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The Economic Performance of the EU Fish Processing Industry (STECF - 13-31)

Scientific, Technical and Economic Committee for Fisheries (STECF)

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SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF)

FISH PROCESSING INDUSTRY (STECF - 13-31)

THIS REPORT WAS REVIEWED DURING THE PLENARY MEETING HELD IN BRUSSELS, BELGIUM, 4-8 NOVEMBER 2013

Background

Following the 2103 DCF call for economic data on the EU fish processing sector, EWG 13-15 was requested to analyse and comment on the economic performance of the EU and national fish processing sectors between 2008 and 2011. The main objective economic report for the 2013 on the fish processing sector is to develop more economic analysis and bring the report more "up to date". Quality of data remains essential and data quality checks and data validation tools were applied by the JRC. This report shall include, at least, the following sections:

1. EU fish processing sector economic overview: drivers and main trends. (It must include specific sections on employment and average salaries, economic performance and productivity at EU level as well as a brief summary for each national chapter).
2. National chapters on the economic performance of the fish processing sector providing:
    - National fish processing sector overview
    - Description of trends and drivers for change.
    - Outlook
3. Data coverage and quality
4. Special topic of analysis

Request to the STECF

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

Introduction

The report is the fourth report of its kind 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. The Expert Working Group was convened in Hamburg 14-18 October 2013.

The key findings of the report are:

- in 2011 the fish processing sector in the EU comprised appr. 3,400 enterprises with fish processing as main activity,
- accounting for about €24.8 thousand million of turnover and more than €5.1 thousand million of Gross Added Value (GVA), and
- employed around 114 thousand people in the whole of Europe.

STECF observations

STECF notes that EWG 13-15 addressed all TORs. In addition the EWG also answered a few additional requests and questions regarding the future data collection for the fish processing industry in the framework of the DC-MAP and the delivery of data by segments.

STECF notes that the data coverage and quality improved compared to the last report in 2012. However, for Belgium no data was delivered and due to the lack of specific expertise in some countries several national chapters include only a description of the data which was delivered instead of also describing major drivers and trends for development.

STECF notes that compared to 2010, turnover in the fish processing industry declined in 2011. After the start of the global financial crisis, many countries reported increases in several socioeconomic indicators over 2008-2010, including turnover, net profit and employment. However, the picture differed across MS. For example, in Denmark and France the situation improved, while in Ireland and Latvia it continued to deteriorate. From 2010 to 2011, there was again a marked decline in the economic condition of the European fish processing industry (e.g. -30% for net profit) and net profit from fish processing declined in all Member States except Cyprus, Denmark, France Lithuania, and Slovenia. Preliminary indications are that over 2012/2013, the situation has improved compared to 2010/2011, but again varies by Member State.

STECF conclusions

STECF concludes that there are several good reasons to include economic data on the fish processing sector in the new data collection regulation (DCMAP). To allow more efficient data collection, the new list of proposed variables to be collected for DCMAP is closer to the list of variables that must also be collected for the Structural Business Statistics (SBS) for delivery to EUROSTAT. Further, some of the additional variables proposed for DCMAP need not be collected annually

STECF concludes that data on social indicators should be reported twice in total (rather than annually) during the period of the DCMAP (2014-2020) and that MS should base their data disaggregation regions on NUTS 2 and 3 classification and define these in their national programmes.

STECF concludes that overall the processing sector is suffering from low margins, which continue to decrease owing essentially to increases in raw material and energy cost,s that cannot be translated into price increases due to the retail sector's high negotiation power.

STECF concludes that the EWG 13-15 addressed the issue of the added value of including data collection on the fish processing industry in the new DC-MAP. The report describes in detail the need for a study on the possible data collection for raw material as this forms the link between the processing industry and the fishing sector. Such a study was also recommended by the STECF in the Report of the November 2010 plenary meeting (PLEN 10-03).

STECF concludes that, under the new DCMAP, when reporting on numbers of enterprises and numbers of persons employed in order to illustrate the importance of the fishing and seafood sector in each region, data from fish catching, fish farming and fish processing should all be used to give a more useful indication of industry importance to the regions. This overview of three parts of the supply chain could enable more useful impact assessments of proposed management measures for catching or aquaculture.

STECF concludes that the appropriate segmentation for data delivery requires further investigation as it would appear to be more useful for the analysis of main drivers and trends in the industry to use a segmentation based on products rather than number of employees. However, as the STECF proposes to include new socio-economic variables in the DC-MAP dealing with location and concentration of the industry, the segmentation by number of employees may also be possible.

STECF concludes that the delivery of data on extraordinary costs and income should be optional as these data are not relevant for many MS. The variables list for the new DC-MAP should be changed accordingly.

STECF considers that a meeting with representatives from Eurostat on standardization of variable definitions is highly desirable and that it would be opportune if an invitation to participate in EWG 13-18, which will take place in Brussels at the end of November 2013, could be extended to Eurostat.

STECF concludes that the EWG 13-15 report represents the culmination of a considerable amount of work by a numerous dedicated experts and provides an excellent overview of the economic performance of the EU fish processing sector. STECF endorses the findings of the report.

EXPERT WORKING GROUP EWG-13-15 REPORT

REPORT TO THE STECF

EXPERT WORKING GROUP ON
ECONOMIC DATA COLLECTED FOR THE FISH PROCESSING INDUSTRY
(EWG-13-15)

Hamburg, Germany, 14-18 October 2013

EWG 13-15 Observations

The EWG 13-15 was able to address all TOR and also answer a few additional requests and questions regarding the future data collection for the fish processing industry in the DCMAP and the delivery of data by segments.

The data coverage and quality improved compared to the last report 2012. However, for Belgium no data was delivered and due to the lack of specific expertise on some countries several national chapters include only a description of the data which was delivered instead of also describing major drivers and trends for development.

EWG 13-15 Suggestions and Conclusions

There are several good reasons why the economic data collection on the fish processing sector shall be in the DCMAP. To allow a lower effort for several of the indicators the proposed new list of variables shall be closer to SBS and for several of the additional variables a yearly data collection is not necessary. EWG 13-15 concludes that the data on social indicators should be reported twice in the reporting period and that MS define the regions in the national programme (this should be based on NUTS 2 and 3 classification).

The EWG 13-15 further concludes that in case the economic data collection on the fish processing sector will be included in the DCMAP the addition of data on the sources of the raw material would really improve usefulness of the information. EWG 13-15 suggests to collect and report raw material data also twice during the time of the DCMAP and, therefore, supports the conduction of a study on the data collection for raw material.

EWG 13-15 strongly suggests to arrange a meeting with Eurostat on the definition of variables to come as close as possible to the same definition. This can also be done by inviting EUROSTAT to the EWG 13-18 which will take place in Brussels at the end of November 2013.

EWG concludes that the proposed indicators for regional importance for the new DCMAP should be combined with information on aquaculture activities and information on the fishing fleet when analysing the importance of the fishing sector (for e.g. impact assessments of management measures). Another possibility would be to have a special chapter in the fleet or fish processing report in the future on regional importance of the sector (in case of the fleet the link to the processing industry, for the processing industry the link with the sources for raw material)

EWG 13-15 suggests making the delivery of data on extraordinary costs and income optional as these data is in many MS not relevant and in cases where it is relevant it should be reported. The variables list for the new DCMAP should be changed accordingly.

The EWG concludes that the question of a data delivery on the segment level needs further investigation as it seems more useful for the analysis of main driver and trends in the industry to use segmentation following products instead of number of employees. However, as the EWG propose to include new socio-economic variables in the DCMAP dealing with location and concentration of the industry the segmentation by number of employees may be also possible to extract from that data.

1 EXECUTIVE SUMMARY

The 2013 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); cf. Council regulation (European Commission (EC) No 199/2008 of 25th February 2008).

The report contains an EU overview additionally including a chapter on data coverage and quality followed by small summaries of each national chapter (TOR 2, TOR 4), national chapters with an elaboration of main drivers and trends and outlook for 2012/13 (TOR 3), and a section on a study to assess the possibilities to collect data on raw material (TOR 5).

The key findings from the report are:

- In 2011 the fish processing sector in the EU comprised appr. 3,500 enterprises with fish processing as main activity,
- Accounting for about €29.4 thousand million of income (99% of this is turnover) and more than €6.3 thousand million of Gross Added Value (GVA), and
- Employed around 100 thousand people in the whole of Europe.

The fish processing industry revealed decreasing income (mainly turnover) in 2011 when compared to 2010. This could be an affect of the global and sectoral situations and the economic difficulties in several EU countries. After the start of the global financial crisis 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 report a better situation than in 2010/11. However, for several indicators there is a different development between member states. In several of the countries with a strong processing sector the industry is further outsourcing activities which then lead to an increase in investments and volume of processed products in other countries. The Baltic States and Poland report increasing investments and activities, e.g. Denmark and Germany decreasing activities even when some of the indicators improve (like net profit).

Overall the sector is suffering from very low margins, which continue to decrease owing essentially to increases in raw materials and energy costs that cannot be translated into price increases due to the retail sector's high negotiation power.

The fish processing enterprises 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.

The EWG were able to adequately address all TOR and also hold a discussion on the data collection for the fish processing industry in the future DCMAP. The EWG were also able to address the issue of the value added of the data collection for the fish processing industry in the new DCMAP. Additionally, the group describes in detail the necessity for a study on the possible data collection for raw material as this forms the link between the processing industry and the fishing sector.

2 INTRODUCTION

This report, also known as the 2013 Annual Economic Report (AER) on the European Union (EU) Fish Processing Industry, is the forth 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 description of the necessity for a study on the possible data collection on raw material including possible contents

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 22 independent experts. The list of experts can be found in section 8.

The economic data used in this publication for the years 2008 to 2011 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 15.20 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, (code 05.01)
- Production of oils and fats from marine material, (code 15.41)
- Manufacture of fish soups (code 15.89).

2.1 Terms of Reference for EWG-13-15

EWG 13-15 is requested to work on and comment, at least, on the following items:

TERMS OF REFERENCE

The 2013 Economic Report on fish processing sector shall include, at least, the following sections:

1. A summary containing key findings.
2. EU fish processing sector economic overview: drivers and main trends. (It must include specific sections on employment and average salaries, economic performance and productivity 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
    - Employment and average salaries
    - Performance
    - Economic indicators
    - Description of trends and drivers for change (market determinants, links with national fleets, analysis of cost structures and vulnerabilities to developments in cost variables).
    - Outlook
4. Data Coverage and quality
5. Special topic: Follow on discussion on fish processing data. EWG 13-15 is requested to define the contents of the study on the collection of data on raw material, the necessary budget and timeframe as follow up of a PGECON discussion in 2012. EWG 13-15 shall also propose possible MS for pilot cases for the next three years prior to the start of the DC MAP (2017) as volume of raw material (divided in species) shall be in the DC MAP as an optional variable.

3 EU OVERVIEW

KEY FINDINGS

- The total number of enterprises in the European fish processing industry was 3.496 in 2011, 56% of which have less than 10 employees and 30% with between 11 and 49 employees.
- The total number of enterprises (excluding Greece) decreased by 2% over the reporting period, although the number of firms employing 10 people or less increased 5%.
- Total employment of the European fish processing industry amounted to 100,225 workers in 2011, and the average wage was equal to €28,674. Omitting Greece from the trend analysis, employment decreased 3% between 2008 and 2011, while the average wage increased by 4%.
- Spain possessed the biggest fish processing industry in 2011 both in terms of number of enterprises (15% of the total) and people employed (18% of the total). Italy and United Kingdom followed in terms of number of firms (respectively 13% and 12% of the total), France and Poland in terms of employment (both 16% of the total).
- The amount of income generated by the European fish processing industry (excluding Greece) in 2011 was €29.4 billion (99% of which was made up of turnover), 4% more than in 2008 and 1% less than in the previous year.
- Total production costs (excluding Greece) in 2010 and 2011 respectively were €25.9 and €26.4 billion, meaning that 2% more was spent in 2011 to generate an amount of income 1% lower.
- The major cost items are purchase of fish and other raw material for production (55-58% of income and 63-65% of costs), followed by other operational costs (18-19% of income) and labour costs (11-12% of income), while energy expenses represent only 2-3% of income.
- The EU fish processing sector was profitable in 2011 and generated €6.3 billion in Gross Value Added (GVA), €1.6 billion of earnings before interest and tax (excluding Greece and Spain) and a net profit of €1.4 billion (excluding Greece and Spain).
- The available data suggest a deterioration of the economic performance over the years. In 2011 GVA and net profit generated by the fish processing industry (for which data was available) were respectively 2% and 7% less than in 2008. Compared to 2010, both indicators fell significantly (-10% for GVA and -30% for net profit).
- Performance indicators as a share of income grew from 2009 to 2010 and then fell in 2011. GVA as a proportion of income declined from 23% to 21% in 2011, while net profit as a share of income decreased from 8% to 6%.
- Economic analysis of national data reveals a very differentiated economic performance by country. The Cypriot, Italian and Latvian fish processing industries, made net losses in 2011, while all the other MS generated a net profit, ranging from €1.9 million for Estonia to €630.8 million for the United Kingdom.
- The UK fish processing industry generated the highest GVA in absolute terms in 2011 (26% of the EU total), followed by the French (22%) and Portuguese (15%). In relative terms, the Bulgarian fish processing industry generated the highest level of GVA in relation to income (97%), followed by the Romanian (70%) and Slovenian (54%) industries.
- Among the countries for which net profit was calculated, the UK industry generated the highest net profit in absolute terms in 2011 (44% of the estimated total), followed by the Portuguese (28%) and the French (7%). In relative terms, net profit (as a share of income) ranged from -10% for Cyprus to 71% for Bulgaria.

This chapter provides an overview of the structure and economic performance of the European fish processing industry in 2011 and highlights some key trends between 2008 and 2011 based on data collected under the latest (2013) DCF data call for the fish processing industry. Results are provided at EU and Member State levels.

As well as the types of information that were requested during the previous data call (refer to the following section for details), the Member States were asked for the first time to voluntarily provide economic data at segment level. The segmentation followed the size categories by number of persons employed in the companies (i.e. ≤ 10, 11 - 49, 50 - 249, and ≥ 250). The delivery was not mandatory. The EWG chair acknowledges the effort by those countries that delivered data by size category and asks for understanding that the EWG is not reporting these data. It was decided to write a specific section (7.3 data delivery at segment level) about the delivery of data by segments. This was agreed at the EWG meeting when it was clear that the decision of whether or not to gather data by size category should be taken only after further investigation (segmentation by size category may be not the preferred option). As the delivery was not mandatory, the EWG decided not to include these data in the national chapters. The editors then decided to report data disaggregated by size category for three countries (France, Portugal, and Romania) in section 7.3. For these countries the experts at the EWG meeting provided some explanations to the data.

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 30 August 2013, and the deadline for the submission was the 30 September 2013.

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) and Croatia, which was not obliged to deliver data for 2011 as it joint the EU only last year. In the 2013 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 2008-2011. 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 and for the first year of each programming period (i.e. 2008 and 2011).

As already mentioned, the Member States were also requested for the first time to voluntarily provide economic data at segment level. The segmentation followed the size categories by number of persons employed in the companies (i.e. ≤ 10, 11-49, 50-249 and > 250). The data call was answered by 17 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 Hamburg, 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 all analyses due to non-submission of data (note: since this is valid for the entire report, this specification has not been added to any graph or figure and, when referring to the European fish processing sector, Belgium is never included, although not explicitly mentioned); (2) the exclusion of Greece from all trend analyses due to non-submission of data for the years 2008, 2009 and 2010; (3) the exclusion of Greece from the calculation of Operating Cash Flow, Earnings before interest and tax, Net Profit and Return on Investment, due to questionable data quality (refer to the national chapter for details); (4) the exclusion of Spain from the calculation of Earnings before interest and tax, Net Profit and Return on Investment due to the non-submission of data on depreciation of capital; (5) confidentiality issues for Cypriot and Maltese data, due to the small number of companies undertaking fish processing as main activity[1].

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

[1] In Cyprus, in 2011, there were 14 enterprises processing fish as a secondary activity, besides the 5 enterprises carrying out fish processing as a main activity. The turnover generated by these firms and attributed to fish processing was 49% of the total turnover of the Cypriot fish processing industry in 2011.

Table 3.1.1: Stages of data submission and resubmission

Country	First submission	Last submission	Reason for resubmission
Belgium			
Bulgaria	**26/09/2013**	-	
Cyprus	**10/10/2013**	**14/10/2013**	Missing templates, minor corrections
Denmark	**26/09/2013**	**14/10/2013**	Minor corrections
Estonia	**30/09/2013**	-	
Finland	**18/09/2013**	**20/09/2013**	Missing templates, minor corrections
France	**30/09/2013**	**11/10/2013**	Minor corrections
Germany	**30/09/2013**	**14/10/2013**	Minor corrections
Greece	**30/09/2013**	-	
Ireland	**25/09/2013**	**11/10/2013**	Minor corrections
Italy	**30/09/2013**	**18/10/2013**	Minor corrections
Latvia	**24/09/2013**	**15/10/2013**	Minor corrections
Lithuania	**25/09/2013**	-	
Malta	**01/10/2013**	-	
Netherlands	**16/10/2013**	**30/10/2013**	Missing templates, minor corrections
Poland	**30/09/2013**	**09/10/2013**	Minor corrections
Portugal	**23/09/2013**	-	
Romania	**26/09/2013**	-	
Slovenia	**20/09/2013**	-	
Spain	**23/09/2013**	-	
Sweden	**30/09/2013**	**18/10/2013**	Minor corrections
United Kingdom	**01/10/2013**	**07/11/2013**	Data corrections

Legend:

Although the templates submitted by MS do not always contain all the variables requested, the data coverage improved in comparison to 2011, with 16 of 22 MS providing 100% of the socio-economic parameters to be collected for enterprises that carry out fish processing as main activity. An overview of the coverage of the required[2] parameters submitted by MS and template is given in **Table 3.1.2**.

As all MS, except for the Netherlands, 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.

[2] The table refers only to the variables which are mandatory according to the legislation (Annex II of Commission Decision 2010/93/EU of 18 December 2009). For example, although it was not provided, the list of missing parameters for the UK do not include the variable "total employees" because it is not mandatory to provide it.

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, which was not possible during the 2011 data call.

Table 3.1.2: Coverage of submitted variable by template

Country	Main Activity				Non Main Activity				Missing variables/Comments
	2008	2009	2010	2011	2008	2009	2010	2011	
Belgium	0%	0%	0%	0%	0%	0%	0%	0%	
Bulgaria	100%	100%	100%	100%	0%	0%	0%	0%	
Cyprus	100%	100%	100%	100%	100%	0%	100%	100%	
Denmark	100%	100%	100%	100%	100%	100%	100%	100%	
Estonia	100%	100%	100%	100%	100%	100%	100%	100%	
Finland	100%	100%	100%	100%	100%	100%	100%	100%	
France	100%	100%	100%	100%	0%	100%	100%	0%	
Germany	100%	100%	100%	100%	0%	100%	0%	100%	
Greece	0%	0%	0%	100%	0%	0%	0%	100%	
Ireland	100%	100%	100%	100%	100%	100%	100%	100%	
Italy	100%	100%	100%	100%	0%	100%	0%	100%	
Latvia	100%	100%	100%	100%	100%	100%	100%	100%	
Lithuania	100%	100%	100%	100%	0%	0%	0%	0%	
Malta	100%	100%	100%	100%	0%	0%	0%	0%	
Netherlands	88%	94%	94%	88%	0%	0%	0%	50%	Extraordinary costs for 2008 and 2011/Total employes available but not disaggregated by gender; turnover attributed to fish processing available in 2011
Poland	94%	94%	94%	94%	100%	100%	100%	100%	Imputed value of unpaid labour
Portugal	100%	100%	100%	100%	100%	0%	100%	0%	
Romania	100%	100%	100%	100%	100%	100%	100%	100%	
Slovenia	100%	100%	100%	100%	100%	100%	100%	100%	
Spain	71%	71%	71%	71%	100%	100%	0%	0%	Imputed value of unpaid labour; depreciation of capital; debt; total value of assets/Total employes available but not disaggregated by gender
Sweden	100%	100%	100%	100%	100%	100%	100%	100%	
United Kingdom	76%	76%	76%	76%	0%	0%	0%	0%	Subsidies; extraordinary costs, net; male and female employees; other income
Total	**88%**	**88%**	**88%**	**92%**	**55%**	**59%**	**55%**	**61%**	

Legend: Template not submitted

3.2 General overview of the European fish processing industry sector

As already mentioned, as well as the exclusion of Belgium from all analyses due to non-submission of data, Greece was also excluded from all analysis of trends, due to incomplete data (no data for 2008-2010) and from most economic analysis for 2011, due to inconsistent data quality. Nevertheless, whenever possible, Greek figures were included in order to provide the most comprehensive possible overview of the industry at least for 2011. For this reason, in tables presenting trends, along with EU totals not including Greece (on which trend rates are calculated), 2011 totals "with 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 demand for fish products in the EU is much larger than can be provided by the European fishing fleet. 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 become worse during the reporting period and especially from 2010 to 2011.

According to Member States DCF data submissions, the total number of enterprises in the European fish processing industry sector in 2011 was around 3.5 thousands, 56% of which have less than 10 employees and another 30% with the number of employees between 11 and 49 (Table 3.2.1).

Over the reporting period, the total number of enterprises decreased by 2%. However, while the number of larger firms declined, explaining the trend observed at the aggregated level, the enterprises employing less than 10 people increased by 5%.

According to the data submitted by MS, the number of workers employed in the European fish processing industry in 2011 was 100,225. Omitting Greece from the trend analyses, the total number of people employed in the sector shrank by 3% from 2008 to 2009 and then remained quite stable until 2011.

Over the same period, the total FTEs decreased less than the total number of workers in the industry, showing a slight tendency towards an increase in the full time employment (the higher the ratio of FTE to total employed, the higher the full-time employment).

As well as businesses, workers and FTEs, the average number of FTEs per enterprise declined over the period 2008 and 2011 (by 2%). On the other hand, average wage and labour productivity, respectively measured as cost of labour and gross value added per FTE, show little improvement (+ 2% and +4%).

Socio-economic data submitted by Member States also suggest that most workers employed in the sector are women and that the proportion of male/female employees has been rather constant over time (Figure 3.2.3).

Table 3.2.1: European fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	2011 (with Greece)	Δ to 2010	Develop. trend
Structure (number)							
Total enterprises	3,402	3,415	3,376	3,344	3,496	-1%	-2%
<=10 employees	1,758	1,779	1,798	1,850	1,958	3%	5%
11-49 employees	1,088	1,139	1,091	1,016	1,052	-7%	-7%
50-249 employees	476	416	408	400	408	-2%	-16%
>=250 employees	81	81	79	78	78	-1%	-4%
Employment (number)							
Total employees	100,756	97,823	97,353	97,720	100,225	0%	-3%
Male employees	33,315	31,810	32,154	32,931	34,157	2%	-1%
Female employees	44,750	43,227	43,387	43,141	44,420	-1%	-4%
FTE	113,365	109,478	108,937	109,412	111,677	0%	-3%
Male FTE	37,270	35,886	36,653	36,653	37,821	0%	-2%
Female FTE	43,029	41,738	41,767	42,363	43,460	1%	-2%
Indicators							
FTE per enterprise	33.3	32.1	32.3	32.7	31.9	1%	-2%
Average wage (thousand €)	27.9	28.9	29.0	29.0	28.7	0%	4%
Labour productivity (thousand €)	54.6	55.7	62.3	55.7	56.5	-11%	2%
Unpaid work (%)	7	7.4	7.4	6.6	6.6	-11%	-8%

Note: "total employees" do not include UK employees; "male employees" and "female employees" do not include UK, Spanish and Dutch employees.

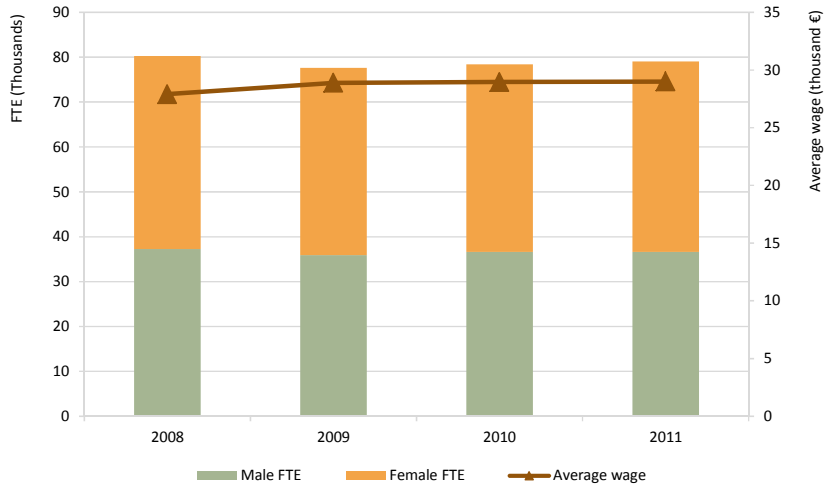


Figure 3.2.1: European employment trends, 2008-2011

Note: All data reporting in the figure do not include Greek figures, because only 2011 data were provided for Greece. Besides Greek ones, "male employees" and "female employees" also do not include UK, Spanish and Dutch employees.

As shown in Table 3.2.2, based on DCF data, in 2011 Spain possessed the biggest fish processing industry in terms of number of enterprises and people employed, respectively constituting 15% and 18% of the total EU

figures. Italy and United Kingdom followed in terms of number of firms (respectively 18% and 15% of the total), France and Poland in terms of employment (both 16% of the total).

Table 3.2.2, also presents trends in number of enterprises and employment level by Member State over the period 2008-2011, 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. France and Portugal); it decreased for others (e.g. Spain and Poland). In general terms, changes in number of enterprises fluctuated between -71% for Malta and +69% for Romania (-2% at EU level) and in the number of employees between -65% for Bulgaria and +130% for Romania (-3% for the EU total).

It is interesting to note that, while the number of enterprises carrying out fish processing as a main activity increased or remained constant in all the East European MS over the reporting period, the fish processing industry of most western countries shrunk, sometimes drastically as in the case of Malta, where the number of firms decreased from 7 in 2011 to only 2 in 2008 and the number of employees almost halved.

It can be also seen from the table that the increase in the total number of firms is not always coupled with growth at the employment level. This can be explained by the fact that for some countries the increase is limited to small businesses and is accompanied by a decrease in the number of large companies. This trend, very pronounced in the case of Bulgaria, can be observed also for Latvia, Poland and Estonia.

Figure 3.1.2 shows that, although the distribution of enterprises by size category is highly differentiated by country, for most of those that submitted data the number of firms with less than 10 employees constituted at least half of the industry in 2011, and for 6 of them (Italy, Sweden, Greece, Finland, Bulgaria, and Malta) even more than 70%. 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 3.2.2: European fish processing industry sector overview by country, 2011

Country	FTE	% of EU total	Δ to 2010	Develop. trend	Total employees	% of EU total	Δ to 2010	Develop. trend	Number of enterprises	% of EU total	Δ to 2010	Develop. trend
Bulgaria	325	0%	3%	-65%	325	0%	3%	-65%	33	1%	230%	57%
Cyprus	75	0%	30%	74%	77	0%	31%	38%	5	0%	0%	25%
Denmark	3,043	3%	-6%	-27%	3,704	4%	-2%	-15%	107	3%	-7%	-9%
Estonia	1,810	2%	-3%	-3%	1,847	2%	-2%	-5%	55	2%	6%	10%
Finland	777	1%	5%	14%	870	1%	-2%	-9%	143	4%	0%	0%
France	15,662	14%	3%	3%	15,963	16%	2%	2%	300	9%	-2%	-8%
Germany	6,509	6%	-4%	-19%	6,780	7%	-4%	-20%	265	8%	0%	-6%
Greece	2,265	2%			2,505	2%			152	4%		
Ireland	2,829	3%	6%	9%	3,270	3%	7%	14%	169	5%	0%	-2%
Italy	5,517	5%	3%	10%	6,545	7%	3%	6%	454	13%	-3%	21%
Latvia	4,998	4%	7%	-11%	5,393	5%	8%	-7%	101	3%	-3%	6%
Lithuania	3,699	3%	20%	27%	4,545	5%	4%	-9%	37	1%	0%	0%
Malta	28	0%	87%	-30%	32	0%	68%	-43%	2	0%	0%	-71%
Netherlands	2,537	2%	1%	9%	3,253	3%	1%	10%	88	3%	-1%	-13%
Poland	15,051	13%	-2%	-4%	15,726	16%	-1%	-3%	206	6%	5%	10%
Portugal	6,913	6%	0%	5%	7,314	7%	1%	10%	185	5%	-5%	-13%
Romania	1,178	1%	-26%	134%	1,181	1%	-26%	130%	22	1%	22%	69%
Slovenia	351	0%	50%	66%	379	0%	42%	52%	14	0%	8%	17%
Spain	17,702	16%	1%	-7%	18,390	18%	-1%	-7%	513	15%	-7%	-10%
Sweden	1,837	2%	2%	9%	2,126	2%	6%	-2%	219	6%	0%	2%
United Kingdom	18,572	17%	-3%	-8%					426	12%	2%	-7%
EU	111,677	100%			100,225	100%			3,496	100%		
EU (without Greece)	109,412		0%	-3%	97,720		0%	-3%	3,344		-1%	-2%

Note: employment data for the UK not available

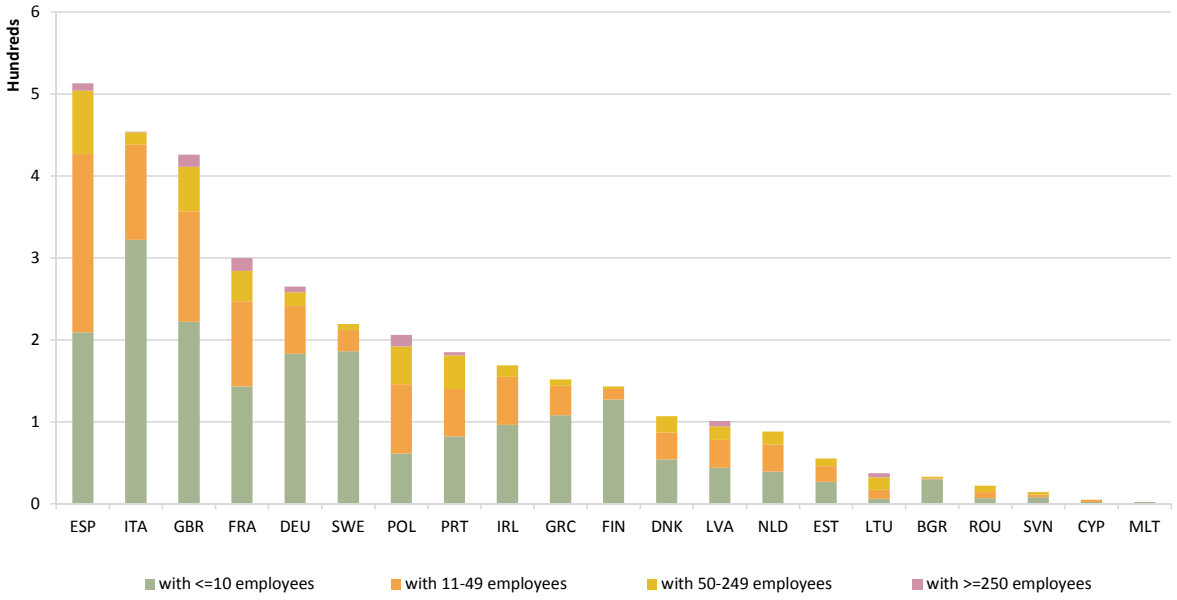


Figure 3.2.2: Number of firms by country, 2011

For only 3 countries of those that submitted data, employment is almost evenly spread between men and women during 2011 both in terms of number of personnel and in terms of FTE (Figure 3.2.3). For all the others there is a clear preponderance of either male or female employees. For example in Ireland and Finland, male employees are more abundant than female ones while in Portugal and Poland men represent less than 35% of the total number of workers.

As already mentioned, the ratio FTE/total employed gives an indication of the main type of employment. The Dutch fish processing industry appears to have the highest level of part-time employment, followed by the Lithuanian and Danish ones. On the other hand, various other countries, such as Romania and Bulgaria, employ mostly full-time workers.

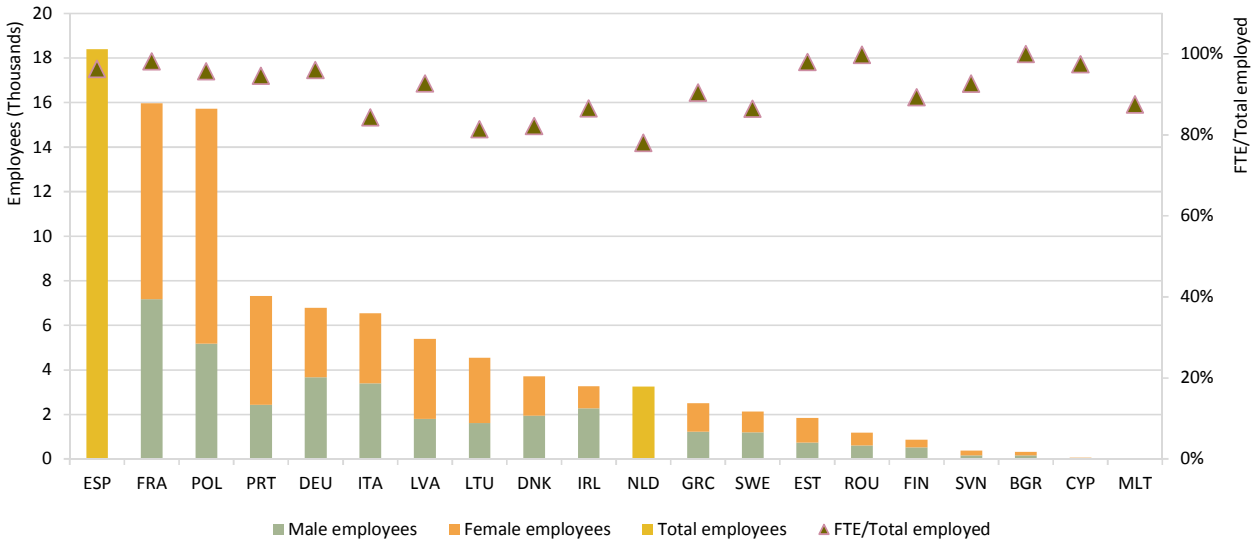


Figure 3.2.3: Employment by country, 2011

Note: No data available for the UK

Data on crew costs and employment suggest that the average wage per FTE varies substantially by MS (Figure 3.1.4), with the Danish fish processing industry paying the highest salaries on average (€59,401), followed by the Swedish (€48,315) and the French (€47,690) ones.

Labour productivity in 2011 ranged from €6,078 for Latvia to €154,821 for Malta. However, for almost all countries it was smaller than €60,000.

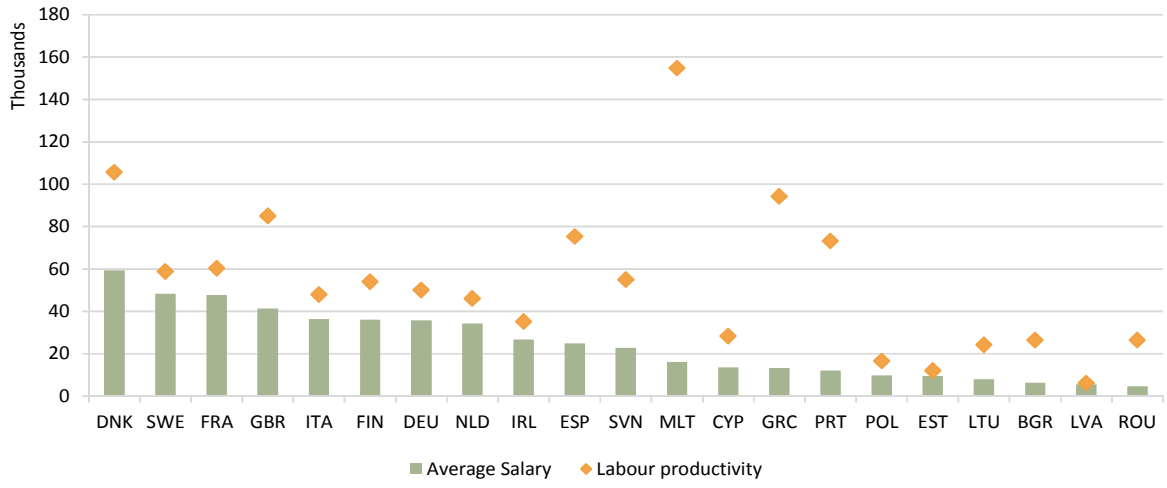


Figure 3.2.4: Average salary and labour productivity by country, 2011

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 15.20) 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 3.2.3 gives an overview by country of the number of enterprises which carry out fish processing but not as the main activity, based on the 2013 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 2011, 792 companies were reported to carry out fish processing not as their main activity. However, taking into account that only 14 out of the 23 country participating in the DCF framework reported data on this type of enterprises, 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 3.2.3: Number of enterprises carrying out fish processing not as a main activity by country, 2011

Country	2008	% of total enterprises	2009	% of total enterprises	2010	% of total enterprises	2011	% of total enterprises	Δ to 2010	Develop. trend
Cyprus	13	76%			13	72%	14	74%	8%	8%
Denmark	7	6%	6	5%	5	4%	5	4%	0%	-29%
Estonia	12	19%	13	20%	13	20%	12	18%	-8%	0%
Finland	22	13%	49	26%	56	28%	27	16%	-52%	23%
France			115	27%	111	27%				
Germany			95	27%			80	23%		
Greece							21	12%		
Ireland	16	9%	16	9%	25	13%	22	12%	-12%	38%
Italy			280	40%			303	40%		
Latvia	4	4%	4	4%	2	2%	2	2%	0%	-50%
Netherlands							97	52%		
Poland	51	21%	58	22%	60	23%	65	24%	8%	27%
Portugal	29	12%			38	16%				
Romania	30	70%	30	70%	43	70%	29	57%	-33%	-3%
Slovenia	8	40%	8	38%	8	38%	7	33%	-13%	-13%
Spain	1	0%	1	0%						
Sweden	87	29%	98	31%	95	30%	108	33%	14%	24%

Note: No data available on enterprises that carry out fish processing but not as a main activity for Bulgaria, United Kingdom, Malta and Lithuania

3.3 Economic performance of the European fish processing industry sector

3.1.1.1 Income and Costs

The amount of income generated by the European fish processing industry in 2011 was almost €29 billion, 98% of which was made up of turnover (Table 3.1.6). After a decrease in 2009, income increased in 2010 and remained almost constant in 2011. Subsidies amounted to 0.2-0.3% of the total income during the entire reporting period.

According to Member States DCF data submissions, total production costs amounted to almost €26.4 and €25.9 billion respectively in 2011 and 2010, meaning that 2% more was spent in 2011 to generate an amount of income 1% lower 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 (55-58% of income) during the period 2008-2011 (Figure 3.1.5). Most of the remaining costs consist of other operational costs (18-19% of income) and labour costs (11-12% of income), while energy expenses represent only 3% of the total (2-3% of income).

