale: 2008-2014.Arrows indicate change (Δ) 2013 to 2012: (\nearrow) increase; (\searrow) decrease and (\leftrightarrow) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							% Δ 2013-12	Trend	Large scale fleet							% Δ 2013-12	Trend			
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014					
Income	Landings income	10.5	10.7	10.5	11.4	12.1	11.9	11.0	-2%	\searrow		29.8	30.9	33.0	36.3	43.7	44.7	36.5	2%	\nearrow	
	Other income	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0%	\leftrightarrow		0.6	0.3	0.1	0.3	0.1	0.1	0.0	-64%	\searrow	
	Direct income subsidies	12.9	9.2	6.8	7.3	10.6	8.8		-17%	\searrow		12.0	10.8	9.4	10.7	4.8	2.9		-41%	\searrow	
	Fishing rights income	0.0	0.0	0.0	0.0	0.0	0.0					0.0	0.0	0.0	0.0	0.0	0.0				
Costs	Labour costs	3.1	2.5	3.6	4.4	5.7	6.7	6.5	17%	\nearrow		10.3	7.8	8.7	8.9	10.8	13.4	9.6	25%	\nearrow	
	Energy costs	1.6	1.0	1.1	1.2	1.3	1.4	1.5	8%	\nearrow		10.1	6.4	7.4	9.6	12.9	11.4	9.8	-12%	\searrow	
	Repair costs	0.5	0.6	0.4	0.7	0.6	0.9	0.9	39%	\nearrow		3.6	2.6	2.9	3.8	3.4	4.4	3.8	32%	\nearrow	
	Other variable costs	1.2	1.0	1.0	1.2	1.3	1.5	1.6	15%	\nearrow		3.5	2.8	3.0	3.7	3.6	3.5	3.1	-3%	\searrow	
	Other non-variable costs	1.1	0.8	0.7	0.8	1.0	0.9	1.0	-14%	\searrow		4.5	3.1	2.9	3.9	4.3	4.4	4.3	3%	\nearrow	
	Capital costs	0.7	1.0	1.2	0.9	0.7	1.3	1.5	98%	\nearrow		3.2	3.2	3.4	3.1	4.0	5.5	5.7	40%	\nearrow	
Capital value	Depreciated replacement value	30.9	33.1	25.8	24.4	28.6	27.7	29.9	-3%	\searrow		86.8	91.6	66.5	60.5	67.6	66.4	62.2	-2%	\searrow	
	Investments	0.4	0.7	1.2	0.5	1.3	0.8		-37%	\searrow		8.4	1.5	2.6	8.2	5.7	5.4		-6%	\searrow	
Economic indicators	GVA	6.5	7.6	7.4	7.6	7.8	7.2	6.1	-8%	\searrow		8.7	16.3	16.9	15.6	19.7	21.0	10.9	7%	\nearrow	
	Gross profit	3.4	5.1	3.7	3.2	2.1	0.5	-0.4	-75%	\searrow		-1.6	8.5	8.1	6.7	8.9	7.6	1.4	-15%	\searrow	
	Gross profit margin	31.6	47.0	35.3	27.8	17.5	4.4	-3.8	-75%	\searrow		-5.1	27.4	24.6	18.2	20.4	17.0	4.3	-17%	\searrow	
	Net profit	2.7	4.2	2.5	2.3	1.5	-0.8	-1.9	-151%	\searrow		-4.8	5.4	4.7	3.6	5.0	2.1	-4.3	-59%	\searrow	
Profitability and development trends	Net Profit margin	24.7	38.2	24.1	20.3	12.2	-6.4	-17.1	-152%	\searrow		-15.7	17.3	14.2	9.9	11.3	4.6	-13.5	-60%	\searrow	
	<i>development trend</i>				Deteriorated														-38%	\searrow	
	RoFTA (%)	10.4	14.6	12.9	11.5	6.4	0.4	-2.9	-93%	\searrow		-3.7	7.9	10.1	8.0	8.6	6.3	-3.5	-27%	\searrow	
<i>development trend</i>				Deteriorated															2%	\nearrow	
GVA per FTE (thousand €)	14.9	18.0	17.6	16.9	16.2	14.0	11.2		-14%	\searrow		9.5	19.2	21.7	20.6	20.7	23.6	13.5	14%	\nearrow	
<i>development trend</i>				Deteriorated																28%	\nearrow

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Fleet Segment Level Economic performance

The Polish fleet is moderately diversified with a range of vessel types targeting different species predominantly in the Baltic Sea, North East Atlantic (1 vessel), and African (Mauritania, Angola) waters (2 vessels).

The national fleet consisted of 8 (DCF) fleet segments in 2013, with 4 inactive length classes consisting of 43 vessels. Four of the active fleet segments made losses in 2013 while 3 made a net profit (information is lacking for the distant water fleet segment). Table 5.17.5 provides a breakdown of key performance indicators for all Polish fleet segments in 2012. A short description of the two most important segments in terms of total value of landings is provided below.

Small-scale fleet

In 2014 the Polish small-scale fleet consisted of 595 registered vessels, with a combined gross tonnage of 2.7 thousand GT and engine power of 21.3 thousand kW. The size of the fleet has not change remarkably between 2012 and 2013, the number of vessels increasing by 1%, GT remained unchanged and kW decreased by 1% (Table 5.17.3).

The total weight landed by the small-scale fleet in 2014 was 12.8 thousand tonnes of fish, with a landed value of €11m. The total weight of landings decreased slightly (-2%) between 2013 and 2014, however landed value decreased by 8% as a result of lower prices for Atlantic cod, European perch and Pike perch. In 2014, Atlantic cod generated the highest landed value (€3.5m), followed by European perch (€1.8m), Atlantic herring (€1.7m), Pike perch (€1.1m), European flounder (€0.8m). In terms of landings weight, Atlantic herring landings 4.1 thousand tonnes, Atlantic cod 2.9 thousand tonnes and European flounder amounted to 2.5 thousand tonnes. Landings of these three top species changed slightly (-2%) compared to 2013.

The prices obtained for most of the small-scale fleet key species decreased between 2013 and 2014 (by 6% average). Out of 5 most valuable species Pike perch achieved the highest average price per kilo in 2013 (€3.7 per kg), 9% lower than in 2013, followed by Atlantic cod (€1.22 per kg), 4% lower than in 2013. European perch prices dropped again, remarkably by 10%. Atlantic herring remained stable and European flounder prices increased by 2.5%.

The landings income generated by the Polish small-scale fleet in 2013 was €11.9m and was slightly lower than in 2012 (-2%). The fleet is heavily subsidised from EFF (European Fisheries Fund) mainly in

the form of compensation of fishing income losses caused by voluntary reduction of fishing effort. In 2013 subsidies paid out to the small scale fleet amounted to as much as €8.8m.

The Polish small-scale fleet's gross profit decreased sharply (by 75%) which can be explained by a significant increase of labour costs of 17% (€1m). Other cost items increased as well. However they did not contribute to the cost structure substantially. The other reason explaining the deteriorating condition of the fleet was smaller landing income (Table 5.17.4).

Large-scale fleet

In terms of economic performance, the total amounts of Gross Value Added (GVA), gross profit and net profit generated by the Polish Baltic large-scale fleet in 2013 were €21m, €7.6m and €2.1m, respectively. GVA increased by 7%, gross profit and net profit decreased by 15% and 59% between 2012 and 2013. The major factor causing the deterioration was a significant increase in labour costs which may be a consequence of higher crew salaries expectations caused by good profits produced in 2012.

In 2013, the Baltic large-scale fleet had an estimated depreciated replacement value of €66.4m. Investment by the fleet amounted to €5.4m in 2012. The capital value of the fleet as well as inter-year investments changed insignificantly compared to 2012.

The net profit margin trend for the Baltic large-scale fleet deteriorated significantly and the indicator decreased from 11.3 in 2012 to 4.6 in 2013. Similarly the RoFTA indicator deteriorated in 2013 compared to 2012. On the other hand GVA per FTE improved remarkably as a result of increased salaries and a lower number of people employed (Table 5.17.4).

Distant-water fleet

The amount of landings by the distant-water fleet² totalled 52 thousand tonnes in 2014 out of which 45.3 thousand tonnes were caught in OFR (Other Fishing Regions) and the remainder (6.8 thousand tonnes) in NEAFC and NAFO areas. In 2014 similarly to 2013, Atlantic horse mackerel generated the highest landed weight (34.9 thousand tonnes), followed by Atlantic cod (6.3 thousand tonnes), Atlantic mackerel (5.7 thousand tonnes) and round sardinella (2.7 thousand tonnes).

A short description of the two most important segments

Pelagic trawl 24-40m – 42 vessels make up this segment which operates exclusively in the Baltic Sea. The fleet targets a variety of species but in particular pelagic species, such as sprat and herring. In 2013, the total value of landings was €24.1m and around 268 FTEs were employed, contributing to 43% and 17% of the total income from landings and FTEs generated by the Polish Baltic fishing fleet. This fleet segment was profitable, with a reported gross profit of around €3.3m. However they produced a negative net profit of €0.1m in 2013. The economic condition of the segment deteriorated in 2013 compared to 2008-2012 mainly due to a large increase in crew, fuel and depreciation costs. The number of vessels and employment in the segment changed (-9% and +14% respectively). No substantial changes in catch composition took place except for a significant decrease of cod landings (This species however doesn't play an important role in the segment landings). In 2013 the segment continued benefiting from high sprat prices, however prices for herring dropped by 16%. In order to avoid over-utilisation of the TAC, a new management policy was introduced in 2011 regarding the quota allocation system for Baltic sprat (ICES 22-32) and Western Baltic herring stocks (ICES 22-24). Individual maximum allowable catch limits were established for these two stocks. Individual limitation was introduced for Central Baltic herring (ICES 25-27) in 2012. Maximum allowable catches for a single vessel were set at a level of 800 tonnes for herring and 3400 tonnes for sprat in 2013. Due to intensive catches and the possibility of quota over-utilisation the sprat and herring (central stock) fisheries had to be closed in July and September 2013.

Passive gears 0-10 m – 456 vessels (in 2012 – 451) make up this segment which operates exclusively in the Baltic Area including lagoon brackish waters. The fleet targets a variety of saltwater species: Atlantic herring, European flounder, Atlantic cod and a variety of freshwater species, such as freshwater bream, pike perch and pike. In 2013, the total value of landings was over €8m and around 338 FTEs (952 total jobs) were employed in this fleet segment, contributing to 14% and 21% of the total income from landings and FTEs generated by the Polish Baltic fishing fleet respectively. In 2013 this segment was profitable, with a reported gross profit of around €0.6m (€1.7m in 2012). However

² Vessels over 40 meters length operating in OFR or Area 27 (except for Baltic Sea)

it produced a negative net profit of €0.1m. The economic development trend deteriorated in 2013 – net profit margin was 108% lower compared to the 2008-2012 average, profitability was weak. The deterioration of the economic situation may be explained by an increase in crew costs (20%) and fuel expenditures (8%) and other cost items with stable landings income. The segment is highly subsidised compared to other fleet segments. In 2013 vessels belonging to a passive gear 0-10 m segment benefited from subsidies for voluntarily reducing fishing effort (mainly in the form of temporary cessation of fishing activities). Subsidies of €6.9 (12% less than in 2012) were paid out to the fleet in 2013. Vessels belonging to small-scale fisheries (those under 8 metres length) continued to benefit from no individual limit restrictions in 2013.

Assessment and Future Trends

Landings income dropped in 2014 (€47.5m) compared to 2013 (€56.6m), despite a similar TAC available for Poland in the Baltic Sea for 2014. This is a result of the crisis in the cod fisheries due to a bad health situation for the stock and a new pelagic quota allocation system implemented by the Polish fisheries administration. The deteriorating condition of Baltic cod (thin fish) is negatively influencing the performance of the demersal fleet segments targeting cod (DTS, DFN, HOK and PG1012). The phenomena remains unsolved in 2015, so following the precautionary principle in such a situation, ICES advised for 2015 severe TAC cuts (53% for the Western and 56% for the Eastern Baltic Sea cod stocks) final reductions were however less significant and amounted to 6.7% and 22% respectively. Cod prices were slightly lower (3% in real terms) in the first quarter of 2015 compared to 2014. The Eastern Baltic bottom and midwater trawl and longline cod fisheries achieved the MSC certificate of conformity at the beginning of 2015. About 300 vessels belonging to 8 PO, landing 8 thousand tonnes of cod (2013) have been certified. The economic conditions of the pelagic fleet will be determined by further development of sprat and herring prices. In the first quarter of 2015 sprat prices were 8% lower than in the same period of 2014, herring prices dropped by 7%. In December 2014 a major inflow of salty North Sea water into Baltic was observed and confirmed in January 2015. It is expected that increased oxygen and salt content should change the hydrological situation in the Baltic and contribute to an improved cod spawning condition.

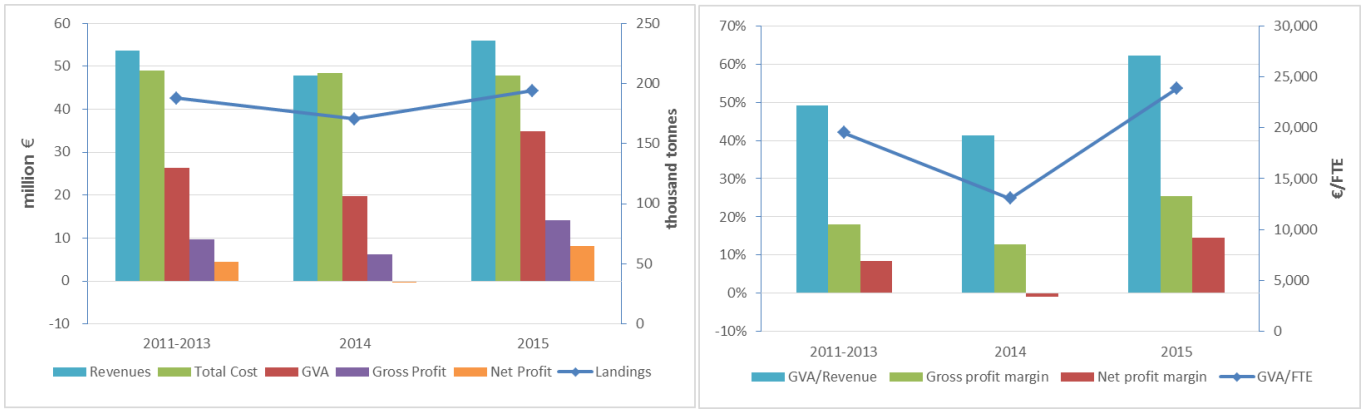
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According to BEMEF projections, 2014 is a weak year for the Polish fishing fleet. A 9% decrease in landings is compounded by a small decline in fish prices to push revenue down 11%. The result is a net profit margin falling from 8% to -1% and GVA/FTE falling to a low level of €13,000.

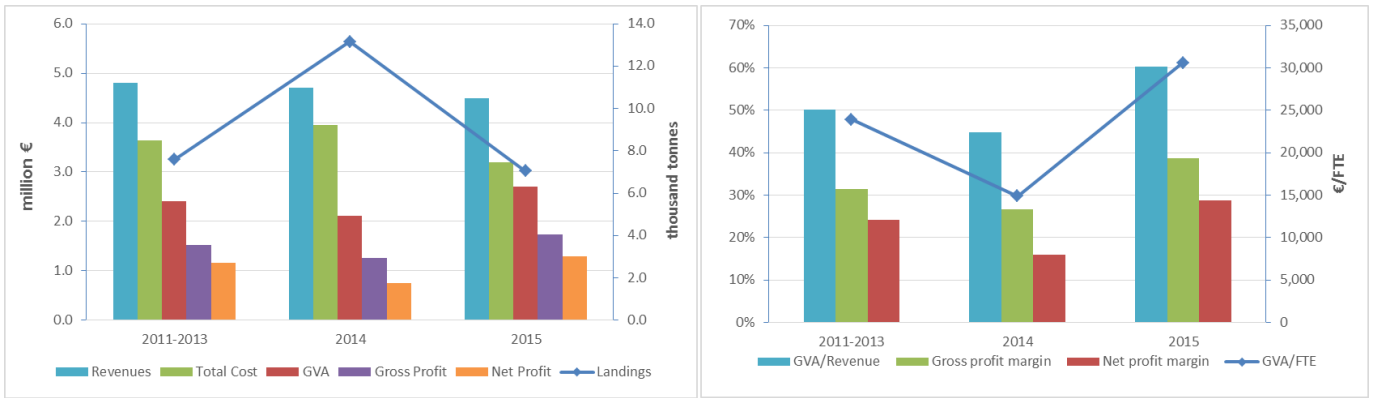
The reverse is seen in 2015 with both landings and fish prices increasing to push revenue up 17% while total costs fall by 1%. All the measures of profitability increase substantially with the net profit margin increasing from -1% to 15%.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

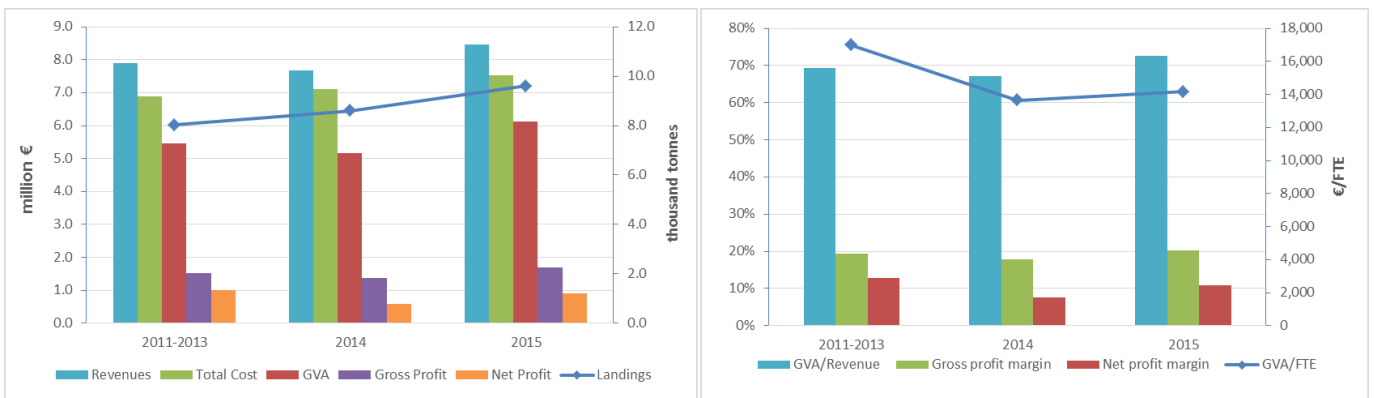
Figure 5.17.6 Poland: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 Polish fleets by gross earnings



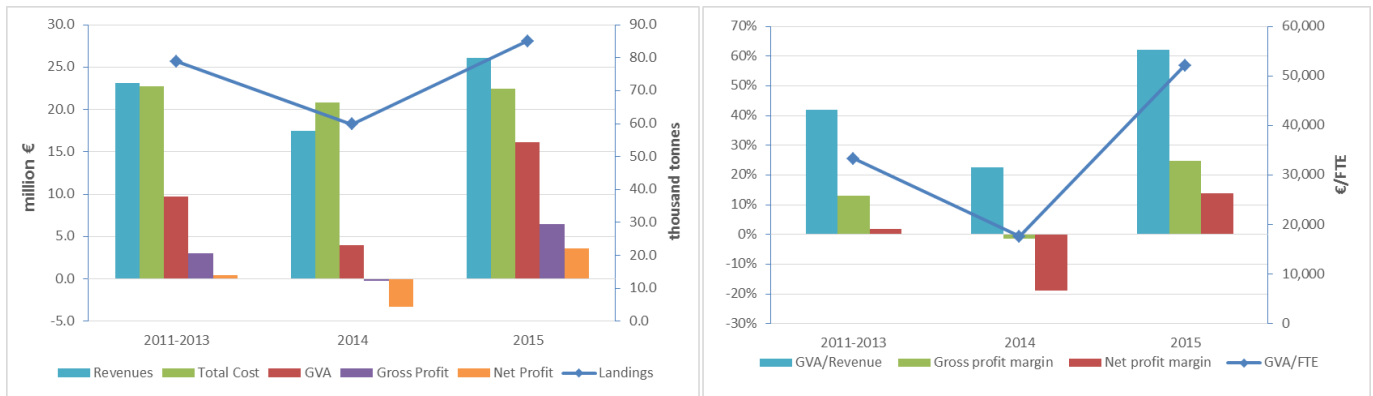
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.17.7 POL AREA27 DTS VL1824: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

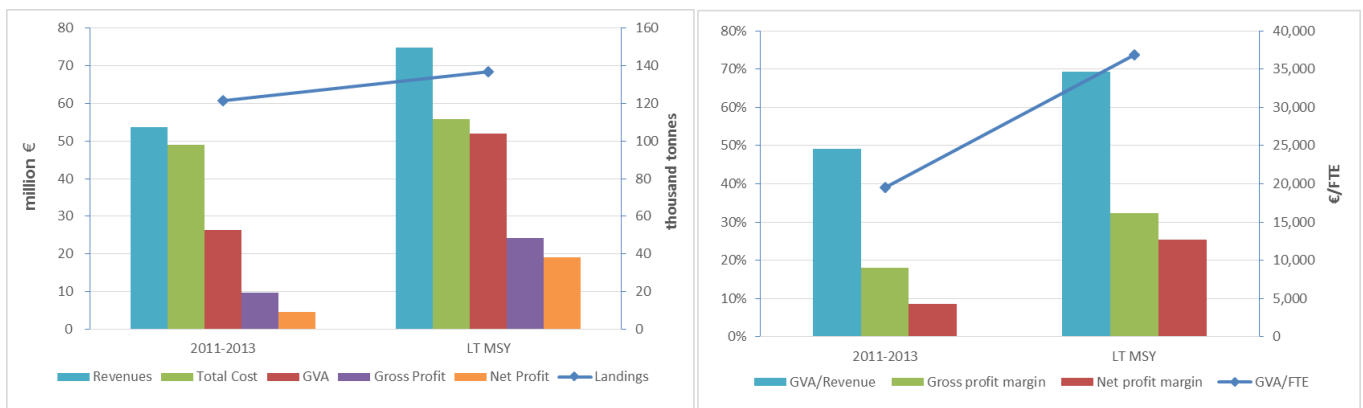
Figure 5.17.8 POL AREA27 PG VL0010: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.17.9 POL AREA27 TM VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, a state of long-term MSY results in improved economic performance for the Poland fishing fleet. A 13% increase in landing to 137,000 results to a significant 40% increase in revenue as the species composition of landings changes from sprat to herring and more expensive cod. Gross and net profit increase to €24 million and €19 million respectively and GVA/ FTE increases 89% to €37,000.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.17.10 Poland: MSY projections for the main socio-economic indicators.

Data issues

Due to confidentiality reasons, distant water fleet (vessels over 40m fishing outside Baltic Sea) were excluded from the economic analysis. However, transversal data (except for value of landings) and employment data were provided for all fleet segments. In order to ensure consistency with data provided for previous years, premiums paid by government for scrapped vessels were taken into account when calculating invested capital (not the PIM method).

Table 5.17.5 Main socio-economic performance indicators by fleet segment in the Polish national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ	Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	POL AREA27 DFN VL1218°	34	-17%	120	-38%	3,206	-33%	464	-53%	1,625	-44%	1,508	-38%	734	-36%	6.1	2%	82	-154%	354	-641%	-21.8	-1244%	Weak	-308%
POL AREA27 DTS VL1218°	73	-10%	320	1%	8,682	5%	4,219	7%	9,497	-11%	16,388	-3%	4,327	-25%	13.5	-25%	1,664	-55%	689	-77%	7.3	-74%	Reasonable	-71%	Deteriorated
POL AREA27 DTS VL1824°	32	-11%	115	-12%	3,174	-3%	1,801	-3%	5,087	-11%	10,122	19%	1,890	-39%	16.4	-31%	979	-50%	489	-70%	9.6	-66%	Reasonable	-71%	Deteriorated
POL AREA27 DTS VL40XX	1	0%	37	0%	281	3%					7,261	36%													
POL AREA27 PG VL0010°	456	1%	338	5%	38,981	10%	1,045	16%	8,112	0%	8,453	3%	5,455	-4%	16.1	-9%	571	-66%	135	-110%	-1.7	-110%	Weak	-108%	Deteriorated
POL AREA27 PG VL1012	97	3%	177	11%	9,161	13%	987	17%	3,772	-4%	4,514	3%	1,744	-17%	9.9	-25%	46	-111%	629	-484%	-16.6	-501%	Weak	-220%	Deteriorated
POL AREA27 TM VL2440°	42	-9%	268	-14%	5,067	-25%	9,219	-21%	24,114	-1%	79,875	0%	11,846	22%	44.2	43%	3,312	7%	99	-124%	-0.4	-125%	Weak	-109%	Deteriorated
POL AREA27 TM VL1824°	18		68		2,246		1,541		4,393		12,704		2,199		32.4		1,721		1,325		29.9		High		
POL OFR TM VL40XX	2	0%	137	-24%	518	15%					54,137	1%													

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.17.6 Main socio-economic performance indicators by fleet segment in the Polish national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	fuel consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend
	POL AREA27 DFN VL1218°	3.5	-25%	94	-19%	470	-7%	605	-7%	24,001	-2%	5,970	30%	5,268	14%	307	-25%	9,290	-45%	50,214	-45%	50,214	-26%	21,590	-23%	-10,412	-794%	-185%
POL AREA27 DTS VL1218°	4.4	12%	119	17%	1,888	-8%	2,054	-4%	36,482	46%	7,475	26%	7,475	33%	257	10%	38,019	21%	107,452	21%	107,452	25%	59,270	-16%	9,445	-74%	-67%	Deteriorated
POL AREA27 DTS VL1824°	3.6	-1%	99	10%	3,189	22%	3,364	25%	28,474	-11%	7,333	-13%	6,487	3%	178	-18%	39,324	8%	128,380	8%	128,380	21%	59,075	-32%	15,291	-66%	-75%	Deteriorated
POL AREA27 DTS VL40XX	37.0	0%	281	3%	25,841	33%	34,252	29%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
POL AREA27 PG VL0010°	0.7	3%	85	9%	217	-7%	217	-7%	10,711	20%	12,608	15%	4,476	17%	124	12%	1,782	7%	16,556	7%	16,556	16%	11,964	-6%	296	-110%	-108%	Deteriorated
POL AREA27 PG VL1012	1.8	8%	94	9%	493	-9%	538	-9%	18,450	4%	9,477	-4%	4,963	9%	219	14%	6,323	5%	39,674	5%	39,674	5%	17,980	-19%	6,489	-472%	-201%	Deteriorated
POL AREA27 TM VL1824°	3.8		125		5,656		5,817		26,566		6,444		6,351		121		57,617		150,376		150,376		122,194		73,597			
POL AREA27 TM VL2440°	6.4	-6%	121	-17%	15,764	33%	18,092	39%	203,179	42%	29,656	59%	29,656	59%	115	-21%	144,119	-21%	495,083	-21%	495,083	7%	282,041	34%	2,360	-127%	-112%	Deteriorated
POL OFR TM VL40XX	68.5	-24%	259	15%	104,512	-12%	117,434	-20%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.18 PORTUGAL

Fleet Structure, Fishing Activity and Production

In 2013, the Portuguese fishing fleet consisted of 8,311 vessels, registered in continental Portugal (mainland fleet) and the outermost regions of Azores and Madeira, with a combined gross tonnage around 100,000 GT, a total engine power of 368 MW and an average age of 30 years.

Between 2012 and 2013, the Portuguese fishing fleet decreased around 1% in number of vessels, power and GT. Compared to 2008, the decrease was 5% in number and engine power and 6% in gross tonnage. The main factors causing these decreases include ageing of vessels and vessel owners, increased restrictions for licensed vessels with no recorded activity in previous years and an administrative effort to adjust the capacity to the available resources in some fleet segments.

Projections for 2014 indicate a continued decreasing trend although the reduction in GT and kW may be less than in the number due to the effort that is being made in modernising vessels, providing them with better working and safety conditions. Despite the high number of inactive vessels, these vessels represent only 21.8% and 22.5% of GT and kW respectively of the Portuguese fleet. However and as started above, there is an ongoing administrative process to withdraw vessels with no, or reduced, activity from the fleet.

Table 5.18.1 Portuguese national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	8,769	8,731	8,655	8,507	8,399	8,311	8,257	-1%	↘	-5%
	No. of Inactive vessels (#)	4,016	4,105	4,178	4,260	4,316	4,287	4,303	-1%	↔	7%
	Average vessel age (year)	26	27	28	28	29	30	31	3%	↗	13%
	Vessel tonnage (thousand GT)	107.1	107.7	104.4	102.2	101.1	100.1	100.4	-1%	↔	-6%
	Vessel power (thousand kW)	388.9	393.2	383.6	374.9	371.2	368.0	367.9	-1%	↔	-5%
	No. of Enterprises (#)	3,141	3,199	3,265	3,288	3,351	3,518		5%	↗	12%
Employment	Total employed (#)	17,235	17,861	16,585	18,259	16,755	17,875	17,616	7%	↗	4%
	FTE (#)	8,714	8,799	8,705	9,099	8,574	9,307	6,976	9%	↗	7%
	Average wage per employed (thousand €)	9.1	7.9	9.1	8.6	9.1	7.6	8.3	-17%	↘	-17%
	Average wage per FTE (thousand €)	18.0	15.9	17.2	17.3	17.8	14.5	16.7	-18%	↘	-19%
Fishing Effort	Days at sea (thousand days)	448.4	432.1	410.9	398.8	393.5	375.4	293.5	-5%	↘	-16%
	Fishing days (thousand days)	399.6	383.7	362.1	351.8	348.9	331.5	275.8	-5%	↘	-17%
	Energy consumption (million litres)	107.6	108.6	108.5	106.0	103.7	100.4	79.7	-3%	↘	-7%
	Energy consumption per landed tonne (l/T)	487.5	566.3	503.6	497.5	545.3	519.0	533.7	-5%	↘	6%
Output	Landings weight (thousand tonnes)	220.8	191.7	215.4	213.2	190.1	193.4	149.4	2%	↗	-12%
	Landings value (million €)	423.9	381.8	408.6	416.8	370.7	351.4	316.0	-5%	↘	-17%

*all monetary values have been adjusted for inflation; constant prices (2014)

When not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete. Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

In 2013, the Azorean fleet comprised 766 vessels with a total engine power of 51.2 thousand kW and gross tonnage of 8.4 thousand GT. Of these, 599 were active vessels, encompassing 41.7 thousand kW and 6.6 thousand GT. Most of these vessels are long-liners (85%) while 72% of the vessels have overall length equal to or less than 10 metres. Main species targeted are demersal species and tuna and tuna like species, especially big-eye tuna and skipjack. The Azorean fleet has been renewed over the last 10 years, in particular between 2008 and 2011, with the entry of 174 new vessels with better working conditions, representing 93% of the total entries for the period. From 2008 to 2011, gross tonnage increased 7%, from 8.5 thousand to 9.1 thousand and kW 10%, from 48 thousand kW to 52.8 thousand kW.

The Madeiran fleet consisted of 438 vessels in 2013, of which 88% had an overall length of 10 metres or less. These vessels totalled 15.9 thousand kW and 3.9 thousand GT. The active fleet amounted to

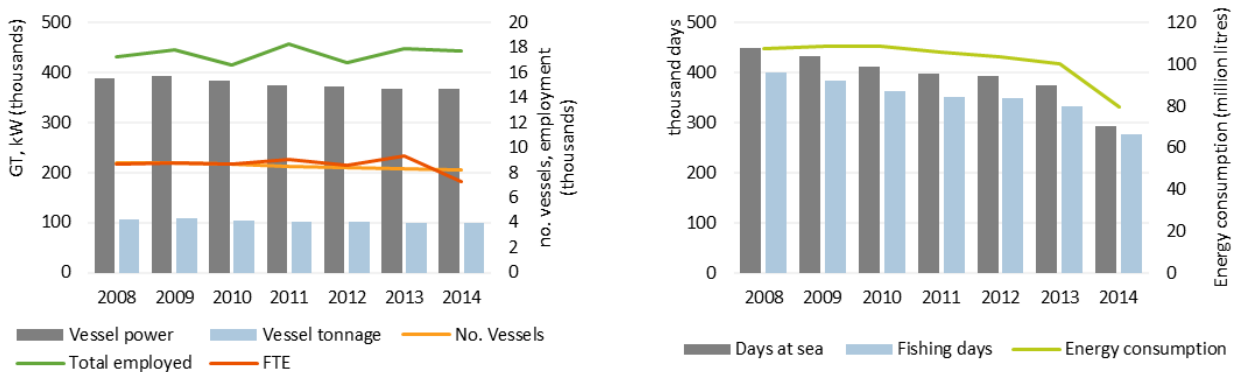
only 89 vessels in 2013, predominantly long-liners (87%) targeting black-scabbard fish (45%) and big-eye tuna (25%).

In 2013, at national level, the number of fishing enterprises totalled 3,518 with the vast majority (95%) owning a single vessel and 5% of the enterprises owning two to five vessels.

Total employment in 2013 was estimated at 17,875 jobs, corresponding to 9,307 FTEs. The mainland fleet was responsible for 77% (13,781) of the employment generated, while the Azores and Madeira were responsible for 20% and 3%, respectively. The employment level has varied greatly between 2008 and 2013 showing some seasonality but no clear trend. The average wage per employed has varied over the past six years, with a sharp reduction in 2013 (16%), similar to 2009. Reasons for these reductions may be explained by the need to reduce costs due to lower incomes from landings and higher fuel costs.

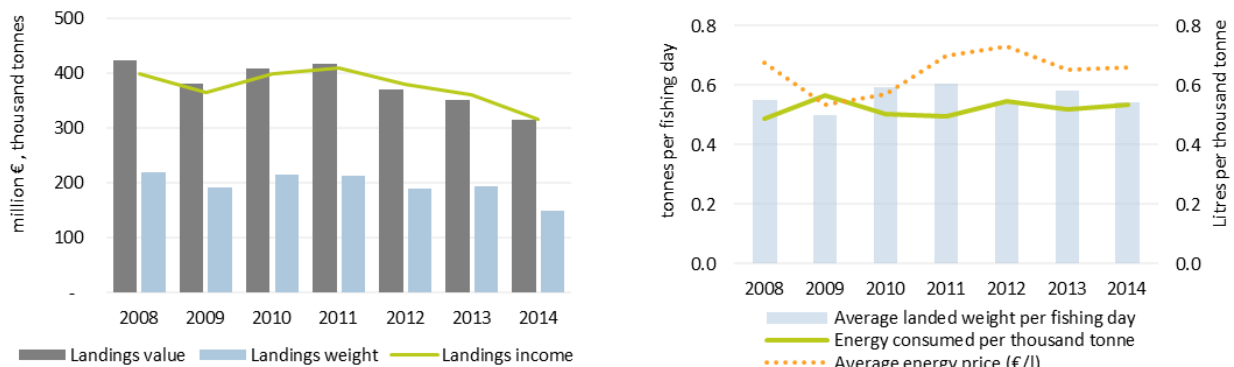
In 2013, the Portuguese fleet spent a total of 375 thousand days at sea and consumed around 100 million litres of fuel. The total days at sea decreased 16% while energy consumption fell by only 7% between 2008 and 2013.

The total weight landed by the Portuguese fleet in 2013 was 193 thousand tonnes of seafood, corresponding to a landed value of €351 million. Over the period 2008-2013 there is a decreasing trend on landings weight not compensated by the increasing prices of fish.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.18.1 Portuguese fleet main capacity and effort trends for the period 2008-2014



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

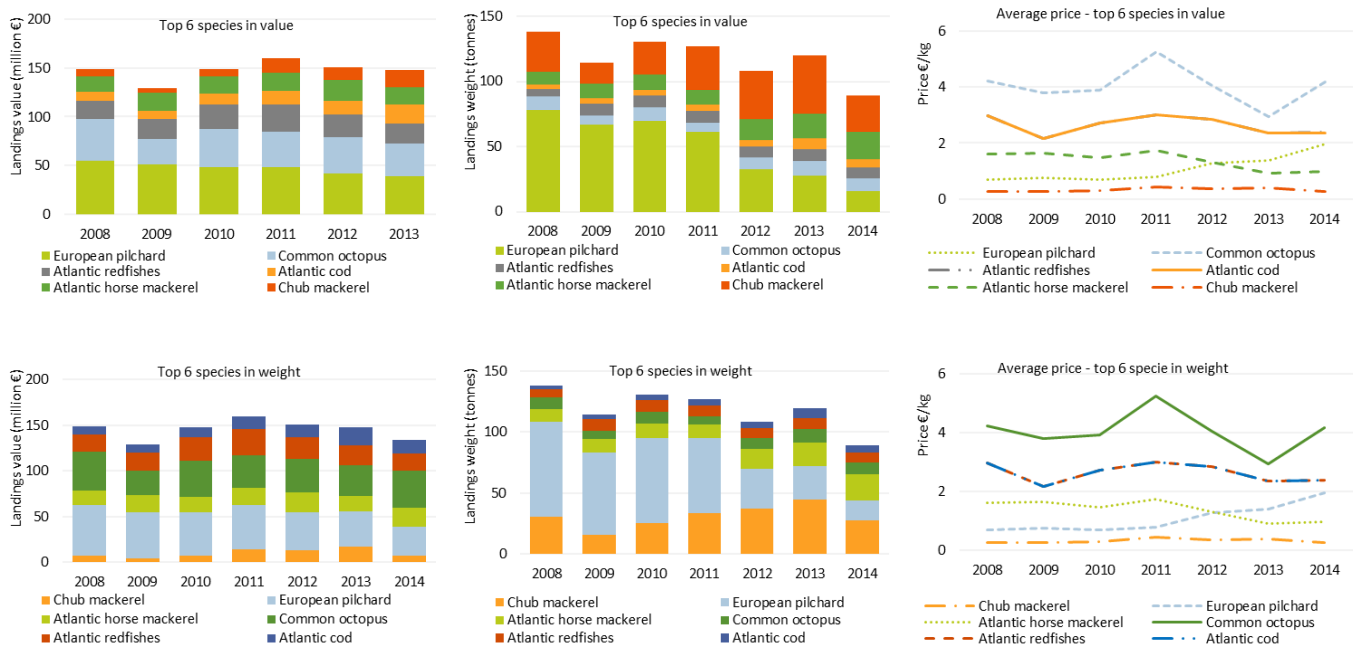
Figure 5.18.2 Landings in value and weight (and corresponding income from landings) by the Portuguese national fleet (left) and some efficiency indicators (right) for the period 2008-2014.

In 2013, European pilchard (sardine) generated the highest landed value (€38.4 million) by the national fleet, followed by common octopus with €33.7 million, Atlantic redfish (€21.3 million) and then Atlantic cod (€19.6 million). It should be noted that prices for Atlantic cod and redfish (and other frozen products) are estimates and may not necessarily equate to the real values (and therefore limit the type of analysis that can be made). Between 2008 and 2013, prices obtained for these key species increased for European pilchard (sardine) and decreased for the other species. Common octopus achieved the highest average price per kilo in 2013 (€2.9 per kg). The increase in sardine prices can be explained by the low availability of the species in the market due to legal restrictions on catches.

In terms of landed weight, 44.3 thousand tonnes of chub mackerel were landed in 2013, followed by European pilchard (27.7 thousand tonnes), Atlantic horse mackerel (19.2 thousand tonnes) and common octopus (11.5 thousand tonnes).

Landings by the Azorean fleet increased 6% in 2013, from 12.7 thousand tonnes in 2012 to 13.6 thousand tonnes in 2013 mainly due to the significant increase of catches of skipjack tuna. Prices decreased by 13% to 2.44 €/kg.

Madeira registered a decrease of landings in 2013 (-22.3%), from 6.3 to 4.9 thousand tonnes. Prices increased by 19% to 2.62 €/kg.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.18.3 Portuguese fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (top) and top 6 species in terms of landed weight (bottom).

National Fleet Economic performance

The total amount of income generated by the Portuguese national fleet in 2013 was €363 million. This consisted of €361 million in landings value and 1.9 million in non-fishing income. The Portuguese fleet's landings income decreased 5% between 2012 and 2013. Total costs in 2013 incurred in 2013 equated to €371.3 million, amounting to 102% of total income. Crew cost and fuel costs, represent the two major fishing expenses (73% of the operating costs and 54% of the total costs), with €135.3 and €65.4 million, respectively. Comparing 2013 to 2012, total operating costs decreased 9.3% however the income also decreased 5.5%. Between 2008 and 2013, operating costs as well as the total income, decreased around 10%.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Portuguese fleet in 2013 were €224 million, €89 million and €-8.3 million, respectively. Gross Value Added (GVA) decreased by 4.5% while gross profit and net profit increased 8% and 67% respectively between 2012 and 2013.

In 2013, the Portuguese fleet had an estimated (depreciated) replacement value of €467 million. Regarding Net profit margin and ROFTA in 2013 there was an improvement on these indicators, 65% and 74% respectively. Gross profit shows that the fleet is making enough income to cover its operating costs while capital costs are critical influencing net profit. It is interesting to note that investments increased (16%) in 2013 compared to 2012 and 49% compared to 2008, suggesting that the sector has a positive view of the future.

Table 5.18.2 Portuguese national fishing fleet economic performance in 2008-2013 and projections for 2014.

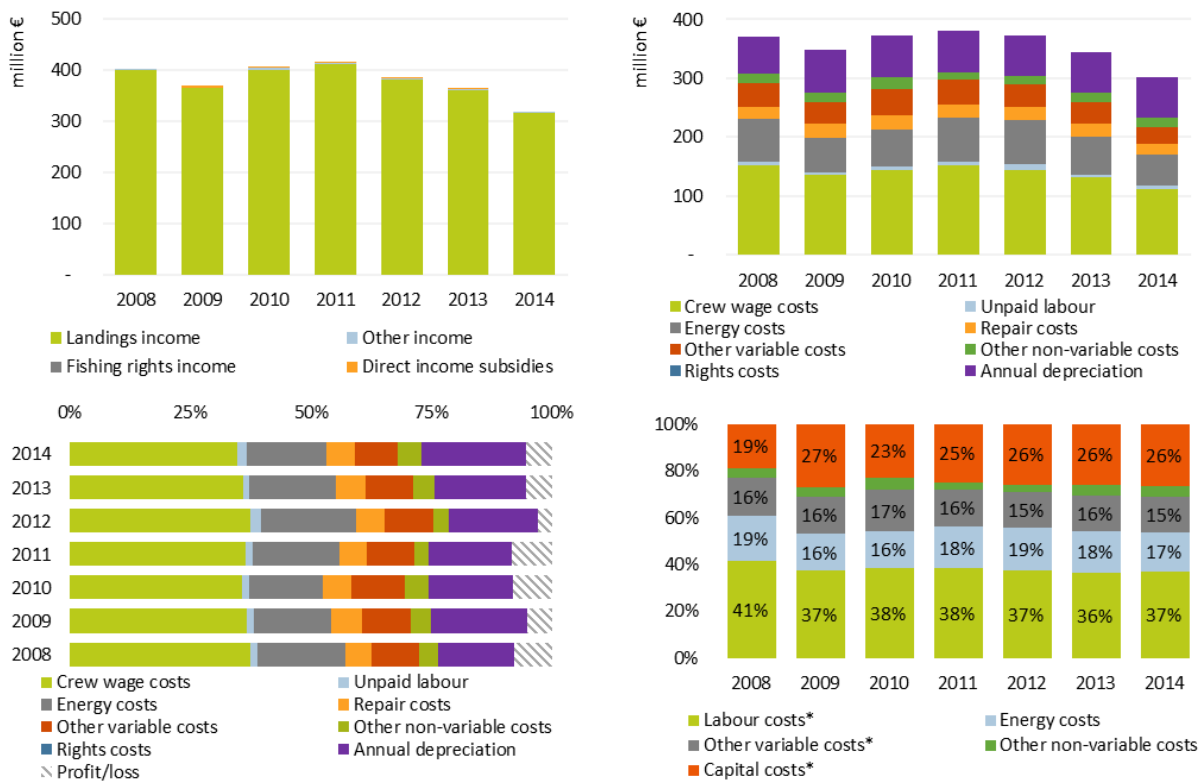
Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	400.1	365.4	400.4	410.7	380.7	361.1	316.0	-5%	↘	-10%
	Other income	1.3	0.9	3.5	3.8	3.4	1.9	1.8	-45%	↘	45%
Costs	Labour costs	156.7	140.2	150.1	157.1	152.7	135.3	116.6	-11%	↘	-14%
	Energy costs	72.8	58.3	61.8	74.4	75.9	65.4	52.8	-14%	↘	-10%
	Repair costs	21.4	23.5	24.3	23.7	22.7	22.4	18.3	-1%	↘	5%
	Other variable costs	40.3	37.5	44.1	41.4	38.0	35.5	28.8	-7%	↘	-12%
	Other non-variable costs	15.8	14.8	20.7	12.0	13.1	15.8	15.7	21%	↗	0%
	Capital costs	71.6	100.7	89.6	102.6	106.6	96.9	82.7	-9%	↘	35%
Economic Indicators	GVA	251.2	232.3	253.1	262.9	234.5	223.9	204.0	-5%	↘	-11%
	Gross profit	94.5	92.1	103.0	105.8	81.8	88.7	87.3	8%	↗	-6%
	Net profit	22.9	-8.6	13.4	3.1	-24.8	-8.3	14.9	67%	↗	-136%
Capital value	Depreciated replacement value	467	526	496	488	478	467	353	-2%	↘	0%
	Investments	9.3	21.0	22.4	14.4	11.4	13.2		16%	↗	42%
Profitability and development trends	Net profit margin (%)	5.7	-2.4	3.3	0.8	-6.5	-2.3	4.7	65%	↗	-140%
	<i>development trend</i>			Deteriorated					-1300%	↘	
	RoFTA (%)	6.7	3.5	6.6	7.1	2.4	4.1	4.83	74%	↗	-38%
	<i>development trend</i>			Deteriorated					-22%	↘	
GVA per FTE (thousand €)		28.8	26.4	29.1	28.9	27.4	24.1	29.2	-12%	↘	-17%
	<i>development trend</i>			Deteriorated					-14%	↘	

*all monetary values have been adjusted for inflation; constant prices (2014)

When not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.18.4 Income and cost structure trends for the Portuguese fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.18.5 Main economic performance indicator trends for the Portuguese fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Small Scale Fleet

In 2013, the small-scale fleet (SSF) comprised 3,185 vessels with a combined gross tonnage of 7.4 thousand GT and a total power of 101 thousand kW. The majority of SSF operate along the coast, using polyvalent passive gears (mainly nets, longlines, pots and traps) and in 2013 generated 9,857 jobs, about 55% of the national employment. In 2013 there was a reduction in the activity of this fleet, due to the harsh winter, with also a reduction in energy costs. Despite this, landings in weight increased around 7%, representing 11% of the total Portuguese landings.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the SSF in 2013 were €57.6 million, €24.6 million and €7.4 million, respectively. Compared to 2012, the performance of the fleet improved. Furthermore, this part of the national fleet contributes significantly to the economic and social sustainability of local fishing communities. Projections for 2014, suggest that small scale fleet continued to decrease in capacity (number, GT and kW) but in terms of economic performance, a further improvement is expected.

Large Scale Fleet

The large scale fleet comprised 811 vessels with a combined gross tonnage of 61.5 thousand GT and a total power of 165.7 thousand kW, representing 20% of the active Portuguese fleet. The majority of large scale fleet use mobile gears (purse seine, demersal trawl and dredges) and in 2013 generated 7,663 jobs, representing 42.7% of total fleet employment. In 2013, the activity of this fleet decreased along with income and the majority of the costs. In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the large scale fleet in 2013 were €153 million, €56.2 million and €-8 million respectively. Despite again suffering net losses in 2013, compared to 2012 the fleet's performance improved 39%.

Distant water fleet

The distant water fleet comprised 28 vessels in 2013, including 5 demersal trawlers and 23 vessels using hooks, with a combined gross tonnage of 9.3 thousand GT and a total engine power of 18.4 thousand kW. In 2013 the fleet generated 357 jobs. This fleet operates in waters regulated by international organisations (NAFO, NEAFC, CECAF, ICCAT, IATTC, etc.) and in Norwegian waters/Svalbard. Comparing 2013 to 2012, there was also a decrease in fleet activity, together with a reduction in the number of jobs and landings. In terms of economic performance, the fleet showed improvements in 2013 with an estimated Gross Value Added (GVA), gross profit and net profit of €13.4 million, €7.8 million and -€1.2 million, respectively. Projections for 2014 suggest improvements in performance.

Fleet Segment Level Economic performance

The Portuguese fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Portuguese Exclusive Economic Zone (27.9.a for the mainland fleet, 27.10 for the Azores's fleet and CECAF 34.1.2 for the Madeira's fleet). The national fleet consisted of 50 (DCF) fleet segments in 2013, and 6 inactive length classes. A short description of the most important segments is provided below.

Demersal trawl and seine over 40m (mainland fleet) – 12 vessels made up this segment which operates predominantly in Area 27 (NAFO, Norway, Banana hole and Irminger). The fleet targets a variety of species but in particular Atlantic Cod, Atlantic redfish and Greenland halibut. In 2013, the total value of landings was around €50 million and around 341 FTEs were employed, contributing to 16% and 3.6% of the total income from landings and FTEs generated by the Portuguese fishing fleet respectively. This fleet segment was reasonably profitable, with a reported gross profit of around €14,627 million and net profit of €1.5 million in 2013.

Demersal trawl and seine 24-40m (mainland and OFR fleets) – 67 vessels made up this segment in 2013; 62 operating in the Area 27 (27.9.a and 27.8.c) and 5 in the supra region OFR. The fleet targets a variety of species but in particular deep water rose shrimp, Atlantic horse mackerel and Atlantic mackerel. In 2013, the total value of landings was around €56 million and 567 FTEs were employed in this fleet segment, contributing to 17.6% and 6% of the total income from landings and FTEs generated by the Portuguese fishing fleet, respectively. In 2013, vessels operating in the Area 27 showed weak profitability while those operating in the OFR showed high profitability.

Hooks 24-40m (OFR) – 12 vessels made up this segment, which operates predominantly along the African Coast and in the Indian Ocean (FAO areas 34, 41, 51 and 57). The fleet targets a variety of species but in particular large pelagics such as blue shark, bigeye tuna and swordfish. In 2013, value of landings reached €6.4 million and 127 FTEs were employed in this fleet segment, contributing 3% and 1.4% of the total landed value and FTEs generated by the national fleet, respectively. This fleet segment had a reported gross profit of almost €2 million and net loss of -€1.5 million in 2013. Due to the poor economic performance, in 2013 an action plan was implemented in order to adjust the capacity of the segment targeting swordfish in the Atlantic Ocean north of 5° N, with the goal to reduce it by approximately 38%, further increasing the available quotas per vessel and consequently improving the economic performance.

Purse seine 18-24m (mainland fleet) – 51 vessels made up this segment in 2013, which operates predominantly in Area 27 (27.9.a and 27.8.c). The fleet targets a variety of species but in particular small pelagic fishes, such as Atlantic pilchard, chub mackerel and Atlantic horse mackerel. In 2013, the total value of landings was almost €30 million and the fleet segment employed around 860 FTEs, contributing 9.7% and 9.2% of the total income from landings and FTEs, respectively. In 2013 this segment had improved and can be considered reasonably profitable, with a reported gross profit of around €7 million and net profit of €2.5 million, but this situation which may change in the coming years due to the restrictions imposed on fishing. The average price per kg continued its upward trend in 2013, contributing to the stability of the segment.

Hooks 24-40m (Azores) – This fleet segment generates over 33% of total value and around 42% of total weight landed by the Azorean fleet. It is composed of 23 vessels operating exclusively in Area 27.10.a. The fleet targets mainly tuna species, such as big-eye tuna, skipjack and albacora. In 2013 catches of skipjack increased significantly by 260%, due to a greater availability of fishes. In 2013 the total value from landings was €11 million and the fleet segment employed 292 FTEs.

Hooks 12-18m (Madeira) - This fleet segment generated over 50% of the total landings value and around 38% of total weight by the Madeiran fleet. The fleet is composed by 18 vessels operating exclusively in Madeiran waters (34.1.2). The fleet targets mainly black scabbard fish, which constitutes over 89% of the fleet segment landings value. In 2013 the total value from landings was €5.5 million and the fleet segment employed 181 FTEs. The fleet segment remained profitable over the period 2008-2013.

Assessment and Future Trends

An overall decreasing trend in the number of active vessels is evident, and is mainly due to the scrapping of older vessels, while stability in terms of engine power and GT is observed in 2012; possibly a result of increased investments. Nonetheless, reduction in capacity is expected to continue over the next few years.

The average price per kilo of landings has shown an increasing trend over the years and is related to the decrease in the quantity landed. The implementation of measures at the national level, such as restricting European pilchard catches, resulted in a 39% decrease in landed weight, from around 70 thousand tonnes in 2010 to 15 thousand tonnes in 2014. While the decreasing catches in previous years may have constituted an opportunity for the purse seiners until 2013, 2014 may prove to be a turning point for the fleet, with longer periods of cessation and decreasing catches not fully compensated by higher prices.

In 2013, European pilchard represented 14% of the total landings; in 2014 it represented 8% and 2015 will further lower total catches by 7% (due to legal restrictions). The purse seine fishery, which catches more than 99% of pilchard in Portugal, received a MSC (Marine Stewardship Council) certification in 2010, as a sustainable and well managed fishery. With the decline in stock biomass following an ICES evaluation, this certification was suspended in 2012. It was therefore decided that a specific management plan should be put in place in 2012, to ensure a fast and sustainable stock recovery. The plan has a life span of 4 years (2012 to 2015) and set all the conditions for this fishery, including very restrictive harvest control rules and catch limits, aiming to: (1) ensure the sustainability of the resources; (2) minimise the impact of fishery activities on the ecosystem; (3) operate at maximum sustainable yield; (4) improve the economic viability and social conditions of the sector and (5) ensure the proper levels of cooperative governance. This plan further set the specific goal of contributing to the avoidance of a further decline of the Iberian sardine stock by reducing fishing effort and to recover, with high probability, levels of stock biomass by 2015. The implementation of the plan resulted in decreased catches of this specie and enabled recovery of the certification in 2013. However, due to low Iberian stock, the certification was suspended by the second time, with effects on August 2014. The stock levels are still at a minimum despite all the efforts made, with the biomass of pilchard with one or more years achieving the historical minimum.

In 2005, a plan was implemented with the goal of recovering stocks of the southern hake in the Western Iberian Peninsula (Areas 8.c and 9.a). Following European Regulation (EC) N° 2166/2005, the Portuguese authorities implemented an effort management plan by limiting the number of days of activity for vessels with more than 5 tonnes of hake. This plan anticipated a 10% annual reduction in effort, calculated between the number of vessels in the plan and the number of days for each vessel. In 2013 every vessel under the plan was allowed 140 days of activity; this number was further reduced to 126 days in 2014. Effort related to this plan reduced from 11 million kwdays in 2007 to 7.9 million kwdays in 2013 and a projected 7.7 million kwdays in 2014. This effort includes all the activity with the plan and special conditions. The main fleet segments targeting hake are Drift or Fixed Nets with vessel lengths between 12-18m and 18-24m, responsible for 74% of total catches. Most effort is applied by the trawlers, although hake catches represent only 4.6% of these vessels total catches, showing that they are not targeting hake. The fleet segment most dependent on hake is DFN with vessel length 18-24m, with hake representing 33% of total catches. Catches of hake within the DFN with vessel length 12-18m represents 20% of total catches. It should be noted that the quota consumption for hake in 2013 was 3 thousand tonnes, representing 65% of the quota for the stock attributed to Portugal. In 2014, catches decreased to 2.5 thousand tonnes, representing 48% of the national quota of 5,320 tonnes. The quota for 2015 decreased to 4,129 tonnes.

In 2013 Portugal managed 52 fishing quotas (not including quotas with 0 allowed catches) worth 93.6 thousand tonnes. This constituted an increase of 3.5% by comparison to 2012. Use of the total quota remained at 77% while 13 quotas were completely used. For 2014, the 47 fishing quotas collectively allocated 102.5 thousand tonnes (+9.6%) of fishing opportunities, with a 70% achieved utilisation. For

2015, the 50 fishing quotas confer fishing opportunities of 118.2 thousand tonnes (+15.3%). Trends show that while landings of fresh products in national ports have been falling (with an accentuated trend due to the decreased sardine catches), the fleet operating outside Portuguese waters increased their catches. NAFO and NEAFC quotas in the Arctic sea are always completely utilised with demand for more fish. While NAFO quotas have been increasing over the last years, from 20.4 thousand tonnes in 2013 to 23.4 thousand tonnes in 2015, NEAFC quotas have been decreasing, from 5.2 thousand tonnes in 2013 to 3.6 thousand tonnes in 2015.

