



European
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JRC SCIENTIFIC AND POLICY REPORTS

Scientific, Technical and Economic Committee for Fisheries (STECF)

The Economic Performance of the EU Fish Processing Industry (STECF-14-21)

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This report was reviewed by the STECF during its 47th plenary meeting
held from 10 to 14 November 2014 in Brussels, Belgium

Report EUR 27029 EN

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

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JRC 93340

EUR 27029 EN

ISBN 978-92-79-44714-3

ISSN 1831-9424

doi:10.2788/968527

Luxembourg: Publications Office of the European Union, 2014

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How to cite this report:

Scientific, Technical and Economic Committee for Fisheries (STECF) – The Economic Performance Report on the EU Fish Processing (STECF-14-21). 2014. Publications Office of the European Union, Luxembourg, EUR 27029 EN, JRC 93340, 355 pp.

Printed in Italy

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SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF)

THE 2014 ECONOMIC REPORT ON THE FISH PROCESSING INDUSTRY (STECF-14-03)

THIS REPORT WAS REVIEWED DURING THE PLENARY MEETING HELD IN BRUSSELS, BELGIUM, 10-14 NOVEMBER 2014

Background

Following the 2014 DCF call for economic data on the EU fish processing sector, EWG 14-15 was requested to analyse and comment on the economic performance of the EU and national fish processing sectors between 2008 and 2012.

This year's report, in addition to providing an overview of the data, presented a more focused analysis compared to the 2013 report due to using a common methodology as well as to the availability of a longer time series. (Data collection for the processing industry started only 2006 and then changed to the DCF 2008). For this year's report the EWG provided more analytical assessments notably on the drivers, trends and aspects of policy relevance.

Despite the data limitations the increased emphasis on analytical approaches is an improvement given the major drivers and issues affecting this sector. Experts were asked to analyse the sector i.e. by markets and trade determinants by main segments of processing activities, sourcing of raw material competitiveness, market prices and consumption, certification, innovation, links with the local fishing fleet and aquaculture sector, the role of European Fisheries Fund support, female/male employment generation, strengths, weaknesses, opportunities and threats. Experts' awareness of national examples and experiences provided valuable input to the analysis.

The two main objectives of the 2014 exercise were to increase qualitative interpretation of all data outputs and to increase the usefulness of the report for DG MARE's fisheries policy development as well as for member states and the industry. At this point in time, this is limited primarily by the lack of specific enough data (e.g. regional importance of the sector and employment, link between raw material – imported or from the EU – linking fishing fleets, aquaculture and fish processing) required to make the necessary analysis.

1. For this the quality of data remains essential: Data quality checks and data validation tools were applied by the JRC. Experts received the data tables for the national and regional analyses on the first day of the meeting, already validated where possible. 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 were requested to check for further errors and report on these whilst carrying out the various tasks.
1. The 2014 report on the economic performance of the EU fish processing sector followed a more analytical approach and contained qualitative information and analysis on the drivers and trends in the fish processing performance and other aspects of policy relevance based largely on the scientists' expert knowledge.

The 2014 report on the economic performance of the EU fish processing sector included the following sections:

1. A summary containing key findings.
2. EU fish processing sector economic overview, including drivers and main trends based on expert knowledge. Specific sections on female/male employment and average salaries, economic

performance contrasting SMEs and non-SMEs (when data is available) and productivity/employee at EU level as well as a brief summary for each national chapter were mandatory.

2. National chapters on the economic performance of the fish processing sector providing:
 1. National fish processing sector overview
 - Recent developments
 - Female/male Employment and average salaries
 - Performance (contrasting SMEs and non-SMEs)
 - Economic indicators
 2. Description of trends and drivers for change based on expert knowledge.
 3. Outlook
 4. Data Coverage and quality
 3. Investigate the medium-/long-term outlook for the investment situation in the industry, on the base of the estimation of the indicator "Future Expectations of the Industry". Using this indicator, expert knowledge can be used to compare the results for different countries and to draw some observations and conclusions about the structural developments within the processing industry. See STECF plenary report (24-28 March 2014, Brussels)

Request to the STECF

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

Introduction

The report is the fifth report of its kind and provides a comprehensive overview of the latest information available on the structure, social, economic and competitive performance of the fish processing industry at the national and EU levels. The Expert Working Group was convened in Ispra, Italy 20-24 October 2014.

The key findings of the report are:

- In 2012, the fish processing sector in the EU comprised approximately 3,500 enterprises with fish processing as their main activity,
- Accounting for a total income around €27.9 billion (98% of this is turnover)
- More than €6.4 billion in Gross Added Value (GVA), and
- Employed around 120 thousand persons within the EU of which 55% are female

Observations of the STECF

STECF observes that EWG 14-15 was able to address all TORs and also answered an additional request regarding the future structure of the fish processing report.

STECF also observes that the data coverage and quality improved relative to the previous report from 2013. However, due to the lack of specific expertise from some countries, a few national chapters include only a description of the data, while a description of major drivers and trends for development was not included.

STECF notes that 17 countries delivered data at a segment level for the first time. The data was reported in the national chapters and is useful for identifying differences between smaller and larger companies.

STECF observes that the 'Future Expectation Indicator' (FEI) has been provided in a dedicated section of the EWG 14-15 report and is used to infer on the propensity to invest in the sector. The FEI is calculated as net investment minus depreciation and then divided by the total asset value. For Member States that have submitted sufficient and reliable data, the trends in the indicator can be used to monitor expectations of the producers concerning future profit opportunities.

STECF observes that the current uncertainty related to the access to Russian consumers has not currently been identified by the EWG 14-15 as a major concern for the processing industry, except for a few member states

(Estonia, Latvia and Portugal). However, it is most likely that it may have an even stronger impact on the processing industry, if the reduced trade continues for a long time period, and if no new markets are identified instead.

STECF observes that the landing obligation is not considered in the report which may result in increased supplies to the processing industry following its introduction.

STECF observes that many companies combine both fish trading and fish processing activities.

Because companies are classified as processing in cases where more than 50% of their total revenue comes from this activity, observed developments in the processing sector (e.g. number of companies and investments), might be due to changes in the fish trade rather than real developments in the processing activities themselves.

In the current report, some analyses on import and export of sea food products are included.

Conclusions of the STECF

STECF concludes that it is possible and useful to apply the 'Future Expectation Indicator', but that the analysis must be based on reliable data and a time series covering at least three years.

Based on the EWG 14-15 report STECF concludes that there are two options for the future reports on the status of the fish processing industry:

1. Have the report continue as a part of the STECF work program either by:
 - a. continuing with the current report and data with limited relevance in relation to the CFP, but relevant for other needs (e.g. regional analysis); or
 - b. expanding the current report by including data on raw material and trade, thus making it possible to analyse the entire value chain (from raw material to the consumer) including data on market development; or
2. Have the report prepared by DG MARE outside the STECF work program

STECF considers that the analysis based on the 'future expectations of the industry' indicator should be included in future reports about the processing industry. STECF observes that there are only a limited number of countries that expect a substantial growth in the sector despite the general desire by MS to expand production.

EXPERT WORKING GROUP EWG-14-15 REPORT

REPORT TO THE STECF

**ECONOMIC DATA COLLECTED FOR THE FISH
PROCESSING INDUSTRY
(EWG-14-15)**

Ispra, Italy, 20-24 October 2014

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

EWG 14-15 Observations

The EWG 14-15 was able to address all TOR and also to answer an additional request regarding the future structure of the fish processing report.

The data coverage and quality improved compared to the last report 2013. However, due to the lack of specific expertise on some countries a few national chapters include only a description of the data which was delivered instead of also describing major drivers and trends for development.

The EWG notes that 17 countries delivered data on the segment level. These countries used funding for the collection of the data and were, therefore, requested to deliver the data this time. The data was reported in the national chapters and is useful to see the differences between smaller and larger companies.

EWG 14-15 Suggestions and Conclusions

For the first time EWG 14-15 elaborated the 'future expectations of the industry' indicator. The EWG concludes that it would be possible and useful to include this indicator in the standard reporting of the fish processing sector in the MS.

The EWG 14-15 concludes that there are basically two options for the future reports on the status of the fish processing industry:

1. To report on the status of the fish processing sector from a more holistic perspective but outside STECF, or
2. going on with the current report by STECF:
 - a. If data on raw material is provided it may be possible to analyse the whole value chain (from raw material to the consumer) including data on market development;
 - b. If the raw material data will not be available some improvements of the report are possible, but the value of the report in terms of contributing significantly to policy advice on the CFP, is questionable but still very valuable for other purposes (like regional development).

1 EXECUTIVE SUMMARY

The 2014 Annual Economic Report (AER) on the European Union (EU) fish processing industry provides a comprehensive overview of the latest information available on the sector's structure and economic performance. The report has been produced by fisheries economists from the JRC and a group of economic experts convened under the Scientific, Technical and Economic Committee for Fisheries (STECF). The data used to compile the various analyses contained within the report were collected under the data collection framework (DCF)¹.

The report also contains an EU overview including a chapter on data coverage and quality followed by small summaries of each national chapter (TOR 2 and 4), national chapters with an elaboration of main drivers and trends and outlook for 2013/14 (TOR 3), and a special chapter on an indicator on the future expectations of the industry (TOR 5). Additionally, the EWG elaborated possible structures for the future report on the fish processing industry.

The key findings from the report are:

- In 2012 the fish processing sector in the EU comprised approximately 3,500 firms with fish processing as their main activity, 5% less than in 2008;
- Employment in the EU fish processing sector has decreased by 5% from 2008 to 2012, when the total number of people employed were around 120 thousand (55% of which were women), 86% of which employed in firms with less than 50 employees
- Despite the increase in production costs, the industry was still profitable, accounting for about €27.9 billion of income and more than €6.4 billion of Gross Added Value (GVA).

The fish processing industry revealed an increase in income (mainly turnover, 98%) in 2012 when compared to 2011. This could be an effect of the slightly improving economic situation in some EU Member States. After the start of the global financial crisis in 2008 many countries reported increases in several socioeconomic indicators in 2008-10, including turnover, net profit and employment. Additionally, and at a first glance at 2012/13, several experts reported a better situation than in 2010/11 and this is now reflected in the data for 2012. However, in other areas, the picture is less positive.

In several of the countries with a strong processing sector the industry is further outsourcing activities both to other EU Member States and outside of the EU. However, overall net investment decreased by 22% compared to 2011. While some countries like Germany and Spain report an increase in investments and activities, e.g. Denmark and Poland reported a decrease of activities even when some indicators have improved (like net profit).

Overall the sector suffers from very low margins, which continue to decrease owing essentially to increases in energy costs and availability of raw materials. These costs are difficult to pass on to the consumer given the retail sector's (mostly supermarkets and large retail chains) negotiation power. The fish processing sector in many Member States seem to be more efficient in reacting to increasing costs than in previous years. In several countries the expectations are positive indicating that total assets are higher than liabilities. However, as the indicator on the future expectation of the industry shows, the situation is very diverse between MS.

With regards to employment, the number of workers employed in the European fish processing industry in 2012 was 120,249. Excluding Croatia and Greece for which data was not available, the total number of people employed in the sector shrank continuously from 2008 to 2011 (by 5% over the entire period), while it increased slightly the year after (by 0.3%).

In contrast to the total number of employees, the total number of FTEs decreased from 2011 to 2012. This can be explained by an increase of the part-time employment (the higher the ratio of FTE to total employed, the higher the full-time employment) or an increased use of seasonal work.

¹ Council regulation (EC) No 199/2008 of 25th February 2008

In a special chapter the EWG elaborates on how the report can be improved in the future. The EWG discussed a broadening of scope and that the data may be reported by size and segments for all MS. STECF proposed the inclusion of two new indicators for regional importance which would also improve the current report by giving an indication where the industry is most vulnerable to e.g. changes in landings of local fleets or the general availability of fish. Additional information can be given on public spending and gender salaries.

The EWG were able to adequately address all TOR and also hold a discussion on the future structure of the fish processing report. There is still an urgent need for a study to elaborate the possibilities for collecting data on the raw material for the industry.

2 INTRODUCTION

This report, also known as the 2014 Annual Economic Report (AER) on the European Union (EU) Fish Processing Industry, is the fifth report of its kind produced for the sector and provides a comprehensive overview of the latest information available on the structure, social, economical and competitive performance of the fish processing industry at the national and EU level.

This publication includes:

- A short summary overview of the processing sector at the EU level using indicators from the national chapters and including a short summary for each national chapter
- A detailed economic and structural assessment of the processing sector for most of the Member States that are required to deliver data
- An overview of the coverage and quality of the data submitted by Member State
- A special chapter on the indicator 'future expectations of the industry' (FEI)
- A description of the possibilities for the future reports on the economic performance of the fish processing industry

The report has been produced by fisheries economists from DG JRC and a group of economic experts convened under the Scientific, Technical and Economic Committee for Fisheries (STECF). The group consisted of 27 independent experts. The list of experts can be found in section 8.

The economic data used in this publication for the years 2008 to 2012 were collected under the Data Collection Framework (DCF), Commission Regulation (EC) No. 665/2008 of the 14 July 2008 and Commission Decision (2008/949/EC).

Data presented in this report on the EU fish processing industry relate to enterprises whose main activity is defined according to the EUROSTAT definition under NACE Code 15.20: 'Processing and preserving of fish and fish products'.

The NACE Code 10.20 class includes:

- Preparation and preservation of fish, crustaceans and molluscs: freezing, deep-freezing, drying, smoking, salting, immersing in brine, canning, etc.
- Production of fish, crustacean and mollusc products: cooked fish, fish fillets, roes, caviar, caviar substitutes, etc.
- Production of prepared fish dishes
- Production of fish-meal for animal feed

This class also includes:

- Activities of vessels only engaged in the processing and preserving of fish

However, this class excludes:

- Activities of vessels engaged both in fishing, processing and preserving of fish
- Production of oils and fats from marine material
- Manufacture of fish soups

2.1 Terms of Reference for EWG-13-15

EWG 14-15 is requested to work on and comment, at least, on the following items:

TERMS OF REFERENCE

The 2014 report on the economic performance of the EU fish processing sector shall include, at least, the following sections:

1. A summary containing key findings.
2. EU fish processing sector economic overview including drivers and main trends based on expert knowledge. It must include specific sections on female/male employment and average salaries, economic performance contrasting small and large enterprises² (when data is available) and productivity/employee at EU level as well as a brief summary for each national chapter.
3. National chapters on the economic performance of the fish processing sector providing:
 - National fish processing sector overview
 - Recent developments
 - Female/male Employment and average salaries
 - Performance (contrasting small and large enterprises)
 - Economic indicators
 - Description of trends and drivers for change based on expert knowledge.
 - Outlook
4. Data Coverage and quality
5. Investigate the medium-/long-term outlook for the investment situation in the industry, on the base of the estimation of the indicator "Future Expectations of the Industry". Using this indicator, expert knowledge can be used to compare the results for different countries and to draw some observations and conclusions about the structural developments within the processing industry. See STECF plenary report (24-28 March 2014, Brussels).

² DCF data on fish processing firms do not allow to analyse the structure and economic performance of the SMEs, as defined by the EU law (EU recommendation 2003/361). DCF data are disaggregated according to the size of the firm, defined only in terms of number of employees. On the other hand, the EU law identifies the small and medium-sized enterprises (SME) on the base of two main factors: number of employees and either turnover or balance sheet total.

3 EU OVERVIEW

KEY FINDINGS in 2012

Number of enterprises

- The total number of enterprises in the European fish processing industry was 3.454 in 2012, 54% of which having less than 10 employees, 31% with between 11 and 49 employees and only 15% with more than 50 employees, of which only 1% of enterprises have more than 250 employees
- The total number of enterprises decreased by 5% over the reporting period, although the number of firms employing 10 people or less decreased only by 2%.
- Italy possessed the largest fish processing industry in 2012 in terms of number of firms (16% of the total) and the United Kingdom in terms of people employed (16% of the total). Spain and United Kingdom followed in terms of number of firms (respectively 14% and 11% of the total), Spain and France in terms of employment (respectively 15% and 13% of the total).

Employment

- Total employment of the European fish processing industry amounted to 120,249 workers in 2012 (20% less than direct employment generated by the EU fleet in the same year) and the average annual wage was equal to €28,581 per FTE (almost 60% more than the average annual wage of the EU fisheries catching sector).
- Employment decreased 5% between 2008 and 2012¹ while the average wage increased by 16%. Over the same period, labour productivity increased by 23%.
- Most of the EU employment in 2012 is to be found in enterprises with less than 10 employees (52%) and only 14% of it in companies with more than 50 employees.
- The share of employment by gender has remained stable over the years (45% male vs. 55% female employees, on average). In some countries, employment was spread almost evenly between men and women in 2012, both in terms of number of employees and FTEs. However, at country level, some significant decrease in female employment can be observed.

Income generated, production costs and profitability

- The amount of income generated by the European fish processing industry in 2012 increased by 2% compared to 2011 (€27.9 billion, of which 98% was made up of turnover). Compared to 2008 this increase was 11%.
- Total production costs also increased by 4% in 2012 (from €23.7, in 2011, to €24.5 billion).
- The major cost items are purchase of fish and other raw material for production (53-57% of income and 63-65% of costs in 2012), other operational costs (17-19% of income) and labour costs (10-11% of income), while energy expenses represent only 2-3% of income.
- Despite the increase in production costs, the EU fish processing sector was profitable in 2012 and generated €6.4 billion in Gross Value Added (GVA), €1.7 billion of earnings before interest² and tax and a net profit of €1.6 billion³.
- The UK fish processing industry generated the highest GVA in absolute terms in 2012 (27% of the EU total), followed by the Spanish (20%) and French (17%) industries.
- Among the countries for which net profit was calculated, the UK industry generated the highest net profit in absolute terms in 2012 (66% of the estimated total), followed by the French (14%) and Italian (6%) industries.

¹ Without data from Croatia and Greece, due to incomplete time series.

² Without data from Portugal and Spain due to missing data.

Economic performance

- The available data shows a generally unsatisfactory economic performance as a proportion of total income (also in relative terms) during the period 2008-2012. However they suggest an improvement in economic performance³ over the years. In 2012, GVA and net profit generated by the EU fish processing industry (considering the MS for which data was available) were respectively 17% and 83% higher than in 2008. Compared to 2011, both indicators fell significantly (-3% for GVA and -5% for net profit) but net profit much less than from 2010 to 2011.
- Performance indicators as a share of income fell from 2010 to 2011 and GVA also fell in 2012. GVA as a proportion of income declined from 24% to 23% in 2012, while net profit as a share of income was stable at 6%.
- Economic analysis of national data reveals a very differentiated economic performance by country. The Croatian, Cypriot, German and Greek fish processing industries, made net losses in 2012, while all the other MS generated a net profit, ranging from €3 million for Slovenia to more than €1 billion for the United Kingdom.
- For 2012 the situation shows overall a mixed picture with countries with decreasing and many other countries with increasing net profits and only a few countries reported overall losses.

Trends and drivers for change

- The high percentage of the costs of raw material (compared to the overall costs) is expected to increase in the future.
- These costs are not expected to be offset by the improvements in efficiency (e.g. via innovations).
- The high dependency on imports from foreign countries will continue to leave the companies very vulnerable to developments on the world markets.
- The increasing demand for certified fish may reduce the availability of raw material and/or increase its price even more.
- The improvement in fish stocks in Europe could potentially increase the volume of landings in the future but this could take some time. Until then, there continues to be potential vulnerability in the availability of raw materials. Given that the landing obligation will probably lead to higher landings, this could potentially improve the volume of raw material available to the fish processing industry. However what the value of these landings will be remains to be seen.
- The discard ban will probably lead to higher landings, which may improve the volume of raw material available to the fish processing industry, however what the value of these landings will be, remains to be seen.

Future expectation index⁴

- Data from 2008 shows a positive expectation of the industry regarding EU-wide figures, while 2009 obviously reflects the economic crises (less positive expectations). In 2009 and 2010 expectations of the producers already turned into more optimistic scenarios again.
- The distinct decrease of the 2012 EU overall FEI (still positive) may be caused by a hold-up phenomenon, meaning that companies are waiting with new investment until the new EU fisheries funds regulations are clear and in force.
- Trends diverge from country to country. This could however partially be explained by a relocation of the industry to another country. In Germany for example, stable negative expectations are clearly visible (resulting in disinvestment in the fish processing sector), at the same time investments are made by German companies into new facilities abroad. This disinvestment decreases the German FEI, but increases the FEI of the country into which the investment was made.

³ Gross value added, earnings before interest, operating costs cash flow and net profits

⁴ The Future Expectation Indicator (FEI) has been created in order to give information about the future expectations of the companies in the sector. It is the difference of net investment minus depreciation divided by total assets. Despite the low data coverage (60-80%), more trends could be identified at a EU-level.

This chapter provides an overview of the structure and economic performance of the European fish processing industry in 2012 and highlights some key trends between 2008 and 2012 based on data collected under the latest (2014) DCF data call for the fish processing industry. Results are provided at EU and Member State levels.

Not all countries who are obligated to deliver data on the fish processing industry included the collection of data on the segment level in their national programs (which implies the use of public money to collect them). Only those countries which did include the collection of disaggregated data in their national programs were requested to provide them. The segmentation followed the size categories by number of persons employed in the companies (i.e. with ≤ 10 , 11 – 49, 50 - 249 and ≥ 250 employees). The data is included in the NC for those countries who provided.

3.1 Data coverage and quality

The analysis of the economic performance of the fish processing sector in the EU is based on national statistics and data for the fish processing industry collected under the Data Collection Framework of the EU. The data call was issued on the 25 August 2014, and the deadline for the submission was the 25 September 2014.

Not all countries of the EU are requested to deliver data under the DCF. These include the five countries that do not have access to coastal waters (Austria, Czech Republic, Hungary, Luxembourg and Slovakia). Croatia delivered data for 2011 and 2012 as it joined the EU only in 2012. In the 2014 data call for the processing industry, the remaining 22 countries that are participating in the DCF framework were requested to provide data on enterprises that carry out fish processing as a main activity for 18 variables and for each year of the period 2008-2012. Furthermore, they were asked to provide numbers of enterprises and the turnover attributed to fish processing for enterprises that carry out fish processing but not as a main activity. Data on enterprises that carry out fish processing not as a main activity were also requested for each year of the period 2008-2012, even if, according to the legislation, the collection of these data is mandatory only in the first year of each programming period (i.e. 2009 and 2011)⁵.

The Member States were also requested to provide economic data by size categories. The segmentation followed the size categories by number of persons employed in the companies (i.e. ≤10, 11-49, 50-249 and ≥250 employees). The same request was made also in the last year's data call. However, differently from last year, the delivery of data disaggregated by size categories was mandatory for those MS which have to collect them according to their National Programs. The intent was to use disaggregated data in order to analyse and compare the profitability of the different categories of firms. The analysis of the economic performance of the various categories of fish processing firms was also part of the Terms of Reference for this Economic Report.

The data call was answered by 22 countries (Table 3.1.1) before the deadline and overall the delivery went very smoothly.

In terms of data quality, inevitably some 'abnormal' estimates for various parameters were detected by the JRC before the one-week meeting in Ispra, during the quality and coverage checking procedures undertaken on the data submitted, or by the experts during the data analysis phase. However, all Member States actively participated to the process of data quality improvement by promptly rectifying or explaining inconsistencies before and during the meetings. A few other corrections were necessary after their end.

Some of the main shortcomings of this EU level analysis include: (1) the exclusion of Belgium from the EU overview, due to questionable data quality. It is important to underline, however, that the inclusion of a National Chapter for Belgium in the present report represents a big improvement compared to last year, when Belgium was excluded from all analyses due to non-submission of data; (2) the exclusion of Greece and Croatia from all trend analyses at EU level, due to the non-availability of data for the years 2008, 2009 and 2010; (3) the exclusion of Portugal from the calculation of several economic indicators (i.e. Earnings before interest and tax, Net Profit, Return on Investment and Future Industry Expectations), due to the non-submission of data on depreciation of capital; (4) the exclusion of Spain from the calculation of several economic indicators (i.e. Earnings before interest and tax, Net Profit, Return on Investment, Future Industry Expectations, Capital Productivity and Financial Position) due to the non-submission of data on Depreciation of Capital and Total Value of Asset; (5) the underestimation of the percentage of unpaid labour and average salary⁶ from 2008 to 2011, due to the non availability of data on imputed value of unpaid labour for the UK and Poland; (6) the exclusion of the UK from the trend analysis on the Future Industry Expectations (see the special chapter for

⁵ Data collected in 2009 and 2011 refer, respectively to year 2009 and 2010



⁶ Average salary is calculated as (wages and salaries of the staff + unpaid labour)/Full Time Equivalents

details), due to the non-submission of 2008 data on Net Investments; (7) the underestimation of the EU total income, due to the non-submission of data on subsidies for some MS; (8) confidentiality issues for Cypriot and Maltese data, due to the small number of companies undertaking fish processing as main activity⁷.

Where relevant, other data related issues are highlighted throughout the text.

Table 3.1.1: Stages of data submission and resubmission

	First submission	Last submission	Reasons for resubmission
Belgium	2014-10-24	2014-10-30	Minor corrections
Bulgaria	2014-09-25	-	
Cyprus	2014-09-25	2014-10-10	Minor corrections
Germany	2014-09-24	2014-09-30	Minor corrections
Denmark	2014-09-05	2014-09-07	Minor corrections
Spain	2014-09-04	2014-10-01	Minor corrections
Estonia	2014-09-25	2014-10-21	Minor corrections
Finland	2014-09-16	2014-09-18	Minor corrections
France	2014-09-25	-	
United Kingdom	2014-09-24	2014-10-22	Missing templates, minor corrections
Greece	2014-09-24	2014-10-27	Minor corrections
Croatia	2014-09-23	2014-10-16	Minor corrections
Ireland	2014-08-26	2014-10-29	Minor corrections
Italy	2014-09-24	2014-10-09	Minor corrections
Lithuania	2014-09-19	2014-10-21	Minor corrections
Latvia	2014-09-17	-	
Malta	2014-09-18	2014-10-08	Minor corrections
Netherlands	2014-09-25	2014-10-27	Minor corrections
Poland	2014-09-24	2014-10-03	Minor corrections
Portugal	2014-09-09	2014-10-29	Minor corrections
Romania	2014-09-18	-	
Slovenia	2014-09-17	2014-10-10	Minor corrections
Sweden	2014-09-19	2014-10-03	Minor corrections

Legend  Submitted within the deadline
 Submitted after the deadline

⁷ In Cyprus, in 2012, there were 13 fish processing firms, of which only 4 had fish processing as a main activity.

Although the templates submitted by MS do not always contain all the variables requested, the data coverage improved in comparison to the last year's data call. During the 2014 data call, 92% of the socio-economic parameters to be collected for enterprises that carry out fish processing as main activity were provided, in average over the period 2008-2012, and 98% of them, if considering only year 2012. During last year's data call, the average share was 89% and the percentage for 2011 was 92%. This improvement results mostly from the availability of Belgian data, which were entirely missing last year.

An overview of the missing variable by MS and template is given in Table 3.1.2. The MS which are not shown in the table (i.e. Cyprus, Denmark, Finland, Ireland, Italy, Latvia, Lithuania, Malta, Romania and Slovenia) provided all the parameters requested for enterprises carrying out fish processing as a main activity, as well as those required for the firms processing fish as a secondary activity. The table provides also two coverage indicators (referring to the parameters required for the firms carrying out fish processing as a main activity and as a secondary activity, respectively), calculated as the share of the parameters provided over the total number of those requested and mandatory according to the legislation⁸.

Although, as mentioned before, for enterprises that carry out fish processing not as a main activity only the provision of 2008 and 2010 data is mandatory, the coverage was estimated also for the other years (Table 3.1.2).

As all MS submitted their data before the beginning of the meetings and the preparation of the economic report, the EWG could finalize most of the calculations at or shortly after the meeting and this improved the work process substantially.

Furthermore, thanks to the improved data coverage, the group could also make an evaluation of the overall economic performance of the European fish processing industry over the time series.

⁸ Commission Decision 2010/93/EU of 18 December 2009 (Annex II)

Table 3.1.2: Missing variables by MS and template

year	MAIN ACTIVITY																	NON MAIN ACTIVITY								
	Turnover	Subsidies	Other income	Total Income *	Wages and salaries of staff	Imputed value of unpaid labour	Energy costs	Purchase of fish and other raw material for production	Other operational costs	Depreciation of capital	Financial costs, net	Extraordinary costs, net	Total value of assets	Net investments	Debt	Male employees	Female employees	Total employees *	Male FTE *	Female FTE *	FTE	Number of enterprises	Coverage (main activity)	Number of enterprises (non main activities)	Turnover attributed to fish processing	Coverage (main activity)
BEL	2008		x			x										x	x		x	x			78%	x	x	0%
BEL	2009		x			x										x	x		x	x			78%	x	x	0%
BEL	2010	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0%	x	x	0%
BEL	2011																						100%	x	x	0%
BEL	2012																						100%	x	x	0%
BGR	2008																						100%	x	x	0%
BGR	2009																						100%	x	x	0%
BGR	2010																						100%	x	x	0%
BGR	2011																						100%	x	x	0%
BGR	2012																						100%	x	x	0%
DEU	2008																		x	x			100%	x	x	0%
DEU	2009																		x	x			100%			100%
DEU	2010																		x	x			100%	x	x	0%
DEU	2011																		x	x			100%			100%
DEU	2012																		x	x			100%	x	x	0%
ESP	2008									x			x		x								83%			100%
ESP	2009									x			x		x								83%			100%
ESP	2010									x			x		x								83%			100%
ESP	2011									x			x		x								83%			100%
ESP	2012									x			x		x								83%			100%
EST	2008																						94%			100%
EST	2009																						94%			100%
EST	2010																						94%			100%
EST	2011																						94%			100%
EST	2012																						94%			100%
FRA	2008																						100%	x	x	0%
FRA	2011																						100%	x	x	0%
FRA	2012																						100%	x	x	0%
GBR	2008		x			x						x		x									78%			100%
GBR	2009		x			x						x											83%			100%
GBR	2010		x			x						x											83%			100%
GBR	2011		x			x						x											83%			100%
GRC	2008	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0%	x	x	0%
GRC	2009	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0%	x	x	0%
GRC	2010	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0%	x	x	0%
GRC	2011																						94%			100%
HRV	2008	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0%	x	x	0%
HRV	2009	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0%	x	x	0%
HRV	2010	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0%	x	x	0%
NLD	2008																						83%	x	x	0%
NLD	2009																						89%			100%
NLD	2010																						89%			100%
NLD	2011																						83%			100%
NLD	2012		x																				83%			100%
POL	2008					x																	94%			100%
POL	2009					x																	94%			100%
POL	2010					x																	94%			100%
POL	2011					x																	94%			100%
PRT	2008																						94%			100%
PRT	2009																						94%	x	x	0%
PRT	2010																						89%			100%
PRT	2011																						94%	x	x	0%
PRT	2012																						94%	x	x	0%
SWE	2008																						100%			100%
SWE	2009																						100%			100%
SWE	2010																						100%			100%
SWE	2011																						100%			100%
SWE	2012																						100%			100%
TOTAL	2008																						87%			70%
TOTAL	2009																						88%			78%
TOTAL	2010																						84%			78%
TOTAL	2011																						97%			83%
TOTAL	2012																						98%			78%

* Requested but not mandatory

Legend for the coverage

	All data provided on a requested template/data not provided but template not mandatory
	No data provided on a requested template
	data provided on a requested template

3.2 Total enterprises and employment of the European fish processing industry

Although Belgium delivered data this year, it was decided not to include it in the EU overview as there are still data quality problems. For Croatia and Greece, data for 2011 and 2012 were delivered but they were excluded from the analysis of trends (as no data is available for 2008-2010). Nevertheless, whenever possible, Croatian and Greek figures were included in order to provide the most comprehensive possible overview of the industry at least for 2011 and 2012. For this reason, in the tables presenting trends, along with EU totals not including Croatia and Greece (on which trend rates are calculated), 2011 and 2012 totals “with Croatia and Greece” are also shown (see, as an example, Table 3.2.1). Overall the countries of the European Union are forming one of the main fish importing and processing regions in the world. The EU as a whole is by far the largest importer of fish and fisheries products in the world⁹. The demand for fish products in the EU is much larger than what can be provided by the European fishing fleet and, indeed, the EU is a net importer of fish and fish products (in 2012, its seafood trade balance was equal to -33,438 million tonnes of seafood, corresponding to -€14,111 billion). The access to the world market is, therefore, of great importance. The economic crisis from 2008 influenced the economic performance of the industry which has deteriorated during the reporting period and especially from 2010 to 2011. In 2012 the situation is diverse, some countries show improvements, others a decreasing trend.

According to Member States DCF data submissions, the total number of enterprises in the European fish processing industry sector in 2012 was around 3.4 thousand, 54% of which have less than 10 employees and another 31% with the number of employees between 11 and 49 (Table 3.2.1).

Over the reporting period, the total number of enterprises decreased by 5%. All size categories shrank in number, especially the one with 50-249 employees (-14%).

According to the data submitted by MS, the number of workers employed in the European fish processing industry in 2012 was 120,249. Omitting Croatia and Greece from the trend analyses, the total number of people employed in the sector shrank continuously from 2008 to 2011 (by 5% over the entire period), while it increased slightly the year after (by 0.3%).

Contrarily to the total number of employees, the total FTEs reduced from 2011 to 2012. This can be explained by an increase of the part-time employment (the higher the ratio of FTE to total employed, the higher the full-time employment) or an increased use of seasonal work.

The average number of FTEs per enterprise showed a slight increase over the period 2008 and 2012. The average wage, measured as cost of labour per FTE shows an improvement by 5% from 2011 to 2012 and of 16% over the whole reporting period. Labour productivity, measured as gross value added per FTE, improved 23% from 2008 to 2012, but it declined slightly from 2011 to 2012.

Table 3.2.1: European fish processing industry sector overview, 2008-2012

⁹ According to FAO data, it contributed around 40% of the total value of world imports in 2010

Variable	2008	2009	2010	2011	2012	2011 (with Greece and Croatia)	2012 (with Greece and Croatia)	Δ to 2011	Develop. trend
Structure (number)									
<i>Total enterprises</i>	3.463	3.406	3.451	3.390	3.287	3.560	3.454	-3%	-5%
<=10 employees	1.801	1.779	1.844	1.865	1.771	1.867	1.882	1%	-2%
11-49 employees	1.092	1.134	1.112	1.033	1.026	1.039	1.066	3%	-6%
50-249 employees	476	422	413	411	410	421	425	1%	-14%
>=250 employees	76	78	77	76	76	76	77	1%	0%
Employment (number)									
<i>Total employees</i>	122.280	117.641	117.465	116.175	116.554	119.953	120.249	0%	-5%
<i>FTE</i>	112.744	108.209	108.747	108.159	107.423	111.574	110.709	-1%	-5%
Indicators									
FTE per enterprise	32,6	31,8	31,5	31,9	32,7	31,3	32,1	2%	0%
Average wage (thousand €)	25,1	26,5	26,9	27,7	29,1	27,2	28,6	5%	16%
Labour productivity (thousand €)	48,0	60,2	68,0	59,9	59,0	59,2	57,8	-2%	23%
Unpaid work (%)	1,2	2,4	2,7	1,2	2,6	1,2	2,6	115%	127%

Note: Employment figures not available for all MS (refer to Table 3.2.2 for details)

Table 3.2.2 shows the EU employment trend, by country and gender. Only for 3 countries of those that submitted data, employment is spread almost evenly between men and women in 2012, both in terms of number of employees and FTEs. For all the others, there is a clear preponderance of either male or female employees. For example in the UK, Ireland and Finland, male employment is higher than female employment, while in Portugal and Poland men are less than 35% of the total number of workers.

At EU level, the share of employment by gender has remained stable over the years (45% of male vs. 55% of female, in average). However, at country level, some specific trend can be observed. For example, in Spain, the percentage of male employees increased every year over the reporting period (from 43% to 47% in 2012), except in 2010.

Table 3.2.2: Employment in the European fish processing industry, by country and gender, 2008-2012

	2008						2009						2010						2011						2012					
	Employees			FTE			Employees			FTE			Employees			FTE			Employees			FTE			Employees			FTE		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female			
Bulgaria	937	46%	54%	937	46%	54%	817	46%	54%	817	46%	54%	317	38%	62%	317	38%	62%	325	49%	51%	325	49%	51%	252	33%	67%	252	33%	67%
Croatia																			1,273	54%	46%	1,150	57%	43%	1,365	55%	45%	1,231	57%	43%
Cyprus	56	43%	57%	43	40%	60%	43	60%	40%	43	60%	40%	66	56%	44%	68	57%	43%	72	57%	43%	75	57%	43%	56	64%	36%	56	64%	36%
Denmark	4,379	49%	51%	4,147	49%	51%	4,227	50%	50%	3,596	53%	47%	3,791	52%	48%	3,235	54%	46%	3,704	53%	47%	3,043	53%	47%	3,409	53%	47%	2,999	54%	46%
Estonia	1,936	35%	65%	1,864	35%	65%	1,847	35%	65%	1,746	35%	65%	1,887	35%	65%	1,861	35%	65%	1,847	40%	60%	1,813	40%	60%	1,861	35%	65%	1,816	35%	65%
Finland	961	56%	44%	682	57%	43%	880	58%	42%	742	58%	42%	885	61%	39%	742	61%	39%	870	60%	40%	777	60%	40%	930	61%	39%	781	61%	39%
France	15,672	44%	56%	15,202	46%	54%	15,590	44%	56%	14,983	46%	54%	15,612	45%	55%	15,139	46%	54%	15,964	45%	55%	15,662	46%	54%	16,184	45%	55%	15,971	46%	54%
Germany	8,441	50%	50%	7,995			7,566	52%	48%	7,212			7,031	51%	49%	6,786			6,780	54%	46%	6,544			7,010	55%	45%	6,664		
Greece																			2,505	49%	51%	2,265	52%	48%	2,330	50%	50%	2,055	52%	48%
Ireland	2,867	70%	30%	2,596	70%	30%	3,020	70%	30%	2,633	71%	29%	3,064	70%	30%	2,677	71%	29%	3,200	70%	30%	2,761	70%	30%	3,342	67%	33%	2,678	67%	33%
Italy	5,425	52%	48%	4,572	52%	48%	5,285	52%	48%	4,454	52%	48%	5,950	52%	48%	5,015	52%	48%	6,109	52%	48%	5,149	52%	48%	6,197	52%	48%	5,223	52%	48%
Latvia	5,792	37%	63%	5,592	37%	63%	4,684	38%	62%	4,174	38%	62%	5,015	36%	64%	4,681	38%	62%	5,393	34%	66%	4,998	34%	66%	5,781	34%	66%	5,357	34%	66%
Lithuania	5,013	32%	68%	2,912	29%	71%	4,489	29%	71%	2,949	27%	73%	4,351	33%	67%	3,053	33%	67%	4,445	35%	65%	3,614	42%	58%	4,451	33%	67%	3,536	34%	66%
Malta	56	95%	5%	40	90%	10%	131	90%	10%	116	88%	12%	19	68%	32%	15	80%	20%	32	50%	50%	28	54%	46%	56	73%	27%	53	74%	26%
Netherlands	2,953			2,335			3,453			2,775			3,218			2,506			3,253			2,537			3,567			2,469		
Poland	16,105	34%	66%	15,580	34%	66%	15,931	32%	68%	15,351	32%	68%	15,983	32%	68%	15,348	32%	68%	15,788	33%	67%	15,108	33%	67%	15,972	33%	67%	15,088	34%	66%
Portugal	6,664	36%	64%	6,561	36%	64%	6,815	36%	64%	6,738	36%	64%	7,277	36%	64%	6,916	36%	64%	7,314	33%	67%	6,913	33%	67%	6,823	32%	68%	6,308	32%	68%
Romania	513	40%	60%	503	40%	60%	572	40%	60%	564	40%	60%	1,598	43%	57%	1,591	43%	57%	1,181	52%	48%	1,178	52%	48%	780	50%	50%	780	50%	50%
Slovenia	250	42%	58%	211	42%	58%	223	42%	58%	210	41%	59%	266	41%	59%	234	42%	58%	379	42%	58%	351	42%	58%	354	42%	58%	306	42%	58%
Spain	19,737	37%	63%	19,095	39%	61%	19,331	45%	55%	18,449	46%	54%	18,581	39%	61%	17,590	41%	59%	18,390	43%	57%	17,702	43%	57%	18,324	47%	53%	17,399	47%	53%
Sweden	2,165	55%	45%	1,773			1,991	56%	44%	1,736			2,007	55%	45%	1,807			2,126	57%	43%	1,837			2,135	57%	43%	1,831		
United Kingdom	22,358	57%	43%	20,104	59%	41%	20,746	57%	43%	18,922	60%	40%	20,547	59%	41%	19,166	60%	40%	19,003	58%	42%	17,745	59%	41%	19,070	57%	43%	17,855	58%	42%
Total	122,280	44%	56%	112,744	45%	55%	117,641	45%	55%	108,209	46%	54%	117,465	44%	56%	108,747	45%	55%	119,953	45%	55%	111,574	46%	54%	120,249	45%	55%	110,709	46%	54%

Note: the shares by gender at total level are calculated excluding The Netherlands, Sweden and Germany for which data were not available for the entire time series

As shown in Table 3.2.3, based on DCF data, in 2012 Italy possessed the biggest fish processing industry in terms of number of enterprises with 16% of the total EU figures.

In the same year, 16% of all the sector's employees were employed in the UK. Spain and the United Kingdom followed in terms of number of firms (respectively 14% and 11% of the total) Spain, France and Poland in terms of employment (Spain 15%, the other two 13% of the total).

Table 3.2.3, also presents trends in number of enterprises and employment level by Member State over the period 2008-2012, highlighting that changes in the structure of the fish processing industry have diverged across Member States. Employment in the fish processing industry increased for several countries (e.g. Netherlands and Finland); it decreased for others (e.g. Denmark and Portugal). In general terms, changes in number of enterprises fluctuated between -52% for Bulgaria and +43% for Italy (-5% at EU level) and in the number of employees between -73% for Bulgaria and +52% for Romania (-5% for the EU total).

As already mentioned, the ratio FTE/total employees provides an indication of the main type of employment (the lower the ratio, the higher the share of part-time employment). The Dutch fish processing industry appears to have the highest level of part-time employment (FTE/total employees = 69%), followed by the Lithuanian and Danish ones. On the other hand, several countries, such as Romania and Bulgaria, employ mostly full-time workers.

The increase in the total number of firms is not always coupled with growth at the employment level and viceversa. This can be explained by the fact that in some countries the number of small businesses increased over the reference period and the larger businesses decreased, while the opposite has happened in other MS. For example, in Malta, France and The Netherlands, the total number of employees increased over the period 2008-2012, even if the total number of enterprises shrank, while the employment contracted in Estonia, even if the number of firms rose.

Figure 3.1.1 shows that, although the distribution of enterprises by size category is highly differentiated by country, for most MS the number of firms with less than 10 employees constituted at least half of the total number of enterprises in 2012. In all MS, most of the other enterprises belong to the categories "11 – 49" and "50 – 249" employees, while the firms with more than 250 workers are generally a minority.

Table 3.2.3: European fish processing industry sector overview by country, 2012

Country	FTE	% of EU total	Δ to 2011	Develop. trend	Total employees	% of EU total	Δ to 2011	Develop. trend	Number of enterprises	% of EU total	Δ to 2011	Develop. trend
Bulgaria	252	0%	▼ -22%	▼ -73%	252	0%	▼ -22%	▼ -73%	10	0%	▼ -70%	▼ -52%
Croatia	1,231	1%	▲ 7%		1,365	1%	▲ 7%		20	1%	▲ 11%	
Cyprus	56	0%	▼ -25%	▲ 30%	56	0%	▼ -22%	▬ 0%	4	0%	▼ -20%	▼ -20%
Denmark	2,999	3%	▼ -1%	▼ -28%	3,409	3%	▼ -8%	▼ -22%	106	3%	▼ -1%	▼ -9%
Estonia	1,816	2%	▬ 0%	▼ -3%	1,861	2%	▲ 1%	▼ -4%	61	2%	▲ 11%	▲ 22%
Finland	781	1%	▲ 1%	▲ 15%	930	1%	▲ 7%	▼ -3%	146	4%	▲ 2%	▲ 2%
France	15,971	14%	▲ 2%	▲ 5%	16,184	13%	▲ 1%	▲ 3%	295	9%	▼ -2%	▼ -10%
Germany	6,664	6%	▲ 2%	▼ -17%	7,010	6%	▲ 3%	▼ -17%	250	7%	▼ -6%	▼ -11%
Greece	2,055	2%	▼ -9%		2,330	2%	▼ -7%		147	4%	▼ -3%	
Ireland	2,678	2%	▼ -3%	▲ 3%	3,342	3%	▲ 4%	▲ 17%	164	5%	▼ -2%	▼ -5%
Italy	5,223	5%	▲ 1%	▲ 14%	6,197	5%	▲ 1%	▲ 14%	537	16%	▲ 1%	▲ 43%
Latvia	5,357	5%	▲ 7%	▼ -4%	5,781	5%	▲ 7%	▬ 0%	101	3%	▬ 0%	▲ 6%
Lithuania	3,536	3%	▼ -2%	▲ 21%	4,451	4%	▬ 0%	▼ -11%	33	1%	▼ -3%	▼ -11%
Malta	53	0%	▲ 89%	▲ 33%	56	0%	▲ 75%	▬ 0%	6	0%	▼ -25%	▼ -14%
Netherlands	2,469	2%	▼ -3%	▲ 6%	3,567	3%	▲ 10%	▲ 21%	84	2%	▼ -5%	▼ -17%
Poland	15,088	14%	▬ 0%	▼ -3%	15,972	13%	▲ 1%	▼ -1%	196	6%	▼ -4%	▲ 4%
Portugal	6,308	6%	▼ -9%	▼ -4%	6,823	6%	▼ -7%	▲ 2%	180	5%	▼ -3%	▼ -15%
Romania	780	1%	▼ -34%	▲ 55%	780	1%	▼ -34%	▲ 52%	14	0%	▼ -36%	▲ 8%
Slovenia	306	0%	▼ -13%	▲ 45%	354	0%	▼ -7%	▲ 42%	15	0%	▲ 7%	▲ 25%
Spain	17,399	16%	▼ -2%	▼ -9%	18,324	15%	▬ 0%	▼ -7%	487	14%	▼ -5%	▼ -15%
Sweden	1,831	2%	▬ 0%	▲ 3%	2,135	2%	▬ 0%	▼ -1%	223	6%	▲ 2%	▲ 4%
United Kingdom	17,855	16%	▲ 1%	▼ -11%	19,070	16%	▬ 0%	▼ -15%	375	11%	▼ -5%	▼ -28%
EU	110,709	100%	▼ -1%		120,249	100%	▬ 0%		3,454	100%	▼ -3%	
EU (without Greece and Croatia)	107,423		▼ -1%	▼ -5%	116,554		▬ 0%	▼ -5%	3,287		▼ -3%	▼ -5%

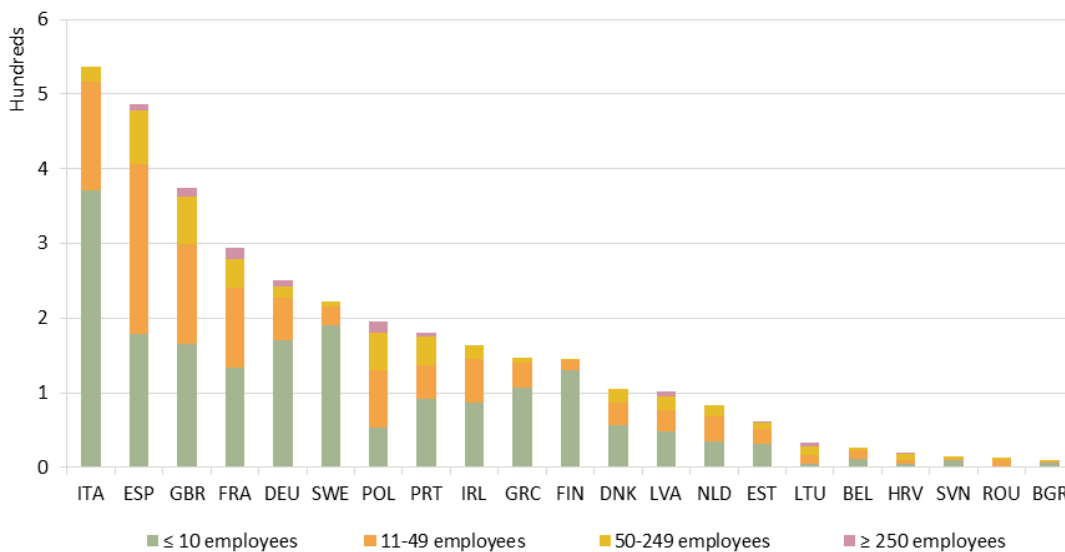


Figure 3.2.1: Number of firms by country, 2012

Data on crew costs and employment suggest that the average wage per FTE varies substantially by MS (Figure 3.2.2), with the Danish fish processing industry paying the highest salaries on average (€57.0 thousand), followed by the French the Swedish industries (respectively, €51.3 thousand and €50.2 thousand).

Labour productivity in 2012 ranged from €8.5 thousand for Croatia to €172.8 thousand for Malta. However, for almost all countries it was smaller than €80 thousand.

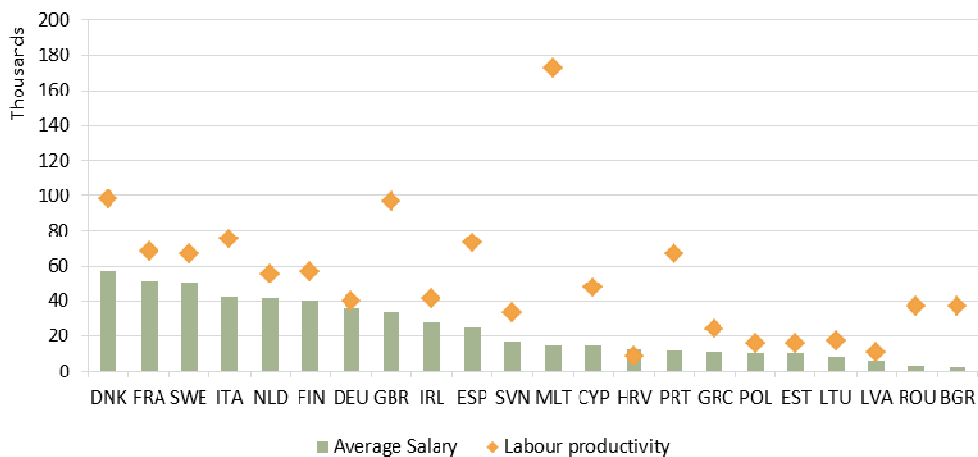


Figure 3.2.2: Average salary and labour productivity by country, 2012

As mentioned before, under the EU data collection framework, MS are requested to provide the number of enterprises and the turnover attributed to fish processing for enterprises that carry out fish processing but not as a main activity. This is one of the main differences in comparison to the data collection for the Structural Business Statistics (SBS), as industry sector companies have to deliver data under the SBS (under NACE code 10.20) only if they undertake fish processing as main activity. In cases where companies have only minor parts of their business in fish processing they will deliver data under a different NACE code and the fish processing activity will not be included in the overall numbers from EUROSTAT. Table 3.2.4 gives an overview by country of

the number of enterprises which carry out fish processing but not as the main activity, based on the 2014 DCF data delivery. The table also shows how much these firms contribute to the total number of firms processing fish (firms processing fish as their main activity plus those processing fish not as their main activity).

In 2012, 872 companies were reported to carry out fish processing not as their main activity. However, taking into account that only 18 out of the 23 country participating in the DCF framework reported data on this type of enterprises (2012 figures were not available for Belgium, Bulgaria, France, Germany and Portugal), as well as the inherent difficulties in collecting the information, this number can be expected to be much higher. Nonetheless, there has been a progressive increase in reporting this data from 2001, when only 8 countries reported information on companies processing fish not as main activity.

It can be also observed that there is a high variability across MS in terms of the contribution of the firms processing fish as a secondary activity to the total number of enterprises. For example, while for Latvia and Denmark they represent less than 5% of the total, for Cyprus and Romania they are the majority.

Table 3.2.4: Number of enterprises carrying out fish processing not as a main activity by country, 2012

Country	2008	% of total enterprises	2009	% of total enterprises	2010	% of total enterprises	2011	% of total enterprises	2012	% of total enterprises	Δ to 2011	Develop. trend
Croatia							24	57%	24	55%	0%	
Cyprus	13	72%	12	80%	10	67%	14	74%	9	69%	-36%	-31%
Denmark	3	3%	6	5%	5	4%	5	4%	5	5%	0%	67%
Estonia	12	19%	13	20%	13	20%	12	18%	11	15%	-8%	-8%
Finland	22	13%	49	26%	56	28%	27	16%	27	16%	0%	23%
France			115	27%	111	27%						
Germany			95	27%			80	23%				
Greece							21	12%	7	5%	-67%	
Ireland	16	9%	16	9%	25	13%	22	12%	29	15%	32%	81%
Italy	162	30%	177	30%	233	30%	227	30%	231	30%	2%	43%
Latvia	4	4%	4	4%	2	2%	2	2%	2	2%	0%	-50%
Lithuania	2	5%	2	6%	2	6%	3	8%	3	8%	0%	50%
Malta	0	0%	0	0%	0	0%	0	0%	2	25%		
Netherlands			398	82%	451	84%	97	52%	64	43%	-34%	
Poland	52	22%	59	23%	64	25%	66	24%	61	24%	-8%	17%
Portugal	29	12%			38	16%						
Romania	30	70%	30	70%	43	70%	29	57%	24	63%	-17%	-20%
Slovenia	8	40%	8	38%	8	38%	7	33%	6	29%	-14%	-25%
Spain	1	0%	0	0%	0	0%	0	0%	0	0%	0%	0%
Sweden	87	29%	98	31%	95	30%	108	33%	120	35%	11%	38%
United Kingdom	647	55%	423	48%	353	46%	353	47%	247	40%	-30%	-62%

3.3 Economic performance of the European fish processing industry sector

3.3.1 Income and Costs

The amount of income generated by the European fish processing industry in 2012 was almost €27.9 billion, 98% of which was made up of turnover (Table 3.3.1). This represents a 2% increase compared to 2011. Income subsidies¹⁰ amounted to 0.2-0.5% of the total income during the entire reporting period.

According to Member States DCF data submissions, total production costs amounted to almost €24.5 and €23.7 billion respectively in 2012 and 2011, meaning that 4% more was spent in 2012 to generate an amount of income 2% higher than the previous year. Purchase of fish and other raw material for production is the dominant cost item, accounting for 63-65% of the total costs (53-57% of income) during the period 2008-2012 (Table 3.3.2). Most of the remaining costs consist of other operational costs (17-19% of income) and labour costs (11-12% of income), while energy expenses represent only 3% of the total (2-3% of income).

The income structure is quite homogeneous across countries, with the turnover having been more than 95% of the total income for all MS in 2012, except Cyprus, Lithuania, Bulgaria, Romania and Croatia (their turnover respectively contributed 85%, 84%, 74%, 70% and 60% of the total income).

The sector received relatively small amounts of income subsidies with 0.2% of income in 2008 and 0.5% in 2012. This is an increase from €59 to €126 million (without Greece and Croatia) from 2008 to 2012.

The production costs ranged from 80% and 100% of the total income for most countries in 2012 (Table 3.3.1). However for some countries the cost/income ratio was quite far from the average (0.4 for Romania and 0.1 for Bulgaria, between 0.68 and 0.78 for Portugal, Malta, the UK and Cyprus).

¹⁰ DCF data on subsidies include only direct income subsidies (i.e. subsidies which have a direct impact on the income), for example subsidies on products (subsidies payable to producers in respect of their production) and import subsidies. Investment subsidies are excluded. More information is available in the 2012 final report of the Planning Group on Economic Issues (PGECON), available at http://datacollection.jrc.ec.europa.eu/documents/10213/488770/PGECON_2012_final_report.pdf?version=1.0.

Table 3.3.1: Economic performance of the European fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	2011 (with Greece and Croatia)	2012 (with Greece and Croatia)	Δ to 2011	Develop. tend
Income (million €)									
Turnover	24,699.8	24,421.6	26,768.8	26,527.7	27,101.7	26,841.9	27,382.5	▲ 2%	▲ 10%
Other income	405.6	307.2	475.6	401.1	408.5	437.5	436.1	▲ 0%	▲ 1%
Subsidies	59.0	55.7	56.5	69.7	126.5	75.7	131.9	▲ 74%	▲ 114%
Total Income	24,954.8	24,607.8	27,263.7	26,970.2	27,593.1	27,326.7	27,907.0	▲ 2%	▲ 11%
Expenditure (million €)									
Purchase of fish and other raw material for production	14,146.5	12,963.4	14,313.6	15,048.4	15,756.8	15,206.4	15,919.1	▲ 5%	▲ 11%
Wages and salaries of staff	2,799.1	2,810.3	2,862.4	2,967.6	3,043.9	3,009.1	3,081.2	▲ 2%	▲ 9%
Imputed value of unpaid labour	25.3	52.1	60.7	27.0	82.3	28.6	83.0	▲ 191%	▲ 225%
Energy costs	588.4	564.2	653.3	636.5	687.1	652.7	704.0	▲ 8%	▲ 17%
Other operational costs	4,751.1	4,513.1	4,844.7	4,737.7	4,689.4	4,785.7	4,758.0	▼ -1%	▼ -1%
Total production costs	22,310.4	20,903.0	22,734.7	23,417.2	24,259.5	23,682.5	24,545.3	▲ 4%	▲ 9%
Capital Costs (million €)									
Depreciation of capital	355.5	376.5	441.4	423.0	394.4	446.7	408.4	▼ -9%	▲ 11%
Financial costs, net	346.4	296.9	326.0	242.9	181.0	264.4	208.6	▼ -21%	▼ -48%
Extraordinary costs, net	14.9	18.8	-1.0	1.2	51.7	2.7	54.7	▲ 1959%	▲ 248%
Capital Value (million €)									
Total value of assets	10,730.1	10,839.8	12,182.8	11,248.8	11,538.6	11,391.0	12,224.1	▲ 7%	▲ 8%
Net Investments	770.4	510.4	752.1	835.9	648.2	857.9	672.3	▼ -22%	▼ -16%
Debt	7,087.2	6,712.9	7,035.2	6,569.5	6,670.1	6,829.2	7,038.0	▲ 3%	▼ -6%
Performance Indicators (million €)									
Gross Value Added	5,409.8	6,511.5	7,395.5	6,477.9	6,333.4	6,606.2	6,394.0	▼ -3%	▲ 17%
Operating Cash Flow	2,644.3	3,704.8	4,529.0	3,552.9	3,333.7	3,644.3	3,361.7	▼ -8%	▲ 26%
Earning before interest and tax	1,083.8	2,081.1	2,846.5	1,784.2	1,724.6	1,851.8	1,738.5	▼ -6%	▲ 59%
Net Profit	887.1	1,906.6	2,592.0	1,651.7	1,619.7	1,697.8	1,606.1	▼ -5%	▲ 83%
Capital productivity (%)	39.3	48.1	50.6	45.7	43.8	45.6	41.9		
Return on Investment (%)	11.2	21.1	25.6	17.4	16.3	17.5	15.5		
Financial Position (%)	66.1	61.9	57.8	58.4	57.8	58.2	57.6		
Future Expectation Indicator (%)	1.7	-0.4	1.5	3.0	1.2	3.0	1.2		

Along with the income structure, Figure 3.3.2 shows the structure of costs of the fish processing industry by country and gives an overview of the contribution of the main cost items to the total production costs. As shown in the table, the cost structure is fairly similar across MS. Purchase of fish and other raw materials for production is by far the most important component of the total costs for most MS, followed by other operational costs and labour costs. Energy costs play a very minor role (4% of the total in average).

Table 3.3.2: Cost structure of the European fish processing industry sector by country, 2012

	Tot. Costs (million €)	Tot. costs/tot. Income (%)	Cost items as a share of total costs (%)				
			Raw material	Wages and salaries	Other operational costs	Energy costs	Unpaid labour
Croatia	81	101%	27%	19%	48%	6%	0.0%
Germany	2,025	99%	63%	12%	23%	2%	0.0%
Netherlands	746	96%	74%	14%	10%	1%	0.0%
Poland	1,857	95%	73%	8%	18%	1%	0.0%
Finland	253	95%	73%	12%	13%	1%	0.4%
Sweden	591	95%	61%	16%	23%	1%	0.0%
France	4,722	94%	44%	17%	33%	6%	0.1%
Ireland	629	94%	74%	11%	13%	2%	0.6%
Denmark	1,907	94%	62%	9%	28%	2%	0.1%
Estonia	138	93%	67%	14%	17%	3%	0.0%
Italy	2,387	92%	73%	9%	13%	4%	0.4%
Lithuania	316	91%	69%	10%	19%	2%	0.0%
Latvia	213	90%	60%	15%	20%	4%	0.0%
Greece	205	88%	69%	11%	15%	6%	0.4%
Slovenia	27	85%	41%	19%	35%	5%	0.1%
Spain	3,738	81%	73%	12%	13%	2%	0.1%
Cyprus	7	78%	77%	12%	6%	5%	0.0%
United Kingdom	3,927	77%	70%	14%	13%	2%	1.4%
Malta	21	72%	85%	4%	9%	3%	0.2%
Portugal	736	68%	83%	10%	2%	4%	0.7%
Romania	17	39%	79%	14%	4%	2%	0.8%
Bulgaria	1	10%	12%	59%	11%	17%	1.0%

Note: The percentage value reported for Slovenia refers to total production cost as a share of turnover (instead of income) because costs reported by Slovenia are attributable to fish processing only while total income includes also income from processing activities other than fish processing.

Table 3.3.3 gives an overview by country of the contribution of the turnover generated by the firms undertaking fish processing not as a main activity to the total turnover generated by fish processing (turnover generated by the firms processing fish as their main activity plus the turnover generated by the firms processing fish not as their main activity).

For the countries for which data are available (data for Denmark are not presented for confidentiality reasons), the analysis reveals a mixed picture. For some countries, for example The Netherlands and Cyprus, firms

processing fish not as a main activity make a large contribution to the overall turnover of the industry coming from fish processing. For others, such as Lithuania and Estonia, total turnover is almost entirely generated by firms undertaking fish processing as a main activity.

Table 3.3.3: Percentage of turnover of enterprises with fish processing not as main activity, 2008-2012

Country	2008 (million €)	% of total turnover	2009 (million €)	% of total turnover	2010 (million €)	% of total turnover	2011 (million €)	% of total turnover	2012 (million €)	% of total turnover	Δ to 2011	Develop. trend
Croatia							31.3	41%	24.3	34%	▼ -22%	
Cyprus	9.8	71%	8.7	64%	7.6	36%	8.1	49%	5.7	44%	▼ -29%	▼ -41%
Estonia	1.1	1%	1.2	1%	1.1	1%	2.0	1%	4.7	3%	▲ 141%	▲ 347%
Finland	10.3	6%	128.8	40%	147.1	38%	81.2	24%	83.5	24%	▲ 3%	▲ 713%
France			683.1	14%	694.2	13%						
Germany			30.0	1%			50.0	2%				
Greece							3.2	1%	1.1	0%	▼ -66%	
Ireland	50.6	8%	52.9	9%	27.5	5%	11.5	2%	22.2	3%	▲ 94%	▼ -56%
Italy	252.7	8%	191.4	8%	228.1	8%	198.4	8%	222.3	8%	▲ 12%	▼ -12%
Latvia	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Lithuania	2.7	1%	3.7	2%	3.4	1%	3.7	1%	3.1	1%	▼ -18%	▲ 13%
Malta	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0.0	0%		
Netherlands			2338.3	77%	2670.9	79%	2879.8	78%	2548.3	77%	▼ -12%	
Poland	109.4	7%	62.4	4%	83.7	5%	88.7	5%	114.0	6%	▲ 29%	▲ 4%
Portugal	194.9	15%			134.9	11%						
Romania	93.4	77%	103.8	76%	6.9	1%	2.9	6%	4.3	12%	▲ 46%	▼ -95%
Slovenia	14.4	33%	12.9	33%	5.3	16%	4.4	11%	2.1	6%	▼ -53%	▼ -85%
Spain	2.8	0%	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Sweden	73.4	12%	80.1	15%	96.6	15%	97.1	14%	111.9	15%	▲ 15%	▲ 52%
United Kingdom	622.3	13%	506.5	9%	511.3	9%	566.7	10%	654.5	12%	▲ 15%	▲ 5%

The sector accounted for approximately €6.4 billion of Gross Value Added (GVA) in 2012 (Table 3.3.4). This shows the importance of the fish processing industry in Europe compared to the fishing fleet (€3.4 billion of GVA¹¹).

The amount of operating cash flow generated by the EU fish processing sector in 2012 was €3.4 billion. Earnings before interest and tax and Net Profit were respectively €1.7 billion and €1.6 billion.

DCF data suggest a clear deterioration of the economic performance from 2011 to 2012. In 2012 GVA, Operating Cash Flow, Earnings before interest and tax and Net Profit were respectively 3%, 8%, 6% and 5% less than in 2011 (with Croatia and Greece). However, with respect to 2008, the value of these indicators increased by 17%, 26%, 59% and 83%, respectively (excluding from the analysis Croatia and Greece, for which only 2011 and 2012 data are available).

Figure 3.3.1 presents trends in performance indicators as a proportion of total income from 2008 to 2012. Data show a generally unsatisfactory economic performance of the European fish processing industry also in relative terms. In addition, they reveal an improvement from 2009 to 2010, followed by a fall in 2011 and an additional

¹¹ Estimate based on DCF data

slightly decrease in 2012. The GVA to income ratio increased from 26% to 27% from 2009 to 2010 and then declined to 24% in 2011 and to 23% in 2012, while net profit as a share of income went up from 8% to 10% in 2010, then down to 6% in 2011 and remained almost stable in 2012.

Table 3.3.1: Economic performance of the European fish processing industry sector by country, 2012

Country	Gross Value Added (million €)				Operating Cash Flow (million €)				Earning before int. and tax (million €)				Net Profit (million €)							
	% of EU total	Δ to 2011	Develop. trend		% of EU total	Δ to 2011	Develop. trend		% of EU total	Δ to 2011	Develop. trend		% of EU total	Δ to 2011	Develop. trend					
Bulgaria	9.2	0.1%	▲	8%	▼	-8%		8.7	0.3%	▲	32%	■	0%		8.7	0.5%	▲	37%	▲	2%
Croatia	10.5	0.2%	▼	-78%	■	0%		-0.5	0.0%	▼	-101%	■	0%		-12.3	-0.8%	▼	-147%	■	0%
Cyprus	2.7	0.0%	▲	176%	▼	-18%		1.9	0.1%	▲	142%	▼	-28%		-0.4	0.0%	▲	94%	▼	-116%
Denmark	293.9	4.6%	▼	-9%	▲	15%		123.0	3.7%	▼	-13%	▲	127%		87.5	0.0%	▼	-18%	▼	-105%
Estonia	28.6	0.4%	▲	31%	▲	16%		9.9	0.3%	▲	114%	▲	54%		5.4	0.3%	▲	822%	▲	84%
Finland	44.3	0.7%	▲	6%	▲	34%		13.3	0.4%	▼	-5%	▲	41%		7.5	0.4%	▼	-18%	▲	27%
France	1,087.4	17.0%	▲	15%	▲	21%		279.2	8.3%	▲	38%	▼	-7%		212.4	12.2%	▲	122%	▼	-12%
Germany	267.6	4.2%	▼	-18%	▼	-26%		26.5	0.8%	▼	-72%	▼	-71%		-14.3	-0.8%	▼	-125%	▼	-129%
Greece	50.1	0.8%	▼	-38%	■	0%		28.5	0.8%	▼	-44%	■	0%		21.9	1.3%	▼	-41%		
Ireland	110.8	1.7%	▲	17%	▼	-59%		38.4	1.1%	▲	130%	▼	-80%		22.6	1.3%	▲	829%	▼	-87%
Italy	394.2	6.2%	▲	46%	▲	40%		195.1	5.8%	▲	137%	▲	257%		129.4	7.4%	▲	525%	▲	1313%
Latvia	55.9	0.9%	▲	78%	▲	3%		24.7	0.7%	▲	424%	▲	9%		18.6	1.1%	▲	4029%	▲	30%
Lithuania	61.3	1.0%	▼	-30%	▼	-15%		31.2	0.9%	▼	-47%	▼	-36%		24.5	1.4%	▼	-54%	▼	-41%
Malta	9.2	0.1%	▲	111%	▲	43%		8.4	0.2%	▲	116%	▲	64%		8.1	0.5%	▲	141%	▲	145%
Netherlands	136.9	2.1%	▼	-5%	▼	-4%		33.8	1.0%	▼	-11%	▼	-40%		16.4	0.9%	▼	-15%	▼	-59%
Poland	241.8	3.8%	▼	-2%	▼	-4%		95.8	2.8%	▼	-11%	▼	-13%		54.6	3.1%	▼	-21%	▼	-30%
Portugal	421.6	6.6%	▼	-17%	▼	-16%		349.2	10.4%	▼	-19%	▼	-19%							
Romania	29.1	0.5%	▼	-47%	▲	35%		26.6	0.8%	▼	-46%	▲	33%		25.8	1.5%	▼	-45%	▲	32%
Slovenia	10.2	0.2%	▼	-47%	▼	-12%		5.0	0.1%	▼	-56%	▼	-33%		3.7	0.2%	▼	-62%	▼	-40%
Spain	1,276.5	20.0%	▼	-4%	▲	7%		865.5	25.7%	▼	-6%	▲	12%							
Sweden	122.4	1.9%	▲	13%	▲	28%		31.3	0.9%	▲	56%	▲	70%		18.0	1.0%	▲	144%	▲	198%
United Kingdom	1,729.7	27.1%	▼	-10%	▲	89%		1,166.1	34.7%	▼	-14%	▲	171%		1,096.1	63.0%	▼	-14%	▲	200%
EU	6,394.0	100%	▼	-3%				3,361.7	100%	▼	-8%				1,738.5	100%	▼	-6%		
EU (without Greece and Croatia)	6,333.4	99%			▲	17%		3,333.7	99%			▲	26%		1,724.6	99%			▲	59%

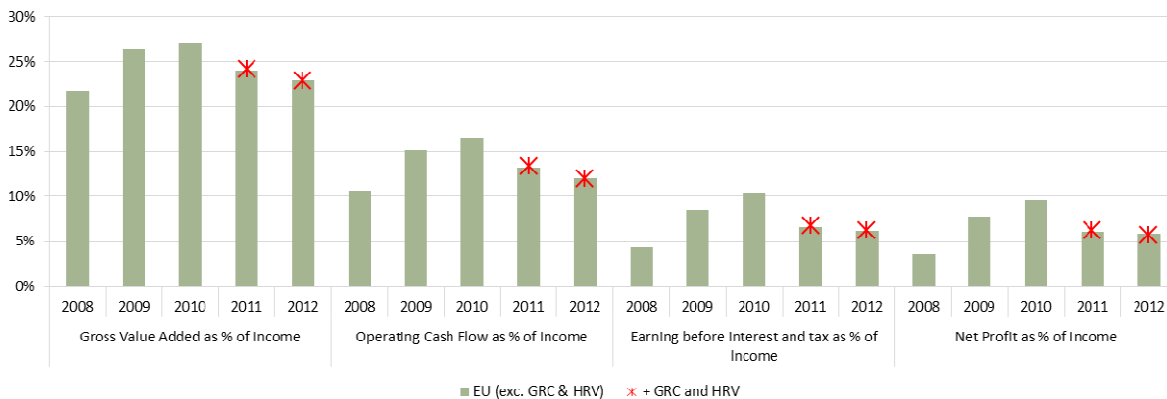
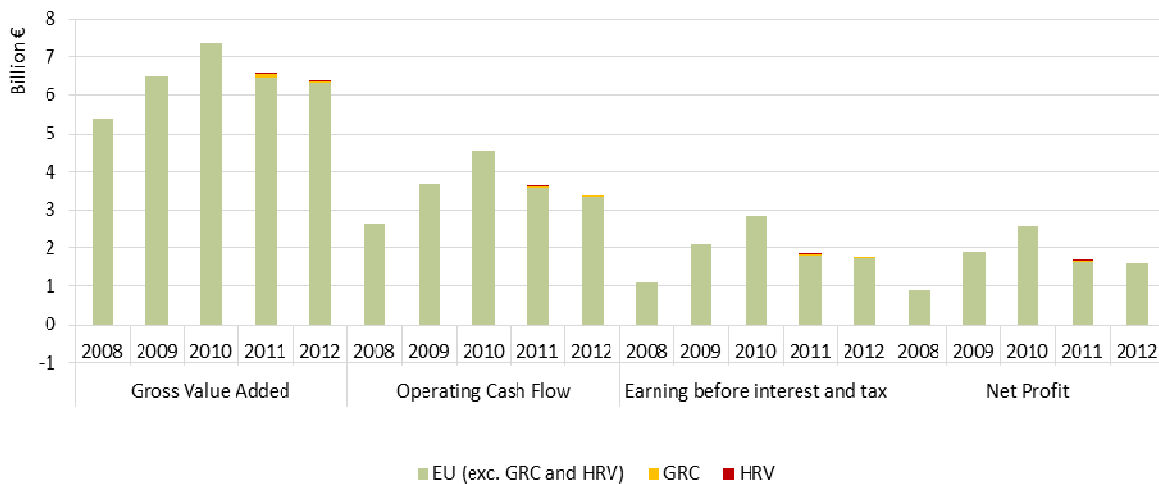


Figure 3.3.1: Economic performance of the European fish processing industry sector, in absolute terms (top figure) and in relation to income (bottom figure)

Analysis of DCF data at national level reveals a very different economic performance across Member State (Table 3.1.8). The Croatian, Cypriot, German, and Greek fish processing industries, together contributing a bit more than 5% to the European Gross Value Added of the sector, made net losses in 2012. All the other MS generated a net profit, ranging from € 3.0 million for Slovenia to €1,054.8 million for the United Kingdom.

The UK fish processing industry generated the highest GVA in absolute terms in 2012 (27% of the EU total), followed by the Spain (20%) and France (17%) ones. In relative terms, the Bulgarian fish processing industry generated the highest level of GVA in relation to income (95%), followed by the Romanian (67%) and Slovenian (32%) industries.

Among the countries for which net profit was calculated¹², the UK industry generated the highest net profit in absolute terms in 2012 (66% of the estimated total), followed by the French (14%) and the Italian (5%) ones. In relative terms, net profit (as a share of income) ranged from -15% for Croatia to 86% for Bulgaria.

¹² Net profit was not calculated for Portugal and Spain due to missing data

When comparing the economic performance of the last two years of the reporting period, the data reveal a differentiated picture by countries. GVA trend rates ranged between -78% for Croatia (from €47.7 to €10.5 million) and +176% for Cyprus (from -€3.5 to €2.7 million), leading to an overall GVA decrease of 3%. Variations were much more pronounced in terms of net profit, with ten countries, out of ten for which data are available, showing in 2012 an improvement compared to the previous year.

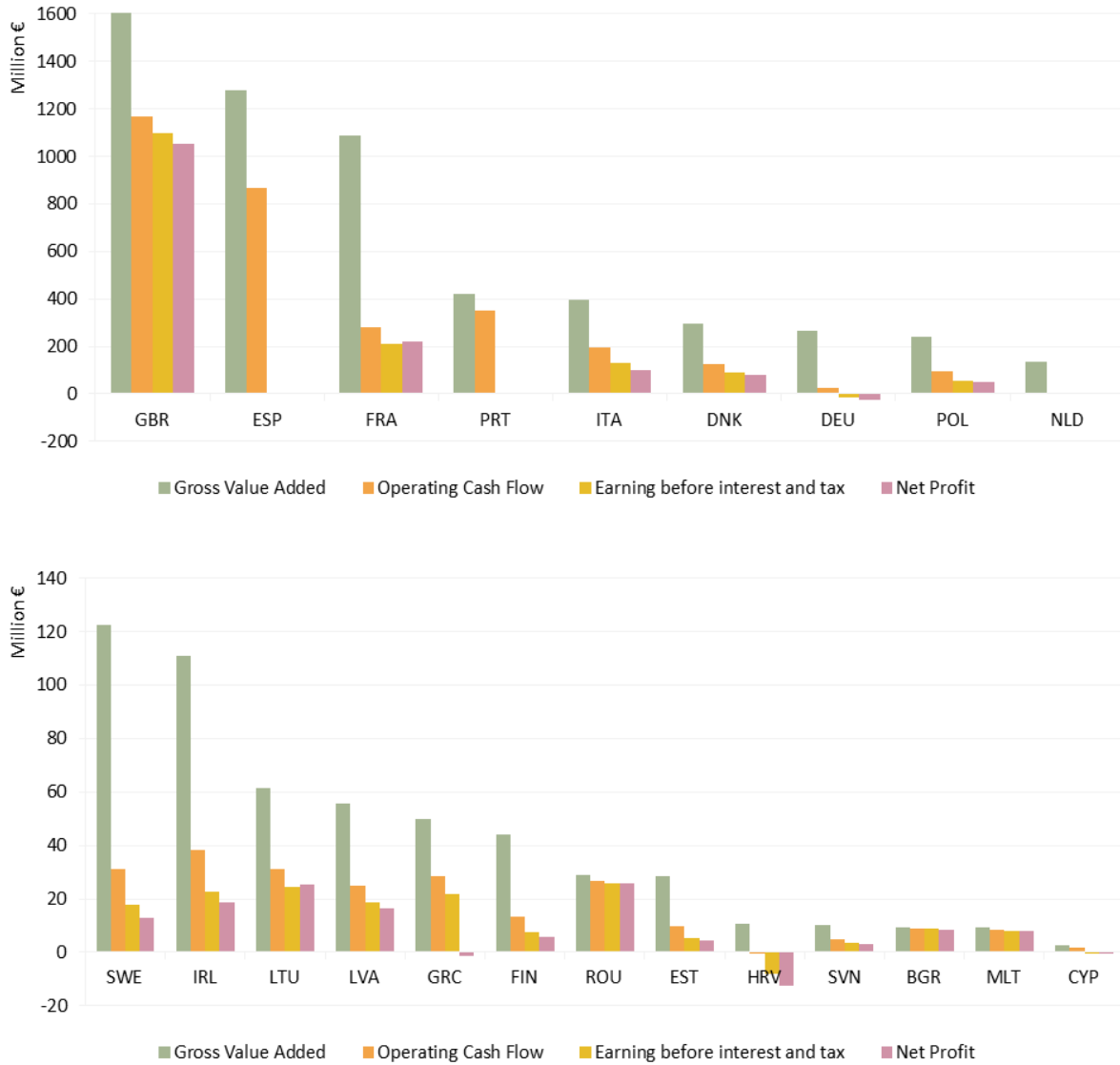


Figure 3.3.2: Economic performance of the European fish processing industry sector by country, 2012

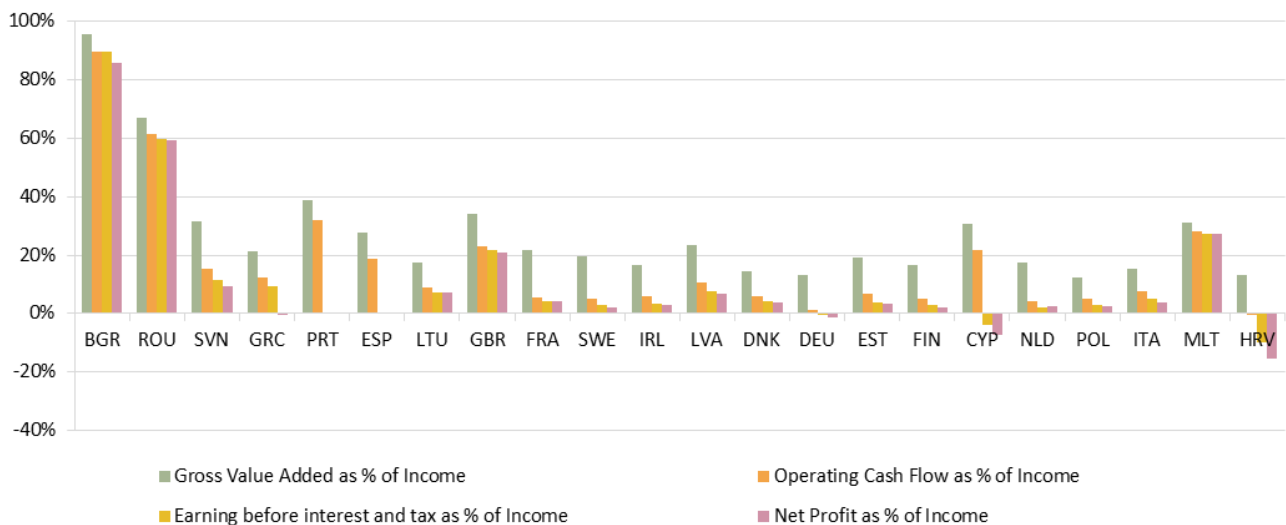


Figure 3.3.3: Economic performance of the European fish processing industry sector by country (indicators in relation to income), 2012

3.4 Trends and drivers for change, outlook for the industry

Dependency on raw materials and imports

Main drivers of the economic situation of the industry are still the high percentage of the costs of raw material compared to the overall costs and the high dependency on imports from foreign countries. This leaves the companies very vulnerable to developments in the world markets. The EU member states report a diverse situation as in some countries the economic situation of the industry improved while in others not. This is due to the increasing costs for raw material which seems to be a stronger effect than improvements in efficiency (e.g. via innovations). Although, several countries expected improvements in fish stocks and increased landings, for 2012 such a development is not visible and more countries now expect more problems due to decreased catches (lower quotas to reach MSY). Therefore, the vulnerability due to the high dependency on world markets is not reduced. Fish production from aquaculture may increase over the next decade but experts are expecting that the regulatory setting and the structure of the industry prevents an increase in production. There is also a vertical integration between aquaculture and processing activities observable (e.g. in Italy almost 70% of the production). This may improve the overall position of the companies and reduces the vulnerability.

Another main driver for the industry is the dependency on specific species and sources. Especially small or very specialized companies (like the industry for canned sardines in Portugal) depend on domestic landings which are often influenced by fisheries management decisions (like in- or decreasing quotas). As the improvement in the fish stocks in European waters are not that significant yet and in several cases quotas are reduced to reach MSY the small companies depending on domestic landings are still in a vulnerable situation.

Several countries reported ongoing outsourcing of activities to other member states (e.g. Denmark, Germany, and Italy in case of the tuna industry) which leads to increasing investments there (e.g. Baltic States, Poland). For these member states, e.g. in the case of Poland, this means that they increased their exports substantially.

Increased consumer demand for certified products

Over the last years the wholesale sector increasingly requested certified products as consumers demand shifted towards certified products aiming to ensure sustainable fisheries. This also means that the processing companies have to be certified. Additionally, there is a price pressure of wholesalers towards the processing industry. Together with increasing prices for raw material this forms a great risk for future economic performance. The increasing demand for certified products can reduce the availability of raw material in some parts of the year or increases prices for raw material even more. This development is especially visible in the Netherlands, Germany and Sweden.

As the list of countries with an increasing demand for certified products shows, this is basically a development in the Northern part of the EU. In the countries around the Mediterranean, a different development is taking place. Consumers have lower purchasing power than before and move from high-valued products to low-valued products (e.g. Greece). However, there are first signs of improvement in Spain which increased its exports to substitute for lower domestic demand. In other countries around the Mediterranean Sea there may be a similar development but exports may further increase. There is additionally in many countries a shift to processed products compared to fresh fish in the past. However, this is not only the case for fish products but for food products in general.

Exchange rate

Another main driver could be the exchange rate between currencies in Europe (e.g. Polish Zloty to the Euro) and to currencies outside Europe. A weaker Euro would lead to higher prices in Europe and may increase the potential for exports.

In many MS, especially in the new MS joining the EU since 2004, a lot of public money was spent to invest in modern processing facilities. However, in some other MS like Germany investment was too low in the last years to renew the capital stock. There were investments in other countries like Poland but this not fully explains this situation.

Economic crisis

In many countries of the European Union the fish processing sector suffered from the economic crisis in 2008. They reported a strong decrease in income and profits. Then in 2010 many countries reported an improved situation compared to the previous year and in fact the overall net profit generated by the European fish processing industry increased 45%. In 2011 the situation deteriorated again and many countries reported lower net profit. This could be an effect of increasing fish prices as the FAO fish price index shows. For 2012 the situation shows a mixed picture with countries with decreasing and many other countries with increasing net profits as only a few countries reported overall losses.

For example, in Estonia and Ireland the situation improved substantially, while in Germany and Croatia it continued to deteriorate. From 2011 to 2012, there was again a pronounced decline in the economic condition of the European fish processing industry (-5% in net profit). However, with the only exceptions of four countries (Croatia, Cyprus, Germany and Greece), all MS showed positive net profits, still a decrease for many but fewer MS with losses.

In several countries there is a shift in consumption habits, from high to low value products (like in Greece).

Outlook

The future economic performance of the sector is at risk due to the price pressure of wholesalers, as well as the increasing prices for raw material. Vertical integration (such as between aquaculture and processing activities which is the case for 70% of the production in Italy) may somewhat improve the overall position of the companies and reduce their vulnerability of imported goods.

With less purchasing power people are not able to buy high-valued products anymore and this will increase the demand for low valued products further. This may be also a reason why parts of the industry in a country improve while others see decreasing activity and overall this leads to a decrease in basic economic indicators.

The improvement in fish stocks in Europe will most likely increase landings in the future but it may take more time than expected in the last years. Reason for that is the move towards MSY which may make a slower increase or sharper decrease in quotas necessary to reach MSY at the latest by 2020. Also the discard ban will probably lead to higher landings instead of discarding the fish at sea. This may improve the accessibility of the fish processing industry on domestic landings and may also keep prices on a relatively low level.

3.5 Summary of National Chapters

Belgium

In 2012, the fish processing industry in Belgium consisted of about 240 enterprises with an estimated turnover of €826 million, employing around 2,500 people (2,200 full-time equivalents). Activity of the Belgian fish processing industry includes the production of fresh and frozen fillets, smoked fish, pickled seafood and prepared dishes.

Belgium is a net importer of seafood products, mainly from the Netherlands, France, Germany, Denmark and Great Britain. The raw materials for the processing industry are purchased on the global market for fish and fish products and the dependency on domestic landing is rather limited. The sector is dominated by small and middle-sized enterprises. The employees are mostly male and the overall number has increased over the years. The purchase of fish and other raw material was the most important expenditure and made up for 57% of the total income in 2012. The value of unpaid labour in the Belgian fish processing industry is insignificant. Subsidies represented less than 1 % of the total income in 2012.

The profitability was positive in 2012, but the economic performance of the sector is relatively low. The Gross Value Added reached €207 million in 2012 (25% of total income), which was an increase of 30% compared to 2011. A decrease of production costs was observed between 2011 and 2012, resulting in an increase in operating cash flow of the sector. Investments have increased between 2011 and 2012 denoting positive expectations for the future of the industry in 2012. All in all, the sector seems to have become more profitable despite the financial crisis.

Bulgaria

In 2012 Bulgaria processing industry registered a decrease of the number of processing units, from 33 in 2011 to 21 in 2012. Also, the staff number decreased from 325 in 2011 to 252 in 2012. Female counted for 67% and male for 33%, with a similar number for FTE, unpaid labour being insignificant. The turnover decreased from €7.7 million to €7.2 million, but total income increased from €8.9 million to €9.7 million, due to an increase of other income by 96% in 2012/2011. The processing sector is dependent on the imports; the processing sector is not well linked with the domestic aquaculture, but is using a significant quantity of the national fleet.

No additional preliminary data are available to have the opportunity for trends and developments remarks, but, as a general remark a slight increase could be assumed.

Croatia

Republic of Croatia had 18 companies in 2011 and 20 companies in the year 2012 with the main activity in fish processing industry. Most of these companies have a multitude of other activities in which they are involved outside of fish processing but the main source of revenue and traffic comes from processing. Most of the enterprises belong to the category of 50-249 employees and that segment has the most significant impact on overall fish processing industry in Croatia.

Total number of employees in the fish processing industry was 1,273 in 2011 and 1,365 employees in 2012 which is trend indicator of processing intensity. From the total number of employees in 2011 that is increasing for 95 male employees, in 2012 for 129 employees. Except the number of employees, increased was FTE and average salary, however these indicators placed in a worse position because labor productivity.

Economic indicators are mostly negative. If we compare those two reference years (2011 and 2012) it is easy to see that almost all the indicators decreased, especially other operating costs. The part that shows better indication for the future is the total asset value and net investment. Exactly from these indicators is expected further development and stagnation in the growth of costs.

Market in Croatia is not developed and there is a lot space for improvement. Fish is usually sold directly to customers, such as farms, fish processors or resellers who then placed the fish overseas. Exports were higher than imports in the economic sense in both of the reference year, although in volume terms somewhat higher were imports (in 2012). Croatia exported mostly in Spain, Italy, outside the EU in Japan, imported from Spain, Norway and Italy. The largest part of the import comes from fresh fish as well as export. The most imported species were Herring and in export Bluefin tuna.

Trends show that the doors are opened now to the new markets, after the Croatian accession to the European Union and that all together with modernization of processing facilities, business development and unification of the company in a unique policy of product placement, there are signs for the continued successful growth for enterprises and the entire Croatian fish processing industry.

Cyprus

The Cypriot processed seafood sector is comprised of 4 enterprises in 2012. The number of enterprises has decreased in 2012 relative to 2011, thus total employment has also decreased during 2012. Total income generated by the Cypriot seafood processing sector in 2012 is €8.7 million Euros and remained the same since 2011. Nevertheless, income generated by seafood processing activities decreased during 2012. The 9 enterprises not included in the sector (i.e. seafood processing is not the main activity), generated turnover of €5.7 million Euros attributed to seafood processing activities in 2012 while €8.1 million Euros were generated in 2011.

Production costs accounted for 78% of the total income of the sector in 2012, raw material costs being the most important part of the production cost, accounted for 60% of the total income. Wages and salaries, other operational costs and energy costs accounted for 9%, 5% and 4% of the total income respectively. Capital costs of the sector have increased by 47% in 2012. As financial costs have decreased during 2012, depreciation of capital represents the vast majority of the capital costs.

The performance indicators for the 2011/2012 period suggest positive performance of the sector and recovery from higher losses during 2011, nevertheless, €2.7 million of GVA generated in 2012 are deteriorated by the relatively high depreciation of capital resulting in negative EBIT and net losses for the sector. For the five year period (2008/2012) the sector has expanded both in terms of turnover generated by seafood processing activities and in terms of total income. Nevertheless, when turnover generated by seafood processing activities both in the sector and from companies not included in the sector is accounted for, total turnover rose during 2010 (at €21.3 million Euro) to decrease in 2012 to a level (€13.1 million Euro) lower than the 2008 level (€13.7 million Euro).

The Cypriot trade balance of fishery products (including aquaculture) is negative both in volume and value terms. Import volume appears to have declined since 2009 and remained relatively stable since. Export volume varies over the five years period. In terms of value, imports are relatively stable during the five years period. On the contrary, export value has significantly declined in 2009 and is slowly recovering since then. The vast majority of Cypriot exports of fishery products since 2009 are mainly comprised of aquaculture products (gilthead seabream and seabass).

In 2013, the Cypriot financial crisis is expected to negatively affect the sector as the purchasing power of the Cypriots is expected to decline. On top, rising imports of low valued processed fish, such as pugnacious, are also expected to displace the products of the sector from the Cypriot market.

Denmark

Profitability of the national sector and main trends

The profitability of the Danish processing sector has been increasing from 2008 to 2011. From 2011 to 2012 the profitability decreases, however the net profit of the industry is still positive. The enterprises have reduced the number of employees from 2008 to 2012 to increase the competitiveness and profitability of the sector partly due to the economic crisis. This has resulted in a more competitive sector increasing income, reducing costs and wages and thereby increasing the economic viability of the sector. Overall, the Danish industry has decreased in terms of numbers of enterprises (-9%) and Full time employees (28%). The industry has outsourced some of their activities to countries with lower salary costs. In particular, the salmon industry has outsourced activities to Poland.

In Denmark, the most important segment is the fish meal and -oil industry, which accounted for 64% of the total volume and 33 % of the total value, in 2012. The fish meal and fish oil factories are very important to the Danish industry and are closely linked to the fleet fishing fish for reduction. The salmon processing industry is the most important segment processing fish for human consumption in terms of value. This industry is dependent on the large Norwegian aquaculture industry and most of the import are processed and exported to other EU countries.

The segmentation on numbers of employees show that the segment with 50-249 employees dominate the overall results even though it only contains 18% of the number of enterprises. However, the smaller segments with 0-10 and 11-49 show a higher growth in GVA from 2011 to 2012.

New developments, trends and outlook

In 2013, the profitability in the Danish fish processing sector for consumption and for processing of fishmeal are expected to increase compared to 2012. The decrease in the number of enterprises and employees are also

expected to continue. Furthermore, the positive trend since 2008 showing an increasing GVA and net profit is expected to continue owing to increasing labour productivity and due to higher prices of fish and a larger volume processed.

Companies with fish processing not as main activity

The Danish industry is very “pure”. Only very few companies are processing fish outside the NACE group 10.20. Statistics Denmark have identified between 3 and 6 companies from 2008 to 2012. Unfortunately, the total income cannot be presented due to confidentiality reasons owing to the fact that one enterprise cover more than 80% of the total income.

Estonia

In 2012 there were 61 enterprises whose main activity was fish processing in Estonia, of which 85% accounted for micro- and small enterprises. The turnover of these 61 enterprises was over €143 million. 2012 showed continued recovery in economic activities and strengthening of competition in the Estonian fish processing industry sector. Compared to the previous year the total number of enterprises and turnover increased each 11% in 2012. Also the economic performance indicators (e.g. GVA, OCF, EBIT, net profit) underwent the rise. The main factors that influenced those performance indicators were increase in total income and decrease in share of production costs to total income. The total number of employees in the Estonian fish processing industry was 1,861 in 2012, of which 35% were male and 65% female. Compared to 2011, the number of FTEs maintained the same level in 2012. Additionally, there were also 11 enterprises that carried out fish processing but not as a main activity in Estonia. Their turnover attributed to fish processing was approximately €4.7 million.

The fish processing sector in Estonia is largely dependent on exports. The share of exported fish products was around 73% in 2012. Baltic herring and sprat caught by trawlers from the Baltic Sea are the most important local raw material for the Estonian fish processing enterprises. Due to its small size, the fish markets and processing enterprises do not depend on domestic aquaculture production.

According to preliminary data the number of microenterprises whose main activity is fish processing decreases somewhat in 2013. However, the growth in total production value is expected in 2013. At the end of 2013, Russia imposes import restrictions for several companies.

Finland

There were 173 fish processing enterprises operating in Finland in 2012, of which 146 companies were processing fish as their main activity. These main activity enterprises generated a total turnover of €265 million. The gross value added of processing industry was €44 million and the net profit €5.6 million in 2012. The Finnish fish processing enterprises used 80 million kg of fish as raw material, 53 million kg were domestic fish and 27 million kg were imported in 2013. The processing industry employed 781 FTEs or 930 persons.

The fish processing industry in Finland is highly concentrated in the sense that 10 companies with the highest turnover produced around 76% of the total revenue generated by the industry in 2012. The main species used in Finnish processing were Baltic herring (31 million kg), salmon (24 million kg) and rainbow trout (18 million kg) in 2013. Most of the raw material is processed to deep frozen (Baltic herring and sprat) or fresh products (fillets, etc.). The main processing products are (hot and cold) smoked products of rainbow trout, salmon and herring. There is also a notable production of salted rainbow trout.

The Finnish seafood trade balance is significantly negative. Finland imported seafood with value of little less than €300 million and exported seafood worth of around €40 million, creating a negative trade balance of €250 million.

Increasing costs and fluctuations of the price of raw materials (fish) are affecting the profitability of the industry. The decrease of salmon prices affected favorably the profitability of the industry in 2012 while automatizing of salmon processing has also increased the profits.

France

The structure of the French seafood processing industry has remained relatively stable between 2008 and 2012. Although the number of enterprises was slightly reduced from 327 to 295 during this period, the industry created 512 jobs and employs now 16,184 people. The total turnover of the industry is estimated to €4.86 billion in 2012. However, according to the French data collection office FranceAgriMer, the turnover of these companies for seafood production is only €3.82 billion (78.6% of total turnover). The French fish processing industry is highly concentrated: in 2012, the 15 companies (5%) which employ more than 250 persons cumulated 57% of the total income. The sector still includes numerous very small companies (in 2012, 45% of the companies employ less than 10 persons), but their number shows the faster decreasing rate (-17% between 2008 and 2012).

The economic performances of the fish processing sector are improving. While the turnover remained stable between 2011 and 2012, the net profit increased from €101.9 million to €219.7 million, which seems to be mainly due to the decrease of operational costs. The net profit represents now 4% of the turnover, its higher level since 2008 when it reached 6%. Investments have increased from €80.3 million to €170.9 million over the period, which may denote positive expectations from the future of the industry. The average salary has increased by 28.6% since 2008. Female employees still represent the majority of the workers (54%) and the proportion of part-time jobs is marginal and decreasing. However, part-time jobs concern also male employees now.

The activity of the French fish processing industry covers a wide range of products: fresh and refrigerated fish fillets, the production of prepared dishes with fish, crustaceans and molluscs, smoked salmon, prepared or conserved crustaceans and molluscs, surimi and canned fish, from which 42% is canned tuna. The French seafood processing industry is heavily reliant on imported raw material; salmon, shrimp and white fish (cod and pollock) are the main imported species used by the processing industry. The cost of raw material has continuously increased since 2008, and raw material alone explains 93% of the increase of total production costs at the end of the period.

The trade deficit of France for seafood products increased by 24.5% between 2008 and 2012, mainly due to a decrease of exports volume by 18.6% and an increase of imports value by 17.4% over the period. French international trade of seafood products concerns mainly EU member States: extra-EU trade represent less than 40% of imports and less than 25% of exports. During the period 2008-2012, the trade deficit in value increased mainly between 2008 and 2009 for fresh products (+61% in value) and between 2009 and 2010 for frozen products (+29%), prepared or preserved products (+11%), and dried, salted or smoked fish (+51%). Since 2011, the context of economic crisis and the rise of the aquatic products prices attributable to the growth of the international demand have weighed on the French households demand. This context of a sluggish internal demand and increasing prices for raw material may lead the French processing industry to face more competition from imported products.

Germany

The fish processing sector in Germany is dominated by the large companies. 75% of employees and about 83% of total turnover belong to the companies with 50 and more employees. The fish processing industry is facing serious economic problems. Price increases in the raw material sector and the market power of the supermarket chains led to losses of the overall sector in 2012.

About 90% of fish in Germany is imported from other countries, with a share of about half and half between EU and non-EU countries. The seafood trade balance is increasing negative. The main species imported to Germany are salmon, pollack, herring and miscellaneous tunas. In terms of categories frozen and prepared and preserved products stand for about 70% of the imports and 80% of the exports. Fresh fish only stand for about 10% to 15% of total imports.

Consumption figures per head show stable per-head consumption of around almost 15 kg per year. Most fish is consumed by older and higher income households.

The future outlook for the German fish processing industry seems currently not to be too optimistic. Figures about investment compared to depreciation show a stable trend to disinvestment or at least less physical capital in the sector. This could reflect the transfer of production capacities to other countries, e.g. Poland.

Greece

The Greek fishery processing sector comprised in 2012 147 SME's that do fish processing, a number that has dropped by 5 since 2011 due to the continuing financial crisis but also due to company absorption, especially by the largest subsector (50-249 employees) which had the biggest decrease of 25% in terms of SME number. Approximately 73% of the SME's are small enterprises, employing less than 10 persons. The turnover of the sector decreased in 2012 13%, corresponding to turnover of €268.3 million in 2011. These enterprises employed 2,330 persons, or 2,055 in terms of full-time equivalent employment (FTE). The number of full-time employees was decreased by 210 FTE's in 2012 compared to the number detected in 2011. FTE per enterprise is estimated at 14.0 (14.9 was in 2011). Net profit of the sector decreased 107% in 2012, compared to the previous year. Thus, average wages and salaries of staff decreased as well during the same period, approximately 17% and reached to €10,900 in 2012 from the amount of €13,200 in 2011.

Therefore, if someone is asked to justify the current underperformance of the fish processing industry in Greece in economic and social indicators could provide the following arguments. The ongoing for the fifth consecutive year financial crisis reflects to low available cash flow due to limited access, especially in the case of small companies, to bank financing and loaning and due to low net profit or yearly economic losses. These two factors prevent the much desired completion of trade agreements for fish and raw material purchases, successful application of marketing strategies and implementation of new investments. The added to the above continuous rise of the fish and raw material prices and energy costs lead also to increased cost of production.

The Greek fish processing enterprises may apply income from subsidies as investment from the European Union. The aim of this investment subsidy is to develop new infrastructure in general but also new mechanical equipment, in terms to producing high quality and high nutritional value processed fishery products and to modernise the existed processing lines for producing high added value traditional fishery delicatessen.

Ireland

There were 164 fish processing enterprises in Ireland in 2012. The number of fish processing enterprises has decreased by 5% since 2008. The total turnover of the Irish fish processing industry in 2012 was €656.5 million which is an increase of 18% from 2011.

In 2012, there were approximately 2,678 FTE's employed in the fish processing industry which was made up of 1,797 Male FTE's and 881 Female FTE's. Male employees represent around 67% of the total employees and the proportion of male/female employees has been relatively constant over time. Investment in the seafood industry has led to an increase in the numbers employed through the provision of grant aid in specific schemes and programmes.

In 2012, Ireland imported 114,469 tonnes of Seafood with a value of €179 million, which was an increase of 171% from 2008 when 42,284 tonnes of Seafood were imported.

For the same period exports amounted to 260,159 Tonnes with a value of €511 million. This was an increase of €125 million, or 32%, from 2011 driven by higher unit prices for Irish Seafood and a large increase in the volumes of seafood exported. During 2012, exports to EU countries represented 70% of total Irish seafood exports. Irish seafood exports to Russia, Egypt, South Korea and Asia continued to grow.

In terms of economic performance the estimated Gross Value Added (GVA), Operating Cash Flow, Earnings before Interest and Tax and Net Profit for the Irish processing sector, in 2012 were €110.8 million, €38.4million, €22.6 million and €18.9 million respectively.

Italy

The turnover of the Italian processing sector amounted, in 2012, to 2,557 billion €, while the total value of production (turnover + subsidies + other income) amounted to €2,582 million. Turnover represents about 99% of the total value of production. If looking at the trend, the main income items appear to have increased, compared to 2011: +12% for turnover and +35% for subsidies. The Italian fish processing industry is characterized by a double-face organization on the market: on the one hand, there is the so-called modern sector, with a few large industrial companies, and on the other hand there is the traditional sector, highly atomized and formed mainly by micro, small and medium-sized enterprises, many of which are organized on a family basis. Indeed, 70% of enterprises is represented by micro-enterprises, with less than 10 employees.

The number of people employed in the sector was equal to 6,197 people consisting in 5,223 FTE. The Italian fish processing industry is a very concentrated sector: the main segment is the canning sector with the most important products being canned and preserved tunas: in the 2012 the production of canned tuna was equal to 66.5 thousand tonnes in volume and €1.48 billion in value. Beside the tuna sector, there is also a significant number of companies processing anchovies, sardines and shellfish.

The Italian fish processing sector is highly dependent on imports as far as the supply of raw material. In general, Italy is to be considered a net importer of fish products. Indeed, the Italian seafood markets has been characterised, in the last decades from a substantial increase in the total demand for fish products mainly due to the increase in the per capita consumption (higher propensity to consume fish proteins, higher focus on more healthy products, higher life standards) and by an increase of total population. The role of imports has been and is still fundamental in satisfying the domestic demand taking into account a national apparent consumption very much higher than domestic production (from fishery and aquaculture). This has become mainly evident since the mid '90s when the increase in imports has been pushed by the decrease in domestic

production. Taking into account the importance of the canned tuna products, the sector continues to record a strong dependence on imports of frozen tuna and tuna loins. Canned tuna is confirmed, also, as the main export product.

Latvia

Fish processing is very important for Latvian agriculture and for employment especially in the coastal areas. The processing sector in Latvia is fully based on the local natural resources. But North Sea and North East Atlantic Herring and Scomber imported from Norway were used for raw material for the production of canned fish. In the most cases fish processing enterprises are situated in the coastal regions. There were 5,781 persons of total employment in 2012. In the most cases in the segment with less than 10 employees fish processing is a family business. There were 101 registered economic active fish processing enterprises in 2012 with the total turnover 238.8 million Euros.

Fish processing production has important share in total Latvian export and supplies domestic market. Export of fish production was to 53 countries and import from 44 countries in 2012. The export of fish production mainly is made Baltic Sea and the Atlantic Ocean catches obtained by the Latvian fishing vessels. External trade balance for fisheries products in 2012 was 30.1 million euros.

The subsidies increased extremely in 16 times from 2008 to 2012. Total profit for the fish processing industry, which showed 12.4 million euros in 2008 changed to total loss of 1.7 million euros in 2011. The main reason of loss in processing industry is the negative impact of global economic crisis to economic situation in Latvia. The economic situation improved in 2012 and Net Profit has a significant increase by 32% between 2008 and 2012 and was 16.8 million euro in 2012. The investments also increase significantly in 3 times for the same period and were 20.7 million euro in 2012. Several fish processing companies due to availability of the EFF, have benefited from the good investment possibilities that have been used for modernization and obtaining of new processing equipment to diversify products, improve quality of the production and increase productivity.

Lithuania

In 2012 Lithuanian fish processing industry consisted of 33 enterprises whose main activity was fish processing. For such part of industry, population changed insignificantly compare to 2011. In 2012 the total income of Lithuanian processing industry, consisting of turnover from processing and other income, was €347.6 million with 10% annual increase. The higher total income was a result of increased in other income, whereas turnover from fish processing declined by 5%. Lithuanian processing industry is highly dependent from imported raw material. In 2012 imported raw material in terms of volume accounted for 97% of the total amount used in manufacturing process. The structure of production by type has remained almost constant from year to year with the majority of supply as surimi products (29%), following by smoked fish (20%) and canned production (11%). The significant part of production from processing industry also comes as frozen cod fillets, and prepared salted products from Atlantic herring, mostly salted fillets and in brine. During 2012 in terms of value, 71.4% of production was exported. Export market consisted from 97% of EU countries, 1.7% of CIS countries and 1.3% other countries. The main commodities for export were surimi, salted and smoked salmon production, prepared and preserved fishery products. In 2012 Lithuanian processing industry employed 4451 employees, by gender consisting from 67% of female and 33% of male corresponding to 2974 and 1477 employees respectively. The number of employed females in 2012 increased by 3% compare to 2011, whereas number of employed male decline by 5%. Taking into consideration the long term cost structure, purchase of raw material took a largest part in total cost structure and increased year by year finally reaching 70% of total costs in 2012. In 2012 Lithuanian fish processing industry generated 61.3 million Euros of Gross Value Added

(GVA) and €25.6 million net profit. Vertical integration of fishery production, covering higher production value chain, and increasing value of produced raw material is one of trends of fishery sector developments, especially at small scale aquaculture enterprises, providing production for local regional market.

Malta

During 2012, the number of enterprises in the Maltese fish processing industry was reduced to six from eight in 2011. Such decrease can also be reflected in total turnover of the processing sector. For 2012, the total turnover has decreased by 21.5% from 2011 while turnover for 2012 has increased from 2010 by 28.5%. It should also be noted that 67% of the enterprises in Malta's fish processing industry belong to the smallest enterprise segment (≤ 10 employees).

The year 2012, compared to 2011, demonstrated a significant increase of 89% in FTE employees in the processing sector that mainly concerned new male employees (160% increase of FTE male employees, 7% of FTE male employees). Although in 2011, there were no indication of unpaid labour within the industry, in 2012, 37500 euro were reported as imputed value of unpaid labour. This reflects an increase in number of workers within the processing industry.

Despite the fact that the total turnover for 2012 has decreased by 22%, the enterprises managed to increase their net profits by 158% from 2011. Similar increase can also be reflected in gross value added (111%), operating cash flow (116%) and earnings before interest and tax (141%). Total value of assets has increased by 50% while debt has also increased by 51% when comparing it to 2011. The 2012 performance indicators demonstrate 118.9% capital productivity, 105.3% return of investment, 74% financial position and 106.3% future expectation indicator.

During 2012, 4 enterprises were categorised under segment 1 (enterprises employing less than 10 employees) while the other 2 enterprises were categorised under segment 2 (enterprises employing between 11 and 49 employees). Since 2008, none of the enterprises in the Maltese fish processing industry sector has employed more than 49 employees. The economic performance of the Maltese fish processing industry sector is improving under both segments.

The Maltese fish processing sector is mostly represented by enterprises, whose main products are preserving and processing of tuna, shrimps, other marine fish and other products. The processed seafood is mainly exported to the Great Britain and Italy. In recent years, the trend in processing sardines has been decreasing while the trend for processing shrimps has been increasing.

Due to change in demand and production, in 2012, some enterprises in the Maltese fishing process industry have replaced their old equipment with the latest technology. Such modernization is helping these enterprises to diversify their products, improve quality of the production and increase productivity. Hence the Maltese fish processing enterprises will be able to beat the challenges of foreign competition.

The Netherlands

In 2012 there were 84 fish processing companies in the Netherlands with a turnover of €775 million. The Netherlands is an important trading hub for the transport of fish to other EU countries. The reliance of the Dutch processing industry on domestic catches has become less important because of declining catches of some of these domestic species and the increasing import of other seafood products. Most enterprises in the Dutch fish processing industry are small and have less than 10 employees. In 2012 the total income showed a decrease of 4% compared to 2011, even as the production cost. The cost for the purchase of raw material is the

main contributor to the growth in the total production cost, which was 5% lower in 2012 compared to 2011. Compared to 2008 there is a 10% increase in the cost of raw material. Important drivers for the Dutch processing industry are sustainability certification, and the reform of the Common Fisheries Policy and Common Market Organisation. The fish processing industry is getting more familiar with the trading business and it is expected that trading will grow in the coming years.

Poland

Fish processing industry in Poland is strong and still developing. It has the ability of generating profits for the companies and jobs and incomes for the involved workers. In 2012 the turnover increased to €1.93 billion, by 7% compared to the previous year and 29% compared to 2008. Turnover created nearly the whole total income (99%). As a result of increase in turnover and reduction of financial costs (about 80%) net profit increased to 47.5 million Euros, by 43% compared to the previous year. The level of other economic and financial indicators of fish processing (GVA -€241.8 million; OCF -€95.8 million, EBIT-€54.6 million) shows that the sector in 2012 was in a safe financial and economic situation.

The average number of employees was 15,972, representing an increase of 1% compared to the previous year. As in previous years the majority of the employed (67%) were women and the number of female employees increased by 1% compared to the previous year and did not change compared to 2008. Most employees worked full-time and FTE amounted to 15,088.

The volume of production slightly increased to 410.6 thousand tonnes (by 13.0% compared to 2011). The prepared and preserved fish had share of 48.6% of the total production, smoked fish 20.4%, frozen fish, filets and fish meat covered 16.9%, fresh or chilled fish, filets and fish meat 5.5%, salted fish 4.6% and other inedible fish products 3.9%.

In 2012 as in previous years a key driver of fish processing sector development was of foreign trade of raw material and final products. Imports played a dominant role in the supply of raw materials because of limited ability to harvest fish from the Baltic Sea and limited production of aquaculture. Exports of fish and fish products amounted to 230 thousand tonnes, with a value of €1.04 billion which represent an increase by 13% and 36% compared to 2008.

Most of projects which modernized fish processing technologies and manufacturing process were funded from the European fisheries fund (EFF) on the basis of operational program "Sustainable development of fisheries sector and coastal fishing areas 2007-2013". About 75% of the available allocation for subsidies for investment in fish processing, was contracted in 2012.

Further development of the fish processing industry in Poland is expected and exports and investment will be the factor that accelerates the pace of development.

Portugal

Portuguese domestic market is a large final consumer for fish and fish products, the biggest within the EU in *per capita* consumption, with around 57 Kg/person/year.

In 2012, Fish Processing Industry in Portugal consisted of 180 enterprises, 91 of which were small enterprises with less than 11 employees. Most enterprises are located in the north (61) and centre (66) of the country. All together these enterprises employed 6,823 people and production amounted to 212 thousand tonnes, and a total income of €1,078 million.

Female employees represent about two thirds of total employees.

Production in 2012: Frozen industry – 105.9 thousand tonnes; Salting and drying – 61.4 thousand tonnes; Cannery and preparation – 44.7 thousand tonnes

The Portuguese fish processing industry still has an enormous dependency on imports in order to fulfil the demand for the huge per capita consumption. This dependency will continue to grow in the near future, mainly due to restrictions on catches imposed by quota regulation. Only the canning sector still depend on domestic production (mainly for sardine and mackerel), while the salting and drying sector depends almost exclusively on imports. Dependency of cannery in imports will probably grow as the sardine catches reduce substantially (from 55 thousand tonnes in 2011 to 15 thousand tonnes in 2014). The industry will remain profitable although the expected increase in fish prices will put pressure in its profitability.

The Portuguese Trade Balance for fish and fisheries and aquaculture products is typically negative, with total imports of about twice the total amount of exports. In 2012, this deficit was of about 180 thousand tonnes or €690 million. These figures partially recovered from 2011 to 2012 in volume (-201 to -181 thousand tonnes), but get a negative increase in value (-€641 to -€690 thousand). Frozen products gives the biggest share to this reality (-131 thousand tonnes/ -€410 thousand tonnes). Dried and salted products also get big responsibility on the negative result (-53 thousand tonnes/-€233 million).

In general, some stability on structure and economic results is expected in the future.

Romania

In 2012 there were reported data for 14 enterprises whose main activity was fish processing in Romania, of which 64% accounted as small and micro-enterprises, a smaller number than 2012. The turnover was decreased amounting only over €30.4 million. 2012 showed continued in a concentration of specialized processors, mainly in the segment 11-49 employees – 50%. Processing industry sector was facing competition from the big supermarket chains and imports. Compared to the previous year, the total number of enterprises and turnover decreased, by 36% as number, and 32% as turnover in 2012. Also the economic performance indicators (e.g. GVA, OCF, EBIT, net profit) underwent the trend. The main factors that influenced those performance indicators were decrease in total income and decrease in share of production costs to total income, but only by 11%. The total number of employees was 780 in 2012, of which 49.7% were male and 50.3% female. Compared to 2011, the number of FTEs maintained the same descendent trend in 2012. Additionally, there were also 24 reporting data enterprises that carried out fish processing, but not as a main activity in Romania. Their turnover attributed to fish processing was approximately €4.3 million.

The fish processing sector in Romania is largely dependent on import. Sprat caught by trawlers and Rapa whelk are the most important local raw material for the Romania fish processing enterprises and exporters. The fish markets and processing enterprises are well linked with domestic aquaculture production.

According to preliminary data the microenterprises whose main activity is fish processing decreases, but a slight increase in total production is expected in 2013.

Slovenia

In 2012 there were 15 companies in the Slovenian fish processing sector. Between 2008 and 2012, the number of companies increased by 25%. In 2012 Slovenia had 10 companies with less than 10 employees, two companies with 11-49 employees and three companies with 50-249 employees. Among them are 6 companies

with fish processing as not main activity. These companies generate €2.1 million of turnover from fish processing, which representing 6.5% of all turnover from fish processing activities.

In 2012 the turnover was €32.3 million. Between 2008 and 2012, the turnover of Slovenian fish processing industry increased by 11%.

The value of raw material decreased by 32% from 2008 to 2012 and amounted €11.2 million in 2012.

In the Slovenian fish processing sector was 354 employees in 2012. With respect to the gender of those in employment, women are predominated with 206 employees. According to the FTE there were 306 FTE employees in 2012. Among them were 178 women and 128 men. The level of employment increased between 2008 and 2012, with total employed increasing by 42% while the number of FTEs increased by 45% over the period.

Slovenian seafood trade balance is significantly negative. Slovenian fish processing industry mainly depends on imports of raw materials. The raw material for fish processing industry is traded from all over the world, but most of the raw material comes from the EU. The largest Slovenian seafood import partners in 2012 were Italy, Spain and Croatia. Concerning export in the same year, the largest partners were Austria, Croatia and Bosnia and Herzegovina.

Slovenia consumes around 9 kg of fish per year per capita, which is well below the European average of 22.3 kg. However, fish consumption per capita in Slovenia is growing due to increasing awareness of healthy lifestyles. So in the future we can expect further development of the fisheries processing industry in Slovenia and therefore higher revenues from this sector. Because of the increased number of enterprises in the future and resulting increased competition we can expect a fall in prices of fish products and thus lower profits.

Spain

The Spanish fish processing industry keeps being an important source of employment and welfare for the coastal communities. Despite a decrease in activity between 2008 and 2011, mainly due to the impacts of the financial crisis, signs of recovery and increased efficiency can be observed in 2012.

The industry, however, has shown to be profitable in all the observed period according to Income and other economic indicators. Large companies over 250 employees have led the economic evolution of the total industry. Significant increases in labor productivity result from more capital intensive processes, allowing economies of scale. On the contrary, medium size companies have significantly reduced their contribution to the GVA and operating cash flow. A significant redistribution of the activity from smaller to large size companies appears to be happening, and may be explained by the intensification of the production processes in the larger companies.

Certain segments of the seafood processing industry, like cannery, are, as well, the main engines behind the trade flows in the international trade of fish and shellfish products, whether on the side of imports or exports. Besides being a net fish importer country in general, the negative trade balances are quite different in absolute value when disaggregating the different categories of commodities.

Sweden

The fish processing industry sector in Sweden is very heterogeneous with small family businesses processing their own landings as well as larger enterprises with large scale industrial production. Total income as well as

turnover has increased during the period, but not as much as the main production cost (purchase of raw material).

The purchase of raw material for production accounts to 60% of the total production costs and the industry imports approximately 70% of all of its raw material. This makes the industry dependent on prices of raw material, tariff quotas and changes in exchange rates. Most of the indicators show an increase for the industry as a whole since gross value added (GVA), return on investment (ROI) and EBIT (earnings before interest and taxes) all were higher in 2012 compared to 2008.

To a large extent, the Swedish processing industry uses different certifications like the MSC, ASC and the Swedish KRAV certification. Non-certified products are hard to place on the market since consumer awareness has increased. In recent years demand has increased for highly processed products that are almost ready to eat, since most consumer prefer food that are almost ready to eat, easy to cook and healthy at the same time.

Changes in the exchange rate of the Swedish krona (SEK) are of great importance of the processing industries economic performance. If the data was converted into SEK a different development (percentage change) would have been shown, especially for 2009 when the Swedish krona was weak.

United Kingdom

The UK fish processing industry has decreased in size in recent years: the latest available DCF data suggests that the sector consisted of approx. 375 businesses in 2012 whose majority of turnover was attributed to fish processing, a decrease of around 28% compared with 2008 figures. Underlying the recent contraction in industry size was a further pronounced decline in the number of businesses with 10 or fewer FTEs. This group's shares of industry income and employment of have also decreased. The total number of FTEs employed by those companies was around 17,855 in 2011, a decrease of around 11% from 2008. With the disproportionate decline seen in the number of businesses in the smallest size category, average enterprise size has been increasing and was 48 in 2012.

The combined turnover of those companies (turnover from all activities, not just processing activity) was approx. €7.5 billion euro in 2012, which was around 23% higher than in 2008 (in nominal terms) but 1% lower than in 2011. Since 2010 a combination of lower turnover and higher operating costs, particularly raw material costs, has placed additional financial pressure on the industry, resulting in tighter (albeit overall still healthy) profit margins. Processing companies have also been combating a number of other difficulties, such as difficult access to trade and longer-term credit post-crisis, increasing fuel and energy costs, etc.