Analysis by Member State reveals that the UK fish processing industry generated the highest income in 2011 (€7.5 billion), followed by the French (€5.0 billion) and the Spanish (€4.7 billion) (Figure 3.1.6).

The income structure is quite homogeneous across countries, with the turnover having been more than 95% of the total income for most MS in 2011. Greece and Romania are exceptions, with the turnover contributing about 66% to the total income.

The production costs ranged from 80% and 100% of the total income for most countries in 2011 (Figure 3.1.7). However for some countries the cost/income ratio was quite far from the average (0.3 for Romania and Bulgaria, between 0.5 and 0.7 for Slovenia, Portugal and Greece).

Along with the income structure, Figure 3.1.6 shows the structure of costs of the fish processing industry by country; Figure 3.1.8, instead, gives an overview of the contribution of the main cost items to the total production costs. As shown in the figures, 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 (3% of the total in average).

It is interesting to note that Bulgaria shows a very different cost structure compared to all other countries, with the labour costs contributing almost 90% to the total production costs and the purchase of fish and raw materials for production only 2%.

Table 3.1.6 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 one generated by the firms processing fish not as their main activity).

For the countries for which data are available, the analysis reveals a mixed picture. For some countries, for example Cyprus and Finland, firms processing fish not as a main activity make a large contribution to the overall turnover coming from fish processing. For others, such as Denmark and Sweden, total turnover is almost entirely generated by firms undertaking fish processing as a main activity.

Figure 3.3.1: Income and cost structure of the European fish processing industry sector, 2008-2011

Note: All data reporting in the figure do not include Greek figures because only 2011 data were provided for Greece

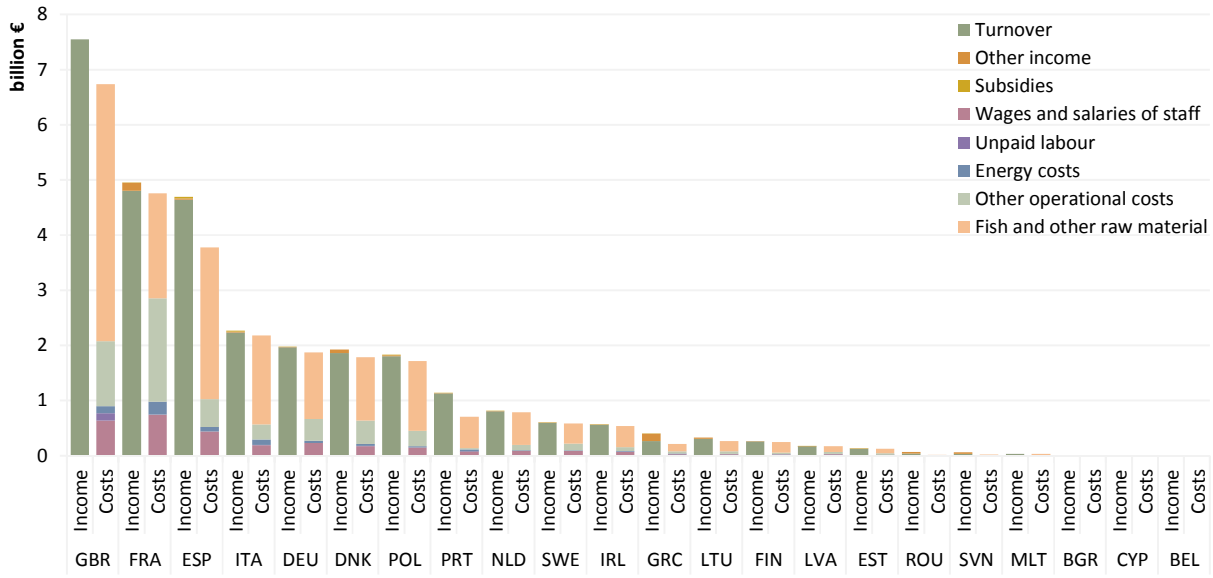


Figure 3.3.2: Income and cost structure of the European fish processing industry sector by country, 2011

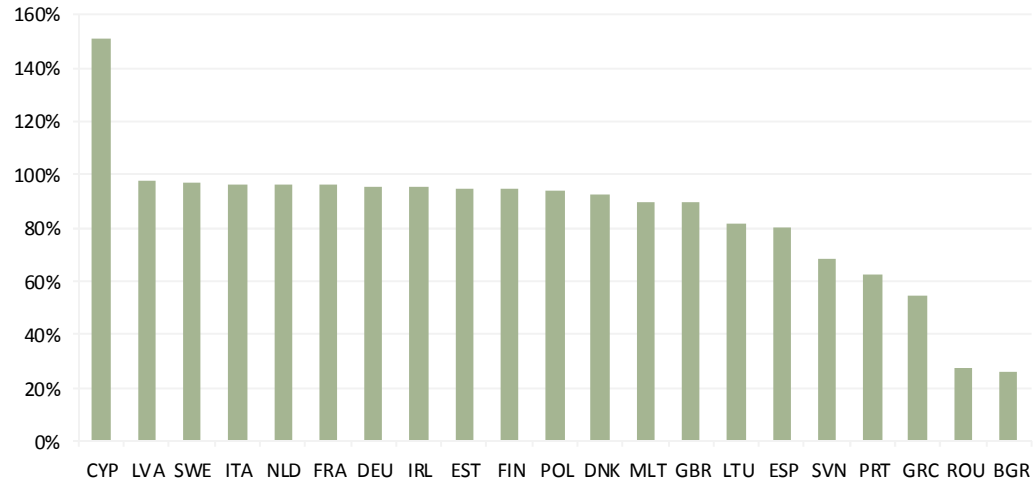


Figure 3.3.3: Total production cost as a share of income by country, 2011

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.

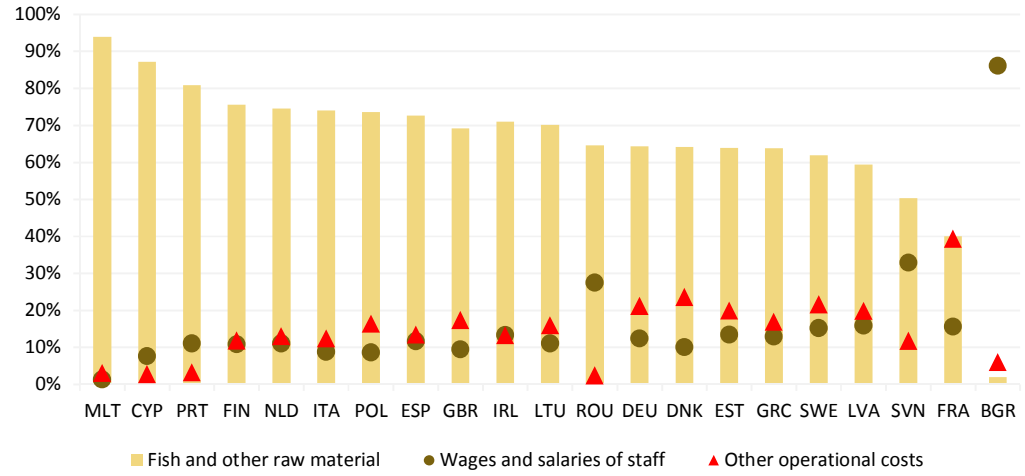


Figure 3.3.4: Main cost items as a percentage of total production costs by country, 2011

Table 3.3.1: Percentage of turnover of enterprises with fish processing not as main activity, 2008-2011

Country	2008 (million €)	% of total turnover	2009 (million €)	% of total turnover	2010 (million €)	% of total turnover	2011 (million €)	% of total turnover	Δ to 2010	Develop. trend
Cyprus	9.8	71%			0.0	0%	8.1	49%		-17%
Denmark	20.6	1%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Estonia	1.1	1%	1.2	1%	1.1	1%	2.0	2%	72%	86%
Finland	10.3	6%	128.8	40%	147.1	38%	81.2	24%	-45%	691%
France			683.1	14%	694.2	13%				
Germany			30.0	1%			50.0	2%		
Greece							3.2	1%		
Ireland	50.6	8%	52.9	9%	27.5	5%	11.5	2%	-58%	-77%
Italy			239.3	10%			247.9	10%		
Latvia	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Poland	103.2	6%	52.9	3%	79.2	4%	89.8	5%	13%	-13%
Portugal	194.9	15%			134.9	11%				
Romania	93.4	77%	103.8	76%	6.9	1%	2.9	6%	-57%	-97%
Slovenia	14.4	33%	12.9	33%	5.3	16%	4.4	11%	-17%	-69%
Spain	2.8	0%	2.8	0%						
Sweden	73.4	12%	80.1	15%	96.6	15%	97.1	14%	0%	32%

Note: no data available for Belgium, Bulgaria, United Kingdom, Malta, Netherland and Lithuania

The sector accounted for approximately €6.3 billion of Gross Value Added (GVA) in 2011 (Table 3.1.7). This shows the importance of the fish processing industry in Europe compared to the fishing fleet (€ 3.4 billion of GVA).

Excluding Greece, the amount of operating cash flow generated by the EU fish processing sector in 2011 was €3.0 billion. With the exclusion also of Spain, earnings before interest and tax and Net Profit were respectively €1.6 billion and €1.4 billion.

DCF data suggest a clear deterioration of the economic performance over the years. In 2011 GVA, Operating Cash Flow, Earnings before interest and tax and Net Profit were respectively 2%, 3%, 14% and 7% less than in 2008. Compared to 2010 levels, economic indicators fell even more significantly, with net profit decreasing by 30% in one single year.

Figure 3.1.10 presents trends in performance indicators as a proportion of total income from 2008 to 2011. 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. The GVA to income ratio increased from 22% to 23% from 2009 to 2010 and then declined to 21% in 2011, while net profit as a share of income went up from 6% to 8% in 2010 and then down again to 6% the year after.

Table 3.3.2: Economic performance of the European fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	2011 (with Greece)	% of total income (with Greece)	Δ to 2010	Develop. trend
Income (million €)												
Turnover	27,974.5	99%	27,535.3	100%	29,210.0	99%	28,954.7	99%	29,223.0	98%	-1%	4%
Other income	393.4	1%	267.9	1%	412.2	1%	378.2	1%	511.2	2%	-8%	-4%
Subsidies	59.9	0%	58.0	0%	57.3	0%	72.1	0%	72.7	0%	26%	20%
Total Income	28,163.6	100%	27,641.2	100%	29,575.2	100%	29,353.7	100%	29,755.5	100%	-1%	4%
Expenditure (million €)												
Purchase of fish and other raw material for production	16,119.2	57%	15,866.7	57%	16,413.0	55%	17,077.9	58%	17,217.1	58%	4%	6%
Wages and salaries of staff	3,000.8	11%	2,990.9	11%	2,985.1	10%	3,021.3	10%	3,049.6	10%	1%	1%
Imputed value of unpaid labour	162.9	1%	171.7	1%	170.0	1%	151.1	1%	152.6	1%	-11%	-7%
Energy costs	711.7	3%	681.0	2%	814.6	3%	725.5	2%	737.6	2%	-11%	2%
Other operational costs	5,082.3	18%	4,934.1	18%	5,501.6	19%	5,384.5	18%	5,421.3	18%	-2%	6%
Total production costs	25,076.9	89%	24,644.4	89%	25,884.2	88%	26,360.3	90%	26,578.1	89%	2%	5%
Capital Costs (million €)												
Depreciation of capital	398.7	1%	416.6	2%	472.5	2%	430.8	1%	444.9	1%	-9%	8%
Financial costs, net	263.2	1%	174.4	1%	290.7	1%	124.0	0%	141.2	0%	-57%	-53%
Extraordinary costs, net	-12.0	0%	6.0	0%	-7.8	0%	16.4	0%	17.6	0%	309%	237%
Capital Value (million €)												
Total value of assets	10,757.4	38%	10,075.5	36%	11,885.9	40%	10,855.8	37%	11,328.0	38%	-9%	1%
Net Investments	458.5	2%	470.6	2%	692.4	2%	885.2	3%	894.5	3%	28%	93%
Debt	7,199.6	26%	6,657.5	24%	7,446.2	25%	6,698.6	23%	6,897.7	23%	-10%	-7%
Performance Indicators (million €)												
Gross Value Added	6,190.5	22%	6,101.4	22%	6,788.7	23%	6,093.7	21%	6,307.0	21%	-10%	-2%
Operating Cash Flow	3,086.7	11%	2,996.8	11%	3,691.0	12%	2,993.4	10%			-19%	-3%
Earning before interest and tax	1,911.5	7%	1,681.5	6%	2,385.3	8%	1,642.0	6%			-31%	-14%
Net Profit	1,540.9	5%	1,412.4	5%	2,043.7	7%	1,433.4	5%			-30%	-7%
Capital productivity (%)	46.4		47.6		46.7		43.8		43.9			
Return on Investment (%)	17.8		16.7		20.1		15.1					
Financial Position (%)	0.7		0.7		0.6		0.6		0.6			
Future Expectation Indicator (%)	-1.9		-1.3		0.7		3.5		3.3			

Notes: 2011 figures "with Greece" for Operating Cash Flow, Earnings before interest and tax, Net Profit and Return on Investment have been omitted from the table due to questionable quality of Greek data (refer to the national chapter for details); Spain is not included in the figures for Earnings before interest and tax, Net Profit and Return on Investment due to the non-submission of data on depreciation of capital.

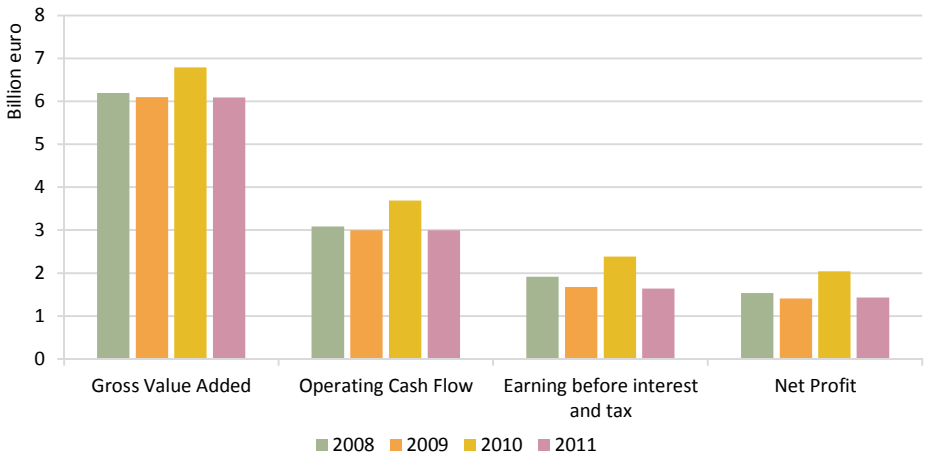


Figure 3.3.5: Economic performance of the European fish processing industry sector, 2008-2011

Notes: Greece is excluded from the calculation of all indicators due to incomplete data submission (only 2011 data); Spain is also excluded from the calculation of Earnings before interest and tax and Net Profit due to the non-submission of data on depreciation of capital.

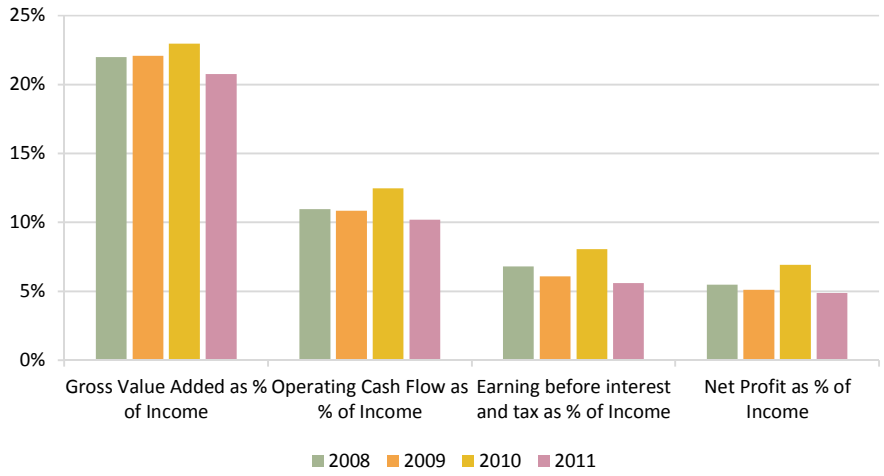


Figure 3.3.6: Economic performance of the European fish processing industry sector (indicators in relation to income), 2008-2011

Notes: Greece is excluded from the calculation of all indicators due to incomplete data submission (only 2011 data); Spain is also excluded from the calculation of Earnings before interest and tax and Net Profit as shares of income due to the non-submission of data on depreciation of capital.

Analysis of DCF data at national level reveals a very different economic performance across Member State (Table 3.1.8). The Cypriot, Italian and Latvian fish processing industries, together contributing 5% to the

European Gross Value Added of the sector, made net losses in 2011. All the other MS generated a net profit, ranging from €1.9 million for Estonia to €630.8 million for the United Kingdom.

The UK fish processing industry generated the highest GVA in absolute terms in 2011 (26% of the EU total), followed by the French (22%) and Portuguese (15%) ones. In relative terms, the Bulgarian fish processing industry generated the highest level of GVA in relation to income (97%), followed by the Romanian (70%) and Slovenian (54%) industries (Figure 3.3.5).

Among the countries for which net profit was calculated[3], the UK industry generated the highest net profit in absolute terms in 2011 (44% of the estimated total), followed by the Portuguese (28%) and the French (7%) ones. In relative terms, net profit (as a share of income) ranged from -10% for Cyprus to 71% for Bulgaria.

When comparing the economic performance across time, the data suggest that the fish processing industries of most EU MS decreased their profitability over the reporting period but the picture is quite varied across countries. GVA trend rates ranged between -55% for Ireland (from 222 to 99.3 million €) and +73% for Slovenia (from 11 to 19.3 million €), leading to an overall GVA decrease of 2%. Variations over the period 2008-2011 were even more pronounced in terms of net profit, ranging from - 165% for Cyprus (from 2.2 to -1.4 million €) to + 442% of Denmark (from -27.7 to 94.8 million €). Compared to 2010, in only five countries (Cyprus, Denmark, France, Lithuania and Slovenia) the fish processing industry generated more profit in 2011; while net profit made by all the other countries together decreased by 36%.

[3] Net profit was not calculated for Greece (questionable data quality) and Spain (partial data submission).

Table 3.3.3: Economic performance of the European fish processing industry sector by country, 2011

Country	Gross Value Added (million €)	% of EU total	Δ to 2010	Develop. trend	Operating Cash Flow (million €)	% of EU total	Δ to 2010	Develop. trend	Earning before int. and tax (million €)	% of EU total	Δ to 2010	Develop. trend	Net Profit (million €)	% of EU total	Δ to 2010	Develop. trend
Bulgaria	8.6	0%	-1%	-14%	6.6	0%	-18%	-24%	6.3	0%	-18%	-26%	6.3	0%	-17%	-21%
Cyprus	2.1	0%	-13%	-35%	1.1	0%	-32%	-57%	-0.4	0%	-214%	-118%	-1.4	0%	-372%	-165%
Denmark	321.5	5%	11%	25%	140.8	5%	39%	159%	107.2	7%	64%	703%	94.8	7%	69%	442%
Estonia	21.7	0%	-9%	-12%	7.1	0%	-21%	3%	3.0	6%	-47%	2732%	1.9	0%	-59%	17%
Finland	41.9	1%	-1%	29%	13.9	0%	-14%	48%	9.2	1%	-17%	56%	7.3	1%	-20%	101%
France	943.3	15%	16%	5%	201.9	7%	28%	-33%	95.6	6%	22%	-60%	101.9	7%	13%	-58%
Germany	325.6	5%	-14%	-9%	93.1	3%	-33%	4%	56.9	3%	-46%	17%	43.5	3%	-54%	48%
Greece	213.3	4%														
Ireland	99.3	2%	-1%	-55%	27.6	1%	-14%	-81%	12.0	1%	-1%	-91%	8.1	1%	-2%	-93%
Italy	263.8	4%	-22%	-4%	80.4	3%	-26%	50%	20.2	1%	-50%	125%	-6.3	0%	-129%	85%
Latvia	30.4	0%	6%	-44%	3.8	0%	-53%	-83%	-0.5	0%	-115%	-104%	-2.7	0%	-285%	-122%
Lithuania	89.3	1%	21%	24%	59.6	2%	29%	22%	53.6	3%	31%	28%	53.6	4%	36%	59%
Malta	4.3	0%	-80%	-32%	3.9	0%	-82%	-24%	3.4	0%	-84%	2%	3.1	0%	-85%	30%
Netherlands	116.8	2%	-5%	-16%	30.0	1%	-17%	-40%	11.5	1%	-36%	-66%	15.8	1%	-32%	-37%
Poland	249.8	4%	9%	1%	111.4	4%	27%	6%	72.9	4%	37%	-1%	39.1	3%	-22%	-15%
Portugal	505.5	8%	-1%	2%	425.5	14%	-2%	-1%	425.5	26%	-2%	-1%	399.7	28%	-3%	4%
Romania	31.1	1%	-96%	46%	25.7	1%	-96%	30%	23.4	1%	-97%	22%	23.4	2%	-95%	80%
Slovenia	19.3	0%	28%	73%	11.3	0%	26%	60%	9.8	1%	29%	70%	9.2	1%	27%	169%
Spain	1,333.5	22%	8%	11%	920.7	31%	10%	19%								
Sweden	107.9	2%	3%	-2%	19.6	1%	-14%	-40%	6.9	0%	-34%	-67%	5.2	0%	-46%	-74%
United Kingdom	1,577.9	26%	-9%	-10%	809.6	27%	-10%	-12%	725.4	44%	-9%	-11%	630.8	44%	-7%	-4%
EU (without Greece)	6,093.7	100%	-10%	-2%	2,993.4	100%	-19%	-3%	1,642.0	100%	-31%	-14%	1,433.4	100%	-30%	-7%

Notes: Greece is excluded from trend analysis due to incomplete data submission (only 2011 data) and from the calculation of all indicators except for GVA due to questionable data quality (refer to the national chapter for details); Spain is also excluded from the calculation of Earnings before interest and tax and Net Profit as shares of income due to the non-submission of data on depreciation of capital.

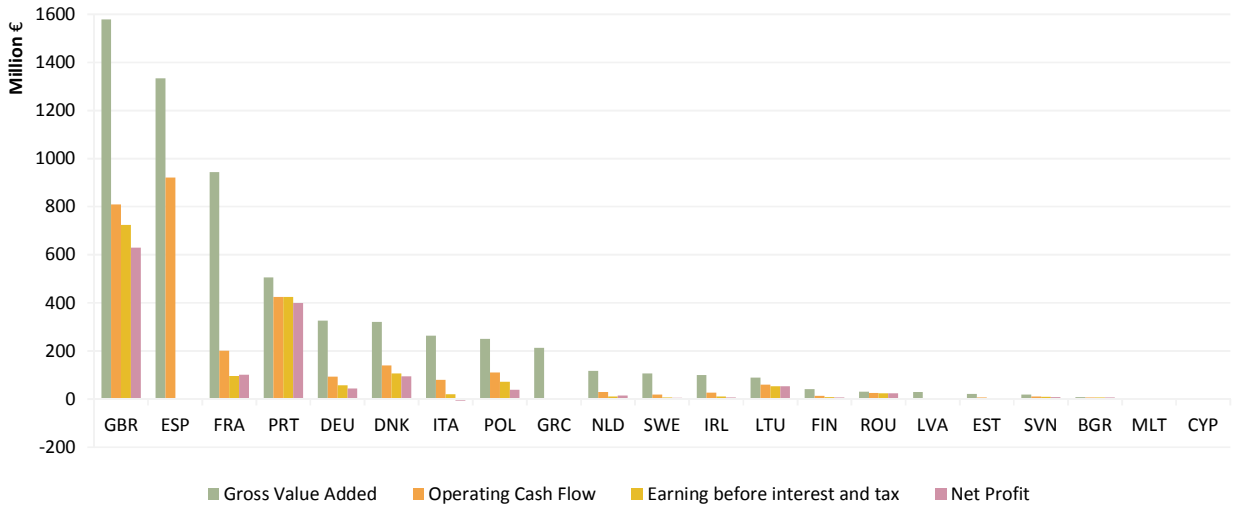


Figure 3.3.7: Economic performance of the European fish processing industry sector by country, 2011

Notes: Operating Cash Flow, Earnings before interest and tax and Net Profit for Greece have been omitted due to questionable data quality (refer to the national chapter for details); Earnings before interest and tax and Net Profit for Spain are not available due to the non-submission of data on depreciation of capital.

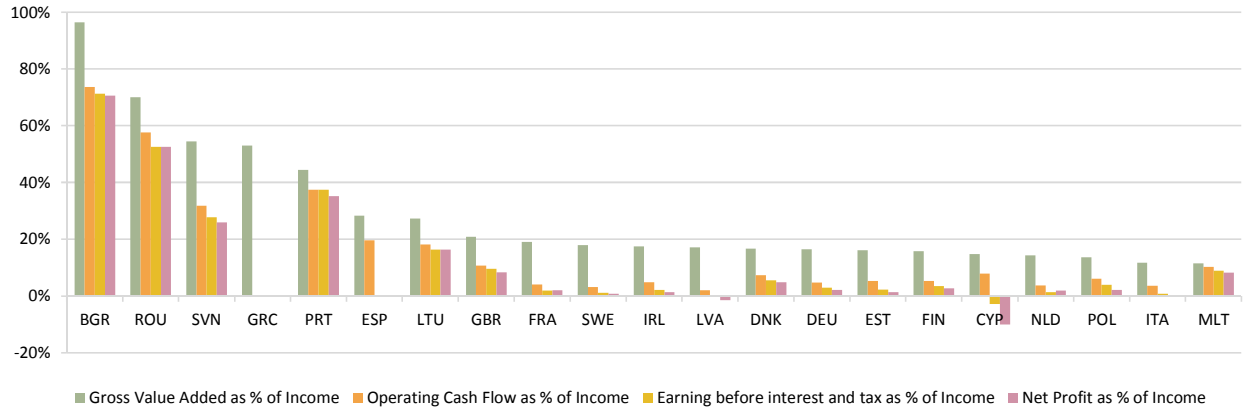


Figure 3.3.8: Economic performance of the European fish processing industry sector by country (indicators in relation to income), 2011

Notes: Operating Cash Flow as a share of income, Earnings before interest and tax as a share of income and Net Profit as a share of income for Greece have been omitted due to questionable data quality (refer to the national chapter for details); Earnings before interest and tax as a share of income and Net Profit as a share of income for Spain are not available due to the non-submission of data on depreciation of capital.

3.4 Trends and drivers for change, outlook for the industry

Main drivers of the economic situation of the industry are 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). Several countries, however, expect that the improvements in the fish stocks in European waters may lead to a higher coverage of the necessary raw material from domestic sources and this may reduce the vulnerability a bit. Additionally, fish production from aquaculture may increase over the next decade and also contribute to a reduction in the dependency on imports.

Another main driver for the industry is the dependency on specific species and sources. Especially small or very specialized companies (like the fishmeal industry in Denmark) depend on domestic landings which are often influenced by fisheries management decisions (like in- or decreasing quotas). The improvement in the fish stocks in European waters may especially help the small companies depending on domestic landings to have easier access to raw material in the future.

Several countries reported 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.

Over the last years the wholesale sector increasingly requested certified products as consumers demand shifted towards certified products aiming to ensure sustainable fisheries. For the processing sector this means that, as processing is one of the value chain stages, processed products have also to be certified and the industry must make sure that the sources of their products are from certified fisheries. This 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. However, to have the possibility to analyse the developments we need to collect data on the origin of the raw material.

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). 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.

In all countries there is an interest in improving the efficiency of the fish processing industry in order to cope with increasing costs for raw material, at least partly (visible for example in Italy, Germany, Sweden, Latvia and Lithuania). 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.

Outlook

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.

However the picture differed across MS. For example, in Denmark and France the situation improved, while in Ireland and Latvia it continued to deteriorate. From 2010 to 2011, there was again a pronounced decline in the economic condition of the European fish processing industry (-30%). With the only exceptions of five countries (Cyprus, Denmark, France Lithuania, and Slovenia), all MS showed a decrease in the net profit.

In several countries there is a shift in consumption habits, from high to low value products (like in Greece). 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. Also the discard ban will hopefully 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 (if not the development on the world market will lead to a total opposite development.

3.5 Summary of National Chapters

Bulgaria

As no expert from Bulgaria attended the meeting, a critical analysis of the Bulgarian fish processing sector was not possible.

The Bulgarian fishery processing industry sector experienced a radical change in terms of number of enterprises and employment during the period 2008-2011. Medium sized enterprises were replaced by micro enterprises and employment decreased in 2011 to approximately 1/3 of the 2008 level.

This radical change was reflected in the economic performance of the sector during the reporting period. Turnover generated by the fish processing industry decreased by 63%, from 20.9 million euro in 2008 to 7.7 million euros in 2011.

From 2008 to 2011, purchase of raw material, energy costs and other operational costs decreased, while wages and salaries increased.

Cyprus

The Cypriot fishery processing sector comprised in 2011 only 5 SME'S that do fish processing, a number that has not changed since 2010. However, the activity of these enterprises was negatively affected by the domestic dept economic crisis. Compared to 2010, the turnover of production decreased approximately 39% in 2011. In contrast, the turnover increased 113% in 2011 compared to 2008.

The number of male and total employees drastically increased in 2011 (153% and 74% respectively compared to the numbers in 2008) and during the same period the total amount of wages and salaries increased from 0.7 to 1.0 million € (45%). The total work places also increased from 59 in 2010 to 77 in 2011. The number of full-time employees increased as well during the same period from 58 to 75 FTEs.

The purchase of fish and other raw materials for production was 11.5 million € in the year 2011, 8% and 2618 % higher than that estimated in the years 2010 and 2008 respectively. In general, if someone wanted to describe the situation of the Cypriot fish processing sector in 2011, it could be said that it was waiting for better time periods. SME's kept labour productivity costs as low as possible. Due to higher net financial and other operational costs, the net profit of the fishery processing sector decreased in 2011, 372 and 165% compared to the years 2008 and 2010 respectively. Thus, average salaries decreased during the same period approximately 17% from €16,200 in 2008 to €13,500 in 2011. No significant changes are expected for the years 2012 and 2013.

The Cypriot fish processing enterprises may apply income from subsidies as investment from the European Union as well as from the local government. The aim of this investment subsidy is to develop new, high quality and highly nutritional final fishery products and modernise the existing processing lines for producing high added value traditional fishery products.

Denmark

Profitability of the national sector and main trends

The profitability is increasing. It seems like the enterprises have laid off workers under the economic crisis 2009-2011 and they have become more competitive increasing income, reducing costs and wages and thereby increasing profitability.

Key number of the sector (employment, production, etc...)

In Denmark, the processing industry can be divided into species dependent segments. In total there are 6 sectors: • Cod and flatfish, • Herring and Mackerel • Molluscs, Shrimps and Crustaceans • Mixed production • Salmonoids • Fishmeal factories

The most important segment in Denmark is the fish meal and fish oil industry, which accounted for 68% of the total volume and 31 % of the total value, in 2011. 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 industry is the second most important segment of the Danish industry in terms of value. This industry is dependent on the Norwegian aquaculture industry and most of the imports are processed and exported to other EU countries.

Overall, the Danish industry has decreased in terms of numbers of enterprises (-9%) and Full time employees (27%). The industry has outsourced some of their activities to countries with lower salary costs. In particular, the salmon industry has outsourced some of their activities to Poland.

New developments, trends and outlook

In 2012, the profitability in the fish processing sector for consumption and the fish meal factories are expected to decrease compared to 2011. However, the positive trend in the industry net profit is expected to continue due to higher prices of fish and fish products and increasing labor productivity.

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 has a huge unleashed potential to increase production in aquaculture. Unfortunately, the framework condition for the industry, especially the regulatory settings (Nielsen 2011, 2012) and the industry structure (Nielsen et al.) are hindering the development of a competitive and sustainable aquaculture sector in EU.

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 5 and 7 companies from 2008 to 2011. Unfortunately, the total income cannot be presented due to confidentiality reasons.

Estonia

In 2011 there were 55 enterprises whose main activity was fish processing in Estonia, of which 84% accounted for micro- and small enterprises, 27 and 19 enterprises respectively; there were also 9 medium-sized enterprises and no enterprise that employed more than 249 persons. Additionally, there were also 12 enterprises that carried out fish processing but not as a main activity. The fish processing sector in Estonia is largely dependent on exports. The share of exported fish products was around 76% in 2011.

Following the trends in the Estonian fish processing industry sector between 2008 – 2011 it is possible to 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. The demand for the labour increased, but the average wage continued to fall. It shows that companies had no problem with finding a cheap labour during this time. 2011 showed continued recovery in economic activities compared to the previous year. The number of fish processing companies grew, turnover increased by 16% and was nearly €129 million in 2011. However, due to the increase in the price of raw materials several performance indicators showed a negative trend in 2011. The net profit was €1.9 million in 2011; in 2010 it was twice as high. Compared to 2010, the number of FTEs decreased 3% in 2011, from 1,860 to 1,810. This decline was mainly caused by business restructuring in one of the country's major fish processing companies. After the fall in 2010 the average wage increased by 10% in 2011 and reached €9503.

According to preliminary estimates the competition in the Estonian fish processing industry sector strengthened in 2012. The number of companies whose main business comprised processing and canning of fish, crustaceans and molluscs increased to 60. Also, growth in production volume is expected in 2012. One of the factors that influence the demand is the rapidly expanding Asian market. Also, the increase in raw material price affects the state of the industry: in order to stay competitive companies are keeping the production price at the same level and, despite the rise in sales volume, this causes the decline in profit.

Finland

There were 170 fish processing enterprises operating in Finland in 2011, of which 143 companies were processing fish as their main activity. These main activity enterprises generated a total turnover of €263 million. The gross value added of the processing industry was €42 million and the net profit €7.3 million in 2011. The Finnish fish processing enterprises used 65 million kg of fish as raw material, 41 million kg were domestic fish and 24 million kg were imported in 2011. The industry employed 777 FTEs or 870 persons.

The fish processing industry in Finland is highly concentrated in the sense that 10% of the companies with the highest turnover produced around 77% of the total revenue generated by the industry in 2011. The main species used in Finnish processing were Baltic herring (23 million kg), salmon (16 million kg) and rainbow trout (14 million kg).

The strong increase of the processing sector has mainly been based on imported cultured fish while the consumption of domestic fish and fish products has decreased considerably during the past 10 years. Increasing costs and fluctuations of the price of raw materials (fish) are affecting the profitability of the industry. The recent decrease of salmon prices has favorably affected the profitability of the industry in 2012 while the automatizing of salmon processing has also increased the profits.

France

The structure of the French seafood processing industry appears to have remained relatively stable between 2008 and 2011. Although the number of enterprises was slightly reduced from 327 to 300 over these last three years, the industry created 291 jobs and employs now 15,963 persons. The total turnover of the fish processing industry is estimated to be €4.3 billion in 2011; however, according to the French data collection office FranceAgriMer, the turnover of these companies for seafood production is only €3.7 billion (77% of total turnover). It is noticeable that only half the turnover of the four biggest companies comes from seafood processing: if the data survey would be adjusted so that it would account precisely for the seafood-related activities of these 4 companies, the deviation in the total turnover would be reduced from 23% to 7%. This would also improve the estimates of the industry concentration: according to the current data, the first 10 enterprises would be responsible for more than 45% of the turnover, which denotes a high level of concentration but is also clearly overestimated. However, the structure of the industry evolves towards the decrease of all the categories of enterprises, except the biggest ones (more than 250 persons employed).

The French seafood processing industry is heavily reliant on imported raw material; salmon (mainly aquaculture salmon from Norway), shrimp and white fish (cod and pollock) are the main imported species used by the processing industry. Fish raw material represents a relatively low share of the production costs (38%) when compared to other countries, but the rate of gross added value represents a normal share of the turnover (19%). The other economic performances of the French fish processing sector are rather low, in particular the net profit which represents only 2% of the turnover. This is primarily due to the high level of the operational costs, which account for 96% of the turnover in 2011, but also to the increasing share of the cash-flow which is used for reducing the debt and increasing investments since 2009. On the other hand, the average salary of the processing industry employees has increased by a 6% yearly rate between 2008 and 2011.

Data collected by size categories demonstrate the influence of the biggest companies on indicators such as net profits or average salary. In fact, while the trends observed for the big companies are in line with those observed at overall level, smaller industries seem not to follow the same evolution pattern.

However, the indicator trends for the different size categories are not easily interpretable. A segmentation of the industry based on activities and products would be more meaningful.

Germany

The German Fish Processing Sector contains around 265 enterprises. More than 90 % of the turnover is produced in the enterprises with 20 or more employees, which were 64 enterprises in 2008 and 55 in 2011.

From 2008 to 2011 there was a decline of 20% in total employment. Female workers were more affected than male employees. More than one quarter of the industries employment is located at Bremerhaven, the largest city on the German North Sea Coast.

Since 2006 a stable average per capita consumption of about 15-15.5 kg fish and seafood products can be noticed. The main species for the German consumers are Alaska-Pollock, Herring and Salmon followed by tuna and bonito.

The German fish processing sector as the whole fish sector does not rely very much on domestic products. The largest foreign suppliers are Poland, followed by China, Norway, The Netherlands and Denmark. The main products in 2011 were fish fingers and breaded fish fillets followed by processed herrings.

As in most of the countries, the profitability of the sector is rather low but still positive. The profit of the sector is still under high pressure from the retail sector as well as from competitors from non-EU and eastern EU-countries. Producers are facing pressure from both sides of the value chain: input markets for purchasing goods and services show higher prices for the enterprises as well as selling products on the sales markets resulting in lower margins.

Greece

In Greece, during 2011, there existed 152 active small to medium sized processing enterprises. The enterprises employed 2,505 persons, or in terms of full-time equivalent employment (FTE), 2,205 persons during 2011. Turnover of the fishery processing activities in Greece is estimated at 268.3 million euro for the year 2011 accounting for 67% of the total turnover i.e. including trade turnover of the fishery and other products.

There is evidence of a constant decrease of all the basic financial figures of the sector. While gross profit margin remained stable during the 2008/2011 period, turnover, gross profit and net profit have decreased for the same period, thus resulting in net losses for the sector during 2011.

Since the beginning of the Greek debt crisis, unemployment in Greece is rising to reach almost 28% during 2013. On top, wages and salaries are dropping rapidly while direct and indirect taxes are rising, thus limiting the purchasing power of the Greek consumers. The Greek fishery processing sector, which mainly targets the

local market, is experiencing the consequences of the persistent debt crisis. As of 2013, there is no clear evidence to suggest any positive change of the Greek consumer purchasing power in the near future.

Demand for high value processed seafood is expected to decline further in Greece. Demand for low value frozen seafood is expected to rise in Greece but turnover of the sector is expected to decline further. Rising energy costs, rising interest rates and strangulation of credit, limit the export potential of the sector.