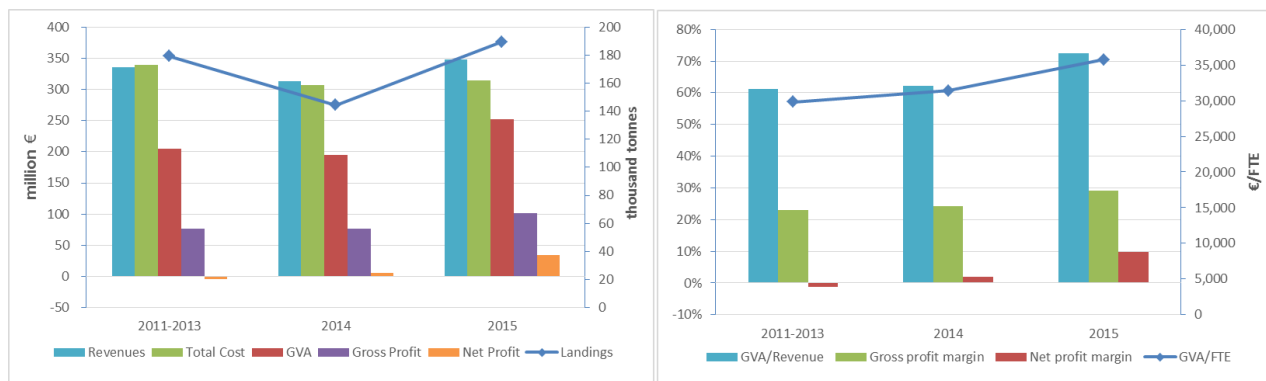
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According the BEMEF projections, the Portuguese fishing fleets bring in substantially fewer landings (-19%), although higher fish prices and lower fuel and other variable costs completely offset this trend with gross profit falling by only 1%. A consolidating fleet with lower opportunity costs results in an increase in net profit from -€4 million to €6 million.

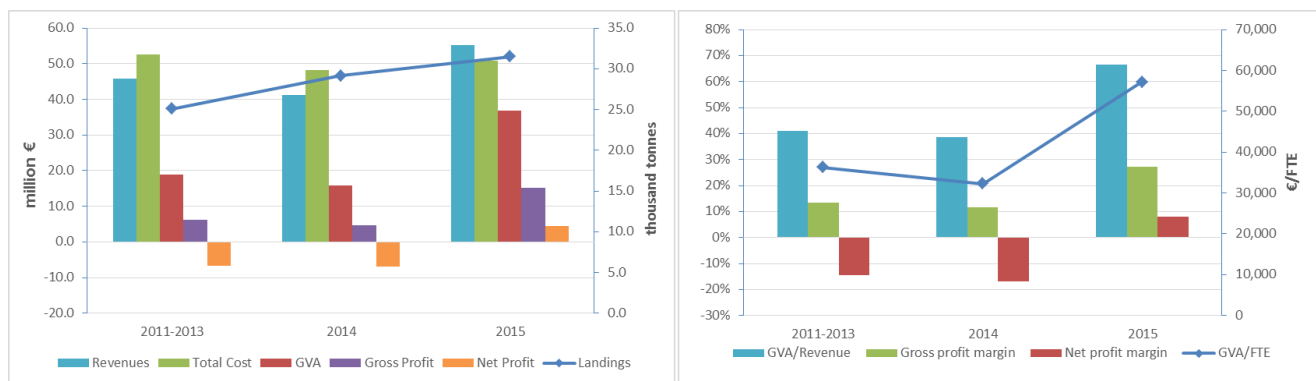
A reversal in landings is projected for 2015 with a 31% increase driving an increase in revenue (+11%) while total costs remain stable (+2%). Net profit continues to increase significantly from €6 million to €34 million and GVA increases from €195 million to €252 million.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

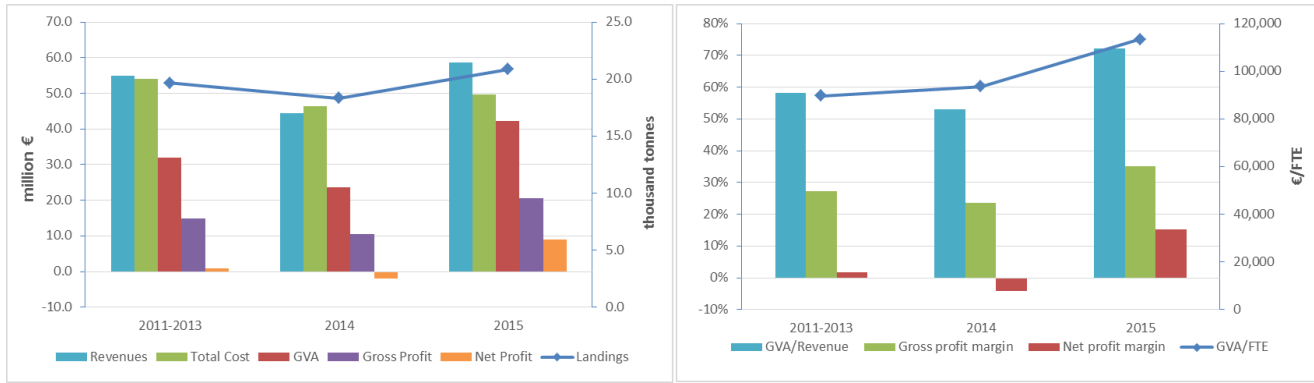
Figure 12.6 Portugal: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 Portuguese fleets by gross earnings



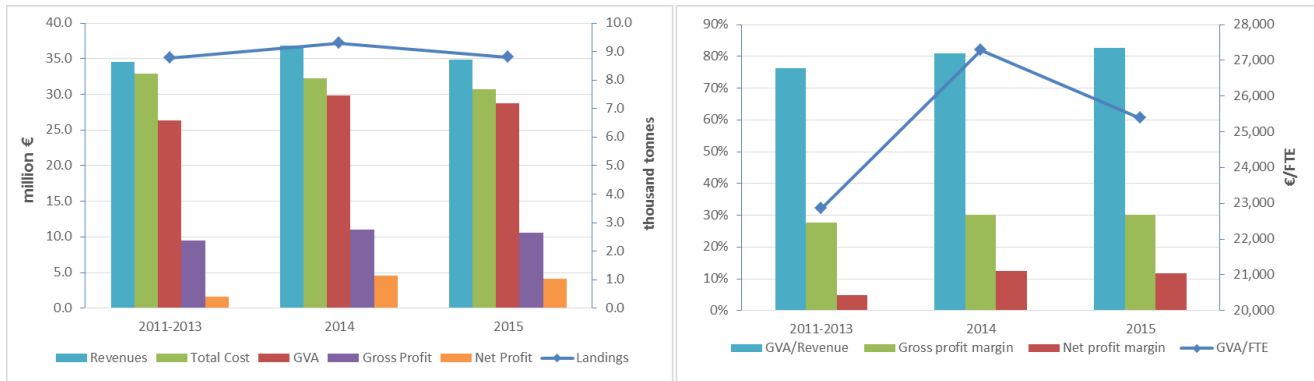
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 12.2 PRT AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

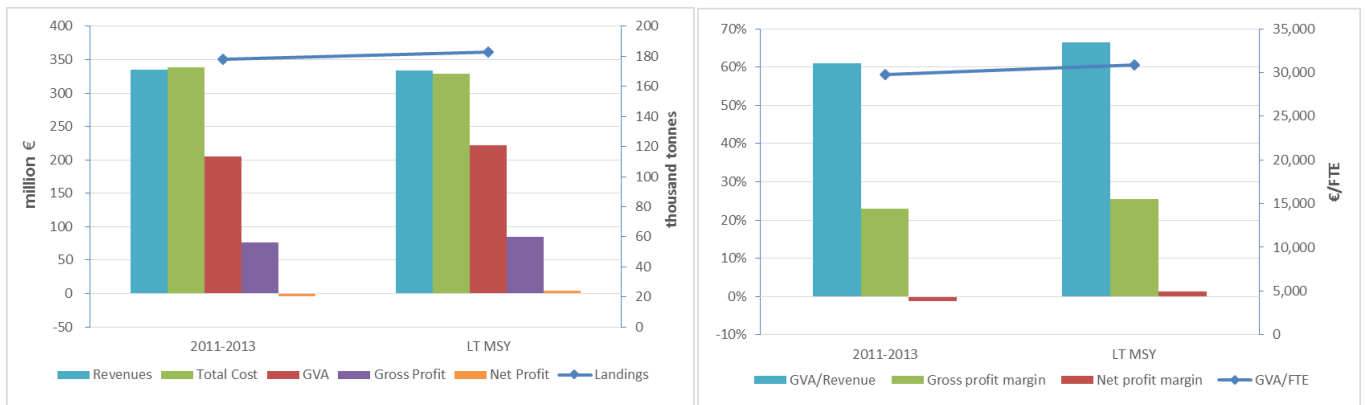
Figure 12.3 PRT AREA27 DTS VL40XX: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 12.4 PRT AREA27 PGP VL0010: Projections on 2014 and 2015 on the main socio-economic indicators.

According to the BEMEF projections, a state of long-term MSY results improved economic performance for the Portuguese fishing fleet. Unlike other MS, this improvement comes from decreasing costs rather than increasing revenue. Results are relatively small, with landings increasing by 3%, revenue decreasing by -1% and total costs decreasing by 3%. Gross profit and net profit increase to €85 million and €4 million respectively with improvements in GVA/revenue, GVA/FTE and gross and net profit margins as well.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 12.7 Portugal: MSY projections for the main socio-economic indicators.

Data issues

Capacity, logbook and landings data are derived from sources that are covered by different legislations. All these data are available exhaustively. The only exception is the group of vessels under 10m without logbook obligations. For these vessels effort is estimated considering that one auction day is equal to one fishing day. The remaining variables (cost, employment, fuel consumption) are estimated based on results from questionnaire surveys.

All segments of the Portuguese fleet have been sampled. As segments are not necessarily homogeneous, the results can be quite variable which is reflected in the high coefficients of variation. Results for the small-scale fleet present a lower response rate and higher variability due to the polyvalent characteristics of the fleet and the difficulties of the fishermen in completing the questionnaires. As many do not have organised accountancy procedures, they tend to rely on memory in order to answer the questions, raising costs and introducing bias into the economic performance estimates.

The value of landings are estimated for frozen products and landings in foreign ports while total income from landings is estimated based on survey with questionnaires. For that reason, total value of landings by species may differ from total income from landings.

In 2014, the Portuguese fisheries administration decided to make an historical revision of DCF data, covering all the time series from 2008 onwards. Based on the accumulated experience from the data collection, new methodologies were devised and new estimates made. The resulting values are considered more stable and consistent over the years, and solve the problem of clustering inconsistency. Two new gears are now available, due to the new reclassification scheme: MGO, which consisted of a local gear called "Xávega", previously integrated in the purse seiners segment, due to some of its characteristics, and beam trawlers were also separated from DTS and are now classified independently as TBB. One final remark for the fleet segment FPO VL2440 operating on Mediterranean waters, with only two vessels and previously clustered with a similar segment in Atlantic waters. The unclustering was made possible with the authorisation granted by the vessel owners to provide their data aggregated with such a small number of vessels.

The revision process shows that modelling is possible and can lead to consistent results, especially in those areas where survey data is not so reliable. There are still some variables that can be better refined, namely the FTE calculation. Study FISH/2005/14 recommended by DCF regulation gives some guidance but doesn't provide a solution for the FTE calculation. At national level Portugal still needs to redefine a better reference for a full time equivalent for each fleet segment. Currently 1920 hours per year is used, consisting of 48 weeks at 40 hours a week working time. The results show that this may be too high and an improved methodology is required.

In addition, and as a result of the revision process, socioeconomic information regarding fleets operating exclusively outside union waters is now available. This is a new requirement from the CFP that is not actually covered by the current DCF.

Indicators for the outermost regions were also revised and quality significantly improved. There is now specific analysis for these regions in the current chapter, in line with the new CFP. As a setback, the new estimates and trends may differ from those estimated in previous years.

Table 5.18.3 Portuguese national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	Distant water fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	3,792	3,665	3,540	3,338	3,230	3,185	3,107	-1%	↘	920	923	898	874	819	811	819	-1%	↔	41.0	38.0	39.0	35.0	34.0	28.0	28.0	-18%	↘
Average vessel age (year)	18.9	19.2	19.5	19.5	19.7	20.5	21.2	4%	↗	20.2	20.0	20.3	20.7	21.7	22.4	23.0	3%	↗	17.2	14.9	16.0	17.5	19.0	19.2	20.6	1%	↔
Average vessel length (m)	6.7	6.7	6.7	6.8	6.8	6.8	6.9	0%	↔	15.6	15.7	15.5	15.7	16.1	16.3	16.1	1%	↗	34.1	33.0	33.4	33.6	33.5	33.9	33.7	1%	↗
Vessel tonnage (thousand GT)	7.9	7.8	7.7	7.5	7.5	7.4	7.4	-1%	↘	63.5	65.6	63.2	63.0	60.9	61.5	60.8	1%	↗	13.6	12.0	12.7	11.5	11.1	9.3	9.2	-16%	↘
Vessel power (thousand kW)	107.9	108.1	107.2	103.7	102.9	101.0	100.3	-2%	↘	177.0	179.4	171.6	169.7	164.1	165.7	164.5	1%	↔	26.9	24.4	25.0	22.5	21.8	18.4	18.0	-16%	↘
Total employed (#)	9,397	9,321	8,523	10,075	8,862	9,857	9,612	11%	↗	7,418	8,125	7,652	7,751	7,479	7,663	7,647	2%	↗	420	415	410	433	416	357	357	-14%	↘
FTE (#)	2,924	2,697	2,533	2,959	2,406	3,026	1,867	26%	↗	5,409	5,739	5,793	5,730	5,774	5,966	4,817	3%	↗	381	363	381	409	396	313	292	-21%	↘
Average wage per employed (thousand €)	4.4	3.7	4.1	3.4	4.3	3.3	3.9	-22%	↘	14.8	12.4	14.2	15.0	14.7	12.6	12.7	-14%	↘	12.8	11.5	17.0	15.8	11.6	15.6	13.3	35%	↗
Average wage per FTE (thousand €)	14.2	12.9	13.7	11.5	15.7	10.9	14.7	-31%	↘	20.3	17.5	18.7	20.3	19.1	16.2	17.5	-15%	↘	14.1	13.1	18.3	16.7	12.2	17.8	16.2	46%	↗
Days at sea (thousand days)	286.8	273.4	255.3	247.4	250.4	237.8	181.0	-5%	↘	151.0	149.3	144.8	141.7	136.0	131.4	106.8	-3%	↘	10.6	9.4	10.8	9.7	7.0	6.1	5.7	-13%	↘
Fishing days (thousand days)	264.8	253.7	236.2	228.4	231.2	218.8	177.8	-5%	↘	127.6	123.7	118.9	116.5	111.5	107.3	93.0	-4%	↘	7.2	6.3	7.1	6.8	6.2	5.4	5.0	-12%	↘
Energy consumption (million litres)	12.3	12.6	12.7	11.7	12.1	10.8	5.7	-10%	↘	78.5	81.1	78.9	78.7	78.9	78.7	64.1	0%	↔	16.8	14.9	16.9	15.6	12.7	10.8	10.0	-15%	↘
Energy consumption per landed tonne (l/T)	531	640	580	663	597	502	379	-16%	↘	417.8	498.9	435.7	427.7	495.8	478.8	510.3	-3%	↘	1,742	1,569	1,360	1,354	1,185	1,462	1,137	23%	↗
Landings weight (thousand tonnes)	23.2	19.6	21.9	17.7	20.2	21.6	15.1	7%	↗	187.9	162.6	181.0	183.9	159.2	164.5	125.5	3%	↗	9.6	9.5	12.4	11.6	10.7	7.4	8.8	-31%	↘
Landings value (million €)	100.5	77.4	79.2	75.8	74.9	74.2	62.4	-1%	↘	295.4	276.0	291.9	307.5	271.1	253.1	216.9	-7%	↘	28.0	28.4	37.5	33.6	24.6	24.1	36.7	-2%	↘

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Table 5.18.4 Economic performance of the Portuguese national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	Distant water fleet							%Δ 2013-12	Trend				
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014						
Income	Landings income	97.0	78.7	79.4	76.2	76.0	75.3	62.4	-1%	↔	274.8	254.4	278.0	296.1	276.1	256.0	216.9	-7%	↘	28.4	32.5	43.1	38.5	28.6	29.8	36.7	4%	↗			
	Other income	0.1	0.1	0.8	0.4	0.5	0.2	0.1	-71%	↘	1.2	0.7	2.4	2.8	2.7	1.6	1.6	-40%	↘	0.1	0.3	0.5	0.2	0.1	0.1	-50%	↘				
	Direct income subsidies		0.1	0.2	0.0						3.9	2.7	1.9	1.0	0.1			-91%	↘	0.1	0.3	0.0									
	Fishing rights income																														
Costs	Labour costs	41.6	34.8	34.6	34.1	37.9	33.0	27.4	-13%	↘	109.7	100.6	108.6	116.2	110.0	96.7	84.5	-12%	↘	5.4	4.8	7.0	6.8	4.8	5.6	4.8	16%	↗			
	Energy costs	8.4	7.1	7.4	8.2	8.5	7.7	5.9	-9%	↘	53.4	43.2	44.9	55.0	58.4	50.7	40.7	-13%	↘	11.1	7.9	9.6	11.2	9.0	6.9	6.2	-24%	↘			
	Repair costs	3.0	3.3	3.3	3.1	3.1	3.1	2.5	1%	↗	15.6	17.4	17.6	17.6	17.1	17.0	13.7	-1%	↔	2.8	2.7	3.4	3.0	2.4	2.3	2.0	-8%	↘			
	Other variable costs	6.2	5.4	5.2	5.0	4.9	4.8	3.9	-3%	↘	28.3	26.7	29.5	30.0	27.9	25.2	19.8	-10%	↘	5.8	5.5	9.3	6.4	5.2	5.5	5.1	7%	↗			
	Other non-variable costs	2.6	1.8	2.8	1.9	1.9	2.2	2.2	14%	↗	11.5	11.3	15.2	9.3	10.0	11.7	11.6	18%	↗	1.6	1.7	2.7	0.9	1.2	1.8	1.9	58%	↗			
	Capital costs	14.0	18.0	17.0	17.7	18.6	17.3	15.5	-7%	↘	47.2	67.1	58.8	66.2	68.4	64.2	58.8	-6%	↘	8.4	9.1	9.3	11.7	11.2	9.0	8.4	-20%	↘			
Capital value	Depreciated replacement value	72.4	79.4	78.3	73.4	72.7	71.4	69.7	-2%	↘	237.0	279.6	258.3	258.8	251.9	250.8	248.1	0%	↔	44.8	42.6	44.1	44.3	41.4	34.8	35.0	-16%	↘			
	Investments	2.7	4.6	2.9	1.3	1.3	1.2		-11%	↘	6.0	14.4	18.0	11.8	9.1	11.2		23%	↗	0.7	2.1	1.4	1.2	1.0	0.9		-11%	↘			
Economic indicators	GVA	76.9	61.1	61.5	58.4	58.1	57.6	48.9	-1%	↔	167.2	156.4	173.2	187.0	165.3	153.0	133.5	-7%	↘	7.1	14.8	18.4	17.5	11.1	13.4	21.6	21%	↗			
	Gross profit	35.3	26.3	26.9	24.3	20.3	24.6	21.4	22%	↗	57.5	55.8	64.6	70.8	55.3	56.2	49.1	2%	↗	1.7	10.0	11.5	10.7	6.3	7.8	16.9	25%	↗			
	Gross profit margin	36.3	33.4	33.6	31.8	26.5	32.6	34.3	23%	↗	20.9	21.9	23.1	23.7	19.9	21.8	22.5	10%	↗	6.0	30.7	26.4	27.3	21.7	26.2	45.8	21%	↗			
	Net profit	21.3	8.3	10.0	6.7	1.7	7.4	9.6	341%	↗	10.3	-11.4	5.8	4.6	-13.1	-8.0	-3.2	39%	↗	-6.7	0.9	2.2	-1.0	-5.0	-1.2	8.5	76%	↗			
Profitability and development trends	Net Profit margin	21.9	10.5	12.4	8.7	2.2	9.8	15.3	348%	↗	3.7	-4.5	2.1	1.5	-4.7	-3.1	-1.5	34%	↗	-23.6	2.7	5.0	-2.6	-17.3	-4.0	23.1	77%	↗			
	<i>development trend</i>			Deteriorated						-12%	↘			Deteriorated						-769%	↘			Improved						45%	↗
	RoFTA (%)	31.1	15.6	16.7	15.5	9.8	16.2	22.4	65%	↗	6.1	1.1	6.2	8.2	2.4	2.7	2.5	14%	↗	-13.2	7.2	8.8	4.1	-4.5	2.5	28.2	154%	↗			
	<i>development trend</i>			Deteriorated						-9%	↘			Deteriorated						-44%	↘			Improved						413%	↗
GVA per FTE (thousand €)		26.3	22.7	24.3	19.7	24.2	19.0	26.2	-21%	↘	30.9	27.3	29.9	32.6	28.6	25.6	27.7	-10%	↘	18.6	40.6	48.3	42.7	28.0	42.8	74.0	53%	↗			
	<i>development trend</i>			Deteriorated						-19%	↘			Deteriorated						-14%	↘			Improved						20%	↗

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Table 5.18.5 Main socio-economic performance indicators by fleet segment in the Portuguese national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	N	% Δ	N	% Δ	N	% Δ	N	% Δ	N	% Δ	N	% Δ	N	% Δ	N	% Δ	N	% Δ	N	% Δ	N	% Δ			
AZO AREA27 DFN VL0010	38	-10%	46	2%	3,962	-17%	127	-31%	580	-12%	236	-25%	490	1%	10.7	-1%	241	2%	104	66%	16.0	75%	High	-31%	Deteriorated
AZO AREA27 HOK VL0010	368	-6%	587	68%	37,778	0%	3,394	-14%	8,808	-3%	2,529	18%	6,745	-3%	11.5	-43%	3,592	-5%	1,181	19%	13.4	22%	High	-26%	Deteriorated
AZO AREA27 HOK VL1012	74	-1%	507	71%	12,535	21%	1,471	-25%	6,223	-2%	1,923	3%	4,631	-10%	9.1	-48%	1,845	-16%	481	5%	7.6	13%	Reasonable	-7%	Deteriorated
AZO AREA27 HOK VL1218	41	3%	285	17%	7,046	-7%	1,352	-37%	5,472	-2%	2,251	16%	4,151	-1%	14.6	-15%	1,489	-8%	383	-29%	6.7	-30%	Reasonable	-20%	Deteriorated
AZO AREA27 HOK VL2440°	26	4%	292	-9%	6,692	2%	3,472	23%	11,149	-13%	5,814	5%	6,837	-29%	23.4	-22%	2,305	-43%	-3,362	-177%	-26.3	-225%	Weak	-1842%	Deteriorated
AZO AREA27 PGP VL0010°	15	25%	16	129%	1,367	20%	97	11%	236	42%	84	101%	150	86%	9.4	-19%	69	203%	9	87%	-3.7	91%	Weak	-240%	Deteriorated
AZO AREA27 PS VL0010	24	26%	21	-53%	2,356	56%	180	96%	249	-12%	169	44%	133	-36%	6.4	38%	19	-78%	88	-210%	-35.6	-253%	Weak	-1071%	Deteriorated
AZO AREA27 PS VL1012°	13	0%	84	-8%	2,951	-8%	369	-3%	974	-39%	585	-22%	684	-45%	8.1	-40%	178	-50%	44	-142%	-4.5	-168%	Weak	-152%	Deteriorated
PRT AREA27 DFN VL0010	307	2%	158	45%	15,078	-3%	403	1%	4,691	14%	1,250	14%	3,773	16%	23.9	-20%	1,360	75%	187	146%	3.9	140%	Reasonable	144%	Improved
PRT AREA27 DFN VL1012	27	-16%	74	-17%	3,911	-13%	341	-11%	2,547	-14%	573	-33%	1,972	-11%	26.7	7%	799	2%	159	408%	6.4	512%	Reasonable	0%	Stable
PRT AREA27 DFN VL1218	66	-3%	410	46%	11,461	-7%	1,673	-4%	10,559	6%	3,178	10%	6,620	1%	16.2	-31%	2,397	23%	468	62%	-4.9	61%	Weak	7%	Improved
PRT AREA27 DFN VL1824	26	0%	335	10%	6,103	-4%	1,810	1%	6,507	-1%	2,799	8%	3,676	-5%	11.0	-14%	1,074	15%	-1,180	30%	-19.3	22%	Weak	17%	Improved
PRT AREA27 DRB VL0010	41	-2%	31	29%	4,292	31%	376	27%	952	29%	499	31%	476	45%	15.4	12%	30	158%	254	29%	-26.4	45%	Weak	25%	Improved
PRT AREA27 DRB VL1012	22	-4%	42	62%	2,221	-8%	470	-14%	824	-26%	440	-22%	608	17%	14.5	-28%	284	108%	107	74%	-10.6	71%	Weak	72%	Improved
PRT AREA27 DRB VL1218	15	7%	45	96%	1,703	16%	294	4%	1,558	8%	660	21%	1,400	48%	31.1	-24%	742	108%	230	360%	12.4	293%	High	140%	Improved
PRT AREA27 DTS VL0010	5	0%	15	-17%	1,086	17%	97	-1%	951	-14%	314	5%	755	-10%	50.4	8%	482	27%	381	44%	38.5	65%	High	86%	Improved
PRT AREA27 DTS VL1218	8	-11%	42	8%	1,635	-8%	782	8%	2,070	0%	760	3%	1,394	39%	33.2	29%	627	98%	297	326%	13.5	314%	High	123%	Improved
PRT AREA27 DTS VL1824	7	-13%	56	6%	1,480	-28%	1,439	-16%	3,645	-20%	881	-8%	1,669	-8%	29.8	-13%	547	13%	404	-6%	-11.3	-29%	Weak	-623%	Deteriorated
PRT AREA27 DTS VL2440	62	5%	514	-1%	14,291	1%	26,703	5%	46,425	1%	32,093	41%	16,771	-4%	32.6	-3%	4,242	-16%	-8,832	-12%	-19.8	-16%	Weak	-118%	Deteriorated
PRT AREA27 DTS VL40XX	12	0%	341	5%	2,687	-12%	17,214	-9%	50,537	3%	21,357	23%	29,698	6%	87.1	1%	14,627	32%	1,534	135%	3.1	136%	Reasonable	211%	Improved
PRT AREA27 FPO VL0010	158	10%	99	-24%	13,271	22%	545	31%	7,026	35%	2,144	73%	5,651	38%	57.1	83%	2,709	43%	1,618	83%	22.9	35%	High	-11%	Deteriorated
PRT AREA27 FPO VL1012	50	4%	118	23%	6,600	1%	519	15%	4,102	7%	1,260	34%	3,826	8%	32.4	-12%	2,018	14%	895	24%	18.0	17%	High	-11%	Deteriorated
PRT AREA27 FPO VL1218	58	14%	375	35%	9,181	8%	1,441	18%	8,774	10%	3,195	40%	6,989	15%	18.6	-15%	2,982	49%	565	332%	5.6	309%	Reasonable	33%	Improved
PRT AREA27 FPO VL1824	7	0%	82	-10%	1,399	-25%	424	-6%	1,605	-15%	722	11%	1,199	-15%	14.6	-6%	567	1%	228	-57%	-12.7	-85%	Weak	-285%	Deteriorated
PRT AREA27 HOK VL0010	161	-6%	104	53%	10,153	-16%	133	-17%	2,267	-15%	743	-15%	1,776	-16%	17.1	-45%	676	640%	307	156%	13.5	165%	High	556%	Improved

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.18.5 continued

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ		% Δ			
PRT AREA27 HOK VL1012	12	0%	43	23%	1,459	-9%	164	1%	1,056	-32%	230	-70%	846	-27%	19.7	-40%	387	-30%	149	-44%	12.8	-22%	High	-30%	Deteriorated
PRT AREA27 HOK VL1218	21	-19%	192	25%	4,031	-15%	1,019	5%	6,039	-11%	1,707	-12%	4,534	-17%	23.6	-33%	2,014	6%	1,090	71%	16.9	100%	High	75%	Improved
PRT AREA27 HOK VL1824	24	0%	297	8%	4,745	-15%	2,066	1%	10,999	-11%	3,156	-19%	7,325	-6%	24.7	-14%	2,455	-1%	29	106%	0.2	107%	Reasonable	-95%	Deteriorated
PRT AREA27 HOK VL2440	20	5%	242	16%	4,709	4%	4,499	3%	11,575	-7%	3,166	-5%	4,000	-33%	16.5	-42%	1,340	-55%	-2,359	-166%	-19.5	-203%	Weak	-1391%	Deteriorated
PRT AREA27 PGP VL0010	1849	-1%	1,169	12%	124,428	-9%	3,164	-7%	33,620	-4%	9,453	9%	25,507	-4%	21.8	-14%	9,894	31%	2,080	400%	6.2	413%	Reasonable	-39%	Deteriorated
PRT AREA27 PGP VL1012	13	0%	23	92%	1,186	3%	105	7%	734	6%	294	28%	557	-1%	24.2	-49%	250	6%	-51	1%	-6.3	4%	Weak	-331%	Deteriorated
PRT AREA27 PGP VL1218	34	-8%	192	-33%	4,488	-25%	977	-16%	4,362	-41%	1,735	-30%	3,026	-38%	15.8	-8%	1,145	-34%	-441	-1859%	-9.4	-3043%	Weak	-1016%	Deteriorated
PRT AREA27 PMP VL0010	60	-6%	37	-21%	3,784	-18%	188	-17%	1,278	-24%	529	-18%	897	-28%	24.3	-8%	313	-12%	-5	-129%	-0.4	-138%	Weak	-139%	Deteriorated
PRT AREA27 PS VL0010	24	-4%	39	-15%	1,792	0%	204	45%	1,150	-3%	1,198	12%	913	-4%	23.4	13%	434	1%	168	5%	14.6	8%	High	-30%	Deteriorated
PRT AREA27 PS VL1012	27	8%	129	10%	3,209	-5%	542	9%	3,791	-14%	3,980	-9%	2,479	-24%	19.2	-31%	740	-39%	106	-82%	3.0	-78%	Reasonable	-84%	Deteriorated
PRT AREA27 PS VL1218	38	6%	229	0%	5,482	8%	1,054	19%	7,759	-17%	10,289	-18%	5,579	-18%	24.4	-18%	1,833	-21%	414	-62%	5.4	-56%	Reasonable	-50%	Deteriorated
PRT AREA27 PS VL1824	51	0%	860	-8%	9,521	5%	5,521	9%	29,789	-19%	40,736	-13%	22,506	-15%	26.2	-8%	7,214	-7%	2,429	-18%	8.1	-4%	Reasonable	104%	Improved
PRT AREA27 PS VL2440	18	0%	309	-7%	3,343	6%	2,352	6%	13,683	-8%	16,891	3%	11,314	6%	36.6	15%	3,280	24%	879	594%	5.9	619%	Reasonable	538%	Improved
PRT AREA27 TBB VL0010	44	-23%	68	-1%	3,659	-32%	216	-28%	1,070	-21%	343	-18%	700	-15%	10.3	-13%	343	-2%	100	557%	9.4	735%	Reasonable	199%	Improved
PRT AREA27 TBB VL1012	8	0%	23	15%	957	-9%	129	1%	616	-5%	330	17%	289	-29%	12.6	-38%	76	-54%	-99	-674%	-21.6	-853%	Weak	-63%	Deteriorated
MAD OFR HOK VL0010*	53	-7%	45	-39%	2,310	-19%	179	1%	1,010	1%	317	-33%	752	12%	16.7	84%	466	75%	269	2695%	26.5	2684%	High	26%	Improved
MAD OFR HOK VL1218	18	0%	181	-13%	3,370	-3%	1,109	-4%	5,464	-10%	1,873	-17%	4,053	-9%	22.4	5%	1,412	15%	955	43%	17.3	60%	High	3%	Stable
MAD OFR HOK VL1824	3	-25%	46	10%	594	46%	211	-42%	1,081	16%	447	-16%	719	25%	15.6	14%	437	133%	169	200%	15.6	186%	High	156%	Improved
MAD OFR HOK VL2440	6	0%	57	-38%	1,086	21%	702	-10%	2,289	-29%	1,658	-29%	1,547	-42%	27.1	-6%	907	-40%	-630	-608%	-20.0	-849%	Weak	19%	Improved
MAD OFR MGP VL0010	6	-25%	20	-35%	629	-23%	37	16%	340	-32%	99	-49%	280	-36%	14.0	-1%	142	-26%	126	-24%	37.0	11%	High	19%	Improved
MAD OFR MGP VL1824	3	0%	50	11%	558	-21%	103	-27%	702	-4%	589	12%	519	2%	10.4	-9%	123	197%	-67	58%	-9.1	57%	Weak	22%	Improved
PRT OFR DTS VL2440	5	-17%	53	-5%	1,289	34%	3,082	1%	9,869	73%	1,092	20%	6,309	130%	119.0	143%	3,806	148%	2,155	644%	21.8	425%	High	590%	Improved
PRT OFR HOK VL2440	12	-29%	127	-24%	2,431	-28%	3,953	-32%	6,431	-31%	2,981	-29%	3,329	63%	26.2	116%	1,982	327%	-1,538	70%	-16.8	64%	Weak	-44%	Deteriorated
PRT OFR HOK VL40XX	5	0%	76	-5%	1,318	-27%	3,082	1%	5,537	-13%	1,670	-50%	2,218	-39%	29.2	-36%	1,128	-59%	-1,175	-273%	-15.3	-274%	Weak	-1331%	Deteriorated
PRT AREA37 FPO VL2440	2	0%	28	8%	804	1%	499	-4%	1,171	21%	100	27%	821	60%	29.3	48%	370	436%	74	121%	5.5	117%	Reasonable	113%	Improved

Table 5.18.6 Main socio-economic performance indicators by fleet segment in the Portuguese national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	fuel consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend
AZO AREA27 HOK VL2440*	11,2	-13%	257	-2%	869	3%	1.494	2%	174.293	-22%	15.519	-10%	11.801	-13%	597	17%	96.338	-6%	402.850	-6%	402.850	-8%	262.956	-31%	-129.315	-166%	-2632%	Deteriorated
PRT AREA27 HOK VL0010	0,7	63%	63	-10%	73	1%	73	0%	6.832	-47%	9.649	-45%	2.401	-14%	180	-3%	1.142	-7%	9.992	-7%	9.992	-38%	11.032	-10%	1.908	160%	511%	Improved
PRT AREA27 HOK VL1012	3,6	23%	122	-9%	158	-67%	181	-69%	38.302	-24%	10.048	-38%	5.334	-46%	712	237%	8.514	-29%	65.096	-29%	65.096	-28%	70.532	-27%	12.430	-44%	-39%	Deteriorated
PRT AREA27 HOK VL1218	9,1	54%	192	6%	423	3%	437	-6%	119.987	-12%	13.124	-43%	12.114	-35%	597	20%	27.364	-8%	210.904	-8%	210.904	-2%	215.906	3%	51.912	112%	67%	Improved
PRT AREA27 HOK VL1824	12,4	8%	198	-15%	665	-5%	734	-21%	202.930	-9%	16.306	-17%	15.181	-21%	655	25%	96.623	1%	429.621	1%	429.621	-6%	305.213	-6%	1.199	106%	-96%	Deteriorated
PRT AREA27 HOK VL2440	12,1	11%	235	-2%	672	-8%	787	-9%	132.997	-16%	10.991	-24%	10.946	-24%	1.421	8%	146.836	-6%	538.809	-6%	538.809	-6%	199.986	-36%	-117.955	-153%	-1481%	Deteriorated
PRT AREA27 MGO VL0010	2,3	42%	80	1%	734	22%	780	21%	15.345	-35%	6.384	-46%	2.296	-27%	50	-10%	6.709	48%	26.123	48%	26.123	-22%	23.396	-25%	1.489	32%	-26%	Deteriorated
PRT AREA27 MGO VL1012	3,6	-30%	77	-37%	583	5%	583	-15%	15.257	-57%	4.238	-38%	1.695	-41%	72	16%	7.915	-9%	33.335	-9%	33.335	-45%	17.164	-71%	-13.178	-255%	-155%	Deteriorated
AZO AREA27 PGP VL0010*	1,1	84%	91	-4%	62	68%	93	70%	5.421	12%	5.082	-39%	1.479	-39%	1.144	-44%	2.238	-29%	11.150	-29%	11.150	-6%	10.012	49%	577	90%	-116%	Deteriorated
PRT AREA27 PGP VL0010	0,6	13%	67	-8%	76	19%	76	19%	8.444	-17%	10.921	-14%	2.525	-8%	335	-14%	2.017	-12%	12.782	-12%	12.782	-13%	13.795	-3%	1.125	403%	-45%	Deteriorated
PRT AREA27 PGP VL1012	1,8	92%	91	3%	248	24%	304	23%	23.589	-7%	12.344	-55%	4.579	-46%	356	-16%	5.888	-7%	42.155	-7%	42.155	2%	42.821	-1%	3.890	1%	-294%	Deteriorated
PRT AREA27 PGP VL1218	5,7	-27%	132	-19%	387	-6%	471	3%	55.338	-29%	9.713	-11%	6.831	-13%	563	19%	20.229	-23%	103.719	-23%	103.719	-34%	89.010	-32%	-12.960	-2033%	-531%	Deteriorated
PRT AREA27 PMP VL0010	0,6	-15%	68	-13%	140	1%	147	2%	9.744	-29%	14.095	-6%	3.500	2%	356	1%	3.416	-17%	16.267	-17%	16.267	-21%	14.956	-23%	83	-131%	-145%	Deteriorated
AZO AREA27 PS VL0010	0,9	-63%	93	23%	72	-8%	102	-10%	4.766	-26%	4.982	83%	1.539	115%	1.067	36%	3.098	14%	9.571	14%	9.571	-8%	5.553	-49%	-3.683	-145%	-376%	Deteriorated
AZO AREA27 PS VL1012*	6,5	-8%	227	-8%	198	-16%	337	-12%	38.910	-43%	6.022	-38%	3.952	-42%	631	24%	10.948	-19%	61.258	-19%	61.258	-36%	52.579	-45%	-3.356	-142%	-126%	Deteriorated
PRT AREA27 PS VL0010	1,6	-11%	75	4%	669	12%	733	12%	19.967	-5%	12.287	12%	4.652	44%	170	29%	4.105	-11%	29.910	-11%	29.910	-2%	38.052	0%	7.013	9%	-50%	Deteriorated
PRT AREA27 PS VL1012	4,8	2%	119	-12%	1.240	-5%	1.583	-3%	64.387	-21%	13.279	-24%	7.681	-29%	136	19%	13.115	-14%	102.334	-14%	102.334	-16%	91.797	-30%	3.925	-83%	-88%	Deteriorated
PRT AREA27 PS VL1218	6,0	-5%	144	2%	1.877	-24%	2.600	-21%	98.579	-21%	15.973	-19%	10.758	-20%	102	44%	18.175	-9%	151.914	-9%	151.914	-15%	146.809	-22%	10.885	-64%	-59%	Deteriorated
PRT AREA27 PS VL1824	16,9	-8%	187	5%	4.279	-17%	6.327	-9%	299.852	-18%	17.782	-11%	15.323	-14%	136	26%	65.744	-17%	448.694	-17%	448.694	-17%	441.296	-15%	47.623	-18%	77%	Improved
PRT AREA27 PS VL2440	17,2	-7%	186	6%	5.053	-3%	7.827	-3%	446.324	1%	25.999	8%	20.494	2%	139	3%	81.657	-25%	643.223	-25%	643.223	-10%	628.574	6%	48.853	594%	466%	Improved
PRT AREA27 TBB VL0010	1,6	28%	83	-12%	94	21%	94	17%	8.119	-1%	4.734	-16%	1.731	-10%	629	-12%	4.222	-12%	16.537	-12%	16.537	-7%	15.907	11%	2.275	751%	288%	Improved
PRT AREA27 TBB VL1012	2,9	15%	120	-9%	345	29%	470	33%	26.594	-12%	9.250	-23%	5.750	-28%	390	-14%	9.493	-13%	47.950	-13%	47.950	-4%	36.096	-29%	-12.430	-674%	-120%	Deteriorated
PRT OFR DTS VL2440	10,6	14%	258	60%	847	-10%	1.136	11%	500.463	150%	47.214	120%	42.412	140%	2.823	-16%	376.291	4%	1.217.785	4%	1.217.785	67%	1.261.706	176%	431.080	752%	1253%	Improved
MAD OFR HOK VL0010*	0,9	-35%	44	-13%	137	-17%	163	-18%	5.391	-24%	5.750	20%	1.334	-26%	566	50%	2.778	-1%	10.421	-1%	10.421	-21%	14.190	20%	5.084	2906%	15%	Improved
MAD OFR HOK VL1218	10,1	-13%	187	-3%	556	-15%	748	-9%	146.690	-18%	14.588	-6%	13.971	-9%	592	16%	46.813	-10%	227.551	-10%	227.551	-17%	225.141	-9%	53.067	43%	12%	Improved
MAD OFR HOK VL1824	15,3	46%	198	95%	752	-42%	1.111	-23%	93.885	-3%	6.123	-34%	6.123	-12%	473	-31%	59.770	112%	214.622	112%	214.622	16%	239.676	67%	56.222	233%	190%	Improved
MAD OFR HOK VL2440	9,5	-38%	181	21%	1.527	-41%	2.123	-25%	106.769	-44%	11.239	-9%	8.542	-31%	423	27%	99.310	-10%	373.344	-10%	373.344	-17%	257.857	-42%	-105.017	-608%	10%	Improved
PRT OFR HOK VL2440	10,6	7%	203	3%	1.226	-1%	1.263	-7%	112.274	21%	10.609	13%	9.165	2%	1.326	-5%	195.554	-16%	599.626	-16%	599.626	-4%	277.432	131%	-128.190	58%	-69%	Deteriorated
PRT OFR HOK VL40XX	15,2	-5%	264	-27%	1.267	-31%	1.299	-46%	218.058	19%	14.346	25%	14.346	25%	1.845	100%	409.944	-7%	1.306.172	-7%	1.306.172	32%	443.692	-39%	-234.933	-273%	-4086%	Deteriorated
MAD OFR MGP VL0010	3,3	-14%	105	2%	157	-33%	170	-28%	22.923	-25%	6.557	-14%	4.098	-15%	373	128%	4.001	78%	33.060	78%	33.060	-15%	46.623	-15%	20.984	1%	-8%	Deteriorated
MAD OFR MGP VL1012																												
MAD OFR MGP VL1824	16,7	11%	186	-21%	1.055	41%	1.055	41%	131.946	-16%	7.917	-24%	7.612	-27%	175	-35%	29.206	-27%	204.290	-27%	204.290	-14%	172.834	2%	-22.365	58%	24%	Improved
MAD OFR MGP VL1824*																												
PRT AREA37 FPO VL2440	14,0	8%	402	1%	124	26%	194	23%	225.608	1%	16.115	-6%	16.115	-6%	4.992	-24%	159.312	10%	491.226	10%	491.226	0%	410.588	60%	37.173	121%	122%	Improved

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

5.19 ROMANIA

Fleet Structure, Fishing Activity and Production

In 2013, the Romanian fishing fleet consisted of 196 registered vessels, with a combined gross tonnage of 0.6 thousand GT, a total power of 6.2 thousand kW and an average age of 15 years. The size of the Romanian fishing fleet decreased between 2008 and 2013, with the number of vessels falling by 56% and GT and kW by 74% and 29% respectively (Table 5.19.1; Figure 5.19.1). The major factors causing the fleet decrease over the time period included the restructuring plan for the fleet, less investment in the industry (financial difficulties encountered in this period did not make the sector attractive to investors) and the lack of fishing infrastructure (absence of specialised ports on the Romanian coast and landing sites and first sale centres which need to be modernised). No subsidies or any other kind of support were granted by the authorities to possible investors or fishermen, which used partly the availabilities of the EEF for fleet restructuring.

In 2013, the number of fishing enterprises in the Romanian fleet totalled 74. Total employment in 2013 was estimated at 304 jobs, corresponding to 37 FTEs (the fact that the number of FTEs is much lower than the total number of jobs is explained by the accentuated seasonality and the low level of qualification of fishermen). The level of employment decreased between 2008 and 2013, with total employed decreasing by 65% and number of FTEs decreasing by around 11%. The major factors causing employment to decrease include a reduction of number of active vessels, a lot of fishermen acting occasionally on their own because of the economic crisis and, as a consequence, the decrease of the funds available for investments and business development. The restrictive exploitation of species such as turbot (under the quota system introduced by the EC) and the fact that young fishermen have not joined the sector were also reasons for the lower number of jobs.

Table 5.19.1 Romanian national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend	
Structure	Total No. Vessels (#)	441	440	429	488	261	196	158	-19%	↘	-56%	
	No. of Inactive vessels (#)	36	280	223	288	78	84	35	-58%	↘	133%	
	Average vessel age (year)	19	21	22	17	12	15	17	12%	↗	-19%	
	Vessel tonnage (thousand GT)	2.3	2.3	1.1	1.0	0.7	0.6	0.8	30%	↗	-74%	
	Vessel power (thousand kW)	8.7	8.2	5.5	7.0	5.9	6.2	6.1	-1%	↔	-29%	
	No. of Enterprises (#)	138	33	43	105	91	74	77	4%	↗	-46%	
Employment	Total employed (#)	875	289	444	454	471	304	323	-35%	↘	-65%	
	FTE (#)	42	31	38	28	39	37	39	-3%	↘	-11%	
	Average wage per employed (thousand €)	0.7	0.9	0.5	1.1	0.7	1.9	1.8	166%	↗	170%	
	Average wage per FTE (thousand €)	14.4	8.2	6.2	17.5	8.6	15.2	14.7	77%	↗	5%	
Fishing Effort	Days at sea (thousand days)	3.7	4.1	4.3	2.6	3.4	2.8	2.8	-17%	↘	-24%	
	Fishing days (thousand days)	3.7	3.9	4.1	2.6	3.4	2.7	2.7	-19%	↘	-26%	
	Energy consumption (million litres)	0.1	0.1	0.2	0.3	0.2	0.4	0.4	112%	↗	227%	
	Energy consumption per landed tonne (l/T)	249	182	889	477	205	223	176	9%	↗	-10%	
Output	Landings weight (thousand tonnes)	0.4	0.3	0.2	0.5	0.8	1.6	2.2	100%	↗	268%	
	Landings value (million €)	0.9	0.7	0.6	1.5	1.0	1.5	2.5	49%	↗	57%	
	Recreational catches of selected species (T)	445	329	258	568	835	1,711		105%	↗	284%	

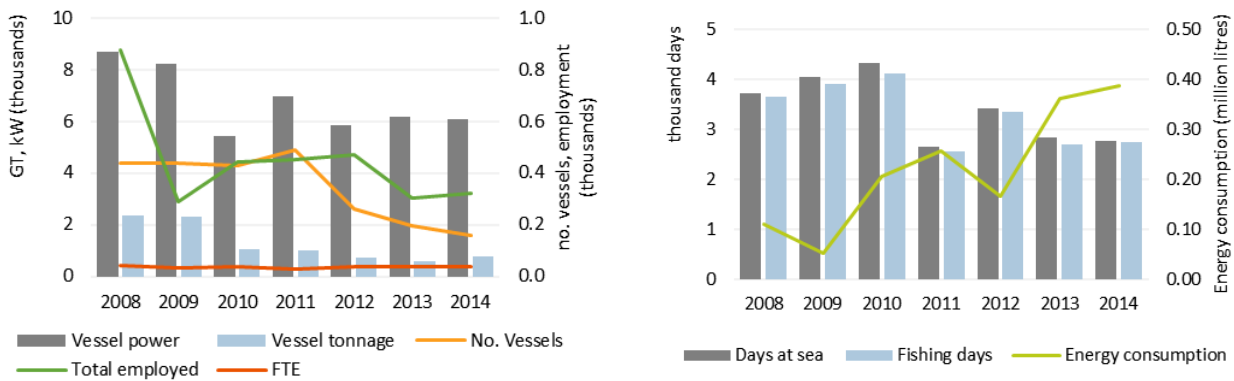
*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

The Romanian fleet spent a total of around 2.8 thousand days at sea in 2013. The total number of days at sea decreased by around 24% between 2008 and 2013, while the fishing days by 26%. The major factors causing the decrease in days at sea include the reduction of the number of active vessel, resulting from the measures for fleet restructuring; this decrease explains the continuous reduction of the number of fishermen, going from 875 in 2008 to 304 in 2013. In the last two years, the fishing activity was focused on Thomas' rapa whelk, due to an increase in the demand for this

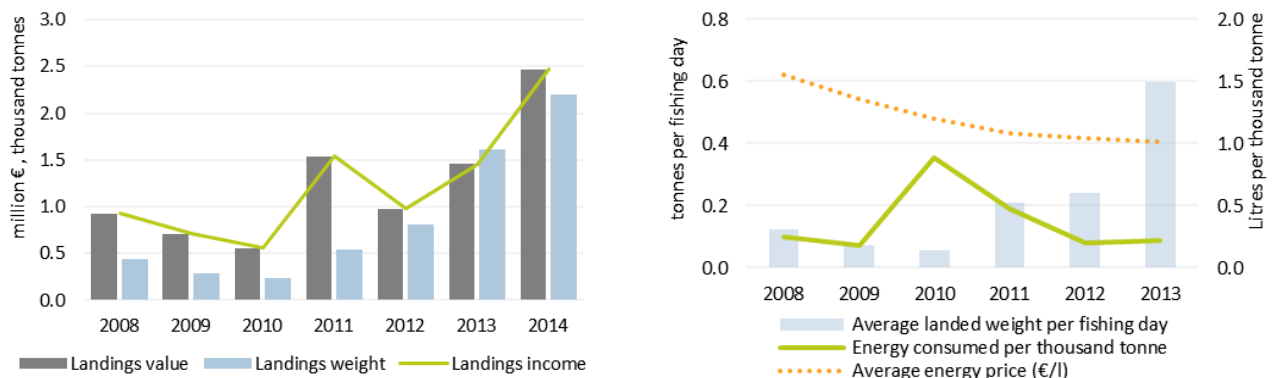
species, especially in the tourist season, and fishermen trying to reduce the effect of the quota system for turbot introduced in 2009.

The quantity of fuel consumed in 2013 totalled around 0.4 million litres, an increase of around 117% from 2012. This increase is mainly explained by the lack of investment in new equipment, despite the reducing number of days at sea and number of active boats, but also by the improvement of the data collection process from year to year.



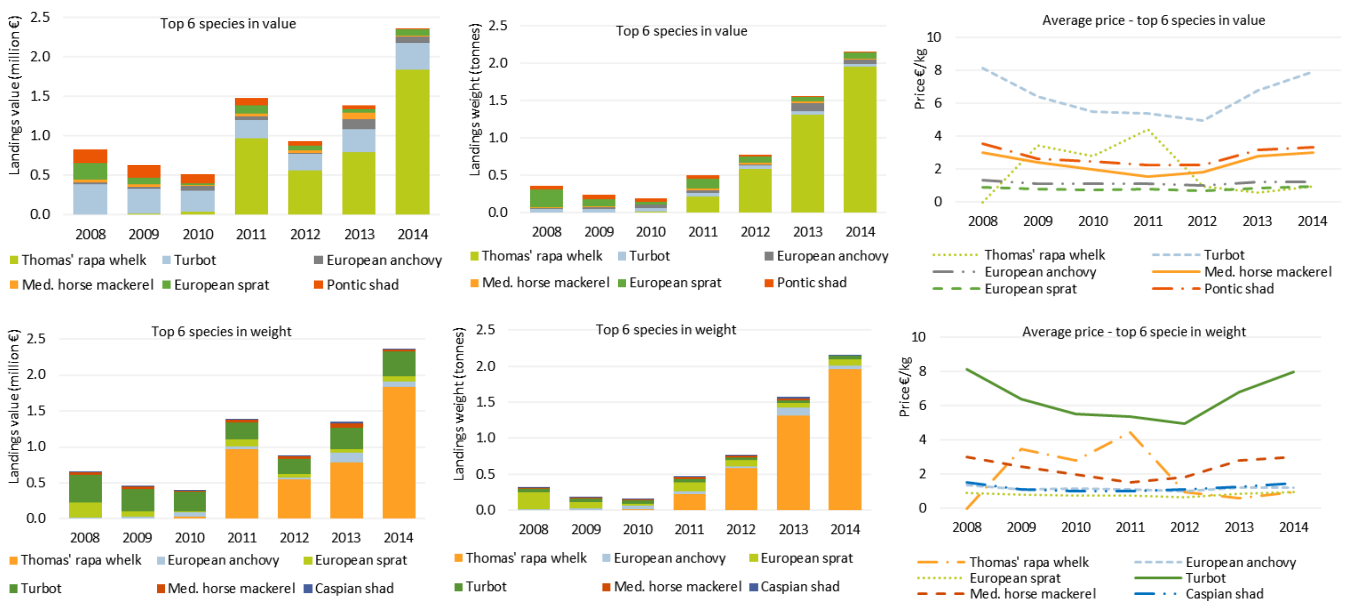
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.19.1 Romanian fleet main capacity and effort trends for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.19.2 Landings in value and weight (and corresponding income from landings) by the Romanian national fleet and some efficiency indicators for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.19.3 Romanian fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

The total weight landed by the Romanian fleet in 2013 was 1,620 tonnes of seafood, with a landed value of €1.46 million. The total weight and value of landings increased overall during the period

2008 to 2013. Thomas' rapa whelk generated the highest landed value by the national fleet around €786 thousand, followed by turbot around €294 thousand. In terms of weight, the main important species landed in 2013 were Thomas' rapa whelk (1,314 tonnes), European anchovy (111 tonnes) and European sprat (60 tonnes).

The prices obtained for the 6 key species remained relatively stable between 2008 and 2013. Thomas' rapa whelk is an exception, achieving its highest average price per kilo in 2011 (€4.42 per kg) due to unusual demand on the market in the tourist season. The next years were characterised by a more stable market and a decreasing quantity landed.

The economic evolution of the Romanian fleet is strictly related to the changes in the structure of the fleet segments during 2008-2013 and the seasonality of small pelagics. These changes resulted in the current structure of the Romanian fleet, characterised by ageing small scale vessels, with a low level of technical capacity.

National Fleet Economic performance

The amount of income generated by the Romanian national fleet from landings in 2013 was €1.5 million. No information is available on non-fishing income, due to unreported data by the fishermen. From 2012 to 2013, total income of the Romanian fleet increased by 49%. Total operating costs in 2013 was €1.2 million, corresponding to 81% of landings income. Crew costs and fuel costs, the two major fishing expenses, were €0.6 and €0.4 million respectively (Table 5.19.2). Between 2008 and 2013, total operating costs increased 30%.