4 NATIONAL CHAPTERS

4.1 BELGIUM

4.1.1 General overview of the Belgian fish processing industry sector

In 2012, the fish processing industry in Belgium consisted of about 240 enterprises with an estimated turnover of €826 million, employing around 2,500 people (2,200 full-time equivalents). Activity of the Belgian fish processing industry included the production of fresh and frozen fillets, smoked fish (salmon, halibut, haring, rainbow trout and others), pickled seafood and prepared dishes. The enterprises have been classified by category according to the number of employees (≤ 10 ; 11-49; 50-249; ≥ 250 employees). Data on the fish processing industry are based on yearly questionnaires sent to all the identified fish processing enterprises. The mean per category was calculated in the sample and then multiplied by the number of enterprises in the population figuring in that category. The sum of the totals of the different categories for this value was made to estimate the total value for the entire population. From 2014 onwards, this method of collecting data based on voluntary participation from enterprises, will be replaced by assessments of more extensive data.

Table 4.1.1 gives an overview of the Belgian fish processing industry, including size of enterprise and level of employment. The sector is dominated by small and middle-sized enterprises. Around 206 enterprises had less than 10 full-time employees, corresponding to 86% of the total number of enterprises in 2012. Furthermore, 28 enterprises had between 11 and 49 employees corresponding to almost 14% of the total. There were few enterprises with more than 50 employees. One large enterprise with more than 250 employees did not always take part in the survey. This explains why there are no data for 2012 for this segment, but it does not mean that this company has ceased production. The inclusion or exclusion of this enterprise may influence total estimated results. The fluctuations in the number of businesses with less than 10 employees are due to uncertainties relating to the population data. However, it is likely that new companies have started a fish processing activity during the period while others have ceased processing. Another phenomenon is related to changing practices, moving away from processing towards trading activity, retail or specialising as importers or exporters. Some businesses may therefore no longer meet the definition of "fish processor". This switch to wholesale was also observed in the Netherlands.

The number of employees seems to have increased over the years (Table 4.1.1 and Figure 4.1.1). Employees were mostly male (estimated at 69% in 2011 and at 58% in 2012). Average salary seems to increase over the years, although the value for 2012 seems rather high when compared to previous years. Average employment per enterprise seems to fluctuate over the years. The difference between 2011 and 2012 may be due to the fact that the largest enterprise did not take part in 2012. The value of unpaid labour in the Belgian fish processing industry was insignificant. Between 2008 and 2012, the value was estimated to be less than 1% of the total amount of wages and salaries paid. Values for labour productivity varied largely from year to year.

Table 4.1.1: Belgian fish processing industry sector overview, 2008-2012 (*)

Variable	2008	2009	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)							
Total enterprises	235	240	236	240	▲	2%	2%
≤10 employees	201	206	202	206	▲	2%	2%
11-49 employees	28	28	28	28	▬	0%	0%
50-249 employees	5	5	5	5	▬	0%	0%
≥250 employees	1	1	1	1	▬	0%	0%
Employment (number)							
Total employees	1,690	1,832	2,326	2,492	▲	7%	47%
Male employees			1,596	1,442	▼	-10%	
Female employees			730	1,050	▲	44%	
FTE	1,373	1,763	2,400	2,202	▼	-8%	60%
Indicators							
FTE per enterprise	5.8	7.4	10.2	9.2	▼	-10%	57%
Average wage (thousand €)	34.6	35.5	35.9	47.9	▲	33%	38%
Labour productivity (thousand €)	34.7	98.3	66.3	93.9	▲	42%	171%
Unpaid work (%)	0.0	0.0	0.0	0.0	▬	0%	0%

(*) Data for 2010 were not available



Figure 4.1.1: Belgian employment trends, 2008-2012 (Data for 2010 were not available)

4.1.2 Economic performance of the Belgian fish processing industry sector

Table 4.1.2 shows detailed income, detailed costs and the overall economic performance for the Belgian processing industry for the period from 2008 to 2012. Figure 4.1.2 focuses on 2012, while Figure 4.1.3 visualises total income and total costs over the period 2008-2012.

For 2012, the total income of the Belgian fish processing industry was estimated at around €830 million. The total income consists of turnover, other income and subsidies, of which turnover and other income made up for 99% and almost 1% respectively. Subsidies represented less than 1% of the total income in 2012. This was comparable to other Members States such as France, the Netherlands, Germany and Denmark. Data on subsidies for 2008 and 2009 were not available separately (they were included in other income). However, it can be assumed that values were low.

The purchase of fish and other raw material appears to be the most important expenditure and made up for 57% of the total income in 2012 (Figure 4.1.2 and Table 4.1.2). Other operational cost covered 17%, wages and salaries 13% and imputed value of unpaid labour less than 1%. Energy cost made up for 2% of the total income in the same year. This was comparable to findings in other Member States. However, the estimated cost for raw material in 2012 decreased with 25% compared to 2011. The average price of raw material in 2011 on the world market was higher than for other years, which can possibly explain the rise and drop of this purchase cost.

A main reason for the low profitability is the high running cost to turnover ratio, which represented 92% and 88% of total income in 2011 and 2012 respectively (Table 4.1.2). The profitability was positive in 2012, but the economic performance of the sector seems relatively low. In 2008, the Belgian fish processing industry experienced a negative net profit, which might have been caused by the financial crisis. However, since then the net profit has been positive. It can be observed that the income increased between 2008 and 2011 and decreased again slightly in 2012. The total production costs seem to follow the same pattern except for 2008. In the period 2008-2012, income showed a stronger increase than production costs (29% vs. 13%). The expenditures for raw material have been reduced with 12% between 2008 and 2012. All other costs have increased.

The Gross Value Added (GVA) is calculated as the total income deducted by energy cost, fish and other raw material cost and other operational cost. The GVA reached €207 million in 2012 (25% of total income), which was an increase of 30% compared to 2011. The GVA also increased over the period 2008-2012. This is a result of the increase in total income relative to total costs over this period. The GVA increased more than the total income meaning that productivity of the production factors has increased over the period 2008-2012. A strengthening of the labour productivity over this time period supports this assumption. However, capital productivity has decreased over this period of time (Table 4.1.2). The decrease in production costs between 2011 and 2012 resulted in an increase in operating cash flow of the sector.

All in all, the sector seemed to have become more profitable despite the financial crisis. The data show that economic performance increased for the indicators gross value added, operating cash flow, EBIT and net profit during the period 2008-2012. Turnover, however, slightly decreased in 2012 compared to 2011 (-4%). The financial position of the industry seems less well off in 2012 than in 2008, which may be due to the significant increase in the amount of debt. Investments have increased between 2011 and 2012 denoting positive expectations for the future of the industry in 2012.

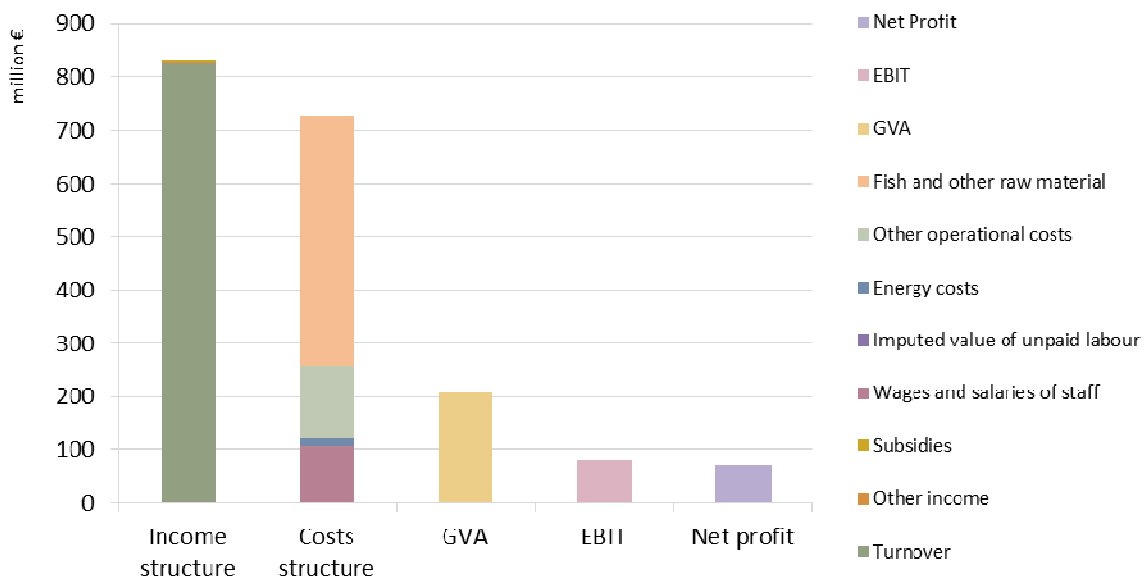


Figure 4.1.2: Economic performance of the Belgian fish processing industry sector, 2012

Table 4.1.2: Economic performance of the Belgian fish processing industry sector, 2008-2012 (*)

Variable	2008	2009	2011	2012		Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	639.9	655.3	860.9	825.9	▼	-4% ▲	29%
Other income	5.9	6.8	19.4	4.9	▼	-75% ▼	-17%
Subsidies			0.3	1.5	▲	473%	
Total Income	645.0	660.1	880.6	830.8	▼	-6% ▲	29%
Expenditure (million €)							
Purchase of fish and other raw material for production	537.4	417.8	628.6	470.5	▼	-25% ▼	-12%
Wages and salaries of staff	47.5	62.6	86.2	105.4	▲	22% ▲	122%
Imputed value of unpaid labour			0.0	0.0	▬	0%	
Energy costs	7.8	8.2	14.1	14.4	▲	2% ▲	84%
Other operational costs	52.2	60.8	78.5	137.5	▲	75% ▲	164%
Total production costs	644.9	549.4	807.4	727.8	▼	-10% ▲	13%
Capital Costs (million €)							
Depreciation of capital	23.0	13.0	24.4	21.2	▼	-13% ▼	-8%
Financial costs, net	50.9	4.9	47.7	11.6	▼	-76% ▼	-77%
Extraordinary costs, net	1.3	0.9	0.5	2.0	▲	349% ▲	61%
Capital Value (million €)							
Total value of assets	39.2	86.5	169.0	388.7	▲	130% ▲	891%
Net Investments	-3.1	62.7	26.7	37.9	▲	42% ▲	1337%
Debt	172.7	149.8	162.2	337.1	▲	108% ▲	95%
Performance Indicators (million €)							
Gross Value Added	47.6	173.4	159.2	206.9	▲	30% ▲	335%
Operating Cash Flow	0.1	110.7	73.3	103.0	▲	41% ▲	142789%
Earning before interest and tax	-22.9	97.8	48.8	81.8	▲	67% ▲	456%
Net Profit	-73.8	92.9	1.2	70.2	▲	5865% ▲	195%
Capital productivity (%)	121.2	200.4	94.2	53.2			
Return on Investment (%)	-58.4	113.0	28.9	21.0			
Financial Position (%)	440.1	173.2	95.9	86.7			
Future Expectation Indicator (%)	-66.4	57.5	1.3	4.3			

(*) Data for 2010 were not available



Figure 4.1.3: Income, production cost, wages and labour productivity trends of the Belgian fish processing industry sector, 2008-2012 (Data for 2010 were not available)

4.1.3 Overview of the Belgian fish processing industry sector by size categories

Figure 4.1.4, Figure 4.1.5, Figure 4.1.6 and Table 4.1.3 give an overview of the economic situation of the fish processing industry by size categories.

As stated in section 4.1.1, most enterprises were small and these small enterprises accounted for the majority of the total turnover and provided the most employment. However, over 20% of total turnover was attributed to one single large enterprise of more than 250 employees in the years that it contributed to the data (2009 and 2011). On the reverse, the category of 50-249 employees contributed in the other years (2008 and 2012) and both size categories seem to hold a comparable share.

For 2012, for all size categories, purchase of raw materials was the most important cost (Figure 4.1.5). Total production costs were particularly high for the categories 11-49 employees and 50-249 employees (95% and 93% of total income respectively). GVA, net profit and operating cash flow were higher for enterprises with less than 11 employees compared to the other categories in 2012.

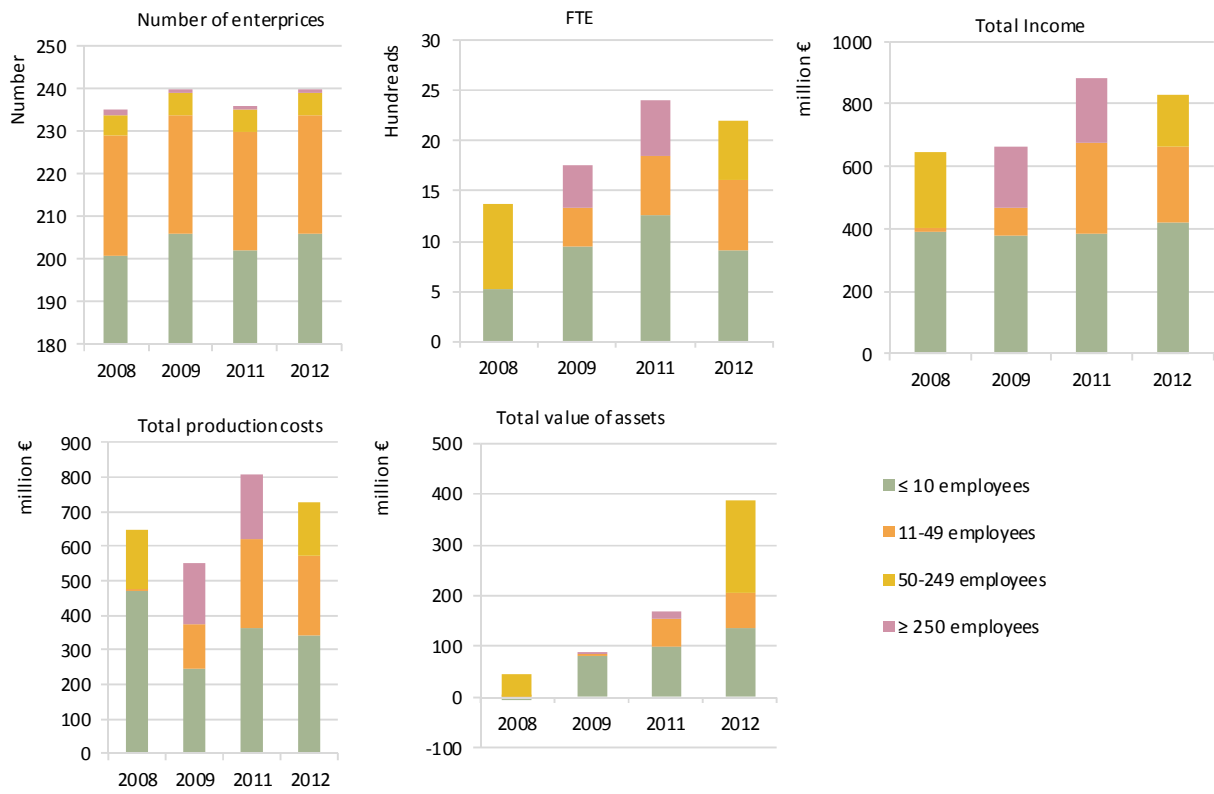


Figure 4.1.4: Belgian main structural and economic variables trends by size category, 2008-2012 (Data for 2010 were not available)

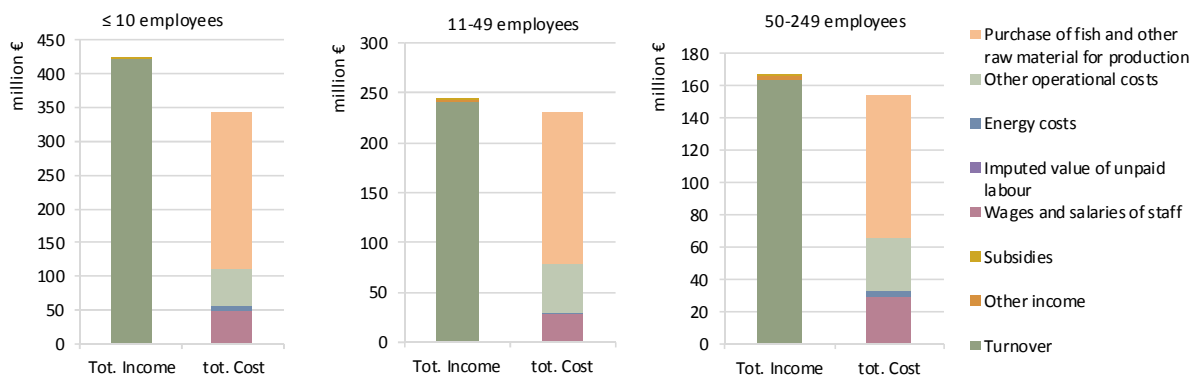


Figure 4.1.5: Belgian income and cost structure, by size category, 2012

Table 4.1.3: Economic performance of the Belgian fish processing industry sector by size category (indicators in million €), 2008-2012 (*)

Variable	2008	2009	2011	2012		Δ (2011-12)	Δ (2008-12)
less than or equal to 10 employees							
Total Income	391.6	381.0	386.4	421.9	▲	9%	▲ 8%
Total production costs	468.8	243.3	363.8	342.7	▼	-6%	▼ -27%
Gross Value Added	-64.3	166.2	59.0	126.9	▲	115%	▲ 297%
Operating Cash Flow	-77.2	137.7	22.6	79.1	▲	251%	▲ 203%
Earning before interest and tax	-97.5	129.2	13.7	72.6	▲	429%	▲ 174%
Net Profit	-146.8	127.1	12.2	70.8	▲	479%	▲ 148%
between 11 and 49 employees							
Total Income	7.5	85.5	290.7	243.3	▼	-16%	▲ 3147%
Total production costs	5.6	130.3	256.2	230.6	▼	-10%	▲ 4041%
Gross Value Added	2.1	-30.1	57.0	39.6	▼	-30%	▲ 1762%
Operating Cash Flow	1.9	-44.8	34.5	12.7	▼	-63%	▲ 561%
Earning before interest and tax	1.7	-46.2	25.1	5.5	▼	-78%	▲ 228%
Net Profit	1.6	-46.5	-20.0	4.2	▲	121%	▲ 156%
between 50 and 249 employees							
Total Income	245.9			165.6	▼		-33%
Total production costs	170.9			154.5	▼		-10%
Gross Value Added	109.7			40.3	▼		-63%
Operating Cash Flow	75.0			11.1	▼		-85%
Earning before interest and tax	72.6			3.6	▼		-95%
Net Profit	71.1			-4.9	▼		-107%
greater than or equal to 250 employees							
Total Income		193.7	203.3				
Total production costs		175.8	187.4				
Gross Value Added		37.3	42.8				
Operating Cash Flow		17.9	15.9				
Earning before interest and tax		14.7	9.7				
Net Profit		12.3	8.7				

(*) Data for 2010 were not available

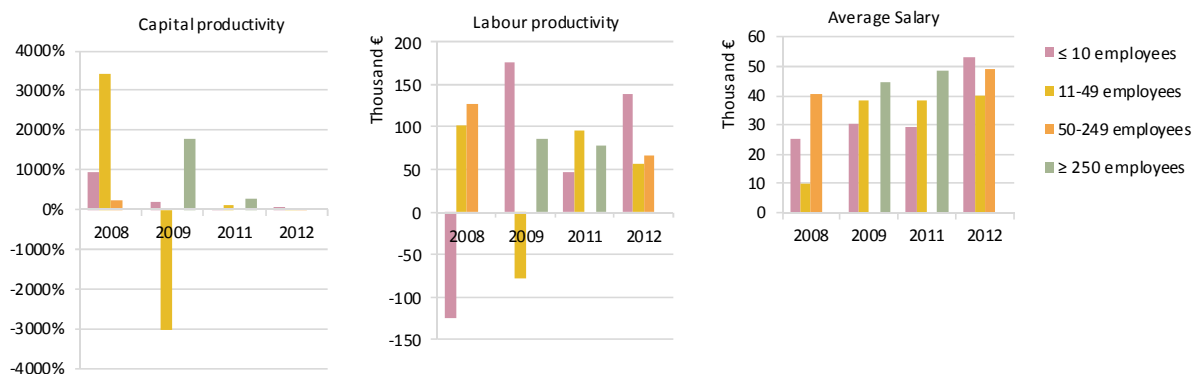


Figure 4.1.6: Capital productivity, labour productivity and salary trends of Belgian fish processing industry (2008-2012) (Data for 2010 were not available)

4.1.4 Belgian seafood trade

Belgium was a net importer of seafood products (Figure 4.1.7). The raw materials for the processing industry were purchased on the global market for fish and fish products and the dependency on domestic landing was rather limited. In the period 2008-2012 imports of seafood in Belgium have been increasing in terms of value (Figure 4.1.7). It seems that this is partly due to an increase of imported fish from EU member states (Figure 4.1.8). In 2012, 59% of the total import value (€1.50 billion) was attributed to EU member states and 41% to countries outside the EU (Figure 4.1.8). Total export values amounted to €732 million and of this amount 97.5% was attributed to exports to EU member states and only 2.5% to countries outside the EU.

Consumption of fish was about 70% fresh and 30% frozen. More than 90% of fresh fish and 95% of frozen products were imported. Imported fish from inside the EU mainly came from the Netherlands, France, Germany, Denmark and Great Britain (Figure 4.1.9). Species from these countries included salmon, mussels, shrimp (including tropical shrimp imported from the Netherlands) and cod (Figure 4.1.10). These imported products were mainly in a frozen or fresh state. However, prepared/preserved products also presented an important share of imported fish products (Figure 4.1.11). Outside the EU, main import countries included China and Vietnam, with frozen products of Alaska pollock and pangasius respectively.

Over 97% of the export occurred to EU member states. A large amount of fish was exported to France and the Netherlands, followed by Germany and Spain (Figure 4.1.8 and Figure 4.1.9). Species included salmon and shrimp (including tropical shrimp). The Norway lobster landed by the Belgian fleet was mainly exported to the Netherlands. Almost 60% of products were exported under a frozen form (Figure 4.1.11). Around 20% was exported as fresh and another 20% as prepared or preserved products.

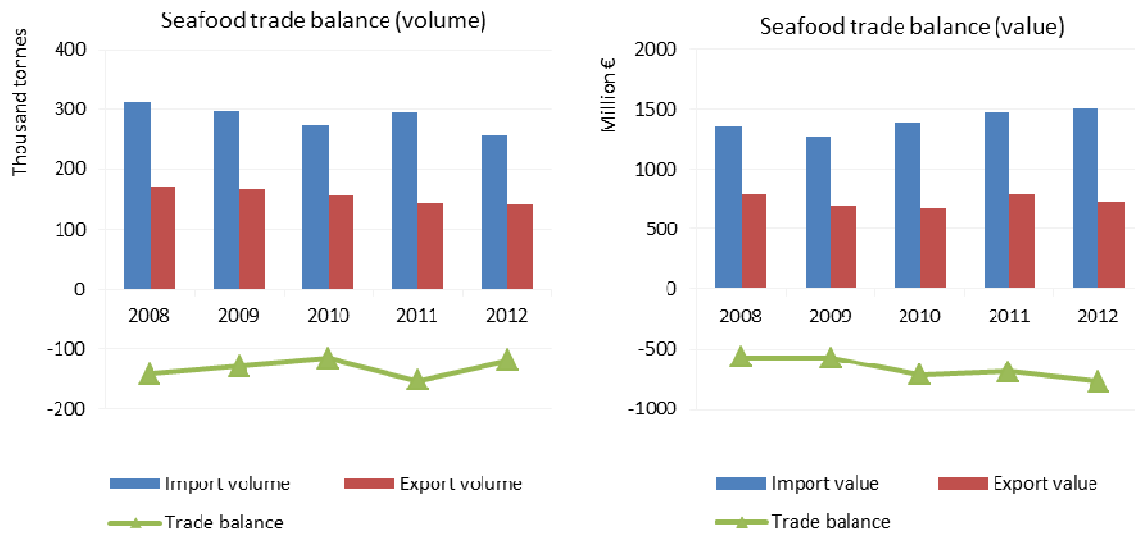


Figure 4.1.7: Belgian seafood trade balance trends in volume (left) and value (right)

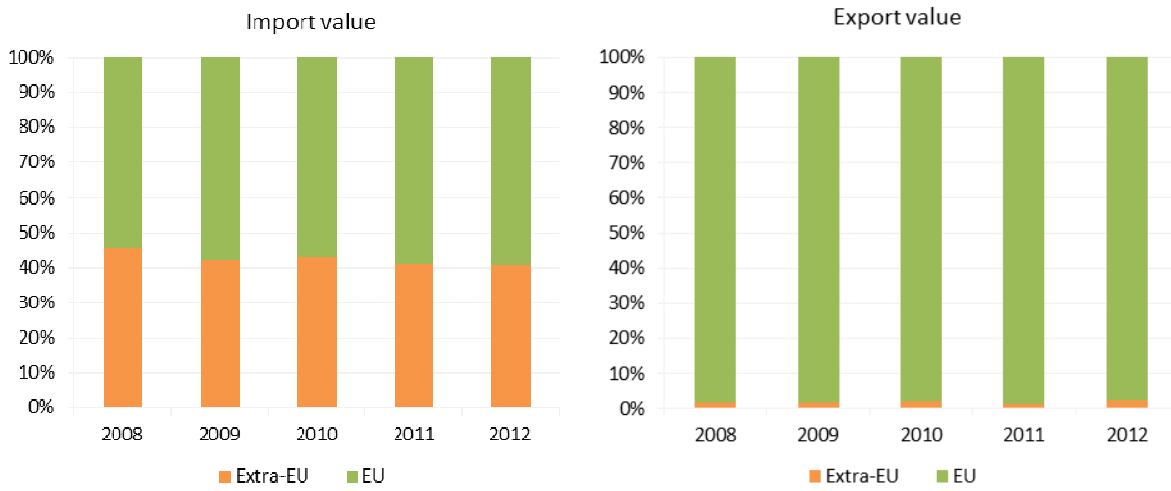


Figure 4.1.8: Belgian seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

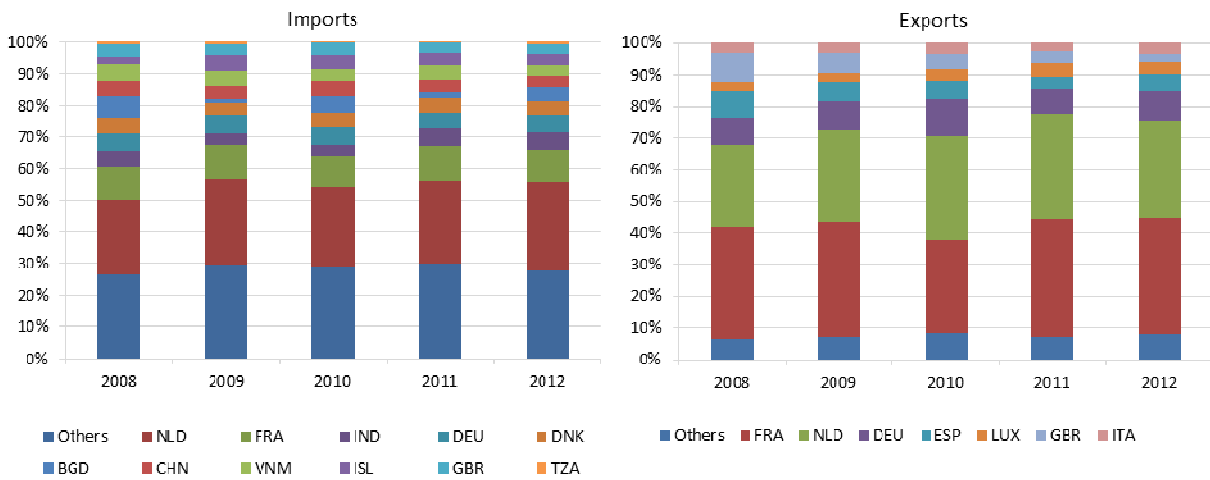


Figure 4.1.9: Belgian seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

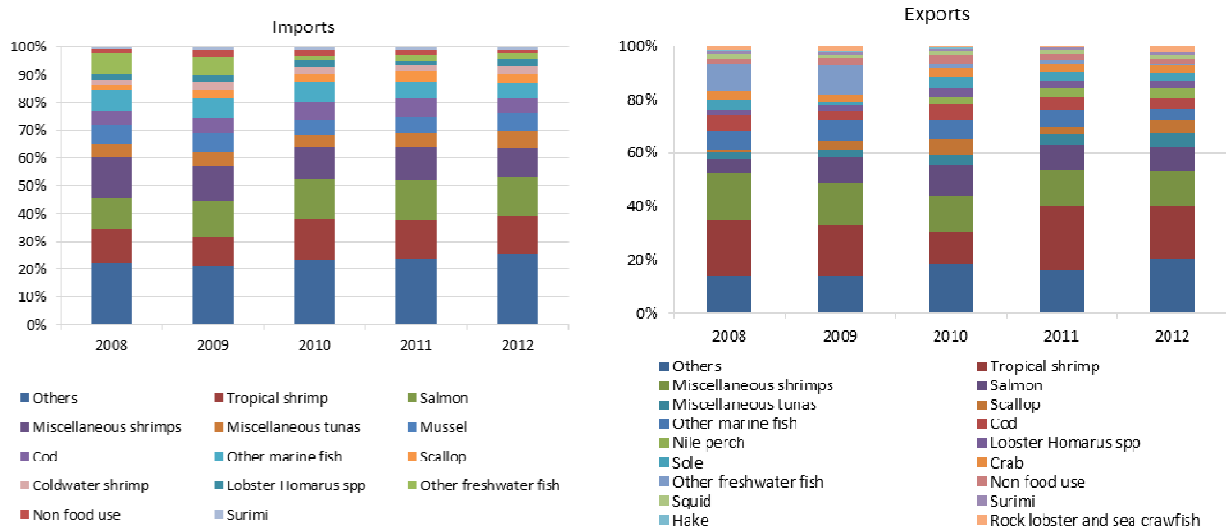


Figure 4.1.10: Belgian seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

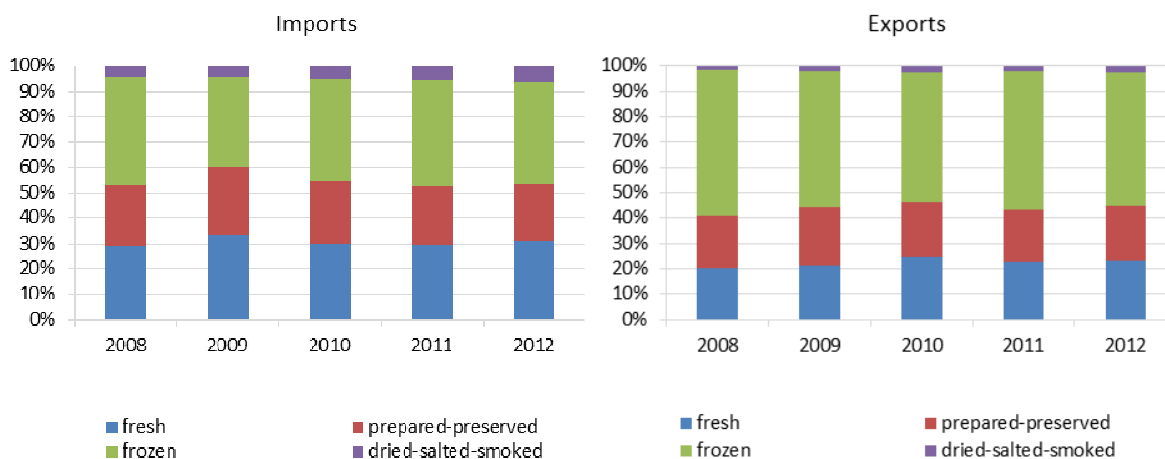


Figure 4.1.11: Belgian seafood imports (left) and exports (right) trends by type of products: shares in value

4.1.5 Trends and drivers for change

Compared to 10 years ago, the number of fish processing enterprises decreased with about one third. This was partly attributed to the implementation of stricter norms with regard to food safety and traceability. However, the market remained rather stable until 2012. The latter is due to market diversification: businesses had their own speciality assuring their reason for existence. For the purchase of fish and other raw material Belgium was almost completely reliant on other countries. Due to the large dependency, many enterprises switched to resale. There was a general tendency to reduce primary processing. Together with a rising awareness of costs, a large amount of the fish were gutted and sliced directly after being caught in order to limit transport to the marketable parts only. However, these enterprises are not taken into account in this report as they figure under a different NACE code (fishing vessels code 05.01). This means that the number of enterprises taking part in processing activities (under NACE code 15.20) may decrease in the future as this would mean reducing investments in gut and filet machinery as well as personnel conducting these tasks. This is a logical trend considering that most enterprises in the sector consisted of small businesses with less than 11 employees. More enterprises were therefore choosing to buy fish that has already been sliced to fillets as this is what was most sold in the retail.

The larger enterprises on the other hand were investing more in the development of convenience products, such as marinated, seasoned and breaded fillets. They were also experimenting with prepared foods (burgers, lasagne, salads, snacks, ...). However, these products were still marginal compared to the meat sector.

The price of fresh fish was instable due to the yearly altering quota, the weather conditions and unpredictability of the catch. This caused the price of certain species to be very high during certain time periods. It can therefore be expected that the high dependency on import for raw material will continue.

4.2 BULGARIA

4.2.1 General overview of the Bulgarian fish processing industry sector

In 2012 the Bulgarian processing industry sector registered a decrease in number of enterprises from 33 in 2011, as well as from 21 units in 2008, to only 10 enterprises in 2012, corresponding to a decrease in percentage of 48% versus 2008 and 70% versus 2011. Also, the staff number decreased from 325 in 2011 to 252 in 2012; the decrease is quite significant comparing with 2008 number – 937; in FTE the figures are the same – no explanation being provided by member state for this identity of the level indicators, so no assumption could be done on. As per gender, female decreased is higher in 2012/2011 by -48%, but the male total number increased by 2%. Due to the huge decrease, as percentage and units number, of enterprises, the FTE per enterprise increased by 156% in 2012 to 2011. This conducted to on decrease of the average wage from €6.3 thousand to €2.4 thousand, by 62%, but labour productivity increased from €26.4 thousand in 2011, to €36.7 thousand in 2012. Unpaid work increased twice in 2012 versus 2011 up to 1.7% from 0.8%; the figures in table 4.2.1 and figure 4.2.1 are used for this analyze.

No expert from Bulgaria attended the meeting, no further analysis and insights of the Bulgarian sector can be provided or additional explanation being no available.

Table 4.2.1: Bulgarian fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	21	19	10	33	10	▼	-70%	▼ -52%
≤10 employees	5	4	6	30	6	▼	-80%	▲ 20%
11-49 employees	7	9	1	1	2	▲	100%	▼ -71%
50-249 employees	9	6	3	2	2	▬	0%	▼ -78%
≥250 employees	0	0	0	0	0	▬	0%	▬ 0%
Employment (number)								
Total employees	937	817	317	325	252	▼	-22%	▼ -73%
Male employees	427	373	121	160	83	▼	-48%	▼ -81%
Female employees	510	444	196	165	169	▲	2%	▼ -67%
FTE	937	817	317	325	252	▼	-22%	▼ -73%
Male FTE	427	373	121	160	83	▼	-48%	▼ -81%
Female FTE	510	444	196	165	169	▲	2%	▼ -67%
Indicators								
FTE per enterprise	44.6	43.0	31.7	9.9	25.2	▲	156%	▼ -44%
Average wage (thousand €)	1.8	2.1	2.4	6.3	2.4	▼	-62%	▲ 33%
Labour productivity (thousand €)	10.7	14.5	27.5	26.4	36.7	▲	39%	▲ 243%
Unpaid work (%)	0.4	10.0	1.3	0.8	1.7	▲	114%	▲ 317%

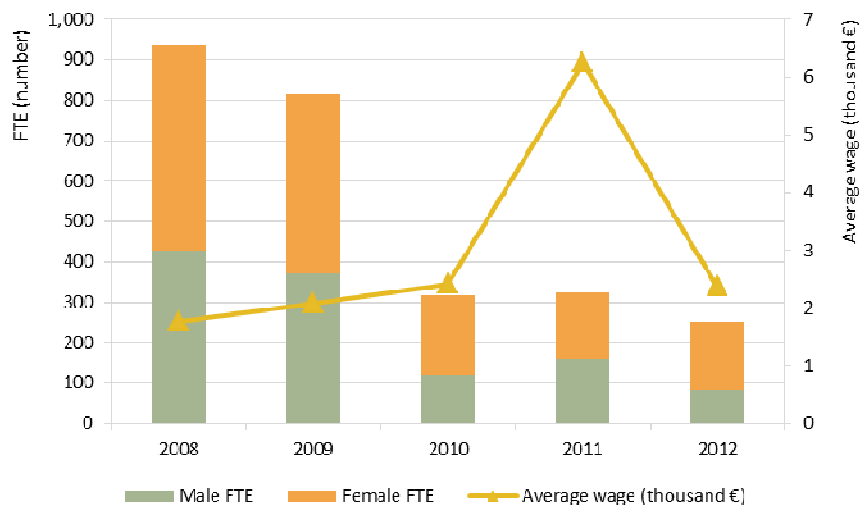


Figure 4.2.1: Bulgarian employment trends, 2008-2012

4.2.2 Economic performance of the Bulgarian fish processing industry sector

In the coming analyses are used only the figures transmitted by Bulgaria to JRC data base; with respect to that it should be mentioned, as a general observation.

With regard to data on economic performance should be noted there is a strange level of indicators: GVA €9.2 million - 94.8% from total income, EBIT €8.7 million - 94.5 % and net profit €8.3 million - 90.2 % in total income amounting €9.7 million. The first observation is the very small level of total costs amounting €1 million.

These aspects are leading for a conclusion on questionable data quality collection, transmission by member state; is very strange the low level of total costs, especially those for fish and other raw material amounting €0.1 million, for a turnover of €7.2 million, meaning only 1.4 % of the costs in the turnover, and 13.89% for total costs – amounting €1 million.



Figure 4.2.2: Economic performance of the Bulgarian fish processing industry sector, 2012

Table 4.2.2: Economic performance of the Bulgarian fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Income (million €)								
Turnover	20.9	17.7	8.4	7.7	7.2	▼	-6%	▼ -66%
Other income	1.1	0.6	0.7	1.3	2.5	▲	96%	▲ 114%
Subsidies	0.3	0.2	0.0	0.0	0.0	▬	0%	▼ -88%
Total Income	22.3	18.5	9.1	8.9	9.7	▲	9%	▼ -57%
Expenditure (million €)								
Purchase of fish and other raw material for production	10.4	5.4	0.1	0.0	0.1	▲	150%	▼ -99%
Wages and salaries of staff	1.7	1.5	0.8	2.0	0.6	▼	-71%	▼ -65%
Imputed value of unpaid labour	0.0	0.2	0.0	0.0	0.0	▼	-37%	▲ 48%
Energy costs	0.6	0.5	0.1	0.1	0.2	▲	40%	▼ -70%
Other operational costs	1.0	0.6	0.2	0.1	0.1	▼	-19%	▼ -89%
Total production costs	13.7	8.2	1.2	2.3	1.0	▼	-57%	▼ -93%
Capital Costs (million €)								
Depreciation of capital	0.1	1.5	0.2	0.2	0.0	▼	-94%	▼ -90%
Financial costs, net	0.6	0.4	0.1	0.1	0.3	▲	528%	▼ -38%
Extraordinary costs, net	0.1	1.2	0.0	0.0	0.0	▼	-31%	▼ -68%
Capital Value (million €)								
Total value of assets	21.3	15.8	1.6	2.0	8.5	▲	325%	▼ -60%
Net Investments	1.4	3.0	0.0	0.0	0.0	▼	-30%	▼ -99%
Debt	11.0	7.7	4.8	4.4	5.8	▲	33%	▼ -47%
Performance Indicators(million €)								
Gross Value Added	10.0	11.8	8.7	8.6	9.2	▲	8%	▼ -8%
Operating Cash Flow	8.6	10.4	8.0	6.6	8.7	▲	32%	▬ 0%
Earning before interest and tax	8.5	8.9	7.7	6.3	8.7	▲	37%	▲ 2%
Net Profit	8.0	8.5	7.6	6.3	8.3	▲	32%	▲ 5%
Capital productivity (%)	47.1	74.7	542.7	430.9	109.1			
Return on Investment (%)	40.1	56.2	483.0	317.8	102.3			
Financial Position (%)	51.5	48.9	297.6	218.9	68.3			
Future Expectation Indicator (%)	5.9	10.0	-11.5	-10.1	0.0			

As special comment on the performance indicators evolution and their huge percentage in turnover, as mentioned above, but also for 2012 level of: capital productivity in 2012 of 109.1 %, ROI 102.3%. For the future expectation indicator no other comment could be done, consequently, only – showing a recovering trend from 2011.

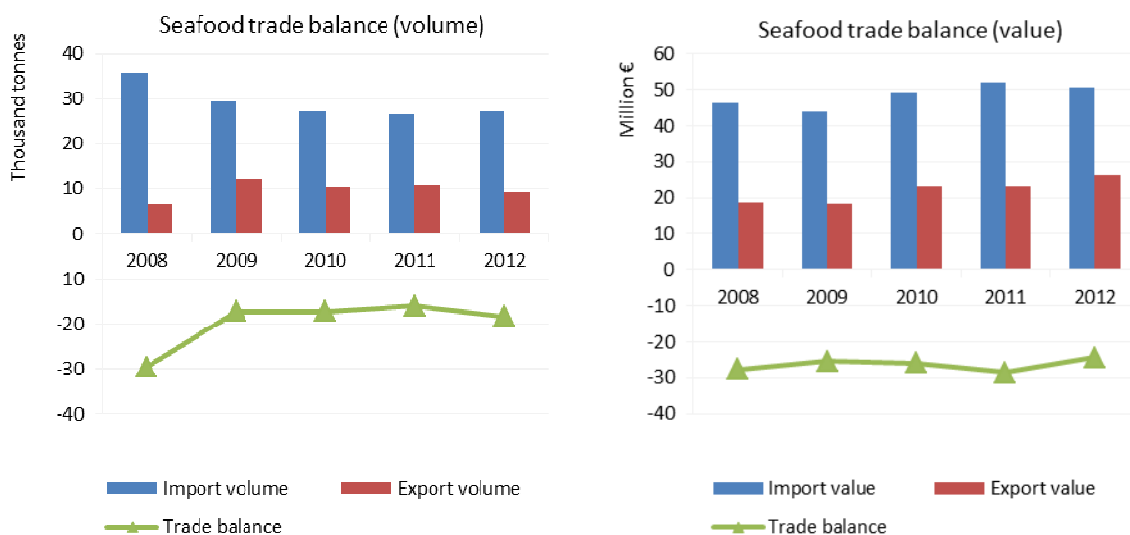


Figure 4.2.3: Income, costs, wages and labour productivity trends of the Bulgarian fish processing industry sector, 2008-2012

As per the figure 4.2.3 the decreasing trend of total income from 2008 to 2011 and a slight increase in 2012 is shown; the same decreasing trend of total costs and average salary, and a result a huge increasing trend of productivity.

4.2.3 Bulgarian seafood trade

The trade balance evolution is similar with other countries in the region, having a deficit over the whole analyzed period, especial for the 2012 year increasing deficit in volume, but with a decreasing deficit as value, mainly due to the increase of exports value, more than €25 million, and reduced imports as value totalizing €50 - figure 4.2.4.



The imports of Bulgaria are originated mainly in the EU countries, more than 83%, and exports also are mainly to the EU countries, more than 62% - figure 4.2.5.

Figure 4.2.4: Bulgarian seafood trade balance trends in volume (left) and value (right)

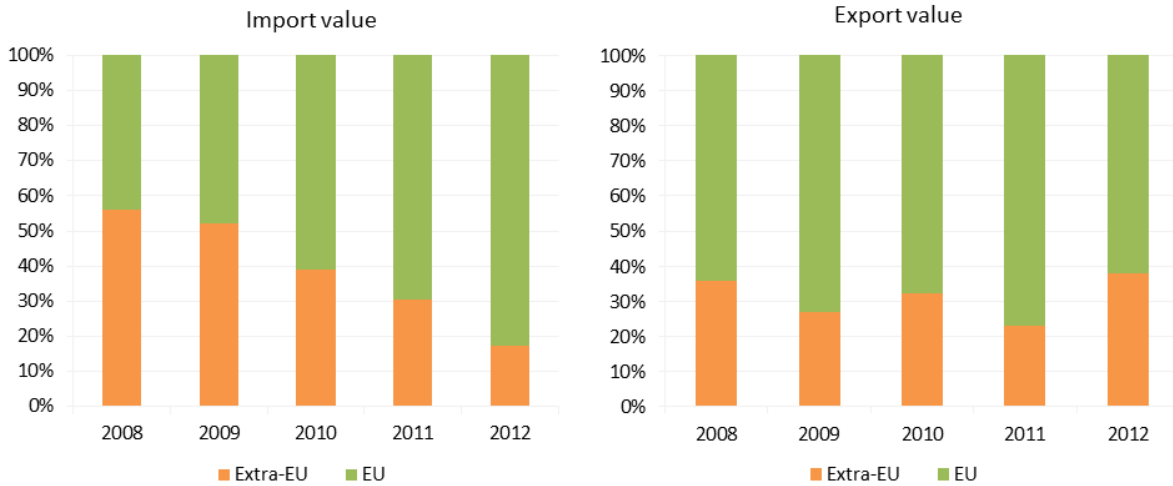


Figure 4.2.5: Bulgarian seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

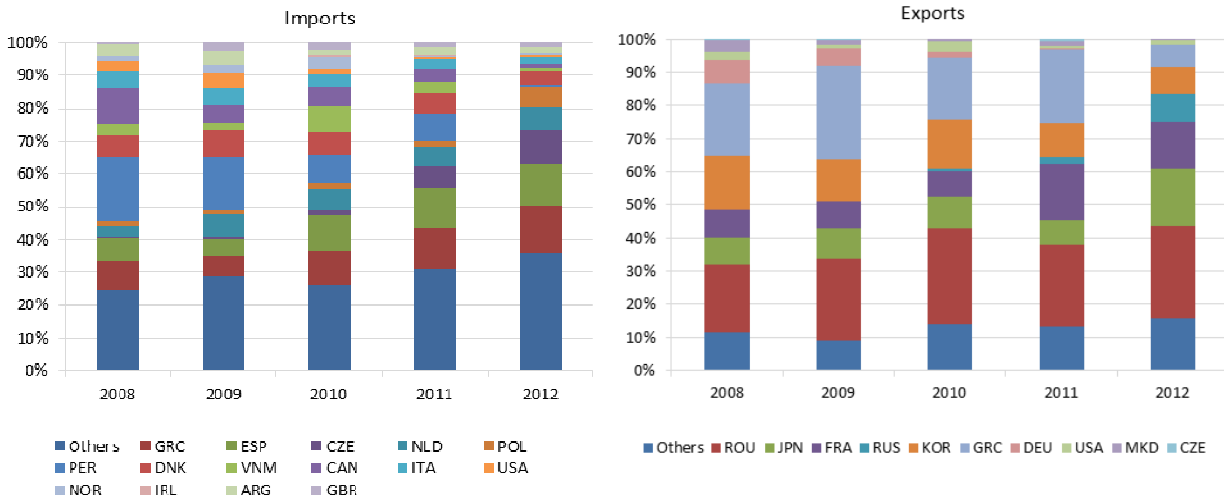


Figure 4.2.6: Bulgarian seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

For 2012, considering the origin of imports of Bulgaria processing industry, as per figure 4.2.6, Greece, Spain, Czech Republic, Nederland and Poland are the main EU countries as suppliers, observing that more 34% are imported from other countries, and as non EU countries are: Peru, Vietnam, Canada, USA, Norway and Argentina. For exports the main EU destinations are: Romania, France, Greece, Germany, Czech Republic, and

non EU countries are: Japan, Russian Federation, Korea, USA and Republic of Macedonia, and around 17% to other destinations – figure 4.2.6.

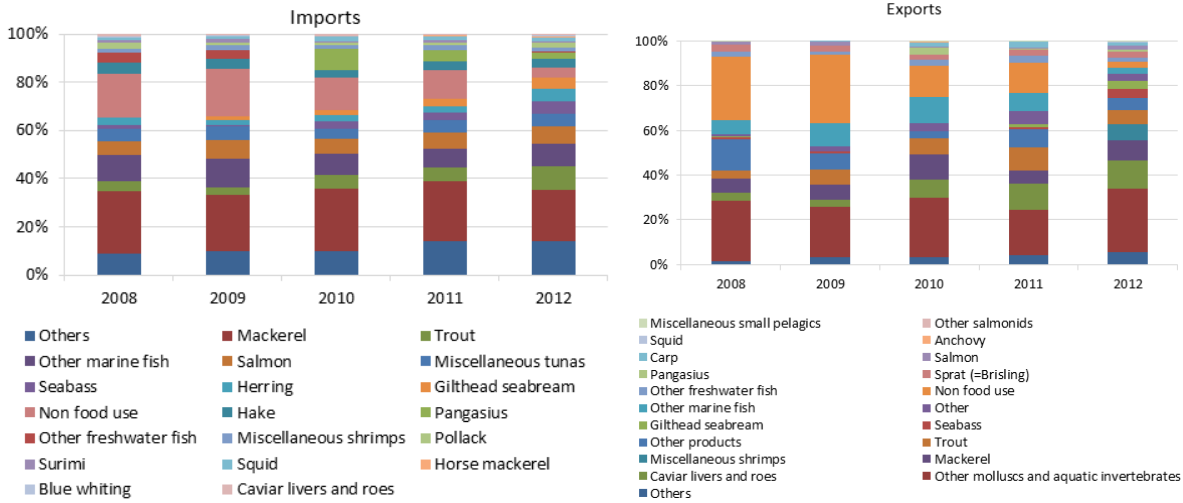


Figure 4.2.7: Bulgarian seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

Figure 4.2.7 shows a similar picture as for the other countries in the region, namely: imports of fish species not originating in the Black Sea area, where the fishing fleet is acting, such as: mackerel, trout, tuna and other miscellaneous of tunas, sea bass, sea bream, herring, hake, pangasius, and others; and exports: molluscs and aquatic invertebrates (mainly Rapa whelk), other fresh water fish, anchovy, trout, carp, small pelagics, sprat, etc.

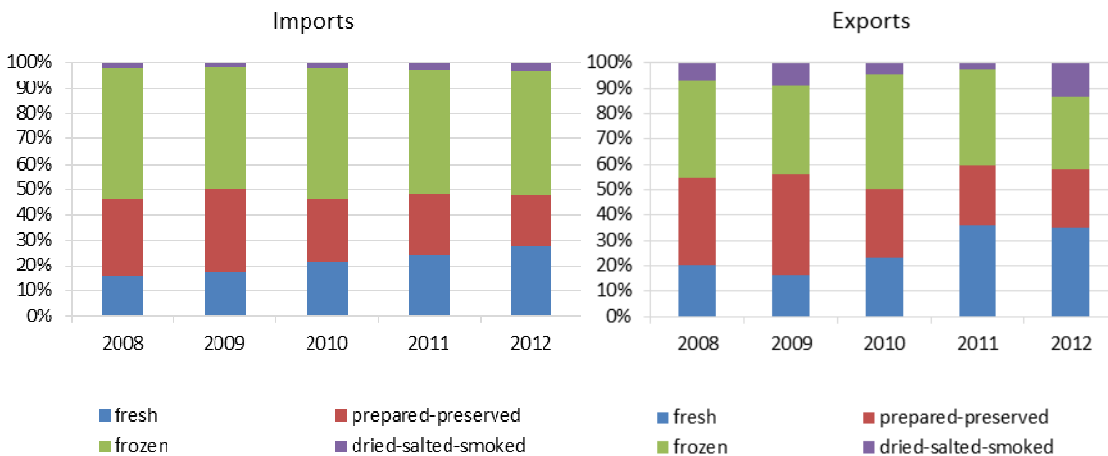


Figure 4.2.8: Bulgarian seafood imports (left) and exports (right) trends by type of products: shares in value

Figure 4.2.8 indicates the frozen fish as the main imported product – around 49%, followed by fresh fish - around 28%, prepared-preserved – around 20% and less than 3 % dried-salted-smoked fish/fish products.

Exports are mainly fresh around 35%, prepared-preserved – around 22%, frozen – around 30% and dried-salted-smoked fish – around 13%.

4.2.4 Trends and drivers for change

As general comment for the trends in Bulgaria fish processing industry could be the aspect of a kind of stabilization of the production limits (as volume and value), the maintaining level of the actual average of salary. Pending on the economic crises effects absorption on the entirely country economy, and the comportment of the owners could be expected to have a stable evolution for the year 2013, that could be continued in 2014. The main trends are the consolidation of the processing units on the segment less than 10 employees. Pending on the market needs, especially for product not available in the area of the fishing fleet, the export and import of fish and fish products would have the same trend with a slight increase in volume, but with no big increase in volume.

The EMFF availabilities could be used for the consolidation of the small companies and to increase the investments in modernization and diversification of the production process.

As in the past years, should be recommended an increase of detailed data availability, and quality, as well as the additional explanation providing on the structure and level of the production costs, the level of which seems to be disproportional comparing with the level of turnover and total income.

4.3 CROATIA

4.3.1 General overview of the Croatian fish processing industry sector

The Croatian fish processing industry is mainly located around the most important fishing harbors in Croatia. The most important areas in terms of value and volume of landings are the north and middle parts of Dalmatia, especially Zadar and surroundings and most of the processing industries are located in these areas. Croatia is one of the member states which exports fish and fish products more than it imports. The Croatian processing industry produces a variety of products based on many different species as is consistent with mixed fisheries. As such, the raw materials for the industry are purchased on the global market for fish and fish products but the dependency on domestic landing is also present. Nevertheless, the catches of tuna, anchovy and sardine are of some importance.

The Croatian fish processing factories are dependent on domestic catches, but they are also receiving raw material from countries like Spain, Italy and Falkland Islands. Furthermore, some Croatian regions and especially islands are heavily dependent on the local fisheries and processing industry, because alternative job opportunities in these areas are low.

The Croatian import is dominated by the European squid and Patagonian squid from Spain but also fresh and chilled fish from Spain, Italy and Norway in 2011 and Spain, Norway and Argentina in 2012. The entire fish processing industry is using fresh raw material for production from domestic fishery and aquaculture, while frozen raw material for production is imported from all over the world.

The net profit of the Croatian processing industry was positive in 2011 and negative in 2012. On the other hand, the turnover increased 5% from 2011 to 2012. However, the total amount of raw material used in the industry measured as output in terms of commodities from the industry (processed raw material) increased in the period. Most products are used for human consumption, some for fish flour; some are intended for further processing while a small percentage is discarded.

In Table 4.3.1 an overview of the development in the number of fish processing enterprises and the number of employees and full time employees is shown. In 2011 there were 18 enterprises with main production in the Croatian fish processing industry sector. The overall structural development in the sector can be characterized by a decline in the number of enterprises. From 2011 to 2012 the number of enterprises increased from 18 to 20, corresponding to an 11% increase.

In total, the Croatian processing sector employed 1273 people in 2011 and 1365 in 2012 which represents a 7% increase in 2012 in the number of full-time employees.

In 2013, 1500 employees were recorded in the processing industry in Croatia with a value of manufacturing industry of about €75.3 million. Compared to other EU member states, Croatia is placed 12th place in terms of number of employees in the processing industry, while in terms of the value it is in the 9th place. It can be concluded that the Croatian industry is producing products of lesser value.

The average size of the enterprises measured by the number of full-time employees decreased from 64 to 62 employees from 2011 to 2012. On the other hand, the average salary per FTE increased from 11.5 to 12.7 thousand

euro per year over the same period. The labor productivity in terms of gross value added per FTE has decreased from €41.8 to 8.5 thousand.

Enterprises that employ 11-49 employees in both years had 50% or more of the total number of employees; the number of male and female employees increased by 7%.

The value of unpaid labor in the Croatian fish processing industry is insignificant. In the years from 2011 to 2012, the value has been estimated to 0% of total amount of wages and salaries paid, which is why nobody confirmed that some of employees are working on a volunteer basis.

Table 4.3.1: Croatian fish processing industry sector overview, 2011-2012

Variable	2011	2012	Δ (2011-12)	
Structure (number)				
Total enterprises	18	20	▲	11%
≤10 employees	2	4	▲	100%
11-49 employees	6	6	▬	0%
50-249 employees	10	9	▼	-10%
≥250 employees	0	1	▬	0%
Employment (number)				
Total employees	1,273	1,365	▲	7%
Male employees	682	747	▲	10%
Female employees	591	618	▲	5%
FTE	1,150	1,231	▲	7%
Male FTE	657	702	▲	7%
Female FTE	493	529	▲	7%
Indicators				
FTE per enterprise	63.9	61.6	▼	-4%
Average wage (thousand €)	11.5	12.7	▲	10%
Labour productivity (thousand €)	41.8	8.5	▼	-80%
Unpaid work (%)	0.0	0.0	▬	0%

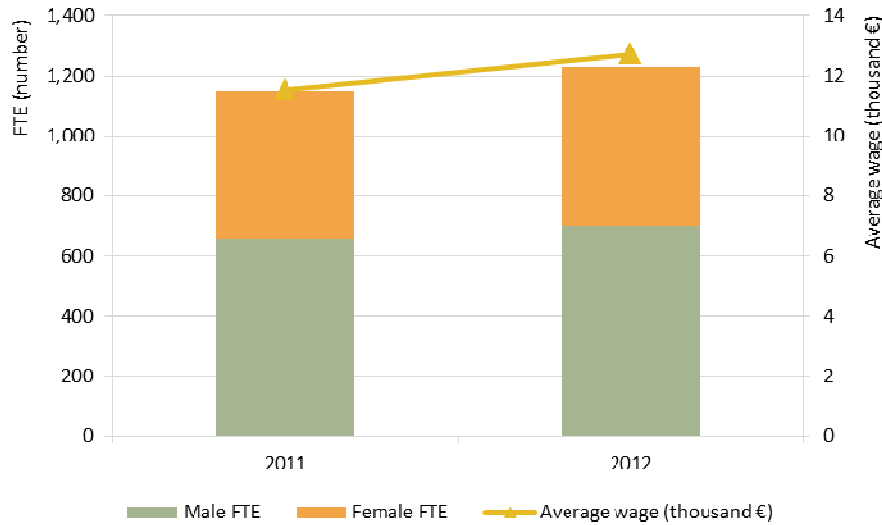


Figure 4.3.1: Croatian employment trends, 2011-2012

4.3.2 Economic performance of the Croatian fish processing industry sector

Turnover in 2012 was more than €48 million, which is €2.3 million more than in 2011, which corresponds to a 5% rise. The total income consists of turnover (52% in 2011, 60% in 2012), other income (42% in 2011, 34.3% in 2012) and subsidies (6% in 2011, 4.7% in 2012). While subsidies did not play the main role in total income, they were important as one of the factors of the economic growth, especially for the enterprises from 11 to 49 and from 50 to 249 employees. In the segment which has more than 250 employees there were no subsidies at all.

The amount of Gross Value Added (GVA) was rather high in 2011 (55% of total income), but it declined to 13% in 2012. This difference between the two years (78% fall in one year) is a result of other income reduction of almost €8 million and an increase of other operational costs of €27.5 million.

Earnings before interests and tax (EBIT) decreased in 2012 compared to 2011 as a result of increasing costs (which belongs to OCF) of over €33 million.

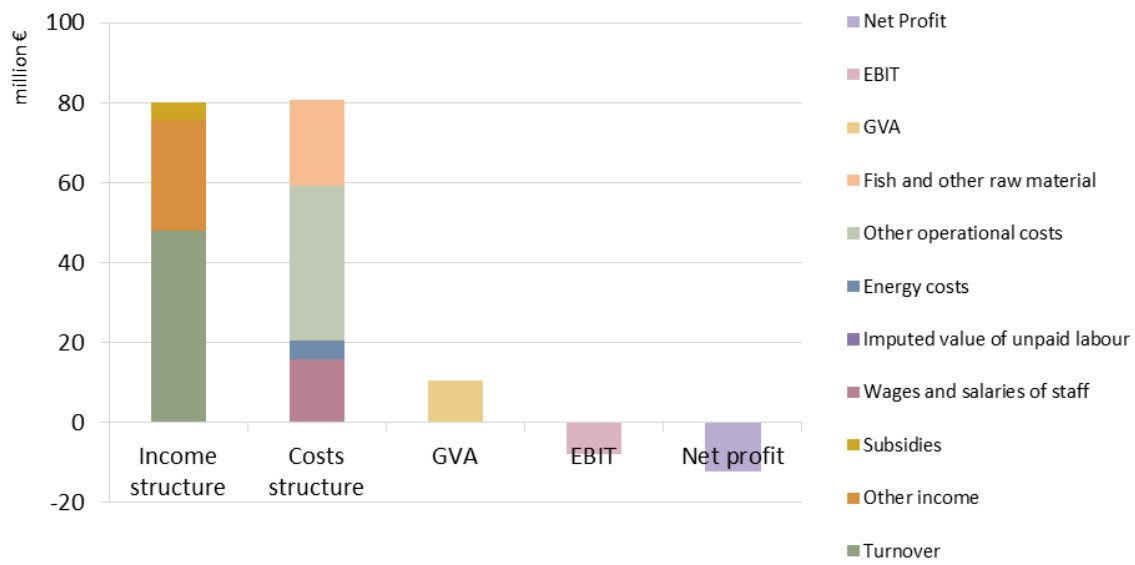


Figure 4.3.2: Economic performance of the Croatian fish processing industry sector, 2012

Table 4.3.2: Economic performance of the Croatian fish processing industry sector, 2011-2012

Variable	2011	2012	Δ (2011-12)	
Income (million €)				
Turnover	45.8	48.0	▲	5%
Other income	36.4	27.6	▼	-24%
Subsidies	5.4	4.6	▼	-15%
Total Income	87.6	80.2	▼	-8%
Expenditure (million €)				
Purchase of fish and other raw material for production	18.8	21.5	▲	14%
Wages and salaries of staff	13.3	15.7	▲	18%
Imputed value of unpaid labour	0.0	0.0	▬	0%
Energy costs	4.1	4.7	▲	16%
Other operational costs	11.2	38.9	▲	246%
Total production costs	47.4	80.8	▲	70%
Capital Costs (million €)				
Depreciation of capital	9.6	7.5	▼	-22%
Financial costs, net	4.3	4.3	▬	0%
Extraordinary costs, net	0.2	0.1	▼	-64%
Capital Value (million €)				
Total value of assets	142.2	174.9	▲	23%
Net Investments	12.7	22.7	▲	79%
Debt	60.5	73.9	▲	22%
Performance Indicators (million €)				
Gross Value Added	48.0	10.5	▼	-78%
Operating Cash Flow	40.2	-0.5	▼	-101%
Earning before interest and tax	30.6	-8.0	▼	-126%
Net Profit	26.3	-12.3	▼	-147%
Capital productivity (%)	33.8	6.0		
Return on Investment (%)	21.5	-4.6		
Financial Position (%)	42.6	42.3		
Future Expectation Indicator (%)	2.2	8.7		



Figure 4.3.3: Income, costs, wages and labour productivity trends of the Croatian fish processing industry sector, 2011-2012

In figure 4.3.3., the income, costs, wages and labor productivity is shown for the Croatian fish processing industry. From the figure it can be seen that total income is constant in the referent period while the total production costs increased by 41%. All together with costs, the labor productivity decreased because of negative GVA influence.

4.3.3 Overview of the Croatian fish processing industry sector by size categories

The most important segment in Croatian fish industry is certainly the size category with 50-249 employees. That category contains the largest number of total value of assets, full time employment and FTE. In 2011 were 10 enterprises with main activity in this category and 9 of them in 2012. Also, this category corresponded to 77% of total (1273) employees in 2011 and 64% of total (1365) in 2012. The main products were frozen sardine and anchovy and canned tuna. Turnover of enterprises with fish processing as a main activity in 2011 reaches €33 million and €71.5 million in total income. In 2012 the amount of turnover stayed almost the same with €31.5 million but total income decreased by 28% and it was less than €52 million. The reason why there was a big difference between total income in the referent period is in the fact that one big enterprise changed the number of employees so segment also had to be changed.

Some enterprises in the segment from 11-49 and the segment from 50-249 employees had tendencies to increase their total value of assets as can be seen from the increase of net investments in the last few years. Total value of assets is rising constantly from 2011 and the result of that is the increasing number of employees, new investments and modernisation of drivers for processing.

Differences between the different segments are shown in figures 4.3.4 and 4.3.5.

While small enterprises with 1-10 employees do not have a big economic influence in the Croatian fish processing industry, they are very important in local communities from a social standpoint and in keeping the tradition. More than 1000 years of fishing in Croatia the importance of maritime affairs and fisheries,

traditionally the most important activities of Croatian coast and islands. Even today, fishing, farming and fish processing are an important source of sustenance for the local population, especially in remote island areas.

Although the Adriatic Sea is rather scarce in fish, it has a high diversity of species that inhabit it. In total catch of marine fish and other marine organisms, the most representative is the small pelagic fish (mostly more than 80%) with the main destination being the fish processing industry.

In the category from 11-49 employees it is obvious that total income is based on turnover and in smaller percentage on subsidies. Costs are based on other operational costs (equipment rental charges, insurance premiums, transportation etc.) and purchase of fish and other raw material for production.

Total income in category from 50-249 employees is based on turnover and other income which is why enterprises in this category have a lot of different activities outside of fish processing. Except purchase of fish and other raw material for production there is also present other operational costs and salaries and wages in total cost amount.

In Croatia, the fish processing industry was divided in two segments in 2011 and in three segments in 2012. In the referent period the segment with the most enterprises is the one with 50-249 employees, 10 enterprises in 2011 and 9 in 2012.



Figure 4.3.4: Croatian main structural and economic variables trends by size category, 2011-2012

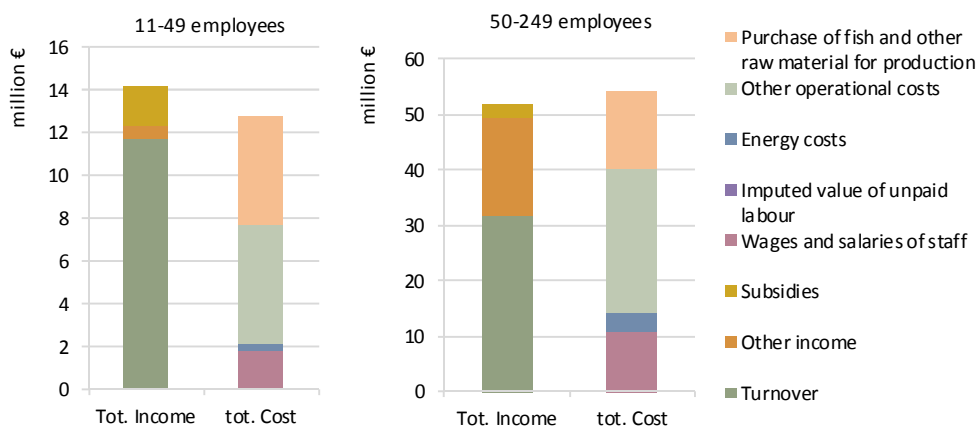


Figure 4.3.5: Croatian income and cost structure, by size category, 2012

Table 4.3.3: Economic performance of the Croatian fish processing industry sector by size category (indicators in million €), 2011-2012

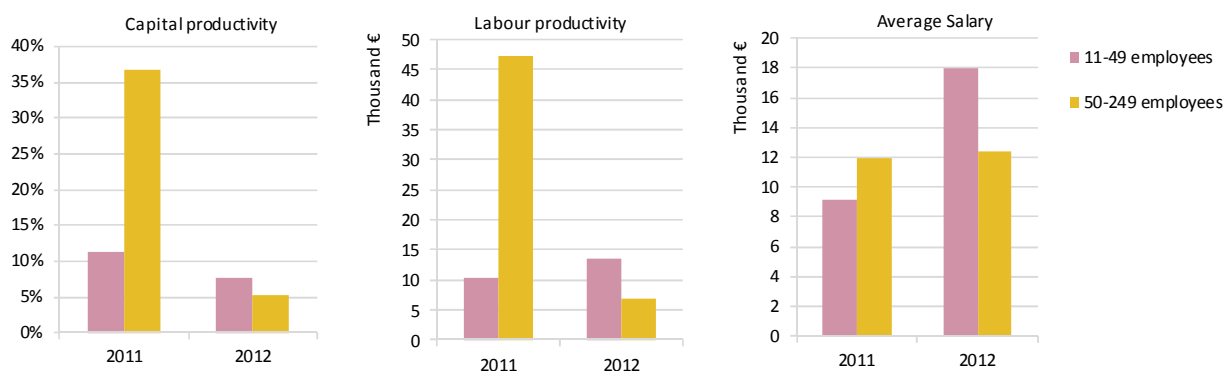
Variable	2011	2012	Δ (2011-12)
between 11 and 49 employees			
Total Income	15.7	14.1	-10%
Total production costs	13.5	12.8	-5%
Gross Value Added	1.7	1.3	-22%
Operating Cash Flow	2.2	1.4	-39%
Earning before interest and tax	1.4	0.2	-86%
Net Profit	0.9	-0.3	-129%
between 50 and 249 employees			
Total Income	71.6	51.7	-28%
Total production costs	33.3	54.1	62%
Gross Value Added	46.5	6.0	-87%
Operating Cash Flow	38.3	-2.4	-106%
Earning before interest and tax	29.5	-7.2	-125%
Net Profit	25.6	-9.8	-138%

According to the geographical location the size category between 11 and 49 employees belongs to Istria peninsula and Zadar area. The average number of people employed in 2011 and 2012 was 60 of which 55% are female employees. Net profit decreased a lot since one enterprise changed category to next size category.

Size category between 50 and 249 employees geographically belongs to Zadar area, while some enterprises are placed in Southern Dalmatia and in the continental parts of Croatia. Table 4.3.3. shows that the largest decrease was

in net profit (-138%) as a result of increasing total production costs and net investments. It is expected that investments will bring some benefits in the upcoming period. Average number of male employees in the referent period was 544 which is 54% of total employees in this category.

Figure 4.3.6: Croatian capital productivity, labour productivity and average salary trends, by size category, 2011-2012



4.3.4 Croatian seafood trade

There are no wholesale fish markets in Croatia yet, but two were scheduled for opening in Istria region, with some planned for other areas. In terms of fish distribution there are several fish markets that are located along the coast, in all major cities (Pula, Rijeka, Zadar, Šibenik, Split, Dubrovnik) and in areas with intensive fish activities (islands, wider Šibenik and Zadar area).

Fish is either sold directly to producers for further processing, to tuna farms as fish meal or to fish markets, and there are several buy-off stations located mainly on the islands and in Istria, Zadar, Šibenik and Split wider area. Fish sold to buy-off stations is either shipped to larger fish markets (Zagreb, Split, Rijeka), to market chains or exported fresh or chilled (figure 4.3.11). A large part of the small pelagic catch is intended for tuna farms, all of which are located in the Zadar and Split-Dalmatia area or delivered to processing plants, and only a small proportion is delivered fresh or chilled to fish markets for direct consumption, or is exported chilled or frozen mostly to Italy or Slovenia.

Croatia imports more in quantity than it exports, but this is partly a result of imports of frozen herring as fish feed for the tuna farming sector. High value exports include the sale of tuna, shipped directly to Japan, as the most important Extra-EU partner for Croatia – figure 4.3.9, and canned fish as well. Tuna farming is the only food producing industrial activity that has a positive balance.

Small pelagic fish is mostly processed into salted and canned products. However, smoked and marinated products are also produced in small quantities.

Croatia is a net exporter of fish and seafood products. Export of farmed tuna is ranked fifth highest in the total export of agricultural products of Croatia. Japan is the most important destination for Croatian tuna, while within the EU, Italy and Spain are the main export destinations for fresh fish and salted products, respectively. Demersal fish and cephalopods are exported fresh mainly to Italy.

The value of Croatian fish import is significantly lower than the value of export. Frozen herring, which is used to fatten farmed tuna, is the most imported species, followed by frozen squid. Imports originate mainly from Spain, the Falkland Islands, Norway, Sweden, and Italy. In total, import and export in EU and Extra-EU countries are about equal.

Seafood trade balance in 2012 increased in volume and value comparative with year before which is why fish processing industry made some investments and is now producing better quality products. Although volume of import was a bit larger than export in 2012, value of products increased because of product appreciation. During 2011 and 2012, Croatia together with Croatian Chamber of Economy has implemented the project "Croatian fish - eat what is worth." The purpose of the project was to establish a brand, product recognition and quality of Croatian fisheries. Likewise, better positioning of domestic fishermen, awareness of consumption of local products as well as building a culture of consumption of fishery products.

Leading position in the export list is tuna, those prevailing in creating a positive financial balance. Croatia exports farmed tuna exclusively to the Japanese market. At one time this activity was so lucrative that the tuna farmers on international markets bought live tuna, and after fattening them in cages re-exported. Imports for export, economically speaking is multiple profitable.

Also, tourism made an important change with enlargement of external demand for the domestic products.

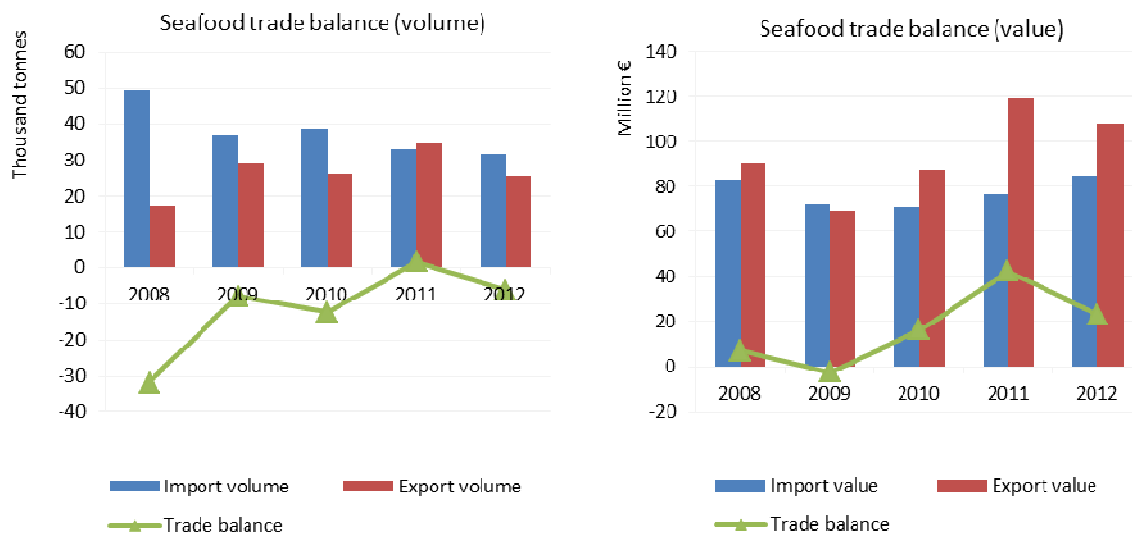


Figure 4.3.7: Croatian seafood trade balance trends in volume (left) and value (right)

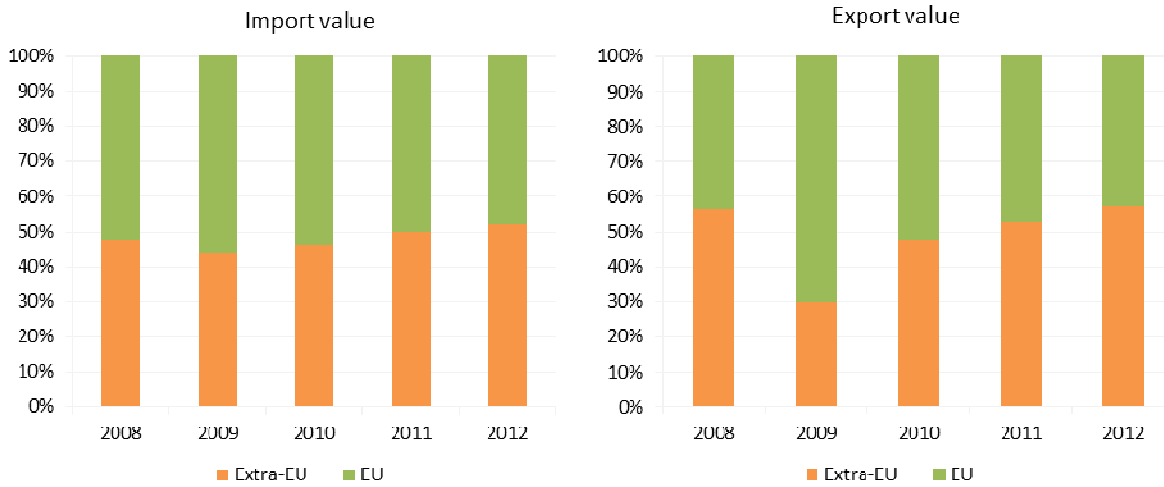


Figure 4.3.8: Croatian seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

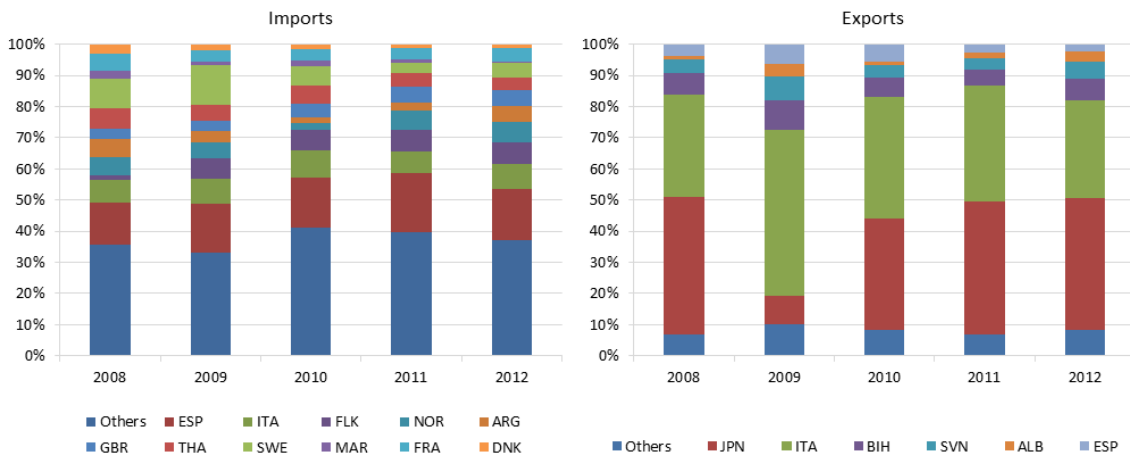


Figure 4.3.9: Croatian seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

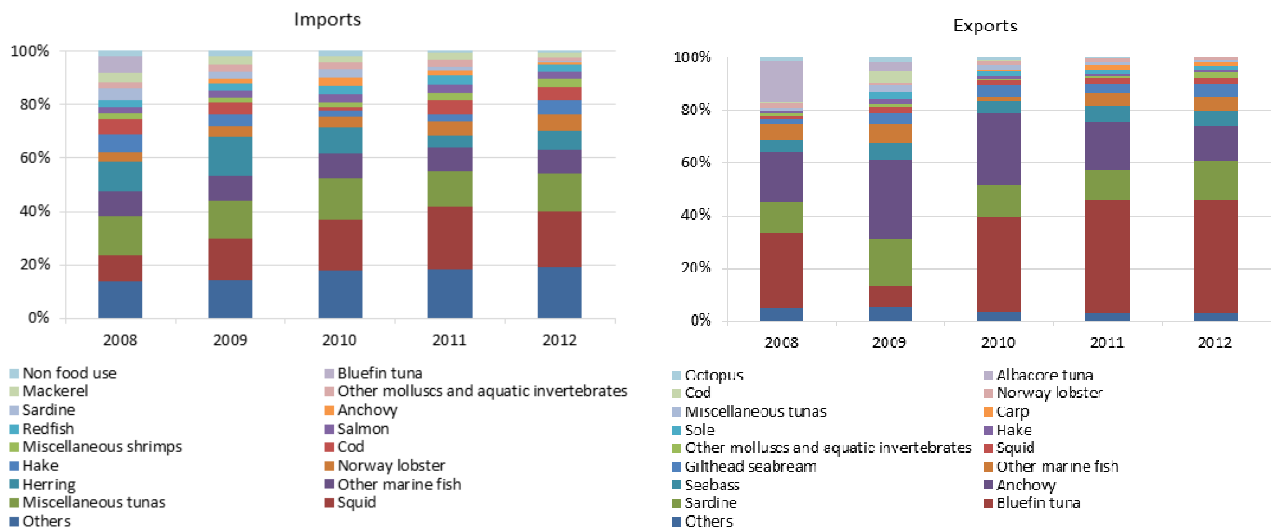


Figure 4.3.10: Croatian seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

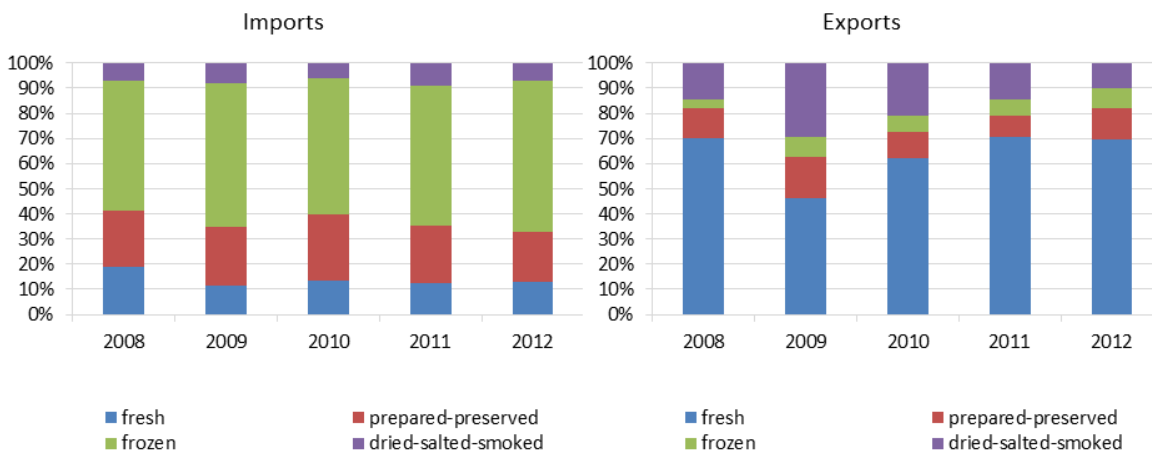


Figure 4.3.11: Croatian seafood imports (left) and exports (right) trends by type of products: shares in value

4.3.5 Trends and drivers for change

The expectations are based on Croatian entrance to the EU. After many initial problems related to the adjustment of to the new conditions of work, business and establishing markets, it is expected to significantly improve in all areas. New markets, support from EU and the modernization of the entire business should bring some advantages compared to the previous period.

It is also expected to increase production of fish processing industry and new products which are especially intended for export to the EU market. An increase in imports from EU countries is expected especially for the tourism needs in the summer period.

In general, in 2013 a further development of the fish processing industry in Croatia is expected also because increasing investment of large firms, using new technologies, better linking all sectors that directly effects the fish processing industry. Along with raising the quality and use of new technologies, marketing investments are increasing. As a result of aforementioned, an increase in domestic consumption is expected.

It is important to say that in the future, connecting aquaculture and fish processing industry is one of the main tasks for fisheries development. Merging those two sectors is leading to increasing domestic raw material for production in processing industry as well as decreasing cost of production.

4.4 CYPRUS

4.4.1 General overview of the Cypriot fish processing industry sector

The Cypriot processed seafood sector is comprised of 4 enterprises in 2012. There also exist 9 enterprises of processed seafood products not included in the sector (i.e. seafood processing is not the main activity). The number of enterprises has decreased in 2012 relative to 2011, thus total employment has also decreased during 2012. For the same year, fifty six persons are employed full time in the sector as indicated by the number of employees which coincides to the full time equivalent value. Female employment has decreased by 35% (11 persons) and male employment has also decreased but on a lower rate of 12% (5 people) in 2012. While employment in terms of full time equivalent per enterprise has also decreased by 7% (at 14 FTE persons) in 2012, average wage rose by 7% (at €14.5 thousand).

For the period 2008/2012, the number of enterprises in the sector and consequently employment vary each year. Data presented in the table below suggest that since 2008, enterprises in the sector are becoming larger in terms of employment but female employment is decreasing both in terms of persons employed and in terms of full time equivalent. Average wage is rising since 2009; nevertheless it still remains lower than in 2008. Labour productivity variation during the period 2008/2012 should probably be attributed to change in stocks each year.

Table 4.4.1: Cypriot fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Structure (number)							
Total enterprises	5	3	5	5	4	▼ -20%	▼ -20%
Employment (number)							
Total employees	56	43	66	72	56	▼ -22%	▶ 0%
Male employees	24	26	37	41	36	▼ -12%	▶ 50%
Female employees	32	17	29	31	20	▼ -35%	▼ -38%
FTE	43	43	68	75	56	▼ -25%	▶ 30%
Male FTE	17	26	39	43	36	▼ -16%	▶ 112%
Female FTE	26	17	29	32	20	▼ -38%	▼ -23%
Indicators							
FTE per enterprise	8.6	14.3	13.6	15.0	14.0	▼ -7%	▶ 63%
Average wage (thousand €)	16.2	12.0	13.0	13.5	14.5	▶ 7%	▼ -11%
Labour productivity (thousand €)	75.5	15.8	77.6	-46.5	47.5	▶ 202%	▼ -37%
Unpaid work (%)	0.0	0.0	0.0	0.0	0.0	▶ 0%	▶ 0%

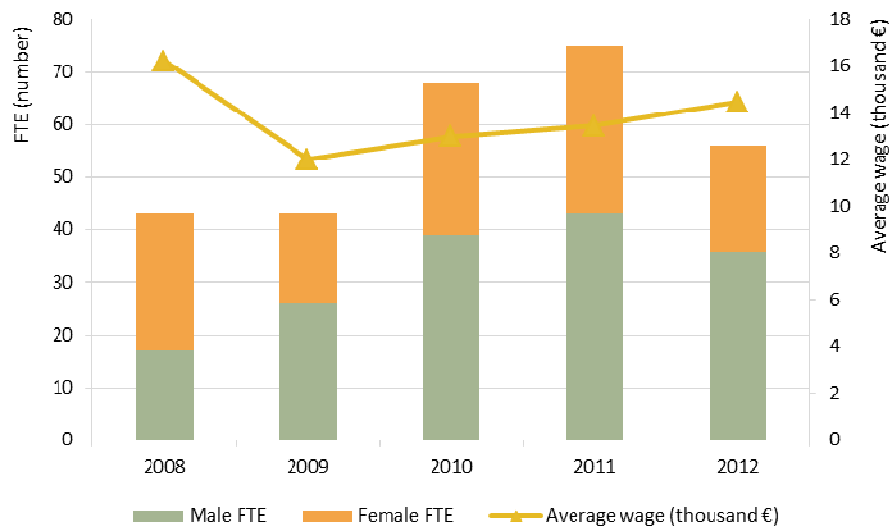


Figure 4.4.1: Cypriot employment trends, 2008-2012

4.4.2 Economic performance of the Cypriot fish processing industry sector

Most of the income of the sector is attributed to the processing activities. For 2012, the sector recorded negative EBIT and net losses; nevertheless it seems that the sector is recovering from higher losses during 2011. The magnitude of the depreciation of capital figures for 2012, relative to the total value of assets of the sector, suggests that probably there exist some quality issues in the data.

In the figure below, the importance of the various operating costs is presented; as expected the cost of raw materials is the most important one followed by the wages and salaries.

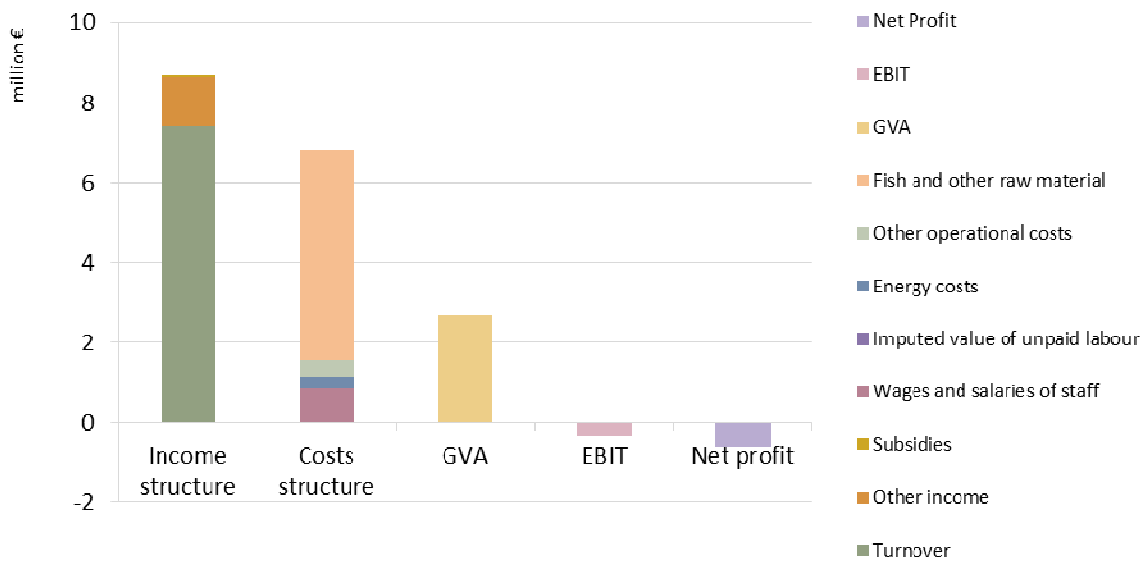


Figure 4.4.2: Economic performance of the Cypriot fish processing industry sector, 2012

Total income generated by the Cypriot seafood processing sector in 2012 is €8.7 million and remained the same since 2011. Nevertheless, income generated by seafood processing activities decreased during 2012 and represents a share of 85% of the total income while income generated by other activities rose at the same year to reach a share of 14% of the total income. As in the previous years, subsidies represent a small part (1%) of the total income in 2012.

The 9 enterprises not included in the sector, generated turnover of €5.7 million attributed to seafood processing activities in 2012 while €8.1 million were generated in 2011. As a result, it can be concluded that seafood processing activities in Cyprus have diminished during 2012.

Table 4.4.2: Economic performance of the Cypriot fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	3.9	4.8	13.7	8.4	7.4	▼ -12%	▲ 89%
Other income	0.0	0.0	2.8	0.3	1.2	▲ 318%	▲ 2739%
Subsidies	0.1	0.0	0.1	0.0	0.1	▲ 100%	▼ -48%
Total Income	4.1	4.8	16.6	8.7	8.7	○ 0%	▲ 113%
Expenditure (million €)							
Purchase of fish and other raw material for production	0.4	3.8	10.6	11.5	5.2	▼ -54%	▲ 1137%
Wages and salaries of staff	0.7	0.5	0.9	1.0	0.8	▼ -20%	▲ 16%
Imputed value of unpaid labour	0.0	0.0	0.0	0.0	0.0	○ 0%	○ 0%
Energy costs	0.2	0.2	0.3	0.3	0.3	○ 0%	▲ 47%
Other operational costs	0.1	0.1	0.3	0.4	0.4	▲ 18%	▲ 357%
Total production costs	1.4	4.6	12.1	13.2	6.8	▼ -49%	▲ 374%
Capital Costs (million €)							
Depreciation of capital	0.4	0.7	1.3	1.5	2.3	▲ 47%	▲ 472%
Financial costs, net	0.1	0.2	0.7	1.0	0.3	▼ -72%	▲ 330%
Extraordinary costs, net	0.0	0.0	0.0	0.0	0.0	○ 0%	○ 0%
Capital Value (million €)							
Total value of assets	7.5	5.6	6.5	5.2	5.5	▲ 6%	▼ -26%
Net Investments	0.3	0.0	0.3	0.3	0.4	▲ 44%	▲ 29%
Debt	2.9	4.7	3.9	3.6	3.6	○ 0%	▲ 22%
Performance Indicators (million €)							
Gross Value Added	3.2	0.7	5.3	-3.5	2.7	▲ 176%	▼ -18%
Operating Cash Flow	2.6	0.2	4.5	-4.5	1.9	▲ 142%	▼ -28%
Earning before interest and tax	2.3	-0.5	3.2	-6.0	-0.4	▲ 94%	▼ -116%
Net Profit	2.2	-0.7	2.5	-7.0	-0.6	▲ 91%	▼ -129%
Capital productivity (%)	43.2	12.0	81.4	-66.9	48.1		
Return on Investment (%)	30.0	-9.0	49.4	-115.2	-6.4		
Financial Position (%)	38.8	84.0	60.7	68.3	64.2		
Future Expectation Indicator (%)	-0.9	-11.3	-15.4	-23.9	-33.2		

Production costs accounted for 78% of the total income of the sector in 2012, and as discussed earlier, raw material costs being the most important part of the production cost, accounted for 60% of the total income. Wages and salaries, other operational costs and energy costs accounted for 9%, 5% and 4% of the total income respectively.

Capital costs of the sector have increased by 47% in 2012. As financial costs have decreased during 2012, depreciation of capital represents the vast majority of the capital costs. Nevertheless, as net investment and

value of total assets did not change significantly since 2011, the magnitude of depreciation of capital suggests that there probably exist some quality issues in the data. While EFF grants for the sector have been paid during 2011, no significant rise in net investment may be identified in the DCF data. Nevertheless it is not clear whether EFF grants have been allocated to the construction or modernisation of processing activities nor if in grants have been allocated to enterprises having seafood processing not as the main activity. Debt has remained stable since 2011 at €3.6 million.

The performance indicators for the 2011/2012 period suggest positive performance of the sector and recovery from higher losses during 2011, nevertheless, €2.7 millions of GVA generated in 2012 are deteriorated by the relatively high depreciation of capital resulting in negative EBIT and net losses for the sector.

For the five year period (2008/2012) the sector has expanded both in terms of turnover generated by seafood processing activities and in terms of total income. Nevertheless, when turnover generated by seafood processing activities both in the sector and from companies not included in the sector are accounted for, total turnover rose during 2010 (at €21.3 million) to decrease in 2012 to a level (€13.1 million) lower than the 2008 level (€13.7 million).

Figure 4.4.3: Income, costs, wages and labour productivity trends of the Cypriot fish processing industry sector, 2008-2012



4.4.3 Cypriot seafood trade

The Cypriot trade balance of fishery products (including aquaculture) is negative both in volume and value terms. Import volume appears to have declined since 2009 and remained relatively stable since. Export volume varies over the five years period. In terms of value, imports are relatively stable during the five years period. On the contrary, export value has significantly declined in 2009 and is slowly recovering since then. The composition of species exported from Cyprus, discussed later in this chapter, may explain the decline of the value of exports.

In 2012, Cyprus imported approximately 14 thousand tonnes of fishery products (including products for non food use) valued at approximately €54 million and exported approximately 1.5 thousand tonnes (including

products for non food use) valued at approximately €19 million, thus presenting a negative trade balance of around 12.5 thousand tonnes and €35 million of value.

While imports are almost evenly spread between European and non European countries, the vast majority of Cypriot exports are directed to non European countries.

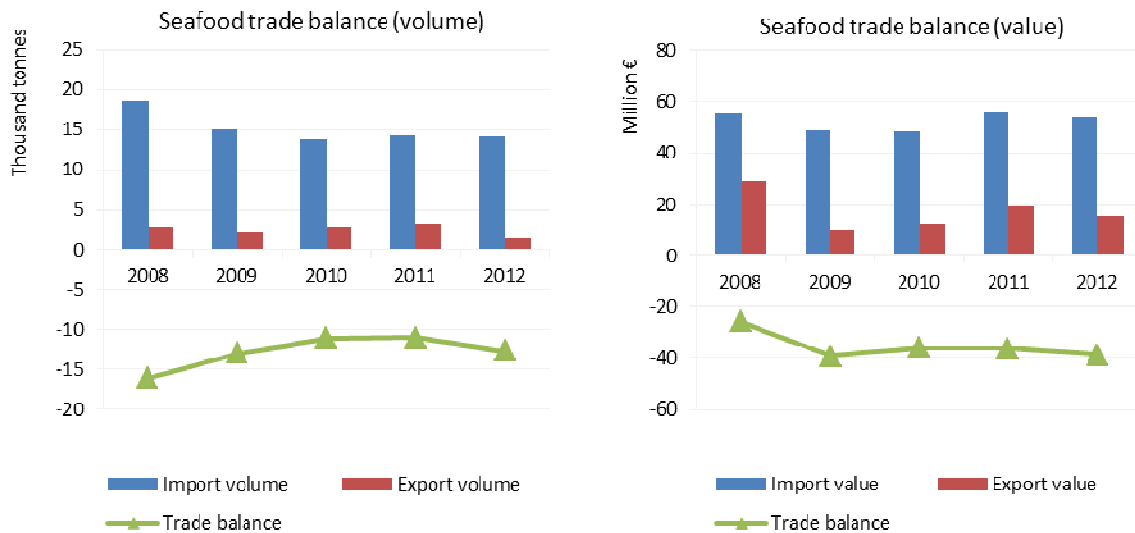


Figure 4.4.4: Cypriot seafood trade balance trends in volume (left) and value (right)

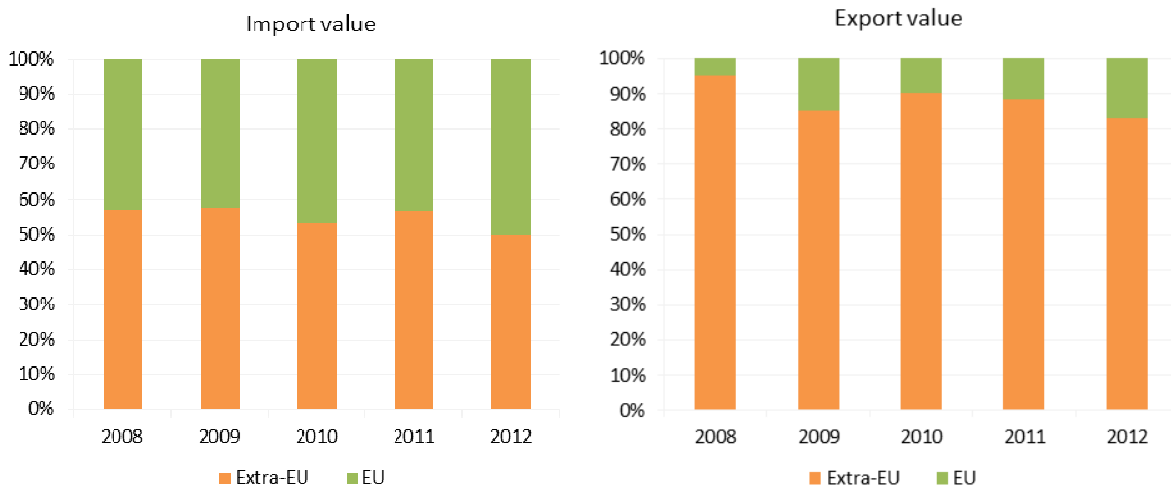


Figure 4.4.5: Cypriot seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

Cyprus imports fishery products from various countries. During 2012, most important import partners, in terms of value, are Greece, Thailand and Vietnam. The most important import partner for the case of fishery products for non food use is Denmark. It is assumed that fishery products for non food use are directed to mammal feed and fish feed production. On the contrary, the vast majority of Cypriot exports of fishery products is directed to Israel since 2009; and is mainly comprised of aquaculture products (gilthead seabream and seabass). For 2008,

it is the bluefin tuna exports directed to Japan that represent around 70% of the export value. Since 2009, the value of bluefin tuna exports has decreased dramatically while the value of albacore tuna exports increases every year.

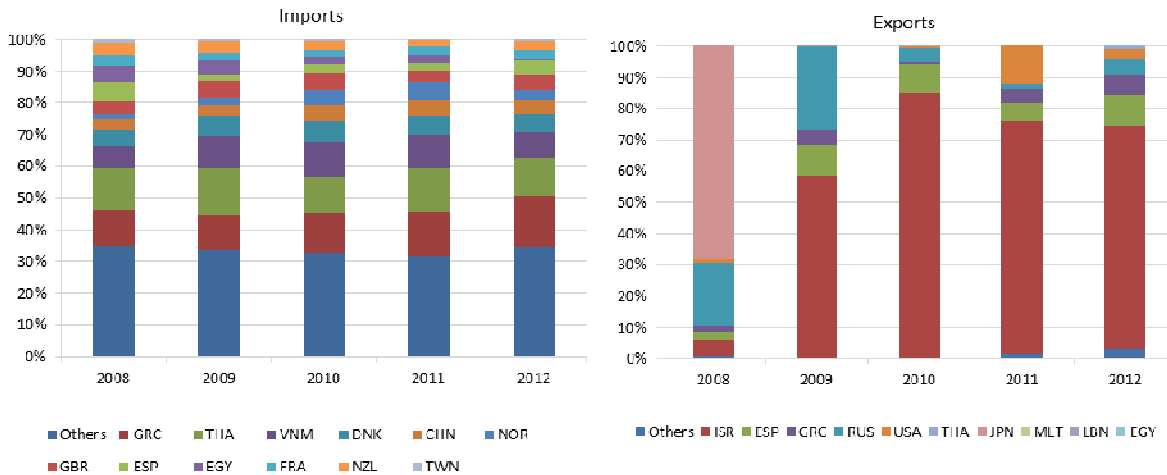


Figure 4.4.6: Cypriot seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

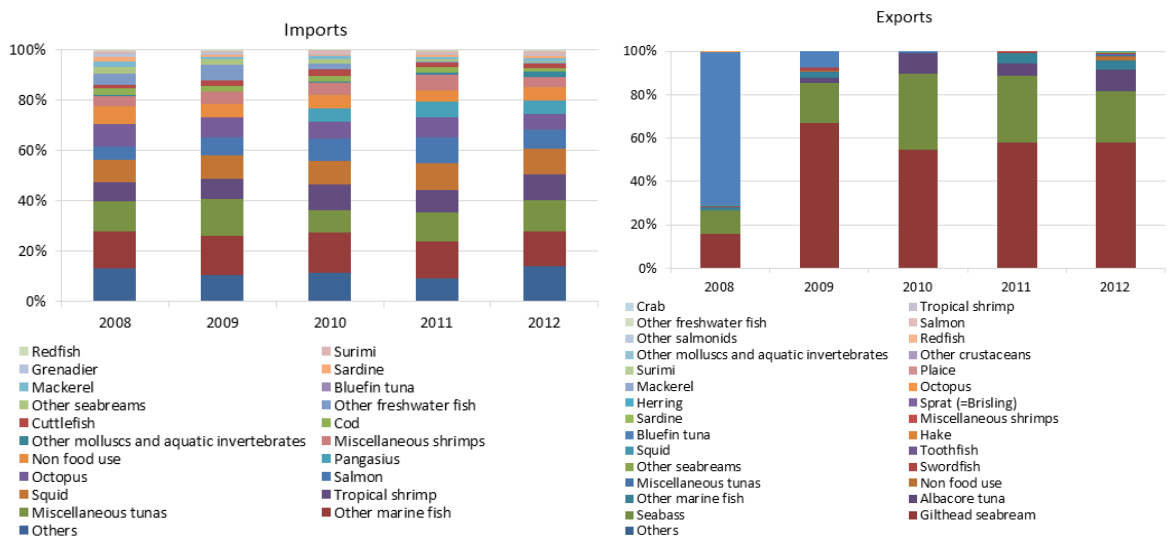


Figure 4.4.7: Cypriot seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

A wide variety of more than 60 species is imported in Cyprus, of which, six species or product categories represent 65% of the total import volume in 2012 namely, products for non food use (16%), squid (11%), pangasius (11%), other marine fish (10%), miscellaneous tunas (10%) and Octopus (7%). In value terms further to these six species or product categories, salmon and tropical shrimp imports are also important.

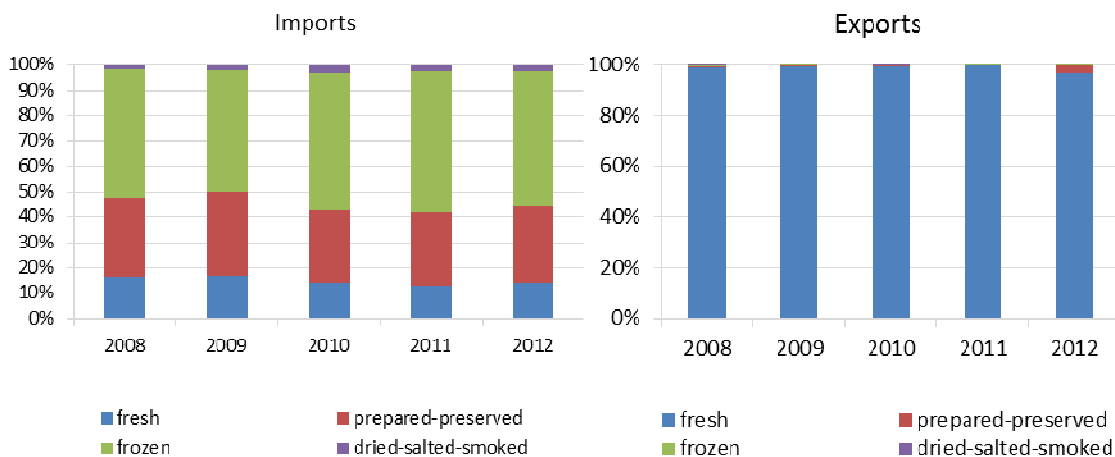


Figure 4.4.8: Cypriot seafood imports (left) and exports (right) trends by type of products: shares in value

Frozen fishery products are the main product type imported in Cyprus for the period 2008/2012. The imports of prepared and preserved products represent a share of 30% of the total imports during 2012, while fresh and dried-salted-smoked products account for 14% and 3% of the imports respectively. Cypriot fishery product exports are comprised almost exclusively of fresh products, of which gilthead seabream and seabass of aquaculture production are the main species exported.

4.4.4 Trends and drivers for change

While no Cypriot expert attended the EWG meeting and no further incites of the sector are available, it is expected that the overall economic environment in Cyprus will affect the seafood processing sector. In 2013, the Cypriot financial crisis is expected to negatively affect the sector as the purchasing power of the Cypriots is expected to decline. On top, rising imports of low valued processed fish, such as pugnacious, are also expected displace the products of the sector from the Cypriot market.

4.5 DENMARK

4.5.1 General overview of the Danish fish processing industry sector

The Danish fish processing industry is mainly located around the most important fishing harbours in Denmark. The most important areas in terms of value and volume of landings are the north and western parts of Jutland and most of the processing industry are located in these areas. Denmark is one of the world largest importers and exporter of fish and fish products and the Danish processing industry produces a large variety of products based on many different species. As such, the raw materials for the industry are purchased on the global market for fish and fish products and the dependency on domestic landing is rather limited. Nevertheless, the catches of cod, herring and mackerel are of some importance. The Danish fishmeal and fishoil factories are also dependent on domestic catches, but they are also receiving raw material from countries like Norway, Iceland, UK and Sweden. Furthermore, some Danish regions and islands are heavily depending on the local fisheries and processing industry, because alternative job opportunities in these areas are low.

The Danish import is dominated by salmon from Norway. A huge amount of salmon is passing through Denmark destined for the European market, especially the market for fresh salmon in France and Germany. The industry processing salmon using fresh raw materials are for most part dependent on the aquaculture production in Norway and the UK, but frozen raw material for production are imported from all over the world, mostly Chile.

The net profit of the Danish processing industry was positive in 2012 and the turnover increased from 2011 to 2012 from €1.9 to €2.0 billion, corresponding to an increase of 5%. However, the total amount of raw material used in the industry measured as output in terms of commodities from the industry (processed raw material) decreased with 11% from 501 thousand tonnes to 444 thousand tonnes. The production for human consumption increased by 2%, whereas the production of fishmeal and –oil decreased by 18%.

In table 4.5.1 an overview of the development in the number of fish processing enterprises and the numbers of employees and full time employees are shown. In 2011 there were 107 enterprises in the Danish fish processing industry sector. The overall structural development in the sector can be characterized by a decline in the number of enterprise. From 2008 to 2012 the number of enterprises decreased from 117 to 106, corresponding to a 9% decrease.

In figure 4.5.1 the size distribution of the Danish fish processing enterprises is shown for 2012. The sector is dominated by small and middle sized enterprises. In Denmark, 57 enterprises have less than 10 full time employees, corresponding to 54% of the total number of enterprises in 2012. Furthermore, 30 enterprises have between 11 to 49 employees and 19 have between 50 to 249 employees, corresponding to 28% and 18%, respectively. The segment with 50-249 employees has experienced a decrease of 37% over the years 2008-2012 in the employment. In Denmark there is no large fish processing company with more than 250 employees.

In total, the Danish fish processing sector employed 3,409 people in 2012, which was a decrease of 8% compared to 2011. From 2008 to 2012 the numbers employed decreased by 22%. The number of full-time employees also decreased from 4,147 in 2008 to 2,999 in 2012, corresponding to a decrease of 28%.

Table 4.5.1: Danish fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Structure (number)							
Total enterprises	117	123	115	107	106	▼ -1%	▼ -9%
≤10 employees	56	63	56	54	57	▲ 6%	▲ 2%
11-49 employees	31	37	37	33	30	▼ -9%	▼ -3%
50-249 employees	30	23	22	20	19	▼ -5%	▼ -37%
≥250 employees	0	0	0	0	0	○ 0%	○ 0%
Employment (number)							
Total employees	4,379	4,227	3,791	3,704	3,409	▼ -8%	▼ -22%
Male employees	2,146	2,121	1,989	1,952	1,811	▼ -7%	▼ -16%
Female employees	2,233	2,106	1,802	1,752	1,598	▼ -9%	▼ -28%
FTE	4,147	3,596	3,235	3,043	2,999	▼ -1%	▼ -28%
Male FTE	2,040	1,917	1,741	1,623	1,611	▼ -1%	▼ -21%
Female FTE	2,107	1,679	1,494	1,420	1,388	▼ -2%	▼ -34%
Indicators							
FTE per enterprise	35.4	29.2	28.1	28.4	28.3	▼ -1%	▼ -20%
Average wage (thousand €)	48.8	55.8	58.6	59.4	57.0	▼ -4%	▲ 17%
Labour productivity (thousand €)	61.9	80.7	89.9	105.7	98.0	▼ -7%	▲ 58%
Unpaid work (%)	0.7	0.8	0.8	0.7	0.8	▲ 10%	▲ 3%

The average size of the enterprises measured by the number of full-time employees fell from 35 to 28 employees from 2008 to 2012. On the other hand, the average salary per FTE increased from €49 to €57 thousand per year. The labour productivity in terms of gross value added per FTE has also been increasing from €62 to €98 thousand.

The value of unpaid labour in the Danish fish processing industry is rather insignificant. In the years from 2008 to 2012, the value has been estimated to be less than 1% of total amount of wages and salaries paid.

In figure 4.5.1, the development of male and female FTE and the average wages are shown from 2008 to 2012. The number of male and female employees and FTEs has been decreasing from 2008 to 2012. The number of females has decreased more than numbers of male employees and FTEs. From 2008 to 2012 the male and female employment decreased by 16% and 28%, respectively. Measured as FTE the decrease for male and female has been 21% and 34%, respectively.

The average salary has been increasing from 2008 to 2012 with 17%, however, the average salary decreased from 2011 to 2012 with 4%.

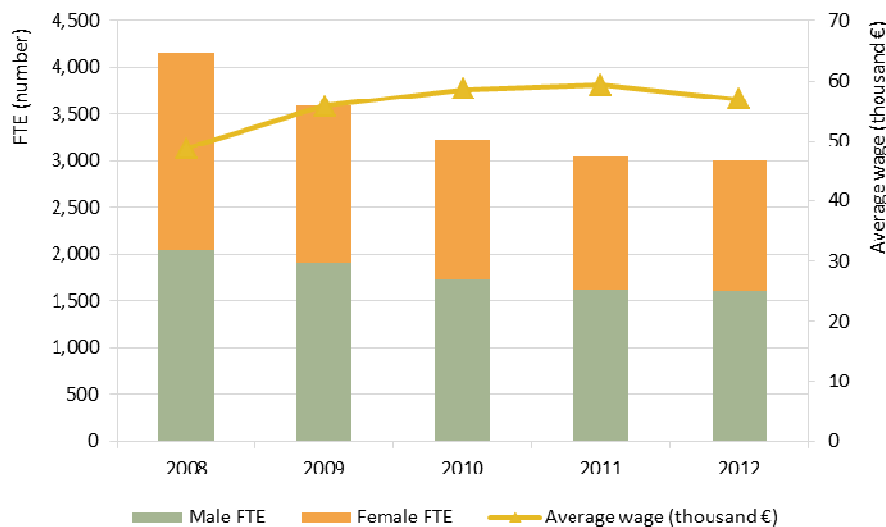


Figure 4.5.1: Danish employment trends, 2008-2012

4.5.2 Economic performance of the Danish fish processing industry sector

In figure 4.5.2 and table 4.5.2 the economic performance for the Danish processing industry is shown for 2012 and for the period 2008 to 2012.

In 2012, the total income for the Danish fish processing industry reached €2 billion, which was an increase of 5% compared to 2011. The total income consists of turnover, other income and subsidies of which turnover and other income make up for 99% and 1%, respectively. There are no registered subsidies in the Danish fish processing industry.

The most important cost component is the purchase of fish and other raw materials, which make up for 62% of the total cost. Other operational cost covers 28%, whereas wages and salaries and imputed value of unpaid labour cover 9% and 0%, respectively. Energy cost make up for 2% of the total income.

The Gross Value Added (GVA) is calculated as the total income deducted by energy cost, fish and other raw material cost and other operational cost. The GVA reached €294 million in 2012, which was a decrease of 9% from 2011.

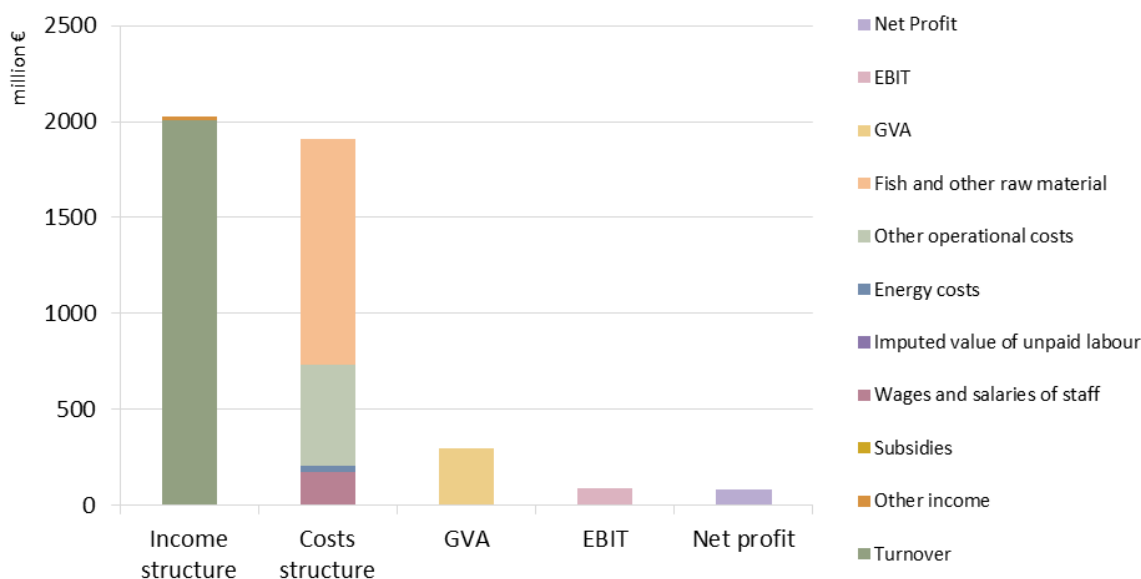


Figure 4.5.2: Economic performance of the Danish fish processing industry sector, 2012

In 2008, the Danish fish processing industry experienced a negative net profit, but since then the net profit has been positive. The net profit increased until 2011 reaching €95 million, however in 2012 the net profit was €78 million corresponding to a decrease of 18%. The total income has increased over the years from 2008 to 2012 with 20%. The cost has not increased at the same pace and has only been growing with 16% over the same period. Especially, the expenditures for wages and salaries have been reduced with 16% from 2008 to 2012 owing to a reduction in the workforce. Energy cost decreased by 8%. On the other hand, the expenditures on other operational cost and purchase of fish and raw material increased by 27% and 19%, respectively over this period. All in all, the sector has become more profitable even though there have been a global economic crisis.

The indicators for capital productivity and return on investment decreased from 2011 to 2012. The financial position was improved compared to 2011, but the indicator of future expectation for the Danish fish processing industry was slightly negative.

Table 4.5.2: Economic performance of the Danish fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
Income (million €)									
Turnover	1,702.6	1,693.2	1,828.8	1,858.7	2,010.0	▲	8%	▲	18%
Other income	-5.3	-49.2	60.1	68.4	19.7	▼	-71%	▲	469%
Subsidies	0.0	0.0	0.0	0.0	0.0	▬	0%	▬	0%
Total Income	1,697.3	1,644.0	1,888.9	1,927.1	2,029.7	▲	5%	▲	20%
Expenditure (million €)									
Purchase of fish and other raw material for production	990.9	953.2	1,041.0	1,146.9	1,177.1	▲	3%	▲	19%
Wages and salaries of staff	200.8	199.2	188.0	179.5	169.7	▼	-6%	▼	-16%
Imputed value of unpaid labour	1.5	1.5	1.5	1.2	1.3	▲	4%	▼	-14%
Energy costs	33.2	30.0	35.3	36.0	30.5	▼	-15%	▼	-8%
Other operational costs	416.6	370.5	521.9	422.7	528.2	▲	25%	▲	27%
Total production costs	1,643.0	1,554.4	1,787.7	1,786.4	1,906.7	▲	7%	▲	16%
Capital Costs (million €)									
Depreciation of capital	41.0	40.1	35.7	33.6	35.5	▲	6%	▼	-13%
Financial costs, net	41.1	35.9	9.5	12.4	9.3	▼	-25%	▼	-77%
Extraordinary costs, net	-2.3	-2.7	0.9	-2.7	0.1	▲	102%	▲	102%
Capital Value (million €)									
Total value of assets	1,218.4	1,195.0	1,142.9	1,134.3	1,221.6	▲	8%	▬	0%
Net Investments	42.0	37.9	7.9	39.2	31.2	▼	-20%	▼	-26%
Debt	915.6	870.0	813.6	628.5	700.7	▲	11%	▼	-23%
Performance Indicators(million €)									
Gross Value Added	256.6	290.3	290.8	321.5	293.9	▼	-9%	▲	15%
Operating Cash Flow	54.3	89.6	101.2	140.8	123.0	▼	-13%	▲	127%
Earning before interest and tax	13.3	49.5	65.5	107.2	87.5	▼	-18%	▲	555%
Net Profit	-27.7	13.6	56.0	94.8	78.2	▼	-18%	▲	382%
Capital productivity (%)	21.1	24.3	25.4	28.4	24.1				
Return on Investment (%)	1.1	4.1	5.7	9.5	7.2				
Financial Position (%)	75.2	72.8	71.2	55.4	57.4				
Future Expectation Indicator (%)	0.1	-0.2	-2.4	0.5	-0.4				

In figure 4.5.3 the total income, total production cost, average salary and labour productivity is shown for the Danish fish processing industry. From the figure it can be seen that the total income is increasing relative to total cost over the period from 2008 to 2012. As a result the GVA has been increasing. The increased GVA and the lower employment have resulted in increasing labour productivity in the sector, even though, the average cost of labour has also increased from 2008 to 2011. However, there is a slightly decrease in the average salary from 2011 to 2012.



Figure 4.5.3: Income, costs, wages and labour productivity trends of the Danish fish processing industry sector, 2008-2012

4.5.3 Overview of the Danish fish processing industry sector by size categories

In figure 4.5.4, the numbers of enterprises distributed on size categories are shown. The segment containing enterprises with 10 or less employees is the largest covering 54% of the total number of enterprises. 30 enterprises have between 11 to 49 employees and 19 have between 50 to 249 employees, corresponding to 28% and 18%, respectively. The segment with 50-249 is the most important in terms of employment covering 67% of the total numbers of FTE. The largest segment is also the segment that have experienced the largest reduction in the labour force from 2008 to 2012 with 35%, where the two smaller segments only have reduced the labour force with 10% and 3%, respectively.