Preliminary results of the 2013 data collection in Greece suggest an overall decline of the employment in the sector partly attributed to personnel lay-offs and mergers but also due to ceased economic operations.

Ireland

There were 169 fish processing enterprises in Ireland in 2011. The number of fish processing enterprises has remained constant since 2009. The total turnover of the Irish fish processing industry in 2011 was €559 million which is an increase of €14m or 2.6% from 2010.

In 2011 , there were approximately 2,829 FTE's employed in the fish processing industry which was made up of 1,990 Male FTE's and 839 Female FTE's. Male employees represent around 70% 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.

Irish Seafood exports amounted to 243,125 Tonnes with a value of €430 million in 2011. This was an increase of €51 million, or 13%, from 2010 driven by higher unit prices for Irish Seafood. During 2011, exports to EU countries represented 80% of total Irish seafood exports. Irish seafood exports to Russia, Egypt, South Korea and Asia continued to grow.

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 2011 were €99.3 million, €27.6 million, €12 million and €8.1 million respectively. Operating Cash Flow decreased by 15% from 2010 due to increases in the costs of raw materials for production and wages and salaries.

Data also demonstrates that, in common with other member states, the sector is very vulnerable to changes in costs and income as Net profit is a very low amount of the overall income (1% in 2011).

Italy

The turnover of the Italian fish processing industry amounted, in 2011, to around 2,231 billion €, while the total value of production (turnover + subsidies + other income) amounted to 2,264 million € registering an overall decreasing trend; -17% if compared to 2010, -21% when considering the overall period 2008-2011. (-17%). The largest share of costs (74% of total production costs, 71% of total income) is represented by costs for purchase of raw materials and other products needed for the production equal, in 2011, to 1,617 million €. The Italian fish processing sector is mostly represented by canning enterprises, whose main products are canned and preserved tunas although there is also a significant number of companies that process anchovies, sardines and shellfish. The most important sector is especially the canned tuna one: in 2011 the production of canned tuna was equal to 68 thousand tonnes in volume and 1.07 billion € in value, about 50% if compared with the total turnover of the sector in 2011 (including also the freezing sector). The canning industry (especially the tuna canning production) is heavily dependent on imports (raw material mainly from Ecuador, Colombia and ACP countries). In the last decade the increase of the production costs, primarily due to the decrease of tuna catches, has 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 has increased at the expense of the semi-manufactured tuna loins, more expensive than the first. Furthermore, the need to reduce costs has led several companies to relocate production in areas closer to fishing grounds

and where the labour cost is lower. All this process has allowed a general reduction of production costs. Even if, as far as the labour costs, a decrease of this cost item means, from the workers point of view, a decrease in the purchasing power of people employed in the sector (the average salary was 45 thousand € in 2008 and 36 thousand € in 2011). On the same time, some Italian brands 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.

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 materials for the production of canned fish. In most cases fish processing enterprises are situated in the coastal regions. There were 5393 people employed in 2011. In most cases, enterprises with less than 10 employees fish processing is a family business. There were 101 registered economic active fish processing enterprises in 2011 with a total turnover 170.8 million Euros.

Fish processing production has an important share in the total Latvian export and domestic markets. Export of fish production was to 52 countries and imported from 45 countries in 2011.

The export of fish production mainly is coming from Baltic Sea and the Atlantic Ocean catches obtained by the Latvian fishing vessels.

There was a 10 fold increase in subsidies from 2008 to 2011. Despite the growth of subsidies income of a lot of companies did not cover the high value of costs. Total profit for the fish processing industry, which was 12.4 million euros in 2008 changed to a total loss of 2.7 million euros in 2011. The main reason for the loss in the processing industry is the negative impact of the global economic crisis on the economic situation in Latvia. Due to the availability of the EFF, several fish processing companies have benefited from the investment possibilities and obtained new processing equipment to diversify products, improve the quality of production and increase productivity.

Lithuania

In 2011 the Lithuanian fish processing industry consisted of 37 enterprises whose main activity was fish processing. Activity is highly dependent on imports which accounts for 77% of the total purchased amount of raw materials. The main produced commodities were surimi, which covered approximately 33% of total production from industry. The second largest commodity in the terms of production volume was smoked fish with the main species Atlantic salmon and Atlantic herring respectively. A significant part of the production from the processing industry also comes as frozen cod fillets, and prepared salted products from Atlantic herring. Regarding production value, 78.2% of total production is destined to foreign markets whereas the remainder is marketed internally.

The Lithuanian fish processing sector is mostly represented by the 50-249 employees segment. In 2011 the average number of employees per enterprise was 122.8 and the annual increase in the number of persons employed in industry was 4%. In terms of full time equivalent employees it provided 3,699 employment positions. In 2011 the average salary per full time employee in fish processing sector was €8,039 and compared to 2010, a 10% decrease was observed. Since the overall average gross earnings per employee in Lithuania was

€7,111 in 2011, the fish processing sector provided quite good possibilities. Outlook for 2012 is foreseen as a 1.5% increase in number of employees.

The annual increase in turnover was 8% and 58% compared to 2008. The industry generated €53.6 million net profit in 2011 with a 36% annual increase. The estimated return on investment has also improved since 2008 and reached 30.1% in 2011. The growth of enterprise total assets, together with increased investments, denotes positive expectations in future compared to 2010. The successful application of investments co-financed by EFF during 2009-2011 for modernization and market expansion is expected to result in short-term stability or insignificant fluctuations around 4% in 2012 as well as a further increase in production in 2013 and onwards. The expected perspective outlook is also based on successful market expansion from 2008 to 2011 by reducing exports to CIS countries in terms of value and diverting it to EU market.

The key driver for improved economic performance and profitability was gradual export expansion to the EU market. Successful investments in modernized fish processing technologies and manufacturing processes has reduced some of the important operational costs which will result in increased production quality and higher profitability indicators.

Malta

During the years 2010 and 2011, Malta saw its national fish processing enterprises number reduced to just two down from ten in 2009. Despite the decrease, the total turnover of the processing sector for 2011 amounted to 37.7 million euro, a 64% raise from year 2010's 23 mil € and even a slight increase from 2009, the year with the highest number of fish processing industries in the last 6 years. It should be emphasized that the two remaining processing industries belong to the very small enterprises sector (<=10 employees).

The Maltese fish processing sector in 2011 demonstrated 3.1 mil € net profit, 4.3 mil € GVA and 3.8 mil € debt while in 2009 the respective figures were -21.6 mil€ net profit, -16 mil€ GVA and 31.3 mil€ debt.

Also, the year 2011, compared to 2010, demonstrated a significant 87% increase of FTE employees in the processing sector that mainly concerned new female employees (333% increase of FTE female employees, 25% of FTE male employees). Also, 2011 is the first year that shows no indication of unpaid work.

The solid level of income and the intake of new personnel just one year after the drastic reduction of the processing companies' number, indicate a sustained demand for Maltese fish processing products, a demand that can be met by small and efficiently managed enterprises. Those enterprises still show zero subsidies income continuing the trend from previous years.

However, one cannot ignore the negative aspect of the 4 year period (2008-2011), a period under severe financial crisis where employment in fish processing sector dropped 33% in FTE numbers following the drastic decrease of operating processing companies while the average wage decreased 51% (from 33.2 mil € in 2008 down to 16.2 mil € in 2011).

The Netherlands

In 2011 there were fish processing companies in the Netherlands with a turnover of 804 million euro. 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 rather limited because of declining domestic quota and the growing diversity of fish species. Most enterprises in the Dutch fish processing industry are small and have less than 10 employees. In 2011 the total income showed an increase of 14% compared to 2010, while the production cost increased in 2011 with 17%. The cost for the purchase of raw material is the main contributor to the growth in the total production cost, which was 24% higher in 2011 compared to 2010. Also compared to 2008 there is a 16% increase in the cost of raw material. Provisional trade data for 2012 show a stabilization of the import value, which might be related to the increase of the Dutch quota for most of the

traditional species for the processing industry. Important drivers for the Dutch processing industry are sustainability certification, and the reform of the Common Fisheries Policy and Common Market Organisation.

Poland

The fish processing industry in Poland is strong and still developing. It has the ability to generate profits for the companies and jobs and incomes for the involved workers. In 2011 the turnover increased to 1.8 billion Euros, by 7% compared to the previous year and 21% compared to 2008. Turnover created nearly the whole total income (99%). Despite a significant increase in turnover net profit decreased to 39.1 million Euros, by 22% compared to the previous year and by 15% compared to 2008, which resulted from the increase in costs, primarily raw materials and financial costs. The level and increase of other economic and financial indicators of fish processing (GVA -249.8 million Euros; OCF -111.4 million Euros, EBIT-73 million Euros) shows that the sector in 2011 was in a safe financial and economic situation.

The average number of employees was 15,726, representing a decrease of 3% compared to 2008. Most employees worked full-time and FTE amounted to 15,051.

The volume of production slightly increased to 375 thousand tonnes (by 1.4% compared to 2010). The prepared and preserved fish had a share of 52% of the total production, smoked fish 20%, fresh and frozen filets covered 12%, fresh fish 6%, salted fish 5% and other products 3%.

In 2011, as in previous years, a key driver of fish processing sector development was the foreign trade of raw materials and final products. Imports played a dominant role in the supply of raw materials because of a limited ability to harvest fish from the Baltic Sea and the limited production of aquaculture. The share of revenues from direct exports in fish processing companies' turnover accounted for 55%.

Most of the projects which modernized fish processing technologies and manufacturing processes were funded from the European fisheries fund (EFF) on the basis of the operational program "Sustainable development of fisheries sector and coastal fishing areas 2007-2013". About 75% of the available 105.2 million Euros for subsidies for investment in fish processing was contracted in 2011.

In 2011, there were no major ownership changes in fish processing, but generally it is believed that further consolidation is needed to strengthened the sector and for further development.

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 56 Kg/person/year.

In 2011, the Fish Processing Industry in Portugal consisted of 185 enterprises, 82 of which were small enterprises with less than 11 employees (44%). By contrast, only 2% of the enterprises have more than 250 employees.

All together these enterprises employed 7,314 persons and production amounted to 207 thousand tons. Total income was €1,135.7 million, an increase of 4% compared to 2008.

Female employees represent about two thirds of total employees.

Production in 2011:

Frozen industry – 104,000 tons

Salting and drying - 59,000 tons

Cannery and preparation – 44,000 tons

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 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.

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

Romania

Despite the fact that Romania implemented a program for data collection only in 2008 and only data from 2009 is available by segments some assumptions could be made for the processing industry for the future. The national authorities responsible for policies on developing the processing sector have to pay more attention to the marketing and trading of local products using the opportunities/facilities/pylons of the next EMFF. Also, the potential of the local aquaculture and, even fishery (marine and freshwater) must be reconsidered for these purposes. The favourable trends will be maintained and the processing sector will make a bigger contribution to the growth of the national economy if specific measures are enforced by the responsible authorities and a structure for processing units (using European funds for establishment of a producers organization – actually missing) are put in place, as well as market provisions, so that 2012 and 2013 will be more relevant for this type of industry. This resource should be better used because the previous policy doesn't provide subsidies for the sector.

It will result in an increasing trend in the number of employees due to the demands on the domestic market and improvement of the trade quality. These assumptions for the future are based on the good profitability shown by the figures/data of the national sector. Also the better availability of the internal resources offered by the local aquaculture and fisheries will be on the benefit of the sector, at the moment processing units importing large quantities of fish and raw materials for their production.

The data for companies with fish processing not as main activity should be better illustrated due to the fact that there still is not a very clear criterion for how the data should be presented. There is also a need for splitting those companies on main and non-main activity in fish processing by not using only the share of this activity in the total incomes, but additional ones for a better understanding of the phenomenon inside the whole sector. To date, due to the largest share of the turnover deriving from fish processing activities represented by big supermarket chains, the results of other companies processing of fish is missing from the data collection process.

Slovenia

In 2011 there were 14 companies in the Slovenian fish processing sector. Between 2008 and 2011 the number of companies increased 17%. In 2011 Slovenia had 8 companies with less than 10 employees, 3 companies with 11-49 employees and also three companies with 50-249 employees. Among them are 7 companies with fish processing as not a main activity. These companies generate 4.4 million Euros of turnover from fish processing, which represent 12% of all turnover from fish processing activities.

In 2011 the turnover was 35.4 million Euros. Between 2008 and 2011 the turnover of the Slovenian fish processing industry increased by 22 %.

The value of raw material decreased by 26 % from 2008 to 2011 and amounted to 12,2 million Euros in 2011.

There were 379 employees in the Slovenian fish processing sector in 2011. With respect to the gender of those in employment, women are predominated with 220 employees. According to the FTE there were 351 FTE

employees in 2011. Among them were 203 women and 148 men. The level of employment increased between 2008 and 2011, with total employed increasing by 52% whiles the number of FTEs increased by 66% over the period.

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 sector is a very dynamic and diversified industry with a long tradition which relates to ancient history and constitutes today an important welfare engine for the coastal communities. Despite the shutdown of some small companies since the beginning of the financial crisis in 2008, equivalent to 10% of the total, the industry is still a strong sector within the seafood related activities in the country, providing full time jobs to 17,702 employees all over the country and yielding a turnover of 4,646.4 million euro in 2011. Although employment went down by 7% since 2008, total income increased by 12%, suggesting an improvement in industry's efficiency.

The Spanish industry, in particular the canned sector, shifted their orientation from traditional products and dependency on the local markets to face new consumers' preferences and trends, and increase focus on export markets, mainly other EU countries. Improved qualities of semi processed imports, enhanced efforts in new product development and strengthened access to the European markets are some of the keys explaining the relatively good position of the fish processing industry with regard to other industrial activities in the country.

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. The net turnover for the Swedish fish processing industry shows a positive trend from 2001, but the net profit has fluctuated and displays a negative trend especially during the studied period 2008-2011 (mainly due to higher cost of raw materials[4]). Most of the indicators indicate a decline for the industry as a whole since gross value added (GVA), return on investment (ROI) and EBIT (Earnings before interest and rate) were all lower in 2011 compared to 2008. However, net investments increased by 33 per cent between 2008 and 2011 which is an indication that the enterprises look positively to the future, besides indicating problematic access to capital.

The purchase of fish and other raw materials for production accounts for 60 per cent of the total operational cost and the industry imports approximately 70 per cent of all of their raw materials. This makes the industry dependent on the prices of raw material, tariff quotas and changes in exchange rates. The Swedish processing industry works a great deal with different certifications like the MSC. Non-certified products are today hard to put on the market since consumer awareness has increased. In past years the demand for highly processed products, which are almost ready to eat has increased. This development is likely to continue since most consumer prefer food that are almost ready to eat, easy to cook and at the same time healthy.

The development of the SEK is of great importance to the processing industries economic performance. If the data were recalculated into SEK a different development (percentage change) would have been shown, especially for the year 2009 when the Swedish krona was weak.

[4] The decrease in net profit during the latest years can be explained by increased costs for raw material due to reduced TAC for i.e. Norwegian spring spawning herring (2010-2012). Since it takes some time for the fish processing industry to increase their prices to consumers, the difference between increased costs for raw material and the realization of higher prices to customers are lost revenue.

Finally, during the studied period the total number of employees slightly decreased from 2,165 to 2,126 (with some variations during the years) and even the labour productivity decreased by a few per cent due to higher labor cost and a decrease in net profit.

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. 426 businesses in 2011 whose majority of turnover was attributed to processing seafood or salmon, a decrease of around 8% compared with 2008 figures. The total number of FTEs employed by those companies was around 18,500 in 2011, a decrease of around 8% from 2008. The combined turnover of those companies (turnover from all activities, not just processing activity) was approx. €7,500 million euro in 2011, around 8% lower than in 2009. A combination of lower turnover and higher operating costs, particularly raw material costs have placed additional financial pressure on the industry, resulting in lower average wages and tighter profit margins.

Across the UK the average size of processing units (in terms of FTE category) has increased since the mid 90's, with the majority of the increases having taken place over the last few years. In recent years, UK processing units, across all sizes, have been confronting many issues affecting business and financial performance. Higher volume units have been operating against tight margins with limited scope for price increases while lower volume units have become particularly exposed to supply volatility. Markets have been relatively flat with traditional peaks not as high and supplies have become increasingly irregular, with resulting higher distribution and transport costs. Credit control and late payment have become more of an issue, particularly for small and medium sized units, while fuel and energy costs have become a particular concern for medium sized units following the credit crunch in 2009.

4 NATIONAL CHAPTERS

4.1 BULGARIA

4.1.1 General overview of the Bulgarian fish processing industry sector

The Bulgarian fishery processing industry sector, as the data presented below suggest, experienced radical change in terms of enterprise (Table 4.1.1) and in terms of employment during the 2008/2011 period. Medium sized enterprises were displaced by micro enterprises and employment decreased in 2011 to approximately 1/3 of the 2008 employment.

Employment is almost evenly spread between men and women during 2011 both in terms of number of personnel and in terms of FTE while the decrease of male employees is estimated at 63% since 2008 and the decrease of female employees is estimated at 68% since 2008. FTE per enterprise is estimated at 9.8, considerably lower (78% decrease) than the 2008 value, reflecting the change in terms of enterprise size in the sector.

With regard to the labour productivity, data presented below suggest vast increase of productivity since 2010 and while average wage seems to have tripled since 2008.

As no expert from Bulgaria attended the meeting, no further analysis and insights of the Bulgarian sector can be provided. The analyses below are based only on the figures transmitted by Bulgaria to JRC data base; with respect to that it should be mentioned, as a general overview.

Table 4.1.1: Bulgarian fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	21	19	10	33	230%	57%
≤10 employees	5	4	6	30	400%	500%
11-49 employees	7	9	1	1	0%	-86%
50-249 employees	9	6	3	2	-33%	-78%
≥250 employees	0	0	0	0	0%	0%
Employment (number)						
Total employees	937	817	317	325	3%	-65%
Male employees	427	373	121	160	32%	-63%
Female employees	510	444	196	165	-16%	-68%
FTE	937	817	317	325	3%	-65%
Male FTE	427	373	121	160	32%	-63%
Female FTE	510	444	196	165	-16%	-68%
Indicators						
FTE per enterprise	44.6	43.0	31.7	9.8	-69%	-78%
Average wage (thousand €)	1.8	2.1	2.4	6.3	158%	252%
Labour productivity (thousand €)	10.7	14.5	27.5	26.4	-4%	147%
Unpaid work (%)	0	10.0	1.3	0.8	-40%	93%

As per the Table 4.1.1 and Figure 4.1.1 the number of enterprises increased in 2011 over 2008 with 11 units, the biggest percentage raising from the units with less than 10 employees; the number of the other two segments seriously decreasing, in 2011 remaining only one company in the segment 11-49 employees and 2 units in the segment 50-249 employees. That could be a result of the efforts for adjusting the investments during the last years of economic crisis.

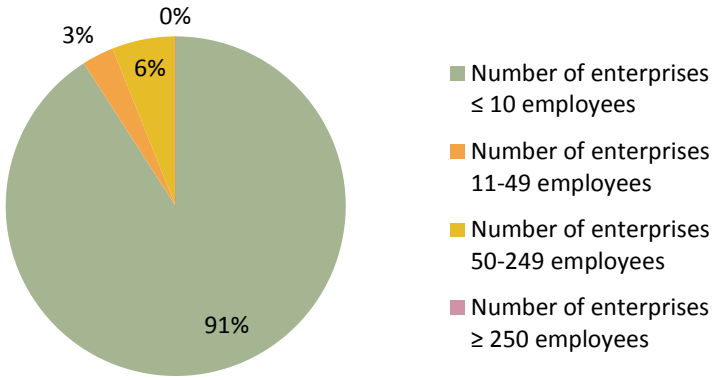


Figure 4.1.1: Size distribution of the Bulgarian fish processing enterprises, 2011

As presented in the Figure 4.1.2 the vast majority of the employment in the Bulgarian fishery processing sector is provided by small enterprises with less than 10 employees.

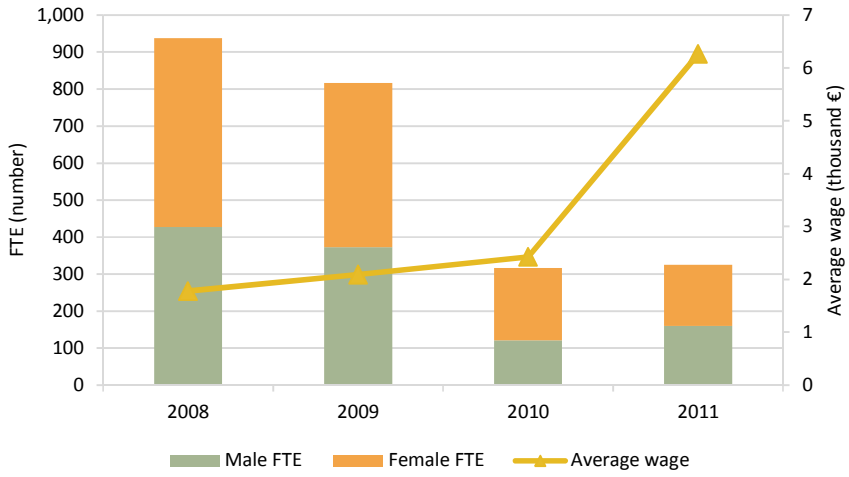


Figure 4.1.2: Bulgarian employment trends, 2008-2011

Total employment in the Bulgarian fishery processing sector has vastly decreased in 2010 to approximately 1/3 of the 2008 total employment and was registering a small increase in 2011 (Figure 4.1.2).

4.1.2 Economic performance of the Bulgarian fish processing industry sector

Income structure of the Bulgarian fishery sector for 2011, as presented below, suggests that processing as main activity generates the majority of the income in the sector.

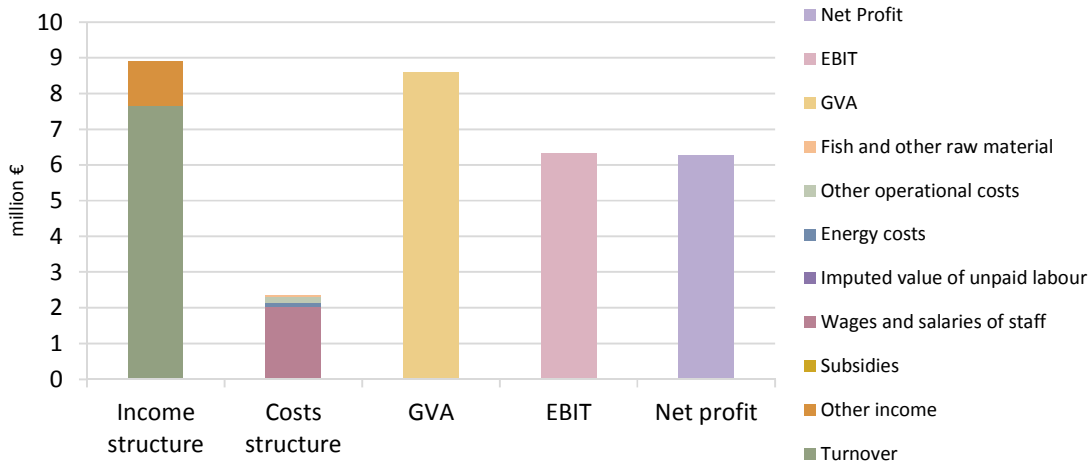


Figure 4.1.3: Bulgarian economic performance of the fish processing industry sector, 2011

The radical change of the Bulgarian fishery processing sector is reflected on the economic performance of the sector for the reporting period 2008/2011. Turnover generated by the processing activity of the sector decreased by 63%, from 20.9 million euro in 2008 to 7.7 million euros in 2011. For the same period other income, estimated at 5% of the total income in 2008 increased to reach 14% of the total income in 2011.

Purchase of raw material, energy costs and other operational costs decreased for the reporting period. On the other hand, wages and salaries increased. Net investment in the sector is estimated almost at zero.

While the performance of the sector is reflected in some of the performance indicators presented below, a number of indicators are affected by raw material costs.

Table 4.1.2: Bulgarian economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	20.9	94%	17.7	95%	8.4	92%	7.7	86%	-9%	-63%
Other income	1.1	5%	0.6	3%	0.7	8%	1.3	14%	76%	9%
Subsidies	0.3	1%	0.2	1%	0.0	0%	0.0	0%	-100%	-100%
Total Income	22.3	100%	18.5	100%	9.1	100%	8.9	100%	-3%	-60%
Expenditure (million €)										
Purchase of fish and other raw material for production	10.4	47%	5.4	29%	0.1	1%	0.0	1%	-66%	-100%
Wages and salaries of staff	1.7	7%	1.5	8%	0.8	8%	2.0	23%	166%	22%
Imputed value of unpaid labour	0.0	0%	0.2	1%	0.0	0%	0.0	0%	59%	136%
Energy costs	0.6	3%	0.5	2%	0.1	2%	0.1	1%	-13%	-79%
Other operational costs	1.0	5%	0.6	3%	0.2	2%	0.1	2%	-8%	-86%
Total production costs	13.7	61%	8.2	44%	1.2	13%	2.3	26%	96%	-83%
Capital Costs (million €)										
Depreciation of capital	0.1	1%	1.5	8%	0.2	2%	0.2	2%	8%	79%
Financial costs, net	0.6	3%	0.4	2%	0.1	1%	0.1	1%	-59%	-90%
Extraordinary costs, net	0.1	0%	1.2	7%	0.0	0%	0.0	0%	-34%	-54%
Capital Value (million €)										
Total value of assets	21.3	95%	15.8	85%	1.6	18%	2.0	22%	24%	-91%
Net Investments	1.4	6%	3.0	16%	0.0	0%	0.0	0%	-10%	-99%
Debt	11.0	49%	7.7	42%	4.8	52%	4.4	49%	-9%	-60%
Performance Indicators (million €)										
Gross Value Added	10.0	45%	11.8	64%	8.7	95%	8.6	97%	-1%	-14%
Operating Cash Flow	8.6	39%	10.4	56%	8.0	87%	6.6	74%	-18%	-24%
Earning before interest and tax	8.5	38%	8.9	48%	7.7	85%	6.3	71%	-18%	-26%
Net Profit	8.0	36%	8.5	46%	7.6	83%	6.3	71%	-17%	-21%
Capital productivity (%)	47.1		74.7		542.7		430.9			
Return on Investment (%)	40.1		56.2		483.0		317.8			
Financial Position (%)	51.5		48.9		297.6		218.9			
Future Expectation Indicator (%)	5.9		10.0		-11.5		-10.1			

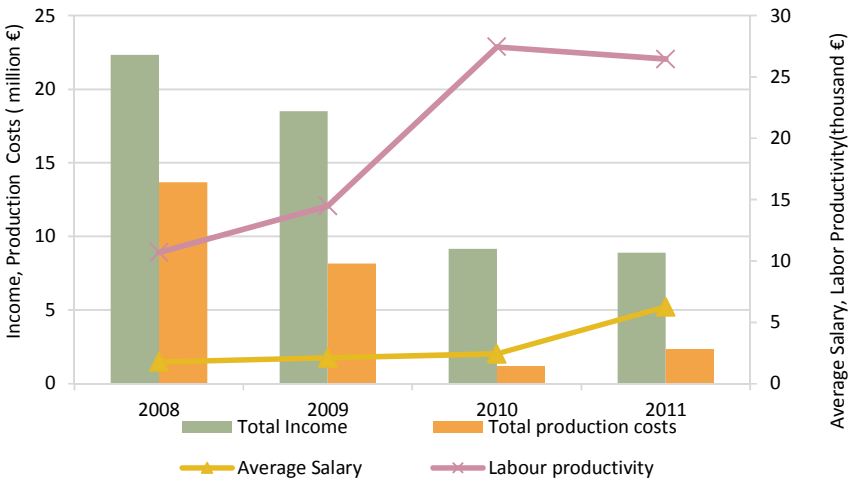


Figure 4.1.4: Income, costs, wages and labour productivity trends for the Bulgarian fish processing industry sector overview, 2008-2011

As mentioned above, the level of the wages and labour productivity - increasing - calculated based on data transmitted by member state have a total "opposite" evolution considering the graph of total income as per the Figure 4.1.4 – decreasing dramatically in 2011 versus 2008. The curve downward trend in total costs of production is greater than the decrease of total income curve. That is due of the missing fish and raw material purchase costs illustrated by the percentage of such component. Member state has to explain the figures and the quality of data transmitted.

4.1.3 Trends and drivers for change

As no expert from Bulgaria attended the meeting, no further analysis and insights of the Bulgarian sector can be provided. Only one remark could be done, as a result of graphs released based on data transmitted by member state, namely the quality and consistency of data collected, which are questionable.

4.2 CYPRUS

4.2.1 General overview of the Cypriot fish processing industry sector

In 2011, there were only 5 SME'S that do fish processing in Cyprus, a number that was no changed relative to 2010. The turnover decreased in the same period 39%, corresponding to turnover of €13.7 million in 2010, but it was increased 113%, corresponding to turnover estimated for the year 2008. The purchase of fish and other raw material for production was 11.5 million € in 2011, 8% and 2618 % higher than that estimated in the years 2010 and 2008 respectively. The development of the Cypriot fish processing industry for the year 2011 is characterised by a significant increase in the number of male employers (71 or 153 male FTE %) relative to 2008.

The total work places were also increased from 56 in 2008 to 59 in 2010, finally up to 77 in 2011. The number of full-time employees increased as well during the same period from 43 in 2008 to 58 in 2010, up to 75 FTEs in 2011. Due to relatively higher net financial and other operational costs, the net profit of the fishery processing sector decreased in 2011, 372 and 165% compared to the years 2008 and 2010 respectively. Thus, average salaries decreased as well during the same period, approximately 17% and reached to €13,500 in 2011 from the amount of €16,200 in 2008. Because of confidentiality issues due to this low number of companies, it is only going to present a small part of the Cyprus fish processing sector data.

In 2011, there were additionally 14 enterprises that carried out fish processing but not as a main activity in Cyprus. Their turnover attributed to fish processing was €8,106,963 million, a number which represent 49% of the total turnover of the sector. For the year 2008 the 13 non-main activities SME's had a turnover of €9,777,349 that represented 71% of the total turnover.

In 2011 there were only 5 SME's whose main activity was fish processing in Cyprus, e.g. 2 of them (40%) accounted very small (< 11 persons) and 3 of them accounted small (11 to 49 persons) enterprises. There were no enterprises that employed more than 50 persons. Compared to the year 2008 the total number of the small enterprises changed negatively (from 4 to 3) by 25 % in 2011. The total number of employees in the Cypriot fish processing sector was 77 in 2011, of which 65% were male and 35% female. Compared to 2008, the number of male and total FTEs increased 153% and 74% respectively in 2011, from 17 to 43 and from 43 to 75 persons. Average salaries decreased during the same period approximately 17% and reached to €13,500 in 2011 from the amount of €16,200 in 2008.

Table 4.2.1: Cypriot fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises						
≤10 employees	0	0	2	2	0%	0%
11-49 employees	4	3	3	3	0%	-25%
50-249 employees	0	0	0	0	0%	0%
≥250 employees	0	0	0	0	0%	0%
Employment (number)						
Total employees	56	43	59	77	31%	38%
Male employees	24	26	37	41	11%	71%
Female employees	32	17	29	31	7%	-3%
FTE	43	43	58	75	30%	74%
Male FTE	17	26	39	43	12%	153%
Female FTE	26	17	29	32	10%	23%
Indicators						
FTE per enterprise						
Average wage (thousand €)	16.2	12.0	15.4	13.5	-12%	-17%
Labour productivity (thousand €)	75.5	15.8	42.3	28.2	-33%	-63%
Unpaid work (%)	0	0.0	0.0	0.0	0%	0%

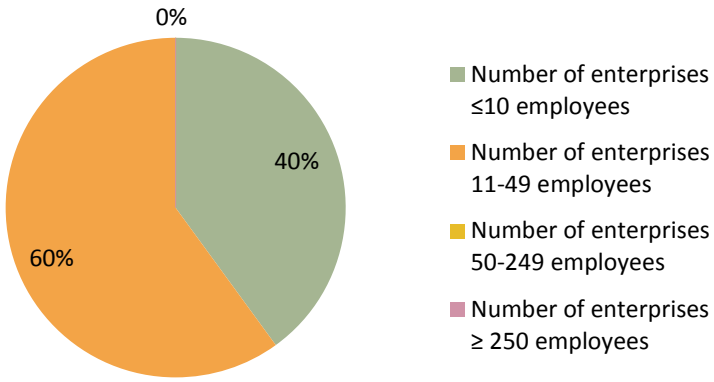


Figure 4.2.1: Size distribution of the Cypriot fish processing enterprises, 2011

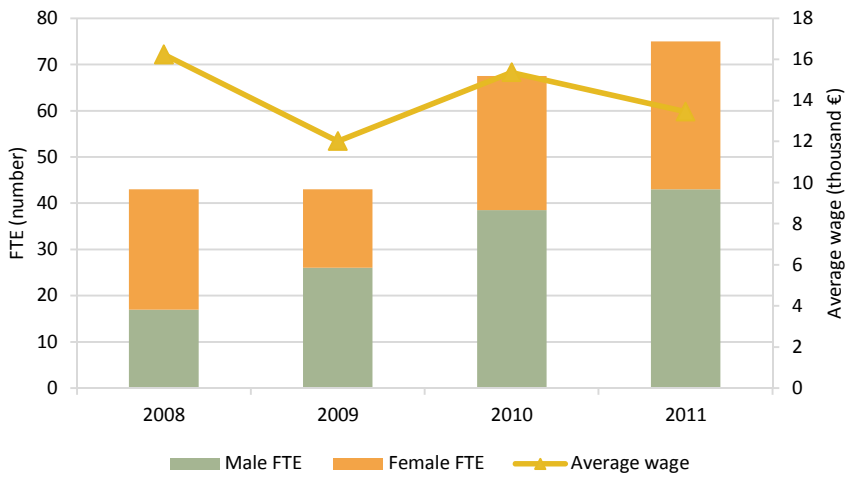


Figure 4.2.2: Cypriot employment trends, 2008-2011

4.2.2 Economic performance of the Cypriot fish processing industry sector

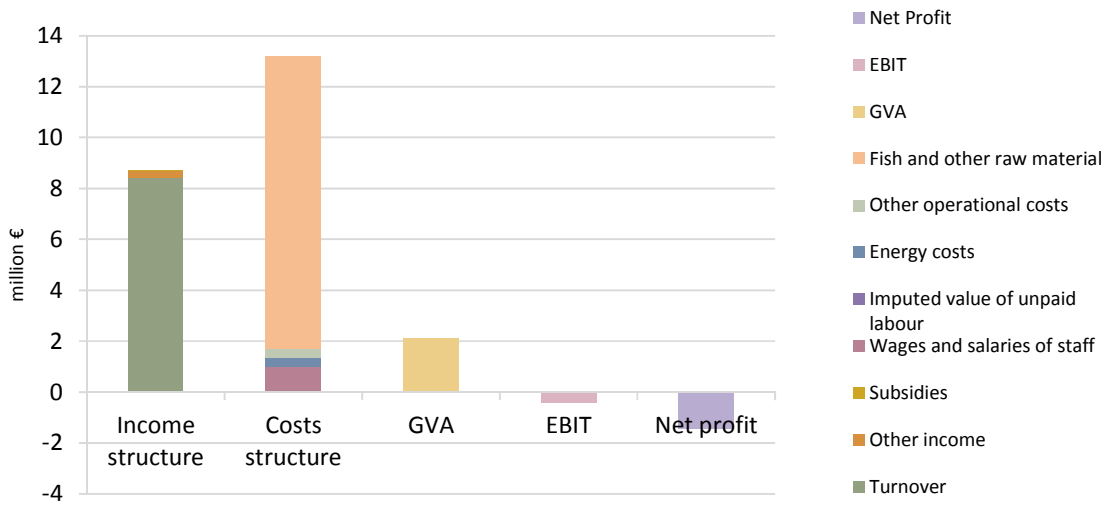


Figure 4.2.3: Cypriot economic performance of the fish processing industry sector, 2011

Table 4.2.2: Cypriot economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	3.9	97%	4.8	100%	13.7	100%	8.4	59%	-39%	113%
Other income	0.0	1%	0.0	0%	2.8	20%	0.3	2%	-90%	580%
Subsidies	0.1	2%	0.0	0%	0.1	1%	0.0	0%	-76%	-74%
Total Income	4.1	100%	4.8	100%	13.8	100%	14.3	100%	4%	251%
Expenditure (million €)										
Purchase of fish and other raw material for production	0.4	10%	3.8	80%	10.6	77%	11.5	80%	8%	2618%
Wages and salaries of staff	0.7	17%	0.5	11%	0.9	6%	1.0	7%	14%	45%
Imputed value of unpaid labour	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Energy costs	0.2	5%	0.2	3%	0.3	2%	0.3	2%	-1%	48%
Other operational costs	0.1	2%	0.1	3%	0.3	2%	0.4	2%	39%	287%
Total production costs	1.4	35%	4.6	97%	12.1	88%	13.2	92%	9%	821%
Capital Costs (million €)										
Depreciation of capital	0.4	10%	0.7	14%	1.3	9%	1.5	11%	18%	290%
Financial costs, net	0.1	2%	0.2	4%	0.7	5%	1.0	7%	56%	1440%
Extraordinary costs, net	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Capital Value (million €)										
Total value of assets	7.5	184%	5.6	118%	6.5	47%	5.2	36%	-20%	-31%
Net Investments	0.3	8%	0.0	1%	0.301	2%	0.289	2%	-4%	-10%
Debt	2.9	71%	4.7	99%	3.9	29%	3.6	25%	-9%	22%
Performance Indicators(million €)										
Gross Value Added	3.2	80%	0.7	14%	2.4	18%	2.1	15%	-13%	-35%
Operating Cash Flow	2.6	65%	0.2	3%	1.7	12%	1.1	8%	-32%	-57%
Earning before interest and tax	2.3	55%	-0.5	11%	0.4	3%	-0.4	3%	-214%	-118%
Net Profit	2.2	54%	-0.7	15%	-0.3	2%	-1.4	10%	-372%	-165%
Capital productivity (%)	43.2		12.0		37.5		40.6			
Return on Investment (%)	30.0		-9.0		5.5		-7.7			
Financial Position (%)	38.8		84.0		60.7		68.3			
Future Expectation Indicator (%)	-0.9		-11.3		-15.4		-23.9			

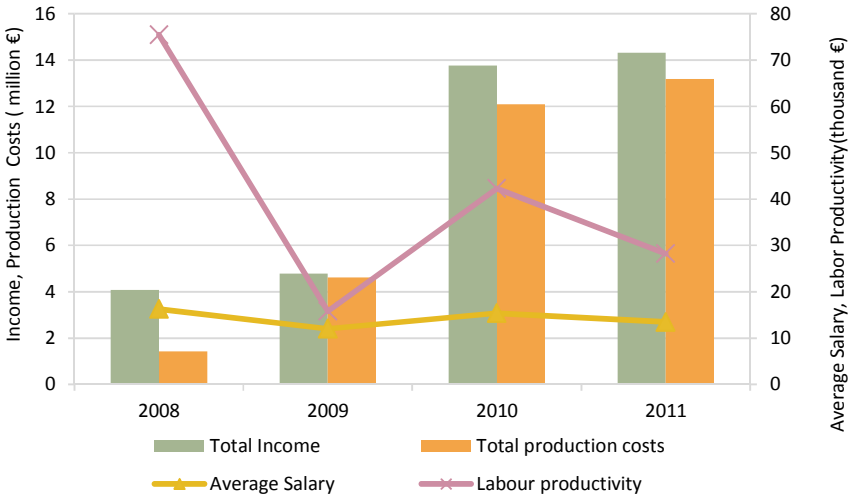


Figure 4.2.4: Income, costs, wages and labour productivity trends for the Cypriot fish processing industry sector overview, 2008-2011

4.2.3 Trends and drivers for change

In general, if someone wanted to describe the situation of the Cypriot fish processing sector in 2011, could say that it was waiting for much better time periods. The number of the fishery processing enterprises in 2011 remained at the same level as in 2010. However, the activity of enterprises was negatively affected by the domestic dept economic crisis. Compared to 2010, the turnover of production decreased approximately 39% in 2011. The number of male and total employees was drastically increased in 2011 (% 153 male FTE and 74 FTE respectively compared to the numbers in 2008) and during the same period time the average salary was decreased 17%. SME's kept labour productivity costs as low as possible. Due to relatively higher net financial and other operational costs the net profit of the fishery processing sector decreased in 2011 (372 and 165% respectively compared to the years 2008 and 2010). There is not to expect significant changes in 2012 and 2013. The Cypriot fish processing enterprises may apply income from subsidies as investment from the European Union as well as from the local government. The aim of this investment subsidy is to develop new, high quality and high nutritional value final fishery products and modernise the existed processing lines for producing high added value traditional fishery products.