Table 5.19.2 Romanian national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12		%Δ 2008	Trend
Income	Landings income	0.9	0.7	0.6	1.5	1.0	1.5	2.5	49%	↗	57%	
	Other income	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Costs	Labour costs	0.6	0.3	0.2	0.5	0.3	0.6	0.6	73%	↗	-7%	
	Energy costs	0.2	0.1	0.3	0.3	0.2	0.4	0.4	118%	↗	118%	
	Repair costs	0.1	0.0	0.0	0.1	0.1	0.1	0.1	50%	↗	50%	
	Other variable costs	0.1	0.0	0.0	0.2	0.1	0.1	0.1	-15%	↘	57%	
	Other non-variable costs	0.0	0.0	0.0	0.0	0.01	0.04	0.06	300%	↗		
	Capital costs	0.0	0.4	0.1	0.2	0.2	0.2	0.3	0%	↔	350%	
Economic Indicators	GVA	0.6	0.6	0.3	0.9	0.6	0.8	1.8	40%	↗	33%	
	Gross profit	0.0	0.3	0.0	0.4	0.3	0.3	1.2	4%	↗	1300%	
	Net profit	0.0	0.0	0.0	0.3	0.1	0.1	0.9	11%	↗	600%	
Capital value	Depreciated replacement value	10.0	8.8	3.4	4.2	3.6	3.3	5.0	-9%	↘	-67%	
	Investments	0.2	0.1	0.1	0.1	0.1	0.1	0.1	-15%	↘	-48%	
Profitability and development trends	Net profit margin (%)	-2.5	-3.1	-6.0	17.1	9.0	6.8	38.5	-25%	↘	371%	
	<i>development trend</i>				Improved				133%	↗		
	RoFTA (%)	-0.4	3.6	0.2	7.7	5.6	5.1	19.49	-9%	↘	1324%	
	<i>development trend</i>				Improved				54%	↗		
GVA per FTE (thousand €)		14.9	18.9	6.9	32.8	15.7	22.6	45.8	44%	↗	51%	
	<i>development trend</i>				Improved				27%	↗		

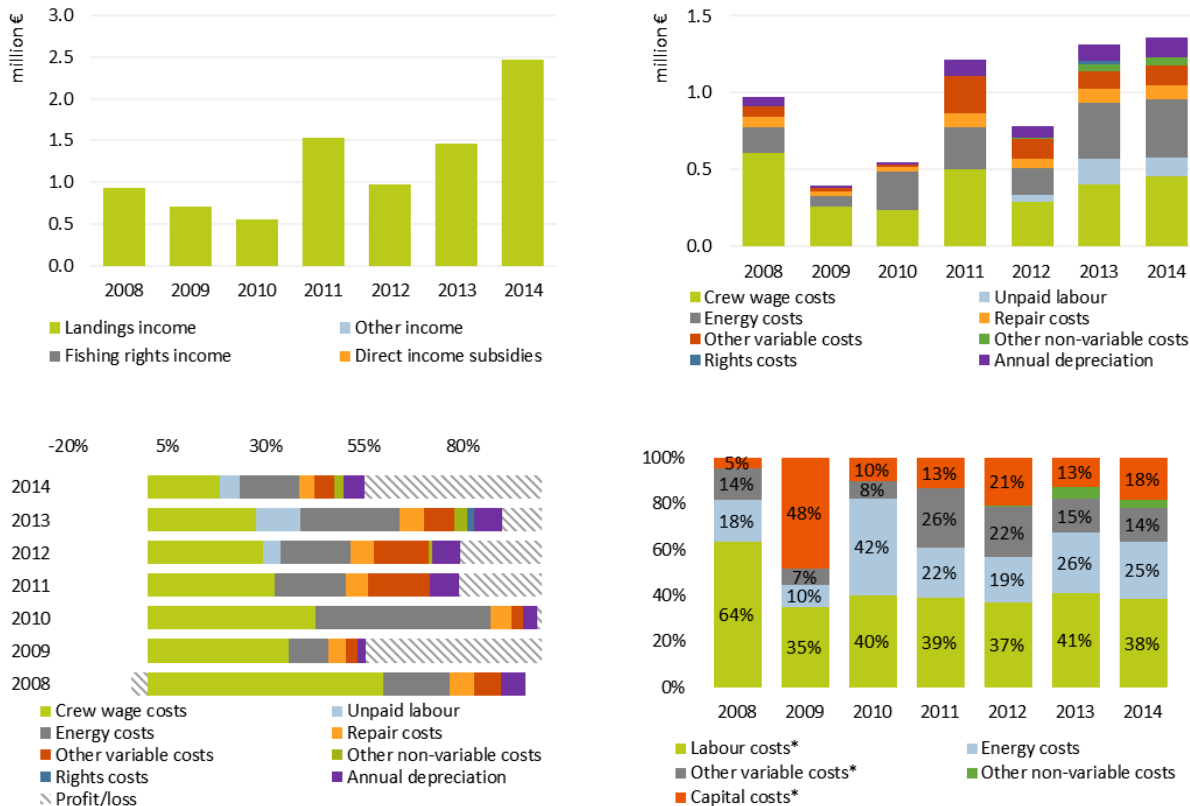
*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Gross Value Added (GVA), gross profit and net profit generated by the Romania national fleet in 2013 were €0.8 million, €0.3 million and €0.1 million respectively. Gross Value Added (GVA), gross profit and net profit increased 40%, 4% and 11% respectively between 2012 and 2013.

In 2013, the Romanian fleet had an estimated depreciated replacement value of €3.3 million and investments in the fleet amounted only to €0.1 million. The capital value has decreased by almost 70% from 2008 to 2013 and investments by almost 50%. The major factors causing the low value of

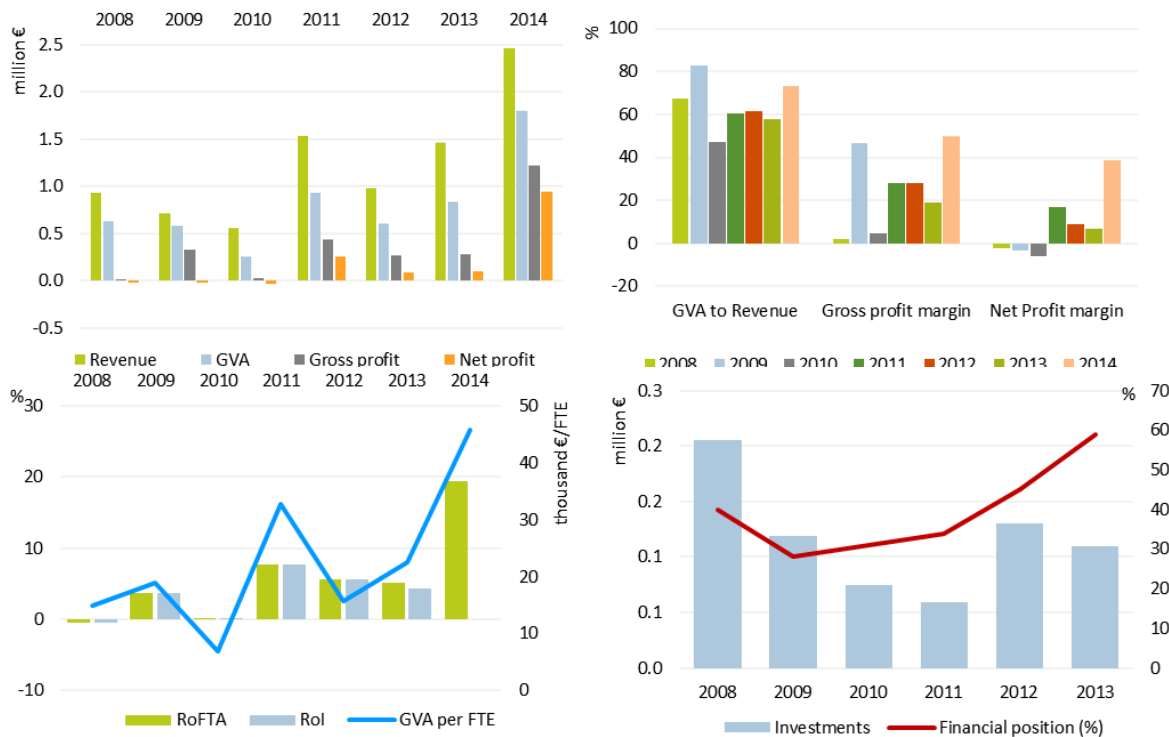
capital are the small capacity of the fleet (the number of active vessels and of fishermen have decreased over the reference period), the low concentration of capital (there still exist a large number of companies owning only one small boat), the high dependency on the internal market, the absence of the fishing infrastructure and government subsidies system, the lack of an integrated supply chain (including an organised selling system – no fishery auction). The small companies did not develop alternative activities, as confirmed by the fact that no other income was reported. The sector is not very attractive for investments, due to the reasons mentioned above and to the constraints imposed by operating only in the Black Sea, where the changing weather conditions heavily affect the small scale fishery.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.19.4 Income and cost structure trends for the Romanian fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Figure 5.19.5 Main economic performance indicator trends for the Romanian fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Fleet Segment Level Economic performance

The Romanian fleet is not diversified with a small range of vessel types targeting different species only in the Black Sea. The national fleet consisted of 3 main (DCF) fleet segments in 2013, with 84 inactive vessels. All active segments made a slight profit in 2013.

The Romanian small scale fleet represents the major part of the national fleet (Table 5.19.3). The total amount of income from landings generated by the small scale fleet in 2013 was €1 million, increased 42% versus 2012. Total operating costs incurred by the small scale fleet in 2013 was equal to €0.81 million, corresponding to approximately 81% of its income. Crew cost and fuel costs, the two major fishing expenses, were €0.39 and €0.24 million respectively. In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Romanian small scale fleet in 2013 were €0.59 million, €0.19 million and €0.01 million respectively. Gross Value Added (GVA) increased by 5%, while gross profit and net profit decrease by 27% and 38%, respectively, between 2012 and 2013.

Table 5.19.5 provides a breakdown of key performance indicators for all fleet segments in 2013. A short description of the small scale fishery segments – the most important segments of the fleet in terms of total value of landings is provided below.

PG VL06-12m makes up the largest segment. It operates only in the Romanian waters of the Black Sea, as does all the national fleet. The fleet targets a variety of species sometimes using several gears on the same trip. The fleet particularly targets small pelagic species, such as European anchovy, European sprat, other small pelagic species as well as picked dogfish and Thomas' rapa whelk. Turbot is a target species, but the quantity available is subject to EC TAC limits; this species is fished by fixed gears, using small boats. The main characteristic of the segment is that during the fishing season the fishermen switch from one fishing technique to another, using the same boats and targeting the mentioned species. It is not a specialized fishery, but a mixed one. The fishery includes also the artisanal fishery. This is due to the fact that investment for improving the quality of activity is lacking. The biggest change consists in an increasing number of engines/motors used, compared to 2008. In 2013, the total value of landings was almost €0.77 million and around 22 FTEs was employed in this fleet segment, contributing more than 53% of the total income from landings

and 59% of the FTEs generated by the Romanian fishing fleet, respectively. This fleet segment continued to be the most important in the Romanian fleet, with a reported gross profit of around €0.16 million and net profit of €0.08 million in 2013.

The fishermen's communities comprise a small number of fishermen. The number of fishermen has decreased over time, due to the fact that young people are not attracted by this activity. The lack of investment in the sector causes a poor level of productivity, small quantities of landings, and a low level of technical work conditions. The infrastructure for stabilisation of the activity is missing: there are no fishing ports (specialised on discarding, receiving, storing, selling, etc.). The fishing activity is largely dependent on the weather conditions in the Black Sea, which is characterised by very large differences of temperature between winter and summer and strong winds. The switches in fishing technique produce high instability in activity and in the process of data collection. Enterprises do not use an accounting system and are not able to allocate costs to each kind of technique and to each gear type used. Fishermen collect and report aggregated data concerning their activity, rather than information disaggregated by type of activity.

As a conclusion it should be mentioned that the fishery in Romania is not specialised, but rather a mixed small scale fishery using many different types of fishing techniques/gear and catching mainly small pelagic species. The quota system for better exploitation of existing stocks, in terms of stability, has to be improved by member state. As it was also mentioned in other economic reports on the fleet produced in the past, no income (such as: fishing rights, direct subsidies and other income) other than landings income was reported/recorded by member state. The large percentage of inactive vessels, related to the diminishing number of fishermen, is one of the reasons for the low results of the Romanian fishing fleet.

Table 5.19.3 Romanian national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
No. Vessels	395	153	206	197	179	106	111	-41%	↘	10	7	3	4	6	12	100%	↗	
Average vessel age	15.9	17.7	16.9	8.8	9.9	15.2	17.9	54%	↗	22.5	25.4	19.0	11.3	8.7	10.0	15%	↗	
Average vessel length	6.5	7.0	6.9	6.9	6.8	7.5	7.3	11%	↗	20.3	20.0	24.0	18.8	18.3	15.3	-17%	↘	
Vessel tonnage	0.4	0.2	0.3	0.2	0.3	0.2	0.2	-41%	↘	0.8	0.5	0.4	0.3	0.4	0.6	57%	↗	
Vessel power	3.1	1.2	2.1	3.4	3.5	3.2	2.4	-9%	↘	2.4	1.6	1.1	1.2	2.1	3.2	54%	↗	
Total employed	790	242	444	434	445	278	271	-38%	↘	85	47	20	26	26	52	100%	↗	
FTE	31	28	38	26	35	27	23	-22%	↘	11	4	3	4	10	16	57%	↗	
Average wage (total employed)	0.5	0.9	0.5	1.1	0.7	1.4	1.1	110%	↗	2.1	0.9	1.9	1.2	6.7	5.2	-21%	↘	
Average wage (FTE)	13.8	7.8	6.2	17.7	8.6	14.5	13.0	68%	↗	16.2	11.8	15.2	8.7	17.1	17.2	0%	↔	
Days at sea	3.5	3.9	4.3	2.6	3.3	2.5	2.2	-25%	↘	0.3	0.1	0.1	0.1	0.4	0.6	58%	↗	
Fishing days	3.4	3.8	4.1	2.5	3.3	2.4	2.2	-27%	↘	0.2	0.1	0.1	0.1	0.3	0.6	62%	↗	
Energy consumption	0.0	0.0	0.2	0.2	0.1	0.2	0.2	85%	↗	0.1	0.0	0.1	0.0	0.1	0.2	58%	↗	
Energy consumption per landed tonne	260	139	843	506	178	227	192	27%	↗	243.4	281.4	379.2	467.7	216.8	161.9	-25%	↘	
Landings weight	0.2	0.2	0.2	0.4	0.7	1.0	1.0	42%	↗	0.3	0.1	0.1	0.1	0.6	1.2	111%	↗	
Landings value	0.4	0.6	0.6	1.4	0.9	1.0	1.2	14%	↗	0.5	0.1	0.1	0.1	0.5	1.3	180%	↗	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Table 5.19.5 Main socio-economic performance indicators by fleet segment in the Romanian national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ	Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	ROU AREA37 PG VL0006*	15	-56%	5	22%	568	29%	62	212%	231	258%	180	302%	132	201%	25.1	146%	33	196%	15	1576%	6.3	454%	Reasonable	-58%
ROU AREA37 PG VL0612*	91	-37%	22	-29%	1,902	-34%	175	59%	767	-5%	865	26%	453	-12%	20.7	23%	160	-35%	86	-48%	11.2	-45%	High	16%	Improved
ROU AREA37 PMP VL2440*	6	50%	10	179%	363	200%	124	246%	460	380%	573	647%	256	483%	25.3	109%	83	570%	9	121%	1.9	104%	Reasonable	107%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.19.6 Main socio-economic performance indicators by fleet segment in the Romanian national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend
	ROU AREA37 PG VL0006*	0.4	169%	38	193%	316	211%	346	228%	6,614	585%	12,744	126%	1,975	502%	345	-22%	4,191	586%	13,190	586%	13,190	586%	8,807	581%	972	3705%	435%
ROU AREA37 PG VL0612*	0.2	14%	21	6%	455	90%	469	93%	3,220	75%	9,403	23%	842	33%	202	26%	1,946	145%	6,662	145%	6,662	73%	4,982	40%	941	-17%	4%	Stable
ROU AREA37 PMP VL2440*	1.7	86%	61	100%	1,578	149%	1,700	126%	28,859	266%	12,742	47%	4,955	308%	217	-54%	20,982	124%	62,841	124%	62,841	201%	42,696	289%	1,466	114%	136%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.20 SLOVENIA

Fleet Structure, Fishing Activity and Production

In 2014, the Slovenian fishing fleet consisted of 170 registered vessels, with a combined gross tonnage of 597,81 GT, a total power of 8.5 thousand kW and an average age of 37,1 years. The average length of the fishing vessels was 7,02 metres in the same year. The size of the fleet decreased between 2008 and 2014; the number of vessels by 6% and GT and kW by 39% and 20%, respectively (Table 5.20.1; Figure 5.20.1). The major factors causing the fleet to decrease include the scrapping of vessels, including two of the largest vessels.

The Slovenian national economy is insignificantly influenced by the marine fisheries sector. However, the sector has a particular social impact in terms of employment. The watershed moment for Slovenian marine fisheries began with Slovenian independency in the year 1991. This period marked a decrease in the extent of fishing regions and a substantial loss of market for fish products. A large number of poorly equipped small-scale fishermen, inadaptability of large-scale fisherman, along with discordance among fishing, producing and marketing capabilities brought the sector into crisis. Landings of almost 6 thousand tonnes in 1990 have decreased to 240 tonnes in 2013.

Table 5.20.1 Slovenian national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	181	185	185	186	181	171	170	-6%	↘	-6%
	No. of Inactive vessels (#)	96	98	94	102	92	88	79	-4%	↘	-8%
	Average vessel age (year)	33	34	35	36	36	36	37	0%	↔	8%
	Vessel tonnage (thousand GT)	1.0	1.0	1.0	1.0	0.8	0.6	0.6	-29%	↘	-39%
	Vessel power (thousand kW)	10.7	11.0	11.0	10.9	10.1	8.5	8.5	-16%	↘	-21%
	No. of Enterprises (#)	135	138	132	138	146	142	102	-3%	↘	5%
Employment	Total employed (#)	109	117	116	114	107	107	115	0%	↔	-2%
	FTE (#)	77	82	81	77	63	75	82	20%	↗	-2%
	Average wage per employed (thousand €)	10.2	12.5	13.4	14.4	12.3	12.0	11.0	-2%	↘	18%
	Average wage per FTE (thousand €)	14.4	17.8	19.2	21.3	21.0	17.1	15.4	-19%	↘	18%
Fishing Effort	Days at sea (thousand days)	6.8	6.9	7.8	7.7	7.6	7.7	8.6	1%	↔	13%
	Fishing days (thousand days)	6.8	6.9	7.8	7.7	7.6	7.7	8.6	1%	↔	13%
	Energy consumption (million litres)	0.5	0.6	0.6	0.6	0.3	0.3	0.3	0%	↔	-48%
	Energy consumption per landed tonne (l/T)	780	739	791	760	844	1,171	1,097	39%	↗	50%
Output	Landings weight (thousand tonnes)	0.7	0.9	0.8	0.7	0.3	0.2	0.3	-27%	↘	-65%
	Landings value (million €)	2.3	2.4	2.1	2.2	1.5	1.2	1.4	-17%	↘	-47%

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

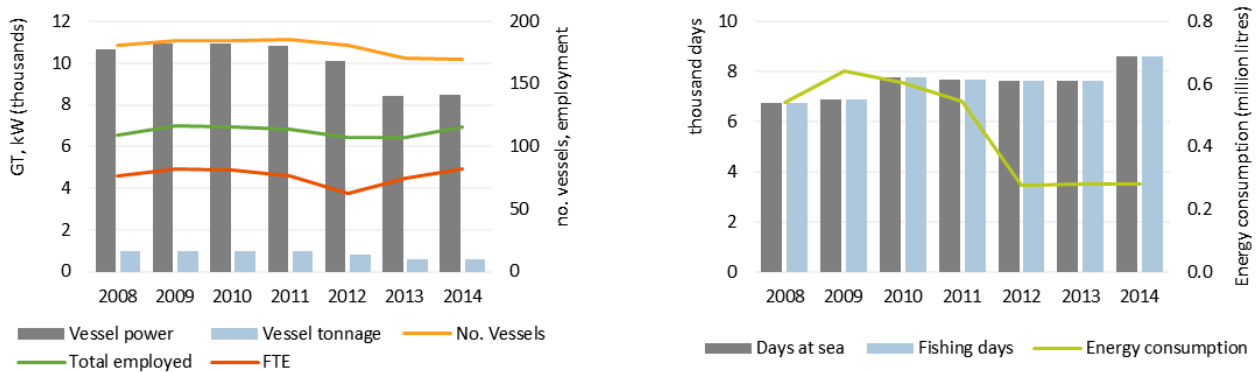
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

The existence of two sea fishery reserves where all fishing activities are banned (Portorož and Strunjan fishery reserves) further limit the reduced Slovenian fishing area. For the last few years, this has had a negative impact, particularly on those fishermen who are engaged only in small-scale coastal fishing.

In 2013, the number of fishing enterprises totalled 142, with the majority (71%), owning a single vessel. 28% of the enterprises owned two to five fishing vessels and only one percent of the enterprises owned six or more vessels. Total employment in 2013 was estimated at 107 jobs, corresponding to 75 FTEs. The level of employment decreased between 2008 and 2013, with total employed decreasing by 1.8%, while the number of FTEs decreased by 2.4%.

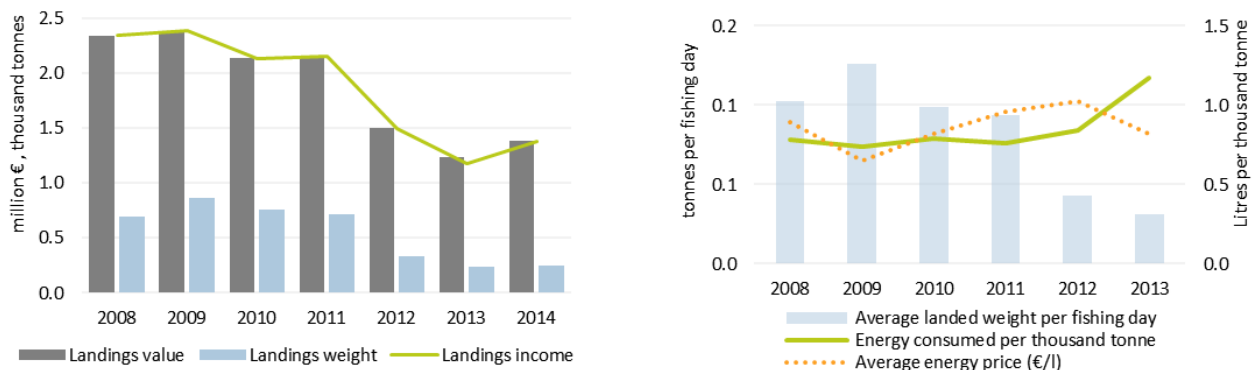
The Slovenian fishing fleet consists predominantly of small vessels of less than 12 meters (mainly vessels of 6 meters). Self-employed fishermen who own one fishing vessel about six meters long represent a typical Slovenian fishing enterprise.

In 2013, the fleet spent a total of around 7.7 thousand days at sea. Effort, in days at sea, increased 13% between 2008 and 2013. The fisheries sector, particularly the small scale fleet, is affected by the limited size of marine fishing area. Most of the fleet is poorly equipped and unable to operate in international waters. One of the reasons for increased days at sea is the high price of fuel, which encourages the fishermen to do shorter and more frequent trips.



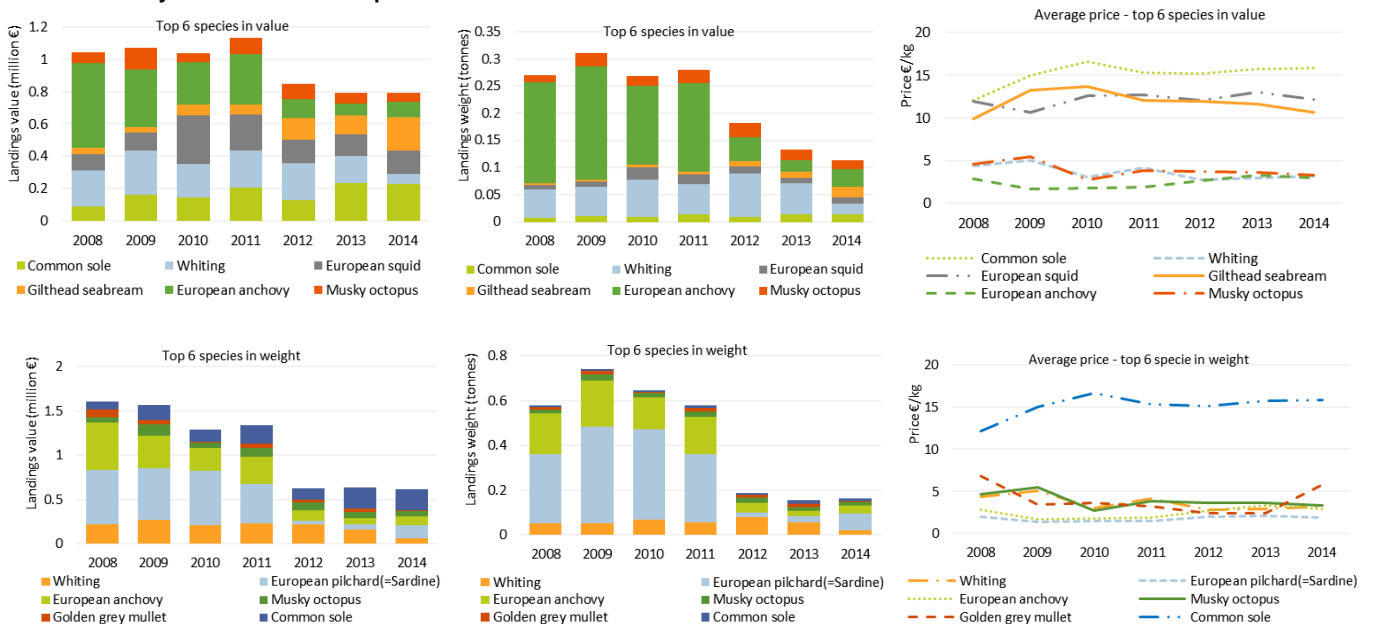
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.20.1 Slovenian fleet main capacity and effort trends for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.20.2 Landings in value and weight (and corresponding income from landings) by the Slovenian national fleet and some efficiency indicators for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.20.3 Slovenian fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

The quantity of fuel consumed in 2013 was around 280 thousand litres, a decrease of around 48% from 2008. The major factor causing this decrease includes the scrapping of several vessels in the fleet, including two of the largest vessels.

The total weight of seafood landed in 2013 was around 240 tonnes, with a landed value of €1.24 million. The total weight and value of landings decreased by 65% and 47%, respectively, over the period analysed. In 2009, the national fleet generated the highest landed value (€2.4 million). In terms of landings weight, in 2009 the fleet landed around 870 tonnes, 760 tonnes in 2010, 720 in 2011. The major factor causing the decrease in landed weight and value, especially for European anchovy and sardine, include scrapping of fishing vessels. In the last quarter of 2011, Slovenia sent the two largest ships to be scrapped (pelagic trawlers 24-40m); those vessels targeted mainly sardine and anchovy and represented around 50% of the Slovenian landed weight.

Prices obtained for the key species targeted by the fleet generally increased between 2008 and 2013. Common sole achieved the highest average price in 2013 (€15.7 per kg). European pilchard, which achieved an average price of €2.1/kg in 2013, accounted for 26% of the total landings value obtained by the Slovenian fleet in 2008, decreasing to only 5% of income in 2013, while European anchovy decreased from 23% in 2008 to 6% in 2013. On the other hand, some species recorded drop of prices in the period 2008 – 2013; e.g. Whiting (32% decrease in prices obtained), Musky octopus (- 21%) and Golden grey mullet (-65%). The reasons for decreased prices are mainly in decreased volume of landings and due to the entrance in the fish market in Trieste (IT).

National Fleet Economic performance

The amount of income generated by the Slovenian national fleet in 2013 was €2.4 million. This consisted of €1.24 million in landings value and €1.16 million in non-fishing income. The Slovenian fleet's landings income decreased 21% between 2012 and 2013, while other income increased 33% during the same period. Due to reduced landings, Slovenian fishermen are looking for the opportunity to generate earnings in other industries, such as tourism and aquaculture.

Table 5.20.2 Slovenian national fishing fleet economic performance in 2008-2013 and projections for 2014.

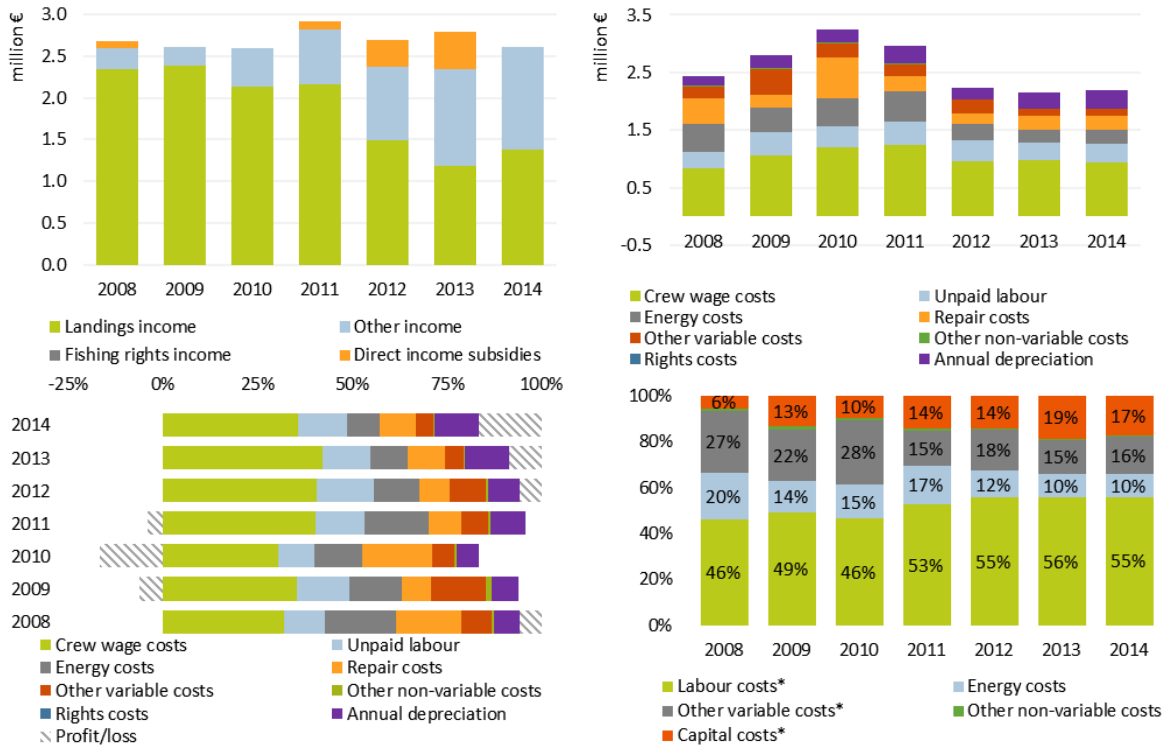
Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend	
Income	Landings income	2.3	2.4	2.1	2.2	1.5	1.2	1.4	-21%	↘	-50%	
	Other income	0.3	0.2	0.5	0.7	0.9	1.2	1.2	33%	↗	364%	
Costs	Labour costs	1.1	1.5	1.6	1.6	1.3	1.3	1.3	-3%	↘	15%	
	Energy costs	0.5	0.4	0.5	0.5	0.3	0.2	0.2	-21%	↘	-52%	
	Repair costs	0.4	0.2	0.7	0.3	0.2	0.2	0.3	21%	↗	-48%	
	Other variable costs	0.2	0.4	0.2	0.2	0.2	0.1	0.1	-52%	↘	-48%	
	Other non-variable costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-50%	↘	-50%	
	Capital costs	0.1	0.4	0.3	0.5	0.3	0.4	0.4	29%	↗	214%	
	Economic Indicators	GVA	1.4	1.5	1.1	1.8	1.7	1.8	2.0	7%	↗	22%
	Gross profit	0.3	0.0	-0.4	0.2	0.3	0.5	0.7	45%	↗	45%	
	Net profit	0.2	-0.4	-0.7	-0.3		0.0	0.3			-79%	
Capital value	Depreciated replacement value	4.5	5.4	5.8	5.8	4.7	4.1	4.5	-13%	↘	-9%	
	Investments	0.4	0.6	0.9	0.3	0.3	0.2		-41%	↘	-47%	
Profitability and development trends	Net profit margin (%)	7.3	-14.2	-28.5	-10.3	-0.1	1.7	13.2	1343%	↗	-76%	
	<i>development trend</i> Improved										119%	↗
	RoFTA (%)	3.4	-3.4	-11.1	-2.2	2.9	4.8	11.60	69%	↗	41%	
	<i>development trend</i> Improved										332%	↗
	GVA per FTE (thousand €)	18.7	18.1	14.0	23.4	26.3	23.4	24.3	-11%	↘	25%	
	<i>development trend</i> Improved										17%	↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

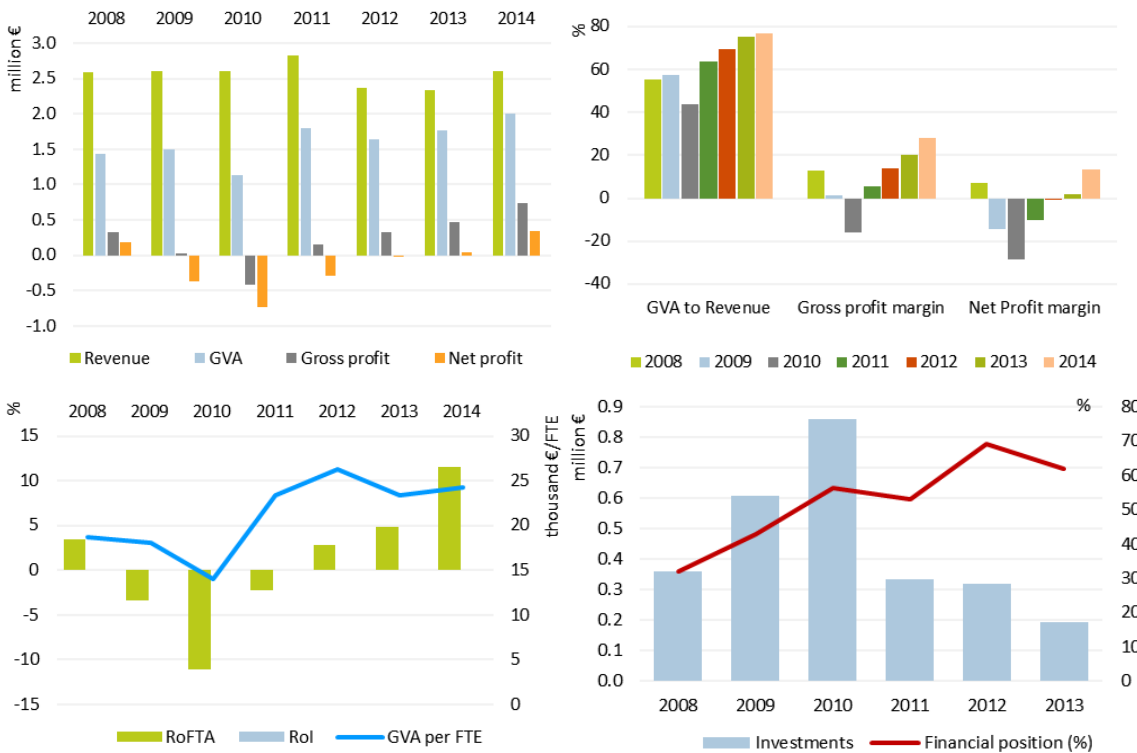
Total operating costs incurred by the fleet in 2013 equated to €2.3 million, amounting to 98% of total income. Crew cost and fuel costs, the two major fishing expenses, were €1.28 and €0.23 million, respectively. Between 2008 and 2013, total operating costs decreased 5%, largely due to scrapping of several vessels.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.20.4 Income and cost structure trends for the Slovenian fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.20.5 Main economic performance indicator trends for the Slovenian fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

In terms of economic performance, the amount of GVA, gross profit and net profit generated by the Slovenian fleet in 2013 were €1.8 million, €0.5 million and €0.04 million, respectively. Between 2012 and 2013, GVA and gross profit increased 7% and 45% respectively. The major factors causing the improvement in economic performance in 2013 included lower expenditure in fuel and labour costs and increases in income from other sources. Regardless of the increase in economic performance, the fleet was in a poor economic condition because of old and poorly equipped fleet and reduced catches. In 2013, the Slovenian fleet had an estimated (depreciated) replacement value of €4 million. Investments by the fleet amounted to €0.2 million in 2013.

Fleet Segment Level Economic performance

The Slovenian fleet has a range of vessel types targeting different species predominantly in the Adriatic Sea. The fleet consisted of 8 (DCF) fleet segments in 2013, with 4 inactive length classes consisting of 88 vessels. Two of the active fleet segments made losses in 2013 (DFN VL00-06m, DFN VL06-12m) while DTS VL12-18m and PS VL12-18m made an overall profit. One of the active fleet segments (DFN VL06-12m) has suffered a deteriorating economic development trend while PS VL12-18m revealed an improving trend.

In 2013, there were 83 active vessels of which around 69 (83% of all active vessels) are classified as small-scale. The majority of these vessels operate in the coastal waters of Slovenia. A breakdown of the key performance indicators by main fishing activity (small and large-scale) is provided in Table 5.20.3 and Table 5.20.4. Table 5.20.5 provides a breakdown of key performance indicators for all Slovenian fleet segments in 2013. A short description of the most important segment in terms of total value of landings is provided below.

Demersal trawlers and demersal seiners 12-18m - 10 vessels make up this segment and are based predominantly in the Adriatic. The fleet targets a variety of species, the most important being whiting, musky octopus and European squid. The value of landings was €0.49 million and 13 FTEs were employed in this fleet segment in 2013, contributing to 39,5% and 17% of the total income from landings and FTEs generated by the MS fishing fleet respectively. This fleet segment made a profit in 2013.

Purse seiners 12-18m - 4 vessels make up this segment and are based predominantly in the Adriatic. The most important targeting species are European anchovy and European pilchard. The value of landings was €0.2 million and 12 FTEs were employed in this fleet segment in 2013, contributing to 16% and 16% of the total income from landings and FTEs generated by the MS fishing fleet respectively. This fleet segment made a profit in 2013.

In 2013, the small scale sector in Slovenia was represented by two segments:

Drift and fixed netters 0-6m – Around 33 vessels make up this segment which operate in Slovenian coastal areas of the Adriatic. These vessels target demersal species, such as sole, European flounder and sea bream. The total value of landings was €0.17 million and around 18 FTEs were employed in this fleet segment in 2013, contributing 14% and 24% of the total income from landings and FTEs generated by the national fleet respectively. This fleet made a loss in 2013.

Drift and fixed netters 6-12m – Around 36 vessels make up this segment which operate in Slovenian coastal areas of the Adriatic. These vessels target demersal species, such as sole, Mulletts and sea bream. The total value of landings was €0.38 million and around 32 FTEs were employed in this fleet segment in 2012, contributing 31% and 43% of the total income from landings and FTEs generated by the national fleet respectively. This fleet segment made a loss in 2013.

Table 5.20.3 Slovenian national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	60	62	67	62	67	69	77	3%	↗	25	25	24	22	22	14	14	-36%	↘
No. of Inactive vessels (#)	32.3	31.8	31.0	33.6	32.8	32.1	33.1	-2%	↘	39.7	40.9	43.3	42.1	45.0	44.3	45.3	-2%	↘
Average vessel age (year)	6.7	6.5	6.7	6.7	6.5	6.7	6.8	3%	↗	14.4	14.2	14.6	15.0	14.2	13.5	13.5	-5%	↘
Vessel tonnage (thousand GT)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	18%	↗	0.6	0.6	0.6	0.6	0.5	0.2	0.2	-56%	↘
Vessel power (thousand kW)	2.5	2.5	3.0	2.5	2.7	4.0	4.3	48%	↗	4.6	4.4	4.4	4.2	3.6	1.9	1.9	-47%	↘
Total employed (#)	67	64	72	62	68	71	79	4%	↗	42	53	44	52	39	36	36	-8%	↘
FTE (#)	48	45	49	42	44	50	59	15%	↗	29	37	32	35	19	25	23	31%	↗
Average wage per employed (thousand €)	5.8	7.3	9.2	10.0	9.6	11.0	10.5	15%	↗	17.3	18.8	20.3	19.7	17.4	13.9	12.0	-20%	↘
Average wage per FTE (thousand €)	8.1	10.4	13.6	14.8	14.9	15.5	14.0	4%	↗	24.8	26.7	27.6	29.0	35.4	20.3	18.9	-43%	↘
Days at sea (thousand days)	4.8	4.7	5.4	5.7	6.2	6.4	7.4	3%	↗	2.0	2.2	2.4	2.0	1.4	1.3	1.2	-9%	↘
Fishing days (thousand days)	4.8	4.7	5.4	5.7	6.2	6.4	7.4	3%	↗	2.0	2.2	2.4	2.0	1.4	1.3	1.2	-9%	↘
Energy consumption (million litres)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	17%	↗	0.5	0.6	0.5	0.5	0.2	0.2	0.2	-9%	↘
Energy consumption per landed tonne (l/T)	1,328	1,260	1,353	1,102	1,041	1,337	1,361	28%	↗	731	705	749	732	801	1,121	1,005	40%	↗
Landings weight (thousand tonnes)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0%	↔	0.6	0.8	0.7	0.7	0.3	0.2	0.2	-33%	↘
Landings value (million €)	0.4	0.5	0.5	0.5	0.5	0.6	0.7	6%	↗	2.0	1.9	1.7	1.7	1.0	0.7	0.7	-30%	↘

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/ AQ(2015)); data for 2014 are provisional.

Table 5.20.4 Economic performance of the Slovenian national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			
Income	Landings income	0.39	0.48	0.49	0.51	0.52	0.51	0.69	-2%	↘	1.95	1.91	1.65	1.65	0.97	0.67	0.69	-31%	↘
	Other income	0.25	0.21	0.46	0.67	0.30	0.47	0.54	57%	↗	0.00	0.02	0.0	0.0	0.57	0.69	0.69	21%	↗
	Direct income subsidies	0.03	0.0	0.0	0.04	0.08	0.01			-88%	↘	0.06	0.0	0.0	0.06	0.26	0.43	65%	↗
	Fishing rights income	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0			
Costs	Labour costs	0.39	0.47	0.66	0.62	0.65	0.78	0.83	20%	↗	0.73	1.00	0.89	1.02	0.66	0.50	0.43	-24%	↘
	Energy costs	0.06	0.05	0.06	0.07	0.07	0.08	0.10	14%	↗	0.42	0.37	0.43	0.45	0.22	0.15	0.13	-32%	↘
	Repair costs	0.09	0.07	0.16	0.07	0.09	0.12	0.15	33%	↗	0.36	0.16	0.56	0.19	0.10	0.11	0.10	10%	↗
	Other variable costs	0.10	0.15	0.15	0.12	0.14	0.07	0.08	-50%	↘	0.10	0.29	0.08	0.09	0.09	0.04	0.04	-56%	↘
	Other non-variable costs	0.0	0.0	0.0	0.01	0.01	0.0				0.01	0.04	0.03	0.01	0.01	0.00			
Capital value	Capital costs	0.03	0.10	0.12	0.20	0.14	0.25	0.28	79%	↗	0.11	0.24	0.18	0.20	0.15	0.13	0.12	-13%	↘
	Depreciated replacement value	1.14	1.02	1.38	1.15	1.30	1.55	1.79	19%	↗	2.81	2.58	2.79	3.20	1.63	1.18	1.18	-28%	↘
Economic Indicators	Investments	0.14	0.29	0.45	0.21	0.06	0.08			33%	↗	0.22	0.25	0.40	0.11	0.15	0.07	-53%	↘
	GVA	0.4	0.4	0.6	0.9	0.5	0.7	0.9	35%	↗	1.1	1.1	0.6	0.9	1.1	1.1	1.1	-6%	↘
	Gross profit	0.0	-0.1	-0.1	0.3	-0.1	-0.1	0.1	43%	↗	0.3	0.1	-0.3	-0.1	0.5	0.6	0.7	19%	↗
	Gross profit margin	-1.0	-7.5	-8.0	24.1	-16.8	-8.7	5.6	48%	↗	17.2	4.2	-20.8	-7.5	30.3	41.1	48.5	36%	↗
Profitability and development trends	Net profit	0.0	-0.2	-0.2	0.1	-0.3	-0.3	-0.2	-26%	↘	0.2	-0.2	-0.5	-0.3	0.3	0.4	0.6	34%	↗
	Net Profit margin	-5.6	-22.0	-20.4	6.6	-33.5	-34.6	-16.8	-3%	↘	11.3	-8.2	-31.5	-19.8	20.8	31.6	39.9	52%	↗
	development trend				Deteriorated				-131%	↘				Improved				675%	↗
	RoFTA (%)	-4.0	-11.2	-12.4	9.6	-18.2	-18.0	-8.7	1%	↔	7.0	-2.7	-16.9	-7.4	22.7	40.4	49.6	78%	↗
Profitability and development trends	development trend				Deteriorated				-149%	↘				Improved				7187%	↗
	GVA per FTE (thousand €)	8.0	9.2	12.0	21.6	11.8	13.9	15.2	18%	↗	36.2	28.8	17.0	25.5	60.4	43.0	48.1	-29%	↘
development trend				Improved				11%	↗				Improved				28%	↗	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/ AQ(2015))

Assessment and Future Trends

National Fleet

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).

Due to scrapping in 2011 and 2012 the size of the fishing fleet decreased between 2008 and 2013; the number of vessels by 5.5% and GT and kW by 40% and 20% respectively. Consequently, the weight of landings decreases in 2013 by more than 60% regarding 2008. On the other hand, we can expect decreased number of inactive vessels, because some of them will be reactivated by the fisherman's who lost their jobs on the vessels which been scrapped. Due to the reduction of the fleet and related reduction of fishing effort we can expect improvement in the biological status of fish stocks. Because of that and because of decreased number of inactive vessels, weight of landings will probably start to increase again due to better catches.

As the fleet is generally old and poorly equipped we can expect that repair and maintenance costs will continue to increase in the future. Due to poor condition and profitability of the fleet, we cannot expect increases in GVA and profits.

Small scale Fleet

The same issues apply to the small scale fleet. Around 20 fishers have lost their jobs due to vessel scrapping. In the future we can expect an increase of small scale vessels because some of them will start operating in a self-employed manner. Due to reduced catch we can also expect higher prices for European pilchard (sardine) and anchovy and, consequently, higher income for those targeting these species.

Projections by the HDA0.2 model – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

The Slovenian national economy is insignificantly influenced by the marine fisheries sector. However, the sector has a particular social impact in terms of employment. The watershed moment for Slovenian marine fisheries began with Slovenian independency in the year 1991. This period marked a decrease in the extent of fishing regions and a substantial loss of market for fish products. A large number of poorly equipped small-scale fishermen, inadaptability of large-scale fisherman, along with discordance among fishing, producing and marketing capabilities brought the sector into crisis. Landings of almost 6 thousand tonnes in 1990 have decreased to 240 tonnes in 2013.

The size of the fleet decreased by 6% between 2008 and 2013. The major factors causing the fleet to decrease include the scrapping of vessels, including two of the largest vessels.

Projections for 2014 and 2015 were produced using the HDA0.2 model and based on the following assumptions:

The measure of fishing effort selected is days at sea.

Labour cost for all fleet segment is estimated assuming a fixed salary (this is estimated on 2013 data).

Projections regarding the consistency of the Slovenian fleet in 2015 were based on the last available information. Given the limited number of vessels registered in Slovenia, it was possible to have direct information of the actual consistency of the fleet.

Average days at sea were estimated by a linear trend on years 2012-2014.

Given the lack of specific information on the future levels of productivity, landings per unit of effort in 2015 is assumed to be the same as in 2014.

Regarding the average landings price by fleet segment, it was assumed a price elasticity of -0.2 for all Slovenian fleet segments.

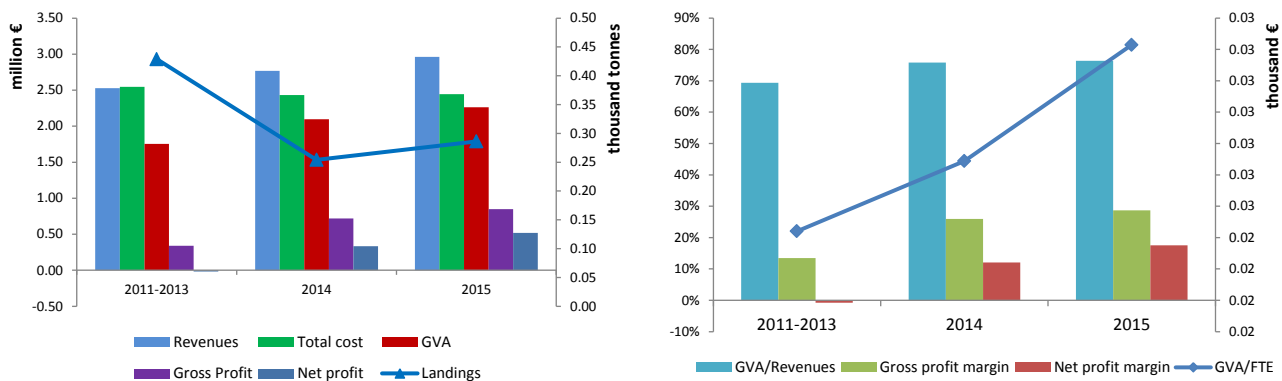
Fuel price for DFN VL0006 and DFN VL0612 were estimated at 1.34 €/litre for 2014 and 1.23 €/litre for 2015. Fuel price for DTS VL1218 and PS VL1218 were estimated at 0.93 €/litre for 2014 and 0.82 €/litre for 2015. The values of interest and inflation rates have been sourced from official statistics of the National Statistical Institute.

Due to scrapping in 2011 and 2012 the size of the fishing fleet decreased between 2008 and 2013; the number of vessels by 5.5% and GT and kW by 40% and 20% respectively. Consequently, the weight of landings decreases in 2013 by more than 60% regarding 2008. On the other hand, in the future, we can expect decreased number of inactive vessels, because some of them will be reactivated by the fisherman's who lost their jobs on the vessels which been scrapped. Due to the reduction of the fleet and related reduction of fishing effort we can expect improvement in the biological status of fish stocks. Because of that and because of decreased number of inactive vessels, weight of landings will probably start to increase again due to better catches.

The same issues apply to the small scale fleet. Around 20 fishers have lost their jobs due to vessel scrapping. In the future we can expect an increase of small scale vessels because some of them will start operating in a self-employed manner. Due to reduced catch we can also expect higher prices for European pilchard (sardine) and anchovy and, consequently, higher income for those targeting these species.

According to projected data for 2015, weight of landings is expected to increase, with increase of 12% compared to 2014. It is also expected an increase of economic indicators. In fact, between 2014 and 2015 the model foresees an increase in Gross cash flow (+18%) and in gross value added (+8%).

Projections for 2014 and 2015 confirm the positive trend in the economic performance of the Slovenian fishing fleet. Landings income is expected to increase by 8% from 2014 to 2015. In 2014, provisional data on the number of vessels in the national fleet show an increase by almost 10% compared to 2013 fleet. According to projected data for 2015 also the number of total employed will increase by 10% compared to 2013.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.20.6 Projections on 2014 and 2015 on the main socio-economic indicators.

Data issues

The economic data on the fishing sector were collected mostly from accounting records – AJPES, from data base 'InfoRib', through questionnaires and sales notes. In the monitoring programme all fishing vessels were included (approximately 180 units). The data collected from all sources were combined in such a way that a complete set of accounting items is compared for each business enterprise. The target population was all fishing sector in Slovenia. There were approx. 100 companies or fishermen in Slovenia. In March 2014 the questionnaires for 2013 were sent to all users of fishing vessels in Slovenia. Where the questionnaire was the only source used, the response rate was more than 60%. Where the data from annual accounts of business enterprises was used the response rate was 100%, because there are economic reports for all investigated companies or fishermen.

Table 5.20.5 Main socio-economic performance indicators by fleet segment in the Slovenian national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ				
SVN AREA37 DFN VL0006	33	0%	18	-6%	3,070	2%	12	57%	167	11%	17	-1%	149	-8%	8.3	-2%	173	-109%	199	-89%	-83.8	-102%	Weak	3%	Stable
SVN AREA37 DFN VL0612	36	6%	32	31%	3,326	4%	61	16%	384	3%	38	-8%	549	55%	17.0	18%	88	260%	139	18%	-18.8	37%	Weak	-89%	Deteriorated
SVN AREA37 DTS VL1218	10	-41%	13	11%	904	-17%	188	-5%	486	-27%	114	-30%	605	-30%	48.3	-37%	197	-45%	114	-54%	13.2	-34%	High	168%	Improved
SVN AREA37 PS VL1218	4		12		346		17		199		69		456		37.5		364		317		63.0		High		
SVN AREA37 TM VL2440*																									
SVN AREA37 PS VL1218*																									

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Table 5.20.6 Main socio-economic performance indicators by fleet segment in the Slovenian national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE		Days at sea		Landed weight per DAS		Landings in weight per fishing day		Wage per vessel		Wage per FTE		Wage per employed		fuel consumed		consumed per landed tonne		Energy costs		Operating costs		GVA		Net profit		%Δ 2013 to average (2008-12)	Economic development trend
	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ			
SVN AREA37 DFN VL0006	0.6	-5%	93	2%	6	-2%	6	-2%	9,762	32%	12,426	18%	6,785	11%	712	58%	316	30%	12,434	30%	12,434	22%	4,520	-8%	6,024	-89%	-63%	Deteriorated
SVN AREA37 DFN VL0612	0.9	23%	92	-2%	11	-11%	11	-11%	12,805	6%	12,250	-1%	10,432	20%	1,625	25%	1,983	15%	18,082	15%	18,082	-1%	15,255	46%	3,865	22%	-1365%	Deteriorated
SVN AREA37 DTS VL1218	1.3	89%	90	42%	126	-16%	126	-16%	40,808	37%	22,286	-27%	16,413	-10%	1,651	37%	12,924	10%	66,543	10%	66,543	28%	60,463	19%	11,377	-22%	297%	Improved
SVN AREA37 PS VL1218	3.0		87		199		199		22,991		7,050		4,515		248		4,178		34,588		34,588		114,031		79,175			
SVN AREA37 TM VL2440*																												
SVN AREA37 PS VL1218*																												

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

5.21 SPAIN

Fleet Structure, Fishing Activity and Production

The data presented in this chapter should be considered with care because data submitted presents some inconsistencies. The main one is that while the value of landings is increasing from 2011 (the first year this data is available), the landings income (which should be the same or very similar) is decreasing from 2011. In addition, value of landings data from the Spanish Ministry show a decrease in 2012 from 2011 level, but 2013 figures reached 2,165 million € to overcome previous years' figures (in 2012, it was 1,784 million €)¹.

In 2013, the Spanish fishing fleet consisted of 10,167 registered vessels, with a combined gross tonnage of 385 thousand tonnes, engine power of 874 thousand kW and an average age of 29 years. Of the total number of registered vessels, 1,372 were inactive during 2013 (13% of the fleet). The size of the fleet also decreased between 2012 and 2013; 4% in number, 4% in GT and 3% in kW (Table 5.21.1). This declining trend continues in 2014 (to 9,921 vessels), and 2015, brought on by structural adjustments (balance between fishing opportunities and capacity) in the Spanish fleet through scrapping, mainly of small scale vessels. Small-scale fleet, with 4,215 vessels, represented 48% of the total national active fishing fleet in terms of number of vessels and 3% and 14% in terms of vessels tonnage and engine power respectively. The distant water fleet, with 240 vessels, represented 3% in terms of number of vessels and 45% of GT and 28% of kW. The other half of the fleet was represented by large scale fleet. Almost 2 out of 3 active vessels operated in the North Atlantic.

Table 5.21.1 Spanish national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	13,115	11,501	11,209	10,900	10,544	10,167	9,921	-4%	-22%	
	No. of Inactive vessels (#)	3,312	1,818	854	1,784	1,606	1,372	1,228	-15%	-59%	
	Average vessel age (year)	28	26	27	28	28	29	29	4%	4%	
	Vessel tonnage (thousand GT)	470	459	440	415	400	385	379	-4%	-18%	
	Vessel power (thousand kW)	1,068	1,027	983	938	904	874	867	-3%	-18%	
No. of Enterprises (#)		12,093	10,616	10,351	10,096	9,776	9,438	9,195	-3%	-22%	
Employment	Total employed (#)	30,539	38,045	39,281	35,808	34,399	33,129	32,328	-4%	8%	
	FTE (#)	30,715	35,844	33,678	33,210	30,302	28,782		-5%	-6%	
	Average wage per employed (thousand €)	18.1	21.1	17.2	18.3	17.0	18.0		6%	-1%	
Average wage per FTE (thousand €)		18.0	22.4	20.1	19.7	19.3	20.8		8%	15%	
Fishing Effort	Days at sea (thousand days)				1,151	1,149	1,097		-5%		
	Fishing days (thousand days)				1,100	1,102	1,049		-5%		
	Energy consumption (million litres)	675	746	719	653	683	695		2%	3%	
	Energy consumption per landed tonne (l/T)				759	784	774		-1%		
Output	Landings weight (thousand tonnes)				861	871	898		3%		
	Landings value (million €)				1,873	1,955	1,983		1%		
	Recreational catches of selected species (T)	11	5	3	8	12	13		11%	14%	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

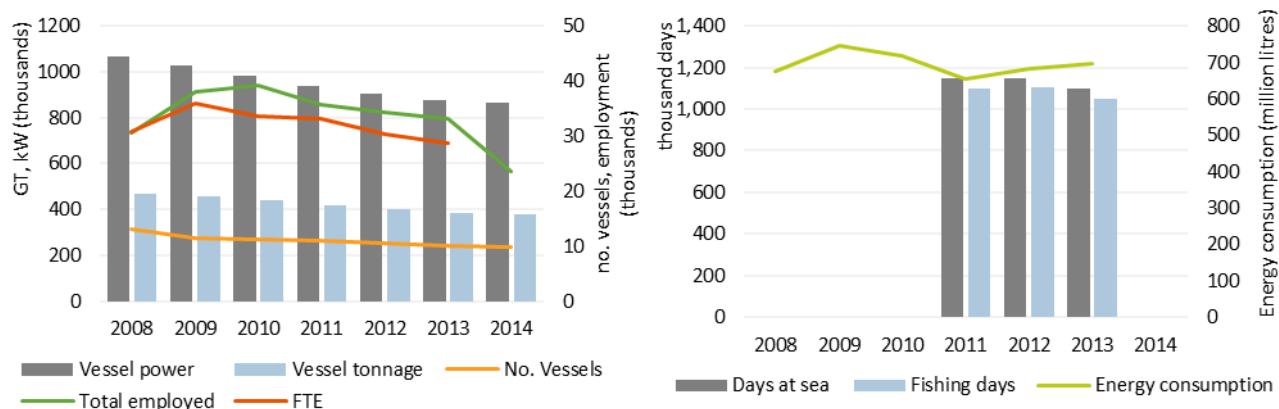
Total employment in the Spanish fishing fleets for 2013 was estimated at 33,129 jobs, corresponding to 28,782 FTEs. The employment level has been decreasing since 2009, when employment increased with the recovery from the high fuel prices. The number of jobs and FTEs decreasing by 4% and 5%

¹ http://www.magrama.gob.es/es/pesca/temas/mercados-economia-pesquera/SECTOR_PESQUERO_ESPA%C3%91A_enero_2015__ACTUALIZACION__2_tcm7-362970.pdf.

respectively compared to 2012 and by 13%, 20% compared to 2009. This reduction is caused by the declining trend in capacity of the fleet. During 2013, small scale fleet represented 29% of the total employment and 25% of the total FTEs, with 7,317 FTEs whereas large scale fleet represented the 57% and the 58% of the total employment and FTEs respectively, with 16,610 FTEs.