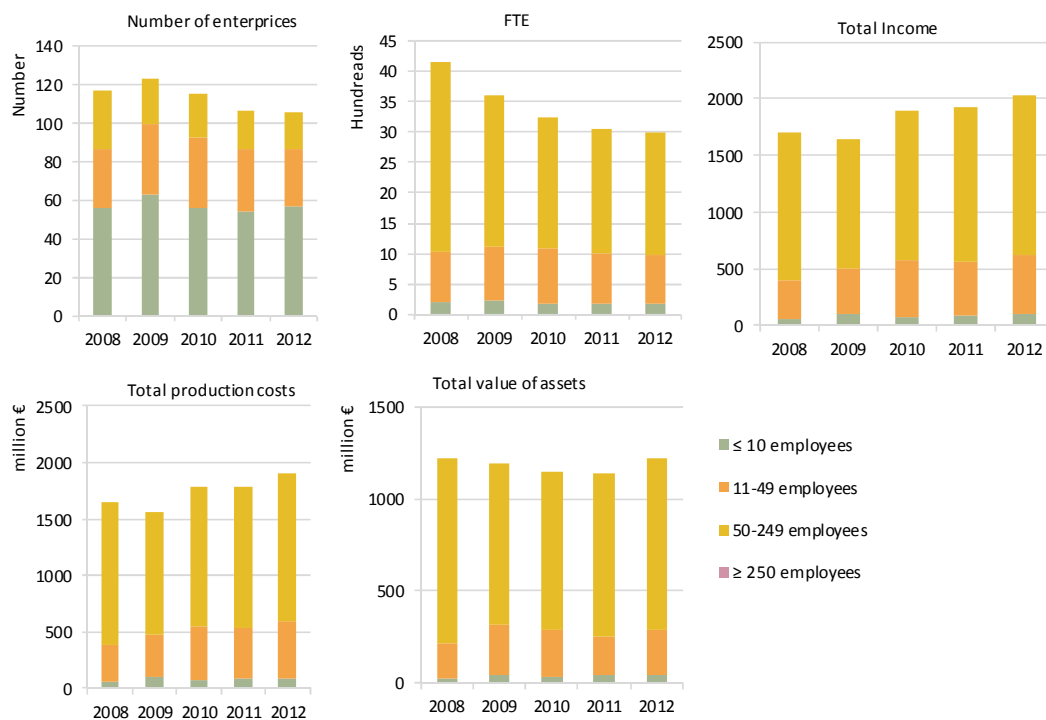


Figure 4.5.4: Danish main structural and economic variables trends by size category, 2008-2012

The segment with 50 to 249 employees is also dominating the economic indicators covering almost 70% of total income and total cost where the segment with less than 10 and between 11-49 employees are covering 5% and 26%, respectively. The total value of assets is the same in 2008 and 2012 even though the numbers of enterprises are falling. The largest enterprises are covering 76% of the total value of assets where the segment with less than 10 and between 11-49 are covering 4% and 20%, respectively.

In figure 4.5.5, the total income and the cost composition for the three Danish segments are shown.

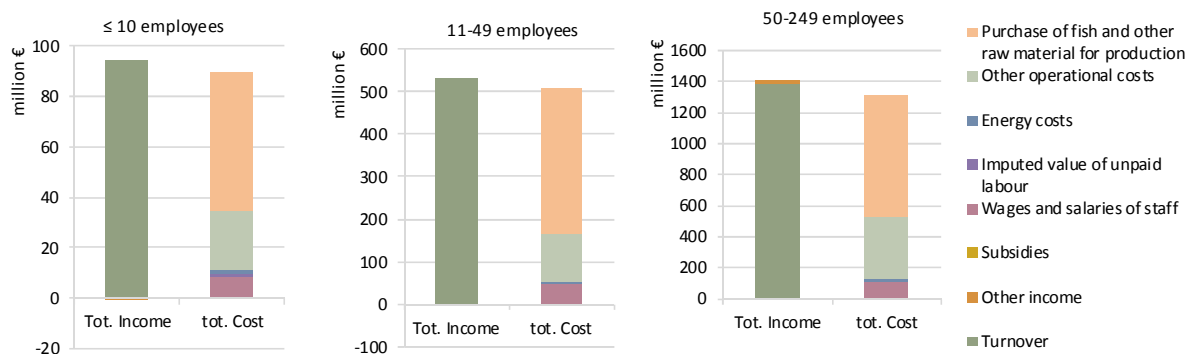


Figure 4.5.5: Danish income and cost structure, by size category, 2012

The segment with less than 10 employees and the segment with between 11-49 employees increased the total income and improved the GVA from 2011 to 2012. The segment with 50-249 employees also increased the total income, but had a decreasing GVA do to an increase in total cost. For all segment the economic performance has improved from 2008 to 2012.

Table 4.5.3: Economic performance of the Danish fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)		Δ (2008-12)
less than or equal to 10 employees									
Total Income	60.8	104.6	78.3	89.3	93.7	▲	5%	▲	54%
Total production costs	59.3	102.2	74.6	86.2	89.9	▲	4%	▲	52%
Gross Value Added	11.4	14.7	13.5	13.0	13.8	▲	6%	▲	21%
Operating Cash Flow	1.5	2.4	3.7	3.1	3.8	▲	24%	▲	155%
Earning before interest and tax	-0.2	0.5	2.4	1.6	2.2	▲	40%	▲	1559%
Net Profit	-1.3	-0.8	1.8	0.7	1.4	▲	102%	▲	204%
between 11 and 49 employees									
Total Income	337.5	392.3	499.1	465.5	526.8	▲	13%	▲	56%
Total production costs	324.1	370.5	473.1	444.1	504.7	▲	14%	▲	56%
Gross Value Added	57.5	74.7	79.1	68.9	69.3	▲	1%	▲	21%
Operating Cash Flow	13.4	21.8	26.0	21.4	22.0	▲	3%	▲	65%
Earning before interest and tax	3.7	10.4	16.8	14.5	14.1	▼	-3%	▲	281%
Net Profit	-4.1	1.7	11.7	9.8	8.7	▼	-12%	▲	309%
between 50 and 249 employees									
Total Income	1299.1	1147.1	1311.5	1372.4	1409.2	▲	3%	▲	8%
Total production costs	1259.6	1081.7	1240.1	1256.1	1312.1	▲	4%	▲	4%
Gross Value Added	187.8	200.9	198.2	239.6	210.8	▼	-12%	▲	12%
Operating Cash Flow	39.4	65.4	71.5	116.3	97.1	▼	-16%	▲	146%
Earning before interest and tax	9.8	38.6	46.3	91.1	71.1	▼	-22%	▲	626%
Net Profit	-22.2	12.6	42.4	84.3	68.1	▼	-19%	▲	406%

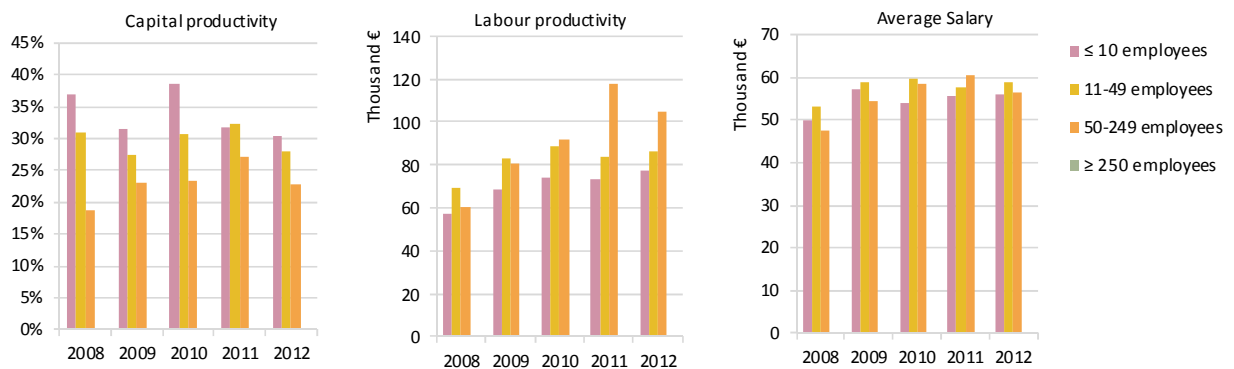


Figure 4.5.6: Danish capital productivity, labour productivity and average salary trends, by size category, 2008-2012

The segment with less than 10 employees shows a falling trend in the capital productivity from 2008 to 2012. The segment with 11-49 employees and 50-249 employees increased the capital productivity from 2008 to 2011, but it is falling from 2011 to 2012.

The labour productivity is increasing for all segments from 2008 to 2012, however; there is a decreasing trend for the segments with less than 10 employees and the segment with 11-49 employees from 2010 to 2012 and for the largest segment from 2011 to 2012. The average salary shows an increasing trend from 2008 to 2012.

4.5.4 Danish seafood trade

Denmark is one of the world largest importer and exporter of fish and fish products. The Danish industry produces a large variety of products based on many different species. The raw material going in to the Danish processing industry are originated both from the Danish fishing and aquaculture sector but is also relying on raw materials purchased at the global market.

The Danish industry is processing the raw material imported but also raw material provided by the national fishing and aquaculture industries. This explains why the Danish export is higher than the import measured in volume, providing a positive trade balance. Furthermore, the raw material imported or provided by the Danish fish and aquaculture industry are processed adding value to the products. This adds to the positive trade balance measured in monetary terms.

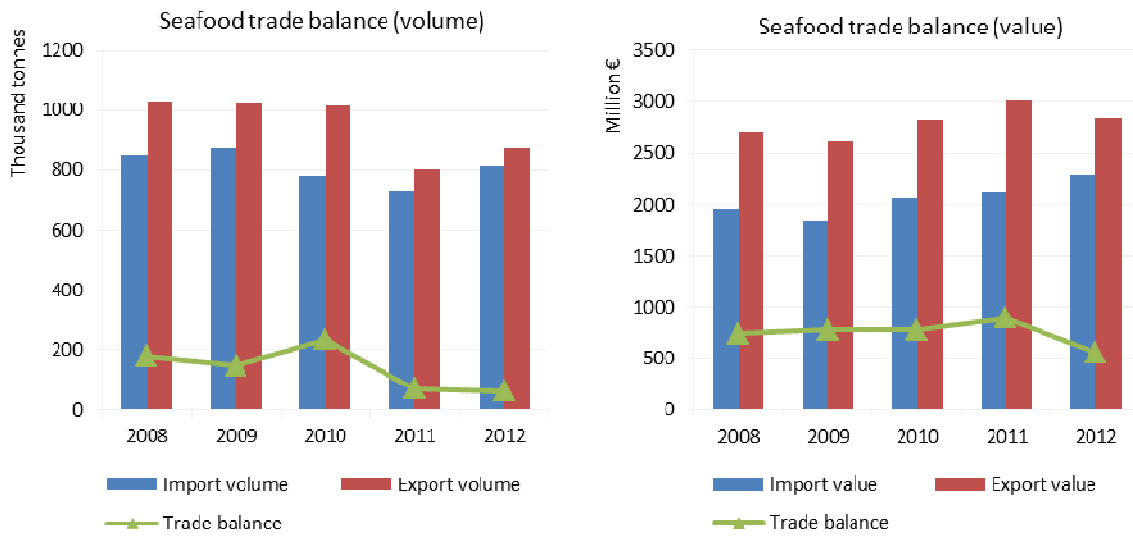


Figure 4.5.7: Danish seafood trade balance trends in volume (left) and value (right)

The Danish fish processing industry is importing raw material from Extra-EU countries, especially the North Atlantic countries. Norway is one of the most important exporters to Denmark. The main product imported from Norway is fresh whole salmon, which is processed and exported to the EU market, especially France, Germany and Italy. The fishmeal and -oil sector is depending on imports from the North Atlantic area and Peru, as well as, the Danish catches of fish for reduction. These products are mainly exported to countries with larger aquaculture sectors like Norway, UK and Greece.

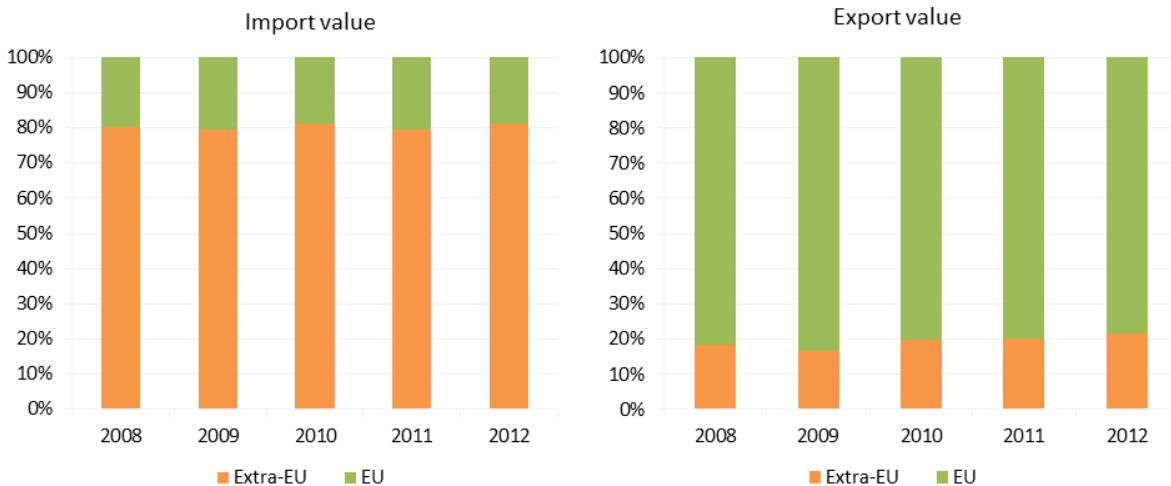


Figure 4.5.8: Danish seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

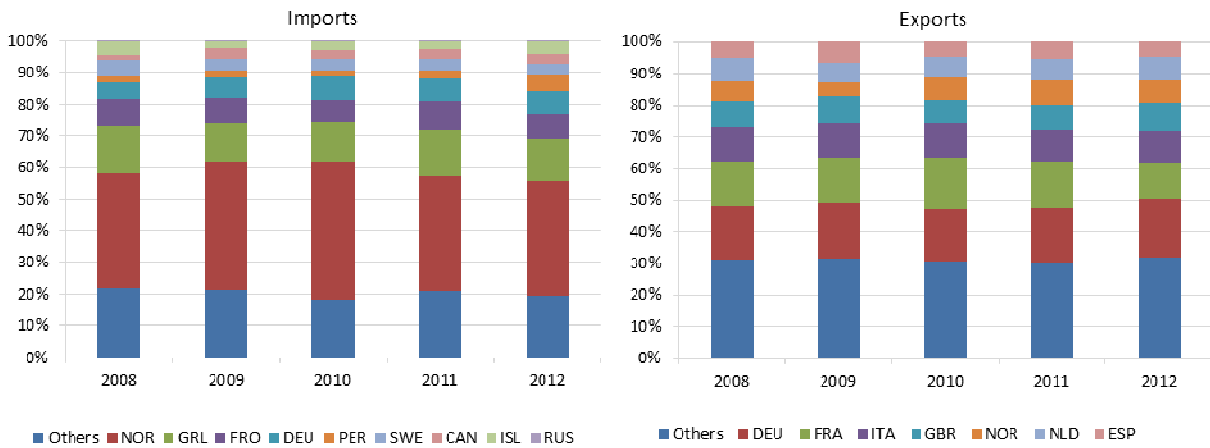


Figure 4.5.9: Danish seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

Other important species imported to Denmark are cod, cold water shrimps and miscellaneous shrimps. The cod is often processed and sold on the EU market. The cold water shrimps are imported from Greenland. This product is both consumed in Denmark, but is also processed and re-exported to the EU market. Fish for non-food use go into the fishmeal and -oil production and is exported to countries with larger aquaculture sectors.

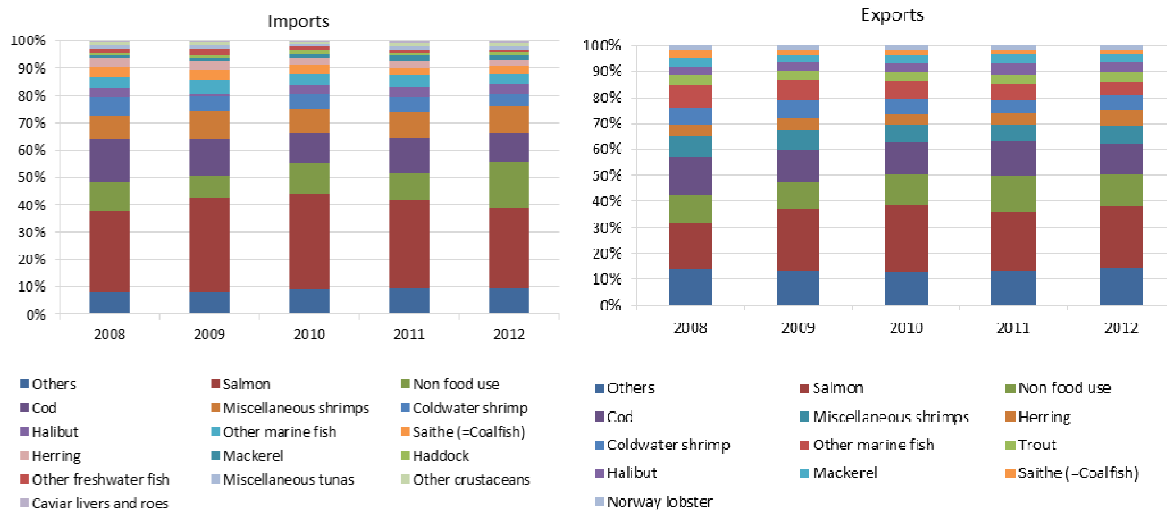


Figure 4.5.10: Danish seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

The Danish fish processing industry can be divided into segments based on the Industry Commodity Trade Statistics collected by Statistics Denmark. The Danish segmentation is based on the main species used in the Danish fish processing sector, which are:

- Cod and flatfish

- Herring and Mackerel
- Molluscs, Shrimps and Crustaceans
- Mixed production
- Salmonoids
- Fishmeal factories

The dependency on the selected species in each sub branches is high. The volume of Cod and flatfish produced in the sub sector cover 74% of the total amount produced, in 2012. Herring and mackerel 81%, Molluscs, Shrimp and Crustaceans 76%, Salmonoids 75% and fishmeal factories 100% fish for reduction.

In table 4.5.4, the production volume and value of raw materials divided on species is shown based on sales from enterprises registered under the NACE code 10.20 from 2008 to 2012. The most important species for consumption in terms of volume is herring (29%) followed by cod (17%) and salmon (17%). In terms of value the most important species are salmon (28%), herring (17%) and cod (14%).

Table 4.5.4: Raw materials as output

	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
	Volume (tonnes)					Value ('000€)				
Herring	65,789	56,090	52,141	37,732	46,893	115,860	99,328	91,657	90,149	152,675
Cod	35,346	30,576	27,882	29,795	27,511	181,317	142,339	126,957	134,930	122,004
Salmon	36,430	33,129	30,164	32,297	36,050	262,769	249,194	252,355	257,634	246,228
Others	81,923	74,547	63,196	62,841	55,319	383,602	368,145	353,026	391,688	355,611
Total consum	219,489	194,343	173,382	162,664	165,773	943,548	859,005	823,996	874,401	876,518
Fish reduction	346,460	358,110	356,795	338,039	278,500	276,613	296,237	375,469	390,552	345,426
Total	565,949	552,453	530,177	500,703	444,273	1,220,296	1,155,108	1,199,465	1,264,953	1,221,944

Source: Calculation based on data from Statistics Denmark.

Production of fishmeal and -oil is an important part of the fish processing industry in Denmark, which is based on fish for reduction. In 2012, fish for reduction make up for 64% of the total Danish catch in volume and 33% of the total value. The volume of fish for reduction has been decreasing from 2008 to 2012, whereas the value has been increasing until 2011.

In figure 4.5.11, the value of Danish seafood import and export is divided on the degree of processing for 2008 to 2012. The fresh products are dominating both the import and export from Denmark. One thing that can be seen from this figure is that especially the share of dried, salted and smoked products has a larger export share than import share, which contribute to the positive seafood trade balance.

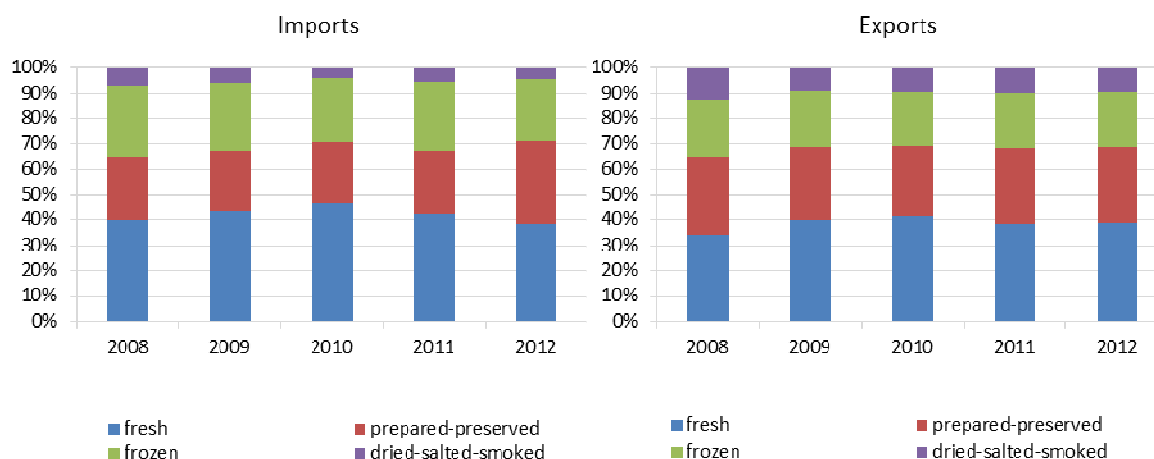


Figure 4.5.11: Danish seafood imports (left) and exports (right) trends by type of products: shares in value

In table 4.5.5, the volume and value divided on degree of processing is shown for the fish processing industry from 2008 to 2012. In this table, the whole fresh and frozen products are excluded, because these products are not considered as processed. After excluding these products, the most important group of products for consumption, in terms of degree of processing, are prepared and preserved products, which accounted for 60% of the volume of processed products. Fresh fillet makes up for 15%, while smoked, salted and dried cover 16%, and frozen fillet 9%. In terms of value prepared and preserved products are the most important covering 56% of the total value, while smoked products cover 22%. Fresh and frozen fillet make up for 16% and 6%, respectively.

Table 4.5.5: Main products

	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
	Volume (tonnes)					Value ('000€)				
Fresh fillet	43,023	34,065	20,986	19,159	28,255	141,801	127,151	96,740	104,807	135,438
Frozen fillet	14,297	9,006	8,744	11,935	11,057	38,441	38,172	50,234	59,493	41,659
Smoked	28,578	25,427	24,126	27,898	28,161	227,823	196,505	192,048	221,293	203,249
Prepared/preserved	133,591	125,846	119,526	103,672	98,300	535,618	497,177	484,974	488,808	496,173
Total for consum.	219,489	194,344	173,382	162,664	165,773	943,548	859,005	823,996	874,401	876,518
Fishmeal/fishoil	346,460	358,110	356,795	338,039	278,500	276,613	296,237	375,469	390,552	345,426
Total	565,949	552,453	530,177	500,703	444,273	1,220,296	1,155,108	1,199,465	1,264,953	1,221,944

Source: Calculation based on data from Statistics Denmark.

Taking fish for reduction into account, fish meal and fish oil accounts for 68% of the total volume and 31% of the total value. The fishmeal and -oil factories are very important to the Danish industry and are closely link to the fishing fleet catching fish for reduction. The factories are depending on the Danish landings, but they also import raw materials from Norway, Island and the UK. It is therefore important both for the fishing fleet and the

factories to have a steady and reliable TAC, so they can plan ahead and make the necessary investment and innovations to stay competitive.

4.5.5 Trends and drivers for change

The salmon processing industry is the most important segment of the Danish industry for consumption in terms of value. This industry is dependent on the Norwegian aquaculture industry and most of the imports of salmon are exported to other EU countries.

Overall, the Danish industry has decreased in terms of numbers of enterprises and employees. The industry has outsourced some of the labour intensive activities to countries with lower salary costs. Especially, the salmon industry has outsourced some of their activities to Poland. In terms of degree of processing, the fresh and frozen fillet production has been reduced from 2008 to 2012. The filleting is for most part done in countries with lower salary cost than Denmark, whereas the industry still produce a substantial part smoked and prepared products.

In general, the industry relies on a steady inflow of raw materials. For industries that are relying on local/EU stocks a change in the availabilities of these materials can heavily affect the industry income, production and employment. For industries that are less dependent on local/EU stocks raw materials are purchased from all over the world.

Most EU stocks are at the moment fully exploited (FAO) and it is not expected that raw materials from EU fisheries will/or can increase in the near future. However, the EU aquaculture sector can, given the right framework condition, increase production and the EU aquaculture sector has a huge unleashed potential to increase production. Unfortunately, the framework condition for the industry, especially the regulatory settings (Nielsen 2011, 2012) and the industry structure (Nielsen et al. 2014 and 2014b) are a hindrance for the development of a competitive and sustainable aquaculture sector in EU.

In 2013, the profitability in the fish processing sector for consumption and for the fish meal factories are expected to increase compared to 2012. This is due to a larger volume of fish processed at higher prices than in 2012. The positive trend in the industry net profit is expected to continue due to a higher income and that cost is kept at the level of 2012, resulting in an increasing labour productivity.

The dollar is expected to increase its value relative to Euro, which means higher prices in the European fish market. In the traditional markets for fish species such as cod, flatfish and shrimp in Western Europe the demand are expected to increase slightly due to increasing purchasing power.

The salmon processing faced high prices on raw material in 2011, because of the collapse of the aquaculture sector in Chile, but the prices have come down since then. This will probably result in a positive result for the salmon processing sector, because the price of the processed product will not be decreasing as much as the price for raw material.

A new regulation on aquaculture production is implemented in Denmark, in 2012. The production in the Danish aquaculture sector is expected to increase in the coming years, providing more raw materials for the industry. This could potentially have a positive effect on the processing industry in Denmark, especially the sub branches processing trout and salmon.

4.5.6 Data issues

Data for the Danish fish processing industry is collected by Statistics Denmark. The data covers all enterprises in the business register covered by NACE 10.20. Data is processed to comply with the DCF and DCR in cooperation with the Department of Food and Resource Economics. The data collected by Statistics Denmark follows the definition of the Structural Business Statistics (SBS) and is, therefore; comparable with Eurostat data and data from other member states that are using the SBS definition, as suggested in the DCR and DCF.

In Statistics Denmark, the Account Statistics are available approximately 20 month after the end of the reference year.

Data can be disaggregated on to the 4 segment on numbers of employees as requested by the DCF. In Statistics Denmark and other statistical offices the numbers of full time employees are used instead of the number of employees. To avoid problems with confidentiality, segments should in general include more than 10 enterprises. In Denmark there are no enterprises with more than 250 full time employees.

In Denmark, the enterprises covered by NACE 10.20 are in most cases not involved in trading. The enterprises covered by NACE 10.20 cover more than 95% of the fish processing in Denmark and is a very good estimate of the total income and production of Danish processing industry.

The data collected and processed for the DCF and DCR can be slightly different from the data that are being published by Eurostat on the processing industry. This is because the data for the DCF and DCR are combined from two different statistics in Statistics Denmark; the Account Statistics and the Industry Commodities Trade Statistics, where data for Eurostat only covers data from the Account Statistics. The two statistics are combined too get more detailed information on the raw material use in the fish processing industry. Furthermore; combining the two statistics provide information on the species used in the processing industry and information about what kind of product is produced and how much they are processed.

Enterprises with fish processing as non-main activity should be surveyed and the number of enterprises and their income should be reported. In Denmark, the fish processing industry is very "pure" and only 3 to 6 enterprises are having fish processing activities outside 10.20 in the period covered from 2008 to 2012. The number of firms is available, however, the income is not available due to reasons of confidentiality. The reason is that a single firm is dominating this group of enterprises, having more than 80% of the total income for this group. According the rules of Statistics Denmark the income can therefore not be shown.

Articles:

Nielsen, R. (2011). Green and technical efficient growth in Danish fresh water aquaculture. *Aquaculture Economics & Management*, 15(4), 262-277.

Nielsen, R. (2012). Introducing individual transferable quotas on nitrogen in Danish freshwater aquaculture: Production and profitability gains. *Ecological Economics*, 75, 83-90.

Nielsen, R., Andersen, J.L., and Bogetoft, P. (2014) Dynamic Reallocation of Marketable Nitrogen Emission Permits in Danish Freshwater Aquaculture. *Marine Resource Economics*. Vol. 29, No. 3. pp. 219-239.

Nielsen, R., Asche, F., Nielsen, M. (2014b). The re-structuring of the European fresh water aquaculture industry: Surviving global competition – Lessons from Danish aquaculture. Presented on Aquaculture Europe 2014. European Aquaculture Society 17. October 2014 in San Sebastian, Spain.

4.6 ESTONIA

4.6.1 General overview of the Estonian fish processing industry sector

In 2012 there were 61 enterprises whose main activity was fish processing in Estonia, of which 85% were rather small having up to 49 employees per enterprise. The number of total employees was 1,861, about 1,816 FTE. The turnover of production was over €143 million in 2012. Additionally, there were also 11 enterprises that carried out fish processing but not as a main activity. Their turnover attributed to fish processing was approximately €4.7 million, which accounts for approximately 3% from total production turnover. The fish processing sector in Estonia is largely dependent on export. The share of exported fish products was around 73% in 2012.

Baltic herring and sprat caught by trawlers from the Baltic Sea are the most important local raw material for the Estonian fish processing enterprises. Fish is sold fresh or frozen (mostly to the eastern markets but also to western fish meal factories), or processed in Estonia before selling in the local market or abroad. Estonian coastal fishing provides reasonably large volumes of expensive freshwater fish like perch, pikeperch and pike which are used as raw material for fillets. Raw material for ready-made products is import origin mainly (e.g. ocean fish). The main Estonian export countries for fish and fisheries products in value were Finland, Slovakia, Russia and Germany, and import countries Latvia, Finland, Lithuania and Sweden in 2012. Due to its small size, the fish markets and processing enterprises do not depend on domestic aquaculture production.

Due to the type of product, the origin of the raw material and the location of the main markets, Estonian fish processing enterprises can be broadly divided into the four groups:

Frozen fish producers – local raw material is used (Baltic herring and sprat from the Baltic Sea), products are marketed in the eastern markets (e.g. Russia, Ukraine, Belarus);

Producers of fish fillets and delicacy products – local or imported raw material is used (e.g. perch, pikeperch, salmon), products are marketed in the western markets (e.g. Switzerland, Germany, Denmark, Finland, Sweden);

Fast food producers – imported raw material is used (e.g. ocean fish), products are marketed in the eastern and western markets (e.g. Lithuania, Finland, Czech Republic);

Canned fish producers – local or imported raw material is used, products are marketed mainly in the eastern markets (e.g. Russia, Ukraine, Kazakhstan, Czech Republic).

Output of all four groups is also represented in the local market. The main products in the Estonian fish processing industry in 2012 were frozen fish, preserves and conserves. But also smoked fish, fish fillets and ready-made products were represented in assortment.

The distribution of 61 enterprises whose main activity was fish processing was divided as follows by number of employees: around 85% of them accounted for micro- and small enterprises, 31 and 21 enterprises respectively; there were also 8 medium-sized enterprises and one enterprise that employed more than 249 persons (Table 4.6.1). Compared to the previous year the total number of enterprises increased 11% in 2012. Some changes

took place also in different size classes. The number of microenterprises increased from 26 in 2011 to 31 in 2012. The number of large enterprises engaged in fish processing increased by one in 2012.

The total number of employees in the Estonian fish processing industry was 1,861 in 2012, of which 35% were male and 65% female. The share of female has been consistently higher from 2008 to 2012 and reached to 60-65%. Compared to 2011, the number of FTEs maintained the same level in 2012. After the fall in 2010 the average wage continued a rising trend in 2012 and reached to € 10,282, the increase was 8%. The more detailed Estonian fish processing industry sector overview in numbers is presented in Table 4.5.1.

Table 4.6.1: Estonian fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	50	51	53	55	61	▲	11%	▲ 22%
≤10 employees	16	21	21	26	31	▲	19%	▲ 94%
11-49 employees	27	20	24	20	21	▲	5%	▼ -22%
50-249 employees	5	9	8	9	8	▼	-11%	▲ 60%
≥250 employees	2	1	0	0	1	▬	0%	▼ -50%
Employment (number)								
Total employees	1,936	1,847	1,887	1,847	1,861	▲	1%	▼ -4%
Male employees	677	646	660	739	651	▼	-12%	▼ -4%
Female employees	1,259	1,201	1,227	1,108	1,210	▲	9%	▼ -4%
FTE	1,864	1,746	1,861	1,813	1,816	▬	0%	▼ -3%
Male FTE	652	611	651	725	636	▼	-12%	▼ -2%
Female FTE	1,212	1,135	1,210	1,088	1,180	▲	8%	▼ -3%
Indicators								
FTE per enterprise	37.3	34.2	35.1	33.0	29.8	▼	-10%	▼ -20%
Average wage (thousand €)	9.8	9.6	8.6	9.5	10.3	▲	8%	▲ 5%
Labour productivity (thousand €)	13.2	12.3	12.9	12.1	15.8	▲	31%	▲ 19%
Unpaid work (%)	0.1	0.1	0.2	0.3	0.3	▲	14%	▲ 220%

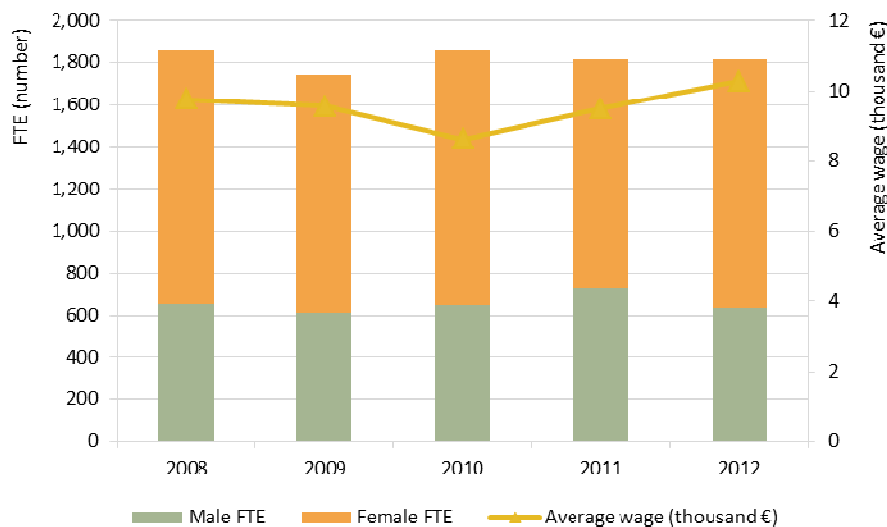


Figure 4.6.1: Estonian employment trends, 2008-2012

4.6.2 Economic performance of the Estonian fish processing industry sector

2012 showed continued recovery in economic activities, as the number of fish processing companies grew somewhat, turnover increased by 11% and was over €143 million in 2012 (Table 4.6.2). Comparing the economic performance indicators between 2011 and 2012, then GVA increased by 31% to €28.6 million in 2012. Also OCF, EBIT and net profit underwent rise, 114%, 822% and 2864% respectively. Return on investment increased from 0.7% in 2011 to 6.1% in 2012. The main factors that influenced those performance indicators were increase in total income and decrease in share of production costs to total income.

The total amount of production costs by the Estonian fish processing industry in 2012 was €137.8 million. The bulk (67%) of this was formed by costs related purchase of fish and other raw material. The parts of labour and energy costs were 13% and 3% respectively. Compared to 2011, the total operational costs increased 8% in 2012.

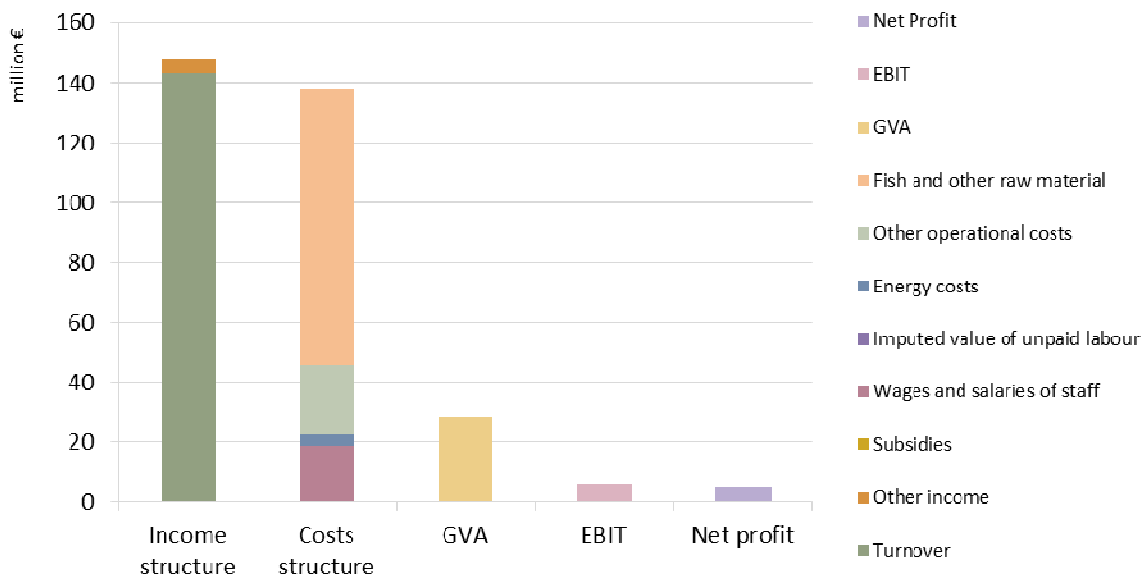


Figure 4.6.2: Economic performance of the Estonian fish processing industry sector, 2012

Table 4.6.2: Economic performance of the Estonian fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	116.5	99.9	110.9	129.2	143.2	▲ 11% ▲ 23%	
Other income	2.7	2.9	3.1	3.5	4.6	▲ 31% ▲ 70%	
Subsidies	0.0	0.0	0.0	0.0	0.0	▬ 0% ▬ 0%	
Total Income	119.3	102.8	114.0	132.7	147.8	▲ 11% ▲ 24%	
Expenditure (million €)							
Purchase of fish and other raw material for production	71.8	60.1	64.8	81.9	92.3	▲ 13% ▲ 28%	
Wages and salaries of staff	18.2	16.7	16.0	17.2	18.6	▲ 8% ▲ 2%	
Imputed value of unpaid labour	0.0	0.0	0.0	0.0	0.1	▲ 27% ▲ 219%	
Energy costs	4.1	3.3	3.6	3.4	3.7	▲ 10% ▼ -9%	
Other operational costs	18.7	17.9	21.6	25.6	23.2	▼ -9% ▲ 24%	
Total production costs	112.8	98.0	106.1	128.1	137.8	▲ 8% ▲ 22%	
Capital Costs (million €)							
Depreciation of capital	3.5	3.6	3.3	4.1	4.5	▲ 11% ▲ 29%	
Financial costs, net	1.1	1.2	0.9	0.8	0.8	▲ 4% ▼ -31%	
Extraordinary costs, net							
Capital Value (million €)							
Total value of assets	88.1	80.9	76.4	84.8	89.2	▲ 5% ▲ 1%	
Net Investments	7.2	4.5	8.7	9.7	3.1	▼ -68% ▼ -57%	
Debt	47.2	42.8	37.5	42.5	45.6	▲ 7% ▼ -3%	
Performance Indicators(million €)							
Gross Value Added	24.7	21.4	24.0	21.9	28.6	▲ 31% ▲ 16%	
Operating Cash Flow	6.5	4.7	7.9	4.7	9.9	▲ 114% ▲ 54%	
Earning before interest and tax	2.9	1.2	4.6	0.6	5.4	▲ 822% ▲ 84%	
Net Profit	1.8	0.0	3.7	-0.2	4.6	▲ 2864% ▲ 158%	
Capital productivity (%)	28.0	26.5	31.4	25.8	32.1		
Return on Investment (%)	3.3	1.4	6.1	0.7	6.1		
Financial Position (%)	53.6	52.9	49.1	50.1	51.2		
Future Expectation Indicator (%)	4.2	1.1	7.1	6.6	-1.6		



Figure 4.6.3: Income, costs, wages and labour productivity trends of the Estonian fish processing industry sector, 2008-2012

4.6.3 Estonian seafood trade

According to Comext data the Estonian seafood trade balance in volume and value has been positive from 2008 to 2012. However, in case of volume the trade balance has been rather stable during the years, but in value the trade balance has been shown increasing trend. It shows that Estonia has begun to export higher-value products (Figure 4.6.4). Estonian seafood import and export in value mainly take place inside the EU (Figure 4.6.5). However, Estonian seafood export in volume mainly takes place outside the EU. It means that products which are exported outside the EU have lower-value (e.g. frozen herring and sprat). The main Estonian export countries for fish and fisheries products in value were Finland, Slovakia, Russia and Germany, and import countries Latvia, Finland, Lithuania and Sweden in 2012 (Figure 4.6.6). Most relevant commercial species in Estonian seafood import were trout, salmon and herring, and in export salmon and coldwater shrimp in 2012 (Figure 4.6.7). The figure shows that compared to previous years the share of salmon increased significantly in import and export value in 2012. The main seafood import articles in value were fresh and frozen products and the main export article were frozen products in 2012 (Figure 4.6.8). When comparing years 2008-2012 the figure reveals that the share of fresh products had increasing trend in import value and at same time the share of frozen products had increasing trend in export value in Estonian seafood trade.

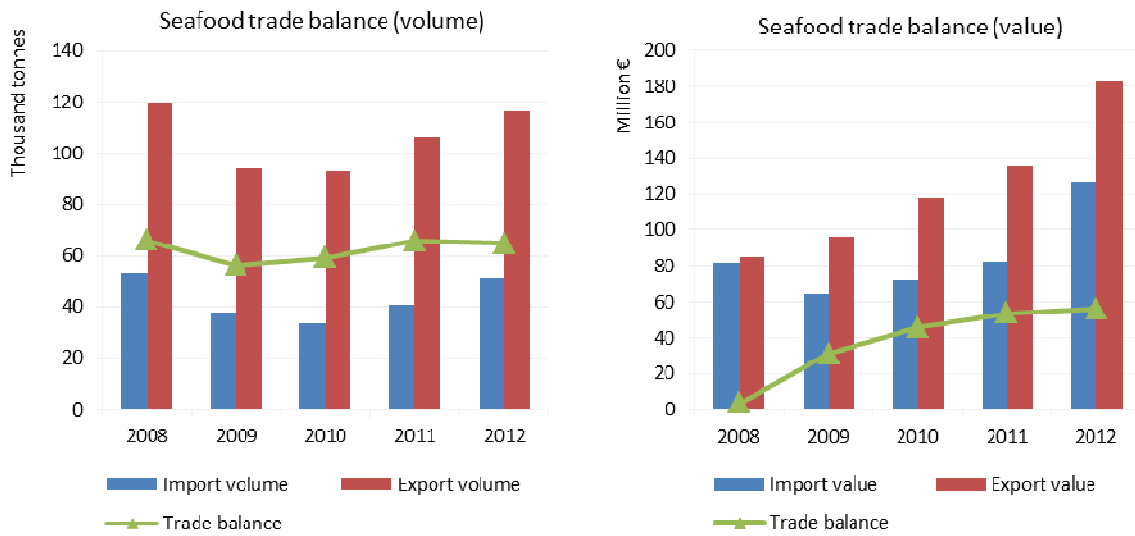


Figure 4.6.4: Estonian seafood trade balance trends in volume (left) and value (right)

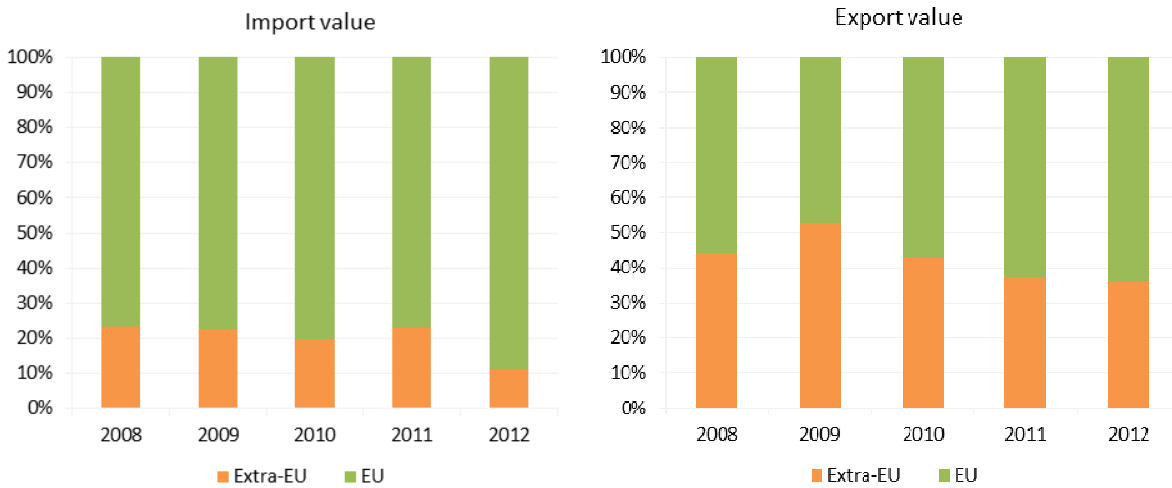


Figure 4.6.5: Estonian seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

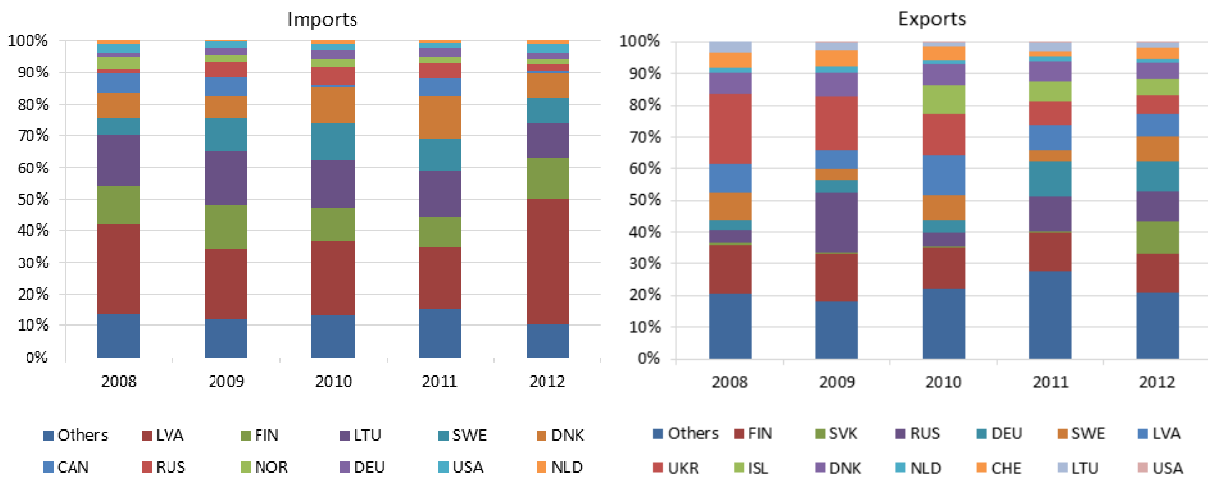


Figure 4.6.6: Estonian seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

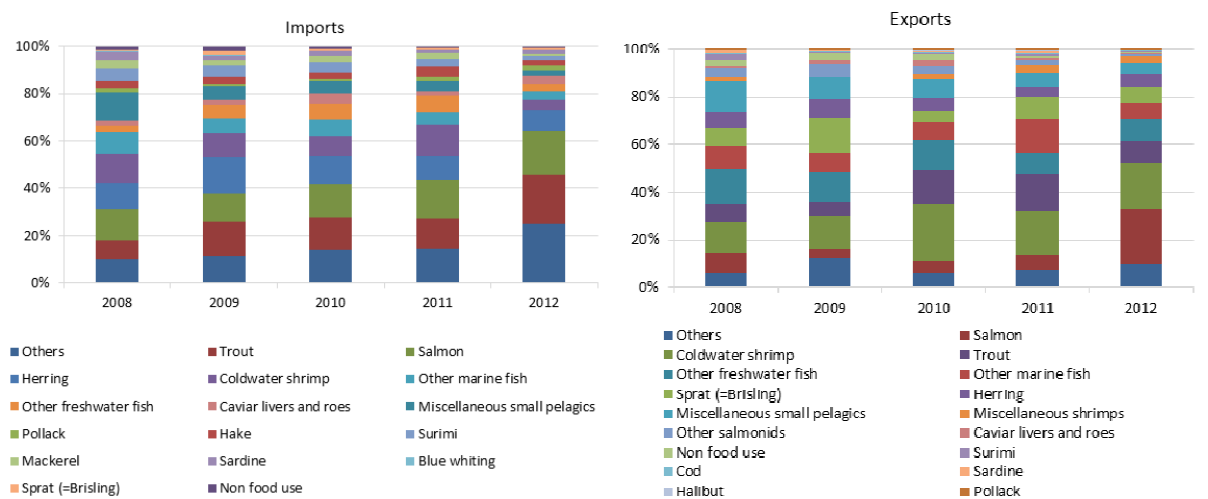


Figure 4.6.7: Estonian seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

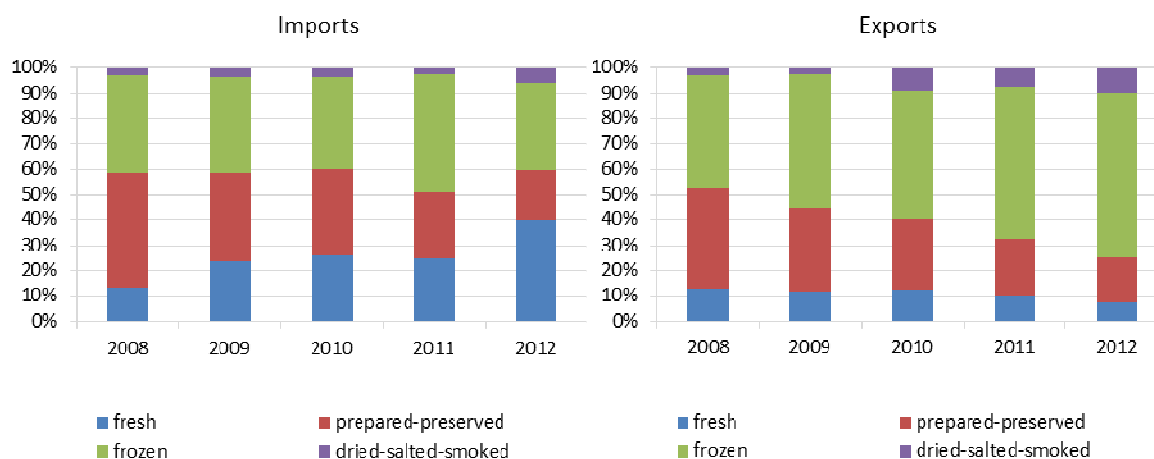


Figure 4.6.8: Estonian seafood imports (left) and exports (right) trends by type of products: shares in value

4.6.4 Trends and drivers for change

If follow some of the trends in the Estonian fish processing industry sector between 2008 – 2012 then we can distinguish the decline in total income in 2009. Compared to 2008, the turnover of production decreased approximately 14% in 2009. Also the number of employees and the average wage decreased. Enterprises kept costs as low as possible. The GVA decreased by 13% to €21.4 million in 2009. Apparently the activity of enterprises was affected by economic crisis. The sector began to show slight signs of recovery already in 2010. Compared to 2009, the turnover of production increased approximately 11% in 2010. The GVA increased by 12% to €24.0 million. Increased demand for the labor, but the average wage continued to fall. It shows that companies had no problem with finding a cheap labor that time. 2011 showed continued recovery in economic activities compared to previous year, as the number of fish processing companies grew somewhat, turnover increased by 16% and was €129 million in 2011. However, the performance indicators for 2011 referred to increase in the raw material price. Compared to 2010, the number of FTEs decreased 3% in 2011, from 1,861 to 1,813. This decline was mainly caused by business restructuring in one of the country's major fish processing companies. 2012 was characterised by intensified competition – compared to 2011 the number of fish processing companies grew 11%. Turnover increased by 11% and was over €143 million. Compared to 2011, the number of FTEs maintained the same level, but the average wage continued a rising trend in 2012 and reached to €10,282, the increase was 8%. The rise of average wage was affected by increasing standard of living in Estonia.

According to preliminary data the number of microenterprises whose main business comprised processing and canning of fish, crustaceans and molluscs decreases somewhat in 2013. However, the growth in total production value is expected in 2013. At the end of 2013, Russia imposes import restrictions for several companies. The Estonian fish processing enterprises continue to use the opportunity to get subsidies from the European Fisheries Fund. There have been mainly three areas for use of subsidies:

To develop and modernize the processing of fishery products – investments into the new production technologies help reduce the cost of production and lead to the increasing in production volumes;

Joint investments for producer organisations – to improve the quality of fishery products and increase year-round stability of supplies through the development of producer organisations;

Development of new markets and promotional campaigns – to promote the consumption of fishery products, create new products and find new market outlets.

4.6.5 Data issues

Data for socio-economic and economic performance originate from the financial statements of all fish processing enterprises and are collected by the Estonian Marine Institute. Estonian fish processing industry data refer to enterprises whose main activity is defined according to the Eurostat definition under NACE Code 15.20 as 'Processing and preserving of fish and fish products'. Also survey used to specify some details (e.g. the share of female and male personnel; unpaid labour).

4.7 FINLAND

4.7.1 General overview of the Finnish fish processing industry sector

There were 173 fish processing enterprises operating in Finland in 2012, of which 146 companies were processing fish as their main activity. These main activity enterprises generated a total turnover of €265 million. There were 27 non main activity enterprises operating in the industry and their total turnover was €84 million in 2012. The processing industry employed 781 FTEs or 930 persons.

The fish processing industry in Finland is highly concentrated in the sense that 10 companies with the highest turnover produced around 76% of the total revenue generated by the industry in 2012. The small enterprises valued by turnover (50% of the enterprises) accounted only for 2% of the total income of the industry. There are several fish wholesale companies operating in the processing sector, and they constitute a substantial part of the total turnover of the sector.

In 2013, Fish processing enterprises used around 80 thousand tonnes of fish as raw material, 53 thousand tonnes were domestic fish and 27 thousand tonnes were imported. Total amount of fish processed in 2013 increased from previous years resulting from increased amounts of Baltic herring and sprat exported deep-frozen and increased amounts of Norwegian salmon and domestic rainbow trout processed.

4.7.1.1 Main products and raw materials

The main species used in Finnish fish processing are Baltic herring, salmon and rainbow trout. The Finnish industry processed also European whitefish, herring and various freshwater fish species. Volumes of raw materials used for processing in 2013 are presented in table 4.7.1. Finnish fish processing statistics are published every second year and 2013 is the most recent year published.

Table 4.7.1: Raw materials in 2013

Main raw materials	Volume (tn)
Baltic herring	31,225
Salmon	24,048
Rainbow trout	17,866
European whitefish	2,282
Other	6,779
Total	79,918

Source FGFR: Fish processing 2013

Most of the raw material is processed to deep frozen (Baltic herring and sprat) or fresh products (fillets, etc.). The main processing products are (hot and cold) smoked products of rainbow trout, salmon and herring. There is also a notable production of salted rainbow trout. Imported herring is processed to semi-preserved product. The main market for Baltic herring is the Russian, Danish and Estonian export market. The increase of the

processing sector has mainly been based on imported farmed fish while the consumption of domestic fish and fish products in processing has decreased considerably during the past decade. However, the share of domestic fish used for processing showed an increase in 2013. About one thirds of the raw material is now imported. Norwegian salmon constituted the most important imported species for processing, and together with rainbow trout, comprised the most important species in terms of value; production volumes for both species together reached 42 thousand tonnes in 2013.

4.7.1.2 Socio-Economic aspects

Overview of the Finnish fish processing industry for 2008-2012 is presented in Table 4.7.2. The Finnish fish processing sector is dominated by micro enterprises employing less than 10 persons. There were 131 micro enterprises in the sector in 2012 and they amounted to 90% of all the main activity enterprises in the industry. There were only 13 enterprises employing 10-49 persons and 2 enterprises employing 50-249 persons. There are no large processing enterprises in Finland employing more than 250 persons. The total number of enterprises increased by 3 firms, while employment measured in FTE increased. The full time equivalent employment has increased by 15% since 2008. However, the number of persons employed has decreased by 3% in 5 years. Male employees are dominant in the sector, with 61% share of the total employees. An average processing enterprise employed 5.4 FTEs with an average wage of €39.9 thousand per employee. There was a decent increase in the average salaries in 2012 (11%). Labour productivity has been increasing: in 2012 the GVA per FTE was €56.7 thousand while in 2008 it was €48.5 thousand.

Table 4.7.2: Finnish fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)		Δ (2008-12)
Structure (number)									
Total enterprises	143	137	143	143	146	▲	2%	▲	2%
≤10 employees	131	125	131	127	131	▲	3%	▬	0%
11-49 employees	9	9	9	13	13	▬	0%	▲	44%
50-249 employees	3	3	3	3	2	▼	-33%	▼	-33%
≥250 employees	0	0	0	0	0	▬	0%	▬	0%
Employment (number)									
Total employees	961	880	885	870	930	▲	7%	▼	-3%
Male employees	539	510	536	522	564	▲	8%	▲	5%
Female employees	422	370	349	348	366	▲	5%	▼	-13%
FTE	682	742	742	777	781	▲	1%	▲	15%
Male FTE	389	430	449	466	474	▲	2%	▲	22%
Female FTE	293	312	293	311	307	▼	-1%	▲	5%
Indicators									
FTE per enterprise	4.8	5.4	5.2	5.4	5.4	▼	-1%	▲	12%
Average wage (thousand €)	34.8	36.4	35.5	36.1	39.9	▲	11%	▲	15%
Labour productivity (thousand €)	48.5	53.0	57.1	53.9	56.7	▲	5%	▲	17%
Unpaid work (%)	3.9	3.2	3.9	3.3	3.5	▲	7%	▼	-10%

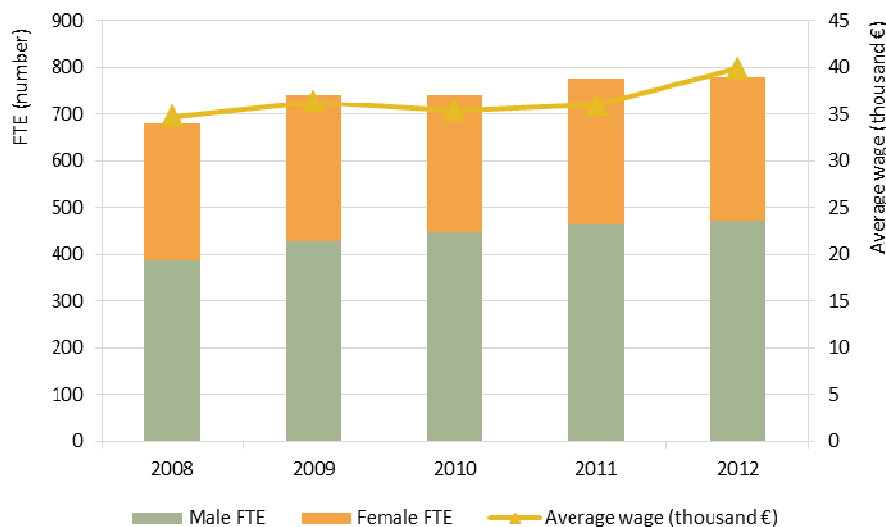


Figure 4.7.1: Finnish employment trends, 2008-2012

4.7.2 Economic performance of the Finnish fish processing industry sector

Increasing costs and fluctuations of the price of raw materials (fish) are affecting the profitability of the industry. Based on the Table 4.7.3 you can see that the total production costs were high in 2012 at around 95% of the total income. Raw materials are the major cost item with a share of 73% of the total production costs in 2012. Wages and salaries made up 12% and other operational costs 13% of the total production costs. Energy costs accounted for only a percentage.

The recent expansion of the processing sector in Finland has mainly been based on imported farmed fish. Turnover of fish processing in Finland has increased dramatically during the past 5 years. The increase has been 65% (inflation not accounted for). In 2012 the turnover of the sector was €265 million.

The gross value added of processing industry increased to €44 million in 2012. Operating cash flow in 2012 was €13.3 million with a decrease of 5%. Earnings before interest and taxes decreased by 18% and amounted €7.5 million in 2012. The net profit also decreased by 23% to €5.6 million. The Return on investment came down to 6.1% and financial position (debt/assets-ratio) increased to 70%. Capital productivity (GVA/Assets) was 36%.

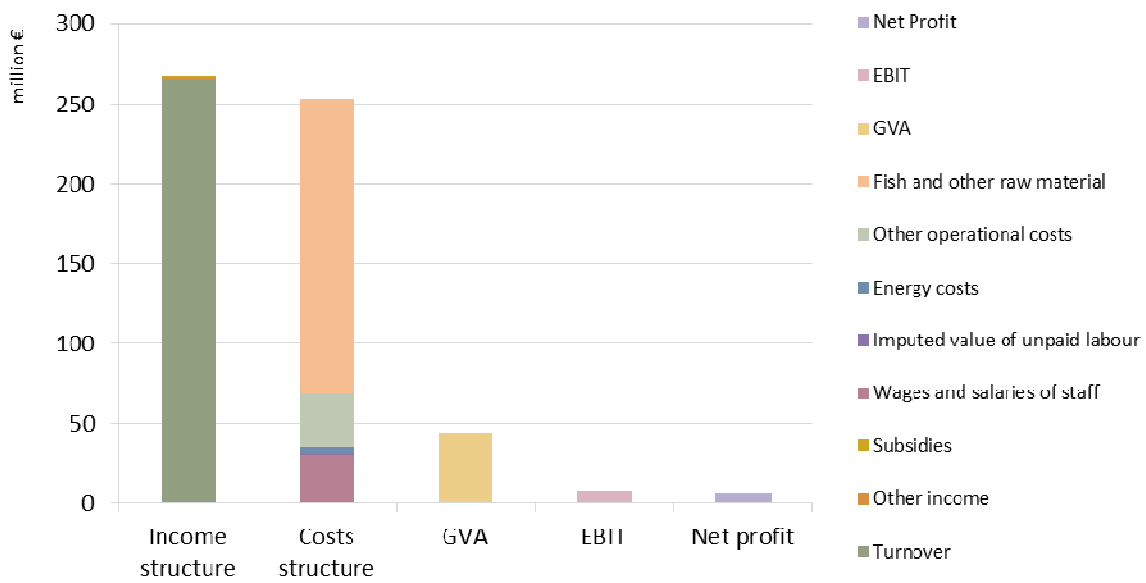


Figure 4.7.2: Economic performance of the Finnish fish processing industry sector, 2012

Table 4.7.3: Economic performance of the Finnish fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Income (million €)								
Turnover	160.0	195.4	236.1	262.8	264.7	▲	1% ▲	65%
Other income	1.2	1.0	3.3	1.4	1.7	▲	23% ▲	45%
Subsidies	0.1	0.1	0.1	0.1	0.1	▲	102% ▲	64%
Total Income	161.3	196.5	239.5	264.2	266.6	▲	1% ▲	65%
Expenditure (million €)								
Purchase of fish and other raw material for production	107.6	131.7	168.4	189.3	185.1	▼	-2% ▲	72%
Wages and salaries of staff	22.8	26.1	25.3	27.1	30.1	▲	11% ▲	32%
Imputed value of unpaid labour	0.9	0.9	1.0	0.9	1.1	▲	19% ▲	19%
Energy costs	2.3	2.7	3.3	3.2	3.3	▲	1% ▲	41%
Other operational costs	18.3	22.7	25.4	29.7	33.8	▲	14% ▲	85%
Total production costs	151.9	184.1	223.4	250.3	253.3	▲	1% ▲	67%
Capital Costs (million €)								
Depreciation of capital	3.5	4.2	5.1	4.8	5.8	▲	21% ▲	64%
Financial costs, net	2.2	1.7	1.8	1.8	1.9	▲	2% ▼	-16%
Extraordinary costs, net	0.8	0.1	0.4	-0.8	-0.2	▲	71% ▼	-128%
Capital Value (million €)								
Total value of assets	73.6	86.7	103.5	108.3	123.6	▲	14% ▲	68%
Net Investments	3.1	7.6	4.9	5.0	12.5	▲	149% ▲	305%
Debt	56.7	67.1	74.3	74.4	86.9	▲	17% ▲	53%
Performance Indicators (million €)								
Gross Value Added	33.0	39.3	42.4	41.9	44.3	▲	6% ▲	34%
Operating Cash Flow	9.4	12.4	16.2	13.9	13.3	▼	-5% ▲	41%
Earning before interest and tax	5.9	8.2	11.0	9.2	7.5	▼	-18% ▲	27%
Net Profit	3.6	6.4	9.2	7.3	5.6	▼	-23% ▲	54%
Capital productivity (%)	44.9	45.3	41.0	38.7	35.9			
Return on Investment (%)	8.0	9.4	10.7	8.5	6.1			
Financial Position (%)	77.0	77.4	71.8	68.7	70.3			
Future Expectation Indicator (%)	-0.6	3.9	-0.2	0.2	5.4			



Figure 4.7.3: Income, costs, wages and labour productivity trends of the Finnish fish processing industry sector, 2008-2012

4.7.3 Finnish seafood trade

The Finnish seafood trade balance is significantly negative (Figure 4.7.4). In 2012, Finland imported around 80 million kg of seafood and exported less than 40 thousand tonnes resulting to a negative trade balance of around 40 thousand tonnes. What comes to trade values, the difference between imports and exports is even higher. Finland imported seafood with value of little less than €300 million and exported seafood worth of around €40 million, creating a negative trade balance of €250 million.

In terms of value, half of the seafood imported comes from the EU countries and half outside the EU (Figure 4.7.5 and Figure 4.7.6). Finland imports mostly from Norway, Sweden and Denmark. The imports are mostly fresh salmon and rainbow trout, canned tuna, other fish prepared-preserved products and shrimp products. Around 75% of the Finnish seafood exports go to EU countries. The Finnish seafood exports go mainly to Sweden, Estonia, Russia and Denmark. Exports consist mostly of fresh rainbow trout, salmon as well as fresh and frozen Baltic herring and sprat.

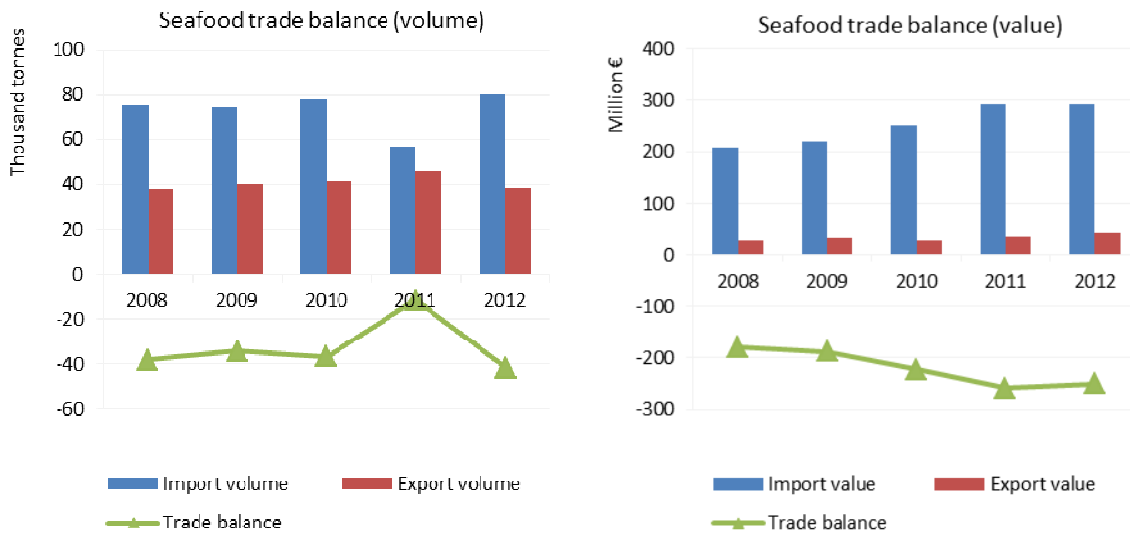


Figure 4.7.4: Finnish seafood trade balance trends in volume (left) and value (right)

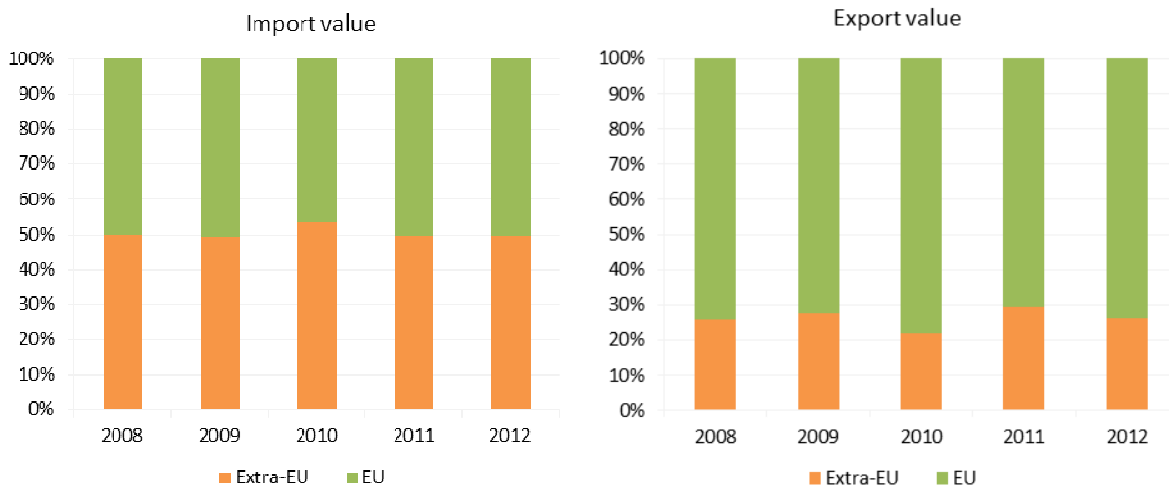


Figure 4.7.5: Finnish seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

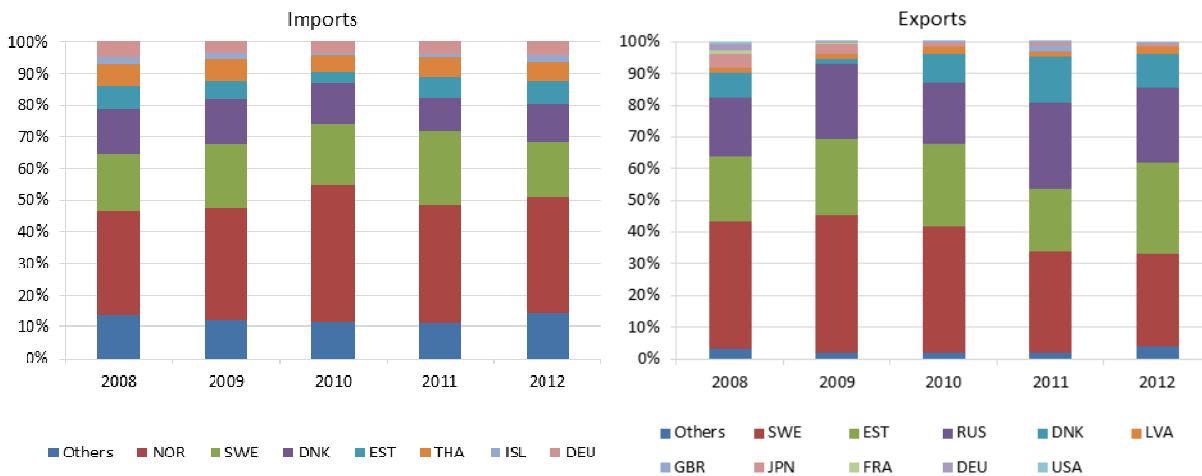


Figure 4.7.6: Finnish seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

4.7.4 Trends and drivers for change

The processing and fish retail sectors started to grow intensively when the import restrictions of fresh fish were dissolved in the beginning of the 90s. The recent expansion of the processing sector in Finland has mainly been based on imported farmed fish. Due to regulative restrictions (in aquaculture), the supply of domestic fish has not been able to keep up with the increasing demand of fish. Increasing costs and fluctuations of the price of raw materials (fish) are affecting the profitability of the industry.

The decrease of salmon prices affected favorably the profitability of the industry in 2012 while automatizing of salmon processing has also increased the profits. Finnish fish processing enterprises continue to invest in new production technologies as well as increasing production volumes. Demand for local and ecological food is increasing and affecting positively the domestic demand of fish. The salmon prices were record-high in 2013 affecting the profitability of the industry. Export of Baltic herring has been increasing and the export prices for Baltic herring have been high. Industry expects to see most growth in the rainbow trout and salmon production. There is an interest to increase the processing of locally produced farmed rainbow trout.

The Finnish Game and Fisheries Research Institute (FGFRI) conducted a survey on fish markets in Finland in the beginning of 2014. According to the survey results, fish processing enterprises believe the demand of fish is growing. In the beginning of 2014 the market situation was regarded as satisfactory; fish prices were up and there were no aggressive competition in the industry.

4.7.4.1 Data quality

The economic data is compiled by combining data from the Structural Business Statistics from Statistics Finland (SF) and survey data from the Finnish Game and Fisheries Research Institute (FGFRI). Economic data is based on financial statement statistics and regional and industrial statistics of SF. Financial data covers all enterprises having fish processing as their main activity and with a turnover above €10,595 in 2012. FGFRI carries out a

survey on processed fish production every second year. The latest information available while writing the report was from 2013. The production survey is carried out as a stratified survey with a target population including all enterprises operating in fish processing, including also enterprises that do not have fish processing as their main activity.

4.8 FRANCE

4.8.1 General overview of the French fish processing industry sector

The fish processing sector is a small component of the food processing sector in France: the turnover of the fish processing industries accounts for approximately 3% of the turnover of the whole food processing industry. According to the collected data for 2012, the French fish processing sector encompasses 295 companies which employ 16,184 people (15,971 full-time equivalents) and generate a total turnover of €4.86 billion. According to the French data collection office FranceAgriMer, the turnover of these companies for seafood production is only €3.82 billion (78.6% of total turnover).

Table 4.8.1: French fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	327	311	305	300	295	▼	-2%	▼ -10%
≤10 employees	160	154	148	143	133	▼	-7%	▼ -17%
11-49 employees	111	102	105	104	108	▲	4%	▼ -3%
50-249 employees	43	37	35	37	39	▲	5%	▼ -9%
≥250 employees	13	18	17	16	15	▼	-6%	▲ 15%
Employment (number)								
Total employees	15,672	15,590	15,612	15,964	16,184	▲	1%	▲ 3%
Male employees	6,943	6,859	6,979	7,167	7,359	▲	3%	▲ 6%
Female employees	8,729	8,731	8,633	8,797	8,825	→	0%	▲ 1%
FTE	15,202	14,983	15,139	15,662	15,971	▲	2%	▲ 5%
Male FTE	6,942	6,842	6,890	7,147	7,275	▲	2%	▲ 5%
Female FTE	8,260	8,141	8,249	8,515	8,696	▲	2%	▲ 5%
Indicators								
FTE per enterprise	46.5	48.2	49.6	52.2	54.1	▲	4%	▲ 16%
Average wage (thousand €)	39.9	42.9	43.5	47.7	51.3	▲	8%	▲ 29%
Labour productivity (thousand €)	59.2	53.7	53.6	60.2	68.1	▲	13%	▲ 15%
Unpaid work (%)	0.5	0.0	0.5	0.6	0.4	▼	-38%	▼ -25%

The activity of the French fish processing industry consists in the production of fresh and refrigerated fish fillets (valued at €629 million in 2012), the production of prepared dishes with fish, crustaceans and molluscs (€624 million), smoked salmon (€579 million), prepared or conserved crustaceans and molluscs (€291 million), surimi (€222 million) and canned fish (€254 million, from which canned tuna is valued at €106 million).

In France, between 2009 and 2010, the share of enterprises for which fish processing was not the main activity was stable and represented 27% (115 enterprises in 2009 and 111 enterprises in 2010) of the total of the enterprises surveyed (426 in 2009 and 416 in 2010). For both years, their turnover represented about 13.5% (€683 million in 2009 and €694 million in 2010) of the total turnover of the fish processing industry.

The French fish processing industry is highly concentrated: in 2011, 20% of the companies cumulated more than 85% of the turnover generated by seafood production (€3.7 billion), and the 10 first companies (3.3%) alone accumulated more than 45% of this turnover. On the other hand, the sector includes numerous small companies: in 2012, 45% of the companies employ less than 10 persons, and 82% employ less than 50 persons. Only 15 companies (5%) employ more than 250 persons. However, during the period 2008-2012, the number of very small enterprises (less than 10 employees) decreased by 17%, while the number of small enterprises (between 10 and 49 employees) decreased by 3% and the number of medium and big enterprises (more than 50 employees) decreased by 4%.

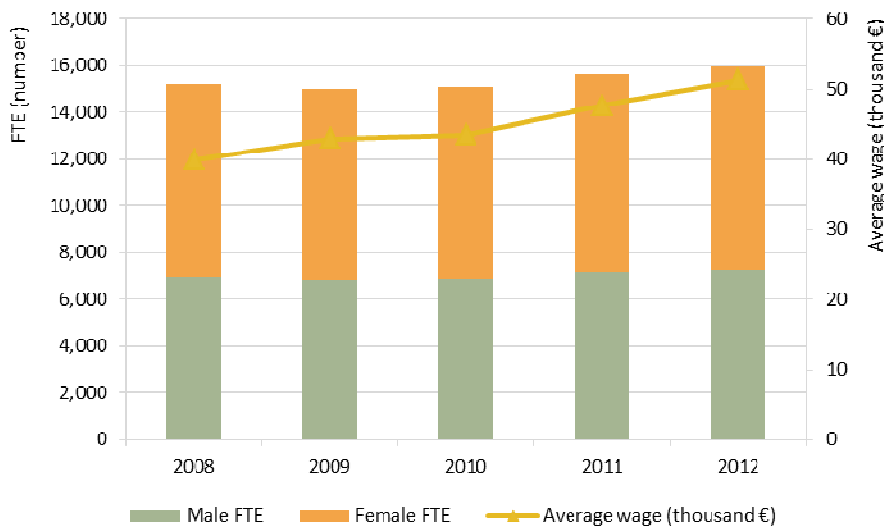


Figure 4.8.1: French employment trends, 2008-2012

Although the number of enterprises was slightly reduced from 327 to 295 between 2008 and 2012, the French fish processing industry created 512 jobs (3.3% increasing rate), what contributed to raise by 769 the number of full-time equivalents (5.4% increasing rate). The average salary has increased by 28.6% since 2008. Female employees still represent the majority of the workers (54%) and the proportion of part-time jobs is marginal and decreasing. However, part-time jobs concern also male employees now, which was not the case in 2008.

4.8.2 Economic performance of the French fish processing industry sector

The cost structure of the French fish processing industry shows that raw material represents 41% of production costs. This share seems relatively low, in comparison with the other countries. Other operational costs, although they are decreasing, still represent 31% of the production cost: this suggests that other operating costs may be overestimated in the data, while raw material purchases may be underestimated (in other words, it may be suspected that 'other operational costs' still include a significant amount of raw material). On the other hand, the cost of raw material has continuously increased since 2008, and raised up by 41% between 2008 and 2012, while total production costs increased by 16%. Thus, raw material alone explains 93% of the increase of total production costs at the end of the period. The gross added value, which is estimated from the total income less the subsidies and all the operational costs except labour costs, represents a share of the total turnover (22%) which may be considered to be normal.

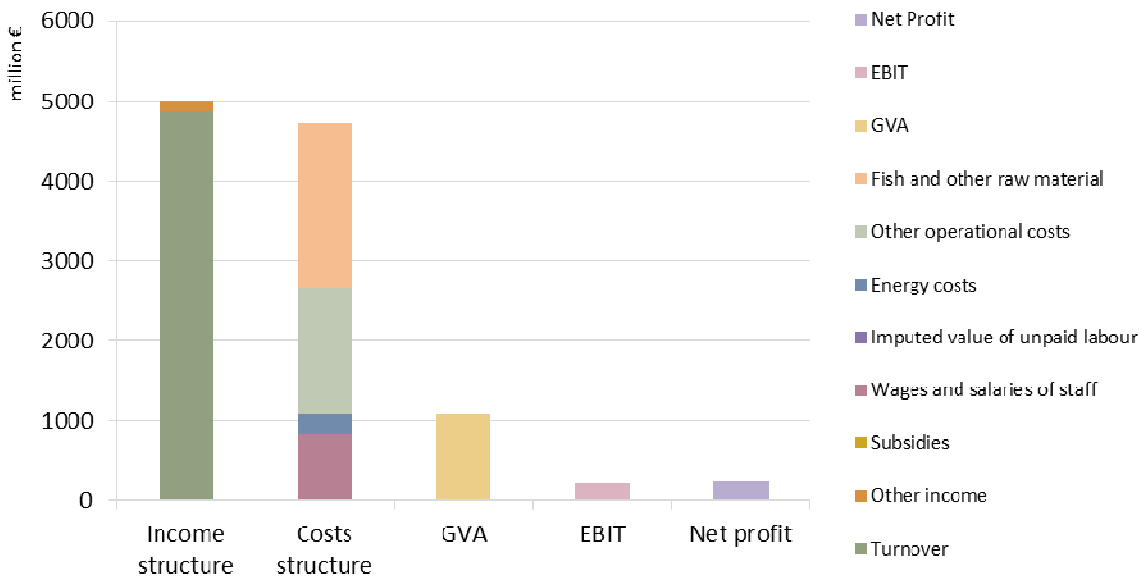


Figure 4.8.2: Economic performance of the French fish processing industry sector, 2012

The economic performances of the fish processing sector are improving. While the turnover remained stable between 2011 and 2012, the net profit increased from €101.9 million to €219.7 million, which seems to be mainly due to the decrease of other operational costs. The net profit represents now 4% of the turnover, its higher level since 2008 when it reached 6%. Indeed, the profit rate dropped from 6% to 3% of turnover between 2008 and 2009, mostly due to the costs of fish raw material purchases, which increased by 7.8% in one year while the level of turnover remained stable. The return on investment followed the same trend: it reached again a normal level in 2012 (8.3%), its higher level since 2008, after low performances between 2009 and 2011. Basically, these economic performances are explained by the evolution of the operational costs, which represented 93% of the turnover in 2008, then increased to 96% or 97%, and decreased to 94% in 2012.

Despite a slight decrease between 2011 and 2012, net investments remain at a relatively significant level (3.5% of the turnover). Investments have increased from €80.3 million to €170.9 million over the period, which may denote positive expectations from the future of the industry. This rise of the level of the investments occurred

mostly in 2009 (increase by 76% in one year). Since 2008, the debt of the French fish processing companies represent a little bit more than a quarter of their turnover. Nevertheless, their financial position is improving, indicating that a more important share of the cash-flow is used to consolidate the value of assets.

Table 4.8.2: Economic performance of the French fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
Income (million €)									
Turnover	4,315.2	4,334.5	4,507.3	4,802.3	4,861.6	▲	1%	▲	13%
Other income	49.0	42.1	28.0	149.0	127.7	▼	-14%	▲	160%
Subsidies	8.9	3.6	5.5	5.5	11.9	▲	116%	▲	34%
Total Income	4,373.1	4,380.3	4,540.7	4,956.8	5,001.3	▲	1%	▲	14%
Expenditure (million €)									
Purchase of fish and other raw material for production	1,464.6	1,578.7	1,754.6	1,902.8	2,066.8	▲	9%	▲	41%
Wages and salaries of staff	604.1	640.2	655.7	742.6	817.1	▲	10%	▲	35%
Imputed value of unpaid labour	2.9	3.2	3.3	4.3	3.0	▼	-32%	▲	1%
Energy costs	195.2	198.7	271.2	231.2	269.8	▲	17%	▲	38%
Other operational costs	1,805.1	1,794.4	1,697.9	1,874.0	1,565.5	▼	-16%	▼	-13%
Total production costs	4,072.0	4,215.1	4,382.6	4,754.9	4,722.0	▼	-1%	▲	16%
Capital Costs (million €)									
Depreciation of capital	60.6	58.6	79.8	106.3	66.8	▼	-37%	▲	10%
Financial costs, net	-3.7	-7.0	-12.0	-6.2	-7.2	▼	-16%	▼	-95%
Extraordinary costs, net	0.7	8.4	-9.7	9.8	0.6	▼	-94%	▼	-19%
Capital Value (million €)									
Total value of assets	2,041.8	1,972.4	2,109.9	2,238.7	2,551.9	▲	14%	▲	25%
Net Investments	80.3	141.5	159.2	188.9	170.9	▼	-10%	▲	113%
Debt	1,421.7	1,140.4	1,211.0	1,312.1	1,366.8	▲	4%	▼	-4%
Performance Indicators (million €)									
Gross Value Added	899.3	804.9	811.6	943.3	1,087.4	▲	15%	▲	21%
Operating Cash Flow	301.1	165.2	158.1	201.9	279.2	▲	38%	▼	-7%
Earning before interest and tax	240.5	106.6	78.3	95.6	212.4	▲	122%	▼	-12%
Net Profit	244.2	113.6	90.3	101.9	219.7	▲	116%	▼	-10%
Capital productivity (%)	44.1	40.8	38.5	42.1	42.6				
Return on Investment (%)	11.8	5.4	3.7	4.3	8.3				
Financial Position (%)	69.6	57.8	57.4	58.6	53.6				
Future Expectation Indicator (%)	1.0	4.2	3.8	3.7	4.1				

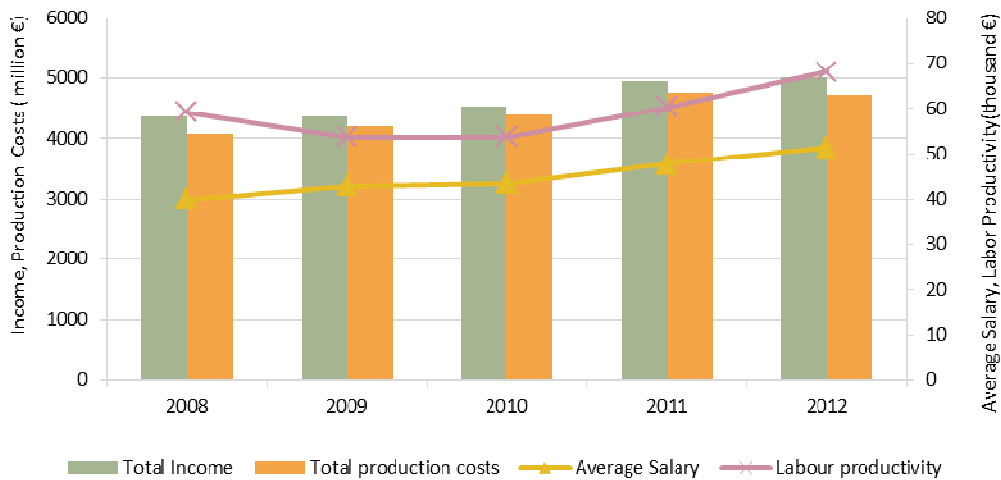


Figure 4.8.3: Income, costs, wages and labour productivity trends of the French fish processing industry sector, 2008-2012

The labour productivity, which was €59.2 per employee in 2008, dropped to €53.7 and €53.6 in 2009 and 2010 and then increased again to reach €60.2 in 2011 and 68,083 in 2012. The periods of relatively low labour productivity correspond to the decrease of gross added value due to raw material costs, while the recovering of the labour productivity is linked to the increase of gross value added by 16% between 2010 and 2011, and by 15% between 2011 and 2012. During the period 2008-2012, the average salary of the processing industry employees has increased by a 6.5% yearly rate, from €39.9 in 2008 to €51.3 in 2012. Between 2008 and 2012, the increase of average salary (28.6%) was higher than the one of gross added value (20.9%).

4.8.3 Overview of the French fish processing industry sector by size categories

The number of enterprises in each size category followed different patterns since 2008 (see figure 4.8.4): the number of very small enterprises (less than 10 employees) is continuously decreasing, the number of small and medium enterprises (from 10 to 49, and from 50 to 249 employees) has fallen between 2008 and 2009 but has been slightly increasing since then, and the number of big enterprises (more than 250 employees) has increased from 13 to 18 between 2008 and 2009 but has slightly decreased since then to 15 companies in 2012. The net creation of jobs in the French processing industry during the period 2008-2012 seems to be mainly due to medium enterprises, even if data for employment per size category are available since 2009 only: indeed, between 2009 and 2012, the number of FTE increased by 18% for the medium enterprises, while it increased only by 2%, 4% and 2% for the very small, small and big enterprises respectively.

On the other hand, the medium enterprises are the only ones which did not improved their total income between 2008 and 2012 (it decreased by 4%), while total income increased by 31% for the very small enterprises, by 14% for the small ones and by 25% for the big enterprises. However, the big company category, which encompassed 15 enterprises this year, cumulates 57% of the total income in 2012: this indicates increasing concentration as the share of the big company category was only 52% of the total income in 2008.



Figure 4.8.4: French main structural and economic variables trends by size category, 2008-2012

The level of the other incomes and the subsidies is very low for all categories of enterprises, with the exception of the other income of the small enterprises (10 to 49 employees) which reaches 11.6% in 2012 (figure 4.8.5).

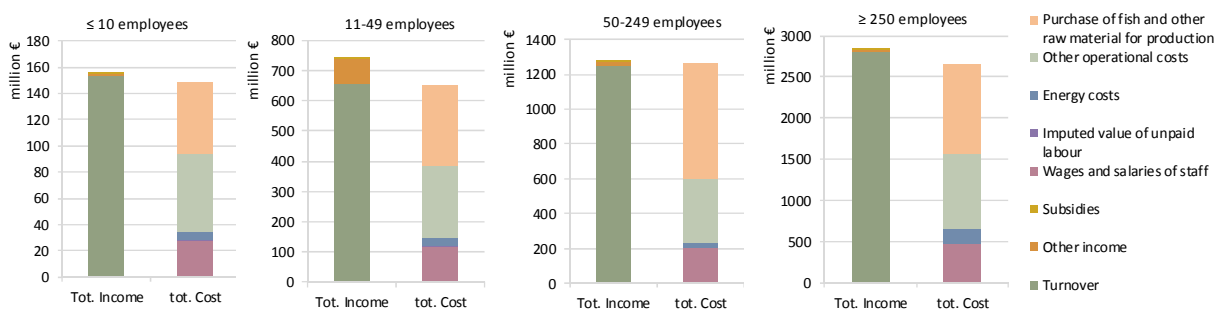


Figure 4.8.5: French income and cost structure, by size category, 2012

The production costs of the very small enterprises increased by 31% between 2008 and 2012 (table 4.8.3), while the changes were moderate for small enterprises (9%) and medium enterprises (-3%). However, the increase of the production costs of the big enterprises by 29% during the period explains most of the pattern of this

variable for the whole industry. Similarly, the value of assets of the very small enterprises increased by 29% between 2008 and 2012, while the increase was much lower for small enterprises (2%) and medium enterprises (1%). But the increase of the production costs of the big enterprises reached 43% during the period, which explains most of the pattern of this variable for the whole industry.

Table 4.8.3: Economic performance of the French fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
less than or equal to 10 employees							
Total Income	118.5	115.9	136.2	155.3	155.0	0%	31%
Total production costs	113.5	112.0	131.4	155.8	148.5	-5%	31%
Gross Value Added	27.4	26.5	27.2	24.5	34.2	40%	25%
Operating Cash Flow	5.0	4.0	4.8	-0.5	6.5	1474%	31%
Earning before interest and tax	-5.1	3.1	2.8	-0.5	3.1	695%	161%
Net Profit	-3.4	2.8	3.3	-0.1	3.4	5065%	200%
between 11 and 49 employees							
Total Income	649.3	680.8	690.2	756.0	743.2	-2%	14%
Total production costs	599.1	659.7	674.8	674.3	651.1	-3%	9%
Gross Value Added	153.8	127.7	120.9	191.0	210.5	10%	37%
Operating Cash Flow	50.1	21.1	15.4	81.7	92.1	13%	84%
Earning before interest and tax	-28.6	16.3	-4.4	65.7	92.2	40%	422%
Net Profit	-26.7	17.0	-2.8	67.6	93.5	38%	451%
between 50 and 249 employees							
Total Income	1,332.2	1,053.8	1,043.4	1,159.7	1,272.8	10%	-4%
Total production costs	1,300.1	1,017.6	1,018.1	1,162.1	1,267.0	9%	-3%
Gross Value Added	197.8	170.5	169.8	190.1	201.2	6%	2%
Operating Cash Flow	32.1	36.2	25.3	-2.3	5.8	351%	-82%
Earning before interest and tax	-49.9	25.9	-16.8	-60.6	-1.5	98%	97%
Net Profit	-45.4	28.5	-14.2	-56.8	3.1	106%	107%
greater than or equal to 250 employees							
Total Income	2,273.2	2,529.7	2,670.9	2,885.8	2,830.2	-2%	25%
Total production costs	2,059.3	2,425.8	2,558.3	2,762.8	2,655.5	-4%	29%
Gross Value Added	520.3	480.2	493.6	537.7	641.4	19%	23%
Operating Cash Flow	213.9	103.9	112.6	123.0	174.8	42%	-18%
Earning before interest and tax	324.1	61.2	96.7	91.0	118.5	30%	-63%
Net Profit	319.7	65.3	104.0	91.1	119.6	31%	-63%

Except for the very small enterprises (less than 10 employees) for which the first cost-headings are the 'other operational costs', the cost structure of the French fish processing companies are similar: the first cost-headings are the purchase of fish raw material, the second one are the other operational costs, the third one are the wages and salaries and the fourth one are energy costs. The medium enterprises (between 50 and 249 employees) show the higher share of the purchase of fish raw material (52.5%), and the big enterprises (more than 250 employees) show the higher share of energy costs (7.5%), which indicates a higher level of mechanization, for instance in canneries. In the case of medium enterprises, the higher share of fish raw material is compensated by a lower share of other operational costs. The reason for this deviation is certainly to be found in the type of products processed by these medium enterprises: this size category encompasses mainly enterprises producing prepared fishes and smoked salmon, products for which the share of fish raw material in the production costs is the highest. Products for which the share of raw material in the production costs is the lowest are the prepared dishes and the canned products, which are processed mainly by big enterprises (canned fish) or small enterprises (prepared dishes).

The production costs amount for a very high share (at least 96%) of the total income, except for the big companies in 2008 (91%) and 2012 (94%) and for the small ones in 2008 (92%), 2011 (89%) in 2012 (88%). Because of this generally low level of operating cash flow, the net profits are often low and sometimes negative. In recent years, small companies were able to keep the same level of production costs while improving their total income; as a consequence, small enterprises reach a net profit to turnover of 9% in 2011 and 13% in 2012, and this last year their total net profit was worth €93.5 million, a value comparable to the total net profit of big companies (€119.6 million). At the beginning of the period, the big enterprises generated a net profit to turnover of 13%, but their net profit was cut by 80% between 2008 and 2009. Since then, the profit to turnover of the big enterprises oscillates between 3% and 4%. The level of net profit earned by big companies, which improved slightly in 2012, explains the global trend of net profit for the whole French seafood industry.

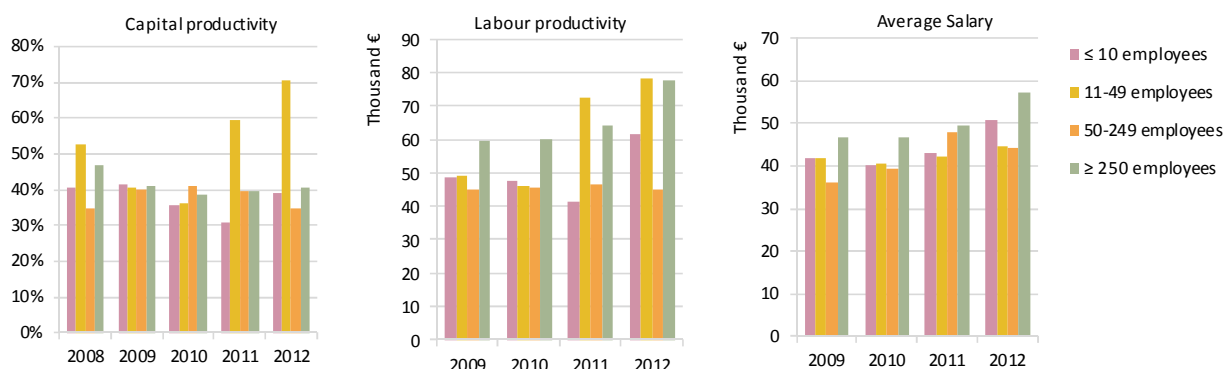


Figure 4.8.6: French capital productivity, labour productivity and average salary trends, by size category, 2008-2012

Over the period 2008-2012, very small enterprises and medium enterprises show the lower rate of capital productivity (figure 4.8.6). Capital productivity follows the same trends as the net profit. It is almost stable around 35% to 40%, but increased for the small enterprises in 2011 and 2012. Labour productivity was almost stable between 2009 and 2010, and then it increased for the small and the big companies in 2011 and 2012, and for the very small enterprises in 2012. Since 2010, the average salary is increasing for all categories, except for the medium enterprises between 2011 and 2012.

4.8.4 French seafood trade

The value of the deficit of the French trade balance for seafood products amounted to €2.98 billion in 2012. The trade deficit increased by 24.5% between 2008 and 2012, mainly due to a decrease of exports volume by 18.6% and an increase of imports value by 17.4% over the period. However, this deficit was slightly reduced between 2010 and 2011 because of the increase of the value of exports, and between 2011 and 2012 because of the increase of the volume of exports and the decrease of the value of imports. However, during the period 2009-2012, exports represent less than 30% of imports both in volume and value. Between 2011 and 2012, imports were stable in terms of value (€4.28 billion in 2011 and €4.24 billion in 2012) but their volume increased by 3.6% (10.0 million tons in 2011 instead of 9.7 in 2011).

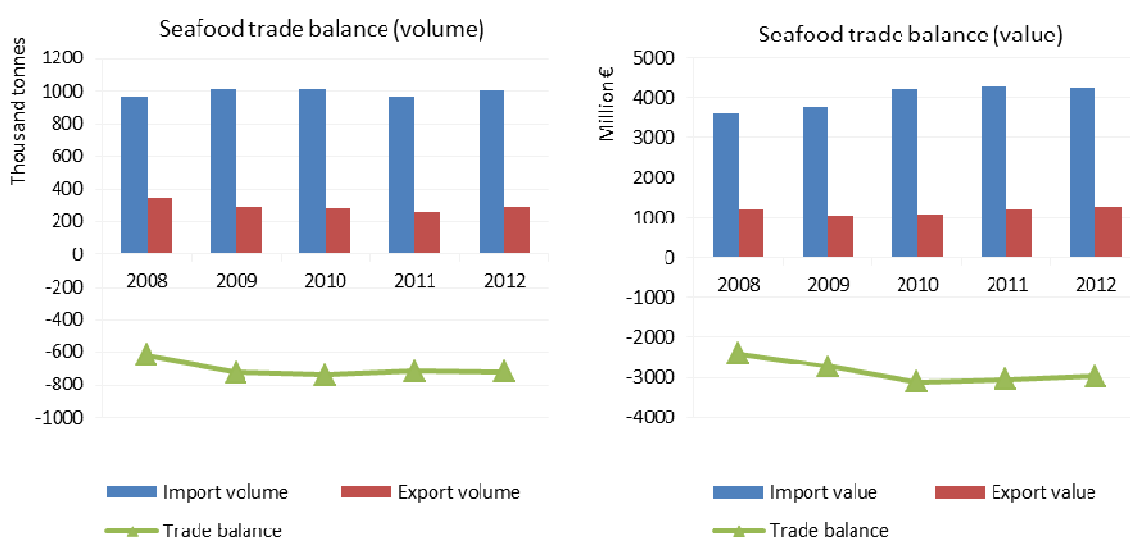


Figure 4.8.7: French seafood trade balance trends in volume (left) and value (right)

French international trade of seafood products concerns mainly EU member States: extra-EU trade represent less than 40% of imports and less than 25% of exports (figure 4.8.8). The structure of imports and exports per product types is almost stable (figure 4.8.9). In 2012, the value of imports is made of 38% frozen products, 33% fresh fish, 25% prepared or preserved products and 4% dried, salted or smoked fish, while the value of exports is made of 41% fresh fish, 33% frozen products, 20% prepared or preserved products and 6% dried, salted or smoked fish. As a result, the French trade deficit was explained at 40% by frozen products, 30% by fresh fish, 27% by prepared or preserved products and 3% by dried, salted or smoked fish.

Frozen products are the one for which the share of the extra-EU trade is the highest: 60% of imports and 49% of exports in 2012. Extra-EU trade represents 44% of imports and 19% of exports for prepared or preserved products, 11% of imports and 15% of exports for fresh products, and only 5% of imports and 7% of exports for dried, salted or smoked fish. During the period 2008-2012, the trade deficit in value increased mainly between 2008 and 2009 for fresh products (+61% in value) and between 2009 and 2010 for frozen products (+29%), prepared or preserved products (+11%), and dried, salted or smoked fish (+51%). The price increase which occurred in 2009 for fresh fish was transmitted one year later to processed products.

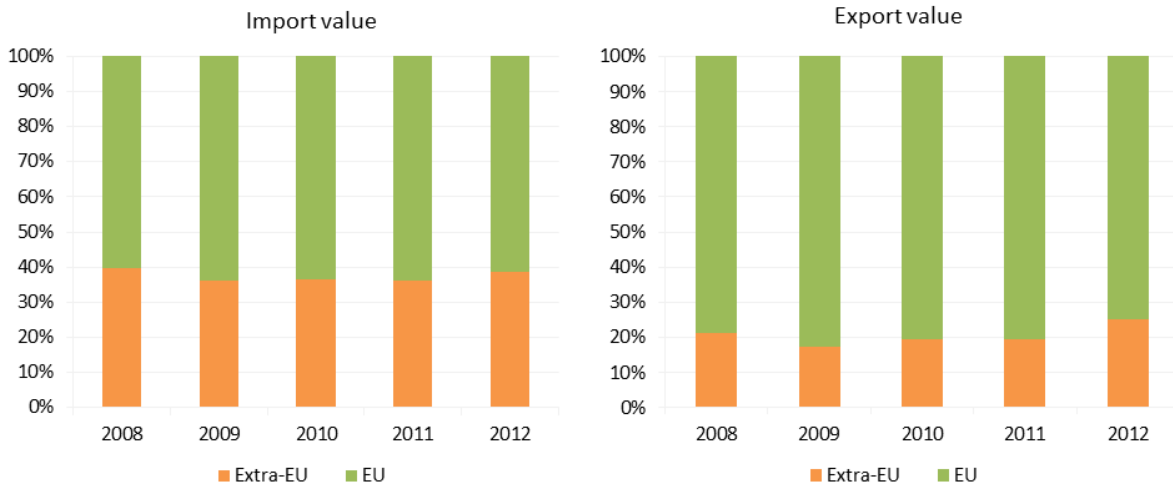


Figure 4.8.8: French seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

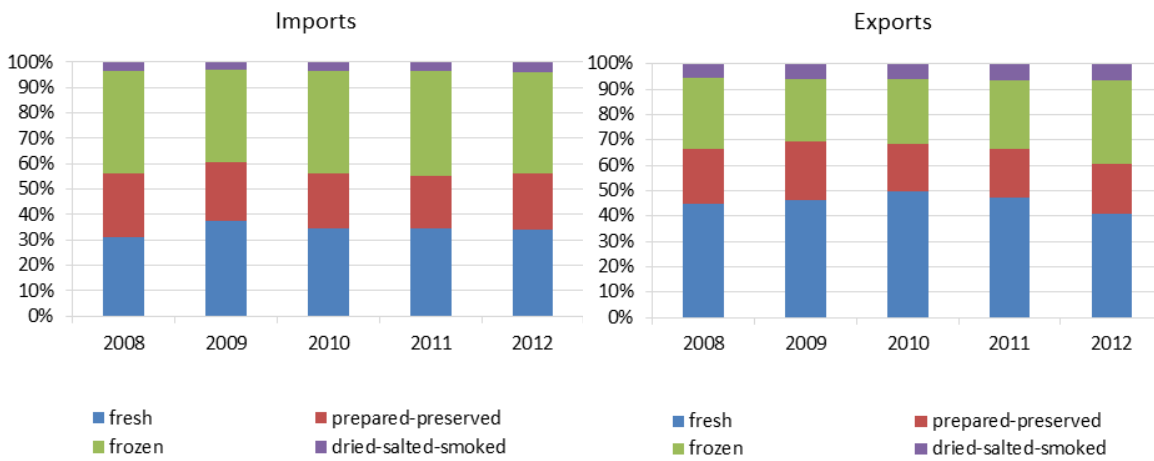


Figure 4.8.9: French seafood imports (left) and exports (right) trends by type of products: shares in value

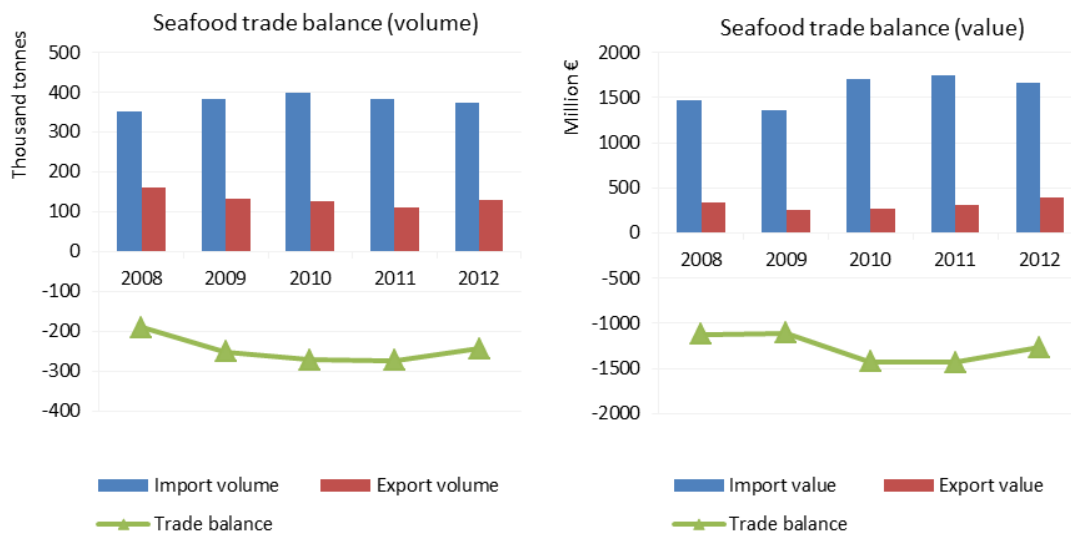


Figure 4.8.10: French frozen seafood trade balance trends in volume (left) and value (right)

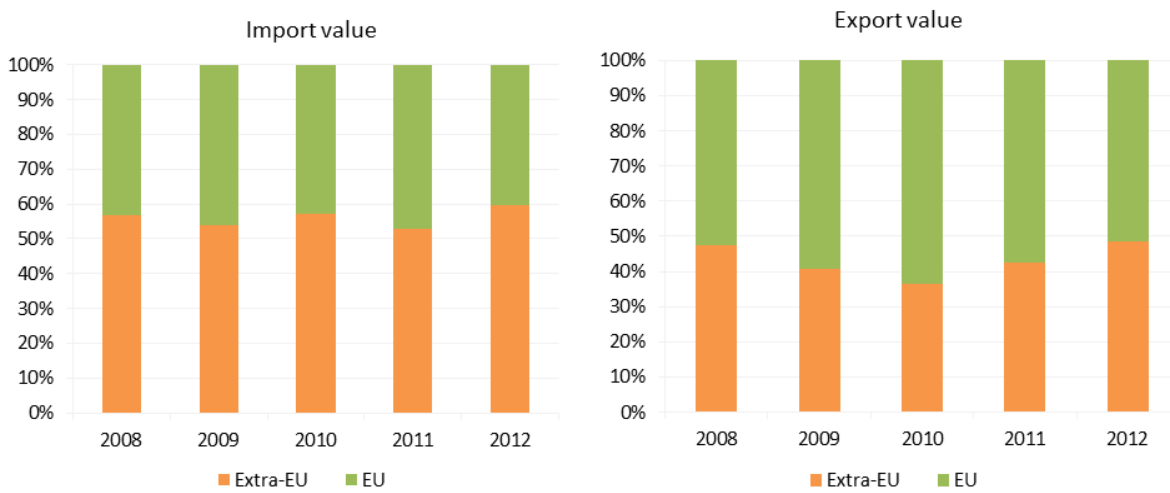


Figure 4.8.11: French frozen seafood imports and exports by origin/destination: shares in value

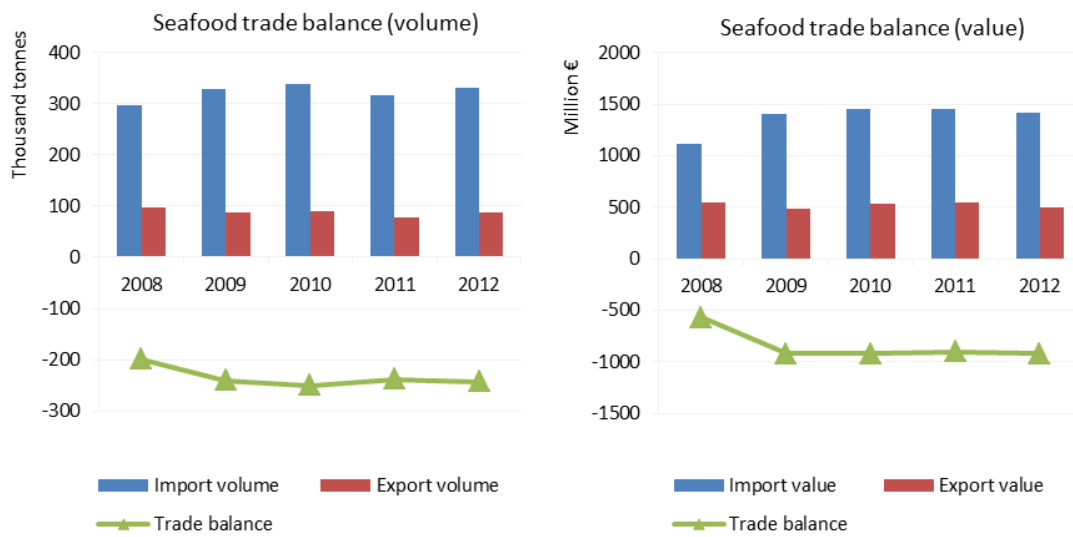


Figure 4.8.12: French fresh seafood trade balance trends in volume (left) and value (right)

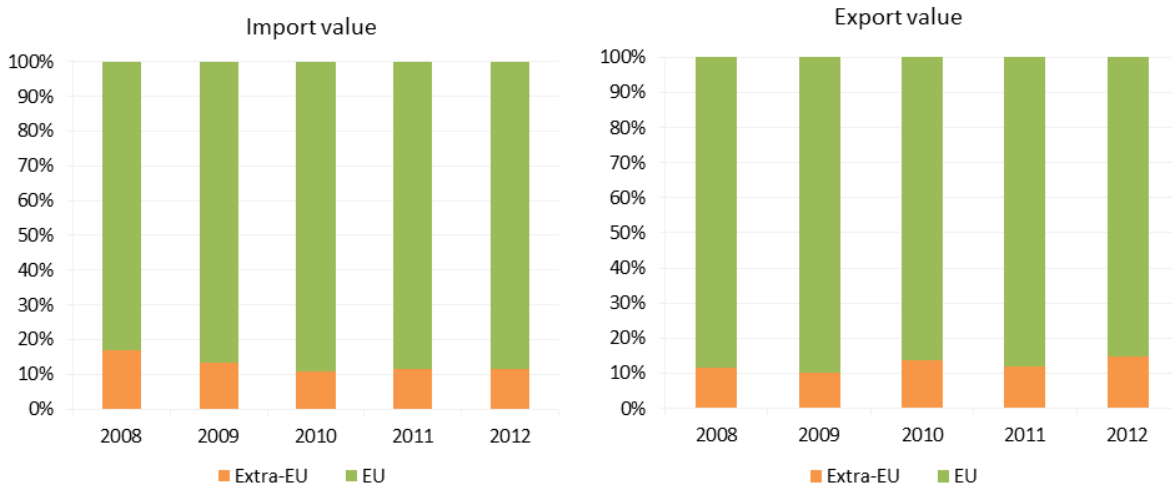


Figure 4.8.13: French fresh seafood imports and exports by origin/destination: shares in value

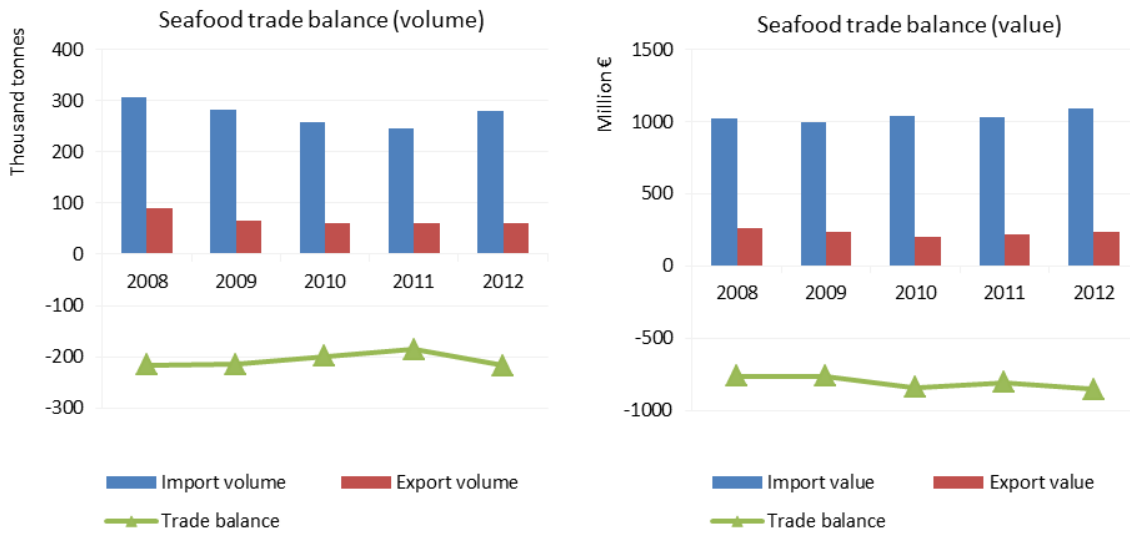


Figure 4.8.14: French prepared or preserved seafood trade balance trends in volume (left) and value (right)

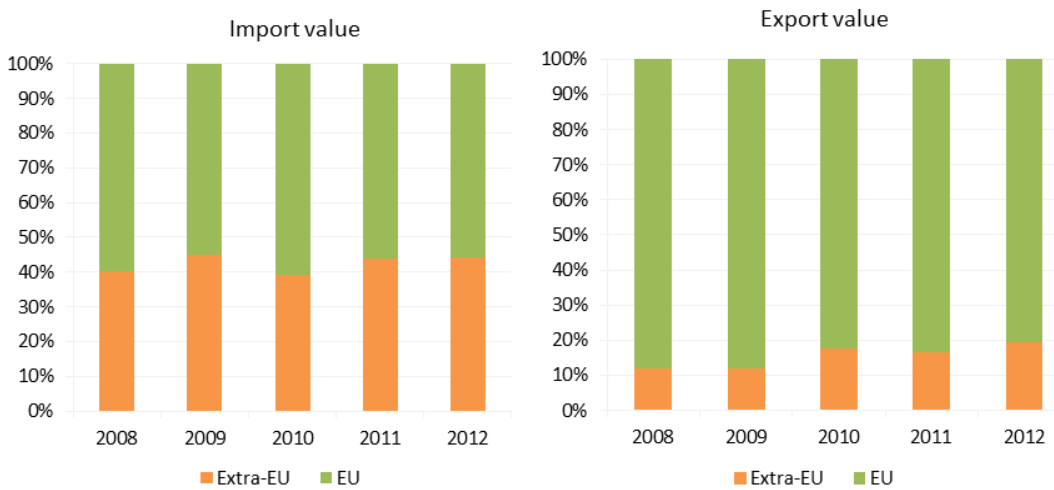


Figure 4.8.15: French prepared or preserved seafood imports and exports by origin/destination: shares in value

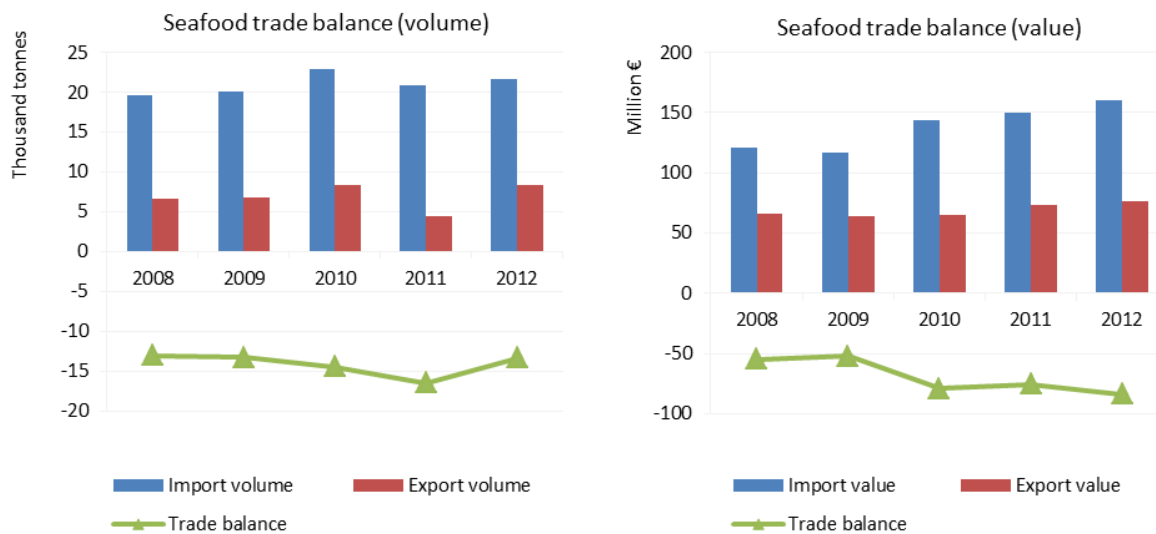


Figure 4.8.16: French dried, salted and smoked seafood trade balance trends in volume (left) and value (right)

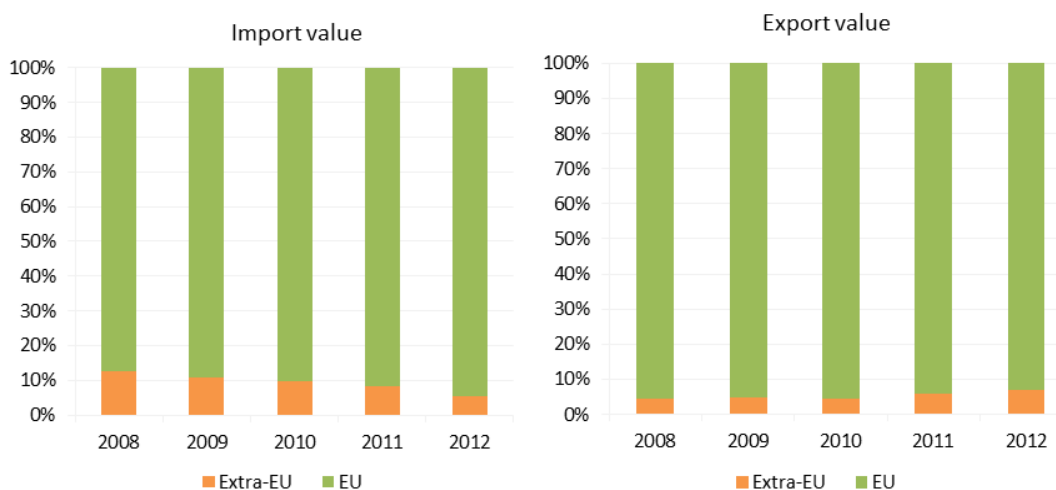


Figure 4.8.17: French dried, salted and smoked seafood imports and exports by origin/destination: shares in value

The general structure of the French seafood trade is as follows: imports are mainly made of salmon, tropical shrimp, tunas, cod, scallop and pollack which come from United Kingdom, Sweden, Netherlands, Spain, Denmark, Belgium and Germany; exports are mainly made of salmon, yellowfin tuna, cuttlefish, skipjack tuna, toothfish and oyster which are purchased by Italy, Spain, Belgium, Germany and United Kingdom.