4.3 DENMARK

4.3.1 General overview of the Danish fish processing industry sector

The Danish fish processing industry is mainly located around the most important fishing harbors 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 fish meal and fish oil 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 thru Denmark destined for the European marked, especially the market for fresh salmon in France and German. 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 2011 and the turnover increased from 2010 to 2011 from 1.8 to 1.9 billion Euros, corresponding to an increase of 2%. 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 6% from 530 thousand tons to 498 thousand tons. The production for human consumption decreased by 8%, whereas the production of fishmeal and –oil decreased by 5 %.

In Table 4.3.1 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 2011 the number of enterprises decreased from 117 to 107, corresponding to a 9% decrease.

In total, the Danish fish processing sector employed 3 704 people in 2011, which was a decrease of 2% compared to 2010. From 2008 to 2011 the numbers employed decreased by 15%. The number of full-time employees also decreased from 4 147 in 2008 to 3 043 in 2011, corresponding to a decrease of 27%.

Table 4.3.1: Danish fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	117	123	115	107	-7%	-9%
≤10 employees	56	63	56	54	-4%	-4%
11-49 employees	31	37	37	33	-11%	6%
50-249 employees	30	23	22	20	-9%	-33%
≥250 employees	0	0	0	0	0%	0%
Employment (number)						
Total employees	4,379	4,227	3,791	3,704	-2%	-15%
Male employees	2,146	2,121	1,989	1,952	-2%	-9%
Female employees	2,233	2,106	1,802	1,752	-3%	-22%
FTE	4,147	3,596	3,235	3,043	-6%	-27%
Male FTE	2,040	1,917	1,741	1,624	-7%	-20%
Female FTE	2,107	1,679	1,495	1,419	-5%	-33%
Indicators						
FTE per enterprise	35.4	29.2	28.1	28.4	1%	-20%
Average wage (thousand €)	48.8	55.8	58.6	59.4	1%	22%
Labour productivity (thousand €)	61.9	80.7	89.9	105.7	18%	71%
Unpaid work (%)	1	0.8	0.8	0.7	-16%	-8%

The average size of the enterprises measured by the number of full-time employees fell from 35 to 28 employees from 2008 to 2011. On the other hand, the average salary per FTE increased from 49 to 59 thousand euro per year over the same period. The labor productivity in terms of gross value added per FTE has also been increasing from 62 to 106 thousand euro.

The value of unpaid labor in the Danish fish processing industry is rather insignificant. In the years from 2008 to 2011, the value has been estimated to be less than 1% of total amount of wages and salaries paid.

In Figure 4.3.1, the size distribution of the Danish fish processing enterprises is shown for 2011. The sector is dominated by small and middle sized enterprises. In Denmark, 54 enterprises have less than 10 full time employees, corresponding to 50% of the total number of enterprises in 2011. Furthermore, 33 enterprises have between 10 to 49 employees and 20 have between 50 to 249 employees, corresponding to 31% and 19%, respectively. In Denmark there is no large fish processing company with more than 250 employees.

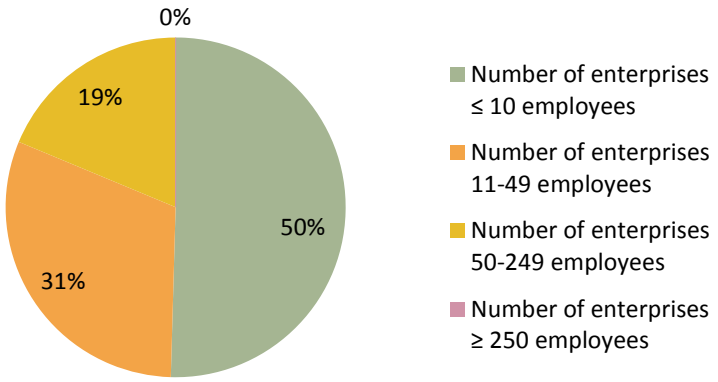


Figure 4.3.1: Size distribution of the Danish fish processing enterprises, 2011

In Figure 4.3.2, the development of male and female employees and the average wages are shown from 2008 to 2011. The number of male and female employees and FTEs has been decreasing from 2008 to 2011, however, the ratio between male and female have been rather evenly distributed. Nevertheless, the number of females has decreased more than numbers of male employees and FTEs. The average salary has been increasing over the whole period.

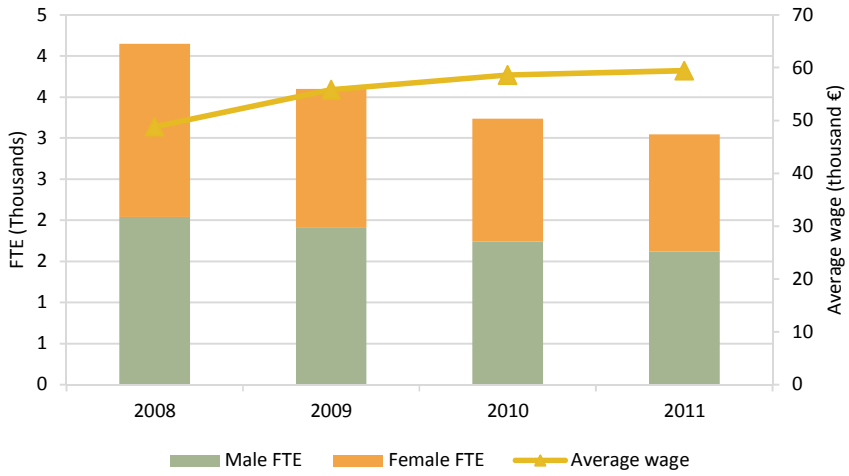


Figure 4.3.2: Danish employment trends, 2008-2011

4.3.2 Economic performance of the Danish fish processing industry sector

In Figure 4.3.3 and Table 4.3.2, the economic performance for the Danish processing industry is shown for 2011 and for the period from 2008 to 2011.

In 2011, the total income for the Danish fish processing industry reached 1.9 billion Euros, which was an increase of 2% compared to 2010. The total income consists of turnover, other income and subsidies of which turnover and other income make up for 96% and 4%, 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 60% of the total income. Other operational cost covers 22%, whereas wages and salaries and imputed value of unpaid labor cover 9% and 1%, 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 322 million Euros in 2011, which was an increase of 11% from 2010.

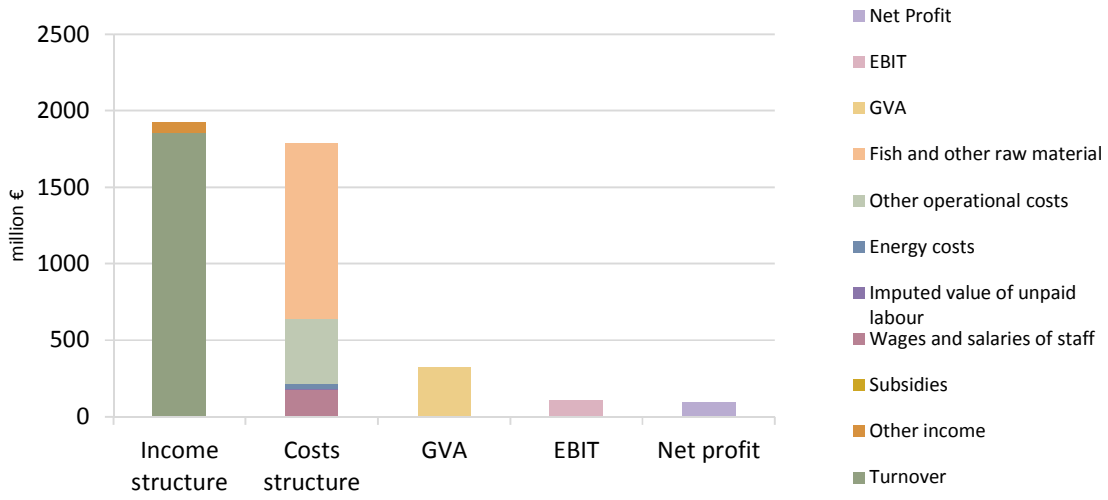


Figure 4.3.3: Danish economic performance of the fish processing industry sector, 2011

Table 4.3.2: Danish economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	1,702.6	100%	1,693.2	103%	1,828.8	97%	1,858.7	96%	2%	9%
Other income	-5.3	0%	-49.2	-3%	60.1	3%	68.4	4%	14%	1383%
Subsidies	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Total Income	1,697.3	100%	1,644.0	100%	1,888.9	100%	1,927.1	100%	2%	14%
Expenditure (million €)										
Purchase of fish and other raw material for production	990.9	58%	953.2	58%	1,041.0	55%	1,146.9	60%	10%	16%
Wages and salaries of staff	200.8	12%	199.2	12%	188.0	10%	179.5	9%	-5%	-11%
Imputed value of unpaid labour	1.5	0%	1.5	0%	1.5	0%	1.2	0%	-20%	-17%
Energy costs	33.2	2%	30.0	2%	35.3	2%	36.0	2%	2%	9%
Other operational costs	416.6	25%	370.5	23%	521.9	28%	422.7	22%	-19%	1%
Total production costs	1,643.0	97%	1,554.4	95%	1,787.7	95%	1,786.4	93%	0%	9%
Capital Costs (million €)										
Depreciation of capital	41.0	2%	40.1	2%	35.7	2%	33.6	2%	-6%	-18%
Financial costs, net	41.1	2%	35.9	2%	9.5	1%	12.4	1%	31%	-70%
Extraordinary costs, net	-2.3	0%	-2.7	0%	0.9	0%	-2.7	0%	-413%	-21%
Capital Value (million €)										
Total value of assets	1,218.4	72%	1,195.0	73%	1,142.9	61%	1,134.3	59%	-1%	-7%
Net Investments	34.3	2%	37.9	2%	7.9	0%	39.2	2%	395%	14%
Debt	908.5	54%	870.0	53%	813.6	43%	628.5	33%	-23%	-31%
Performance Indicators(million €)										
Gross Value Added	256.6	15%	290.3	18%	290.8	15%	321.5	17%	11%	25%
Operating Cash Flow	54.3	3%	89.6	5%	101.2	5%	140.8	7%	39%	159%
Earning before interest and tax	13.3	1%	49.5	3%	65.5	3%	107.2	6%	64%	703%
Net Profit	-27.7	2%	13.6	1%	56.0	3%	94.8	5%	69%	442%
Capital productivity (%)	21.1		24.3		25.4		28.3			
Return on Investment (%)	1.1		4.1		5.7		9.5			
Financial Position (%)	74.6		72.8		71.2		55.4			
Future Expectation Indicator (%)	-0.5		-0.2		-2.4		0.5			

In 2008, the Danish fish processing industry experienced a negative net profit, but since then the net profit has been positive and increasing. The total income has increased over the years from 2008 to 2011 with 14%. The cost has not increased at the same pace and grew with 9% in the same period. Especially, the expenditures for wages and salaries have been reduced with 11% from 2008 to 2011. Furthermore, the expenditures on other operational cost have only been increasing by 1% over this period. All in all, the sector has become more profitable even though there have been a global economic crisis.

Capital productivity and return on investment has increased over the period and the indicator of future expectation for the fish processing industry is positive.

In Figure 4.3.4, the income, cost, wages and labor 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 2011. As a result the GVA has been increasing. The increased GVA and the lower employment have resulted in increasing labor productivity in the sector, even though, the average cost of labor has also increased from 2008 to 2011.

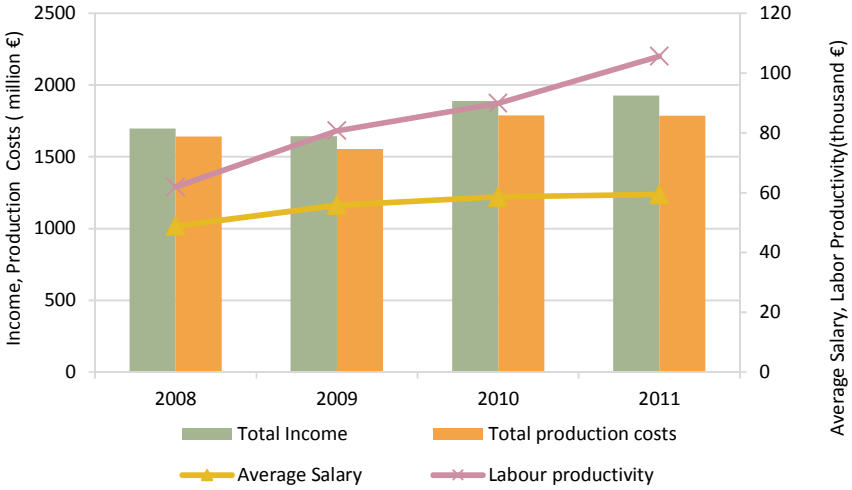


Figure 4.3.4: Income, costs, wages and labour productivity trends for the Danish fish processing industry sector overview, 2008-2011

4.3.3 Trends and drivers for change

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 in the Danish processing industry is measured as output from the industry and not as raw material going in to the industry, nevertheless; the output data give a good overview of the species used and the importance of each species for the industry.

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 Figure 4.3.3, 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 2011. The most important species for consumption in terms of volume is herring (24%) followed by Salmon (20%) and cod (18%). In terms of value the most important species are salmon (30%), cod (16%), and herring (11%). The production volume and value has been falling for all three species from 2008 to 2011.

Table 4.3.3 : Danish raw materials as output

	Volume (tonne)				Value (thousand €)			
	2008	2009	2010	2011	2008	2009	2010	2011
Herring	65,789	56,090	52,141	37,665	115,860	99,328	91,667	90,054
Cod	35,346	30,576	27,882	29,400	181,317	142,339	127,016	133,333
Salmon	36,430	33,129	30,164	32,297	262,769	249,194	252,419	257,661
Others	81,923	74,547	63,195	60,375	383,602	368,145	352,957	374,059
Total for consumption	219,489	194,343	173,382	159,737	943,548	859,005	824,059	855,108
Fish for reduction	346,460	358,110	356,795	338,039	276,613	296,237	375,403	390,591
Total	565,949	552,453	530,176	497,775	1,220,296	1,155,108	1,199,462	1,245,699

Source: Calculation based on data from Statistics Denmark.

Production of fish meal and fish oil is an important part of the fish processing industry in Denmark, which is based on fish for reduction. In 2011 fish for reduction make up for 68% of the total Danish catch in volume and 31% of the total value. The volume of fish for reduction has been decreasing from 2008 to 2011, whereas the value has been increasing.

In Table 4.3.4, the volume and value divided on degree of processing is shown for the fish processing industry form 2008 to 2011. The most important group of products for consumption, in terms of degree of processing, are prepared and preserved products, which accounted for 65% of the volume of processed products. Fresh fillet makes up for 12%, while smoked, salted and dried cover 18%, and frozen fillet 6%. In terms of value prepared and preserved products are the most important covering 57% of the total value, while smoked products cover 26%. Fresh and frozen fillet make up for 12 % and 5 %, respectively.

Table 4.3.4: Danish main products

	Volume (tonne)				Value (thousand €)			
	2008	2009	2010	2011	2008	2009	2010	2011
Fresh fillet	43,023	34,065	20,986	19,159	141,801	127,151	96,774	104,839
Frozen fillet	14,297	9,006	8,744	9,007	38,441	38,172	50,269	40,188
Smoked	28,578	25,427	24,126	27,898	227,823	196,505	192,070	221,237
Prepared/preserved	133,591	125,846	119,526	103,672	535,618	497,177	484,946	488,844
Total for consumption	219,489	194,344	173,382	159,737	943,548	859,005	824,059	855,108
Fish meal/fish oil	346,460	358,110	356,795	338,039	276,613	296,237	375,403	390,591
Total	565,949	552,453	530,176	497,775	1,220,296	1,155,108	1,199,462	1,245,699

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 fish meal and fish oil factories are very important to the Danish industry and are closely link to the fleet fishing 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 a head and make the necessary investment and innovations to stay competitive.

The salmon 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 their 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 2011. 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.) are a hindrance for the development of a competitive and sustainable aquaculture sector in EU.

In 2012, the profitability in the fish processing sector for consumption and the fish meal factories are expected to decrease compared to 2011. However, the positive trend in the industry net profit is expected to continue due to higher prices on fish and fish products and increasing labor productivity.

In 2012, the amount of raw materials going into the industry for human consumption is slightly decreasing, whereas the raw material for the fishmeal and oil industry is decreasing with 18% and the value of production is decreasing with 12%. The industry for human consumption is therefore expected to have a result close the result in 2011. However, the situation for the fish meal and fish oil is more uncertain. It is expected that the result from fishmeal factories will be substantial lower than in 2011.

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 the beginning of 2011, because of the collapse of the aquaculture sector in Chile, but in the middle of 2011 the prices dropped. This will probably result in a positive result, 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.

4.3.3.1 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 2011, 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 between 5 to 7 enterprises outside 10.20 have fish processing activities. 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.

4.3.3.2 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., Asche, F., Nielsen, M. (2013) The re-structuring of the European fresh water aquaculture industry:

Surviving global competition - From family owned to large scale industry. (Unpublished)

4.4 ESTONIA

4.4.1 General overview of the Estonian fish processing industry sector

In 2011 there were 55 enterprises whose main activity was fish processing in Estonia, of which 84% were rather small having up to 49 employees per enterprise. The number of total employees was 1847, about 1810 FTE. The turnover of production was nearly €129 million in 2011. Additionally, there were also 12 enterprises that carried out fish processing but not as a main activity. Their turnover attributed to fish processing was approximately €2 million, which accounts for approximately 2% from total production turnover. The fish processing sector in Estonia is largely dependent on export. The share of exported fish products was around 76% in 2011.

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 were Russia and Ukraine and import countries Latvia and Finland in 2011. 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), 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, Serbia, 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 2011 were frozen fish, preserves and conserves. But also smoked fish, fish fillets and ready-made products were represented in assortment.

The distribution of 55 enterprises whose main activity was fish processing was divided as follows by number of employees: around 84% of them accounted for micro- and small enterprises, 27 and 19 enterprises respectively; there were also 9 medium-sized enterprises and no enterprise that employed more than 249 persons. General overview for enterprises by the size category is presented in Figure 4.4.1. Compared to the previous years the total number of enterprises increased slightly in 2011. Some changes took place also in different size classes – increased the proportion of micro-sized enterprises.

The total number of employees in the Estonian fish processing industry was 1847 in 2011, of which 40% were male and 60% female. Compared to 2010, the number of FTEs decreased 3% in 2011, from 1860 to 1810. This decline was mainly caused by business restructuring in one of the country's major fish processing companies. After the fall in 2010 the average wage showed a rising trend in 2011 and reached to €9503, the increase was

10%. The more detailed Estonian fish processing industry sector overview in numbers is presented in Table 4.4.1.

Table 4.4.1: Estonian fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	50	51	52	55	6%	10%
≤ 10 employees	16	21	21	27	29%	69%
11-49 employees	27	20	23	19	-17%	-30%
50-249 employees	5	9	8	9	13%	80%
≥ 250 employees	2	1	0	0	0%	-100%
Employment (number)						
Total employees	1,936	1,847	1,887	1,847	-2%	-5%
Male employees	677	646	660	739	12%	9%
Female employees	1,259	1,201	1,227	1,108	-10%	-12%
FTE	1,864	1,746	1,860	1,810	-3%	-3%
Male FTE						
Female FTE						
Indicators						
FTE per enterprise	37.3	34.2	35.8	32.9	-8%	-12%
Average wage (thousand €)	9.8	9.6	8.6	9.5	10%	-3%
Labour productivity (thousand €)	13.2	12.3	12.9	12.0	-7%	-9%
Unpaid work (%)	0	0.5	0.3	0.4	19%	47%

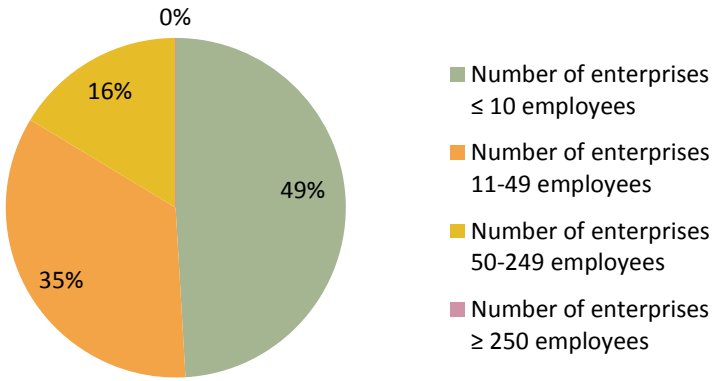


Figure 4.4.1: Size distribution of the Estonian fish processing enterprises, 2011

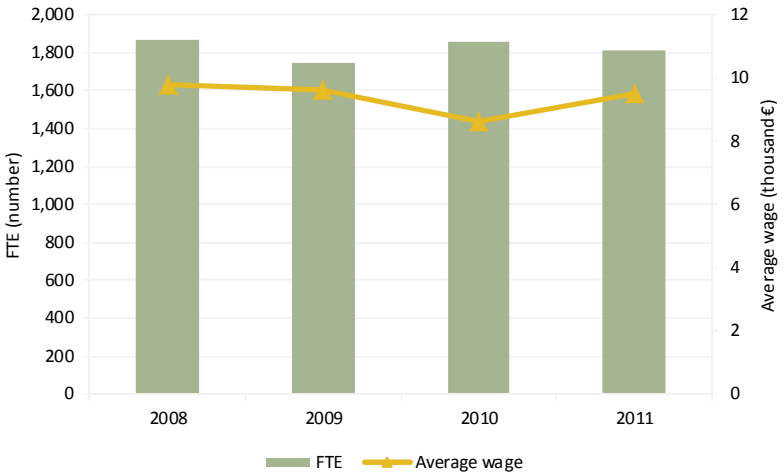


Figure 4.4.2: Estonian employment trends, 2008-2011

4.4.2 Economic performance of the Estonian fish processing industry sector

2011 showed continued recovery in economic activities, as the number of fish processing companies grew somewhat, turnover increased by 16% and was nearly €129 million in 2011 (Table 4.4.2). However, in comparing the other economic performance indicators between 2010 and 2011, then GVA decreased by 9% to €21.7 million in 2011. Also OCF, EBIT and net profit underwent reduction, 21%, 47% and 59% respectively. Return on investment decreased from 12.8% in 2010 to 5.9% in 2011. The main factor that influenced those performance indicators was significant increase in costs of purchase of fish and other raw material. The share of this variable to total income was 61% in 2011. But in 2010 it was 56%. It refers to increase in the raw material price and that companies were forced to keep the production price at the previous level.

The total amount of production costs by the Estonian fish processing industry in 2011 was €127.6 million. The bulk (64%) 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 2010, the total operational costs increased 20% in 2011.

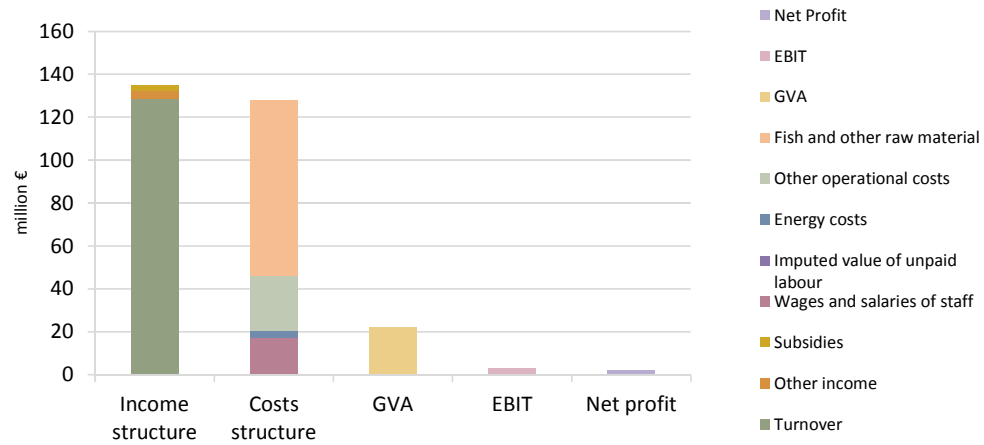


Figure 4.4.3: Estonian economic performance of the fish processing industry sector, 2011

Table 4.4.2: Estonian economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	116.5	97%	99.9	95%	110.9	96%	128.6	95%	16%	10%
Other income	2.7	2%	2.9	3%	3.1	3%	3.6	3%	15%	30%
Subsidies	0.4	0%	2.5	2%	1.0	1%	2.5	2%	145%	491%
Total Income	119.7	100%	105.2	100%	115.0	100%	134.7	100%	17%	13%
Expenditure (million €)										
Purchase of fish and other raw material for production	71.8	60%	60.1	57%	64.8	56%	81.6	61%	26%	14%
Wages and salaries of staff	18.2	15%	16.7	16%	16.0	14%	17.1	13%	7%	-6%
Imputed value of unpaid labour	0.0	0%	0.1	0%	0.1	0%	0.1	0%	28%	38%
Energy costs	4.1	3%	3.3	3%	3.6	3%	3.4	2%	-7%	-17%
Other operational costs	18.7	16%	17.9	17%	21.6	19%	25.5	19%	18%	36%
Total production costs	112.8	94%	98.1	93%	106.1	92%	127.6	95%	20%	13%
Capital Costs (million €)										
Depreciation of capital	3.5	3%	3.6	3%	3.3	3%	4.1	3%	24%	16%
Financial costs, net	1.7	1%	1.2	1%	0.9	1%	1.1	1%	18%	-36%
Extraordinary costs, net	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Capital Value (million €)										
Total value of assets	44.2	37%	43.4	41%	44.0	38%	50.6	38%	15%	15%
Net Investments	6.7	6%	4.5	4%	8.7	8%	9.2	7%	5%	36%
Debt	47.2	39%	42.8	41%	37.5	33%	42.2	31%	13%	-11%
Performance Indicators(million €)										
Gross Value Added	24.7	21%	21.4	20%	24.0	21%	21.7	16%	-9%	-12%
Operating Cash Flow	6.9	6%	7.2	7%	9.0	8%	7.1	5%	-21%	3%
Earning before interest and tax	3.3	3%	3.6	3%	5.7	5%	3.0	2%	-47%	-10%
Net Profit	1.7	1%	2.4	2%	4.7	4%	1.9	1%	-59%	17%
Capital productivity (%)	55.8		49.4		54.5		43.0			
Return on Investment (%)	7.6		8.2		12.8		5.9			
Financial Position (%)	106.9		98.6		85.1		83.3			
Future Expectation Indicator (%)	7.3		2.0		12.3		10.0			

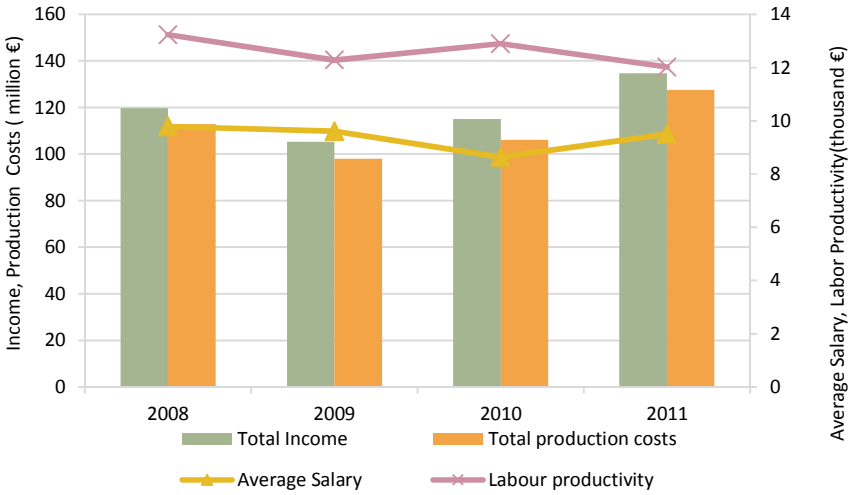


Figure 4.4.4: Income, costs, wages and labour productivity trends for the Estonian fish processing industry sector overview, 2008-2011

4.4.3 Trends and drivers for change

If follow some of the trends in the Estonian fish processing industry sector between 2008 – 2011 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 nearly €129 million in 2011. However, the performance indicators for 2011 refer to increase in the raw material price. Compared to 2010, the number of FTEs decreased 3% in 2011, from 1860 to 1810. This decline was mainly caused by business restructuring in one of the country's major fish processing companies. After the fall in 2010 the average wage showed a rising trend in 2011 and reached €9503, the increase was 10%.

According to preliminary estimates the competition in the Estonian fish processing industry sector strengthens in 2012. The number of companies whose main business comprised processing and canning of fish, crustaceans and molluscs increases to 60. Also the growth in production volume is expected in 2012. One of the factors that influence the demand is rapidly expanding Asian market. Also the increase in raw material price affects the state of the industry: in order to stay competitive companies are keeping the production price at the same level and despite of the rise in sales volume this causes the decline in profit.

The Estonian fish processing enterprises continue to use the opportunity to get investment subsidy from the European Fisheries Fund. The aim of this subsidy is 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.

4.5 FINLAND

4.5.1 General overview of the Finnish fish processing industry sector

There were 170 fish processing enterprises operating in Finland in 2011, of which 143 companies were processing fish as their main activity. These main activity enterprises generated a total turnover of €263 million. There were 27 non main activity enterprises processing fish and their total turnover was €81 million in 2011. Fish processing enterprises used 65 million kg of fish as raw material, 41 million kg were domestic fish and 24 million kg were imported. Total amount of fish processed in 2011 decreased from previous years due to decreased amounts of Baltic herring and sprat exported deep-frozen. The processing industry employed 777 FTEs or 870 persons.

The fish processing industry in Finland is highly concentrated in the sense that 10% of the companies with the highest turnover produced around 77% of the total revenue generated by the industry in 2011. 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.

4.5.1.1 Main products and raw materials

The main species used in Finnish processing were Baltic herring (23 million kg), salmon (16 million kg) and rainbow trout (14 million kg). The Finnish industry processed also herring and various freshwater fish species.

Table 4.5.1: Finnish raw materials in 2011

Main raw materials	Volume (tonne)
Baltic herring	23,107
Salmon	16,414
Rainbow trout	14,039
Herring	5,587
Other	5,846
Total	64,993

Source FGFRI: Fish processing 2011

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 produced as semi-preserved product. There is also some production of ready-to-eat food, in particular of rainbow trout.

The main market for Baltic herring is the Russian and Estonian export market. The strong increase of the processing sector has mainly been based on imported cultured fish while the consumption of domestic fish and fish products has decreased considerably during the past 10 years. About one thirds of the raw material is now imported. Norwegian salmon constituted the most important imported species for processing in 2011, and

together with rainbow trout, comprised the most important species in terms of value; production volumes for both species together reached 30 thousand tons in 2011.

4.5.1.2 Socio-Economic aspects

Fish processing sector is dominated by micro enterprises employing less than 10 persons. There were 137 micro enterprises in the sector in 2011 and they amounted to 89% of all the main activity enterprises in the industry. There were only 13 enterprises employing 10-49 persons and 3 enterprises employing 50-249 persons. There are no large processing enterprises in Finland employing more than 250 persons.

The total number of enterprises remained at the same level as in 2010 while employment measured in FTE increased by 5% in 2011. The full time equivalent employment has increased by 14% since 2008. However, the number of persons employed has decreased by 9% in 4 years. Male employees are dominant in the sector, with 67% share of the total employees. An average processing enterprise employed 5.4 FTEs with an average wage of €36,100 per employee. The average salaries have been steady throughout the period. Labour productivity has been increasing: in 2011 the GVA per FTE was €54,000 while in 2008 it was €47,600.

Table 4.5.2: Finnish fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	143	137	143	143	0%	0%
≤ 10 employees	131	125	131	127	-3%	-3%
11-49 employees	9	9	9	13	44%	44%
50-249 employees	3	3	3	3	0%	0%
≥ 250 employees	0	0	0	0	0%	0%
Employment (number)						
Total employees	961	880	885	870	-2%	-9%
Male employees	539	510	536	522	-3%	-3%
Female employees	422	370	349	348	0%	-18%
FTE	682	742	742	777	5%	14%
Male FTE	389	430	449	466	4%	20%
Female FTE	293	312	293	311	6%	6%
Indicators						
FTE per enterprise	4.8	5.4	5.2	5.4	5%	14%
Average wage (thousand €)	34.8	36.4	35.5	36.1	2%	4%
Labour productivity (thousand €)	47.6	52.9	57.2	54.0	-6%	13%
Unpaid work (%)	4	3.2	3.9	3.3	-17%	-15%

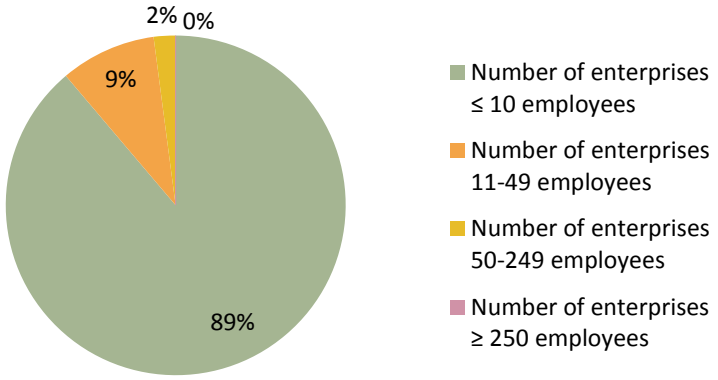


Figure 4.5.1: Size distribution of the Finnish fish processing enterprises, 2011

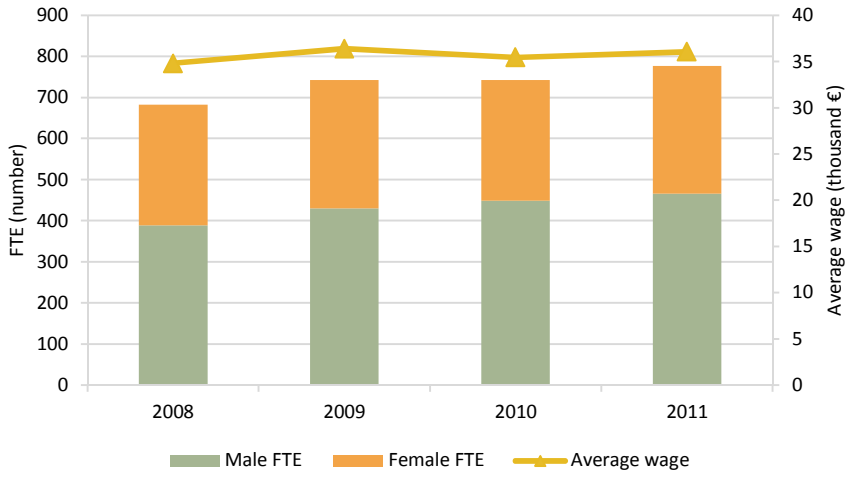


Figure 4.5.2: Finnish employment trends, 2008-2011

4.5.2 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. Total operating costs were high in 2011 at around 95% of the turnover. Raw materials are the major cost item and they have been increasing during the past 4 years. Cost of raw materials accounted for 76% of the total production costs in 2011. Wages and salaries made up 11% and other operational costs 12% of the total operational costs. Energy costs accounted for only a percentage of the total operational costs.

The recent expansion of the processing sector in Finland has mainly been based on imported cultured fish. Turnover of fish processing in Finland has increased dramatically during the past 4 years. The increase has been 64% (inflation not accounted for). In 2011 the turnover of the sector was €263 million with an annual increase of 11%.

The gross value added of processing industry was €42 million in 2011. The GVA remained at the same level as in 2010. Operating cash flow in 2011 was €13.9 million with a decrease of 14%. Earnings before interest and taxes decreased by 17%, amounting to €9.2 million in 2011. The net profit also decreased by 20% to €7.3 million. The Return on investment came down to 8.5% and financial position (debt/assets-ratio) to 69%. Capital productivity (GVA/assets) was 39%.