In 2013 the Spanish fleet spent a total of around 1,097 thousand days at sea, a decrease of 5% in effort, similar to the fleet reduction, staying the number of fishing days per vessels relatively constant. The quantity of fuel consumed in 2013 totalled around 695 million litres, a slight 2% increase from 2012; however, the fuel consumption per vessel increased by more than 4%..

The total weight landed by the Spanish fleet in 2013 was 898 thousand tonnes of seafood, corresponding to €2.0 billion in landed value, a 3% and 1% increase, respectively. There was also an increase in the analysed recreational catches by 11% in 2013. Spanish recreational catches covered in this analysis are represented by eel, Bluefin tuna and salmon catches only and the increase was mainly driven by increase of Bluefin tuna fishing opportunities and catches in the Mediterranean Sea in 2013. The majority of catches of commercial fishing fleets are landed by the distant-water fleets operating in other fishing regions. Their landings represented 55% in weight and 52% in value of the total catches in 2013, whereas only 9% of the catches in weight and 13% in value are originating from the Mediterranean Sea.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.21.1 Spanish fleet main capacity and effort trends for the period 2008-2014.

The EU is a major market of seafood products, with 12.3 million tonnes consumed in 2011, worth a total € 52.2 billion. Spain is the largest seafood market in the EU, with an apparent consumption of € 11.3 billion, followed by France and Italy with € 10 and € 9.7 billion, respectively².

Spanish apparent consumption per capita in 2013 was 37.77 Kg/year, higher than 2011 and 2012, showing a consumption recovery from the economic crisis originated in 2008. Consumption at home follows a similar trend and reached 27.19 Kg/year in 2013³. Spanish landings represent the 67% of total fish consumption at home in Spain (own elaboration from MAGRAMA, 2015)⁴. Thus the Spanish market is very reliant on imports, especially if it is considered that a significant part of the landings is also exported.

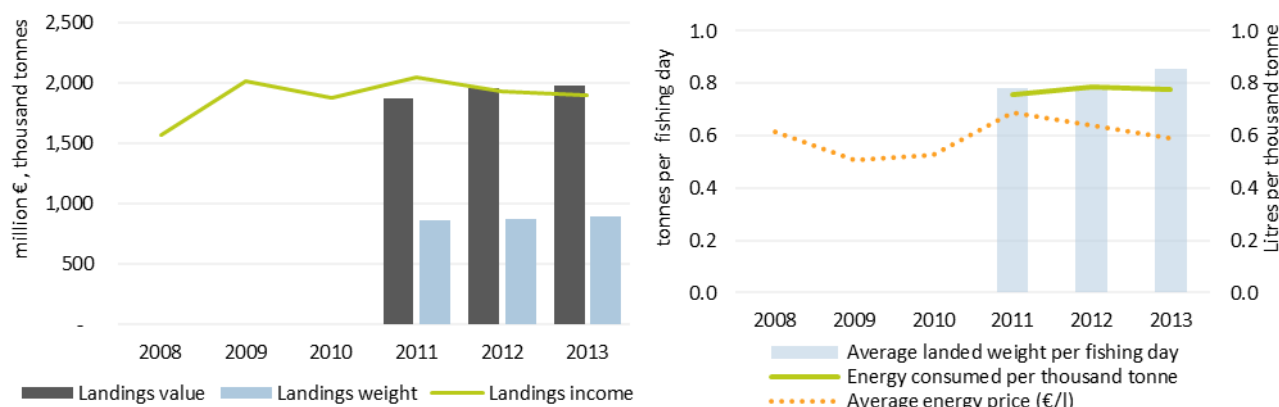
Guillen and Maynou (2015) and Guillen and Franquesa (2015) show that prices of most expensive seafood products (e.g., shrimps and *nephrops*) have been decreasing since 2008; while, the price of cheapest seafood products (e.g., sardine) have been increasing for the same period. In fact, the

² http://ec.europa.eu/fisheries/documentation/publications/2015-04-international-trade-and-eu-market_en.pdf.

³ http://www.magrama.gob.es/es/pesca/temas/mercados-economia-pesquera/SECTOR_PESQUERO_ESPA%C3%91A_enero_2015_ACTUALIZACION__2__tcm7-362970.pdf.

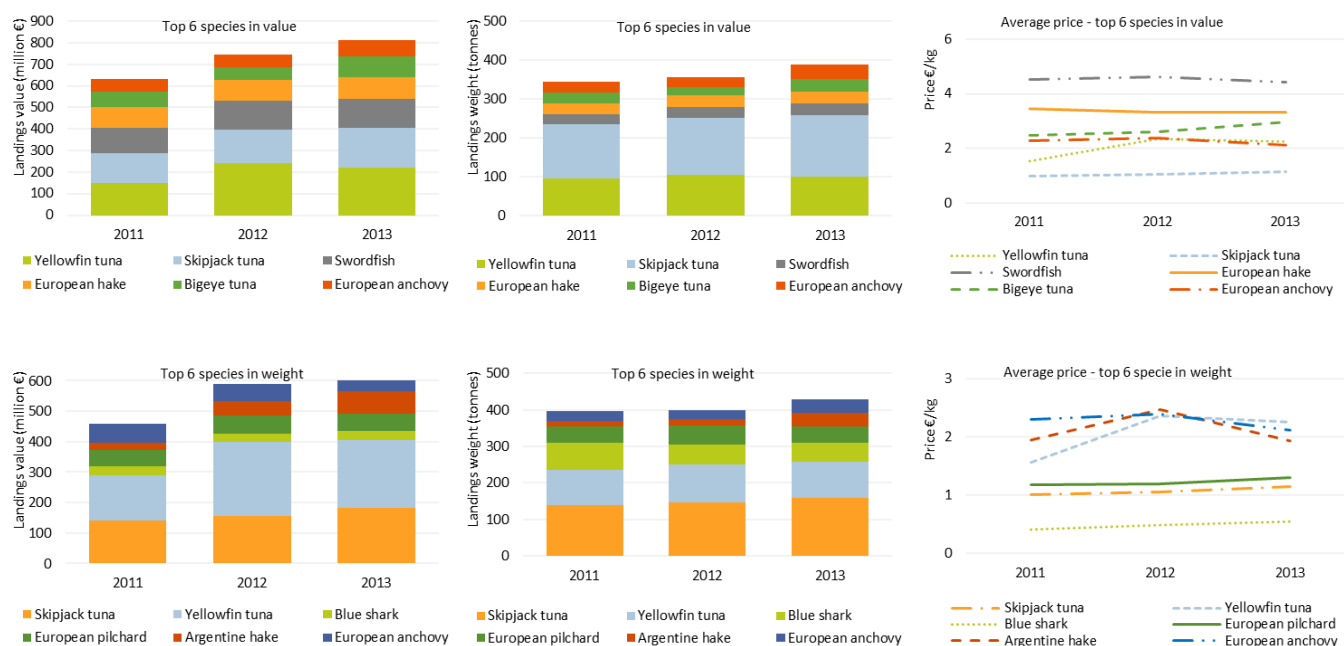
⁴ <http://www.magrama.gob.es/es/alimentacion/temas/consumo-y-comercializacion-y-distribucion-alimentaria/panel-de-consumo-alimentario/base-de-datos-de-consumo-en-hogares/consulta11.asp>.

price of seafood species depend significantly on the economic cycle; there is a general price decrease in most of the seafood species analysed due to the current economic crisis⁵.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.21.2 Landings in value and weight (and corresponding income from landings) by the Spanish national fleet and average price trends of top species in price for the period 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.21.3 Spanish fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (left) and top 6 species in terms of landed weight (right).

National Fleet Economic performance

According to the data provided Spanish fleet generated about 1.9 billion Euros of landings income in 2013. Spanish fleet's incomes have decreased by 2% between 2012 and 2013. It was mainly caused by the large scale fleet which income, contributing by 47% to the national total, deteriorated by 11%. Please note that this data is in conflict with the landings value, provided by specie, so it must be considered with care. Total operating costs incurred by the national fleet in 2013 equated to €1,805 million, or 95% of income. Crew, other variable costs and fuel costs were the major fishing expenses

⁵ Guillen, J., and Franquesa, R. 2015. Price transmission and volatility along the Spanish fresh fish market chain. *New Medit*, 14(1): 4-11.

Guillen, J., and Maynou, F. 2015. Characterization of fish species based on ex-vessel prices and its management implications: an application to the Spanish Mediterranean. *Fisheries Research*, 167: 22-29.

in 2013 representing 33%, 24% and 23% of total income respectively (Table 5.21.2; Figure 5.21.2). Between 2012 and 2013, total operating costs were reduced by less than 1% due to the decrease in energy and capital costs that compensated the increase in labour and other variable costs.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the Spanish national fleet in 2013 was €821 million, €225 million, and €105 million, respectively. Gross Value Added (GVA), gross profit and net profit decreased by 3%, 15% and 12% respectively between 2012 and 2013. In accordance, net profit margin was 5.5% in 2013, and RoFTA was 23.8%, a 9% and 11% decrease from 2012, showing a decrease in profitability for 2013.

In 2013, the Spanish fleet had an estimated (depreciated) replacement value of €504 million a 3% decrease from the previous year, while investments amounted to €88 million in 2013, the highest value since 2008, meaning a 278% increase from 2012. Labour productivity (GVA per FTE) reached 28.6 thousand €, the largest value for the whole period, and a 2% increase from 2012.

Table 5.21.2 Spanish national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend	
Income	Landings income	1,573.6	2,015.5	1,880.1	2,048.7	1,933.1	1,896.8		-2%	↘	21%	
	Other income			16.9	45.7	0.1	12.8	12.5	10583%	↗		
Costs	Labour costs	553.4	803.0	676.0	655.4	584.8	597.1		2%	↗	8%	
	Energy costs	413.8	378.1	380.5	451.2	435.8	411.9		-5%	↘	0%	
	Repair costs	118.7	154.3	142.4	164.6	123.0	128.5		4%	↗	8%	
	Other variable costs	374.4	494.3	437.5	482.7	391.3	427.6		9%	↗	14%	
	Other non-variable costs	108.1	170.3	131.5	135.8	134.3	119.8	116.9	-11%	↘	11%	
	Capital costs				147.9	145.2	119.9	116.6	-17%	↘		
Economic Indicators	GVA	558.6	818.6	805.1	860.2	848.8	821.8		-3%	↘	47%	
	Gross profit	5.3	15.6	129.1	204.8	264.1	224.7		-15%	↘	4180%	
	Net profit				57.0	118.9	104.8		-12%	↘		
Capital value	Depreciated replacement value				536.7	521.4	503.7	491.6	-3%	↘		
	Investments	105.8	29.4	47.5	34.4	23.2	87.6		278%	↗	-17%	
Profitability and development trends	Net profit margin (%)				2.7	6.2	5.5		-11%	↘		
	<i>development trend</i>											
	RoFTA (%)				12.9	26.2	23.8		-9%	↘		
<i>development trend</i>												
<i>development trend</i>	GVA per FTE (thousand €)	18.2	22.8	23.9	25.9	28.0	28.6		2%	↗	57%	
<i>development trend</i>												

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using MS level data, which may not always be complete

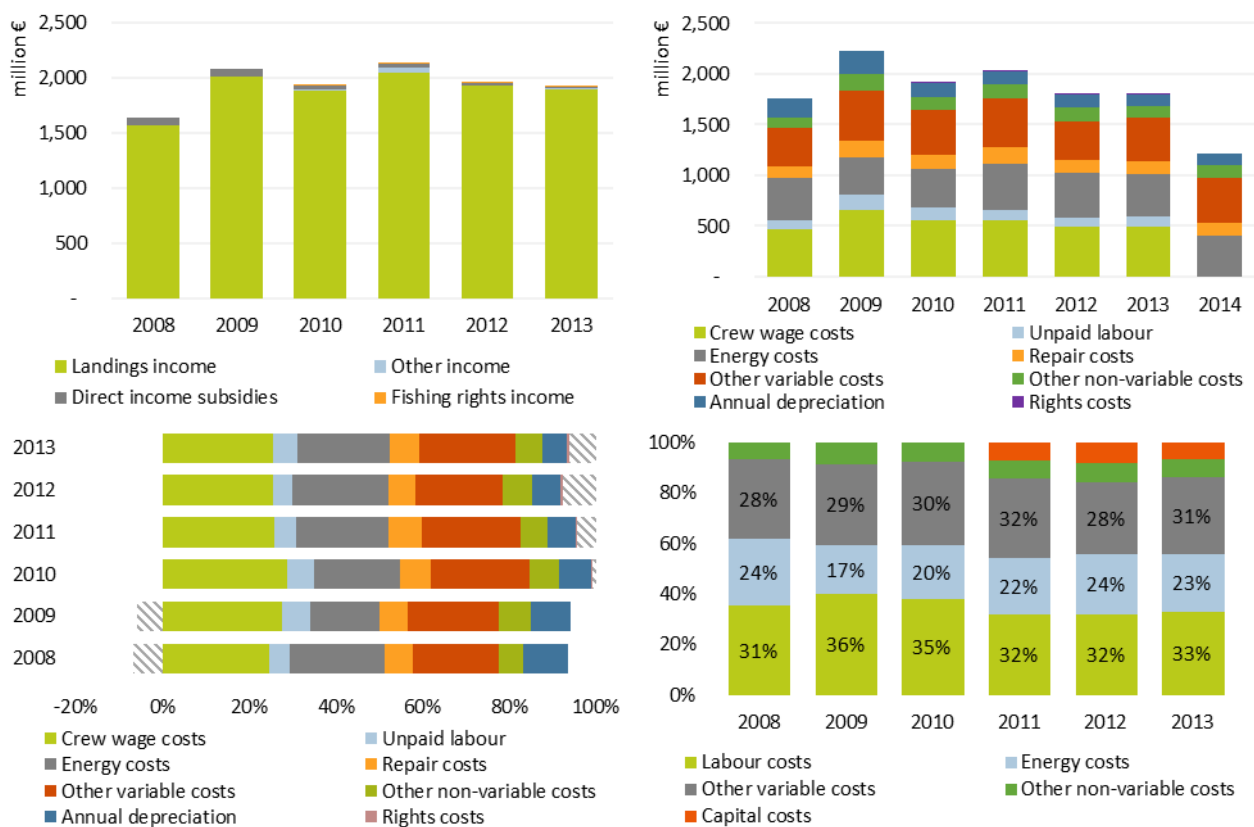
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Spanish fleets receive almost all their income from their normal fishing activity (selling the landings), being other income sources (i.e., subsidies, other income and income from selling the fishing rights) almost negligible.

Labour costs with 33% of the total costs represent the largest cost item Spanish fleets had to face in 2013, followed by other variable costs (31%) and energy (fuel) costs with 23%.

The overall economic performance of the Spanish fleet was showing an increasing trend from 2008 (for GVA and gross profit margin), but decreased slightly in 2013. Similar decrease for net profit margin can be observed for 2013, even if the data series are only available since 2011.

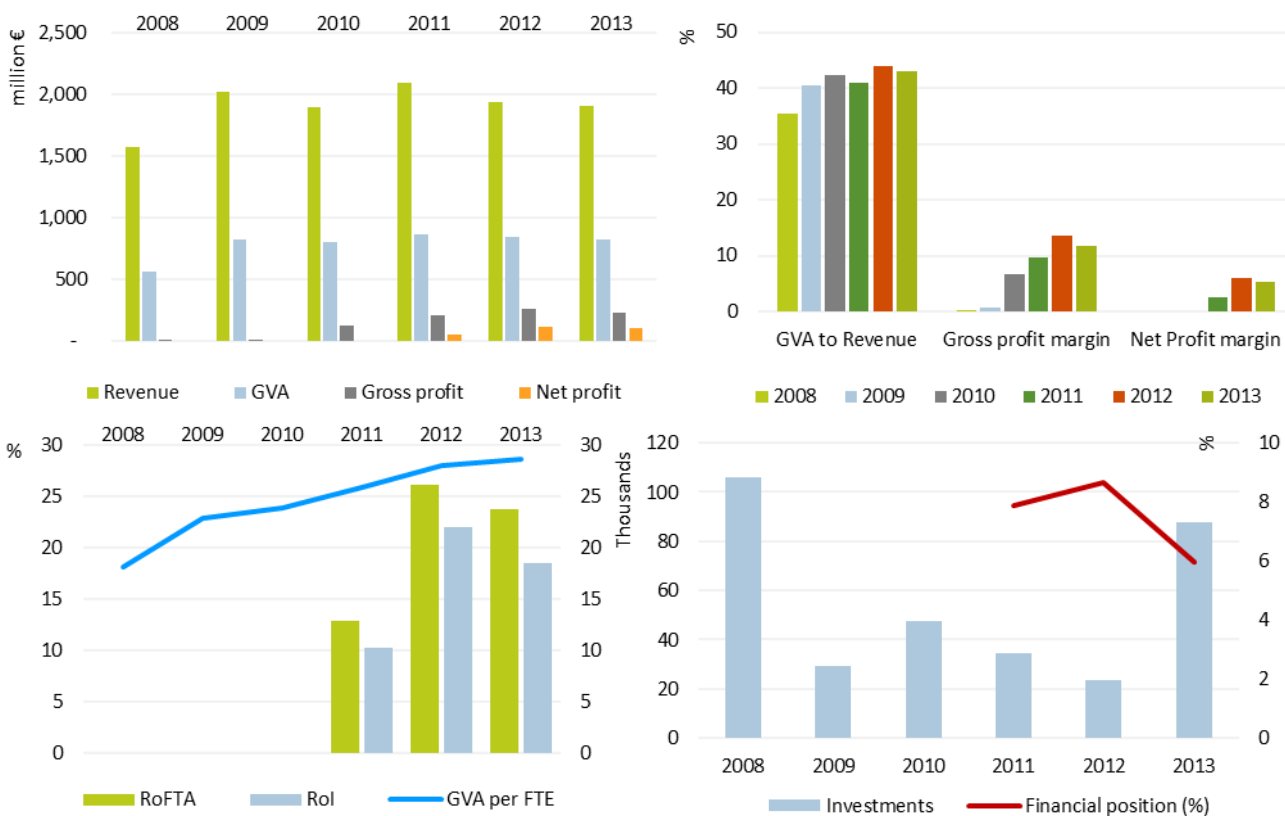
Considering the decrease in the number of vessels, and consequently employment, the productivity of capital (GVA per FTE) shows an even more clear increasing trend.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.21.4 Income and cost structure trends for the Spanish fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.21.5 Main economic performance indicator trends for the Spanish fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Table 5.21.3., reports that the small scale fleet provides 3% of the landing in weight and the 5% in value; while the industrial fleet provides the 43%, both in weight and value of landings, and the distant water fleet provides the 54% in weight and the 52% in value of landings. The effort and capacity of the both major groups of fleets decreased in 2014 compared to 2013 by 6.5% of GT and 8.7% of fishing days for the distant water fleet and 2.3% and 7.2% respectively for large scale fleet. Despite this landings per fishing day increased for both fleets (by 6% in case of large scale fleet and 18% in case of distant water fleet). At the same time the landings per fishing day of the small scale fleet deteriorated by 9%.

The economic performance of the small scale fleet was negative and deteriorating; for industrial large scale vessels even if the economic performance is still positive (produces profits), it is deteriorating; while the long distant fleet shows a positive economic performance and it is improving.

The significant reduction of small scale fleet's income in 2011 was a result of a reduction in the number of vessels, by almost 41% in the same year. At the same time large scale fleets capacity increased by 56% in terms of number of vessels. This change was driven by the change in the data collection methodology in Spain and disaggregation of some fleets to more precise fleet segments. Therefore comparison of 2008-2010 and 2011-2014 periods and small scale and large scale fleets should be avoided.

On the other hand, distant water fleet's income increased by 3% and was accompanied by the increase of all economic indicators. GVA, gross profit and net profit have increased by 12%, 27% and 42% respectively.

Table 5.21.3 Spanish national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	Distant water fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	6,420	6,315	7,102	4,214	4,188	4,215	4,156	1%	↔	3,089	3,101	2,956	4,622	4,486	4,340	4,307	-3%	↘	294.0	267.0	297.0	280.0	264.0	240.0	230.0	-9%	↘
Average vessel age (year)	28.6	28.7	30.0	27.0	27.7	28.5	28.9	3%	↗	14.9	15.4	16.0	24.5	25.2	25.6	27.1	2%	↗	12.3	12.9	14.7	15.0	15.5	16.8	16.9	8%	↗
Average vessel length (m)	6.9	6.9	6.8	7.6	7.5	7.5	7.6	0%	↔	20.3	20.1	19.7	13.5	13.4	13.5	13.4	0%	↔	40.0	41.6	40.2	39.3	41.8	41.8	42.8	0%	↔
Vessel tonnage (thousand GT)	14.4	14.1	15.1	13.1	11.6	11.6	11.5	0%	↔	268.1	262.8	237.2	202.9	189.7	185.3	178.0	-2%	↘	176.6	173.4	179.4	169.3	174.0	162.7	163.6	-6%	↘
Vessel power (thousand kW)	139.1	135.5	146.9	115.2	109.0	109.8	110.5	1%	↔	624.5	609.6	556.7	513.4	487.7	472.3	465.2	-3%	↘	252.4	245.9	255.3	237.6	240.5	225.5	228.8	-6%	↘
Total employed (#)	7,818	11,797	12,698	8,803	8,601	9,484	3,945	10%	↗	18,170	20,714	19,524	21,545	21,085	18,991	16,333	-10%	↘	4,551.0	5,533.7	7,060.1	5,460.5	4,713.5	4,653.6	3,245.3	-1%	↘
FTE (#)	5,033	7,261	8,223	6,695	5,378	7,317		36%	↗	19,385	21,266	17,140	19,802	19,033	16,110		-15%	↘	6,297.0	7,317.3	8,316.0	6,712.5	5,890.8	5,354.8		-9%	↘
Average wage per employed (thousand €)	10.7	12.1	11.0	11.7	8.3	12.3		49%	↗	20.3	25.5	20.0	18.6	17.9	18.3		2%	↗	22.3	23.9	22.8	28.1	29.1	29.5		1%	↗
Average wage per FTE (thousand €)	16.6	19.9	16.5	15.4	13.3	15.8		19%	↗	19.0	24.8	22.7	20.2	19.8	21.6		9%	↗	16.1	18.1	19.4	22.9	23.3	25.6		10%	↗
Days at sea (thousand days)				393.1	392.2	391.1		0%	↔				680.0	684.9	640.5		-6%	↘				77.6	72.0	65.3		-9%	↘
Fishing days (thousand days)				392.7	392.2	390.9		0%	↔				639.7	647.6	600.9		-7%	↘				67.6	62.6	57.1		-9%	↘
Energy consumption (million litres)	26.2	33.9	34.7	21.6	21.3	28.4		33%	↗	439.4	439.3	388.4	366.3	373.5	378.3		1%	↗	209	273	296	265	288	289		0%	↔
Energy consumption per landed tonne (l/T)				846	748	1,095		46%	↗				914.6	946.2	969.9		3%	↗				610	644	599		-7%	↘
Landings weight (thousand tonnes)				25.6	28.5	26.0		-9%	↘				400.5	394.7	390.0		-1%	↘				435.0	447.8	482.2		8%	↗
Landings value (million €)				114.4	101.5	95.3		-6%	↘				954.4	901.3	860.6		-5%	↘				804.4	951.9	1,026.7		8%	↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Table 5.21.4 Economic performance of the Spanish national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	Distant water fleet							%Δ 2013-12	Trend	
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			
Income	Landings income	121.9	196.9	199.3	130.3	113.9	159.9	40%	↗	936.9	1,212.1	932.5	1,077.6	986.4	882.5	-11%	↘	514.9	606.5	748.3	840.8	832.8	854.4	3%	↗			
	Other income			1.9	0.6	0.0	0.1	600%	↗			3.5	18.9		6.3	3.5			11.5	26.3	0.1	6.5	6.3	5782%	↗			
	Direct income subsidies	0.5	4.8	0.6	1.3	1.2	1.0	-20%	↘	46.0	56.8	19.8	18.0	8.4	4.1	-51%	↘	14.7	6.9	14.4	11.8	13.4	6.4	-52%	↘			
	Fishing rights income											0.6	0.1	0.8	5.7	576%	↗					0.0	0.9	4600%	↗			
Costs	Labour costs	83.8	143.0	126.0	103.2	71.3	112.7	58%	↗	368.2	528.0	389.0	398.7	376.3	347.1	-8%	↘	101.4	132.5	161.0	153.5	137.1	137.3	0%	↔			
	Energy costs	15.6	19.7	26.1	16.3	14.6	17.8	22%	↗	259.5	218.2	188.8	252.9	235.8	213.4	-9%	↘	138.6	140.1	165.6	181.9	185.5	180.7	-3%	↘			
	Repair costs	8.6	16.4	13.8	6.1	7.1	10.8	53%	↗	76.8	92.7	77.4	98.5	57.2	56.4	-1%	↘	33.4	45.2	51.2	60.1	58.8	61.2	4%	↗			
	Other variable costs	19.0	26.6	29.7	18.6	14.6	23.0	57%	↗	168.9	217.6	126.1	172.0	117.9	131.9	12%	↗	186.5	250.1	281.6	292.1	258.8	272.7	5%	↗			
	Other non-variable costs	3.2	6.1	6.8	7.9	4.4	7.4	6.2	68%	↗	60.1	100.8	64.2	66.1	57.2	55.5	-3%	↘	44.8	63.4	60.5	61.8	72.7	56.9	49.7	-22%	↘	
	Capital costs				9.0	5.4	5.8	2.2	9%	↗				89.7	86.5	58.4	41.5	-32%	↘				48.4	51.7	54.7	51.0	6%	↗
Capital value	Depreciated replacement value				34.4	33.5	34.1	21.8	2%	↔				289.4	268.4	268.0	208.7	0%	↔				188.9	192.0	173.4	141.2	-10%	↘
	Investments	7.5	4.8	5.0	7.9	1.9	10.5	469%	↗	74.6	16.0	16.4	18.0	14.8	64.3	334%	↗	23.7	8.7	26.1	8.6	6.5	12.8	95%	↗			
Economic indicators	GVA	75.5	128.1	124.8	81.9	73.2	100.9	38%	↗	371.5	582.8	479.5	506.9	518.4	431.6	-17%	↘	111.6	107.7	200.8	271.3	257.2	289.3	12%	↗			
	Gross profit	-8.3	-14.9	1.7	-21.3	1.9	-14.7	-881%	↘	3.3	54.8	90.3	107.6	142.1	84.6	-41%	↘	10.3	-24.8	39.9	117.9	120.1	152.0	27%	↗			
	Gross profit margin	-6.8	-7.5	0.9	-16.3	1.7	-9.4	-672%	↘	0.4	4.5	9.7	9.8	14.4	9.5	-34%	↘	2.0	-4.1	5.3	13.6	14.4	17.7	23%	↗			
	Net profit				-30.0	0.9	-20.5	-2304%	↘				17.1	48.9	25.5	-48%	↘				69.4	68.4	97.4	42%	↗			
Profitability and development trends	Net Profit margin				-24.8	1.0	-13.8	-1449%	↘				1.6	5.2	2.9	-44%	↘				8.0	8.2	11.3	38%	↗			
	<i>development trend</i>				Deteriorated			-16%	↘				Deteriorated			-15%	↘				Improved			39%	↗			
	RoFTA (%)				-92.3	7.0	-65.1	-1036%	↘				8.2	22.6	12.6	-44%	↘				39.0	39.0	59.2	52%	↗			
<i>development trend</i>				Deteriorated			-53%	↘				Deteriorated			-19%	↘				Improved			52%	↗				
GVA per FTE (thousand €)	15.0	17.7	15.2	12.2	13.6	13.8	1%	↗	19.2	27.4	28.0	25.6	27.2	26.8	-2%	↘	17.7	14.7	24.2	40.4	43.7	54.0	24%	↗				
<i>development trend</i>				Deteriorated			-6%	↘				Improved			5%	↗				Improved			92%	↗				

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

Fleet Segment Level Economic performance

The Spanish fleet is highly diversified with a broad range of vessels types targeting many different species such as tunas, cod, anchovies, sardines, squid, cuttlefish, octopus mainly in the North Atlantic Ocean and the Mediterranean Sea. The national fleet consisted of 60 active fleet segments in 2013. In 2013, there were gross losses in 21 of the active fleet segments while 37 active segments had gross profits, compared to the 19 and 38 active segments that had gross losses and profits in 2012.

In 2013, small scale fleet, with 4,215 vessels, represented 48% of the Spanish fleet but only 29% of the total employment. This fleet's landings income increased significantly (by 40%) in 2013, but at the same time value of landings, provided by specie, decreased 6%. Therefore the outcomes from this analysis should be considered with care. The Spanish small-scale fleet was not profitable in 2013, decreasing the economic performance compared to 2012, only the GVA increased from previous years. This is because labour costs represent the major cost item of the fleet.

In 2013, the large-scale fleet with 4340 vessels represented 49% of the Spanish fleet and 57% of the total employment. Landings incomes have reduced by 11% in 2013, leading to a significant decrease in profitability.

With 240 vessels, the distant-water fleet represented 3% of the Spanish fleet and 14% of employment. This group of fleets contributes significantly to the landings, producing 54% of landings weight and 52% of value and at the same time contributing by 35% to GVA and 69% to gross profit of the Spanish national fleet. This fleet was the only one that managed to increase profits in 2013, in part due to the landings income increase (Table 5.21.3).

Table 5.21.5 provides a breakdown of key performance indicators for all active segments in 2013. A short description of the three most important segments in terms of total landings income is provided below.

Purse seine over 40m (Other Fishing Regions) – The 32 vessels in this segment operate in other fishing regions (distant-water/high sea fleet). The importance of the segment comes from the total landings income of about €476 million for the 276 thousand tonnes caught and around 1,244 FTEs employed in this fleet segment in 2013, contributing to 25%, 31% and 4% of the landings value, weight of landings and FTEs generated by the Spanish fishing fleet, respectively. This fleet segment was profitable with a reported gross profit of €152 million in 2013.

Demersal trawl/seine 24-40m (North East Atlantic) – This segment was compounded of 152 vessels in 2013, an 8% decrease from 2012. In 2013, landings value was around €154 million, landings weight was 74 thousand tonnes and 1,916 FTEs were employed in this segment, contributing between 7 and 8% to the total of the Spanish fleet. This fleet segment was profitable, with a reported €3 million gross loss.

Demersal trawl/seine 24-40m (Mediterranean) – This segment was compounded of 332 vessels in 2013, a 4% decrease from 2012. In 2013, landings value was around €53 million (a 22% decrease from 2012), landings weight was 11 thousand tonnes and 865 FTEs were employed (an unrealistic 52% decrease) in this segment, contributing between 1 to 3% to the total of the Spanish fleet. This fleet segment was profitable, with a reported €5 million gross profits.

Assessment and Future Trends

The Spanish fishing fleet is significantly decreasing in the number of vessels, engine power and gross tonnage in the last years in order to bring fishing capacity in balance with the fishing opportunities. Between 2012 and 2013, the fleet was reduced by 4% in number of vessels and gross tonnage, by 3% in vessel power. This trend of reducing the fleet capacity will continue in the near future (e.g., in 2014 there were 9,921 vessels, a 2% decrease from 2013), and may even accelerate if harder management measures are taken in order to achieve MSY objectives.

Profitability of the Spanish fleet decreased in 2013, but profitability is expected to increase in 2014 and 2015, mainly because of fuel cost decreases, as well as improvements in fish prices. Fishing fleets' economic performance is highly dependent on the fuel price (Cheilari et al., 2013)⁶. From that perspective, future expectations are not very encouraging; despite the recent oil price plummet to

⁶ Cheilari, A., Guillen, J., Damalas, D. and Barbas, T. 2013. Effects of the Fuel Price Crisis on the Energy Efficiency and the Economic Performance of the European Union Fishing Fleets. *Marine Policy*, 40: 18-24.

an historical low (December 2014), analysts expect oil prices to rebound in the next two years, rising to near \$100 a barrel. (IEA, 2014)⁷. Fish prices are expected to increase due to an increase in the demand for what it seems to be the beginning of the Spanish economic recovery.

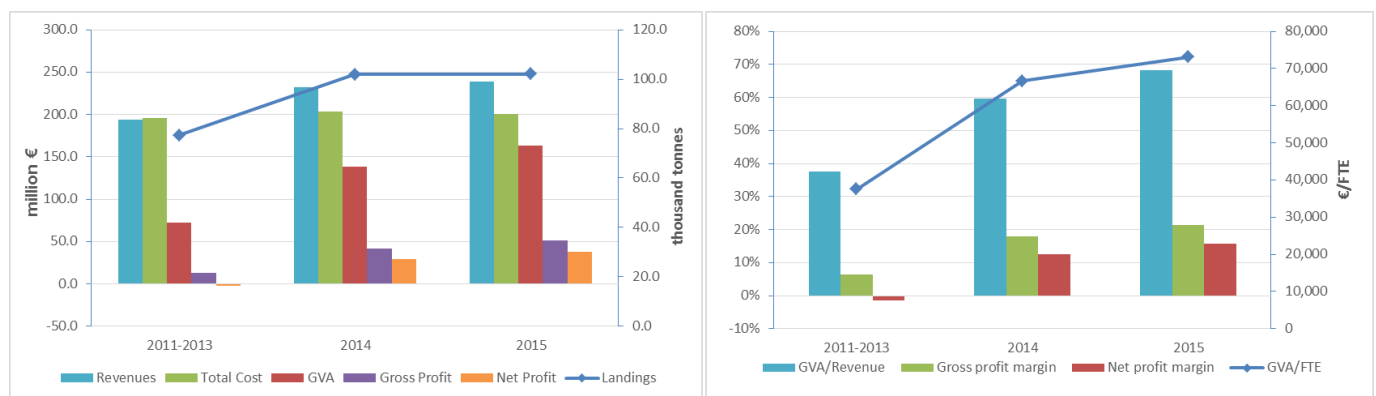
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

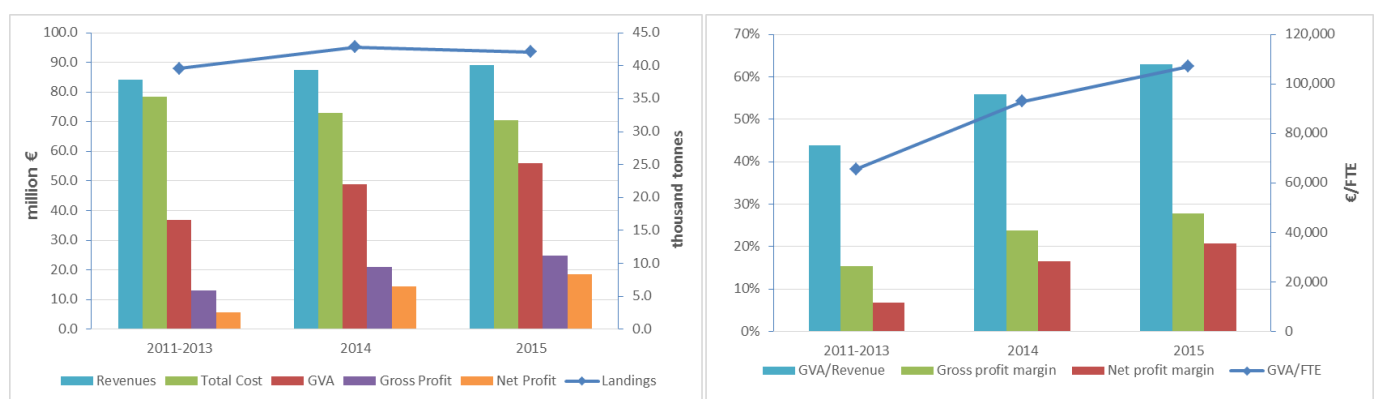
A Member State overview is not provided for Spain as only 37% of its landings occur in the Northeast Atlantic. The general economic trend for the fleets covered by BEMEF is one of increased revenue and profitability.

The following graphs provide results for the top 3 Spanish fleets by gross earnings



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

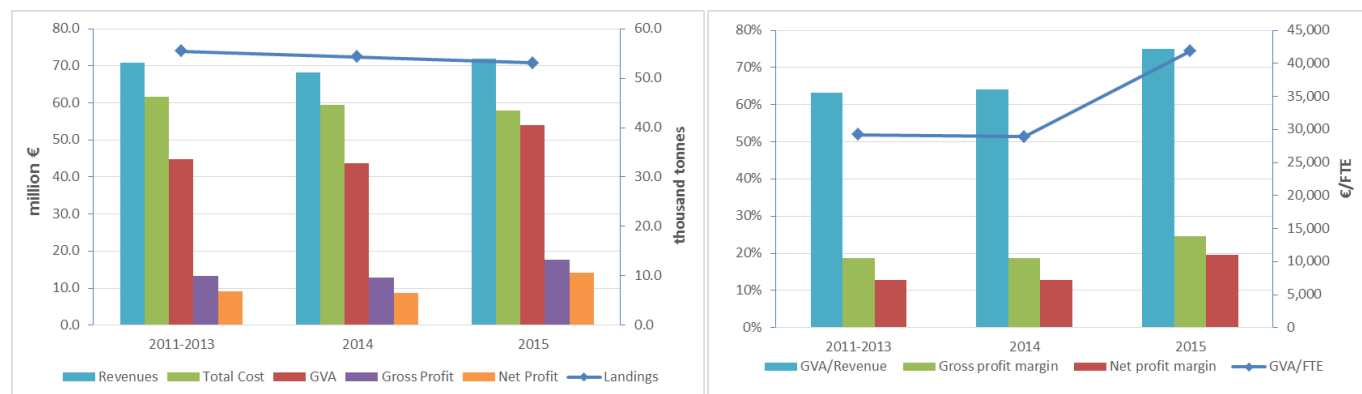
Figure 13.6 ESP AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 13.2 ESP AREA27 DTS VL40XX: Projections on 2014 and 2015 on the main socio-economic indicators.

⁷ IEA (International Energy Agency). 2014. World Energy Outlook 2014. OECD/ IEA. Paris.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Figure 13.3 ESP AREA27 PS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.

A Member State overview is not provided for Spain as only 37% of its landings occur in the Northeast Atlantic. The general economic trend for the fleets covered by BEMEF is one of increased profitability in a state of long-term MSY.

Data issues

Landings value and income value do not match, and not even the trends. The value of landings is increasing from 2011 (the first year this data is available), the landings income (which should be the same or very similar) is decreasing from 2011. Differences increase once data is checked on more detail, for example, for the small scale fisheries there is a more than 60% difference for 2013. Moreover, value of landings data from the Spanish Ministry show a decrease in 2012 from 2011 level, but 2013 figures reached 2,165 million € to surpass previous years' figures⁸.

Effort data and landings data was only provided from 2011, instead of 2008.

Moreover, some data is not disaggregated by fishing region, and this does not allow including Spain in some of the analysis performed in the regional chapter. There are significant inter-annual variations in the composition of the small and large-scale fleets, which are mainly driven by the change in the methodology of data collection in Spain in 2010-2011.

We acknowledge that data collection for Spain could be difficult due the size and complexity (by fishing areas and technology) of the Spanish fishing fleet, and quality has been increasing over time, but it has still not achieve the desired levels, and further work should be addressed to improve data collection system, quality and coverage of the data provided.

⁸

http://www.magrama.gob.es/es/pesca/temas/mercados-economia-pesquera/SECTOR_PESQUERO_ESPA%C3%91A_enero_2015__ACTUALIZACION__2_tcm7-362970.pdf.

Table 5.21.5 Main socio-economic performance indicators by fleet segment in the Spanish national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ	Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	ESP AREA27 DFN VL1012°	122	-16%	209	-31%	18,198	-16%	567	-52%	6,258	-9%	1,970	-17%	2,985	33%	14.3	93%	172	113%						
ESP AREA27 DFN VL1218	162	-4%	627	-10%	27,319	-5%	4,709	-62%	18,189	4%	6,061	3%	7,898	166%	12.6	196%	3,108	-113%	3,292	-23.2			Weak		
ESP AREA27 DFN VL1824°	30		254		6,363		3,423		11,497		3,771		8,433		33.2		2,328		1,843		13.8		High		
ESP AREA27 DRB VL0010	1830	-2%	1,650	-15%	183,300	-13%	3,204	-54%	22,376	-5%	3,475	10%	17,844	-26%	10.8	-13%	201	102%	327	97%	-1.3	96%	Weak	84%	Improved
ESP AREA27 DRB VL1012	12	0%	28	70%	2,004	24%	134	-21%	1,114	37%	464	52%	1,119	158%	40.6	52%	516	825%	447	1358%	31.6	774%	High	774%	Improved
ESP AREA27 DRB VL1218	83	0%	199	21%	13,895	12%	2,484	15%	7,833	35%	3,274	41%	8,161	129%	41.0	89%	3,637	254%	848	24%	7.9	-31%	Reasonable	126%	Improved
ESP AREA27 DTS VL1218°	60	-6%	165	-67%	10,346	-1%	8,080	-3%	14,904	13%	4,546	58%	2,553	-77%	15.4	-30%	261	-105%	616	-6.3			Weak		
ESP AREA27 DTS VL1824	82	0%	413	-33%	14,784	6%	23,671	50%	26,191	19%	10,020	57%	8,393	39%	20.3	109%	3,360	130%	690	129%	3.3	128%	Reasonable	149%	Improved
ESP AREA27 DTS VL2440	152	-8%	1,916	9%	38,888	-8%	130,177	6%	153,973	-15%	73,774	-8%	53,986	-34%	28.2	-40%	6,323	-122%	18,423	-235%	-10.6	-249%	Weak	-477%	Deteriorated
ESP AREA27 DTS VL40XX	21	11%	536	17%	4,375	-5%	27,615	12%	121,849	30%	42,780	15%	39,239	1%	73.3	-13%	16,088	-4%	9,070	17%	10.4	7%	High	108%	Improved
ESP AREA27 FPO VL1012	60	-38%	181	-39%	8,295	-42%	774	-60%	2,921	-39%	940	-25%	429	-83%	2.4	-72%	854	-122%	1,004	-133%	-60.5	-615%	Weak	-615%	Deteriorated
ESP AREA27 FPO VL1218	49	-35%	131	-46%	6,635	-37%	825	-9%	2,585	-32%	864	-17%	1,775	-35%	13.5	21%	191	-15%	358	55%	-11.1	37%	Weak	55%	Improved
ESP AREA27 HOK VL1012°	63		185		6,743		2,045		4,655		1,620		4,251		23.0		658		776		-11.3		Weak		
ESP AREA27 HOK VL1218	76	-27%	353	-44%	11,598	-23%	4,204	29%	9,189	-24%	3,607	-28%	7,972	-34%	22.6	20%	627	-71%	471	169%	2.7	181%	Reasonable	139%	Improved
ESP AREA27 HOK VL1824	28	-38%	211	-46%	5,549	-37%	3,237	-44%	7,808	-45%	3,605	-38%	4,089	-60%	19.4	-26%	396	-59%	185	-35%	-2.2	-245%	Weak	34%	Improved
ESP AREA27 HOK VL2440	27	-75%	425	-77%	8,054	-69%	11,214	-67%	21,030	-80%	15,529	-65%	8,005	-90%	18.8	-58%	1,268	-95%	646	-104%	-3.1	-124%	Weak	-171%	Deteriorated
ESP AREA27 PGP VL0010	2030	1%	3,504	44%	176,836	-2%	11,642	49%	36,834	-8%	8,621	1%	45,639	35%	13.0	-6%	8,514	-239%	11,123	-460%	-15.1	-346%	Weak	-74%	Deteriorated
ESP AREA27 PGP VL1012	87	93%	111	83%	9,236	117%	408	57%	2,239	32%	997	135%	1,187	26%	10.7	-31%	319	-2363%	874	-1193%	-44.3	-903%	Weak	-903%	Deteriorated
ESP AREA27 PGP VL1218	50		142		6,594		1,071		2,977		1,331		2,561		18.1		399		1,160		-25.5		Weak		
ESP AREA27 PGP VL1824	24		213		4,004		2,665		6,989		2,173		4,500		21.2		125		245		-2.4		Weak		
ESP AREA27 PGP VL2440	71		939		16,404		22,443		61,312		20,246		57,159		60.9		18,470		13,630		14.6		High		
ESP AREA27 PMP VL1012	30		62		3,790		255		1,440		774		543		8.8		12								
ESP AREA27 PMP VL1218°	29		273		3,861		4,084		7,108		4,259		9,238		33.9		4,332		4,131		29.2		High		
ESP AREA27 PS VL1012°	21	-32%	82	-44%	2,037	-37%	190	-53%	1,830	-21%	1,832	1%	1,136	8%	13.8	92%	218	289%	104	159%	7.0	164%	Reasonable	361%	Improved
ESP AREA27 PS VL1218	127	-2%	619	-27%	19,001	-4%	4,037	-19%	28,595	-4%	23,561	7%	14,880	-28%	24.1	-2%	3,698	14%	1,311	-50%	5.9	-21%	Reasonable	11%	Improved
ESP AREA27 PS VL1824	97	0%	910	-23%	18,086	0%	7,441	-18%	39,966	-8%	34,260	-5%	18,076	14%	19.9	49%	1,136	-78%	2,191	-235%	-8.1	-250%	Weak	-269%	Deteriorated
ESP AREA27 PS VL2440	96	26%	1,421	16%	17,270	19%	14,266	24%	66,418	0%	51,847	-3%	37,334	-19%	26.3	-30%	11,360	-4%	8,788	-3%	16.5	14%	High	36%	Improved
ESP AREA37 DFN VL0612	85	-15%	147	-1%	12,699	-14%	1,352	62%	3,415	-24%	787	-37%	2,148	-43%	14.6	-42%									
ESP AREA37 DFN VL1218	63		117		10,549		611		2,950		802		3,437		29.3		807		159		3.4		Reasonable		
ESP AREA37 DRB VL0612°	35	-36%	21	-44%	3,208	-37%	78	1%	529	-37%	216	-5%	226	-19%	10.7	45%	90	63%							
ESP AREA37 DRB VL1218	10	-29%	18	-48%	1,754	-33%	325	-52%	423	-31%	115	-32%	381	-39%	21.2	18%	136	-22%	109	-14%	15.1	55%	High	51%	Improved

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Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ				
ESP AREA37 DTS VL0612	21	39		3,452		592		1,276		351		1,017		26.2		220		162		8.3		Reasonable			
ESP AREA37 DTS VL1218	161	-2%	568	71%	30,492	-1%	8,432	34%	15,848	-18%	4,006	-15%	10,975	-5%	19.3	-44%	487	-83%	1,026	-192%	-4.6	-187%	Weak	-29%	Deteriorated
ESP AREA37 DTS VL1824	332	-4%	865	-52%	65,657	-5%	44,973	2%	53,349	-22%	10,554	-14%	19,223	-43%	22.2	18%	5,382	-49%	2,709	228%	4.3	268%	Reasonable	259%	Improved
ESP AREA37 DTS VL2440	147	-5%	523	-17%	30,213	-1%	27,895	-4%	37,391	-8%	6,524	4%	5,319	-69%	10.2	-63%	6,413	-263%	9,734	-376%	-22.5	-509%	Weak	-124%	Deteriorated
ESP AREA37 FPO VL1218*	17	13%	93	11%	2,622	12%	767	43%	3,455	-2%	332	33%	1,169	-24%	12.5	-31%	1	106%							
ESP AREA37 HOK VL0612°	55	-32%	92	-33%	5,399	-36%	609	-45%	1,778	-47%	324	-41%	2,605	17%	28.3	75%	543	1597%	112	91%	-2.3	92%	Weak	92%	Improved
ESP AREA37 HOK VL1218	70	-22%	148	-38%	8,692	-11%	821	-59%	7,072	-27%	1,268	-22%	2,133	-62%	14.4	-38%	549	-75%	393	-122%	-8.2	-144%	Weak	-572%	Deteriorated
ESP AREA37 HOK VL1824°	27	-10%	152	-32%	4,291	-23%	1,855	-16%	6,950	-18%	1,322	-6%	5,593	44%	36.7	113%	3,068	193%	2,409	2732%	22.6	2188%	High	3755%	Improved
ESP AREA37 PGP VL0006	126	4%	53	-24%	7,827	13%	162	87%	1,510	8%	291	9%													
ESP AREA37 PGP VL0612	977	3%	1,667	74%	100,437	5%	6,517	100%	25,195	4%	5,541	0%	23,111	44%	13.9	-17%	1,302	232%	226	87%	-0.6	92%	Weak	91%	Improved
ESP AREA37 PGP VL1218°	23		86		2,919		336		1,269		157		700		8.2		384		609		-37.3		Weak		
ESP AREA37 PMP VL0612	29		40		3,692		179		1,805		523		1,238		30.7		441		496		-21.5		Weak		
ESP AREA37 PMP VL1218	13		27		1,981		300		1,184		239		1,567		58.3		539		358		14.3		High		
ESP AREA37 PS VL0612	21		92		3,496		272		3,236		1,892		2,212		24.1		766								
ESP AREA37 PS VL1218	91	-1%	680	40%	18,136	9%	2,937	87%	28,254	28%	17,418	11%	18,491	140%	27.2	72%	6,280	143%	5,731		22.0		High		
ESP AREA37 PS VL1824	91	-2%	745	-16%	20,664	-1%	5,176	-35%	39,435	18%	23,657	13%	23,338	21%	31.3	45%	9,360	19%	7,988	155%	25.7	157%	High	323%	Improved
ESP AREA37 PS VL2440°	24	-8%	132	-47%	4,062	-9%	1,667	-41%	18,427	-10%	5,884	18%	14,731	-24%	111.5	44%	5,876	-49%	3,771	-54%	14.7	-54%	High	-22%	Deteriorated
ESP OFR DTS VL2440	35	-36%	1,090	39%	7,743	-28%	39,032	20%	109,164	47%	14,165	10%	8,397	-49%	7.7	-63%	6,898	-753%	7,892	-13%	-9.2	11%	Weak	-2182%	Deteriorated
ESP OFR DTS VL40XX	29	-17%	902	-1%	7,796	-18%	58,016	-7%	263,102	-2%	106,799	19%	38,632	66%	42.8	68%	1,018	91%	9,890	43%	-6.1	49%	Weak	-661%	Deteriorated
ESP OFR HOK VL1012	23		87		1,408		368		1,214		868		1,550		17.9		2		61		-3.1		Weak		
ESP OFR HOK VL1218	24	-4%	78	-18%	2,253	-34%	659	-57%	2,247	-39%	1,216	-59%	1,126	-75%	14.5	-70%	95	-106%	310	-131%	-11.8	-167%	Weak	-1857%	Deteriorated
ESP OFR HOK VL2440°	96		1,369		27,406		53,702		117,641		61,113		29,920		21.9		14,088		12,269		13.9		High		
ESP OFR HOK VL40XX	28	-7%	561	-45%	8,911	-7%	19,701	-37%	56,277	3%	22,009	6%	19	-100%	0.0	-100%	5,428	-260%	9,050	-17%	-26.0	-131%	Weak	-411%	Deteriorated
ESP OFR PGP VL0010°	498		873		34,435		3,202		5,514		2,380		13,571		15.5		5,725		5,826		-29.6		Weak		
ESP OFR PGP VL1012°	30	20%	107	181%	2,090	14%	341	105%	542	-33%	316	-53%	954	458%	8.9	99%	198	27%							
ESP OFR PGP VL1218°	30		126		3,846		1,083		2,248		1,516		2,773		22.0		376		215		4.6		Reasonable		
ESP OFR PGP VL2440°	20		190		3,894		4,267		3,810		2,320		4,159		22.0		713		920		-8.6		Weak		
ESP OFR PS VL1218*	13	-19%	93	3%	1,822	-7%	309	-37%	1,300	-1%	1,252	-19%	2,881	211%	30.9	203%	206	227%	25		0.7		Reasonable		
ESP OFR PS VL40XX	32		1,244		9,575		114,023		476,708		275,786		208,228		167.4		151,994		112,860		23.6		High		