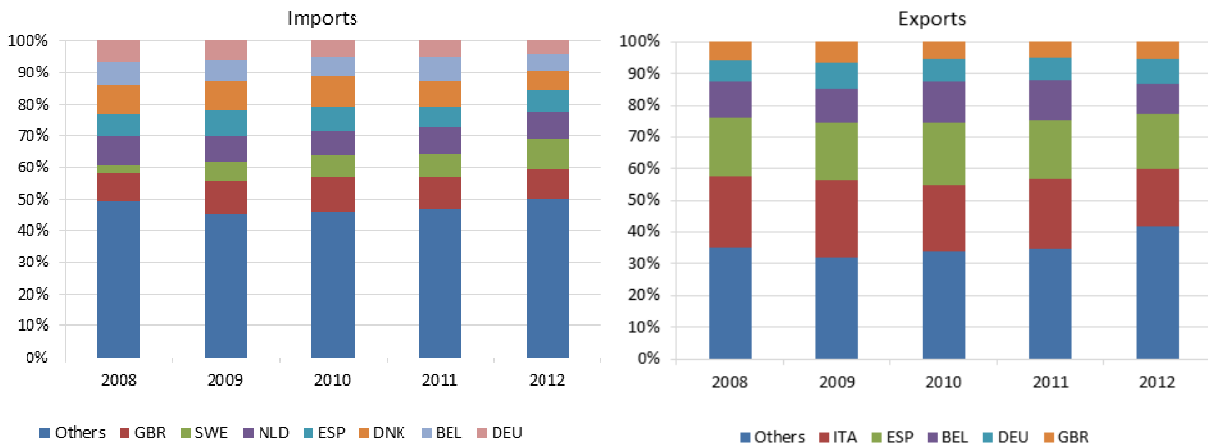


Figure 4.8.18: French seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

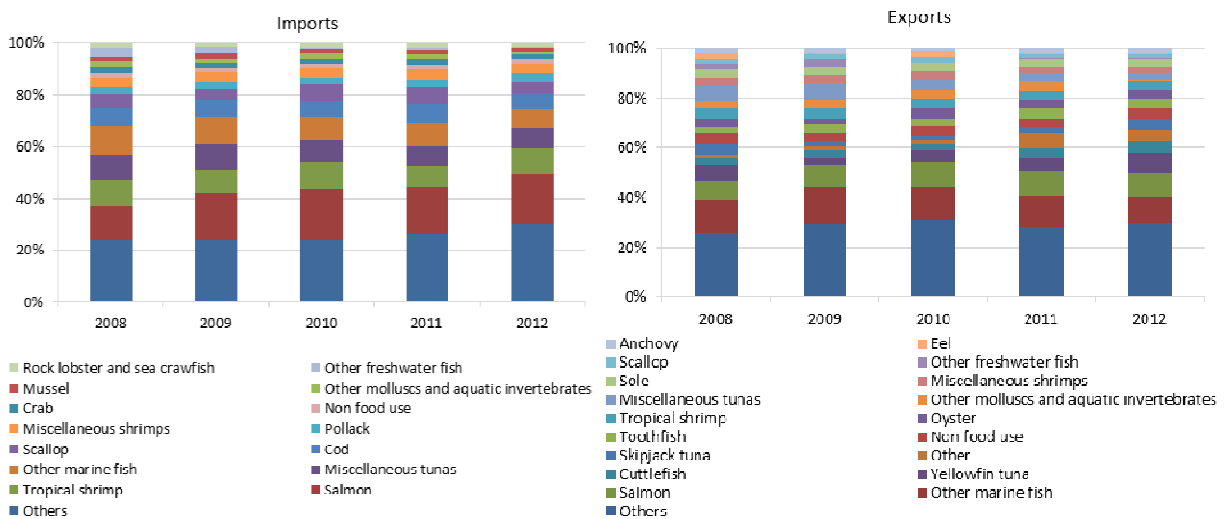


Figure 4.8.19: French seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

French imports of fresh fish consist mainly in salmon from Sweden (€346 million in 2012), United Kingdom (€104 million) and Denmark (€71 million), cod from Denmark (€36 million) and scallop from the United Kingdom (€42 million). Imports of frozen fish are dominated by shrimps from Ecuador (€112 million in 2012), Madagascar (€72 million) and India (€59 million), cod from the Netherlands (€46 million) and China (€27 million), scallop from Peru (€35 million), salmon from Chile (€30 million) and Pollack from China (€57 million). Imports of prepared or preserved seafood products include mainly canned tuna which come from Seychelles (€95 million in 2012), Ghana (€38 million), Ecuador (€38 million), Spain (€31 million) and Ivory Coast (€22 million), and also shrimps from Thailand (€21 million) and the Netherlands (€21 million), or sardine from Morocco and Portugal. Imports of dried, salted and smoked fish are made of salmon from Poland (€56 million in 2012) and Germany

(€11 million), cod from Portugal (€13 million) and herring from the Netherlands (€8 million). It should be noted that part of the increase of fresh salmon from Sweden, which were only worth €42 million in 2008 and reached €346 million in 2012, may have been linked with the no compliance to sanitary bans by some importers.

French exports of fresh fish consist mainly in oyster which are purchased by Italy (€15 million in 2012), cuttlefish purchased by Spain (€17 million) and Italy (€14 million), and sole for Spain (€13 million) and Italy (€11 million). Exports of frozen fish are dominated by yellowfin tuna sold to Spain (€29 million), Ivory Coast (€21 million), Mauritius (€16 million) and Italy (€12 million) and by skipjack tuna sold to Seychelles (€15 million), Mauritius (€14 million) and Ivory Coast (€13 million). French exports of prepared or preserved products consist mainly in non food use products imported by Denmark (€14 million in 2012) and canned tuna imported by the United Kingdom, Germany and Italy (around €3 million for each country). Exports of dried, salted and smoked fish are made of 80% smoked salmon sold to Italy (€30 million in 2012) and Belgium (€15 million).

4.8.5 Trends and drivers for change

According to Kantar Worldpanel whose data are estimated to cover 80% of the consumption, since 2011, the context of economic crisis and the rise of the aquatic products prices attributable to the growth of the international demand have weighed on the French households demand. After two years of growth, the fisheries and aquaculture products purchases of households had decreased in 2011 by 2.8% in volume but increased by 0.4% in value. In 2012, this situation is stabilising: the household purchases of seafood products have decreased by 0.4% in volume but increased by 1% in value.

These evolutions hide wide disparities among products. Fresh fish total consumption has increased by 2.3% in volume in 2012, mainly because of the increase of the sales of salmon (+30% in volume), cod (+9%), and also pollack and monkfish, while the sales of all other species have decreased. Sales of fresh shellfish have also increased, especially for mussels (+8.6% in volume). On the other hand, the demand of special prepared dishes is stabilising: the consumption of surimi, which had risen from 40.5 thousand tonnes to over 53 thousand tonnes between 2007 and 2011, has experienced a decrease by 5.6% in volume in 2012, but sales are still increasing for smoked fish (+2%), shrimp and gambas (1.8%) and other special dishes. Between 2011 and 2012, the consumption of frozen fish has decreased by 3% in volume, and the consumption of canned products has decreased by 3.9% in volume. This adverse pattern concerns mainly canned tuna (-5.2% of sales in volume) and canned sardine (-5.5%), which experienced also raising prices (+7.6% and +5.3% respectively)

This context of a sluggish demand and increasing prices for raw material may lead the French processing industry to face more competition from imported products. Increased competition may occur for instance on the canned fish segment, where a large part of the industry has already been relocated, or the smoked salmon segment where other European producers like Poland hold increasing market shares.

4.9 GERMANY

4.9.1 General overview of the German fish processing industry sector

The German fish processing sector is dominated by the bigger companies. Although about two third of the enterprises have 10 or less employees (and 75% less than 20), the most turnover and employment (both stand for more than 90% of the sector totals) belongs to the enterprises with 20 and more employees. This is the reason why Germany only presents detailed data for the segment 20 and more employees as most data are collected already under the Structural Business Statistics Regulation and this procedure avoids double effort.

This means, that besides the number of enterprises in the different size segment, all presented data in this report belong to the segment with 20 and more employees. The sector is, compared with the size of the German fishing fleet to other EU fleets, quite large in an EU wide comparison. This is due to historical reasons and the size of the German market. Germany e.g. has the world's largest fish finger factory, which is located in Bremerhaven. In terms of employment and turnover Bremerhaven is by far the most important location for the German fishery sector (fisheries and processing).

Table 4.9.1 shows some facts about the employment and the general structure of the German processing sector, including some performance indicators. The sector was characterized by a more or less continuous decline of employees until 2011 and the offshore of activities to e.g. Poland. In 2012 there was a significant increase in employment which mainly increased the number of male employees (see also figure 4.9.1). Average wages show a stable increase for all of the years while labour productivity figures show no trend as there are fluctuating significantly.

Table 4.9.1: German fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Structure (number)							
Total enterprises	281	263	265	265	250	▼ -6%	▼ -11%
≤10 employees	197	184	186	183	171	▼ -7%	▼ -13%
11-49 employees	55	52	51	58	56	▼ -3%	▲ 2%
50-249 employees	21	20	22	17	15	▼ -12%	▼ -29%
≥250 employees	8	7	6	7	8	▲ 14%	○ 0%
Employment (number)							
Total employees	8,441	7,566	7,031	6,780	7,010	▲ 3%	▼ -17%
Male employees	4,244	3,923	3,558	3,667	3,826	▲ 4%	▼ -10%
Female employees	4,197	3,643	3,473	3,113	3,184	▲ 2%	▼ -24%
FTE	7,995	7,212	6,786	6,544	6,664	▲ 2%	▼ -17%
Indicators							
FTE per enterprise	28.5	27.4	25.6	24.7	26.7	▲ 8%	▼ -6%
Average wage (thousand €)	33.9	34.7	35.5	35.6	36.2	▲ 2%	▲ 7%
Labour productivity (thousand €)	45.0	43.9	56.0	49.8	40.2	▼ -19%	▼ -11%
Unpaid work (%)	0.0	0.0	0.0	0.0	0.0	○ 0%	○ 0%

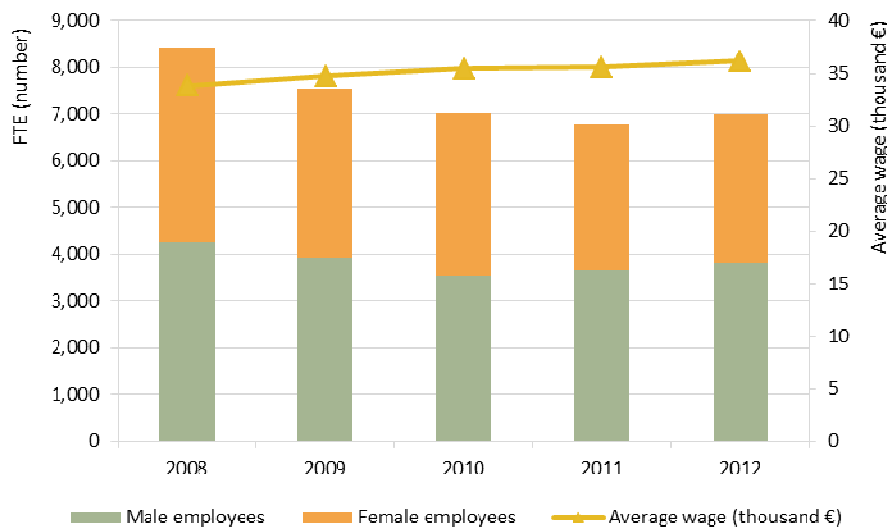


Figure 4.9.1: German employment trends, 2008-2012

4.9.2 Economic performance of the German fish processing industry sector

2012 was not a successful year for the sector in total. Even if several companies are still making profit, the whole sector shows losses (comp. Figure 4.9.2). This might be caused by significant losses of a few big companies. But also in general and affecting the entire sector, raw material prices (as the main part of production costs) put pressure on the profitability of the sector as price increases here cannot easily be transmitted to higher retail prices as the big supermarket chains have a huge market power and long term contracts also cause that prices of the products cannot easily be changed.

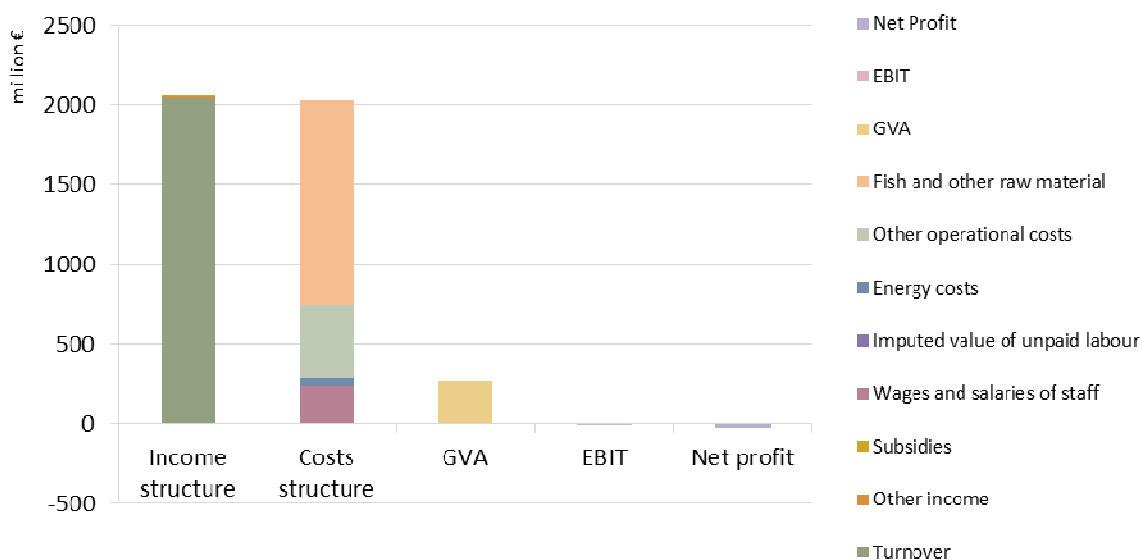


Figure 4.9.2: Economic performance of the German fish processing industry sector, 2012

Looking at the development from 2008-2012 (table 4.9.2), economic performance indicators (see table 4.9.2) until 2012 show the influence from the economic crises in 2008/2009 and fluctuating figures (compare also figure 4.9.3), but also some decreasing trend resulting in net losses in 2012 (which might be caused by special effect of one companies performance). Depreciation has been higher than investment since years with the only exemption in 2009. This reluctance to invest and at least to replace the “lost?” production capital is obvious and if this persists, future production and profit opportunities are seriously affected. Trends may be changed, but it seems that the sector will further decline, if not a more or less massive turnaround will be introduced. The increase of modern processing capacity e.g. in Poland puts further pressure on the prices. The expectations of the companies, indicated by the FEI (see chapter X.F.), reflect this not optimistic scenario.

Table 4.9.2: Economic performance of the German fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	2,366.5	2,034.0	1,972.7	1,966.5	2,040.4	▲ 4%	▼ -14%
Other income	6.7	4.4	4.3	5.1	11.4	▲ 122%	▲ 69%
Subsidies	1.2	1.0	0.4	0.3	0.1	▼ -85%	▼ -96%
Total Income	2,374.4	2,039.4	1,977.5	1,971.9	2,051.8	▲ 4%	▼ -14%
Expenditure (million €)							
Purchase of fish and other raw material for production	1,433.5	1,297.5	1,181.7	1,208.2	1,282.8	▲ 6%	▼ -11%
Wages and salaries of staff	270.8	250.5	240.8	232.9	241.1	▲ 4%	▼ -11%
Imputed value of unpaid labour	0.0	0.0	0.0	0.0	0.0	○ 0%	○ 0%
Energy costs	38.8	36.4	36.7	39.3	44.9	▲ 14%	▲ 16%
Other operational costs	540.8	387.6	378.7	398.1	456.4	▲ 15%	▼ -16%
Total production costs	2,284.0	1,972.0	1,837.9	1,878.5	2,025.3	▲ 8%	▼ -11%
Capital Costs (million €)							
Depreciation of capital	40.8	38.2	34.0	36.1	40.8	▲ 13%	○ 0%
Financial costs, net	19.0	14.4	11.1	13.4	13.4	○ 0%	▼ -30%
Extraordinary costs, net	0.0	0.0	2.3	0.0	0.0	○ 0%	○ 0%
Capital Value (million €)							
Total value of assets	586.2	410.1	403.5	402.7	392.3	▼ -3%	▼ -33%
Net Investments	50.9	31.6	33.2	25.7	28.4	▲ 11%	▼ -44%
Debt	316.5	221.4	184.6	223.4	222.8	○ 0%	▼ -30%
Performance Indicators (million €)							
Gross Value Added	360.1	316.8	379.9	325.9	267.6	▼ -18%	▼ -26%
Operating Cash Flow	90.4	67.4	139.6	93.4	26.5	▼ -72%	▼ -71%
Earning before interest and tax	49.7	29.2	105.6	57.3	-14.3	▼ -125%	▼ -129%
Net Profit	30.7	14.8	94.5	43.9	-27.7	▼ -163%	▼ -190%
Capital productivity (%)	61.4	77.3	94.2	80.9	68.2		
Return on Investment (%)	8.5	7.1	26.2	14.2	-3.7		
Financial Position (%)	54.0	54.0	45.8	55.5	56.8		
Future Expectation Indicator (%)	1.7	-1.6	-0.2	-2.6	-3.2		

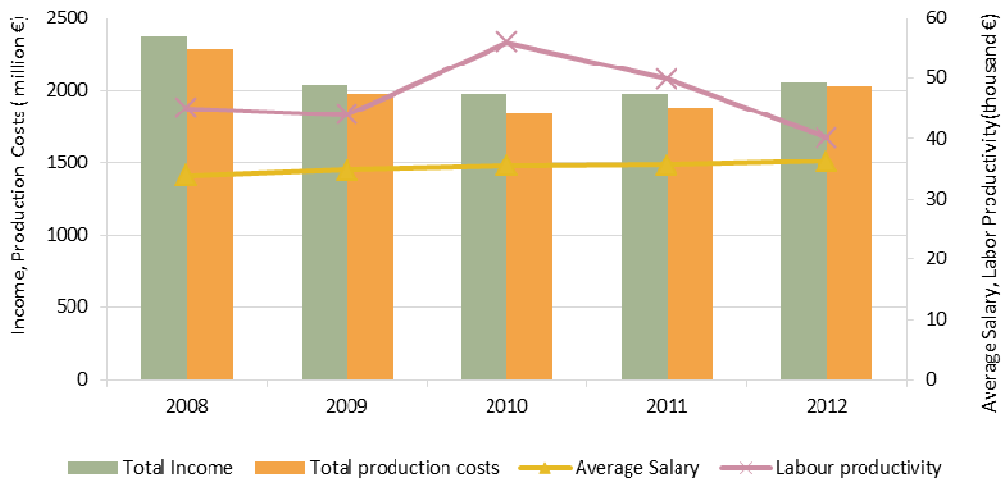


Figure 4.9.3: Income, costs, wages and labour productivity trends of the German fish processing industry sector, 2008-2012

The main products of the totally produced 481.5 thousand tonnes of seafood in 2013 are fish fingers and alike with 170.4 thousand tonnes, herring products with 70.6 thousand tonnes, frozen fish fillets with 44.9 thousand tonnes, fish salad 29 thousand tonnes and smoked fishes with 19.9 thousand tonnes (of which salmon stands for 13.6 thousand tonnes). In terms of value of production in 2013 fish fingers stand for €506 thousand, herring products sum up to €283 thousand, smoked fishes €199 thousand (salmon €138 thousand), fish salad €145 thousand and frozen fillets total to €120 thousand.

4.9.3 German seafood trade

Even if Germans are not the consumers with the highest per head consumption of sea food in Europe (more to the opposite), it is one of the biggest markets due to the population. Most of the seafood is imported, but also the German domestic processing industry is still important compared to the whole EU market. German employment is about 6% of total employment in the sector in Europe, 7% of the companies are located here and some more than 7% of the turnover of the sector in Europe belongs to German companies. But related to seafood consumption, more than 90% of the consumed products are imported. Regarding the fish processing industry, around 24% of the turnover in 2012 and almost 25% of the turnover in 2013 were exported, showing stable figures for the industry. This leads to a negative trade balance for the seafood sector in total, presented in figures 4.9.4 and 4.9.5, where the latter shows that import relies about half and half on EU and non-EU sources, while the export relies by about 90% on EU countries.

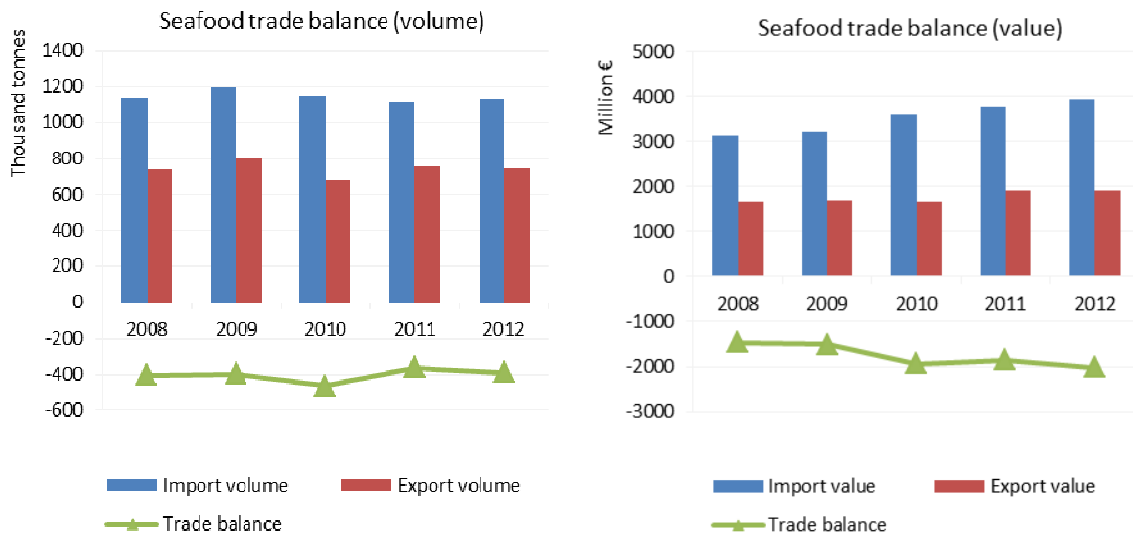


Figure 4.9.4: German seafood trade balance trends in volume (left) and value (right)

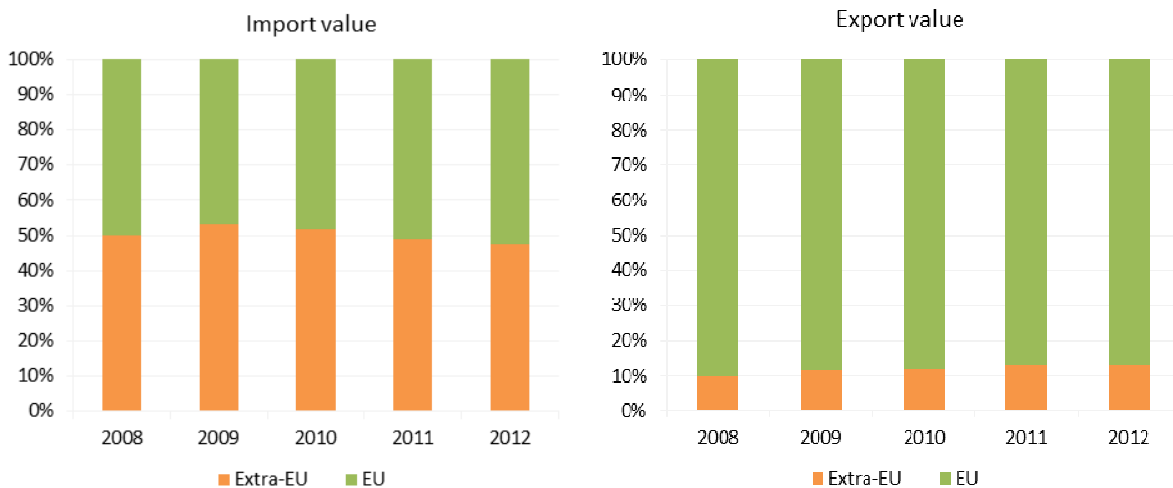


Figure 4.9.5: German seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

Concerning the importance of countries regarding the source of imports, Poland, Denmark, Netherlands, China and Norway stand for about 60%, while others, in particular Vietnam, export about 40% of the German import value. Regarding export destinations, The Netherlands, France, Austria, Denmark, Great Britain and Italy sum up to more than 60% of the value.

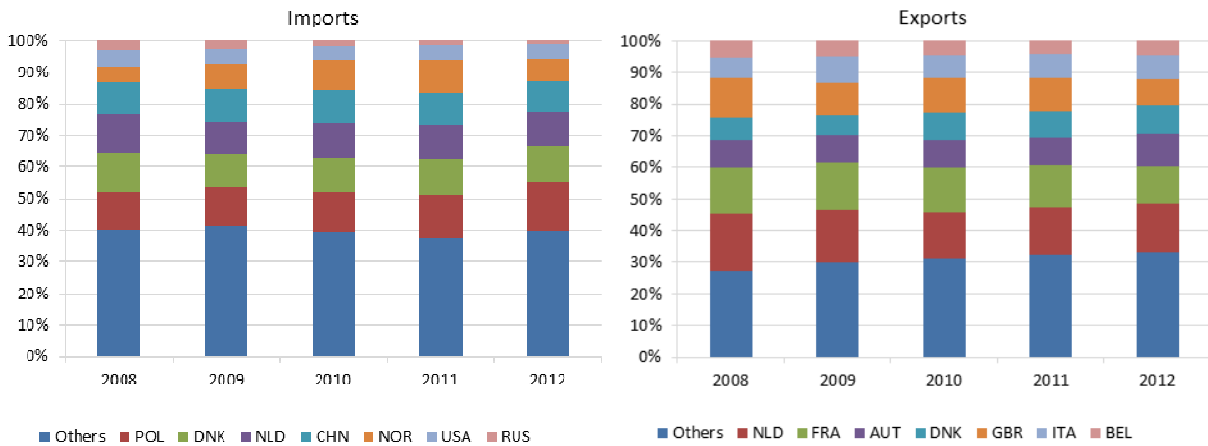


Figure 4.9.6: German seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

Related to species and species groups in the import composition, figure 4.9.7 shows the respective value shares. Most important species and groups in terms of value of import are salmon, pollack, herring, miscellaneous tunas, other here not specified species, seafood for non-food use and cod. Concerning value of exports, salmon and other non specified marine fish, products for non-food use, cod and pollack sum up to more than 70%.

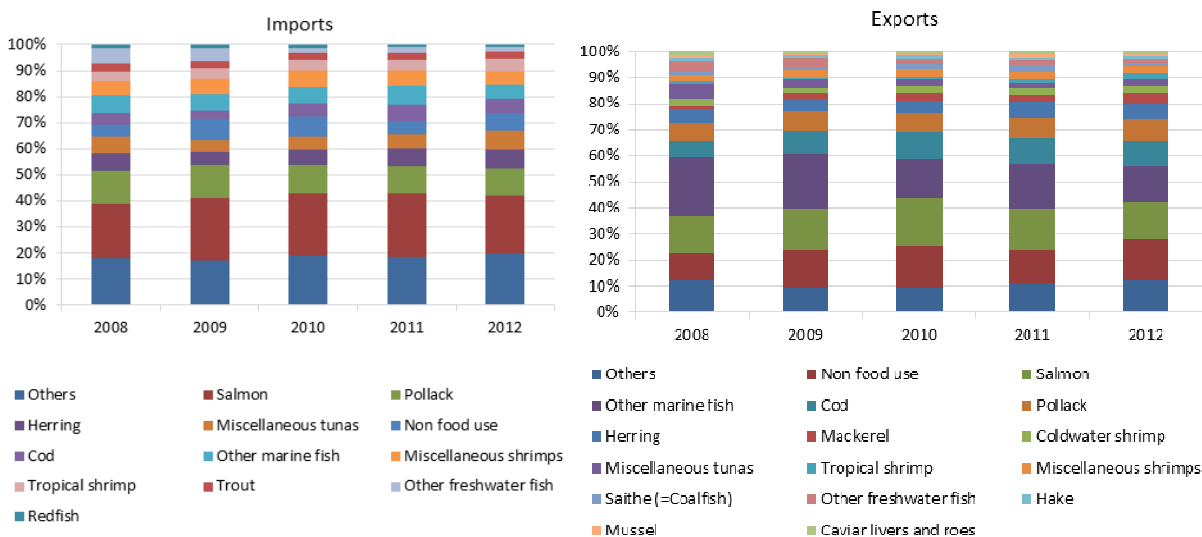


Figure 4.9.7: German seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

Figures 4.9.8 shows the shares of the import value by different product categories. By far the most group of product types in the import and export composition are frozen products and prepared and preserved products, standing for more 70% of imports resp. almost 80% of exports. The importance of dried-salted products increases for imports and exports.

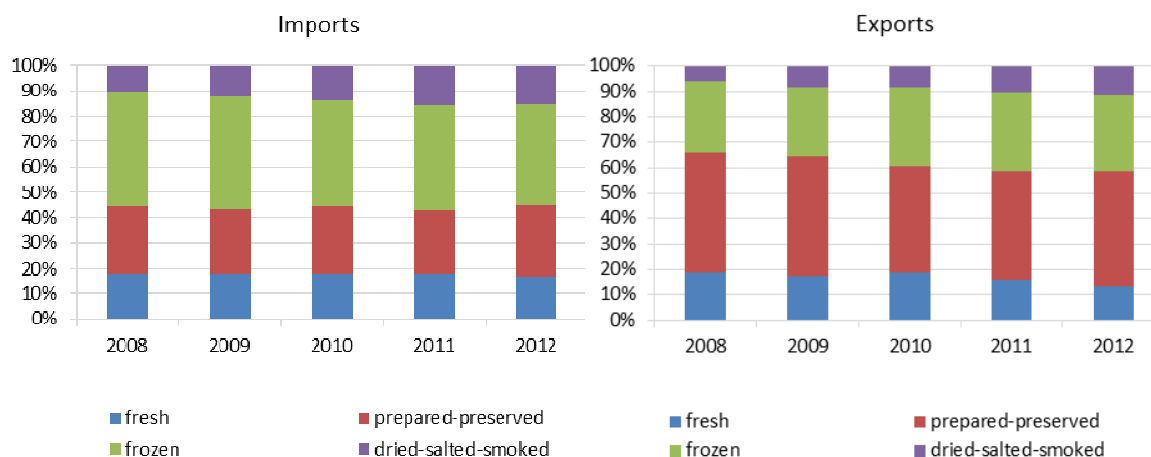


Figure 4.9.8: German seafood imports (left) and exports (right) trends by type of products: shares in value

Consumers are preparing less and less fresh fish meals at home. More and more they prefer prepared meals or convenience food, either frozen or otherwise preserved.

4.9.4 Trends and drivers for change

Expenditures for fish and other raw materials stand for about three quarter of total costs. As enterprises are facing price increases that cannot easily be transmitted to higher product prices due to the market power of the retail sector, profitability is seriously decreasing. On the other hand, discounter started recently to introduce fresh fish in their shops, which will probably lead to more fresh fish consumption in Germany. For the processing sector the fresh fish segment is not of highest importance but could help to stabilize or even increase turnover and margins. Unfortunately, it seems that this increase in the fresh fish segment is mainly served by non German companies. Furthermore, investment activities in new facilities is going offshore, leading to higher processing capacities abroad. This also puts pressure on prices and profitability on the German processing sector. Due to the actual pressure on profitability and uncertain expectations, smaller and medium size enterprises are reluctant to new investments in their physical capital leading to non up-to-date facilities.

The consumer side of the market is dominated by older couples and singles (older than 50). In terms of weight they consume about 60% of the seafood at home consumption in Germany. More than 55% of the seafood is consumed by household with more than €2 thousand net income. Figures on the consumption of seafood outside the own household, e.g. in restaurants, are not available.

One large company in Germany is owned by a private equity investment fund. This fund is mainly interested in profitability of its investment and takes financial resources from that processing company. As this enterprise is quite large, problems here are also affecting the overall sector figures in Germany.

4.10 GREECE

4.10.1 General overview of the Greek fish processing industry sector

The activities of freezing, processing (filleting, salting, drying, smoking, marinating, cooking, canning) of fish, and the de-shelling of mussels are included in the Greek fishery processing sector.

During 2012, there existed 147 active small to medium sized fishery processing enterprises (SME's), five less than in the previous year 2011. The total number of the Greek SME's decreased not only due to the continuing financial crisis but also due to company absorption. Thus, the largest subsector (50-249 employees) had the biggest decrease of 25% in terms of SME number. Nevertheless, approximately 73% of the SME's are small enterprises, employing less than 10 persons. The turnover of the sector decreased in 2012 13%, corresponding to turnover of €268.3 million in 2011 and the purchase of fish and other raw material for production was € 140.8 million in 2012, 1% higher than that estimated in the year 2011.

The 147 SME's employed 2,330 people, or 2,055 in terms of full-time equivalent employment (FTE). The shrinking of the Greek fish processing industry in 2012 is characterised also by a significant decrease in the number of total employees (7% in the number of the persons or 9% in FTE) relative to 2011, while the decrease of female employees was twofold higher respectively to male employees because, traditionally, Greece's processing industry employs women during seasonal high production periods. The total work places were also decreased from 2,505 in 2011 to 2,330 in 2012.

The number of full-time employees decreased as well during the same period from 2,265 in 2011 to 2,055 in 2012. FTE per enterprise is estimated at 14.0 (14.9 was in 2011). Due to relatively higher net financial and other operational costs, the net profit of the fishery processing sector decreased 107% in 2012, compared to the year 2011. Thus, average wages and salaries of staff decreased as well during the same period, approximately 17% and reached to € 10.9 thousand in 2012 from the amount of € 13.2 thousand in 2011.

Unfortunately, no data are provided by Greece for the time period from the year 2008 to the year 2010 (except the trade market data), so the most of comparisons will be made in context of this report only between the years 2012 and 2011.

Table 4.10.1: Greek fish processing industry sector overview, 2008-2012

Variable	2011	2012	Δ (2011-12)	
Structure (number)				
Total enterprises	152	147	▼	-3%
≤10 employees		107		
11-49 employees		34		
50-249 employees		6		
≥250 employees		0		
Employment (number)				
Total employees	2,505	2,330	▼	-7%
Male employees	1,226	1,172	▼	-4%
Female employees	1,279	1,158	▼	-9%
FTE	2,265	2,055	▼	-9%
Male FTE	1,168	1,073	▼	-8%
Female FTE	1,097	982	▼	-10%
Indicators				
FTE per enterprise	14.9	14.0	▼	-6%
Average wage (thousand €)	13.2	10.9	▼	-17%
Labour productivity (thousand €)	35.5	24.4	▼	-31%
Unpaid work (%)	5.2	3.3	▼	-35%

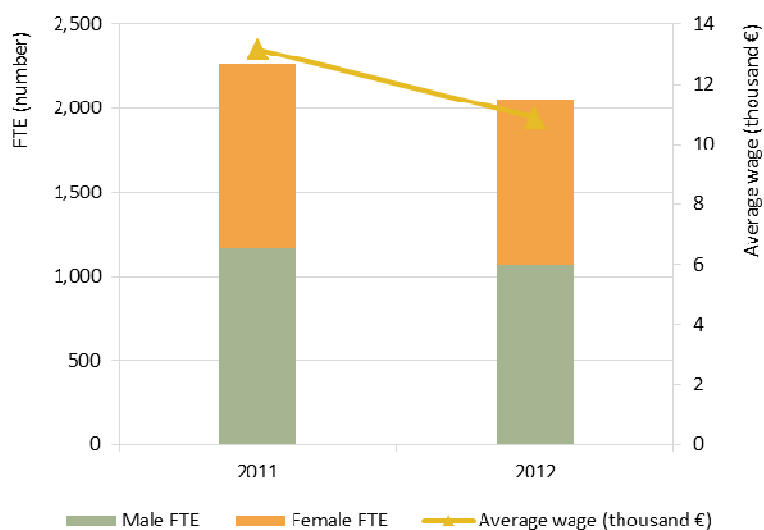


Figure 4.10.1: Greek employment trends, 2008-2012

4.10.2 Economic performance of the Greek fish processing industry sector

Following the unfavourable economic situation in Greece, the fisheries processing industry turnover shows a 13% reduction in 2012 respectively to 2011. Regarding production cost, the total value of staff salaries also decreased almost 25% due not only to layoffs and production discontinuation but mainly to the continuing reduction of labour cost in Greece, a case confirmed by the 52% reduction of unpaid labour which is calculated by the current average wage value. Furthermore, despite the 18.5% reduction of total raw material volume purchased for processing during 2012 compared to the previous year, its total cost slightly increased, showing a rise of prices of fish and raw material.

As for capital costs, in 2012 loan and financial cost values increased 35%, followed by a significant rise of extraordinary costs (130%). As a result, the debt for the processing sector rose to 294 up from €199 million in 2011 and net investments were reduced by 85%.

All those facts show the continuing severe impact of the financial crisis on the processing sector which led to significant decrease of all the main performance indicators compared to 2011: Gross Value Added decreased 38%, Operating Cash Flow 44%, Earning before interest and tax and Net Profit dropped 41% and 107% respectively. It is clear that the sector cannot profit from the drop of the values of most production cost indicators as it results to a very low decrease of production cost, negated by a drop of labour productivity and performance of the industry.

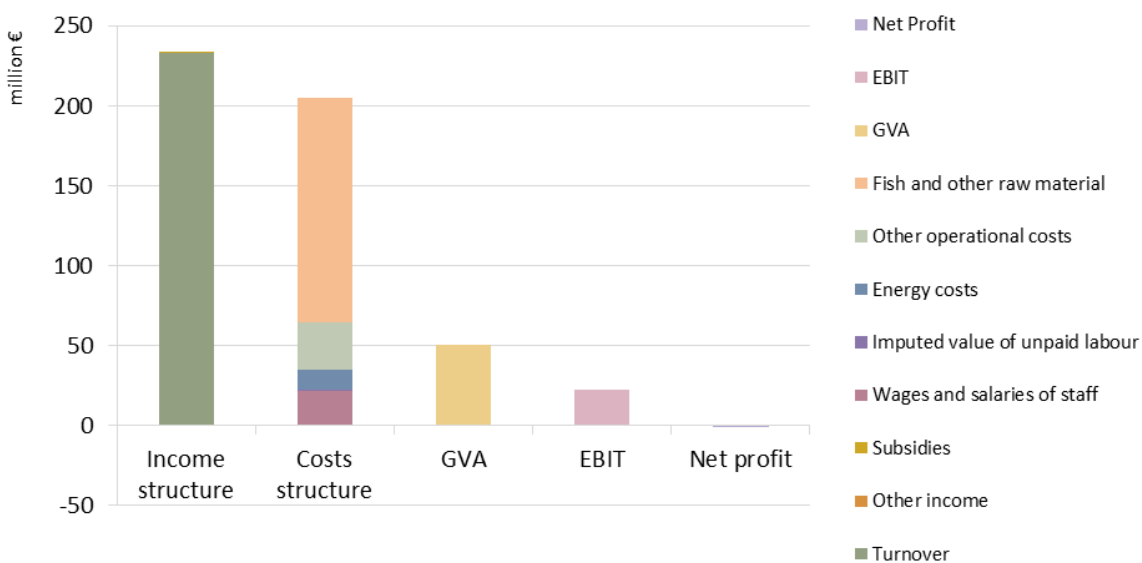


Figure 4.10.2: Economic performance of the Greek fish processing industry sector, 2012

Table 4.10.2: Economic performance of the Greek fish processing industry sector, 2008-2012

Variable	2011	2012	Δ(2011-12)
Income (million €)			
Turnover	268.3	232.9	▼ -13%
Other income			
Subsidies	0.6	0.8	▲ 31%
Total Income	268.9	233.6	▼ -13%
Expenditure (million €)			
Purchase of fish and other raw material for production	139.1	140.8	▲ 1%
Wages and salaries of staff	28.3	21.6	▼ -24%
Imputed value of unpaid labour	1.5	0.7	▼ -52%
Energy costs	12.1	12.2	○ 0%
Other operational costs	36.8	29.7	▼ -19%
Total production costs	217.8	205.1	▼ -6%
Capital Costs (million €)			
Depreciation of capital	14.1	6.6	▼ -53%
Financial costs, net	17.2	23.3	▲ 35%
Extraordinary costs, net	1.2	2.8	▲ 130%
Capital Value (million €)			
Total value of assets		510.6	
Net Investments	9.3	1.4	▼ -85%
Debt	199.1	294.0	▲ 48%
Performance Indicators(million €)			
Gross Value Added	80.3	50.1	▼ -38%
Operating Cash Flow	51.1	28.5	▼ -44%
Earning before interest and tax	37.0	21.9	▼ -41%
Net Profit	19.8	-1.3	▼ -107%
Capital productivity (%)		9.8	
Return on Investment (%)		4.3	
Financial Position (%)		57.6	
Future Expectation Indicator (%)		-1.0	

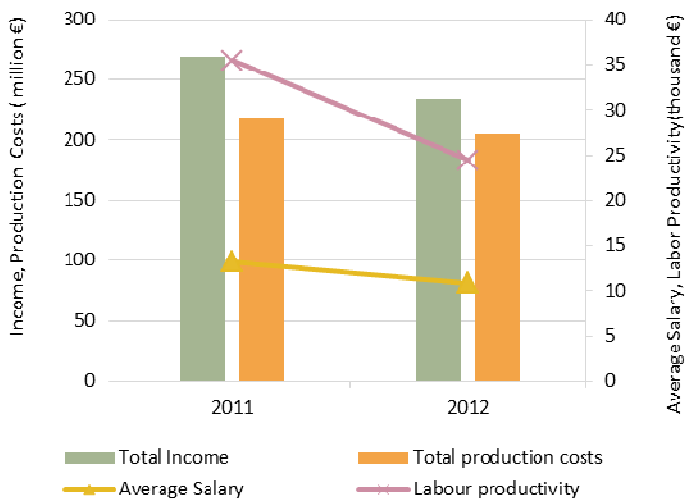


Figure 4.10.3: Income, costs, wages and labour productivity trends of the Greek fish processing industry sector, 2008-2012

4.10.3 Overview of the Greek fish processing industry sector by size categories

Regarding the number of employees, most of the fish processing industry companies in Greece belong to the sector with less than eleven (107 out of 147). The 11-49 employees sector shows 34 companies and 6 companies in the 50-249 sector. In terms of FTE employment, the 11-49 and 50-249 sectors share almost the same numbers (799 and 796 respectively) while the ≤ 10 sector employs 460. Similar to FTE categorization, the two highest sectors share the largest amount of total income, the 11-49 sector produces €98.3 million and 50-249 €107 million while the less than eleven employees sector produces €28.3 million.

Additionally, the 11-49 sector shows the highest total production cost (€96.4 million) mainly because it employs also the highest by far total value of assets (€287.3 million). The 50-249 sector follows with €72.6 million production cost and €158.9 million value of assets and finally the smallest ≤ 10 employees sector with €36.1 million and €64.4 million respectively.

According to the main structural and economic variables trends by size category values, the ≤ 10 employees sector shows significantly larger amount of other operational costs comparing to the other two sectors, a fact that, combined with the also highest energy and salary costs in the industry, indicates a somewhat poor performance, always in comparison with the other sectors.

The Greek income and cost structure, by size category indicators confirm the previous conclusion, since the ≤ 10 sector presents significant losses (€14.8 million) amounting to 52% of its total income while the 11-49 sector presents fewer losses (€2.7 million) and only the 50-249 employees sector produces net profits of € 16.2 million.

It has to be pointed out though that in these cases the data applies only to processing as the primary activity so the income from secondary activities is not included, as well as its cost, thus it does not provide a safe conclusion of the financial position of these two sectors.

In any case, the low value of operational cash flow of the sector ≤ 10 employees shows the sector's limited access to bank loaning and financing. In terms of capital and labour productivity, the 50-249 sector easily outperforms the other two, providing at the same time the highest average salary in the industry.

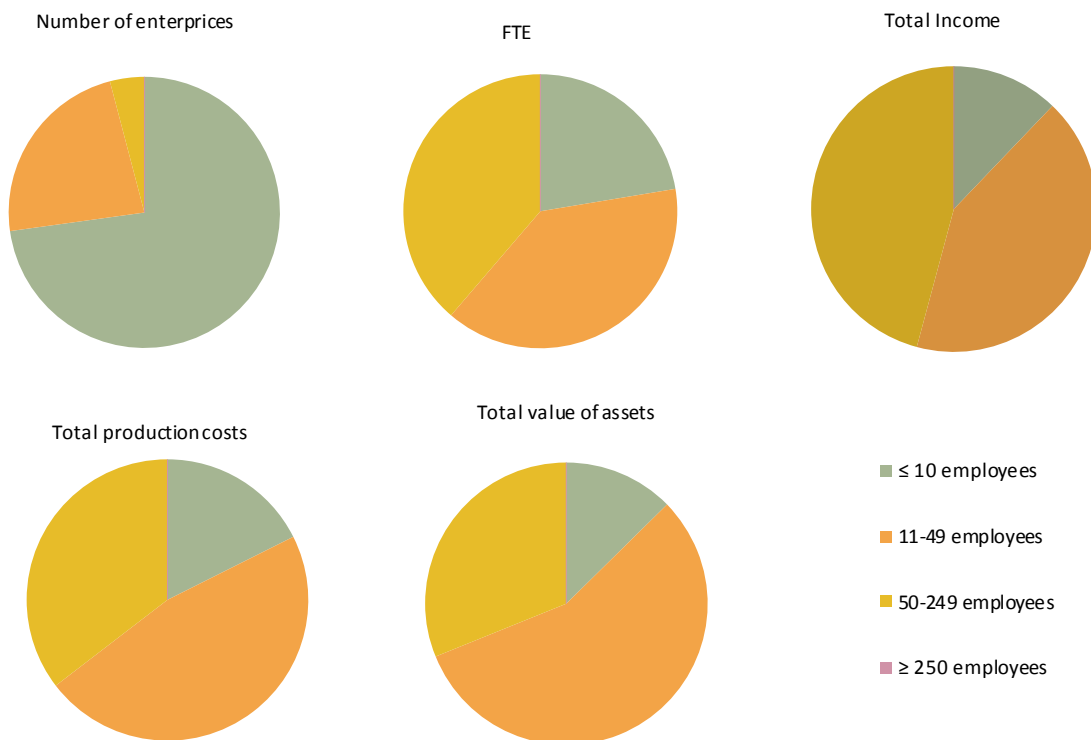


Figure 4.10.4: Greek main structural and economic variables trends by size category, 2008-2012

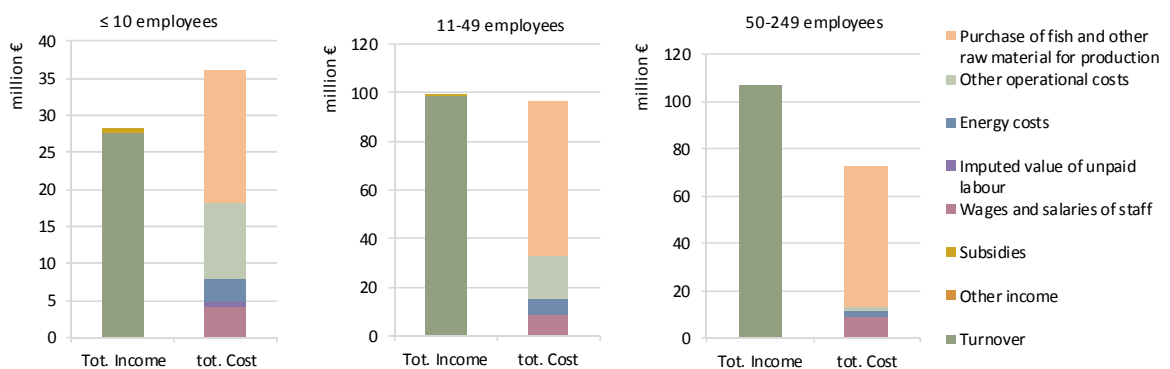


Figure 4.10.5: Greek income and cost structure, by size category (indicators in million €), 2012

Variable	2012
less than or equal to 10 employees	
Total Income	28.3
Total production costs	36.1
Gross Value Added	-3.6
Operating Cash Flow	-7.8
Earning before interest and tax	-9.5
Net Profit	-14.8
between 11 and 49 employees	
Total Income	98.3
Total production costs	96.4
Gross Value Added	10.5
Operating Cash Flow	1.9
Earning before interest and tax	0.2
Net Profit	-2.7
between 50 and 249 employees	
Total Income	107.0
Total production costs	72.6
Gross Value Added	43.2
Operating Cash Flow	34.4
Earning before interest and tax	31.3
Net Profit	16.2

Table 4.10.3: Economic performance of the Greek fish processing industry sector by size category, 2008-2012

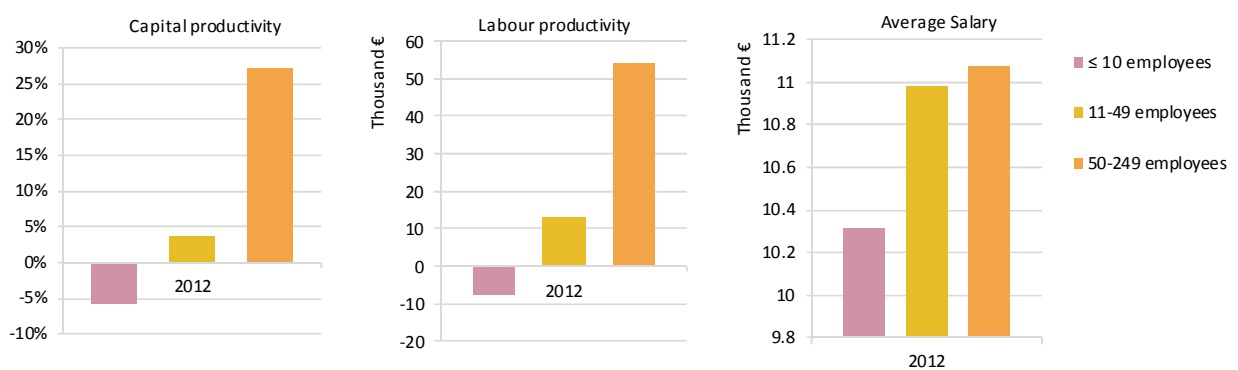


Figure 4.10.6: Greek capital productivity, labour productivity and average salary trends, by size category, 2008-2012

4.10.4 Greek seafood trade

Greece is currently (2012 data) a €418.8 million market for annual seafood imports (Figure 4.9.7), with expectations for additional potential in the future, especially in the frozen seafood sector. The domestic debt crisis has negatively affected the value for seafood imports the past 5 years in Greece (for example €520.6 million was the market for seafood imports in 2008). The frozen seafood market is a million market but changing trends in lifestyle are creating exciting opportunities for new products. In addition, preparation for the upcoming, when tourism is expected to 25 million (2014 preliminary data), is creating a dramatic impact on seafood imports. The dynamics surrounding the big cities and the islands, especially in summertime are creating an increased demand for frozen and ready to eat-made seafood for the touristic plethora but also for the domestic population, as Greeks gain the opportunity to experience a wider range of international foods. While the value for imports is decreased about 19.6% in the period from 2008 to 2012, seafood export value is detected increasing from €451.8 million in 2008 to €579.2 million in 2012 (ca. 22.0%). This factum is a good sign in shaping a positive current account balance of Greece, which will help the exit of the country from the economic crisis.

With regard to the type of origin of seafood imports recorded a balance at values of fishery products between the EU and non-EU countries (Figure 4.10.8). On exports (type of destination) of the Greek seafood products to the EU countries rates are much higher (>90%) than those detected for non-EU countries (<10%).

Greek seafood imports (Figure 4.10.9 left) in 2012 compared with most relevant trading partners come mainly from Spain, Italy, The Netherlands, Denmark and Germany (€45.5, €45.1, €28.5, €27.0 and €21.9 million respectively). These values are not significantly differentiated over the past 5 years. Imports coming from the above 5 EU countries comprise approximately 40% of the total rate of seafood imports in Greece. In addition, very important representatives of non-EU countries for seafood imports to Greece are the following: Peru, Norway, India and China (€20.8, €20.2, €17.2 and €14.7 million respectively). Greece's exports of catches in 2012 (Figure 4.10.9 right) were made to the following countries: Italy, Spain, France, Netherlands, Portugal, Germany and Great Britain (€227.9, €74.7, €61.0, €54.9, €30.5, €29.7 and €16.0 million respectively). Exports were made in the above seven EU countries comprise approximately 85% of the total rate of 2012 Greek seafood exports.

The most relevant commercial species that were imported in Greece at 2012 (Figure 4.10.10 left) from the EU and non-EU countries are the following: different species of tunas, octopus, squid, salmon, scrimps, cod and flatfish, cod, tropical scrimps, squid respectively. Furthermore, seafood imports for non food use from both EU and non EU countries are notable. Exports (Figure 4.10.10 right) include mainly two aquacultured species, namely sea bream and sea bass (comprise more than 60% of the total rate of exported species) but also eels, primarily to Italy but also to other EU countries, such as Spain, France and The Netherlands.

As regards the type of products that were imported in Greece 2012 but also in the past four years before, the first place is occupied by the frozen products, followed by prepared-preserved, fresh and finally the dried-salted-smoked products (Figure 4.10.11 left). Greece's exports in 2012 (Figure 4.10.11 right) comprised mainly fresh seafood (over 80% of the total rate of exported species), followed by frozen, dried-salted-smoked and finally prepared-preserved products. In the years from 2008 to 2011 prepared-preserved products were at third place followed by dried-salted-smoked products there were at fourth place of the above series.

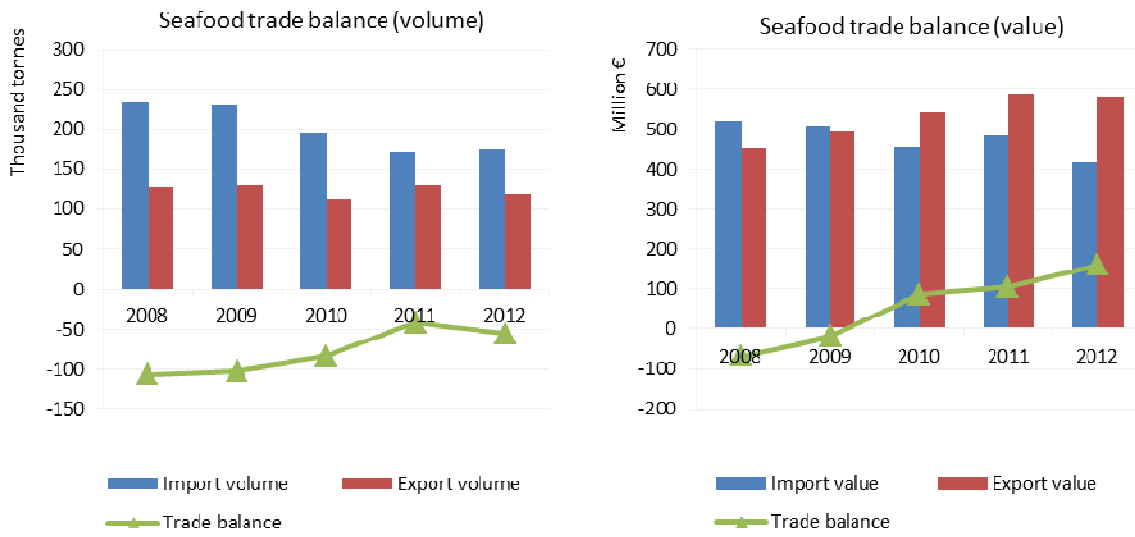


Figure 4.10.7: Greek seafood trade balance trends in volume (left) and value (right)

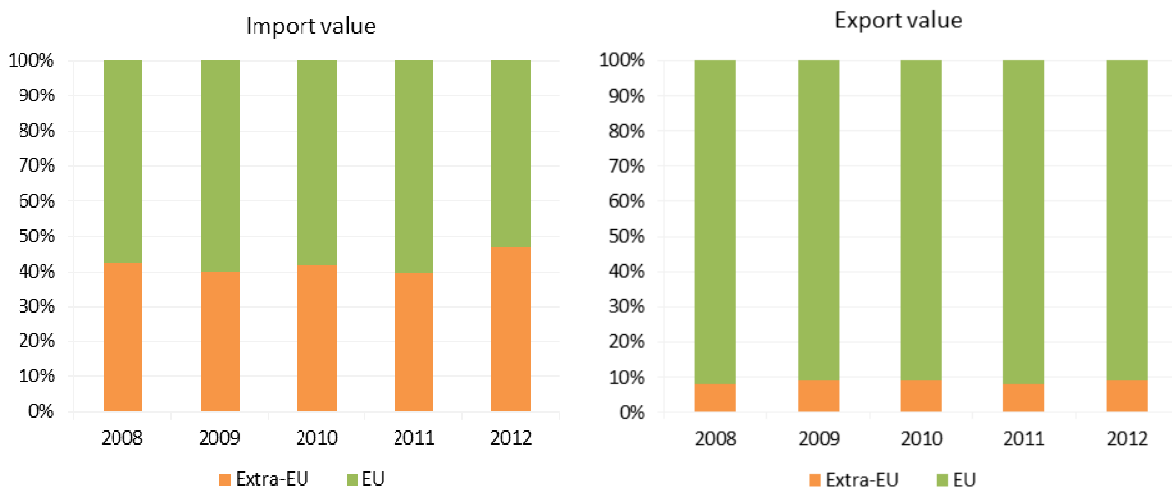


Figure 4.10.8: Greek seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

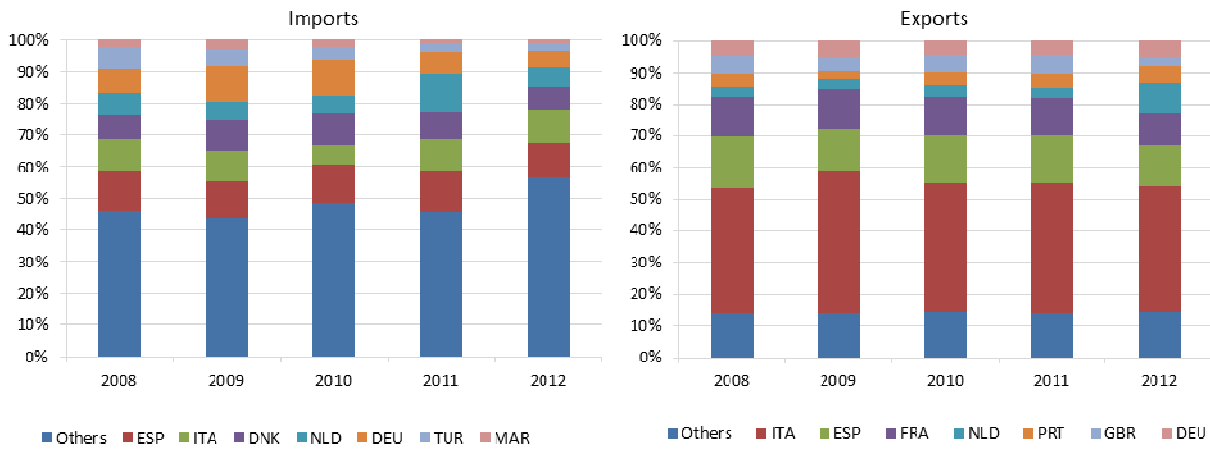


Figure 4.10.9: Greek seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

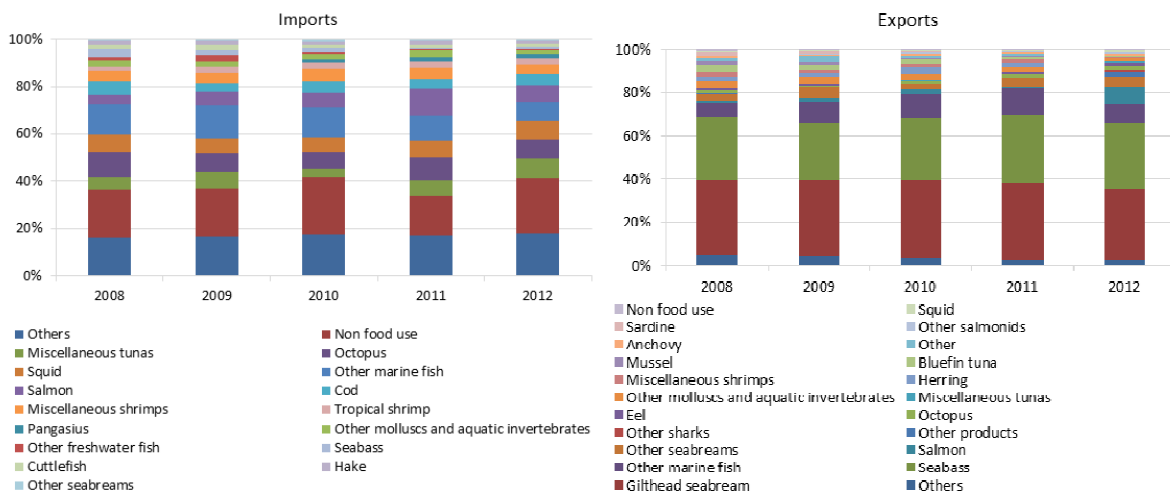


Figure 4.10.10: Greek seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

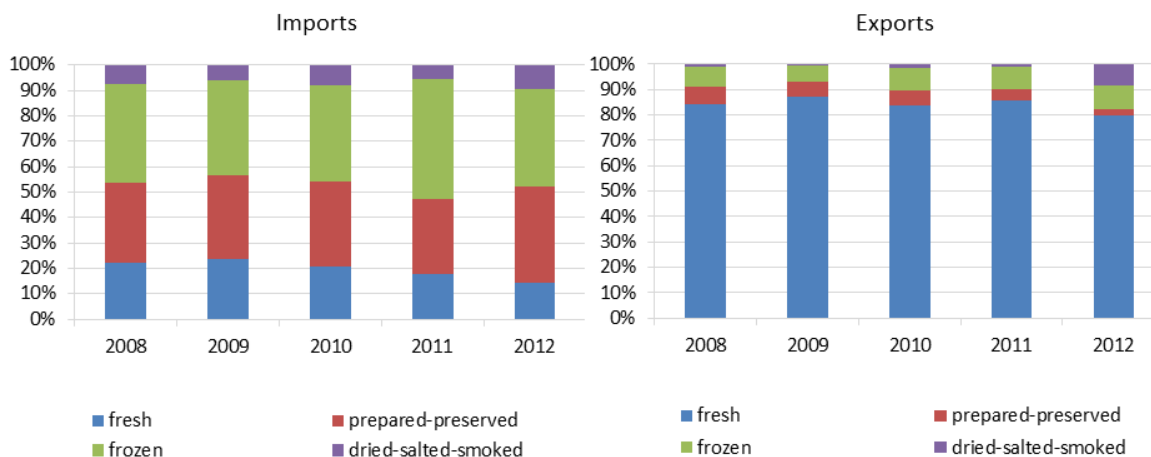


Figure 4.10.11: Greek seafood imports (left) and exports (right) trends by type of products: shares in value

4.10.5 Trends and drivers for change

During 2012, the Greek fish processing sector has been negatively affected by the ongoing for the fifth consecutive year financial crisis and by some infrastructural weaknesses of the sector. The Greek fish processing companies missed another year for some good investment possibilities that may have been used for modernization of their mechanical equipment for improving production quality and increasing productivity. The financial crisis reflects to low available cash flow due to limited access, especially in the case of small companies, to bank financing and loaning and due to low net profit or yearly economic losses. These two factors prevent the much desired completion of trade agreements for fish and raw material purchases, successful application of marketing strategies and implementation of new investments. The added to the above continuous rise of the fish and raw material prices and energy costs lead also to increased cost of production.

The infrastructural problems of processing industry such as high dependence on loans decrease of payment speed of short-term obligations and further increase of loaning cost lead to low capital productivity.

Since the duration of the financial crisis impact on Greece's economic environment cannot be safely estimated, the aforementioned problems will not be addressed unless there is a change in banks' policy of loan granting along with re-negotiation of current bank loans, improvement of both labor and capital productivity through efficient marketing and elaboration of new management planning especially on small companies. Also, new marketing research is required that will lead to new gourmet products in order to gain access in new markets.

Furthermore, the Greek fish processing enterprises could utilize income from subsidies by European Union to implement new investments in order to develop new infrastructure in general but also new mechanical equipment, in terms to producing high quality and high nutritional value processed fishery products and to modernise the existed processing lines for producing high added value traditional fishery delicatessen.

4.10.6 Data quality

Economic variables of processing industry are based on the information provided by Fisheries Research Institute (FRI) of the Hellenic Agricultural Organisation-Demeter (ELGO-Demeter) that belongs to the Greek Ministry of Rural Development and Food. FRI collected economic data basing mainly on the questionnaires, but also on statistical forms that are provided by the Greek Ministry of Rural Development and Food and other administrative sources, such as official balance sheets, chambers of commerce and the national statistical office. The questionnaires are distributed by FRI to the owners of SME's, so all economic active enterprises are involved in the survey. The data for small SME's (less than 10 employees), were gathered only through the questionnaires and the statistical forms from the Ministry in charge. The data collection type was census for all fish processing industry segments for the years 2011 and 2012. These data were provided to JRC according to the Call for data concerning the EU fish processing industry 2008-2012. Data for trade are drowning from COMEXT according to the classification scheme adopted by EUMOFA.

4.11 IRELAND

4.11.1 General overview of the Irish fish processing industry sector

There were 164 fish processing enterprises in Ireland in 2012. The number of fish processing enterprises has decreased by 5% since 2008. The total turnover of the Irish fish processing industry in 2012 was €656.5 million which is an increase of 18% from 2011.

In 2012, there were approximately 2.68 thousand FTE's employed in the fish processing industry which was made up of 1.8 thousand Male FTE's and 881 Female FTE's. Male employees represent around 67% of the total employees and the proportion of male/female employees has been relatively constant over time. Investment in the seafood industry has led to an increase in the numbers employed through the provision of grant aid in specific schemes and programmes.

The industry comprised of finfish, shellfish, smoked, pelagic and whitefish operators. Shellfish companies accounted for the largest number of fish processing companies in Ireland. Many companies in Ireland specialised in more than one species.

In 2012 there were 329 thousand tonnes of seafood landed by vessels into Irish Ports with a value of €334 million. The primary landing ports in 2012 were Killybegs, Castletownbere, Dingle, Dunmore East, Ros a Mhíl, Kilmore Quay, Howth, Greencastle, Union Hall, and Clogherhead. These ports accounted for 82% of the value of fish landings in Ireland in 2012. The top fisheries species landed in 2012 were Atlantic Mackerel, Norway Lobster, Blue Whiting, Monkfish, Horse Mackerel, Hake, Atlantic Herring, Megrim, Crab Edible and Tuna Albacore.

Aquaculture production in 2012 was 36.4 thousand Tonnes with an overall value of €31 million. The primary aquaculture species in Ireland were Bottom Mussels, Salmon (predominately organic), Rope Mussels and Gigas Oysters. The most valuable of these species was Salmon & Trout which accounted for 64% of the value of overall aquaculture production in Ireland. The majority of aquaculture is still carried out along the western seaboard.

In 2012, Ireland imported 114.5 thousand Tonnes of Seafood with a value of €179 million, which was an increase of 171% from 2008 when 42.3 thousand Tonnes of Seafood were imported.

For the same period exports amounted to 260.16 thousand Tonnes with a value of €511 million. This was an increase of €125 million, or 32%, from 2011 driven by higher unit prices for Irish Seafood and a large increase in the volumes of seafood exported. During 2012, exports to EU countries represented 70% of total Irish seafood exports. Irish seafood exports to Russia, Egypt, South Korea and Asia continued to grow.

Table 4.11.1: Irish fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	172	169	169	168	164	▼	-2%	-5%
≤10 employees	93	98	96	97	87	▼	-10%	-6%
11-49 employees	58	60	60	57	58	▲	2%	0%
50-249 employees	21	11	13	14	19	▲	36%	-10%
≥250 employees	0	0	0	0	0	▬	0%	0%
Employment (number)								
Total employees	2,867	3,020	3,064	3,200	3,342	▲	4%	17%
Male employees	2,007	2,102	2,143	2,226	2,245	▲	1%	12%
Female employees	860	918	921	974	1,097	▲	13%	28%
FTE	2,596	2,633	2,677	2,761	2,678	▼	-3%	3%
Male FTE	1,817	1,859	1,891	1,942	1,797	▼	-7%	-1%
Female FTE	779	774	786	819	881	▲	8%	13%
Indicators								
FTE per enterprise	15.1	15.6	15.8	16.4	16.3	▼	-1%	8%
Average wage (thousand €)	32.2	30.5	27.5	29.5	28.2	▼	-4%	-12%
Labour productivity (thousand €)	104.1	93.9	38.1	34.3	41.4	▲	21%	-60%
Unpaid work (%)	5.8	6.0	5.2	4.7	4.9	▲	4%	-16%

The employment and number of enterprises per category for 2008 were provided based on the best available information. However, for 2009-2012 an employment survey was carried out and this information allowed for the reclassification of enterprises into the most appropriate segments.

The number of enterprises with 50-249 employees has grown from 11 in 2009 to 19 in 2011. Investment in the seafood industry to create employment and increase sales is assisting companies to grow. The average wage decreased from 32.2 in 2008 to 28.2 in 2012, a drop of 12% due to the downturn in the national economy and an increase in the number of seasonal staff employed.

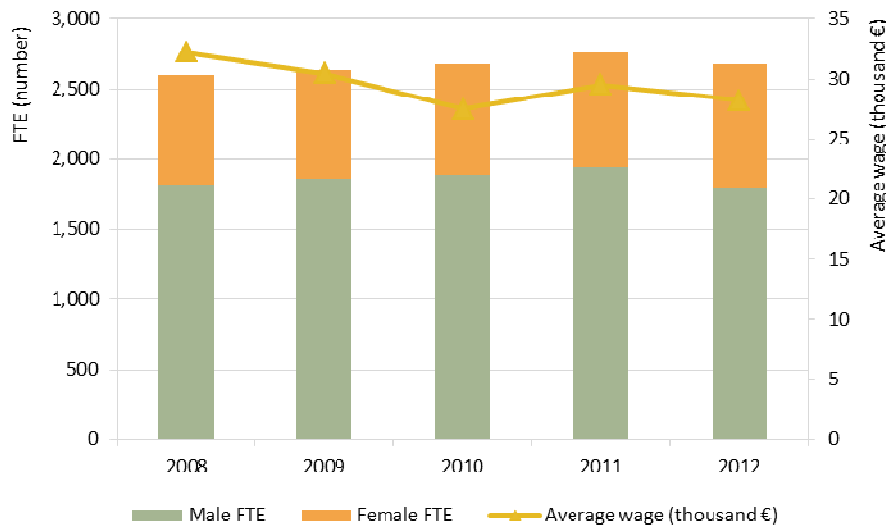


Figure 4.11.1: Irish employment trends, 2008-2012

The number of employees increased constantly from 2008 to 2012, reaching 3.34 thousand in 2012 whilst the number of FTE's increased from 2008 to 2011 and decreased slightly to 2.68 thousand in 2012. Male employees represent around 67% of the total employees and the proportion of male/female employees has been relatively constant over time.

4.11.2 Economic performance of the Irish fish processing industry sector

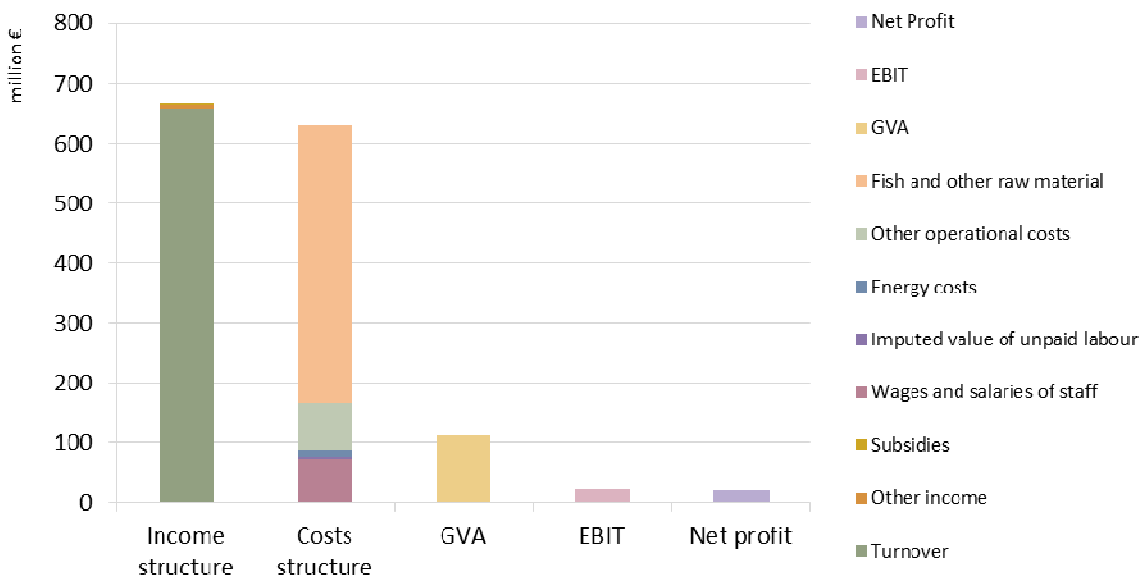


Figure 4.11.2: Economic performance of the Irish fish processing industry sector, 2012

The amount of income generated by the Irish fish processing industry in 2012 was €667.6 million, consisting almost exclusively by turnover. Data reveals that total income increased has increased by 15% since 2008 and by 18% between 2011 and 2012. The domestic market experienced a decline in sales between 2008 and 2011 but it has recovered and sales have increased in 2012.

It should be noted that the data for 2008 & 2009 may not be indicative due to the difference in the sampling methodology used for the 2008 & 2009 survey and the 2010-2012 survey. The enterprises sampled in the 2010-2012 survey represent a sample of the main seafood processing companies in Ireland and the data provided may be more indicative than those provided in the 2008/2009 data set which was taken from a benchmarking study of the industry. The response rate of enterprises with <10 employees was low and this segment represents the largest number of total enterprises in the total population. Therefore, the estimated data for this segment and its associated figures may be under/over representative of the industry.

Other operational costs differ from 2008/2009 and 2010-2012 as the information was collected in a different manner in 2010-2012. This information may not be indicative as the information provided by the enterprises may include other costs than strictly operational costs.

The cost structure is dominated by raw material costs, representing 74% of total production costs and 69% of total income in 2012. In the same year, other operational costs and labour costs gave a contribution of 13% and 11% respectively to the total production costs.

In terms of economic performance the Gross Value Added (GVA), Operating Cash Flow, Earnings before Interest and Tax and Net Profit for the Irish processing sector, in 2012 were €110.8 million, €38.4million, €22.6 million and €18.9 million respectively.

Table 4.11.2: Economic performance of the Irish fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	571.5	537.9	544.8	558.7	656.5	▲ 18%	▲ 15%
Other income	4.0	1.3	0.9	2.8	7.8	▲ 181%	▲ 96%
Subsidies	5.9	4.7	3.8	3.5	3.3	▼ -6%	▼ -44%
Total Income	581.4	543.9	549.5	564.9	667.6	▲ 18%	▲ 15%
Expenditure (million €)							
Purchase of fish and other raw material for production	282.5	270.3	355.2	388.5	463.0	▲ 19%	▲ 64%
Wages and salaries of staff	78.8	75.4	69.8	77.7	71.9	▼ -7%	▼ -9%
Imputed value of unpaid labour	4.9	4.8	3.9	3.8	3.7	▼ -4%	▼ -24%
Energy costs	13.1	12.6	15.1	8.8	10.5	▲ 19%	▼ -20%
Other operational costs	9.6	9.2	73.4	69.5	80.0	▲ 15%	▲ 736%
Total production costs	388.9	372.2	517.3	548.2	629.1	▲ 15%	▲ 62%
Capital Costs (million €)							
Depreciation of capital	15.4	17.8	20.2	14.3	15.9	▲ 11%	▲ 3%
Financial costs, net	3.3	3.2	3.9	3.3	3.6	▲ 10%	▲ 11%
Extraordinary costs, net	0.0	1.7	0.6	0.3	2.6	▲ 725%	○ 0%
Capital Value (million €)							
Total value of assets	270.5	258.8	233.0	177.2	199.6	▲ 13%	▼ -26%
Net Investments	8.6	8.3	19.6	17.6	19.4	▲ 10%	▲ 125%
Debt	206.0	197.1	98.9	75.7	75.6	○ 0%	▼ -63%
Performance Indicators (million €)							
Gross Value Added	270.3	247.2	102.0	94.7	110.8	▲ 17%	▼ -59%
Operating Cash Flow	192.5	171.7	32.2	16.7	38.4	▲ 130%	▼ -80%
Earning before interest and tax	177.1	153.9	12.0	2.4	22.6	▲ 829%	▼ -87%
Net Profit	173.8	150.8	8.1	-0.9	18.9	▲ 2232%	▼ -89%
Capital productivity (%)	99.9	95.5	43.8	53.5	55.5		
Return on Investment (%)	65.5	59.5	5.1	1.4	11.3		
Financial Position (%)	76.2	76.2	42.4	42.7	37.9		
Future Expectation Indicator (%)	-2.5	-3.7	-0.3	1.9	1.7		



Figure 4.11.3: Income, costs, wages and labour productivity trends of the Irish fish processing industry sector, 2008-2012

4.11.3 Overview of the Irish fish processing industry sector by size categories

The total number of seafood companies in Ireland in 2012 with less than 10 employees was 87 and this has decreased from 93 in 2008 or by 6%. These enterprises represented 53% of the total number of seafood companies in Ireland in 2012. The total number of FTE employees in these companies was approximately 333 in 2012. This has decreased slightly compared to previous years due to a decrease in the number of enterprises.

The total number of seafood companies in Ireland in 2012 with 11-49 employees was 58 which is the same as 2008. These enterprises represented 35% of the total number of seafood companies in Ireland in 2012. The total number of FTE employees in these companies was approximately 1.20 thousand in 2012. This has decreased slightly compared to previous years due to a decrease in the number of enterprises from 60 in 2009 and also due to the increase in the number of seasonal employees.

The total number of seafood companies in Ireland in 2012 with 50-249 employees was 19 and this has increased from 11 in 2009. These enterprises represented 12% of the total number of seafood companies in Ireland in 2012. The total number of FTE employees in these companies was approximately 1.11 thousand in 2012. This number has steadily increased compared to previous years due to an increase in the number of enterprises.

There are no seafood processing companies in Ireland with more than 250 employees.

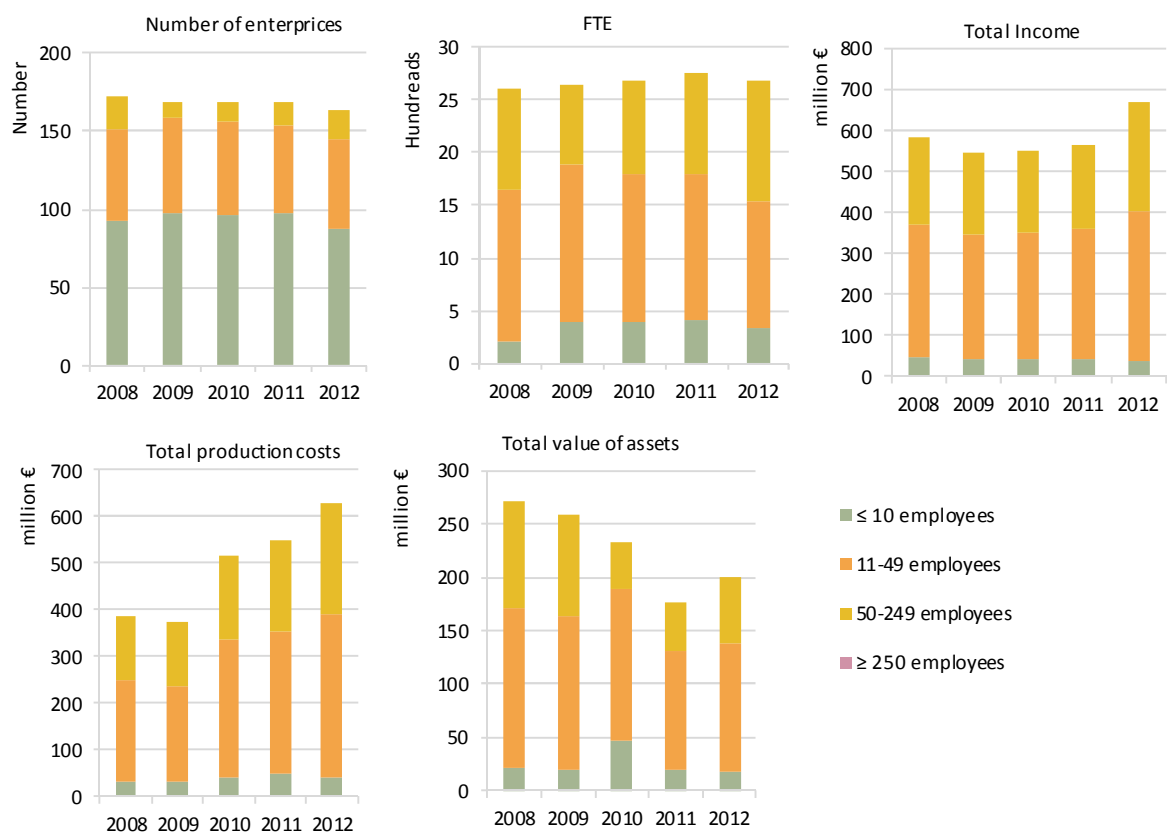


Figure 4.11.4: Irish main structural and economic variables trends by size category, 2008-2012

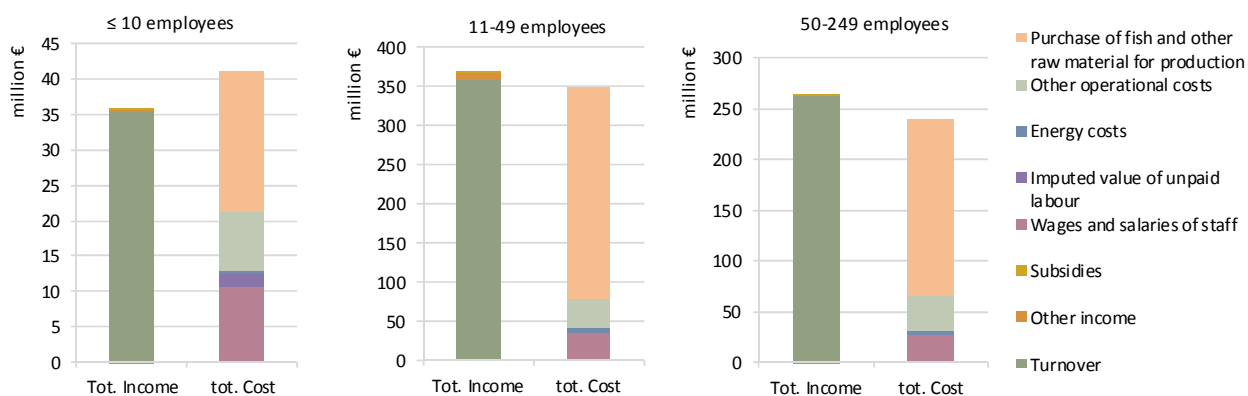


Figure 4.11.5: Irish income and cost structure, by size category, 2012

Table 4.11.3: Economic performance of the Irish fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
less than or equal to 10 employees							
Total Income	44.7	41.8	43.8	43.2	35.8	▼ -17%	▼ -20%
Total production costs	32.1	31.0	38.6	47.0	41.2	▼ -12%	▲ 28%
Gross Value Added	20.8	19.0	12.9	12.4	7.0	▼ -44%	▼ -66%
Operating Cash Flow	12.5	10.8	5.2	-3.9	-5.4	▼ -41%	▼ -143%
Earning before interest and tax	11.3	9.4	-1.3	-6.3	-7.3	▼ -17%	▼ -164%
Net Profit	11.1	9.2	-2.4	-6.8	-7.6	▼ -12%	▼ -169%
between 11 and 49 employees							
Total Income	323.8	303.0	304.4	315.2	367.5	▲ 17%	▲ 13%
Total production costs	215.5	206.4	299.3	308.1	348.2	▲ 13%	▲ 62%
Gross Value Added	150.6	137.7	46.6	45.2	53.3	▲ 18%	▼ -65%
Operating Cash Flow	108.3	96.6	5.1	7.2	19.3	▲ 170%	▼ -82%
Earning before interest and tax	99.7	86.7	-2.2	-1.7	9.5	▲ 652%	▼ -90%
Net Profit	97.9	85.0	-3.4	-3.6	8.0	▲ 323%	▼ -92%
between 50 and 249 employees							
Total Income	212.9	199.2	201.3	206.6	264.3	▲ 28%	▲ 24%
Total production costs	141.2	134.9	179.4	193.2	239.7	▲ 24%	▲ 70%
Gross Value Added	99.0	90.5	42.5	37.2	50.5	▲ 36%	▼ -49%
Operating Cash Flow	71.7	64.3	21.9	13.4	24.5	▲ 83%	▼ -66%
Earning before interest and tax	66.0	57.8	15.4	10.4	20.4	▲ 96%	▼ -69%
Net Profit	64.8	56.7	14.0	9.5	18.5	▲ 94%	▼ -71%

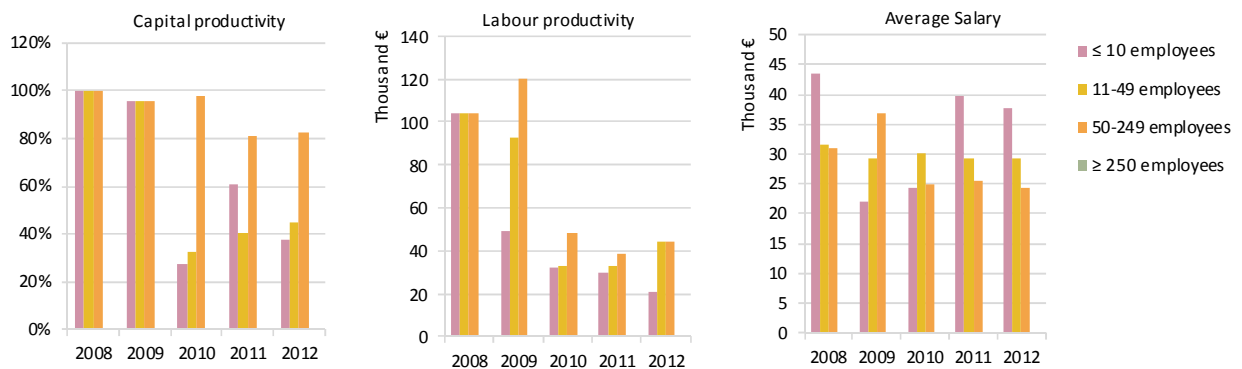


Figure 4.11.6: Irish capital productivity, labour productivity and average salary trends, by size category, 2008-2012

4.11.4 Irish seafood trade

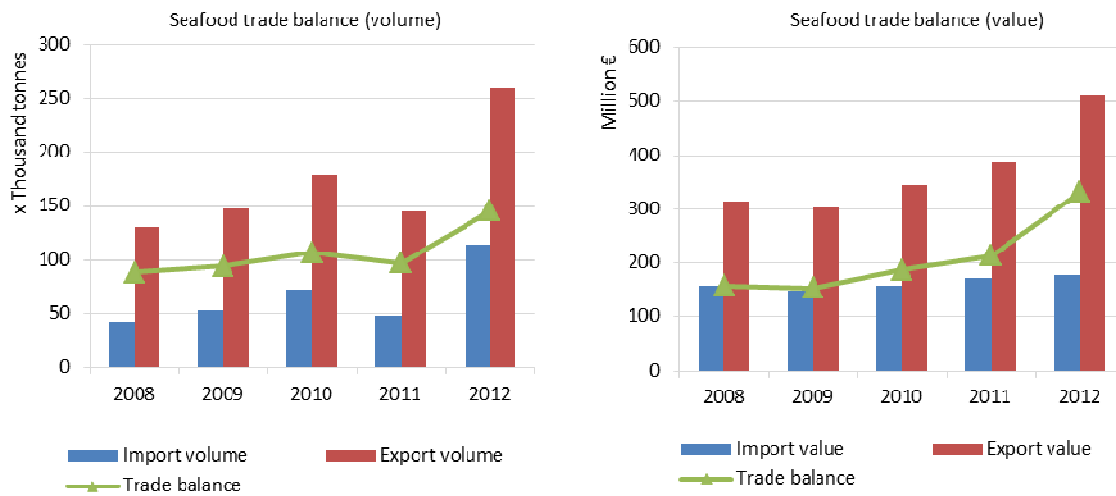


Figure 4.11.7: Irish seafood trade balance trends in volume (left) and value (right)

Irish seafood exports were valued at €511 million in 2012, up 62% since 2008. The volume of seafood exported in 2012 was 260.16 thousand tonnes up 99% since 2008. Irish seafood imports were valued at €179 million in 2012 up 14% since 2008. The volume of Imports in 2012 was 114.5 thousand tonnes up 171% since 2008.

In 2012, approximately 70% of Irish seafood was exported to EU countries. Irish seafood exports to non EU

countries such as Russia, Egypt, South Korea and Asia continued to grow.

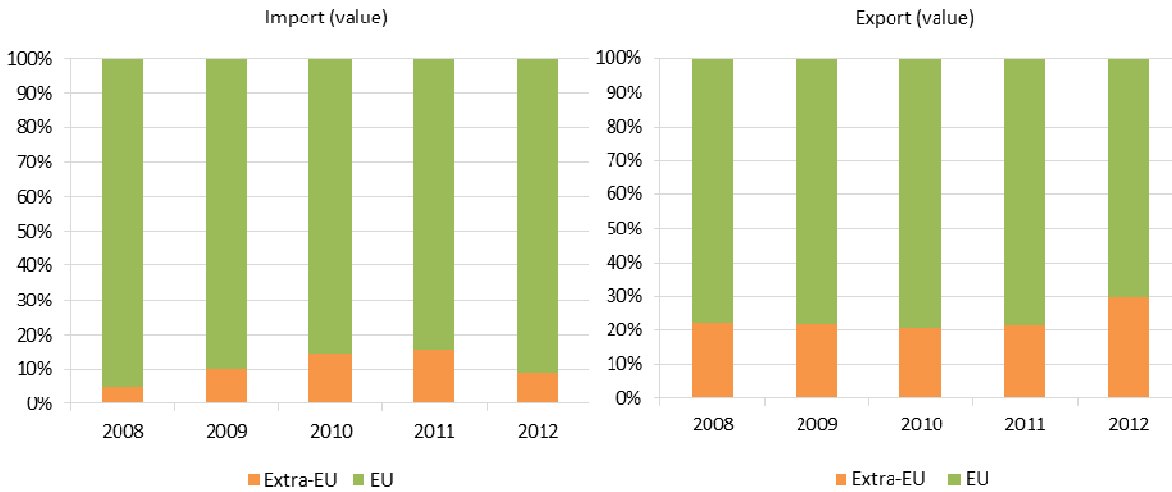


Figure 4.11.8: Irish seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

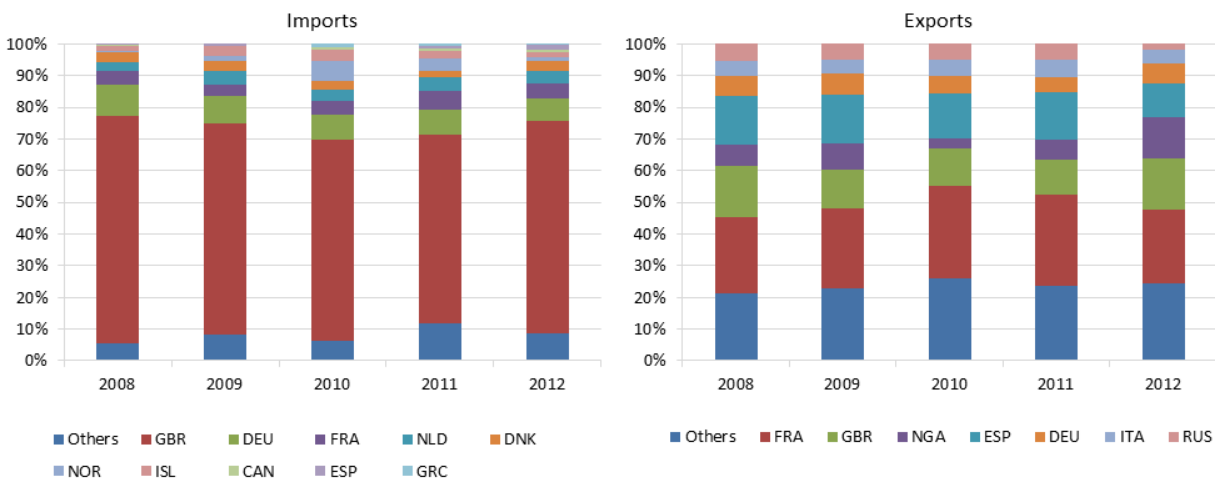


Figure 4.11.9: Irish seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

In 2012, the top countries Ireland exported seafood to were France (23%), Great Britain (16%), Nigeria (13%), Spain (10%) and Germany (6%). The top species exported in 2012 were Horse Mackerel (13%), Salmon (12%), Mackerel (12%), Blue Whiting (8%) and Norway Lobster (7%).

In 2012, the top countries Ireland imported seafood from were Great Britain (67%), Germany (7%), France (5%) and The Netherlands (4%). The top species imported in 2012 were Salmon (21%), Miscellaneous Tuna (14%),

Other marine fish (11%), Cod (9%) and Miscellaneous Shrimp (5%).

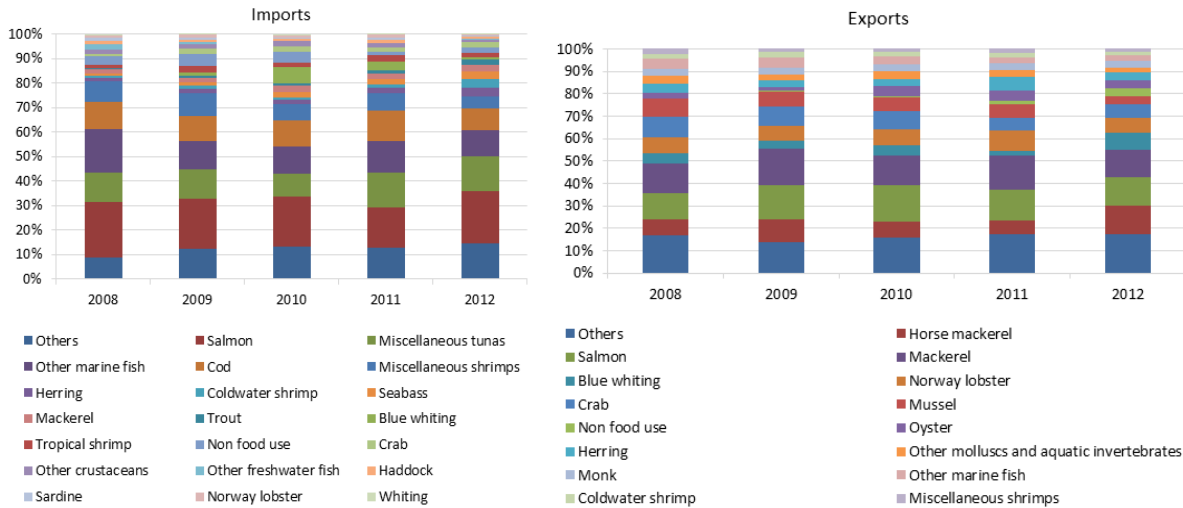


Figure 4.11.10: Irish seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

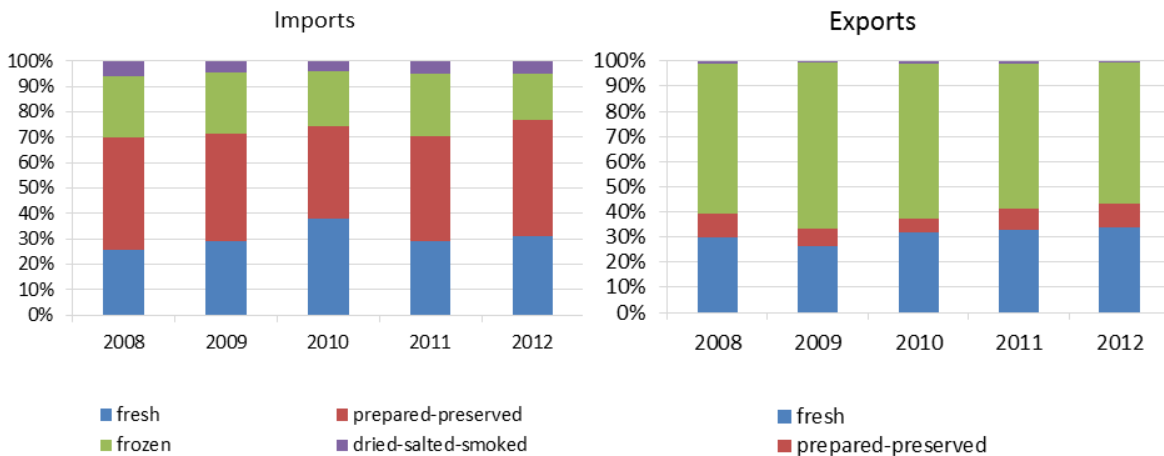


Figure 4.11.11: Irish seafood imports (left) and exports (right) trends by type of products: shares in value

In 2012, exports by type of product were as follows: Fresh (34%), Frozen (56%), Prepared-Preserved (9%) and Dried, Salted, Smoked (1%)

In 2012, imports by type of product were as follows: Fresh (31%), Frozen (18%), Prepared-Preserved (46%) and Dried, Salted, Smoked (5%)

4.11.5 Trends and drivers for change

The Irish seafood industry is relatively small in scale but has an excellent raw material base to work from. It is also quite under-scaled in comparison with other international companies. Despite this Irish seafood sales performed well in 2012, despite difficult trading conditions and on-going recessionary impact to an estimated value of €840 million. The domestic market grew by approximately 3% in sales to €329 million. This was balanced by a further increase in seafood exports valued at €511 million, an overall increase of 32% on 2011 and 62% on 2008.

In order to grow the industry further and build scale and competitiveness the Irish seafood industry needs access additional sources of raw material. This will enable the sector to capitalise on emerging market opportunities. There is a need to shift the focus from the traditional EU markets and look to emerging markets such as Asia and Africa. China has a growing middle class population who are driving increased seafood consumption. Exports to the Chinese market almost trebled between 2011 and 2012 with exports climbing to €8 million-plus for 2012. BIM launched a collective scheme aimed at promoting collaborations between seafood companies to work collectively to reduce duplication costs, boost profitability and increase competitiveness in export markets.

4.12 ITALY

4.12.1 General overview of the Italian fish processing industry sector

In 2012 the total number of fish processing enterprises registered in Italy (the overall number including both “main” and “non-main” enterprises) was 768 producing a turnover of about €2.8 billion. This number include enterprises processing fish products as “main” and as “non-main” activities. Enterprises processing fish as a main activity were equal, in 2012, to 537, representing 70% in number and 92% in terms of contribution to the total turnover of the sector. On the other hand, enterprises processing fish products not as a main activity represent, in numerical terms, about 30% of the total (231) while contribute for 8% to the total turnover of the sector.

The Italian fish processing industry is a very concentrated sector: the main segment is the canning sector with the most important products being canned and preserved tunas: in the 2012 the production of canned tuna was equal to 66.5 thousand tonnes in volume and €1.48 billion in value. Beside the tuna sector, there is also a significant number of companies processing anchovies, sardines and shellfish. As far as canned and preserved tuna, the sector continues to record a strong dependence on imports of frozen tuna and tuna loins. Canned tuna is confirmed, also, as the main export product, with an incidence of 15.3% in volume and 21.3% in value of total exports¹ (see also the paragraph on markets).

The following analysis is based only on those enterprises processing fish as a “main-activity”, according to the current specification of the DCF.

According to DCF data, the Italian fish processing sector consisted of 537 enterprises. The Italian fish processing industry is characterized by a double-face organization on the market: on the one hand, there is the so-called modern sector, with a few large industrial companies, and on the other hand there is the traditional sector, highly atomized and formed mainly by micro, small and medium-sized enterprises, many of which are organized on a family basis.

¹ ISMEA, 2013, Check up settore ittico in Italia. Roma, Maggio 2013.

Table 4.12.1: Italian fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	376	414	547	530	537	▲	1%	▲ 43%
≤10 employees	192	221	347	375	372	▼	-1%	▲ 94%
11-49 employees	152	166	175	136	144	▲	6%	▼ -5%
50-249 employees	31	27	24	18	21	▲	17%	▼ -32%
≥250 employees	1	0	1	1	0	▼	-100%	▼ -100%
Employment (number)								
Total employees	5,425	5,285	5,950	6,109	6,197	▲	1%	▲ 14%
Male employees	2,821	2,748	3,094	3,177	3,222	▲	1%	▲ 14%
Female employees	2,604	2,537	2,856	2,932	2,975	▲	1%	▲ 14%
FTE	4,572	4,454	5,015	5,149	5,223	▲	1%	▲ 14%
Male FTE	2,378	2,316	2,608	2,677	2,716	▲	1%	▲ 14%
Female FTE	2,195	2,138	2,407	2,471	2,507	▲	1%	▲ 14%
Indicators								
FTE per enterprise	12.2	10.8	9.2	9.7	9.7	▬	0%	▼ -20%
Average wage (thousand €)	50.9	46.2	47.4	39.8	42.7	▲	7%	▼ -16%
Labour productivity (thousand €)	61.7	68.5	68.5	52.4	75.5	▲	44%	▲ 22%
Unpaid work (%)	3.9	3.8	7.9	3.8	4.4	▲	15%	▲ 14%

The 70% of enterprises is represented by micro-enterprises, with less than 10 employees. In general, looking at the other dimensional classes, it can be strongly asserted that the Italian fish processing industry is dominated by small companies, as 96% of enterprises are represented by companies with less than 50 employees (sum of classes <10 and 11-49). Table 4.12.1 highlights that in the last year bigger enterprises have increased while the number of the smaller ones have decreased.

As far as the geographical localisation, the large part of enterprises is located in the Southern Italy and in the islands. Indeed, the regions with the largest number of companies are Sicily (21%) and Campania (11%). Sicily is, by far, also the region with highest number of employees (20% of the national total).

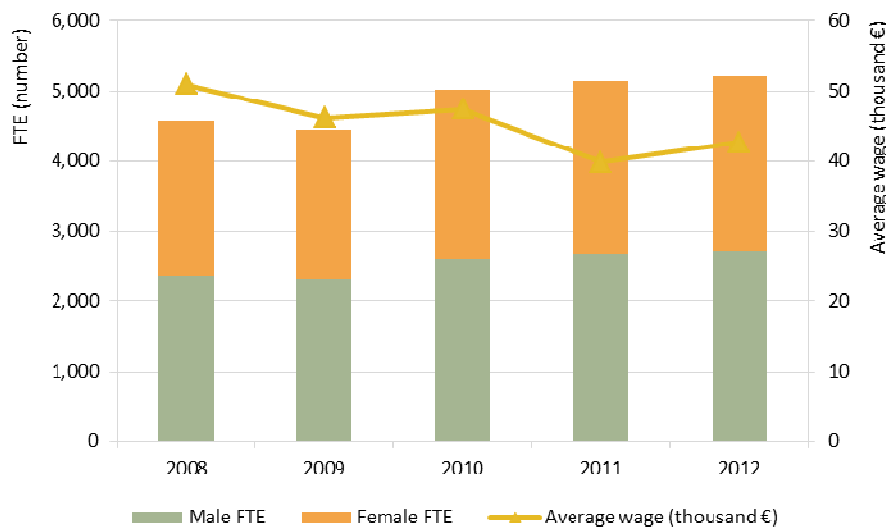


Figure 4.12.1: Italian employment trends, 2008-2012

The number of people employed in the sector was equal to 6,197 people consisting in 5,223 FTE. Figure 4.12.1 clearly shows that the Italian fish processing industry is a rather equal opportunity industry as the number of men and women employed in the sector is almost equal. In the observed period (2008-2012) the trend of FTE per enterprise shows a decrease (-20%), while the average labour productivity increased of 22%.

4.12.2 Economic performance of the Italian fish processing industry sector

The turnover of the sector amounted to €2,557 million in 2012, while the total value of production (turnover + subsidies + other income) amounted to €2,582 million. Turnover represents about 99% of the total value of production. If looking at the trend, the main income items appear to have increased, compared to 2011: +12% for turnover and +35% for subsidies.

As far as subsidies, the figures collected under the Italian NP refer mainly to incomes accounted by enterprises under item A5 according to the IV directive; this means mainly current advances that include aids destined to improve the income production in the current operational years. According to what accounted by enterprises in the profit and loss accounts, it results that subsidies have a very low incidence on the total income of the sector, on average 1%.

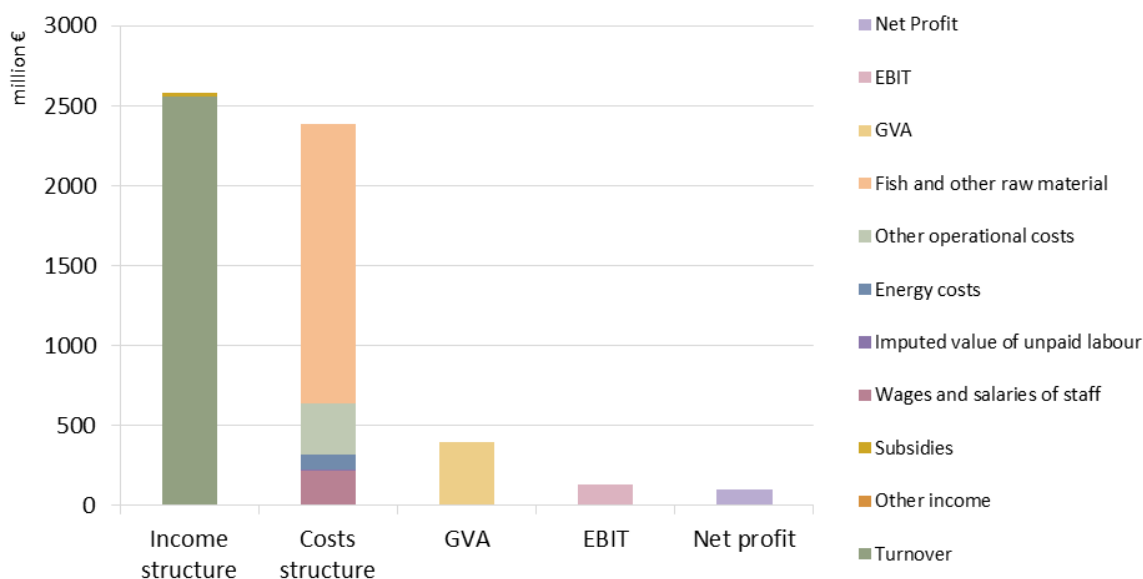


Figure 4.12.2: Economic performance of the Italian fish processing industry sector, 2012

Total production costs were equal to €2,387 million in 2012, representing about 92% of total income and showing an increase of +7% compared to 2011. The largest share of costs (73% of total production costs, 68% of total income) is represented by costs for purchase of raw materials and other products needed for the production equal, in 2012, to €1,752 million. Labour costs represents about 9% of the running costs while energy costs impacted by 4%. An increasing trend for most of the cost items is shown by table 4.12.2 on the latest year of the historical series under analysis, while an opposite trend can be observed if we focus the analysis on the overall period 2008-2012 (except for the imputed value of unpaid labour).

Table 4.12.2: Economic performance of the Italian fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
Income (million €)									
Turnover	2,906.1	2,201.2	2,623.4	2,281.2	2,557.0	▲	12%	▼	-12%
Other income	27.6	-6.4	146.4	15.8	1.6	▼	-90%	▼	-94%
Subsidies	5.6	4.7	4.8	17.6	23.8	▲	35%	▲	324%
Total Income	2,939.3	2,199.4	2,774.7	2,314.7	2,582.3	▲	12%	▼	-12%
Expenditure (million €)									
Purchase of fish and other raw material for production	2,125.3	1,435.1	1,952.7	1,653.4	1,752.1	▲	6%	▼	-18%
Wages and salaries of staff	223.9	197.9	218.9	197.2	213.1	▲	8%	▼	-5%
Imputed value of unpaid labour	9.0	7.9	18.8	7.9	9.8	▲	25%	▲	9%
Energy costs	119.8	93.2	87.7	97.5	92.3	▼	-5%	▼	-23%
Other operational costs	406.7	361.1	385.9	276.6	319.9	▲	16%	▼	-21%
Total production costs	2,884.6	2,095.2	2,664.0	2,232.5	2,387.3	▲	7%	▼	-17%
Capital Costs (million €)									
Depreciation of capital	45.5	60.5	69.1	61.5	65.6	▲	7%	▲	44%
Financial costs, net	51.7	28.5	19.4	27.1	31.3	▲	15%	▼	-40%
Extraordinary costs, net	-3.1	-4.6	2.1	1.0	-9.7	▼	-1119%	▼	-220%
Capital Value (million €)									
Total value of assets	2,164.8	2,166.0	2,607.2	2,118.4	2,247.8	▲	6%	▲	4%
Net Investments	225.9	-96.2	183.7	121.7	-7.2	▼	-106%	▼	-103%
Debt	1,485.4	1,425.6	1,597.9	1,444.7	1,569.0	▲	9%	▲	6%
Performance Indicators (million €)									
Gross Value Added	281.9	305.3	343.5	269.6	394.2	▲	46%	▲	40%
Operating Cash Flow	54.7	104.2	110.6	82.2	195.1	▲	137%	▲	257%
Earning before interest and tax	9.2	43.8	41.6	20.7	129.4	▲	525%	▲	1313%
Net Profit	-42.6	15.3	22.2	-6.4	98.1	▲	1633%	▲	331%
Capital productivity (%)	13.0	14.1	13.2	12.7	17.5				
Return on Investment (%)	0.4	2.0	1.6	1.0	5.8				
Financial Position (%)	68.6	65.8	61.3	68.2	69.8				
Future Expectation Indicator (%)	8.3	-7.2	4.4	2.8	-3.2				

As far as the performance indicators, table 4.12.2 highlights a positive economic performance of the sector, being all the indicators increasing over the time.

The GVA produced by the sector in 2012 was equal to about €395 million, increasing of +45% compared to 2011. The reason is mainly to be found in the increase of incomes (excluding subsidies) higher (+12%) than the decrease of total costs related to production (excluding labour costs) (+7%).

The sector shows a very positive performance also in terms of Operating Cash Flow, equal to around €195 million in 2012. As far as EBIT, it was equal to €129 million in 2012 while the net profit was equal to €98 million.

Anyway, the incidence of GVA, OCF, EBIT and net profit on the value of the income appear to be almost stable over the period 2008-2011, at least on the latest 2 years.

The capital productivity, measuring the amount of GVA created by €1 of capital invested (or the capacity to produce GVA, in % terms, of 1 unit of capital invested), increased from 12.7% to about 17.5%.

The return on investments (ROI), given by the ratio EBIT/total value of assets and measuring the profitability (efficiency) of 1 unit of capital invested, increased from 1.0% to 5.8%.

On the opposite, the FEI (future expectation indicator) appears to be lower in 2012 compared to 2011 (from 2.8 to -3.2). FEI should be interpreted as a proxy for the industry's wish to remain in the market in the medium/long term. It is given by the difference between net investments and depreciation compared to the total value of assets. A positive indicator means that the sector is allocating resources to increase its production capacity, and therefore it expects to remain in the market to recover the cost of the investment. When the indicator is close to zero, it could be interpreted as an indicator that the sector is only wishing to maintain its production capacity in the future, and that it is not planning to expand. In this case, it means that the willingness of Italian fish processors to expand in the sector is highly decreasing.



Figure 4.12.3: Income, costs, wages and labour productivity trends of the Italian fish processing industry sector, 2008-2012

4.12.3 Italian seafood trade

As already mentioned in the introduction, the Italian fish processing sector is highly dependent on imports as far as the supply of raw material.

In general, Italy should be considered a net importer of fish products, as it emerges from figure 4.12.4, reporting the seafood trade balance for the period 2008-2012.

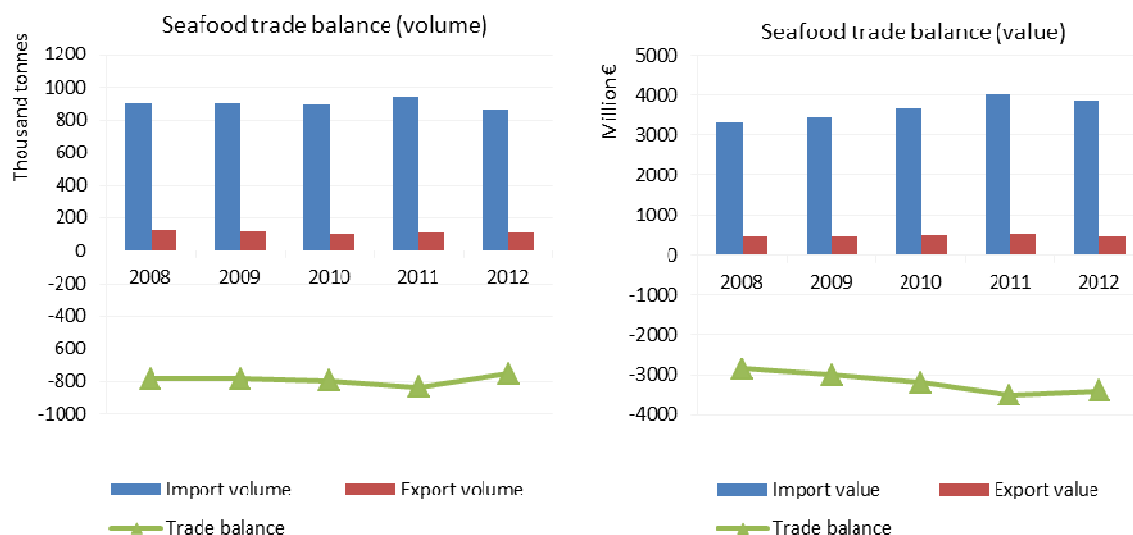


Figure 4.12.4: Italian seafood trade balance trends in volume (left) and value (right)

Indeed, the Italian seafood markets has been characterised, in the last decades from substantial increase in the total demand for fish products mainly due to the increase in the per capita consumption (higher propensity to consume fish proteins, higher focus on more healthy products, higher life standards) and by an increase of total population. The role of imports has been and is still fundamental in satisfying the domestic demand taking into account a national apparent consumption very much higher than domestic production (from fishery and aquaculture). This has become mainly evident since the mid '90s when the increase in imports has been pushed by the decrease in domestic production (based on a presentation given by L. Malvarosa at the EUROFISH Regional Workshop "WTO and fisheries", S. Petersburg, October, 29th -31th 2013 <http://wto.eurofishmagazine.com/countries/Italy.pdf>).

As far as the origin and destination of the seafood products, it is clear from figure 4.12.5 the important role that the European countries have on the exchange flows, especially as user of Italian seafood products.

As far as the imports it is concerned, imports of seafood product originating from EU countries is, on average, about 60% for the overall period 2008-2012. As far as the export flows, around 85% of the seafood products produced in Italy are destined to EU partners.

Figure 4.12.5 shows the composition of the Italian seafood imports and exports by type of origin/destination. It is clear the role that Spain plays both on supply and the demand side.

As far as the EU partners, other important countries are Netherlands, Denmark, France and Greece on the import side while on the export side the main EU partners, beside Spain, are Germany, Greece, France and Austria.

In the most recent period new countries are emerging as Italian partners in the seafood trade. A positive trend is registered in imports of seafood products from Sweden and Portugal as well as in the trend of export flows toward some Eastern European countries, like the Czech Republic, Poland and Slovenia.

As far as the extra-EU partners, the most important partners are Argentina and Ecuador but it's also important to highlight the increasing trend, over the past ten years, of imports from some Asian countries such as Vietnam, China, India, Indonesia and Thailand. On the export side the most important partners are Japan and Switzerland but it should be highlighted the positive dynamics that has characterized exports towards some Arab countries, as Saudi Arabia, Libya and especially Tunisia for which a double-digit growth in imports from Italy is registered in the last decade.

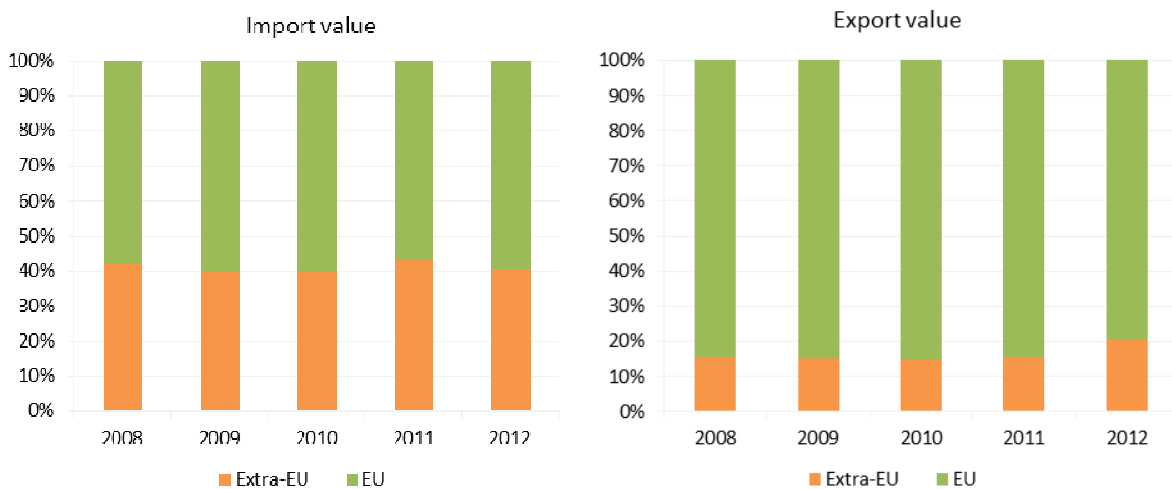


Figure 4.12.5: Italian seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

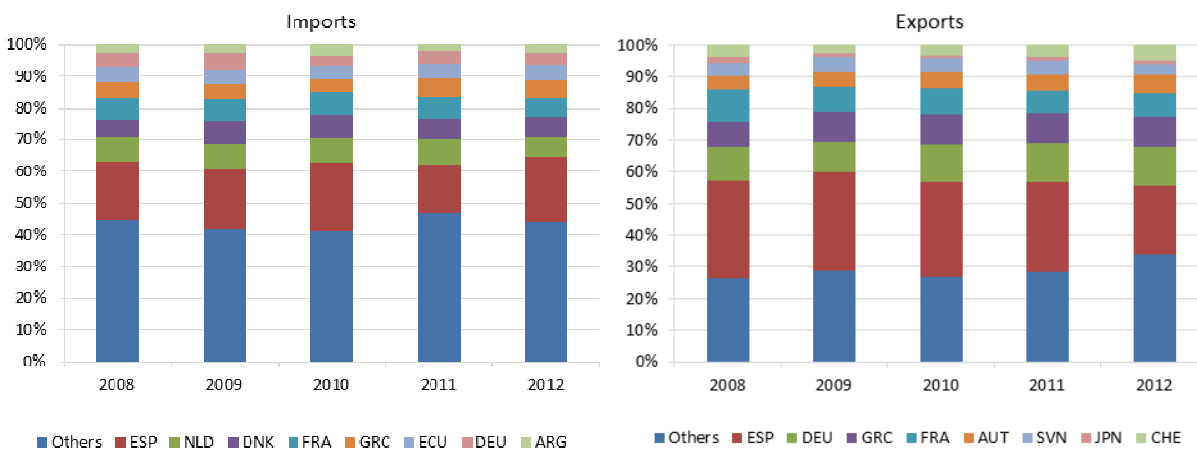


Figure 4.12.6: Italian seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

Figure 4.12.7 shows the import and export flows from a product perspective, taking into account also the type of preservation (fresh, frozen, prepared-preserved and dried-salted-smoked seafood products).