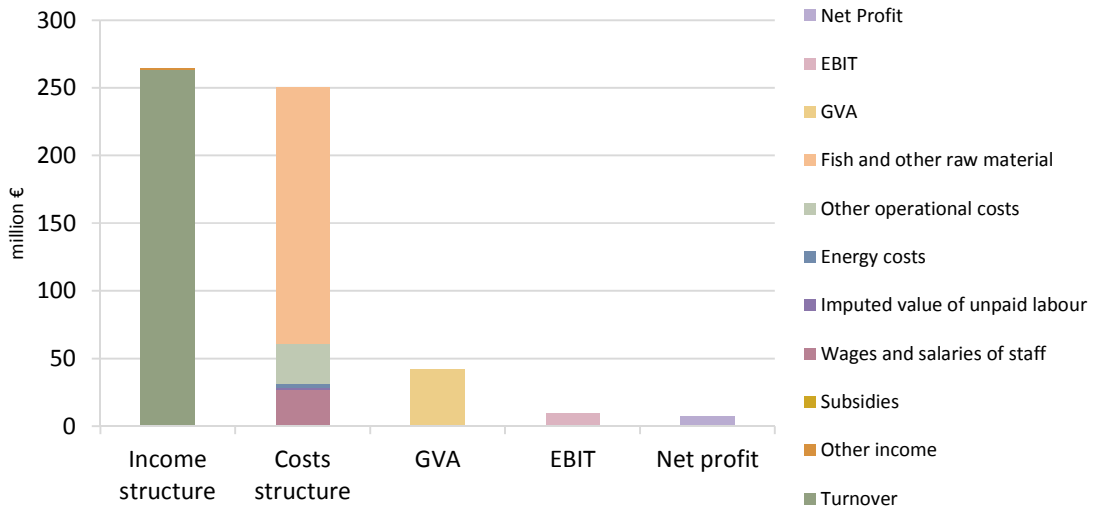


Figure 4.5.3: Finnish economic performance of the fish processing industry sector, 2011

Table 4.5.3: Finnish economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	160.0	99%	195.4	99%	236.1	99%	262.8	99%	▲ 11%	▲ 64%
Other income	0.6	0%	0.9	0%	3.4	1%	1.4	1%	▼ -58%	▲ 135%
Subsidies	0.6	0%	0.1	0%	0.0	0%	0.0	0%	▬ 0%	▼ -100%
Total Income	161.3	100%	196.5	100%	239.5	100%	264.2	100%	▲ 10%	▲ 64%
Expenditure (million €)										
Purchase of fish and other raw material for production	107.6	67%	131.7	67%	168.4	70%	189.3	72%	▲ 12%	▲ 76%
Wages and salaries of staff	22.8	14%	26.1	13%	25.3	11%	27.1	10%	▲ 7%	▲ 19%
Imputed value of unpaid labour	0.9	1%	0.9	0%	1.0	0%	0.9	0%	▼ -11%	▬ 0%
Energy costs	2.3	1%	2.7	1%	3.3	1%	3.2	1%	▼ -1%	▲ 40%
Other operational costs	18.3	11%	22.7	12%	25.4	11%	29.7	11%	▲ 17%	▲ 63%
Total production costs	151.9	94%	184.1	94%	223.4	93%	250.3	95%	▲ 12%	▲ 65%
Capital Costs (million €)										
Depreciation of capital	3.5	2%	4.2	2%	5.1	2%	4.8	2%	▼ -7%	▲ 35%
Financial costs, net	2.2	1%	1.7	1%	1.8	1%	1.8	1%	▲ 1%	▼ -17%
Extraordinary costs, net	0.8	0%	0.1	0%	0.4	0%	-0.8	0%	▼ -278%	▼ -195%
Capital Value (million €)										
Total value of assets	73.6	46%	86.7	44%	103.5	43%	108.3	41%	▲ 5%	▲ 47%
Net Investments	3.1	2%	7.6	4%	4.9	2%	5.0	2%	▲ 2%	▲ 63%
Debt	56.7	35%	67.1	34%	74.3	31%	74.4	28%	▬ 0%	▲ 31%
Performance Indicators(million €)										
Gross Value Added	32.5	20%	39.3	20%	42.5	18%	41.9	16%	▼ -1%	▲ 29%
Operating Cash Flow	9.4	6%	12.4	6%	16.2	7%	13.9	5%	▼ -14%	▲ 48%
Earning before interest and tax	5.9	4%	8.2	4%	11.0	5%	9.2	3%	▼ -17%	▲ 56%
Net Profit	3.6	2%	6.4	3%	9.2	4%	7.3	3%	▼ -20%	▲ 101%
Capital productivity (%)	44.1		45.3		41.0		38.7			
Return on Investment (%)	8.0		9.4		10.7		8.5			
Financial Position (%)	77.0		77.4		71.8		68.7			
Future Expectation Indicator (%)	-0.6		3.9		-0.2		0.2			

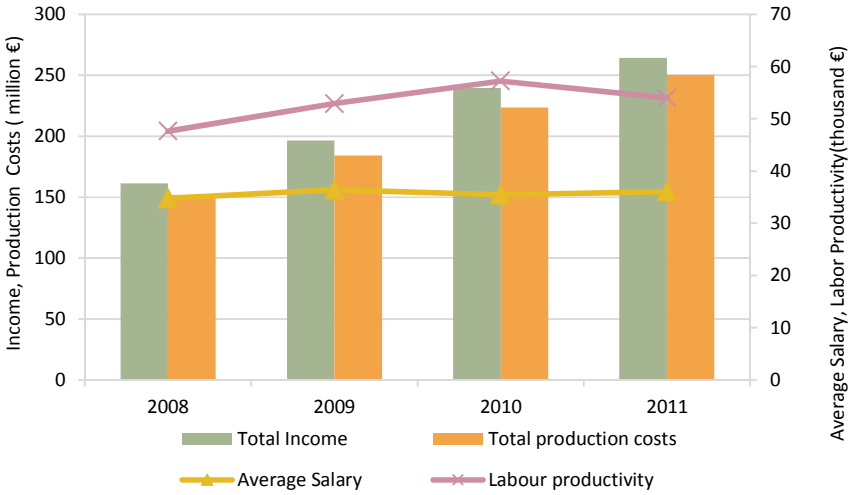


Figure 4.5.4: Income, costs, wages and labour productivity trends for the Finnish fish processing industry sector overview, 2008-2011

4.5.3 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 cultured fish. Due to regulative restrictions, 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.

Recent decrease of salmon prices has affected favourably 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.

According to the Economic Outlook of Finnish Fishery Enterprises (2012) by FGFRI processing enterprises expected the business situation to continue favourably in 2012. Companies believed that the domestic consumption of processed fish and the exports would grow in 2012.

4.5.3.1 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 €10,340 in 2011. FGFRI carries out a survey on processed fish production every second year. The latest information available while writing the report was from 2011. 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.

4.6 FRANCE

4.6.1 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 2011, the French fish processing sector encompasses 300 companies which employ 15,963 persons (15,662 full-time equivalents) and generate a total turnover of €4.3 billion. According to the French data collection office FranceAgriMer, the turnover of these companies for seafood production is only €3.7 billion (77% of total turnover).

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%, for both years (€683 Million in 2009 and €694 Million in 2010), of the total turnover of the fish processing industry.

Table 4.6.1: French fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	327	311	305	300	-2%	-8%
≤ 10 employees	160	154	148	143	-3%	-11%
11-49 employees	111	102	105	104	-1%	-6%
50-249 employees	43	37	35	37	6%	-14%
≥ 250 employees	13	18	17	16	-6%	23%
Employment (number)						
Total employees	15,672	15,590	15,633	15,963	2%	2%
Male employees	6,943	6,859	6,980	7,167	3%	3%
Female employees	8,729	8,731	8,633	8,796	2%	1%
FTE	15,202	14,983	15,158	15,662	3%	3%
Male FTE	6,942	6,842	6,890	7,147	4%	3%
Female FTE	8,260	8,140	8,249	8,515	3%	3%
Indicators						
FTE per enterprise	46.5	48.2	49.7	52.2	5%	12%
Average wage (thousand €)	39.9	42.9	43.5	47.7	10%	19%
Labour productivity (thousand €)	59.2	53.7	53.5	60.2	12%	2%
Unpaid work (%)	0	0.5	0.5	0.6	17%	20%

The deficit of the French trade balance for seafood products amounted to €3.48 billion in 2011, corresponding to an increase of 7% since 2010. Imports were stable in terms of volume (1.13 million tons instead of 1.12 in 2010) but their value increased by 7% in 2011 (€4.78 billion). Imports include a significant amount of processed food (mainly canned tuna). The French seafood processing industry is heavily reliant on imported raw material.

Salmon (mainly aquaculture salmon from Norway), shrimp and white fish (cod and pollock) are the main imported species used by the processing industry. Imports come from Norway, the United Kingdom, Spain, USA and the Netherlands.

The activity of the French fish processing industry is dominated by the production of fresh and refrigerated fish fillets (€680 million in 2011), smoked salmon (€607 million), the production of prepared dishes with fish, crustaceans and molluscs (€552 million in 2011), prepared or conserved crustaceans and molluscs (€314 million), surimi (€225 million) and canned fish (from which more than half is canned tuna, valued at €109 million).

The French fish processing industry is highly concentrated: in 2011, 20% of the companies cumulate more than 85% of the turnover generated by seafood production (€3.7 billion), and the 10 first companies (3.3%) alone accumulate more than 45% of this turnover. On the other hand, the sector includes numerous small companies: 48% of the companies employ less than 10 persons, and 82% employ less than 50 persons. Only 16 companies (5%) employ more than 250 persons.

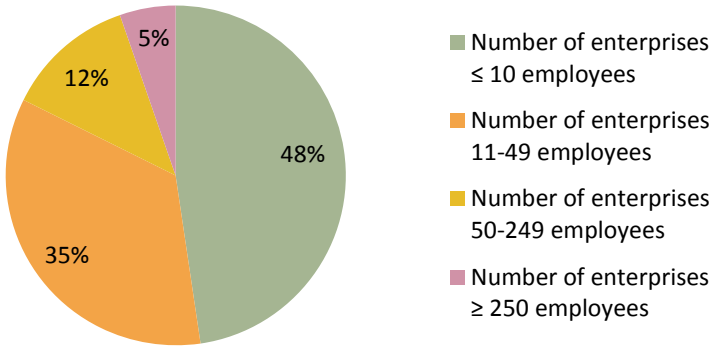


Figure 4.6.1: Size distribution of the French fish processing enterprises, 2011

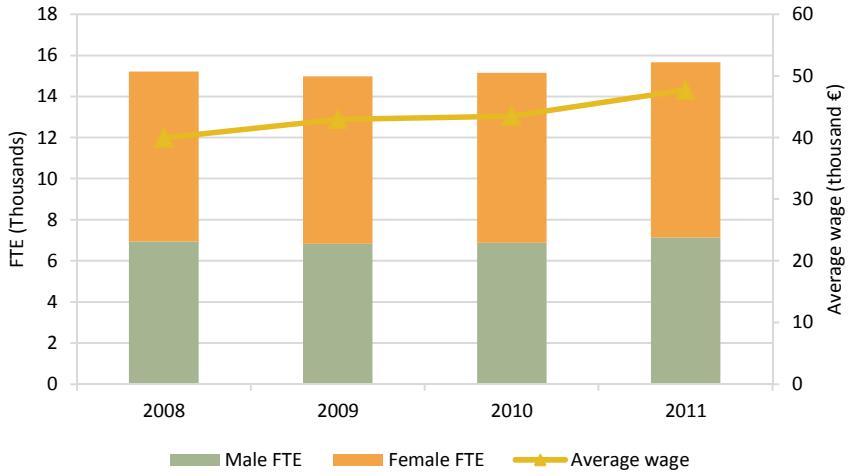


Figure 4.6.2: French employment trends, 2008-2011

Although the number of enterprises was slightly reduced from 327 to 300 between 2008 and 2011, the French fish processing industry created 291 jobs (1.85% increasing rate), what contributed to raise by 460 the number of full-time equivalents (3% increasing rate). The proportion of part-time jobs remains low and the average salary has increased by 19% since 2008. Female employees represent the majority of the workers (55%).

4.6.2 Economic performance of the French fish processing industry sector

The cost structure of the French fish processing industry shows that raw material represents the same share (38%) as the other operational costs. This share seems relatively low, in comparison with the other countries, and suggests that raw material purchases may be underestimated in the data, while other operating costs may be overestimated (in other words, it may be suspected that 'other operational costs' includes a significant amount of raw material). However, 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 (19%) which may be considered to be normal.

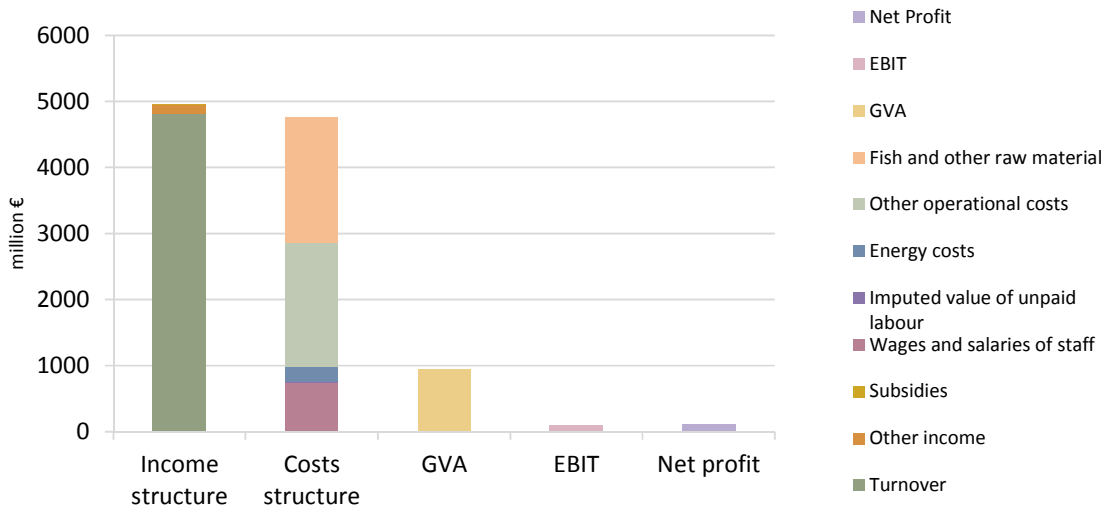


Figure 4.6.3: French economic performance of the fish processing industry sector, 2011

The economic performances of the fish processing sector are rather low. The net profit has plummeted from €244 million to €102 million between 2008 and 2011, and represents only 2% of the turnover. However this decrease occurred mostly between 2008 and 2009, when the profit rate dropped from 6% to 3% of turnover in one year, mostly due to the costs of fish raw material purchases, which increased by 7.8% while the level of turnover remained stable. The return on investment followed the same trend: it decreased from 5% in 2008 to 2% in 2009 and remained unchanged since then. Basically, these low performances are explained by the high level of the operational costs, which represented already 93% of the turnover in 2008 and have reached 96% in 2009, up to 97% in 2010 and 96% again in 2011.

Table 4.6.2: French economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	4,315.2	99%	4,334.5	99%	4,507.3	99%	4,802.3	97%	7%	11%
Other income	49.0	1%	42.1	1%	28.0	1%	149.0	3%	432%	204%
Subsidies	8.9	0%	3.6	0%	5.5	0%	5.5	0%	1%	-38%
Total Income	4,373.1	100%	4,380.3	100%	4,540.7	100%	4,956.8	100%	9%	13%
Expenditure (million €)										
Purchase of fish and other raw material for production	1,464.6	33%	1,578.7	36%	1,754.6	39%	1,902.8	38%	8%	30%
Wages and salaries of staff	604.1	14%	640.2	15%	655.7	14%	742.6	15%	13%	23%
Imputed value of unpaid labour	2.9	0%	3.2	0%	3.3	0%	4.3	0%	33%	48%
Energy costs	195.2	4%	198.7	5%	271.2	6%	231.2	5%	-15%	18%
Other operational costs	1,805.1	41%	1,794.4	41%	1,697.9	37%	1,874.0	38%	10%	4%
Total production costs	4,072.0	93%	4,215.1	96%	4,382.6	97%	4,754.9	96%	8%	17%
Capital Costs (million €)										
Depreciation of capital	60.6	1%	58.6	1%	79.8	2%	106.3	2%	33%	75%
Financial costs, net	-3.7	0%	-7.0	0%	-12.0	0%	-6.2	0%	48%	-67%
Extraordinary costs, net	0.7	0%	8.4	0%	-9.7	0%	9.8	0%	201%	1332%
Capital Value (million €)										
Total value of assets	2,041.8	47%	1,972.4	45%	2,109.9	46%	2,238.7	45%	6%	10%
Net Investments	80.3	2%	141.5	3%	159.2	4%	188.9	4%	19%	135%
Debt	1,421.7	33%	1,140.4	26%	1,211.0	27%	1,312.1	26%	8%	-8%
Performance Indicators(million €)										
Gross Value Added	899.3	21%	804.9	18%	811.6	18%	943.3	19%	16%	5%
Operating Cash Flow	301.1	7%	165.2	4%	158.1	3%	201.9	4%	28%	-33%
Earning before interest and tax	240.5	5%	106.6	2%	78.3	2%	95.6	2%	22%	-60%
Net Profit	244.2	6%	113.6	3%	90.3	2%	101.9	2%	13%	-58%
Capital productivity (%)	44.0		40.8		38.5		42.1			
Return on Investment (%)	11.8		5.4		3.7		4.3			
Financial Position (%)	69.6		57.8		57.4		58.6			
Future Expectation Indicator (%)	1.0		4.2		3.8		3.7			

On other hand, the financial position of the industry is far much better in 2011 than it was in 2008, which is due to the fact that the debt decreased from €1.42 to €1.31 billion. Investments have increased from €80.3 to €188.9 million over the period, which denotes 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). Thus, as from now on a more important share of the cash flow seems to be used for reducing the debt and increasing investments, this may also explain why economic performances are lower since 2009.

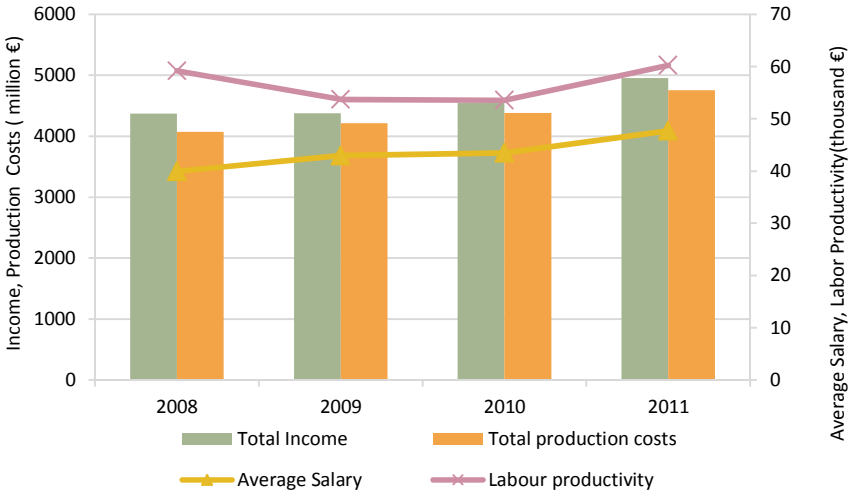


Figure 4.6.4: Income, costs, wages and labour productivity trends for the French fish processing industry sector overview, 2008-2011

The labour productivity, which was €59 158 per employee in 2008, dropped to €53 722 and €53 539 in 2009 and 2010 and then increased again to reach €60 229 in 2011. 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. During the period 2008-2011, the average salary of the processing industry employees has increased by a 6% yearly rate.

4.6.3 Trends and drivers for change

According to Kantar Worldpanel whose data are estimated to cover 80% of the consumption, in 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 have decreased by 2.8% in volume but increased by 0.4% in value. The amount of money spent for the fisheries and aquaculture products, which had risen for several years, is stabilising. These evolutions hide wide disparities among products. The demand is decreasing for fresh filets and all species except the sardine are subjected to a drop of sales in volume (in particular pangasius, trout, sea bass and sea bream). Sales of smoked, dried and salted fish, which are dominated by smoked salmon, are stabilising. The value of canned fish sales is still increasing, but following a decreasing rate (+2.7% only between 2010 and 2011), while sales are slightly decreasing in volume. Frozen products demand is stable in volume and slightly increasing in value; within this category of products scallops, shrimps and gambas exhibit decreasing patterns in volume but rising prices. On the other hand, the demand of special prepared dishes is increasing, especially for surimi whose consumption has risen from 40,500 to over 53,000 tons between 2007 and 2011, but without any change in total value of sales.

4.6.4 Collection of processing sector data

Three sources are used to produce the data regarding the French fish processing industry:

- data collected by the National Statistics Institute (ESANE survey);

- financial data files of companies who have published their balance sheet and account (DIANE database);

- the data collection survey implemented by FranceAgriMer, which targets all the companies of the sector, including the companies employing less than 20 people.

The first step of the FranceAgriMer survey consists in updating the list of companies involved in fisheries and aquatic products (FAP) processing activities in France including its overseas "departments" (DOM), using and crossing different data sources. According to the definition of the scope in the current DCF Regulation, the relevant population list is updated and enlarged taking into account all companies involved in FAP processing, as a main or secondary activity, whether they are registered under:

- NACE rev 1.1 code 1520, which now corresponds to NACE rev 2 code 1020 (processing and preserving of fish, crustaceans and molluscs) and part of NACE rev 2 code 1085 *i.e.* NAF code 1085Z (processing and preserving of fish and fish products)
- other activity codes (e.g. NAF 4638A wholesale of other food, including fish, crustaceans and molluscs).
- professional databases on processing companies (ADEPALE: Association for processed food products enterprises) and professional press, for identifying newly created companies, merging operations and cessations of activity.

Very small companies with no mandatory obligation of publishing detailed financial accounts were considered out of the scope. According to ESANE enquiry, it concerned 75 individual businesses in 2011, representing 0.8% of the total turnover and 1.3% of the employment in FTE of NAF10.20Z.

Following this process, the number of companies retained for 2011 is:

- 300 companies with fisheries and aquaculture products processing as their main activity are registered
- 117 companies with fisheries and aquaculture products processing as a secondary activity

For the year 2011, the final database includes only the 300 companies of the secondary processing sector. FranceAgriMer implements also a survey targeting the companies of the primary processing sector ("mareyeurs", not considered in this chapter), which carry out processing as well as trading activities. According to this survey, the French primary processing sector includes 306 companies in 2011, among which 36 are also involved in processing, and provides 4584 jobs. This sector generates a turnover worth €1.9 billion, from which €260 million come from processing activities.

4.7 GERMANY

4.7.1 General overview of the German fish processing industry sector

The German Fish Processing Sector contains around 265 enterprises. More than 90% of the turnover is produced in the enterprises with 20 and more employees, which were 64 enterprises in 2008 and 55 in 2011. The turnover for the above 20 employee enterprises in 2008 was 2,366,500,000 Euro and total employment was 8,469 persons, whilst in 2011 the turnover was 1,966,500,000 Euro and 6780 persons were employed. 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. The sector is characterized by a more or less continuous decline of employees and the offshore of activities to e.g. Poland.

Table 4.7.1 shows some facts about the employment and the general structure of the German processing sector, including some performance indicators. It has to be noted, that the indicators average wage and labour productivity are calculated for the above 20 employees enterprises only.

A general trend to less employment in the sector can be stated. From 2008 to 2011 a decline of 20% in total employment figures happened. Female workers are more affected as the female employees decreased by 26%. Labour productivity and average wages increased from 2008 to 2011.

Table 4.7.1: German fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	281	263	265	265	0%	-6%
≤ 10 employees	198	184	186	183	-2%	-8%
11-49 employees	55	52	51	58	14%	5%
50-249 employees	21	20	22	17	-23%	-19%
≥ 250 employees	8	7	6	7	17%	-13%
Employment (number)						
Total employees	8,469	7,581	7,044	6,780	-4%	-20%
Male employees	4,272	3,938	3,571	3,667	3%	-14%
Female employees	4,197	3,643	3,473	3,113	-10%	-26%
FTE	8,082	7,268	6,762	6,509	-4%	-19%
Male FTE						
Female FTE						
Indicators						
FTE per enterprise	28.8	27.6	25.5	24.6	-4%	-15%
Average wage (thousand €)	33.5	34.5	35.6	35.8	0%	7%
Labour productivity (thousand €)	44.4	43.5	56.1	50.0	-11%	13%
Unpaid work (%)	0	0.0	0.0	0.0	0%	0%

Nature of the industry: concentration

From the sectors around 260 enterprises around 180 have 0-10 employees. This part of the whole sector stands for only about 5 % of the whole sector sales and of the whole sectors employment. The enterprises (in 2011: 24) with 50 and more employees contribute more than 80 % of the sectors turnover and around 80% of all employees are employed in this size segment. The size distribution is shown by Figure 4.7.1.

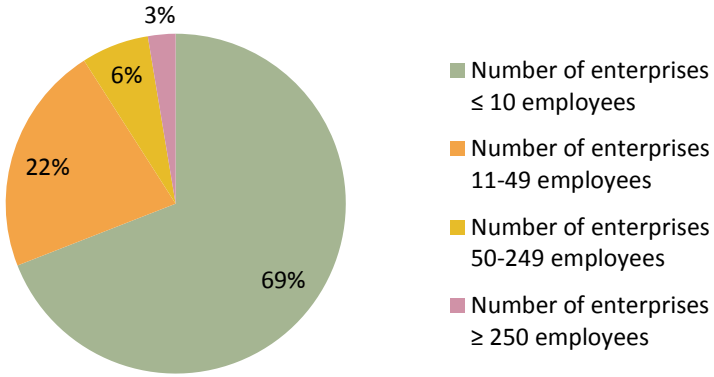


Figure 4.7.1: Size distribution of the German fish processing enterprises, 2011

In terms of employment more than one quarter of the industry is located at Bremerhaven, the largest city at the German North Sea Coast, located at the outlet of the river Weser. In the whole fishery sector including logistics, research etc., about 4,000 persons are directly employed in this sector at Bremerhaven, which is one of Europe´s leading centres for fish processing and frozen food products. Around one eights of the sectors employment is located at Cuxhaven, a town about 45 km north of Bremerhaven at the mouth of the river Elbe.

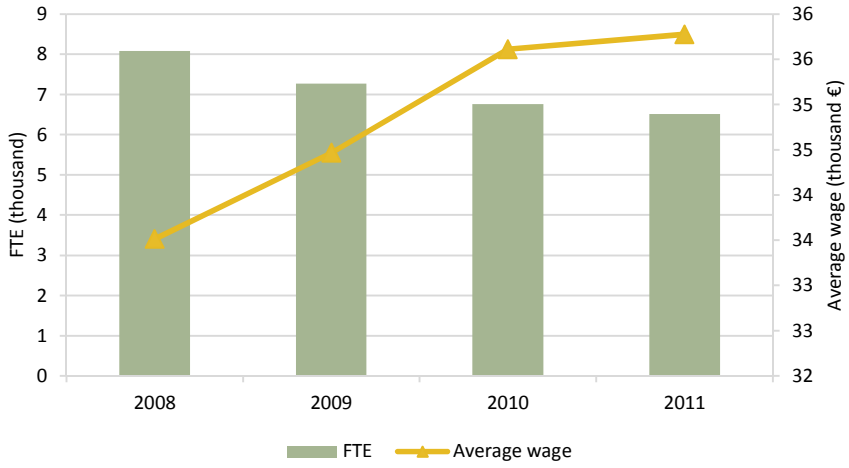


Figure 4.7.2: German employment trends, 2008-2011

4.7.2 Economic performance of the German fish processing industry sector

As in most of the countries, the profitability of the sector is rather low but still positive. One of the main reasons for this low economic performance is the high running cost to turnover ratio. Figure 4.7.3 shows the importance of the different operating costs, being the cost of raw materials the most important one.

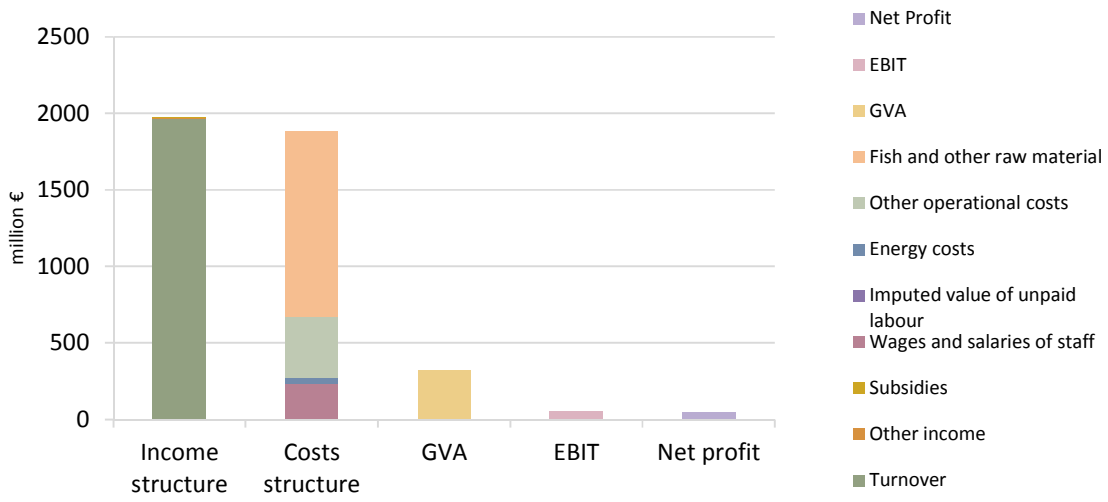


Figure 4.7.3: German economic performance of the fish processing industry sector, 2011

4.7.2.1 Dependency on foreign production

The German fish processing sector as the whole fish sector does not rely very much on domestic products nor landings. Meanwhile only about 20% (2011) of the total German fish market is covered by domestic or foreign landings of the German fleet (including fresh water fishery), imports stand for around 80% of the total fish market in terms of volume (incl. export).

In terms of import value the largest foreign suppliers are Poland, followed by China, Norway, The Netherlands and Denmark. In total 492,231 tonnes of fisheries products have been produced in Germany during 2011.

The main products in 2011 were fish fingers and breaded fish fillets with a production value of slightly more than 500 million Euro, followed by processed herrings with about 280 million Euros. Prepared fish and fish salads follow with about 170 million and 140 million Euros.

Table 4.7.2: German economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	2,366.5	100%	2,034.0	100%	1,972.7	100%	1,966.5	100%	0%	-17%
Other income	6.7	0%	4.4	0%	4.3	0%	5.1	0%	18%	-24%
Subsidies	1.2	0%	1.0	0%	0.4	0%	0.3	0%	-19%	-72%
Total Income	2,373.2	100%	2,038.4	100%	1,977.0	100%	1,971.6	100%	0%	-17%
Expenditure (million €)										
Purchase of fish and other raw material for production	1,433.5	60%	1,297.5	64%	1,181.7	60%	1,208.2	61%	2%	-16%
Wages and salaries of staff	270.8	11%	250.5	12%	240.8	12%	232.9	12%	-3%	-14%
Imputed value of unpaid labour	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Energy costs	38.8	2%	36.4	2%	36.7	2%	39.3	2%	7%	1%
Other operational costs	540.8	23%	387.6	19%	378.7	19%	398.1	20%	5%	-26%
Total production costs	2,284.0	96%	1,972.0	97%	1,837.9	93%	1,878.5	95%	2%	-18%
Capital Costs (million €)										
Depreciation of capital	40.8	2%	38.2	2%	34.0	2%	36.1	2%	6%	-11%
Financial costs, net	19.0	1%	14.4	1%	11.1	1%	13.4	1%	21%	-29%
Extraordinary costs, net	0.0	0%	0.0	0%	2.3	0%	0.0	0%	-100%	0%
Capital Value (million €)										
Total value of assets	586.2	25%	410.1	20%	403.5	20%	402.7	20%	0%	-31%
Net Investments	50.9	2%	31.6	2%	33.2	2%	25.7	1%	-23%	-49%
Debt	316.5	13%	221.4	11%	184.6	9%	223.4	11%	21%	-29%
Performance Indicators(million €)										
Gross Value Added	358.9	15%	315.8	15%	379.5	19%	325.6	17%	-14%	-9%
Operating Cash Flow	89.3	4%	66.4	3%	139.1	7%	93.1	5%	-33%	4%
Earning before interest and tax	48.5	2%	28.1	1%	105.2	5%	56.9	3%	-46%	17%
Net Profit	29.5	1%	13.8	1%	94.1	5%	43.5	2%	-54%	48%
Capital productivity (%)	61.2		77.0		94.1		80.9			
Return on Investment (%)	8.3		6.9		26.1		14.1			
Financial Position (%)	54.0		54.0		45.8		55.5			
Future Expectation Indicator (%)	1.7		-1.6		-0.2		-2.6			

Table 4.7.2 shows the economic performance of the processing sector more detailed. It can observed that profit has been increased compared to the years 2008 and 2009, when lower profit figures probably have been caused by the economic crises. Furthermore, the decline of total production costs is proportional to the decrease of total income since 2008, mainly caused by the decrease of enterprises belonging to the segment of enterprises with 20 and more employees. Gross value added decreased less than the total income, meaning that productivity of the production factors has increased. Looking at the figures for capital productivity in Table 4.7.2 and labour productivity in Figure 4.7.4 confirms this assumption. The negative value of the future expectation indicator leads to the conclusion, that actors in the sector have quite bad expectations for the future development of the industry.

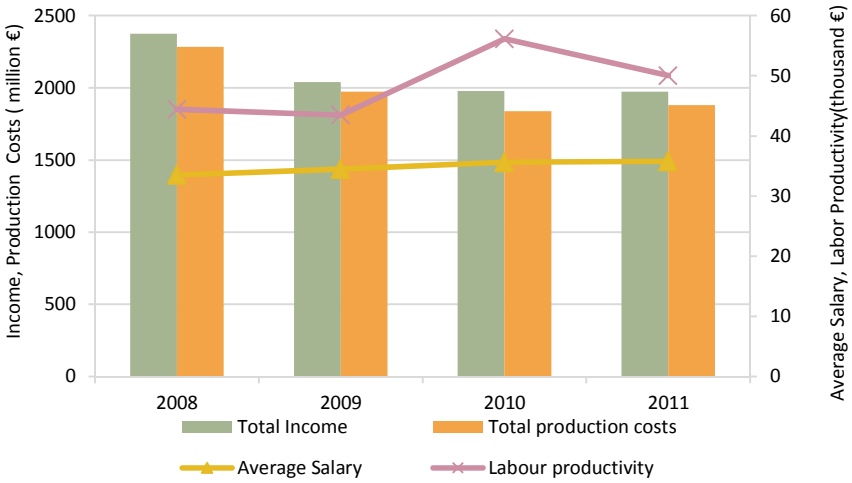


Figure 4.7.4: Income, costs, wages and labour productivity trends for the German fish processing industry sector overview, 2008-2011

Figure 4.7.4 shows the declining trend of total income for the more than 20 employees enterprises followed by more or less proportional decrease of total production costs. Nominal average salary shows an upward trend, whilst labour productivity varies from year to year by showing a slight upward trend for 2011 compared to 2008.

4.7.3 Trends and drivers for change

The profit of the sector is still under high pressure from the retail sector as well as from competitors from non-EU and eastern EU-countries. A movement of processing enterprises and activities from Germany to these new EU-countries can still be detected, financed partly by subsidies from the European Union. Moreover primary processing of raw material fishery products has continued to increase in third countries (non EU), supplying semi-prepared products for the European added value processing industry.

Since 2006 a stable average per capita consumption of about 15-15.5 kg fish and seafood products can be noticed. The main species for the German consumers are Alaska-Pollock, Herring and Salmon followed by tuna and bonito. The ratio of young people including families at the overall fish consumption (in terms of weight) is decreasing, whilst the share of elder couples 50+ and single seniors is significantly higher compared to 2006. This trend is also obvious when looking at households' income structure, where the group of net income over 2,500 Euro is the only fraction with increasing proportion of fish consumption. This may leads to the conclusion that the fisheries sector has to find a way to make fish more attractive for younger people and families, if they want fish consumption to be stable or increasing for the next decades.

The retailers are very much looking on certified products. Domestic producers including aquaculture producers try to fit this requirement in order to be listed in the supermarkets. Producers are facing pressure from both sides of the value chain: input markets for purchasing goods and services show higher prices for the enterprises as well as selling products on the sales markets results in lower margins.

Increasing demand for new convenience products, traceability requirements and energy costs reduction are the main investment drivers, including resource saving logistical solutions.

4.7.3.1 Comments on the data

All data, except those on debt, financial position, raw material and total value of assets, which were asked for in an extra survey, are from different official statistics of the Federal Statistical Office (FSO) and the Federal Employment Agency (FEA) in Germany. Answering the questionnaire of the FSO is mandatory; answering the additional survey is voluntary. So the precision of the FSO and FEA data is quite higher than that from the other source.

As most structural data are only available for the 20 and more employee part of the sector, calculation of performance indicators is based on the 20 and more strata, unless otherwise indicated.

4.8 GREECE

4.8.1 General overview of the Greek fish processing industry sector

Processing of fisheries products in Greece includes the activities of freezing, processing (filleting, salting, drying, smoking, marinating, cooking, canning) of fish, and the de-shelling of mussels. During 2011, there existed 152 active small to medium sized processing enterprises. While all the enterprises are registered under the national register for fisheries possessing products, yet for 2011 it is not clear if all enterprises are also included in the 10.20 NACE classification. There also exist 21 enterprises of processed seafood products not included in the fishery processing sector (i.e. seafood processing is not the main activity).

The vast majority of the fishery processing enterprises (71%), including all mussel de-shelling units, are small enterprises, employing less than 10 persons.

The 152 enterprises employed 2,505 persons, or in terms of full-time equivalent employment (FTE), 2,205 persons during 2011. Employment figures also include self-employment as well as unpaid work. Employment is almost evenly spread between men and women both in terms of number of personnel and in terms of FTE. FTE per enterprise is estimated at 14.9.

Average wage, which is estimated at 13,200 euro for 2011, has not significantly changed compared to the 2007 average wage presented at the STECF-OWP-12-01 report.

Labour productivity is estimated at 94,200 euro for 2011.

Unfortunately, no data is provided by Greece for 2008 to 2010 and not all data for 2007 presented in the STECF-OWP-12-01 report, are directly comparable to the 2011 data.

Table 4.8.1: Greek fish processing industry sector overview, 2008-2011

Variable	2011
Structure (number)	
Total enterprises	152
≤ 10 employees	108
11-49 employees	36
50-249 employees	8
≥ 250 employees	0
Employment (number)	
Total employees	2,505
Male employees	1,226
Female employees	1,279
FTE	2,265
Male FTE	1,168
Female FTE	1,097
Indicators	
FTE per enterprise	14.9
Average wage (thousand €)	13.2
Labour productivity (thousand €)	94.2
Unpaid work (%)	5.2

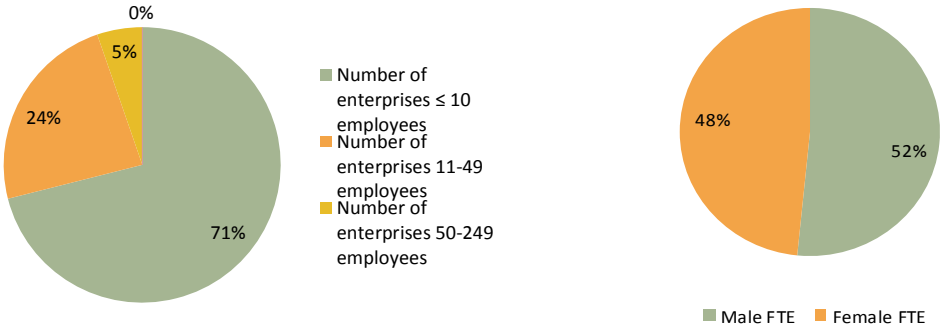


Figure 4.8.1: Size distribution of the Greek fish processing enterprises (left) and employment (right), 2011

4.8.2 Economic performance of the Greek fish processing industry sector

Turnover of the fishery processing activities in Greece is estimated at 268.3 million euro for the year 2011 accounting for 67% to the total turnover i.e. including trade turnover of fishery and other products. Sales of processed seafood products from enterprises not included in the fishery processing sector (i.e. seafood processing is not the main activity) are estimated at 1.2% of the turnover of the sector.