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Table 5.21.6 Main socio-economic performance indicators by fleet segment in the Spanish national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	%Δ	Days at sea	%Δ	Landed weight per DAS	%Δ	Landings in weight per fishing day	%Δ	Wage per vessel	%Δ	Wage per FTE	%Δ	Wage per employed	%Δ	fuel consumed	%Δ	consumed per landed tonne	%Δ	Energy costs	%Δ	Operating costs	%Δ	GVA	%Δ	Net profit	%Δ	%Δ 2013 to average (2008-12)	Economic development trend				
ESP AREA27 DFN VL1012*	1.7	-18%	149	0%	108	-2%	108	-2%	23,056	-6%	4,375	-4%	3,743	-22%	288	-42%	3,100	-43%	32,050	-43%	32,050	-24%	24,466	58%	-	20,318	-	-	-	-	-	
ESP AREA27 DFN VL1218	3.9	-7%	169	-1%	222	8%	231	9%	67,943	158%	11,899	168%	10,633	102%	777	-63%	17,626	53%	106,713	53%	106,713	100%	48,755	176%	-	61,449	-	-	-	-	-	
ESP AREA27 DFN VL1824*	8.5		212		593		695		203,478		20,591		24,916		908		78,529		367,407		367,407		281,088		-	-	-	-	-	-	-	-
ESP AREA27 DRB VL0010	0.9	-13%	100	-12%	19	27%	19	27%	9,641	-48%	1,305	-80%	679	-78%	922	-58%	1,953	-42%	13,346	-42%	13,346	-44%	9,751	-24%	-	179	97%	89%	Improved			
ESP AREA27 DRB VL1012	2.3	70%	167	24%	231	22%	231	22%	50,197	60%	16,075	43%	13,845	173%	289	-48%	7,467	-27%	74,699	-27%	74,699	28%	93,211	158%	37,218	1358%	1358%	Improved				
ESP AREA27 DRB VL1218	2.4	21%	167	12%	236	27%	236	27%	54,501	78%	22,709	47%	18,167	78%	759	-18%	12,683	-10%	84,732	-10%	84,732	44%	98,321	129%	10,211	24%	426%	Improved				
ESP AREA27 DTS VL1218*	2.8	-65%	172	6%	439	59%	444	58%	46,897	-50%	15,555	37%	12,869	-24%	1,777	-38%	86,882	45%	167,838	45%	167,838	-6%	42,546	-75%	-	10,259	-	-	-	-	-	
ESP AREA27 DTS VL1824	5.0	-33%	180	6%	678	49%	689	48%	61,376	10%	9,053	73%	9,765	28%	2,362	-5%	112,912	-18%	217,376	-18%	217,376	-6%	102,355	39%	8,420	129%	149%	Improved				
ESP AREA27 DTS VL2440	12.6	19%	256	0%	1,897	0%	2,180	0%	396,773	23%	31,478	6%	35,507	11%	1,765	16%	410,586	-1%	1,190,627	-1%	1,190,627	19%	355,174	-29%	-	121,203	-246%	-466%	Deteriorated			
ESP AREA27 DTS VL40XX	25.5	6%	208	-14%	9,778	20%	11,359	20%	1,102,432	-5%	43,230	-10%	45,394	-17%	646	-2%	781,198	-16%	3,371,483	-16%	3,371,483	2%	1,868,506	-9%	431,913	6%	106%	Improved				
ESP AREA27 FPO VL1012	3.0	-1%	138	-6%	113	28%	113	28%	21,374	-27%	4,767	-27%	4,101	-31%	824	-47%	8,107	-51%	41,891	-51%	41,891	-26%	7,144	-72%	-	16,738	-276%	-276%	Deteriorated			
ESP AREA27 FPO VL1218	2.7	-18%	135	-3%	130	31%	131	32%	40,114	4%	11,718	37%	9,401	35%	955	9%	10,889	19%	69,686	19%	69,686	12%	36,220	-1%	-	7,315	31%	58%	Improved			
ESP AREA27 FPO VL1012*	2.9		107		240		241		77,924		15,385		13,573		1,263		7,439		119,112		119,112		67,477		-	12,322	-	-	-	-	-	
ESP AREA27 HOK VL1218	4.6	-24%	153	5%	311	-6%	337	-6%	96,649	2%	19,150	53%	17,788	132%	1,166	79%	38,750	66%	219,313	66%	219,313	24%	104,893	-9%	6,193	194%	137%	Improved				
ESP AREA27 HOK VL1824	7.5	-14%	198	1%	650	0%	775	-2%	131,922	-36%	16,640	-22%	15,375	-22%	898	-11%	57,024	-37%	283,872	-37%	283,872	-37%	146,048	-36%	-	6,591	-117%	54%	Improved			
ESP AREA27 HOK VL2440	15.7	-10%	298	21%	1,928	13%	2,438	14%	249,509	-52%	15,569	-46%	19,001	-43%	722	-6%	254,146	32%	734,270	32%	734,270	-33%	296,477	-62%	-	23,938	-114%	-138%	Deteriorated			
ESP AREA27 PGP VL0010	1.7	43%	87	-3%	49	3%	49	3%	26,676	94%	6,637	2%	5,073	35%	1,350	48%	4,127	23%	40,573	23%	40,573	84%	22,482	34%	-	5,479	-458%	-146%	Deteriorated			
ESP AREA27 PGP VL1012	1.3	-5%	106	12%	108	8%	108	8%	17,312	-19%	7,448	35%	5,450	119%	409	-33%	3,411	-34%	26,371	-34%	26,371	-23%	13,646	-35%	-	10,046	-569%	-569%	Deteriorated			
ESP AREA27 PGP VL1218	2.8		132		202		209		59,197		14,924		10,357		805		14,736		98,809		98,809		51,220		-	23,197	-	-	-	-	-	
ESP AREA27 PGP VL1824	8.9		167		543		695		182,260		19,761		17,961		1,227		74,296		415,366		415,366		187,481		-	10,194	-	-	-	-	-	
ESP AREA27 PGP VL2440	13.2		231		1,234		1,635		544,912		38,715		41,526		1,109		170,616		1,058,486		1,058,486		805,051		-	191,969	-	-	-	-	-	
ESP AREA27 PMP VL1012	2.1		126		204		204		17,696		2,059		1,211		330		5,650		31,119		31,119		18,090		-	-	-	-	-	-	-	-
ESP AREA27 PMP VL1218*	9.4		133		1,103		1,160		169,172		15,317		15,997		959		87,974		339,113		339,113		318,536		-	142,458	-	-	-	-	-	-
ESP AREA27 PS VL1012*	3.9	-17%	97	-7%	899	60%	899	60%	43,677	16%	7,738	32%	7,589	64%	104	-54%	6,035	-32%	60,087	-32%	60,087	7%	54,072	59%	4,945	186%	614%	Improved				
ESP AREA27 PS VL1218	4.9	-25%	150	-2%	1,240	12%	1,436	15%	88,046	-34%	17,191	-5%	10,551	-33%	171	-24%	22,210	-25%	146,281	-25%	146,281	-40%	117,167	-26%	10,322	-48%	-22%	Deteriorated				
ESP AREA27 PS VL1824	9.4	-23%	186	0%	1,894	-5%	2,424	-4%	174,633	60%	15,886	87%	14,188	40%	217	-14%	47,486	-30%	267,017	-30%	267,017	5%	186,347	14%	-	22,591	-235%	-212%	Deteriorated			
ESP AREA27 PS VL2440	14.8	-8%	180	-6%	3,002	-18%	3,509	-19%	270,555	-40%	17,376	-31%	18,962	-31%	275	28%	82,625	-21%	436,772	-21%	436,772	-34%	388,891	-36%	91,543	-23%	-16%	Deteriorated				
ESP AREA37 DFN VL0612	1.7	16%	149	1%	62	-27%	62	-27%	-	-	-	-	-	1,717	158%	10,740	74%	15,260	74%	15,260	-62%	25,273	-33%	-	-	-	-	-	-	-	-	
ESP AREA37 DFN VL1218	1.9		167		76		76		41,747		15,434		12,756		763		6,509		62,156		62,156		54,553		-	2,517	-	-	-	-	-	
ESP AREA37 DRB VL0612*	0.6	-12%	92	-1%	67	51%	67	51%	9,044	-5%	4,085	-36%	1,649	-37%	359	6%	1,504	58%	12,947	58%	12,947	-5%	6,462	27%	-	-	-	-	-	-	-	
ESP AREA37 DRB VL1218	1.8	-27%	175	-6%	65	1%	65	1%	24,489	-23%	8,378	31%	6,676	17%	2,833	-30%	22,155	-31%	58,755	-31%	58,755	-27%	38,068	-14%	10,885	20%	16%	Improved				

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Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend
ESP AREA37 DTS VL0612	1.9		164		102		102		37,993		16,398		13,473		1,684		18,527		82,368		82,368		48,450		7,706			
ESP AREA37 DTS VL1218	3.5	74%	189	1%	131	-15%	132	-14%	65,142	24%	16,128	10%	15,184	19%	2,105	58%	34,317	26%	137,110	26%	137,110	22%	68,170	-3%	6,373	-193%	-33%	Deteriorated
ESP AREA37 DTS VL1824	2.6	-49%	198	-1%	161	-9%	163	-9%	41,692	-38%	11,870	-1%	10,308	-28%	4,261	18%	89,546	1%	173,274	1%	173,274	-17%	57,902	-41%	8,159	233%	227%	Improved
ESP AREA37 DTS VL2440	3.6	-13%	206	4%	216	5%	220	5%	79,807	-8%	18,387	-14%	15,402	-16%	4,276	-8%	124,939	-14%	337,633	-14%	337,633	2%	36,183	-68%	66,219	-401%	-80%	Deteriorated
ESP AREA37 FPO VL1218*	5.5	-2%	154	-1%	127	18%	131	16%	68,706	-34%	11,069	-36%	11,062	-32%	2,311	8%	30,393	19%	171,157	19%	171,157	-13%	68,771	-33%				
ESP AREA37 HOK VL0612*	1.7	-2%	98	-5%	60	-8%	61	-7%	37,485	38%	18,033	66%	15,094	124%	1,877	-8%	7,561	-22%	78,774	-22%	78,774	49%	47,356	72%	2,036	87%	87%	Improved
ESP AREA37 HOK VL1218	2.1	-21%	124	15%	146	-12%	168	-7%	22,620	-40%	8,437	-23%	4,125	-44%	648	-48%	7,861	-57%	60,486	-57%	60,486	-27%	30,468	-51%	5,620	-128%	-284%	Deteriorated
ESP AREA37 HOK VL1824*	5.6	-25%	159	-14%	308	21%	367	20%	93,544	-1%	13,868	31%	11,856	-3%	1,404	-11%	46,102	-8%	282,162	-8%	282,162	15%	207,157	60%	89,238	3025%	3563%	Improved
ESP AREA37 PGP VL0006	0.4	-28%	62	8%	37	-4%	37	-4%	-	-	-	-	-	-	557	71%	776	53%	1,480	53%	1,480	-92%						
ESP AREA37 PGP VL0612	1.7	68%	103	1%	55	-4%	55	-4%	22,322	23%	8,009	23%	5,808	76%	1,176	100%	4,105	128%	35,225	128%	35,225	34%	23,655	39%	231	88%	89%	Improved
ESP AREA37 PGP VL1218*	3.7		127		54		55		47,116		10,429		5,751		2,142		9,921		87,645		87,645		30,423		26,471			
ESP AREA37 PMP VL0612	1.4		127		142		142		57,918		25,570		12,918		343		4,239		94,848		94,848		42,703		17,107			
ESP AREA37 PMP VL1218	2.1		152		121		122		79,092		26,642		12,723		1,255		15,431		151,551		151,551		120,537		27,508			
ESP AREA37 PS VL0612	4.4		166		541		629		68,881		14,617		10,664		144		8,833		94,661		94,661		105,338					
ESP AREA37 PS VL1218	7.5	41%	199	10%	960	2%	1,209	9%	134,190	141%	17,606	71%	15,470	137%	169	69%	21,595	75%	217,872	75%	217,872	141%	203,200	143%	62,983			
ESP AREA37 PS VL1824	8.2	-15%	227	2%	1,145	14%	1,441	15%	153,596	26%	16,955	43%	13,884	22%	219	-43%	38,859	-27%	238,967	-27%	238,967	-6%	256,458	24%	87,781	160%	371%	Improved
ESP AREA37 PS VL2440*	5.5	-43%	169	-2%	1,449	30%	1,922	37%	368,962	19%	67,018	111%	29,020	10%	283	-50%	45,958	-41%	821,988	-41%	821,988	52%	613,806	-18%	157,116	-50%	-12%	Deteriorated
ESP OFR DTS VL2440	31.1	118%	221	13%	1,829	53%	1,910	54%	437,001	55%	14,035	-29%	18,361	-7%	2,755	9%	755,258	144%	2,659,227	144%	2,659,227	120%	239,925	-20%	225,472	-77%	-1156%	Deteriorated
ESP OFR DTS VL40XX	31.1	19%	269	-1%	13,699	45%	15,593	46%	1,367,244	41%	43,950	18%	41,432	27%	543	-22%	1,357,820	11%	5,668,029	11%	5,668,029	25%	1,332,145	101%	341,045	31%	-735%	Deteriorated
ESP OFR HOK VL1012	3.8		61		616		616		67,488		14,051		10,575		424		10,884		87,651		87,651		67,410		2,673			
ESP OFR HOK VL1218	3.2	-14%	94	-31%	540	-38%	604	-34%	50,848	-58%	9,987	-62%	6,816	-69%	542	3%	16,369	-33%	113,825	-33%	113,825	-34%	46,900	-74%	12,934	-132%	-317%	Deteriorated
ESP OFR HOK VL2440*	14.3		285		2,230		2,619		164,917		11,362		13,084		879		248,464		771,077		771,077		311,671		127,804			
ESP OFR HOK VL40XX	20.0	-41%	318	0%	2,470	14%	2,872	10%	193,200	-47%	9,651	-10%	11,365	-24%	895	-41%	397,506	-39%	1,435,080	-39%	1,435,080	-34%	672	-100%	323,200	-25%	-183%	Deteriorated
ESP OFR PGP VL0010*	1.8		69		69		69		38,747		4,099		3,804		1,345		3,248		51,080		51,080		27,251		11,699			
ESP OFR PGP VL1012*	3.6	135%	70	-5%	151	-59%	151	-59%	38,402	118%	5,803	-8%	6,368	38%	1,078	339%	7,607	74%	61,474	74%	61,474	157%	31,802	365%				
ESP OFR PGP VL1218*	4.2		128		394		415		79,894		13,818		12,430		714		24,005		143,369		143,369		92,429		7,153			
ESP OFR PGP VL2440*	9.5		195		596		640		243,583		23,375		22,149		1,839		90,167		568,275		568,275		207,948		46,017			
ESP OFR PS VL1218*	7.2	26%	140	14%	687	-13%	698	-12%	205,802	203%	22,791	118%	25,118	126%	247	-22%	15,467	-28%	267,389	-28%	267,389	164%	221,644	283%	1,894			
ESP OFR PS VL40XX	38.9		299		28,803		33,534		1,757,323		45,216		56,309		413		2,441,983		10,182,796		10,182,796		6,507,135		3,526,881			

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

5.22 SWEDEN

Fleet Structure, Fishing Activity and Production

In 2014, the Swedish fishing fleet consisted of 1,267 registered vessels, with a combined gross tonnage of 30 thousand GT, engine power of 171 thousand kW and an average age of 32 years. The size of the Swedish fleet decreased between 2008 and 2014; the number of vessels decreased by 16% and GT and kW decreased by 32% and 23%, respectively (See Table 5.22.1). The major factors causing the fleet to decrease include decreased number of permits to fish European eel, entry barriers, bad profitability, scrapping campaigns, introduction of transferable fishing rights and natural wastage due to age.

In 2014, the number of fishing enterprises in the Swedish fleet totalled 985, with the vast majority (76%), owning a single vessel. Only 24% of the enterprises owned two or more fishing vessels. Total employment in 2013, latest data on employment, was estimated at 1,577 jobs, corresponding to 886 FTEs. The level of employment decreased between 2008 and 2013, with total employed decreasing by 20% and the number of FTEs decreasing by 22% over the period. The major factors causing employment to decrease include the decreasing fleet size and less labour intensive vessels. That total employment decreased less than FTE means that the share of part-time fishermen is slightly increasing in Sweden. In 2013 there were in average 0.56 FTE per employed. The average wage per employed and per FTE has increased heavily over the period 2008 to 2013, 40% and 42% respectively. This means average wages has increased with more than 7% per year which are well above the Swedish national average for all employees over the same period (slightly under 2 %).

Table 5.22.1 Swedish national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013(structure) and 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	1,507	1,471	1,415	1,359	1,322	1,299	1,267	-2%	↘	-14%
	No. of Inactive vessels (#)	359	339	351	328	303	315	290	-8%	↘	-12%
	Average vessel age (year)	31	32	31	31	32	32.2	33	2%	↗	4%
	Vessel tonnage (thousand GT)	43	42	39	33	30	30.5	29	-5%	↘	-29%
	Vessel power (thousand kW)	212	208	196	178	169	171	164	-4%	↘	-19%
	No. of Enterprises (#)	1,211	1,181	1,134	1,089	1,055	1,035	985	-5%	↘	-15%
Employment	Total employed (#)	1,980	1,758	1,765	1,679	1,663	1,577	1,543	-5%	↘	-20%
	FTE (#)	1,133	1,019	990	974	942	886	851	-6%	↘	-22%
	Average wage per employed (thousand €)	15.1	14.8	16.3	17.3	18.4	21.2	18.6	15%	↗	40%
	Average wage per FTE (thousand €)	26.4	25.5	29.1	29.9	32.4	37.6	33.8	16%	↗	42%
Fishing Effort	Days at sea (thousand days)	103	97	85	84	79	78	78	-2%	↘	-24%
	Fishing days (thousand days)	103	97	85	84	79	78	78	-2%	↘	-24%
	Energy consumption (million litres)	41	62	54	41	47	48	44	2%	↗	17%
	Energy consumption per landed tonne (l/T)	193	312	265	236	347	273	267	-21%	↘	41%
Output	Landings weight (thousand tonnes)	214	199	204	173	136	178	166	30%	↗	-17%
	Landings value (million €)	122	105	114	126	125	131	111	5%	↗	7%
	Recreational catches of selected species (T)	315	299	500	518	575	758	758	32%	↗	141%

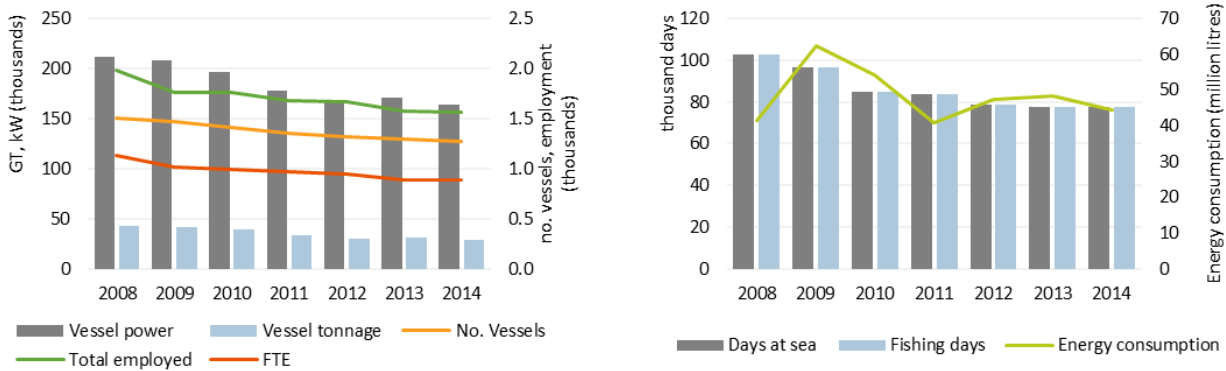
*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

In 2013, and also in 2014, the Swedish fleet spent a total of around 78 thousand days at sea. The number of days at sea decreased 25% between 2008 and 2014. The major factors causing this decrease include lower quotas and increasing catch per effort. The quantity of fuel consumed in 2013 totalled around 48 million litres, a decrease of around 22% from 2009, driven by fewer vessels, days at sea and increased fuel efficiency.

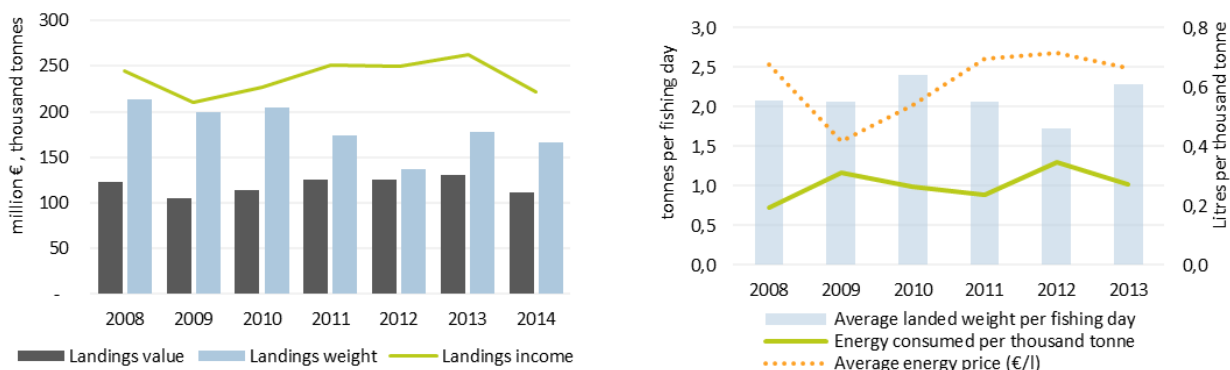
The total weight landed by the Swedish fleet in 2013 was 178 thousand tonnes of seafood, with a landed value of €131 million. The total weight decreased while the value of landings increased over

the period analysed. In 2012, the catch was exceptionally low due to low quotas. The highest landed value (€131 million) by the national fleet was achieved in 2013; landing value in 2014 was lower due to decreased quotas. Recreational catches of selected species (cod and salmon) has decreased over the period 2008-2014, due to a better stock situation.



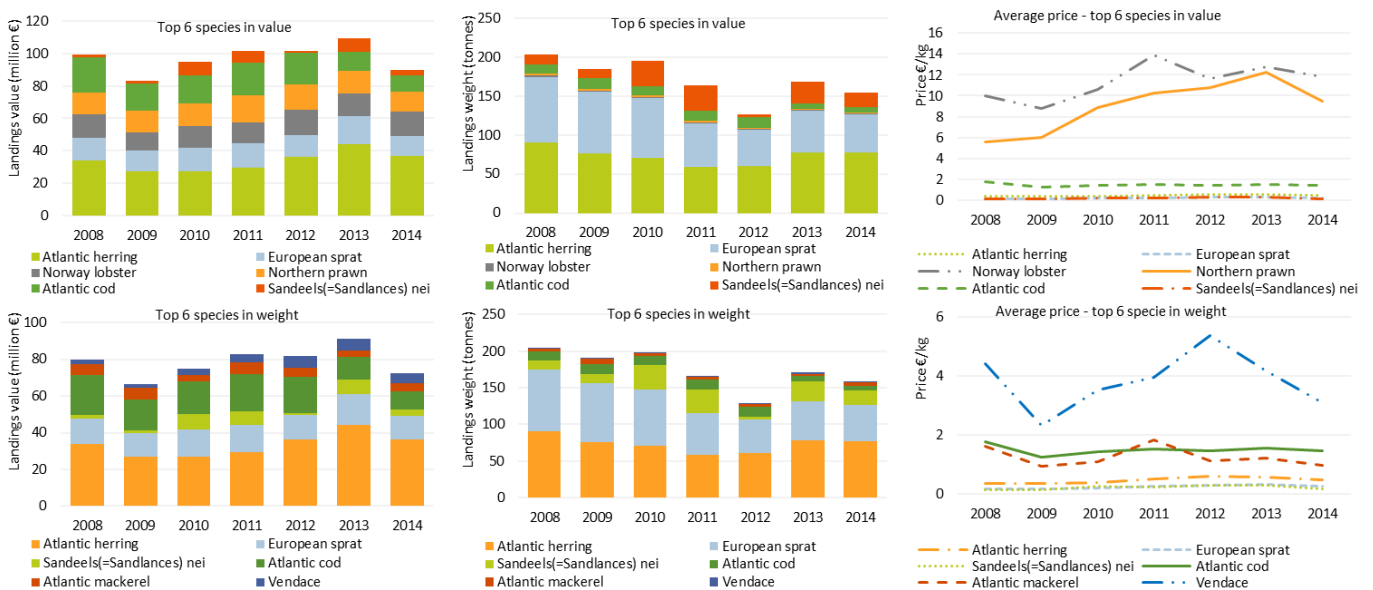
Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.22.1 Main capacity and effort trends for the Swedish fleet: 2008-2014.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.22.2 Landings in value and weight (and corresponding income from landings) by the Swedish national fleet and some efficiency indicators: 2008-2014



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.22.3 Swedish fleet landings and average prices trends for the top 6 species in terms of landed value (top) and top 6 species in terms of landed weight (bottom): 2008-2014.

In 2014, herring generated the highest landed value (€36 million) by the national fleet, followed by Norway lobster (€15 million), sprat (€13 million), northern prawn (€12 million), and then cod (€10 million). In terms of landings weight, in 2014 sprat was the dominating species landed with 77 thousand tonnes, followed by herring (49 thousand tonnes), sandeels (19 thousand tonnes), cod (7 thousand tonnes), northern prawn (1.3 thousand tonnes), and Norway lobster (1.3 thousand tonnes). The major factors causing the decline in value of landings between 2013 and 2014 include a decrease in prices for all the major species in weight and value (herring 17%, sprat 20%, sandeels 38%, cod 6%, Norway lobster 7%, and northern prawn 22%). Landings of all these major species also decreased from 2013 to 2014, except for northern prawn.

National Fleet Economic performance

The total amount of income generated by the Swedish national fleet in 2013 was over €140 million. This consisted of €131 million in landings value and €11 million in non-fishing income. The Swedish fleet's total income increased between 2008 and 2013, but there were no clear trend; a result of the introduction of transferable quotas. In fact, both income and cost data for 2009 and 2010 was affected by the introduction of transferable quotas in the Swedish Pelagic fishery, resulting in substantial reductions in pelagic vessels. The effect of the introduction of the transferable rights with high values on other cost seems to have declined. The other income variable is technically not supposed to include income from selling fishing rights but in this case, it does due to secrecy issues.

Table 5.22.2 Swedish national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	122.4	105.0	113.6	125.5	125.0	131.2	111.1	5%	↗	7%
	Other income	5.2	18.0	38.8	8.8	5.7	11.3	10.8	100%	↗	117%
Costs	Labour costs	30.0	26.0	28.8	29.1	30.5	33.3	28.7	9%	↗	11%
	Energy costs	27.9	26.0	29.1	28.5	33.9	32.2	28.8	-5%	↘	15%
	Repair costs	21.7	24.5	23.7	21.3	20.5	21.3	19.8	4%	↗	-2%
	Other variable costs	5.9	6.9	8.9	12.6	10.0	10.3	9.5	3%	↗	73%
	Other non-variable costs	8.3	10.1	10.1	9.5	9.4	9.9	9.4	5%	↗	19%
	Capital costs	40.4	36.9	32.4	32.9	24.1	28.7	25.6	19%	↗	-29%
Economic Indicators	GVA	63.6	55.4	80.7	62.4	56.9	68.8	54.4	21%	↗	8%
	Gross profit	33.7	29.4	51.9	33.3	26.4	35.4	25.7	34%	↗	5%
	Net profit	-6.7	-7.6	19.6	0.4	2.3	6.7	0.1	199%	↗	201%
Capital value	Depreciated replacement value	173.6	166.7	162.5	166.5	128.6	147.0	139.0	14%	↗	-15%
	Investments	13.6	4.7	8.3	5.4	7.3	5.9		-19%	↘	-57%
Profitability and development trends	Net profit margin (%)	-5.2	-6.2	12.9	0.3	1.7	4.7	0.1	174%	↗	190%
	<i>development trend</i>			Improved					582%	↗	
	RoFTA (%)	-3.3	-3.2	13.0	1.4	2.4	6.3	0.06	158%	↗	291%
	<i>development trend</i>			Improved					202%	↗	
GVA per FTE (thousand €)		56.2	54.4	81.6	64.1	60.4	77.6	64.0	29%	↗	38%
	<i>development trend</i>			Improved					23%	↗	

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Total operating costs incurred by the Swedish fleet in 2013 equated to €107 million, amounting to almost 75% of total income. Crew cost and fuel costs, the two major fishing expenses, were €33 and €32 million, respectively. Between 2008 and 2013, total operating costs generally increased with the exception of repair costs, which remained stable due to a diminishing fleet. The increase in operating costs was due to higher costs for labour and fuel exceeding the effect of a diminishing fleet, especially in the most recent years. Non-variable costs were stable during the period, the increase in these cost were evened by less vessels. Capital costs decreased due to a diminishing fleet size. Overall, the increases in price for cost items during the period are in some way

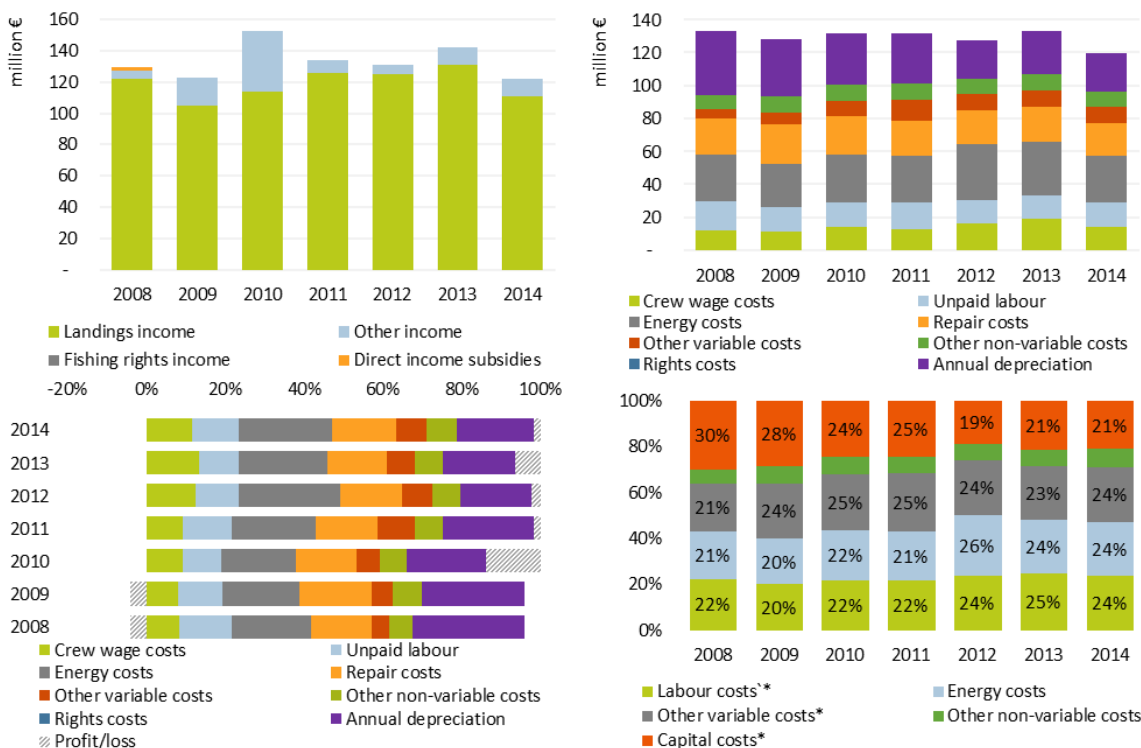
compensated by less fishing and a decreasing fleet. There are also currency effects that can be seen especially on input factors with global prices, like fuel.

The overall economic performance trend for the Swedish fleet (excluding 2010; abnormally high) is positive. In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the national fleet in 2013 were €68.8 million, €35.4 million and €6.7 million, respectively. Gross Value Added (GVA) and gross profit were stable between 2008 and 2013 (again, excluding 2010) but per vessel increased, since the fleet in number has decreased.

The resource rent is perhaps the optimal indicator for assessing the balance between the fishing fleet (e.g. users) and fish stocks. Net profit, as provided here, can be used as a proxy for the resource rent generated by fisheries. The major factors causing the improvement in economic performance include a diminishing fleet and introduction of transferable quotas. Net profit generally increased between 2008 and 2013, an exception being 2010; abnormally high (a result of the aforementioned issues regarding the introduction of transferable fishing rights). Net profit margin for 2013 was estimated as 4.7%.

In 2013, the Swedish fleet had an estimated (depreciated) replacement value of €147 million. The replacement value remained stable over the period 2008-2011 but decreased significantly during 2012 and then increased during 2013. Rent, exchange currency, and second-hand market for vessels influence the replacement value. Investments by the fleet amounted to €6 million in 2013. Investments were stable over the period but with fewer vessels in the fleet the indicator per vessel has increased, suggesting that fishers are more optimistic regarding the future. The indicator Return on Fixed Tangible Assets (RoFTA) is an appropriate indicator of capital productivity when the tangible assets are correctly estimated. In 2013, RoFTA was estimated at just above 6 %. This indicator shows an increasing trend resulting from decreasing tangible asset value due to fewer vessels.

Labour productivity (GVA/FTE) does not provide a commensurate picture between fisheries because it is a “gross” indicator (GVA is profit before labour and capital is deducted). However, it’s not affected by potential bias from the estimation procedure of capital costs and labour that includes making several assumptions. Labour productivity increased over the period; labour productivity was estimated at €38 thousand in 2013, a 40% increase compared to 2008.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.22.4 Income and cost structure trends for the Swedish fleet: 2008-2014.

Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).

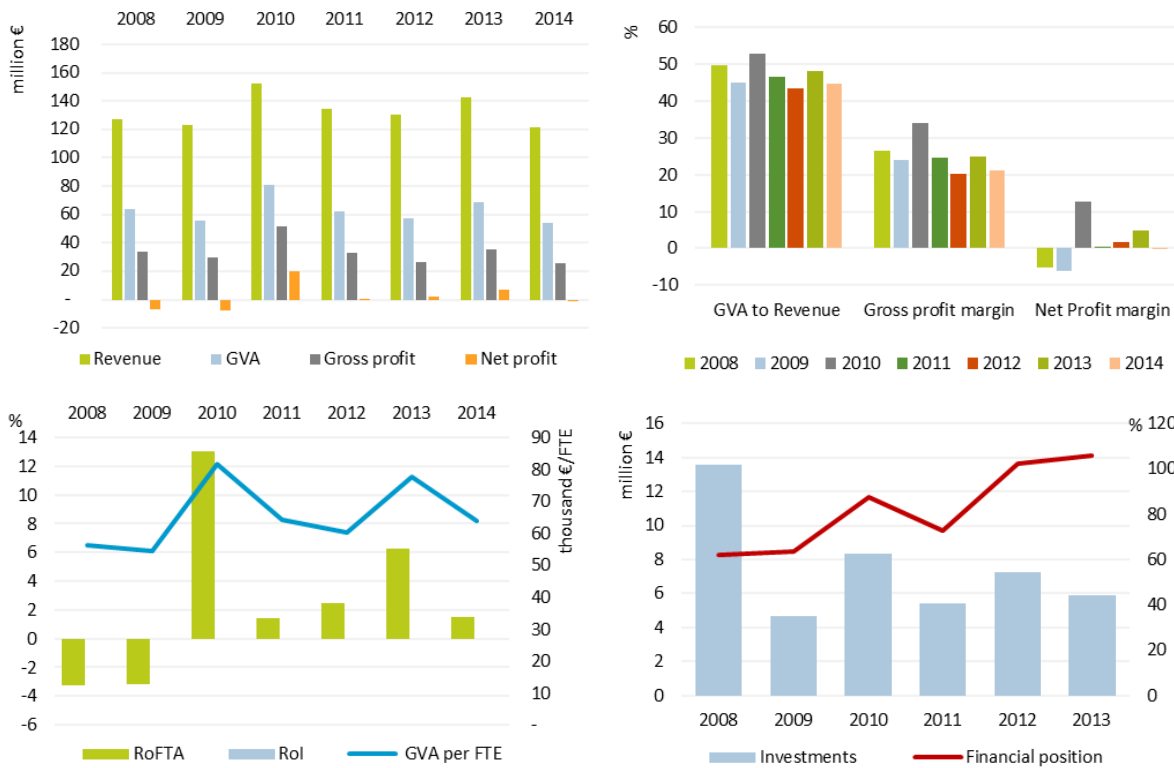


Figure 5.22.5 Main economic performance indicator trends for the Swedish fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Fleet Segment Level Economic performance

The Swedish fleet is highly diversified with a broad range of vessel types targeting different species predominantly in the Baltic Sea, Skagerrak, and Kattegat regions. The national fleet consisted of 10 clustered fleet segments in 2008-2014, with 3 clustered inactive length classes consisting of 290 vessels in 2014. One of the active fleet segments made losses in 2013, passive gear under 10 meters, while the remaining 6 made overall gross profits. All segments, both with active and passive gear less than 12m made negative net profits in 2013.

It can further be observed that the vessels with active gears account for the main part of the landed value and the landed weight. During the time period 2008-13, the vessels with active gears annually accounted for 96-97% of the total catch measured in weight, and 85-89% of the total catch value. Thus, the vessels with passive gears only accounts for 3-4% of the total catch measured in weight, and 11-15% of the total catch value.

Small-scale fleet

The number of small-scale vessels decreased from 819 in 2008 to 730 in 2014, a decrease of 11%, following the general trend of the Swedish fleet. But from 2013 to 2014 the number of small-scale vessels actually increased, the number of vessels between 10-12 meter still decreased but were outnumbered by an increase in vessels under 10 meters. Close to half of this decrease in number of vessel between 2008-2014 stems from vessels with main income from fishing European eel. The Swedish authorities, through different management actions, such as permits, have tried to diminish effort in the threatened European eel fishery. The number of vessel with main income (more than 50% in value) from cod, salmon, and Norwegian lobster fisheries have also decreased while vessel numbers increased slightly for main income originating from mixed fishery (Table 5.22.3, Table 5.22.4).

The numbers employed in the small-scale fisheries follows the same decreasing trend as the fleet in general, with FTE decreasing more rapidly, indicating a larger portion of part-time fishers. Vessel tonnage has decreased slightly but power has remained stable over the period. These figures indicate that the new vessels entering, despite lower numbers, have more engine power perhaps going for higher speed. Average vessel age is increasing but not more than the time span, less than 4 years in age over a period of seven years.

Overall, the small-scale fleet is not profitable, generating a negative net profit margin of 40%. Gross value added is positive but relatively low per FTE at €22.3 thousand. As tangible assets are, in most cases, probably paid off, these vessels can afford to continue to fish. Low GVA estimates signal that there are other reasons for fishing than just profit, such as part-time employment or a way of life. Additionally, increased seal populations along the Swedish coastline are heavily affecting both income, by taking and eating fish directly from the gears, and costs, by destroying gears as well as creating extra work.

Large-scale fleet

For the large-scale fleet, the number of vessels decreased from 329 in 2008 to 247 in 2014, a decrease of nearly 25%. More than half of this decrease stems from vessels with main income from the Norwegian lobster fishery. The Swedish authorities have promoted fishing lobster with passive gears and as cod populations are in bad conditions, mixed fisheries with cod and lobster are no longer a profitable option. Vessels fishing for cod as main source of income have also decreased. Some of these vessels also fished pelagic species and after the introduction of fishing-rights in the pelagic fishery they sold their rights and left the fishery.

The numbers employed in the large-scale fisheries follows the same decreasing trend as the fleet in general, but with FTE decreasing less the numbers employed, indicating a decreasing portion of part-time fishers. Vessel tonnage and power has decreased heavily but seems to have stabilised the last two years in the period, indicating that new vessels have more engine power. Average vessel age is increasing but much less than the time span, less than 2 years in age over a period of seven years.

The increase in the value of landings for the large-scale vessels from 2008 to 2013 is considerably better than the development of the fleet as a whole. This is despite the fact that landings weight has decreased substantially over the period due to reduced quotas. Overall the large-scale fleet seems to perform fairly well but the variation is large. Vessels fishing pelagic species and those that fish in the north Baltic for vendace rom are performing very well while those fishing for cod, northern prawn and Norwegian lobster are performing poorly. The large-scale fleet has been affected by high energy costs, higher labour and capital costs so the effect of higher landing values has been partly equalised. However, the increase in landing incomes together with increase in other incomes accedes the increase in costs and results in a higher net profit in 2013 compared to 2012 (Table 5.22.3, Table 5.22.4).

Table 5.22.3 Swedish national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014		
Total No. Vessels (#)	819	818	776	754	754	729	730	-3%	↘	329	314	288	277	265	255	247	-4%	↘
No. of inactive vessels (#)	28.4	28.7	29.1	29.8	30.5	31.2	32.0	2%	↗	31.7	31.5	31.8	32.0	33.1	33.4	34.2	1%	↗
Average vessel age (year)	8.1	8.1	8.1	8.1	8.2	8.2	8.1	0%	↔	18.7	18.7	18.5	17.9	17.8	18.1	17.8	2%	↗
Vessel tonnage (thousand GT)	3.8	3.8	3.6	3.5	3.6	3.5	3.3	-4%	↘	33.7	32.4	29.5	26.6	24.8	25.4	23.6	2%	↗
Vessel power (thousand kW)	53.7	53.9	51.8	51.6	53.3	52.7	51.8	-1%	↘	128.9	125.1	113.0	104.6	98.5	98.0	92.5	0%	↔
Total employed (#)	1,073	929	951	925	920	902	902	-2%	↘	907	829	813	754	743	675	641	-9%	↘
FTE (#)	470	383	384	367	340	321		-6%	↘	663	636	606	606	602	565		-6%	↘
Average wage per employed (thousand €)	10.0	9.2	10.2	10.8	10.6	10.9	10.9	3%	↗	21.2	21.1	23.5	25.4	28.0	34.8	29.5	24%	↗
Average wage per FTE (thousand €)	22.9	22.4	25.2	27.1	28.7	30.7	29.2	7%	↗	29.0	27.4	31.6	31.6	34.5	41.6	36.7	20%	↗
Days at sea (thousand days)	66.5	63.4	56.2	53.6	49.3	48.0	50.2	-3%	↘	36.3	33.2	28.9	30.1	29.6	29.6	27.3	0%	↔
Fishing days (thousand days)	66.5	63.4	56.2	53.6	49.3	48.0	50.2	-3%	↘	36.3	33.2	28.9	30.1	29.6	29.6	27.3	0%	↔
Energy consumption (million litres)	3.2	4.4	4.2	4.9	4.3	3.8	3.9	-11%	↘	38.1	57.8	49.9	36.0	43.1	44.7	40.4	4%	↗
Energy consumption per landed tonne (l/T)	438	666	781	965	831	853	838	3%	↗	184.5	299.8	250.7	213.8	328.0	258.0	250.1	-21%	↘
Landings weight (thousand tonnes)	7.4	6.7	5.4	5.1	5.2	4.5	4.7	-14%	↘	206.7	192.7	199.0	168.3	131.3	173.2	161.4	32%	↗
Landings value (million €)	16.1	13.3	13.2	13.7	14.6	13.4	12.5	-8%	↘	106.2	91.6	100.5	111.9	110.4	117.8	98.6	7%	↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Table 5.22.4 Economic performance of the Swedish national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)	Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend	
	2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014			
Income	Landings income	16.1	13.3	13.2	13.7	14.6	13.4	12.5	-8%	↘	106.2	91.6	100.5	111.8	110.4	117.8	98.6	7%	↗
	Other income	4.0	2.7	2.9	6.0	3.1	3.5	3.5	14%	↗	1.2	15.3	35.9	2.8	2.6	7.8	7.4	199%	↗
	Direct income subsidies	1.0	0.0	0.0	0.0	0.0	0.0	0.0			0.8	0.0	0.0	0.0	0.0	0.0			
	Fishing rights income	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0			
Costs	Labour costs	10.7	8.6	9.7	9.9	9.7	9.9	9.8	1%	↗	19.2	17.5	19.1	19.2	20.8	23.5	18.9	13%	↗
	Energy costs	2.4	2.2	2.7	3.5	3.3	2.8	2.8	-14%	↘	25.6	23.8	26.4	24.9	30.7	29.4	26.0	-4%	↘
	Repair costs	3.8	3.0	2.9	3.3	3.2	3.3	3.4	3%	↗	18.0	21.4	20.7	18.0	17.3	18.0	16.4	4%	↗
	Other variable costs	1.2	1.3	1.3	2.0	1.9	1.6	1.6	-16%	↘	4.7	5.6	7.6	10.6	8.1	8.7	7.9	7%	↗
	Other non-variable costs	1.6	1.9	2.1	2.4	2.1	2.1	2.1	-2%	↘	6.7	8.2	8.0	7.1	7.2	7.8	7.3	8%	↗
	Capital costs	8.7	8.2	5.4	5.2	3.5	4.1	4.0	17%	↗	28.0	25.3	24.5	25.8	19.6	23.2	21.6	18%	↗
Capital value	Depreciated replacement value	40.5	39.2	25.7	25.4	18.2	20.1	19.9	10%	↗	119.6	115.5	127.4	131.9	105.1	120.1	112.9	14%	↗
	Investments	0.6	1.2	1.4	1.5	1.6	1.5		-3%	↘	13.0	3.5	6.9	3.9	5.7	4.4		-23%	↘
Economic indicators	GVA	11.1	7.6	7.1	8.5	7.2	7.2	6.0	0%	↔	52.5	47.9	73.7	53.9	49.7	61.6	48.4	24%	↗
	Gross profit	0.4	-1.0	-2.6	-1.5	-2.6	-2.7	-3.8	-5%	↘	33.3	30.4	54.6	34.7	28.9	38.1	29.5	32%	↗
	Gross profit margin	1.8	-6.4	-16.2	-7.4	-14.4	-15.9	-23.7	-10%	↘	31.0	28.4	40.0	30.3	25.6	30.4	27.8	19%	↗
	Net profit	-8.3	-9.3	-8.0	-6.7	-6.1	-6.8	-7.8	-12%	↘	5.3	5.1	30.0	8.9	9.3	14.9	7.9	60%	↗
Profitability and development trends	Net Profit margin	-41.5	-57.9	-49.6	-33.7	-34.4	-40.3	-49.0	-17%	↘	4.9	4.8	22.0	7.8	8.3	11.9	7.4	44%	↗
	<i>development trend</i>				Improved				7%	↗				Improved				24%	↗
	RoFTA (%)	-20.0	-22.3	-30.1	-25.0	-32.6	-32.2	-37.8	1%	↗	5.0	5.8	24.5	8.0	9.6	14.1	8.5	48%	↗
	<i>development trend</i>				Deteriorated				-24%	↘				Improved				34%	↗
GVA per FTE (thousand €)		23.6	19.7	18.4	23.1	21.2	22.3	18.0	5%	↗	79.2	75.2	121.6	88.9	82.6	109.0	93.9	32%	↗
	<i>development trend</i>				Improved				5%	↗				Improved				22%	↗

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Short description of important fleet segments

Table 5.22.5 provides a breakdown of key performance indicators for all fleet segments in 2012. A short description of the 2 most important segments in terms of total value of landings is provided below.

Demersal trawl / seine 24-40m – 45 vessels in 2013 made up this clustered segment, which also contains a vessel using polyvalent active gear (only), a purse seiner and 16 pelagic trawlers (7 of the pelagic trawlers are over 40 m), This segment is operating in the Baltic Sea and North Sea. The fleet targets a variety of species, in particular pelagic species such as herring and sprat but also demersal species such as cod, lobster and prawn. In 2013, the total value of landings was almost €75 million and around 239 FTEs were employed in this fleet segment, contributing to 57% and 27% of the total income from landings and FTEs in the Swedish fishing fleet, respectively. This fleet segment was profitable, with a reported gross profit of around €31 million and a net profit of €14 million in 2013. The profit is generated mainly from vessels fishing pelagic species. Vessels with more than 50% cod or prawn in landing value are generally less profitable. Around 49% of the vessels are inside the “pelagic system” with tradable fishing rights and these are highly profitable.

Demersal trawl seine 18-24m – in 2013, 46 vessels made up this segment, which operates predominantly in the Baltic Sea, Skagerrak and Kattegat. The fleet targets a variety of species but in particular demersal species such as cod, lobster and prawn. In 2013, the total value of landings was more than €20 million and around 145 FTEs were employed in this fleet segment, contributing 15% and 16% of the total income from landings and FTEs in the Swedish fishing fleet, respectively. This fleet segment was only just profitable, with a reported gross profit of around €3 million and a net profit of €0.3 million in 2013. The vessels fishing pelagic species are more profitable than the rest of the segment (20% of the vessels are within the tradable fishing rights system).

Assessment and Future Trends

Towards the end of 2009, Sweden introduced a tradable fishing right system for pelagic quotas. Pelagic vessels both in the system and not are clustered together with other vessels, mostly in the demersal trawl/seine 18-24m and 24-40m segments. The reason, in addition to confidentiality issues, is that many of the pelagic vessels also fish cod and vice-versa. A clear positive economic effect of the pelagic system can be seen. The first transactions took place in early 2010 and the first effects of

these transactions became visible in late 2010 in terms of profitability for the pelagic fisheries. But the effect of the new system can be better seen in the profitability of 2012 and 2013, once capacity had been removed. However, decreases in quotas for pelagic species (most importantly for herring and sprat) and increases in fuel prices have had a chilling effect on the expected profitability increase resulting from the introduction of the system. There have also been investments in new vessels (replacement); these investments cannot be seen clearly in the statistics, just that the new capital gives an increased capital cost when new vessels are introduced.

Fuel prices increased during 2010 and 2011 and remained at high levels during 2012, which had an effect on all fleet segments. During 2013 the fuel prices has decreased which have a strong effect especially on segments fishing with active gears (e.g. trawls and seiners). In general, fuel consumption has decreased since 2009 but increased in 2012 and 2013. The large demersal and pelagic vessels, demersal trawl/seines 24-40m, increased their use of fuel, the rest of the fleet has remained stable or decreased their use of fuel. Lower fuel consumption was generally the result of decreased number of days spent at sea and better fuel efficiency. However, the question of how much further fuel efficiency rationalisation can occur without significant investments in new technologies remains. For newer vessels perhaps the limit has been reached or at least rationalisation has slowed down.

The general trend since the beginning of the 2000s is a decrease in capacity, i.e. in the number of vessels that also reflects reduction of total engine power and gross tonnage. This is partly due to management efforts directed at decreasing fleet size in order to bring it in balance with the resources. But that is not the whole truth since a part of the decrease is due to the fact that many fishermen have left the sector since they can no longer make a living from fishing. Some of the fishermen operating inside the pelagic fishing rights system sold their rights and left the sector while others just left the sector without being compensated. The profitability of the diminishing Swedish fleet is increasing perhaps not as fast as expected due to decreasing quotas. The analysis of economic performance shows that all Swedish segments with vessels over 12 m are making positive net profits. The segments with vessels with a length of less than 12 m and fishing with passive gear are all making net losses. These segments are heavily affected by increasing populations of seals in recent years.

There is also a crew recruitment problem as jobs on board fishing vessels is not a particularly attractive way of making a living for younger people due to the low wages and relatively poor working conditions compared to other land-based jobs. This poor recruitment is reflected in the increasing average age of Swedish fishermen. This coupled with a decreasing fleet size is expected to continue for some time.

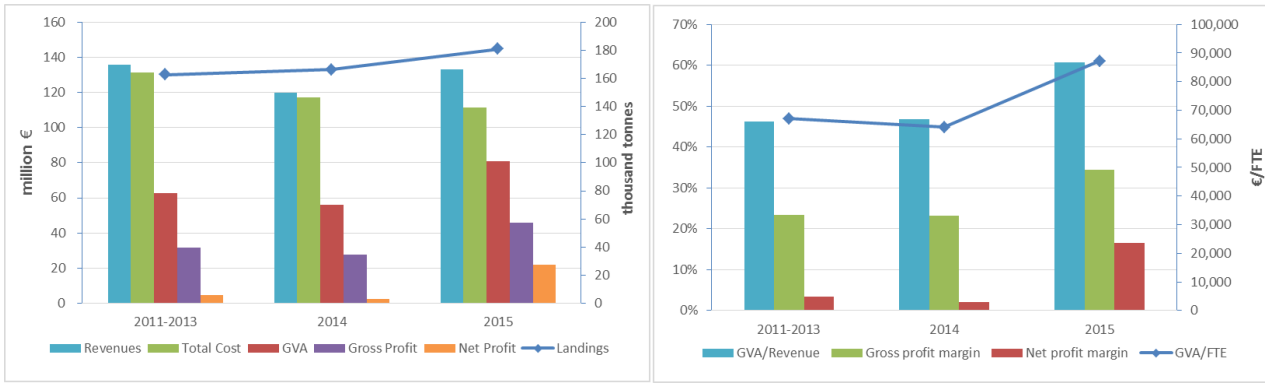
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

According to BEMEF projections, increased landings (+2%) for the Swedish fishing fleet are offset by lower fish prices for key species to push revenue down by 12% and gross and net profit down 12% and 49% respectively. GVA/FTE and GVA/Revenue remain more stable in 2014 at €64,000 and 47% respectively.

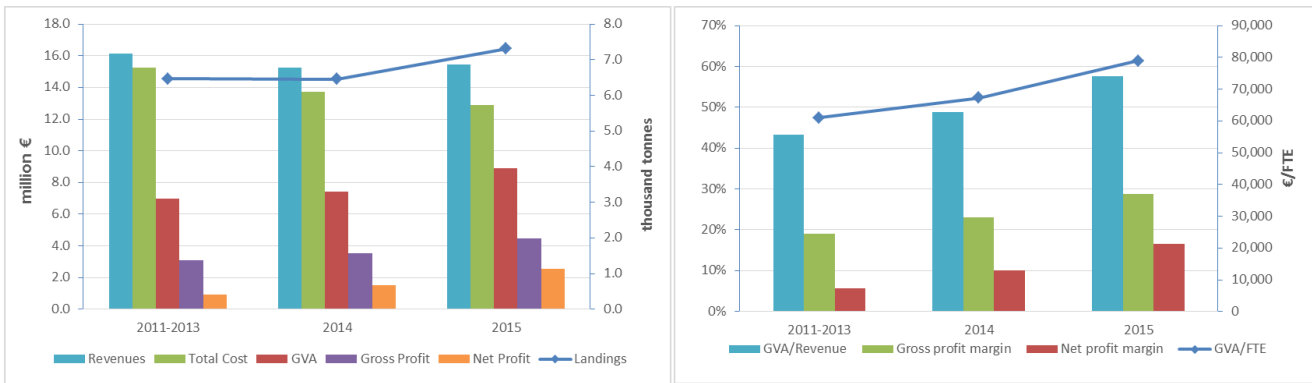
A further increase in landings (+9%) in 2015 is paired with more stable prices to increase revenue for the Swedish fleet by 11% to €133 million. The result is an improvement across economic indicators covered here including the gross profit margin (+49%) and net profit margin (+746%).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

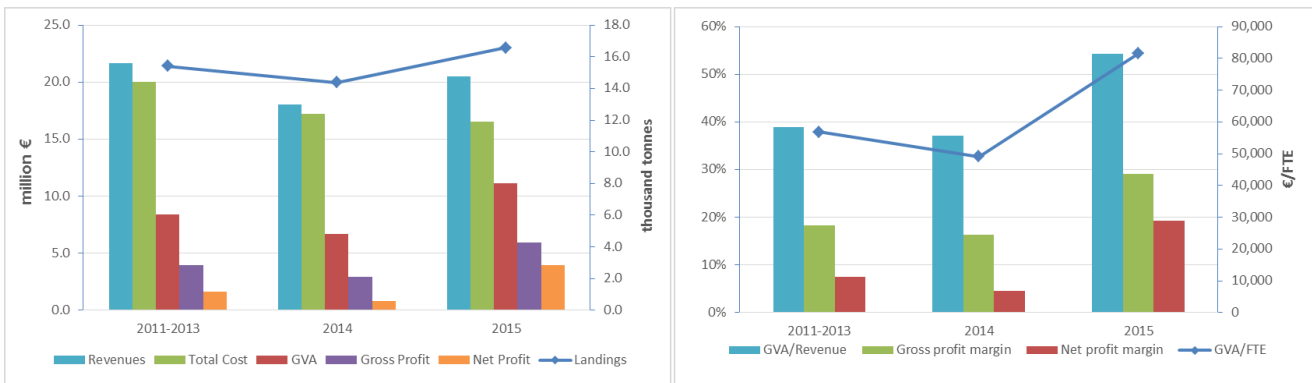
Figure 5.22.6 Sweden: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 Swedish fleets by gross earnings.



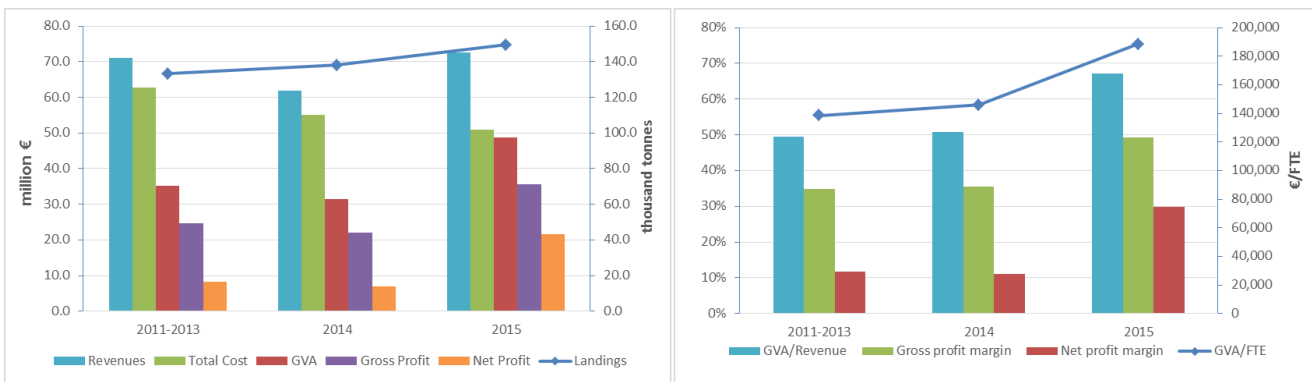
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.22.7 SWE AREA27 DTS VL1218: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

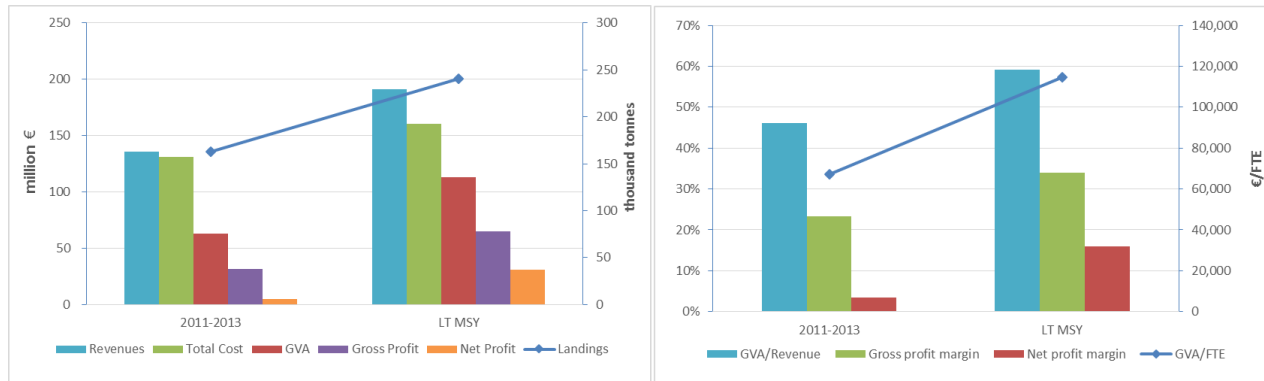
Figure 5.22.8 SWE AREA27 DTS VL1824: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.22.9 SWE AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, a state of long-term MSY results in improved economic performance for the Swedish fishing fleet with landings increasing with 48% from 162,000 tonnes to 241,000 tonnes and revenue increasing 41% from €136 million to €191 million. Large increases are also seen in gross and net profit with MSY estimates of €65 million and €30 million respectively and GVE/FTE increases 71% from €67,000 to €115,000 (Figure 5.22.10).



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Figure 5.22.10 Sweden: MSY projections for the main socio-economic indicators.