From the imports side, canned tuna is the first product, mainly originating from Spain (even if imports from this country records a decrease compared to 2011), Colombia, Ivory Coast and Ecuador (imports from this country show an average annual growth rate of over 60% in the last ten years). Other seafood products important from the import side are frozen squid, mainly originating in Asia (Thailand, Vietnam, China, India and Indonesia); frozen shrimps (Ecuador) and salmon, fresh, chilled and smoked (Sweden and Denmark). Imports of sea-bass and sea-bream, fresh and chilled, from Greece and Turkey also play an important role.

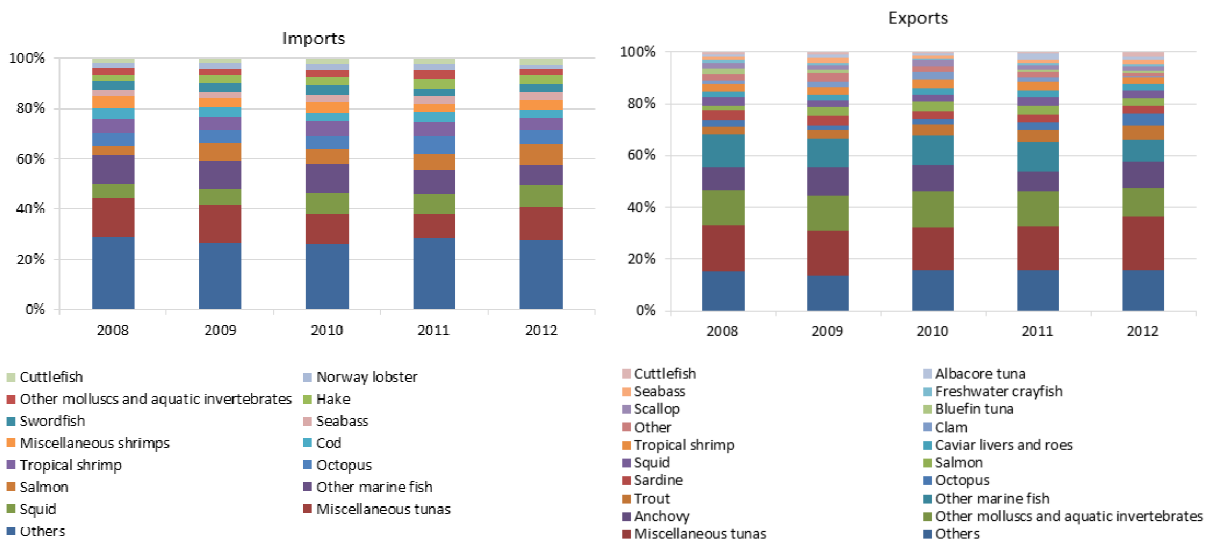


Figure 4.12.7: Italian seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

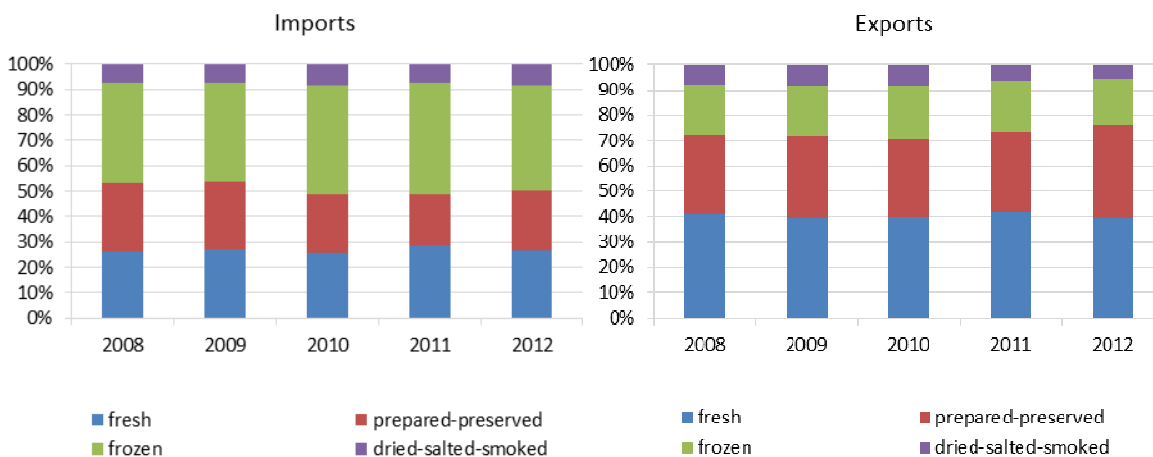


Figure 4.12.8: Italian seafood imports (left) and exports (right) trends by type of products: shares in value

4.12.4 Trends and drivers for change

In general in 2012 it is confirmed the difficulty of the Italian fishing industry to cope with several critical issues related not only to the severe economic crisis, but also to some characteristics of the industry for example the high dependence on imports for raw materials, which often are subject to high fluctuations in quantities and prices.

The production prices index of the processing industry (base year 2010 = 100, source ISTAT) reported, on average, in 2012, an increase of 5.9% compared to 2011, partly as a result of increased energy² and raw materials costs (above all, those for the tuna industry, such as tuna loins and frozen).

In recent years (last decade), the increase of the production costs, primarily due to the decrease of tuna catches, led the Italian companies, totally depending from abroad for the supply of raw materials, to change their production and marketing strategies. On one hand, imports of frozen, fresh and refrigerated tuna (mainly from Vietnam) is again increasing at the expense of the semi-manufactured tuna loins: mostly imported, in 2012, from Ecuador and Thailand.

On the same time, some Italian brand of canned tuna have been acquired, in the recent years, by foreign companies, especially Spanish. This means that Italy imports from Spain finished products and only distribute them on the market.

Only recently the interest for the processing industry to process raw materials from aquaculture is seen as an opportunity in order to decrease the dependency from import. This trend has been observed mainly for massive production of freshwater species, mainly trout and salmon trout. The aquaculture fish products processed represent an opportunity and a potential future link between aquaculture and processing industry. As regards Italian aquaculture, more than 70% of production destined to processing is processed and canned directly by aquaculture companies, thanks to vertical integration of the production processes. Vertical integration ensures both reduction of production costs, stabilizing them because allows firms to reduce their dependency on imports, and a better satisfaction of the market demand taking into accounts that consumption of products "made in Italy" is preferred by Italian consumers.

Nevertheless the problems linked with the supply of raw materials, it can be said that the Italian food market is less impacted by the general economic crisis that all the EU countries, including Italy, is facing in the latest period.

In this context canned tuna products represent a real challenge: in general, canned tuna is an excellent opportunity for the consumer being the most affordable protein in the market along with the milk and eggs. The quality and versatility of tuna are an excellent remedy for a good diet and Italian companies offering high level products, provide a complete product from the nutritional point of view.³

The tuna in olive oil is without doubt the most important category (representing 65% of the tot canned fish in value), the most penetrated (up to 95% of Italian households) and the seafood product less affected by the

² Cost of electricity (0.22 €/kWh) 70% higher than the EU average (0.13 €/kWh), P. Bono- La filiera agroalimentare italiana: inefficienze sì, speculazioni no, NOMISMA. Maggio 2014.

³ Mercato delle conserve ittiche 2013: il commento del Presidente ANCIT Vito Santarsiero, <http://tonno360.it/>, ANCIT website.

contraction in volumes showing, in 2013, an increase in value of 5% compared to 2012, driving the growth of the sector. Tuna therefore continues to satisfy customers for its versatility in the kitchen and because it is available in several versions and formats: it is a suitable product and satisfy the different willingness to pay of consumers. Based on this different fish processing enterprises active on canned tuna are starting to enrich their portfolio with other high quality products, acting also as distributors.

In a context of a mature market, industries have started to differentiate also the range of products offered by proposing to consumers new formats of products that can further stimulate sales (e.g., canned tuna produced with a single tuna fillet in olive oil in glass vase, handmade, and using only adult tunas over 20 kg of weight, certifying that these tunas are caught on free school - rules that protect the reproduction of the species yellowfins - *Thunnus albacares* - by purse seiners in not overfished fishing area). To better penetrate the market, in the more recent year, tuna processor enterprises show also to be more active on the side of the communication strategy, using more and more digital means of communication.

4.13 LATVIA

4.13.1 General overview of the Latvian fish processing industry sector

Fish processing is a well-developed old tradition in Latvia. The processing sector is based on the local natural resources and also on the imported raw materials for production. In most cases fish processing enterprises are situated in the coastal regions.

There were 101 registered economic active fish processing enterprise in 2012 with a total turnover of €226.7 million. The number of enterprises did not change significantly from 2008 to 2012 and has an insignificant increase by 6%. There are only few enterprises in Latvia where processing is not the main activity. For these enterprises the data about turnover could not be reported for confidentiality reasons. All fish processing enterprises operate according to European Union standards. Investments to new technologies and improvement of working conditions for labour between 2008 and 2012 assist in increase of the total turnover between 2011 and 2012 by 33%.

Fish processing as a type of economic activity is very important for Latvian agriculture and for employment especially in the coastal areas. Total number of employment was 5,781 people in 2012 from them 5,357 people were employed full time. In most cases in the segment with less than 10 employees fish processing is a family business. Table 4.13.1 shows employment dynamic, companies' structure and some of economic performance indicators. Number of female was more than male and was 3,511 and 1,846 employment respectively. Number of full time employed decreased insignificantly by 4% from 2008 to 2012. The average wage showed the increasing by 8% from 2008 to 2012 and was €511 per month in 2012. Total wage also has negligible increase by 5% from 2008 to 2012. The full time employment per enterprise decreased by 10% from 2008 to 2012 and was 59 and 53 person respectively. Towards the end of 2008 and during 2009 the global economic crisis was negatively affected to Latvian sector of fish processing, which led to significant decrease of total turnover, employment and average wage levels (Figure 4.13.1).

Fish processing production has important share in total Latvian export and also supplies domestic market. Export of fish production was to 53 countries and import from 44 countries in 2012. The main type of imported products by volume were "Fresh or chilled fish", "Frozen fish and Fresh, chilled or frozen fish fillets and other fish meat (whether or not minced)". "Prepared or canned fish" was the main product type for the export and for the domestic market. The export of fish production is mainly are made Baltic Sea and the Atlantic Ocean catches obtained by the Latvian fishing vessels. Fish range is very wide. North Sea and North East Atlantic Herring and Scomber imported from Norway were used for raw material for the production of canned fish. The biggest fish markets are concentrated in the Riga, Daugavpils, Liepaja and Jelgava cities.

The most of fish processing enterprises are located in Riga and Roja cities. Large amount of the enterprises are also situated along the Latvian coast and in the Kurzeme region territory. Some of them are in Tukums, Engure, Carnikava and Kekava cities. Small fish processing enterprises are situated near the fishermen settlements. Some of fishermen have smokehouses and sell the smoked, salted and brine fish to the tourists.

Table 4.13.1: Latvian fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	95	91	104	101	101	▬	0%	6%
≤10 employees	27	33	44	44	48	▲	9%	78%
11-49 employees	26	37	36	34	29	▼	-15%	12%
50-249 employees	37	16	18	16	18	▲	13%	-51%
≥250 employees	5	5	6	7	6	▼	-14%	20%
Employment (number)								
Total employees	5,792	4,684	5,015	5,393	5,781	▲	7%	0%
Male employees	2,148	1,774	1,814	1,807	1,992	▲	10%	-7%
Female employees	3,644	2,910	3,201	3,586	3,789	▲	6%	4%
FTE	5,592	4,174	4,681	4,998	5,357	▲	7%	-4%
Male FTE	2,074	1,580	1,761	1,697	1,846	▲	9%	-11%
Female FTE	3,518	2,594	2,920	3,301	3,511	▲	6%	0%
Indicators								
FTE per enterprise	58.9	45.9	45.0	49.5	53.0	▲	7%	-10%
Average wage (thousand €)	5.7	4.3	4.9	5.5	6.1	▲	11%	8%
Labour productivity (thousand €)	9.7	5.4	6.1	6.3	10.4	▲	66%	8%
Unpaid work (%)	0.0	0.9	0.0	0.0	0.0	▬	0%	-100%

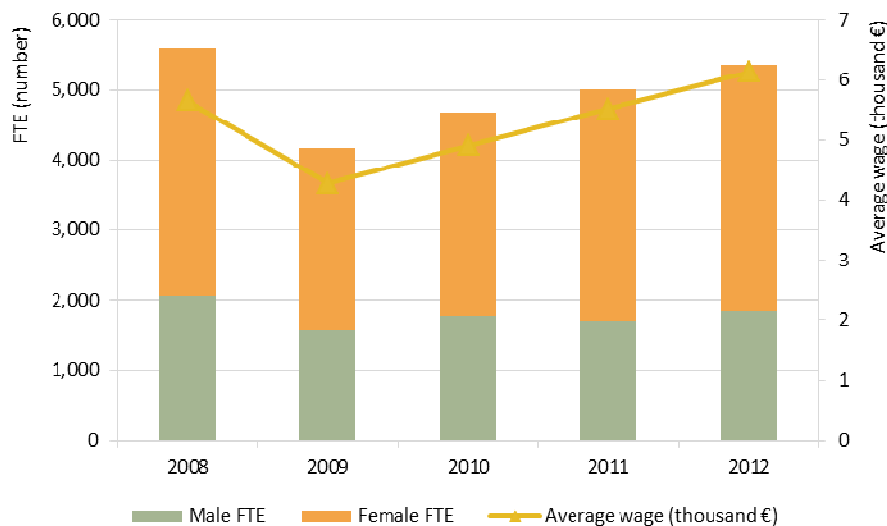


Figure 4.13.1: Latvian employment trends, 2008-2012

4.13.2 Economic performance of the Latvian fish processing industry sector

Table 4.13.2 and figure 4.13.2 shows economic performance for the fish processing sector. The total production costs share was 90% of total fish processing industry income. Share of purchase and raw material for production made up of 54% of the total income. Furthermore, the value of total production costs demonstrated increasing by 6% from 2008 to 2012. The total income sharply increased by 34% from 2011 to 2012 and was €178.2 million in 2011 and € 238 million in 2012 (Figure 4.13.3). It can be observed that Gross Value Added and Operating Cash Flow also have increased significantly by 78% and 424% respectively in the same period. In its turn the subsidies increased extremely in 16 times from 2008 to 2012. Despite of the growth of subsidies income of a lot of companies did not cover a high value of costs in the time period between 2009 and 2011. The negative impact of global economic crisis to economic situation in Latvia processing industry also shows the negative total profit €1.7 million in 2011. The economic situation improved in 2012 and Net Profit has a significant increase by 32% between 2008 and 2012 and was €16.8 million in 2012. Nevertheless the increase of Gross Value Added and Operating Cash Flow by 3% and 9% respectively between 2008 and 2012 mainly caused by the high growth of turnover by 6% since 2008, and also of the increase of subsidies. Based on analysis of the economic indicators it could be concluded, that subsidies in the processing sector assist for the industry development and also may have a good expectation for the growth of the economic effectiveness in the future.

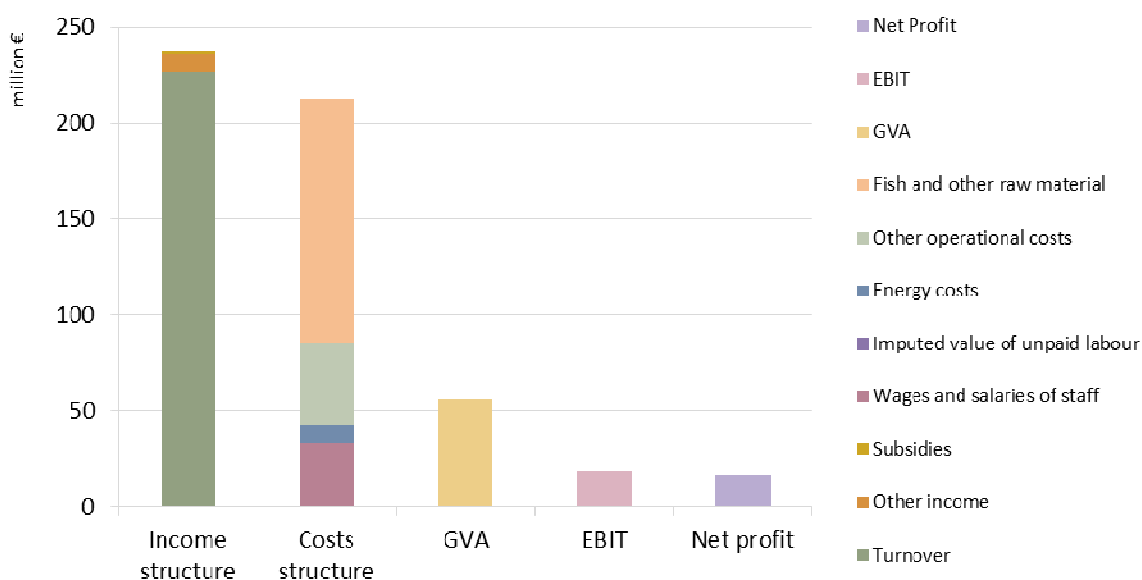


Figure 4.13.2: Economic performance of the Latvian fish processing industry sector, 2012

Table 4.13.2: Economic performance of the Latvian fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Income (million €)								
Turnover	214.9	152.8	153.8	170.8	226.7	▲	33% ▲	6%
Other income	9.1	5.2	6.7	6.5	9.5	▲	47% ▲	5%
Subsidies	0.1	1.5	2.3	1.0	1.7	▲	77% ▲	1518%
Total Income	224.0	159.5	162.8	178.2	238.0	▲	34% ▲	6%
Expenditure (million €)								
Purchase of fish and other raw material for production	120.2	96.0	93.3	103.2	128.1	▲	24% ▲	7%
Wages and salaries of staff	31.5	17.7	23.0	27.6	32.9	▲	19% ▲	5%
Imputed value of unpaid labour	0.2	0.2	0.0	0.0	0.0	▬	0% ▼	-100%
Energy costs	9.4	7.6	7.6	8.3	9.5	▲	15% ▲	1%
Other operational costs	40.1	32.0	31.1	34.4	42.7	▲	24% ▲	7%
Total production costs	201.3	153.4	154.9	173.5	213.2	▲	23% ▲	6%
Capital Costs (million €)								
Depreciation of capital	8.4	6.0	4.5	4.3	6.2	▲	45% ▼	-26%
Financial costs, net	1.9	1.9	2.0	2.1	2.2	▲	4% ▲	14%
Extraordinary costs, net	0.0	0.0	0.0	0.7	0.0	▼	-96% ▲	2570%
Capital Value (million €)								
Total value of assets	111.9	100.6	101.3	114.8	143.4	▲	25% ▲	28%
Net Investments	6.7	5.3	3.5	13.2	20.6	▲	57% ▲	207%
Debt	83.6	82.5	79.9	90.4	104.3	▲	15% ▲	25%
Performance Indicators (million €)								
Gross Value Added	54.2	22.5	28.6	31.4	55.9	▲	78% ▲	3%
Operating Cash Flow	22.7	6.1	7.9	4.7	24.7	▲	424% ▲	9%
Earning before interest and tax	14.3	0.1	3.5	0.4	18.6	▲	4029% ▲	30%
Net Profit	12.4	-1.8	1.4	-1.7	16.3	▲	1069% ▲	32%
Capital productivity (%)	48.5	22.3	28.3	27.3	39.0			
Return on Investment (%)	12.8	0.1	3.4	0.4	12.9			
Financial Position (%)	74.7	82.0	78.9	78.7	72.7			
Future Expectation Indicator (%)	-1.5	-0.7	-1.0	7.7	10.1			



Figure 4.13.3: Income, costs, wages and labour productivity trends of the Latvian fish processing industry sector, 2008-2012

4.13.3 Overview of the Latvian fish processing industry sector by size categories

The number of fish processing enterprises increased insignificantly from 95 in 2008 to 101 in 2012. There are only 6 big enterprises which have more than 250 employed people. The middle size companies are dominated in Latvia and their total share was 65% from the all companies' size. There were 29 enterprises in the segment <10 employees and 18 enterprises which were included to the segment 11-49 employees. The biggest segment 50-249 employees had consisted of 48 enterprises in 2012. Table 4.13.3 and figures 4.13.4, 4.13.5 and 4.13.6 shows economic variables trends for the fish processing sector by size category.

In the all fish processing companies segments the economic situation improved significantly between 2011 and 2012. The segment with more than 250 employees was the most important segment for the Latvian economy. Only 6 fish processing companies made up this segment in 2012. The total income was €95.3 million in 2012 and the production costs amounted 88% from the total income. The generated Gross Value Added and Operating Cash Flow were €26 million and € 11 million respectively in 2012. Despite of the € 4 million losses in 2011 the segment was highly profitable in 2012, with a reported Net Profit of around € 8.9 million. The total income, Gross Value Added, Operation Cash flow also has increase by 17%, 128% and 621% respectively. But in spite of that growth, the Net Profit still had a decrease by 12% between 2008 and 2012.

The second important segment is the segment with less than 10 employees. The small fish processing companies produce a variety of products such as dried, salted and smoked fish. The segment showed negative profit around €400 thousand in 2011. The economic situation improved in 2012 but the segment contributed only €800 thousand to the total Net Profit of the fish processing sector. Nevertheless this segment predominantly supports local markets and is important for employees in the coastal cities.



Figure 4.13.4: Latvian main structural and economic variables trends by size category, 2008-2012

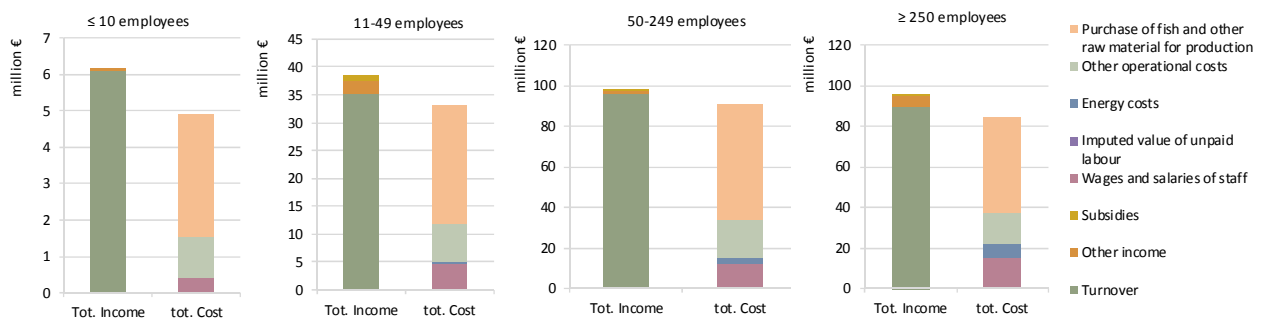


Figure 4.13.5: Latvian income and cost structure, by size category, 2012

Table 4.13.3: Economic performance of the Latvian fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
less than or equal to 10 employees									
Total Income	2.2	2.5	3.6	3.0	6.2	▲	104%	▲	187%
Total production costs	2.1	2.7	3.2	2.6	4.9	▲	86%	▲	138%
Gross Value Added	0.5	0.2	0.8	0.6	1.7	▲	164%	▲	212%
Operating Cash Flow	0.1	-0.2	0.5	0.4	1.3	▲	227%	▲	1358%
Earning before interest and tax	-0.3	-0.6	0.1	-0.3	0.9	▲	443%	▲	367%
Net Profit	-0.3	-0.6	0.1	-0.4	0.8	▲	305%	▲	343%
between 11 and 49 employees									
Total Income	35.0	37.5	35.5	23.4	38.5	▲	64%	▲	10%
Total production costs	31.4	34.1	32.2	19.8	33.0	▲	66%	▲	5%
Gross Value Added	8.5	6.2	5.6	7.1	9.2	▲	30%	▲	9%
Operating Cash Flow	3.6	3.4	3.3	3.6	5.5	▲	55%	▲	53%
Earning before interest and tax	1.7	1.0	2.1	3.3	4.4	▲	35%	▲	155%
Net Profit	1.0	0.3	1.4	2.5	3.9	▲	55%	▲	277%
between 50 and 249 employees									
Total Income	108.5	70.3	60.1	70.2	98.0	▲	40%	▼	-10%
Total production costs	102.3	70.5	57.5	67.3	91.0	▲	35%	▼	-11%
Gross Value Added	20.9	7.0	10.8	12.2	19.0	▲	55%	▼	-9%
Operating Cash Flow	6.2	-0.1	2.7	2.9	7.0	▲	141%	▲	13%
Earning before interest and tax	2.6	-1.7	1.1	0.9	3.7	▲	290%	▲	40%
Net Profit	1.6	-2.3	0.3	0.2	2.7	▲	1060%	▲	74%
greater than or equal to 250 employees									
Total Income	78.4	49.2	63.5	81.6	95.3	▲	17%	▲	22%
Total production costs	65.5	46.1	62.1	83.7	84.3	▲	1%	▲	29%
Gross Value Added	24.3	9.1	11.4	11.4	26.0	▲	128%	▲	7%
Operating Cash Flow	12.9	3.1	1.5	-2.1	11.0	▲	621%	▼	-14%
Earning before interest and tax	10.3	1.4	0.2	-3.5	9.5	▲	370%	▼	-7%
Net Profit	10.1	0.9	-0.3	-4.0	8.9	▲	319%	▼	-12%

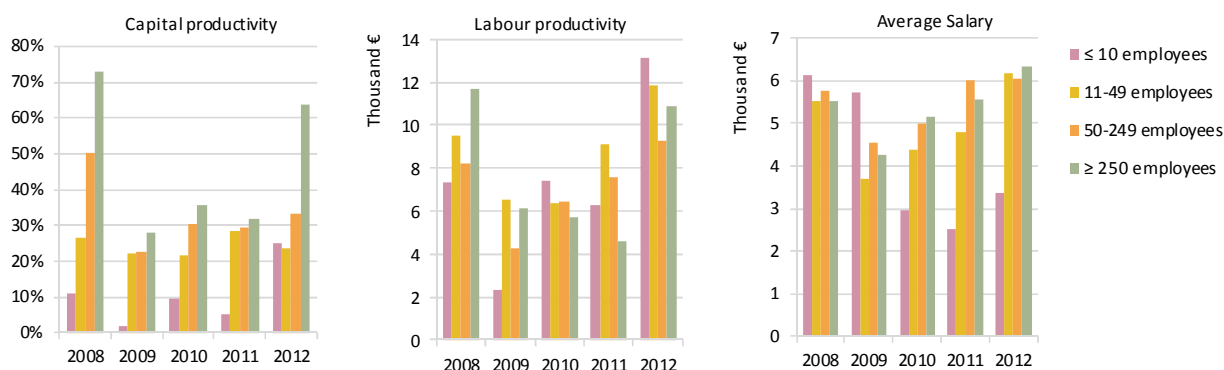


Figure 4.13.6: Latvian capital productivity, labour productivity and average salary trends, by size category, 2008-2012

4.13.4 Latvian seafood trade

Historically the Latvian fishers and fish processing companies produce more fish products than it is necessary to ensure the local market demand. Therefore fisheries can be considered as more export tended sector of economy and this is characterized by permanent positive external trade balance. External trade balance for fisheries products in 2012 was €30.1 million (Figure 4.13.7).

Latvian export in terms of value was €182.6 million, weighted 113.4 thousand tonnes, in 2012. The volume of total export was relatively stable and the value increase by 37% from 2008 to 2012. The most important trade partners for Latvian export in 2012 were Estonia, Russian Federation, Lithuania, France and Poland with the total exported volume 71.1 thousand tonnes and € 138 million (corresponding 63% and 78% from the total exported volume and value respectively) (Figure 4.13.8 and 4.13.9). The most exported product types by value were “Prepared or canned fish, caviar and caviar substitutes prepared from fish eggs” (KN 1604) with the value €83.5 million and “Fresh or chilled fish” (KN 0302) with €37.7 million (Figure 4.13.10 and 4.13.11). The largest export volume was 62.7 thousand tonnes for “Prepared or canned fish, caviar and caviar substitutes prepared from fish eggs” (KN 1604). The second export product type by volume was “Frozen whole salt water fish” (KN 0303) and its volume was 27.6 thousand tonnes.

The import of fish products comes from countries all over the world, such as EU countries, East Asia, USA, South America and Africa (Figure 4.13.8 and 4.13.9). The major Latvian suppliers in 2012 were Sweden, Poland, Lithuania, Estonia and Norway with the imported volume 41.8 thousand tonnes and €112 million (contributed by 72% from the total exported volume and corresponding 74% to total imported value). The most imported products by volume and value were “Fresh or chilled fish” (KN 0302) and “Frozen whole salt water fish” (KN 0303) (Figure 4.13.10 and 4.13.11). Theirs volume were 23.8 and 21.5 thousand tones and value €51.7, € 27.1 million respectively in 2012. The volume and value of total import has increased by 39% between 2008 and 2012. Salmon, herring, trout, mackerel, and sprat were the major species importer to the Latvian market. The second most important raw material and import products in terms of value are small pelagic species like herring, mackerels, sprat, sardine and etc. The proportion of raw material for further processing in the total amount of imported fish production is 70%. The main raw material is frozen herring and herring fillets, frozen sardinellas and sardines, salmon fillets and mackerel.

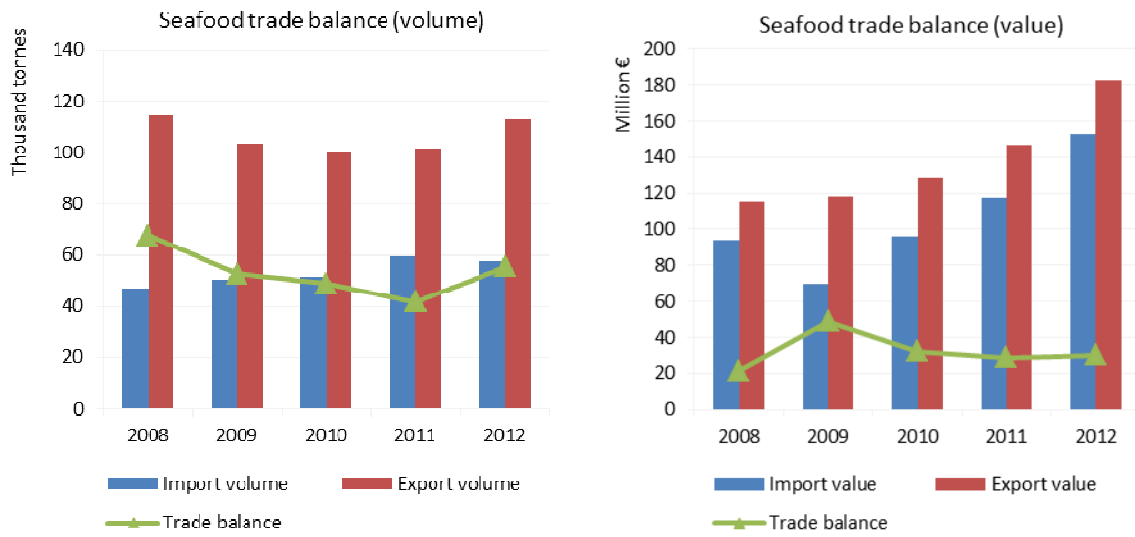


Figure 4.13.7: Latvian seafood trade balance trends in volume (left) and value (right)

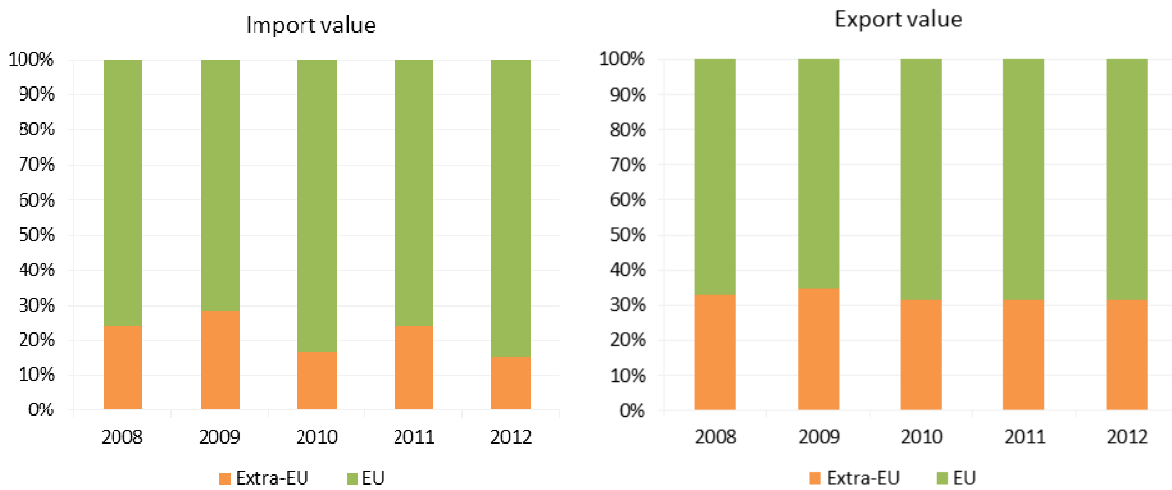


Figure 4.13.8: Latvian seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

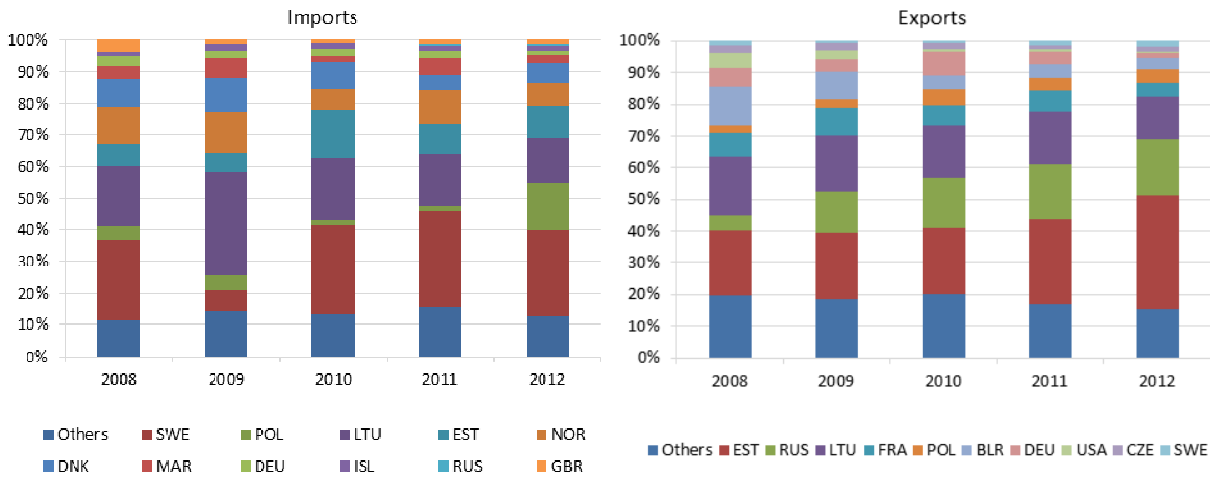


Figure 4.13.9: Latvian seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

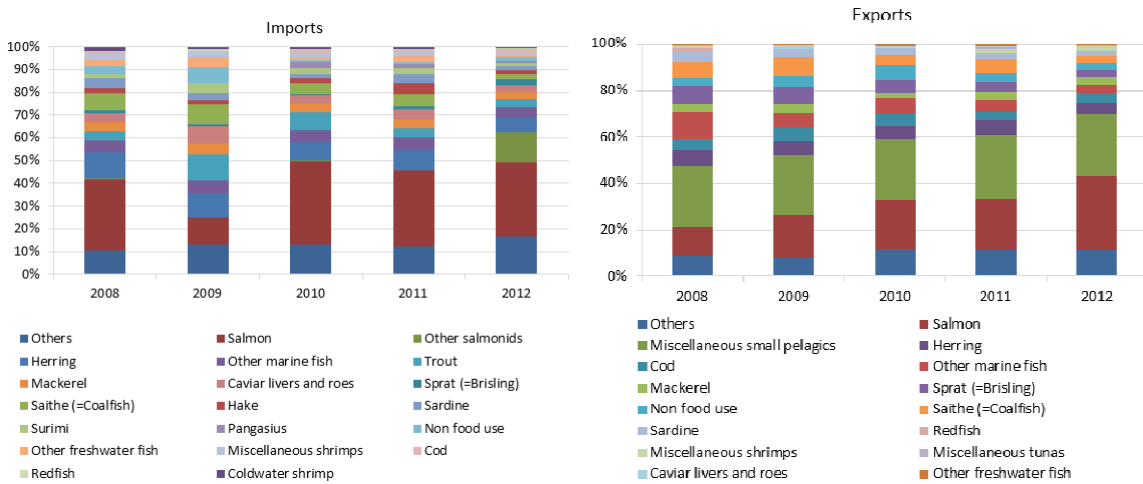


Figure 4.13.10: Latvian seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

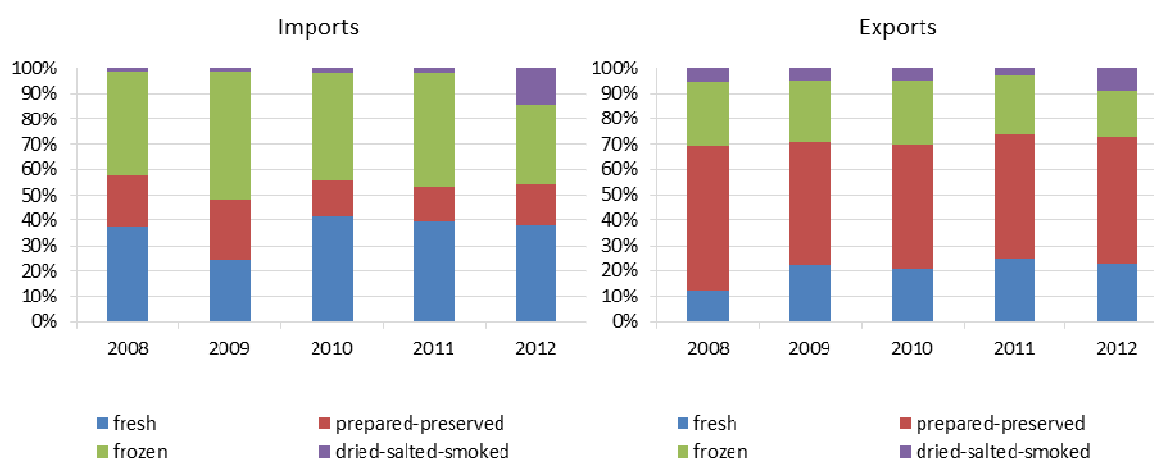


Figure 4.13.11: Latvian seafood imports (left) and exports (right) trends by type of products: shares in value

4.13.5 Trends and drivers for change

Despite of economic crisis several fish processing companies due to availability of the EFF, have benefited from the good investment possibilities that have been used for modernization and obtaining of new processing equipment to diversify products, improve quality of the production and increase productivity. But as it was stated before the problems with the raw material has arisen due to the quota reduction. Therefore fish processing companies has to look for raw material imports to ensure the demand for fish products. However it results in higher prices for the consumers. Another negative side effect is the export of frozen sprat, which also negatively influences the availability of raw materials for local processing of canned fish. Therefore Latvia faces the challenge how to motivate the producers for production of high value products in Latvia not to export the useful raw material abroad.

Latvian fish production is focused on quality and it has a high achievement at the international level. The fish products have high demand at the markets of neighbouring countries. The main sales regions are the Russian Federation, the former CIS countries and the European Union countries. This year in February, an international food exhibition "Prodexpo 2014", which was held in Moscow were invited 14 Latvian companies with their products. At this exhibition Latvian company "Ventspils zivju konservu kombināts" received a gold medal in the nomination The Best Product 2014 and a diploma for the product "Rīga sprats in oil – delicacy", as well as a gold star for the best innovative product "Rīga sprats in oil – delicacy".

Unfortunately on August 7, 2014 Russia imposed an embargo on the import of key food groups from the European Union in response to the sanctions that the United States and other Western countries have introduced against Moscow on the backdrop of the Ukrainian crisis. Russian embargo applies to beef, pork, fruits, vegetables, poultry, cheese, milk products and also fish and fish products, although the embargo list does not include sprat, canned meat and fish, as well as alcohol and ice cream.

The exported value of foodstuffs included in the Russian embargo list accounted for € 52.8 million in 2013, and reached € 38.5 million in the 1st half of 2014. However, the share of these products in the total Latvian export in the first six months of 2014 accounted for only 0.8%. In export to Russia the share of embargo products in the first half of 2014 reached 8.1%. In 2013, 37.9% of the total export to Russia was foodstuffs which are not subjected to embargo, 4.5% - foodstuffs that cannot be exported any more, and the remaining 57.6% were non-food products. Analyzing the products included in the embargo list, in 2013, 50.3% of export of this product

group to Russia was milk and dairy produce, 24.5% - other foodstuffs, 10.5% - sausages and similar products, 5.4% - raw fish, 4.2% - fruit and nuts, 3.1% - meat and meat offal, and 2% - vegetables.*

The embargo could have an influence to the Latvian fish processing sector and also reduce a total volume for exported production. However it will be possible to analyse sector profitability for all companies in the long term period when necessary economic data will be collected.

4.13.6 Data quality

Economic variables of processing industry are based on the information provided by Central Statistical Bureau of Latvia (CSB). CSB collects economic data basing on the questionnaires/statistical forms and administrative sources. Questionnaires/statistical forms are distributed by CSB to the owners of processing enterprises. All economic active enterprises are involved in the survey. The participation of the enterprises where are more than 10 employments is obligatory according to the Latvian national legislation. The data for small segment which have less than 10 employments were requested from Latvian Revenue Service.

* Latvian Central Statistical Bureau data

4.14 LITHUANIA

4.14.1 General overview of the Lithuanian fish processing industry sector

In 2012 Lithuanian fish processing industry consisted of 33 enterprises whose main activity was fish processing. For such part of industry, population changed insignificantly compare to 2011. Recent production trends of processed fishery products indicates that increasing supply comes from units where processing activity could be defined as secondary, mainly aquaculture and fishing enterprises which creates added value of production by processing activities. Vertical integration of fishery production, covering higher production value chain, and increasing value of produced raw material is one of trends of fishery sector developments, especially at small scale aquaculture enterprises, providing production for local regional market. In addition to that, a relatively significant part of processed production which is not covered by this analysis comes from enterprises which have main income from fish trade (resale) and secondary income, but still important in terms of value, from processing activities.

In 2012 the total income of Lithuanian processing industry, consisting of turnover from processing and other income, was €347.6 million with 10% annual increase. The higher total income was a result of increased in other income, whereas turnover from fish processing declined by 5%. This slight correction in turnover was expected as far as in long term run income from processing was continuously increasing for the almost constant population. For instance in five year period total income of Lithuanian processing industry increased by 56%.

Lithuanian processing industry is highly dependent from imported raw material. In 2012 imported raw material in terms of volume accounted for 97% of the total amount used in manufacturing process. The structure of production by type has remained almost constant from year to year with the majority of supply as surimi products (29%), following by smoked fish (20%) and canned production (11%). The significant part of production from processing industry also comes as frozen cod fillets, and prepared salted products from Atlantic herring, mostly salted fillets and in brine. For example, in 2012 industry produced 25.9 thousand tonnes of surimi products and 18.5 thousand tonnes of smoked fish production. Smoked fish and salted or in brine is mainly supplied in the internal market. According to 2012 data fish and fishery product consumption in Lithuania was 17.2 kg/capita. The major part of supply for consumption comes from processing industry.

During 2012 in terms of value, 71.4% of production was exported. Export market consisted from 97% of EU countries, 1.7% of CIS countries and 1.3% other countries. The main commodities for export were surimi, salted and smoked salmon production, prepared and preserved fishery products. The highest demand in the internal market consists of smoked and salted or in brine commodities. Products ready to eat, has a tendency to increase during recent period.

In 2012 Lithuanian fishery sector, processing industry employed 4.451 people, when fleet and aquaculture sectors provide 732 and 368 working places respectively. Furthermore, in terms value, generated of Lithuanian fisheries sector, consisting from income from fish processing industry, aquaculture and fisheries, processing industry generates almost 90% of sectors income, and if exclude long distance fisheries, number will reach almost 96%. Regarding the importance of this sector, in terms of generated added value to fishery production and employment it also received the highest proportion of funds from EFF during 2007-2013 period. According to data of National Paying Agency under the Ministry of Agriculture, around 35% of total used funds from EFF 2007-2013 program were appointed for action under measure 2.3 "Fish processing and marketing". Modernization of infrastructure and investments to marketing resulted in relatively good long term socioeconomic performance, increasing employment and competitiveness which led to gradually increase production value and successfully compete in the EU market during 2008-2012 period.

Table 4.14.1: Lithuanian fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	37	34	34	34	33	▼	-3%	▼ -11%
≤10 employees	12	10	13	12	11	▼	-8%	▼ -8%
11-49 employees	12	15	12	13	12	▼	-8%	▬ 0%
50-249 employees	6	4	4	4	5	▲	25%	▼ -17%
≥250 employees	7	5	5	5	5	▬	0%	▼ -29%
Employment (number)								
Total employees	5,013	4,489	4,351	4,445	4,451	▬	0%	▼ -11%
Male employees	1,583	1,298	1,435	1,555	1,477	▼	-5%	▼ -7%
Female employees	3,430	3,191	2,916	2,890	2,974	▲	3%	▼ -13%
FTE	2,912	2,949	3,053	3,614	3,536	▼	-2%	▲ 21%
Male FTE	845	794	1,004	1,534	1,189	▼	-22%	▲ 41%
Female FTE	2,067	2,155	2,049	2,080	2,346	▲	13%	▲ 14%
Indicators								
FTE per enterprise	78.7	86.7	89.8	106.3	107.1	▲	1%	▲ 36%
Average wage (thousand €)	7.9	10.1	8.9	8.0	8.5	▲	7%	▲ 8%
Labour productivity (thousand €)	24.7	22.9	23.9	24.2	17.3	▼	-28%	▼ -30%
Unpaid work (%)	0.0	0.0	0.0	0.0	0.0	▬	0%	▬ 0%

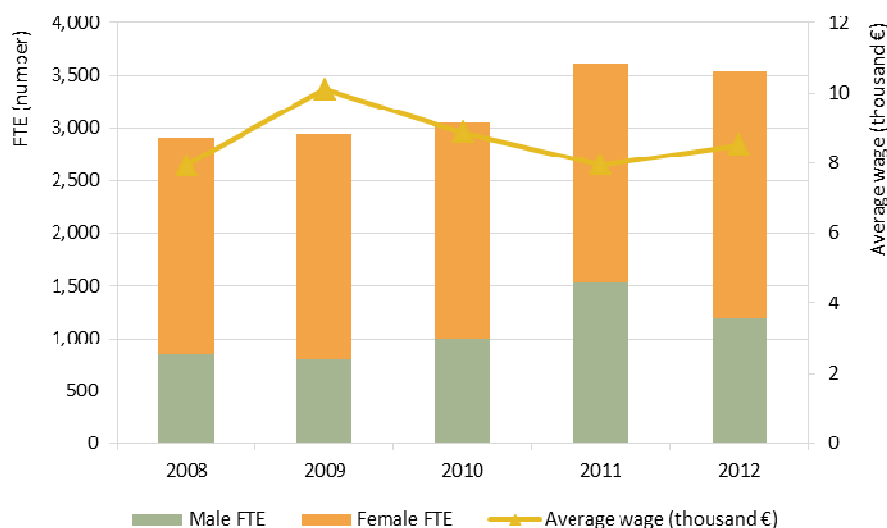


Figure 4.14.1: Lithuanian employment trends, 2008-2012

In 2012 Lithuanian processing industry employed 4.451 employees, by gender consisting from 67% of female and 33% of male corresponding to 2.974 and 1.477 employees respectively. The number of employed females in 2012 increased by 3% compare to 2011, whereas number of employed male decline by 5%. The domination of females in the processing industry manufacturing process was driven by relatively low level of salaries. In 2012 annual average wage increased by 7% to €8.5 thousand. Total FTE in Lithuanian fish processing industry was 3.536. In comparison to total employees, one working place provided around 0.8 FTE, this indicates that part time job in processing industry has not been very frequent.

4.14.2 Economic performance of the Lithuanian fish processing industry sector

The economic performance of the Lithuanian fish processing industry sector is further sustaining gradual increasing trend. Annual turnover from fish processing decreased by 5%, but significant growth of other income resulted in higher total income compare to 2011. In 2012 Total income from Lithuanian fish processing industry improved by 10%. Other income increased in the enterprises, performing resale of fishery products as secondary activity.

In 2012 estimated Gross Value Added (GVA) was €61.3 million and was 30% lower than in 2011 and 15% lower compare to 2008. The growth of GVA was negatively affected by significantly increase in prices of raw material and other operational costs, as for example logistics and transportation. The production cost structure remained almost unchanged compare to previous years. Taking into consideration the long term cost structure, share of purchase of raw material increased year by year and in 2012 reached 70% of total costs. It corresponded to the consistent rise of fish import price from 2008 to 2012. For example, import price for fish and fishery products increased by 32% from 2008 to 2012 and 1.2% during 2011 and 2012. Since the Lithuanian fish processing industry is highly dependent from imported raw material, which meanwhile contributes to the major part of cost structure, despite the demand driven increase in commodity price, fluctuation of currency rates also contributes to the cost formation. For instance, the main part of imported raw material is purchased from Sweden and Norway, currency rates with national currency constantly increased from 2010 to maximum in 2012, correlating with growth of raw material costs, whereas in 2013 rate sharply declined to the 2009 level and it could result in better outlook for costs of 2013 and 2014 production.

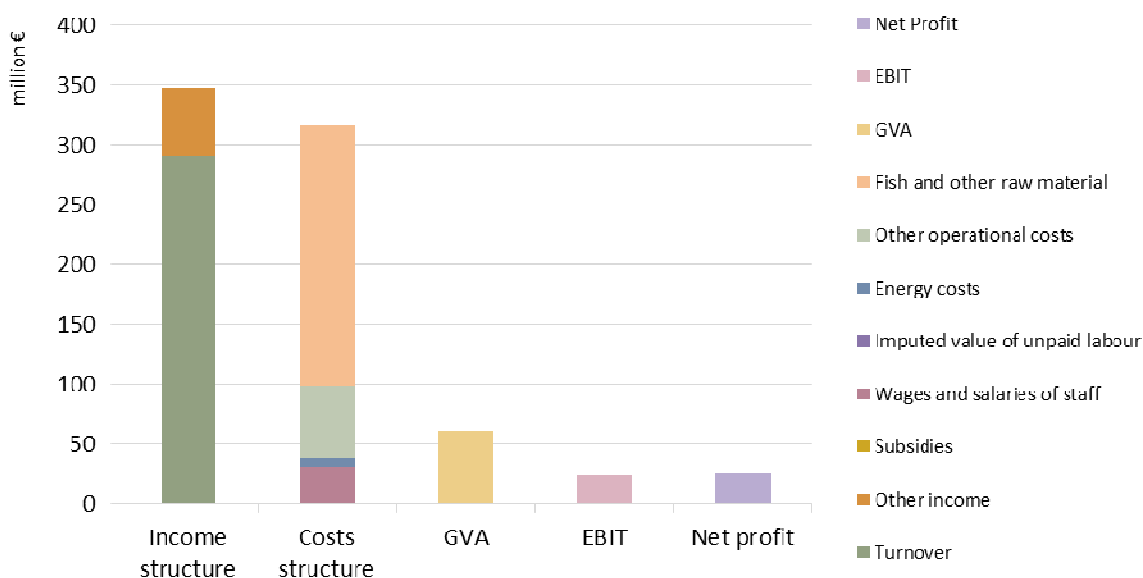


Figure 4.14.2: Economic performance of the Lithuanian fish processing industry sector, 2012

Table 4.14.2: Economic performance of the Lithuanian fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	194.9	231.0	283.5	305.1	290.8	▼ -5%	▲ 49%
Other income	28.2	26.3	14.6	9.8	56.8	▲ 480%	▲ 102%
Subsidies	0.0	0.0	0.0	0.0	0.0	▬ 0%	▬ 0%
Total Income	223.0	257.3	298.1	314.9	347.6	▲ 10%	▲ 56%
Expenditure (million €)							
Purchase of fish and other raw material for production	111.0	147.4	177.9	178.5	217.8	▲ 22%	▲ 96%
Wages and salaries of staff	23.1	29.8	27.1	28.7	30.1	▲ 5%	▲ 31%
Imputed value of unpaid labour	0.0	0.0	0.0	0.0	0.0	▬ 0%	▬ 0%
Energy costs	4.6	5.5	5.6	7.3	7.4	▲ 2%	▲ 60%
Other operational costs	35.6	36.9	41.5	41.6	61.1	▲ 47%	▲ 72%
Total production costs	174.3	219.6	252.2	256.1	316.4	▲ 24%	▲ 82%
Capital Costs (million €)							
Depreciation of capital	6.9	5.6	5.3	5.9	6.7	▲ 12%	▼ -3%
Financial costs, net	8.3	2.9	1.6	0.1	-1.0	▼ -1629%	▼ -113%
Extraordinary costs, net	0.0	0.0	0.0	0.0	0.0	▼ -76%	▬ 0%
Capital Value (million €)							
Total value of assets	159.2	115.5	151.2	174.3	186.2	▲ 7%	▲ 17%
Net Investments	23.6	9.2	9.4	9.9	9.1	▼ -9%	▼ -62%
Debt	107.6	95.3	85.7	93.6	112.9	▲ 21%	▲ 5%
Performance Indicators (million €)							
Gross Value Added	71.8	67.5	73.0	87.5	61.3	▼ -30%	▼ -15%
Operating Cash Flow	48.7	37.7	45.9	58.8	31.2	▼ -47%	▼ -36%
Earning before interest and tax	41.9	32.0	40.6	52.9	24.5	▼ -54%	▼ -41%
Net Profit	33.6	29.1	39.0	52.8	25.6	▼ -52%	▼ -24%
Capital productivity (%)	45.1	58.4	48.3	50.2	32.9		
Return on Investment (%)	26.3	27.7	26.8	30.3	13.2		
Financial Position (%)	67.6	82.5	56.7	53.7	60.6		
Future Expectation Indicator (%)	10.5	3.1	2.7	2.3	1.3		

The domestic supply of raw fish is mostly presented by Baltic cod and Baltic Herring caught from Baltic Sea, trout and African catfish from Recirculating aquaculture systems as well as carps and other fresh water species from pond aquaculture. But as was mentioned before, such species have insignificant part in total supply of raw material for large scale fish processing industry. However expanding vertical integration of aquaculture farms and development of small scale processing units will increase a demand for domestic fishery production, especially from aquaculture. The development of small processing units in aquaculture and fishing units could also bring a social benefit by employing more people, especially in rural areas.

Wages in processing industry had 9.5% of share in total production cost structure and compare to 2011 increased 5%. Despite the modest annual fluctuations, last three years wages amounted 9% from total income and for 2013 is forecasted to remain at the same level.

In 2012 the significant rise in other operational cost was observed. It has significant impact to profitability indicators. At national level transportation and logistics costs increased during 2012, it has an important role in formation of costs in processing industry. The costs related to increase in other income presumably also affected such rise in this cost item. In long term other operational costs have 14% of total income, when in 2012 it increased to 18%.

The decline of profitability in 2012 was expected when in 2011 enterprises achieved the record level profits. The industry generated €25.6 million net profit in 2012. The detailed development of Lithuanian fish processing sector profitability is shown in table 4.14.2.

Net investments were at the stable level since 2009 and fluctuated around €9.1 million. In 2012 net investments had a 3% of share in total income. Increased total value of assets with a constant amount of investments decreased future expectation indicator (FEI) in 2012. Constant decline of FEI was observed since 2008. Despite the decline in this ratio, amount of designated investments were sufficient to ensure successful market development from 2008 to 2012, including economic crisis period. The decrease in this ratio could be also explained as increased total assets are not used for investments, but rather kept as reserves for risk management in market fluctuations.



Figure 4.14.3: Income, costs, wages and labour productivity trends of the Lithuanian fish processing industry sector, 2008-2012

4.14.3 Overview of the Lithuanian fish processing industry sector by size categories

In terms of generated income, Lithuanian fish processing sector is mostly represented by large scale enterprises, employing more than 250 people. It contributes with 79% to total income, generated by sector. By number of enterprises, two sectors are equally dominated, 11-49 employees and 50-249 employees respectively. The smallest segment consisting from micro enterprises, mostly individual companies is characterized by processing its own produced or cached raw material and often is being excluded from main activity enterprise analysis as far as it receive a main income from selling fresh production.

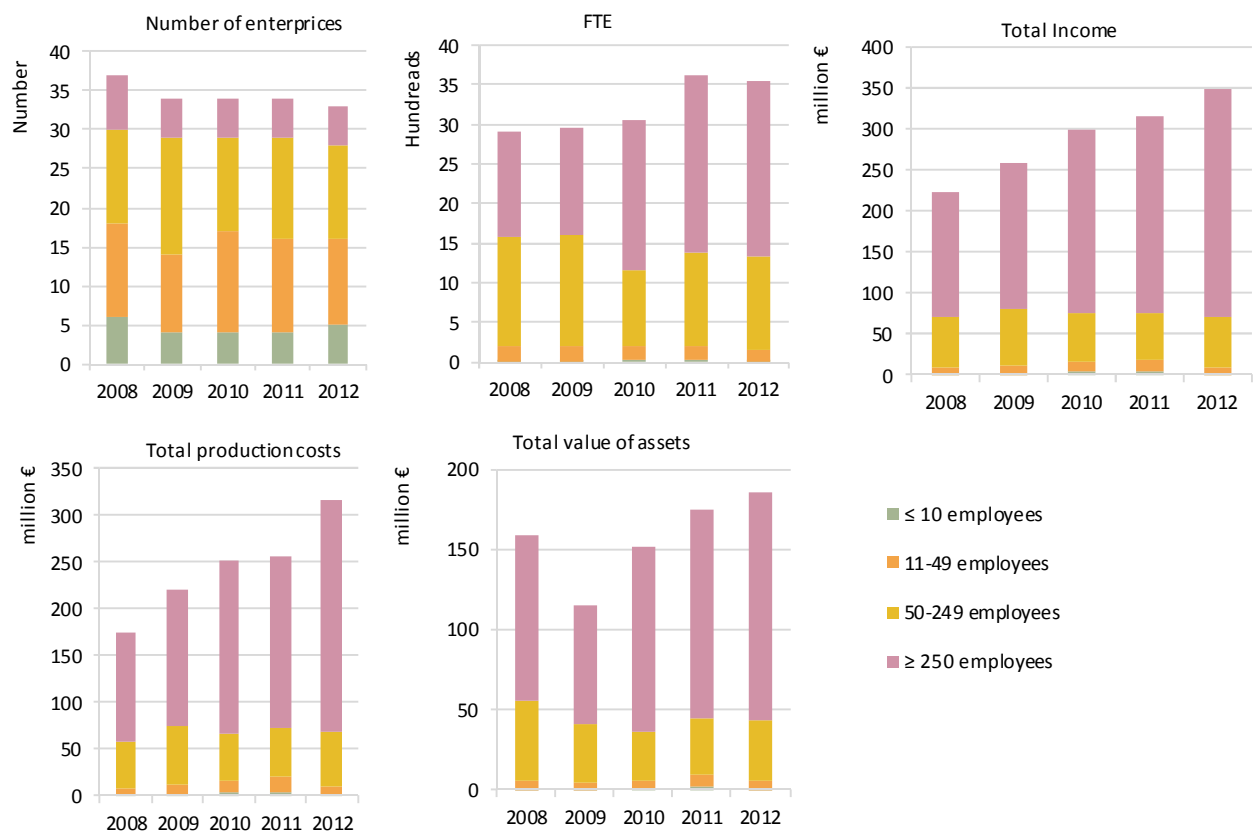


Figure 4.14.4: Lithuanian main structural and economic variables trends by size category, 2008-2012

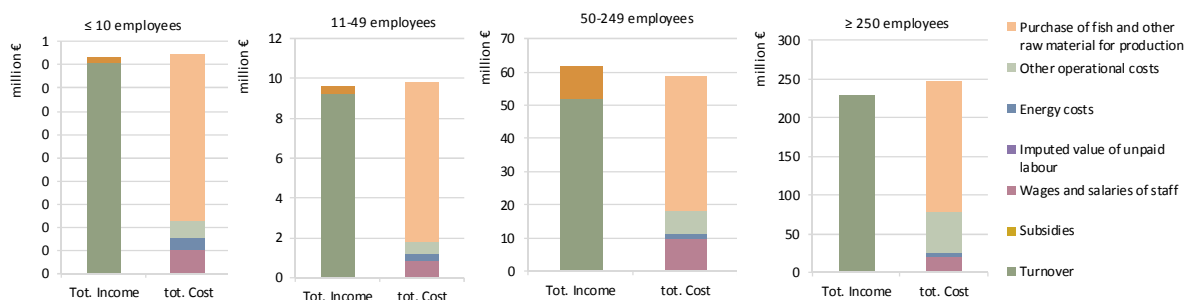


Figure 4.14.5: Lithuanian income and cost structure, by size category, 2012

As was mentioned before, the largest segment in terms of income (more than 250 employees) is consequently has the highest impact on economic performance at national level. In 2012 this segment gained €25.8 million net profit and €48.2 million GVA. From the rest of population, only segment with 11-49 employees obtained losses.

Table 4.14.3: Economic performance of the Lithuanian fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
less than or equal to 10 employees									
Total Income	0.3	0.4	4.2	3.4	0.5	▼	-86%	▲	39%
Total production costs	0.5	0.7	4.1	3.3	0.5	▼	-86%	▼	-14%
Gross Value Added	-0.1	-0.2	0.3	0.2	0.0	▼	-82%	▲	133%
Operating Cash Flow	-0.2	-0.3	0.1	0.1	0.0	▼	-108%	▲	97%
Earning before interest and tax	-0.2	-0.3	0.0	0.0	0.0	▼	-597%	▲	94%
Net Profit	-0.2	-0.3	0.0	0.0	0.0	▼	-131%	▲	94%
between 11 and 49 employees									
Total Income	9.2	10.8	11.7	14.6	9.6	▼	-34%	▲	4%
Total production costs	8.0	10.3	10.9	15.8	9.8	▼	-38%	▲	22%
Gross Value Added	2.0	1.6	1.7	0.4	0.7	▲	84%	▼	-68%
Operating Cash Flow	1.2	0.4	0.8	-1.2	-0.2	▲	82%	▼	-119%
Earning before interest and tax	0.9	0.2	0.5	-1.7	-0.5	▲	67%	▼	-159%
Net Profit	0.3	0.0	0.5	-1.7	-0.6	▲	66%	▼	-306%
between 50 and 249 employees									
Total Income	60.6	69.6	59.8	57.8	61.7	▲	7%	▲	2%
Total production costs	49.1	62.5	51.5	52.3	58.9	▲	12%	▲	20%
Gross Value Added	20.5	18.8	18.9	14.2	12.5	▼	-12%	▼	-39%
Operating Cash Flow	11.4	7.1	8.3	5.5	2.8	▼	-49%	▼	-75%
Earning before interest and tax	9.4	5.4	6.4	3.8	0.6	▼	-83%	▼	-93%
Net Profit	7.4	4.7	6.1	3.5	0.4	▼	-88%	▼	-94%
greater than or equal to 250 employees									
Total Income	152.9	176.5	222.4	239.1	275.9	▲	15%	▲	80%
Total production costs	116.6	146.1	185.7	184.7	247.3	▲	34%	▲	112%
Gross Value Added	49.4	47.2	52.1	72.8	48.2	▼	-34%	▼	-2%
Operating Cash Flow	36.4	30.4	36.7	54.4	28.6	▼	-47%	▼	-21%
Earning before interest and tax	31.8	26.6	33.6	50.7	24.4	▼	-52%	▼	-23%
Net Profit	26.1	24.6	32.4	51.0	25.8	▼	-50%	▼	-1%

In 2012 the average salary was not strongly depended from the segment size, for instance three from four segments had the average salary from 7.0 to €8.5 thousand per year, but labour productivity was considerably higher in large scale processing industry with more than 250 employees.

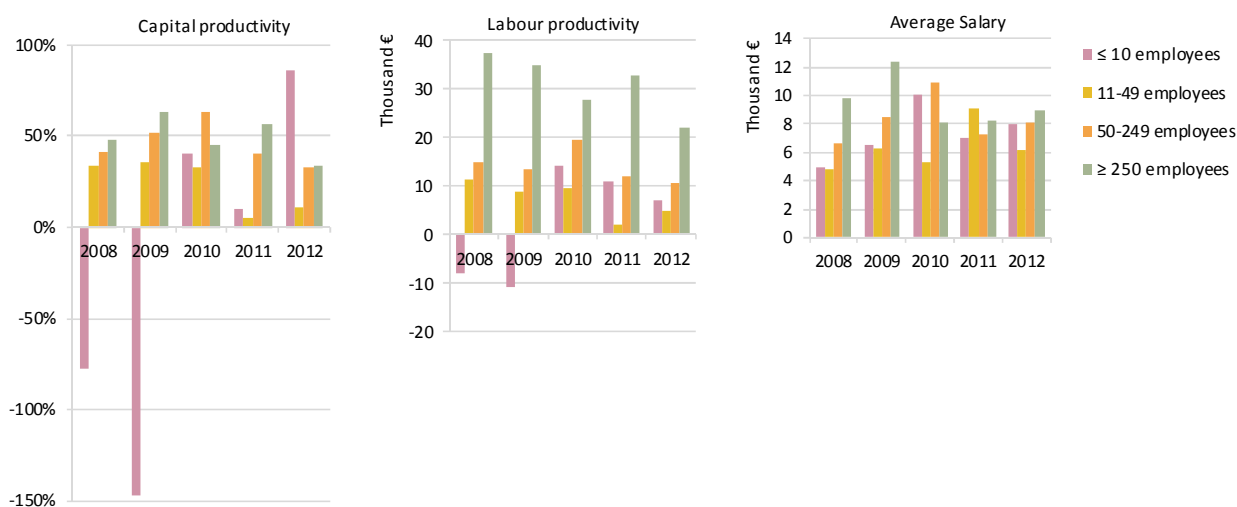


Figure 4.14.6: Lithuanian capital productivity, labour productivity and average salary trends, by size category, 2008-2012

4.14.4 Lithuanian seafood trade

In 2012, Lithuanian fish processing industry imported 67.4 thousand tonnes of seafood as raw material for processing. The total volume of imports was 105.6 thousand tonnes. Almost 40% of imported commodities was from extra-EU countries with the highest volume from Norway and less amount from Iceland and China. The production from imported material is exported mainly to EU countries (Figure 4.14.8). The major trade partners for export, including resale were Germany and Belgium with dried-salted-smoked salmon production, surimi products to France and prepared or preserved fish products to Latvia.

The trade balance for Lithuanian fishery products was positive from 2008 to 2011, when in 2012 it turned to negative. Considering only fishery production for human consumption (03, 1604 and 1605 code) and excluding fish oils for feed production, trade balance remains positive.

Regarding the export development by type of commodities in 2008-2010 it was clearly dominated by prepared and preserved fish, whereas from 2011 more variety of production took a significant part of export market. For example dried-salted-smoked products, mainly from salmonids were constantly increasing and in 2011 reached almost 35% of export value compare to 4% in 2008. It is notable that these products took a market share from prepared and preserved products. Quite stable market share was for frozen and fresh fishery products. It is important to mention that increasing imports of dried-salted-smoked products indicates that the supply for export was also contributed from resale instead of processing from frozen or fresh raw material.

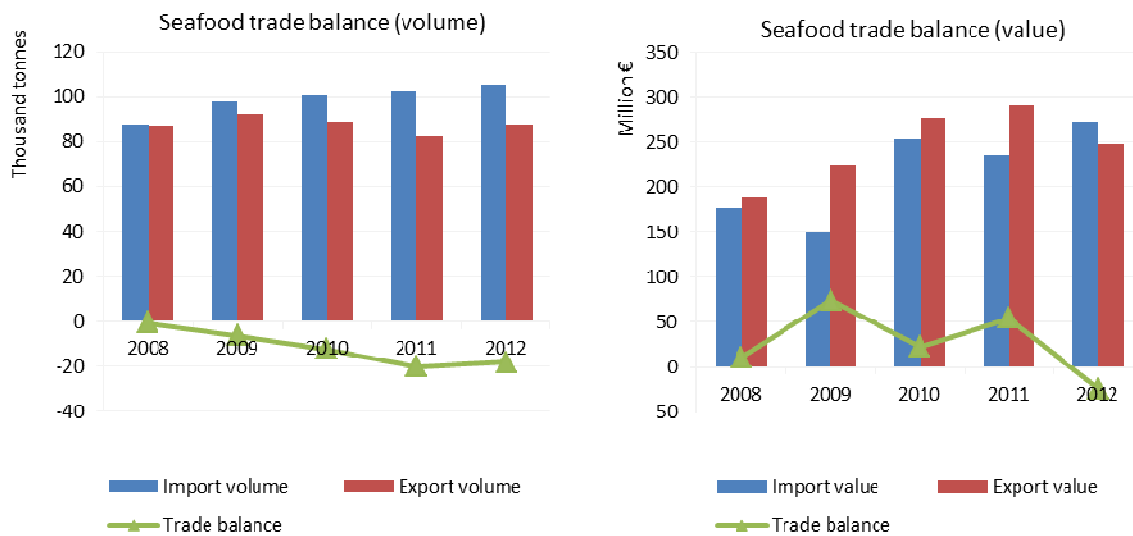


Figure 4.14.7: Lithuanian seafood trade balance trends in volume (left) and value (right)

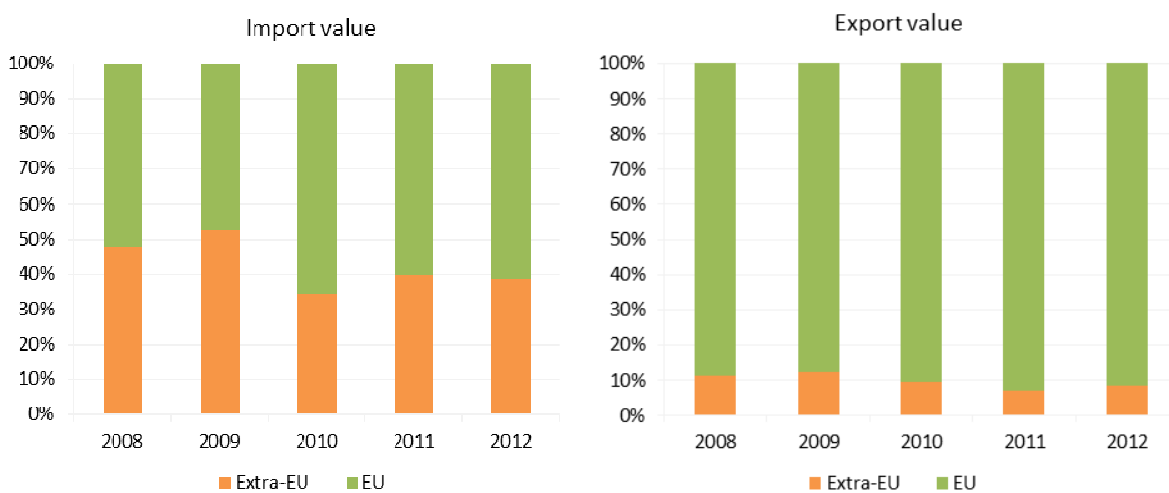


Figure 4.14.8: Lithuanian seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

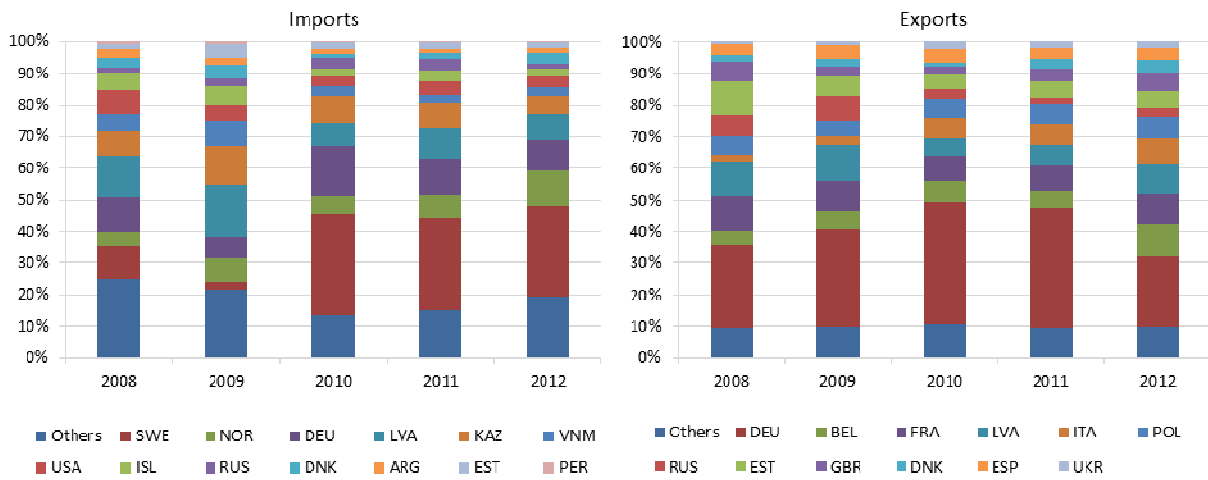


Figure 4.14.9: Lithuanian seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

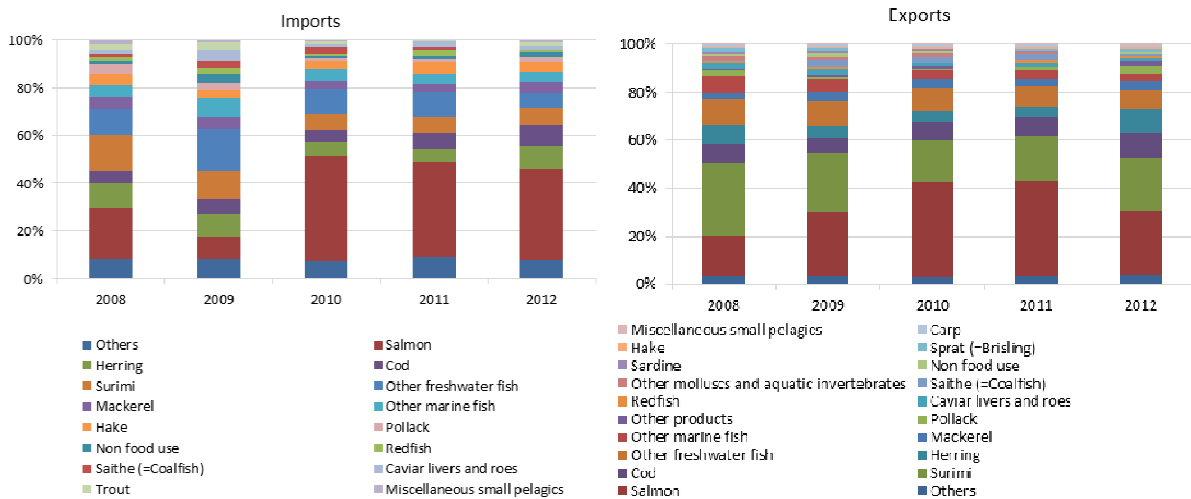


Figure 4.14.10: Lithuanian seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

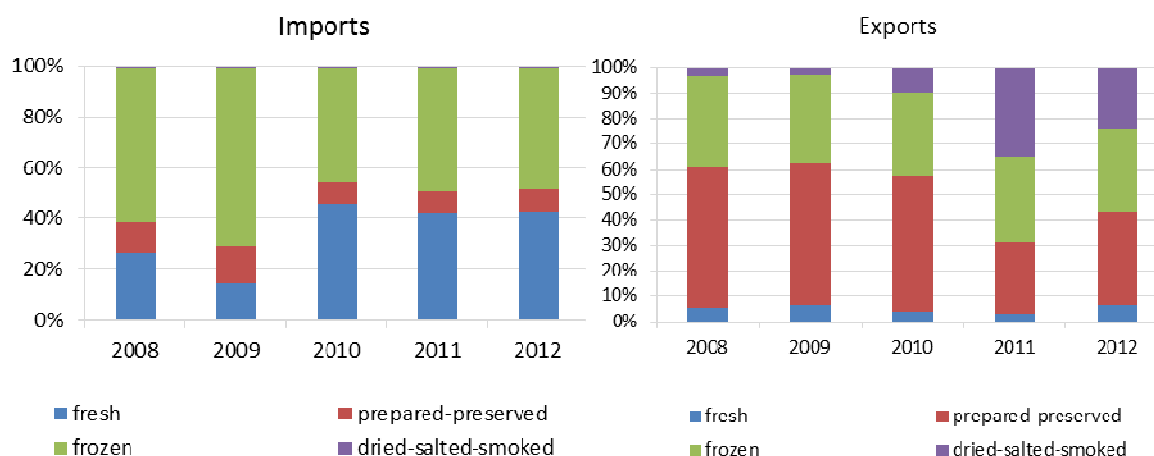


Figure 4.14.11: Lithuanian seafood imports (left) and exports (right) trends by type of products: shares in value

4.14.5 Trends and drivers for change

The main driver for processing industry economic performance and profitability indicators is raw material prices and at the same time the significant part of production costs. At the large scale of Lithuanian processing industry this cost item is depending on the market prices for the main species as Atlantic salmon, Atlantic herring and mackerels which are dependent from aquaculture production demand, natural resources as well as currency exchange rate for the trade partners. For instance a drop in the Norwegian or Swedish national currency in relation to €, will supply relatively cheaper material. This could be illustrated by an example when growing demand of aquaculture production thus increase in prices together with higher exchange rates in 2010-2012 considerably increased costs of raw material. The currency rate for 2013-2014 is very favourable for Lithuanian processing industry, and it will depend only from demand driven price of producers. Transport and logistics prices which had a tendency to increase also influence production price. The drop of energy price in 2014 will be expected to slightly decrease production costs.

Investment subsidies from EMFF funds for processing of own produced aquaculture production with the aim to bring added value to aquaculture and fishing sectors, is currently very important development trend in Lithuania. Fresh water aquaculture enterprises started to develop processing units at the enterprise level and began to supply first quantities of processed production to the local markets and exports at small level. Main species were carp, rainbow trout and sturgeons. Another recent trend is development of new RAS complexes with processing facilities as well as retail trade including local restaurants covering the full production chain. Target species are African catfish and rainbow trout. For reduction of energy costs, which is important cost item in raw material production, RAS developers, invested in renewable energy sources.

One of the long term development drivers for improved economic performance and profitability was gradual export expansion to EU market, instead of choosing CIS countries, which in terms of profitability is more advanced but trade risk is considerably higher.

Increasing fish consumption in Lithuania in relation to improved marketing measures and better consumer opinion formation as well as increased household income could be an important factor positively affecting processing industry which is orientated to the internal market. As a matter of fact and last trends, small processing enterprises with high vertical integration would be one of the beneficiaries.

Implication of EMFF funds to marketing and development of production facilities had an increased competitiveness and consequently increasing production volume and value with a competitive price in EU market.

4.15 MALTA

4.15.1 General overview of the Maltese fish processing industry sector

While during 2008 and 2009, the number of enterprises in the Maltese fish processing industry amounted to 7 and 10 respectively and during 2010 and 2011, the number of enterprises remained stable with 8 enterprises in the industry, it has decreased to 6 enterprises in the year 2012. This has been the year with the least number of enterprises in the sector in a period of 5 years (2008 to 2012). Such decrease can also be reflected in total turnover of the processing sector. For 2012, the total turnover amounted to €29.6 million, a 21.5% decrease from 2011's €37.7 million turnover while turnover for 2012 has increased from 2010 by 28.5%. It should be emphasized that 67% of the enterprises in Malta's fish processing industry belong to the smallest enterprise segment (≤ 10 employees).

Despite the fact that a subsidy scheme was available for enterprises in the Maltese fish processing industry, the subsidy income has always been reported as zero since 2008.

The year 2012, compared to 2011, demonstrated a significant increase of 89% in FTE employees in the processing sector that mainly concerned new male employees (160% increase of FTE male employees, 7% of FTE male employees). Since the number of companies in the industry has decreased during the 2012, then this shows that new employees were hired by the processing enterprises. Although, the total turnover has decreased in 2012, such enterprises have invested €7 million in their processing business. This shows that such enterprises are forecasting that more future economic benefits will flow into the enterprises within the processing sector and hence this could be one of the reasons of such an increase in FTE employees.

Although in 2011, there were no indication of unpaid labour within the industry, in 2012, €37.5 thousand were reported as imputed value of unpaid labour. This also reflects an increase in number of workers within the processing industry. The main reason could be the intensive investment of new equipment by the enterprises.

An interesting fact is that for the period 2008 to 2012, employment per enterprise has increased by 55% while the average wage has decreased by 56%. However between 2011 and 2012 such trend has improved since employment per enterprise has increased by 152% while the average wage has decreased by 9% only.

Table 4.15.1: Maltese fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Structure (number)							
Total enterprises	7	10	8	8	6	▼ -25%	▼ -14%
≤10 employees	6	5	8	8	4	▼ -50%	▼ -33%
11-49 employees	1	5	0	0	2	▲ 0%	▲ 100%
50-249 employees	0	0	0	0	0	▲ 0%	▲ 0%
≥250 employees	0	0	0	0	0	▲ 0%	▲ 0%
Employment (number)							
Total employees	56	131	19	32	56	▲ 75%	▲ 0%
Male employees	53	118	13	16	41	▲ 156%	▼ -23%
Female employees	3	13	6	16	15	▼ -6%	▲ 400%
FTE	40	116	15	28	53	▲ 89%	▲ 33%
Male FTE	36	102	12	15	39	▲ 160%	▲ 8%
Female FTE	4	14	3	13	14	▲ 8%	▲ 250%
Indicators							
FTE per enterprise	5.7	11.6	1.9	3.5	8.8	▲ 152%	▲ 55%
Average wage (thousand €)	33.2	20.1	18.7	16.2	14.7	▼ -9%	▼ -56%
Labour productivity (thousand €)	160.3	-120.8	1,461.9	154.8	172.8	▲ 12%	▲ 8%
Unpaid work (%)	9.5	11.9	19.8	0.0	4.8	▲ 0%	▼ -50%

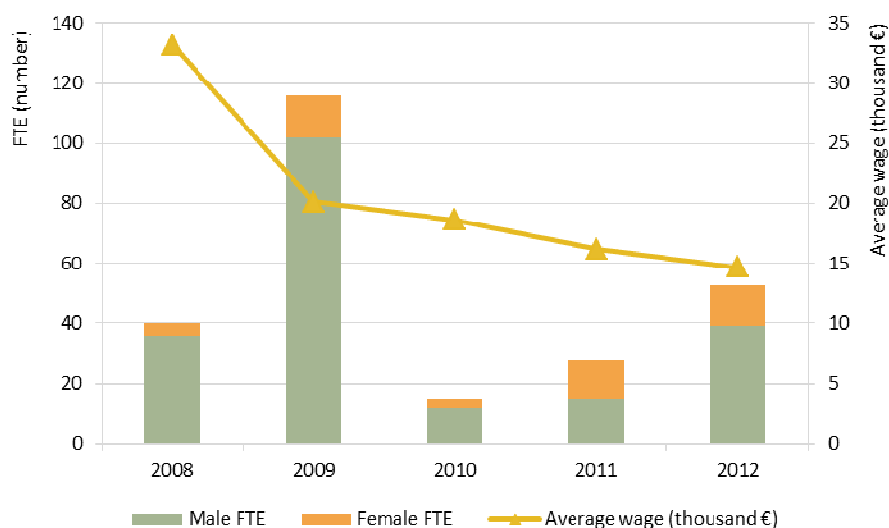


Figure 4.15.1: Maltese employment trends, 2008-2012

4.15.2 Economic performance of the Maltese fish processing industry sector

Given the fact that the number of enterprises in Malta’s fish processing industry has decreased by 25% from 2011 to 2012, the total turnover for 2012 (€29.6 million) has also decreased by 22% when comparing it to 2011 (€37.6 million). This shows that the trend in turnover remained the same.

Despite the fact that the total turnover for 2012 has decreased by 22%, the enterprises managed to increase their net profits by 158% from 2011. Similar increase can also be reflected in gross value added (111%), operating cash flow (116%) and earnings before interest and tax (141%). This positive economic performance of the Maltese fish processing industry was mainly derived out of the intensive net investment (€7 million) contributed by the enterprises in this industry during 2012. Such investment led the result of cost effectiveness. Total value of assets has increased by 50% while debt has also increased by 51% when comparing it to 2011.

The 2012 performance indicators also show a positive economic performance in the Maltese fish processing industry sector. Such performance indicators demonstrate 118.9% capital productivity, 105.3% return of investment, 74% financial position and 106.3% future expectation indicator.

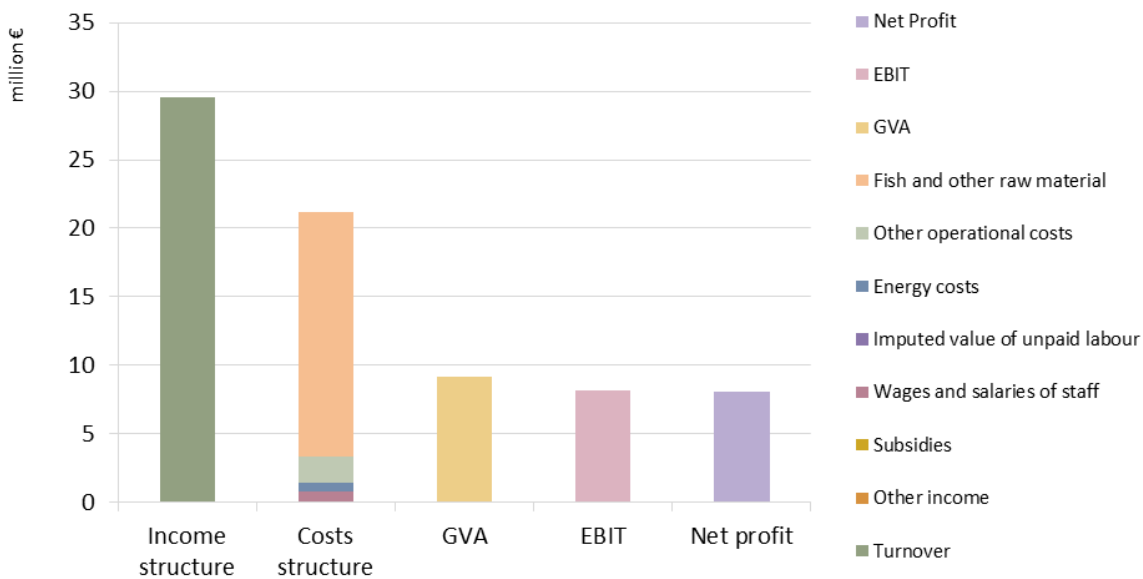


Figure 4.15.2: Economic performance of the Maltese fish processing industry sector, 2012

Table 4.15.2: Economic performance of the Maltese fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	37.0	37.4	23.0	37.7	29.6	▼ -22%	▼ -20%
Other income	0.0	0.0	0.0	0.0	0.0	▬ 0%	▬ 0%
Subsidies	0.0	0.0	0.0	0.0	0.0	▬ 0%	▼ -100%
Total Income	37.0	37.4	23.0	37.7	29.6	▼ -22%	▼ -20%
Expenditure (million €)							
Purchase of fish and other raw material for production	21.8	39.4	0.0	31.7	17.9	▼ -44%	▼ -18%
Wages and salaries of staff	1.2	2.1	0.2	0.5	0.7	▲ 64%	▼ -38%
Imputed value of unpaid labour	0.1	0.3	0.1	0.0	0.0	▬ 0%	▼ -70%
Energy costs	0.3	0.4	0.3	0.6	0.6	▲ 6%	▲ 102%
Other operational costs	8.5	11.6	0.7	1.0	1.9	▲ 83%	▼ -78%
Total production costs	31.9	53.8	1.4	33.8	21.2	▼ -37%	▼ -34%
Capital Costs (million €)							
Depreciation of capital	1.8	3.8	0.5	0.5	0.3	▼ -49%	▼ -85%
Financial costs, net	0.9	1.5	0.1	0.3	0.1	▼ -62%	▼ -89%
Extraordinary costs, net	0.1	0.2	0.0	0.4	6.3	▲ 1514%	▲ 7082%
Capital Value (million €)							
Total value of assets	8.6	14.0	2.7	5.1	7.7	▲ 51%	▼ -11%
Net Investments	1.3	0.3	1.3	1.4	8.5	▲ 489%	▲ 546%
Debt	17.9	31.3	2.3	3.8	5.7	▲ 50%	▼ -68%
Performance Indicators (million €)							
Gross Value Added	6.4	-14.0	21.9	4.3	9.2	▲ 111%	▲ 43%
Operating Cash Flow	5.1	-16.3	21.6	3.9	8.4	▲ 116%	▲ 64%
Earning before interest and tax	3.3	-20.1	21.2	3.4	8.1	▲ 141%	▲ 145%
Net Profit	2.4	-21.6	21.0	3.1	8.0	▲ 158%	▲ 235%
Capital productivity (%)	74.5	-100.1	817.6	85.0	118.9		
Return on Investment (%)	38.5	-143.7	789.1	66.0	105.3		
Financial Position (%)	207.5	223.4	86.1	74.4	74.0		
Future Expectation Indicator (%)	-5.8	-25.1	30.4	18.0	106.3		



Figure 4.15.3: Income, costs, wages and labour productivity trends of the Maltese fish processing industry sector, 2008-2012

4.15.3 Overview of the Maltese fish processing industry sector by size categories

During 2012, 4 enterprises were categorised under segment 1 (enterprises employing less than 10 employees) while the other 2 enterprises were categorised under segment 2 (enterprises employing between 11 and 49 employees). In 2010 and 2011 all enterprises in the Maltese fish processing industry sector were categorised under segment 1. Since 2008, none of the enterprises in the Maltese fish processing industry sector has employed more than 49 employees.

During 2012, 73% of the total turnover (€21.5 million) was achieved by segment 1 while only 27% (€8 million) was achieved by segment 2. This is due to the fact that 67% of the enterprises in the Maltese fish processing industry sector are categorised under segment 1. In 2010 and 2011 the whole turnover was categorised under segment 1 with €23 million and €37.7 million, respectively.

Despite the fact that the enterprises in segment 1 has decreased from 8 to 4 enterprises from 2011 to 2012, the FTE employees in segment 1 of the Maltese fish processing industry sector has increased from 28 to 36 FTE employees from 2011 to 2012. The main increase is due to an increase of 73% in the male employees. FTE employees under segment 2 were reported to be 17 in 2012.

Although in 2011, there were no indication of unpaid labour within the industry, in 2012, 23% of the total imputed value of unpaid labour were categorised under segment 1 while 77% under segment 2. This implies that under segment 2, more unpaid labour hours are being invested in the industry and hiring fewer employees while under segment 1, more employees are hired and less unpaid labour hours are being invested. The former could be a strategy to attract higher net profits.

Even though, in segment 1, there was a decrease in total turnover of 43% from 2011 to 2012, the economic performance of this segment is positive. This is due to the fact that gross value added has improved by 51% over 2011, operating cash flow has improved by 54%, earnings before interest and tax has improved by 70% and net

profit has improved by 82% over 2011. In 2012, the high increase in net profit has resulted from a reduction of 54% in production costs. For the years 2008 to 2012, the trend also shows a positive increase in the economic performance of the Maltese fish processing industry under segment 1.

The same trend is being reflected in segment 2. Between 2008 and 2012, segment 2 reports an increase in gross value added of 151%, operating cash flow has improved by 564%, earnings before interest and tax has improved by 324% and net profit has improved by 226%.

In a nut shell, the economic performance of the Maltese fish processing industry sector is improving under both segments.

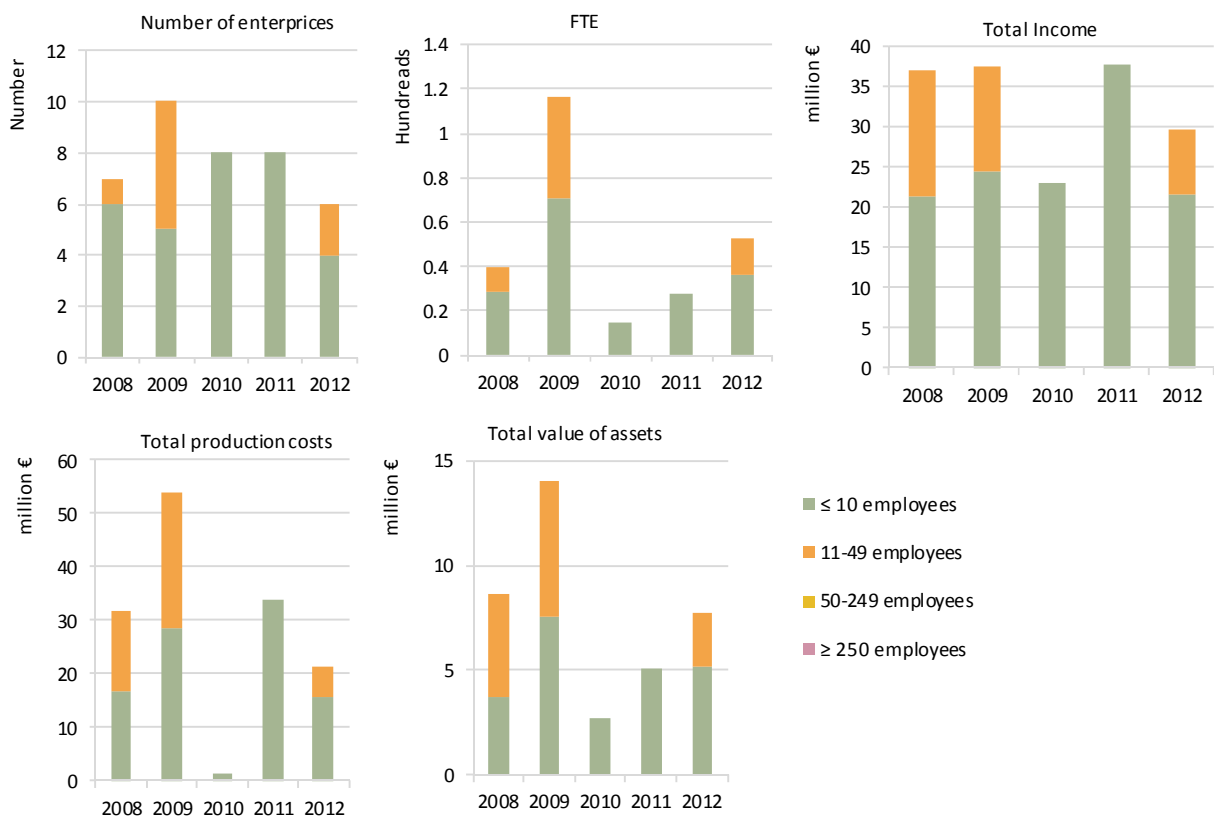


Figure 4.15.4: Maltese main structural and economic variables trends by size category, 2008-2012

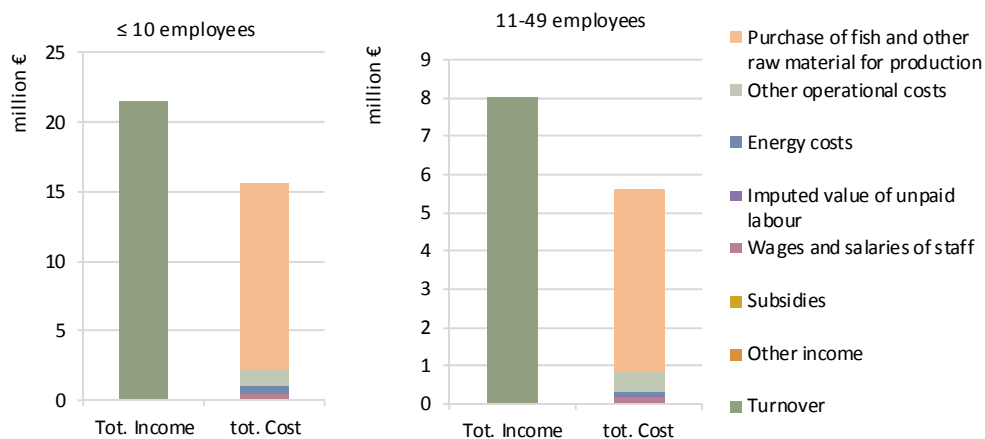


Figure 4.15.5: Maltese income and cost structure, by size category, 2012

Table 4.15.3: Economic performance of the Maltese fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)	
less than or equal to 10 employees									
Total Income	21.4	24.4	23.0	37.7	21.5	▼	-43%	▲	1%
Total production costs	16.6	28.5	1.4	33.8	15.6	▼	-54%	▼	-6%
Gross Value Added	5.4	-2.9	21.9	4.3	6.5	▲	51%	▲	22%
Operating Cash Flow	4.8	-4.2	21.6	3.9	6.0	▲	54%	▲	26%
Earning before interest and tax	4.4	-5.5	21.2	3.4	5.7	▲	70%	▲	31%
Net Profit	4.3	-6.1	21.0	3.1	5.7	▲	82%	▲	33%
between 11 and 49 employees									
Total Income	15.6	13.1			8.0	▼	-49%		
Total production costs	15.3	25.2			5.6	▼	-63%		
Gross Value Added	1.0	-11.1			2.6	▲	151%		
Operating Cash Flow	0.4	-12.2			2.4	▲	564%		
Earning before interest and tax	-1.1	-14.6			2.4	▲	324%		
Net Profit	-1.9	-15.6			2.4	▲	226%		

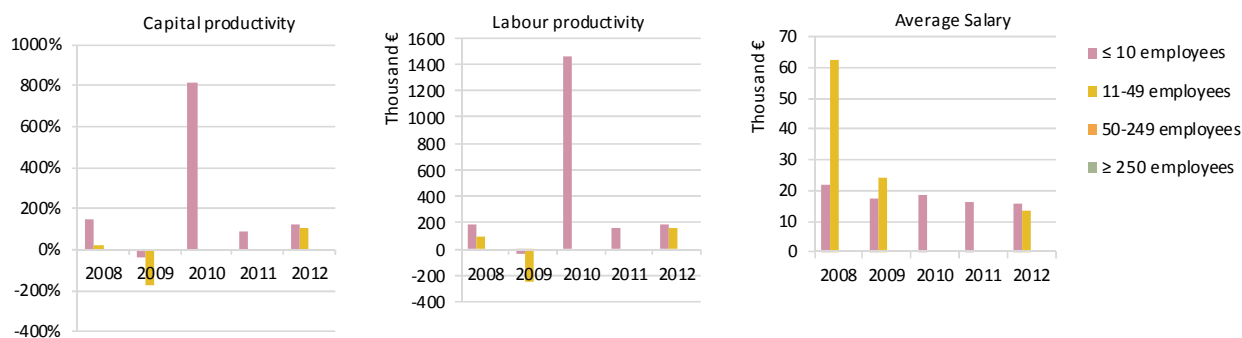


Figure 4.15.6: Maltese capital productivity, labour productivity and average salary trends, by size category, 2008-2012

4.15.4 Maltese seafood trade

Generally most bluefin tuna and swordfish caught by Maltese long-liners are exported to foreign markets. Most seafood processed by Maltese fish processing enterprises are either purchased locally as fresh or imported from other countries. The seabass and gilthead seabream are exported whole mainly to central and north Italy. The bluefin tuna are exported fresh or frozen to Asian markets, mainly Japan.

During 2012, €54.7 million of seafood was exported to EU Member States and to Extra-EU countries. This shows an increase of 8% over the year 2011 for which the export sales of seafood amounted €50.7 million. Between 2008 and 2012, the year 2008 was the year in which the highest value of seafood was exported to other EU Member States and to Extra-EU countries (€88.3 million).

During 2012, €40.7 million of seafood were imported to Malta. This shows an increase of 185% over 2011 for which the import value of seafood amounted to €14.3 million. In 2009 and 2010 the import value of seafood amounted to €18.8 million and €14.4 million respectively. Malta had a decrease in importation of seafood between 2009 and 2011 but during 2012, it had increased such importation as much as it was imported in 2008. The year 2012 is the second best year of importation after 2008.

Although the exportation of seafood has always been higher than the importation of seafood (with the exception of 2009), Malta had the highest trade balance in 2010 and since then it had experienced a drop in such balance. This is due to the higher demands for fish products from the tourist industry.

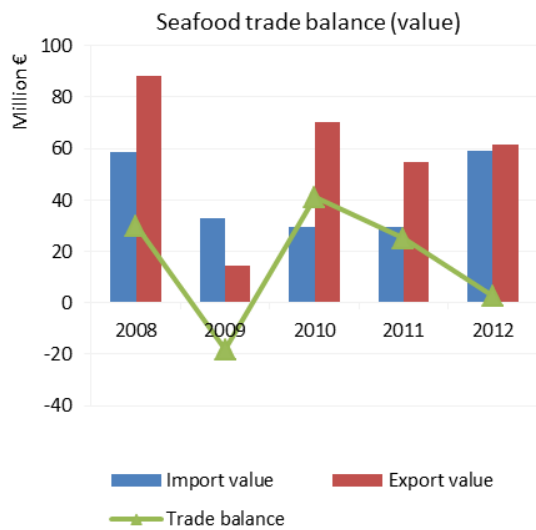


Figure 4.15.7: Maltese seafood trade balance trends in value

Since 2008, Malta has been exporting a high majority of the seafood to Extra-EU countries. In 2012, 15% of the exportation was delivered to other member states while 85% were exported to countries outside the European Union. Malta has exported most of the seafood to Japan and Italy.

The majority of the importation of the seafood to Malta is imported from other EU Member States. In 2012, 75% of the importation of seafood was imported from other EU Member States. In the last few years, Malta has been importing such seafood mainly from Italy and Spain. The trend towards such importation from these two countries has been increasing over time.

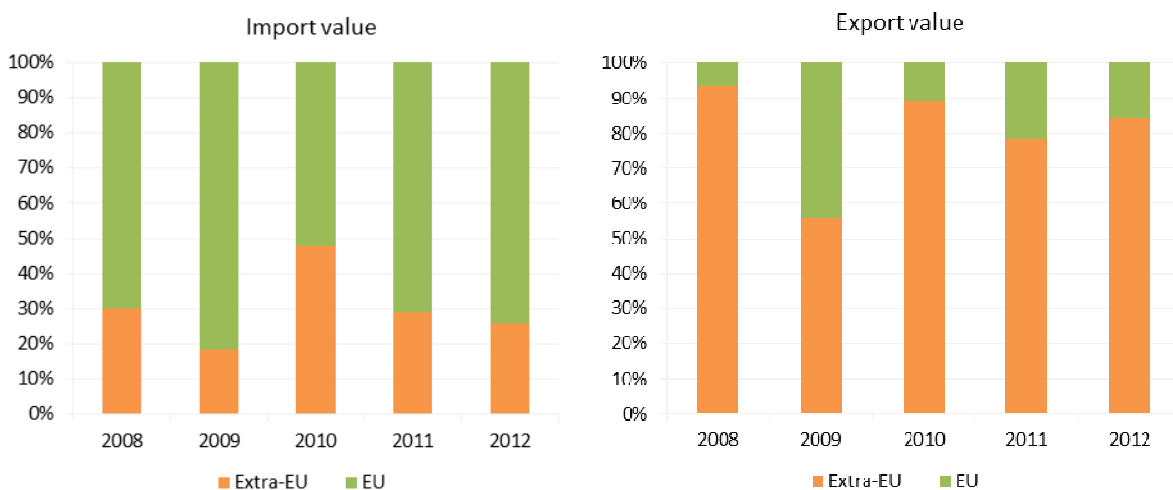


Figure 4.15.8: Maltese seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

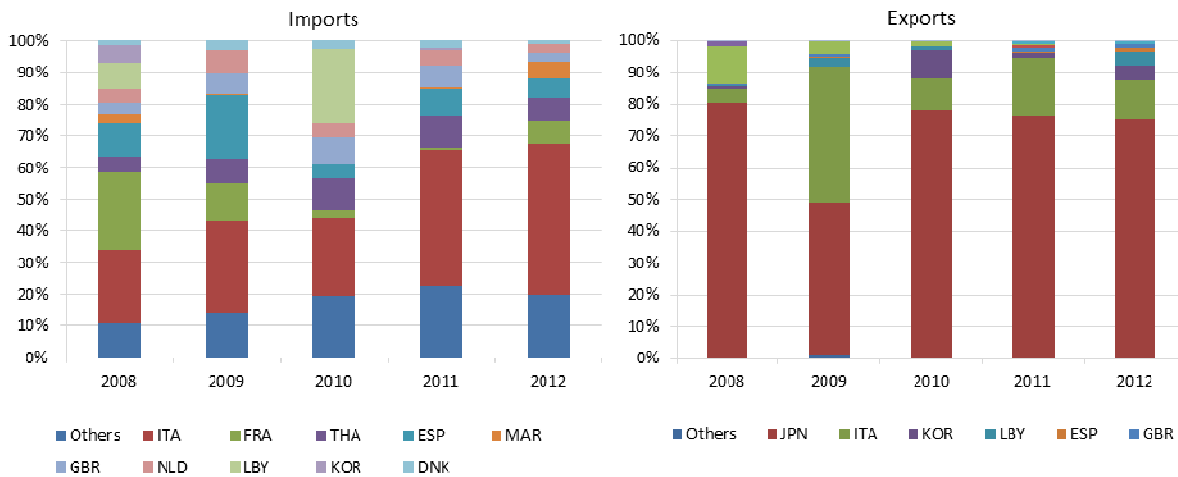


Figure 4.15.9: Maltese seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

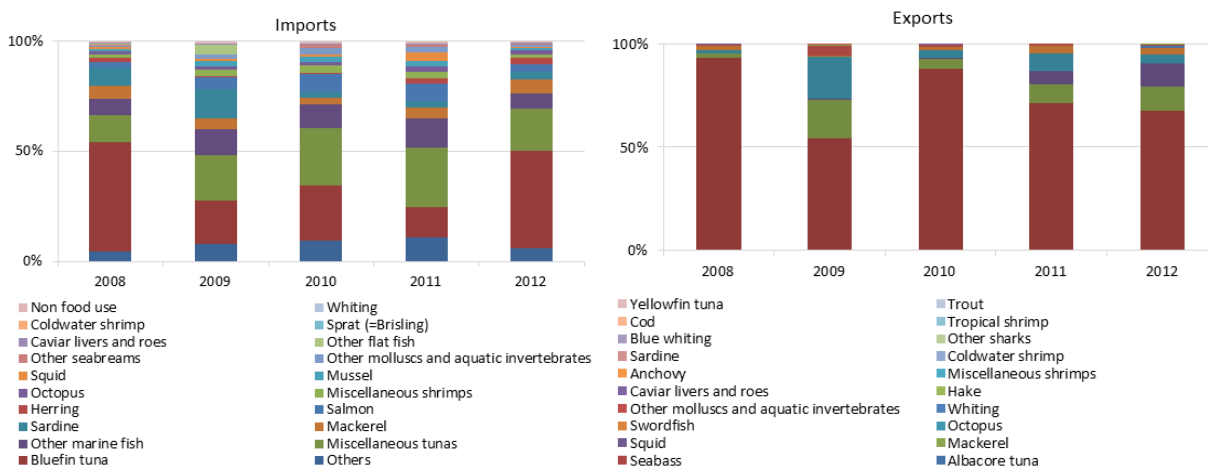


Figure 4.15.10: Maltese seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

In 2012, 80% of Maltese exportation was exported as frozed seafood, 19% was exported as fresh food while 1% was exported as prepared preserved. In 2012, 50% of the importation of seafood is fresh, 26% prepared preserved seafood while the remaining imports consisted of frozen or dried-salted-smoked seafood.

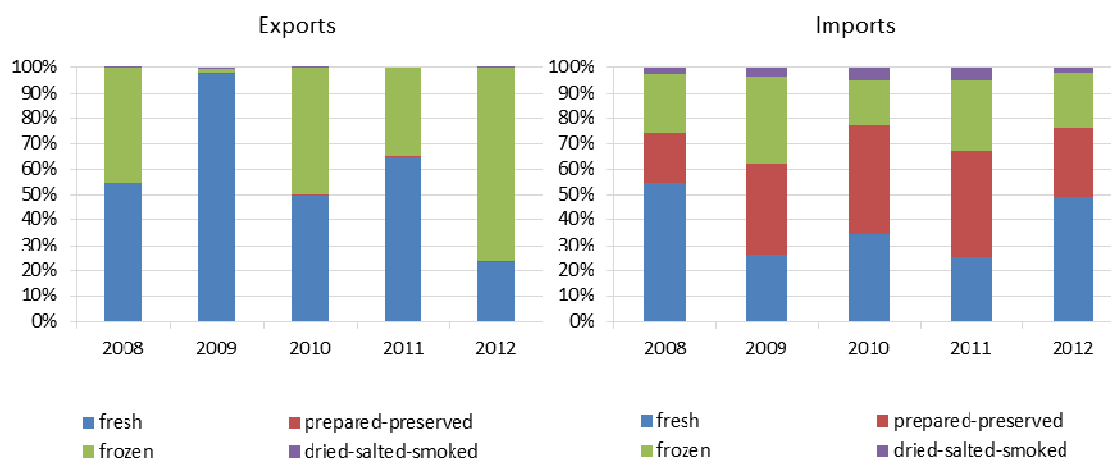


Figure 4.15.11: Maltese seafood imports (left) and exports (right) trends by type of products: shares in value

4.15.5 Trends and drivers for change

The Maltese fish processing sector is mostly represented by enterprises, whose main products are preserving and processing of tuna, shrimps, other marine fish and other products. The processed seafood is mainly exported to the Great Britain and Italy. However Malta exports processed fish to several other EU member states and Extra EU countries such as Denmark, Spain, The Netherlands, Belgium and Libya.

In recent years, the trend in processing sardines has been decreasing while the trend for processing shrimps has been increasing. The trend for caviar, makarel and salmon remained stable.

Due to change in demand and production, in 2012, some enterprises in the Maltese fishing process industry have replaced their old equipment with the latest technology. Such modernization is helping these enterprises to diversify their products, improve quality of the production and increase productivity. Hence the Maltese fish processing enterprises will be able to beat the challenges of foreign competition.

4.16 NETHERLANDS

4.16.1 General overview of the Dutch fish processing industry sector

In 2012 the Dutch fish processing industry consisted of 84 enterprises with a total turnover of €775 million. The main product segments are flatfish, shrimp and mussels, for which the raw material is sourced from the North Sea and Wadden Sea. Also the processing of salted herring is an important product for the Dutch processing industry, although nearly all raw material is imported from countries in Northern Europe. Besides these traditional products, an increasing volume of imported species such as pangasius and tropical shrimp is sourced by Dutch enterprises for processing and trading. The Dutch fish processing and wholesaling industry as a whole has an important function as trading hub for other EU countries. The declining catches of some traditional species, and growing diversity of fish products on the EU market, have resulted in growing imports of fish products. The reliance of the Dutch processing industry on domestic catches has become rather limited. In The Netherlands processing becomes more and more integrated with trading activities. Therefore it is often difficult to distinguish processing enterprises from wholesalers or traders.

Most traditional fish processing enterprises are situated around the main fish auctions near the North Sea like IJmuiden or Scheveningen, and in the city of Urk at Lake IJsselmeer. Nearly all mussel processing enterprises are based in Yerseke in the South of the Netherlands where also the only auction for mussels is located. The Dutch processing sector has an important position in the processing of flatfish which is mainly exported to countries in Southern Europe, especially to Italy. The main export markets for shrimp (not only domestically caught but also imported tropical shrimp) are Belgium, France and Germany. Mussels are mainly exported to Belgium and France. Besides these products, there is a wide variety of other products that are exported to many different countries.

Table 4.16.1 and figure 4.16.1 provide an overview of the Dutch fish processing industry including the size of the enterprises and the level of employment. Most enterprises in the Dutch fish processing industry are small and have less than 10 employees. Based on the data from the period 2008-2012 there are no enterprises with more than 250 employees. In the Netherlands however, there are several processing enterprises with more than 250 employees. These enterprises do process fish but fish processing is not their main activity, and they are more involved in trading activities.

Table 4.16.1: Dutch fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	101	85	89	88	84	▼	-5%	▼ -17%
≤10 employees	54	47	48	39	35	▼	-10%	▼ -35%
11-49 employees	34	33	30	33	33	▬	0%	▼ -3%
50-249 employees	13	15	11	16	16	▬	0%	▲ 23%
≥250 employees	0	0	0	0	0	▬	0%	▬ 0%
Employment (number)								
Total employees	2,953	3,453	3,218	3,253	3,567	▲	10%	▲ 21%
FTE	2,335	2,775	2,506	2,537	2,469	▼	-3%	▲ 6%
Indicators								
FTE per enterprise	23.1	32.7	28.2	28.8	29.4	▲	2%	▲ 27%
Average wage (thousand €)	37.8	37.5	41.5	42.2	41.8	▼	-1%	▲ 11%
Labour productivity (thousand €)	61.2	54.2	59.4	57.0	55.5	▼	-3%	▼ -9%
Unpaid work (%)	0.1	0.1	0.1	0.1	0.1	▼	-13%	▲ 40%

Between 2008 and 2012 the number of processing enterprises slowly decreased from 101 to 84 enterprises. The main explanation for the declining number of fish processing enterprises is that in the period 2008-2012 some enterprises switched from fish processing to fish wholesaling or trading as the main activity. These enterprises therefore are not characterised as fish processor, but still process fish. The number of enterprises with 11-49 employees and 50-249 employees remained rather stable during 2008-2012. The number of enterprises with less than 10 employees however decreased from 54 in 2008 to 35 in 2012, a decrease of 35%. Compared to 2011 the decrease of the enterprises with less than 10 employees in 2012 was 10%. Reasons for this decline are that some enterprises increased their number of employees, or that these companies had fish wholesaling or trading as their main activity.

Both the number of employees and FTE showed an overall increase in the period between 2008 and 2012: the total number of employees increased by 21% and the total FTE increased by 6%. The small increase in FTE and the fact that the number of (bigger) enterprises almost remained stable, indicate that the total FTE per enterprise increased with around 2%. Labour productivity however decreased with 3% between 2011 and 2012. In the Netherlands no distinction is made between male and female employees in the collection of data regarding the number of employees and the number of FTE.

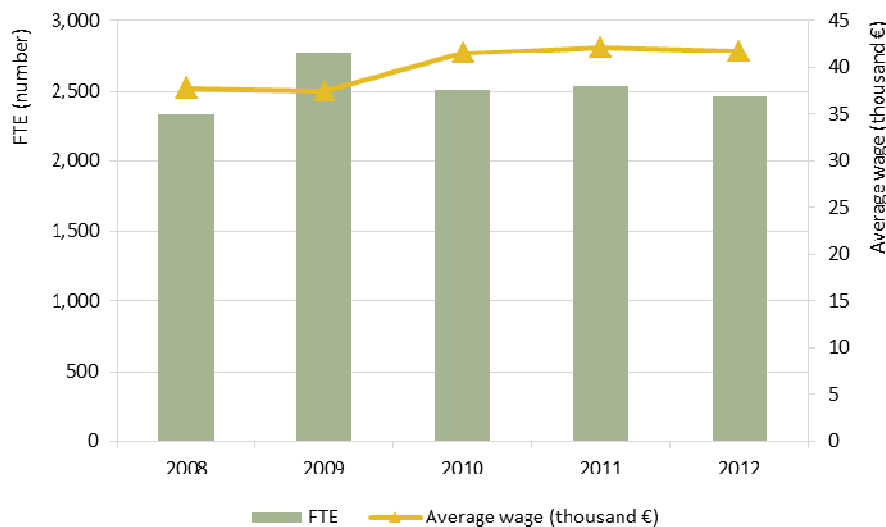


Figure 4.16.1: Dutch employment trends, 2008-2012

The wages in 2012 were almost identical to those in 2010 and 2011, around €42 thousand per FTE. The average wage in 2010 to 2012 was lower than in 2008 but higher than in 2009. The low average wage in 2009 can be explained by the economic downturn in 2009 and the remarkably increase in the number of FTE.

4.16.2 Economic performance of the Dutch fish processing industry sector

Information about the economic performance can be found in table 4.16.2, and figures 4.16.2 and 4.16.3. In the period 2008-2012 the Dutch fish processing sector on average was profitable. During this period the net profit decreased by 56%, from almost €47 million in 2008 to €21 million in 2012. Both total income and production cost increased in the above mentioned period, production cost however showed a stronger increase (7% vs. 11%).

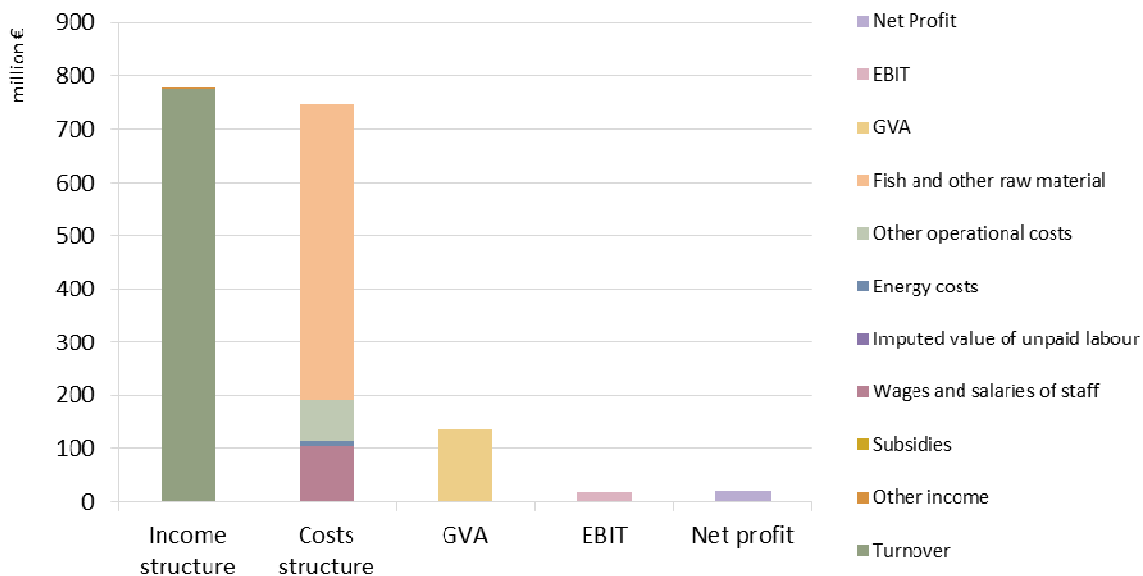


Figure 4.16.2: Dutch economic performance of the fish processing industry sector, 2012

The income structure in 2011 is comparable with previous years. Subsidies and other income are only a very small part of the total income. The Netherlands spent only 2% of their total EFF budget between 2007 and 2013 on fish processing and marketing. In 2012 the turnover accounted for 99% of the total income (see table 4.16.2). The total income decreased with 4% compared to 2011. Also the total production cost showed a decrease in 2012 with 4% (see figures 4.16.3 and figures 4.16.4). Most of the production cost goes to the purchase of raw material, around 70% in general. Because of this reason the purchase of raw material is the main contributor to the drop in the total production cost. These cost decreased with 5% in 2012 compared to 2011. Compared to the 2008-2012 average there is still a 10% increase in the cost of raw material. Purchases of raw material as share of the total production cost are relatively stable in the period 2008-2012 and ranged from 67% to 72% of the total production cost. Other production cost remained relatively stable during this period. The decrease in total income and wages and salaries resulted in a lower Gross Value Added and Operating Cash Flow. The net investments fluctuate a lot among years and are mostly influenced by restructuring of enterprises. In some years this caused negative investments in specific segments.