With regard to the main activity, three subsectors may be identified, freezing subsector, processing subsector and mussel de-selling subsector accounting for 78%, 21.3% and 0.7% of the annual turnover respectively.

Raw material cost is the main operational cost component (35% of the total income) of the sector followed by wages and salaries (7% of the total income), other operational costs (9% of the total income) and energy costs (3% of the total income).

As it is not clear if cost data include costs of other activities (i.e. marketing, trade) for 2011, it is likely that performance indicators presented in the figures below, do not reflect the economic performance of the sector.

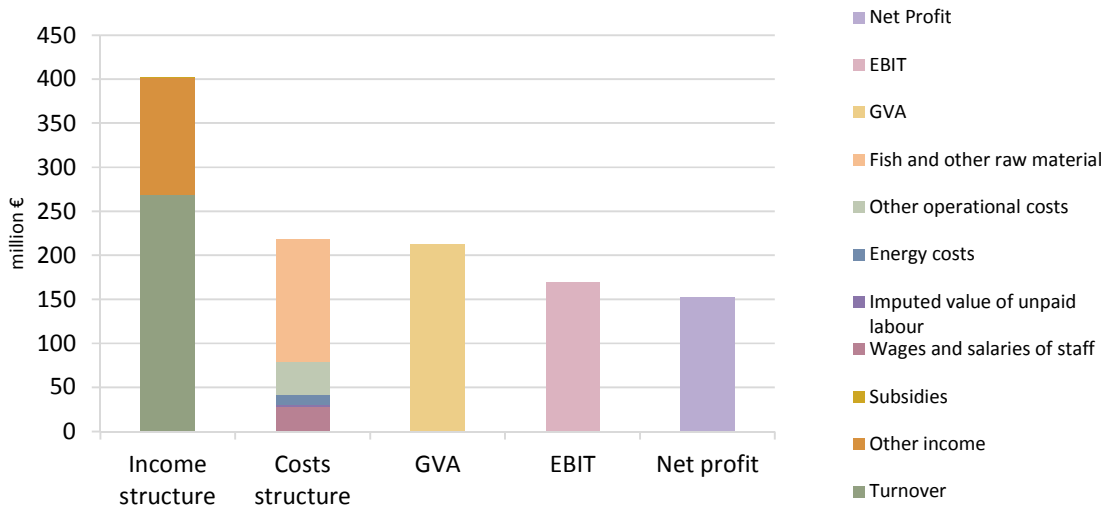


Figure 4.8.2: Greek economic performance of the fish processing industry sector, 2011

Table 4.8.2: Greek economic performance of the fish processing industry sector, 2008-2011

Variable	2011	% of total income
Income (million €)		
Turnover	268.3	67%
Other income	133.0	33%
Subsidies	0.6	0%
Total Income	401.9	100%
Expenditure (million €)		
Purchase of fish and other raw material for production	139.1	35%
Wages and salaries of staff	28.3	7%
Imputed value of unpaid labour	1.5	0%
Energy costs	12.1	3%
Other operational costs	36.8	9%
Total production costs	217.8	54%
Capital Costs (million €)		
Depreciation of capital	14.1	4%
Financial costs, net	17.2	4%
Extraordinary costs, net	1.2	0%
Capital Value (million €)		
Total value of assets	472.1	117%
Net Investments	9.308	2%
Debt	199.1	50%
Performance Indicators(million €)		
Gross Value Added	213.3	53%
Operating Cash Flow	184.1	46%
Earning before interest and tax	170.0	42%
Net Profit	152.8	38%
Capital productivity (%)	45.2	
Return on Investment (%)	36.0	
Financial Position (%)	42.2	
Future Expectation Indicator (%)	-1.0	

An analysis of the performance of the Greek fishery processing sector[1], according to the NACE classification, and relevant indicators are presented by the Foundation for Economic & Industrial Research (IOBE[2]). IOBE (pp. 34-36, 2013) presents evidence of a constant decrease of all the basic financial figures of the sector. While gross profit margin remained stable during the 2008/2011 period, turnover, gross profit and net profit have decreased for the same period, thus resulting in net losses for the sector during 2011.

[1] Only limited liability enterprises, publishing annual balance sheets are included in the analysis
[2] IOBE (2013). Greek food and beverage industry. Facts and figures (in Greek). Downloaded from http://www.iobe.gr/research_e.asp?RSC=2 on 14/09/2013

4.8.3 Trends and drivers for change

Since the beginning of the Greek debt crisis, unemployment in Greece is rising to reach almost 28% during 2013. On top, wages and salaries are dropping rapidly while direct and indirect taxes are rising, thus limiting the purchasing power of the Greek consumers. The Greek fishery processing sector, which mainly targets for the local market, is experiencing the consequences of the persistent debt crisis. As of 2013, there is no clear evidence to suggest any positive change of the Greek consumer purchasing power in the near future.

Imported, low valued processed fish, such as pugnacious, displace the products of the sector from the Greek market.

The origin and the composition of the row material used by the sector have changed drastically since 2007. Nevertheless, it is not clear if substitution of formerly local purchased raw material by imported row material is demand or supply driven. A deeper analysis of the drivers for this change is proposed.

In 2011, for the first time, processed fish of local aquaculture origin are indentified in the product composition of the sector which may be partly attributed to the acquisition of processing units by large aquaculture companies and outsourcing of aquaculture processing activities.

Demand for high valued processed seafood is expected to decline further in Greece. Demand for low valued frozen seafood is expected to rise in Greece but turnover of the sector is expected to decline further. Rising energy costs, rising interest rates and strangulation of credit, limit the export potential of the sector.

Preliminary results of the 2013 data collection in Greece suggest an overall decline of the employment in the sector partly attributed to personnel lay-offs and mergers but also due to ceased economic operations.

EU FIFG funding was extended till the end of 2009 for Greece. Subsidies from the European Fisheries Fund (EFF) are not granted for 2010 and 2011 and 2012 both for the aquaculture and the processing sector. EFF grant approvals are expected during 2013.

On the long run, innovation and development of new products based on consumer preferences would aid the development of fishery processing industry in Greece. Availability of local aquaculture products may be considered as an opportunity for the industry. On the short run, measures that would minimize energy costs and financial instruments to aid exports of traditional products are essential for the survival of the sector in the radically changing Greek economic environment.

4.8.3.1 Data collection issues

During the data collection procedure, a number of issues emerged mainly in the interviews phase. In addition to the items covered in the questionnaires, further problems of the companies during production, development of new products, future trends in the sector, and the potential of collaborating with research institutes were discussed with the personnel in charge.

The following problems were encountered:

- Mistrust, reservation and, in some cases, denial to provide data, especially in questions regarding loans, sale prices of final products, and price of raw material.
- Difficulties in completing sections of the questionnaire concerning costs (production, sales, administration and financing), due to the lack of computerization in the companies with small capacity, and also due to the lack of time and available staff in almost the total of the companies.

4.9 IRELAND

4.9.1 General overview of the Irish fish processing industry sector

There were 169 fish processing enterprises in Ireland in 2011. The number of fish processing enterprises has remained constant since 2009. The total turnover of the Irish fish processing industry in 2011 was €559 million which is an increase of €14m or 2.6% from 2010. In 2011 , there were approximately 2,829 FTE's employed in the fish processing industry which was made up of 1,990 Male FTE's and 839 Female FTE's. 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 2011 there were 199 thousand tonnes of wild catch landed into Ireland with a value of €269 million. The primary landing ports in 2011 were Killybegs, Castletownbere, Kilmore Quay, Dingle, Dunmore East, Ros a Mhíl, Howth, Union Hall, Greencastle and Clogherhead. These ports accounted for 76% of the value of fish landings in Ireland in 2011. The top fisheries species landed in 2011 were Atlantic Mackerel, Norway Lobster, Blue Whiting, Hake, Monkfish, Scallop, Horse Mackerel, Megrim, European Lobster and Atlantic Herring.

Aquaculture production in 2011 was 44,000 Tonnes with an overall value of €127 million. By 2020 it is estimated that aquaculture will account for 32% of Irish fish production.

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 63% of the value of overall aquaculture production in Ireland. Aquaculture sites are located in the coastal communities. The majority of aquaculture is still carried out along the western seaboard with the highest value of aquaculture production in Donegal where the industry provides a sales value of €48m.

In 2011, Ireland imported 51,898 Tonnes of Seafood with a value of €189 million which was an increase of 16% from 2008 when 39,196 Tonnes of Seafood were imported. The top species imported in 2011 were Prepared Tuna (13%), Salmon Fresh (7%), Salmon Prepared (6%) and Shrimp and Prawns Frozen (4%)

For the same period exports amounted to 243,125 Tonnes with a value of €430 million. This was an increase of €51 million, or 13%, from 2010 driven by higher unit prices for Irish Seafood. Pelagic, shellfish and whitefish exports all returned higher prices while Irish organic salmon held its value – a good performance considering the reduction in salmon prices on international markets. During 2011, exports to EU countries represented 80% of total Irish seafood exports. Irish seafood exports to Russia, Egypt, South Korea and Asia continued to grow.

Table 4.9.1: Irish fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	172	169	169	169	0%	-2%
≤ 10 employees	93	98	96	96	0%	3%
11-49 employees	58	60	60	59	-2%	2%
50-249 employees	21	11	13	14	8%	-33%
≥ 250 employees	0	0	0	0	0%	0%
Employment (number)						
Total employees	2,867	3,020	3,064	3,270	7%	14%
Male employees	2,007	2,102	2,143	2,275	6%	13%
Female employees	860	918	921	995	8%	16%
FTE	2,596	2,633	2,677	2,829	6%	9%
Male FTE	1,817	1,859	1,891	1,990	5%	10%
Female FTE	779	774	786	839	7%	8%
Indicators						
FTE per enterprise	15.1	15.6	15.8	16.7	6%	11%
Average wage (thousand €)	32.2	30.5	26.8	26.7	0%	-17%
Labour productivity (thousand €)	85.3	79.6	37.4	35.1	-6%	-59%
Unpaid work (%)	6	6.1	5.4	5.1	-5%	-12%

The employment and number of enterprises per category for 2008 were provided based on the best available information. However, for 2009-2011 an employment survey was carried out and this information allowed for the re classification of enterprises into the most appropriate segments.

The number of enterprises with 50-249 employees has grown from 11 in 2009 to 14 in 2011. Investment in the seafood industry to create employment and added sales are assisting companies to grow. The average wage decreased from 32.2 in 2008 to 26.7 in 2011, a drop of 17% due to the downturn in the national economy. The figures from 2010 to 2011 remained unchanged which is positive.

The figure for labour productivity for 2008 & 2009 may not be indicative due to the difference in the sampling methodology used for the 2008 & 2009 survey and the 2010 & 2011 survey and the sample size.

The total number of enterprises in the Irish fish processing industry in 2011 was around 169, almost 60% of which employing less than 10 people.

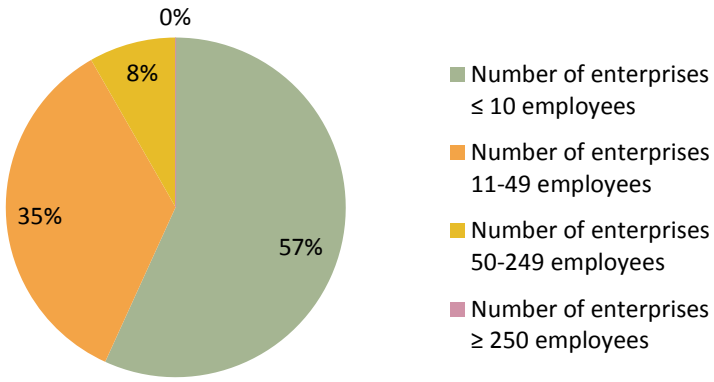


Figure 4.9.1: Size distribution of the Irish fish processing enterprises, 2011

Number of employees and FTEs increased constantly from 2008 to 2011, reaching respectively 3,270 and 2,829 in 2011. Male employees represent around 70% of the total employees and the proportion of male/female employees has been relatively constant over time.

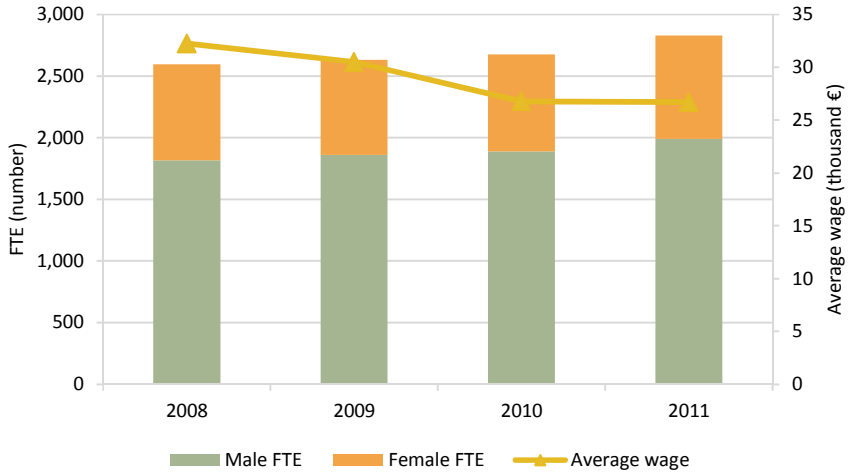


Figure 4.9.2: Irish employment trends, 2008-2011

4.9.2 Economic performance of the Irish fish processing industry sector

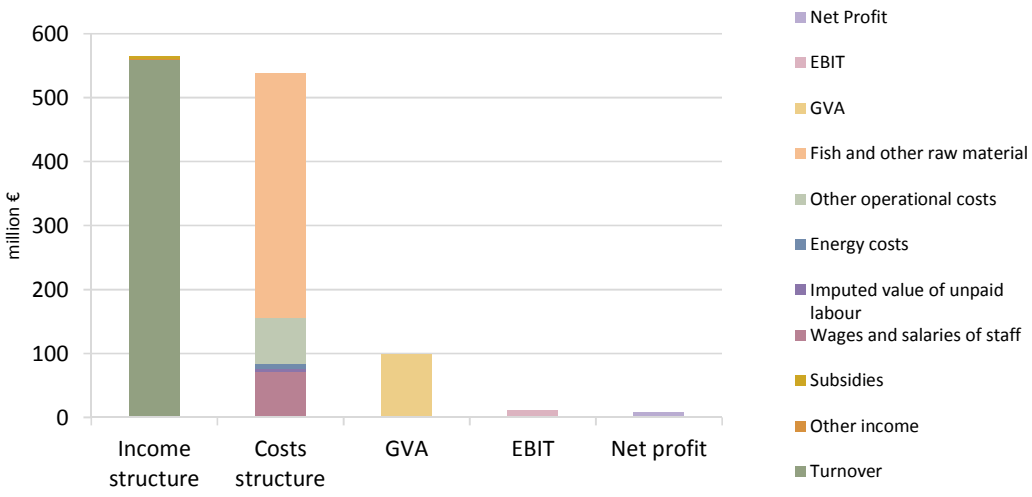


Figure 4.9.3: Irish economic performance of the fish processing industry sector, 2011

The amount of income generated by the Irish fish processing industry in 2011 was €565 million, consisting almost exclusively by turnover. Data reveals that, after a 6% decrease in 2009, total income increased until the end of the reporting period, however, it did not reach 2008 levels even though Irish seafood exports grew between 2008 and 2011. 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 & 2011 survey. The enterprises sampled in the 2010 & 2011 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 2010/2011 as the information was collected in a different manner in 2010/2011. 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 almost 70% of total costs and 71% of total income in 2011. In the same year, other operational costs and labour costs gave an equal contribution of 13% to the total costs. Furthermore, while revenues decreased from 2008 to 2011, total expenses increased by 38%, and so did the costs/income ratio reaching almost 1 in 2011.

The figures for total income in Table 4.10.2 Irish economic performance of the fish processing industry sector, 2008-2011 for 2008, 2009 and 2010 were €532.6m, €506.2m and €549.3m respectively. The figures for 2008, 2009 and 2010 were not calculated correctly. However this was noted post data upload and could not be

changed at the time of preparation of the report. The correct figures for total income for 2008, 2009 and 2010 are €581.4m, €543.9m and €549.5m respectively.

As a result some of the calculations which include total income are also in error as follows:

- Gross Value Added for 2008, 2009 and 2010 were €221.6m, €209.5m and €100.1m respectively. The correct figures for 2008, 2009 and 2010 are €270.3m, €247.2m and €100.3m respectively.
- Operating Cash Flow for 2008, 2009 and 2010 were €143.58m, €133.9m and €32.2m respectively. The correct figures for 2008, 2009 and 2010 are €192.5m, €171.6m and €32.4m respectively.
- Earnings before Interest and Tax for 2008, 2009 and 2010 were €128.4m, €116.2m and €12.2m respectively. The correct figures for 2008, 2009 and 2010 are €177.1m, €153.8m and €12.3m respectively.
- Net Profit for 2008, 2009 and 2010 were €125.1m, €113.0m and €8.3m respectively. The correct figures for 2008, 2009 and 2010 are €173.8m, €150.7m and €8.5m respectively.
- Capital Productivity for 2008, 2009 and 2010 were 81.9%, 81% and 43.2% respectively. The correct figures for 2008, 2009 and 2010 are 99.9%, 95.5% and 43.3% respectively.
- Return on Investment for 2008 and 2009 were 47.5% and 44.9% respectively. The correct figures for 2008 and 2009 are 65.4% and 59.4% respectively.
- Labour Productivity for 2008, 2009 and 2010 were €85,348, €79,574 and €37,408 respectively. The correct figures for 2008, 2009 and 2010 are €104,121, €93,885 and €37,465 respectively.

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 2011 were €99.3 million, €27.6 million, €12 million and €8.1 million respectively. Operating Cash Flow decreased by 15% from 2010 due to increases in the costs of raw materials for production and wages and salaries.

Data also demonstrates that, in common with other member states, the sector is very vulnerable to changes in costs and income as Net profit is a very low amount of the overall income (1% in 2011).

Table 4.9.2: Irish economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	571.5	*107%*	537.9	*106%*	544.8	*99%*	558.7	*99%*	*3%*	*-2%*
Other income	4.0	*1%*	1.3	*0%*	0.9	*0%*	2.8	*0%*	*213%*	*-30%*
Subsidies	5.9	*1%*	4.7	*1%*	3.8	*1%*	3.8	*1%*	*1%*	*-35%*
Total Income	*532.6*	*100%*	*506.2*	*100%*	*549.3*	*100%*	*565.3*	*100%*	*3%*	*6%*
Expenditure (million €)										
Purchase of fish and other raw material for production	282.5	*53%*	270.3	*53%*	357.0	*65%*	381.8	*68%*	*7%*	*35%*
Wages and salaries of staff	78.8	*15%*	75.4	*15%*	67.8	*12%*	71.7	*13%*	*6%*	*-9%*
Imputed value of unpaid labour	4.9	*1%*	4.9	*1%*	3.8	*1%*	3.9	*1%*	*0%*	*-21%*
Energy costs	13.1	*2%*	12.6	*2%*	15.2	*3%*	8.8	*2%*	*-42%*	*-33%*
Other operational costs	9.6	*2%*	9.2	*2%*	73.2	*13%*	71.6	*13%*	*-2%*	*648%*
Total production costs	*388.9*	*73%*	*372.3*	*74%*	*517.0*	*94%*	*537.7*	*95%*	*4%*	*38%*
Capital Costs (million €)										
Depreciation of capital	15.4	*3%*	17.8	*4%*	20.1	*4%*	15.6	*3%*	*-22%*	*1%*
Financial costs, net	3.3	*1%*	3.2	*1%*	3.9	*1%*	3.9	*1%*	*-1%*	*17%*
Extraordinary costs, net	0.0	*0%*	1.7	*0%*	0.6	*0%*	0.3	*0%*	*-51%*	*0%*
Capital Value (million €)										
Total value of assets	270.5	*51%*	258.8	*51%*	231.6	*42%*	200.8	*36%*	*-13%*	*-26%*
Net Investments	8.6	*2%*	8.3	*2%*	19.630	*4%*	18.258	*3%*	*-7%*	*112%*
Debt	206.0	*39%*	197.1	*39%*	525.3	*96%*	309.3	*55%*	*-41%*	*50%*
Performance Indicators(million €)										
Gross Value Added	221.6	*42%*	209.5	*41%*	100.1	*18%*	99.3	*18%*	*-1%*	*-55%*
Operating Cash Flow	143.8	*27%*	133.9	*26%*	32.2	*6%*	27.6	*5%*	*-14%*	*-81%*
Earning before interest and tax	128.4	*24%*	116.2	*23%*	12.2	*2%*	12.0	*2%*	*-1%*	*-91%*
Net Profit	125.1	*23%*	113.0	*22%*	8.3	*2%*	8.1	*1%*	*-2%*	*-93%*
Capital productivity (%)	81.9		81.0		43.2		49.4			
Return on Investment (%)	47.5		44.9		5.3		6.0			
Financial Position (%)	76.1		76.1		226.8		154.0			
Future Expectation Indicator (%)	-2.5		-3.7		-0.2		1.3			

Figures for 2008, 2009 and 2010 are in error. See explanation in section 4.9.2 Economic performance of the Irish fish processing industry sector

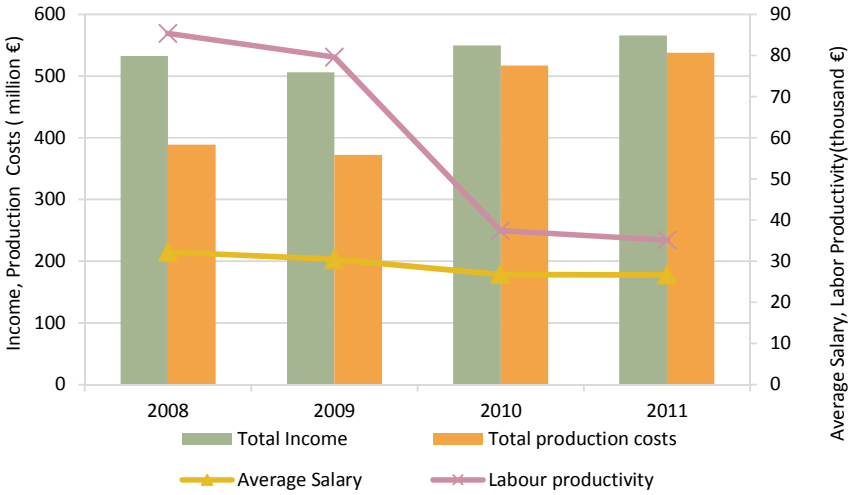


Figure 4.9.4: Income, costs, wages and labour productivity trends for the Irish fish processing industry sector overview, 2008-2011

4.9.3 Trends and drivers for change

The global population is projected to grow to 8 billion by 2025 and Ireland is uniquely placed to play a key role in addressing the global demand for healthy seafood proteins.

Irish seafood sales performed well in 2011, despite difficult trading conditions and on-going recessionary impact to an estimated value of €749 million. The domestic market continued to reflect the challenging times showing a decrease of 4% in sales to €319 million. This was balanced by a further increase in seafood exports valued at €430 million, an overall increase of 13% on 2010 and 27% on 2008.

Emerging markets such as China has a growing middle class population which is driving increased seafood consumption there. BIM launched a collective route to market scheme aimed at promoting collaborations between seafood companies to work collectively to reduce duplication costs, boost profitability and increase competitiveness in export markets.

In 2010 the Irish government launched a strategy called “Food Harvest 2020, a vision for Irish agri food and fisheries”. This strategy looked at specific sector issues and seeks to address these in order to realise the potential that exists in the Irish Seafood Industry. This strategy focuses on access to raw material for the Irish fish processing sector and aims to support innovation and the creation of added value products.

As part of this strategy Bord Iascaigh Mhara (BIM) is leading a project to develop three deep sea salmon farms. It is expected that each farm will be capable of producing 15,000 tonnes of Irish Organic Salmon annually, valued at €102 million.

In 2009, BIM opened the Seafood Development Centre (SDC). This was the first dedicated innovation facility for the Irish seafood sector. Through the support of the SDC, companies can exploit market opportunities and maximise the potential for success through integrated business development and new product development

strategies. During 2011, over 300 enterprises worked on the development of ideas through the centre and over 20 new products were launched with SDC assistance. The Seafood Graduate Development Scheme, operated by the SDC, has already placed four highly skilled graduates in companies in the industry and they are filling the demand in industry for well trained and motivated seafood experts. This scheme is continuing on an annual basis.

BIM and Sustainable Energy Ireland (SEI) developed the Seafood Energy Management Action Programme (SEAMAP) to assist seafood processors to reduce costs and drive operation efficiency. Fourteen companies participated in the pilot programmes held in Donegal and Dublin. The average savings for these companies was 16% for those who participated in the Donegal programme and 21% for those who participated in the Dublin programme.

Government grant aid was approved in 2010 and 2011 for a Processing Investment Scheme. In 2010, nine approved projects invested €4.7 million in the Irish processing sector with grant aid of €1.3 million. This investment is estimated to result in new sales of €26 million and the creation of 82 new jobs. In 2011 twenty one projects supported by the scheme invested €7 million with grant aid of €1.7 million. This investment is expected to generate 191 jobs and increased sales of €38 million by 2015. This scheme was offered again in 2012 and 2013.

The Seafood Value Adding Scheme was offered in 2011 to assist seafood processing companies achieve higher and added value to seafood products. The scheme received 32 applications with a total grant aid of €170,000 towards an industry spend on added value and route to market concepts. This scheme was offered again in 2012 and 2013. BIM delivered €2.4 million in grant aid to the catching and aquaculture sector in 2011.

In 2013 BIM launched their strategy “Capturing Irelands Share of the Global Seafood Opportunity”. It is an action plan which will be achieved by building scale and enhancing competitiveness in the Irish seafood sector. The key targets for end 2017 include:

- 1,200 jobs created
- Sales Value €1 billion, of which exports €650 million & domestic €350 million
- 8,000 training places delivered
- Expand raw material supply by +45,000 tonnes
- companies with a turnover of +€50 million

Data issues

The data for 2008 & 2009 information was gathered in a Benchmark Study of the Irish fish processing sector. For 2010 and 2011 data was collected from a specific questionnaire. Therefore, there are a number of differences in the figures provided and calculations of indicators in this report between these two sampling methodologies.

The sample data for 2010 and 2011 is taken from some of the main seafood companies in the Irish processing industry and represents a more accurate sample. It should be noted that there was a low data return from enterprises with less than 10 employees which represent the largest number of enterprises in the Irish seafood processing industry.

Due to the lack of regulation to make it a legal obligation to complete a survey regarding the Irish fish processing sector, it was very difficult to get companies to respond to a structured survey form. This changed in

2010 with the introduction of a statutory instrument SI 132/2010 which made it mandatory for all companies to maintain data of (a) quantities and species of raw material entering the plant, (b) quantities and types of products produced, and (c) economic data as listed in Annex XII of the Commission Decision in order to allow them complete to complete the survey form.

4.10 ITALY

4.10.1 General overview of the Italian fish processing industry sector

In 2011 the total number of fish processing enterprises registered in Italy (the overall number including both "main" and "non-main" enterprises) was 757 producing a turnover of about 2.5 billion €. This number includes enterprises processing fish products as "main" and as "non-main" activities. Enterprises processing fish as a main activity were equal, in 2011, to 454, representing 60% in number and 90% 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 40% of the total (303) while contribute for 10% to the total turnover of the sector.

The canning sector is the main segment of the Italian fish processing industry. The main products are canned and preserved tunas although there is also a significant number of companies that process anchovies, sardines and shellfish.

From sources external to the DCF the value of production of the seafood canning industry amounted to 1.46 billion euro in 2011[1]. The most important sector is the canned tuna one: in 2011 the production of canned tuna was equal to 68 thousand tonnes in volume and 1.07 billion € in value[2]. The value of the freezing sector production amounted to 116 million Euro in 2008[3].

In any case the fish processing industry has a very low importance on the overall food processing industry. 1.1% is the incidence of the fish canning industry on the value of the total turnover of the whole agri-food industry, while the incidence of the turnover of the seafood freezing sector on the value of the whole freezing sector is a little bit higher (4% in 2008, according to the above mentioned external sources).

As far the dependency on the domestic production, the Italian fish processing industry is heavily dependent on imports, especially the tuna canning industry, the most important at national level.

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 (mostly from Spain) is again increasing at the expense of the semi-manufactured tuna loins (mostly imported from Ecuador, Colombia and ACP countries), more expensive than the first. Furthermore, the need to reduce costs has led several companies to relocate production in areas closer to fishing grounds and where the labour cost is lower. All this process has allowed a general reduction of production costs. Even if, as far as the labour costs, a decrease of this cost item means, from the workers point of view, a decrease in the purchasing power of people employed in the sector.

On the same time, some Italian brands 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.

[1] ISMEA, 2012, Rapporto annuale 2012. Analisi e dati di settore. Analisi delle filiere. Roma, Dicembre 2012.
[2] ISMEA, 2012, Report ittico. Analisi e dati di settore 2011 e 2012. Roma, Dicembre 2012.
[3] ISMEA, 2010, Indicatori del sistema agroalimentare italiano - 2009. Sezione D- Analisi di settore, 33 pp., Roma, Novembre 2010.

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.

The following analysis is based only on those enterprises processing fish as a "main-activity".

According to data collected under the DCF, the Italian fish processing sector consisted of 454 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.

Table 4.10.1: Italian fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	376	414	468	454	-3%	21%
≤ 10 employees	192	221	297	322	8%	68%
11-49 employees	152	166	150	116	-23%	-24%
50-249 employees	31	27	20	15	-25%	-52%
≥ 250 employees	1	0	1	1	0%	0%
Employment (number)						
Total employees	6,200	6,040	6,375	6,545	3%	6%
Male employees	3,224	3,141	3,315	3,404	3%	6%
Female employees	2,976	2,899	3,060	3,142	3%	6%
FTE	5,017	4,924	5,373	5,517	3%	10%
Male FTE	2,609	2,560	2,794	2,869	3%	10%
Female FTE	2,408	2,364	2,579	2,648	3%	10%
Indicators						
FTE per enterprise	13.3	11.9	11.5	12.2	6%	-9%
Average wage (thousand €)	45.4	40.9	43.3	36.4	-16%	-20%
Labour productivity (thousand €)	55.0	60.6	62.5	47.8	-24%	-13%
Unpaid work (%)	4	3.8	7.9	3.8	-52%	0%

The pie chart on Figure 4.10.1, on the dimensional characteristics of the sector, shows that 71% of the total number of enterprises working in the Italian fish processing sector are micro enterprises, i.e. companies with up to a maximum of 10 employees. Looking at the other dimensional classes, it can be strongly asserted that the Italian fish processing industry is dominated by small companies, as 97% of enterprises are represented by companies with less than 50 employees (sum of classes ≤10 and 11-49).

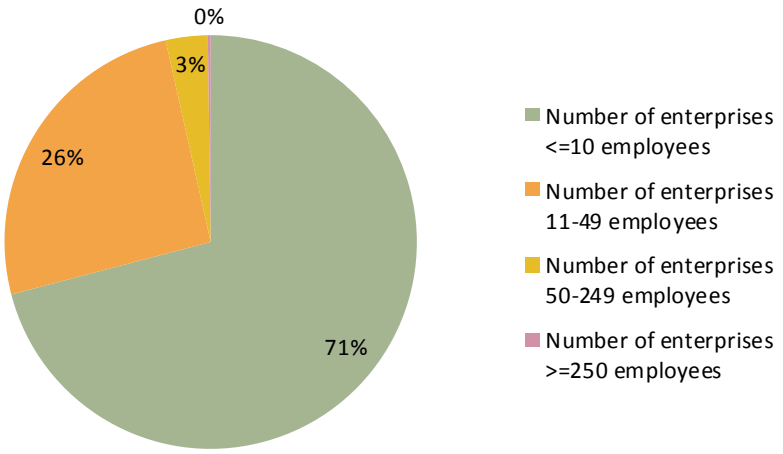


Figure 4.10.1: Size distribution of the Italian fish processing enterprises, 2011

As far as the geographical localisation, the large part (60%) of enterprises is located in the Southern Italy and in the islands, 26% in the North and 15% in the central regions. Indeed, the regions with the largest number of companies are Sicily (22%) and Campania (17%). Sicily is, by far, also the region with highest number of employees (20% of the national total).

The number of people employed in the sector was equal to 6,545 persons consisting in 5,517 FTE. Figure 4.10.2 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. The average wage of the sector, equal to 36 thousand € in 2011, shows a decreasing trend both with respect to 2010 (-16%) and on over the considered period 2008-2011 (-20%).

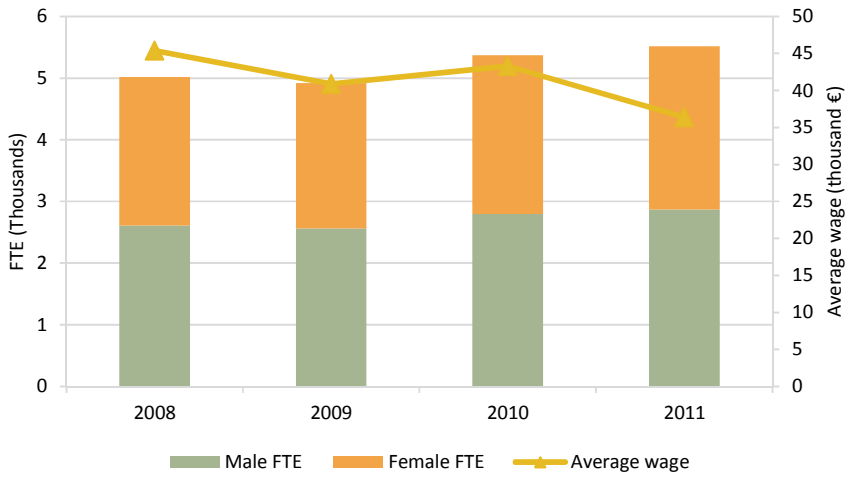


Figure 4.10.2: Italian employment trends, 2008-2011

4.10.2 Economic performance of the Italian fish processing industry sector

The turnover of the sector amounted, in 2011, to around 2,231 billion €, while the total value of production (turnover + subsidies + other income) amounted to 2,264 million € registering an overall decreasing trend; -17% if compared to 2010, -21% when considering the overall period 2008-2011. (-17%).

Turnover represents, on average, 99% of the total income. The remaining 1% is almost equally split between the other forms of income: subsidies and other incomes.

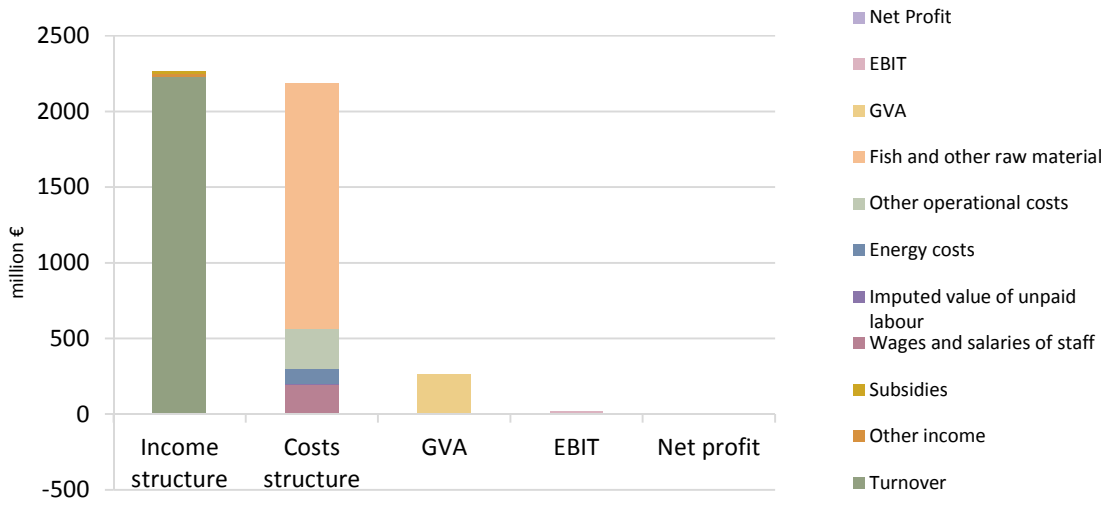


Figure 4.10.3: Italian economic performance of the fish processing industry sector, 2011

Total production costs were equal to 2,184 million € in 2011, representing about 96% of total income and showing a decrease of -16% with respect to 2010. The largest share of costs (74% of total production costs, 71% of total income) is represented by costs for purchase of raw materials and other products needed for the production equal, in 2011, to 1,617 million €. Labour costs represents about 9% of the running costs while energy costs impacted by 4%. A decreasing trend for all the cost items is shown by Table 4.10.2, both on the last 2-years period and on the overall period 2008-2011.

Table 4.10.2: Italian economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	2,842.9	99%	2,153.3	100%	2,566.4	95%	2,231.7	99%	-13%	-22%
Other income	27.0	1%	-6.3	0%	143.3	5%	15.5	1%	-89%	-43%
Subsidies	5.5	0%	4.6	0%	4.7	0%	17.2	1%	267%	215%
Total Income	2,875.4	100%	2,151.6	100%	2,714.3	100%	2,264.4	100%	-17%	-21%
Expenditure (million €)										
Purchase of fish and other raw material for production	2,079.1	72%	1,403.9	65%	1,910.2	70%	1,617.5	71%	-15%	-22%
Wages and salaries of staff	219.0	8%	193.6	9%	214.1	8%	192.9	9%	-10%	-12%
Imputed value of unpaid labour	8.7	0%	7.7	0%	18.4	1%	7.7	0%	-58%	-12%
Energy costs	117.2	4%	91.2	4%	85.8	3%	95.3	4%	11%	-19%
Other operational costs	397.9	14%	353.3	16%	377.5	14%	270.6	12%	-28%	-32%
Total production costs	2,821.8	98%	2,049.7	95%	2,606.1	96%	2,184.0	96%	-16%	-23%
Capital Costs (million €)										
Depreciation of capital	44.5	2%	59.2	3%	67.6	2%	60.1	3%	-11%	35%
Financial costs, net	50.6	2%	27.9	1%	19.0	1%	26.5	1%	40%	-48%
Extraordinary costs, net	-3.0	0%	-4.5	0%	2.0	0%	0.9	0%	-53%	131%
Capital Value (million €)										
Total value of assets	2,117.7	74%	2,118.9	98%	2,550.5	94%	2,072.3	92%	-19%	-2%
Net Investments	221.0	8%	-94.1	-4%	179.7	7%	119.0	5%	-34%	-46%
Debt	1,453.1	51%	1,394.6	65%	1,563.2	58%	1,413.3	62%	-10%	-3%
Performance Indicators(million €)										
Gross Value Added	275.8	10%	298.6	14%	336.1	12%	263.8	12%	-22%	-4%
Operating Cash Flow	53.5	2%	102.0	5%	108.2	4%	80.4	4%	-26%	50%
Earning before interest and tax	9.0	0%	42.8	2%	40.6	1%	20.2	1%	-50%	125%
Net Profit	-41.6	1%	14.9	1%	21.7	1%	-6.3	0%	-129%	85%
Capital productivity (%)	13.0		14.1		13.2		12.7			
Return on Investment (%)	0.4		2.0		1.6		1.0			
Financial Position (%)	68.6		65.8		61.3		68.2			
Future Expectation Indicator (%)	8.3		-7.2		4.4		2.8			

As far as the performance indicators, Table 4.10.2 shows that they followed almost the same path, especially on the latest 2 years of the series, all of them decreasing.