Data issues

Since 2008, the Swedish data collection is mostly based on census data mixed with a census survey in order to distinguish specific cost items. The introduction of a tradable fishing right system has affected the 2010 data. Half of the vessels that had more than half of the total landings value left the fleet. There are most probably incomes in the 'other income' variable that result from selling quotas. The effect is that the profitability of 2010 is higher than it should be (since incomes and costs from fishing rights should be kept outside in this analysis). At the same time some costs incurred from buying fishing rights may have been recorded in the variable other costs, as well as, in the 'in year investments' variable. Sweden has performed an evaluation of the introduction of the fishing right system showing the success of the new management system for the pelagic fishery.

There are no other major data issues in the Swedish DCF data. The main problems had previously stemmed from changes in certain methodologies over time, which interrupted time series data especially for expenditure data. One example is the issues with the estimation of capital costs. 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 the PIM-model are hard 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. Old wooden vessels cannot be insured and newer vessels normally don't need full insurance since part of the vessel is insured by guarantees. This issue has now been taken into consideration by using different models for estimating price per capacity unit for the Swedish data.

Another important issue is clustering. With a small and diminishing fleet, Sweden is forced to cluster all of the economic data and also report cluster definitions. At the same time Sweden is recommended to report un-clustered transversal data on capacity, landings etc. Previously Sweden used different clusters for different years but has now worked around this problem, back-calculating all data, and is now using the same clusters for the whole DCF period. This makes it easier to follow trends.

Most of the Swedish data comes from registers but cost data is collected separately. Sweden uses mandatory questionnaires for data on costs (combined with tax declarations from registers). Previously, Sweden used probability sampling when sending out the questionnaires. Since 2012, questionnaires requesting 2011 data are sent to all vessels (census). Instead of getting 60% response from a 50% sample, Sweden now gets more than 85% response from a census sample, i.e. the number of data points has increased threefold.

Table 5.22.5 Main socio-economic performance indicators by fleet segment in the Swedish national fishing fleet in 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ	Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	SWE AREA27 DFN VL0010°	584	-4%	247	0%	38,290	-1%	2,270	-7%	8,213	1%	2,193	-5%	4,142	1%	16.8	1%	3,455	-15%	5,998	-16%	-57.8	-15%	Weak	-3%
SWE AREA27 DFN VL1012°	145	-1%	74	-21%	9,690	-8%	1,547	-17%	5,220	-19%	2,280	-21%	3,024	-3%	41.1	23%	762	69%	818	7%	-12.5	-5%	Weak	45%	Improved
SWE AREA27 DFN VL1218°	16	-20%	16	17%	1,727	-7%	577	102%	1,633	-2%	812	-5%	815	-29%	50.5	-39%	319	-57%	141	-75%	8.0	-75%	Reasonable	1578%	Improved
SWE AREA27 DTS VL1012°	76	-1%	55	-2%	4,924	-1%	1,981	12%	6,533	-2%	1,694	13%	3,566	-5%	64.6	-3%	1,772	-7%	18	-105%	-0.2	-105%	Weak	98%	Improved
SWE AREA27 DTS VL1218°	72	-6%	111	-5%	8,108	3%	5,198	-5%	15,051	-10%	6,446	3%	6,779	-15%	61.3	-10%	2,653	-29%	443	-75%	2.8	-71%	Reasonable	-48%	Deteriorated
SWE AREA27 DTS VL1824°	46	0%	145	-7%	7,294	0%	6,794	-30%	19,512	-12%	15,406	0%	7,918	-5%	54.7	3%	2,867	-25%	312	-80%	1.6	-77%	Reasonable	-87%	Deteriorated
SWE AREA27 DTS VL2440°	45	0%	239	-8%	7,569	0%	30,118	16%	75,031	18%	148,788	39%	42,539	49%	178.3	62%	30,522	63%	14,048	175%	17.4	117%	High	57%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

Table 5.22.6 Main socio-economic performance indicators by fleet segment in the Swedish national fishing fleet: average by vessel for 2013.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	fuel consumed per landed T	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend
	SWE AREA27 DFN VL0010°	0.4	2%	66	3%	57	-4%	57	-4%	13,008	11%	2,383	15%	833	13%	1,035	-2%	3,059	-3%	23,696	-3%	23,696	8%	7,092	5%	10,270	-20%	-7%
SWE AREA27 DFN VL1012°	0.5	-19%	67	-7%	235	-14%	235	-14%	15,604	-14%	7,091	23%	2,676	13%	678	4%	6,976	-23%	39,849	-23%	39,849	-15%	20,858	-2%	5,639	6%	45%	Improved
SWE AREA27 DFN VL1218°	1.0	46%	108	16%	470	3%	470	3%	30,966	57%	13,489	111%	7,053	151%	710	112%	23,973	136%	90,062	136%	90,062	72%	50,911	-11%	8,827	-69%	952%	Improved
SWE AREA27 DTS VL1012°	0.7	0%	65	0%	344	14%	344	14%	23,606	0%	12,945	0%	6,460	-1%	1,169	-1%	18,833	15%	74,423	15%	74,423	6%	46,927	-3%	234	-105%	96%	Improved
SWE AREA27 DTS VL1218°	1.5	1%	113	10%	795	0%	795	0%	57,312	6%	23,365	-1%	19,155	9%	806	-8%	49,044	-5%	181,034	-5%	181,034	0%	94,152	-9%	6,153	-73%	-41%	Deteriorated
SWE AREA27 DTS VL1824°	3.2	-7%	159	0%	2,112	0%	2,112	0%	109,808	13%	27,983	2%	28,152	0%	441	-30%	110,327	-16%	369,405	-16%	369,405	-9%	172,132	-5%	6,778	-80%	-87%	Deteriorated
SWE AREA27 DTS VL2440°	5.3	-8%	168	0%	19,658	39%	19,658	39%	267,039	21%	43,157	53%	40,441	62%	202	-16%	422,486	-1%	1,118,003	-1%	1,118,003	12%	945,301	49%	312,173	175%	91%	Improved

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

5.23 United Kingdom

Fleet Structure, Fishing Activity and Production

In 2013, the UK fishing fleet consisted of 6,428 registered vessels, with a combined gross tonnage of 201,000 GT, a total engine power of 806 MW and an average age of 27 years. The size of the UK fishing fleet decreased between 2008 and 2013, with the number of vessels falling by 6% and GT and kW decreasing 5% and 6%, respectively (Table 5.23.1). The major factor causing the fleet to decrease was technological creep exacerbated by a lowering of the average age of the fleet, large parts of which are under the application of effort controls. Preliminary information for 2014 indicates that the decreasing trend is consistent (6,282 vessels, 198,000 GT and 801,000 kW).

In 2013, the number of fishing enterprises in the UK fleet totalled 5,501, a small decrease from the previous year. In 2013 this number decreased 2% (114 enterprises) despite the total number of vessels remaining stable. This is symptomatic of a trend of large businesses consolidating and purchasing smaller enterprises (Table 5.23.1; Figure 5.23.1).

Total employment in 2013 was estimated at 12,022 jobs, corresponding to 7,333 FTEs. The level of employment decreased between 2008 and 2012, with total employed decreasing by just 2% and the number of FTEs decreasing 14% over the period. The major factors causing employment to decrease relate to the declining number of fishing vessels and a continued substitution of capital for labour.

Table 5.23.1 UK national fleet structure, fishing activity and production trends: 2008-2014.

Arrows indicate change (Δ) 2014 to 2013: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Structure	Total No. Vessels (#)	6,804	6,632	6,551	6,474	6,428	6,428	6,422	0%	↔	-6%
	No. of Inactive vessels (#)	2,076	1,945	1,945	1,807	1,815	1,939	2,023	7%	↗	-7%
	Average vessel age (year)	29	29	28	28	27	27	26	-1%	↘	-9%
	Vessel tonnage (thousand GT)	213	208	208	207	202	201	198	0%	↔	-5%
	Vessel power (thousand kW)	862	843	836	827	809	806	801	0%	↔	-6%
No. of Enterprises (#)	5,995	5,903	5,810	5,717	5,615	5,501		-2%	↘	-8%	
Employment	Total employed (#)	12,275	12,038	12,526	12,302	12,345	12,022	12,011	-3%	↘	-2%
	FTE (#)	8,567	9,501	9,148	9,109	8,347	7,333	7,739	-12%	↘	-14%
	Average wage per employed (thousand €)	20.5	19.8	17.8	19.5	19.7	17.9	19.9	-9%	↘	-13%
	Average wage per FTE (thousand €)	29.3	25.1	24.4	26.3	29.1	29.3	30.9	1%	↔	0%
Fishing Effort	Days at sea (thousand days)	448	427	422	415	406	394	416	-3%	↘	-12%
	Fishing days (thousand days)	371	344	338	334	333	318	317	-5%	↘	-14%
	Energy consumption (million litres)	311	308	299	283	276	263	264	-5%	↘	-15%
	Energy consumption per landed tonne (l/T)	555	543	528	473	454	425	379	-6%	↘	-23%
Output	Landings weight (thousand tonnes)	561	568	566	598	608	618	708	2%	↗	10%
	Landings value (million €)	909	863	901	1,021	982	882	1,006	-10%	↘	-3%

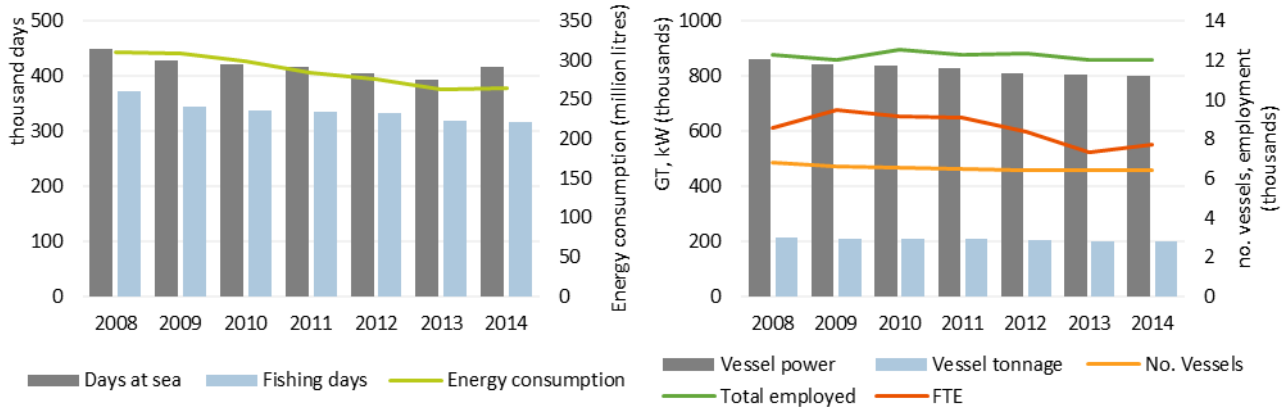
*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/A3/AC(2015)); data for 2014 are provisional.

The total weight landed by the UK fleet in 2013 was 618 thousand tonnes of seafood, with a landed value of €882 million. The total weight of landings increased by 10% over the period 2008-2013, in the same period, value of landings has decreased by -3%. In 2013, mackerel generated the highest landed value (€184 million) by the national fleet, followed by Norway lobster (€103 million), scallops (€62 million), Cod (€53 million), Haddock (€53 million) and then monkfish/angler (€48 million). In terms of landings weight, in 2013 mackerel was the first species landed by the UK fleet with 164 thousand tonnes, followed by herring (94 thousand tonnes), haddock (40 thousand tonnes) and Scallops (30 thousand tonnes). The major factors causing the decline in value of landings between 2012 and 2013 include a decrease in prices for the major pelagic species (mackerel and herring), which has not been compensated by the increase in landings observed, but also by the decrease of the value of

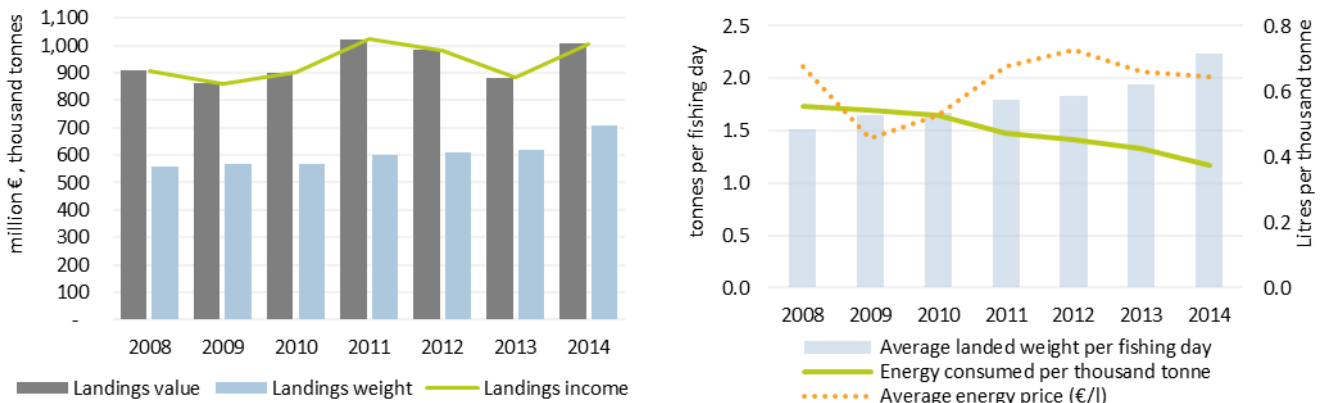
Norway lobster landings by 28% due to the decline in weight landed combined with a drop of its price. Preliminary data for 2014 indicate a strong rebound of the total value generated by the UK fleet, mainly due to a strong increase of the landings of mackerel (Figure 5.23.2).

In 2013 the UK fleet spent a total of around 394,000 days at sea. The total number of days at sea has fallen steadily between 2008 and 2013 by around 12%. The major factors causing the decrease in days at sea include continuing falls in the days that are permitted to be spent at sea under the CFP effort controls for some UK fleets. The quantity of fuel consumed in 2013 totalled around 263 million litres, a decrease of around 15% from 2008 (Table 5.23.1; Figure 5.23.1). The major factors causing the decrease in fuel consumption include decreases in vessel numbers and days at sea, increasing fuel efficiency of newer engines and high cost of fuel.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.23.1 UK fleet main capacity and effort trends for the period 2008-2014.

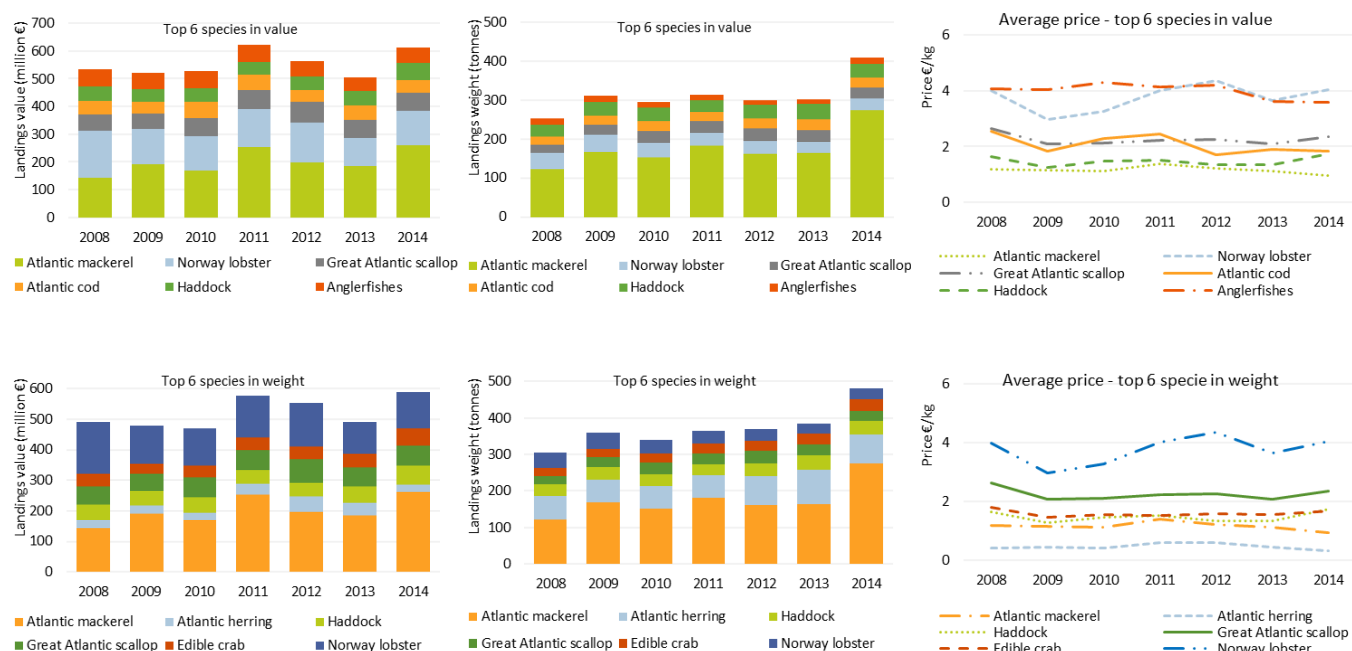


Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.23.2 Landings in value and weight (and corresponding income from landings) by the UK national fleet and some efficiency indicators for the period 2008-2014.

The changes in prices obtained for these key species varied between 2012 and 2013. Norway lobster achieved the highest average price per kilo in 2013 (€3.65 per kg), followed by monkfish/ anglers (€3.61 per kg). While the inverse relationship between price and quantity largely prevails, it does not explain the fall in price of Norway Lobster and of Scallops, which may have suffered from depressed exporting markets.

The six major species represented 57% of the value generated by the UK fleet. Mackerel accounted for 20% of the total landings value obtained by the UK fleet in 2012 and remained largely stable in 2013 accounting for 21% of the total income. In the meantime, the share of Norway lobster decreased from 15% in 2012 to 12% in 2013. The decline in importance of Norway lobster reflects both the drop in landings (-14%) and the decline in its price (-16%) (Figure 5.23.1).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Figure 5.23.3 UK fleet landings and average prices trends for the period 2008-2014 of the top 6 species in terms of landed value (top) and top 6 species in terms of landed weight (bottom).

National Fleet Economic performance

Table 5.23.2 UK national fishing fleet economic performance in 2008-2013 and projections for 2014.

Development trend based on %Δ net profit margin 2013 to average net profit margin 2008-2012. Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

VARIABLE (million €)		2008	2009	2010	2011	2012	2013	2014	%Δ 2013-12	%Δ 2008	Trend
Income	Landings income	906.9	862.2	901.7	1,021.5	982.6	882.4	1,006.5	-10%	↘	-3%
	Other income	29.0	20.2	19.2	26.7	40.9	34.5	33.3	-16%	↘	19%
Costs	Labour costs	251.2	238.9	222.8	239.9	242.9	214.9	228.9	-12%	↘	-14%
	Energy costs	210.4	141.4	157.8	191.3	200.5	173.4	169.8	-14%	↘	-18%
	Repair costs	90.7	89.3	84.9	92.7	86.5	59.2	60.4	-32%	↘	-35%
	Other variable costs	160.3	154.8	145.3	173.9	165.5	136.9	140.4	-17%	↘	-15%
	Other non-variable costs	84.3	81.9	122.8	126.7	113.3	61.3	59.8	-46%	↘	-27%
	Capital costs	75.3	74.8	65.3	62.7	60.1	62.1	65.5	3%	↗	-18%
Economic Indicators	GVA	390.2	415.0	410.1	463.7	457.7	486.1	595.9	6%	↗	25%
	Gross profit	139.0	176.1	187.2	223.8	214.8	271.2	367.0	26%	↗	95%
	Net profit	63.7	101.3	122.0	161.1	154.8	209.1	301.5	35%	↗	229%
Capital value	Depreciated replacement value	596.9	609.0	616.6	562.3	561.2	486.7	472.8	-13%	↘	-18%
	Investments	52.7	37.6	69.9	49.5	87.7	148.4		69%	↗	181%
Profitability and development trends	Net profit margin (%)	6.8	11.5	13.2	15.4	15.1	22.8	29.4	51%	↗	235%
	<i>development trend</i>				Improved				84%	↗	
	RoFTA (%)	11.5	17.8	19.8	27.1	26.6	42.4	69.52	60%	↗	268%
	<i>development trend</i>				Improved				106%	↗	
Profitability and development trends	GVA per FTE (thousand €)	45.6	43.7	44.8	50.9	54.8	66.3	78.9	21%	↗	46%
	<i>development trend</i>				Improved				38%	↗	

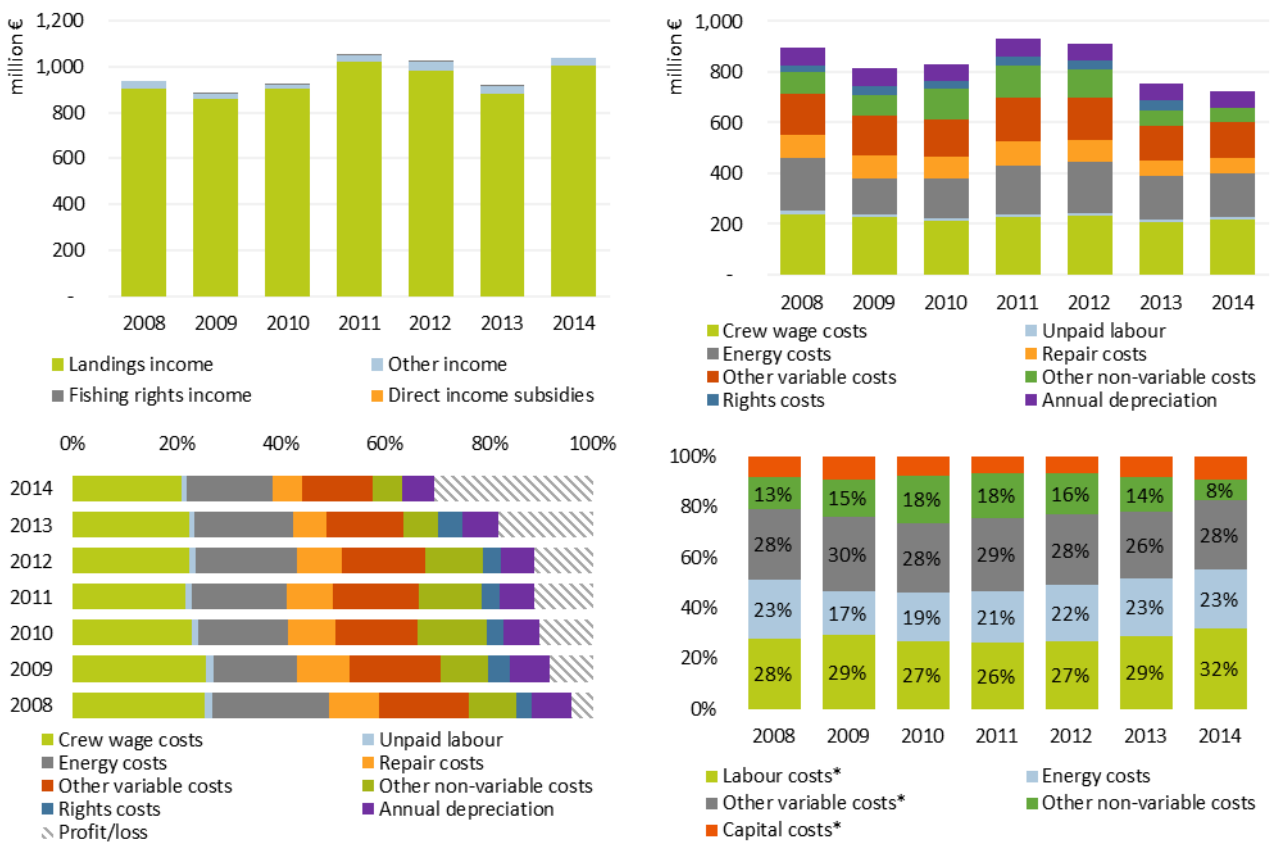
*all monetary values have been adjusted for inflation; constant prices (2014); when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

The total amount of income generated by the UK national fleet in 2013 was €917 million. This consisted of €882 million in landings value and €35 million in non-fishing income. From 2008 to 2013 non-fishing income increased by over 19% partially due to demand for guard work in areas with a thriving oil industry. The UK fleet's total income declined 10% between 2012 and 2013. Total operating costs incurred by the UK national fleet in 2013 equated to €646 million, amounting to 70% of total income. Crew cost and fuel costs, the two major fishing expenses, were €215 and €173 million respectively. Between 2008 and 2012, total operating costs decreased 9%, largely due to an decrease in fuel costs, in repair costs and other non-variable costs (Table 5.23.2; Figure 5.23.4).

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the UK national fleet in 2013 were €486 million, €271 million and €209 million, respectively. Gross Value Added (GVA), gross profit and net profit increased between 2012 and 2013, mainly driven by the performance of the large pelagic vessels over 40m.

The UK fleet had an estimated (depreciated) replacement value of €487 million and an estimated value of fishing rights of £617 million in 2013. Investments by the fleet amounted to €148 million in 2013. The major factors causing a change in the capital value of the fleet include a fall of 20% in the value of fishing rights between 2012 and 2013 (Table 5.23.2; Figure 5.23.5).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Figure 5.23.4 Income and cost structure trends for the UK fleet: 2008-2014.

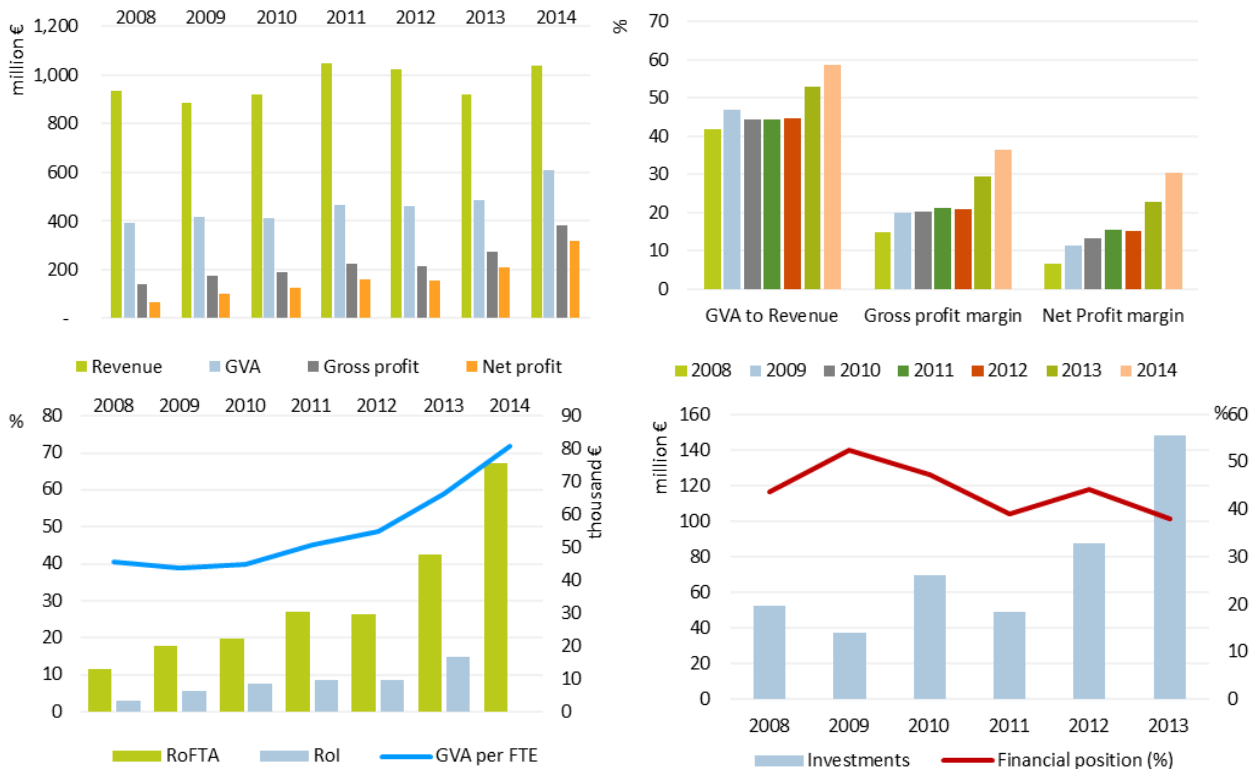
Top left – income structure; top right – cost structure; bottom left – cost items as a percentage of total income; bottom right – main costs items as a % of total costs (projected figures for 2014).

Fleet Segment Level Economic performance

The UK fleet is highly diversified with a broad range of vessel types targeting different species predominantly in ICES areas II (Bering Sea), IV (North Sea), V and VI (West of Scotland) and VII (English Channel and Western Approaches). The national fleet consisted of 27 (DCF) fleet segments and 6,422 vessels in 2013, with 6 inactive length classes consisting of 2,023 vessels. Four of the active fleet segments made losses in 2012 while 23 made a reasonable or better profit. 9 fleet segments improved their profitability while 18 segments showed deterioration.

Pelagic Trawl >40m – 32 vessels make up this segment which operates predominantly in ICES areas IIa, IVa, VIa and VII. The fleet targets pelagic species, mainly mackerel and herring. In 2013, the total

value of landings was about €235 million and around 110 FTEs were employed in this fleet segment, contributing 27% of the UK fleet total income from landings and 2% of FTEs generated by the UK fishing fleet. This fleet segment was profitable, with a reported gross profit of around €146 million and net profit of €126 million in 2013. The volume of landings increased by 5% but weaker prices meant value of landings dropped by 10% compared to the previous year. This fleet has been affected by the suspension of the MSC certificate for the North East Atlantic mackerel fishery, due to the absence of international agreement on the management plan of this fishery.



Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)); data for 2014 are provisional.

Figure 5.23.5 Main economic performance indicator trends for the UK fleet: 2008-2014.

Top left – economic performance indicators; Top right – performance indicators as a % of revenue (landings income + other income); bottom left – labour and capital productivity indicators; bottom right – in-year investment and financial position (projected figures for 2014).

Demersal Trawl and Seine 24m to <40m – 89 vessels make up this segment which operates predominantly around the UK coast in ICES areas II, IV, Vb, VI, and VII. The fleet targets a variety of species but in particular the demersal species, such as monkfish, cod, haddock and whiting, and the shellfish species, Norway lobster. In 2013, the total value of landings was €125 million and around 876 FTEs were employed in this fleet segment, contributing 14% of the total income from landings and 12% of FTEs generated by the UK fishing fleet. This fleet segment was profitable, with a reported gross profit of around €9 million and net profit of €3 million in 2013.

Demersal Trawl and Seine 18m to <24m – 179 vessels make up this segment which operates predominantly around the UK coast in ICES areas II, IV, Vb, VI, and VII. The fleet targets a variety of species but in particular the demersal species, such as monkfish, cod, haddock and whiting, and the shellfish species, Norway lobster. In 2013 the total value of landings was €94 million and around 1,074 FTEs were employed in this fleet segment, contributing 11% of the total income from landings and 15% of FTEs generated by the UK fishing fleet. This fleet segment was profitable, with a reported gross profit of around €16 million and net profit of almost €7 million in 2013. The volume landed by this segment has improved by 13%, while the value of landings has declined by 10%, due to depressed price notably for Norway lobster (-16%) and anglerfish (-14%).

Assessment and Future Trends

National Fleet

When adjusted for inflation, the value of landings of the UK fleet has slightly declined by 3% from 2008 to 2013. The recent decline in landings of mackerel has been compensated for by increases in

herring and the other species important to the UK fleet. However the value associated has declined, mainly due to a drop in prices between 2011 and 2013, when five of the six major species in landed weight saw their price decreasing (mackerel -19%, herring -23%, haddock -11%), while the price of edible crab remained almost stable over the period (+2% between 2011 and 2013). Preliminary data for 2014 indicate that the price for pelagic species continued to decrease (-15% for mackerel between 2013 and 2014, -28% for herring price), while important demersal species experienced better price (haddock +29%, Norway lobster +11%).

The number of vessels continues to fall steadily from 6,804 in 2008 to 6,428 in 2013 but the falling average age (29 year in 2008, 27 years in 2013) suggests that there has been little if any fall in capacity, newer boats being more effective than older ones. The fall in FTEs from 10,055 in 2009 – there was a decommissioning scheme in 2008 which distorts the impression for that year - to 7,333 in 2013 suggests that the cost of labour is continuing to cause substitution of capital for labour but the magnitude of the trend is not unduly strong.

While overall the fleet is profitable, with 22% of income being retained as net profit, there are considerable variations within the fleet segments. Most of this profit is generated by the large pelagic trawler (Pelagic trawl > 40m). For the rest of the segments, there is little indication of the cause of the variability. The value of fishing rights showed a sharp decrease of 20% between 2012 and 2013. The large pelagic vessels generate three quarter of this drop, reflecting some concerns about the prospects of this part of the industry, notably in the context of inconclusive international negotiations on transboundary stocks (mackerel).

Energy efficiency of the fleet continued to improve, by 2%, between 2012 and 2013, a consequence of the decreasing average age of vessels in the UK fleet.

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

In addition, the UK government has recently re-allocated quota from the over 10m sector to the under 10m sector. This invoked a legal challenge that ultimately failed. The under 10m fleet segments may therefore benefit from access to this quota with vessels it was taken from possibly needing to access additional quota or reduce effort.

Small-Scale Fleet

The small scale fleet saw a 10% decrease in landing value from 2012 to 2013, which is almost identical to the evolution of the value of landings for the UK fleet (-10% over the same period). This is despite 30 Marine Protected Areas being implemented in England and a 5% decrease in the number of vessels making up the fleet.

In terms of economic performance, the total amount of Gross Value Added (GVA), gross profit and net profit generated by the small scale fleet in 2013 were €55 million, €14 million and €5 million respectively. All three variables saw decreases from 10% (GVA), 15% (gross profit) to 35% (net profit) between 2012 and 2013. This decrease in economic performances comes in spite of declining costs and largely due to a 10% decrease in landings income and 22% decrease in other income. As 2013, 4% of income is retained as net profit.

Distant-Water Fleet

The UK distant water fleet consists of a few very large vessels fishing in Arctic waters and in the northern Atlantic near Greenland. The value of landings remained fairly steady at around €24 million between 2012 and 2013. Little other information can be separated from the aggregate because the size of the fleet is too small to protect the commercial sensitivity of the data.

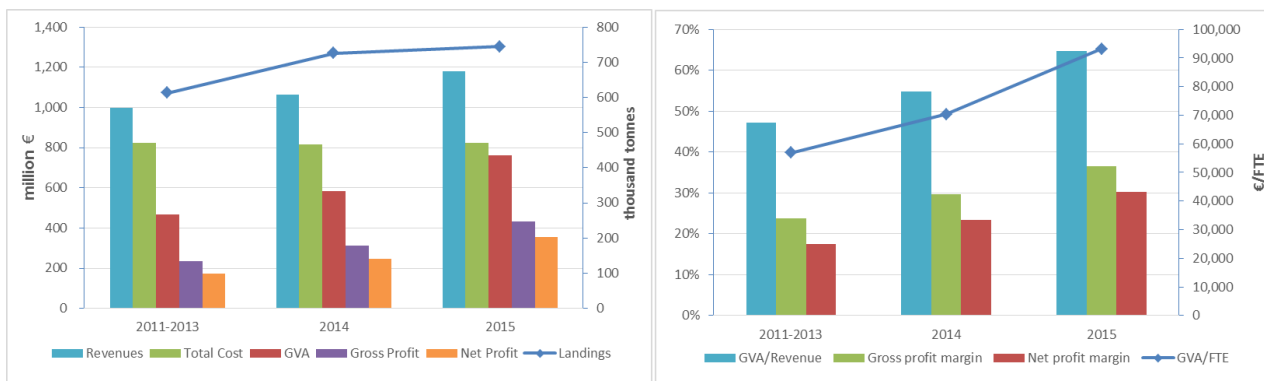
Projections by BEMEF – 2014, 2015 and MSY

The aim of this section was to provide projections on fleet economic performance for 2014, 2015 and a future situation where we have MSY status on the fish stocks. The projections are based on the BEMEF model (see methodology), which is not a model grounded on economic theory but instead a

tool for estimating trends. The model uses correlations between variables to estimate a future status based on current observed changes as input. These types of models for forecasting are generally accepted by the scientific community but also heavily criticised. Accuracy will depend on how close in time and how big the changes in the status are. Estimating projections for the next year (2014) or even forecasts for the year after (2015) can give fairly good estimates but it can also provide erroneous results or a misleading picture. Estimating the economic performance from the current status to a MSY status, which for many stocks imply a major change, is well above the scope and range of most models for projections.

The results provided here should be used with caution; the uncertainties are large and many. It is recommended to use the direction of the results as input for further discussions about the future and MSY instead of using the estimates as such.

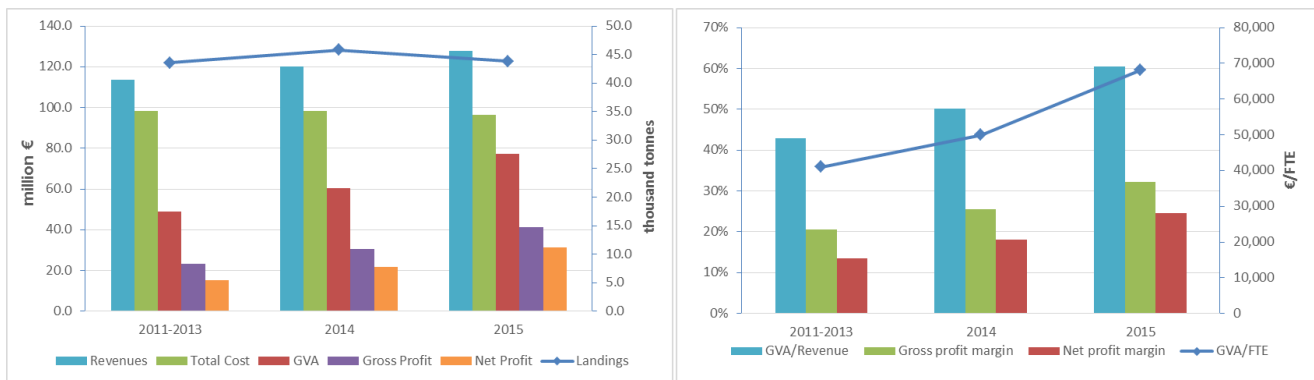
According to BEMEF projections, the economic performance of the British fishing fleet improves across the indicators reported here. Although fishing prices fall for most key species in 2014 an increase in landings of 18% leads to a 7% increase in revenue and improvements to gross profit and net profit of 33% and 42% respectively. This positive economic trend for the British trend is projected to continue in 2015 with landings reaching 744,000 tonnes and revenue reaching €1.2 billion. The gross profit margin and net profit margin also reach high levels of 37% and 30% respectively (Figure 5.23.6).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

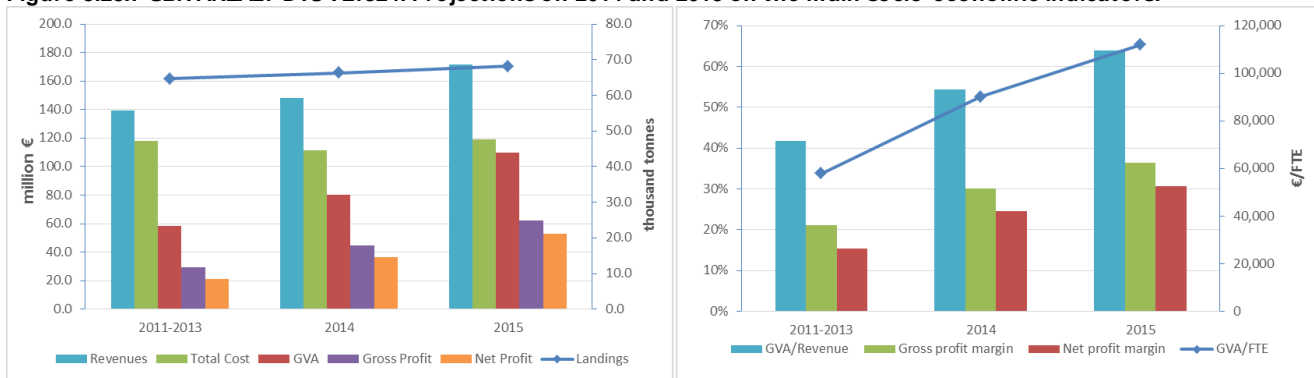
Figure 5.23.6 United Kingdom: Projections on 2014 and 2015 on the main socio-economic indicators.

The following graphs provide results for the top 3 UK fleets by gross earnings.



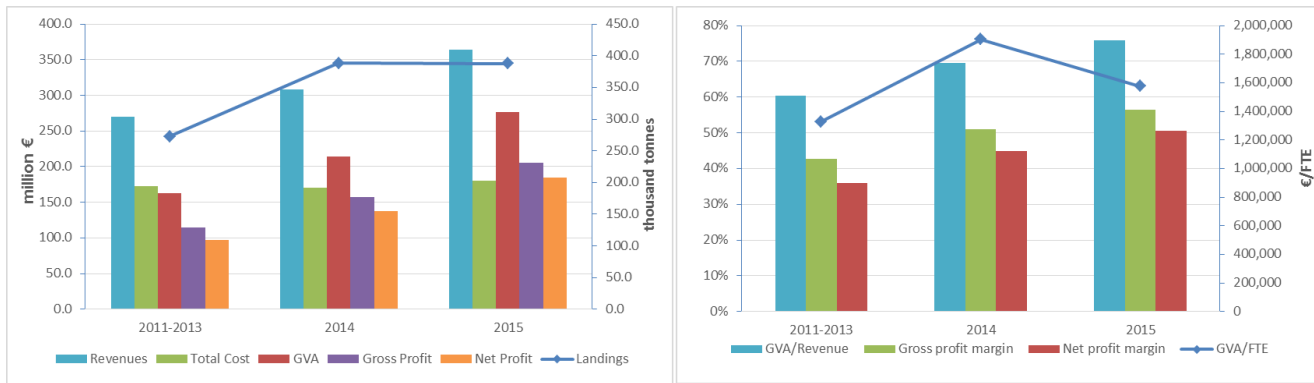
Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

Figure 5.23.7 GBR AREA27 DTS VL1824: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)).

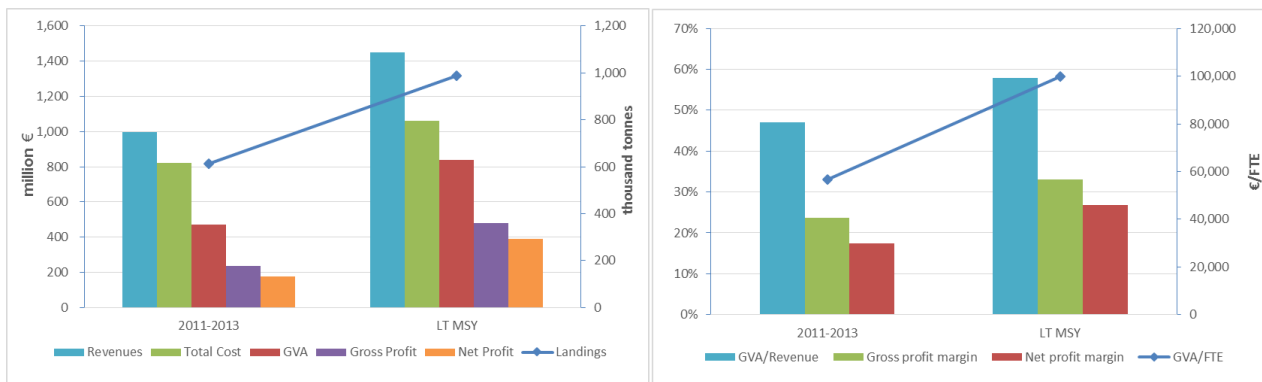
Figure 5.23.8 GBR AREA27 DTS VL2440: Projections on 2014 and 2015 on the main socio-economic indicators.



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.23.9 GBR AREA27 TM VL40XX: Projections on 2014 and 2015 on the main socio-economic indicators.

According to BEMEF projections, large increases in landings (+61%) in a state of long-term MSY lead to improved economic performance for the British fishing fleet. Gross and net profit increase to €479 million and €388 million and gross and net profit margins, already relatively high, increase to 33% and 27% respectively. As a percentage of revenue, GVA increases from 47% to 58% (Figure 5.23.10).



Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)).

Figure 5.23.10 United Kingdom: MSY projections for the main socio-economic indicators.

Data issues

There have been no significant data issues in producing this chapter, and the coverage and quality appear to be good. The reader should note that UK fleet revenues and costs do not include trade in quota. Quota trades take two forms; transfer in perpetuity and transfers for a defined period, usually one year - generally called leasing. There are two components within each of these. First, there is the windfall accruing to those enjoying the initial allocation of the resource in 1999 and secondly the normal capital gain or loss arising on transfer of the asset. Only the latter should be included in the accounts used in this report. However, it is impossible to identify the contribution of each component, but as the proportion of the total value is declining with each transfer of the original allocation, the problem will disappear as time goes by. Initially, however, the windfall component will be by far the greater proportion and hence for the time being omission of transfers limits any distortion of the fleet profitability figures.

Table 5.23.3 UK national fleet structure, activity and production trends by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

	Small scale fleet								%Δ 2013-12	Trend	Large scale fleet								%Δ 2013-12	Trend	Distant water fleet								%Δ 2013-12	Trend
	2008	2009	2010	2011	2012	2013	2014	2008			2009	2010	2011	2012	2013	2014	2008	2009			2010	2011	2012	2013	2014					
Total No. Vessels (#)	3,123	3,123	3,127	3,229	3,199	3,097	3,027	-3%	↘	↘	1,593	1,555	1,471	1,430	1,406	1,388	1,368	-1%	↘	↘	12.0	9.0	8.0	8.0	8.0	4.0	4.0	-50%	↘	↘
Average vessel age (year)	27.7	27.2	26.5	25.8	25.2	24.8	24.2	-1%	↘	↘	30.9	30.1	29.8	29.4	29.2	28.9	28.7	-1%	↘	↘	34.8	33.3	31.1	32.0	33.9	38.0	38.0	12%	↗	↗
Average vessel length (m)	7.4	7.4	7.4	7.4	7.4	7.4	7.5	0%	↔	↔	16.6	16.5	17.0	16.9	17.0	17.0	17.1	0%	↔	↔	53.0	58.4	54.1	60.9	60.5	54.0	54.0	-11%	↘	↘
Vessel tonnage (thousand GT)	12.2	12.3	12.2	12.5	12.4	12.1	12.1	-2%	↘	↘	164.3	160.5	168.3	161.4	160.9	163.1	158.1	1%	↗	↗	13.8	15.2	10.7	14.9	14.9	4.8	4.8	-68%	↘	↘
Vessel power (thousand kW)	185.0	187.1	186.0	193.8	192.4	190.5	189.5	-1%	↔	↔	509.9	500.8	506.1	491.4	487.8	487.1	474.5	0%	↔	↔	25.2	22.1	19.1	21.6	20.3	7.1	7.1	-65%	↘	↘
Total employed (#)	5,028	5,299	5,637	5,792	5,531	5,703	5,578	3%	↗	↗	7,233	6,739	6,889	6,510	6,813	6,319	6,260	-7%	↘	↘	13.7									
FTE (#)	1,718	1,945	1,963	2,065	1,778	1,720	1,870	-3%	↘	↘	6,832	7,556	7,185	7,044	6,568	5,614	5,684	-15%	↘	↘	17.0									
Average wage per employed (thousand €)	10.5	7.7	7.6	7.1	7.9	7.1	7.9	-10%	↘	↘	27.4	29.4	26.2	30.5	29.2	27.6	29.5	-6%	↘	↘	45.0									
Average wage per FTE (thousand €)	30.7	21.1	21.7	19.9	24.6	23.6	23.6	-4%	↘	↘	29.0	26.2	25.1	28.2	30.3	31.1	32.5	2%	↗	↗	36.5									
Days at sea (thousand days)	232.7	216.0	218.7	224.2	217.3	210.9	230.5	-3%	↘	↘	212.7	209.1	202.0	189.4	186.6	182.0	184.4	-2%	↘	↘	2.7	2.2	1.6	1.8	2.0	1.2	1.0	-38%	↘	↘
Fishing days (thousand days)	178.5	154.5	155.1	163.1	166.4	157.4	158.4	-5%	↘	↘	190.5	187.5	181.5	169.4	164.9	159.3	157.8	-3%	↘	↘	2.1	1.6	1.2	1.2	1.4	0.9	0.9	-36%	↘	↘
Energy consumption (million litres)	28.4	26.5	27.3	27.5	27.4	26.6	29.1	-3%	↘	↘	282.5	281.8	271.7	255.8	249.0	236.4	234.8	-5%	↘	↘										
Energy consumption per landed tonne (l/T)	755	708	674	654	607	566	631	-7%	↘	↘	605.1	594.8	551.7	489.8	462.7	425.8	361.5	-8%	↘	↘										
Landings weight (thousand tonnes)	37.6	37.4	40.5	42.1	45.1	47.0	46.0	4%	↗	↗	466.9	473.8	492.4	522.3	538.0	555.1	649.6	3%	↗	↗	56.1	56.5	33.4	34.0	25.1	16.2	12.1	-35%	↘	↘
Landings value (million €)	125.5	104.3	112.2	117.2	121.5	109.7	121.5	-10%	↘	↘	740.9	710.3	742.1	851.0	835.0	748.5	871.5	-10%	↘	↘	42.3	48.0	46.9	52.9	25.8	24.1	13.4	-7%	↘	↘

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AQ(2015)); data for 2014 are provisional.

Table 5.23.4 Economic performance of the UK national fishing fleet by operational scale: 2008-2014.

Arrows indicate change (Δ) 2013 to 2012: (↗) increase; (↘) decrease and (↔) stable/no change (Δ between -1 and +1%)

Variable (million €)		Small scale fleet							%Δ 2013-12	Trend	Large scale fleet							%Δ 2013-12	Trend		
		2008	2009	2010	2011	2012	2013	2014			2008	2009	2010	2011	2012	2013	2014				
Income	Landings income	125.3	104.2	112.2	117.2	121.5	109.8	121.5	-10%	↘		779.0	758.0	789.4	904.3	861.1	772.7	871.5	-10%	↘	
	Other income	5.4	3.2	4.2	4.7	5.9	4.6	4.4	-22%	↘		23.6	17.0	15.1	22.0	35.1	29.9	28.9	-15%	↘	
	Direct income subsidies	0.0	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0				
	Fishing rights income	0.0	0.20	0.05	0.03	0.03	0.0					0.0	2.7	2.1	1.8	3.9	1.9		-51%	↘	
Costs	Labour costs	52.8	41.0	42.7	41.1	43.8	40.5	44.1	-7%	↘		197.8	197.9	180.2	198.8	199.2	174.4	184.8	-12%	↘	
	Energy costs	19.0	12.2	14.4	18.6	19.9	17.6	18.7	-12%	↘		189.5	129.2	143.4	172.7	180.6	155.9	151.1	-14%	↘	
	Repair costs	10.2	6.9	8.6	10.6	9.6	7.6	8.3	-21%	↘		80.4	82.5	76.3	82.1	76.9	51.6	52.1	-33%	↘	
	Other variable costs	18.2	17.6	19.2	25.8	26.0	24.1	26.2	-7%	↘		141.8	137.2	126.2	148.0	139.5	112.8	114.2	-19%	↘	
	Other non-variable costs	11.5	10.7	13.2	10.0	11.4	10.3	10.1	-9%	↘		72.5	71.2	109.6	116.7	102.0	51.0	49.7	-50%	↘	
	Capital costs	11.3	10.6	7.7	7.1	9.5	9.5	10.3	0%	↔		63.3	63.3	57.5	56.5	51.2	52.8	55.2	3%	↗	
Capital value	Depreciated replacement value	75.0	73.1	83.8	70.4	74.2	87.1	85.7	17%	↗		459.7	453.9	491.7	435.0	428.8	361.9	348.1	-16%	↘	
	Investments	1.1	10.3	17.6	44.3	20.1	32.4		61%	↗		51.6	47.4	58.9	28.8	67.5	116.0		72%	↗	
Economic indicators	GVA	71.8	60.1	61.0	57.0	60.6	54.8	62.6	-10%	↘		318.5	354.9	349.0	406.7	397.2	431.3	533.3	9%	↗	
	Gross profit	19.0	19.1	18.4	15.9	16.8	14.3	18.5	-15%	↘		120.6	157.0	168.9	207.9	198.0	256.9	348.5	30%	↗	
	Gross profit margin	14.5	17.8	15.8	13.0	13.2	12.5	14.7	-5%	↘		15.0	20.3	21.0	22.4	22.1	32.0	38.7	45%	↗	
	Net profit	7.7	8.5	10.6	8.8	7.4	4.8	8.2	-35%	↘		57.4	93.7	111.4	151.4	146.8	204.1	293.4	39%	↗	
Profitability and development trends	Net Profit margin	5.9	7.9	9.1	7.2	5.8	4.2	6.5	-27%	↘		7.2	12.1	13.8	16.3	16.4	25.4	32.6	55%	↗	
	<i>development trend</i>				Deteriorated				-42%	↘				Improved				93%	↗		
	RoFTA (%)	11.2	12.8	12.8	11.0	8.9	5.0	10.2	-44%	↘		13.4	21.8	22.7	33.2	33.2	55.8	84.9	68%	↗	
<i>development trend</i>				Deteriorated				-56%	↘				Improved				125%	↗			
GVA per FTE (thousand €)	41.8	30.9	31.1	27.6	34.1	31.9	33.5	-6%	↘		46.6	47.0	48.6	57.7	60.5	76.8	93.8	27%	↗		
<i>development trend</i>				Stable				-4%	↘				Improved				48%	↗			

*all monetary values have been adjusted for inflation - constant prices 2014; when not provided by MS, figures for 2014 are projected based on several assumptions (see methodology section) and using fleet segment level data, which may not always be complete.

Data source: DCF 2015 Fleet Economic (MARE/ A3/ AC(2015)); data for 2014 are provisional.

Table 5.23.5 Main socio-economic performance indicators by fleet segment in the UK national fishing fleet in 2013.