Table 4.16.2: Dutch economic performance of the fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	712.3	689.0	704.4	803.7	775.4	▼ -4% ▲	9%
Other income	11.4	16.2	3.7	10.7	3.9	▼ -64% ▼	-66%
Subsidies	1.6	0.4	0.5	0.1			
Total Income	725.3	705.6	708.6	814.6	779.3	▼ -4% ▲	7%
Expenditure (million €)							
Purchase of fish and other raw material for production	504.5	479.3	472.8	584.9	554.6	▼ -5% ▲	10%
Wages and salaries of staff	88.2	104.0	104.0	106.9	103.1	▼ -4% ▲	17%
Imputed value of unpaid labour	0.0	0.1	0.1	0.1	0.1	▼ -7% ▲	76%
Energy costs	9.7	10.7	9.4	10.8	9.7	▼ -9% ▬	0%
Other operational costs	66.5	64.7	77.1	74.2	78.0	▲ 5% ▲	17%
Total production costs	669.0	658.7	663.4	776.8	745.5	▼ -4% ▲	11%
Capital Costs (million €)							
Depreciation of capital	16.1	19.3	18.4	18.5	17.4	▼ -6% ▲	8%
Financial costs, net	-6.9	-8.2	-5.3	-4.3	-4.4	▼ -3% ▲	35%
Extraordinary costs, net		1.2	-1.1		-0.3		
Capital Value (million €)							
Total value of assets	638.7	973.2	529.2	709.2	595.2	▼ -16% ▼	-7%
Net Investments	2.5	77.7	3.8	89.1	23.9	▼ -73% ▲	870%
Debt	355.1	359.2	368.9	464.0	326.0	▼ -30% ▼	-8%
Performance Indicators (million €)							
Gross Value Added	143.0	150.5	148.9	144.6	136.9	▼ -5% ▼	-4%
Operating Cash Flow	56.3	46.9	45.2	37.7	33.8	▼ -11% ▼	-40%
Earning before interest and tax	40.2	27.6	26.9	19.2	16.4	▼ -15% ▼	-59%
Net Profit	47.1	35.8	32.2	23.5	20.8	▼ -11% ▼	-56%
Capital productivity (%)	22.4	15.5	28.1	20.4	23.0		
Return on Investment (%)	6.3	2.8	5.1	2.7	2.8		
Financial Position (%)	55.6	36.9	69.7	65.4	54.8		
Future Expectation Indicator (%)	-2.1	6.0	-2.8	10.0	1.1		



Figure 4.16.3: Income, costs, wages and labour productivity trends of the Dutch fish processing industry sector, 2008-2012

4.16.3 Overview of the Dutch fish processing industry sector by size categories

Figures 4.16.4, 4.16.5, 4.16.6 and table 4.16.3 show the main structural and economic variables for the processing industry per size category. The number of enterprises were subdivided into 4 size categories. Due to confidentiality reasons it was not possible to make the same subdivision per size category for most of the economic variables for the Dutch processing industry. Instead of having four size categories the categories 0-10 employees and 11-49 employees were aggregated and put in the category 11-49 employees.

0-49 employees size category

The number of FTE's in enterprises with 0-49 employees amounted to 745 FTE's in 2012, around 30% of the total FTE's in the processing industry sector. The number of enterprises and total FTE's in this size category decreased in time. Total income was €269 million in 2012, €6 million less than 2011 (-8%). The overall decrease in income between 2008 and 2012 amounted to 27%. The same pattern was found for production costs. The production costs in 2012 were €258 million, a decrease of €15 million compared to 2011 (-6%) and €67 million compared to 2008 (-21%). Between 2008 and 2012 the enterprises in this size category were profitable. The highest net profit, €37.8 million, was realized in 2008 but decreased during the years to €8.8 million in 2012 (a total decrease of 77%). The average salary varied between €32 thousand and €41 thousand.

50-249 employees size category

The number of FTE's in enterprises with 50-249 employees amounted to 1,724 in 2012, around 70% of the total FTE's in the processing industry sector. Between 2008 and 2012 the number of FTE's had increases while the number of enterprises did not change a lot. Also total income and total production costs increased for this size category in the same period with both 42%. Between 2008 and 2012 total income increased from €358 million

to €506 million and production costs from €344 million to €488 million. The net result decreased by 13% from €9.3 million in 2008 to €8.1 million in 2012. The average salary varied between €40 thousand and €45 thousand.

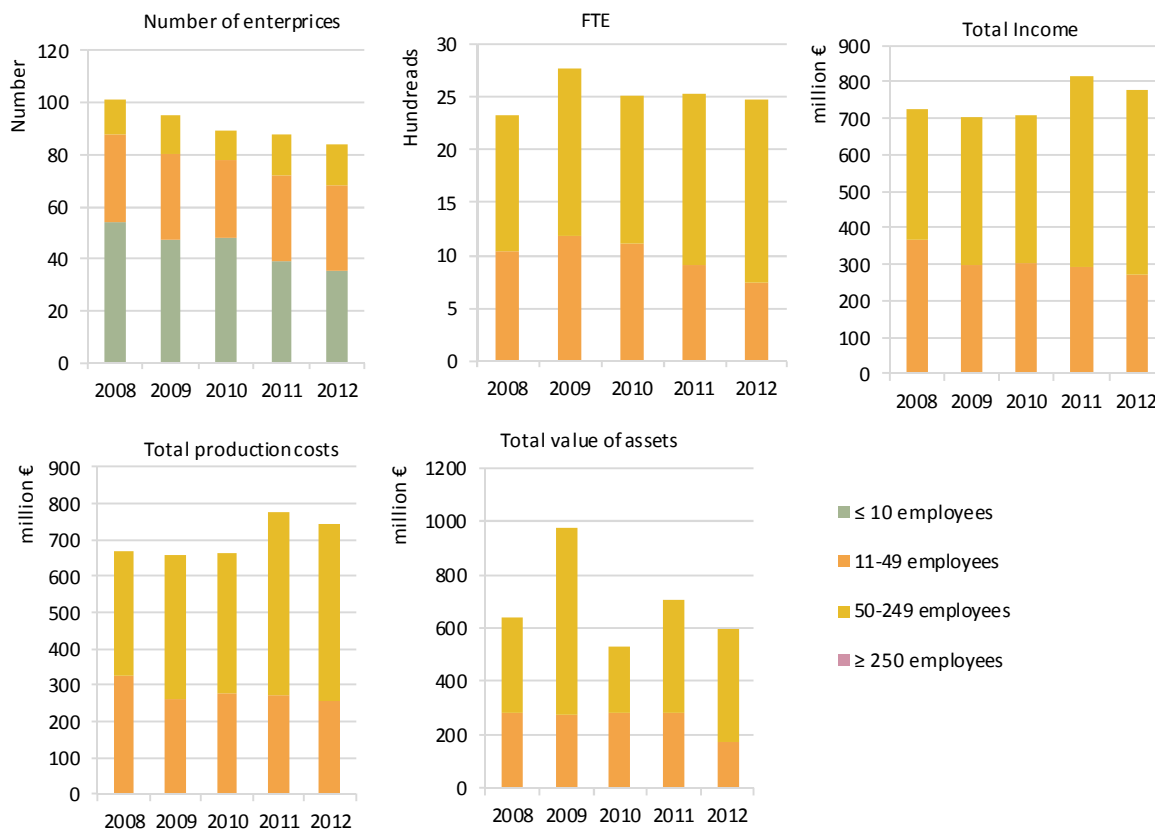


Figure 4.16.4: Dutch main structural and economic variables trends by size category, 2008-2012

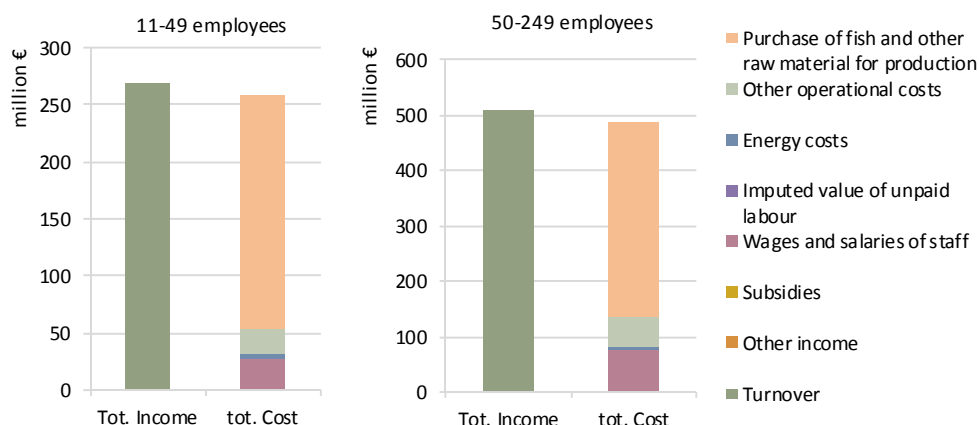


Figure 4.16.5: Dutch income and cost structure, by size category, 2012

Table 4.16.3: Economic performance of the Dutch fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
between 11 and 49 employees							
Total Income	367.7	300.3	305.4	292.8	269.0	▼ -8%	▼ -27%
Total production costs	324.5	263.2	278.1	272.9	257.5	▼ -6%	▼ -21%
Gross Value Added	75.8	77.0	72.6	53.9	40.1	▼ -26%	▼ -47%
Operating Cash Flow	43.2	37.1	27.3	19.9	11.5	▼ -42%	▼ -73%
Earning before interest and tax	35.2	28.8	18.3	13.0	6.7	▼ -49%	▼ -81%
Net Profit	37.8	31.8	21.0	15.6	8.8	▼ -44%	▼ -77%
between 50 and 249 employees							
Total Income	357.5	405.3	403.2	521.7	506.4	▼ -3%	▲ 42%
Total production costs	344.4	395.5	385.2	503.9	488.0	▼ -3%	▲ 42%
Gross Value Added	67.2	73.6	76.3	90.7	92.9	▲ 3%	▲ 38%
Operating Cash Flow	13.1	9.8	18.0	17.7	18.4	▲ 4%	▲ 40%
Earning before interest and tax	5.0	-1.2	8.6	6.1	5.8	▼ -5%	▲ 15%
Net Profit	9.3	4.0	11.1	7.8	8.1	▲ 4%	▼ -13%

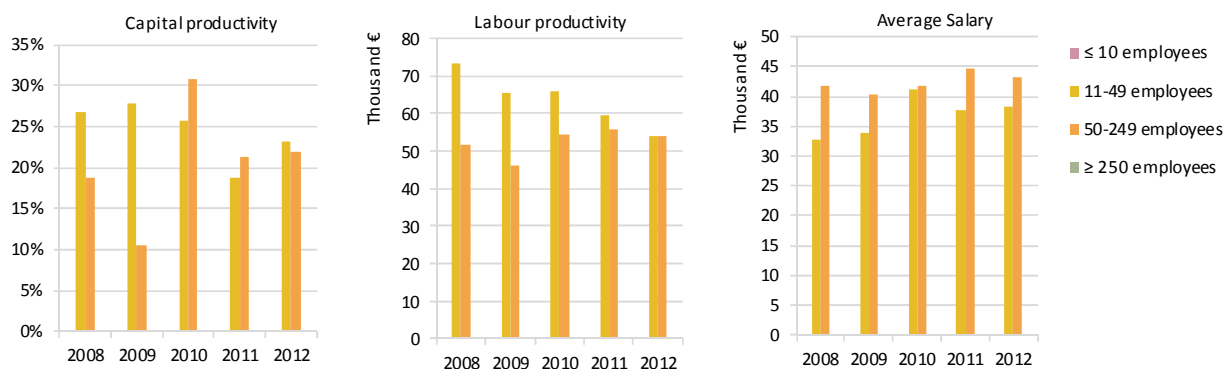


Figure 4.16.6: Dutch capital productivity, labour productivity and average salary trends, by size category, 2008-2012

4.16.4 Dutch seafood trade

The figure in 4.16.7 gives an overview of the Dutch seafood trade. The Netherlands can be seen as a European trading hub. Import volumes and export volumes increased by 20% and 10% respectively between 2008 and 2012. A substantial part of the imported seafood product is re-exported directly. However, the increasing imports indicate that companies increasingly source fish from outside the EU for their processing activities. These processed products were exported again or used for local consumption. Import and Export volumes did not differ much in 2012. Around 861 thousand tonnes of seafood were imported and around 831 thousand tonnes were exported. Also for the years between 2008 and 2011 the import and export volume difference did not differ much, less than 10%. The trade of processed imported and domestic seafood led to a higher export value. Between 2008 and 2012 the exported values of exported seafood products were much higher than the import values. There was a positive trade balance between €375 million and €250 million. Exported seafood products were worth around over €2.7 billion in 2012. Imported seafood products amounted for €2.4 billion.



Figure 4.16.7: Dutch seafood trade balance trends in volume (left) and value (right)

Between 2008 and 2012 around 60% of the import value of seafood was assigned to countries from outside the EU (figure 4.16.8, 4.16.9 and 4.16.10). In 2012 the most important extra-EU countries the Netherlands imported from were Iceland (€274 million, mainly cod and coalfish), Norway (€134 million, mainly cod, coalfish and salmon), Russia (€112 million, mainly cod and haddock) and China (€99 million, mainly tilapias and monkfish). The most important intra-EU countries were Germany (€371 million, mainly pelagic fish species and cold water shrimps), Belgium (€168 million, mainly salmon, sole and shrimps and prawns) and Denmark (€149 million, mainly cod and salmon).

Based on export value around 80% of the Dutch (processed) seafood products were sold to intra-EU countries between 2008 and 2012. In 2012 the most important intra-EU import countries were Germany (around €450 million, mainly flatfish, shrimps and prawns), Belgium (around €395 million, mainly cold water shrimps and mussels) and France (around €375 million, mainly cod, shrimps and prawns). The most important extra-EU countries were Nigeria (around €145 million, mainly pelagic fish species) and Egypt (around €80 million, mainly pelagic fish species).

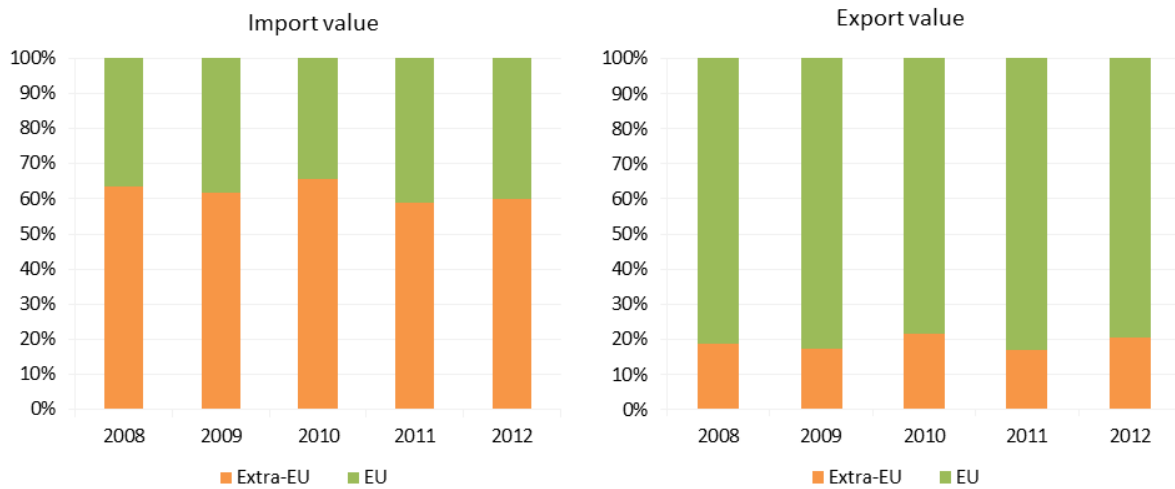


Figure 4.16.8: Dutch seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

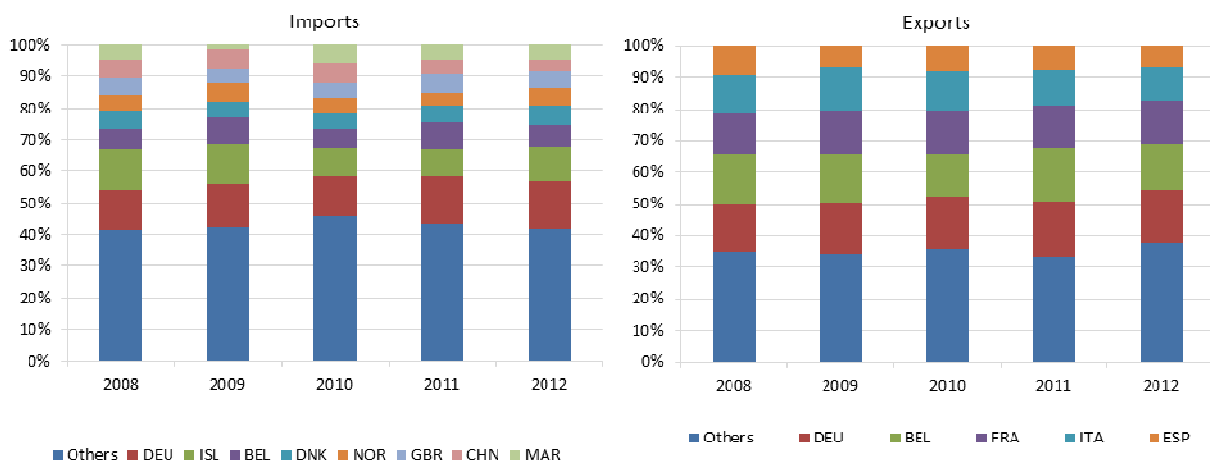


Figure 4.16.9: Dutch seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

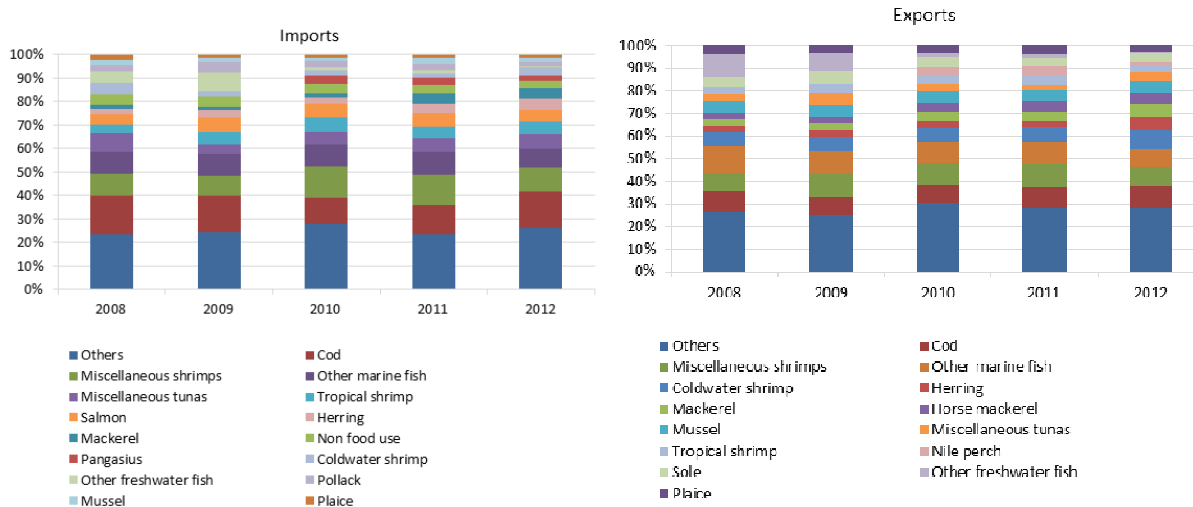


Figure 4.16.10: Dutch seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

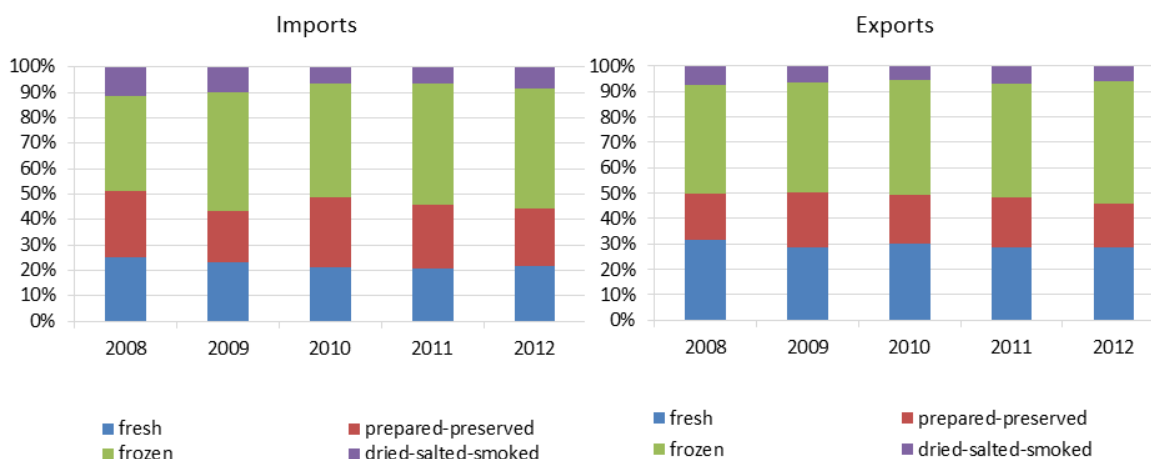


Figure 4.16.11: Dutch seafood imports (left) and exports (right) trends by type of products: shares in value

4.16.5 Trends and drivers for change

The Netherlands is becoming more depending on imported seafood products. Between 2008 and 2012 the total Dutch import value of fish products increased by almost 40% from 1.8 billion to 2.5 billion euro. However, not all imported fish products will be processed. Where species like salmon are imported and processed (smoked) in the Netherlands, imports of species like cod and pangasius are not processed but traded directly to other EU countries through the harbour of Rotterdam. The processing industry is getting more familiar with trading business. It is expected that trading will grow in importance and become the main business for some processors in the coming years.

The landings of the main Dutch fish species will influence the performance of the fish processing industry. Provisional data for 2013 and 2014 show increased fisheries landings in the Netherlands. Mainly plaice and sole landings increased a lot. It is expected that the landings of plaice will grow further in 2015, but sole landings will decrease because of the declining quota for this species. The increased plaice landings and the additional price decrease will cause a decreased use of usually cheaper plaice substitutes like rock sole or yellowfin sole in the processing industry.

An important driver for the Dutch fish processing industry is sustainability certification. Already quite a few fisheries have been certified by the Marine Stewardship Council (MSC). In 2015 Dutch supermarkets have the ambition to only sell fish products that are certified by MSC, the Aquaculture Stewardship Council (ASC) or an equivalent certification programme. At least for supermarkets and large food service companies in the Netherlands, sustainable caught or farmed fish is becoming a market access requirement. Many Dutch processing companies already sell certified seafood products. Because most of the processed fish products in the Netherlands are exported to Southern Europe where sustainability certification is not an important issue (yet), a large part of the processed products are still not certified sustainably. In the next few years the emphasis on sustainable certification is likely to remain.

Clearly the reform of the Common Fisheries Policy will have an effect on the processing industry in the coming years. The ban on discards for instance might create an additional source for processing enterprises, although it is not clear if the processing enterprises can use the discarded fish for human consumption. Together with the reform of the CFP also the new Common Market Organisation is implemented. For the Dutch fish processing industry it will be essential to maintain its competitive position. Still most of the enterprises are relatively small, and in the future can get difficulties to compete with large international enterprises. The advantages of the processing industry in the Netherlands such as the knowledge about logistics and distribution, and the understanding of the dynamics in the world market, should be further explored to maintain its position in the EU. This however could implicate that the focus will be more on trading instead of processing of fish products.

4.17 POLAND

4.17.1 General overview of the Polish fish processing industry sector

In 2012 there were 257 fish processing companies involved in fish processing approved by the General Veterinary Inspectorate to intra-community trade according to Council Regulation (EC) no. 853/2004 and to direct sales in the internal market in accordance with the regulation of the Minister of Agriculture and Rural Development of December 29, 2006. 196 of them defined the primary production under the NACE Code 10.20.

The remaining ones were involved in fish business, but as a secondary activity. In the period 2008-2012 there was a fluctuating trend in the number of processing plants as a result of both the formation of new businesses, consolidation and changes in companies already working, as well as the uncertainties relating to population data. The share of enterprises for which fish processing was not the main activity represented 23-25% of the total number of processing firms. In terms of the number of employees, Polish processing industry with the fish production as main activity is dominated by small and micro sized firms. In 2012 the largest number of plants (39% of total) employed between 11 and 49 persons, then 28% less or equal than 10, 25% between 50 and 249 and 8% employed greater or equal than 250 people.

The distribution of processing activity across Poland remained consistent with previous years. There is a continued dominance of processing activity in the coastal region in Pomorskie and Zachodniopomorskie voivodeships where about 60% of Polish fish processing industry was located.

In 2012 the production of fish processing industry defined as the main activity increased to 410.6 thousand tonnes (by 13.0% compared to 2011) and reached €1.57 billion.

The most important group of products in terms of volume was prepared and preserved fish with the share of 48.6% of the total production. The production of fish prepared and preserved increased by 1.5% compared to the previous year and 3.2% compared to the 2008. Processed or preserved herrings covered 50.7% of production in this group of products. The production of processed and preserved herring increased by 10.5% compared to the previous year. The second largest group was smoked fish with a 20.4% share in production volume. The production of smoked fish increased by 11.0% compared to the previous year. In this group the largest share of 62.2% had smoked salmon which production increased by 35.5%.

Other groups of products had a smaller share of production volume. Frozen fish, filets and fish meat covered 16.9% of the volume of total production, fresh or chilled fish, filets and fish meat 5.5%, salted fish 4.6% and meals and other inedible fish products 3.9%. In terms of value smoked fish were the most important covering 41.7% of the total value, while prepared and preserved covered 40.3%. Frozen and fresh products make up for 9.2% and 5.5%, respectively, while salted for 3% and meals and other inedible fish products for 0.4%.

The Polish fish processing industry was highly concentrated. In 2012 most of production (57.3% of volume and 72.8% of value) was concentrated in 16 large fish processing companies with more than 250 employees.

In 2012, despite the decrease in the number of enterprises, the average number of employees increased to 15,972 (by 1%) compared with the previous year. As in previous years the majority of the employed (67%) were

women and the number of female employees increased by 1% compared to the previous year and did not change compared to 2008.

Most employees worked full-time and FTE amounted to 15,088. FTE demonstrated a decreasing tendency from 2008. The average size of the enterprises measured by the number of FTE was 77 employees and increased by 3.3 FTE from the previous year.

The average salary per employee (in FTE) per year reached €10.3 thousand and increased by 5% and 9% respectively from 2011 and 2008. But the labor productivity decreased compared to the previous year and to 2008, respectively by 2% and 1%. Both the average salary and labor productivity seems lower in comparison to the old EU countries.

Table 4.17.1: Polish fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Structure (number)							
Total enterprises	188	200	196	205	196	▼ -4%	▲ 4%
≤10 employees	51	54	49	59	54	▼ -8%	▲ 6%
11-49 employees	69	80	81	85	77	▼ -9%	▲ 12%
50-249 employees	52	50	51	47	49	▲ 4%	▼ -6%
≥250 employees	16	16	15	14	16	▲ 14%	▬ 0%
Employment (number)							
Total employees	16,105	15,931	15,983	15,788	15,972	▲ 1%	▼ -1%
Male employees	5,444	5,051	5,049	5,196	5,303	▲ 2%	▼ -3%
Female employees	10,661	10,880	10,934	10,592	10,669	▲ 1%	▬ 0%
FTE	15,580	15,351	15,348	15,108	15,088	▬ 0%	▼ -3%
Male FTE	5,353	4,922	4,909	5,038	5,092	▲ 1%	▼ -5%
Female FTE	10,227	10,429	10,439	10,070	9,996	▼ -1%	▼ -2%
Indicators							
FTE per enterprise	82.9	76.8	78.3	73.7	77.0	▲ 4%	▼ -7%
Average wage (thousand €)	9.4	8.4	9.7	9.8	10.3	▲ 5%	▲ 9%
Labour productivity (thousand €)	16.1	16.1	15.1	16.3	16.0	▼ -2%	▼ -1%
Unpaid work (%)	0.0	0.0	0.0	0.0	0.0	▬ 0%	▬ 0%

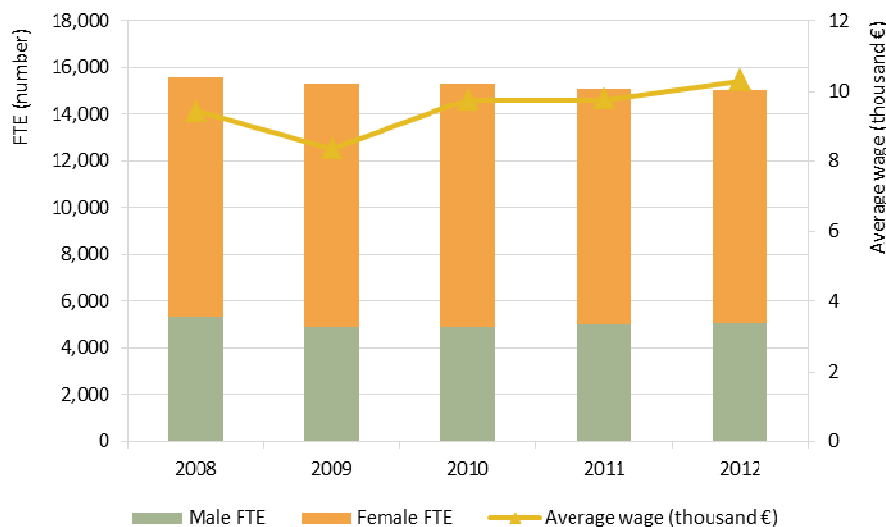


Figure 4.17.1: Polish employment trends, 2008-2012

4.17.2 Economic performance of the Polish fish processing industry sector

In 2012 the economic performance of fish processing industry in Poland was good but the increasing costs of raw materials affected the profitability of the industry. The total income increased to €1.93 billion, by 7% compared to the previous year and 29% compared to 2008. Turnover created nearly the whole total income and share of subsidies and other income did not exceed 1%. Total production costs increased to 95% of the total income.

The greatest amount of total production costs (73%) was represented by the purchase of raw materials and other products needed for the production and resale in the same condition. The second cost item was represented by other operational costs (18%). The third by labor costs (8%), and the last by energy costs (1%). The share of labor costs seems lower in comparison to the other EU countries and explains why Danish, Germans or French companies located their fish processing in Poland.

The fastest rate of growth of production costs were energy costs, by 43% compared to 2008 but were stable in 2011-2012. The costs of fish and other raw material for production increased by 7% compared to the previous year and by 37% compared to 2008. The rising cost of raw materials for processing fish was determined mainly by increases in the prices of raw materials on world markets. Other operational costs increased by 17% and 30%, respectively to previous year and 2008. The slowest rate of growth was labor costs by 5% and 6%, respectively to previous year and 2008.

Capital costs decreased to 2% of the total income. From 2010 depreciation demonstrated an increasing trend as a result an increasing total value of assets.

Financial and extraordinary costs net showed irregular changes, related to the financial needs of the companies and unexpected gains and loss. In general, the income structure does not show relevant differences in all the analyzed years.

In the whole period total assets demonstrated an increased trend by 2% and 18%, respectively to 2011 and 2008. But net investment decreased by 31% compared to the previous year due to the exhaustion of the allocation of EU aid from the EFF. Also the future industry Expectations indicator decreased and was estimated at 1.7%.

In 2012 was still in a safe financial and economic situation. The contribution of fish processing to the national economy generated in the processing of fish, measured by Gross Value Added (GVA) indicator amounted to €241.8 million and decreased by 2% compared to the previous year but only by 4% compared to 2008.

The amount of cash companies generate from its operations, measured by Operating Cash Flow (OCF) indicator, amounted to €95.8 million and decreased by 11% compared to the previous year and by 13% compared to 2008.

Earnings before interest and taxes (EBIT) was equal to about €54.6 million, showing a decrease by 21% compared to the previous year but a slight decrease by 30% compared to 2008.

As a result of increase in turnover and significant reduction of financial costs net profit increased to €47.5 million, by 43% compared to the previous year.

The fish processing recorded a slight decrease in capital productivity to 19.9%. Also return of investment indicating the sector's ability to innovate and investments decreased to 4.5%.

During the whole period fish processing activity was mainly financed by borrowed capital. The share of external financing of fish processing increased to 61.8% in 2012.

In 2012, the turnover attributed to fish processing by the companies which processed fish as a secondary activity was €114 million. This was an increase by 29% compared with the previous year and by 4% decrease compared to 2008.

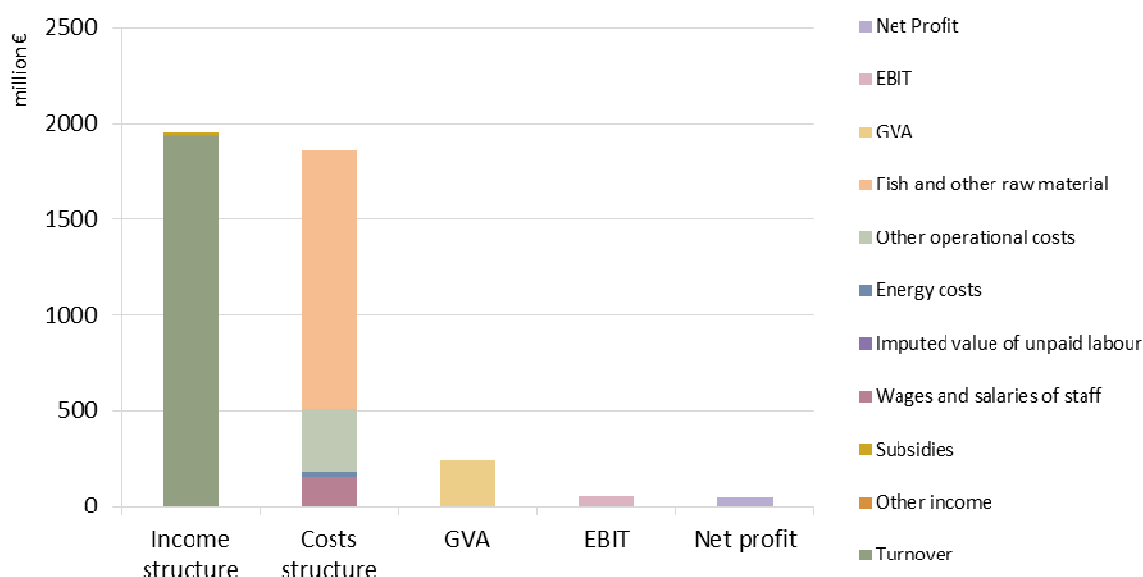


Figure 4.17.2: Economic performance of the Polish fish processing industry sector, 2012

Table 4.17.2: Economic performance of the Polish fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	1,494.5	1,479.0	1,685.5	1,801.8	1,934.8	▲ 7%	▲ 29%
Other income	12.3	12.0	13.3	13.4	8.7	▼ -35%	▼ -29%
Subsidies	5.8	7.0	7.4	9.5	9.5	○ 0%	▲ 63%
Total Income	1,512.6	1,498.0	1,706.1	1,824.7	1,952.9	▲ 7%	▲ 29%
Expenditure (million €)							
Purchase of fish and other raw material for production	985.5	985.5	1,164.3	1,263.9	1,349.0	▲ 7%	▲ 37%
Wages and salaries of staff	146.8	128.3	149.5	147.6	155.5	▲ 5%	▲ 6%
Imputed value of unpaid labour					0.1		
Energy costs	17.4	22.0	22.7	24.9	25.0	○ 0%	▲ 43%
Other operational costs	252.8	236.9	280.5	280.5	327.6	▲ 17%	▲ 30%
Total production costs	1,402.5	1,372.7	1,616.9	1,716.9	1,857.1	▲ 8%	▲ 32%
Capital Costs (million €)							
Depreciation of capital	31.9	30.8	34.6	38.4	41.2	▲ 7%	▲ 29%
Financial costs, net	30.1	20.5	6.5	36.1	7.1	▼ -80%	▼ -76%
Extraordinary costs, net	0.0	0.2	-0.1	0.0	0.0	▲ 295%	▲ 272%
Capital Value (million €)							
Total value of assets	1,031.2	895.6	1,142.9	1,193.7	1,217.6	▲ 2%	▲ 18%
Net Investments	58.0	44.9	59.5	89.9	61.7	▼ -31%	▲ 6%
Debt	687.5	571.9	724.4	731.0	752.7	▲ 3%	▲ 9%
Performance Indicators (million €)							
Gross Value Added	251.1	246.7	231.4	245.9	241.8	▼ -2%	▼ -4%
Operating Cash Flow	110.1	125.3	89.2	107.8	95.8	▼ -11%	▼ -13%
Earning before interest and tax	78.2	94.5	54.7	69.4	54.6	▼ -21%	▼ -30%
Net Profit	48.1	74.0	48.2	33.3	47.5	▲ 43%	▼ -1%
Capital productivity (%)	24.4	27.5	20.3	20.6	19.9		
Return on Investment (%)	7.6	10.6	4.8	5.8	4.5		
Financial Position (%)	66.7	63.9	63.4	61.2	61.8		
Future Expectation Indicator (%)	2.5	1.6	2.2	4.3	1.7		

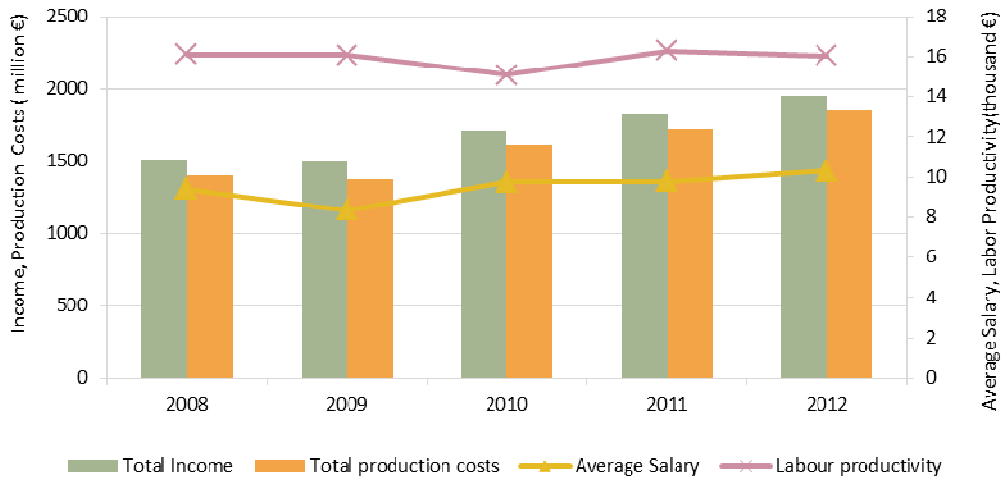


Figure 4.17.3: Income, costs, wages and labour productivity trends of the Polish fish processing industry sector, 2008-2012

4.17.3 Overview of the Polish fish processing industry sector by size categories

In the period 2008-2012 there were about 200 fish processing plants in Poland with defined primary production under the NACE Code 10.20. In terms of the number of enterprises, fish processing was dominated by micro and small sized firms with the number of employees less than 49 (64-70%). Medium sized enterprises (between 50 and 249 employees) shared 25-27 % of total population and the largest (with more than 250 persons) 8-9%. On the other hand most of the employed worked in 14-16 largest plants (52-54%), and further 37-39% in medium-sized enterprises. Production was also concentrated in the largest companies and 60-64% both of total income and total production costs were generated in plants with more than 250 people employed and further 25-28% in medium-sized. Most of assets were also located in the largest and medium sized companies, respectively 62-68% and 24-28% of total.



Figure 4.17.4: Polish main structural and economic variables trends by size category, 2008-2012

In 2012 in all groups of enterprises the total income structure was the same with a 99% share of turnover. Also, the structure of production costs was similar regardless of the size category. The dominance of raw material costs was revealed, accounting for 71-72% of total production costs in medium and large enterprises and for 77-79% in small and micro. Wages and salaries represented 7% of total production costs in micro and small companies and 8-10% in large and medium sized. Share of energy was 1-2% of total production costs in all size categories. Other operational costs (such as packaging, transport, water charges etc.) represented 12-14% in micro and small enterprises and 17-19% in medium and large sized.

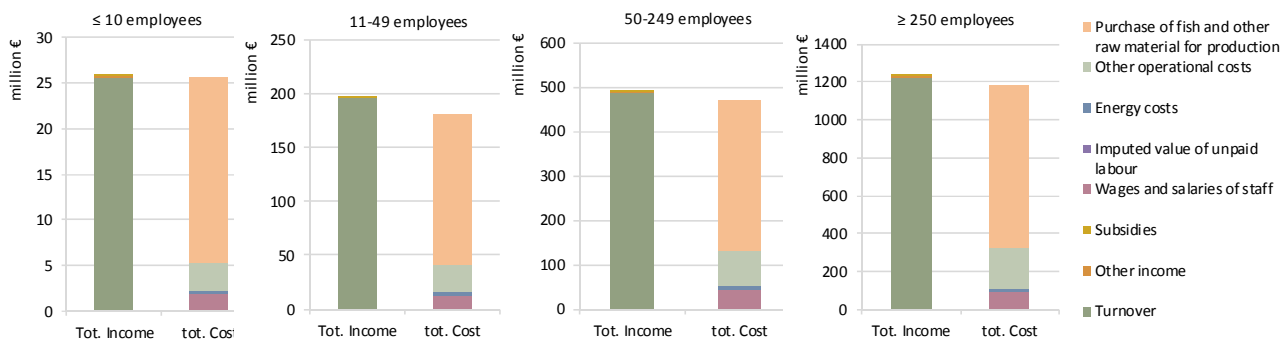


Figure 4.17.5: Polish income and cost structure, by size category, 2012

Data reflect the variability of the economic performance of the Polish fish processing industry sector by size category. In 2012 the economic performance for all economic indicators increased for the segment with a number of employees between 11 and 49 but decreased for the segment with a number of employees between 50 and 249 compared to the previous year. In the largest companies income and net profit increased respectively by 13% and 112%, gross value added has not changed, operation cash flow and EBIT decreased respectively by 12% and 26% compared to the previous year. In the micro sized firms income increased by 6% but economic performance decreased for gross value added (-2%), operation cash flow (-24%), EBIT (-14%) and net profit (-25%). For all segments the gross value added was positive. The net profit was negative only in micro sized enterprises with less than or equal to 10 employees in 2011 and 2012. Micro companies produced almost exclusively for the domestic market, which declined in 2012, while other companies export most of its products.

Table 4.17.3: Economic performance of the Polish fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
less than or equal to 10 employees								
Total Income	19.0	17.0	16.6	24.4	25.8	▲	6%	▲ 36%
Total production costs	16.4	15.1	15.8	24.1	25.6	▲	6%	▲ 56%
Gross Value Added	3.9	3.0	2.0	2.1	2.0	▼	-2%	▼ -48%
Operating Cash Flow	2.6	1.9	0.8	0.3	0.2	▼	-24%	▼ -92%
Earning before interest and tax	2.2	1.6	0.2	-0.4	-0.4	▼	-14%	▼ -119%
Net Profit	2.1	1.0	0.1	-0.6	-0.7	▼	-25%	▼ -134%
between 11 and 49 employees								
Total Income	154.7	139.0	164.9	186.0	197.3	▲	6%	▲ 28%
Total production costs	136.8	124.0	151.2	173.9	180.8	▲	4%	▲ 32%
Gross Value Added	28.7	24.3	24.5	24.7	28.9	▲	17%	▲ 1%
Operating Cash Flow	17.9	15.0	13.7	12.2	16.5	▲	36%	▼ -8%
Earning before interest and tax	15.8	12.9	11.2	8.6	12.9	▲	50%	▼ -18%
Net Profit	15.2	10.8	11.3	6.8	12.1	▲	78%	▼ -20%
between 50 and 249 employees								
Total Income	413.2	380.2	469.3	519.5	492.2	▼	-5%	▲ 19%
Total production costs	387.5	355.7	436.7	487.1	468.7	▼	-4%	▲ 21%
Gross Value Added	68.5	60.0	75.3	73.2	65.2	▼	-11%	▼ -5%
Operating Cash Flow	25.7	24.5	32.6	32.4	23.5	▼	-27%	▼ -8%
Earning before interest and tax	14.6	15.4	21.4	20.3	12.0	▼	-41%	▼ -18%
Net Profit	6.3	8.6	17.0	14.0	8.4	▼	-40%	▲ 32%
greater than or equal to 250 employees								
Total Income	925.8	961.8	1,055.4	1,094.7	1,237.6	▲	13%	▲ 34%
Total production costs	861.9	877.9	1,013.2	1,031.8	1,182.0	▲	15%	▲ 37%
Gross Value Added	150.0	159.4	129.5	145.9	145.6	▬	0%	▼ -3%
Operating Cash Flow	63.9	83.9	42.2	63.0	55.6	▼	-12%	▼ -13%
Earning before interest and tax	45.6	64.5	21.8	40.9	30.1	▼	-26%	▼ -34%
Net Profit	24.5	53.5	19.7	13.1	27.7	▲	112%	▲ 13%

Capital productivity weakened over the period analyzed in micro (≤ 10 employees) and medium sized (50-249 employees) firms. In small enterprises (11-50 employees) a decreasing trend was changed in 2012 and capital productivity increased to 30%. In the large firms capital productivity fluctuated from year to year but in 2012 decreased to 19%.

Labor productivity in micro (≤ 10 employees) and small firms (11-50 employees) decreased during the period 2008-2011 but in 2012 increased respectively by 10% and 38%. In the medium (50-249 employees) and large (\geq than 250 employees) plants labour productivity fluctuated from year to year but in decreased respectively by 5% and 8% respectively.

Average salary in every group of enterprises increased from 2010 to 2012. Decrease was noticed only in 2009 compare to the previous year. Data shows that during analysed period the average salary grows according to an increased number of employees. In the small firms, the wages and salaries were higher than in micro plants by 12-40%, in medium sized higher than in small by 2-24% and in large higher than in medium by 33-41%. In the biggest companies the average salary is almost doubled compared to the micro firms during the period 2008-2010, but in 2012 the range decreased to 162%.

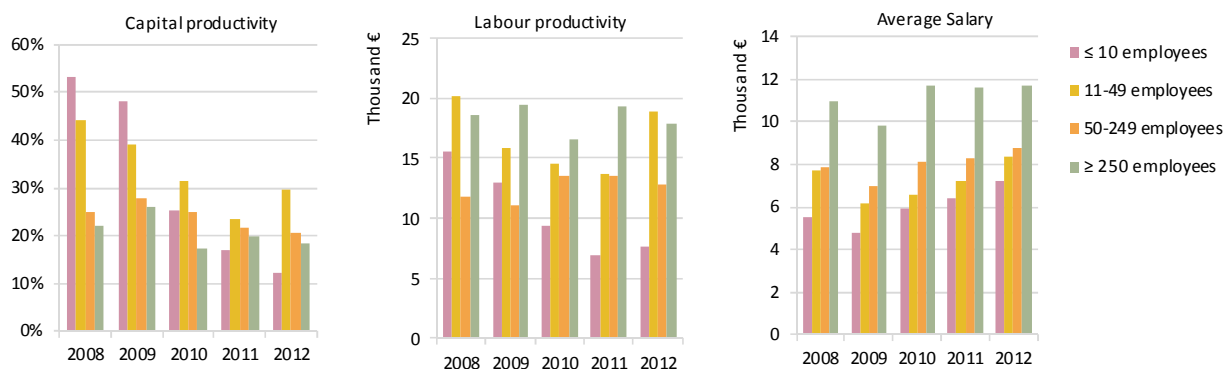


Figure 4.17.6: Polish capital productivity, labour productivity and average salary trends, by size category, 2008-2012

4.17.4 Polish seafood trade

In the period 2008-2012 a key driver of fish processing sector development was growing exports. In 2012 exports of fish and fish products amounted to 230 thousand tonnes, with a value of €1.04 billion which represent an increase by 13% and 36% compared to 2008. The main source of supply of fish processing raw materials was the import, which amounted to 420.7 thousand tonnes, with the value of €833 million which represent an increase by 4% and 2%. The higher rate of growth of export value compared to the import value meant that a positive balance of foreign trade was recorded in 2011-2012, respectively amounted to € 48.5 million and €209.6 million. In terms of quantity during the whole period remained negative trade balance at the level of 170-190 thousand tonnes.

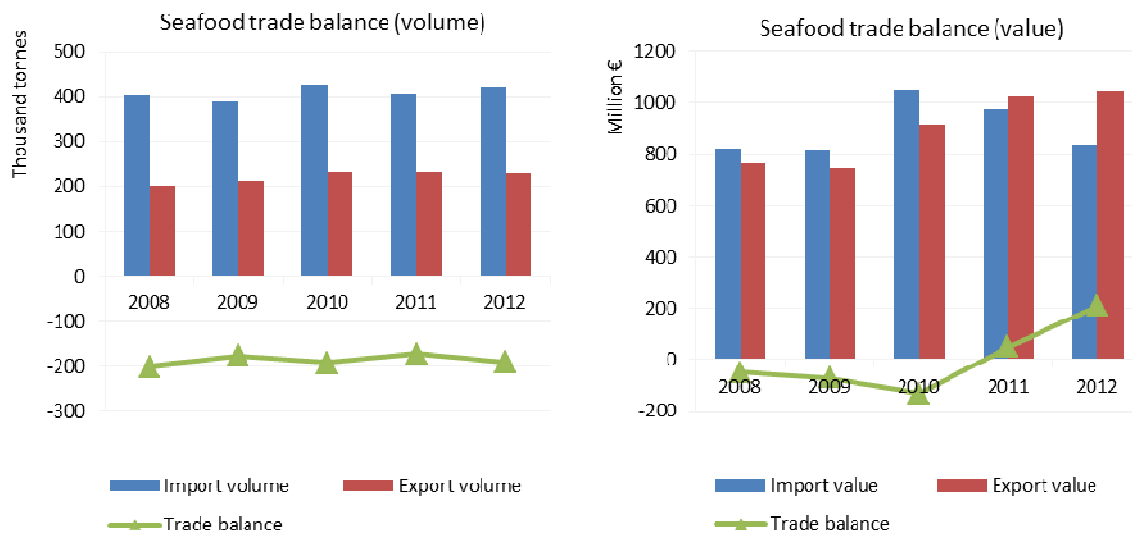


Figure 4.17.7: Polish seafood trade balance trends in volume (left) and value (right)

The main export market for Polish fish products was the EU internal market with 90% share in volume and 92% in value. Most of them were sent to the German market (54% of the EU intra volume and 64% of value). According to presented data most of Polish imports originated from the UE countries (about 60%). Presented data classified Norwegian salmon imported from Sweden as intra EU. Taking into account the place of origin of raw material, most of it was imported to Poland from the extra EU countries.

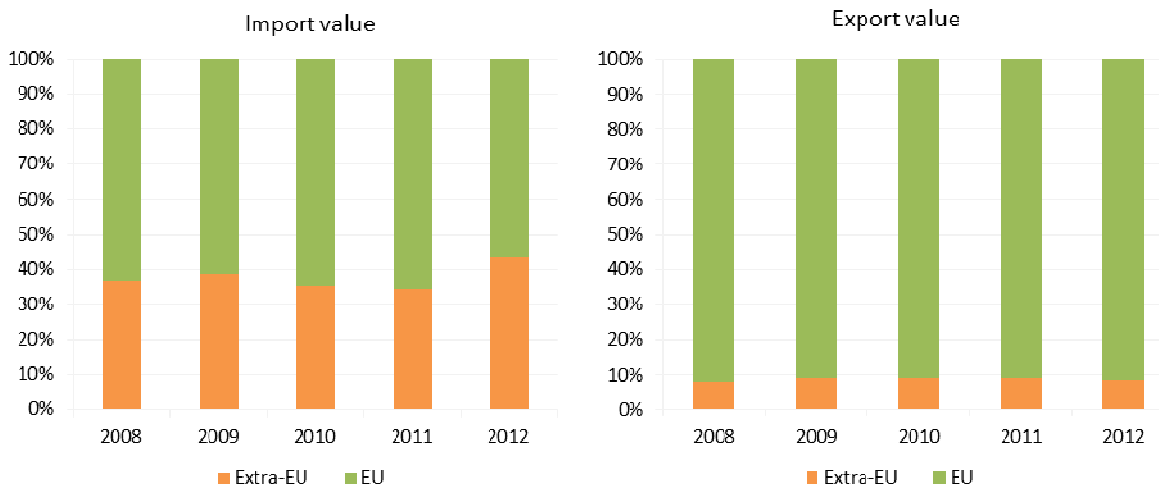


Figure 4.17.8: Polish seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

During 2008-2011 in terms of value most of fish was imported from Sweden (30-35%). In 2012 import from Sweden decreased to 11%. But Sweden was only the logistic center for Norwegian salmon exports to Poland. Share of direct import from Norway fluctuated by 8-13%. Germany and Denmark also had a significant share in Polish import, respectively by 9-17% and 7-10%. Among the extra EU countries the largest was share of China, Vietnam and Island, respectively by 5-10%, 3-9% and 2-5%. In 2012 an increase of import was observed from the Great Britain by almost 300% and from Germany by 25% and a decrease from Sweden and from Vietnam, respectively by 70% and 30%. The strong decline in imports from Vietnam was a result of the fall in domestic demand for pangasius due to media campaigns against this species of fish.

During 2008-2011 the main export market for Polish fish was the German market (50-60% in terms of volume). France and Great Britain also had a significant share in Polish export (fluctuated by 5-10%).

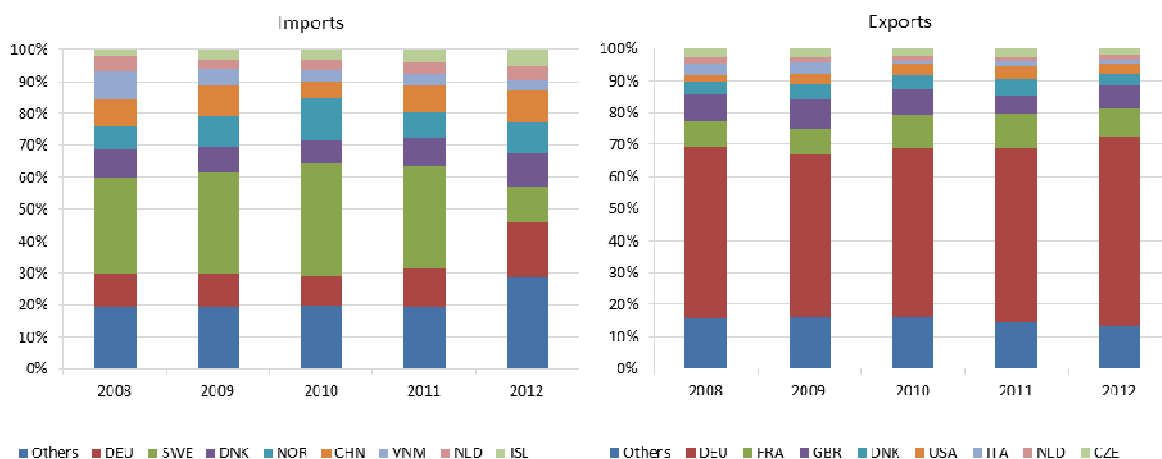


Figure 4.17.9: Polish seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

During the analyzed period Poland imported mainly salmon (24%-50%), herring (9-18%), mackerel (4-5%), Pollack (2-8%), cod (5-8%) and saithe (2-3%) intended for further processing. These species covered about 70% of import in terms of value.

The most important exported species, in terms of value, were salmon (about 45-51%), herring (10-16%), cod (6-10%) and trout (4-5%). Listed species together with other marine fish covered more than 80% of Polish exports.

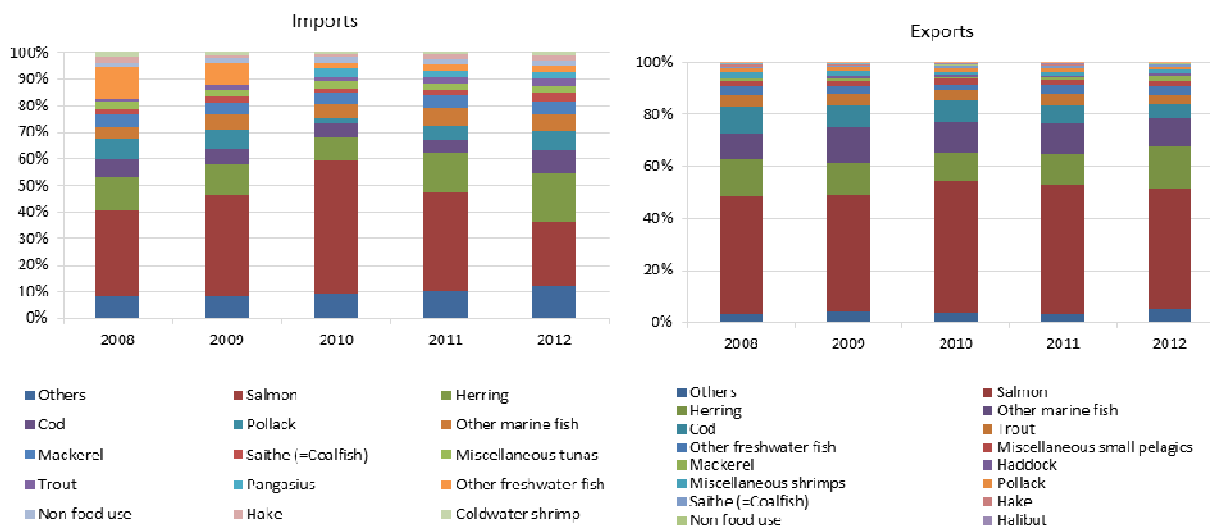


Figure 4.17.10: Polish seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

In terms of value the dominant items in import structure during 2008-2012 were fresh and frozen raw materials (85%-88%) dedicated to processing. In 2012 the share of frozen fish in total import increased to 61% but fresh fish decreased to 21%.

Processed and preserved fish goes in large part to foreign markets. In terms of value Poland exported mainly three groups of products during the period 2008-2012: smoked-dried-salted (40%), processed and preserved (36%) and frozen (20%). During 2008-2012, Poland was one of the largest producers and exporters of processed smoked salmon and processed and preserved herring in the European Union.

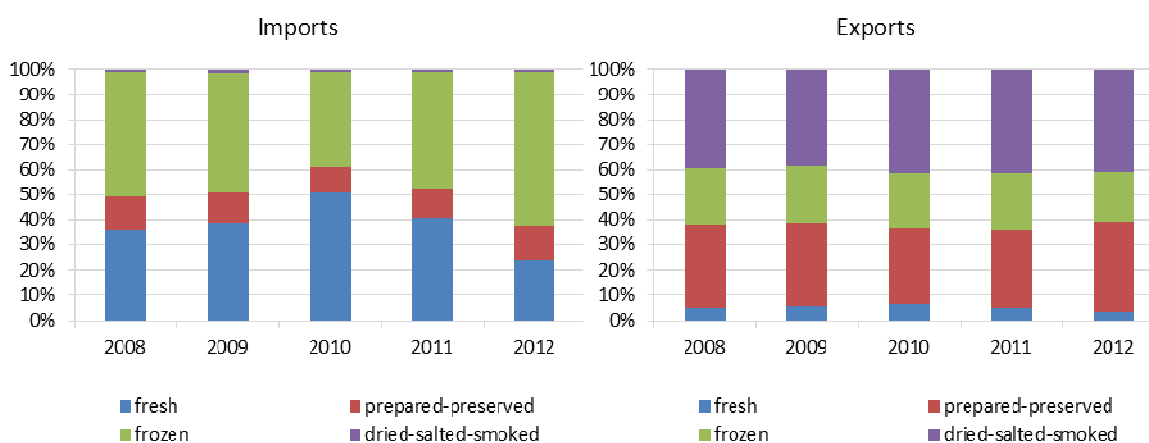


Figure 4.17.11: Polish seafood imports (left) and exports (right) trends by type of products: shares in value

4.17.5 Trends and drivers for change

Presented figures show a developing Polish fish processing industry, with the ability of generating profits for the companies and jobs and incomes for the involved workers. But the year 2012 was a difficult year for the fish processing industry in Poland. According to the Central Statistical Office "Household budget survey" the Polish households demand decreased in volume by 2%, but increased by 6% in value compared to the previous year. The consumption of fresh, chilled and frozen fish and fish products decreased by 4% in volume; while its value increased by 4%. Decisive impact on the decrease in consumption of fresh, chilled and frozen fish had a large price increase of imported fish and a sharp drop in demand for pangasius. Consumption of smoked, dried and salted fish and also canned fish was stable in volume but increased in value respectively by 11% and 6% compared to the previous year.

As in the previous years in 2012 a key driver of fish processing sector development was growing exports. Imports played a dominant role in the supply of raw materials because of limited ability to domestic harvest fish from the Baltic Sea and limited production of Polish aquaculture. A large role of foreign trade in fish processing industry means that its economic and financial results are largely dependent on the exchange rate of the Polish zloty against other currencies and trends in prices on international markets.

In the end of 2012 Marine Harvest, leading Norway Company specialized in processing salmon, bought 48.5% share of Morpol (the biggest Polish company which is primarily involved in value added processing of smoked salmon) on the Oslo Stock Exchange. There were no other ownership changes in fish processing, but generally it is believed that further consolidation is needed to strengthened the sector and for further development.

Most of projects which modernized fish processing technologies and manufacturing process were funded from the European Fisheries Fund (EFF) on the basis of operational program "Sustainable development of fisheries sector and coastal fishing areas 2007-2013". 73 agreement was signed in 2012 in measure 2.5 for investment in fish processing and marketing and €20.6 million was contracted. From the beginning of operational program 324 agreements was signed in measure 2.5 and €79.1 million was contracted at the level of 75.2% allocation used.

In 2013 a further development of the fish processing industry in Poland is expected as a result of stopping the downward trend in domestic consumption and increased exports. The economic recovery in the EU, particularly in Germany – the main market for fish products from Poland, will develop the export of fish products.

Investment will be continued as the result of efforts to improve competitiveness in foreign markets.

It is expected that sector's economic performance will stay stable compared to the previous years.

4.18 PORTUGAL

4.18.1 General overview of the Portuguese fish processing industry sector

Portuguese domestic market is a large final consumer for fish and fish products, the biggest within UE in *per capita* consumption, with around 57.1 Kg/person/year (2011 FAO - Food Balance Sheets). This configures a unique profile and opportunity, combining tradition, experience, innovation and know-how, for the fish processing companies.

In 2012, Fish Processing Industry in Portugal consisted of 180 enterprises, 91 of which were small enterprises with less than 11 employees. Most enterprises are located in the north (61) and centre (66) of the country. All together these enterprises employed 6,823 people and production amounted to 212 thousand tonnes, and a total income of €1,078 million.

Traditionally there are three main segments in Fish Processing in Portugal: frozen industry; cannery and preparation; salting and drying, each with their own specificity.

Frozen industry produced 105.9 thousand tonnes of seafood in 2012. With a big number of different productions presented, from fish to crustaceous, shellfish or cephalopods, the main products of this segment are frozen desalted cod, sardine and hake. In general, frozen industry depends on a high import of raw material. Production is mostly directed to supply national market, but also has a high export value component.

Salting and drying produced 61.4 thousand tonnes of seafood in 2012. The main product of this segment of the industry is salted dried cod. This production is mostly concentrated near the port of Aveiro (Ílhavo) and the final product is for domestic consumption within the national market. The raw material is mainly imported.

Cannery and preparation produced 44.7 thousand tonnes in 2012. Main products include preparation and cannery of sardine, mackerel, horse mackerel and tuna. This industry is concentrated near major ports specialized on pelagic fisheries, such as Matosinhos (North), Peniche (Center) and Olhão (South). One of the reasons for this situation is the high dependency of the national industry on small pelagic production, namely sardine, mackerel and horse-mackerel. This is the only segment of the Portuguese fish processing industry that is more exported than home consumed, and with increased figures on exports.

Fish processing as secondary activity is done by 38 enterprises representing a combined turnover of €135 million in 2010 and corresponding to approximately 11% of total turnover from fish processing.

Most Portuguese fish processing enterprises are small companies with less than 11 employees. By contrast, only 2% of the enterprises have more than 250 employees. This is related with the labour work intensity over the production: cannery still is very high intensive man-power (mostly women by tradition), the salted cod is medium to small intensive, while frozen is much less intensive in labour-work (but also with the higher number in companies).

From 2008 to 2012 the number of enterprises in total reduced by 15%, mainly due to the decrease in the number of small enterprises between 11 and 49 employees, mostly in frozen and salting segments. The number of employees slightly increased (by 2%) during the same period and the average wage increased by 11% to 12 thousand euros. The ratio between male and female workers is changing, with the prevalence of the last one over the first. Over the period, female workforce increased by 9% while male workforce decreased by the same amount. In 2012 the female workforce represented 68% of the total employees, against 64% in 2008.

Table 4.18.1: Portuguese fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	213	202	194	185	180	▼	-3%	▼ -15%
≤10 employees	111	99	91	82	91	▲	11%	▼ -18%
11-49 employees	57	62	59	58	46	▼	-21%	▼ -19%
50-249 employees	43	37	41	41	39	▼	-5%	▼ -9%
≥250 employees	2	4	3	4	4	▬	0%	▲ 100%
Employment (number)								
Total employees	6,664	6,815	7,277	7,314	6,823	▼	-7%	▲ 2%
Male employees	2,377	2,431	2,596	2,425	2,163	▼	-11%	▼ -9%
Female employees	4,287	4,384	4,681	4,889	4,660	▼	-5%	▲ 9%
FTE	6,561	6,738	6,916	6,913	6,308	▼	-9%	▼ -4%
Male FTE	2,340	2,404	2,467	2,291	2,033	▼	-11%	▼ -13%
Female FTE	4,221	4,334	4,449	4,622	4,275	▼	-8%	▲ 1%
Indicators								
FTE per enterprise	30.8	33.4	35.7	37.4	35.0	▼	-6%	▲ 14%
Average wage (thousand €)	10.9	11.1	11.6	12.1	12.0	▬	0%	▲ 11%
Labour productivity (thousand €)	76.1	66.6	74.2	73.6	66.8	▼	-9%	▼ -12%
Unpaid work (%)	1.3	1.1	4.7	5.4	6.6	▲	22%	▲ 426%

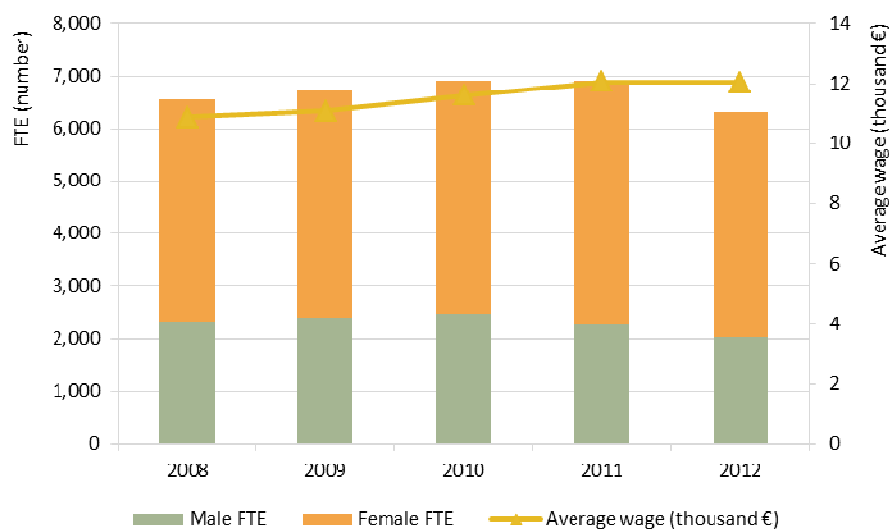


Figure 4.18.1: Portuguese employment trends, 2008-2012

4.18.2 Economic performance of the Portuguese fish processing industry sector

In 2012, total income was €1,085.6 million, a decrease of 1% by comparison to 2008.

Frozen industry produced 105.9 thousand tonnes of seafood in 2012, a decrease of 3.7% compared to the 2009-12 period, while the sales amounted to 85.6 thousand tonnes, with a value of €329.9. From 2011 to 2012 there was an increase of 1.6% on sales by quantity but with a decrease of 2.6% in value, which translates in the decreasing of the average price per kilo, from 4.02 €/kg to 3.85 €/kg.

Salting and drying produced 61.4 thousand tonnes in 2012, an increase of 4.7% over the previous year, while sales amount to 47.4 thousand tonnes, with a value of €259 million also in 2012. The average price per kilo decreased from 5.82 €/kg to 5.46 €/kg from 2011 to 2012.

Cannery and preparation produced 44.7 thousand tonnes in 2012, an increase of 1% over the previous year, while sales amount to 42.8 thousand tonnes, with a value of €194.7 million. The value of sales decreased by 2.7% over the previous year and as an aftermath of the 10% increasing in the 2010-11 period. The average price per kilo increased from 4.27 €/kg to 4.55 €/kg.

Purchase of raw materials (fish and others) represented, in 2012, the largest share of the cost structure, with 83% of total costs, and representing 56% of the total income.

Labour costs are, historically, the second main cost item. In 2012 these costs amount to 10% of the total cost structure and 7% of the total income. Labour costs decreased by 10% over the 2011-12 period. Labour productivity reduced in the same period mainly due to lower prices of sales.

The GVA has been decreasing over the years, mainly due to increasing prices of fish and other raw material and simultaneously to a decreasing income (resulting from lower prices from sales). Albeit decreasing GVA and Net profit, the Portuguese processing industry remained profitable (€326.8 million net profit in 2012), being able to increase investment and reduce debt. The operational cash flow decreased by 33% but the companies are still making money from the activity, generating an overall €349.2 million.

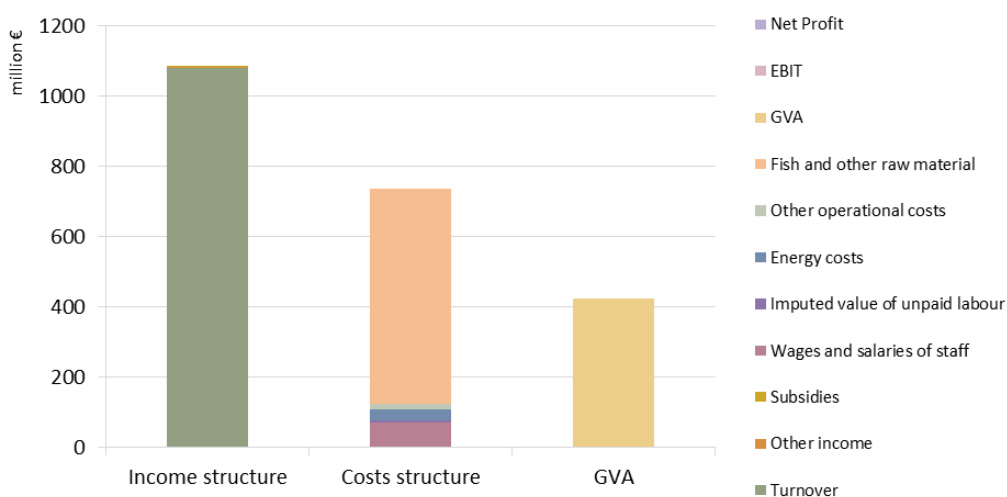


Figure 4.18.2: Economic performance of the Portuguese fish processing industry sector, 2012

Table 4.18.2: Economic performance of the Portuguese fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	1,090.8	1,015.0	1,089.2	1,131.6	1,078.0	▼ -5%	▼ -1%
Other income	3.5	2.8	3.2	4.1	4.0	▼ -3%	▲ 16%
Subsidies	3.7	4.1	2.7	3.4	3.7	▲ 8%	▼ -2%
Total Income	1,098.0	1,021.8	1,095.1	1,139.1	1,085.6	▼ -5%	▼ -1%
Expenditure (million €)							
Purchase of fish and other raw material for production	566.6	541.8	534.1	574.1	611.9	▲ 7%	▲ 8%
Wages and salaries of staff	70.5	73.8	76.5	78.9	71.0	▼ -10%	▲ 1%
Imputed value of unpaid labour	0.9	0.8	3.7	4.5	5.0	▲ 11%	▲ 461%
Energy costs	26.7	25.8	26.2	29.6	30.3	▲ 2%	▲ 13%
Other operational costs	1.3	1.2	18.9	23.1	18.3	▼ -21%	▲ 1264%
Total production costs	666.1	643.4	659.3	710.2	736.4	▲ 4%	▲ 11%
Capital Costs (million €)							
Depreciation of capital							
Financial costs, net	42.2	27.7	20.7	25.8	22.3	▼ -14%	▼ -47%
Extraordinary costs, net	4.8	5.8		0.0	0.0	▬ 0%	▼ -100%
Capital Value (million €)							
Total value of assets	1,034.8	989.9	1,054.3	1,013.4	976.3	▼ -4%	▼ -6%
Net Investments	43.8	47.2	30.5	28.5	39.7	▲ 39%	▼ -9%
Debt	745.8	697.0	735.3	694.4	623.8	▼ -10%	▼ -16%
Performance Indicators (million €)							
Gross Value Added	499.6	449.0	513.3	508.9	421.6	▼ -17%	▼ -16%
Operating Cash Flow	431.9	378.4	435.8	428.9	349.2	▼ -19%	▼ -19%
Earning before interest and tax							
Net Profit							
Capital productivity (%)	48.3	45.4	48.7	50.2	43.2		
Return on Investment (%)							
Financial Position (%)	72.1	70.4	69.8	68.5	63.9		
Future Expectation Indicator (%)							



Figure 4.18.3: Income, costs, wages and labour productivity trends of the Portuguese fish processing industry sector, 2008-2012

4.18.3 Overview of the Portuguese fish processing industry sector by size categories

Not all variables are discriminated by size categories, due to national statistics limitations, including energy costs and purchase of fish and other raw material for production. In this absence of data, it's impossible to analyse the economic performance of each size category.

In 2012 there are 51% companies with less than 10 employees, and only 2% with more than 250.

The smallest companies increased in number by 11% comparing with 2011, while the segment of 11-49 employees decreased 21%, the segment 50-249 decreased 5%, and the over 250 employees remains equal to 2011.

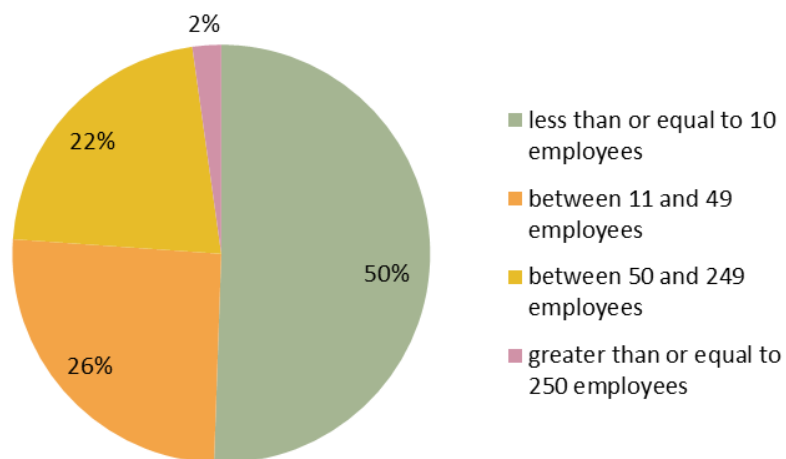


Figure 4.18.4: Number of enterprises by size category, 2012

Within a total employment of 6,308 FTE, the smallest companies represents only 2% of total FTE, while the big companies represents 25% of employment. The 50 to 249 employee's category represents 57% of the total manpower in fish processing industry.

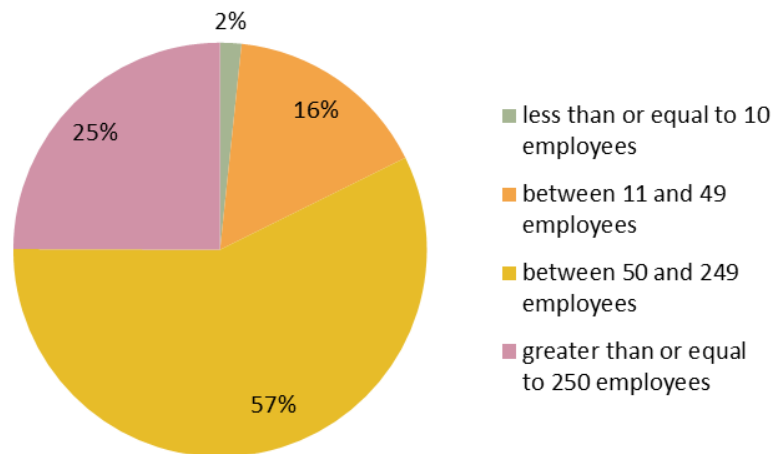


Figure 4.18.5: Employment (FTE) by size category, 2012

By income in 2012, the small companies represents 3% of the all (€29 million, increased 94% from the previous year), while big companies gets 18% (193 million, an increase of 13% from 2011).

The 50 to 249 employees companies gets the biggest share with over 60% income (€657 million), but reduced by 3% comparing with 2011.

The 11 to 49 employees companies represents 19% income, with €205 million, but reduced by 26% regarding the previous year.



Figure 4.18.6: Portuguese main structural and economic variables trends by size category, 2008-2012

Table 4.18.3: Economic performance of the Portuguese fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
less than or equal to 10 employees								
Total Income		16.2	15.6	15.0	29.1	▲	94%	
Total production costs		1.6	3.9	1.7	2.3	▲	35%	
Gross Value Added		16.2	13.2	14.6	28.5	▲	95%	
Operating Cash Flow		14.7	11.7	13.3	26.8	▲	101%	
Earning before interest and tax				13.3	26.8	▲	101%	
Net Profit				12.9	26.3	▲	104%	
between 11 and 49 employees								
Total Income	273.7	295.7	275.4	277.9	205.9	▼	-26%	▼ -25%
Total production costs	14.5	18.1	21.1	24.9	15.9	▼	-36%	▲ 10%
Gross Value Added	272.8	294.8	271.1	268.4	201.6	▼	-25%	▼ -26%
Operating Cash Flow	259.2	277.6	254.3	253.1	190.0	▼	-25%	▼ -27%
Earning before interest and tax				253.1	190.0	▼	-25%	
Net Profit				246.9	186.7	▼	-24%	
between 50 and 249 employees								
Total Income	700.6	569.7	671.3	674.9	656.9	▼	-3%	▼ -6%
Total production costs	46.1	40.9	56.2	54.2	52.5	▼	-3%	▲ 14%
Gross Value Added	698.5	567.5	659.6	664.3	645.5	▼	-3%	▼ -8%
Operating Cash Flow	654.5	528.8	615.1	620.7	604.5	▼	-3%	▼ -8%
Earning before interest and tax				620.7	604.5	▼	-3%	
Net Profit				604.2	590.7	▼	-2%	
greater than or equal to 250 employees								
Total Income		140.3	132.8	171.2	193.7	▲	13%	
Total production costs		15.3	17.9	25.7	23.6	▼	-8%	
Gross Value Added		138.2	129.6	165.3	188.1	▲	14%	
Operating Cash Flow		124.9	114.9	145.5	170.2	▲	17%	
Earning before interest and tax				145.5	170.2	▲	17%	
Net Profit				142.9	165.5	▲	16%	

Because there are some inconsistency on data for small company (under 10 employees) neither productivity nor average salary will be considered to further analysis.

4.18.4 Portuguese seafood trade

The Portuguese profile in fish processing industry is reflected in the natural trend on imports and exports profile.

For each industry segment there is an enormous difference on that pattern, which is consistent over the years, and is based on the natural home resources, versus the offer of the international markets to fulfil the huge national market demand.

In the whole, there is a traditional dependence on imports, with a considerable deficit on the international trade balance for fish and seafood products. This situation is somehow recovering for the last years (in quantity but not on value, due to the increasing international prices).

In 2012 EU market represented about 75% of the total value imported and exported, while extra EU represented the remaining 25% origin or destiny. If in imports this figure is stable for the last years, in exports the extra EU trend is growing; however is expected to decline in future analysis due to the Russia ban, which will affect an important share of the imported frozen cod that act as raw-material to salting and drying factories.

The most important partner is both import and export, Spain. For imports Russia (frozen cod) and Sweden (salted cod) are a very relevant source. For exports, also France (frozen, cannery), Brazil (dry salted and desalted frozen cod) and Italy (frozen and cannery) are the most relevant markets.

All together, the imports of fish and fisheries and aquaculture products represents in 2012 around 390 thousand tonnes and over €1.4 billion.

By segments, only cannery is considerably provisioned by national fleet (small pelagic, but not tuna), and get positive results within the general Trade Balance.

In the other side, both frozen and salting/drying industry has an enormous and structural dependency on imported raw-material, with negative consequences over the Portuguese trade balance.

For frozen there is a considerable amount of different species imported, but for salting the main species is and will be cod.

All together in 2012, in gross weight, the imports of frozen fish products and seafood represents more than half of the whole (57% in quantity; 48% in value), while dried (17% and 21%), fresh (18% and 20%) and cannery (8% in volume and in value) are the remaining components.

By species the imports are quite different: salting and drying is mainly cod, the imports on cannery is based on tuna and tune like, but fresh and frozen imports are based on multiple species (frozen cod for salting is the main, but then came hake, squid, octopus, tuna, crustaceous, redfish, horse-mackerel, sardine and salmon, before a long list of other species).

Because Portugal is a net consumer of fish and seafood products, exports has a traditional smaller impact on the general economics and in trade balance. Exports represents in 2012 around 207 thousand tonnes and close to €680 million.

Nevertheless in the last years exports are increasing both in value and in quantity. However, from 2011 to 2012 the value of exports diminishes by 11%, while increasing by 2% in quantity.

Cannery, and more specific sardine and mackerel cannery, are the main exports of the national resources with 22% in volume (gross weight) and 27% of the total exports. Either fresh or frozen has important and increasing shares in exports: 28% and 43% in volume and 23% and 40% in value.

As a result of this dynamics the Portuguese Trade Balance for fish and fisheries and aquaculture products is typically negative, with total imports of about twice the total amount of exports.

The result is a traditional deficit, of about 180 thousand tonnes or €690 million in 2012. These figures partially recovered from 2011 to 2012 in volume (-201 to -181 thousand tonnes), but get a negative increase in value (-€641 to -€690 thousand).

Because of the involved amounts in import and export, frozen products gives the biggest share to this reality (-131 thousand tonnes/ -€410 thousand tonnes). Dried and salted products also get big responsibility on the negative result (-53 thousand tonnes/-€233 million).

Import (2011-2012)

	2011				2012			
	ton	%	euro	%	ton	%	euro	%
Dried-salted-smoked	67628,7	16,7	326 257 486	23,2	65098,4	16,8	300 677 949	22,0
Fresh	77342,1	19,1	259 709 938	18,5	68711,8	17,7	274 838 611	20,1
Frozen	222785,5	55,0	701 112 378	49,9	221982,8	57,1	680 535 249	49,7
Other	0	0,0	0	0,0	0	0,0	0	0,0
Prepared-preserved (cannery)	37372,5	9,2	117 967 863	8,4	32757	8,4	113 473 130	8,3
TOTAL	405128,8	100,0	1 405 047 665	100,0	388550	100,0	1 369 524 939	100,0

Variation (2012/2011)	-4,1	-2,5
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Export (2011-2012)

	2011				2012			
	ton	%	euro	%	ton	%	euro	%
Dried-salted-smoked	10648,8	5,2	64 079 742	8,4	11269,5	5,4	67 423 304	9,9
Fresh	53608,7	26,3	182 840 097	23,9	59372,9	28,7	156 569 018	23,1
Frozen	99178,9	48,7	355 669 283	46,6	90411,5	43,7	269 684 249	39,7
Other	0	0,0	0	0,0	0	0,0	0	0,0
Prepared-preserved (cannery)	40184,7	19,7	161 375 647	21,1	46043,1	22,2	185 239 629	27,3
TOTAL	203621,1	100,0	763 964 769	100,0	207097	100,0	678 916 200	100,0

Variation (2012/2011)	1,7	-11,1
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Trade Balance (2011-2012)

	2011		2012	
	ton	euro	ton	euro
Dried-salted-smoked	-56 980	-262 177 744	-53 829	-233 254 645
Fresh	-23 733	-76 869 841	-9 339	-118 269 593
Frozen	-123 607	-345 443 095	-131 571	-410 851 000
Other	0	0	0	0
Prepared-preserved (cannery)	2 812	43 407 784	13 286	71 766 499
TOTAL	-201 508	-641 082 896	-181 453	-690 608 739

Data source: Eurostat

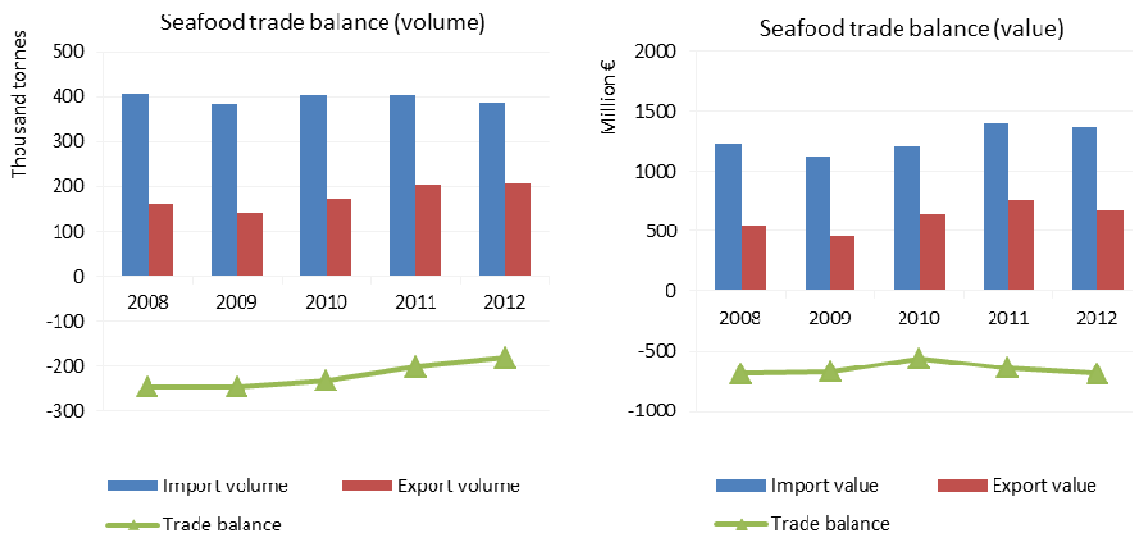


Figure 4.18.7: Portuguese seafood trade balance trends in volume (left) and value (right)

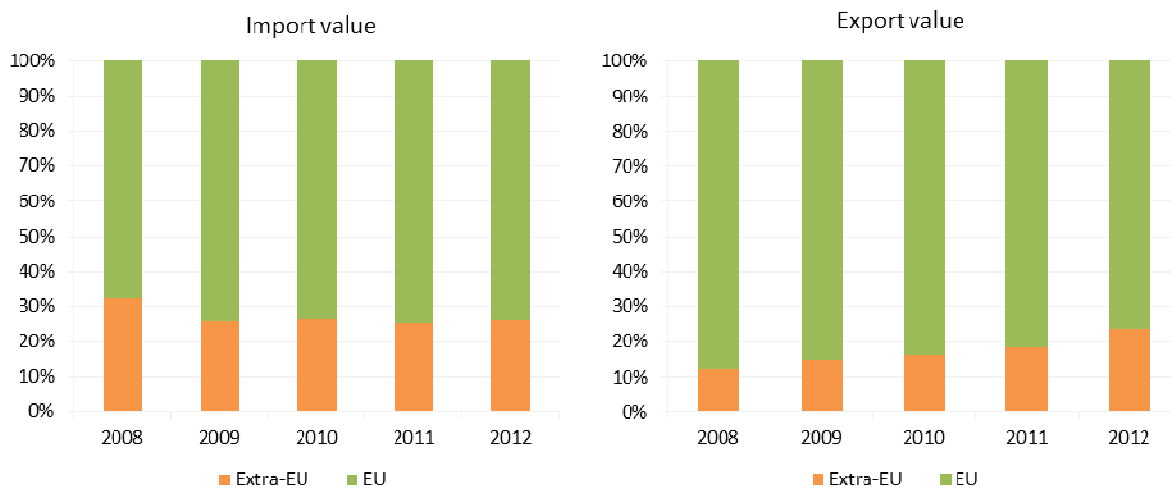


Figure 4.18.8: Portuguese seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

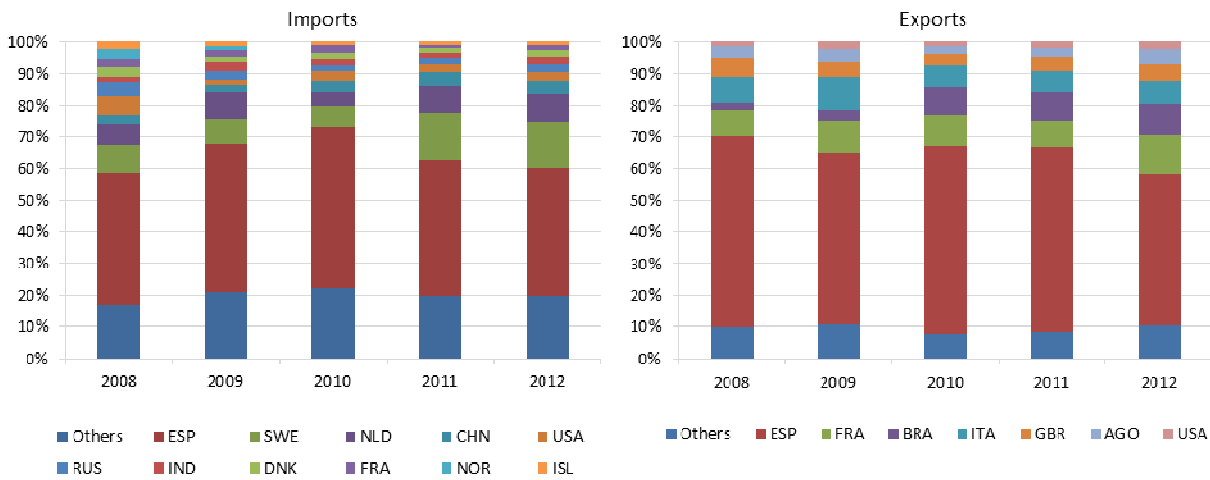


Figure 4.18.9: Portuguese seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

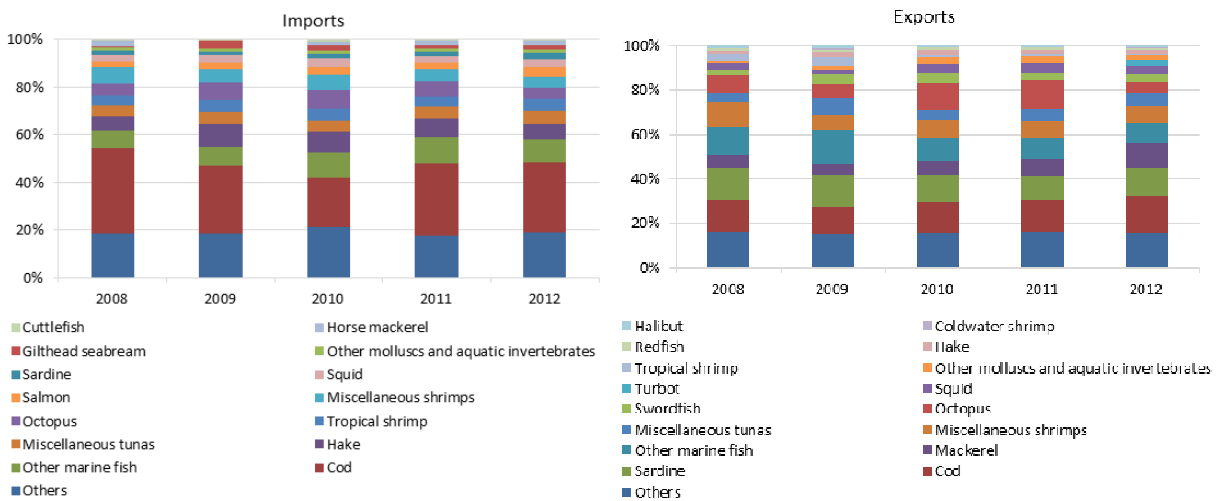


Figure 4.18.10: Portuguese seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

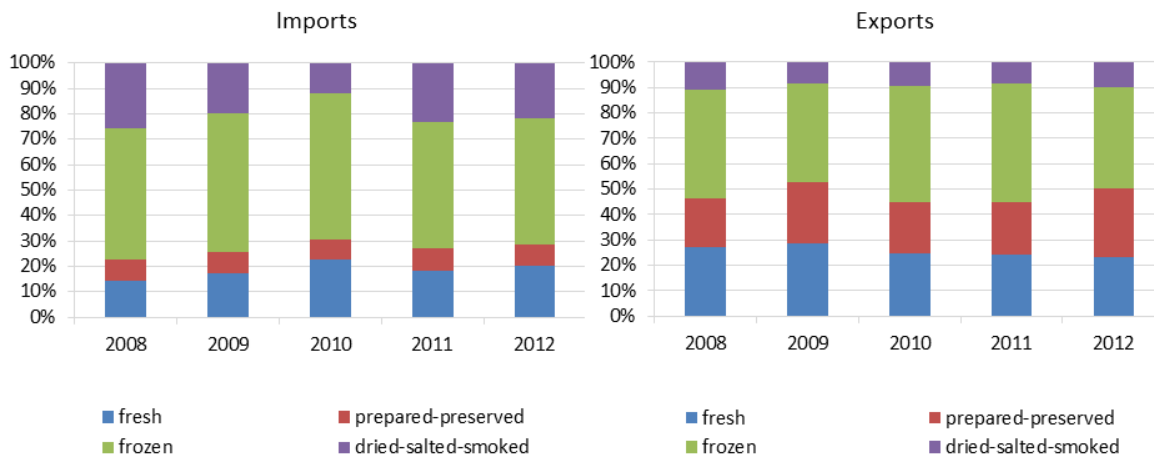


Figure 4.18.11: Portuguese seafood imports (left) and exports (right) trends by type of products: shares in value

4.18.5 Trends and drivers for change

The Portuguese fish processing industry will continue to be highly dependent on imports in order to fulfil the demand for the huge consumption *per capita*, mainly due to restrictions on catches imposed by quota regulation.

Only cannery still depends on domestic production (mainly for sardine and mackerel), while salting and drying sector depends almost exclusively from imports.

The increasing prices of raw material are expected to grow in the future and will put more pressure on the industry. Although the industry still have some room to accommodate this increasing of fish prices, it will continue to hinder its profitability, as the trends shows with the consistent decreasing of the net profit. It's expectable that the industry will keep some stability on structure and economic results.

Increasing prices of sardine due to low availability of this specie and the implementing of catch restrictions on national level fleet (sardine catches reduce from 55 thousand tonnes to 33 thousand tonnes in 2012 and 15 thousand tonnes in 2014) are putting high pressure on the cannery industry, which will probably need to turn to imports as an alternative for supply.

4.19 ROMANIA

4.19.1 General overview of the Romanian fish processing industry sector

In 2012 the Romania processing industry registered a decrease of productive enterprises in number at 14 comparing with 2011-22 units. The registration of data released by operators as a main activity (subject of data collection) is showing the actual situation change, due to the fact that those types of producers didn't operate significant modifications in the structure of the companies trying to keep their profile. Consequently, the number of the employees reported is decreased from 1181 to 780 and from 1178 to 780 as FTE, out of which male number is 388 and female 392 – see Table 4.19.1. Due to the bigger decrease of the number of units having less than 10 employees, by 71%, comparing with the same decreasing number of the units 50-249 employees, by 38%, the FTE per enterprise increased slowly – 4%. The average wage is decreasing to 3.3 thousands Euros due to the decreasing of total income (as turnover and other income) by 36%. It could be an assumption that some companies switch to other activities, so existing from the segment of processing units as main activity, in their attempt to diversify the targets on total income, ensuring the developing of the companies, and as a response to the competition from big supermarkets chains, detaining the first place on processing fish products sales on the internal market.

Table 4.19.1: Romanian fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	13	13	18	22	14	▼	-36%	▲ 8%
≤10 employees		3	2	7	2	▼	-71%	
11-49 employees		5	9	7	7	▬	0%	
50-249 employees		5	5	8	5	▼	-38%	
≥250 employees		0	2	0	0	▬	0%	
Employment (number)								
Total employees	513	572	1,598	1,181	780	▼	-34%	▲ 52%
Male employees	206	230	681	612	388	▼	-37%	▲ 88%
Female employees	307	342	917	569	392	▼	-31%	▲ 28%
FTE	503	564	1,591	1,178	780	▼	-34%	▲ 55%
Male FTE	201	224	677	610	388	▼	-36%	▲ 93%
Female FTE	302	340	914	568	392	▼	-31%	▲ 30%
Indicators								
FTE per enterprise	38.7	43.4	88.4	53.6	55.7	▲	4%	▲ 44%
Average wage (thousand €)	3.1	3.1	4.0	4.6	3.2	▼	-31%	▲ 4%
Labour productivity (thousand €)	42.9	43.1	492.3	46.3	37.3	▼	-19%	▼ -13%
Unpaid work (%)	23.6	23.5	3.9	5.3	5.5	▲	3%	▼ -77%

The actual figures can not lead to a conclusion of a decreasing trend of employees' number, due to the units which changed in 2012 the percentage of other activities in their total income, and in this way being excluded from the process of data collection, according to the regulation. This is an issue should be consider on analyzing the sector as a whole, in what meant the global overview on the export, import of raw material, total products sales, according to other information sources, for example Eurostat data. It will be explained in the respective chapter. The market opportunities should be consider for the medium term evolution strictly related to the international market situation in one hand, and the weaknesses of the sector organization itself.

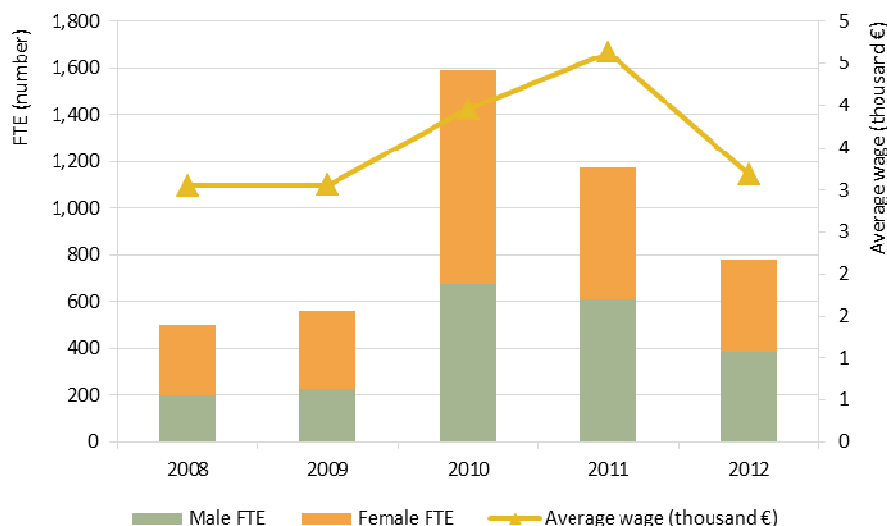


Figure 4.19.1: Romanian employment trends, 2008-2012

The distribution of fish processing companies into the sector reveals that 50% is of the segment of companies 11-49 employees, 36% is of the segment 50-249 employees and 14% is of the segment ≤ 10 employees, as per the data recorded; that meant the enterprises with 11-249 employees is representing the huge part of the sector. The policy to consolidate the development of the sector, as a government strategy, should comprise measures for these enterprises.

4.19.2 Economic performance of the Romanian fish processing industry sector

The total turnover of the Romania fish processing industry in 2012 registered a decrease, as a consequence of the decreased number of units as main activity, from €44.5 million to €30.4 million, respectively a decreasing percentage of 32%; the other income shoes also a decrease by 44%, from €23.3 million to €13 million. The total income decreased from €67.9 million in 2011 to €43.4 million 2012, by a total percentage of 36%. The subsidies for the sector have been 0, without any influence on the evolution of the total income inside industry. That could be also, an explanation on the decreasing number of enterprises, number of employees, and total income; and the migration to other activities in order to resist on the business by other units, which were in the past in the segment of companies as main activity. Table 4.19.2 reflects the corresponding changes in this “involution” of the sector, i.e. decrease of: total income (as turnover and other income – as above mentioned), number of units, employees, total value of assets, despite of a slow increase of investments by 4%. This last indicator shows the fact that the real producers (not the investors guided by the other opportunities resulting exclusively in profit increase) are still on the way.

According to Figure 4.19.2., the structure of the total income is characterised by the consistency of the turnover-70% of total income, and only 30% for other income. The costs structure is composed by the main cost – raw material purchase, wages and salaries, other costs and energy costs. This structure is illustrating the low level of net investments, which are not targeting the modernization of the production technology, investing in new equipments. As a conclusion, the trends in the costs structure are unchanged in Romania processing industry.

The extensive use of the manual works is resulting in a decrease trend of productivity Table 4.19.3. This aspect is permissive in the domestic market, due to the lower cost of the work. Despite of this aspect, due to the fact

that employees number decreased by 34%, and meantime the average of wages and salaries decreased by 31%; the productivity decreased only by 19% in 2012 versus 2011, as per reported data, and Table 4.19.2.

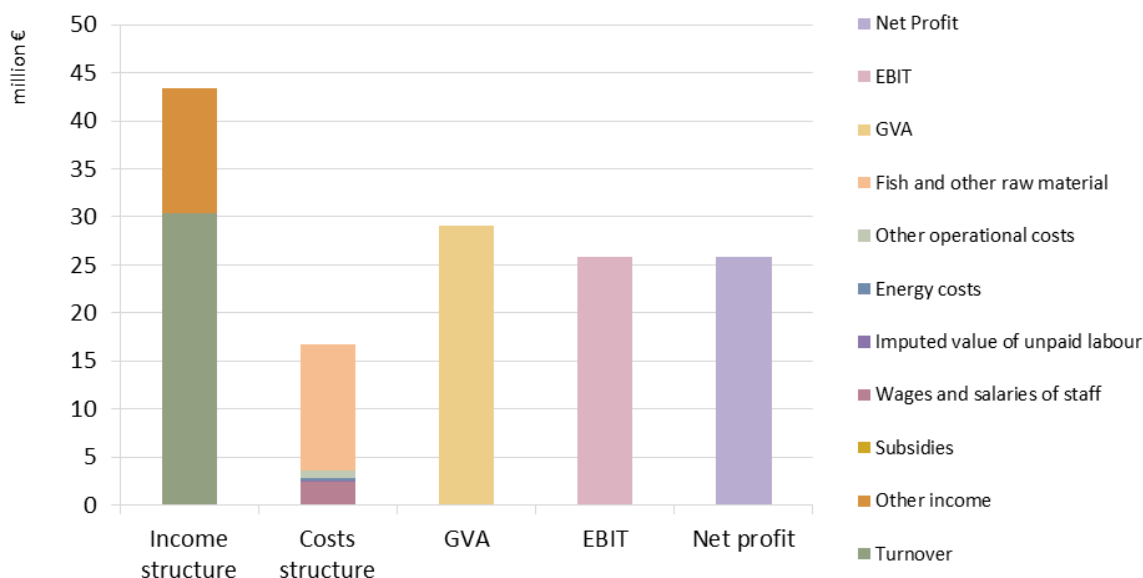


Figure 4.19.2: Economic performance of the Romanian fish processing industry sector, 2012

Table 4.19.2 shows a decreased amount of total income, total costs, net profit in 2012 versus 2011; the Table 4.19.2 shows a decreased amount of total income, total costs, net profit in 2012 versus 2011; the explanation is a number of companies “left” the category of units main activity processing, and falling in the category of units with other main activity than processing, and, as per regulation provisions, data for those enterprises are not collected. So that, all parameters are lower in 2012 versus 2011 by percentages between 65% - depreciation of capital, and 32% - total value of assets.

A significant increase in 2012 over 2011 is for purchase of fish and raw material for production by 9%, and other operational costs - 49% and financial costs net – 373%, due to the better collection of data. Despite the decrease of the total income in 2012 over 2011 by 36%, mostly due to the decreased number of companies, other indicators, such as capital productivity, return of investment, and financial position reached a positive level, despite of lower level in 2012 than 2011.

The decrease of wages and salaries is resulting in a good level of the future expectation as an indicator illustrating the actual situation of the economic potential of the sector (still existing) and of the market opportunities. That meant the processing industry, not enough supported by the government (having other priorities) illustrated by the lack of subsidies, is recovering having a positive value of 1.4. This could be a response on the challenges of the sector and the real producers of the fish products and their confidence to continue maintaining and persisting on the business.

Table 4.19.2: Economic performance of the Romanian fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	28.4	31.9	816.6	44.5	30.4	▼ -32% ▲	7%
Other income	0.3	0.3	60.2	23.3	13.0	▼ -44% ▲	4404%
Subsidies	0.0	0.0	0.1	0.0	0.0	▬ 0% ▬	0%
Total Income	28.7	32.3	876.9	67.9	43.4	▼ -36% ▲	51%
Expenditure (million €)							
Purchase of fish and other raw material for production	5.7	6.4	18.5	12.2	13.2	▲ 9% ▲	133%
Wages and salaries of staff	1.2	1.3	6.1	5.2	2.4	▼ -55% ▲	100%
Imputed value of unpaid labour	0.4	0.4	0.2	0.3	0.1	▼ -53% ▼	-63%
Energy costs	0.2	0.3	2.3	0.7	0.4	▼ -51% ▲	61%
Other operational costs	1.2	1.4	72.9	0.5	0.7	▲ 49% ▼	-44%
Total production costs	8.6	9.7	99.9	18.8	16.7	▼ -11% ▲	94%
Capital Costs (million €)							
Depreciation of capital	0.6	0.6	44.6	2.3	0.8	▼ -65% ▲	45%
Financial costs, net	6.2	7.0	161.6	0.0	0.0	▲ 373% ▼	-99%
Extraordinary costs, net	0.0	0.0	0.0	0.0	0.0	▬ 0% ▬	0%
Capital Value (million €)							
Total value of assets	16.6	19.0	1,022.0	29.4	20.0	▼ -32% ▲	20%
Net Investments	0.0	3.4	15.3	1.0	1.1	▲ 4% ▬	0%
Debt	14.2	15.9	469.9	24.1	16.6	▼ -31% ▲	17%
Performance Indicators(million €)							
Gross Value Added	21.6	24.3	783.2	54.5	29.1	▼ -47% ▲	35%
Operating Cash Flow	20.1	22.6	777.0	49.0	26.6	▼ -46% ▲	33%
Earning before interest and tax	19.5	21.9	732.4	46.7	25.8	▼ -45% ▲	32%
Net Profit	13.3	15.0	570.8	46.7	25.8	▼ -45% ▲	94%
Capital productivity (%)	130.2	128.2	76.6	185.3	146.0		
Return on Investment (%)	117.7	115.8	71.7	158.9	129.5		
Financial Position (%)	85.5	84.1	46.0	81.9	83.0		
Future Expectation Indicator (%)	-3.3	14.5	-2.9	-4.2	1.4		

As mentioned above, the extensive use of the manual works is resulting in a decrease trend of productivity Table 4.19.3. This aspect is permissive in the domestic market, due to the lower cost of the work. Despite of this aspect, due to the fact that employees number decreased by 34%, and meantime the average of wages and salaries decreased by 31%; the productivity decreased only by 19% in 2012 versus 2011, as per reported data, and Table 4.19.2. .



Figure 4.19.3: Income, costs, wages and labour productivity trends of the Romanian fish processing industry sector, 2008-2012

The total costs and total income decreased in 2012 due to the decreasing number of companies main activity processing. This change is a result of the fact that, other companies moved for their main activity to other profile of business, and keeping the processing activity as secondary one, in order to increase the income on total business of the company. That meant in processing sectors are investors which are looking not only for processing; they invested money as a business opportunity and are ready to shift any time to other activities appearing more profitable in a certain economic situation. That could be also interrelated with the lack of support from the authorities for the sector and difficulties on getting financial support from other sources, as example EFF funding.

The lack in new investments (equipments, technologies, innovation actions, products advertising to increase the sales, etc) is resulting in a lower productivity and, in a slight decrease of average salaries and wages in 2012 comparing with 2011. The policy to consolidate the development of the processing sector, as a government strategy, should comprise measures for the enterprises, as medium size, having 11-249 employees; these companies are sharing more than 75% of the total income in the industry.

4.19.3 Overview of the Romanian fish processing industry sector by size categories

Romania fish processing industry is characterized by the main size category of enterprises with 11-49 employees, corresponding to 50% as units number-seg.2, followed by the segment with 50-249 employees – 36%-as seg.3, and the third one less than 10 employees – 14%-seg.1, as per the Figure 1, in 2012. The main characteristic is the domination of enterprises as SSM companies. Analyze on the structure composition of total income – seg. 2 and 3 summing 42.9 mil € represents all most 99% of the total. Consequently the importance of the companies 11-249 is more than significant, and is a result of the economic crises which shows the absence of the company bigger than 250 employees, and a decreasing importance of the small companies (seg.1) less than 10. These companies have the possibility to resist to increasing competition of the imported goods on the market; these companies, as a general remark, decreased the total number of employees, over the period, resulting in a good economic efficiency and profitability, as per GVA, Net profit and EBIT and with a reasonable Operating cash flow; reducing the level of salaries was the solution chosen by its, obviously. The seg.1 (less than

10 employees) was not able to adapt to the market involution, despite the units number, leading to a negative efficiency, costs recorded are bigger than total income; but smaller investors were trying to stay in the business.

As a general over look the sector registered a slight increase over the period 2008-2012 from total income of €32.2 million in 2008 to €33.4 million in 2012 of 0.03%. The missing investments in technical production means and resuming to investments in improving the facilities of auxiliary means it's a sign of a lack of confidence in the future evolution of the sector and the limitation of owners of the risks, aiming just the own profit, despite the market demands. In the following subchapters the analyze is detailed for each segment of the industry.

According to the regulation in Romania in 2012, data were collected for the four segments, corresponding on the number of employees per productive unit- Figure 4.19.4. As a number, the decreasing of the companies' ≤10 employees is more significant, form 7 in 2011 to 2 in 2012 – as above explained, the owners shift to other activities as main activity, other than processing, and they left this category and relevant data couldn't be collected. A similar situation is encountered on the segment 50-249 employees, from 8 in 2011 to 5 in 2012. That means the small companies are shifting very fast to other activities (could be trade or transportation of fish, or may be other activities) illustrating the elasticity/flexibility of the capital migration, and this is the reason for which the percentage of reduction is 71%, and for the segment 50-249 employees per unit the percentage of reduction is 38%. Both figures are too big in enough but characterising the immaturity of the investors. The sector is still under emergent stage, with a week organization; there are only 2 organizations of producers, but having 2/3 companies and not merged in one association of processing producers. Secondly, the most part of investors are people looking after the profit opportunities. The second segment of units' 10-49 employees is more stable, no variation as unit number, showing the consistency on the purposes targeted by investors for the processing business.

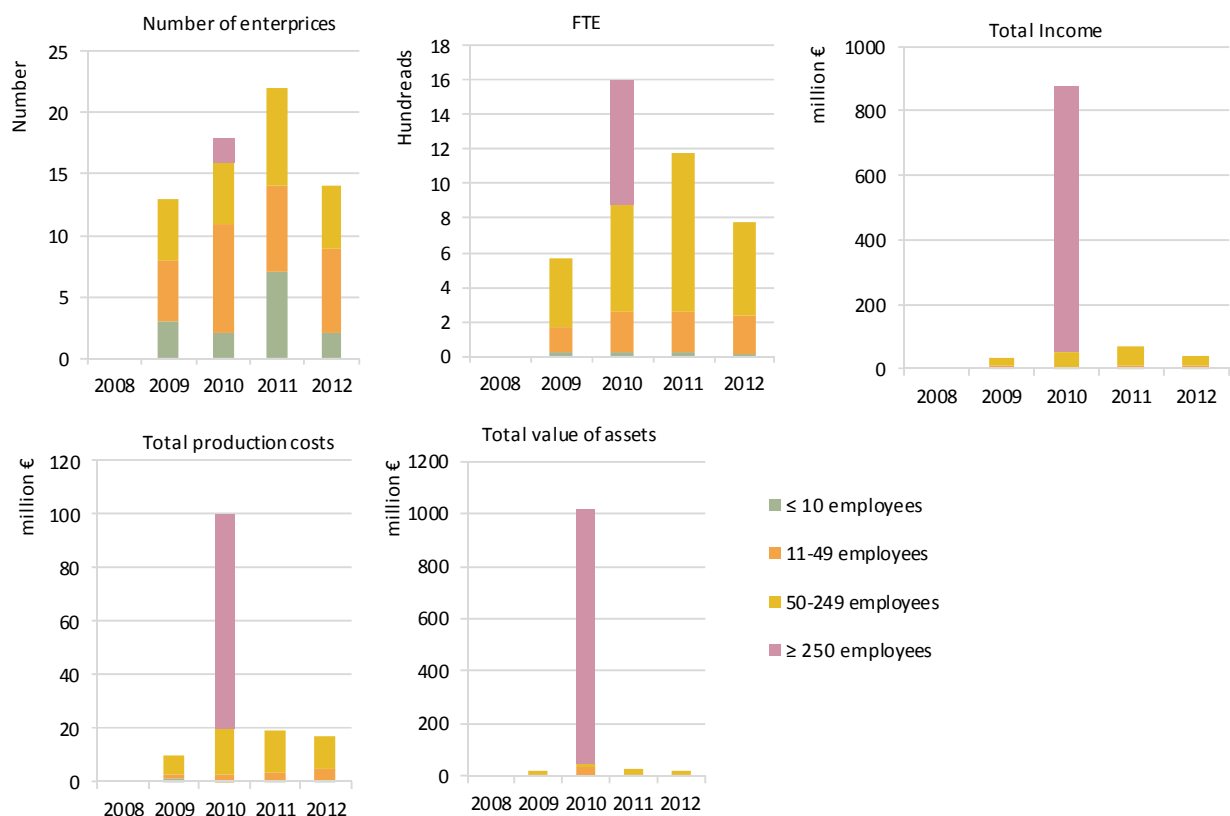


Figure 4.19.4: Romanian main structural and economic variables trends by size category, 2008-2012

The total employees as number and FTE, also, is a result in the evolution of capital migration shifting for other opportunities, as a business. These shifting are resulting on the inconsistency of the figures to one year to other, as per the graphs, both as total income and total costs. The comparability between the years and economic data series are not relevant for analyzing the sector using a guide of a SWOT analyze; it is more a year status picture.

The main characteristic is that one that the segment 50-249 employees is giving the biggest values for income and costs, showing the importance of those companies, which are the more stable during the analyzed period. In terms of value of assets the same assumption is made; that meant the stability of the business in the segment 50-249 employees is crucial for the entire processing sector in Romania.

The assets value increase in 2012 over 2008 with €3.4 million, but decreasing from 2011 with €9.4 million, by 32%, because of shifting to other activities (complementary ones).

Between the segments, in 2012 – Figure 4.19.5, the figures of total income are smaller that the total costs, as per data recorded for enterprises on the segment ≤ 10 employees leading to an net loss (profit) of around €100 thousand; the situation is explained in a very slow potential on adaptation to the market needs and a temporary (2012) non-profitability, caused “inter alia” of missing other income; the business is mostly a family one and missing the enlargement of activities could lead to such a result. Contrary, the segment 10-49 employees gate €11.3 million as income and €4.3 total costs; this is the main important segment in terms of stability and good presence in the market. The biggest part of income is coming from the biggest companies, 50-249 employees reaching €31.6 million and €11.8 million as total costs; in this segment position other income is around 10 mil€, illustrating the capacity of companies on additional activities for income. The cost structure is dominated, in all segments, by purchase of fish and other raw material for production, followed by wages and salaries of staff; the low percentage of depreciation of capital, energy costs is underling the fact the extensive use of manual work is a characteristic of the sector, as detrimental to the use of technical means for production, and leading to a low level of productivity and its decreasing trend.

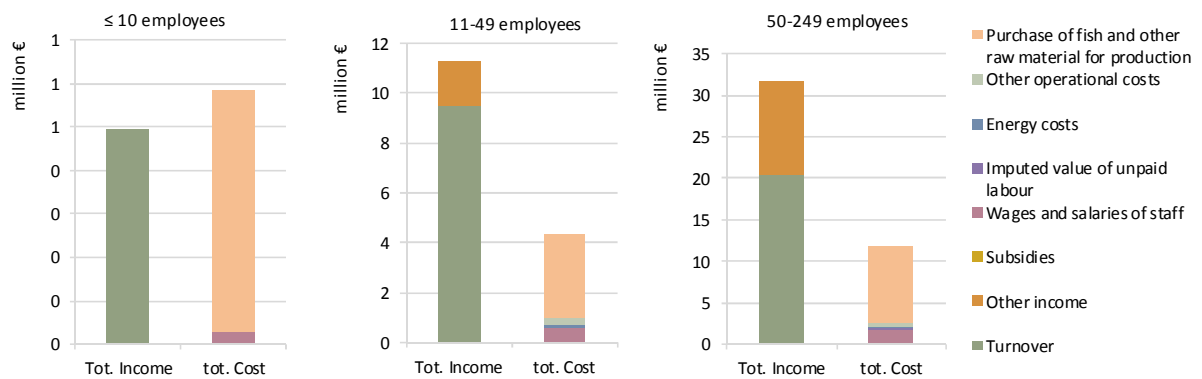


Figure 4.19.5: Romanian income and cost structure, by size category, 2012

As a consequence of the mentioned above analyzed aspects related to the costs, income, net assets as value and structure, and missing significant investments, as value and composition (especially for equipments) in Table 4.19.3 it could be seen the economic performance of the Romania processing sector by segments composition during 2008-2012.