The GVA produced by the sector in 2011 was equal to about 264 million €, decreasing of about -22% with respect to 2010. The reason is mainly to be find in the increase of costs related to the production (excluding labour costs) higher (-21%) than the decrease of total income (excluding subsidies) (-17%).

Operating Cash Flow, equal to around 80 million € in 2011, shows a decrease, as well, of -26% if compared to 2010. As far as EBIT, it was equal to 20 million € in 2011, decreasing about -50% with respect to 2010. The net

profit is the indicator showing the highest decrease, mostly due to the increase in the interest costs (financial costs) equal to +40% with respect to 2010 value.

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), decreased from 13.2% to about 12.7%.

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, decreased from 1.6% to 1%.

The same is for the FEI (future expectation indicator) going from 4.4 to 2.8. FEI could 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 decreasing.

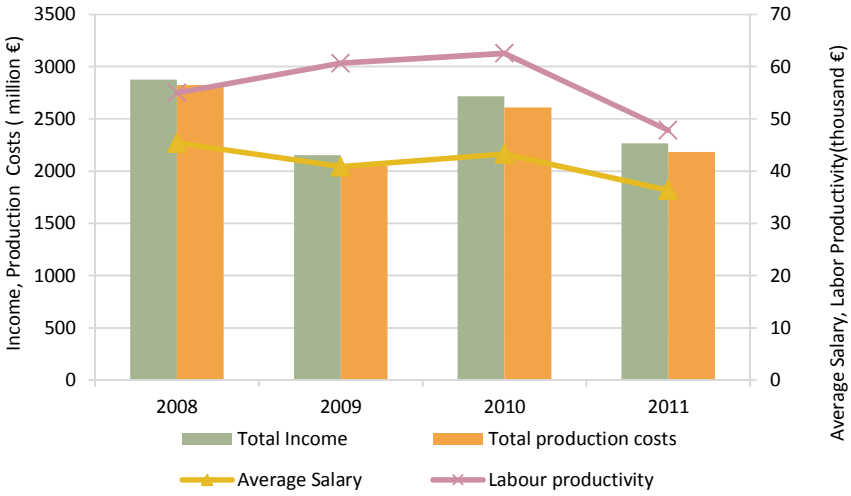


Figure 4.10.4: Income, costs, wages and labour productivity trends for the Italian fish processing industry sector overview, 2008-2011

4.10.3 Trends and drivers for change

The Italian fish processing sector is mostly represented by canning enterprises, whose main products are canned and preserved tunas although there is also a significant number of companies that process anchovies, sardines and shellfish.

The most important sector is especially the canned tuna one: in 2011 the production of canned tuna was equal to 68 thousand tonnes in volume and 1.07 billion € in value, about 50% if compared with the total turnover of the sector in 2011 (including also the freezing sector). Because of this the trend and triggers of the domestic

sector is mainly to be find in the access to raw materials as it is well know that the Italian fish processing industry is heavily dependent on imports, especially the tuna canning industry.

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 (mostly from Spain) is again increasing at the expense of the semi-manufactured tuna loins (mostly imported from Ecuador, Colombia and ACP countries), more expensive than the first. Furthermore, the need to reduce costs has led several companies to relocate production in areas closer to fishing grounds and where the labour cost is lower. All this process has allowed a general reduction of production costs. Even if, as far as the labour costs, a decrease of this cost item means, from the workers point of view, a decrease in the purchasing power of people employed in the sector (the average salary was 45 thousand € in 2008 and 36 thousand € in 2011).

On the same time, some Italian brands 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.

4.11 LATVIA

4.11.1 General overview of the Latvian fish processing industry sector

Fish processing is a well-developed old tradition in Latvia. The processing sector is fully based on the local natural resources. In most cases fish processing enterprises are situated in the coastal regions. This type of economic activity is very important for Latvian agriculture and for employment especially in the coastal areas. Total employment in 2011 was 5,393, in terms of number of people. In 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 2011 with a total turnover of 170.8 million Euros. The number of enterprises did not change significantly from 2008 to 2011. There are only few enterprises in Latvia where processing is not the main activity. For these enterprises the data about turnover could not be provided for confidentiality reasons. All fish processing enterprises operate according to European Union standards. Fish processing production has important share in total Latvian export and supplies domestic market.

Export of fish production was to 52 countries and import from 45 countries in 2011. 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 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 4.11.1: Latvian fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	95	91	104	101	-3%	6%
≤ 10 employees	27	33	44	44	0%	63%
11-49 employees	26	37	36	34	-6%	31%
50-249 employees	37	16	18	16	-11%	-57%
≥ 250 employees	5	5	6	7	17%	40%
Employment (number)						
Total employees	5,793	4,684	5,015	5,393	8%	-7%
Male employees	2,148	1,774	1,814	1,807	0%	-16%
Female employees	3,644	2,910	3,201	3,586	12%	-2%
FTE	5,592	4,174	4,679	4,998	7%	-11%
Male FTE	2,074	1,580	1,761	1,697	-4%	-18%
Female FTE	3,518	2,594	2,920	3,301	13%	-6%
Indicators						
FTE per enterprise	58.9	45.9	45.0	49.5	10%	-16%
Average wage (thousand €)	5.7	4.3	4.9	5.5	13%	-2%
Labour productivity (thousand €)	9.7	5.4	6.1	6.1	-1%	-37%
Unpaid work (%)	1	0.9	0.0	0.0	0%	-100%

The number of fish processing enterprises increased insignificantly from 95 in 2008 to 101 in 2011. There are only 7 big enterprises which have more than 250 employed people. Small and middle size companies dominated in Latvia and their total size were 77% from all companies size (Figure 4.1.1.).

There were 34 enterprises in the segment 11-49 employees and 16 enterprises which were included to the segment 50-249 employees. The biggest segment ≤ 10 employees had consisted of 44 enterprises in 2011.

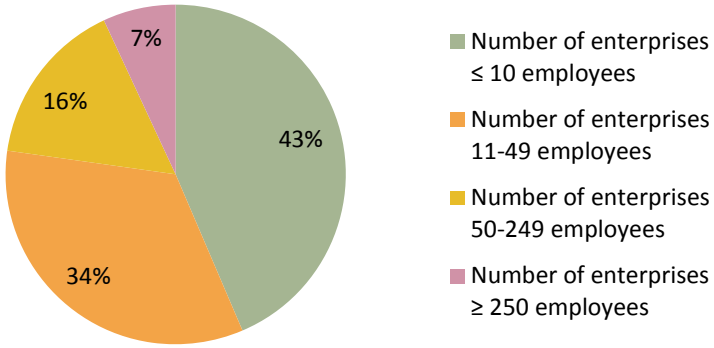


Figure 4.11.1: Size distribution of the Latvian fish processing enterprises, 2011

Total number of employments was 5,393 persons in 2011 from them 4,998 persons were employed full time (Table 4.11.1). Number of female was more than male and was 3,301 and 1,697 employments respectively. Number of full time employed insignificantly decreased by 11% from 2008 to 2011. The mean wage showed a decreasing only by 2 % from 2008 to 2011 and was 550 euros per month in 2011 (Figure 4.1.5.). Total wage had decreasing by 12 % from 2008 to 2011. The main reason for the salary reduction was direct impact of global economic crises. The average full time employment per enterprise, for all segments decreased by 16% from 2008 to 2011 and was 59 and 49 person respectively.

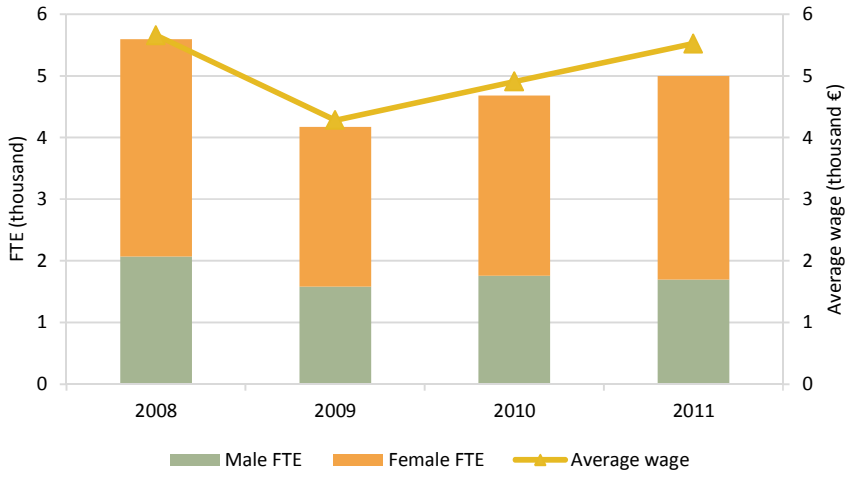


Figure 4.11.2: Latvian employment trends, 2008-2011

4.11.2 Economic performance of the Latvian fish processing industry sector

The total production costs share was 98% of total fish processing industry income (Table 4.1.2.). Share of purchase and raw material for production made up of 58% of the total income. But nevertheless the value of total production costs demonstrated decreasing by 14% from 2008 to 2011. The total turnover sharply decreased by 21% from 2008 to 2011 and was 214.9 to million euros in 2008 and 170.8 million euros in 2011 (Table 4.1.2.). The Gross Value Added and Operating Cash Flow also reduced significantly by 44% and 83% respectively. In its turn the subsidies increased extremely in 10 times from 2008 to 2011. Despite of the growth of subsidies income of a lot of companies did not cover a high value of costs. Total profit for the fish processing industry, which showed 12.4 million euros in 2008 changed to total loss of 2.7 million euros in 2011. The negative impact of global economic crisis to economic situation in Latvia processing industry also shows productivity indicators. The labour and capital productivity indicators reduced by 37% and 45% respectively.

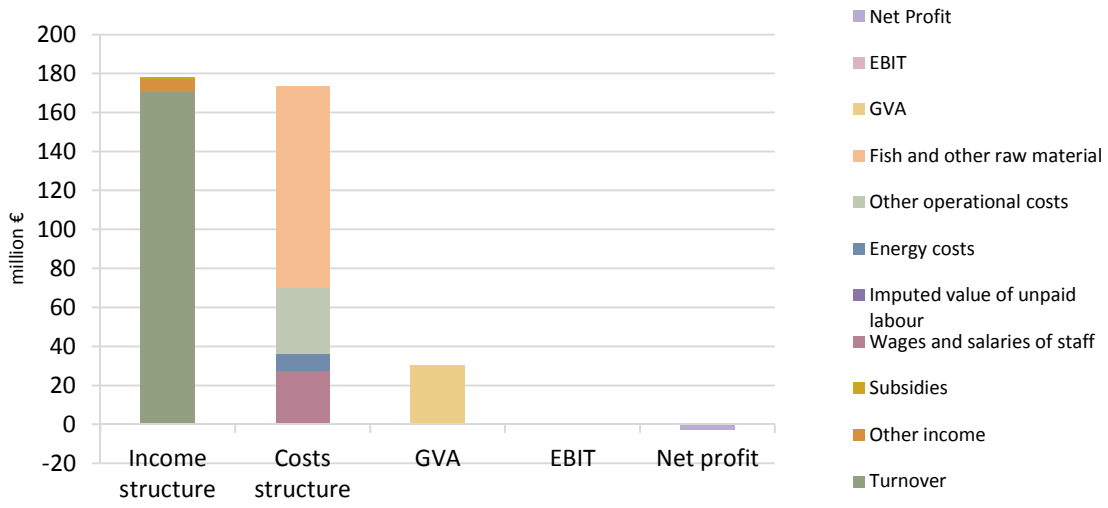


Figure 4.11.3: Latvian economic performance of the fish processing industry sector, 2011

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 2010 was 34.14 million euros[1].

The most important trade partners for Latvian export in 2011 were Estonia, Russia, Lithuania, Belorussia, France and Denmark with the total exported volume 73.5 tonnes and 107 million euros. 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 65.8 million euros and "Fresh or chilled fish" (KN 0302) with 33.7 million euros. The largest volume export was 51.6 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 28.2 thousand tones. The volume of total export was relatively stable and the value increase in some degree by 14% from 2010 to 2011.

The import of fish products comes from countries all over the world - EU countries, East Asia, USA, South America and Africa. The total input of imported production was 118 million euros and 61.7 thousand tons in 2011. The main important trade partners for import were Sweden, Lithuania, Estonia and Norway with the imported value 37, 19, 12 and 10 million euros respectively. The most imported products by volume and value were "Fresh or chilled fish" (KN 0302) and "Frozen whole salt water fish" (KN 0303). Theirs volume were 10.3 and 18.5 thousand tones and value 43.1, 32.2 million euros respectively in 2011. The volume and value of total import has increased by 18% from 2010 to 2011. 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.

[1] Information sources: http://www.zm.gov.lv/?sadala=2086

Table 4.11.2: Latvian economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	214.9	96%	152.8	96%	153.8	94%	170.8	96%	11%	-21%
Other income	9.1	4%	5.2	3%	6.7	4%	6.5	4%	-4%	-29%
Subsidies	0.1	0%	1.5	1%	2.3	1%	1.0	1%	-57%	814%
Total Income	224.0	100%	159.5	100%	162.8	100%	177.2	100%	9%	-21%
Expenditure (million €)										
Purchase of fish and other raw material for production	120.2	54%	96.0	60%	93.3	57%	103.2	58%	11%	-14%
Wages and salaries of staff	31.5	14%	17.7	11%	23.0	14%	27.6	16%	20%	-12%
Imputed value of unpaid labour	0.2	0%	0.2	0%	0.0	0%	0.0	0%	0%	-100%
Energy costs	9.4	4%	7.6	5%	7.6	5%	8.3	5%	10%	-12%
Other operational costs	40.1	18%	32.0	20%	31.1	19%	34.4	19%	11%	-14%
Total production costs	201.3	90%	153.4	96%	154.9	95%	173.5	98%	12%	-14%
Capital Costs (million €)										
Depreciation of capital	8.4	4%	6.0	4%	4.5	3%	4.3	2%	-4%	-49%
Financial costs, net	1.9	1%	1.9	1%	2.0	1%	2.1	1%	6%	10%
Extraordinary costs, net	0.0	0%	0.0	0%	0.0	0%	0.7	0%	22847%	63163%
Capital Value (million €)										
Total value of assets	111.9	50%	100.6	63%	101.3	62%	114.8	65%	13%	3%
Net Investments	6.7	3%	5.3	3%	3.5	2%	13.2	7%	278%	96%
Debt	83.6	37%	82.5	52%	79.9	49%	90.4	51%	13%	8%
Performance Indicators(million €)										
Gross Value Added	54.2	24%	22.5	14%	28.6	18%	30.4	17%	6%	-44%
Operating Cash Flow	22.7	10%	6.1	4%	7.9	5%	3.8	2%	-53%	-83%
Earning before interest and tax	14.3	6%	0.1	0%	3.5	2%	-0.5	0%	-115%	-104%
Net Profit	12.4	6%	-1.8	1%	1.4	1%	-2.7	2%	-285%	-122%
Capital productivity (%)	48.5		22.3		28.3		26.5			
Return on Investment (%)	12.8		0.1		3.4		-0.5			
Financial Position (%)	74.7		82.0		78.9		78.7			
Future Expectation Indicator (%)	-1.5		-0.7		-1.0		7.7			

Figure 4.11.4: Income, costs, wages and labour productivity trends for the Latvian fish processing industry sector overview, 2008-2011

4.11.3 Trends and drivers for change

Despite of economic crises 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 here, not to export the useful raw material abroad[2].

4.11.3.1 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.

The data collection type was Census for all fish processing industry segments from 2008 to 2011.

[2] Information sources: http://www.zm.gov.lv/?sadala=2086

The data received from CSB by company size category were arranged by the number of person employed to protect the data confidentiality. These data were provided to JRC according to the Call for data concerning the EU fish processing industry 2008-2011 structure.

The data were collected according to the Structural Business Statistics (SBS) COMMISSION REGULATION (EC) No 250/2009 amending Commission Regulation (EC) No 2700/98 definitions. Turnover and price data, as well as information on import, export and main product type mentioned in the text were collected according to EUROSTAT PRODCOM NACE Rev.2. codification.

4.12 LITHUANIA

4.12.1 General overview of the Lithuanian fish processing industry sector

In 2011 Lithuanian fish processing industry consisted of 37 enterprises whose main activity was fish processing and population remained unchanged compared to 2010. The total income consisting of turnover and other income was €326.9 million in 2011 with 8.4% annual increase and almost 47% gain compared to 2008. The industry provided 3,699 employment positions in terms of full time equivalent (FTE).

Lithuanian processing industry is highly dependent from imported raw material which accounts for 77% of the total purchased amount of raw material and recently show a tendency to increase. The main products were surimi, which covered approximately 33% of total production from industry. The second largest commodity in the terms of production volume was smoked fish with the main species Atlantic salmon and Atlantic herring respectively. The significant part of production from processing industry also comes as frozen cod fillets, and prepared salted products from Atlantic herring. Regarding production value, 78.2% of total production is destined to foreign markets whereas the rest part is marketed internally. The main markets for export are EU and CIS countries with the 94% and 4% respectively in terms of value as well as 90% and 10% respectively in terms volume. Fish processing industry in Lithuania possess a positive trade balance with higher export value compare to import. Data of foreign trade of fish and its products (including fish products for resale) reveals continuous increasing export trend since 2008. For instance, value of exported production in 2011 amounted 298.7 million EUR and was 4.4% higher compare to 2010 and 52.7% more than in 2008. Regarding 2012 outlook for export value it is foreseen the increase of 1%. In 2011 the main part of production in terms of production value was exported to Germany, France and Poland respectively.

Lithuanian fish processing sector is mostly represented by 50-249 employees segment. Detailed information about size distribution of the Lithuanian fish processing enterprises is presented in Figure 4.12.1. The average number of employees per enterprise was 122.8 in 2011. The yearly increase in number of employees were 4%, but from 2008 to 2010 was observed a decreasing tendency with the recovering in 2011. Outlook for 2012 is foreseen as 1.5% increase in number of employees.

In the recent years the number of employed persons per enterprise was relatively constant but in some cases had a trend to increase corresponding to 27% decline in number of companies with lower number of employees and 25% increase in 50-249 employees.

If the number of employed persons in fish processing sector had a fluctuating trend during 2008-2011, full time equivalent (FTE) demonstrated clear increasing tendency indicating the positive development of employment. In 2011 the number of FTE increased by 20% annually and by 27% compare to 2008.

The gender structure of labour force was more favourable for female employees which amounted 64.5% of total persons employed.

Table 4.12.1: Lithuanian fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	37	36	37	37	0%	0%
≤ 10 employees	6	4	4	6	50%	0%
11-49 employees	12	12	15	11	-27%	-8%
50-249 employees	12	15	12	15	25%	25%
≥ 250 employees	7	5	6	5	-17%	-29%
Employment (number)						
Total employees	5,013	4,518	4,378	4,545	4%	-9%
Male employees	1,583	1,310	1,445	1,614	12%	2%
Female employees	3,430	3,208	2,933	2,931	0%	-15%
FTE	2,912	2,973	3,073	3,699	20%	27%
Male FTE	845	804	1,010	1,586	57%	88%
Female FTE	2,067	2,169	2,063	2,113	2%	2%
Indicators						
FTE per enterprise	78.7	82.6	83.1	100.0	20%	27%
Average wage (thousand €)	7.9	10.2	8.9	8.0	-10%	1%
Labour productivity (thousand €)	24.7	23.2	24.0	24.1	1%	-2%
Unpaid work (%)	0	0.0	0.0	0.0	0%	0%

In 2011 the average salary per full time employee in fish processing sector was €8,039 and compare to 2010, the 10% decrease was observed. For 2012, the average salary per full time employee in fish processing sector is estimated 6.9% higher than in 2011 reaching €8,593. The overall average gross earnings per employee in Lithuania was €7,111 in 2011, so the sector provided quite good possibilities for the employees, salaries in fish processing sector were relatively higher than average gross wages in Lithuania. During 2008 – 2011 period labour productivity has a tendency to decrease with minor fluctuations in 2010, consequently the productivity in 2011 was 9% lower than 2010, but 19% higher compare to 2008.

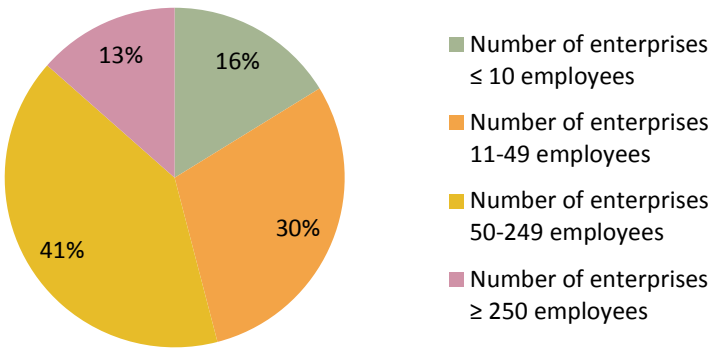


Figure 4.12.1: Size distribution of the Lithuanian fish processing enterprises, 2011

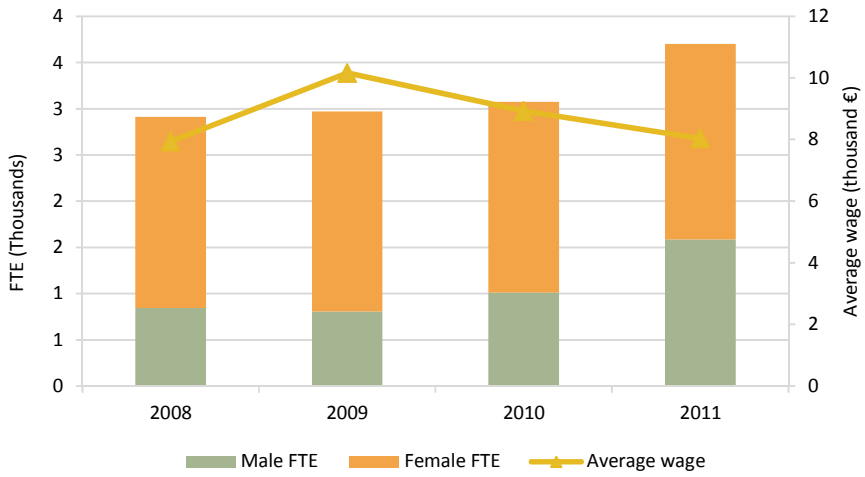


Figure 4.12.2: Lithuanian employment trends, 2008-2011

4.12.2 Economic performance of the Lithuanian fish processing industry sector

The economic performance of the Lithuanian fish processing industry sector is further demonstrates yearly increasing trend. Annual increase in turnover was 8% and 58% comparing to 2008. For the year 2012, it is estimated that turnover will fluctuate with a possible slight decline around 4 % and will further recover in 2013. In 2011 estimated Gross Value Added (GVA) was 89.3 million which is 21.1% higher than in 2010 and 24.3% higher compare to 2008. The growth of GVA is negatively affected by the increase in cost of purchased raw material.

The production cost structure remained almost unchanged during 2010 and 2011. Taking into consideration the long term cost structure trend, share of purchase of raw material increased year by year and in 2011 amounted 70% of total operating costs. It corresponded to the consistent rise of fish import price from 2008 to 2011. For instance, import price for fish (CN code ex03) from 2008 to 2011 increased 33%. As much as Lithuanian fish processing industry is highly dependent from imported raw material, this inflation affected production and marketing price. In relation with such increase, production export price was also shifted, but with less extent. From 2009 to 2011, export price of Lithuanian fish processing industry production, which accounts for almost 70% in terms of volume, increased 17.14% when import price for raw material during respective period gained 24.8%. Import price for 2012, compare to 2011 increased by 1%. This would not have a significant impact in production cost.

The domestic supply of raw fish is mostly presented by Baltic cod and Baltic Herring caught from Baltic Sea, several fresh water species from inland waters and trout from RAS aquaculture. But as was mentioned before, such species have insignificant part in total supply of raw material for industry.

Wages had 11% of share in total operating cost structure and from 2008 slightly decreased, from 13% to 11%. For 2012 is forecasted the same level for labor cost. On the other hand labor productivity remained stable during analyzing period which indicates that GVA is generated in line with changes of employment.

Decreasing trend during 2008-2011 was observed in cost items as other operating costs. In 2011 it had a 16% share in total operating cost structure. From 2008 to 2011 it dropped by 20%, but remained stable concerning

annual change. Regarding 2012 outlook this item is forecasted to decrease and consist of 13% in cost structure. This is due to successful modernization of manufacturing process with optimization of costs during recent years.

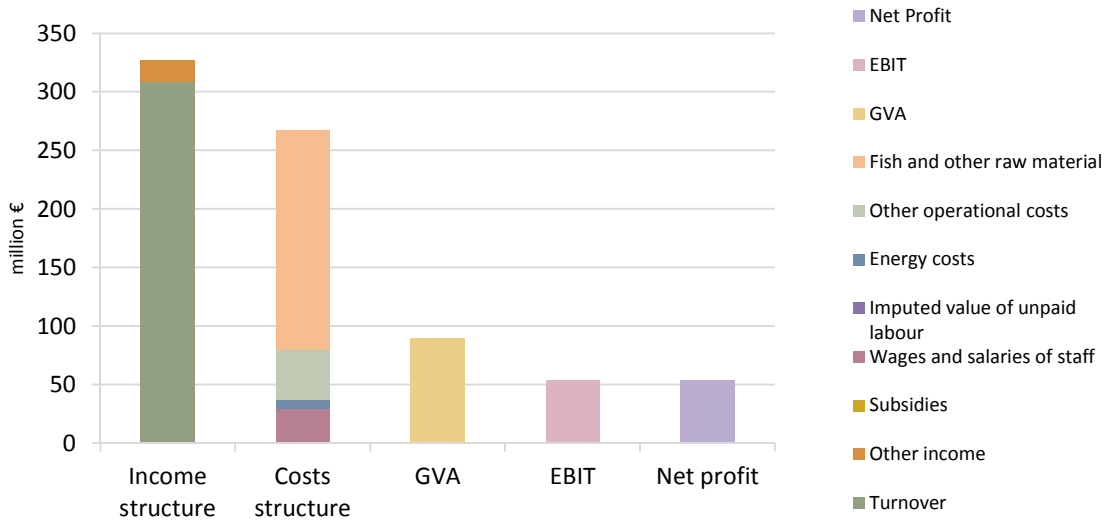


Figure 4.12.3: Lithuanian economic performance of the fish processing industry sector, 2011

In the Lithuanian processing industry, year 2011 was the most successful in the terms of profitability during analyzing period. The industry generated €53.6 million net profit in 2011 with the 36% annual increase. Estimated return on investment also improved since 2008 and reached 30.1% in 2011. The growth of enterprise total assets, together with increased investments, compare to 2010 denote positive expectations in future. The future industry Expectations indicator is also showing positive trends of investment and suggests further growth of the sector. This indicator was positive in 2011 and was estimated at 2.3%.

Despite the continuously increasing economic performance, the financial position demonstrated the opposite trend; it declined yearly from 67.6% in 2008 to 54.5% in 2011. The annual decrease was 3.9%. Decreasing financial position could also indicate that generated cash flow which is do not assigned to reduce debts, but is foreseen for investments and rise of capital. Capital assets were managed relatively sufficient, financial income were almost the same as cost therefore net profit was equal to EBIT. It was improvement compared to previous year, when net profit was lower than EBIT.

Table 4.12.2: Lithuanian economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	194.9	87%	234.7	90%	286.9	95%	308.8	94%	▲ 8%	▲ 58%
Other income	28.2	13%	26.3	10%	14.6	5%	18.1	6%	▲ 24%	▼ -36%
Subsidies	0.0	0%	0.0	0%	0.0	0%	0.0	0%	▼ -100%	▬ 0%
Total Income	223.0	100%	261.0	100%	301.5	100%	326.9	100%	▲ 8%	▲ 47%
Expenditure (million €)										
Purchase of fish and other raw material for production	111.0	50%	149.4	57%	180.1	60%	187.5	57%	▲ 4%	▲ 69%
Wages and salaries of staff	23.1	10%	30.2	12%	27.4	9%	29.7	9%	▲ 8%	▲ 29%
Imputed value of unpaid labour	0.0	0%	0.0	0%	0.0	0%	0.0	0%	▬ 0%	▬ 0%
Energy costs	4.6	2%	5.6	2%	5.7	2%	7.4	2%	▲ 30%	▲ 59%
Other operational costs	35.6	16%	37.2	14%	42.0	14%	42.7	13%	▲ 2%	▲ 20%
Total production costs	174.3	78%	222.3	85%	255.2	85%	267.3	82%	▲ 5%	▲ 53%
Capital Costs (million €)										
Depreciation of capital	6.9	3%	5.6	2%	5.3	2%	6.0	2%	▼ 11%	▼ -14%
Financial costs, net	8.3	4%	3.0	1%	1.6	1%	0.0	0%	▼ -97%	▼ -99%
Extraordinary costs, net	0.0	0%	0.0	0%	0.0	0%	0.0	0%	▬ 200%	▬ 0%
Capital Value (million €)										
Total value of assets	159.2	71%	152.3	58%	152.2	50%	177.9	54%	▲ 17%	▲ 12%
Net Investments	23.6	11%	9.2	4%	9.4	3%	10.0	3%	▼ 7%	▼ -58%
Debt	107.6	48%	95.8	37%	86.3	29%	96.9	30%	▼ 12%	▼ -10%
Performance Indicators(million €)										
Gross Value Added	71.8	32%	68.9	26%	73.7	24%	89.3	27%	▲ 21%	▲ 24%
Operating Cash Flow	48.7	22%	38.7	15%	46.3	15%	59.6	18%	▲ 29%	▲ 22%
Earning before interest and tax	41.9	19%	33.1	13%	40.9	14%	53.6	16%	▲ 31%	▲ 28%
Net Profit	33.6	15%	30.1	12%	39.4	13%	53.6	16%	▲ 36%	▲ 59%
Capital productivity (%)	45.1		45.2		48.4		50.2			
Return on Investment (%)	26.3		21.7		26.9		30.1			
Financial Position (%)	67.6		62.9		56.7		54.5			
Future Expectation Indicator (%)	10.5		2.4		2.7		2.3			

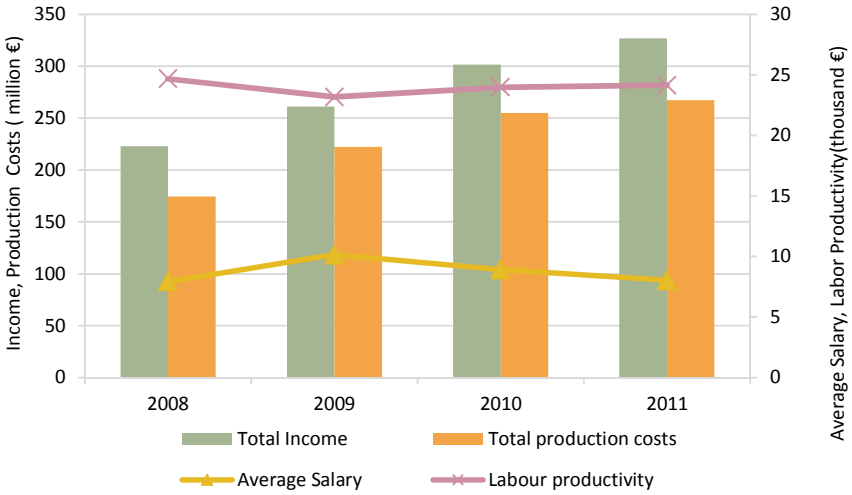


Figure 4.12.4: Income, costs, wages and labour productivity trends for the Lithuanian fish processing industry sector overview, 2008-2011

4.12.3 Trends and drivers for change

Successful application of investments for modernization co-financed by EFF during 2009-2011 is expected to result at least short-term stability in 2012 and further increase of production in 2013 and onwards. The expected perspective outlook is also based on successful market expansion from 2008 to 2011 by reducing export to CIS countries in terms of value and diverting it to EU market. Volumes of export to CIS countries are fluctuating, which indicates that cheaper production is diversified to those markets. CIS markets, especially Russian is politically motivated and characterized by high risk. The market share in CIS countries in terms of export value from 2009 to 2011 was reduced by 62% and is foreseen further decline in 2012 and 2013 with the adequate expansion in EU markets.

The key driver for improved economic performance and profitability was gradual export expansion to EU market. Modernized fish processing technologies and manufacturing process after successful investments reduced some of the important operational costs which will result in the increased production quality and higher profitability indicators. Only inflation of imported raw material had a relatively negative influence on marketing production. Investments during 2008-2011 for improved marketing and market expansion will benefit to the further economic performance and profitability.

Increasing fish consumption in Lithuania is also could be a minor factor positively affecting processing industry performance for those enterprises which targeting internal market.

4.13 MALTA

4.13.1 General overview of the Maltese fish processing industry sector

While during a 3 year period, from 2006 to 2008, Malta's fish processing industries number remained stable (7) with an increase in 2009 to 10 enterprises, it significantly decreased to 2 in the year 2010. That number remained unchanged in 2011. Despite the decrease, the total turnover of the processing sector for 2011 amounted up to 37.7 million euro, a 64% raise from year 2010's 23 million and even a slight increase from 2009, the year with the highest number of fish processing industries. It should be emphasized that the two processing industries belong to the very small enterprises sector (≤10 employees).

Continuing the trend from previous years, 2011 shows zero subsidies income. Perhaps Maltese public sector could provide their national companies with more information about the available subsidies for the processing sector and facilitate their acquisition.

The year 2011, compared to 2010, demonstrated a significant 87% increase of FTE employees in the processing sector that mainly concerned new female employees (333% increase of FTE female employees, 25% of FTE male employees). As the number of companies remained idle, this shows that the processing enterprises hired new personnel to meet higher production demands.

Also, 2011 is the first year that shows no indication of unpaid work.

An interesting fact is that in a 4 year period, employment dropped 33% in FTE numbers while the average wage decreased 51% (from 33.2 mil € in 2008 to 16.2 mil € in 2011). Please note that he respectively high 2008 figure, according to STECF-OWP-12-01, could be the result of the fact that the wage for the year 2008 reflected the total remuneration paid to all the employees engaged in all the activities of the enterprise such as fish processing, aquaculture and retail

Both facts combined however; demonstrate a possible impact of the sustained economic crisis in Mediterranean area.

Table 4.13.1: Maltese fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises						
≤ 10 employees	6	5	2	2	0%	-67%
11-49 employees	1	5	0	0	0%	-100%
50-249 employees	0	0	0	0	0%	0%
≥ 250 employees	0	0	0	0	0%	0%
Employment (number)						
Total employees	56	131	19	32	68%	-43%
Male employees	53	118	13	16	23%	-70%
Female employees	3	13	6	16	167%	433%
FTE	40	116	15	28	87%	-30%
Male FTE	36	102	12	15	25%	-58%
Female FTE	4	14	3	13	333%	242%
Indicators						
FTE per enterprise						
Average wage (thousand €)	33.2	20.1	18.7	16.2	-13%	-51%
Labour productivity (thousand €)	160.3	-120.8	1461.9	154.8	-89%	-3%
Unpaid work (%)	10	11.9	19.8	0.0	-100%	-100%

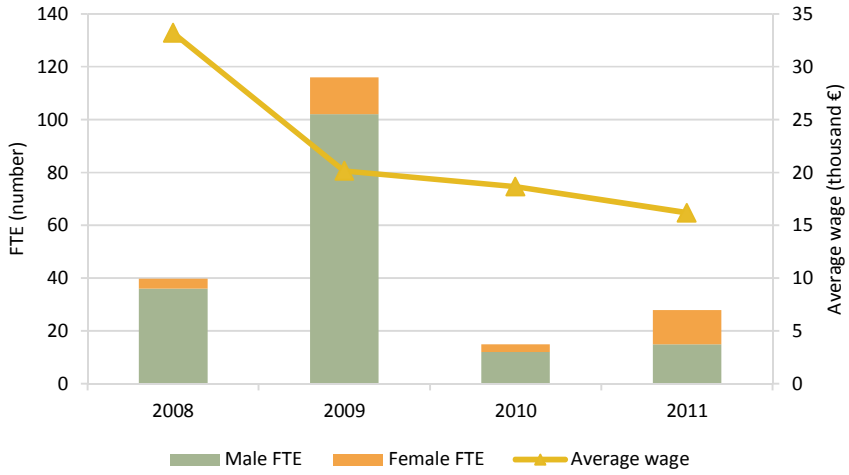


Figure 4.13.1: Maltese employment trends, 2008-2011

4.13.2 Economic performance of the Maltese fish processing industry sector

Despite the fact that during 2011 only two fish processing industries remained operative, out of 10 during 2009, the total turnover for the same year (37.7 mil.€) remained on the same level as in previous years.

The two companies also demonstrated 3.1 mil € net profit, 4.3 mil € GVA and 3.8 mil € dept. For the year 2009,a year with 5 very small and 5 small fish processing enterprises, the same figures were respectively -21.6 mil€ net profit, -16 mil€ GVA and 31.3 mil€ debt.

Regarding 2011 performance indicators, Maltese fish processing industry sector demonstrates 85% capital productivity, 66% return of investment, 74.4% financial position and 18 % Future Expectation Indicator.