Development trend based on %Δnet profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	No. of vessels (N)		FTE (N)		Days at sea (days)		Energy consumption (litres)		Value of landings (thousand €)		Weight of landings (thousand tonnes)		GVA (thousand €)		GVA per FTE (€/FTE)		Gross profit (thousand €)		Net profit (thousand €)		Net profit margin (%)		Profitability (2013)	Net profit margin %Δ 2013 - average (2008-12)	Economic development trend
	No. of vessels (N)	% Δ	FTE (N)	% Δ	Days at sea (days)	% Δ	Energy consumption (litres)	% Δ	Value of landings (thousand €)	% Δ	Weight of landings (thousand tonnes)	% Δ	GVA (thousand €)	% Δ	GVA per FTE (€/FTE)	% Δ	Gross profit (thousand €)	% Δ	Net profit (thousand €)	% Δ	Net profit margin (%)	% Δ			
GBR AREA27 DFN VL0010°	575	-11%	207	-2%	25,982	-7%	2,335	-11%	12,236	-11%	4,775	-4%	5,437	-31%	26.3	-30%	1,669	-31%	370	-59%	3.0	-50%	Reasonable	-60%	Deteriorated
GBR AREA27 DFN VL1012°	11	-15%	8	-62%	845	-16%	227	-19%	1,260	-17%	1,013	-10%	577	-17%	73.1	117%	172	-42%	83	-68%	6.6	-61%	Reasonable	19%	Improved
GBR AREA27 DFN VL1218°	11	-15%	27	-52%	1,779	-8%	752	-8%	5,351	-16%	3,977	3%	2,595	-19%	96.8	71%	864	-43%	479	-63%	8.9	-56%	Reasonable	-23%	Deteriorated
GBR AREA27 DFN VL2440°	13	0%	96	-51%	3,208	4%	1,918	4%	12,984	-16%	4,228	15%	6,234	-20%	64.9	62%	2,035	-45%	1,102	-66%	8.5	-60%	Reasonable	-33%	Deteriorated
GBR AREA27 DRB VL0010°	132	2%	125	-22%	9,884	2%	4,450	5%	10,785	-21%	6,111	-9%	4,152	-43%	33.2	-26%	1,140	-56%	139	-92%	1.3	-90%	Reasonable	-81%	Deteriorated
GBR AREA27 DRB VL1218°	102	26%	253	-22%	12,940	14%	8,735	15%	25,467	7%	22,874	27%	10,631	-7%	42.1	19%	4,379	-11%	2,466	-33%	9.5	-37%	Reasonable	-29%	Deteriorated
GBR AREA27 DRB VL1824°	21	5%	99	-37%	3,902	4%	4,521	5%	13,890	-18%	10,658	-31%	5,674	-31%	57.3	10%	2,441	-39%	1,730	-44%	12.3	-32%	High	-28%	Deteriorated
GBR AREA27 DRB VL2440°	30	0%	223	-33%	5,905	1%	8,105	2%	24,565	-15%	14,048	-35%	9,962	-27%	44.6	8%	4,244	-35%	2,964	-40%	11.9	-29%	High	-29%	Deteriorated
GBR AREA27 DTS VL0010°	267	-5%	230	-13%	20,033	-11%	3,887	-11%	14,425	-21%	5,296	-13%	7,604	-17%	33.0	-4%	2,625	-4%	1,777	21%	11.2	46%	High	62%	Improved
GBR AREA27 DTS VL1012°	86	-9%	180	-24%	10,600	-9%	3,590	-5%	10,743	-19%	4,172	-14%	5,044	-19%	28.0	7%	2,326	-18%	1,762	-21%	15.5	-1%	High	54%	Improved
GBR AREA27 DTS VL1218°	234	-3%	832	-20%	33,553	-5%	19,042	-6%	52,890	-22%	24,808	-12%	23,421	-28%	28.2	-11%	10,385	-32%	7,055	-38%	12.6	-19%	High	22%	Improved
GBR AREA27 DTS VL1824°	179	-1%	1,074	-13%	27,984	-3%	34,663	-4%	93,638	-13%	45,965	10%	44,768	-9%	41.7	4%	23,349	3%	15,317	1%	14.9	14%	High	71%	Improved
GBR AREA27 DTS VL2440°	89	-8%	876	-8%	16,645	-8%	41,962	-13%	124,881	-10%	68,392	5%	59,130	4%	67.5	13%	30,968	17%	24,994	34%	18.9	46%	High	95%	Improved
GBR AREA27 DTS VL40XX°	6	-33%	149	-30%	1,251	-26%	13,397	-23%	12,313	-27%	8,659	-4%	18,531	104%	124.7	190%	12,789	3769%	9,697	595%	27.7	622%	High	347%	Improved
GBR AREA27 FPO VL0010°	1714	-2%	993	-4%	135,543	-2%	16,903	-2%	64,929	-8%	26,882	4%	32,712	-3%	33.0	1%	7,236	6%	1,873	34%	2.8	48%	Reasonable	-50%	Deteriorated
GBR AREA27 FPO VL1012°	171	-3%	315	13%	24,745	-3%	3,799	-4%	20,141	-9%	9,974	12%	10,797	-13%	34.3	-23%	4,767	-32%	3,244	-43%	15.8	-38%	High	-11%	Deteriorated
GBR AREA27 FPO VL1218°	74	9%	336	11%	11,401	1%	6,712	2%	23,658	4%	12,682	6%	11,334	-6%	33.8	-15%	3,886	-18%	2,172	-35%	8.7	-33%	Reasonable	8%	Improved
GBR AREA27 FPO VL1824°	12	9%	150	23%	3,112	15%	2,334	15%	11,758	26%	6,474	15%	6,294	16%	42.0	-5%	2,592	8%	1,758	-5%	14.1	-19%	High	11%	Improved
GBR AREA27 HOK VL0010°	515	1%	152	-12%	19,114	-1%	2,541	19%	8,955	2%	2,551	-4%	4,422	18%	29.1	34%	364	229%	636	42%	-6.2	47%	Weak	25%	Improved
GBR AREA27 HOK VL2440°	11	-8%	149	-32%	2,342	2%	4,534	-2%	19,798	14%	5,413	1%	12,979	92%	87.2	183%	2,608	199%	1,128	140%	5.1	138%	Reasonable	4%	Stable
GBR AREA27 PGP VL0010°	111	0%	45	-31%	4,667	-19%	820	-33%	2,222	-48%	1,821	11%	849	-59%	18.7	-40%	84	-84%	123	-160%	-5.3	-219%	Weak	-358%	Deteriorated
GBR AREA27 TBB VL0010°	23	5%	21	-12%	1,415	1%	700	-15%	1,320	-19%	808	23%	430	-18%	20.1	-6%	92	-17%	15	165%	1.1	178%	Reasonable	110%	Improved
GBR AREA27 TBB VL1218°	19	-32%	175	6%	2,779	1%	2,628	2%	3,578	-21%	1,358	-26%	617	-48%	3.5	-51%	88	-134%	261	-167%	-7.0	-238%	Weak	56%	Improved
GBR AREA27 TBB VL1824°	19	6%	399	19%	4,738	5%	6,106	5%	15,416	-8%	5,172	2%	5,704	-24%	14.3	-36%	1,929	-41%	1,595	-44%	10.3	-37%	High	135%	Improved
GBR AREA27 TBB VL2440°	30	7%	110	-8%	6,547	9%	25,716	17%	35,194	-5%	16,651	10%	6,995	-13%	63.6	-6%	1,030	-29%	556	-15%	-1.6	-23%	Weak	-185%	Deteriorated
GBR AREA27 TM VL40XX°	30	0%	110	-8%	1,936	6%	42,620	-11%	235,849	-8%	287,358	7%	189,245	34%	1720.9	45%	147,310	56%	128,778	67%	53.9	85%	High	133%	Improved
GBR OFR DTS VL40XX°	2	-33%			564	-21%			22,349	18%	15,377	-14%													
GBR OFR HOK VL40XX°	2				664				1,756		856														

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF2015 Fleet Economic (MARE/A3/AQ(2015)).

Table 5.23.6 Main socio-economic performance indicators by fleet segment in the UK national fishing fleet: average by vessel for 2013.

Development trend based on %Δnet profit margin 2013 to average net profit margin 2008-2012.

Fleet segment	FTE	% Δ	Days at sea	% Δ	Landed weight per DAS	% Δ	Landings in weight per fishing day	% Δ	Wage per vessel	% Δ	Wage per FTE	% Δ	Wage per employed	% Δ	fuel consumed	% Δ	consumed per landed tonne	% Δ	Energy costs	% Δ	Operating costs	% Δ	GVA	% Δ	Net profit	% Δ	%Δ 2013 to average (2008-12)	Economic development trend
GBR AREA27 DFN VL0010*	0.4	9%	45	5%	184	3%	184	3%	6,553	-22%	10,614	-30%	2,205	-28%	489	-6%	2,678	-8%	18,470	-8%	18,470	-4%	9,456	-23%	643	-53%	-64%	Deteriorated
GBR AREA27 DFN VL1012*	0.7	-55%	77	0%	1,199	6%	1,412	4%	36,824	20%	51,339	166%	11,848	22%	224	-10%	13,580	-13%	99,021	-13%	99,021	6%	52,448	-2%	7,509	-62%	28%	Improved
GBR AREA27 DFN VL1218*	2.4	-44%	162	8%	2,236	13%	3,130	8%	157,325	22%	64,550	117%	32,359	41%	189	-10%	45,060	-1%	408,040	-1%	408,040	9%	235,897	-4%	43,519	-57%	-18%	Deteriorated
GBR AREA27 DFN VL2440*	7.4	-51%	247	4%	1,318	11%	1,668	12%	323,001	3%	43,731	109%	31,536	13%	454	-9%	97,272	-6%	842,499	-6%	842,499	-6%	479,554	-20%	84,799	-66%	-35%	Deteriorated
GBR AREA27 DRB VL0010*	1.0	-23%	75	0%	618	-11%	678	-13%	22,824	-36%	22,055	-14%	10,070	-17%	728	16%	22,230	-7%	75,650	-7%	75,650	-16%	31,457	-44%	1,055	-93%	-82%	Deteriorated
GBR AREA27 DRB VL1218*	2.5	-38%	127	-10%	1,768	12%	1,946	14%	61,297	-24%	24,751	23%	18,375	0%	382	-10%	56,466	-17%	212,443	-17%	212,443	-12%	104,225	-26%	24,180	-47%	-40%	Deteriorated
GBR AREA27 DRB VL1824*	4.7	-40%	186	-1%	2,731	-34%	3,082	-33%	153,952	-26%	32,657	24%	34,397	-7%	424	52%	141,947	-9%	553,077	-9%	553,077	-16%	270,183	-34%	82,365	-47%	-37%	Deteriorated
GBR AREA27 DRB VL2440*	7.4	-33%	197	1%	2,379	-35%	2,692	-38%	190,586	-20%	25,605	18%	28,298	-7%	577	56%	178,138	-7%	687,097	-7%	687,097	-10%	332,059	-27%	98,809	-40%	-43%	Deteriorated
GBR AREA27 DTS VL0010*	0.9	-9%	75	-6%	264	-2%	289	-5%	18,646	-18%	17,870	-12%	7,415	-17%	734	3%	9,599	-14%	49,723	-14%	49,723	-15%	28,478	-12%	6,656	27%	59%	Improved
GBR AREA27 DTS VL1012*	2.1	-16%	123	1%	394	-6%	407	-6%	31,596	-12%	15,090	6%	11,504	-14%	860	11%	27,522	-4%	104,776	-4%	104,776	-12%	58,647	-11%	20,484	-13%	57%	Improved
GBR AREA27 DTS VL1218*	3.6	-18%	143	-3%	739	-7%	814	-4%	55,711	-24%	15,677	-7%	14,190	-23%	768	7%	53,657	-13%	194,258	-13%	194,258	-19%	100,090	-27%	30,150	-36%	6%	Improved
GBR AREA27 DTS VL1824*	6.0	-12%	156	-3%	1,643	14%	1,942	16%	119,659	-19%	19,943	-8%	19,663	-22%	754	-12%	127,687	-12%	442,540	-12%	442,540	-15%	250,100	-9%	85,569	1%	59%	Improved
GBR AREA27 DTS VL2440*	9.8	0%	187	1%	4,109	14%	4,912	14%	316,426	2%	32,153	1%	39,054	1%	614	-17%	310,886	-13%	1,141,364	-13%	1,141,364	-7%	664,379	14%	280,833	46%	109%	Improved
GBR AREA27 DTS VL40XX*	24.8	6%	208	12%	6,922	29%	8,486	27%	956,986	-1%	38,637	-7%	49,960	4%	1,547	-19%	1,472,329	6%	3,704,901	6%	3,704,901	-9%	3,088,510	207%	1,616,181	843%	366%	Improved
GBR AREA27 FPO VL0010*	0.6	-2%	79	0%	198	6%	302	10%	14,864	-4%	20,406	6%	6,562	-2%	629	-6%	6,502	-9%	35,264	-9%	35,264	-10%	19,085	-1%	1,093	36%	-50%	Deteriorated
GBR AREA27 FPO VL1012*	1.8	16%	145	0%	403	15%	476	16%	35,264	14%	19,133	-2%	12,603	0%	381	-14%	14,649	-10%	92,255	-10%	92,255	6%	63,139	-11%	18,968	-41%	-15%	Deteriorated
GBR AREA27 FPO VL1218*	4.5	2%	154	-7%	1,112	4%	1,301	7%	100,652	-7%	22,182	-8%	23,020	-9%	529	-3%	59,806	-15%	286,924	-15%	286,924	-8%	153,168	-14%	29,346	-40%	14%	Improved
GBR AREA27 FPO VL1824*	12.5	13%	259	5%	2,080	0%	2,484	4%	308,557	13%	24,713	0%	42,569	8%	361	0%	128,264	-5%	824,383	-5%	824,383	10%	524,541	7%	146,464	-13%	37%	Improved
GBR AREA27 HOK VL0010*	0.3	-15%	37	-3%	133	-2%	155	0%	7,880	0%	19,529	19%	3,305	-1%	996	23%	3,254	7%	19,222	7%	19,222	2%	8,586	17%	1,235	43%	8%	Improved
GBR AREA27 HOK VL2440*	13.5	-26%	213	11%	2,311	-1%	3,064	1%	942,855	20%	69,644	63%	89,951	50%	838	-3%	271,808	-3%	1,766,427	-3%	1,766,427	-10%	1,179,901	109%	102,511	144%	75%	Improved
GBR AREA27 PGP VL0010*	0.4	-31%	42	-19%	390	37%	410	22%	6,890	-50%	11,703	-36%	2,532	-56%	451	-39%	4,874	-39%	20,013	-39%	20,013	-45%	7,647	-59%	1,107	-160%	-243%	Deteriorated
GBR AREA27 TBB VL0010*	0.9	-16%	62	-3%	571	21%	613	17%	14,700	-22%	14,148	-9%	5,116	-23%	866	-31%	20,059	-27%	57,117	-27%	57,117	-21%	18,711	-22%	643	162%	115%	Improved
GBR AREA27 TBB VL1218*	9.2	56%	146	48%	489	-26%	570	-26%	37,092	12%	4,018	-29%	5,220	-34%	1,935	37%	91,209	37%	200,583	37%	200,583	26%	32,474	-24%	13,753	-293%	32%	Improved
GBR AREA27 TBB VL1824*	21.0	13%	249	-1%	1,092	-3%	1,282	3%	198,684	-15%	9,462	-25%	13,429	-3%	1,181	4%	211,897	-9%	714,437	-9%	714,437	-9%	300,216	-28%	83,973	-47%	101%	Improved
GBR AREA27 TBB VL2440*	3.7	-14%	218	1%	2,543	1%	3,003	2%	198,844	-15%	54,245	-2%	21,221	-2%	1,544	7%	565,222	-1%	1,149,390	-1%	1,149,390	-12%	233,168	-18%	18,538	-7%	-176%	Deteriorated
GBR AREA27 TM VL40XX*	3.7	-7%	65	6%	148,429	1%	309,387	4%	1,397,817	-9%	381,327	-2%	137,481	22%	148	-17%	936,758	-19%	3,060,216	-19%	3,060,216	-46%	6,308,156	34%	4,292,608	67%	115%	Improved
GBR OFR DTS VL40XX*			282	19%	27,264	9%	39,837	1%	-								-											
GBR OFR HOK VL40XX*			332		1,290		1,706		-								-											

*all monetary values have been adjusted for inflation - constant prices 2014

Data source: DCF 2015 Fleet Economic (MARE/A3/AQ(2015)).

6. AER REPORT METHODOLOGY

Background

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 2015 data call for economic data on the EU fishing fleet for EU Member States was the seventh data call to be requested under the DCF. This year's fishing fleet economic data call was issued by DG MARE on the 4 February 2015 with a one month deadline (4 March 2014).

The 2015 data call requested transversal and economic data for the years 2008 to 2014. Capacity data was requested up to and including 2014, while employment and economic parameters were requested up to and including 2013. Most effort and all landings data were requested up to and including 2014, as well as, income from landings (non-mandatory) to allow for economic performance projections to be estimated at fleet segment and national level for 2014.

The table below outlines all the DCF economic and transversal variables to be submitted for the years 2008-2014, along with their uploading acronyms and corresponding aggregation levels. All the various definitions for variables, aggregation levels, gear types, length classes, DCF supra regions, FAO sub regions, species, sampling strategies and precision levels can be found by navigating through the data collection website.

See <https://datacollection.jrc.ec.europa.eu>

Additionally, data held in the EU Fleet Register was used to complement the fleet capacity data (number of vessels, gross tonnage and engine power) for trend analysis as the data submitted under the DCF was not complete for the entire period considered.

<http://ec.europa.eu/fisheries/fleet/index.cfm>

6.1. DCF VARIABLES REQUESTED

Table 6.1 2015 DCF Fleet economic data call contents for years 2008-2014.

Variable group	Variable	Years	Aggregation level
Fishing Enterprises	Enterprises consisting of 1 vessel	2008 - 2014	Yearly, by 1) National totals
	Enterprises consisting of 2-5 vessels	2008 - 2014	
	Enterprises consisting of > 5 vessels	2008 - 2014	
Employment	Number of engaged crew	2008 - 2013	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	FTE national	2008 - 2013	
	FTE harmonised	2008 - 2013	
Income	Value of landings	2008 – 2014*	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	Income from fishing rights	2008 - 2013	
	Direct subsidies	2008 - 2013	
	Other income	2008 - 2013	
Costs	Crew wages	2008 - 2013	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	Value of unpaid labour	2008 - 2013	
	Energy costs	2008 - 2013	
	Repair and maintenance costs	2008 - 2013	
	Other variable costs	2008 - 2013	
	Other non-variable costs	2008 - 2013	
	Rights costs	2008 - 2013	
	Annual depreciation costs	2008 - 2013	
Capital and Investments	Vessel replacement value	2008 – 2013	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	Value of fishing rights	2008 - 2013	
	In-year investments	2008 - 2013	
	Financial position	2008 - 2013	
	Vessel historical value**	2008 - 2013	
Capacity	Number of vessels	2008 - 2014	Yearly, by 1) Fleet segment, Supra-region, 2) National totals
	Mean length overall	2008 - 2014	
	Total GT	2008 - 2014	
	Total kW	2008 - 2014	
	Mean age	2008 - 2014	
	Number of vessels by region	2008-2013	Yearly, by 1) Fleet segment, Supra-region, Region (level 2)
Variable group	Variable	Years	Aggregation level

Effort	Fishing days	2008 – 2014*	Yearly, by 1) National Totals, 2) Fleet segment, Supra-region, FAO Area level 4 (Baltic), GFCM-GSA (Mediterranean & Black Sea), FAO Area level 3 (All other regions), and 3) (2) + gear type
	kW fishing days	2008 – 2014*	
	GT fishing days	2008 – 2014*	
	Hours at sea***	2008 – 2014*	Yearly, by 1) Fleet segment, Supra-region, FAO Area level 4 (Baltic), GFCM-GSA (Mediterranean & Black Sea), FAO Area level 3 (All other regions)
	GT hours at sea***	2008 – 2014*	
	kW hours at sea***	2008 – 2014*	
	Days at sea	2008 – 2014*	Yearly, by 1) Fleet segment, Supra-region, FAO Area level 4 (Baltic), GFCM-GSA (Mediterranean & Black Sea), FAO Area level 3 (All other regions) 2) National Totals
	Number of trips	2008 – 2013	Yearly, by
	Energy Consumption	2008 - 2013	1) Fleet segment, Supra-region, 2) National totals
Maximum days at sea ***	2008-2013	Yearly, by 1) Fleet segment, Supra-region	
Landings	Weight of landings per species	2008 – 2014*	Yearly, by 1) Fleet segment, Supra-region, FAO Area level 4 (Baltic), GFCM-GSA (Mediterranean & Black Sea), FAO Area level 3 (All other regions), and gear type 2) National Totals
	Value of landings per species	2008 – 2014*	
Recreational Catches	Weight of catch	2008-2014	Yearly, by Region (level 2)

* 2014 data not mandatory but requested from MS wherever possible in order to estimate economic projections for 2014. These data, if provided, will be flagged as preliminary in the 2015 Annual Fleet Economic Report and corresponding data tables.

** Optional

***Non-mandatory under the DCF

6.2. CONCEPTS, TERMS AND DEFINITIONS

Revenue

Revenue – the value of production (sale of landed seafood products) and income generated from the use of the vessel in other, non-commercial fishing activities, such as recreational fishing, transport, tourism, oil rig duty, research, etc., may also include insurance payment for gear damage/loss /vessel. Income from direct subsidies and fishing rights are excluded.

Gross Value Added (GVA)

Gross Value Added - net output of a sector after deducting intermediate inputs from all outputs. It is a measure of the contribution to GDP made by an individual producer, industry or sector. The Gross Value Added indicator calculated in this report is similar, but does not fully correspond to the Value added at factor cost of the Structural Business Statistics.

GVA to Revenue

Gross value added to revenue ratio - indicates the share of revenue that contributes to the economy through factors of production (returns to labour and returns to capital). Indicator is calculated as the ratio between gross value added and revenue and expressed as a percentage.

Gross profit

Gross profit – the normal profit after accounting for operating costs, excluding capital costs. Also referred to as gross cash flow, i.e. the flow of cash into and out of a sector or firm over a period of time.

Gross profit margin (%)

Gross profit margin - a measure of profitability that can be used to analyse how efficiently a sector is using its inputs to generate profit. Calculated as the ratio between gross profit and revenue. Expressed as a percentage.

Gross profit margin indicates the normal profitability of a firm and is of most interest to fishers as it represents the share of income they are left with at the end of the year. For managers, it may be used as an indication of the viability of an industry in terms of its commercial profitability by measuring the share of cash coming in and out of an industry. A high gross profit margin indicates that the sector has a low-cost operating model; reflects efficiency in turning inputs into outputs. A low percentage value can indicate a low margin of safety, i.e. a higher risk that declines in production or increases in costs may result in a net loss, or negative profit margin.

Net profit

Net profit is the difference between revenue and explicit costs and opportunity costs. Explicit costs include all operational costs, such as wages, energy, repair and other variable and non-variable costs. Net profit differs from gross profit in that it includes depreciation and opportunity costs of capital. It measures the efficiency of a producer in society's view by evaluating the total costs of inputs (excluding natural resource costs) in comparison to outputs or revenue.

Economic profit is the primary indicator of economic performance and is often used as a proxy of resource rent in fisheries. Economic profits emerge as the excess of revenue over the opportunity cost of producing the good. Also referred to as supernormal or abnormal profits. Abnormal profits in a sector is an incentive for other firms to enter the industry (if they can). Zero or a negative profit margin may indicate high competition in the sector and can be used as one of the indicators of overcapacity.

Net profit margin (%)

Economic profit margin - a measure of profitability after all costs have been accounted for, and reflects the percentage of revenue that a sector retains as profit. It measures the relative performance of the sector compared to other activities in the economy and provides an indication of the sector's operating efficiency as it captures the amount of surplus generated per unit of production.

Labour productivity (GVA/FTE):

Labour productivity - defined as output per unit of labour. Calculated as Gross Value Added (measure of output) by full-time equivalent (FTE) employment (unit of labour input). Labour productivity can be used as a measure of economic growth, competitiveness, and living standards within a sector. An increase in labour productivity indicates that a unit of input labour is producing more output or that the same amount of output is being produced with fewer units of labour. Labour productivity may also provide an indicator of worker's wellbeing or living standards, assuming that increases in productivity are matched by wage increases.

Capital productivity

Capital productivity - the return of the investment divided by the cost of the investment, also referred to as ROI (Rate on Investment). It measures profits in relation to capital invested, i.e. indicates how profitable a sector is relative to its total assets. The higher the return, the more efficient the sector is in utilising its asset base.

As data on intangible assets (e.g. fishing rights, natural resource) are not always available in fisheries, the Return on Fixed Tangible Assets (ROFTA) is used as an approximation of ROI.

Fuel efficiency

Fuel efficiency - ratio between the quantity of energy consumed and the quantity of output (e.g. landing value or weight). Calculated as the amount of litres of fuel consumed for each kilogram of fish landed (litres per tonne landed). Fuel efficiency may vary considerably in function of fishing effort and specific fisheries characteristics such as fishing gear and targeted species.

6.3. ECONOMIC PERFORMANCE INDICATOR CALCULATIONS

From the data submitted by Member States, indicators were calculated in order to assess the economic performance of fleet segments, national fleets, regional fleets and the EU fleet as a whole.

In order to account for inflation over the given time-period, all nominal values (i.e., the actual price in a given year) were converted to real values before estimating indicators.

For this conversion from nominal to real values, a Consumer Price Index (CPI) 'deflator' for each MS was applied to nominal values. Annual CPI data was taken from Eurostat's time-series of harmonised CPI <http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/data/database> (Table 6.2).

$$Real\ value_i = \frac{Nominal\ value_i}{\frac{CPI_i}{CPI_{2014}}}$$

where i represents the year for which the nominal value is converted into 2014 real value

All values in this report are therefore given in real 2014 EUR, rather than nominal EUR.

Table 6.2 Consumer price index by EU Member State 2008-2014

MS	Consumer Price Index (CPI)					
	2008	2009	2010	2011	2012	2013
BEL	0.91	0.91	0.93	0.96	0.98	0.99
BGR	0.91	0.93	0.96	0.99	1.01	1.02
CYP	0.91	0.91	0.94	0.97	1.00	1.00
DEU	0.92	0.92	0.93	0.96	0.98	0.99
DNK	0.91	0.92	0.94	0.97	0.99	1.00
ESP	0.92	0.92	0.93	0.96	0.99	1.00
EST	0.86	0.86	0.88	0.92	0.96	1.00
FIN	0.88	0.89	0.91	0.94	0.97	0.99
FRA	0.92	0.93	0.94	0.96	0.98	0.99
GBR	0.85	0.87	0.89	0.93	0.96	0.99
GRC	0.93	0.94	0.98	1.01	1.02	1.01
HRV	0.89	0.91	0.92	0.94	0.98	1.00
IRE	0.99	0.98	0.96	0.97	0.99	1.00
ITA	0.91	0.91	0.93	0.95	0.98	1.00
LTU	0.87	0.91	0.92	0.96	0.99	1.00
LVA	0.91	0.94	0.93	0.97	0.99	0.99
MLT	0.89	0.91	0.93	0.95	0.98	0.99
NLD	0.91	0.91	0.92	0.95	0.97	1.00
POL	0.86	0.90	0.92	0.96	0.99	1.00
PRT	0.93	0.92	0.94	0.97	1.00	1.00
ROU	0.78	0.82	0.87	0.92	0.96	0.99
SVN	0.90	0.91	0.93	0.95	0.98	1.00
SWE	0.93	0.95	0.97	0.98	0.99	1.00

HICP (2005 = 100) - annual data (average index and rate of change) Source: Eurostat

For economic performance calculations relating to the years 2008-2013, the following formulas were used:

Total Income:

Total Revenue = Income from landings + income from fishing rights + other income + direct subsidies

Revenue:

Revenue = Income from landings + other income

Gross Value Added (GVA):

GVA = Income from landings + other income – energy costs – repair costs – other variable costs – non variable costs

Gross Profit (GRP):

GRP = Income from landings + other income – crew costs – unpaid labour - energy costs – repair and maintenance costs – other variable costs – non variable costs

Net Profit/Loss:

Net Profit = Income from landings + other income – crew costs – unpaid labour - energy costs – repair costs – other variable costs – non variable costs – depreciation cost – opportunity cost of capital

Where opportunity cost of capital = fixed tangible asset value * real interest

Where real interest (r) = $[(1 + i) / (1 + \pi)] - 1$.

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 6.3.

Table 6.3 Inflation and nominal LT interest rates by EU Member State 2008-2014

MS	Inflation								Interest rate							
	2008	2009	2010	2011	2012	2013	2014	2008	2009	2010	2011	2012	2013	2014		
BEL	4.5	0	2.3	3.4	2.6	1.2	0.5	4.42	3.90	3.46	4.23	3.00	2.41	1.71		
BGR	12	2.5	3	3.4	2.4	0.4	-1.6	5.38	7.22	6.01	5.36	4.50	3.47	3.35		
CYP	4.4	0.2	2.6	3.5	3.1	0.4	-0.3	4.60	4.60	4.60	5.79	7.00	6.50	6.00		
DEU	2.8	0.2	1.2	2.5	2.1	1.6	0.8	3.98	3.22	2.74	2.61	1.50	1.57	1.16		
DNK	3.6	1.1	2.2	2.7	2.4	0.5	0.3	4.29	3.59	2.93	2.73	1.40	1.75	1.33		
ESP	4.1	-0.2	2	3.1	2.4	1.5	-0.2	4.37	3.98	4.25	5.44	5.85	4.56	2.72		
EST	10.6	0.2	2.7	5.1	4.2	3.2	0.5	8.16	7.98	5.97	:	:	:	:		
FIN	3.9	1.6	1.7	3.3	3.2	2.2	1.2	4.29	3.74	3.01	3.01	1.89	1.86	1.45		
FRA	3.2	0.1	1.7	2.3	2.2	1	0.6	4.23	3.65	3.12	3.32	2.54	2.20	1.67		
GBR	3.6	2.2	3.3	4.5	2.8	2.6	1.5	4.50	3.36	3.36	2.87	1.74	2.03	2.14		
GRC	4.2	1.3	4.7	3.1	1	-0.9	-1.4	4.80	5.17	9.09	15.75	22.50	10.05	6.93		
HRV	5.8	2.2	1.1	2.2	3.4	2.3	0.2	6.04	7.83	6.29	6.54	6.13	4.68	4.05		
IRE	3.1	-1.7	-1.6	1.2	1.9	0.5	0.3	4.53	5.23	5.74	9.60	6.17	3.79	2.37		
ITA	3.5	0.8	1.6	2.9	3.3	1.3	0.2	4.68	4.31	4.04	5.42	5.49	4.32	2.89		
LTU	11.1	4.2	1.2	4.1	3.2	1.2	0.2	5.61	14.00	5.57	5.16	4.83	3.83	2.79		
LVA	15.3	3.3	-1.2	4.2	2.3	0	0.7	6.43	12.36	10.34	5.91	4.57	3.34	2.51		
MLT	4.7	1.8	2	2.5	3.2	1	0.8	4.81	4.54	4.19	4.49	4.13	3.36	2.61		
NLD	2.2	1	0.9	2.5	2.8	2.6	0.3	4.23	3.69	2.99	2.99	1.93	1.96	1.45		
POL	4.2	4	2.7	3.9	3.7	0.8	0.1	6.07	6.12	5.78	5.97	5.00	4.03	3.52		
PRT	2.7	-0.9	1.4	3.6	2.8	0.4	-0.2	4.52	4.21	5.40	10.24	10.55	6.29	3.75		
ROU	7.9	5.6	6.1	5.8	3.4	3.2	1.4	7.70	9.69	7.34	7.29	6.68	5.41	4.48		
SVN	5.5	0.9	2.1	2.1	2.8	1.9	0.4	4.61	4.38	3.83	4.97	5.81	5.81	3.27		
SWE	3.3	1.9	1.9	1.4	0.9	0.4	0.2	3.89	3.25	2.89	2.61	1.59	2.12	1.72		

Annual average rate of change (%) HICP - Inflation rate – Source: Eurostat http://epp.eurostat.ec.europa.eu/portal/page/portal/hicp/data/main_tables
Harmonised long-term interest rates for convergence assessment purposes - Source: ECB <http://www.ecb.int/stats/money/long/html/index.en.html>

Rate of Return on Fixed Tangible Assets (RoFTA):

ROFTA = (net profit + opportunity cost of capital) / tangible asset value (vessel depreciated replacement value)

Break-even revenue (BER):

BER = (Fixed costs + opportunity costs of capital + depreciation) / (1 - (crew costs + unpaid labour + energy costs + repair and maintenance costs + other variable costs) / Revenue)

Revenue to Break-even revenue Ratio (CR/BER):

CR/BER = revenue / break-even revenue = Income from landings + other income / BER

CR/BER gives an indication of the short term profitability of the fleet/fleet segment (or over/under capitalised): if the ratio is greater than 1, then enough cash flow is generated to cover fixed costs (economically viable in the short term). If the ratio is less than 1, insufficient cash flow is generated to cover fixed costs (indicating that the segment is economically unviable in the short to mid-term).

6.4. ECONOMIC PERFORMANCE INDICATOR CLASSIFICATIONS

Development trend

The development trend, calculated as the change between 2013 and the average value 2008-2012, for the economic performance indicators analysed, such as GVA, gross profit, net profit and GVA/FTE were classified as *High*, *Reasonable* or *Weak* according to the criteria in Table 6.4.

Table 6.4 Development trend classification

Development - change 2013/2008-2012 average	
>5%	Improved
-5% - 5%	Stable
< -5%	Deterioration

Based on: Pavel, AER 2005

Profitability

Profitability, as net profit (or net profit as a % of income, where income includes income from the sale of fish and other non-fishing income and excludes direct income subsidies and income from fishing rights) was classified as *High*, *Reasonable* or *Weak* according to the criteria in Table 6.5.

Table 6.5 Profitability classification

Profitability: Net profit margin in 2013		
>10%	High	Profitability is good and segment is generating a good amount of resource rent
0-10 %	Reasonable	Segment is profitable generating some resource rents
<0%	Weak	The segment is making losses; economic overcapacity

6.5. ECONOMIC PERFORMANCE PROJECTIONS

In addition to some capacity and transversal data (i.e. effort, landings), Income from landings in 2014 was also requested in the 2015 data call in order to calculate projection estimates for the year 2014. If MS were not in a position to provide figures for *Income from landings* in 2014, then the *value of landings* was used as a proxy in the calculations.

The economic performance projections at fleet segment level were estimated based on recommendations and main conclusions reported in STECF 11-19, using the following formulas:

Crew wages (CW) and unpaid labour costs (ULab) were estimated using the average of the ratios crew wage / days at sea (DAS) during the three previous years:

$$\text{Crew wages: } CW_t = \frac{\sum_{i=1}^{t-3} CW}{\sum_{i=1}^{t-3} DAS} \times DAS_t$$

$$\text{Unpaid labour costs: } ULab_t = \frac{\sum_{i=1}^{t-3} ULab}{\sum_{i=1}^{t-3} DAS} \times DAS_t$$

When days at sea unavailable, Crew wages (CW) were estimated as an average proportion of the value of landing (VaL) during the three previous years:

$$\text{Crew wages: } CW_t = \frac{\sum_{i=1}^{t-3} CW}{\sum_{i=1}^{t-3} VaL} \times VaL_t$$

Non-variable costs (NVC) were estimated using the change in capacity i.e. number of vessels (N):

$$\text{Non-variable costs: } NVC_t = \frac{NVC_{t-1}}{N_{t-1}} \times N_t$$

This method was also used to project total employed (JOB), Other income (OInc), annual depreciation (DEP) and fleet depreciated replacement value (REP).

$$\text{Total employed: } JOB_t = \frac{JOB_{t-1}}{N_{t-1}} \times N_t$$

$$\text{Other Income: } OInc_t = \frac{OInc_{t-1}}{N_{t-1}} \times N_t$$

$$\text{Annual depreciation: } DEP_t = \frac{DEP_{t-1}}{N_{t-1}} \times N_t$$

$$\text{Fleet depreciated replacement value: } REP_t = \frac{REP_{t-1}}{N_{t-1}} \times N_t$$

Variable costs (VC) were projected using change in effort, i.e. Days at Sea (DAS):

Variable costs:
$$VC_t = \frac{VC_{t-1}}{DAS_{t-1}} \times DAS_t$$

The same method applied on variable costs was also used to project FTE (FTE), Repair & Maintenance costs (RMC) and Fuel consumption (FCon).

FTE:
$$FTE_t = \frac{FTE_{t-1}}{DAS_{t-1}} \times DAS_t$$

Repair & Maintenance costs:
$$RMC_t = \frac{RMC_{t-1}}{DAS_{t-1}} \times DAS_t$$

Fuel consumption:
$$FCon_t = \frac{FCon_{t-1}}{DAS_{t-1}} \times DAS_t$$

Fuel costs (FC) were projected using change in effort (DAS) and change in average fuel price (P):

Fuel costs:
$$FC_t = \frac{FC_{t-1}}{DAS_{t-1}} \times DAS_t \times \frac{P_t}{P_{t-1}}$$

6.6. DISAGGREGATION OF ECONOMIC DATA

Fleet economic data cannot be collected at higher resolution than defined in the DCF. Only landings (value and weight) and effort data (days at sea, fishing days, etc.) are provided by Member States at the sub-region level by fleet segment. Therefore, the correlation with transversal data is the only viable way for disaggregating economic data at the sea basin level (Baltic Sea, North Sea, NE Atlantic, Mediterranean & Black Sea and Other Fishing Regions).

Several assumptions can be made based on correlations between transversal and economic data, which were previously examined during the PGECON workshop in Hamburg 2012. However, these analyses are still preliminary and considered as work in progress. PCEGON (2013) strongly recommended a study on the disaggregation that delivers a comprehensive analysis of different approaches and methods, while also addressing the availability of individual data which varies by MS.

This year, an effort based approach was used to disaggregate economic data. Seeing that the methodology is still to be validated, this exploratory exercise set out to estimate the economic performance indicators at the sea basin level by MS and fleet segment.

For this exercise, transversal and economic data by fleet segment were disaggregated based on either the number of active vessels in a region, value of landings or effort (days at sea), as:

- (1) Number of vessels in region (N_{Reg}) – used to estimate fleet capacity, non-variable costs and capital costs (annual depreciation and opportunity costs of capital)
- (2) Value of landings (VaL) – used to allocate income from landings;
- (3) Effort in days at sea (DAS) – used to allocate all variable costs, including labour, energy, repair & maintenance, and fuel consumption. DAS was also used to estimate the number of vessels when N_{Reg} was not available.

The number of vessels operating in each region (N_{Reg}) was again requested in the 2015 data call. However, not all Member States were able to provide this information.

In cases where N_{Reg} was not available, the estimated number of vessels in the region (N_{Reg^*}) was calculated based on DAS and using the total number of vessels (N_{Tot}), as:

$$N_{Reg^*} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times N_{Tot}$$

When available, the number of vessels operating in a given region (N_{Reg}) was used to disaggregate other capacity variables (GT and kW), as:

Gross tonnage (GT): $GT_{reg} = \frac{N_{Reg}}{\sum N_{Reg}} \times GT_{Tot}$, if N_{Reg} is missing, $GT_{reg} = \frac{GT_{Tot}}{N_{Tot}} \times N_{Reg^*}$

Engine power (kW): $kW_{Reg} = \frac{N_{Reg}}{\sum N_{Reg}} \times kW_{Tot}$, if N_{Reg} is missing, $kW_{reg} = \frac{kW_{Tot}}{N_{Tot}} \times N_{Reg^*}$

The number of vessels in the region was also used to disaggregate employment, *other income* (OInc), *non-variable costs* and capital costs (*opportunity cost of capital* and *annual depreciation*), as:

Total employed (JOB):
$$JOB_{reg} = \frac{N_{Reg}}{\sum N_{Reg}} \times JOB_{Tot}$$

If N_{Reg} is missing,
$$JOB_{Reg} (OInc) = \frac{N_{Reg}^*}{N_{Tot}} \times JOB_{Tot}$$

Other income as:
$$Other\ Income_{Reg} (OInc) = \frac{N_{Reg}}{\sum N_{Reg}} \times OInc_{tot}$$

If N_{Reg} is missing,
$$Other\ Income_{Reg} (OInc) = \frac{N_{Reg}^*}{N_{Tot}} \times OInc_{tot}$$

Opportunity cost of capital as:
$$Opportunity\ Cost\ of\ Capital_{Reg} (OPC) = \frac{N_{Reg}}{\sum N_{Reg}} \times OPC_{tot}$$

If N_{Reg} is missing,
$$Opportunity\ Cost\ of\ Capital_{Reg} (OPC) = \frac{N_{Reg}^*}{N_{Tot}} \times OPC_{tot}$$

Annual Depreciation costs as:
$$Annual\ Depreciation\ Costs_{Reg} (DEP) = \frac{N_{Reg}}{\sum N_{Reg}} \times DEP_{tot}$$

If N_{Reg} is missing,
$$Annual\ Depreciation\ Costs_{Reg} (DEP) = \frac{N_{Reg}^*}{N_{Tot}} \times DEP_{tot}$$

Income from Landings was disaggregated based on the value of landings (VAL) in the region and the total value of landings for the fleet segment multiplied by Income:

Income from landings:
$$Landings\ Income_{Reg} (LInc) = \frac{VAL_{Reg}}{\sum VAL_{Reg}} \times LInc_{Tot}$$

If N_{Reg} is missing,
$$Landings\ Income_{Reg} (LInc) = \frac{VAL_{Reg}}{VAL_{Tot}} \times LInc_{Tot}$$

Crew wage (CW), unpaid labour, fuel costs (FC), repair & maintenance (REP) and other variables costs (VAR) were allocated based on effort (DAS) as:

Crew wages:
$$CW_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times CW_{Tot}$$

Unpaid labour costs:
$$ULab_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times ULab_{Tot}$$

Fuel costs:
$$FC_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times FC_{Tot}$$

Repair costs:

$$REP_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times REP_{Tot}$$

Other variable costs:

$$VAR_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times VAR_{Tot}$$

This method was also used to disaggregate fuel consumption.

Fuel consumption:

$$FCon_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times FCon_{Tot}$$

Full Time Equivalent (FTE):

$$FTE_{reg} = \frac{DAS_{Reg}}{\sum DAS_{Reg}} \times FTE_{Tot}$$

Data Limitations

Complete estimates were not possible due to fleet segments with incomplete or missing data sets submitted by MS (i.e. number of vessels by region, landings and efforts variables by sub-region).

Fleet segments for which days at sea or landings in value were not available at the sub-region level, could not be completely disaggregated. Information on these MS fleet segments is provided, when either the days at sea or landings values that were available, occurred on only one region. In all other cases, only incomplete results could be provided. This affects the entire Spanish fleet as days at sea were not available. Greece is excluded due to missing DCF data on effort and landings, as well as income. Additional information to fill gaps is provided where possible.

6.7. ECONOMIC INDICATORS PROJECTIONS IN 2014 AND 2015 USING BEMEF AND HDA0.2

6.7.1 ECONOMIC INDICATORS PROJECTIONS IN 2014 AND 2015 using BEMEF

Model description

For the 15 Member States with fleets operating in the Northeast Atlantic, these projections were made using the Bio-Economic Model of European Fleets (BEMEF). BEMEF is an extended version of the EIAA model used in previous Annual Economic Reports and is designed to incorporate the most recent data available through the DCF framework while integrating knowledge of key economic relationships and incorporating data from other sources. Model methodology is available at the end of this chapter and in more detail at www.fisheriesmodel.org.

In addition, to provide an indication of potential economic changes when a state of MSY is reached, projections for the EU fishing fleet is also documented. This is a long-term state of MSY where the biomass of the stock has reached a point approximating BMSY. For the 15 Member States with fleets operating in the Northeast Atlantic, these projections were made using the Bio-Economic Model of European Fleets (BEMEF), as were the 2014 and 2015 short-term projections.

Data approach

The model calculations use the most recent three years of verified data (2011-2013) as a baseline to remove some of the year-to-year variance while ensuring that the data used for projections is current and relevant. From this baseline, projections for 2014 and 2015 are calculated using what is known about potential fleet performance in 2014 and 2015 from other sources and by using equations that approximate fleet behaviour on key economic relationships – described in the model methodology. Where data has already been provided by a MS for 2014 this data overrides the model estimate and is used in this report.

Additional inputs for 2014 and 2015 projections are:

- agreed Total Allowable Catch;
- changes in spawning stock biomass (2014);
- changes in the number of registered vessels by MS and by length class;
- changes in import/export fish prices by MS and species;
- changes in fuel prices;
- Member State interest rates.

For the last three inputs the 2015 values come from the first five months of the year.

The 2014 and 2015 Total Allowable Catch comes from the relevant Council legislation. For BEMEF 25 quota species and 150 TACs are covered. Each fleet's allocation of the TAC is determined based on its proportion of the MS landings in the base period.

The spawning stock biomass is published by the International Council for Exploration of the Sea (ICES) for most stocks in 2014. This information is used to estimate changes in catchability.

The number of vessels comes from the EU Fleet Register. For BEMEF this database is grouped by Member State and by three length classes (0-12m, 12-24m, 24m+) based on the 1 January registration in 2014 and 2015 and compared to the average 1 January registration from 2011-2013.

Import/export fish prices come from the European Market Observatory for Fisheries and Aquaculture Products (EUMOFA). These prices do not directly reflect the price at first sale fleets receive but the relative change from the base period to 2014 and 2015 should approximate overall prices changes. Member State prices are calculated per species and then an average is taken between the import/export price for the Member State and the EU as an average as landings often do not take place in the same MS as vessels in the fleet are registered.

The Brent oil prices come from the Energy Information Administration. Similar to fish prices, the absolute value may not reflect the fuel price vessels face but the relative change from the base period to 2014 and 2015 should approximate overall prices changes.

The interest rate comes from the European Central Bank and is used to calculate opportunity costs. The rate for Estonia is calculated as an average of Lithuania and Latvia.

Estimates of yield and biomass at a long-term state of MSY are taken from a collection of sources. Where available, multispecies estimates are used. These estimates cover the main commercial stocks in the North Sea and the Baltic Sea. For stocks where multispecies estimates are not available estimates for single species are taken as provided in academic literature and from previous studies. Where no estimate is available, quota and SSB

from the base period are used for the MSY comparison. This represents a more equal comparison for changes from the base period but not when comparing MSY estimates with other years like 2014 and 2015 projections.

As with the short-term forecasts, landings of non-quota species are assumed constant. This may be an underestimate in the modelling of the MSY potential as non-quota species are also required to reach a state of MSY.

Modelling is completed at the fleet level using the equations detailed in the methodology section and the fleet results are summed to reach estimates at the Member State level.

Coverage

Projections for 2014 and 2015 have been performed by Member State for each fleet segment operating in the Northeast Atlantic, although only a subset of fleets are documented in this chapter. To give a representative sample with manageable coverage of EU fishing fleets the top three fleets by each Member State were selected. One Spanish fleet was swapped as most of its activity is in Mediterranean waters. For the 45 fleets covered, the entirety of their catch is in the Northeast Atlantic (FAO Area 27).

Fleet segment	BEL	DEU	DNK	ESP	EST	FIN	FRA	GBR	IRL	LTU	LVA	NLD	POL	PRT	SWE
AREA27 DFN VL1012										x					
AREA27 DFN VL2440											x				
AREA27 DTS VL1218							x								x
AREA27 DTS VL1824							x	x	x				x		x
AREA27 DTS VL2440	x	x	x	x			x	x	x	x				x	x
AREA27 DTS VL40XX		x	x	x										x	
AREA27 PG VL0010					x	x							x		
AREA27 PG VL1012					x										
AREA27 PGP VL0010														x	
AREA27 PS VL2440				x											
AREA27 TBB VL1218		x													
AREA27 TBB VL1824	x											x			
AREA27 TBB VL2440	x														
AREA27 TBB VL40XX												x			
AREA27 TM VL1218											x				
AREA27 TM VL1824						x									
AREA27 TM VL2440					x	x				x	x		x		
AREA27 TM VL40XX			x					x	x			x			

BEMEF provides projections for 2014 and 2015 by fleet segment for a range of socio-economic measures. For this chapter only a synthesis of six economic performance measures and four relative measures. These measures are shown graphically and allow for a comparison of three periods: 2011-2013, 2014 and 2015. The reported economic performance measures are:

- Landings;
- Revenue;
- Total cost
- Gross value added (GVA);
- Gross profit;
- Net profit.
- As well as the four relative measures:
- GVA/Full time equivalent fisher (FTE);
- GVA/Revenue;
- Gross profit margin;
- Net profit margin.

For each Member State and fleet covered a series of two graphs are displayed. The first graph shows the projected development of landings and the key economic variables of gross earnings, total cost, GVA, gross profit and net profit. The second graph normalises these key economic variables and shows the project development of GVA/revenue, the gross profit margin, the net profit margin and GVA/FTE employee.

Exception of Lithuania and Spain where less than half of the Member States' landings take place in the Northeast Atlantic (14% and 37% respectively). For these two Member States only the top three fleets (operating in the

Northeast Atlantic) are covered with no general MS overview as this forecast would not be a representative approximation.

Model specification

The following section explains the methodology used to calculate the ten forecasted economic performance measures. The full model methodology and data sources for BEMEF can be found online at www.fisheriesmodel.eu.

Landings

The following equation is used to determine landings for a fleet:

$$L_{j,t,k} = FSS_{j,k} RU_{j,k} RS_{c,k} Q_{t,k}$$

Where:

- L - Quantity of landings
- j - Fleet segment
- k - TAC (species and area)
- c - Member state
- t - Time period
- FSS - Fleet segment share
- RU - Realised uptake
- RS - Relative stability
- Q - Quota

Fleet segment share and quota allocation

The default assumption is that quota is allocated to fleets within member states based on historic landings reported in the base period.

Realised uptake

Not all of the quota that is allocated to a fleet will actually be landed in a given year and model simulations account for this more likely outcome. The default level of uptake is calculated for each TAC and for each country using reported landings from the AER database and comparing this to the amount of quota allocated to a country through relative stability.

$$RU_{j,k} = \frac{L_{0,j,k}}{FSS_{0,j,k} Q_{0,k}}$$

Where:

- 0/t - Time period

Revenue

Total revenue in future periods is calculated based on the computed future landings and prices.

$$TR_{t,j} = \left(\sum_i P_{0,i,j} L_{0,i,j} + K_{0,j} \right) * \frac{GR_{0,j}}{\sum_i P_{0,i,j} L_{0,i,j} + K_{0,j}}$$

Where landings value in year t of other species than quota species of segment j are defined as:

$$K_{t,j} = TR_{0,j} - \sum_i P_{0,i,j} L_{0,i,j}$$

And where gross revenue including non-fisheries specific income of segment j is defined as:

$$GR_{0,j} = TR_{0,j} + OR_{0,j}$$

Where:

- TR - Total revenue (from all fishing activities)
- P - Price at port of landings
- GR - Gross revenue (including non-fisheries income)
- K - Landing value of non-quota species

- OR - Income from non-fisheries activities
- i - Species

Fish prices

To forecast prices first baseline prices are calculated by fleet and species from the fleet level data:

$$P_{0,i,j} = \frac{V_{0,i,j}}{L_{0,i,j}}$$

Where:

- P - Price at port of landing
- V - Value of landings

For the majority of commercial fish species the EUMOFA database covers import/export prices by Member State. In these situations future prices by fleet and species are calculated as the average of the change in Member State and EU import/export prices. The adjustment factor is adjusted by inflation as the EUMOFA prices are nominal.

Where EUMOFA prices are used:

$$P_{t,i,j} = P_{0,i,j} * \frac{\left[\left(\frac{EUP_{0,i,m}}{EUP_{t,i,m}} \right) + \left(\frac{EUP_{0,i,eu}}{EUP_{t,i,eu}} \right) \right]}{2}$$

Where:

- EUP – EUMOFA import/export price
- m – Member state
- eu - EU

Where species are not covered by the EUMOFA database a fish price flexibility is used. Fish price flexibilities (the inverse of a price elasticity) tend to follow an inverse demand model with a decrease in supply leading to an increase in price. The reference rates for a species' price flexibility largely come from academic literature and those used in other bio-economic models.

Where price flexibility is required:

$$P_{t,i,j} = P_{0,i,j} * \frac{\sum Q_{t,i,j}^e}{\sum Q_{0,i,j}^e}$$

Where:

- e - Price flexibility

Changes in the quantity of landings in a MSY scenario occur over a longer period where market adjustments would be expected. With no estimates of price flexibilities over a longer period the short-term price flexibilities are adjusted down by a factor of four.

Prices at MSY take the following form:

$$P_{t,i,j} = P_{0,i,j} * \frac{\sum Q_{t,i,j}^{e/4}}{\sum Q_{0,i,j}^{e/4}}$$

Total Cost

$$TC_{t,j} = EC_{t,j} + OVC_{t,j} + RC_{t,j} + NVC_{t,j} + LC_{t,j} + D_{t,j} + O_{t,j}$$

Where:

- TC – Total costs
- EC – Energy costs
- OVC – Other variable costs
- RC – Repair costs
- NVC – Non-variable costs
- LC – Labour costs
- D – Depreciation

- O – Opportunity costs

Energy costs

$$EC_{t,j} = EC_{0,j} * A_{t,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Where:

- A – Activity coefficient
- V – Vessel number

The MSY forecast uses EIA fuel price projections for 2020, although results are not sensitive to the year chosen as the projections are highly stable over time.

Production function and effort change

An activity variable is calculated and used in the model to adjust variable costs. These changes are calculated within a fleet segment, rather than between fleets.

This calculation takes the form of an inverse Cobb-Douglas production function to isolate for the effort change variable.

$$A_{t,j} = \sum (L_{0,i,j} P_{t,i,j} \theta_{t,i,j}) * \left(\frac{SSB_{t,i,j}}{SSB_{0,i,j}}\right)^{\gamma_{i,j}} * \left(\frac{Q_{t,i,j}}{Q_{0,i,j}}\right)^{\chi_{i,j}}$$

Where:

- θ - Effort driver
- SSB - Spawning stock biomass
- γ - Activity-stock flexibility rate (β/α)
- χ - Activity-landing flexibility rate ($1/\alpha$)
- α - catch-effort coefficient
- β - stock-catch coefficient

Other variable costs

$$OVC_{t,j} = OVC_{0,j} * A_{t,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Repair costs

$$RC_{t,j} = RC_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Non-variable costs

$$NVC_{t,j} = NVC_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Labour costs

$$LC_{t,j} = (TR_{t,j} - EC_{t,j} - OVC_{t,j}) * \left(\frac{LC_{0,j}}{TR_{0,j} - EC_{0,j} - OVC_{0,j}}\right)$$

Depreciation

$$D_{t,j} = D_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}}\right)$$

Opportunity costs

$$O_{t,j} = TAV_{t,j} * r_{t,m}$$

And tangible asset value:

$$TAV_{t,j} = TAV_{0,j} * \left(\frac{V_{t,j}}{V_{0,j}} \right)$$

And the real interest rate:

$$r_{t,m} = \frac{1 + i_{t,m}}{1 + \pi_{t,m}} - 1$$

Where:

- TAV – Tangible asset value
- r – Real interest rate
- i – Interest rate
- π – Inflation rate

Gross value added

$$GVA_{t,j} = TR_{t,j} - EC_{t,j} - OVC_{t,j} - RC_{t,j} - NVC_{t,j}$$

Where:

- GVA – Gross value added

Gross Profit/Gross cash flow

$$GCF_{t,j} = GVA_{t,j} - LC_{t,j}$$

Where:

- GCF – Gross cash flow

Net Profit

$$P_{t,j} = GCF_{t,j} - D_{t,j} - O_{t,j}$$

Where:

- P – Net profit

GVA/Revenue

$$(GVA/TR)_{t,j} = \frac{GVA_{t,j}}{TR_{t,j}}$$

Gross profit margin

$$GPM_{t,j} = \frac{GCF_{t,j}}{TR_{t,j}}$$

Where:

- GPM – Gross profit margin

Net profit margin

$$NPM_{t,j} = \frac{P_{t,j}}{TR_{t,j}}$$

Where:

- NPM – Net profit margin

GVA/FTE

$$(GVA/FTE)_{t,j} = \frac{GVA_{t,j}}{FTE_{t,j}}$$

Where:

- GVA/FTE – Gross value added per FTE fisher
- FTE – Full time equivalent (national) employees

On board employment

BEMEF uses an effort-based approach by calculating the amount of labour required. First the number of days at sea are calculated using data on landings and days at sea over the reference period. Then, the employment (FTE) required to work those days at sea is calculated using data over the reference period and a fixed relationship. Like many aspects of the model these relationships assume no changes to labour productivity or adjustments due to technological innovations. First landings ability (CPUE) in future periods is calculated as an adjustment to the landings ability from the three year base period using stock-landings and effort-landings flexibility rates in a Cobb-Douglas production function.

$$CPUE_{0,i,j} = \frac{L_{0,i,j}}{SD_{0,j}}$$

Then future catchability:

$$CPUE_{t,i,j} = CPUE_{0,i,j} * \left(\frac{L_{t,i,j}}{L_{0,i,j}} \right)^{1-\left(\frac{1}{\alpha_{i,j}}\right)} * \left(\frac{SSB_{t,i,j}}{SSB_{0,i,j}} \right)^{\frac{\beta_{i,j}}{\alpha_{i,j}}}$$

And future sea days:

$$SD_{t,i,j} = L_{t,i,j} CPUE_{t,i,j}$$

To calculate future jobs in fishing:

$$FTE_{t,j} = \frac{FTE_{0,j}}{SD_{0,j}} * SD_{t,i,j}$$

Where:

- CPUE - Catch per unit of effort
- α - catch-effort coefficient
- β - stock-catch coefficient
- SD - Sea days

Other MSY adjustments

As the long-term MSY scenario represents a future state no real-time data on vessel numbers is available, the adjustment factor taking the form $\left(\frac{V_{t,j}}{V_{0,j}} \right)$ is removed, making non-variable costs, repair costs and depreciation costs all fixed costs equal to those in the base period. Interest rates and inflation rates are set equivalent to those in the base period making opportunity costs fixed as well.

6.7.2 ECONOMIC INDICATORS PROJECTIONS IN 2014 AND 2015 for Mediterranean Member States using the HDA0.2 model

Modelling approach

HDA0.2 is a tool aimed to produce projections on socio-economic indicators by fleet segment. The methodological approach used in HDA0.2 is derived from the economic module of the BEMTOOL model. BEMTOOL is a bio-economic model specifically designed for Mediterranean fisheries. BEMTOOL has been developed within a study funded by DG MARE of the European Commission with the main objective to make available a model enough flexible to accommodate the different features of Mediterranean fisheries. Even though BEMTOOL is a flexible model, it requires both biological and economic data to be used. As the data set provided for the STECF EWG 15-07 does not include biological data, the use of this model is not feasible.

The HDA0.2 modelling approach is based on a number of functional relationships among variables where parameters are estimated on the basis of the last available data. Projections on 2014 and 2015 have been performed by MS for each fleet segment. DCR data on transversal variables are available for 2014 and not available for 2015, while DCR data on economic variables are not available for 2014 and 2015. Not available data for transversal and economic variables are estimated by using the HDA0.2 model equations described below. Projections depend on a number of assumptions and inputs to be defined by MS level and/or fleet segment level.

Two methodological assumptions are requested to be specified for using the model:

- selection of a measure for fishing effort;
- selection of a method to estimate labour cost.

Fishing effort is used in the model to estimate a number of parameters for projections. The model user can select among days at sea, GT times average days at sea and KW times average days at sea.

The labour cost can be estimated assuming crew share, fixed salary or a combination of both as remuneration type. The model user is requested to specify for each fleet segment the percentage of fleet using the crew share as remuneration type; the remaining part of the fleet is assumed to pay a fixed salary.