According to the preliminary data, the segment ≤10 employees' with 2 companies reporting data is the most affected by the economic crisis and the recovering time should be longer for it. The efficiency indicators are negative in values, but taken into account the size of enterprises, these small entities are able to become profitable in the next 2013 year. The segment of medium size, as number of employees, 11-49 companies are stable as number in 2011 and 2012 – namely 7 units reporting data; as well as the total income grew in 2012 at €11.3 million over 2011 of €8.5 million, by 35%, and corresponding to a total amount of costs of €4.3 million in 2012. The results are positive for GVA, operational cash flow and EBIT, despite the fact that these indicators increased versus 2011 by 27% till 33%. This sector shows the good stability and the good orientation on the market/sector of this kind of company having a medium size, up to the regulation of data collection. The decreasing in size of the segment 50-249 employees per company, as number from 8 to 5, in 2012, generated a decrease of the income from €59.1 million in 2011 to €31.6 million in 2012, respectively from €15.7 million in 2011 to 11.8 €million in 2012 as total costs. Because of the reduction of enterprise number in the segment, the total amounts reduced, but despite of this reduction, the values of GVA, operational cash flow and EBIT are positive; should be specified that comparing the level of 2012 with that one on 2011, there is a reduction on a scale from 55% till 53%. There is a finding, generally resulting based on figures analyze, namely the processing is a profitable activity, especially to the fact that the prices for raw material are not so high in respect to the products prices on the market. The aspect of this discrepancy has an explanation on the presence of supermarket chains imposing a level of prices comparable with the similar products in other EU countries, but used in the Romania market with a low availability of consumers money. This is also an explanation for the contradictory evolution of data collected into the sector resulting in a certain variability of the data year to year, creating a possible conclusion of instability of the sector; more than that the domination of the fish and fish products market by the super market chains is creating the shifting from main activity processing companies to other activities, during the overlooked time period.

Table 4.19.3: Economic performance of the Romanian fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
less than or equal to 10 employees						
Total Income	2.3	0.5	0.3	0.5	▲ 64%	
Total production costs	1.5	0.1	0.1	0.6	▲ 402%	
Gross Value Added	1.3	0.5	0.2	-0.1	▼ -129%	
Operating Cash Flow	0.9	0.5	0.2	-0.1	▼ -149%	
Earning before interest and tax	0.8	0.5	0.2	-0.2	▼ -200%	
Net Profit	0.8	0.5	0.2	-0.2	▼ -213%	
between 11 and 49 employees						
Total Income	10.1	5.4	8.5	11.3	▲ 33%	
Total production costs	1.4	2.6	3.1	4.3	▲ 42%	
Gross Value Added	9.2	3.3	6.0	7.5	▲ 27%	
Operating Cash Flow	8.7	2.8	5.4	6.9	▲ 28%	
Earning before interest and tax	8.4	2.0	5.0	6.6	▲ 33%	
Net Profit	8.2	0.8	5.0	6.6	▲ 33%	
between 50 and 249 employees						
Total Income	19.8	48.3	59.1	31.6	▼ -46%	
Total production costs	6.8	17.1	15.7	11.8	▼ -25%	
Gross Value Added	13.8	34.8	48.3	21.6	▼ -55%	
Operating Cash Flow	13.0	31.2	43.4	19.8	▼ -54%	
Earning before interest and tax	12.8	29.5	41.6	19.4	▼ -53%	
Net Profit	6.0	28.2	41.6	19.4	▼ -53%	
greater than or equal to 250 employees						
Total Income		822.6				
Total production costs		80.1				
Gross Value Added		744.6				
Operating Cash Flow		742.5				
Earning before interest and tax		700.4				
Net Profit		541.3				

It should be reiterated that the domination of the market by the supermarket chains and a result of the actual economic crisis effects still persisting in Romania with a very slow trend of economic growth, the capital and labour productivity are decreasing between 2008 and 2012; the average of wages and salaries has a contradictory evolution as a response of the companies during their attempts to adapt to the market challenges. This evolution can be seen in Figure 4.19.6 below.

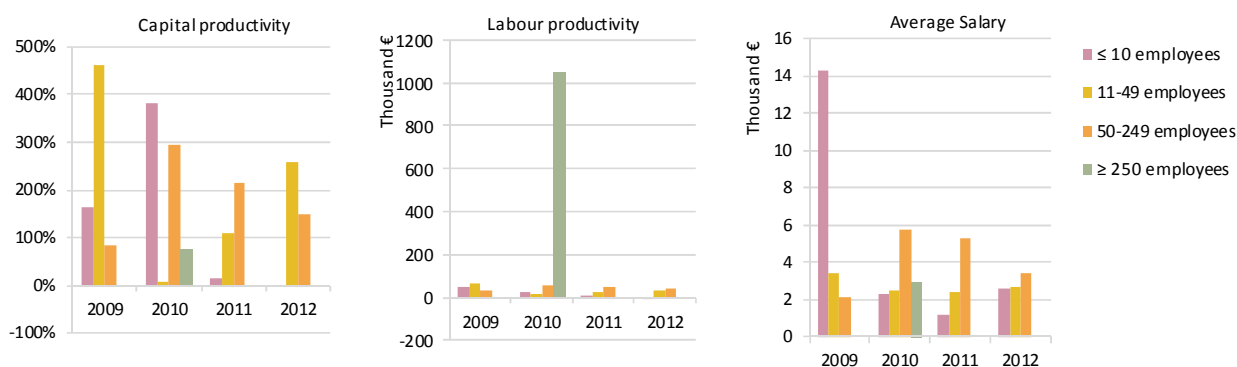


Figure 4.19.6: Romanian capital productivity, labour productivity and average salary trends, by size category, 2008-2012

These indicators reveal the actual status that it could be the base for the policy makers' guidance for the medium size companies, supporting the investments and helping the consolidation of the companies having 11-249 employees, covering more than 75% of total results in the sector, mainly in capital productivity, ensuring the increasing of the average salary.

4.19.4 Romanian seafood trade

The evolution of the market situation during 2008-2012 illustrated in Figure 4.19.7 conduct to a conclusion that the processing sector is dependent on imports of fish/fish products and some other raw material for production, and the result is in unbalanced trade balance, big imports versus small exports during the period, both intra and extra EU. The unbalanced amount is over €100 million, having the smaller level in 2011, due to the fact the imported quantities decreased also at 63.6 thousands tonnes comparing with 2010. The dependency of the market on foreign sources is explained on the missing marine fish species and sea food, because the marine aquaculture is not developed, the national fishery is offering small quantities catch in the Black Sea (the only fishing area and the fleet capacity is very low, in number of fishing vessels, as well as GT and KW-the ceiling level imposed by the EU Commission - and the aquaculture sector is offering fresh water species, generally from carp family (dominated by the Asian carp species) and certain quantity of trout, as the inland fishery is also offering to the consumers. More than that, the consumption of fish per capita is very small, and the additional quantities of fish to cover the national market demands are covered by import. The imports from EU countries reached 43.7 thousands tonnes and 19.9 thousands tonnes are from extra EU countries. In 2012 the imported quantities increased up to a total of 71.6 thousands tonnes amounting €143 million, out of which €116.9 million from EU countries and €26.1 million from non EU countries. The negative unbalanced trade amounted over €127 million, in 2012.

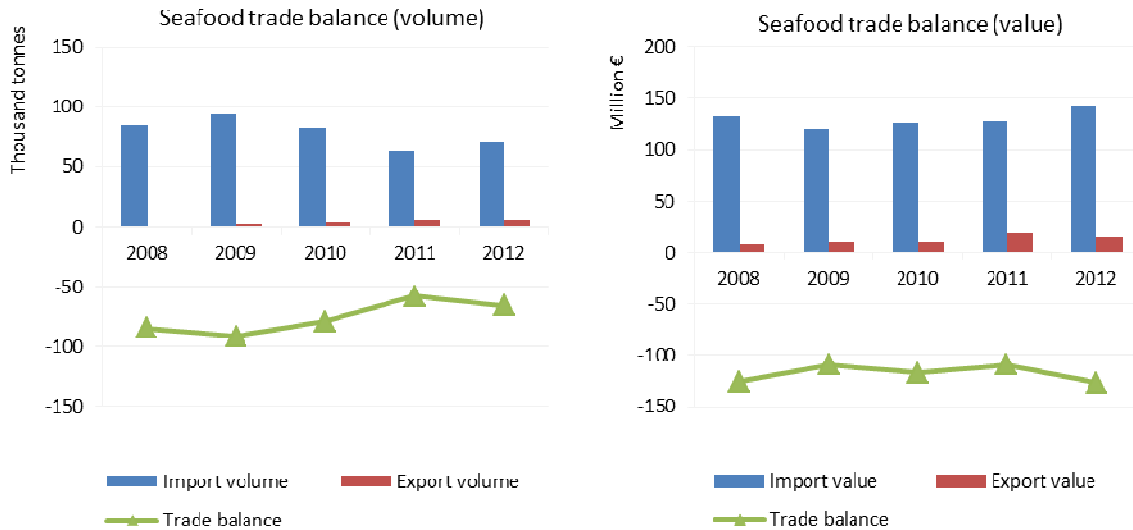


Figure 4.19.7: Romanian seafood trade balance trends in volume (left) and value (right)

Regarding the composition type of import and export of fish, as value, reveals that the in 2012 less than 20% came from Extra EU countries, resulting in an orientation of this type of trade to EU countries; as well as the exports are mostly oriented to the EU countries – approximately 90%, and only 10% to Extra EU countries – Figure 4.19.8.

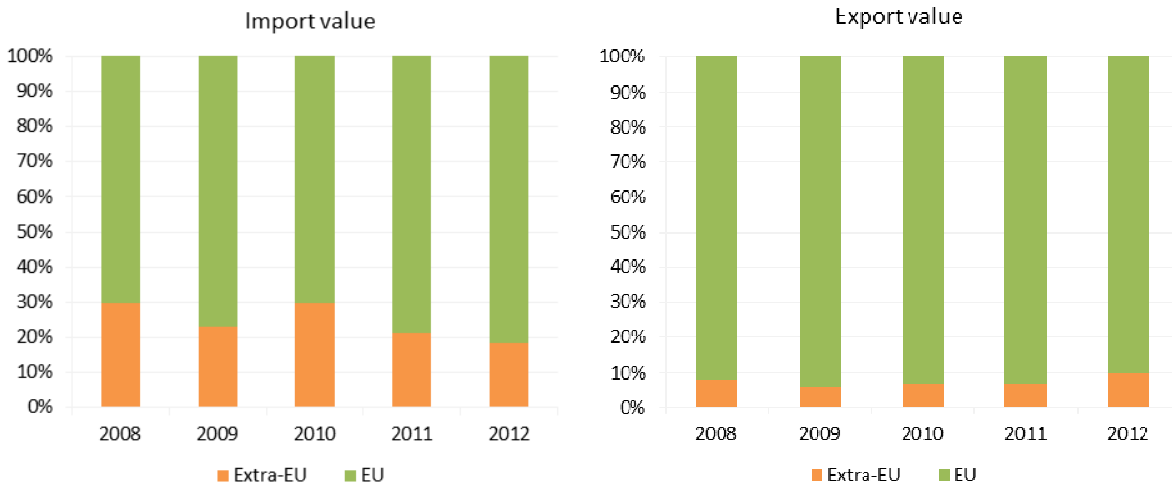


Figure 4.19.8: Romanian seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

Responding to the market national needs, especially in order to cover the reorientation of consumers to diversify the structure of fish and fish products consumption, the traders are attempting to respond diversifying the import origin from various countries – 35%, and from EU countries, on which the share is spread mainly by Italy, Nederland, Poland, Deutschland, Spain, Sweden – totalizing more than 47%, and non EU countries such as

Vietnam, Thailand, Peru, Norway, Taiwan and USA for approximately 18%. All percentages are shares of total import value - see Figure 4.19.9.

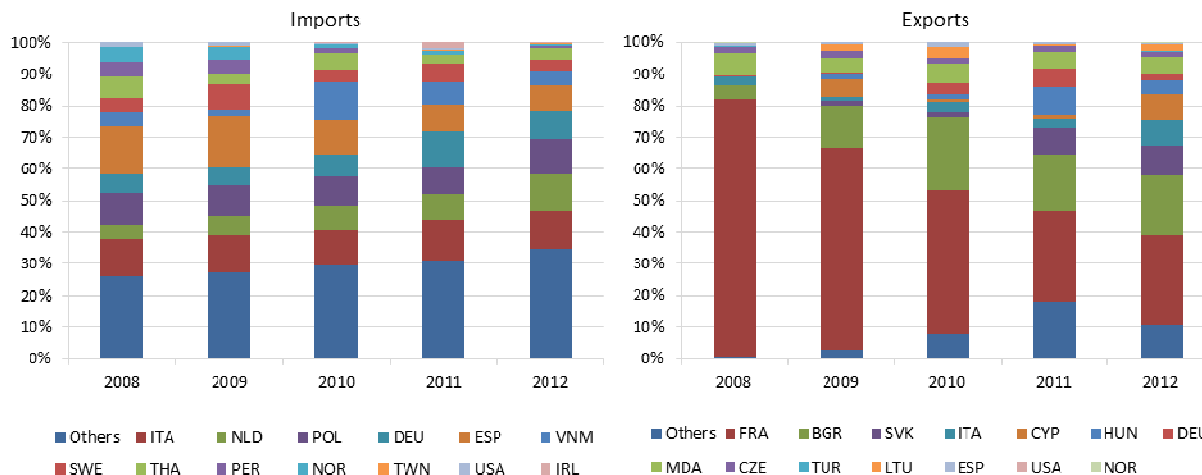


Figure 4.19.9: Romanian seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

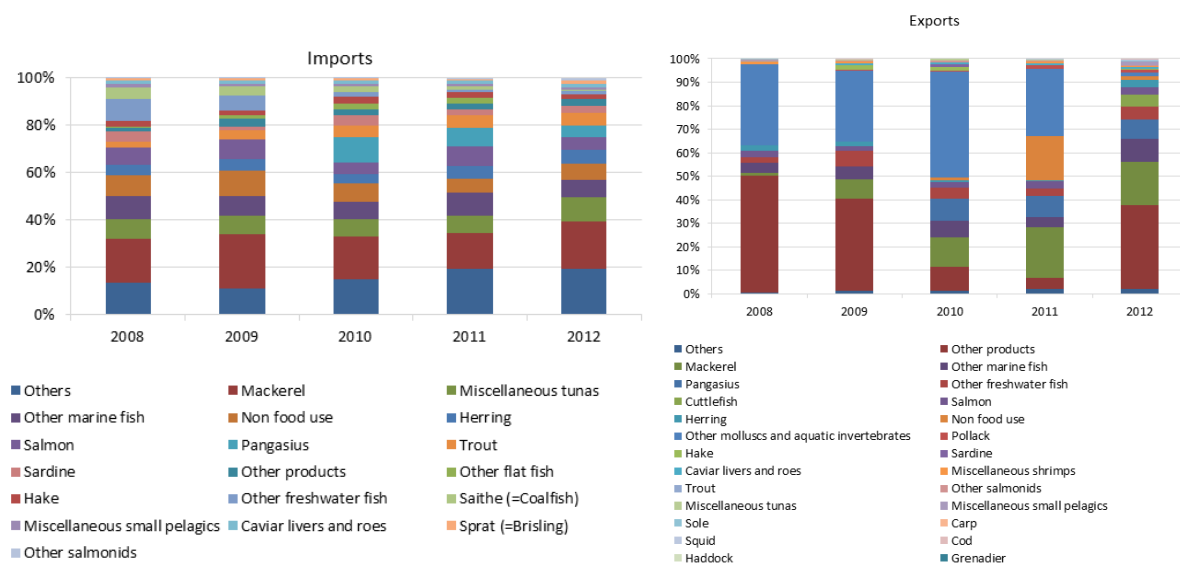


Figure 4.19.10: Romanian seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

Considering the species imported targeting the diversification of internal market consumption, and raw material for production (oriented to the internal market and for export), as per the Figure 4.19.10, it can be observed the main fish species imported, as follows:

Mackerel, miscellaneous tunas and other marine fish amounting more than €86 million;

Herring, salmon, pangasius and trout fish amounting around €40 million;

According to the same data the exports, less than €16 million, are represented by the main fresh fish and fish products, such as:

Mackerel – €2.7 million, pangasius – €1.2 million, cuttlefish – €0.7 million; salmon – €0.5 million, herring – €0.4 million, amounting more than 30% of total value of exports;

The rest of 70% is represented by other products and processed species such as: hake, sardine, miscellaneous shrimps, tunas and small peclagics, trout, sole, carp and cod – mainly.

This statistic is showing the attempts of traders and producers, despite the small dimensions of the industry (compared with other countries) trying to diversify the production and entering in other markets.

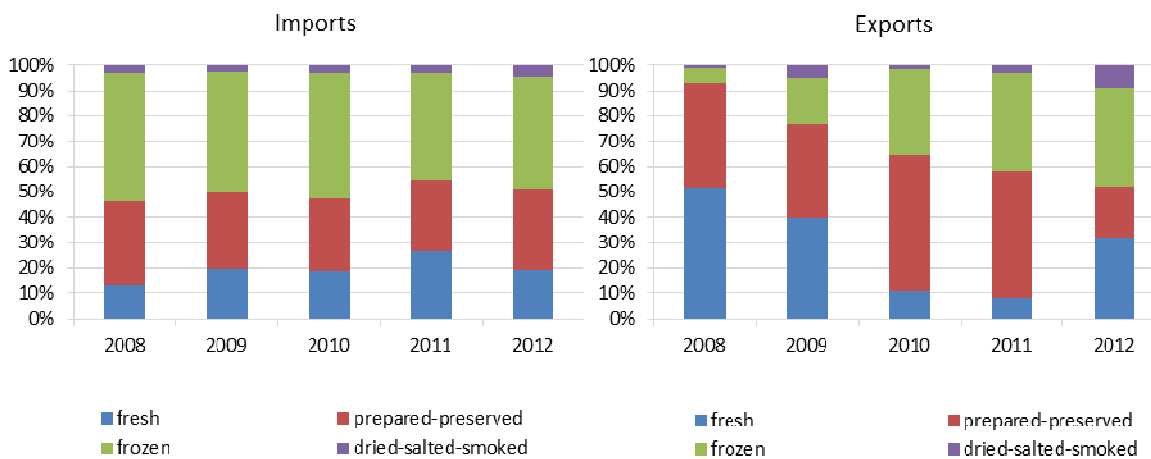


Figure 4.19.11: Romanian seafood imports (left) and exports (right) trends by type of products: shares in value

As per the mentioned above, the same considerations should be done analyzing the structure of imports and exports by products type – Figure 4.19.1. More than 75% of imports are prepared-preserved and frozen fish/fish products, followed by fresh fish – around 18% and around 7% dried-salted-smoked fish/fish products. Mean time in the exports structure fresh fish is more than 32%, frozen fish/products – 40% prepared-preserved around 20% and salted-dried-smoked around 8%.

4.19.5 Trends and drivers for change

Romania started to implement the data collection programme in 2008 for marine fishery and aquaculture. Starting with 2009 data were collected for each segment and transmitted to JRC/EC according to each data call. The first aspect should be underlined is the fact that number of processing enterprises is varying form year to year because of the instability of owners keeping the main activity processing during the analyzed period; this is a structural weakness of the sector leading to the different results in assessing annually the support of the sector to the economy growth. Consequently the total income and costs, as well the other indicators, especially those used for efficiency evaluation have certain fluctuation, as figures and indices evolution. Considering these mentioned specific aspects of the sector should be stressed, again, the importance must be granted by the

national authorities, under fish policy principles, oriented to the a stable evolution of the sector in short and medium term.

Considering the potential of the internal sectors of fishery (inland mainly, and marine) and fresh water aquaculture direction of developments, it could be observed that the fish and other raw material for production are coming from imports, and the national products are used in a small percentage. This is generating a negative balance for trade (as import and exports), in one hand, and, in the other hand the less diversification of the products offered for the internal consumers, as well as the export opportunities are dependent to imports, also. The explanation could be that the imports are consisting in other fish species, mainly marine ones, nor provided by national resources, as first element of analyse, but, also, by the lack of available quantities and not varied spectrum of production technologies, using intensive manual work and less new equipments.

Those realities are asking for more measures to organize the producers, to guide them on enlarging the chain production-advertising-sales, focusing in the last two components. These could be opportunities on using funds through the new EMFF under national OPF. As per 2013 Annual Implementing Report of EFF, for processing have been used only €0,8 million. This resource should be better used in the future, because the previous and actual policy in the meter do not provide subsidies granting for the sector, in the actual situation still facing the consequences of the last economic crises.

Is still persisting the huge challenge from super markets chains, dominating the national market, the contribution of the sector to the national GDP is insignificant, near to zero, as the whole fish sector in the country.

Taken into account the needs of the domestic market there are important opportunities to invest in the sector (the processing enterprises having good efficiency and level of profitability in Romania). In the same time, should be mentioned the weak concentration of the capital, as well the geographical distribution over the country, the most important companies being located in the capital (here is around 11% of total country population - first, and second - the main entries of imported fish and other raw material for production are also located around the area).

As in the last evaluation of the sector, the main conclusion is valuable, namely, the responsible authority in the country has to take the necessary measures and to promote the opportunities of the new EMFF, so that processing sector might have a bigger contribution to the national economy growth, cooperating with the specific structure of processing units (organization of the producers, and why not including main traders), because for 2013 the same uncertainties are foreseen for this type of industry.

4.20 SLOVENIA

4.20.1 General overview of the Slovenian fish processing industry sector

In 2012 there were 15 companies in the Slovenian fish processing sector. Between 2008 and 2012, the number of companies increased by 25%. In 2012 Slovenia had 10 companies with less than 10 employees, two companies with 11-49 employees and three companies with 50-249 employees. Among them are 6 companies with fish processing as not main activity. These companies generate €2.1 million of turnover from fish processing, which representing 6.5% of all turnover from fish processing activities.

In 2012 the turnover was €32.3 million. Between 2008 and 2012 the turnover of Slovenian fish processing industry increased by 11%.4.20.

The value of raw material decreased by 32% from 2008 to 2012 and amounted €11.2 million in 2012.

In the Slovenian fish processing sector was 354 employees in 2012. With respect to the gender of those in employment, women are predominated with 206 employees. According to the FTE there were 306 FTE employees in 2012. Among them were 178 women and 128 men. The level of employment increased between 2008 and 2012, with total employed increasing by 42% while the number of FTEs increased by 45% over the period.

Slovenian fish processing industry mainly depends on imports of raw materials. The raw material for fish processing industry is traded from all over the world, but most of the raw material comes from the EU. Only a few companies depend on local landings of sardines and anchovy.

In 2012 Slovenia imported 14.2 thousand tonnes of fish and fish products, while the Slovenian volume of landings for this year amounted 330 tonnes. In the same year Slovenian aquaculture sector has produced 1.2 thousand tonnes of fish and shellfish.

The main products in Slovenian fish processing industry are various fish cans, Tuna pate, dried cod spread, and products from cephalopods, Atlantic salmon and hake filet. Turnover from the Fish cans and tuna pate represents almost 50% of all turnovers from Slovenian fish processing sector.

Most Slovenian fish processing companies is located on the Slovenian coast, including the two largest Slovenian companies which employing 61% of all persons employed in processing industry and representing around 66% of all income. All companies which are located on the Slovenian coast representing 72% of all income of Slovenian fish processing industry.

In the period 2010-2012 Slovenian fisheries processing sector underwent major structural changes. Small businesses are brought together in larger companies which have more impact on the market. Some of the larger companies that are dealing with different types of processing activities, separated fish processing from other activities formed a new smaller companies which are exclusively engaged in the processing of fish and other marine organisms. Consequently, the share of other income in total income has decreased in the period 2010-2012. The structural changes made in Slovenian fish processing sector had impact also in Slovenian employment trends in period 2008-2012.

Socio-Economic aspects - Employment (male FTE/female FTE) and wages

Total employment was 354 jobs and 306 FTEs in the Slovenian fish processing sector in 2012, see Table 4.20.1. The level of employment in the Slovenian fish processing sector has decreased between 2011 and 2012. The total number employed decreased by 7% between 2011 and 2012 while the number of FTEs decreased by 13%. Among all employees are 58% of women 42% and of male.

Mean wage per employee in the Slovenian fishing processing industry amounted €17.1 thousand in 2012 and it was 6% lower from average wage in Slovenia in the same year, which was €18.3 thousand. Mean wage in fish processing sector decreased by 20% from 2008 to 2012. Lower average wages are mainly due to lowering production costs as a response to economic crisis.

Table 4.20.1: Slovenian fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
Structure (number)									
Total enterprises	12	13	13	14	15	▲	7%	▲	25%
≤10 employees	7	9	8	8	10	▲	25%	▲	43%
11-49 employees	4	3	3	3	2	▼	-33%	▼	-50%
50-249 employees	1	1	2	3	3	▬	0%	▲	200%
≥250 employees	0	0	0	0	0	▬	0%	▬	0%
Employment (number)									
Total employees	250	223	266	379	354	▼	-7%	▲	42%
Male employees	105	93	110	159	148	▼	-7%	▲	41%
Female employees	145	130	156	220	206	▼	-6%	▲	42%
FTE	211	210	234	351	306	▼	-13%	▲	45%
Male FTE	89	87	97	148	128	▼	-13%	▲	45%
Female FTE	122	123	137	203	178	▼	-12%	▲	46%
Indicators									
FTE per enterprise	17.6	16.2	18.0	25.1	20.4	▼	-19%	▲	16%
Average wage (thousand €)	21.4	21.5	26.4	22.8	17.1	▼	-25%	▼	-20%
Labour productivity (thousand €)	54.9	43.1	52.0	55.0	33.3	▼	-39%	▼	-39%
Unpaid work (%)	4.2	3.6	1.2	0.7	0.4	▼	-46%	▼	-91%

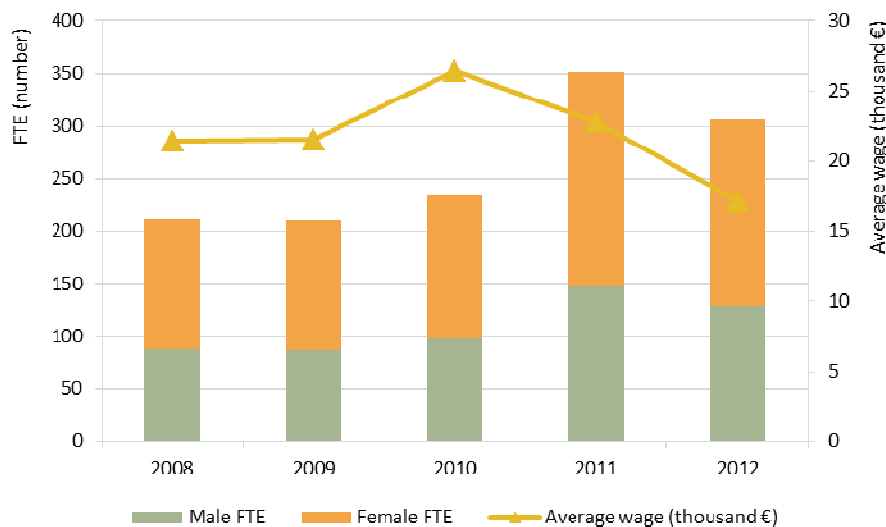


Figure 4.20.1: Slovenian employment trends, 2008-2012

4.20.2 Economic performance of the Slovenian fish processing industry sector

The total amount of income generated by the Slovenian fish processing industry, in 2012, was €75.9 million Euros. This consists of €0.1 million in subsidies, €32.3 million in turnover and €43.5 million in other income.

Slovenia has just a few processing companies that are entirely committed to fishery products. Most companies do have different types of processing activities, of which fish may be one, but not necessarily the most important one. That is the reason for large share of other income in total income – 57 %.

In the period 2010 - 2012 Slovenian fisheries processing sector underwent major structural changes. Small businesses are brought together in larger companies which have more impact on the market. Some of the larger companies that are dealing with different types of processing activities, separated fish processing from other activities formed a new smaller companies which are exclusively engaged in the processing of fish and other marine organisms. Consequently, the share of other income in total income has decreased for 79% in the period 2008-2012.

Between 2008 and 2012 the turnover has increase by 11%, while the profit has decreased by 21% in the same period. GVA and OCF have decreased for 12% and 33% in the same period. We recorded also decreasing of EBIT by 40% in the period from 2008 to 2012. The decreased value of performance indicators are mainly due a large increased value of other operational costs in 2012, as a result of structural changes made in Slovenian fish processing sector.

The cost of raw material (fish) is the most important input in the processing industry, and covers 41% of the total running cost. Raw material costs decrease by 32% from 2008 to 2012. Two main species used in Slovenian fish processing sector are Mackerel and Tuna. The volume and value of Mackerel in 2012 was 1.5 thousand tonnes and €2.9 million while the volume and value of Tuna in 2012 was 647 tonnes and €4 million. Other

operational costs is the second most important cost item covers 35% of the total running cost. Wages and salaries of staff and Energy costs cover 19% and 5%, respectively.

GVA per employee was €28.8 thousand (€33.3 thousand per FTE employee) in 2012, which is below the Slovenian GVA per employee average of the same year – €37.2 thousand.

The Slovenian fish processing industry had an estimated value of assets of €27.7 million and a return on investment of 13.3%.

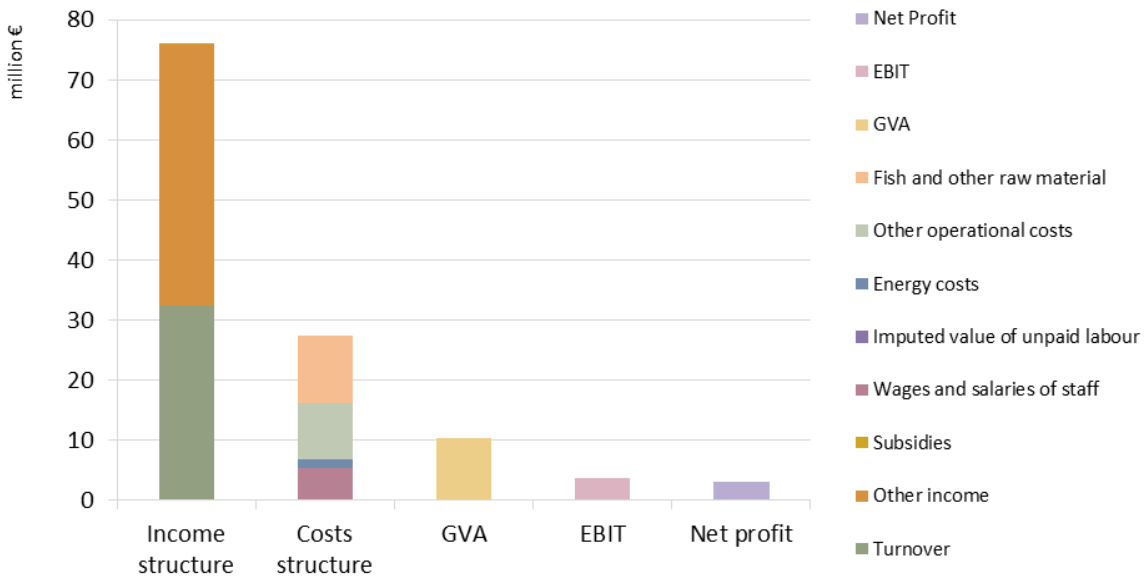


Figure 4.20.2: Economic performance of the Slovenian fish processing industry sector, 2012

Table 4.20.2: Economic performance of the Slovenian fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	29.0	26.1	28.6	35.4	32.3	▼ -9% ▲	▲ 11%
Other income	209.6	176.6	37.3	28.4	43.5	▲ 53% ▼	▼ -79%
Subsidies	0.4	0.0	0.1	0.0	0.1	■ 0% ▼	▼ -84%
Total Income	29.5	26.1	28.7	35.4	32.3	▼ -9% ▲	▲ 10%
Expenditure (million €)							
Purchase of fish and other raw material for production	16.5	15.6	11.1	12.2	11.2	▼ -8% ▼	▼ -32%
Wages and salaries of staff	4.3	4.4	6.1	8.0	5.2	▼ -34% ▲	▲ 21%
Imputed value of unpaid labour	0.2	0.2	0.1	0.1	0.0	▼ -64% ▼	▼ -90%
Energy costs	0.6	0.9	0.9	1.1	1.4	▲ 23% ▲	▲ 134%
Other operational costs	0.4	0.6	4.5	2.8	9.5	▲ 233% ▲	▲ 2207%
Total production costs	22.0	21.6	22.6	24.2	27.3	▲ 13% ▲	▲ 24%
Capital Costs (million €)							
Depreciation of capital	1.3	1.4	1.3	1.4	1.3	▼ -9% ▲	▲ 3%
Financial costs, net	2.4	0.4	0.4	0.7	0.7	■ 0% ▼	▼ -72%
Extraordinary costs, net	0.3	0.9	0.1	0.0	0.2	▲ 364% ▼	▼ -41%
Capital Value (million €)							
Total value of assets	53.0	28.0	22.5	32.2	27.7	▼ -14% ▼	▼ -48%
Net Investments	0.8	0.5	0.3	0.3	0.4	▲ 14% ▼	▼ -50%
Debt	41.2	12.8	11.4	14.0	17.5	▲ 25% ▼	▼ -58%
Performance Indicators (million €)							
Gross Value Added	11.6	9.1	12.2	19.3	10.2	▼ -47% ▼	▼ -12%
Operating Cash Flow	7.5	4.5	6.1	11.3	5.0	▼ -56% ▼	▼ -33%
Earning before interest and tax	6.2	3.2	4.7	9.8	3.7	▼ -62% ▼	▼ -40%
Net Profit	3.8	2.7	4.3	9.2	3.0	▼ -67% ▼	▼ -21%
Capital productivity (%)	21.8	32.3	53.9	59.9	36.8		
Return on Investment (%)	11.7	11.3	21.0	30.6	13.3		
Financial Position (%)	77.8	45.7	50.4	43.6	63.2		
Future Expectation Indicator (%)	-1.0	-3.2	-4.6	-3.4	-3.3		



Figure 4.20.3: Income, costs, wages and labour productivity trends of the Slovenian fish processing industry sector, 2008-2012

4.20.3 Overview of the Slovenian fish processing industry sector by size categories

The total number of fish processing enterprises in the Slovenia was 15 in 2012. The vast majority of them had ten or fewer employees. Two enterprises had 11 to 49 employees and three enterprises had more than 50 employees. In Slovenia there is no large fish processing company with more than 250 employees. Slovenia has a few processing companies that are entirely committed to fishery products. Most companies do have different types of processing activities, of which fish may be one, but not necessarily the most important one.

In terms of full time employment, the smallest segment employs only 8.5% of the total numbers of full time employees. The segment between 10 and 49 employs 5.4% of the total number of FTE employees, whereas the segment between 50 and 249 employs 86.1% of the total numbers of full time employees in the Slovenian fish processing industry.

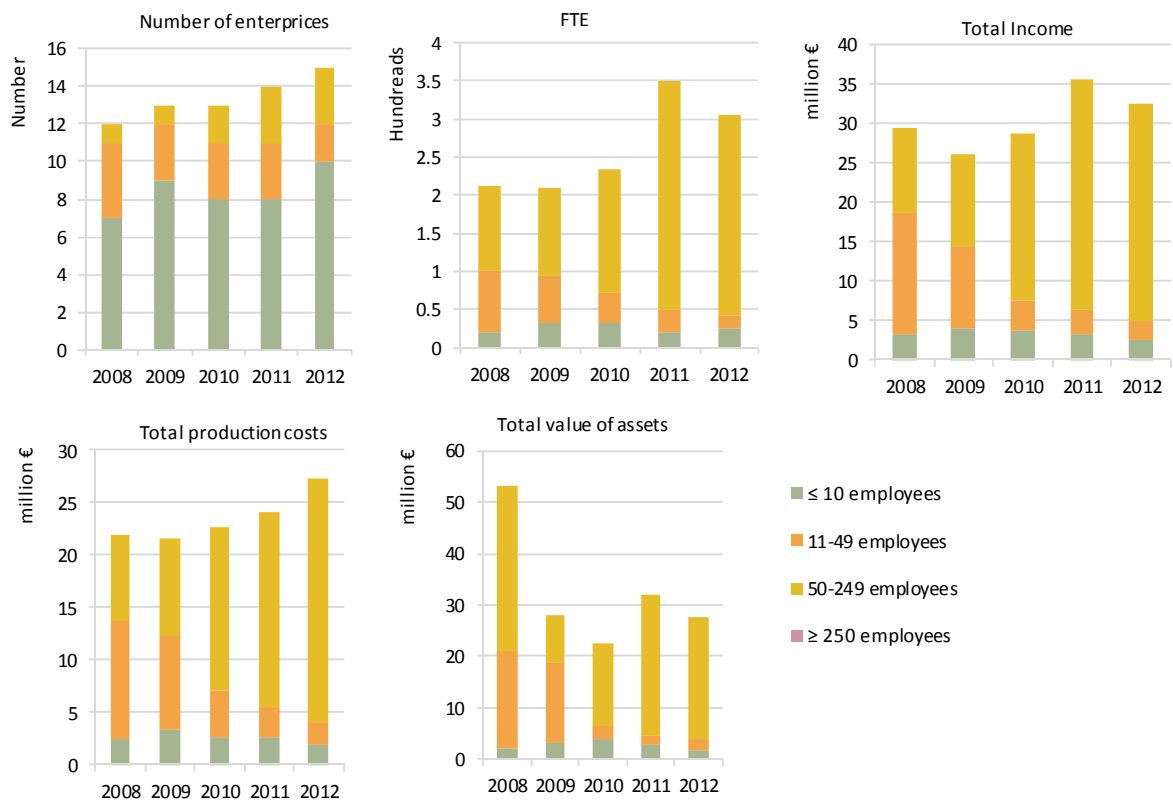


Figure 4.20.4: Slovenian main structural and economic variables trends by size category, 2008-2012

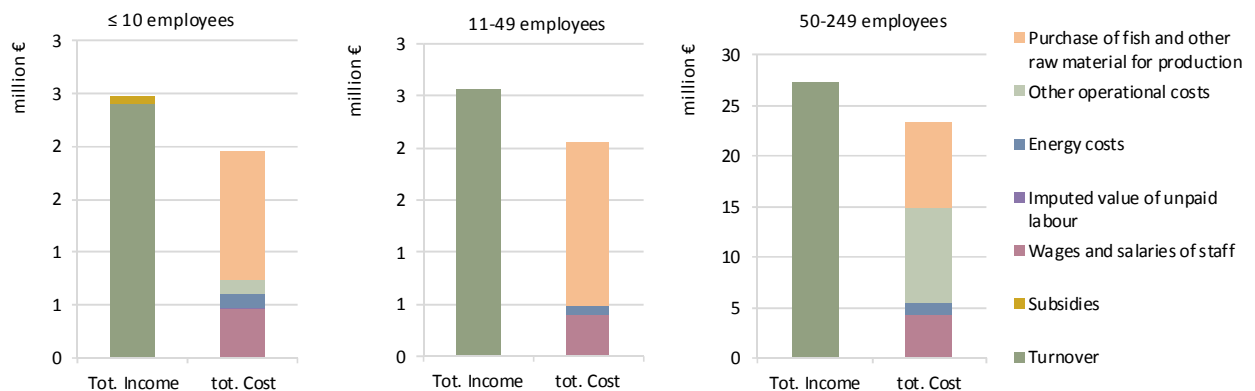


Figure 4.20.5: Slovenian income and cost structure, by size category, 2012

- **Sector less or equal 10 employees**

The total amount of income generated by this sector, in 2012, was €32.5 million. This consists of €0.1 million in subsidies, €2.4 million in turnover and €30 million in other income. Total income decrease for 27% over the period 2008-2012.

The value of Total production costs decreased by 19% from 2008 to 2012 and amounted €2 million in 2012.

In the period between 2008 and 2012 the net profit has decreased by 53%. GVA and OCF have decreased for 34% and 46% in the same period. We recorded also decreasing of EBIT by 52% in the period from 2008 to 2012.

The main products in the present sector are dried cod spread and products from cephalopods.

- **Sector 11-49 employees**

The total amount of income generated by this sector, in 2012, was €15.1 million. This consists of €2.6 million in turnover and €12.5 million in other income. Total income decrease for 83% over the period 2008-2012.

The value of Total production costs decreased by 82% from 2008 to 2012 and amounted €2 million in 2012.

In the period between 2008 and 2012 the net profit has decreased by 87%. GVA and OCF have decreased for 85% and 87% in the same period. We recorded also decreasing of EBIT by 89% in the period from 2008 to 2012.

The main products in the present sector are dried cod spread and products from Atlantic salmon and trout.

- **Sector 50-250 employees**

The total amount of income generated by this sector, in 2012, was €28.2 million. This consists of €27.3 million in turnover and €0.9 million in other income. Total income increase for 155% over the period 2008-2012.

The value of Total production costs increased by 183% from 2008 to 2012 and amounted €23.3 million in 2012.

In the period between 2008 and 2012 the net profit has increased by 2219%. GVA and OCF have increased for 109% and 60 % in the same period. We recorded also decreasing of EBIT by 58 % in the period from 2008 to 2012.

The main products in the present sector are various fish cans, Tuna pate, products from cephalopods, Atlantic salmon and hake.

Table 4.20.3: Economic performance of the Slovenian fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
less than or equal to 10 employees									
Total Income	3.4	4.0	3.8	3.3	2.5	▼	-24%	▼	-27%
Total production costs	2.4	3.4	2.7	2.6	2.0	▼	-24%	▼	-19%
Gross Value Added	1.4	1.4	1.7	1.2	0.9	▼	-19%	▼	-34%
Operating Cash Flow	1.0	0.7	1.1	0.7	0.5	▼	-24%	▼	-46%
Earning before interest and tax	0.9	0.5	0.9	0.5	0.4	▼	-19%	▼	-52%
Net Profit	0.8	0.5	0.8	0.5	0.4	▼	-21%	▼	-53%
between 11 and 49 employees									
Total Income	15.4	10.4	3.8	3.1	2.6	▼	-18%	▼	-83%
Total production costs	11.3	8.9	4.4	2.9	2.0	▼	-30%	▼	-82%
Gross Value Added	6.2	3.2	0.2	0.8	0.9	▲	10%	▼	-85%
Operating Cash Flow	4.0	1.5	-0.6	0.2	0.5	▲	148%	▼	-87%
Earning before interest and tax	3.5	1.0	-0.7	0.1	0.4	▲	189%	▼	-89%
Net Profit	2.9	0.7	-0.7	0.1	0.4	▲	282%	▼	-87%
between 50 and 249 employees									
Total Income	10.7	11.7	21.1	29.0	27.3	▼	-6%	▲	155%
Total production costs	8.2	9.3	15.5	18.7	23.3	▲	25%	▲	183%
Gross Value Added	4.0	4.5	10.3	17.3	8.3	▼	-52%	▲	109%
Operating Cash Flow	2.5	2.4	5.6	10.4	4.0	▼	-62%	▲	60%
Earning before interest and tax	1.8	1.6	4.5	9.2	2.9	▼	-69%	▲	58%
Net Profit	0.1	1.6	4.2	8.6	2.3	▼	-74%	▲	2219%

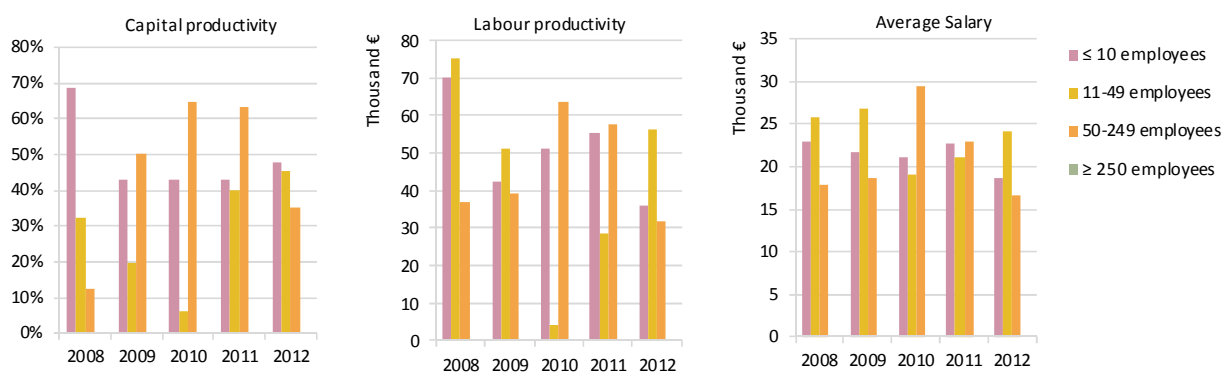


Figure 4.20.6: Slovenian capital productivity, labour productivity and average salary trends, by size category, 2008-2012

4.20.4 Slovenian seafood trade

The figure in 4.20.7 gives an overview of the Slovenian seafood trade balance which is significantly negative. Slovenian fish processing industry mainly depends on imports of raw materials. The raw material for fish processing industry is traded from all over the world, but most of the raw material comes from the EU. Only a few companies depend on local landings of sardines and anchovy.

In 2012 Slovenia imported 14.2 thousand tonnes of fish and fish products, while the Slovenian volume of landings amounted to 330 tonnes. In the same year Slovenian aquaculture sector has produced 1.2 thousand tonnes of fish and shellfish. Slovenian exports amounted 3.2 thousand tonnes of fish and shellfish in 2012.

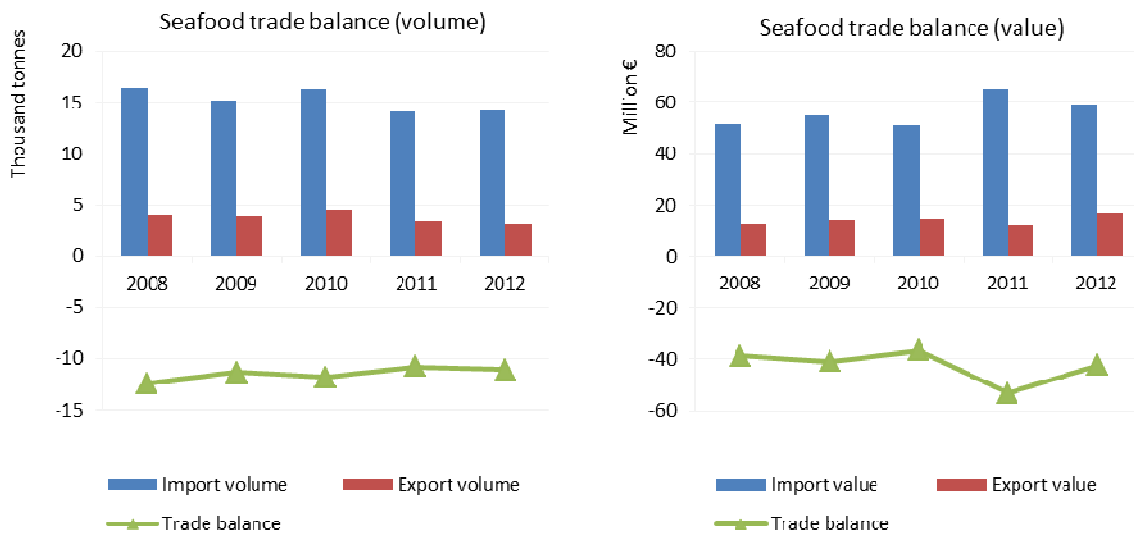


Figure 4.20.7: Slovenian seafood trade balance trends in volume (left) and value (right)

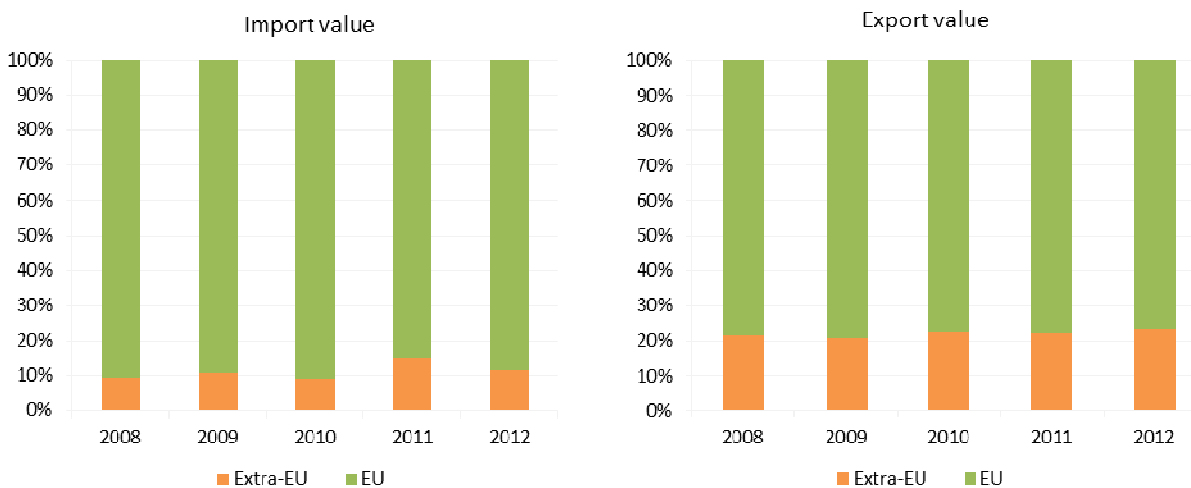


Figure 4.20.8: Slovenian seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

The largest Slovenian seafood import partners in 2012 were Italy (3.4 thousand tonnes), Spain (2.8 thousand tonnes) and Croatia (1.4 thousand tonnes). Concerning export in the same year, the largest partners were Austria (1.1 thousand tonnes), Croatia (748 tonnes) and Bosnia and Herzegovina (280 tonnes).

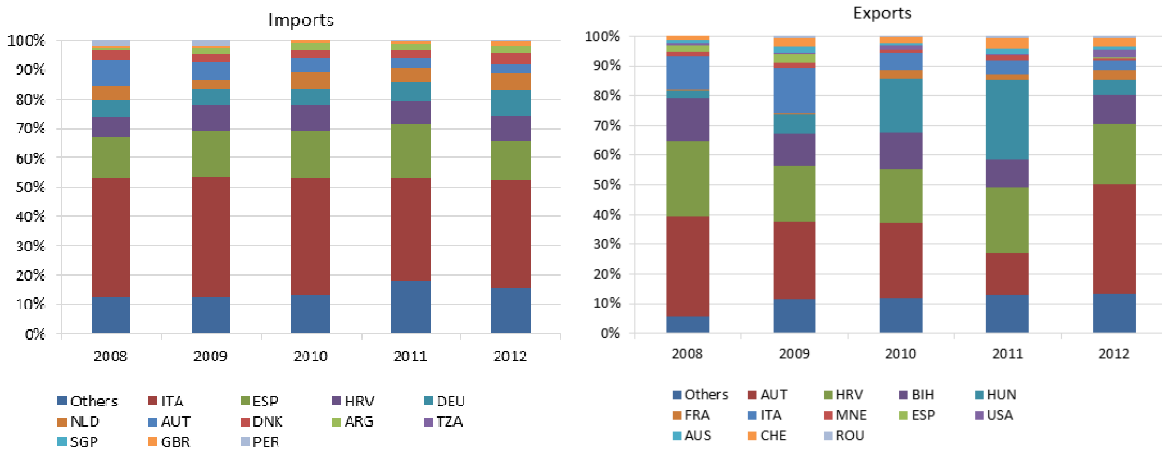


Figure 4.20.9: Slovenian seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

Concerning commercial species, the most relevant import species in 2012 are Miscellaneous tuna (2.9 thousand tonnes), followed by Squid (2.3 thousand tonnes) and Mackerel (1.1 thousand tonnes). Regarding export, the most relevant species are Mackerel (1.1 thousand tonnes), followed by Miscellaneous tuna (891 tonnes) and Squid (327 tonnes). Mackerel and Tuna are also two main species used in Slovenian fish processing sector.

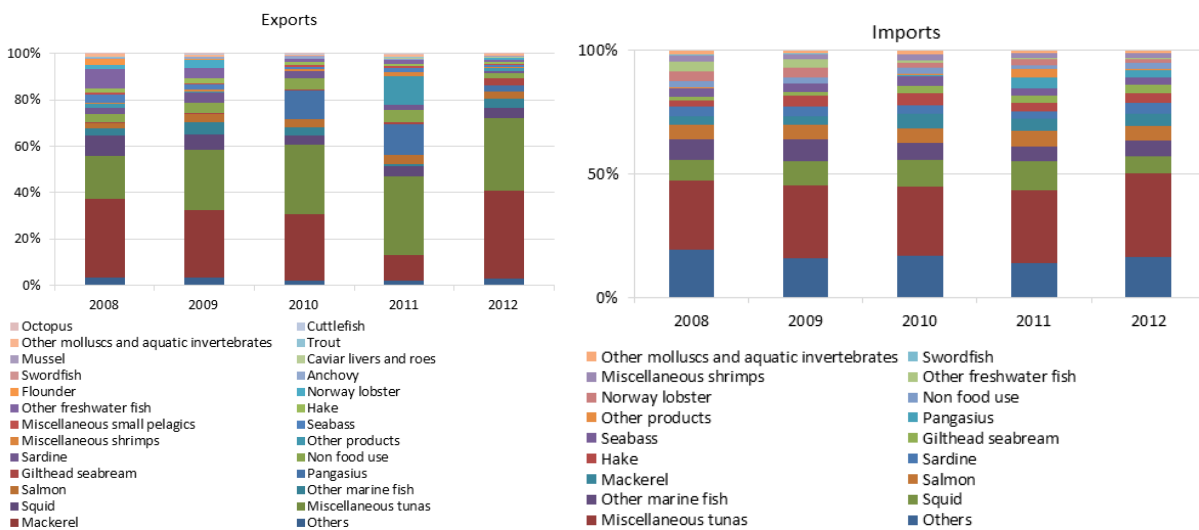


Figure 4.20.10: Slovenian seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

By the type of products, the most relevant import products in 2012 were Frozen products (6.9 thousand tonnes), followed by Prepared-preserved products (4.4 thousand tonnes) and Fresh one (2.6 thousand tonnes). Regarding export in the same year, the most relevant were Prepared-preserved products (2.2 thousand tonnes), followed by frozen products (516 tonnes) and Fresh products (500 tonnes).

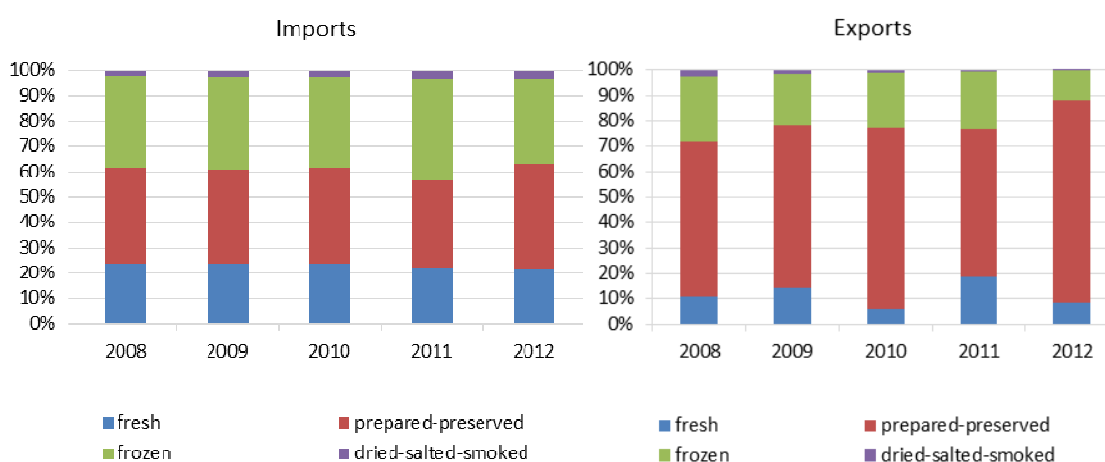


Figure 4.20.11: Slovenian seafood imports (left) and exports (right) trends by type of products: shares in value

4.20.5 TONNESTrends and drivers for change

Slovenia consumes around 9 kg of fish per year per capita, which is well below the European average of around 22kg. However, fish consumption per capita in Slovenia is growing due to increasing awareness of healthy lifestyles. So in the future we can expect further development of the fisheries processing industry in Slovenia and therefore higher revenues from this sector. Because of the increased number of enterprises in the future and resulting increased competition we can expect a fall in prices of fish products and thus lower profits.

Due to scrapping in 2011 and 2012 the size of the Slovenian fishing fleet decreased between 2011 and 2012, with the number of vessels by 6% and GT and kW by 38% and 19% respectively. Consequently, the weight of landings decreases in 2012 for more than 50%. Furthermore Slovenian fisheries sector is affected by the small size of our sea fishing area, significant characteristic of Slovenian fleet is also age. Average age was calculated at approximately 36 years in 2012. Because of that and because of increase in markets, the Slovenian fish processing industry will be even more dependent on imports of fish raw material.

4.19.6. Data issues

Slovenia reported data also from companies with fish processing not as main activity to avoid confidentiality issues. In this case there is a high proportion of other income.

Target populations in Slovenia for collecting economic data are all companies who have, according to the data from Veterinary Administration of the Republic of Slovenia (VURS), a license for the processing of maritime organisms and the processing involved in practice. The number of such enterprises in Slovenia in 2012 was fifteen. In June 2013 the questionnaires were sent to all enterprises.

In cases where a questionnaire, as the only source, was used the response rate was 82%. In cases where the data from annual accounts of business enterprises was used the response rate was 100%, because we have economic reports for all investigated companies.

Slovenia has a few processing companies that are entirely committed to fishery products. Most companies do have different types of processing activities, of which fish may be one, but not necessarily the most important one. This was taken into account when we putting together the questionnaires and in the subsequent analysis of the data provided. Therefore all the provided data refers just to fish processing part of all companies activities. Because of the large differences between turnover and total income, only turnover was used in calculating the indicators (GVA, OCF...).

4.21 SPAIN

The fishing industry has been the main economic engine for the coastal communities since the ancient to the present times. As a part of this broad industry, seafood processing has been evolving in parallel with the development of the fishing fleet along the centuries, and today constitutes a fundamental part in the structure of production and income in the present fishing communities. Today, the fish processing industry is not just another economic activity, but also a relevant tool for development and social welfare of the coastal regions, and provides a way for reallocation of unemployment resulting from the decrease in fishing effort imposed in the last decades. The processing industry provides full time, more stable and better skilled jobs, which directly contributes to the improvement of the neighborhood's livelihood.

In addition to the social importance in coastal communities, the Spanish fish processing industry is a quite dynamic, profitable and productive activity. The Industry has improved the income and the economic performance indicators during the last five years. This positive evolution has been led by the large companies of more than 250 employees, which have significantly increased their labor productivity as a result of their capital intensive production structure. This shift in the factor structure has allowed them to improve economies of scale. On the contrary, medium size companies have significantly reduced their contribution to the total GVA and the operating cash flow. This evolution suggests a significant redistribution of the activity from the medium size to the biggest companies, and can be explained by the intensification of the production processes in the big companies.

It is expected that in the near future, with the recovery from the financial crisis hitting the country in last few years, the importance of the fish processing industry as a social and economic regional driver will increase as the activity in the country also increases.

4.21.1 General overview of the Spanish fish processing industry sector

The Spanish fish processing industry comprised 487 enterprises in 2012. The distribution by number of employees shows that the industry is composed by a large number of small firms. Around 84% of the industry are companies below 50 workers, and companies under 10 employees represent 36.5%. The number of enterprises decreased 5% with regard to the previous year and 15% since 2008. The decreases in the number of enterprises are common to all the size segments, but lower in companies between 11 and 249 employees, and more pronounced in the case of the smaller enterprises with less than 10 employees. Companies between 11 and 49 employees even increased by 5% with 11 new enterprises established in 2012. On the other hand, the largest companies, those with over 250 employees, remained stable in the last two observed years.

A decrease in total employment and FTE can also be observed in the trend of the evolution in the number of companies. However, the destruction of work is slowing down in the last observed years, pointing to an apparent recovery and stabilization. Total employment decreased 7% from 2008 but remained at the same levels between 2011 and 2012. Full time employment decreased 9% since 2008, but only 2% in the last 2 years. The consequence of these changes revert the situation observed in 2011, when the number of full time employees increased with regard to the previous year. The data for 2012 indicates that some full time contracts are being converted into part time. Anyway, the rate of full time employment in the processing industry is much higher than in other fishery activities.

Regarding gender distribution of labor, it is worthy to mention that the Spanish processing industry has been traditionally intensive in the use of female employees as a result of technical division of work in the coastal areas. This scenario is changing in the last years and while in 2008 there were 12,514 females (11,732 FTE) in confront of 7,233 males¹, in 2012 the distribution was 9,730 females (9,204 FTE) versus 8,594 (8,195) males. Males appear to be replacing females in a similar opposed trend. Female total employment has decreased 22% in the full observed period and male total employment increased 19%. In terms of full time employment the decrease in females (22%) was even greater than the increase of males (11%). As a result of these trends, the gender distribution of labor in the processing industry is becoming more balanced than it used to be. All seems that this kind of jobs, which were traditionally considered as female work, it is also becoming interesting for males. As women got their retirement, they are being replaced by a larger amount of men, resulting in some sort of gender equilibrium. Upcoming years will clarify whether gender equilibrium will persist or whether fish processing is becoming a male intensive work like it is actually the wild fishery.

Despite the absolute decrease in full time employment, when analyzing the relative FTE per enterprise it shows a decrease between 2008 and 2009, but an important recovery between 2010 and 2012 reaching higher levels than those observed in 2008. The evolution of this indicator shows that, even employment and the number of companies have decreased; the remaining companies are providing better quality jobs in terms of workers occupation and income. An increase in the average wages is consistent with the idea of more skilled labor resulting from a higher rate of full time employees. Wages rose 6% since 2008, with a peak of 26 thousand euro in 2010 and kept stable in 25.1 thousand euro in the following two years. Labor productivity also increased since 2008 by 17% even it have had a change in trend in 2012 when it resulted in a decrease of 3% with regard the value recorded in the previous year.

Table 4.21.1: Spanish fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	572	585	552	513	487	▼	-5%	▼ -15%
≤10 employees	239	234	215	209	178	▼	-15%	▼ -26%
11-49 employees	247	267	253	218	229	▲	5%	▼ -7%
50-249 employees	75	75	76	77	71	▼	-8%	▼ -5%
≥250 employees	11	9	8	9	9	○	0%	▼ -18%
Employment (number)								
Total employees	19,737	19,331	18,581	18,390	18,324	○	0%	▼ -7%
Male employees	7,223	8,614	7,321	7,858	8,594	▲	9%	▲ 19%
Female employees	12,514	10,717	11,260	10,532	9,730	▼	-8%	▼ -22%
FTE	19,095	18,449	17,590	17,702	17,399	▼	-2%	▼ -9%
Male FTE	7,363	8,461	7,142	7,679	8,195	▲	7%	▲ 11%
Female FTE	11,732	9,988	10,448	10,023	9,204	▼	-8%	▼ -22%
Indicators								
FTE per enterprise	33.4	31.5	31.9	34.5	35.7	▲	4%	▲ 7%
Average wage (thousand €)	23.6	25.0	26.0	25.1	25.1	○	0%	▲ 6%
Labour productivity (thousand €)	62.7	70.5	70.2	75.3	73.4	▼	-3%	▲ 17%

¹ Note that male FTE in 2008 is bigger than total male employment. This has to be a mistake in data collection which was not clarified by the time this report was prepared. Anyway, the real figure of male employment should not be much higher than the reported 7,200 employees.

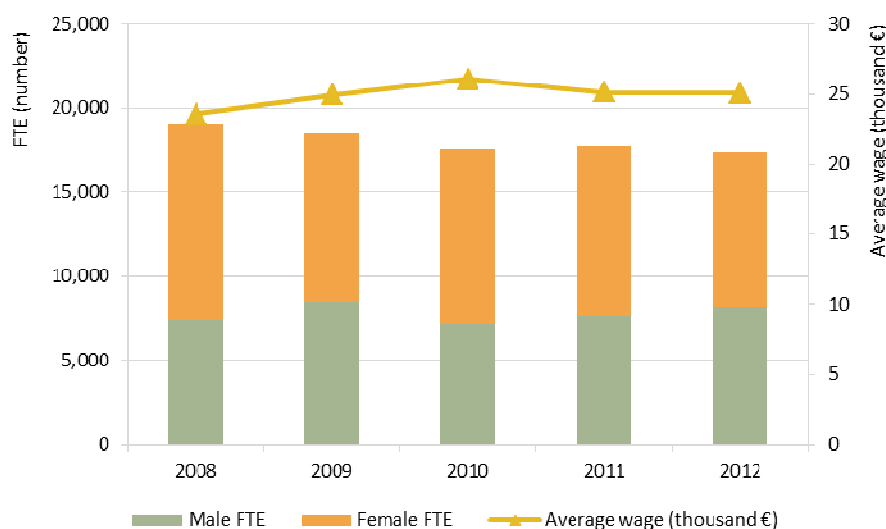


Figure 4.21.1: Spanish employment trends, 2008-2012

4.21.2 Economic performance of the Spanish fish processing industry sector

During the last five years the national processing industry has increased 10% its total income, which results in a significant positive evolution in a context of financial crisis. This evolution shows a strong and well organized industry that has been able to recover from the financial crisis faster than other industries of the primary sector. It can be explained by a process of concentration described in the previous section, but also by the strong reorientation of the activity during the last five years focused on the production of high value added products. Due to the stagnation in the domestic demand due to the economic difficulties in Spain, the industry has increased its marketing effort on other EU countries where demand persists solid. This focus on foreign markets with high added value products has reduced reliance on domestic demand.

The 98% of the Spanish fish processing industry's income comes from sales turnover, suggesting a strong dependence on the main activity. Turnover has followed a positive trend during the period analyzed resulting in an increase of 9% between 2008 and 2012, although last year this variable experienced a decrease of 2%. Innovations developed by the industry and orientation to new market suggest that this negative data is a fluctuation and not a real change in trend. Direct subsidies account for less than 1% of total income and remained stable during the observed period. The low dependence of the total incomes on subsidies and other incomes resulted in a similar evolution of the total incomes and turnover.

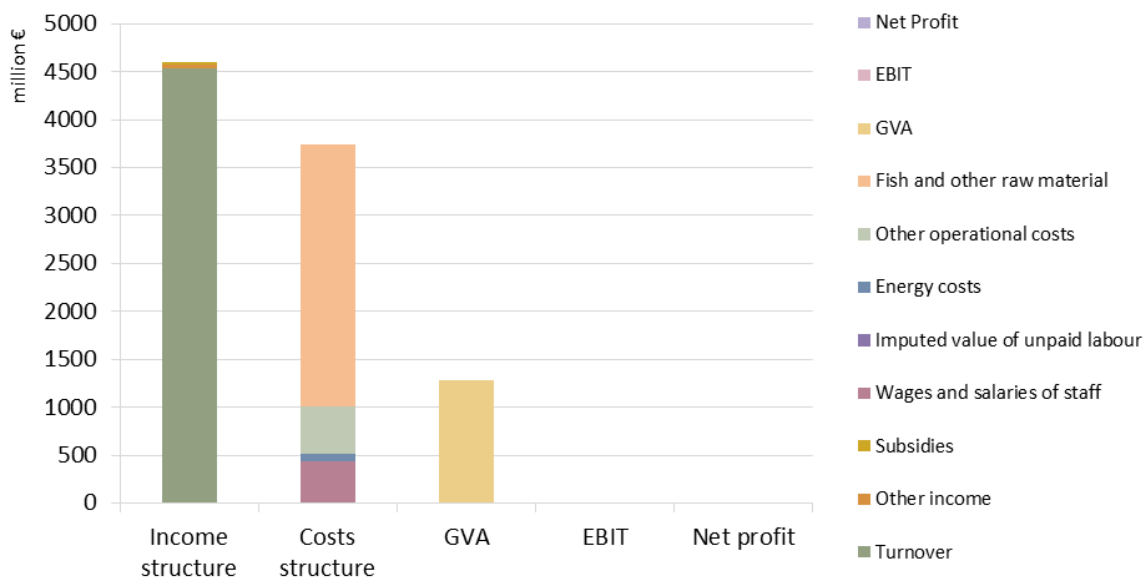


Figure 4.21.2: Economic performance of the Spanish fish processing industry sector, 2012

The main operational cost of the Spanish fish processing industry is generated by the purchases of raw material which in 2012 accounted 73% of the total production costs. This cost has increased 12% during the observed period, especially in the last three years when the expenditure in raw material increased from €2.5 to €2.7 billion euro. As well as the total income, the purchases of raw material experienced a decrease between 2011 and 2012. This, along with the decrease in the number of companies and employees, indicates a reduction in the activity of the industry during 2012. The evolution of the energy cost helps to confirm the argument of an increase in the production during the period analyzed, since it grew an 18% percent between 2008 and 2012. Energy was the production cost with the highest increase and it can be explained by several reasons. Firstly, the increase in the production requires more energy for the production process. Then the rise in the energy price in Spain during the last years, particularly the electricity, which is the main energy source used by this industry. Finally, it also can be a consequence of the innovation process, especially between 2008 and 2010, in which the industry became more capital intensive. This last argument is coherent with the decrease in the number of employees combined with an increase in the production.

Total salaries decreased 3% between 2008 and 2012, and the €432.7 million of labor cost in 2012 represented 12% of the total production cost, which was a decrease compared with 2008 when the labor cost accounted 13% of the production cost in the industry. However, the reduction in labor cost was proportionally lower than the decrease in the number of employees, suggesting an increase in the average salary. That was particularly significant in a negative economic context, and can be explained by an improvement in the qualification of the labor force, pointed in previous sections, associated to the innovation and capitalization process at the industry. During the last two years analyzed the average salary has stabilized around €25 thousand euro per year.

Finally, other operational costs, mostly associated with external services, have not followed a clear trend, with increases and decreases from year to year. However, the importance of the other operational cost in the total production cost has remained stable around 13% during the last three years analyzed.

Table 4.21.2: Economic performance of the Spanish fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	4,148.2	4,112.1	4,256.1	4,646.4	4,533.2	▼ -2% ▲	9%
Other income	29.2	27.9	22.7	22.9	45.0	▲ 97%	▲ 54%
Subsidies	25.0	28.0	28.4	28.2	25.3	▼ -10%	▲ 1%
Total Income	4,202.4	4,168.0	4,307.2	4,697.4	4,603.5	▼ -2%	▲ 10%
Expenditure (million €)							
Purchase of fish and other raw material for production	2,433.1	2,282.7	2,503.1	2,744.5	2,727.3	▼ -1%	▲ 12%
Wages and salaries of staff	446.6	430.6	430.1	441.0	432.7	▼ -2%	▼ -3%
Energy costs	69.4	68.5	70.7	83.2	81.7	▼ -2%	▲ 18%
Other operational costs	476.8	487.6	470.0	508.2	492.7	▼ -3%	▲ 3%
Total production costs	3,429.3	3,299.2	3,501.9	3,780.6	3,738.0	▼ -1%	▲ 9%
Capital Costs (million €)							
Depreciation of capital							
Financial costs, net	107.4	94.7	50.9	84.5	53.8	▼ -36%	▼ -50%
Extraordinary costs, net	13.5	6.4	3.4	-7.6	-3.6	▲ 53%	▼ -127%
Capital Value (million €)							
Total value of assets							
Net Investments	204.6	125.6	112.9	80.5	88.5	▲ 10%	▼ -57%
Debt							
Performance Indicators (million €)							
Gross Value Added	1,198.1	1,301.3	1,234.9	1,333.5	1,276.5	▼ -4%	▲ 7%
Operating Cash Flow	773.1	868.8	805.3	916.8	865.5	▼ -6%	▲ 12%
Earning before interest and tax							
Net Profit							
Capital productivity (%)							
Return on Investment (%)							
Financial Position (%)							
Future Expectation Indicator (%)							

Capital costs followed an irregular evolution, which may be related to the financial needs and the financial structure of the companies. The net financial result showed a decrease of 50% in the financing cost of the production activities. Without additional information it is not possible to assess whether this evolution in capital cost are related with changes in the amount of debt, changes in the debt structure, changes in the interest rates or renegotiation of the existing debt. Extraordinary costs also show a similar irregular trend. Finally, net investments have decrease 57% from 2008. The decrease in the investments may be related both with the crisis affecting industrial investments in Spain, but also with the modernization and capitalization strategy developed

in the previous years. The net investment in the fish processing industry in 2012 was a 10% higher than in 2011 what can means a change in the trend, and the first step for a new strategy of investments, both for the renovation of the depreciated capital, but also for new improvements.



Figure 4.21.3: Income, costs, wages and labour productivity trends of the Spanish fish processing industry sector, 2008-2012

The only available economic performance indicators to assess the evolution of the performance in the Spanish seafood processing industry are the gross added value and the operating cash flow. These indicators may not be enough to develop a detailed analysis of the profitability and performance of this industry in Spain. GVA evolution between 2008 and 2012 reflects fluctuations, but during this period it accounted between 28% and 31% of the total income. The same can be said about the operating cash flow which ranged between 18% and 21% of the total income.

4.21.3 Overview of the Spanish fish processing industry sector by size categories

The detailed analysis of the employment (FTE) and the number of enterprises by size categories shows significant changes in the structure of the Spanish fish processing industry. Data show a general decreasing trend in the number of companies and employees. However, these reductions had different impacts in the companies according to their size. The number of companies decreased in all the cases, but especially in the small companies segment (less than 10 employees), which fall 26% between 2008 and 2012. In the case of the big companies (more than 250 employees) there was a decrease of 18%, when in 2012 there were 9 companies operating instead of the 11 companies that were active in 2008. Medium size companies (more than 10 and less than 250 employees) have been those which better withstood the impact of the economic crisis, decreasing only 7% during the observed period. However, this medium size segment, which in 2008 and 2012 generated 72% and 70% of the total employment in the industry, was the only category that decreased the average number of employees by enterprise, as a consequence of a bigger reduction in the number of employees than in the number of enterprises. On the contrary, big companies significantly increased the average number of employees from 398 to 496 between 2008 and 2012, resulting in an increase of 25%. These changes confirm that the small companies have been the most affected by the financial crisis, as a consequence of their higher difficulties in access to credit and liquidity, due to their small scale both in terms of assets and production. The medium size companies received a lower impact from the negative economic context, but at the same time

they needed to reduce their work force. Finally, the increasing work force in the big companies can be the consequence of a strategy according to which these enterprises used their scale as a competitive advantage to reduce their unit cost and increase their economic margin or reduce the impact derived from reduction in prices.



Figure 4.21.4: Spanish main structural and economic variables trends by size category, 2008-2012

The contribution of the small enterprises to the Spanish fish processing industry remained stable despite the reduction in the number of companies and employees. Both the total income and the total production cost obtained in the small business section accounts around 4% of the total industry, and 5% in the case of FTE. The total income and the total production cost of the small companies decreased during 2009 and 2010, but increased again during the last two years analyzed until recovering the income obtained in 2008. Different from the general trend of the sector, which started to increase total income in 2010, small companies needed more time to adjust their business to the new economic context. Considering that there were 61 less small companies in 2012 than in 2008, the incomes obtained in 2011 and 2012 were better. The proportional increase of the total income between 2010 and 2012 was higher than the proportional increase in the total production cost and suggest an improvement in the average profitability of the production process obtained in this category of enterprises.

The medium size companies generated in 2012 61% and 63% of the total income and the total production cost of the Spanish fish processing industry respectively. It evidenced a reduction compared to 2008, when these percentages achieved 67% and 65%. Medium size companies employed in 2012 the 70% of the workforce in the

industry, what is similar to the 72% achieved in 2008. The evolution in the total income and the total production cost in the medium size companies between 2008 and 2012 have followed the evolution of the industry, that is, a positive trend since 2008 to 2011, and then a decrease in both variables during 2012. The companies of this section suffered a reduction in the profitability of their production process because of a decrease of the total cost in 2012 proportionally lower than the decrease in the total income.

In contrast with the small and medium size enterprises, the large companies increased their importance in the Spanish fish processing industry. The contribution of the big companies to the total industry's income increased from 29% to 35% between 2008 and 2009. Also the contribution to the employment increased from 23% to 26% in the same period. The recovery of total income after the first years of the economic crisis started in 2010. Further, it kept on growing until 2012. While the industry suffered a decrease of 2% in the total income in 2012, big companies increased this variable by 23%, suggesting an increasing effort of concentration in the biggest companies. An improvement in the economic results of the production process is evidenced by a higher proportional increase in the total income than in the total cost of production in 2012.

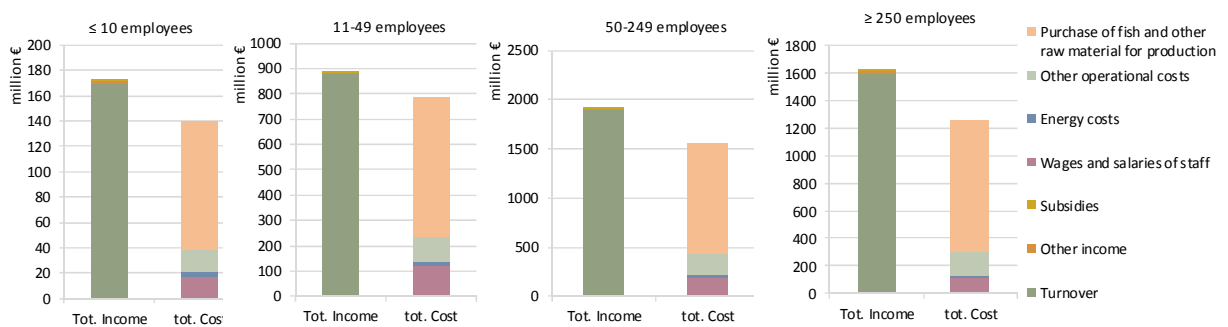


Figure 4.21.5: Spanish income and cost structure, by size category, 2012

The income in all the size categories shows the same structure and it has been following the same trends. Around 98% of the total income was generated by turnover, while the subsidies received by the enterprises represented less than 1% of the total income. Considering this last percentage, the performance of the industry is far from having a reliance on subsidies. In 2012 all the size categories of the industry obtained more incomes that the cost assumed to develop the production, resulting in a positive operating cash flow. The analysis of the cost structure and the subsequent comparison between the different categories revealed some interesting differences. Labor cost represented 13% in the small and medium size companies while in the large companies it was less than 9%. It suggests a more capital intensive production in the case of the big ones. Energy cost achieved more than 2.5% of the total production cost in the small and medium size companies while this percentage only represented less than 1.5 in the large ones. This can be explained by several reasons: the use of more energy efficient systems at the big companies and, an electricity price system in which the more you consume, the lower is the price. The other cost achieved around 13% in all the size categories. The purchase of fish and raw materials achieve 72% in the case of the small and medium size companies and 76% at the big companies. This can be explained by the development of a production process less labor intensive and more intensive in capital and technology, which allow big companies to process proportionally more quantities of seafood.

Table 4.21.3: Economic performance of the Spanish fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
less than or equal to 10 employees									
Total Income	168.3	148.2	133.5	170.6	172.7	▲	1%	▲	3%
Total production costs	136.8	115.3	116.6	117.0	139.6	▲	19%	▲	2%
Gross Value Added	58.3	53.0	34.6	73.9	50.2	▼	-32%	▼	-14%
Operating Cash Flow	31.5	32.9	16.9	53.6	33.0	▼	-38%	▲	5%
Earning before interest and tax									
Net Profit									
between 11 and 49 employees									
Total Income	1,033.6	983.1	995.8	1,016.5	893.8	▼	-12%	▼	-14%
Total production costs	828.6	784.2	782.0	835.7	785.6	▼	-6%	▼	-5%
Gross Value Added	328.3	324.7	336.7	284.1	218.8	▼	-23%	▼	-33%
Operating Cash Flow	204.9	199.0	213.9	180.8	108.2	▼	-40%	▼	-47%
Earning before interest and tax									
Net Profit									
between 50 and 249 employees									
Total Income	1,793.2	1,949.3	2,019.6	2,187.8	1,916.0	▼	-12%	▲	7%
Total production costs	1,392.7	1,462.2	1,618.2	1,759.4	1,558.4	▼	-11%	▲	12%
Gross Value Added	574.6	677.6	598.5	624.4	534.4	▼	-14%	▼	-7%
Operating Cash Flow	400.5	487.1	401.4	428.4	357.7	▼	-17%	▼	-11%
Earning before interest and tax									
Net Profit									
greater than or equal to 250 employees									
Total Income	1,207.3	1,087.4	1,158.2	1,322.5	1,621.0	▲	23%	▲	34%
Total production costs	1,071.1	937.6	985.1	1,068.6	1,254.4	▲	17%	▲	17%
Gross Value Added	236.9	246.0	265.0	351.0	473.2	▲	35%	▲	100%
Operating Cash Flow	136.2	149.9	173.1	254.0	366.6	▲	44%	▲	169%
Earning before interest and tax									
Net Profit									

As in the whole industry, all the size categories resulted in a positive GVA and operating cash flow during the period analyzed. However, the analysis by size categories shows differences in their evolution and in their contribution to the total industry.

Although the positive evolution in 2012 of the GVA and the operating cash flow in the big companies, where it grew 35% and 44% respectively, the negative evolution of these two indicators in the whole industry is explained by a decrease in small and medium size companies. The proportional reduction is higher in the small companies, 32% and 38% reduction in the GVA and the operating cash flow respectively, than in the medium

size companies, where these two indicators decreased 17% and 24% respectively. However, the real impact in industry's economic results came mostly from medium size companies, in which the decrease in value, in absolute terms, was higher than in the small companies.

The contribution of the small size companies to the GVA and the operating cash flow have remain stable around 5% between the period considered. However, in the case of the medium size and the big companies there have been significant changes. While in 2008 the contribution of the medium size and big companies to the GVA were 75% and 20% respectively, in 2012 these percentages decreased to 59% in the medium size companies and increased to 37% in the big ones. This evolution suggests a significant redistribution of the activity from the medium size companies to the biggest ones, and can be explained by the intensification of the production processes in the big companies. Their bigger size may helped them to reduce the impact of the financial crisis by increasing the production and taking advantages from the economies of scale that they can obtain due to their higher use of capital. The same situation has taken place in the case of the operating cash flow, but in a more intense way. The contribution of the medium size companies and the big companies to the industry GVA decreased 22% and increased 87% respectively, while their contribution to the operating cash flow decreased 31% in the medium size companies and increased 141% in the big ones. Different from the GVA, the operational cash flow also considers subsidies and labor cost in its calculation. Subsidies has not an impact in this case because of its low value, but the lower importance of the labor cost in the production cost structure of the big companies compared with the medium companies allowed big companies to obtain an operational cash flow that achieved 23% of their total income in 2012 compared with 11% in 2008, while for the medium size companies represented 17% in 2012 and 21% in 2008.



Figure 4.21.6: Spanish labour productivity and average salary trends, by size category, 2008-2012

The evolution of labor productivity in the small and medium size companies between 2008 and 2012 reflects fluctuations and a decreasing behavior during 2011 and 2012. On the contrary, labor productivity in big companies has significantly increased during all the period analyzed and the value reached in 2012 was 96% and 23% higher than in 2008 and 2011 respectively. The average salary in the Spanish fish processing industry has remained stable between €20 thousand and €25 thousand during the observed period. The average salaries at this industry have been over the Spanish national average salary all the years analyzed, particularly around 5% higher during 2010, 2011, and 2012 (INE, 2014). However, there were differences in the average salaries and their evolution by size categories. In 2008 the employees at small companies earned an average salary more

than 20% higher than in the medium and big size companies. However, between 2008 and 2009 there was an adjustment in the salaries of small companies resulting in a decrease of more than 30% of the average salary. Such a decrease can be explained by the difficulties derived from the economic crisis and the need to reduce production cost. After 17% increase in the average salary in the small companies in 2010, this variable has remained stable until 2012. The evolution of the average salaries in the medium and big size companies has followed a positive trend during the period considered.

4.21.4 Spanish seafood trade

Spain is the second largest per capita seafood consumer country in the EU after Portugal, and thus, a net importer of seafood products. Frozen seafood is the main group of commodities in terms of quantities and value, either for imports or exports. However, the relative value of imports exceeds the value of exports, which in part is a result of internal consumption, like it happens with fresh fish imports. Prepared or preserved seafood, instead, result in a greater relative value for exports rather than imports, which is a consequence of the aggregation of value undertaken by the Spanish processing industry consisting in further processing, packaging and branding (Fig. 4.21.11).

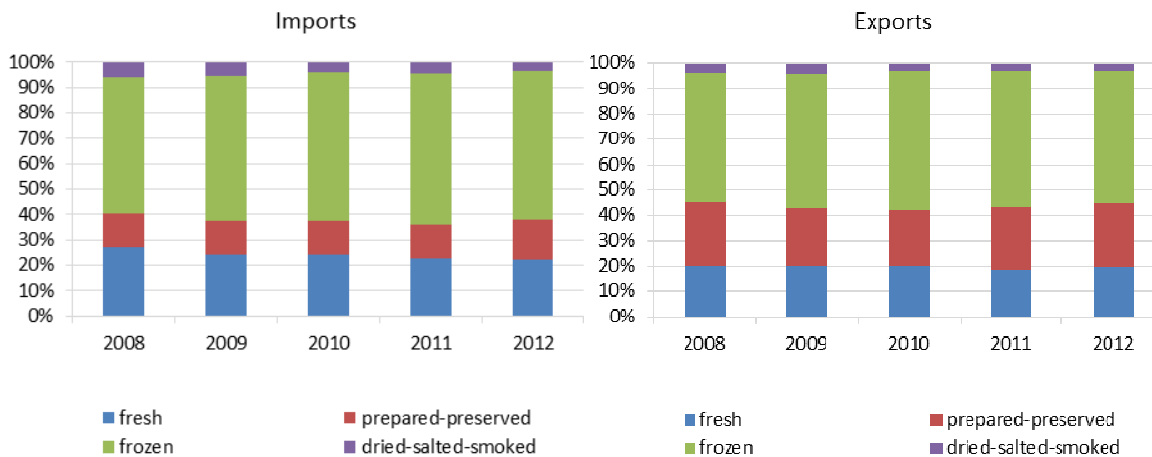


Figure 4.21.11: Spanish seafood imports (left) and exports (right) trends by type of products: shares in value

The high rates of seafood consumption by Spanish population result in negative trade balances in all the observed years both in terms of quantities and values (Fig. 4.21.7a). The situation changes when the different categories of imported commodities are considered separately. As the preference among Spanish consumers is focused on fresh seafood, reporting the higher market prices, it is very unlikely that fresh products would have a significant contribution on exports, and thus, it increases the negative values of the trade balance when fresh products are considered.

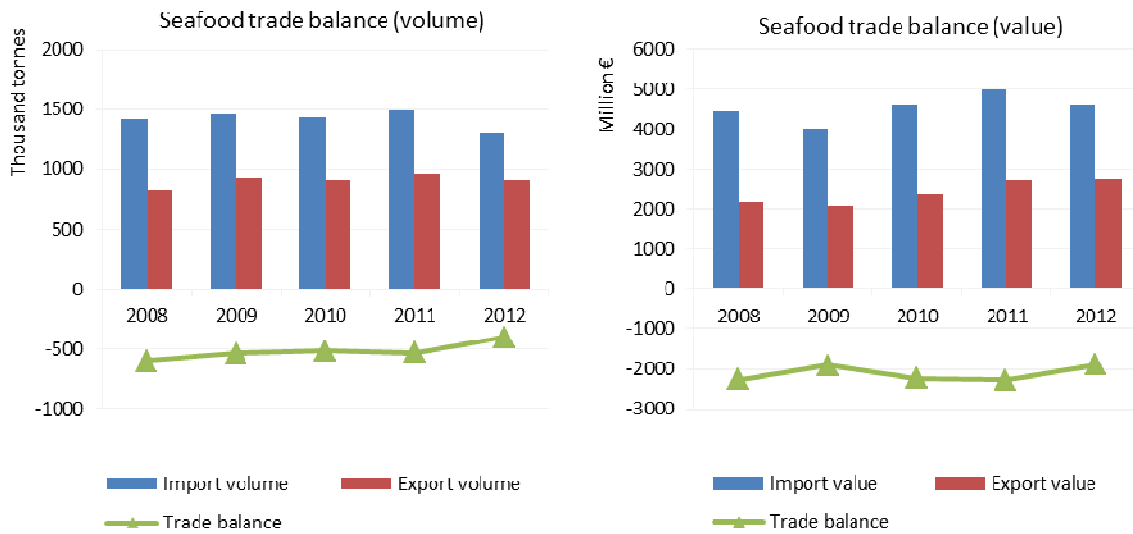


Figure 4.21.7a: Spanish seafood trade balance trends in volume (left) and value (right)

When considering the different categories of processed seafood, the absolute value of the different trade balances decreases. This is a direct consequence of changes in the orientation of the local processing industry, which in the first decade of the century became more dependent on imports of already processed or partially processed commodities to be finalised in Spain rather than on fresh raw materials. The canning industry is a good example of these new trends in the industry, in particular canned tuna products, where the exported amounts almost match with that of imported prepared or preserved tuna. Other canned fish and shellfish like anchovy, sardine or cephalopods, which are very popular across consumers, are also strongly dependent on partially or already processed imports which are further completed, packaged and branded to be sold in the domestic markets. As a result of this practices, the negative value of the trade balance of processed and preserved seafood products is considerably smaller than the values observed with the aggregation of all seafood commodities (Fig. 4.21.7b). The decrease in the absolute value of the trade balance of processed and preserved seafood is even higher in the last observed years, as a result of an increased industry’s exporting effort due to the fall in internal demand motivated by the impacts of the financial crisis on domestic consumption.

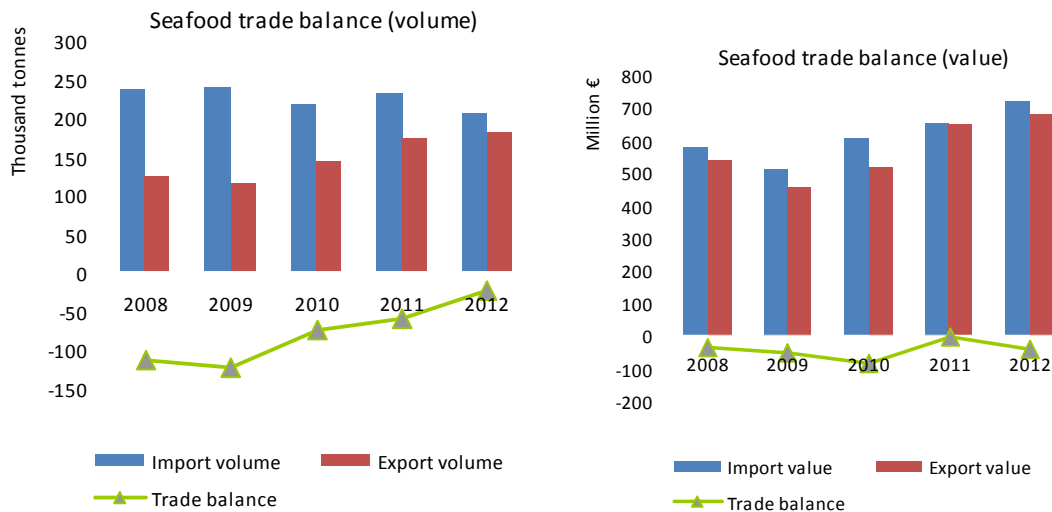


Figure 4.21.8b: Spanish processed and preserved seafood trade balance trends in volume (left) and value (right)

Dried, salted and smoked fish (Fig. 4.21.7c) offers another particular situation in which the example of salted cod is quite illustrative. Salted fish in general and cod in particular are quite traditional products appreciated by Spanish consumers since several centuries ago. Raw materials had a significant supply from the domestic fleet until the late 80's, when overfishing issues exhausted the New Foundland fishery. Today, even holding about 15% of the total EU cod quota, the industry strongly depends on imports in order to sustain the existing capacity of salted cod facilities. The bulk of imports consist on cod salted or in brine, locally known as "bacalao verde (green cod)" which is then dried and processed in Spain. The final products are mainly consumed in the domestic market, with some exports to neighboring countries like Portugal, France or Italy. The resulting balance trade is negative since local demand is strong enough to cover a large quota of the final supply. In the case of smoked fish the trade balance is even more negative since most of the product is imported ready for final consumption.

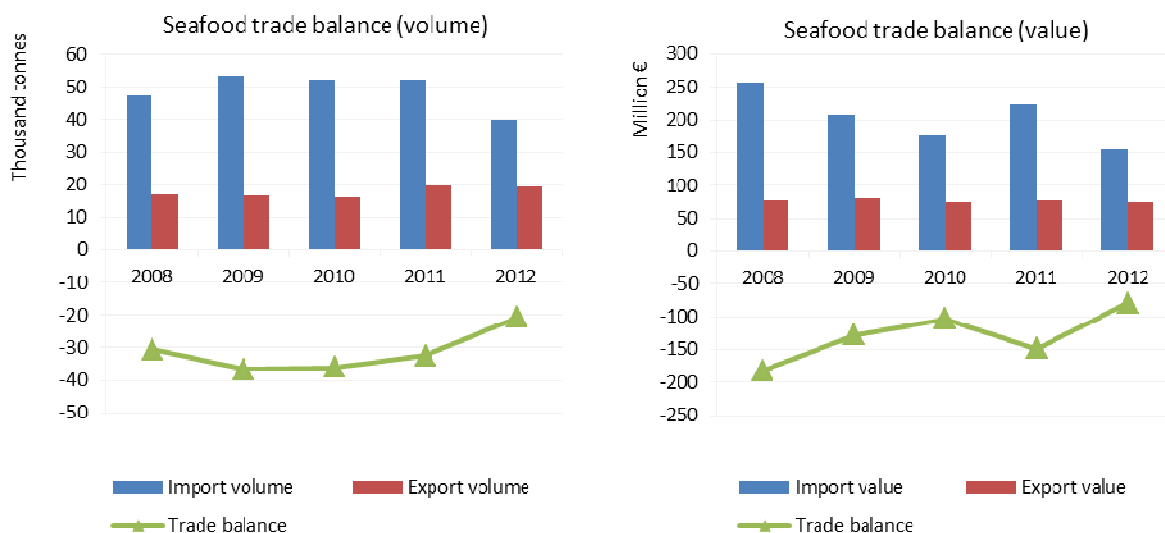


Figure 4.21.9c: Spanish salted, dried and smoked fish trade balance trends in volume (left) and value (right)

Finally, frozen fish shows a similar profile as prepared and preserved but with a stronger domestic demand, resulting in more negative trade balances. Besides smaller exported quantities, another important difference with regard the canning industry is the value of frozen exports which is considerably lower compared with the value of imports. This observation suggests that the more expensive frozen fish products are consumed in the domestic market, while the exports are driven by less valued species and products (Fig. 4.21.7.d).

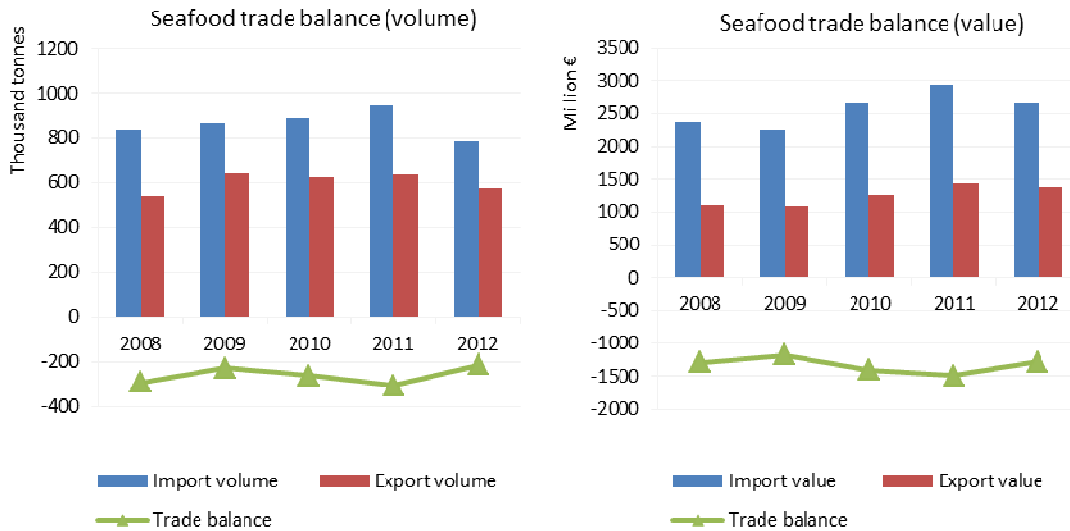


Figure 4.21.10d: Spanish frozen fish trade balance trends in volume (left) and value (right)

Imports origin and export destination of Spanish seafood products do not differ too much by categories of commodities. When considering all seafood commodities, including fresh products, imports mainly come from outside the EU, while exports are focused on intra EU trade (Fig. 4.21.8). This is just a result of a maximizing profit behavior of traders and processors. The EU market, like all developed countries, offers higher prices for food products imported from developing countries at lower prices. The lack of trade barriers of any kind also facilitates and increases the attractiveness of the intra-EU market. This is a common trend in all categories and in almost all other EU countries with relevance in the processing industry.

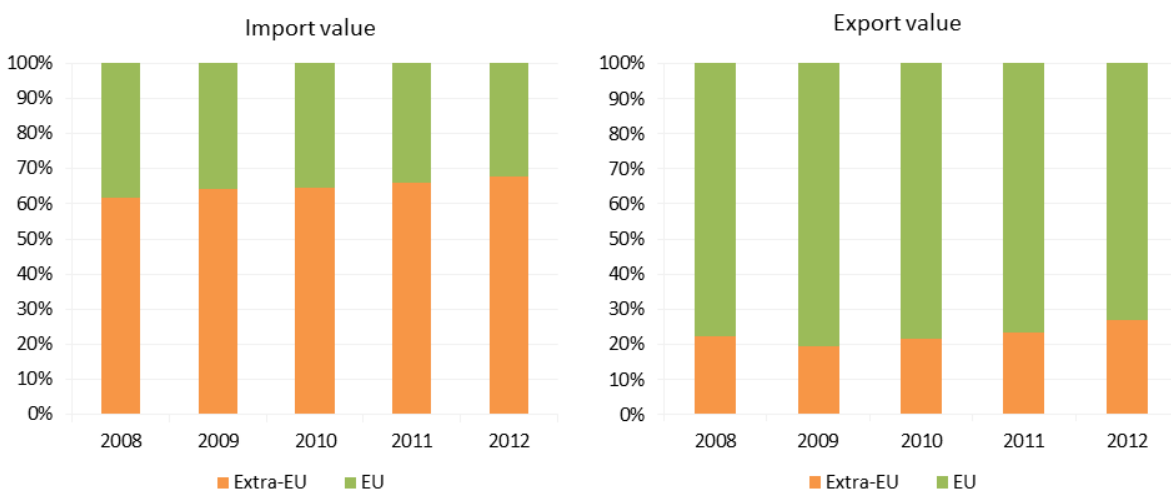


Figure 4.21.11: Spanish seafood imports (left) and exports (right) composition by type of origin/destination: shares in value.

Countries of origin and destination of imports and exports (Fig. 4.21.9) vary according to the species and commodities considered. In general terms Morocco is the main partner for Spanish importers, in particular in pelagic species and cephalopods whether fresh or semi processed, but also some other demersal species. Ecuador is another relevant partner from where large amounts of penaeus shrimp and different species of tunas used in the canning industry are imported. Argentina and Namibia are the two main suppliers of frozen Southern hake, which complements the supply of fresh European hake, which is the most popular species across Spaniards. In the last decade China has become another main partner also for Spain as it is being happening in the rest of the world. The other three relevant partners are EU members. With regard destination countries of Spanish exports, neighboring and other EU countries are the most relevant partners. Japan and Ecuador are the two most important destinations for Spanish seafood outside the EU. Bluefin and other kinds of tunas are the main species exported to Japan for the sashimi market.

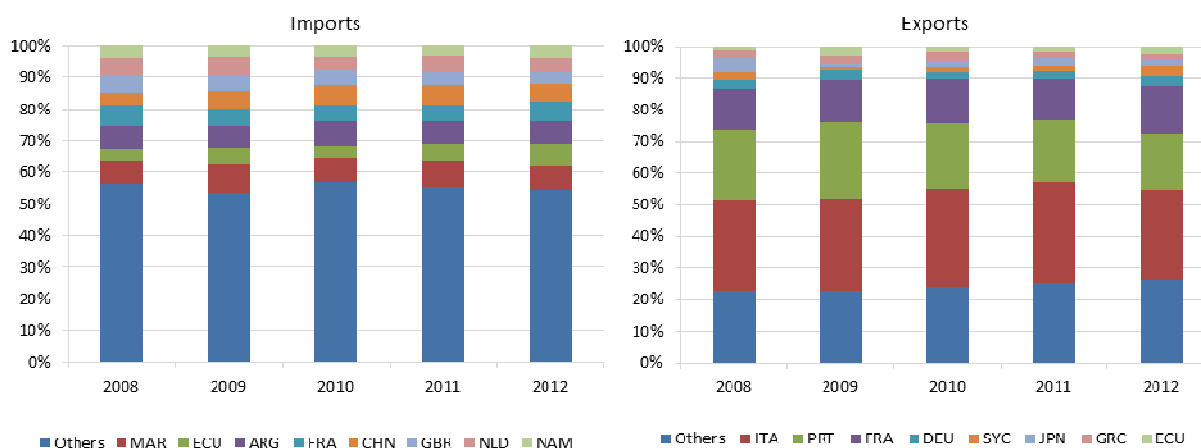


Figure 4.21.12: Spanish seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

Among the most relevant imported species (Fig. 4.21.10), tunas, small pelagics and cephalopods are the main raw materials for the canning industry. Shrimp and Southern hake are usually imported frozen and derived to the domestic market with small or none further processing. Cod is mainly imported fresh or frozen, but also salted, not dry, or in brine for the local salted cod processing industry. Exports have a higher level of processing and value added, such as canned tuna or molluscs or frozen hake and cephalopods.

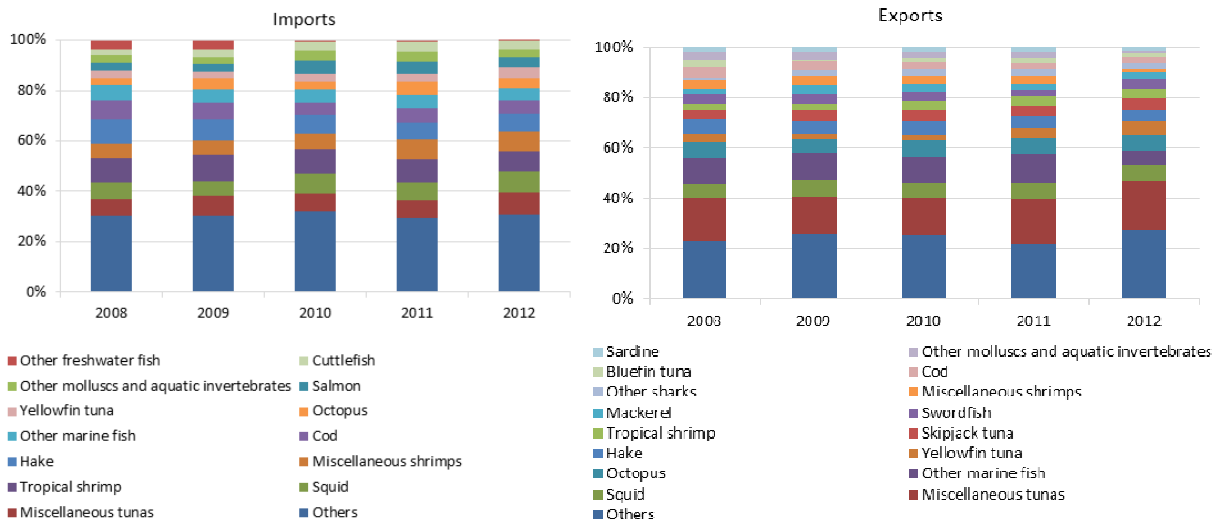


Figure 4.21.13: Spanish seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

4.21.5 Trends and drivers for change

2013 appears to mark the beginning of the economic recovery in Spain. Despite high unemployment and limited access to credit persists, Spanish productive economy marked one of the biggest growths along the EU countries. This situation improves expectancies in all the relevant domestic industries and fish processing will not be an exception. It is likely to expect that the recovery in activity observed in 2012 with regard the two previous years will continue in the short term.

Changes may be expected in the composition of the industry's income. As the level of economic activity in the country increases, internal demand and consumption is also expected to increase. The main consequence of the increase in local demand of processed seafood will reduce the relative importance of exports even these may keep increasing.

In addition, it is expected an increase in the process of concentration in the industry structure that will continue with reduction of the small and medium size companies and an increase in the importance of the big companies in terms of employment, production and incomes. Increasing the orientation to external markets, improving access to credit, reducing financial cost, increasing production efficiency or reducing average costs through economies of scale are some examples of issues that fish processing industry is addressing in order to increase the competitiveness of the enterprises and which a bigger scale helps to achieve.

4.21.6 References

INE (2014). Encuesta nacional de estructura salarial. Instituto Nacional de Estadística.
<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=/t22/p133&file=inebase&L=0>

4.22 SWEDEN

4.22.1 General overview of the Swedish fish processing industry sector

The total number of enterprises operating in the Swedish processing industry increased from 301 to 343 during the period 2008-2012, if one includes both enterprises that process fish as their main activity and enterprises that do not. If you separate these two groups, the enterprises that process fish as their main activity increased from 214 to 223, which can be compared to 177 enterprises in 2001. This can also be compared to an increase by 38% for enterprises that do not process fish as their main activity.

Please note that the rest of this chapter mostly concerns enterprises that have fish processing as their main activity, since we have almost no further data on the other enterprises.

The fish processing industry sector in Sweden is very heterogeneous with small family businesses processing their own landings as well as larger enterprises with large-scale industrial production. A majority of the companies, however, are small firms with less than 10 employees. Often only the owner is working in the company. A correlation between business size and diversification is expected, since smaller enterprises tend to specialise and larger enterprises produce a wider range of products.

The fish processing industry is located mainly along the west and south coasts of Sweden, as are major parts of the fishing fleet. Two regions stand out: the Sotenäs municipality and the county of Halland. In these coastal areas the processing industry is an important source of employment, particularly since other employment can sometimes be hard to find there. Several Swedish companies have merged with foreign ones, for example from Norway and the United Kingdom.

The Swedish processing industry produces a wide range of fresh, chilled, canned and frozen products. These products are primarily based on herring, whitefish, prawn and roe. In recent years, the processing rate has increased since demand has moved towards products that are almost ready to eat. At the same time, less whole fish is being sold. To be able to compete on the market the Swedish fish processing industries, especially the larger enterprises, are very dependent on raw material of the right quality and quantity. They therefore import approximately three quarters of their raw material.

In 2012 a total of 223 enterprises had fish processing as their main activity. Many of the small companies were financially connected to the fishery operations, since they often processed their own landings. During the studied period, around 85% of the enterprises had less than ten employees. The total number of employees was slightly lower in 2012 compared to 2008 (2,135 compared to 2,165). There was a drop in total number of employees in 2009, and the number of employees has in fact increased every year since then. Even labour productivity has increased during the studied period and at the same time unpaid work has decreased.

Table 4.22.1: Swedish fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	214	217	219	219	223	▲	2%	4%
≤10 employees	181	186	183	186	190	▲	2%	5%
11-49 employees	26	26	30	26	25	▼	-4%	-4%
50-249 employees	7	5	6	7	8	▲	14%	14%
≥250 employees								
Employment (number)								
Total employees	2,165	1,991	2,007	2,126	2,135	▬	0%	-1%
Male employees	1,187	1,116	1,112	1,202	1,215	▲	1%	2%
Female employees	978	875	895	924	920	▬	0%	-6%
FTE	1,773	1,736	1,807	1,837	1,831	▬	0%	3%
Indicators								
FTE per enterprise	8.3	8.0	8.3	8.4	8.2	▼	-2%	-1%
Average wage (thousand €)	43.9	39.3	45.4	48.3	50.2	▲	4%	14%
Labour productivity (thousand €)	54.1	50.7	58.0	59.0	66.9	▲	13%	24%
Unpaid work (%)	1.3	2.8	0.0	0.0	0.0	▬	0%	-100%

Note: The data covers 3 segments, since the data in the third segment includes firms with more than 50 employees.

In 2012, total FTE in the Swedish processing industry was 1,831 which was an increase by 3% compared to 2009. The fact that FTE is lower than the total number of employees indicates that several employees are working part time.

FTE development can only be studied on an aggregated level, since no data is available by gender. However, between 2009 and 2012 total FTE increased by 3% which can be compared to a decrease by 1% in total employment. This development might be explained by the fact that more employees are working part time, and the increase in average wages may also have an impact on the development.

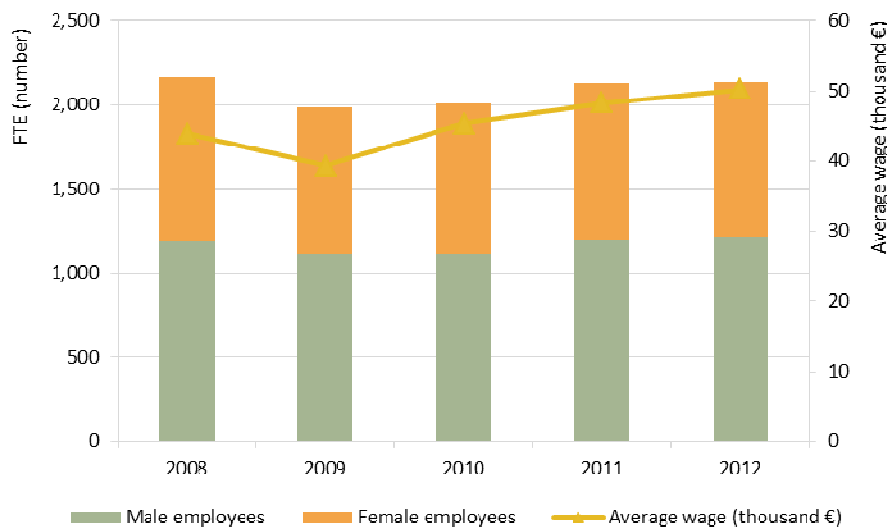


Figure 4.22.1: Swedish employment trends, 2008-2012

As shown in figure 4.22.1 the average wage level has a positive trend during the period and increased by 14%, which is slightly higher than the increase in Sweden as a whole. The decrease in 2009 is mainly due to changes in exchange rates, since the Swedish krona was weak. The total number of employees was slightly lower in 2012 compared to 2009 (2,135 compared to 2,165). During the studied period the total number of male employees increased by 2% and at the same time the total numbers of female employees decreased.

4.22.2 Economic performance of the Swedish fish processing industry sector

The performance of the Swedish processing industry is highly dependent on the prices of raw material, which amounted to almost 60% of total operational costs in 2012. The industry is also dependent on raw material of the right quality and quantity. If such materials cannot be found within the Union the industry has to import it from third countries. Generally speaking, smaller enterprises are more dependent on local landing and larger enterprises with industrial production depend more on imported raw material. Therefore, in addition to variations in the prices of raw material, the industry is also sensitive to fluctuations in exchange rates.

As shown in figure 4.22.2 both EBIT and GVA are low since income (especially turnover) has not increased at the same rate as costs (especially the costs for wages and salaries) during 2012.

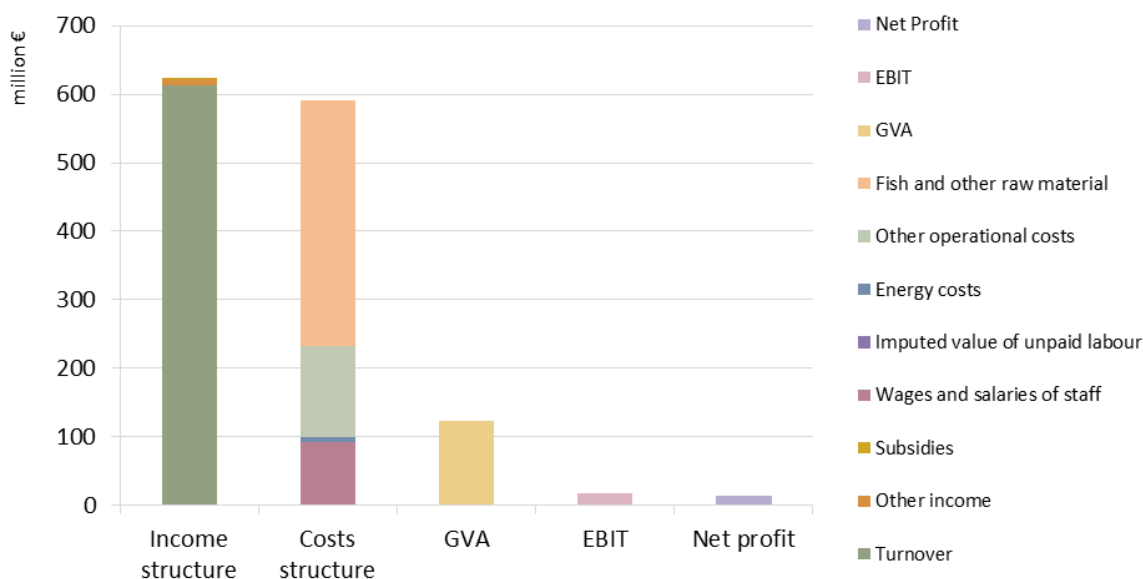


Figure 4.22.2: Economic performance of the Swedish fish processing industry sector, 2012

Please note that the development of the economic performance (figure 4.22.2 and table 4.22.2) would be different if it was presented in Swedish krona, especially for the year 2009 when the Swedish krona was weak. The exchange rates used in this chapter are for €1: SEK 9.6055 in 2008, SEK 10.6213 in 2009, SEK 9.5413 in 2010, SEK 9.0355 in 2011 and SEK 8.7053 in 2012.

For example, if you compare the turnover in 2008 and 2009 it was at a similar level in Swedish krona, but decreased by 10% when presented in €. During the same period the costs of raw material increased by 11% in krona, but were almost the same when expressed in €. When you compare the evaluation for the turnover between 2008 and 2012 it increased by 7% in Swedish krona, but by 18% expressed in €. The situation is much the same as regards the cost of raw material; in Swedish krona it increased by 20% between 2008 and 2012, but by 32% expressed in €.

The development (2008-2012) of the Swedish economic performance of the fish processing sector is shown in table 4.22.2. Beneath the table the most interesting variables are commented.

Table 4.22.2: Swedish economic performance of the fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
Income (million €)									
Turnover	519.8	467.2	567.5	599.4	613.2	▲	2%	▲	18%
Other income	3.7	3.6	3.9	3.4	8.7	▲	159%	▲	133%
Subsidies	0.3	0.3	0.5	0.5	0.8	▲	63%	▲	210%
Total Income	523.8	471.1	571.9	603.3	622.7	▲	3%	▲	19%
Expenditure (million €)									
Purchase of fish and other raw material for production	271.9	272.8	327.1	360.8	358.6	▼	-1%	▲	32%
Wages and salaries of staff	76.8	66.4	82.0	88.8	92.0	▲	4%	▲	20%
Imputed value of unpaid labour	1.0	1.9	0.0	0.0	0.0	▲	21%	▼	-100%
Energy costs	7.4	6.5	8.5	7.6	6.4	▼	-16%	▼	-14%
Other operational costs	148.3	103.6	130.9	126.0	134.5	▲	7%	▼	-9%
Total production costs	505.4	451.1	548.6	583.2	591.5	▲	1%	▲	17%
Capital Costs (million €)									
Depreciation of capital	12.3	10.5	12.5	12.7	13.3	▲	4%	▲	8%
Financial costs, net	0.8	-0.1	0.6	-1.7	5.3	▲	415%	▲	557%
Extraordinary costs, net	0.0	0.0	0.0	0.0	0.0	▬	0%	▬	0%
Capital Value (million €)									
Total value of assets	401.3	344.5	355.8	441.8	409.7	▼	-7%	▲	2%
Net Investments	9.5	9.8	11.4	12.4	8.9	▼	-29%	▼	-6%
Debt	254.8	206.0	233.7	246.0	251.7	▲	2%	▼	-1%
Performance Indicators(million €)									
Gross Value Added	96.0	88.0	104.8	108.4	122.4	▲	13%	▲	28%
Operating Cash Flow	18.4	19.9	23.3	20.1	31.3	▲	56%	▲	70%
Earning before interest and tax	6.1	9.5	10.8	7.4	18.0	▲	144%	▲	198%
Net Profit	5.3	9.6	10.2	9.0	12.8	▲	41%	▲	143%
Capital productivity (%)	23.9	25.5	29.5	24.5	29.9				
Return on Investment (%)	1.5	2.8	3.0	1.7	4.4				
Financial Position (%)	63.5	59.8	65.7	55.7	61.4				
Future Expectation Indicator (%)	-0.7	-0.2	-0.3	-0.1	-1.1				

Income

The Swedish processing industry has shown a steady increase in net turnover since 2001, which might be related to the increase in the total number of enterprises during the same time. With the exception of 2009 both turnover and total income increased every year during the period, both when expressed in € and in krona, but, due to exchange rates the increase was larger when expressed in €. The turnover increased by 18% in enterprises where fish processing is their main activity. This can be compared to turnover for enterprises in

which fish processing is not their main activity. For these enterprises, turnover increased from €73.4 million in 2008 to €111.9 million in 2012, which is an increase by 50%. If turnover is aggregated for the enterprises where fish processing is their main activity and the ones where it is not, total turnover increased by 22% from €593.2 million in 2008 to €725.1 million in 2012.

The variable “subsidies” shows a very large percentage change, but from extremely low values. The variable is the only one collected by surveys, and variations can probably be explained by differences in structures of the enterprises that are included in the survey or that one more measure has been paid one year compared to another. If you compare the value for the variable “subsidies” collected by surveys to the value from the European Fisheries Fund they correspond well.

When it comes to subsidies from the European Fisheries Fund, the Swedish processing industry has mainly received subsidies under Article 34 (investments in processing and marketing) during the studied period. The total OP budget for the Swedish fisheries program is approximately €105 million (of which 50 is national co-financing). Between 2007 and 2013 around 10% can be related to actions under measure 2.3 (Fish processing and marketing).

The processing industry has shown a great interest in these subsidies and the size of the received subsidies varies considerably. More than 60% of the received subsidies under this measure amounted to less than 1 million krona (approximately €100 thousand) and approximately 15% to less than 100 thousand krona (approximately €10 thousand). Even in 2012 the Swedish processing industry showed a considerable interest in the measures in Article 34. Examples of investments in that measure include cold storage rooms, sorting machines, production of ready meals, compressors, facilities for fish handling, packaging machines, ice machines, recycling centre, loading dock and traceability system for frozen fish. According the Swedish 2012 Annual report for EFF, 229 applications were received, 123 of them approved and 99 finalised. The annual report states that 50 of the measures have led to an increase in processing capacity, 47 to new production, extension or modernization of the processing unit, and that two have led to a modernization of existing marketing establishments. There are several examples of investments that have resulted in better health and working conditions for some companies and improved environmental conditions. The processing industry has also received subsidies for MSC certification and the Swedish KRAV certification, for marketing surveys and for marketing campaigns etc.

Expenditures

The purchase of fish and other raw material for production is without question the largest expenditure for the Swedish fish processing industry. It amounts to 52-60% of total operational costs during the studied period. The processing industry is therefore sensitive to changes in prices of raw material as well as to changes in exchange rates. As shown in table 4.22.2 this expenditure increased by 32% between 2008 and 2012, but if it had been presented in krona the increase would have been less, only 20%.

As mentioned before, there are insufficient quantities of fish of the correct quantity, quality and species in Swedish waters to satisfy the requirements of the Swedish processing industries’ need for raw material. The processing industry is therefore highly dependent on imported raw material. Approximately 70-80% of the raw material is imported, but the share differs between species. For example, all Alaska Pollock used by the processing industry have to be imported. In addition herring (Norwegian spring spawning herring), prawn (cooked and peeled), roe and farmed salmon have to be imported from third countries; if this was not possible the processing industry would not have sufficient quantities and the right quality of raw material. However, only 8% of Sweden’s total import of fish and other seafood during 2012 came from EU27, which is a decrease by 1.5% compared to 2008 (please see 4.22.4).

Wages and salaries added up to 15% of total production costs during the whole studied period, and increased by 20% during the studied period. However, if this development was presented in krona the increase would have been 8%, which are a few percentage points higher than for Sweden as a whole. When it comes to imputed value of unpaid labour, it is not relevant to analyse the development since the values are extremely low.

Energy costs represent a small share of total operational costs and have been stable during the period, even in absolute terms. "Other operational cost" is the only variable that has decreased during the studied period, especially in 2009 when the krona was weak.

Performance Indicators

All of the indicators (except "Financial position") show an increasing trend since 2008, except for 2009 when the krona was weak compared to the €. The weakening of the market has also been affected by the financial crisis in 2009. However, despite the financial crisis the total number of enterprises has been increasing every year. Net profit has fluctuated, but displays a positive trend. The decrease in net profit in 2011 can be explained by increased costs for raw material due to reduced TAC for i.e. Norwegian spring spawning herring (2010-2012). Since the processing industry feared a negative reaction from consumers if they were to increase their prices too quickly, they could not immediately compensate for the increase in raw material prices.

EBIT and GVA are low since income has not increased at the same rate as costs (especially costs for raw material and wages and salaries). If these indicators were calculated in krona they might show a different development. Especially the EBIT has decreased due to higher costs for raw material. Operating cash flow has had a positive trend and increased by 70% in 2012 compared to 2008.

Figure 4.22.3 shows the evaluation of total income, total production cost, average salary and labour productivity. As the figure indicates all of them have had a positive trend during the studied period, except for 2009 when the Swedish krona was weak compared to the €. Total income increased by two additional percentage points during the period compared to total production costs (19% compared to 17). At the same time labour productivity increased by 24%, which can be compared to 14% for average salary. Worth mentioning again is that the number of enterprises increased during this period.



Figure 4.22.3: Income, costs, wages and labour productivity trends of the Swedish fish processing industry sector, 2008-2012

4.22.3 Overview of the Swedish fish processing industry sector by size categories

The fish processing industry sector in Sweden is very heterogeneous with small family businesses processing their own landings as well as larger enterprises with large scale industrial production. A majority of the companies, however, are small firms with less than 10 employees. Please note that the Swedish data covers three segments, since the data in the third segment includes firms with more than 50 employees.



Figure 4.22.4: Swedish main structural and economic variables trends by size category, 2008-2012

Note: The data covers 3 segments, since the data in the third segment includes firms with more than 50 employees

When you compare the development in total income and total production costs for the three segments in Sweden, you can see similarities in development. For all segments, the increase in total income has been a few percentage points higher than the corresponding increase in total costs. The larger enterprises with industrial production are, however, generally speaking more dependent on imported raw material than smaller ones, which often process their own landing. Therefore, in addition to variations in the prices of raw material, the industry is also sensitive to fluctuations in exchange rates. This is illustrated in figure 4.22.4 and table 4.22.3 where it is shown that total production cost has increased by 34% during the studied period for enterprises with more than 50 employees and by 3% for enterprises with less than 10 employees.

Even if the values for the different segments differ in figure 4.22.5, the relationships between the included variables are almost the same for all segments. Purchase of fish and other raw material is the largest variable in total costs, followed by other operational costs and wages and salaries of the staff.

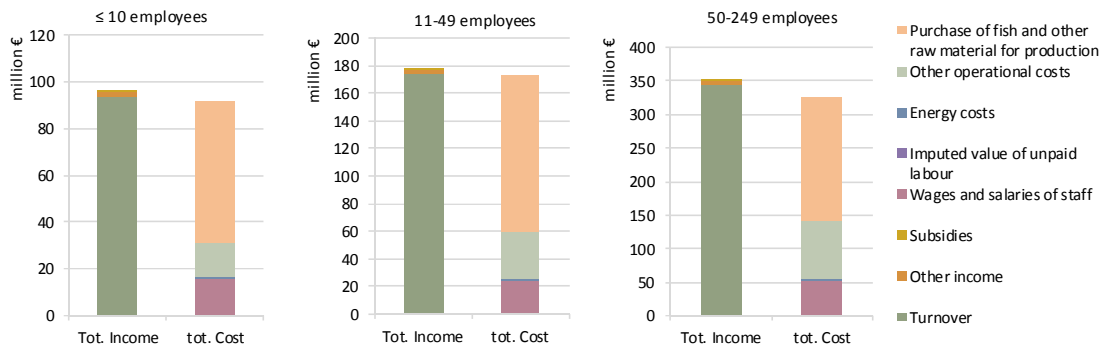


Figure 4.22.5: Swedish income and cost structure, by size category, 2012

Some of the economic indicators in table 4.22.3 show an increase by several hundred % for some segments, since the calculations are based on very low values. It is therefore not relevant to analyse the development. This is similar to when a country has few enterprises in one segment, and then the percentage change might also be misleading.

Table 4.22.3: Economic performance of the Swedish fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)		Δ (2008-12)	
less than or equal to 10 employees									
Total Income	91.3	77.9	85.3	92.7	95.8	▲	3%	▲	5%
Total production costs	89.0	75.8	80.9	87.2	92.0	▲	5%	▲	3%
Gross Value Added	14.5	14.3	16.3	19.8	18.9	▼	-5%	▲	31%
Operating Cash Flow	2.3	2.2	4.4	5.5	3.8	▼	-31%	▲	67%
Earning before interest and tax	-0.2	-0.2	2.3	2.9	1.4	▼	-52%	▲	735%
Net Profit	-1.8	-1.8	1.1	2.4	0.5	▼	-78%	▲	129%
between 11 and 49 employees									
Total Income	173.1	164.0	199.9	198.1	176.8	▼	-11%	▲	2%
Total production costs	172.6	159.5	193.3	192.4	172.6	▼	-10%	■	0%
Gross Value Added	22.3	25.5	33.0	29.8	27.7	▼	-7%	▲	24%
Operating Cash Flow	0.5	4.5	6.5	5.7	4.2	▼	-27%	▲	781%
Earning before interest and tax	-2.3	2.1	3.2	2.8	1.1	▼	-62%	▲	146%
Net Profit	-1.2	2.5	3.5	3.6	0.0	▼	-99%	▲	104%
between 50 and 249 employees									
Total Income	259.4	229.2	286.7	312.5	350.1	▲	12%	▲	35%
Total production costs	243.8	215.9	274.3	303.6	326.8	▲	8%	▲	34%
Gross Value Added	59.1	48.1	55.6	58.7	75.8	▲	29%	▲	28%
Operating Cash Flow	15.6	13.3	12.3	8.9	23.3	▲	162%	▲	49%
Earning before interest and tax	8.6	7.6	5.3	1.7	15.6	▲	796%	▲	82%
Net Profit	8.2	8.9	5.5	3.0	12.2	▲	306%	▲	48%

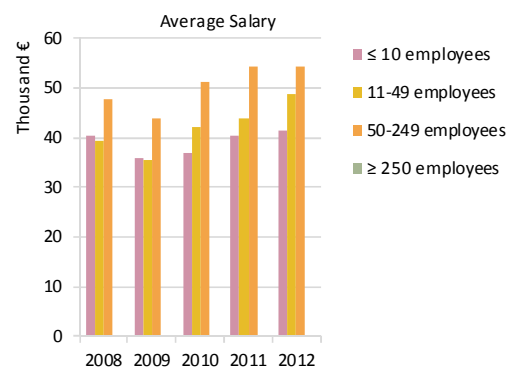
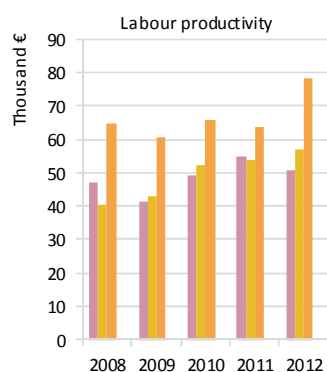
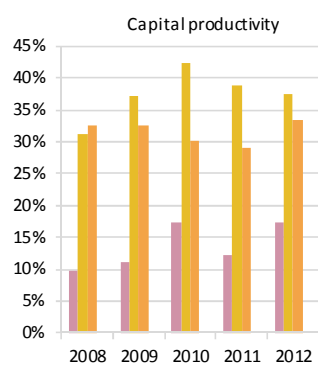


Figure 4.22.6: Swedish capital productivity, labour productivity and average salary trends, by size category, 2008-2012

4.22.4 Swedish seafood trade

There are insufficient quantities of fish of the correct quantity, quality and species in Swedish waters to satisfy the requirements of the Swedish processing industries' need for raw material. The processing industry is therefore highly dependent on imported raw material. Approximately 70-80% of the raw material is imported, but the share differs between species.

The processing industry in Sweden imports most of its raw material at reduced tariffs within the framework of autonomous tariff quotas (ATQs), other import quotas and tariff suspensions. The volume of these quotas (and the in-quota tariff) is of vital importance for the industry since the in-quota tariff is lower than the so called MFN tariff (most favoured nation). If the quota is not large enough the industry has to import the raw material at full duty, which of course has a negative effect on their economic performance. For example, the autonomous tariff quota for cooked and peeled prawns for processing has been too small during the studied period. It has frequently been exhausted as early as during the summer. As a consequence the processing industry has had to store their raw materials in order to ensure a stable supply throughout the year. This increases their production costs.

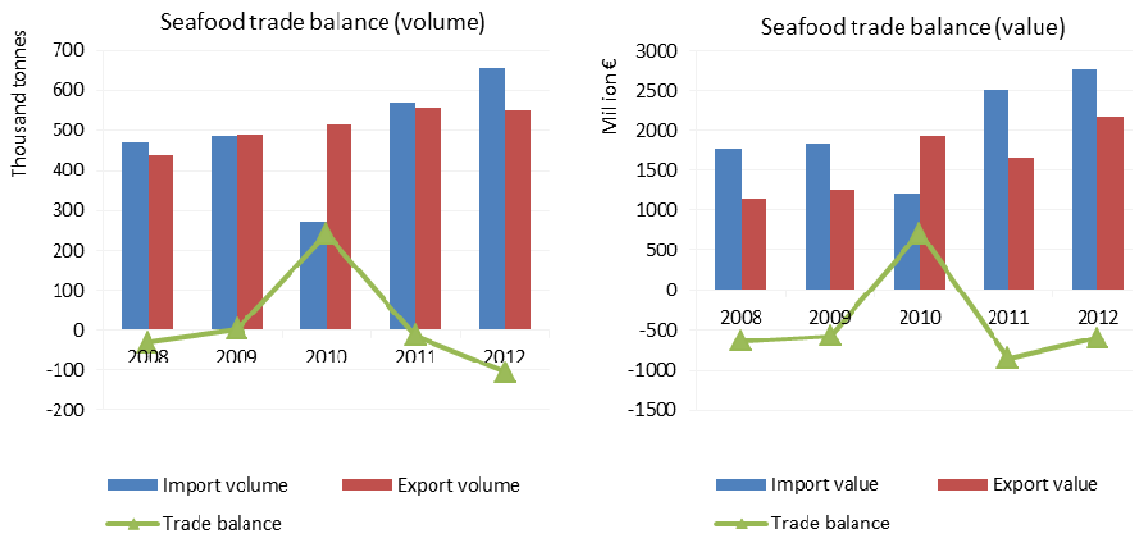


Figure 4.22.7: Swedish seafood trade balance trends in volume (left) and value (right)

Farmed salmon from Norway is one of the most imported raw materials used by the Swedish processing industry. Between 2008 and 2011 the imported quantity of whole salmon to Sweden increased by almost 60%. In 2011 this import accounted for 40% of the total Swedish import of fishery products. After the EU accession Sweden has become a transit country for Norwegian fish, especially salmon. In 2007, 15% of total EU import of fish and fishery products entered Sweden. In 2011 this share had increased to 58%. According to Swedish estimates nearly 80% of the value of the fish that was included in the Swedish trade statistics 2009-2011 were re-exported to other countries, most likely without going through any processing in Sweden (see figure 4.22.7).

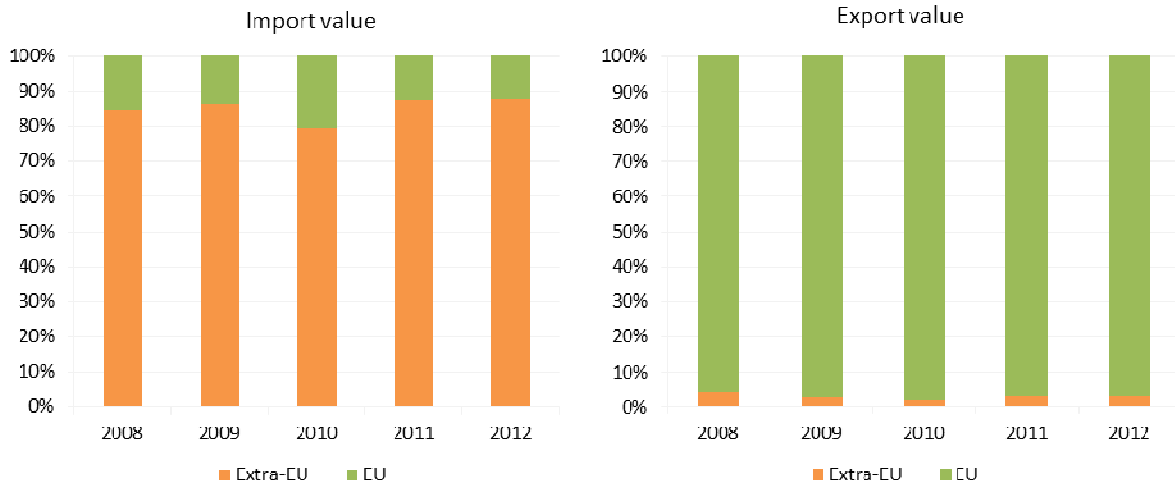


Figure 4.22.8: Swedish seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

Norway is Sweden’s most important trading partner when it comes to import of fish and other seafood (figure 4.22.9), but imports also come from other third countries like China, Thailand, Iceland and Canada. Among EU Member States, Sweden imports mostly from Denmark, the Netherlands, Germany and Poland. Looking at imports of processed fishery products, the main trading partners in third countries are Norway, China, Thailand and Morocco. In the EU the most important trading partners for imports of processed fishery products are Denmark, Poland, France and Germany according to Statistics Sweden.

Most Swedish exports of fish and other seafood go to EU members, primarily to France, Poland, Portugal, Spain and the UK. As regards Swedish exports of processed fisheries products, our main trading partners outside the EU are (according to Statistics Sweden) Norway and the United States, and inside the EU the most important trading partners are Finland, Germany, Denmark and France.

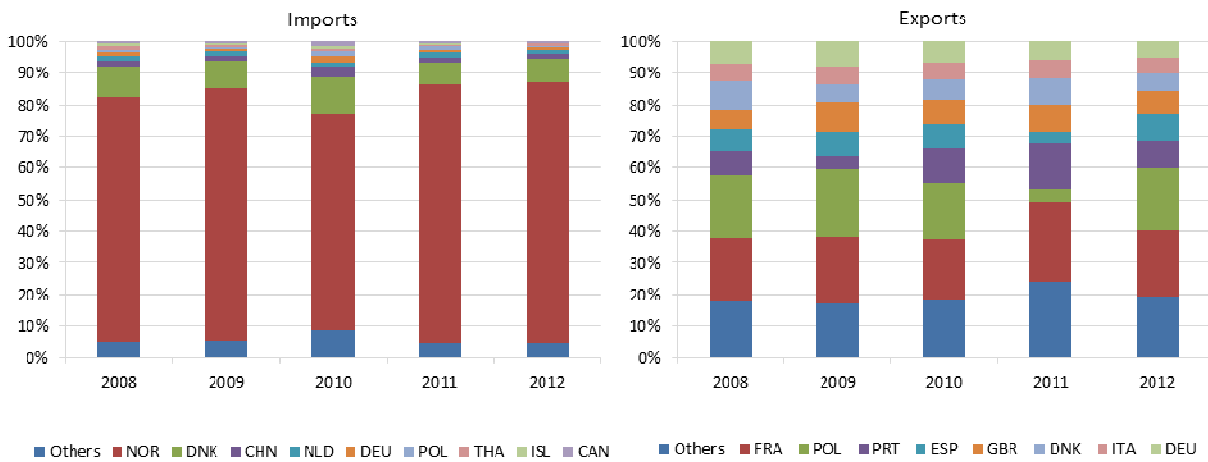


Figure 4.22.9: Swedish seafood imports (left) and exports (right) trends by most relevant trade partners: shares in value

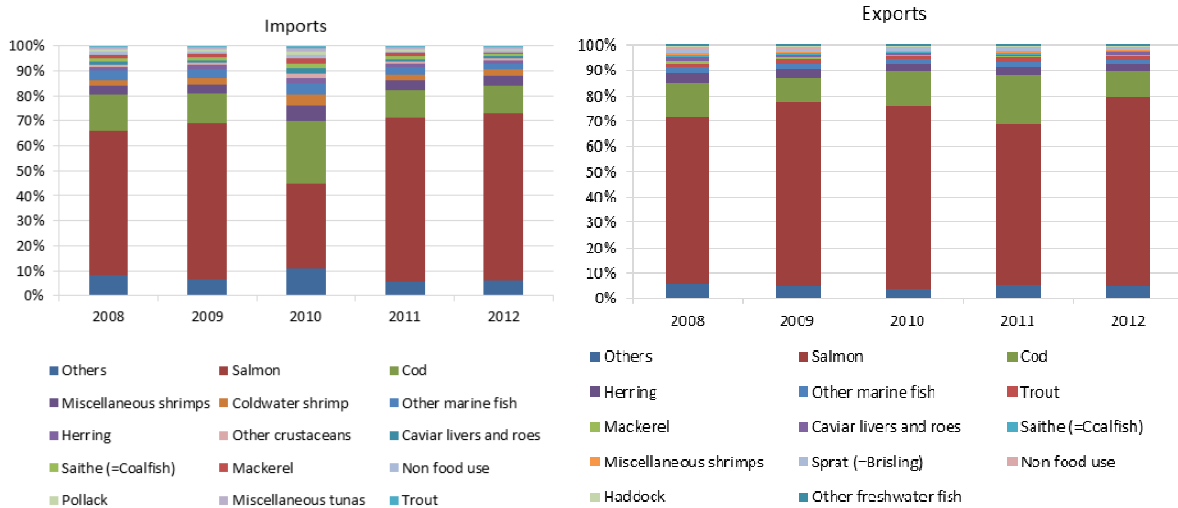


Figure 4.22.10: Swedish seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

Data on trade patterns and domestic landings show clear trends. Domestic landings of fish decrease whereas imports increase of fish that is fresh, frozen or primarily processed (see figure 4.22.11). However, how dependent the enterprise is on imported or Swedish landed raw material depends on the individual enterprise.

The size of the Swedish fishing fleet decreased between 2008 and 2013. The total number of vessels decreased by 14% to 1,299 in 2013, while total GT and kW of the fleet declined by 30% and 20%, respectively, during the same period. The EU-subsidized scrapping campaign during late 2009 and 2010, along with the introduction of an ITQ system in the pelagic fishery, are the main reasons for the decrease. However, the eel fishing ban that was introduced in 2007 has also had some effect on the decrease of the total number of vessels, but only a minimal impact on the decrease in the fleet's capacity.

During 2008-2013 total landing weight decreased by 17% and at the same time the corresponding landing value increased by 15%. The main reason for the decrease in landing weight was decreased quotas for mainly pelagic species. An increase in prices for shrimps, Norwegian lobster, herring and sprat is the main reason for the increase in landing value during the studied period.

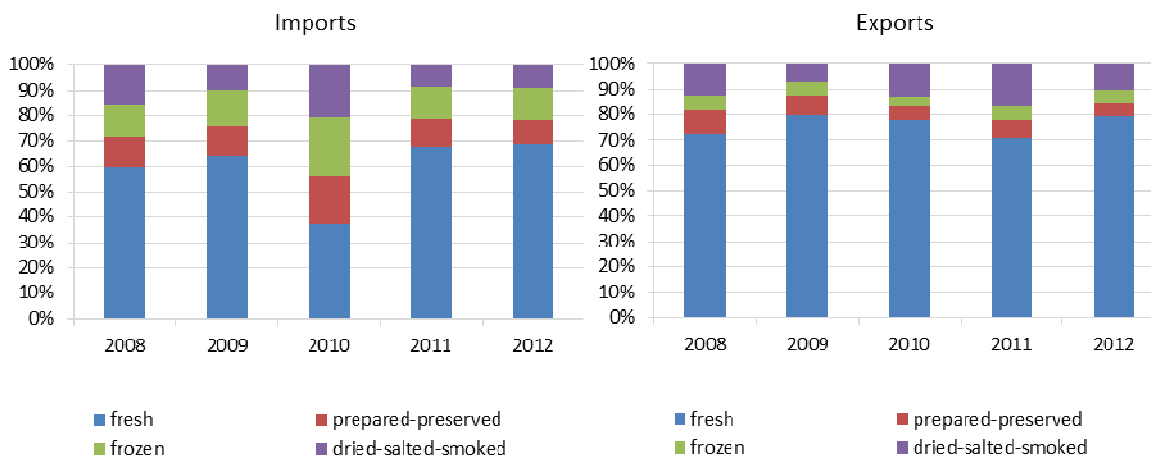


Figure 4.22.11: Swedish seafood imports (left) and exports (right) trends by type of products: shares in value

4.22.5 Trends and drivers for change

The net turnover for the Swedish fish processing industry shows a positive trend from 2001, with the exception of 2009 when the Swedish krona was weak compared to the €. At the same time, net profit has fluctuated but shows a positive trend especially during the studied period. Most of the indicators show an increase for the industry as a whole since gross value added (GVA), return on investment (ROI) and EBIT (earnings before interest and taxes) all were higher in 2012 compared to 2008. However, net investments increased by 33% between 2008 and 2011 which is an indication that the enterprises have a positive view of the future, besides indicating access to capital. But in 2012 net investments decreased by 29% compared to 2011 and the values were lower than they were during the years of the financial crisis. It is hard to explain the decrease, but it might depend on few enterprises or an uneven pace of investments. Notable is also that turnover for the fish processing industry (including enterprises that do not have fish processing as their main activity) increased by 22% between 2008 and 2012.

The Swedish processing industry is to a large extent affected by the global situation, for example supply of raw material of the right quality and quantity and consumer behaviour. In 2014 the new Common Fisheries Policy for the EU entered into force, which aims to create a more sustainable sector. Fishing and aquaculture are to be sustainable ecologically, economically and socially. The ambition is that the new policy will increase the sector's credibility and create sustainable fishery. Actors in the whole chain are to improve sustainability and pay more attention to fish and other seafood coming from sustainable stocks. The Swedish processing industry works to a large extent with different certifications like the MSC, ASC and the Swedish KRAV label. Non-certified products are hard to place on the market since consumer awareness has increased, which of course has been picked up by the retailing chains. Even the fish and seafood guide from the WWF appears to play a more important role for consumers and retailing chains. The aim of the WWF fish and seafood guide is to help consumers to choose fish that comes from sustainable stocks and to reduce the depletion of the oceans. Since consumer awareness is increasing, several retailing chains do not sell products that are marked with a red light in the WWF fish and seafood guide. For 2014 for example the WWF put a red light on the shrimp from the North Sea (*Pandalus borealis*), which caused a debate in Sweden since according to ICES the shrimp stock has been fluctuated during the past ten years. One reason, according to ICES, could be fishing pressure, but natural variations are deemed

to be the most important factor. The researchers estimate that despite the low level there are margins for a fishery.

If the sector's credibility is low, there is a risk that consumers will prefer other protein-rich food than fish and other sea food. Hopefully, clearer labelling of for example origin and traceability will increase the sector's credibility. The new Common Fisheries Policy will hopefully work in the same direction.

Since the purchase of fish and other raw material for production accounts for 60% of total operational costs, the development of this variable is very important for the sector's economic performance. However, the processing industry fears a negative reaction from consumers if it was to increase its own prices too quickly, which means that the industry cannot immediately compensate for the increase in raw material prices.

In 2010-2012 for example, the TAC for Norwegian spring spawning herring decreased, which led to increased costs for raw material and a decrease in net profit. The Swedish processing industry imports approximately 70% of all of its raw material and the sector is therefore dependent on tariff quotas and sensitive to changes in exchange rates. Since Swedish landings are declining it is likely that the share of imported raw material will increase as inputs in the fish processing industry in the future, since the industry needs raw material of the right quality and quantity. On the other hand, smaller enterprises that often process their own landings are less likely to be dependent on imported raw material. The ITQ system that was introduced in 2009 for the Swedish pelagic fishery has probably resulted in a win-win situation for the fishery sector as well as for the processing industry as a whole. The fishery can adapt their processes to better meet the demands of the processing industry, and the processing industry can invest in processes for better supply.

Access of raw material of the right quality and quantity is vital for the Swedish processing industry to compete on the market. Increased competition can be an incentive for enterprises to reduce costs. Incentives for cost reductions combined with an expected increase in consumer demand, especially for highly processed products, can be reasons for enterprises to outsource production to regions with low labour costs and better access to raw materials.

In recent years, demand has increased for highly processed products that are almost ready to eat. This development is likely to continue since most consumers prefer food that is almost ready to eat, easy to cook and healthy at the same time. A similar development has already taken place in sectors of other protein-rich food like chicken. The fishery products sector needs to move in this direction if it is to be competitive compared to beef, pork and chicken in the future. Developing new products and product differentiation are other ways for the enterprises to improve their economic performance and competitiveness.

Herring, sprat, cod, shrimp and Norwegian lobster are the most important species when it comes to landing volume and value in Sweden. They accounted for around 80% of the total Swedish landing value during the studied period, and for 90% of the landing volume. The prices of herring, sprat, shrimp and Norwegian lobster have increased during the period, but the price of Baltic cod has decreased. The decrease in cod prices has had a major impact on the profitability of the Swedish cod fishermen. The cod that are caught in the Baltic Sea have been very small compared to earlier years and therefore yield a low price per kilo. Despite the reduced size of the caught cod, the lower price is explained by the fact that Baltic cod is part of a wider European market for whitefish. In recent years, Norway has increased its sales of cod a lot on the European market and prices have been pushed down.

Finally, the development of the krona is also of great importance for the processing industries' economic performance. If the data in this chapter was converted into krona a different development would have been shown, especially for the year 2009 when the Swedish krona was weak. The exchange rates used in this chapter are for €1: SEK 9.6055 in 2008, SEK 10.6213 in 2009, SEK 9.5413 in 2010, SEK 9.0355 in 2011 and SEK 8.7053 in 2012.

4.22.6 Data issues

The Swedish data in this report was bought by the Swedish Board of Agriculture from Statistics Sweden and reported by the Swedish Board of Agriculture. The reported data are consistent with the data reported to Eurostat by Statistic Sweden. The calculations of indicators from the data collected under the data collection framework may however differ from figures reported to Eurostat, due to different methods of calculation. The description and interpretation of the Swedish data show how important the choice of currency can be. Even if it is important to use the same currency for all countries for comparability it can have a large effect on the description of a single country.

4.23 UNITED KINGDOM

4.23.1 General overview of the UK fish processing industry sector

It is estimated that in 2012 there were 375 UK companies deriving the majority of their income from fish processing, with a marked variety in processor size, range of activities and other business characteristics such as location and processed species. The number of processors in 2012 decreased by 5% compared to 2011 (down by 20 from 395) and 28% compared to 2008 (down by 144 from 519). Thus the contraction in 2012 occurred at a similar rate to that observed in 2011 (4%) but at a slower rate than in 2010 (12%) and 2009 (10%).

Underlying the recent contraction in industry size was a further pronounced decline in the number of businesses with 10 or fewer FTEs (a 10% fall on 2011). Note that between 2008 and 2012 the total decrease in the size of this category was around 38%. The average size of UK processors has been increasing, against a backdrop of an already relatively high industry concentration. The most recent data suggests that the largest 12 fish processing enterprises accounted for 3% of total enterprises and 41% of industry employment.

Majority-processing companies in the UK employed a total of 17.9 thousand Full Time Equivalentents (FTEs) in 2012, which is 1% higher than 2011 but 7% lower than 2010 and 11% lower compared to 2008. In 2012 the number of FTEs per enterprise was approx. 48, which is 6% higher than in 2011 and 23% higher than in 2008.

Table 4.23.1: UK fish processing industry sector overview, 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
Structure (number)								
Total enterprises	519	466	412	395	375	▼	-5%	▼ -28%
≤10 employees	269	235	201	184	166	▼	-10%	▼ -38%
11-49 employees	166	151	136	135	133	▼	-1%	▼ -20%
50-249 employees	73	67	61	63	64	▲	2%	▼ -12%
≥250 employees	11	13	14	13	12	▼	-8%	▲ 9%
Employment (number)								
Total employees	22,358	20,746	20,547	19,003	19,070	▬	0%	▼ -15%
Male employees	12,702	11,898	12,067	10,962	10,847	▼	-1%	▼ -15%
Female employees	9,656	8,848	8,480	8,041	8,223	▲	2%	▼ -15%
FTE	20,104	18,922	19,166	17,745	17,855	▲	1%	▼ -11%
Male FTE	11,957	11,274	11,546	10,465	10,331	▼	-1%	▼ -14%
Female FTE	8,147	7,648	7,620	7,279	7,524	▲	3%	▼ -8%
Indicators								
FTE per enterprise	38.7	40.6	46.5	44.9	47.6	▲	6%	▲ 23%
Average wage (thousand €)	24.2	28.7	28.3	31.4	34.2	▲	9%	▲ 41%
Labour productivity (thousand €)	45.6	112.5	116.6	108.0	96.9	▼	-10%	▲ 112%
Unpaid work (%)	0.0	0.0	0.0	0.0	8.9	▬	0%	▬ 0%

In 2012 58% of FTE jobs and 57% of full-time positions were male employees – proportions which have remained relatively stable over the period 2008-2012. In absolute terms male FTEs declined by a total of 14% between 2008 and 2012, while the number of female FTEs decreased by 8%.

The mean nominal wage in the industry was €34.2 thousand in 2012, an increase of 9% on the previous year and an increase of 41% compared to 2008. Note that year-on-year increase is driven by the fact that the 2012 figure captures the imputed value of unpaid labour for the first time. If we excluded this item, we would observe a 1% decrease in nominal wages between 2011 and 2012 and a 28% increase between 2008 and 2012. If we also adjust for inflation, the data suggest that real wages (excluding unpaid labour) saw a decrease of approx. 4% between 2011 and 2012 (Retail Prices Index data from the Office for National Statistics). Analogously, the 28% increase in nominal wages (excluding unpaid labour) in the period 2008-2012 should be considered against the backdrop of around 10% cumulative inflation over the period.

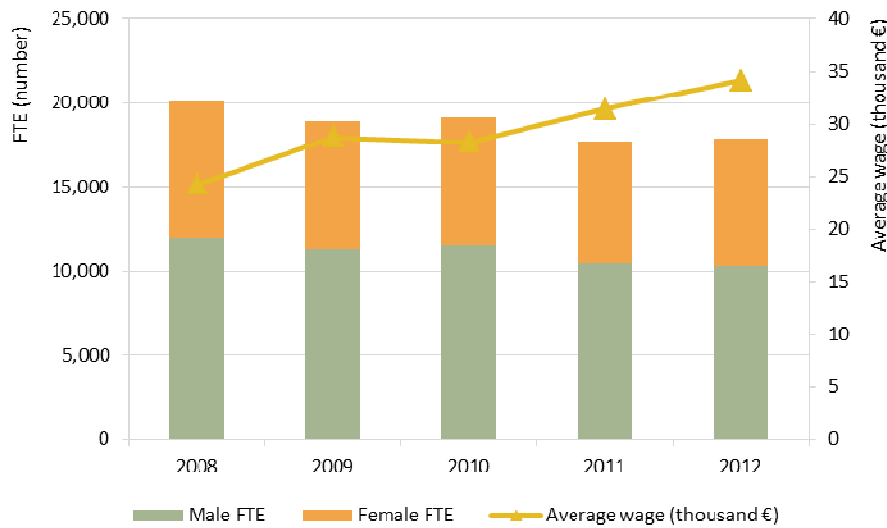


Figure 4.23.2: UK employment trends, 2008-2012

4.23.2 Economic performance of the UK fish processing industry sector

The combined turnover of the 375 processing companies (turnover from all activities, not just processing activity) was approx. €5 billion in 2012, down 1% (in nominal terms) compared to 2011 but 23% higher than 2008 (note peak in 2010). Industry total income in 2012 was virtually unchanged from 2011 and 25% higher than in 2008 (again with a peak in 2010). In 2012 total income comprised 98% turnover, 1% other income and 1% subsidies. By comparison in 2008 turnover accounted for 100% of total income; however note that this does not include any subsidies received in 2008 (no data available).

Table 4.23.3: Economic performance of the UK fish processing industry sector, 2008-2012

Variable	2008	2009	2010	2011	2012	Δ (2011-12)	Δ (2008-12)
Income (million €)							
Turnover	4,066.6	5,061.5	5,314.4	5,075.9	5,009.5	▼ -1%	▲ 23%
Other income	11.3	39.5	60.3	31.1	37.1	▲ 19%	▲ 229%
Subsidies					46.2		
Total Income	4,077.9	5,101.1	5,374.8	5,107.0	5,092.8	○ 0%	▲ 25%
Expenditure (million €)							
Purchase of fish and other raw material for production	2,622.8	2,360.7	2,482.4	2,599.9	2,742.6	▲ 5%	▲ 5%
Wages and salaries of staff	487.1	543.8	541.8	557.4	555.3	○ 0%	▲ 14%
Imputed value of unpaid labour					54.5		
Energy costs	35.2	38.6	45.8	42.6	59.3	▲ 39%	▲ 68%
Other operational costs	502.6	572.7	611.4	548.9	515.0	▼ -6%	▲ 2%
Total production costs	3,647.7	3,515.9	3,681.4	3,748.7	3,926.7	▲ 5%	▲ 8%
Capital Costs (million €)							
Depreciation of capital	65.4	73.5	71.1	76.6	70.0	▼ -9%	▲ 7%
Financial costs, net	37.7	70.0	51.5	45.7	41.3	▼ -9%	▲ 10%
Extraordinary costs, net					55.8		
Capital Value (million €)							
Total value of assets	802.6	1,168.2	1,116.6	1,263.2	1,114.8	▼ -12%	▲ 39%
Net Investments		48.3	86.8	101.6	127.1	▲ 25%	
Debt	316.4	664.2	297.2	399.0	382.4	▼ -4%	▲ 21%
Performance Indicators (million €)							
Gross Value Added	917.3	2,129.0	2,235.2	1,915.7	1,729.7	▼ -10%	▲ 89%
Operating Cash Flow	430.2	1,585.2	1,693.4	1,358.3	1,166.1	▼ -14%	▲ 171%
Earning before interest and tax	364.8	1,511.7	1,622.3	1,281.7	1,096.1	▼ -14%	▲ 200%
Net Profit	327.1	1,441.7	1,570.8	1,236.1	1,054.8	▼ -15%	▲ 222%
Capital productivity (%)	114.3	182.3	200.2	151.7	155.2		
Return on Investment (%)	45.5	129.4	145.3	101.5	98.3		
Financial Position (%)	39.4	56.9	26.6	31.6	34.3		
Future Expectation Indicator (%)		-2.2	1.4	2.0	5.1		

The data suggests that total production costs in 2012 stood at around €3.9 billion, accounting for 77% of total income. Production costs in 2012 were 5% higher than in 2011 and 8% higher than in 2008. This was primarily driven by a 5% hike in industry spending on purchasing fish and other raw materials, which saw this cost item rise above its 2008 level (at least in nominal terms) for the first time since then.

In 2012 raw materials equalled around 54% of total income (up from 51% in 2011 and down from 64% in 2008; also note the trough in 2009-10 at 46%) and 70% of production costs. Labour remuneration accounted for 11%

of total income (unchanged from 2011 and 1 percentage point (pp) lower than in 2008) and 14% of production costs. Operational costs were 10% as a proportion of total income in 2012 (down 2 pp on 2008) and 13% of production costs. Although a relatively small part of production input spending (approx. 1% of total income and 2% of production costs), it is worthwhile highlighting the 39% year-on-year rise in industry energy spending in 2012. This cost item has seen a total increase of 68% between 2008 and 2012.

The value of assets employed in the industry in 2012 was around €1.1 billion: 12% lower vs. 2011 but up 39% on 2008. In 2012 net investments increased 25% year-on-year to €127 million (around 2% of total income). The total level of industry debt in 2012 fell by 4% year-on-year, but has stabilised at around 8% of total income since 2011 (vs. a peak of 13% of total income in 2009). Capital costs accounted for 3% of income in 2012.

The gross value added (GVA) of the industry stood at approx. €1.7 billion in 2012: a 10% decrease on 2011 but an 89% increase on 2008 (note peak in 2010). In absolute terms industry net profit in 2012 is estimated to have fallen by 15% year-on-year. Industry net profit margin stood at 21% in 2012 – up from 8% in 2008 but lower than its 29% peak in 2010.



Figure 4.23.4: Income, costs, wages and labour productivity trends of the UK fish processing industry sector, 2008-2012

Labour productivity estimates suggest that Gross Value Added per FTE in 2012 stood at €96.9 thousand, which represents a 10% decrease on 2011 and a 112% increase on 2008. If we exclude unpaid labour costs from the calculation, labour productivity in 2012 stood at €93.8 thousand was 13% lower than in 2011 and 106% higher than in 2008. Labour productivity was at its peak in 2009 and has reduced somewhat since then.

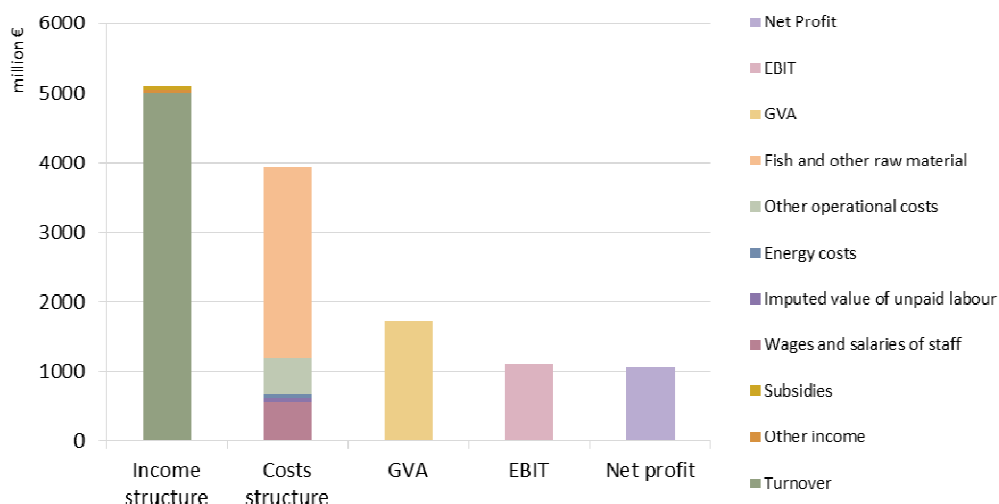


Figure 4.23.5: Economic performance of the UK fish processing industry sector, 2012

4.23.3 Overview of the UK fish processing industry sector by size categories

Company size category	2008				2012			
	No. of enterprises	% of total No. of enterprises	FTEs	% of total employment (FTEs)	No. of enterprises	% of total No. of enterprises	FTEs	% of total employment (FTEs)
Less than or equal to 10 FTEs	269	52%	1,402	7%	166	44%	843	5%
Between 11 and 49 FTEs	166	32%	3,517	17%	133	35%	3,059	17%
Between 50 and 249 FTEs	73	14%	7,259	36%	64	17%	6,616	37%
Greater than or equal to 250 FTEs	11	2%	7,927	39%	12	3%	7,337	41%
All size categories	519	100%	20,104	100%	375	100%	17,855	100%

Figure 4.23.6: UK shares of total number of enterprises and industry employment by size category, 2012

Company size category	2008				2012			
	Total income (million EUR)	% of industry total income	Net profit (million EUR)	% of total industry net profit	Total income (million EUR)	% of industry total income	Net profit (million EUR)	% of total industry net profit
Less than or equal to 10 FTEs	277	7%	21	6%	248	5%	57	5%
Between 11 and 49 FTEs	679	17%	42	13%	949	19%	253	24%
Between 50 and 249 FTEs	1,363	33%	44	13%	1,748	34%	269	26%
Greater than or equal to 250 FTEs	1,759	43%	221	68%	2,149	42%	475	45%
All size categories	4,078	100%	327	100%	5,093	100%	1,055	100%

Figure 4.23.7: UK shares of industry total income and net profits by size category, 2012

The number of fish processing companies employing up to 10 FTEs stood at 166 in 2012 and these companies represented 44% of the total number of enterprises and 5% of total employment. This contrasts sharply with the situation in 2008, when there were 269 companies of this size, representing 52% of the total number of enterprises and 7% of total FTEs. The relative decline of this category is pertinent, both in terms of share of total

number of companies (down 8 pp) and in terms of its industry employment share (down 2 pp). The relative position of this category has also deteriorated with regards to income and profit: the category lost 2 pp in share of total income (from 7% in 2008 to 5% in 2012) and 1 pp in share of net profits (6% to 5%).

In 2012 the number of enterprises employing between 11 and 49 FTEs was 133. This represented 35% of the total number of processors and 17% of total FTEs. At 166 companies in 2008, this size category contained 32% of the number of companies and 17% of total FTEs. Thus this category of processor has seen an increase in its share of total number of enterprises (by 3 pp) and a stable share of employment between 2008 and 2012. Companies in the 11-49 FTEs category have seen their share of industry turnover increase by 2 pp (from 17% to 19%) over the period 2008-2012. Importantly, their share of net profits has increased by 11 pp to 24% of the industry total.

In 2012 there were 64 processors employing between 50 and 249 FTEs, representing 17% of processing companies and 37% of FTEs. In 2008 this category contained 14% of processors and 36% of FTEs. Therefore regardless of the overall decline in total industry size, this size category has increased its relative importance to the industry between 2008 and 2012, both in terms of share of total number of companies (up 3 pp) and also in terms of its share of total industry employment (up 1 pp). The 50-249 FTEs size category has seen a 1 pp increase in its share of turnover (from 33% to 34%) and a considerable 13 pp increase in its share of industry net profits to 26%.

In 2012 12 processing companies employed more than 250 FTEs, representing 3% of the total number of processors and employing 41% of FTEs in the industry. In 2008 there were 11 such companies, which represented 2% of the total number of processors and 39% of FTEs in the industry. Thus the relative importance of this size category has increased between 2008 and 2012, both in terms of its share of total number of enterprises (up 1 pp) and in terms of its share of industry employment (up 2pp). However, the category has experienced a relative decline in terms of its share of both turnover (down 1 pp to 42%) and (especially) net profit – down by 23 pp (from 68% to 45%) between 2008 and 2012.

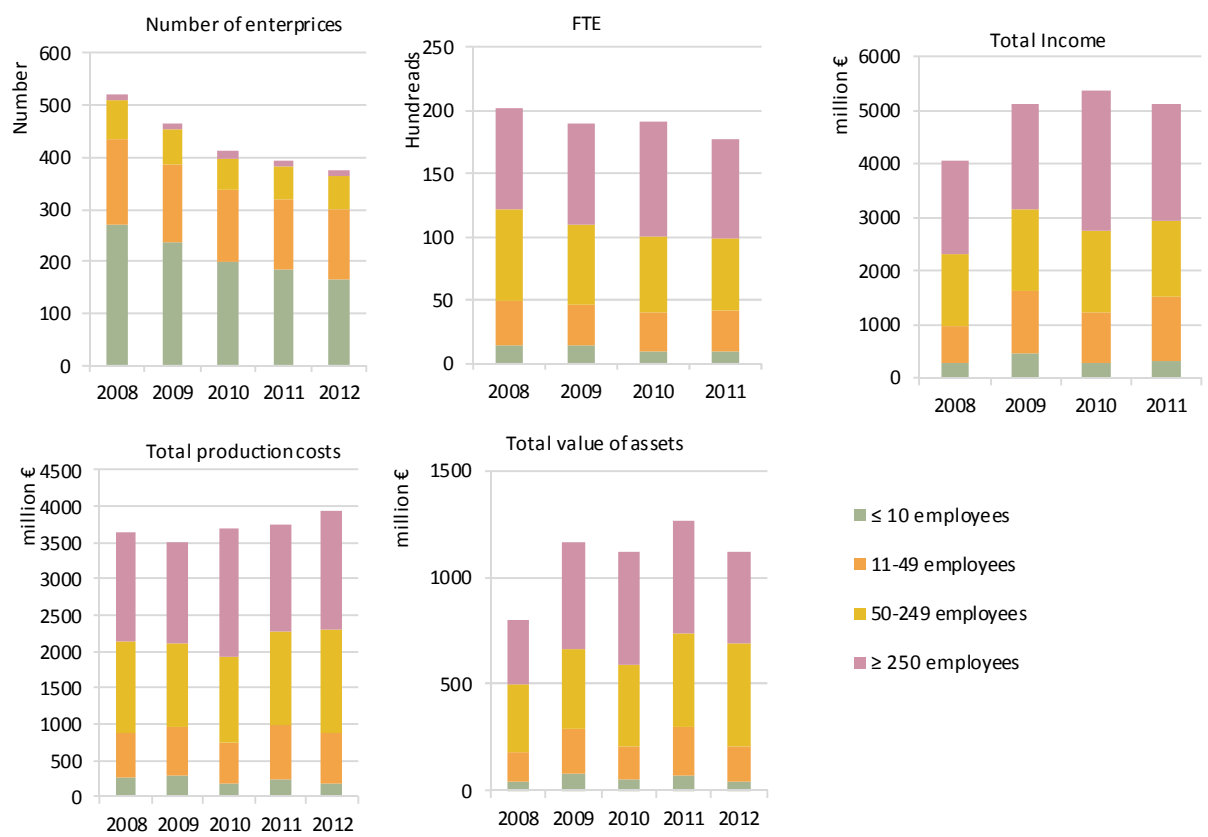


Figure 4.23.8: UK main structural and economic variables trends by size category, 2008-2012

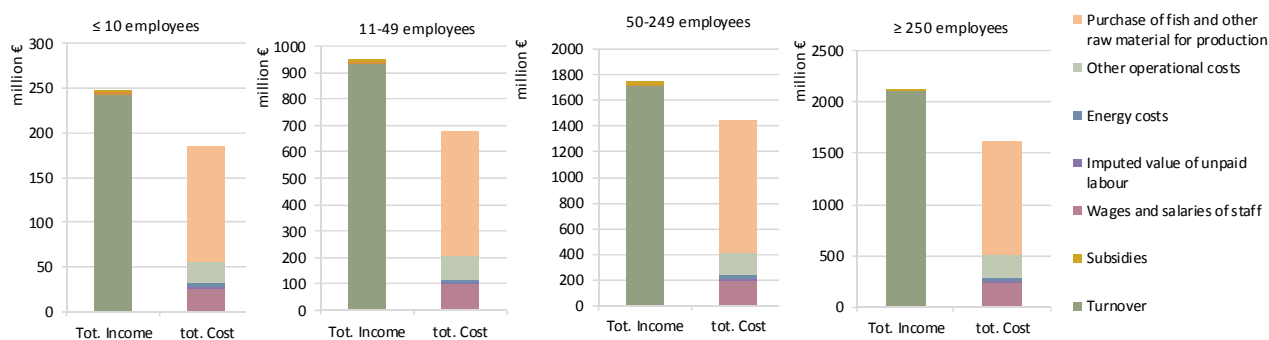


Figure 4.23.9: UK income and cost structure, by size category, 2012

In terms of income and cost structures the data reveal almost identical structures across the company size spectrum in 2012.

Table 4.23.10: Economic performance of the UK fish processing industry sector by size category (indicators in million €), 2008-2012

Variable	2008	2009	2010	2011	2012		Δ (2011-12)	Δ (2008-12)
less than or equal to 10 employees								
Total Income	276.9	459.6	290.9	326.3	247.5	▼	-24%	▼ -11%
Total production costs	249.4	282.2	190.9	226.6	186.1	▼	-18%	▼ -25%
Gross Value Added	60.8	223.5	128.6	133.2	87.8	▼	-34%	▲ 44%
Operating Cash Flow	27.5	177.4	100.0	99.7	61.4	▼	-38%	▲ 123%
Earning before interest and tax	23.3	171.4	96.4	95.5	58.3	▼	-39%	▲ 150%
Net Profit	20.5	168.2	94.7	93.7	56.9	▼	-39%	▲ 177%
between 11 and 49 employees								
Total Income	678.6	1,168.6	928.6	1,183.2	948.8	▼	-20%	▲ 40%
Total production costs	618.0	664.9	554.4	744.9	680.8	▼	-9%	▲ 10%
Gross Value Added	149.6	616.1	461.8	551.3	366.2	▼	-34%	▲ 145%
Operating Cash Flow	60.6	503.7	374.2	438.3	268.1	▼	-39%	▲ 343%
Earning before interest and tax	48.9	489.4	364.4	425.3	258.4	▼	-39%	▲ 428%
Net Profit	41.8	482.1	359.7	419.2	253.5	▼	-40%	▲ 506%
between 50 and 249 employees								
Total Income	1,363.3	1,542.3	1,518.3	1,418.9	1,747.6	▲	23%	▲ 28%
Total production costs	1,283.4	1,156.5	1,177.0	1,289.0	1,444.0	▲	12%	▲ 13%
Gross Value Added	254.1	560.9	512.3	309.7	503.4	▲	63%	▲ 98%
Operating Cash Flow	80.0	385.8	341.3	129.8	303.6	▲	134%	▲ 280%
Earning before interest and tax	57.4	362.5	320.2	106.7	279.4	▲	162%	▲ 386%
Net Profit	43.7	353.0	312.5	99.7	269.1	▲	170%	▲ 516%
greater than or equal to 250 employees								
Total Income	1,759.1	1,930.6	2,637.0	2,178.6	2,148.9	▼	-1%	▲ 22%
Total production costs	1,496.9	1,412.3	1,759.1	1,488.1	1,615.8	▲	9%	▲ 8%
Gross Value Added	452.8	728.5	1,132.5	921.5	772.3	▼	-16%	▲ 71%
Operating Cash Flow	262.2	518.3	877.9	690.5	533.0	▼	-23%	▲ 103%
Earning before interest and tax	235.1	488.4	841.3	654.2	500.0	▼	-24%	▲ 113%
Net Profit	221.0	438.4	803.9	623.4	475.2	▼	-24%	▲ 115%

Absolute changes in financial performance across the different size categories reveal additional nuances of the recent industry developments. Between 2011 and 2012 income, costs and profits appear to have decreased for the smaller categories (up to 49 FTEs). The 50-249 FTEs category experienced a recent increase in income, costs and profits; whereas the 250+ category experienced an increase in costs, a small decline in income and a sizeable fall in profits. Despite any recent decreases, all indicators across all size categories were at higher levels

in 2012 than they had been in 2008, with the only exception of total income and production costs in the under-10-FTEs category.

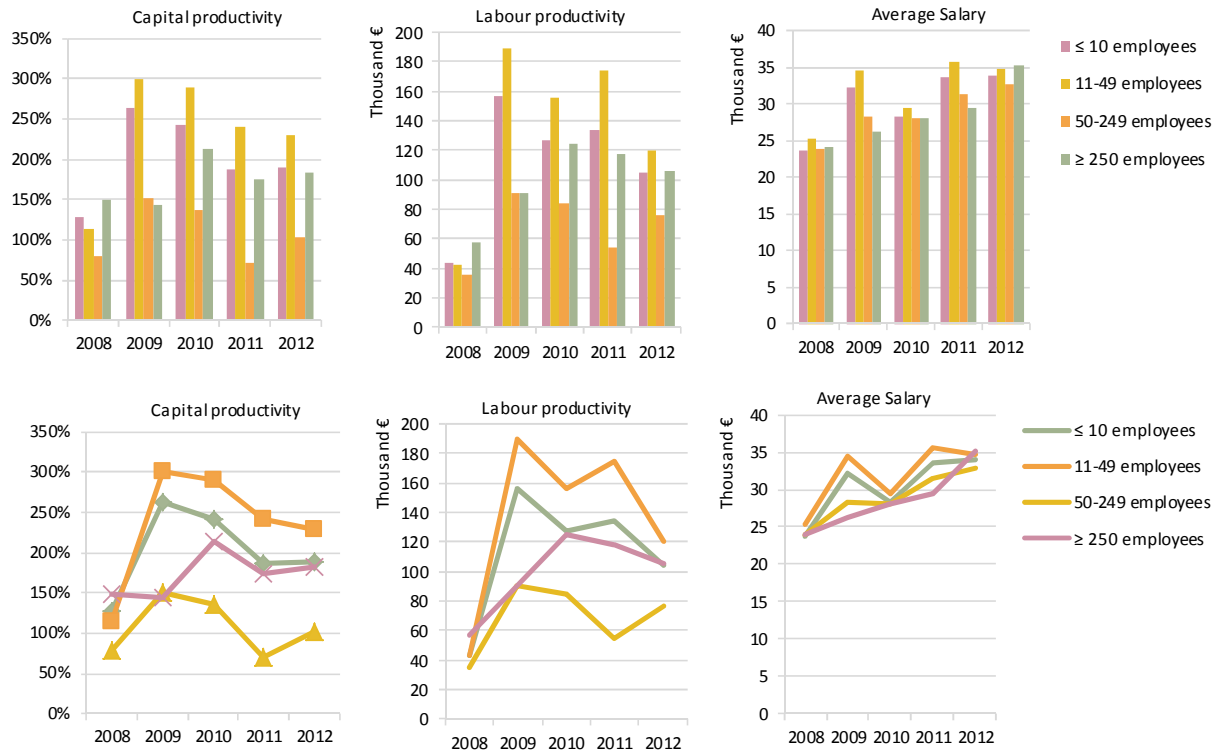


Figure 4.23.11: UK capital productivity, labour productivity and average salary trends, by size category, 2008-2012

Capital and labour productivity have fluctuated between years across the size categories, with a common theme being a peak in 2009 and a general easing afterwards. Both capital and labour productivity for all categories were estimated to be higher in 2012 than they had been in 2008.

Average salaries in the different size categories have generally moved in the same direction since 2008, with the exception of average salary for companies in the 250+ FTEs category. Interestingly, the upward trend for this category observed in the data since 2011 goes in the opposite direction to the rest of the categories, with average salaries for this group suddenly becoming the highest (from having been the lowest in previous years). 2010 was a low point for average salaries across the categories (still higher than 2008). With the exception of 2012, salaries were on average the highest in companies employing 11-49 FTEs, followed by the less-than-10-FTEs category.

4.23.4 UK seafood trade

In 2012 the UK recorded a deficit in seafood trade, both in terms of volume and value. The UK imported over €2.7 billion and exported around €1.43 billion worth of seafood in 2012. In comparison to 2011, the trade deficit in terms of volume deepened, driven by higher import volumes. In contrast, the trade deficit in terms of value

edged up towards a more positive balance, driven by a combination of lower imports value and higher exports value compared to 2011.

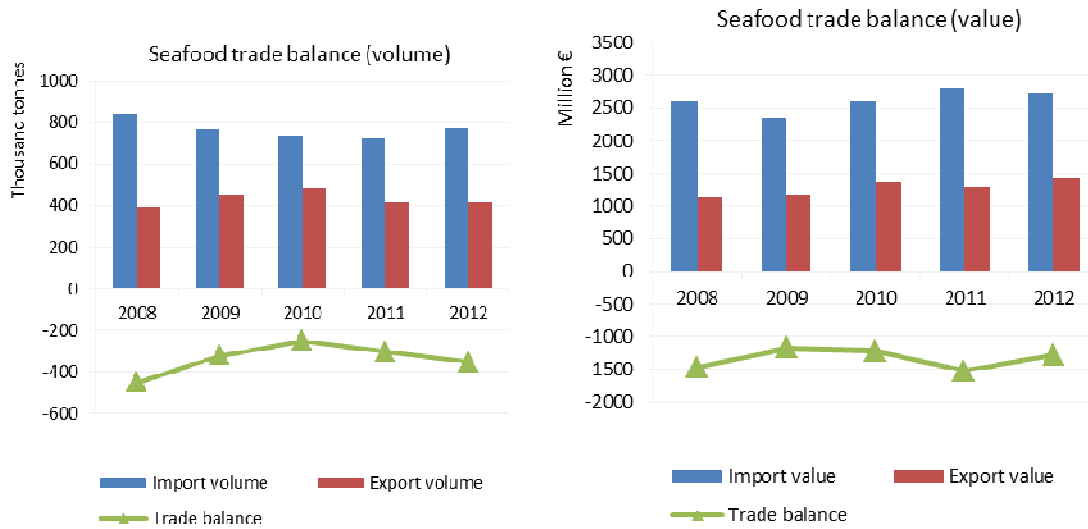


Figure 4.23.12: UK seafood trade balance trends in volume (left) and value (right)

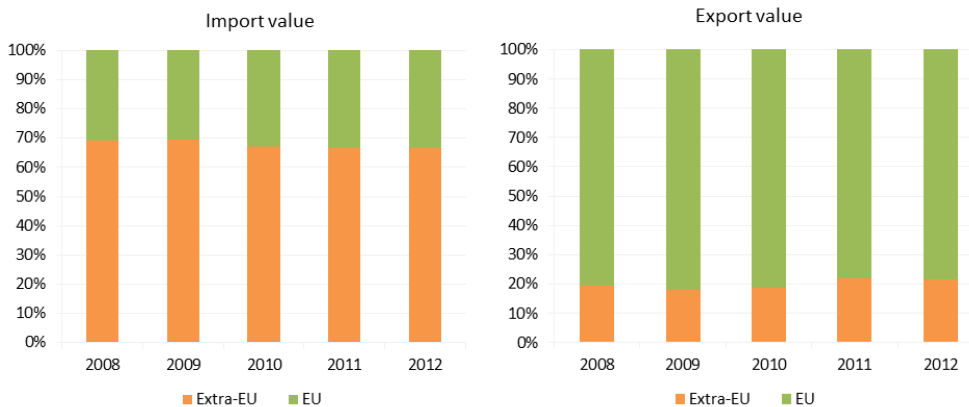


Figure 4.23.13: UK seafood imports (left) and exports (right) composition by type of origin/destination: shares in value

The relative importance of intra-EU exports has decreased slightly since 2008 (in terms of share of total UK exports value); nonetheless, in 2012 the EU share was still close to 80% of total seafood UK exports. In contrast to exports, imports from EU countries have increased as a share of total UK seafood imports; however, extra-EU exports still accounted for over 65% of UK imports in 2012.

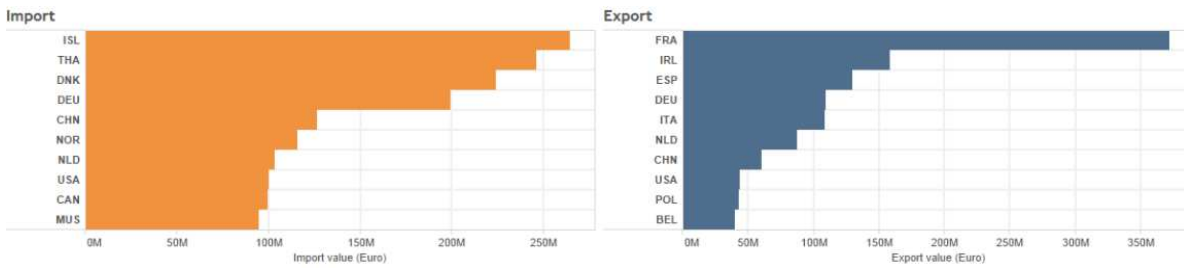


Figure 4.23.1: Top 10 UK seafood trade partner countries, 2012

Similarly to previous years, the top importer (in terms of value) into the UK in 2012 was Iceland with €265 million worth of imports, followed by Thailand (€246 million, up from 4th to 2nd rank in 2011) and Denmark (the top EU importer with €225 million). UK's top export market was France with €372 million worth of seafood exports in 2012, followed by Ireland (€158 million) and Spain (€130 million). Outside the EU, the top export market was China with €61 million.

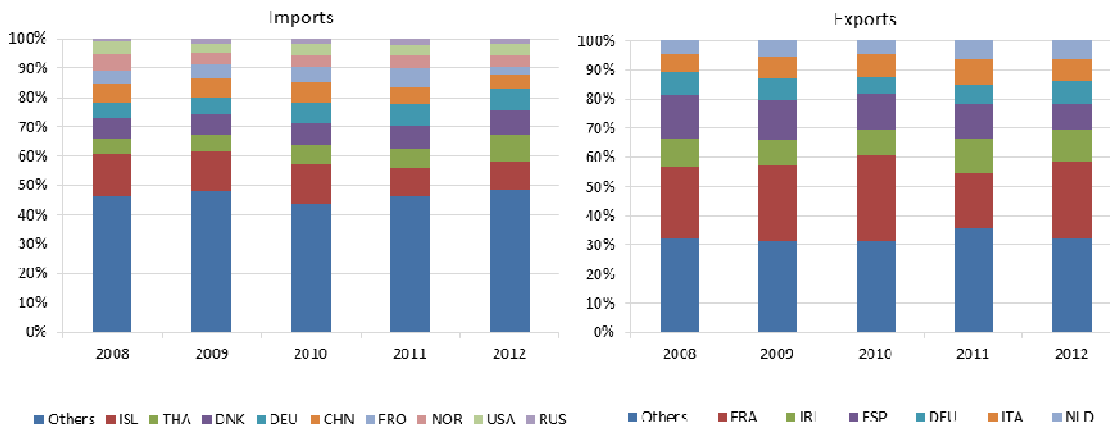


Figure 4.23.25: UK seafood imports (left) and exports (right) trends by most relevant trade partners: shares of value

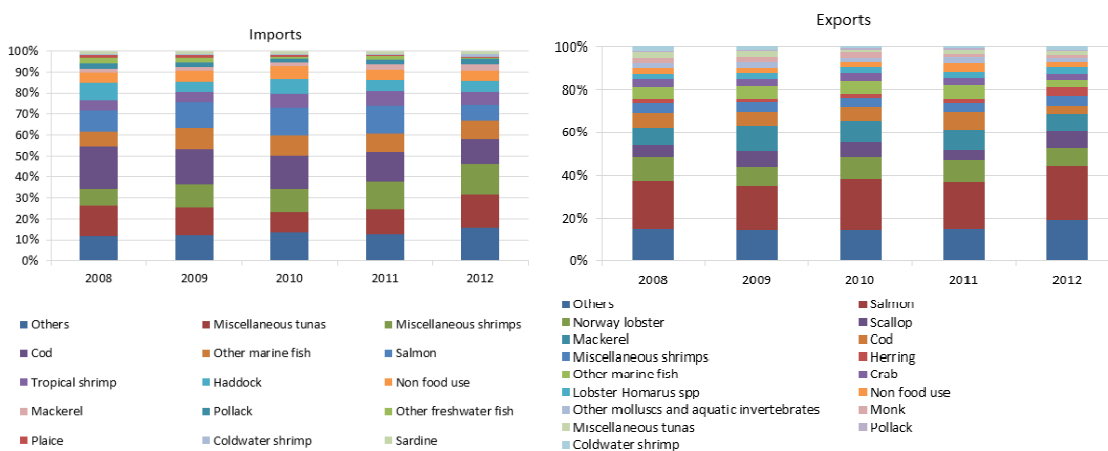


Figure 4.23.36: UK seafood imports (left) and exports (right) trends by most relevant commercial species: shares in value

The top imported species by value in 2012 were miscellaneous tunas (€432 million), followed by miscellaneous shrimps (€386 million) and cod (€322 million). The most valuable export species was salmon (€361 million), followed by Norwegian lobster (€118 million) and scallops (€111 million).

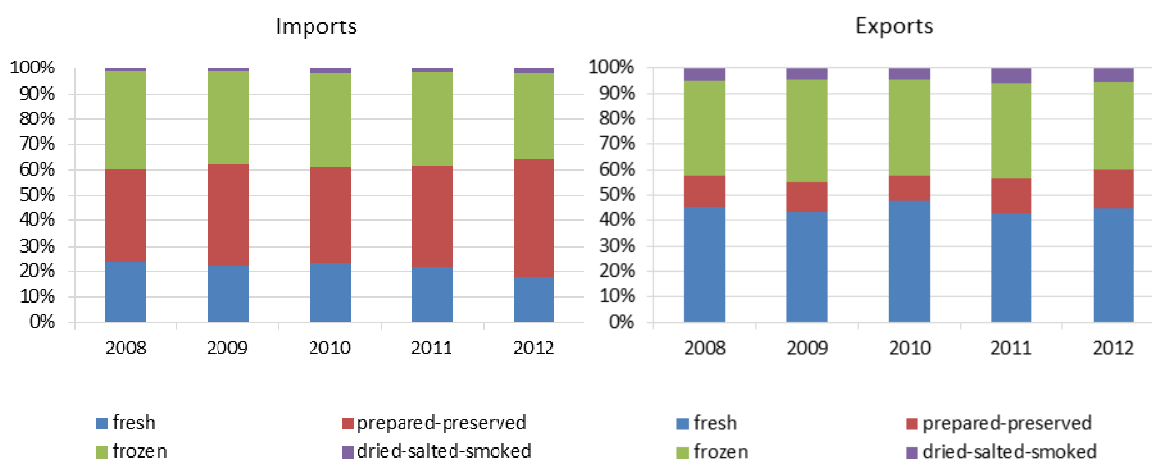


Figure 4.23.47: UK seafood imports (left) and exports (right) trends by type of products: shares in value

The type of product with largest share of UK import value over the 2008-2012 period was the prepared/preserved form and its share increased further between 2011 and 2012. In contrast, the largest share of UK exports value over the period has been in the fresh category. The second most popular form has continued to be frozen, both for imports and exports.

4.23.5 Trends and drivers for change

The rate of decline in the size of the industry observed in 2008-2010 appears to have decelerated and stabilised at around 5% per annum in the years 2011-2012. Socio-economic indicators reveal that aggregate demand for labour in the industry has reduced by around 11% between 2008 and 2012, with a recent stabilisation at roughly 17.8 thousand (± 50) FTEs since 2011. The decline in the number of enterprises in the smallest category (of up to 10 FTEs) has been very pronounced, while the number of larger companies has broadly stabilised. Of the 2.25 thousand FTE job losses between 2008 and 2012, 559 were in the smallest size category, representing a 40% fall for that group.

The above analysis suggests that the pre-existing trends of industry contraction and concentration continued into 2012. Broadly speaking, concentration has taken place through a combination of: business consolidation (mergers and take-overs); market exits (e.g. cessation due to loss of market share to competitors who offer lower prices, either consistently due to better technology of production, or temporarily as a strategic tactic); and independent increases in average firm size. The relative importance of each of these mechanisms would be an interesting topic for more in-depth analysis.

If the observed stabilisation of total FTEs between 2011 and 2012 continued into the following years, we could stipulate that employment is close to its long-term equilibrium level, *ceteris paribus*. Further industry concentration could either add or remove FTEs, depending on the choice of technology utilised by the increasingly bigger processing companies. Changes in demand and technological innovation would also impact the steady-state level of employment in the industry, among other factors.

To summarise the economic performance highlights, in 2012 industry revenue, GVA and net profit continued to decrease relative to their highs in 2010 (as a whole and also across all size categories except for the 50-249 FTE group). Total industry spending on production inputs registered a moderate rise in 2012, driven by a recovery in raw material spending since the lows of 2009-2010. Indeed, since 2010 a combination of lower turnover and higher operating costs, particularly raw material costs, have exerted financial pressure on the industry, resulting in tighter profit margins and most recently, lower average wages. Note that industry spending on raw materials has increased not only in absolute terms, but also in relative terms as a proportion of total income and production costs. Albeit small in relative terms, energy costs have also been rising at a rapid pace.

Notably, the data suggest an approximate trebling in estimated net profit of the industry in the 4 years between 2008 and 2012. On one hand, the change appears to be too big and perhaps at least partially due to data quality or estimation technique problems. On the other hand, this increase could have been driven by a combination of the following: expansion in market demand (e.g. as demand for “luxury” proteins recovers post-crisis); favourable exchange rate adjustments; temporary cheaper supplies of raw materials like in 2009-10 (e.g. as a result of a boost in supply, collapse in demand, or higher bargaining power of the increasingly bigger processors); industry concentration and the associated increase in average firm size (fewer companies commanding higher market share and utilising economies of scale and scope, as well as market power); mechanisation through investment in capital-intensive technologies of production (increasingly larger spending on capital than on labour due to lower marginal costs); perhaps even changes in company ownership structures (whether owner earnings are counted as part of labour costs).

Overall, the industry appears to have moved even further away from perfectly competitive markets (an infinite number of very small firms, operating at zero economic profit) and closer to a situation of differentiated oligopoly with a fringe of smaller firms operating on the periphery (differentiated implying a heterogeneous product, i.e. company A’s product is not a perfect substitute for company B’s product due to product characteristics, regional location, brand reputation, etc.). Such an industry structure could have naturally allowed for an equilibrium situation where at least some firms in the industry command much higher than normal profit. (Normal profit, or zero economic profit, is a level of profit above accounting profit, which takes into account the opportunity cost of investing in that business vs. the best available alternative investment). This is not surprising in markets with relatively high entry costs (e.g. the initial high investment in plant and equipment) especially in post-credit-crunch conditions when accessing credit might be very difficult for potential new entrants into the industry.

The UK fish processing industry continues to rely heavily on trade with a variety of countries in a multitude of currencies. Foreign market developments and exchange rate fluctuations are crucial to the future of the industry; the pound-euro exchange rate is particularly important for UK exports. But while the long-term impacts of permanent exchange rate adjustments are unavoidable, the extent to which exchange rate fluctuations affect businesses’ short-term financial performance actually depends heavily on the financial instruments businesses use (or not) to hedge those risks. Generally speaking, larger companies have better access to bespoke financial services such as currency risk hedging instruments. Therefore if the average company size increases further, we can expect short-term financial performance volatility associated with exchange rate fluctuations to decrease in the future.

5 SPECIAL TOPICS

5.1 The Future Industry Expectations (FEI)

5.1.1 Introduction

This special chapter deals with the development of the Future Expectation Indicator (FEI) in the EU-countries participating in the Data collection framework as it was specifically requested by the EU Commission.

As data necessary for the FEI calculation are collected since the reference year 2008, values are in general available for 5 years in a row now (2008-2012). This chapter is organized as follows: First the indicator is described and defined, and then some words are said about data quality. After this, the development of the indicator in the individual countries will be analyzed. A discussion of the EU wide indicator will finalize the chapter.

5.1.2 Description/Definition

The Future Expectation Indicator (FEI) has been created in order to give information about the future expectations of the companies in the sector. It is the difference of net investment minus depreciation divided by total assets:

$$FEI = \frac{\text{Investment, net} - \text{depreciation}}{\text{total value of assets}}$$

Where net investment represents the difference between purchase and sale of investment goods in the respective year and total value of assets means the balance sheet total. If the indicator is positive it means that the capital formation in the sector increases, a minus signals a decline of the capital in the sector, i.e. over consumption of capital goods which will result in lower production capacities in the future. The development of the indicator is then interpreted in the way that continuous declining or increasing trends reflect the negative resp. positive expectations of the economic agents (producers) concerning future profit opportunities.

5.1.3 Data quality

Of course, all analysis relies on the quality of the data submitted by the member states. As the quality is still improvable, the indicator is only interpreted with cautious assuming that trends can be interpreted qualitatively as mentioned in the former paragraph. Countries with obvious data problems or unexplainable outliers are excluded from the analysis. Some countries did not participate in the CFP over the whole time period, others did not collect specific data for the variables needed to calculate the FEI. This led to the exclusion of some countries, which is indicated in Table 5.1.2 which gives the EU-wide value of the FEI indicator.

5.1.4 Remarks on Method

The FEI is calculated for each country, if all values were available and are presented in Table 5.1.1. Regarding the calculation of the EU-wide FEI value, two different approaches are applied. The first calculation was done by taking all available values of the three variables net investment, depreciation and total value of assets and summing it up to EU level. Alternatively, a weighted average was also calculated, where the weighting factor was total income of a specific country. Countries that were excluded from the analysis for the respective years are mentioned.

The second way of calculating the EU total value of the FEI was done by only taking those countries into consideration where data on each single year for the period 2008-2012 are available. This leads to the so called comparable time series where the excluded countries are also mentioned.

For both ways of calculating the EU-FEI the coverage rate is shown separately. This coverage rate is calculated as percentage share of income from fish processing for those countries included in the FEI in comparison to the total EU fish processing income for all countries.

5.1.5 Data presentation

The following Table 5.1.1 shows the values of the FEI for the different years and countries. The country specific analysis will be done in the next section, while the discussion of EU wide data will be at the end of this chapter.

Table 5.1.1: Future Industry Expectations by MS, 2008-2012

	FEI (%)				
	2008	2009	2010	2011	2012
Bulgaria	5.86	9.95	-11.45	-10.10	0.02
Croatia				2.16	8.72
Cyprus	-0.94	-11.26	-15.44	-23.92	-33.19
Denmark	0.09	-0.18	-2.43	0.50	-0.36
Estonia	4.17	1.09	7.09	6.63	-1.63
Finland	-0.60	3.86	-0.21	0.22	5.42
France	0.96	4.20	3.76	3.69	4.08
Germany	1.72	-1.60	-0.20	-2.59	-3.15
Greece					-1.02
Ireland	-2.51	-3.67	-0.26	1.88	1.74
Italy	8.33	-7.23	4.40	2.84	-3.24
Latvia	-1.52	-0.69	-0.95	7.74	10.05
Lithuania	10.47	3.12	2.72	2.30	1.29
Malta	-5.80	-25.13	30.42	18.04	106.28
Netherlands	-2.13	6.00	-2.75	9.95	1.09
Poland	2.53	1.58	2.18	4.31	1.69
Romania	-3.32	14.49	-2.86	-4.24	1.41
Slovenia	-0.96	-3.21	-4.58	-3.41	-3.34
Sweden	-0.71	-0.19	-0.31	-0.07	-1.08
United Kingdom		-2.16	1.41	1.98	5.12

5.1.6 Country analysis

Belgium

The Belgian FEI indicator was negative in 2008, but has been positive in 2009, 2011 and 2012. Between 2011 and 2012, the FEI has increased due to a rise in investments and total value of assets, combined with a slight decrease in depreciation of capital. This generally indicates that there is a potential to increase investments in the future.

Bulgaria

A positive trend of the indicator may be identified for 2008 and 2009 changing to negative values during 2010 and 2011 and positive again during 2012. The variation of the number of enterprises in the sector during 2008/2012 and consequently the value of the assets of the sector does not allow for any concrete conclusion on the future expectations of the sector.

Cyprus

The indicator is negative each year for the period 2008/2012 and an increasing negative trend may be identified. While EFF grants for the sector have been paid during 2011, no rise in net investment may be identified in the DCF data. Based on the indicator, the Cypriot processing sector is expected to further reduce its presence in the market.

Germany

The German development shows different figures compared to other EU-DCF countries. While the indicator had a positive value in the crises year 2008 it shows a stable declining negative trend for the following years. Having in mind the negative profit in 2012, this obviously reflects stable negative expectations of the German fish processors for their business and about the development of the sector in Germany. So the overall sector is facing serious problems, which may differ between single companies. One explanation for the negative trend might be the offshore of investment activities to e.g. Poland, as pressure on profitability on activities in Germany led to disinvestment or at least no new investment in Germany and instead to the investment into new processing capacities abroad.

Denmark

The FEI has been stable around zero for Denmark as a whole during the studied period, except for 2010 when it decreased (-2%). Net investments were significantly lower in 2010, which can explain the decrease in FEI. It seems like the segment with 50 to 249 employees has a more positive view about the future, since the FEI is higher. Enterprises with 11-49 employees have the lowest FEI.

Spain

Spain did not provide the data of capital depreciation and the index cannot be computed. In the case of Spain total income slightly decreased in 2009, but recovered on the next year and kept up rising resulting in an increase of 10% in the observed period. Net investment showed a significant decrease until 2012 which seems to start a period of slight recovering with regard to the previous year.

Estonia

Estonian FEI was positive during 2008-2011 with the highest value in 2010. In 2012 FEI turned to be negative indicating overconsumption of capital goods which will result in lower production capacities in the future, if this figure is not an exemption, maybe due to the former stable and quite high investment activities.

Finland

FEI in Finish fish processing industry indicates a periodical investment to industry with high expectation following by decreased rate. For instance in 2009 and 2012 years FEI was 3.9% and 5.4% respectively, whereas for the rest of years in the 2008-2012 period future expectation indicator was fluctuating around zero.

France

Total income of the fish processing industry in France has been continuously increasing in the observed period from a value of € 4.37 billion to about 5 billion. This increase is consistent with the values of the future expectation index, which rose from 0.96 in 2008 to 4.08 in 2012, suggesting that the French industry may continue expanding. The future expectation index shows a change in order of magnitude between 2008 and 2009, which is mainly due to an increase of net investment by 76% in 2009. However, in contrast with net income, the expectation index does not show continued trend as it has fallen in 2010 and 2011 as a result of an increase in the depreciation of capital, reducing the index value even net investments also increased.

UK

In UK the FEI was very low in the beginning (-2% in 2009) probably due to the financial crises, but has steadily increased during the period (5% in 2012). The segments less or equal to 10 employees and 50-249 employees have a similar development and the highest FEI. For the two other segments, there was a slight decrease in 2011, but they also have a positive trend. The variable, both in total and in the different segments, indicates that the industry as a whole is planning to increase their investments in the future.

Greece

The indicator is negative both for 2011 and for 2012. As EFF grants for the sector are expected to be allocated during 2013, the indicator is expected to be positive during 2014.

Croatia

An increasing positive trend of the indicator may be identified for the 2011/2012 period.

Ireland

Ireland has a similar total development as the UK, but the FEI has lower values (-2.5 % in 2008 and 1.7% in 2012). The impact of the crisis seems to be higher in Ireland as the FEI turns into positive values in 2011. The development for the segment with less than 10 employees differs from the others, since the FEI has been decreasing every year except for 2010. In Ireland the total net investment has increased with more

than 100 per cent during the studied period and at the same time the total assets has decreased with 26 per cent.

Italy

The evolution of the total income in the Italian processing industry has been not regular along the five observed years, having alternative periods of increase and decrease from one year to the next. Total income increased with regard the previous year in 2010 and 2012, but decreased in 2009 and 2011. The result of these changes is a 12% decrease in the full period. The value of the expectation index evolved even more erratically with changes from negative to positive values and vice versa in different years than those observed with the net income. These facts suggest issues with the quality of data and results should be considered cautiously.

Lithuania

Continuously increasing total income in Lithuanian fish processing industry since 2008 was a result of parallel increase in total assets. Net investment in Lithuanian industry remained at stable level, which in relation to rising assets caused decreasing but positive values of the FEI. Current level of investments was sufficient to guarantee an improving industry performance in 2008-2012 including the economic crisis period. The decrease in this ratio could also be explained if increased total assets are not used for investments, but rather kept as reserves for risk management for market fluctuations. The highest FEI was estimated to two segments, 50-249 employees and more than 250 employees respectively, whereas segment regarding micro enterprises significantly increased FEI in 2012 compared to previous years.

Latvia

Latvian fish processing industry during 2008-2010 period had a negative value of FEI indicating low confidence of future of industry. This period overlapped with economic crisis in EU and such tendency is easily justified. From 2011 Latvian processing industry devoted more investments compare to the total assets, thus increased FEI for 2012. The rate of investment designation was higher compared to growth of total assets and in 2012 reached 10%. This trend was observed for all segments except micro enterprises with less than 10 employees.

Malta

Malta illustrates another curious example, in which despite of a significant 22% decrease in total income between 2011 and 2012, the expectation index rose from 18.04 up to 106.28 in the same years. Such an extraordinary variation can only be explained by ceasing and settlement of large operators. Actually, it seems have happened between 2010 and 2012. According to the evolution in the number of enterprises by size segments, in 2010 the companies over 10 employees have had ceased with their activity. The index then went from a negative value to positive indicating that the less profitable companies have had closed or being resized. In 2012 two new companies over 10 employees appeared, resulting in a significant increase in total investment which dramatically raised the value of the expectation index.

The Netherlands

The Dutch data show some yearly variation of the FEI. While in 2008 and 2010 a negative value for the FEI occurs, the 2009, 2011 and 2012 years show positive values with a significant decrease in 2012. This is maybe caused by the economic crises in 2008. For 2010 the negative value could result from the investment the year before, resulting in higher depreciation in the following years and maybe no substantial new investments in this particular year. But it should be cautiously investigated if this fluctuation in the FEI will persist in the following years.

Poland

Poland fish processing industry demonstrated positive fluctuating FEI during 2008-2012. The highest value indicating considerable amount of investments assigned for sector development. The highest expectation was observed for the segment less than or equal to 10 employees, reaching 55.8 % in 2012. This trend could be related to EFF funds for small segment development, since is not very typical for small scale micro enterprises to designate significant part of assets to investments.

Portugal

Like in the case of Spain, Portugal did not provide data on depreciation of capital and thus the future expectation index cannot be computed. However, the evolution of total income and net investment may provide some idea on what the industry expectations were. Besides the fact that the number of companies decreased, total income remained stable in a range between € 1 and 1.14 billion. The settlement of new large companies in 2009 may have contributed to avoid a fall in total income. Net investment decreased in 2010 and 2011 significantly from € 47 million to around 30 million, but started to recover in 2012 with almost € 40 million. The effects of the financial crisis and the improvement of the general expectations by the end on 2012 may be behind this evolution.

Romania

A positive value of the indicator during 2009 and 2012 may be identified while for 2008 and 2010-2011 the indicator is negative not allowing for a clear trend to be identified. The variation of the number of enterprises in the sector during 2008/2012 and the excessive variation of the value of the assets of the sector does not allow for any concrete conclusion on the future expectations of the sector.

Slovenia

For all years Slovenia shows negative values of the indicator, meaning that if this trend remains, the production opportunities of the industry will decrease in the future.

Sweden

The FEI has been stable around zero for Sweden as a whole during the period, except for a decrease in 2012 (-1%) when net investments was significantly lower. Like in Denmark it seems like the segment with 50 to 249 employees has a more positive view about the future, since the FEI is higher. For the two other segments, the FEI has decreased during the period.

5.1.7 EU level

Table 5.1.2 shows the value of the FEI for the different calculations, which have been described at the beginning of this chapter.

Table 5.1.2: Future Industry Expectations of the EU, 2008-2012

	MS excluded	FEI (%)	Weighted FEI (%)	Coverage (%)
2008	BEL_ESP_GBR_GRC_HRV_PRT	2.61	2.28	62
2009	BEL_ESP_GRC_HRV_PRT	-0.39	-0.33	79
2010	BEL_ESP_GRC_HRV_PRT	1.50	1.48	80
2011	BEL_ESP_GRC_PRT	2.96	2.40	78
2012	BEL_ESP_PRT	1.21	1.93	80
Comparable time series				
2008	BEL_ESP_GBR_GRC_HRV_PRT	2.61	2.28	62
2009	BEL_ESP_GBR_GRC_HRV_PRT	-0.16	0.32	58
2010	BEL_ESP_GBR_GRC_HRV_PRT	1.52	1.51	60
2011	BEL_ESP_GBR_GRC_HRV_PRT	3.11	2.54	59
2012	BEL_ESP_GBR_GRC_HRV_PRT	0.72	0.97	60

Even if the coverage is between 60% and 80% of total EU production, some trends could be identified on the EU-level. While 2008 shows a positive expectation of the industry regarding EU-wide figures, 2009 obviously reflects the economic crises. In 2009 and 2010 expectations of the producers already turned into more optimistic scenarios again. The distinct decrease of the 2012 EU overall FEI (still positive) may be caused by a hold-up phenomenon, meaning that companies are waiting with new investment until the new EU fisheries funds regulations are clear and in force.

Of course, behind this figures are some diverging trends from country to country, which could be interpreted as relocation of the industry. Some countries, like Germany, show stable negative expectations resulting in disinvestment in the fish processing sector. At the same time investments into new facilities are made abroad.

Regarding the quality, i.e. the reliability of the indicators value, the results show increasing coverage of the data, meaning that the impact of individual countries missing may not alter the value of the FEI substantially. As the FEI obviously reflects the economic development in the sector according to the opinion of several experts attending the meeting, the analysis of this indicator should be kept as a special content of the fish processing report. The group furthermore agreed that a comparison with the value of this indicator with the aquaculture and fishing sector may leads to further insights of the total fisheries industry in Europe.

An analysis for the future report might be the comparison of investment supported by EU- fishery fund means with the surplus of investment over depreciation in order to get a feeling about the importance of the EU-subsidies for the sector.

5.2 The Future of the fish processing report

The EWG 14-15 was asked to suggest possible improvements of the actual fish processing report and additionally to discuss alternative formats for reporting the status and development of the fish processing sector.

Background

The STECF is a scientific advisory body established to specifically advise on the sustainable exploitation of marine living resources. It is obvious that the performance of the fishing fleet and the behavior of fishermen influence the exploitation rate and, therefore, it makes sense to analyse the socio-economic performance of the fleet.

The link from the fish processing industry's to the 'sustainable exploitation of marine living resources' is less obvious. However, the industry are partly dependent on the availability of certain fish stocks/species in some local/regional communities and, therefore, the fish processing industry are depending on catches from European fish stocks. In contrast to this, the processing industry is at the same time pushing the agenda for more sustainable products, such as eco-labeling or sustainability certification. Therefore, there is an increasing pressure on the fishing fleet to improve sustainability and at the same time be more efficient to deliver more raw materials for the industry.

STECF has several times recommended that the EC should issue a study to elaborate how the link between the activities of the fishing fleet and the processing sector can be assessed and make this link more transparent. The study shall include an elaboration of how data on raw material can be collected by the MS and how this additional data can be linked to the already collected data. Such a study was never issued by the EC. As a first step, STECF suggested to re-include two variables on raw material (Purchase of fish by species and origin) in the new data collection regulation as optional (see report STECF 13-31, p. 192). This would give MS an opportunity to issue pilot studies using funds to start up a collection of data on raw material and explore what can actually be collected.

The data from the DCF is the basis for the EWG on the annual report on the economic situation of the fish processing sector. The EWG is yearly being asked to base their analysis, to a significant degree, on "expert knowledge". There is additional data to the DCF available from other sources but without being provided and in many cases specifically prepared for the needs of a working group, further analysis than what is achievable with the DCF data is not possible. Unfortunately the one-week time frame does not provide the experts with enough time to search for and analyse additional sources.

5.2.1 Improvement of the actual report in the future

The EWG 14-15 discussed how the report on the status of the fish processing industry in its actual format can be improved in the next years, even if it is not possible to draw the link to the fishing fleet.

Every new report includes at least one additional year of data and the routine of putting together the basic information in the NCs of the report may give the experts a bit more free space to elaborate on drivers and trends in the NCs in the future.

Some experts argued that for some of the MS 2013 data is already available at the time of the preparation of the report and question why this data is not included. If this would be the case for all MS the data call may be changed to allow MS to upload this data voluntarily. Afterwards the EWG may elaborate on how many countries are actually able to provide more recent data and if this data can be used.

Broaden the scope: discussing drivers and trends along the whole value chain?

The fish processing sector is not acting in isolation. The industry is purchasing raw material from the fisheries and aquaculture sector and on the other hand, the processed or semi-processed products go up in the value chain to supermarkets. Therefore, looking at the value chain as a whole may give a better indication of which drivers and trends are influencing on the processing industry in contrast to just analyzing the DCF or EUMAP data on the status of the industry. Even without the data on raw material it would be possible to include some market information (see NC part on markets) or statistics on national landings, which together with the data on the regional importance of the industry may give a better indication on how dependent local/regional industries are on local/regional landings from a certain fishery.

Drivers are mostly external factors like energy costs or certification demands. This can be analysed using the existing information. However, it cannot easily be used to assess future developments. If the link to the fishing fleet can be established using the raw material data information on future landings may be generated using bio-economic models assessing the future developments of stocks and catches and how this will reflect back on the processing sector.

An important development of the fish processing industry is the outsourcing of activities. However, many of these activities are outsourced to countries outside Europe (like filleting of Cod in China) and it will be necessary to broaden the analyses and perspective looking outside of the EU. However, for this kind of analysis it is not yet clear what data is needed and what data is available for such an analysis.

The EWG 14-15 decided to include more market information in the NC without formalizing it in the sense that the information and graphs provided in every chapter is not necessarily comparable between MS. This inclusion of market information is seen as a step forward and it is very useful to get more insides and understanding on the processing industry. This information came from the DGMARE database. The market information provides knowledge on origin, species and degree of processing. The trade statistics is publicly available and it is therefore not that much of an additional effort to include it in the report. However, without the more detailed information on raw material the market data still only provides limited additional information on how dependent local/regional industries are on local/regional stock in the EU.

EWG 14-15 considered to have additional chapters with information on main products (e.g. canned, salted, fresh or frozen) and species (such as anchovies, cod, herring or tuna) in each country, which could provide additional information on how dependent the local/regional industries are on certain sources of raw material. However, there will still be a large part of the trade of fresh and frozen fish traded by wholesalers there will not be covered by the fish processing report as the wholesaling sector is not covered by the regulation and these fish are not going through a processing plant.

Reporting by size category or segment

The experts present at the EWG14-15 were questioning the value of disaggregating the data collected for SMEs and Non-SMEs. One reason is that the definition of being a SME is not only based on the number of

employees but also turnover. If the right definitions are not used it can cause confusion and devalue the information provided in the report. Furthermore, it is not possible to compare enterprises without looking at the species produced and the degree of processing, because the income, cost and investment are very different and in economic terms these parameters are a lot more important than the numbers of employees.

However, it would be nevertheless very valuable to have a closer look at the performance of smaller versus larger processing facilities and the markets for these different sized industries as keeping especially smaller companies in remote areas is often a high political priority. In the EU more and more seafood products are purchased by consumers at larger supermarket chains. It has been estimated that up to 80% of the seafood is sold by these larger chains. This may affect the economic viability of smaller enterprises. There is a lot of focus on providing means to smaller size enterprises, but often without questioning their economic sustainability/viability to survive in a more and more globalized market.

The EWG also discussed the usefulness of reporting by size categories in relation to the very useful analysis of the regional importance of the sector (see also next chapter). In this case it may be of much more relevance to analyse the industry distinguishing the companies by size and main species or products. However, the problem then can occur that if the sector will be divided in a lot of subgroups an economic analysis may not be possible anymore. Therefore, how this can be done needs to be more elaborated.

The amount of fish (divided in species) processed by the processing industry is reported to ProdCom to a certain extent, which could be an additional source for data.

Regional importance of the sector

The EWG 14-15 identified the analysis of the regional importance of the fish processing sector as very important as it would give a lot of information on how dependent a local community or region is on their fishing and aquaculture sectors to provide raw material to the fish processing industry. To be able to conduct such a study the enterprises should be segmented by species groups and commodities. This kind of study should only be carried out every 4-5 years.

As a starting point for having more social variables in the EUMAP STECF suggested three additional variables on the regional importance of the processing sector (regional importance of the industry by number of enterprises and employees plus average GDP per capita in a region) and these variables shall be collected twice during the EUMAP period. Therefore, additional data will be available for some basic analysis. However, it will be necessary to collect additional data as the three new variables are not sufficient to perform an in dept economic analysis on the regional importance of the processing sector.

Public funding for the sector

Another possible item which can be assessed in future reports could be the role of public funding. The EWG had the possibility to look at the public spendings for the fish processing industry from the EFF during the period 2007-2013. As it can be observed from Figure 5.2.1, overall 16% of the public subsidies (EFF and national co-financing) went to fish processing and marketing (with huge differences between the MS) Figure 5.2.1. However, there was not sufficient time to analyse the effects of these public fundings on the investment behavior and performance of the sector.

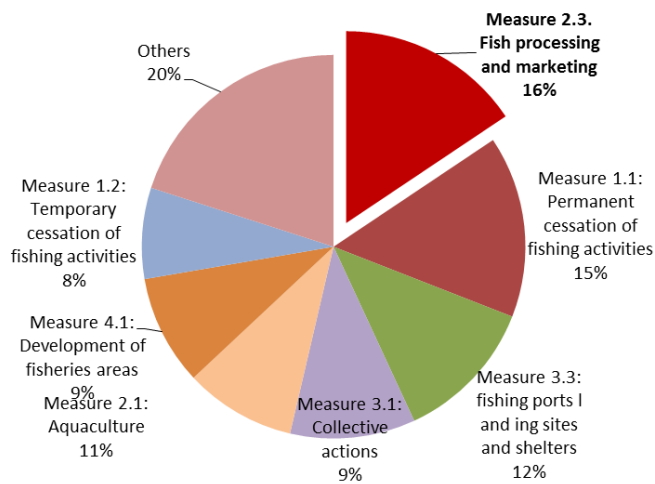


Figure 5.2.1: EFF funding per measures

The money spend for the fish processing sector can be further divided by certain actions. Most of the payment (91%) went into construction and increasing production capacity.

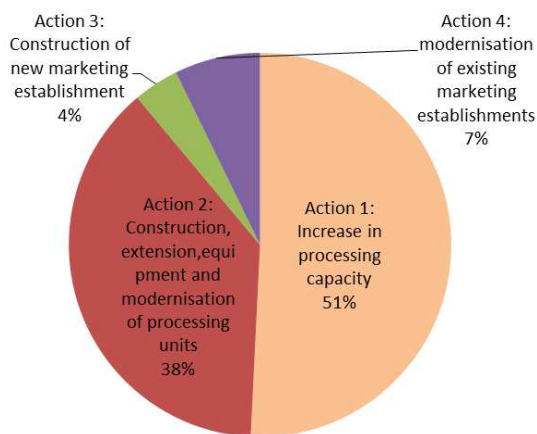


Figure 5.2.2: EFF funding for fish processing

The following overview shows the different priorities MS give to these actions.

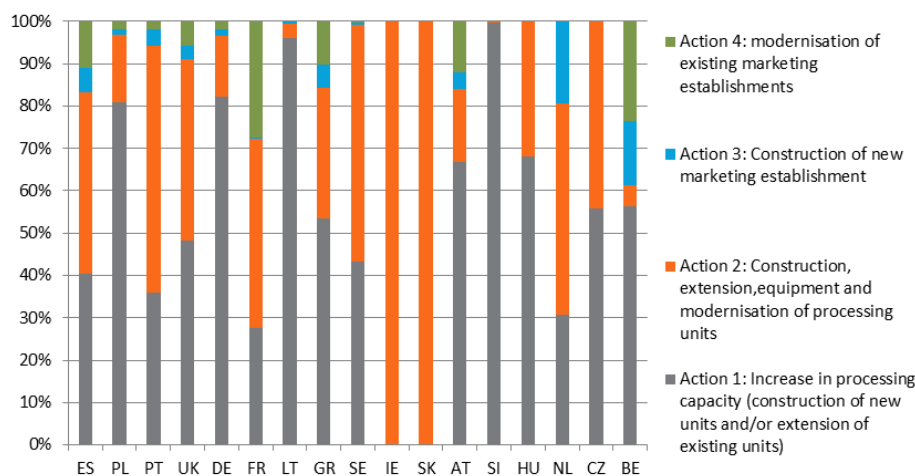


Figure 5.2.3: MS priorities for the EFF payments

In the DCF only income subsidies are included and, therefore, additional data from the EC is needed to analyse the role of public subsidies in the processing sector. The question is why MS have spent 16% of their overall funds on processing and marketing. However, it was not possible for the EWG to assess the effectiveness of the payments as this would need a much deeper analysis even of individual projects sometimes.

Gender employment

The EWG discussed how the gender distribution in the workforce can be made more operational and visible. Traditionally men go to sea while women process the fish on land. This may or may not have changed that much even with structural changes in the industry or the overall economic crisis. In Spain there is a 22% increase in male employment and the question is whether female unemployment increases or do they move into better paid positions. It would also be interesting to investigate the average salaries divided by gender as women often have the less paid positions.

Indicator 'future expectation of the industry' (FEI)

The EWG elaborated in the special chapter 5.1 the usefulness of the indicator 'future expectations of the industry' (FEI). This indicator should be included in the national chapters in the future.

5.2.2 Alternative formats of the report on the status of the processing industry

The EWG 14-15 discussed the possible alternative of reporting concerning the status of the fish processing industry if the EC should decide not to request the report on the fish processing sector in its current form from STECF. The specific data collection on the fish processing sector will continue in the EUMAP. There are some good reasons for the continued data collection as there are several variables which are not collected by Eurostat (SBS). Furthermore, it also includes the collection of data on enterprises which do not have fish processing as their main activity. This provides a more nuanced picture on the economic status of the fish processing sector than the data obtained by the Eurostat (SBS). However, EWG 13-15 proposed some changes to the list of variables to be collected under the EUMAP to avoid double work (STECF 13-31, p. 192).

The EC may decide to change the procedure to report the status of the processing sector by issuing individual contracts to experts to report the basic data (in comparison also with Eurostat data) instead of requesting STECF to issue a working group to do it (once the fish processing report was also done by correspondence).

Working by correspondence will not allow the same way of interaction and discussions among experts and will prevent the experts from performing deeper economic analysis. If the work of the report is organized in this way there will be a need for supplementing the yearly report with analysis on regional developments, value chain per fish species, trade flows by countries within EU and outside etc. with probably one every year from alternating regions (e.g. Baltic Sea, North Sea, Western Waters, Mediterranean, Black Sea). For such a report additional data collection may also be necessary. It is expected that such an analysis could be made every 4-5 years and it should not increase the overall effort for data collection that much.

Conclusions

The EWG 14-15 concludes that there are basically two options for the future reports on the status of the fish processing industry:

1. To report on the status of the fish processing sector from a more holistic perspective but outside STECF, or
2. going on with the current report by STECF:
 - a. If data on raw material is provided it may be possible to analyse the whole value chain (from raw material to the consumer) including data on market development;
 - b. If the raw material data will not be available some improvements of the report are possible, but the value of the report in terms of contributing significantly to policy advise on the CFP, is questionable but still very valuable for other purposes (like regional development).

References

Fernández Polanco, J.M., Llorente, I., Luna L., & Fernández, J.L. (2012) GRP 106 El mercado de productos pesqueros en España. FAO - Globefish, Rome.

7 GLOSSARY

The economic variables to be collected for the processing industry sector under the Data Collection are specified in section B of the Chapter IV and in Appendix XII of Commission Decision 2010/93/EC of the 18th of December 2009, on the adoption of a multiannual Community programme for the collection, management and use of data in the fisheries sector for the period 2011-2013.

Table 7.1: List of economic variables for the processing industry sector

Variable group	Variable	Unit
Income	Turnover	EUR
	Subsidies	EUR
	Other income	EUR
Personnel costs	Wages and salaries	EUR
	Imputed value of unpaid labour	EUR
Energy costs	Energy costs	EUR
Raw material costs	Purchase of fish and other raw material for production	EUR
Other operational costs	Other operational costs	EUR
Capital costs	Depreciation of capital	EUR
	Financial costs, net	EUR
Extraordinary costs, net	Extraordinary costs, net	EUR
Capital value	Total value of assets	EUR
Net Investments	Net Investments	EUR
Debt	Debt	EUR
Employment	Number of persons employed	Number
	FTE National	Number
Number of enterprises	Number of enterprises	Number

7.1 Parameters requested

Turnover:

“Turnover” comprises the totals invoiced by the observation unit during the reference period, and this corresponds to market sales of goods or services supplied to third parties.

Turnover includes all duties and taxes on the goods or services invoiced by the unit with the exception of the VAT invoiced by the unit vis-à-vis its customer and other similar deductible taxes directly linked to turnover.

It also includes all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately in the invoice. Reduction in prices, rebates and discounts as well as the value of returned packing must be deducted. Income classified as other operating income, financial income and extraordinary income in company accounts is excluded from turnover. Operating subsidies received from public authorities or the institutions of the European Union are also excluded (Structural Business Statistics (SBS) Code 12 11 0, Commission Regulation (EC) No 2700/98).

Subsidies:

“Subsidies” are the financial assistance received from public authorities or the institutions of the European Union which are excluded from turnover.

It includes direct payments, e.g. compensation for stopping trading, refunds of fuel duties or similar lump sum compensation payments; excludes social benefit payments and indirect subsidies, e.g. reduced duty on inputs such as fuel or investment subsidies.

Other income:

“Other income” refers to other operating income included in company accounts which are excluded from turnover; income coming from activities other than fish processing.

Wages and salaries:

“Wages and salaries” is equivalent to “Personnel costs” on the Structural Business Statistics.

“Personnel costs” are defined as the total remuneration, in cash or in kind, payable by an employer to an employee (regular and temporary employees as well as home workers) in return for work done by the latter during the reference period. Personnel costs also include taxes and employees' social security contributions retained by the unit as well as the employer's compulsory and voluntary social contributions.

Personnel costs are made up of:

- wages and salaries
- employers' social security costs

All remuneration paid during the reference period is included, regardless of whether it is paid on the basis of working time, output or piecework, and whether it is paid regularly or not. Included are all gratuities, workplace and performance bonuses, ex gratia payments, thirteenth month pay (and similar fixed bonuses), payments made to employees in consideration of dismissal, lodging, transport, cost of living and family allowances,

commissions, attendance fees, overtime, night work etc. as well as taxes, social security contributions and other amounts owed by the employees and retained at source by the employers. Also included are the social security costs for the employer. These include employer's social security contributions to schemes for retirement pensions, sickness, maternity, disability, unemployment, occupational accidents and diseases, family allowances as well as other schemes. These costs are included regardless of whether they are statutory, collectively agreed, contractual or voluntary in nature. Payments for agency workers are not included in personnel costs. (Structural Business Statistics (SBS) Code 13 31 0, Commission Regulation (EC) No 2700/98).

Wages and salaries: Wages and salaries are defined as "the total remuneration, in cash or in kind, payable to all persons counted on the payroll (including homeworkers), in return for work done during the accounting period." regardless of whether it is paid on the basis of working time, output or piecework and whether it is paid regularly or not. Wages and salaries include the values of any social contributions, income taxes, etc. payable by the employee even if they are actually withheld by the employer and paid directly to social insurance schemes, tax authorities, etc. on behalf of the employee. Wages and salaries do not include social contributions payable by the employer. Wages and salaries include: all gratuities, bonuses, ex gratia payments, "thirteenth month payments", severance payments, lodging, transport, cost-of-living, and family allowances, tips, commission, attendance fees, etc. received by employees, as well as taxes, social security contributions and other amounts payable by employees and withheld at source by the employer. Wages and salaries which the employer continues to pay in the event of illness, occupational accident, maternity leave or short-time working may be recorded here or under social security costs, depending upon the unit's accounting practices. Payments for agency workers are not included in wages and salaries. (Structural Business Statistics (SBS) Code 13 32 0, Commission Regulation (EC) No 2700/98).

Social security costs: Employers' social security costs correspond to an amount equal to the value of the social contributions incurred by employers in order to secure for their employees the entitlement to social benefits. Social security costs for the employer include the employer's social security contributions to schemes for retirement pensions, sickness, maternity, disability, unemployment, occupational accidents and diseases, family allowances as well as other schemes. Included are the costs for all employees including homeworkers and apprentices. Charges are included for all schemes, regardless of whether they are statutory, collectively agreed, contractual or voluntary in nature. Wages and salaries which the employer continues to pay in the event of illness, occupational accident, maternity leave or short-time working may be recorded here or under wages and salaries, dependent upon the unit's accounting practices. (Structural Business Statistics (SBS) Code 13 33 0, Commission Regulation (EC) No 2700/98).

Imputed value of unpaid labour:

Unpaid workers normally refers to persons who live with the proprietor of the unit and work regularly for the unit, but do not have a contract of service and do not receive a fixed sum for the work they perform. This is limited to persons who are not included on the payroll of another unit as their principal occupation.

Thus, imputed value of unpaid labour estimates the value of the salaries that these unpaid workers would have received if their work was remunerated.

The chosen methodology to estimate this imputed value of unpaid labour should be explained by the Member State in their national programme.

Energy costs:

“Energy costs” corresponds to the “Purchases of energy products (in value)” on the Structural Business Statistics.

Purchases of all energy products during the reference period should be included in this variable only if they are purchased to be used as fuel. Energy products purchased as a raw material or for resale without transformation should be excluded. This figure should be given in value only. (Structural Business Statistics (SBS) Code 20 11 0, Commission Regulation (EC) No 2700/98).

Purchase of fish and other raw material for production

“Purchase of fish and other raw material for production” accounts for the cost of the unfinished goods (fish and other products) purchased by a manufacturer in order to sell them, normally after some elaboration.

“Purchase of fish and other raw material for production” and “Other operational costs” are part of the “Total purchases of goods and services” and the “Purchases of goods and services purchased for resale in the same condition as received” on the Structural Business Statistics. (Structural Business Statistics (SBS) Codes 13 11 0 and 13 12 0, Commission Regulation (EC) No 2700/98).

Other operational costs:

Other operating costs should comprise packaging costs, outsourcing costs, property or equipment rental charges, the cost of raw materials and supplies that cannot be held in the inventory and have not been already specified (i.e. water, small items of equipment, administrative supplies, etc.), insurance premiums, studies and research costs, external personnel charges, fees payable to intermediaries and professional expenses, advertising costs, transportation charges, travel expenses, the costs of meetings and receptions, postal charges, bank charges (but not interest on bank loans) and other items of expenditure.

“Purchase of fish and other raw material for production” and “Other operational costs” are part of the “Total purchases of goods and services” and the “Purchases of goods and services purchased for resale in the same condition as received” on the Structural Business Statistics. (Structural Business Statistics (SBS) Codes 13 11 0 and 13 12 0, Commission Regulation (EC) No 2700/98).

Depreciation of capital:

Depreciation refers to the decline in value of the assets. In accounting, it is used as the allocation of the cost of tangible assets to periods in which the assets are used, in order to reflect this decline in their value.

The chosen methodology to allocate these costs over periods should be explained in the national programme. ESA (6) 6.02 to 6.05 European System of Accounts 1995 (Regulation (EC) No 2223/96, Regulation (EC) No 1267/2003, Eurostat ESA 1995 manual).

Financial costs, net:

“Financial costs, net” should be calculated as the difference between financial costs, coming from financial activity of the enterprise, and financial income, as defined in art. 23, item 9-11 for income and item 13 for costs of the IV Council Directive 78/660/EEC

Extraordinary costs, net:

“Extraordinary costs, net” is the difference between “Extraordinary charges” and “Extraordinary income”.

“Extraordinary income” and “Extraordinary charges” are the income and costs that arise otherwise than in the course of the company's ordinary activities (Article 29 of the Fourth Council Directive 78/660/EEC of 25 July 1978).

Total value of assets:

This parameter corresponds to the Balance sheet total of the Structural Business Statistics and the Capital value in the European System of Accounts.

Balance sheet total consists of the sum of items 1 to 16 of the asset side of the balance sheet or of the sum of items 1 to 14 of the liability side of the balance sheet. (Structural Business Statistics (SBS) Code 43 30 0, Commission Regulation (EC) No 2700/98).

Capital value is the total accumulated value of all net investments in the enterprise at the end of the year. ESA 7.09 to 7.24 European System of Accounts 1995 (Regulation (EC) No 2223/96, Regulation (EC) No 1267/2003, Eurostat ESA 1995 manual).

Net Investments:

“Net investments” refers to the difference between Purchase (Gross investment in tangible goods) and Sale (Sales of tangible investment goods) of assets during the year.

Gross investment in tangible goods is the Investment during the reference period in all tangible goods. Included are new and existing tangible capital goods, whether bought from third parties or produced for own use (i.e. Capitalised production of tangible capital goods), having a useful life of more than one year including non-produced tangible goods such as land. The threshold for the useful life of a good that can be capitalised may be increased according to company accounting practices where these practices require a greater expected useful life than the one year threshold indicated above.

All investments are valued prior to (i.e. gross of) value adjustments, and before the deduction of income from disposals. Purchased goods are valued at purchase price, i.e. transport and installation charges, fees, taxes and other costs of ownership transfer are included.

Own produced tangible goods are valued at production cost. Goods acquired through restructurations (such as mergers, take-overs, break-ups, split-off) are excluded. Purchases of small tools which are not capitalised are included under current expenditure. Also included are all additions, alterations, improvements and renovations which prolong the service life or increase the productive capacity of capital goods. Current maintenance costs are excluded as is the value and current expenditure on capital goods used under rental and lease contracts. Investment in intangible and financial assets are excluded. Concerning the recording of investments where the invoicing, delivery, payment and first use of the good may take place in different reference periods, the following method is proposed as an objective:

i) Investments are recorded when the ownership is transferred to the unit that intends to use them. Capitalised production is recorded when produced. Concerning the recording of investments made in identifiable stages, each part-investment should be recorded in the reference period in which they are made.

In practice this may not be possible and company accounting conventions may mean that the following approximations to this method need to be used:

- i) investments are recorded in the reference period in which they are delivered,
- ii) investments are recorded in the reference period in which they enter into the production process,
- iii) investments are recorded in the reference period in which they are invoiced,
- iv) investments are recorded in the reference period in which they are paid for.

Gross investment in tangible goods is based on Gross investment in land (15 12 0) + Gross investment in existing buildings and structures (15 13 0) + Gross investment in construction and alteration of buildings (15 14 0) + Gross investment in machinery and equipment (15 15 0). (Structural Business Statistics (SBS) Code 15 11 0, Commission Regulation (EC) No 2700/98).

Sales of tangible goods includes the value of existing tangible capital goods, sold to third parties. Sales of tangible capital goods are valued at the price actually received (excluding VAT), and not at book value, after deducting any costs of ownership transfer incurred by the seller. Value adjustments and disposals other than by sale are excluded. (Structural Business Statistics (SBS) Code 15 21 0. Commission Regulation (EC) No 2700/98).

Debt:

Financial assets created when creditors lend funds to debtors, either directly or through brokers, which are either evidenced by non-negotiable documents or not evidenced by documents.

Short-term loans: loans whose original maturity is normally one year or less, and in exceptional cases two years at the maximum, and loans repayable on demand.

Long-term loans: loans whose original maturity is normally more than one year, and in exceptional cases more than two years at the minimum.

Number of persons employed (Total employment):

This indicator refers to the number of people employed (including full-time and part-time employees) (SGECA-09-03). It corresponds to the Number of people employed of the Structural Business Statistics.

The number of persons employed is defined as the total number of persons who work in the observation unit (inclusive of working proprietors, partners working regularly in the unit and unpaid family workers), as well as persons who work outside the unit who belong to it and are paid by it (e.g. sales representatives, delivery personnel, repair and maintenance teams). It includes persons absent for a short period (e.g. sick leave, paid leave or special leave), and also persons on strike, but not those absent for an indefinite period. It also includes part-time workers who are regarded as such under the laws of the country concerned and who are on the pay-roll, as well as seasonal workers, apprentices and home workers on the pay-roll. The number of persons employed excludes manpower supplied to the unit by other enterprises, persons carrying out repair and maintenance work in the enquiry unit on behalf of other enterprises, as well as those on compulsory military service.

Unpaid family workers refer to persons who live with the proprietor of the unit and work regularly for the unit, but do not have a contract of service and do not receive a fixed sum for the work they perform. This is limited to those persons who are not included on the payroll of another unit as their principal occupation. (Structural Business Statistics (SBS) Code 16 11 0, Commission Regulation (EC) No 2700/98).

The number of employees should be reported by gender.

FTE National:

“FTE national” is the number of employees converted in full time equivalents (calculation methodologies vary between countries).

It corresponds to the “Number of employees in full time equivalent units” of the Structural Business Statistics.

The number of employees converted into full time equivalents (FTE). Figures for the number of persons working less than the standard working time of a full-year full-time worker, should be converted into full time equivalents, with regard to the working time of a full-time full-year employee in the unit. Included in this category are people working less than a standard working day, less than the standard number of working days in the week, or less than the standard number of weeks/months in the year. The conversion should be carried out on the basis of the number of hours, days, weeks or months worked. (Structural Business Statistics (SBS) Code 16 14 0, Commission Regulation (EC) No 2700/98).

Reporting the number of FTE national by gender is optional.

Number of enterprises:

A count of the number of enterprises registered to the population concerned in the business register corrected for errors, in particular frame errors. Dormant units are excluded. This statistic should include all units active during at least part of the reference period. (Structural Business Statistics (SBS) Code 11 11 0, Commission Regulation (EC) No 2700/98).

Moreover, under the DCF regulation, the number of companies should be disaggregated by size categories, defined according to the number of persons employed (≤ 10 , 11-49, 50-249, ≥ 250).

7.2 Indicators calculated

Average salary:

The average salary or mean wage estimates the salary an employee working full time is receiving on this sector. It includes the salaries themselves, the social security costs and imputed value of unpaid labour.

$$\text{Average salary} = (\text{Wages and salaries} + \text{Imputed value of unpaid labour}) / \text{FTE}$$

Employment per enterprise (FTE)

The employment per enterprise ratio shows the mean number of employees (in full time equivalent) that a firm has in this sector.

It is calculated as the ratio between the “Number of employees in full time equivalent” and the total “Number of enterprises”.

Percentage of unpaid work

It is the percentage of labour costs (Wages and salaries of staff + Imputed value of unpaid labour) which is estimated as “imputed value of unpaid labour”.

$$\text{Percentage of unpaid work (\%)} = \frac{\text{Imputed value of unpaid labour}}{\text{Labour costs}} * 100$$

Gross Value Added (GVA):

Gross Value Added measures the contribution of the sector to the economy. The Gross Value Added indicator calculated in this report is similar, but does not exactly correspond to the Value added at factor cost of the Structural Business Statistics.

Value added at factor cost defined in the Structural Business Statistics is the gross income from operating activities after adjusting for operating subsidies and indirect taxes. It can be calculated from turnover, plus capitalised production, plus other operating income, plus or minus the changes in stocks, minus the purchases of goods and services, minus other taxes on products which are linked to turnover but not deductible, minus the duties and taxes linked to production. Alternatively it can be calculated from gross operating surplus by adding personnel costs. Income and expenditure classified as financial or extra-ordinary in company accounts is excluded from value added. Value added at factor costs is calculated "gross" as value adjustments (such as depreciation) are not subtracted. (Structural Business Statistics (SBS) Code 12 15 0, Commission Regulation (EC) No 2700/98).

Hence, the Gross Value Added indicator calculated in this report differs from the Value added of the Structural Business Statistics because “Change in stocks of goods and services”, “Capitalised production”, “Purchases of goods and services”, “Other taxes on products which are linked to turnover but not deductible” and “Duties and taxes linked to production” have not been taken into account. However, it should be considered that these accounts normally represent a small part of the income, so the use of this indicator is relevant.

Gross Value Added is calculated in this report as:

$$GVA = \text{Turnover} + \text{Other Income} - \text{Energy costs} - \text{Purchase of fish and other raw material for production} - \text{Other Operational costs.}$$

Operating Cash Flow (OCF)

"Operating Cash Flow" refers to the amount of cash a company generates from its operations.

$$\text{Operating Cash Flow} = \text{Turnover} + \text{Other Income} + \text{Subsidies} - \text{Energy costs} - \text{Wages and salaries} - \text{Imputed value of unpaid labour} - \text{Purchase of fish and other raw material for production} - \text{Other Operational costs}$$

Earnings Before Interest and Tax (EBIT):

“Earnings before interest and taxes (EBIT)” or “Operating profit” is a measure of a firm's profitability that excludes interest and income tax expenses.

$$EBIT = OCF - Depreciation\ of\ capital$$

Net profit:

“Net Profit” corresponds to the difference between income and all costs, including depreciation and interest costs.

$$Net\ profit = EBIT - Financial\ costs\ net$$

Return on Investment (ROI):

Return on investment is a performance measure used to evaluate the efficiency of an investment.

During the SGECA-10-04 meeting it was decided that it was more appropriate to calculate the Return on Investment using the “Earnings Before Interest and Tax (EBIT)”, rather than the Net profit.

$$ROI\ (\%) = \frac{EBIT}{Total\ Value\ of\ Assets} * 100$$

Running Cost to Turnover Ratio:

This indicator shows how much of the turnover (income) is consumed by production costs.

$$Running\ cost\ to\ turnover\ ratio\ (\%) = (Energy\ costs + Wages\ and\ salaries + Imputed\ value\ of\ unpaid\ labour + Purchase\ of\ fish\ and\ other\ raw\ material\ for\ production + Other\ Operational\ costs) \times 100 / Turnover$$

Labour productivity (by FTE or Employee):

Labour productivity is calculated as Gross Value Added (GVA) divided by Full Time Equivalents (FTE).

$$Labour\ productivity = \frac{GVA}{FTE}$$

When a MS cannot report the level of employment in FTEs, the number of employees is used as an alternative (whenever this is the case, it is stated in the report).

Capital productivity:

Capital productivity is calculated as Gross Value Added (GVA) divided by the value of capital (total value of assets) and is expressed in percentage terms.

$$Capital\ productivity\ (\%) = \frac{GVA}{Total\ value\ of\ assets} 100$$

Future Expectations of the Industry indicator:

The indicator “Future Expectations of the Industry” can be interpreted as a proxy for the industry’s intent to remain in the market in the medium/long term. If investments minus depreciation is positive, the sector is allocating resources to increase its production capacity, and therefore it expects to remain in the market to recover the cost of the investments. A value of this difference close to zero could be interpreted as an indication that sector is only wishing to maintain its production capacity in the future and is not planning to expand. When depreciation is higher than investments, it is possible to assume that the industry wants to reduce its presence in the market in the future. Therefore, this indicator can be used to approximate the industry’s investing behaviour in the future.

$$FEI (\%) = \frac{(Net_investment - Depreciation)}{Total\ value\ of\ assets} * 100$$

Financial position

Financial position is estimated as the ratio of own capital and borrowed capital (SGECA-09-03), expressed in percentage terms.

$$Financial\ position (\%) = \frac{Debt}{Total\ value\ of\ assets} * 100$$

8 APPENDICES

8.1 Data

The data used to compile this report will be provided at the following address:

<https://stecf.jrc.ec.europa.eu/data-reports>

8.2 Contact details of STECF members and EWG-14-15 List of Participants

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 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 organisational 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>

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8.3 Background Documents

Background documents are published on the EWG-13-15 meeting's web site on:

<https://stecf.jrc.ec.europa.eu/web/stecf/ewg1415>

List of background documents:

1. EWG-14-15 – Doc 1 - Declarations of invited and JRC experts (see also section 8.2 of this report – List of participants)

European Commission

EUR 27029 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen

Title: Scientific, Technical and Economic Committee for Fisheries – The Economic Performance of the EU Fish Processing Industry (STECF-14-21).

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Luxembourg: Publications Office of the European Union

2014 – 355 pp. – 21 x 29.7 cm

EUR – Scientific and Technical Research series – ISSN 1831-9424 (online), ISSN 1018-5593 (print)

ISBN 978-92-79-44714-3

doi:10.2788/968527

Abstract

The 2014 Economic Report on the European Union (EU) fish processing industry provides a comprehensive overview of the latest information available on the structure and economic performance of the sector. The report has been produced by fisheries economists from the JRC and a group of economic experts convened under the Scientific, Technical and Economic Committee for Fisheries (STECF). The data used to compile all the various analyses contained within the report were collected under the frameworks of the data collection framework (DCF).

The fish processing sector in the EU had appr. 3,500 companies with fish processing as main activity that accounted for around 27.9 billion Euros of turnover and more than 6.4 billion Euros of Gross Added Value (GVA) in 2012. The fish processing industry provided employment to around 120 thousand people in the whole of Europe.

The available data suggests an improvement of the economic performance over the years. In 2012 GVA and net profit generated by the fish processing industry (for which data exists) were respectively 17% and 83% higher than in 2008. Compared to 2011, however, both indicators fell significantly (-3% GVA and -5% net profit). However, there are differences between countries as some report improving indicators while others report decreasing numbers. On a first look at 2013/14 compared to 2011/12 many experts report a similar development, in some countries the situation improved in others not.

The high dependency on imports from foreign countries will continue to leave the companies very vulnerable to developments on the world markets. The sector suffers also from very low margins which continue to decrease due to increasing energy costs that cannot be translated easily into price increases due to the high negotiation power of the retail sector.

The fish processing companies in many countries seem not to be more efficient than previous years in its ability to react to increasing costs. They report increasing total costs while at the same time income only increases slightly. However, in a lot of countries there are positive expectations given that total assets are higher than debt. The STECF reviewed the report during its plenary meeting in November 2014.

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The Scientific, Technical and Economic Committee for Fisheries (STECF) has been established by the European Commission. The STECF is being consulted at regular intervals on matters pertaining to the conservation and management of living aquatic resources, including biological, economic, environmental, social and technical considerations.