In addition to the methodological assumptions, the model user is requested to input data for each of the model drivers listed below:

- number of vessels by fleet segment in 2015;
- changes in the average days at sea by fleet segment from 2014 to 2015;
- changes in total landings per unit of effort by fleet segment from 2014 to 2015;
- changes in the average price of total landings by fleet segment from 2014 to 2015;
- values of fuel price in 2014 and 2015;
- values of interest rate and inflation rate in 2014 and 2015.

The number of vessels in 2015 can be derived from the last available MS fleet (fleet register or other sources). Additional information can come from management plans aimed to reduce the fleet. When no information on the 2015 fleet is available, this can be assumed to be equal to that of 2014.

The change in the average days at sea from 2014 to 2015 can be derived from information on what is occurring in the first part of 2015 or from clear trends in data (the model provide an estimation of the likely value for each fleet segment in 2015 based on the trend estimated on the last available data). Additional information can come from management plans aimed to reduce days at sea. When no information on changes in average days at sea is available, an alternative can be to assume no change from 2014 to 2015.

The change in total landings per unit of effort from 2014 to 2015 can be derived from information on what is occurring in the first part of 2015 or from clear trends in data. Additional information can come from specific studies or reports on the status of stocks. When no information on changes in total landings per unit of effort is available, this variable can be set equal to the value of 2014.

The change in average prices from 2014 to 2015 can be derived from information on what is occurring in the first part of 2015 or from clear trends in the data. In these cases, the model user can input a percentage variation for each fleet segment. An alternative option provided by the model consists in using an elasticity function to estimate prices in 2015. This option requires the input of an elasticity coefficient. When no information on changes in average prices is available, this variable can be set equal to the value of 2014 (i.e. percentage variation equal to zero).

The last two drivers are fuel price and interest and inflation rates. Both of them can be obtained through official statistics for 2014 and as an average of monthly data for the first part of 2015. The fuel price is used by the model to estimate the energy costs, while interest and inflation rates are used to estimate the opportunity cost of capital.

On the basis of the information reported above, the model provides projections for 2014 and 2015 by fleet segment for all the variables included in its logical-conceptual pattern. The model produces graphs for a subgroup of variables and indicators, which allow to compare the three periods: 2011-2013, 2014 and 2015. The subgroup of variables reported in the model graphs are:

- Landings;
- Revenues;
- Total cost;
- GVA;
- Gross profit;
- Net profit;
- GVA/FTE;
- GVA/Revenues;
- Gross profit margin;
- Net profit margin.

Model HDA0.2 equations

The equations described below are used in HDA0.2 to produce projections on 2014 and 2015. Projections on 2014 regard only economic data, while transversal data are assumed to be available. Projections on 2015 regard both transversal and economic data.

The number of vessels in 2015 is an input by the model user. Gross tonnage and engine power, where not available, are estimated as a linear function of the number of vessels as follows:

$$GT_t = gt_t N_t,$$

$$KW_t = kw_t N_t,$$

where gt and kw are coefficients estimated on the last year of available data (generally 2014).

Average days at sea by fleet segment in 2015 is an input to the model. Given the average days at sea and the number of vessels, the total number of days at sea is estimated by the model.

Three different options are available for the model user to calculate fishing effort:

- 1 Days at sea;
- 2 $GT \times$ average days at sea;
- 3 $KW \times$ average days at sea.

Total landings (L) in 2015 by fleet segment are estimated as a linear function of fishing effort (E) with two coefficients: a coefficient representing the total landings per unit of effort (LPUE) estimated on the last year of available data (generally 2014), and a correction coefficient (cc) allowing the user to input a percentage variation in the LPUE from 2014 to 2015:

$$L_t = (cc * LPUE_{t-1}) E_t.$$

The average price of landings by fleet segment is calculated as a ratio between landings value and landings weight for the period in which data are available. In 2015, this variable can be estimated through an elasticity function or a percentage variation respect to the previous year. When the elasticity function is selected, the model user is requested to input the elasticity coefficients for each fleet segment and the model estimates the average prices through the following equation:

$$p_t = p_{t-1} \left(\frac{L_t}{L_{t-1}} \right)^\epsilon.$$

When the percentage variation is selected, the model user is requested to input this variation for each fleet segment, and average prices are estimated through the following equation:

$$p_t = pv * p_{t-1},$$

where pv is the price variation.

Total value of landings in 2015 is estimated as the product between total landings and average price.

$$R_t = L_t p_t.$$

Other income in 2014 and 2015 are estimated as a linear function of landings value in the same years. The coefficient (oi) is estimated on the last year of available data (generally 2013).

$$OI_t = oi * R_t.$$

Total income (TI) is the sum of landings value (R) and other income (OI).

From a cost perspective, variable and fixed costs, labour and capital costs are included in the model. Variable costs are divided in energy cost and other variable costs, fixed costs are divided in repair cost and non-variable costs. Capital costs are divided in depreciation and opportunity costs of capital.

Energy costs (EC) are based on energy consumption (En), which is estimated as a linear function of fishing effort in 2014 and 2015. The coefficient (en) is estimated on the last year of available data (generally 2013). Energy costs in 2014 and 2015 are calculated by multiplying energy consumption by the average fuel price (Fp) registered in 2014 and in the first months of 2015:

$$EC_t = En_t Fp_t,$$

$$En_t = en * E_t.$$

Other variable costs (OVC) are estimated as a linear function of fishing effort in 2014 and 2015. The coefficient (ovc) is estimated on the last year of available data (generally 2013).

$$OVC_t = ovc * E_t.$$

Both repair (RC) and non-variable costs (NVC) are estimated as linear functions of GT in 2014 and 2015. The coefficients (rc and nvc) are estimated on the last year of available data (generally 2013).

$$RC_t = rc * GT_t,$$

$$NVC_t = nvc * GT_t.$$

Labour costs are calculated by considering two different remuneration types for fishing employees, the share contract and the fixed salary. Under the share contract, labour costs (LC) are calculated as a percentage of the difference between revenues (R) and variable costs (VC), where VC is the sum of energy costs and other variable costs:

$$LC_t = cs(R_t - VC_t).$$

Under the fixed salary, labour costs are calculated as a linear function of the number of employees (EM):

$$LC_t = fs * EM_t.$$

In both equations, coefficients are estimated on the last year of available data (generally 2013). The model allows also the user to estimate labour costs by using a combination of the two remuneration types.

The total number of employees by fleet segment, when not available, is estimated in 2014 and 2015 as a linear function of the number of vessels, and the number of full time equivalent (FTE) as a linear function of the number of employees:

$$EM_t = em * N_t,$$

$$FTE_t = fte * EM_t.$$

Regarding capital costs, both depreciation (D) and capital value (CV) are estimated as linear functions of GT in 2014 and 2015. The coefficients (d and cv) are estimated on the last year of available data (generally 2013). The opportunity costs (O) in 2014 and 2015 are calculated by multiplying capital value by the interest rates (r) deflated by the inflation rate (i) registered in 2014 and in the first months of 2015:

$$D_t = d * GT_t,$$

$$CV_t = cv * GT_t,$$

$$O_t = ((1+r)/(1+i) - 1) * CV_t.$$

The gross value added (GVA) is calculated as a difference between the total income and the sum of variable and fixed costs, which include energy costs, other variable costs, repair costs and non-variable costs:

$$GVA_t = TI_t - EC_t - OVC_t - RC_t - NVC_t.$$

The gross profit (GP) is calculated by the difference between the gross value added and the labour costs:

$$GP_t = GVA_t - LC_t.$$

The net profit (NP) is calculated as a difference between the gross profit and the sum of depreciation and opportunity costs:

$$NP_t = GP_t - D_t - O_t.$$

Annex tables – MSY 2015 and Long-term MSY by Species

Species	Quantity (t)	Quantity (t)	Quantity (t)	Quantity (t)	Value (€)	Value (€)	Value (€)	Value (€)
	2011-2013 Average	2014	2015	Long-Term MSY	2011-2013 Average	2014	2015	Long-Term MSY
ANE	30,246	25,878	32,156	29,842	52,661,315	33,752,907	59,384,880	52,243,407
ANF	57,237	58,890	61,686	62,187	246,401,861	214,314,602	262,322,121	266,602,317
COD	174,813	188,002	167,619	373,740	317,589,707	288,958,985	304,543,971	534,457,407
DAB	18,434	18,434	18,434	18,434	14,112,892	12,710,911	16,172,734	14,112,892
HAD	57,559	52,100	54,892	47,994	77,829,387	89,366,560	98,341,904	65,936,884
HER	671,912	782,778	817,611	920,920	272,106,950	259,778,063	291,187,855	367,116,195
HKE	67,484	98,112	104,675	93,351	238,084,602	382,417,205	375,608,839	323,777,923
JAX	252,031	196,890	168,754	323,209	123,700,116	93,337,715	86,785,441	154,737,677
LEM	6,391	6,391	6,391	6,391	24,134,528	25,035,072	23,695,211	24,134,528
LEZ	25,873	27,515	26,690	21,603	92,809,619	91,466,683	110,495,043	78,194,783
MAC	325,567	613,317	521,689	767,584	328,052,295	525,672,361	422,431,862	740,975,973
NEP	68,831	61,981	64,183	69,446	400,669,999	317,363,617	387,050,231	403,890,511
NOP	55,833	106,250	128,000	73,253	14,348,508	11,734,830	32,494,088	18,571,399
PLE	101,687	127,806	143,188	140,405	139,411,922	161,701,322	198,899,929	189,413,557
POL	15,887	15,887	15,887	15,887	47,692,980	31,484,618	48,685,700	47,692,980
POK	57,243	54,068	47,337	80,271	70,399,682	63,753,282	65,154,903	97,064,919
PRA	18,784	12,767	11,474	18,784	134,158,860	121,117,787	80,704,473	134,158,860
SAL*	704	479	436	704	3,202,920	1,628,608	2,127,490	3,202,920
SAN	228,741	207,219	207,219	614,680	60,352,808	34,947,229	54,008,684	154,360,685
SOL	28,832	24,362	22,723	36,480	309,572,323	225,357,700	249,894,530	365,642,449
SPR	455,709	410,913	467,515	319,636	115,614,795	102,965,484	102,176,072	82,543,638
SRX	22,281	17,961	17,961	22,281	24,594,468	36,246,472	34,949,653	24,594,468
TUR	4,642	4,642	4,642	4,487	43,065,621	45,414,588	60,622,897	41,699,985
WHB	72,361	218,348	231,482	198,946	55,416,460	55,371,026	135,055,460	141,229,365
WHG	40,220	40,669	35,541	36,384	56,540,659	52,852,540	48,293,805	51,533,799
Total	2,859,303	3,371,659	3,378,185	4,296,898	3,262,525,278	3,278,750,168	3,551,087,776	4,377,889,520
*salmon TAC converted from number to weight								

Species	Area	Quantity (t)	Quantity (t)	Quantity (t)	Quantity (t)	Value (€)	Value (€)	Value (€)	Value (€)
		2011-2013 A	2014	2015	Long-Term MSY	2011-2013 Average	2014	2015	Long-Term MSY
ANE	ANE (VIII)	22,000	17,100	22,500	21,596	38,304,204	22,303,683	41,552,426	37,807,406
ANE	ANE (IX, X, CECAF 34.1.1)	8,246	8,778	9,656	8,246	14,357,112	11,449,224	17,832,454	14,436,001
ANF	ANF (IIa, IV)	9,169	7,833	9,390	9,169	39,471,996	28,506,135	39,931,341	39,308,642
ANF	ANF (IV (Norwegian waters))	1,500	1,500	1,500	1,500	6,457,410	5,458,854	6,378,809	6,430,686
ANF	ANF (Vb, VI, XII, XIV)	5,188	4,432	5,313	5,188	22,332,595	16,129,094	22,593,740	22,240,172
ANF	ANF (VII)	30,704	33,516	33,516	32,000	132,180,318	121,972,631	142,528,097	137,187,976
ANF	ANF (VIIIabde)	8,227	8,980	8,980	8,227	35,418,178	32,680,338	38,187,800	35,271,600
ANF	ANF (VIIIc, IX, X, CECAF 34.1.1)	2,449	2,629	2,987	6,103	10,541,364	9,567,551	12,702,334	26,163,241
COD	COD (I, IIb)	30,311	36,908	33,176	17,171	55,066,485	56,727,579	60,276,883	24,554,396
COD	COD (I (Norwegian waters), II (Norwegian waters))	16,802	20,524	20,524	10,622	30,525,407	31,545,378	37,289,690	15,190,331
COD	COD (IIa, IIIa (exc. Skagerrak and Kattegat), IV)	22,076	23,073	24,227	74,004	40,105,662	35,463,190	44,017,604	105,827,978
COD	COD (Subdivisions 22-24)	20,048	17,037	15,900	36,877	36,421,321	26,185,861	28,888,426	52,735,003
COD	COD (Subdivisions 25-32)	62,791	65,934	51,429	172,000	114,074,076	101,340,527	93,440,433	245,964,164
COD	COD (Skagerrak)	3,677	3,843	4,035	14,368	6,680,139	5,906,689	7,331,120	20,545,898
COD	COD (Kattegat)	141	100	100	141	256,160	153,700	181,688	201,633
COD	COD (Norwegian waters south of 62° N)	382	382	382	1,406	693,993	587,134	694,049	2,010,406
COD	COD (Vib - EC and international waters of Vb to the west of 12°00 W and to XII and XIV)	77	74	74	77	139,283	113,738	134,449	109,635
COD	COD (Via - EC and international waters of Vb to the east of 12°00 W)	61	-	-	12,878	110,215	-	-	18,415,852
COD	COD (V (Faroeese waters))	-	950	950	2,389	-	1,460,150	1,726,038	3,415,899
COD	COD (VIIa)	390	228	182	8,445	709,133	350,436	330,673	12,076,554
COD	COD (VIIbc, VIIe-k, VIII, IX, X, CECAF 34.1.1)	8,094	6,848	5,072	8,688	14,704,663	10,525,373	9,215,276	12,424,384
COD	COD (VIId)	1,550	1,620	1,701	6,260	2,815,941	2,489,939	3,090,517	8,952,096
COD	COD (NAFO 1 (Greenland waters), XIV (Greenland waters))	2,067	2,200	2,000	2,067	3,754,588	3,381,399	3,633,764	2,955,383
COD	COD (NAFO 2J3KL)	-	-	-	-	-	-	-	-
COD	COD (NAFO 3M)	6,348	8,281	7,867	6,348	11,532,641	12,727,893	14,293,412	9,077,794
COD	COD (NAFO 3NO)	-	-	-	-	-	-	-	-
DAB	DAB (IIa, IV)	18,434	18,434	18,434	18,434	14,112,892	12,710,911	16,172,734	14,112,892
HAD	HAD (I (Norwegian waters), II (Norwegian waters))	1,394	1,200	1,200	6,418	1,884,481	2,058,347	2,149,863	8,817,997
HAD	HAD (IIa, IV)	30,424	32,079	33,947	17,157	41,138,120	55,024,758	60,817,835	23,570,772
HAD	HAD (IIla, subdivisions 22-32)	2,323	2,256	2,399	2,323	3,140,652	3,869,692	4,297,935	3,190,989
HAD	HAD (Norwegian waters south of 62° N)	707	707	707	429	955,988	1,212,709	1,266,628	588,711
HAD	HAD (Vb, VIa)	4,077	3,988	4,536	4,077	5,512,817	6,840,573	8,126,483	5,601,175
HAD	HAD (Vib, XII, XIV)	2,679	1,210	2,580	4,521	3,622,927	2,075,500	4,622,206	6,211,460
HAD	HAD (VIIa)	1,252	1,181	1,181	1,620	1,693,374	2,025,756	2,115,824	2,225,633
HAD	HAD (VIIb-k, VIII, IX, X, CECAF 34.1.1)	14,703	9,479	8,342	11,450	19,881,028	16,259,225	14,945,132	15,730,147
HER	HER (I, II)	52,948	27,244	13,697	22,278	21,442,568	9,041,380	4,878,114	8,880,842
HER	HER (IIa, IV, VIId)	16,280	13,085	15,744	23,436	6,592,843	4,342,478	5,607,143	9,342,683
HER	HER (IIIa)	37,389	39,915	37,188	47,212	15,141,576	13,246,465	13,244,311	18,820,703
HER	HER (By-catches in area IIIa)	6,659	6,659	6,659	9,913	2,696,722	2,209,901	2,371,568	3,951,532
HER	HER (Subdivisions 22-24)	20,861	19,754	22,220	38,176	8,448,299	6,555,698	7,913,536	15,218,355
HER	HER (Subdivisions 25-27, 28.2, 29, 32)	92,006	112,725	163,451	188,000	37,259,911	37,409,690	58,212,214	74,944,474
HER	HER (Subdivision 28.1)	32,517	30,720	38,780	32,632	13,168,677	10,194,949	13,811,293	13,008,447
HER	HER (Subdivisions 30-31)	105,456	137,800	158,470	85,689	42,707,082	45,731,251	56,438,257	34,159,133
HER	HER (EU waters and Norwegian waters in IV north of 53°30N)	215,088	282,022	267,197	283,376	87,105,067	93,593,751	95,160,805	112,965,113
HER	HER (Norwegian waters south of 62° N)	897	866	1,093	1,159	363,127	287,397	389,266	462,097
HER	HER (IVc, VIId)	41,222	51,704	48,986	51,952	16,693,707	17,158,843	17,446,106	20,710,221
HER	HER (Vb, VIa N, VIb)	24,045	28,067	22,690	79,260	9,737,602	9,314,507	8,080,924	31,596,273
HER	HER (VIa S, VIIbc)	3,406	3,676	-	25,014	1,379,342	1,219,943	-	9,971,601
HER	HER (VI Clyde)	-	-	-	-	-	-	-	-
HER	HER (VIIa)	5,008	5,251	4,854	11,931	2,028,245	1,742,633	1,728,727	4,756,184

Species	Area	Quantity (t)	Quantity (t)	Quantity (t)	Quantity (t)	Value (€)	Value (€)	Value (€)	Value (€)
		2011-2013 A	2014	2015	Long-Term MSY	2011-2013 Average	2014	2015	Long-Term MSY
HER	HER (Vilef)	963	930	930	963	390,125	308,636	331,215	384,024
HER	HER (VIghjk)	17,167	22,360	15,652	19,929	6,952,055	7,420,543	5,574,377	7,944,513
HKE	HKE (IIa, IV)	1,935	2,874	3,190	2,613	6,826,676	11,202,167	11,446,785	9,061,430
HKE	HKE (IIla, subdivisions 22-32)	1,661	2,466	2,738	2,242	5,860,005	9,611,881	9,824,858	7,777,491
HKE	HKE (Vb, VI, VII, XII, XIV)	30,900	45,896	50,944	41,722	109,015,142	178,891,675	182,804,076	144,710,190
HKE	HKE (VIIIabde)	20,609	30,610	33,977	27,827	72,708,513	119,310,488	121,920,817	96,514,175
HKE	HKE (VIIIc, IX, X, CECAF 34.1.1)	12,379	16,266	13,826	18,947	43,674,265	63,400,993	49,612,303	65,714,636
JAX	JAX (IIa, IVa, VI, VIIa-c, VIIe-k, VIIIabde, Vb, XII, XIV)	157,522	115,212	84,032	219,643	77,313,595	54,617,425	43,215,297	105,154,968
JAX	JAX (Ibvc, VIII)	39,328	28,170	11,650	39,328	19,302,836	13,354,276	5,991,268	18,828,609
JAX	JAX (VIIIc)	25,053	18,508	13,572	36,192	12,296,324	8,773,906	6,979,698	17,327,153
JAX	JAX (IX)	30,128	35,000	59,500	28,046	14,787,361	16,592,107	30,599,178	13,426,947
JAX	JAX (X, CECAF (Azores))	-	-	-	-	-	-	-	-
JAX	JAX (CECAF (Canary Islands))	-	-	-	-	-	-	-	-
JAX	JAX (CECAF (Madeira))	-	-	-	-	-	-	-	-
LEM	LEM (IIa, IV)	6,391	6,391	6,391	6,391	24,134,528	25,035,072	23,695,211	24,134,528
LEZ	LEZ (IIa, IV)	1,876	2,083	2,083	1,876	6,728,333	6,924,409	8,623,498	6,789,285
LEZ	LEZ (Vb, VI, XII, XIV)	3,387	4,074	4,129	3,387	12,149,740	13,542,986	17,093,819	12,259,806
LEZ	LEZ (VII)	17,690	17,385	17,385	14,477	63,457,013	57,792,051	71,972,886	52,402,011
LEZ	LEZ (VIIIabde)	1,746	1,716	1,716	1,429	6,263,196	5,704,410	7,104,140	5,172,381
LEZ	LEZ (VIIIc, IX, X, CECAF 34.1.1)	1,174	2,257	1,377	434	4,211,336	7,502,828	5,700,700	1,571,300
MAC	MAC (IIa, IIIa, IIIbc, subdivisions 22-32, IV)	21,359	42,304	36,338	56,589	21,522,385	36,258,645	29,424,291	54,627,179
MAC	MAC (IIa, Vb, VI, VII, VIIIabde, XII, XIV)	263,377	494,941	420,692	655,139	265,387,216	424,212,608	340,650,665	632,429,337
MAC	MAC (IIa (Norwegian waters), IVa (Norwegian waters))	10,703	19,437	16,521	25,728	10,785,040	16,659,401	13,377,696	24,836,139
MAC	MAC (VIIIc, IX, X, CECAF 34.1.1)	30,128	56,635	48,138	30,128	30,357,654	48,541,707	38,979,210	29,083,317
NEP	NEP (IIa, IV)	20,971	15,499	17,843	20,971	122,073,047	79,360,105	107,600,724	121,964,508
NEP	NEP (IIIa, subdivisions 22-32)	5,457	5,019	5,318	5,457	31,763,479	25,698,972	32,069,756	31,735,238
NEP	NEP (IV (Norwegian waters))	1,133	1,000	1,000	1,133	6,597,180	5,120,337	6,030,417	6,591,314
NEP	NEP (Vb, VI)	14,821	15,287	14,190	14,821	86,271,705	78,274,594	85,571,612	86,194,999
NEP	NEP (VII)	22,194	20,989	21,619	22,194	129,194,120	107,470,756	130,371,577	129,079,250
NEP	NEP (VIIIabde)	3,899	3,899	3,899	4,514	22,696,238	19,964,195	23,512,594	26,252,815
NEP	NEP (VIIIc)	82	67	60	82	479,266	343,063	361,825	478,840
NEP	NEP (IX, X, CECAF 34.1.1)	274	221	254	274	1,594,965	1,131,595	1,531,726	1,593,547
NOP	NOP (IIa, IIIa, IV)	55,833	106,250	128,000	73,253	14,348,508	11,734,830	32,494,088	18,571,399
NOP	NOP (IV (Norwegian waters))	-	-	-	-	-	-	-	-
PLE	PLE (IIa, IIIa (exc. Skagerrak and Kattegat), IV)	79,763	104,117	119,690	118,140	109,353,867	131,729,782	166,259,271	159,377,368
PLE	PLE (Subdivisions 22-32)	3,113	3,409	3,409	2,661	4,267,894	4,313,098	4,735,382	3,589,827
PLE	PLE (Skagerrak)	8,180	9,855	9,855	8,180	11,215,160	12,468,636	13,689,407	11,035,694
PLE	PLE (Kattegat)	1,925	2,160	2,626	1,925	2,639,614	2,732,852	3,647,730	2,597,374
PLE	PLE (Vb, VI, XII, XIV)	681	658	658	681	934,102	832,508	914,016	919,154
PLE	PLE (VIIa)	1,627	1,220	1,098	1,346	2,230,602	1,543,555	1,525,212	1,815,824
PLE	PLE (VIIbc)	77	74	74	77	105,109	93,625	102,792	103,427
PLE	PLE (VIIde)	5,376	5,322	4,787	5,916	7,369,989	6,733,443	6,649,537	7,980,991
PLE	PLE (VIIfg)	383	461	461	733	524,632	583,261	640,367	988,855
PLE	PLE (VIIhk)	167	135	135	350	229,412	170,803	187,526	472,168
PLE	PLE (VIII, IX, X, CECAF 34.1.1)	395	395	395	395	541,541	499,758	548,688	532,875
POL	POL (Vb, VI, XII, XIV)	397	397	397	397	1,191,799	786,769	1,216,606	1,191,799
POL	POL (VII)	13,495	13,495	13,495	13,495	40,512,165	26,744,188	41,355,418	40,512,165
POL	POL (VIIIabde)	1,482	1,482	1,482	1,482	4,448,983	2,937,005	4,541,588	4,448,983
POL	POL (VIIIc)	231	231	231	231	693,465	457,792	707,899	693,465
POL	POL (IX, X, CECAF 34.1.1)	282	282	282	282	846,568	558,863	864,189	846,568

Species	Area	Quantity (t)	Quantity (t)	Quantity (t)	Quantity (t)	Value (€)	Value (€)	Value (€)	Value (€)
		2011-2013 A	2014	2015	Long-Term MSY	2011-2013 Average	2014	2015	Long-Term MSY
POK	POK (I (Norwegian waters), II (Norwegian waters))	2,550	2,550	2,550	3,291	3,136,072	3,006,785	3,509,834	3,979,605
POK	POK (I, II)	-	-	-	-	-	-	-	-
POK	POK (IIa, IIIa, IIIbc, IV, subdivisions 22-32)	41,701	36,917	31,383	55,518	51,284,813	43,529,998	43,195,731	67,132,705
POK	POK (Norwegian waters south of 62° N)	880	880	880	3,274	1,082,252	1,037,636	1,211,237	3,959,235
POK	POK (Vb, VI, XII, XIV)	8,825	7,545	6,348	8,825	10,853,677	8,896,547	8,737,422	10,671,740
POK	POK (Vb (Faroeese waters))	-	3,000	3,000	6,075	-	3,537,394	4,129,216	7,346,535
POK	POK (VII, VIII, IX, X, CECAF 34.1.1)	3,287	3,176	3,176	3,287	4,042,868	3,744,922	4,371,464	3,975,098
PRA	PRA (IIa, IV)	3,238	2,446	3,270	3,238	23,126,405	23,204,677	23,000,142	23,126,405
PRA	PRA (IIIa)	3,926	3,551	4,074	3,926	28,042,611	33,687,574	28,655,223	28,042,611
PRA	PRA (Norwegian waters south of 62° N)	480	480	480	480	3,428,250	4,553,657	3,376,168	3,428,250
PRA	PRA (V (Greenland waters) XIV (Greenland waters))	6,600	2,650	1,650	6,600	47,138,441	25,139,981	11,605,576	47,138,441
PRA	PRA (NAFO 3L)	740	240	-	740	5,282,838	2,276,828	-	5,282,838
PRA	PRA (NAFO 1 (Greenland waters))	3,800	3,400	2,000	3,800	27,140,315	32,255,070	14,067,365	27,140,315
SAL	SAL (Subdivisions 22-31)	642	426	384	642	2,922,149	1,450,280	1,871,763	2,922,149
SAL	SAL (Subdivision 32)	62	52	52	62	280,771	178,327	255,726	280,771
SAN	SAN (IIa, IIIa, IV)	228,741	207,219	207,219	614,680	60,352,808	34,947,229	54,008,684	154,360,685
SOL	SOL (IIa, IV)	14,723	11,890	11,890	21,266	158,087,861	109,986,990	130,759,405	213,157,062
SOL	SOL (IIIa, Subdivisions 22-32)	670	353	205	759	7,193,946	3,265,383	2,254,473	7,607,564
SOL	SOL (Vb, VI, XII, XIV)	59	57	57	59	633,497	527,272	626,853	591,365
SOL	SOL (VIIa)	277	95	90	1,357	2,970,634	878,786	989,768	13,601,403
SOL	SOL (VIIbc)	43	42	42	43	465,280	388,516	461,892	434,336
SOL	SOL (VIIcd)	5,444	4,838	3,483	4,665	58,453,497	44,753,327	38,304,038	46,757,953
SOL	SOL (VIIe)	794	832	851	1,042	8,521,784	7,696,314	9,358,810	10,444,113
SOL	SOL (VIIfg)	1,134	1,001	851	1,197	12,172,443	9,259,628	9,358,810	11,997,700
SOL	SOL (VIIhk)	416	382	382	313	4,466,689	3,533,644	4,201,017	3,137,243
SOL	SOL (VIIlab)	4,200	3,800	3,800	4,706	45,096,379	35,151,435	41,790,222	47,168,902
SOL	SOL (VIIIcde, IX, X, CECAF 34.1.1)	1,072	1,072	1,072	1,072	11,510,314	9,916,405	11,789,242	10,744,807
SPR	SPR (IIa, IV)	150,975	135,000	218,000	141,563	38,302,772	33,827,940	47,644,212	36,557,452
SPR	SPR (IIIa)	44,893	30,784	30,784	44,893	11,389,587	7,713,773	6,727,887	11,593,366
SPR	SPR (Subdivisions 22-32)	254,660	239,979	213,581	128,000	64,608,168	60,133,298	46,678,433	33,055,038
SPR	SPR (VIIde)	5,180	5,150	5,150	5,180	1,314,268	1,290,473	1,125,540	1,337,782
SRX	SRX (IIa, IV)	1,302	1,256	1,256	1,302	1,437,556	2,534,690	2,444,004	1,437,556
SRX	SRX (IIIa)	56	47	47	56	61,815	94,849	91,456	61,815
SRX	SRX (VIab, VIIa-c, VIIe-k)	10,073	8,032	8,032	10,073	11,118,526	16,209,101	15,629,175	11,118,526
SRX	SRX (VIIcd)	857	798	798	857	946,351	1,610,416	1,552,799	946,351
SRX	SRX (VIII, IX)	4,221	3,420	3,420	4,221	4,658,905	6,901,783	6,654,853	4,658,905
SRX	SRX (NAFO 3LNO)	5,772	4,408	4,408	5,772	6,371,315	8,895,632	8,577,366	6,371,315
TUR	TUR (IIa, IV)	4,642	4,642	4,642	4,487	43,065,621	45,414,588	60,622,897	41,699,985
WHB	WHB (I, II, III, IV, V, VI, VII, VIIIabde, XII, XIV)	63,165	185,525	197,195	169,478	48,373,635	47,047,418	115,051,112	120,310,541
WHB	WHB (II (Norwegian waters), IV (Norwegian waters))	343	-	-	-	262,935	-	-	-
WHB	WHB (VIIIc, IX, X, CECAF 34.1.1)	8,853	30,823	32,287	27,749	6,779,891	7,816,427	18,837,472	19,698,605
WHB	WHB (Faroeese waters)	-	2,000	2,000	1,719	-	507,181	1,166,877	1,220,219
WHG	WHG (IIa, IV)	15,379	15,233	13,060	6,270	21,620,031	19,796,473	17,746,183	8,880,197
WHG	WHG (IIIa)	1,031	1,031	1,031	1,031	1,449,364	1,339,865	1,400,943	1,460,301
WHG	WHG (Norwegian waters south of 62° N)	190	190	190	190	267,099	246,920	258,176	269,115
WHG	WHG (Vb, VI, XII, XIV)	307	292	263	8,430	432,044	379,477	357,370	11,940,134
WHG	WHG (VIIa)	97	80	80	97	136,361	103,966	108,706	137,390
WHG	WHG (VIIbcdefghk)	20,040	20,668	17,742	17,191	28,172,393	26,859,679	24,108,176	24,349,613
WHG	WHG (VIII)	3,175	3,175	3,175	3,175	4,463,366	4,126,160	4,314,252	4,497,048
WHG	WHG (IX, X, CECAF 34.1.1)	-	-	-	-	-	-	-	-
Total	25 species	2,859,303	3,375,687	3,382,215	4,296,898	3,262,525,278	3,278,754,196	3,551,091,806	4,377,889,520

7. DCF DATA COVERAGE AND QUALITY – AER EXERCISE

Background

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 2015 data call for economic data on the EU fishing fleet for EU Member States was the seventh data call to be requested under the DCF. This year's fishing fleet economic data call was issued by DG MARE on the 4 February 2015 with a one month deadline (4 March 2014).

The 2015 data call requested transversal and economic data for the years 2008 to 2014. Capacity data was requested up to and including 2014, while employment and economic parameters were requested up to and including 2013. Most effort and all landings data were requested up to and including 2014, as well as, income from landings (non-mandatory) to allow for economic performance projections to be estimated at fleet segment and national level for 2014.

See <https://datacollection.jrc.ec.europa.eu> for all the economic and transversal variables to be submitted for the years 2008-2014, along with their uploading acronyms and corresponding aggregation levels. All the various definitions for variables, aggregation levels, gear types, length classes, DCF supra regions, FAO sub regions, species, sampling strategies and precision levels can be found by navigating through the data collection website.

Additionally, data held in the EU Fleet Register was used to complement the fleet capacity data (number of vessels, gross tonnage and engine power) for trend analysis as the data submitted under the DCF was not complete for the entire period considered.

<http://ec.europa.eu/fisheries/fleet/index.cfm>

QUALITY AND COVERAGE CHECKING PROCEDURES ON THE DATA SUBMITTED UNDER THE 2015 FLEET ECONOMIC DATA CALL

Although the quality and coverage of the fleet economic data reported under the DCF are a responsibility of the EU Member States (MS), JRC has undertaken quality and coverage checking procedures on the data submitted, some carried out during the data uploading phase and some afterwards. The quality and coverage of the data has also been checked by independent fisheries experts during the STECF EWG 15-03 meeting on the 2015 Annual Economic Report of the EU fishing fleet which took place at the JRC premises during the week 4 – 8 May 2015.

Fleet data submitted under the 2015 fleet economic data to be used for the present report have been checked in four subsequent steps. This section provides a synthetic description of each of them. More information of the quality and coverage checking procedures undertaken on DCF fleet data are available in the JRC technical report available at: <http://datacollection.jrc.ec.europa.eu/>

Step 1- Data have been checked before being uploaded and during the uploading procedure on the DCF database

Several data checks are already embedded in the excel templates which the MS are required to use for uploading data on their national fleets. In specific cells of these files, the data entry is restricted to certain records (e.g. acceptable codes, value types and acceptable ranges).

JRC produces also a second set of excel data templates which embed a Data Validation Tool (DVTool). This tool consists in a set of macros developed in Visual Basic for Applications (VBA) which allow the MS to detect possible errors in the data before its upload.

Furthermore, during the data uploading procedure, a number of automatic syntactic checks are carried out on the data before it is accepted by the DCF database hosted by JRC. Syntactic checks are carried out without any specific knowledge of what the data contains or its meaning. They tell if the data is present or not and in the correct format. These checks automatically reject data that do not conform to specific restrictions, such as ensuring textual data is validated against defined parameters lists (e.g. Species types and FAO code). In

addition, numeric data are checked to make sure they contain numbers and not strings. MS receive immediate feedback when attempting to upload their data submissions.

Step 2 - JRC experts have analysed the results of the data quality checks/analyses

Once the datasets with the fleet data are successfully uploaded by the MS, JRC produces many different analyses on the data submitted in order to facilitate the assessment of its quality and coverage. Some of these analyses are presented in Data Quality Analysis Reports produced using the programming language R; others are available in interactive online dashboards created using the software Tableau. The same software is used also for analyses not specifically related to data quality, i.e. analyses on the structure and economic performance of the EU Fleets and overviews of the uploading status of DCF fleet data.

All the analyses performed by JRC in Tableau are available in interactive online dashboards, which are refreshed every morning and are accessible (only after authentication), on the following link

<https://datacollection.jrc.ec.europa.eu/da/fleet/data-and-quality>

Besides developing the checks and analyses, JRC experts actively participate in the analysis of their results. All quality issues (e.g. inconsistencies, outliers and missing data) concerning the data submitted, identified through the analyses performed in R, in Tableau or with manual checks are listed by JRC in excel files, one for each MS, including the most relevant information concerning the problems identified (e.g. description of the problem, structural and economic Indicators affected and assessed impact on the analyses of the Annual Economic Report), together with comments and actions recommended by JRC to solve the issues.

Step 3 – The results of the data quality checks/analyses have been sent to the national correspondents

The excel files listing the data quality issues (and including JRC experts' comments and opinions on the action to undertake) are sent to the national correspondents, together with the Data Quality Analysis Reports (each national correspondent receives information only about the country he/she represents).

MS are requested to consider the potential anomalies listed in the excel file, amend and re-submit the data as necessary. They are also requested to go over the quality analyses performed in order to detect additional (if any) problems and add them to the list. Finally, they are asked to provide feedback (i.e. whether or not the problem has been resolved, which actions have been taken and possible comments) in designated columns of the excel file.

Step 4 – The quality and coverage of the data have been checked by the STECF Expert Working Groups

In addition to being analysed by JRC's experts, the quality and coverage of fleet data submitted under the DCF is also checked by independent fisheries experts during the STECF EWGs meetings. Data submitted under the 2015 fleet economic data call has been checked during the EWG meeting 15-03 which took place during the week 4 – 8 May 2015.

Data for each country has been analysed independently by two independent experts. At the beginning of the meeting, the experts have received the Data Quality Analysis Reports of the countries assigned to them and the excel files with the list of data issues for those MS, which included also for each specific issue comments by JRC and feedback sent by the MS. Furthermore, all experts have been given access to the tableau dashboards. This has allows them to visualise changes in the data whenever the MS have uploaded revised data during the meeting or submitted new templates. The comments provided by the experts have been added to the process and were then used by the meeting in plenum to decide on the exclusion of part of the data submitted from the analyses of the AERs, due to data coverage, quality issues or by other reasons.

Main data issues

In terms of the completeness of the MS data submissions, most countries submitted the majority of the parameters requested under the call. In many cases missing data relates to fleet segments with low vessel numbers for which data is hard to obtain.

This year Greece provided data but only for 2012 and 2013, and with substantial amount of missing data, in particular effort and landings. Croatia submitted DCF data for the second time, providing economic data for the years 2012 and 2013. Submission from France and Spain continue to be incomplete and some data quality issues remain for several other MS, such as Bulgaria, Cyprus and Malta.

In terms of data quality, inevitably some 'abnormal' estimates for various parameters were detected by JRC or the experts and in many cases rectified by the MS. However, some quality issues remain outstanding.

Furthermore, incomplete time series data due to either the non-submission of data, questionable data and/or new MS additions, make trend analysis at the EU level impossible without excluding the MS fleets that are incomplete. These discrepancies make an evaluation of the overall economic performance of the EU fishing fleet in 2013 not possible.

Under the DCF, MS provide transversal and economic data on their fleets at national level and by fleet segments (combination of main fishing technology and vessel length group at the supra-region level). For this report, national level datasets were used for the EU and MS level analyses while data submitted at the fleet segment level were used to analyse performance by fleet segment and fishing activity. While in theory both national level and fleet segment datasets submitted by MS should equate, this is not always the case and some discrepancies exist between the two. These discrepancies are mainly due to missing/incomplete datasets at the fleet segment level or the non-submission of data due to confidentiality issues.

Due to these and other data related issues, a complete overview of the EU fishing fleet for all reference years was not possible.

To mitigate data deficiencies, a status quo of the EU fleet in 2013 was provided considering only MS fleets for which reliable data was provided while trend analyses included only the MS that provided the necessary data over the entire period (2008-2013/14). The National Chapters present all the DCF data provided by MS (some questionable data has been highlighted).

The MS that were excluded from the trend analyses and the main reasons for their exclusion were:

Bulgaria: coverage and quality considered questionable, employment data unreliable

Croatia: excluded due to the fact that it is a new MS in EU and therefore able only to provide data on a shorter time frame than other MS (i.e. 2012-2014)

Cyprus: incomplete coverage and quality considered questionable; substantial amount of missing data over the entire period

Estonia: excluded from trend analysis at the fleet segment level due to incomplete/missing data on the small scale fleet

Ireland: excluded only from the trend analysis at the fleet segment due to missing data for under 10 m segments

France: missing data for essential parts of the data call, such as effort, landings and capital costs in 2008 and 2009

Greece: partial data available only for 2012 and 2013

Malta: coverage and quality considered questionable; methodology changes in 2010 makes time series questionable.

Spain: missing data for essential parts of the data call, such as effort and capital costs for most of the period.

For confidentiality reasons, MS may aggregate fleet segments into clusters to provide sensitive economic data. The regulation provides with an instruction on how clustering should be done if necessary and if MS clusters segments it has to define how it's done in the submitted data. When fleet segments are clustered to provide economic data, one result may be that some MS fleet segments appear to be missing but these have just been grouped together with other segments, becoming part of a cluster.

But in several cases, clustering may not be enough to guarantee confidentiality, and hence, parts of MS fleets are not covered at all, these include MS such as Germany and Lithuania. Other MS, such as Estonia and Latvia, simply do not provide any data on part of their fleet (high sea fleet).

Another result may be that the clustering of fleet segments with different characteristics, such as different vessel length groups or fishing gears, could bias results when assessing by type of fishing gear or activity, such as small-scale versus large-scale fleet. For example, a fleet segment that would otherwise be considered as small scale (i.e. vessel under 12 m using non-towed gears) may be clustered into a large-scale fleet segment (i.e. vessel under 12m using towed gears), and vice-versa. Hence, results at the fishing activity level should be considered as only indicative of each fishing type. Furthermore, although clustering of fleet segment should be applied consistently, as far as possible, over the period, this is not always the case, making time-series hard to follow.

8. List of Participants EWG 15-03 and 15-07

1 - Information on STECF members and invited experts' affiliations is displayed for information only. In some instances the details given below for STECF members may differ from that provided in COMMISSION DECISION of 27 October 2010 on the appointment of members of the STECF (2010/C 292/04) as some members' employment details may have changed or have been subject to organizational changes in their main place of employment. In any case, as outlined in Article 13 of the Commission Decision (2005/629/EU and 2010/74/EU) on STECF, Members of the STECF, invited experts, and JRC experts shall act independently of Member States or stakeholders. In the context of the STECF work, the committee members and other experts do not represent the institutions/bodies they are affiliated to in their daily jobs. STECF members and invited experts make declarations of commitment (yearly for STECF members) to act independently in the public interest of the European Union. STECF members and experts also declare at each meeting of the STECF and of its Expert Working Groups any specific interest which might be considered prejudicial to their independence in relation to specific items on the agenda. These declarations are displayed on the public meeting's website if experts explicitly authorized the JRC to do so in accordance with EU legislation on the protection of personnel data. For more information: <http://stecf.jrc.ec.europa.eu/adm-declarations>

STECF members:

Name	Address ¹	Tel.	Email
STECF members			
Abella, J. Alvaro (vice-chair)	ARPAT – AREA MARE Agenzia Regionale per la Protezione Ambientale della Toscana Articolazione Funzionale RIBM Risorse Ittiche e Biodiversità Marina Via Marradi 114, 57126 Livorno – Italia	Tel. 0039-0555-3206956	alvarojuan.abella@arpat.toscana.it
Andersen, Jesper Levring (vice-chair)	Department of Food and Resource Economics (IFRO) Section for Environment and Natural Resources University of Copenhagen Rolighedsvej 25 1958 Frederiksberg Denmark	Tel.dir.: +45 35 28 68 92	jla@ifro.ku.dk
Bailey, Nicholas	Fisheries Research Services Marine Laboratory, P.O Box 101 375 Victoria Road, Torry Aberdeen AB11 9DB UK	Tel: +44 (0)1224 876544 Direct: +44 (0)1224 295398 Fax: +44 (0)1224 295511	baileyn@marlab.ac.uk n.bailey@marlab.ac.uk
Bertignac, Michel	Laboratoire de Biologie Halieutique IFREMER Centre de Brest BP 70 - 29280 Plouzane, France	tel : +33 (0)2 98 22 45 25 - fax : +33 (0)2 98 22 46 53	michel.bertignac@ifremer.fr
Cardinale, Massimiliano	Föreningsgatan 45, 330 Lysekil, Sweden	Tel: +46 523 18750	massimiliano.cardinale@slu.se

Name	Address ¹	Tel.	Email
STECF members			
Curtis, Hazel	Sea Fish Industry Authority 18 Logie Mill Logie Green Road Edinburgh EH7 4HS	Tel: +44 (0)131 558 3331 Fax: +44 (0)131 558 1442	H_Curtis@seafish.co.uk
Delaney, Alyne	Innovative Fisheries Management, -an Aalborg University Research Centre, Postboks 104, 9850 Hirtshals, Denmark	Tel.: +45 9940 3694	ad@ifm.aau.dk
Daskalov, Georgi	Laboratory of Marine Ecology, Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences	Tel.: +359 52 646892	gmdaskalov@yahoo.co.uk
Döring, Ralf	Thünen Bundesforschungsinstitut, für Ländliche Räume, Wald und Fischerei, Institut für Seefischerei - AG Fischereiökonomie, Palmaille 9, D-22767 Hamburg, Germany	Tel.: 040 38905-185 Fax.: 040 38905-263	ralf.doering@ti.bund.de
Gascuel, Didier	AGROCAMPUS OUEST 65 Route de Saint Brieuc, bat.4 CS 84215, F-35042 RENNES Cedex France	Tel:+33(0)2.23.48.55.34 Fax: +33(0)2.23.48.55.35	Didier.Gascuel@agrocampus-ouest.fr
Graham, Norman (chair)	Marine Institute, Fisheries Science Services (FSS), Rinville, Oranmore, Co. Galway, Ireland	Tel: + 353(0) 91 87200	norman.graham@marine.ie
Garcia Rodriguez, Mariano	Instituto Español de Oceanografía, Servicios Centrales, Corazón de María 8, 28002, Madrid, Spain		Mariano.Garcia@md.ieo.es
Gustavsson, Tore Karl-Erik	Independent Consultant, Göteborg, Sweden		tore.gustavsson@hotmail.com
Jennings, Simon	CEFAS Lowestoft Laboratory, Pakefield Road, Lowestoft Suffolk, UK NR33 0HT	Tel.: +44 1502562244 Fax: +44 1502513865	simon.jennings@cefasc.co.uk
Kenny, Andrew	CEFAS Lowestoft Laboratory, Pakefield Road, Lowestoft Suffolk, UK NR33 0HT	Tel.: +44 1502562244 Fax: +44 1502513865	andrew.kenny@cefasc.co.uk

Name	Address ¹	Tel.	Email
STECF members			
Kraak, Sarah	Thünen-Institut für Ostseefischerei, Alter Hafen Süd 2, 18069 Rostock Germany	Tel. +49 3818116113	sarah.kraak@ti.bund.de
Kuikka, Sakari	University of Helsinki, Department of Environmental Sciences, P.O. Box 65 (Viikinkaari 1), FI-00014 University of Helsinki, FINLAND	Tel.: +358 50 3309233 Fax. +358-9-191 58754	skuikka@mappi.helsinki.fi
Martin, Paloma	CSIC Instituto de Ciencias del Mar PasseigMarítim, 37-49 08003 Barcelona Spain	Tel: 34.93.2309500 direct line : 34.93.2309552 Fax: 34.93.2309555	paloma@icm.csic.es
Malvarosa, Loretta	NISEA S.c.a.r.l.		malvarosa@nisea.eu
Murua, Hilario	AZTI - Tecnalia / Unidad de Investigación Marina, Herrera kaia portualdea z/g 20110 Pasaia (Gipuzkoa), Spain	Tel: 0034 667174433 Fax: 94 6572555	hmurua@azti.es
Nord, Jenny	Southeast Asian Fisheries Development Centre SEAFDEC		jenny@seafdec.org
Nowakowski, Piotr	Maritime University of Szczecin. – Faculty of Food Science and Fisheries, Department of Fishing Technique, Szczecin		npfgd@poczta.onet.pl
Prelezzo, Raul	AZTI - Tecnalia / Unidad de Investigación Marina Txatxarramendi Ugarteia z/g 48395 Sukarrieta (Bizkaia), Spain	Tel: 94 6029400 Ext: 406- Fax: 94 6870006	rprelezzo@suk.azti.es
Sala, Antonello	Fishing Technology Unit National Research Council (CNR) Institute of Marine Sciences (ISMAR) - Fisheries Section Largo Fiera della Pesca, 1 60125 Ancona - Italy	Tel: +39 071 2078841 Fax: +39 071 55313	a.sala@ismar.cnr.it
Scarcella, Giuseppe	Environmental Management Unit National Research Council (CNR) Institute of Marine Sciences (ISMAR) - Fisheries Section Largo Fiera della Pesca, 1 60125 Ancona - Italy	Tel: +39 071 2078846 Fax: +39 071 55313	g.scarcella@ismar.cnr.it

Name	Address ¹	Tel.	Email
STECF members			
Somarakis, Stylianos	Department of Biology University of Crete VassilikaVouton P.O. Box 2208 71409 Heraklion Crete Greece	Tel.: +30 2610 394065, +30 6936566764	somarak@biology.uoc.gr
Stransky, Christoph	Thünen Institute [TI-SF] Federal Research Institute for Rural Areas, Forestry and Fisheries, Institute of Sea Fisheries, Palmaille 9, D-22767 Hamburg, Germany	Tel. +49 40 38905-228 Fax: +49 40 38905-263	christoph.stransky@ti.bund.de
Theret, Francois	Scapêche 17 Bd Abbé Le Cam 56100 Lorient France		ftheret@comata.com
Ulrich, Clara	DTU Aqua, National Institute of Aquatic Resources, Technical University of Denmark, Charlottenlund Slot, JægersborgAllé 1, 2920 Charlottenlund, Denmark		cu@aqua.dtu.dk
Vanhee, Willy	ILVO - Institute for Agricultural and Fisheries Research Unit Animal Sciences - Fisheries Ankerstraat 1, B-8400 Oostende, Belgium	Tel 00-32-59-34-22-55 Fax 00-32-59-33-06-29	willy.vanhee@ilvo.vlaanderen.be
van Oostenbrugge, Hans	LandbouwEconomishInstituut- LEI, Fisheries Section, Burg. Patijnlaan 19 P.O.Box 29703 2502 LS The Hague The Netherlands	Tel:+31 (0)70 3358239 Fax: +31 (0)70 3615624	Hans.vanOostenbrugge@wur. NI

EWG-15-03 and 15-07 participants

Name	Address	Email / Telephone no.
INVITED EXPERTS		
Paolo ACCADIA	NISEA Società Cooperativa	accadia@nisea.eu
Edo AVDIC MRAVLJE	Fisheries research institute of Slovenia	edoavdic@gmail.com
Douglas BEARE	Globefish Consultancy Services	doug.beare@gmail.com
Jörg BERKENHAGEN	Thuenen Institute of Sea Fisheries	joerg.berkenhagen@ti.bund.de

Name	Address	Email / Telephone no.
Cecile BRIGAUDEAU	Des requins et de Hommes	cecile@desrequisetdeshommes.org
Griffin CARPENTER	New Economics Foundation	griffin.carpenter@neweconomics.org
Richard CURTIN	Bord Iascaigh Mhara	curtin@bim.ie
Irina DAVIDJUKA	Institute of Food Safety- Animal Health and Environment - BIOR	irina.davidjuka@bior.lv
José Luis FERNÁNDEZ SÁNCHEZ	UNIVERSITY OF CANTABRIA	fernandezjl@unican.es
Helena Maria GALRITO	Direção-Geral de Recursos Naturais- Segurança e Serviços Marítimos	galrito@dgrm.mam.gov.pt
Jordi GUILLEN GARCIA	Institut de Ciències del Mar (Marine Sciences Institute)	jordiguillen@hotmail.com
Tore GUSTAVSSON	private consultant	tore_gustavsson@hotmail.com
Emmet JACKSON	Bord Iascaigh Mhara	jackson@bim.ie
EDVARDAS KAZLAUSKAS	Agricultural Information and Rural Business Center	edvardas.kazlauskas@vic.lt
Vedran KOLARIĆ	Ministry of Agriculture of Republic of Croatia	vedran.kolaric@mps.hr
bernard KORMAN	MEDDE / DPMA / BSPA	bernard.korman@developpement-durable.gouv.fr
Emil KUZEBSKI	Morski Instytut Rybacki	emil@mir.gdynia.pl
Janek LEES	Estonian Marine Institute	janek.lees@ut.ee
Christos MARAVELIAS	Hellenic Centre for Marine Research	cmaravel@hcmr.gr
Sebastien METZ	Sakana Consultants	s_metz@sakana-consultants.com
Marin MIHANOVIC	Ministry of Agriculture of Republic of Croatia	marin.mihanovic@mps.hr
Carlos MOURA	DGRM	cmoura@dgrm.mam.gov.pt
Jenny NORD	Government agency	jenny.nord@havochvatten.se
Anton PAULRUD (CHAIR)	Swedish Agency for Marine and Water Management	Anton.Paulrud@gmail.com
Heidi POKKI	Natural Resources Institute Finland	heidi.pokki@luke.fi
Lars RAVENSBECK	Department of Food and Resource Economics (IFRO)- University of Copenhagen	lars@ifro.ku.dk
Philip RODGERS	Erinshore Economics Ltd	phil@erinecon.com
Rosaria Felicita SABATELLA	NISEA	r.sabatella@nisea.eu
Evelina Carmen SABATELLA	NISEA Fisheries and Aquaculture Economic Research	e.sabatella@nisea.eu
Arnaud SOUFFEZ	University Of Nantes	arnaud.souffez@univ-nantes.fr
Mike TURENHOUT	LEI wageningen UR	mike.turenhout@wur.nl

Name	Address	Email / Telephone no.
Irene TZOURAMANI	Agricultural Economics Research Institute	tzouramani@agreri.gr
Katrien VERLÉ	Instituut for Agricultural and Fisheries Research (ILVO)	katrien.verle@ilvo.vlaanderen.be
Jarno VIRTANEN	Natural Resources Institute Finland	jarno.virtanen@luke.fi
Ivana VUKOV	Ministry of Agriculture of Republic of Croatia - Directorate of Fisheries	ivana.vukov@mps.hr

JRC EXPERTS

Natacha CARVALHO	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (Varese) ITALY	natacha.carvalho@jrc.ec.europa.eu Tel.+390332786713
Franca CONTINI	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (VA) ITALY	franca.contini@jrc.ec.europa.eu Tel.+390332785646
Alessandra BORRELLO	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (VA) ITALY	alessandra.borrello@jrc.ec.europa.eu Tel.+390332785253
Arina MOTOVA	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (VA) ITALY	arina.motova@jrc.ec.europa.eu Tel.+390332785253

COMMISSION

Angel CALVO (DG MARE focalpoint)	DG Maritime Affairs and Fisheries Unit A3 - Structural Policy and Economic Analysis J-99 02/70 B-1049 Brussels BELGIUM	angel-andres.calvo-santos@ec.europa.eu Tel. +32 2 29 93630
Natacha CARVALHO (JRC focalpoint)	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (Varese) ITALY	natacha.carvalho@jrc.ec.europa.eu Tel.+390332786713
Aidas GLEMZA	Joint Research Centre (IPSC) Maritime Affairs Unit Via E. Fermi, 2749 21027 Ispra (VA) ITALY	Aidas.GLEMZA@ec.europa.eu Tel.+390332789455

9. List of Background Documents

Background documents are published on the EWG-15-03 meeting's web site on:

<http://stecf.jrc.ec.europa.eu/web/stecf/ewg15043>

Background documents are published on the EWG-15-05 meeting's web site on:

<http://stecf.jrc.ec.europa.eu/web/stecf/ewg1507>

List of background documents:

EWG-15-03 and 15-07 – Doc 1 - Declarations of invited and JRC experts (see also section 7 of this report – List of participants)

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EUR 27428 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen

Title: Scientific, Technical and Economic Committee for Fisheries. 2015 Annual Economic Report on the EU fishing fleet (STECF-15-07).

Authors:

EWG-15-03 and EWG 15-07 members: A. PAULRUD (CHAIR); P. ACCADIA; E. AVDIC; D. BEARE; J. BERKENHAGEN; A. BORRELLO; C. BRIGAUDEAU; G. CARPENTER; N. CARVALHO; F. CONTINI; R. CURTIN; I. DAVIDJUKA; J. L. FERNÁNDEZ SÁNCHEZ; H. M. GALRITO; J. GUILLEN GARCIA; T. GUSTAVSSON; E. JACKSON; E. KAZLAUSKAS; V. KOLARIĆ; B. KORMAN; E. KUZEBSKI; J. LEES; C. MARAVELIAS; S. METZ; M. MIHANOVIC; C. MOURA; A. MOTOVA, J. NORD; H. POKKI; L. RAVENSBECK; P. RODGERS; R. SABATELLA; E. SABATELLA; A. SOUFFEZ; M. TURENHOUT; I. TZOURAMANI; K. VERLÉ; J. VIRTANEN; I. VUKOV

STECF members: Graham, N., Abella, J. A., Andersen, J., Bailey, N., Bertignac, M., Cardinale, M., Curtis, H., Daskalov, G., Delaney, A., Döring, R., Garcia Rodriguez, M., Gascuel, D., Gustavsson, T., Jennings, S., Kenny, A., Kirkegaard, E., Kraak, S., Kuikka, S., Malvarosa, L., Martin, P., Murua, H., Nord, J., Nowakowski, P., Prellezo, R., Sala, A., Scarcella, G., Somarakis, S., Stransky, C., Theret, F., Ulrich, C., Vanhee, W. & Van Oostenbrugge, H.

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