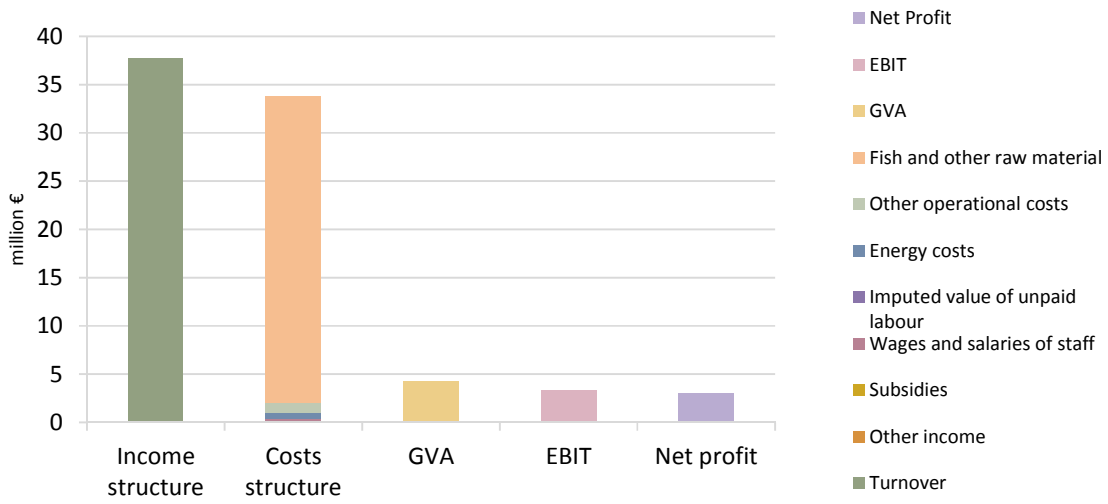


Figure 4.13.2: Maltese economic performance of the fish processing industry sector, 2011

Table 4.13.2: Maltese economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	37.0	100%	37.4	100%	23.0	100%	37.7	100%	64%	2%
Other income	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Subsidies	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	-100%
Total Income	37.0	100%	37.4	100%	23.0	100%	37.7	100%	64%	2%
Expenditure (million €)										
Purchase of fish and other raw material for production	21.8	59%	39.4	105%	0.0	0%	31.7	84%	817405%	46%
Wages and salaries of staff	1.2	3%	2.1	6%	0.2	1%	0.5	1%	102%	-62%
Imputed value of unpaid labour	0.1	0%	0.3	1%	0.1	0%	0.0	0%	-100%	-100%
Energy costs	0.3	1%	0.4	1%	0.3	1%	0.6	2%	70%	91%
Other operational costs	8.5	23%	11.6	31%	0.7	3%	1.0	3%	40%	-88%
Total production costs	31.9	86%	53.8	144%	1.4	6%	33.8	90%	2391%	6%
Capital Costs (million €)										
Depreciation of capital	1.8	5%	3.8	10%	0.5	2%	0.5	1%	7%	-71%
Financial costs, net	0.9	2%	1.5	4%	0.1	1%	0.3	1%	82%	-72%
Extraordinary costs, net	0.1	0%	0.2	0%	0.0	0%	0.4	1%	0%	345%
Capital Value (million €)										
Total value of assets	8.6	23%	14.0	37%	2.7	12%	5.1	14%	90%	-41%
Net Investments	1.3	4%	0.3	1%	1.299	6%	1.436	4%	11%	10%
Debt	17.9	48%	31.3	84%	2.3	10%	3.8	10%	64%	-79%
Performance Indicators(million €)										
Gross Value Added	6.4	17%	-14.0	37%	21.9	95%	4.3	12%	-80%	-32%
Operating Cash Flow	5.1	14%	-16.3	44%	21.6	94%	3.9	10%	-82%	-24%
Earning before interest and tax	3.3	9%	-20.1	54%	21.2	92%	3.4	9%	-84%	2%
Net Profit	2.4	6%	-21.6	58%	21.0	91%	3.1	8%	-85%	30%
Capital productivity (%)	74.5		-100.1		817.6		85.0			
Return on Investment (%)	38.5		-143.7		789.1		66.0			
Financial Position (%)	207.5		223.4		86.1		74.4			
Future Expectation Indicator (%)	-5.8		-25.1		30.4		18.0			

Figure 4.13.3: Income, costs, wages and labour productivity trends for the Maltese fish processing industry sector overview, 2008-2011

4.13.3 Trends and drivers for change

As no national expert was present during the EWG meeting, no further trend description or change estimation can be presented.

4.14 NETHERLANDS

4.14.1 General overview of the Dutch fish processing industry sector

In 2011 the Dutch fish processing industry consisted of 88 enterprises with a total turnover of 804 million euro. 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 most 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.

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 were 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 4.14.1, Figure 4.14.1 and Figure 4.14.2 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 2008-2011 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 4.14.1: Dutch fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	101	95	89	88	-1%	-13%
≤ 10 employees	54	47	48	39	-19%	-28%
11-49 employees	34	33	30	33	10%	-3%
50-249 employees	13	15	11	16	45%	23%
≥ 250 employees	0	0	0	0	0%	0%
Employment (number)						
Total employees	2,953	3,453	3,218	3,253	1%	10%
Male employees						
Female employees						
FTE	2,335	2,775	2,506	2,537	1%	9%
Male FTE						
Female FTE						
Indicators						
FTE per enterprise	23.1	29.2	28.2	28.8	2%	25%
Average wage (thousand €)	38.9	30.6	34.6	34.3	-1%	-12%
Labour productivity (thousand €)	59.7	44.3	48.9	46.0	-6%	-23%
Unpaid work (%)	3	0.1	0.1	0.1	-5%	-97%

Both the number of employees and FTE showed a small increase in 2011 compared to 2010. Because of this small increase and the fact that the number of enterprises almost remained stable, the FTE per enterprise increased with only 2%. Labour productivity decreased with 6%. 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.

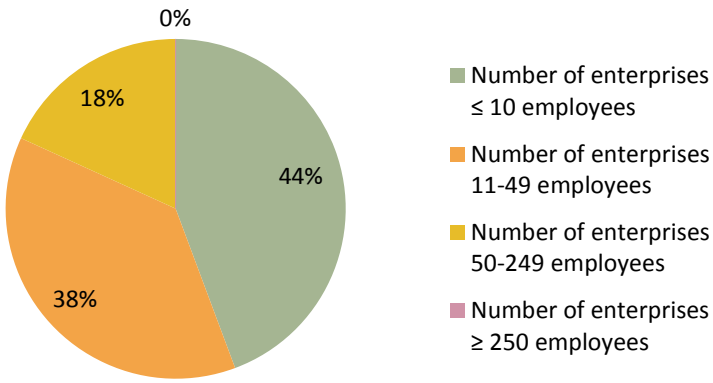


Figure 4.14.1: Size distribution of the Dutch fish processing enterprises, 2011

Between 2008 and 2011 the number of processing enterprises slowly decreased from 101 to 88 enterprises. The main explanation for the declining number of fish processing enterprises is that in the period 2008-2011 some enterprises switched from fish processing to fish wholesaling as the main activity. These enterprises therefore are not characterised as fish processor, but still process fish. Also the increasing Dutch imports of fish products indicate that many companies increasingly source fish from outside the EU for their processing activities. The number of enterprises with 11-49 employees remained rather stable during 2008-2011. The number of enterprises with less than 10 employees however decreased from 53% in 2011 to 44% in 2011. Compared to 2010 the decrease of the enterprises with less than 10 employees in 2011 was almost 20%. Reasons for this decline are that some enterprises increased their number of employees, or that these companies had fish wholesaling as the main activity.

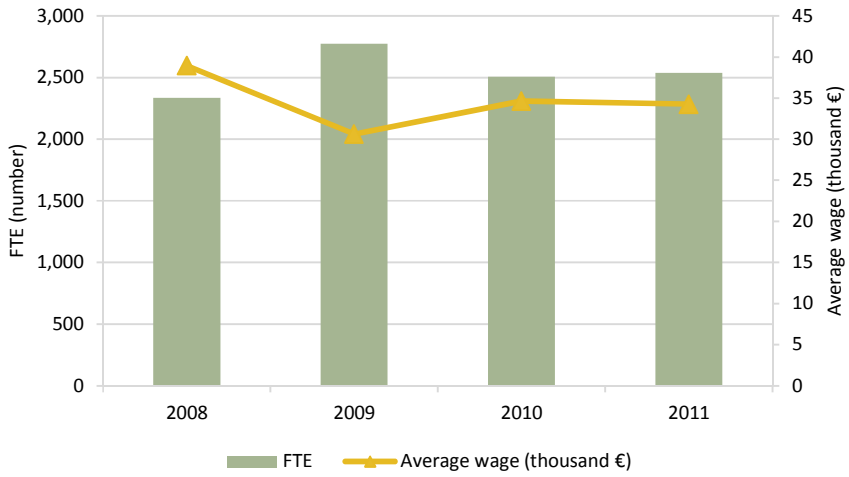


Figure 4.14.2: Dutch employment trends, 2008-2011

The wages in 2011 were almost identical to those in 2010. Because the number of FTE only showed a small increase, the average wage in 2011 was comparable to 2010. The average wage in 2010 and 2011 were 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.

4.14.2 Economic performance of the Dutch fish processing industry sector

Information about the economic performance can be found in Table 4.14.2, Figure 4.14.3 and Figure 4.14.4. In the period the Dutch fish processing sector 2008-2011 on average were profitable. In 2008 to 2010 the net profit was relatively stable and was around 25 million euro. In 2011 however net profit decreased by 32% to 15.8 million. Both total income and production cost increased in 2011, production cost however showed a stronger increase (17% vs. 15%).

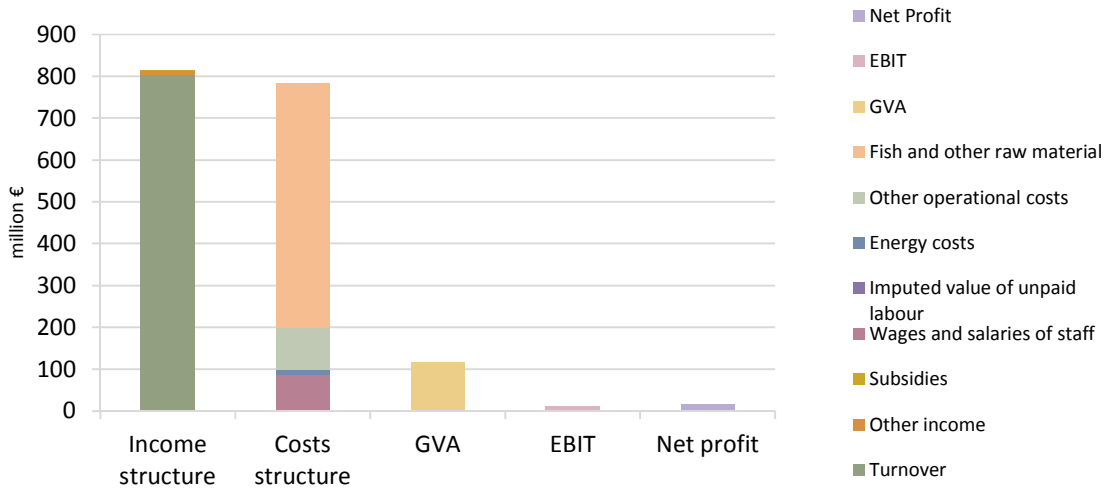


Figure 4.14.3: Dutch economic performance of the fish processing industry sector, 2011

The income structure in 2011 is comparable with previous years. Subsidies and other income are only a very small part of the total income. In 2011 the turnover accounted for 99% of the total income (see Table 4.14.2). In 2011 the total income increased with 14% compared to 2010. Also the total production cost showed an increase in 2011 with 17% (see Figure 4.14.3 and Figure 4.14.4). The cost for the purchase of raw material is the main contributor to the growth in the total production cost. These cost increased with 24% in 2011 compared to 2010. Also compared to 2008 there is a 16% increase in the cost of raw material. The average price of raw material in 2011 on the world market increased, which reflects the higher purchase cost. Quota for some important species for the domestic fishing fleet such as plaice and herring however increased in 2011. Purchases of raw material as share of the total production cost are relatively stable in the period 2008-2011 and ranged from 67% to 72% of the total production cost. Other production cost remained relatively stable during this period. The increase in production cost also resulted in a lower Gross Value Added and Operating Flow. The increase in the total value of the assets resulted in a decrease in all performance indicators in Table 4.14.2.

Table 4.14.2: Dutch economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	712.3	98%	689.0	98%	704.4	99%	803.7	99%	14%	13%
Other income	11.4	2%	16.2	2%	3.7	1%	10.7	1%	186%	-6%
Subsidies	1.6	0%	0.4	0%	0.5	0%	0.1	0%	-72%	-92%
Total Income	725.3	100%	705.6	100%	708.6	100%	814.6	100%	15%	12%
Expenditure (million €)										
Purchase of fish and other raw material for production	504.5	70%	479.3	68%	472.8	67%	584.9	72%	24%	16%
Wages and salaries of staff	88.2	12%	84.9	12%	86.7	12%	86.8	11%	0%	-2%
Imputed value of unpaid labour	2.7	0%	0.1	0%	0.1	0%	0.1	0%	-5%	-97%
Energy costs	9.7	1%	10.7	2%	9.4	1%	10.8	1%	15%	11%
Other operational costs	70.2	10%	92.4	13%	103.3	15%	101.9	13%	-1%	45%
Total production costs	675.3	93%	667.3	95%	672.3	95%	784.5	96%	17%	16%
Capital Costs (million €)										
Depreciation of capital	16.1	2%	19.3	3%	18.4	3%	18.5	2%	1%	15%
Financial costs, net	8.8	1%	-8.2	-1%	-5.3	-1%	-4.3	1%	19%	-149%
Extraordinary costs, net			1.2	0%	-1.1	0%				
Capital Value (million €)										
Total value of assets	527.6	73%	572.9	81%	572.9	81%	722.4	89%	26%	37%
Net Investments	-318.2	-44%	64.5	9%	18.4	3%	168.0	21%	813%	153%
Debt	355.1	49%	359.2	51%	368.9	52%	464.0	57%	26%	31%
Performance Indicators(million €)										
Gross Value Added	139.3	19%	122.8	17%	122.7	17%	116.8	14%	-5%	-16%
Operating Cash Flow	50.0	7%	38.3	5%	36.3	5%	30.0	4%	-17%	-40%
Earning before interest and tax	33.9	5%	19.0	3%	17.9	3%	11.5	1%	-36%	-66%
Net Profit	25.2	3%	27.2	4%	23.3	3%	15.8	2%	-32%	-37%
Capital productivity (%)	26.4		21.4		21.4		16.2			
Return on Investment (%)	6.4		3.3		3.1		1.6			
Financial Position (%)	67.3		62.7		64.4		64.2			
Future Expectation Indicator (%)	-63.4		7.9		0.0		20.7			

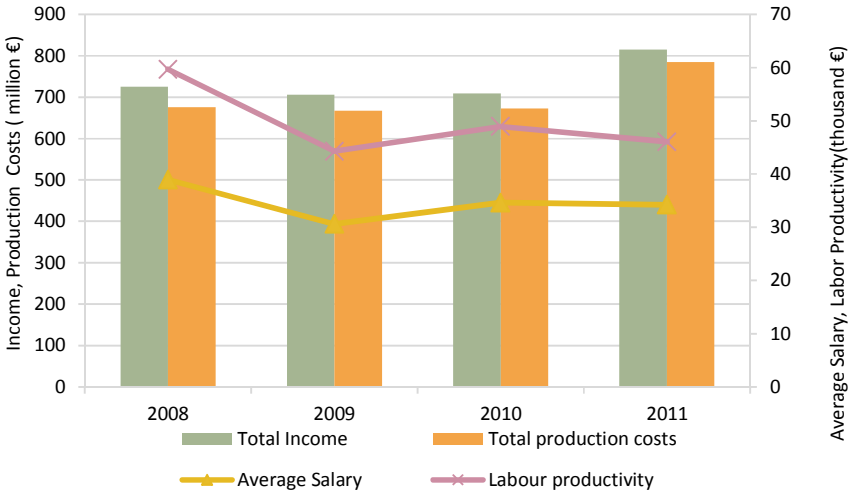


Figure 4.14.4: Income, costs, wages and labour productivity trends for the Dutch fish processing industry sector overview, 2008-2011

4.14.3 Trends and drivers for change

The Dutch fish processing industry is becoming more depending on imported fish products. Between 2008 and 2011 the total Dutch import value of fish products increased by almost 30% from 1.7 billion to 2.2 billion euro. Provisional data for 2012 however show a stabilization of the import value. This might be related to the increase in Dutch quota for most of the traditional species that are important for the processing industry in 2012 and 2013 like plaice, sole and herring. It is however difficult to relate changes in imports to the performance of the fish processing industry. Imports of flatfish refer to UK and German vessels that are owned by Dutch enterprises. Also imports of species like cod and pangasius are not processed but traded directly to other EU countries through the harbour of Rotterdam. In 2011 61% of the fish that was imported by the Netherlands consisted of frozen fish or fish fillets, while 10% of the imports were fresh or chilled fish products. Prepared fish products had a share of 12% in the total imports. The remaining imported products in 2011 were fresh shellfish (8%), frozen shellfish (6%) and smoked/dried fish (3%). Compared to 2008 only the share of frozen fish or fish fillets (15%) and fresh or chilled fish products (57%) show a significant change. This can be explained by the fact that most of the quota has declined in this period, and fish processors had to switch to frozen products that are imported instead of fresh or chilled fish from the national fishing fleet.

Another main 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). 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 will be 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.

4.15 POLAND

4.15.1 General overview of the Polish fish processing industry sector

In 2011 there were 271 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. 206 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. The number of enterprises which defined fish processing as the main activity increased by 5% compared to 2010 and by 10% compared to 2008. Most of Polish fish processing industry (about 60%) was located in the coastal region in Pomorskie and Zachodniopomorskie voivodeships.

In terms of numbers Polish fish processing industry is dominated by small and micro sized firms. The largest number of plants (41% of total) employed between 11 and 49 persons, then 30% less or equal than 10, 22% between 50 and 249 and 7% employed greater or equal than 250 person. In 2011 the number of micro and small enterprises increased respectively by 17% and 5% compared to the previous year and by 20% and 23% compared to the 2008. The number of middle sized and big firms decreased compared both to the previous year and 2008.

In 2011 the volume of production of fish processing industry defined as the main activity slightly increased to 375 thousand tonnes (by 1.5% compared to 2010). The most important group of products were prepared and preserved fish with the share of 52% of the total production. The production of fish prepared and preserved increased by 10% compared to the previous year. Processed or preserved herrings covered 54% of production in this group of products. The production of processed and preserved herring increased by 7% compared to the previous year. The second largest group was smoked fish with a 20% share in production volume. The production of smoked fish decreased by 3% compared to the previous year. In this group the largest share of 53% had smoked salmon whose production increased by 3%.

Other groups of products had a smaller share of production volume. Fresh and frozen filets covered 12% of the volume of total production, fresh fish 6%, salted fish 5% and other products 3%.

Most of production (about 60%) was concentrated in large fish processing companies with more than 250 employees.

In 2011 the turnover of fish processing industry defined as the main activity was amounted to 1.8 billion Euros, representing an increase by 7% compared to the previous year and 21% compared to 2008. In 2009 there was a turnover decrease by 1% compared to the previous year despite strong depreciation of zloty against Euro. In terms of the Polish zloty the turnover increased by 22% from 2008 to 2009.

In 2011 65 companies which processed fish as a secondary activity attributed to fish processing 89.7 million Euros turnover. This was an increase by 13% compared with the previous year but 13% decrease compared to 2008.

Since 2008 the number of people employed in fish processing plants was decreasing every year. In 2011, the average number of employees was 15,726, representing a decrease of 3% compared to 2008.

As in previous years the majority of the employed (67%) were women but the number of female employees decreased by 3% compared to the previous year and by 2% compare to 2008. Number of men employees increased by 3% compare to the previous year and decreased by 4% compared to 2008.

Most employees worked full-time and FTE amounted to 15,051. The rate of full time employment surpasses 96% in almost all the observed years. FTE also demonstrated decreasing tendency from 2008. The average employment (in FTE) per firm was 73.1 persons and decreased by 4.6 units from the previous year and by 10.7 units from 2008.

The average salary per employee (in FTE) was stable in 2010-2011 and amounted 9.8 thousand Euros. There was a significant increase of the labour productivity to 100.6 thousand Euros, about 10% compared to the previous year and of 28% compared to 2008.

In this period of time there was a large concentration of FTE. More than 50% of FTE was concentrated in fish processing plants which employed greater or equal than 250 people. 36% in firms between 50 and 249 employees, 12% in small firms between 11 and 49 persons and only 1% in micro plants with less or equal that 10 employees.

Table 4.15.1: Polish fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	187	200	197	206	5%	10%
≤ 10 employees	51	55	52	61	17%	20%
11-49 employees	69	80	81	85	5%	23%
50-249 employees	50	48	49	46	-6%	-8%
≥ 250 employees	17	17	15	14	-7%	-18%
Employment (number)						
Total employees	16,135	16,060	15,939	15,726	-1%	-3%
Male employees	5,397	5,023	5,031	5,170	3%	-4%
Female employees	10,738	11,036	10,908	10,556	-3%	-2%
FTE	15,659	15,475	15,309	15,051	-2%	-4%
Male FTE	5,326	4,895	4,894	5,013	2%	-6%
Female FTE	10,333	10,580	10,415	10,038	-4%	-3%
Indicators						
FTE per enterprise	83.7	77.4	77.7	73.1	-6%	-13%
Average wage (thousand €)	9.5	8.3	9.8	9.8	1%	4%
Labour productivity (thousand €)	15.8	15.7	15.0	16.6	10%	5%
Unpaid work (%)	0	0.0	0.0	0.0	0%	0%

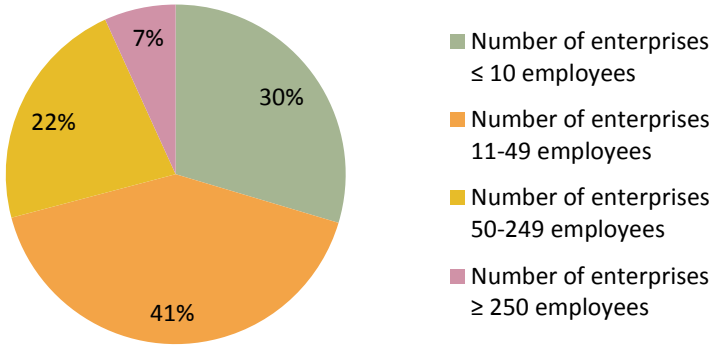


Figure 4.15.1: Size distribution of the Polish fish processing enterprises, 2011

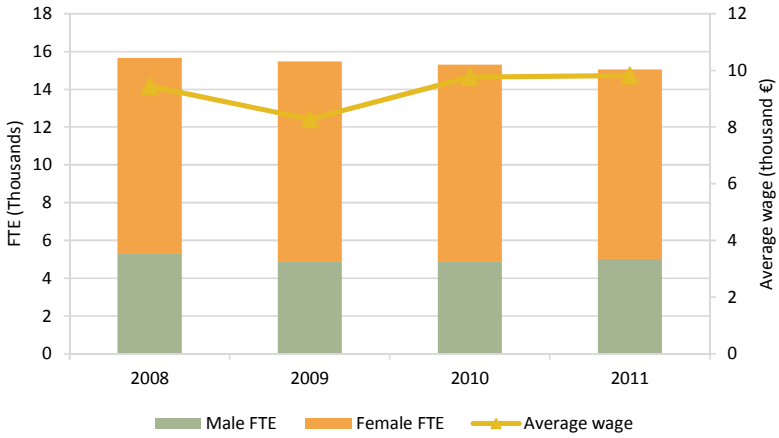


Figure 4.15.2: Polish employment trends, 2008-2011

4.15.2 Economic performance of the Polish fish processing industry sector

In 2011 the economic performance of fish processing industry in Poland was good. The total income increased to 1.83 billion Euros, by 7% compared to the previous year and 21% compared to 2008. Turnover created nearly the whole total income (99%). Share of subsidies and other income did not exceed 1%. Total production costs were equal to 1.72 billion Euros, which means 94% of the total income. The greatest amount of production costs (74%) was represented by the purchase of raw materials and other products needed for the production and resale in the same condition. The second was represented by other operational costs (16%). The third by labor costs (9%), and the last by energy costs (1%). The fastest rate of growth was energy costs, by 11% compared to the previous year and 44% compared to 2008. The costs of fish and other raw material for production increased by 9% compared to the previous year and by 28% 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. Labor costs were stable during the whole period; also other operational costs were stable in 2010-2011. Capital costs did not exceed 4% of the total income. Share of both depreciation and financial costs net

over the period stood at the level of 2% of the total income. From 2010 depreciation demonstrated increasing trend as a result of increasing total value of assets. Financial costs net showed irregular changes, related to the financial needs of the companies. Extraordinary costs also show an irregular trend. In general, the income structure does not show relevant differences in all the analyzed years.

The growth of total assets and increased investments, compared to 2010 and 2008 denoted positive expectations in future. Also the future industry Expectations indicator increased and was estimated at 4.2%.

The level of other economic and financial indicators of fish processing shows that the sector in 2011 was 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 249.8 million Euros and increased by 9% compared to the previous year but only by 1% compared to 2008.

The amount of cash a company generates from its operations, measured by Operating Cash Flow (OCF) indicator, amounted to 111.4 million Euros and increased by 27% compared to the previous year and by 6% compared to 2008.

Earnings before interest and taxes (EBIT) was equal to about 73 million Euros, showing an increase by 37% compared to the previous year but a slight decrease by 1% compared to 2008.

Despite a significant increase in turnover net profit decreased to 39.1 million Euros, by 22% compared to the previous year and by 15% compared to 2008, which resulted from the increase in costs, primarily raw materials and financial costs. In 2011, financial expenses were 2% of total income, compared to 0.2% in 2010. The share of net profit in total income was estimated at 2%. The best results the industry achieved in 2009, when net profit accounted for 5% of total income.

The fish processing recorded a slight increase in capital productivity to 20.9%.

Return on investment indicating the sector's ability to innovate and investments increased to 6.1% but was lower than in 2008 and 2009.

During the whole period fish processing activity was mainly financed by borrowed capital, but the share of external financing slightly decreased and the financial position indicator decreased to 61.1% in 2011.The share of internal financing fish processing increases from year to year.

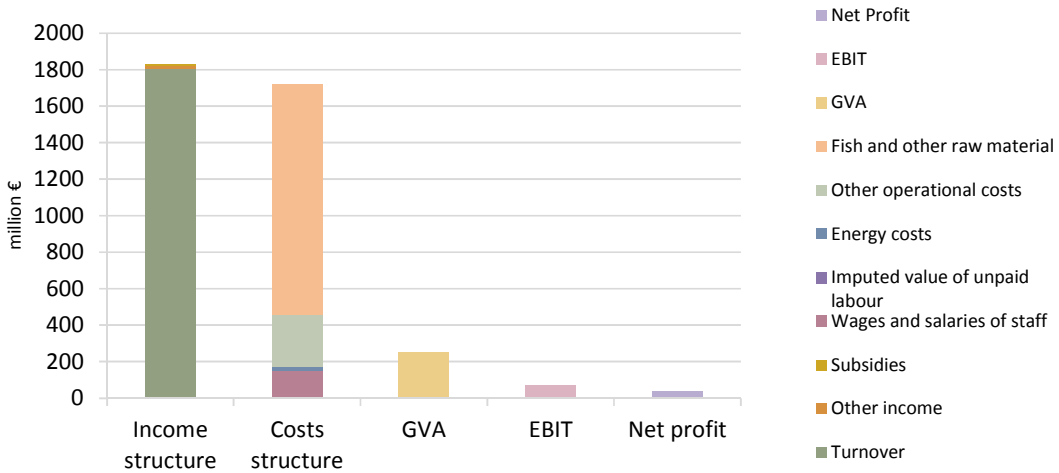


Figure 4.15.3: Polish economic performance of the fish processing industry sector, 2011

Table 4.15.2: Polish economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	1,490.5	99%	1,475.8	99%	1,684.4	99%	1,806.3	99%	7%	21%
Other income	12.6	1%	12.0	1%	13.3	1%	13.5	1%	2%	7%
Subsidies	5.8	0%	6.9	0%	7.3	0%	9.4	1%	29%	63%
Total Income	1,508.9	100%	1,494.8	100%	1,705.0	100%	1,829.3	100%	7%	21%
Expenditure (million €)										
Purchase of fish and other raw material for production	985.5	65%	985.5	66%	1,164.4	68%	1,263.9	69%	9%	28%
Wages and salaries of staff	148.0	10%	128.2	9%	149.4	9%	147.8	8%	-1%	0%
Imputed value of unpaid labour										
Energy costs	17.5	1%	22.0	1%	22.7	1%	25.1	1%	11%	44%
Other operational costs	252.7	17%	236.9	16%	280.6	16%	281.1	15%	0%	11%
Total production costs	1,403.7	93%	1,372.5	92%	1,617.2	95%	1,717.9	94%	6%	22%
Capital Costs (million €)										
Depreciation of capital	31.9	2%	30.8	2%	34.6	2%	38.5	2%	11%	21%
Financial costs, net	27.2	2%	17.8	1%	2.9	0%	33.8	2%	1074%	24%
Extraordinary costs, net	0.0	0%	0.2	0%	-0.1	0%	0.0	0%	82%	13%
Capital Value (million €)										
Total value of assets	1,030.9	68%	895.5	60%	1,143.5	67%	1,197.1	65%	5%	16%
Net Investments	56.8	4%	44.4	3%	59.1	3%	89.3	5%	51%	57%
Debt	688.7	46%	572.9	38%	725.6	43%	731.5	40%	1%	6%
Performance Indicators(million €)										
Gross Value Added	247.5	16%	243.5	16%	230.0	13%	249.8	14%	9%	1%
Operating Cash Flow	105.3	7%	122.3	8%	87.8	5%	111.4	6%	27%	6%
Earning before interest and tax	73.4	5%	91.5	6%	53.2	3%	72.9	4%	37%	-1%
Net Profit	46.2	3%	73.7	5%	50.4	3%	39.1	2%	-22%	-15%
Capital productivity (%)	24.0		27.2		20.1		20.9			
Return on Investment (%)	7.1		10.2		4.7		6.1			
Financial Position (%)	66.8		64.0		63.4		61.1			
Future Expectation Indicator (%)	2.4		1.5		2.1		4.2			

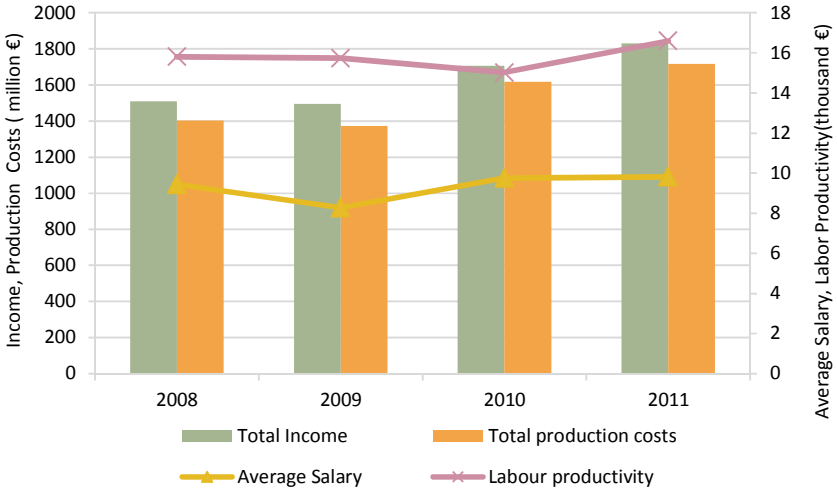


Figure 4.15.4: Income, costs, wages and labour productivity trends for the Polish fish processing industry sector overview, 2008-2011

4.15.3 Trends and drivers for change

Presented figures show a strong and developing fish processing industry, with the ability of generating profits for the companies and jobs and incomes for the involved workers. The year 2011 was a difficult year for the fish processing industry in Poland. The problem was expensive and difficult to obtain imported fish as raw material, whose prices throughout the year strongly increased. Raw materials, which have gone up the most were the herring, sprat and mackerel. As a result, many processing companies reported a decline in sales and suffered losses, and all the fish processing industry saw a decline in profitability. In addition, long over the year 2011, maintained a low exchange rate of the Polish zloty against other currencies.

In 2011 as in the previous years a key driver of fish processing sector development was growing exports. Exports of fish and fish products amounted to 364.1 thousand tonnes with a value of 1.15 billion Euros[1]. Three groups of products: smoked fish, processed and preserved fish and fish fillets fresh and frozen accounted for 90% of exports value and 60% of its volume, and Poland is one of the largest producers and exporters of processed smoked salmon and herring in the European Union.

The main export market for Polish fish for smoked fish, processed and preserved fish and fish fillets was the EU-25 market with more than 88% share both in volume and value. Most of them were sent to the German market (57% of volume and 60% of value).

The share of revenues from direct exports in turnover accounted for 55%. For some product groups, such as smoked salmon, this share was even higher and increased to 84%.

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. Polish deep-sea fishery sold their catches in foreign markets.

[1] Including exports directly from the fishing ship's sides.

In 2011, Baltic catch amounted to 110.8 thousand tonnes and aquaculture production for consumption was about 31.3 thousand tonnes. The Baltic basic catch were sprats (51%), herrings (27%), cods (11%), and flounders (9%). The main aquaculture species were carp (46%) which was generally sold alive and rainbow trout (41%) was raw material for the processing.

In 2011, Poland imported 384.6 thousand tonnes of fresh or frozen fish and fish filets, with the value of 972 million Euros, intended for further processing. It was a decrease in volume by 1.1% but increased in volume by 1.5% compared to the previous year.

The most important species, in terms of volume, were salmon (23%), herrings (21%), mackerels (8%) thousand tonnes), Alaska Pollock (8%), cod (8%) and pangasius (4%). In Poland most fish, in terms of volume, was imported from Norway (35%), China (12%), Iceland and Germany (both at 7%) and Vietnam (6%), Denmark (5%).

Such 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 and trends in prices on international markets.

In 2011, there were no major ownership changes in fish processing, but generally it is believed that further consolidation is needed to strengthened the sector and for further development. Morpol, a Polish parent company of the group Morpol, which is primarily involved in value added processing of smoked salmon, was listed on the Oslo Stock Exchange from 2010.

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 105.2 million Euros for subsidies for investment in fish processing, was contracted in 2011.

In 2012 a further development of the fish processing industry in Poland is expected.

As in the previous years, exports and investment will be the factor that accelerates the fish processing. 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.

4.15.3.1 Data issues

Economic variables of processing industry are based on the information provided with questionnaires that included all economic parameters included in Appendix XII of Commission Decision 2008/949/EC. The study was census and questionnaire with economic variables was sent to all processing companies approved by the General Veterinary Inspectorate:

- to intra-community trade according to Council Regulation (EC) no. 853/2004 of April 29, 2004, which sets forth detailed requirements regarding hygiene in foodstuffs of animal origin, Appendix IIII Section VIII Fishery Products.
- to make direct sales in accordance with the regulation of the Minister of Agriculture and Rural Development of December 29, 2006 regarding veterinarian requirements during the production of products of animal origin for direct sale (Journal of Laws of 2007. No. 5, pos. 38).

Answering the questionnaire is mandatory but the response rate was 78% in 2011 for companies defined the primary production under the NACE Code 10.20. and 36% for firms involved in fish business, but as a secondary activity.

4.16 PORTUGAL

4.16.1 General overview of the Portuguese fish processing industry sector

Portuguese domestic market is a larger final consumer for fish and fish products, the biggest within UE in *per capita* consumption, with around 56 Kg/person/year. This configures a unique profile and opportunity for the fish processing companies.

In 2011, Fish Processing Industry in Portugal consisted of 185 enterprises, 82 of which were small enterprises with less than 11 employees. Most enterprises are located in the north (62) and centre (69) of the country. All together these enterprises employed 7,314 persons and production amounted to 207 thousand tons, and a total income of €1,135.7 million.

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 104,000 tons in 2011. 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, depends on a high import of raw material, is mostly directed to supply national market, but also has a high export value component.

In salting and drying was produced 59,000 tons in 2011. 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, but the raw material is mainly imported.

Cannery and preparation produced 44,000 tons in 2011. 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.

Under the European Fisheries Fund (EFF), since 2007, a considerable number of jobs were created (564) and the production capacity was increased by 13.3 thousand tonnes.

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 2011 the number of enterprises in total reduced by 13%, mainly due to the decrease in the number of small enterprises with less than 11 employees, mostly in frozen and salting segments. Yet, the number of employees increased by 10% in the same period and the average wage increased by 11% to 12.1 thousand euros. Reasons for this increase are sustained on the cannery subsector production and the enlargement of their effectives on factory platform.

Female employees represent about two thirds of total employees, with a tendency to increase, according to last year's trend, and again based on the cannery production growth.

Table 4.16.1: Portuguese fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	213	202	194	185	-5%	-13%
≤ 10 employees	111	99	91	82	-10%	-26%
11-49 employees	57	62	59	58	-2%	2%
50-249 employees	43	37	41	41	0%	-5%
≥ 250 employees	2	4	3	4	33%	100%
Employment (number)						
Total employees	6,664	6,815	7,277	7,314	1%	10%
Male employees	2,377	2,431	2,596	2,425	-7%	2%
Female employees	4,287	4,384	4,681	4,889	4%	14%
FTE	6,561	6,738	6,916	6,913	0%	5%
Male FTE	2,340	2,404	2,467	2,291	-7%	-2%
Female FTE	4,221	4,334	4,449	4,622	4%	10%
Indicators						
FTE per enterprise	30.8	33.4	35.6	37.4	5%	21%
Average wage (thousand €)	10.9	11.1	11.6	12.1	4%	11%
Labour productivity (thousand €)	75.6	66.0	73.8	73.1	-1%	-3%
Unpaid work (%)	1	1.1	4.7	5.4	16%	333%

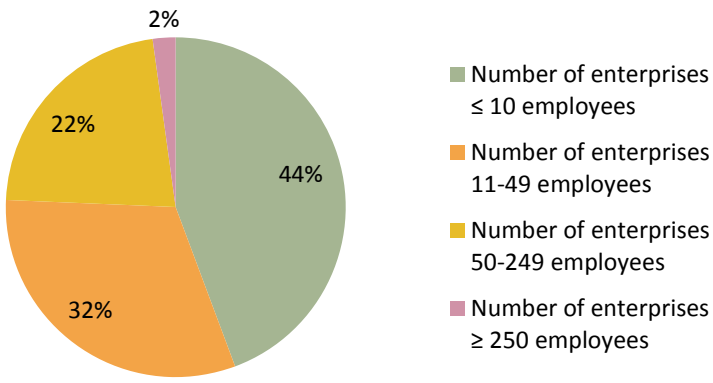


Figure 4.16.1: Size distribution of the Portuguese fish processing enterprises, 2011

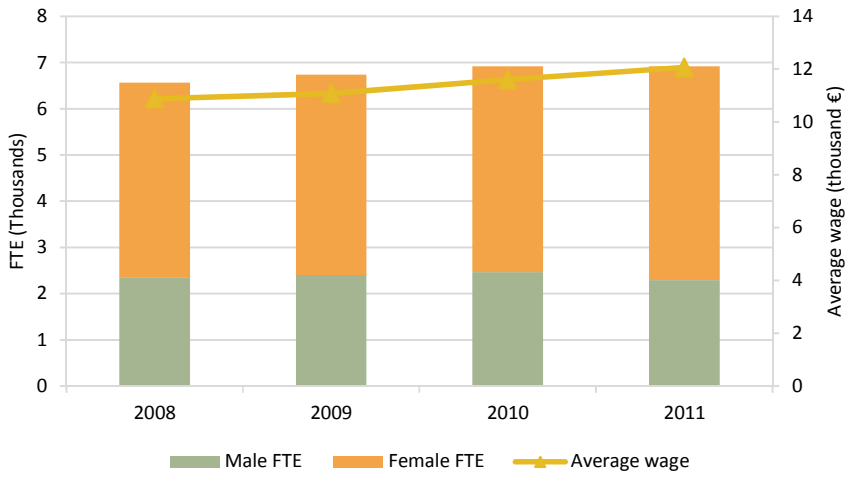


Figure 4.16.2: Portuguese employment trends, 2008-2011

4.16.2 Economic performance of the Portuguese fish processing industry sector

In 2011, total income was €1,135.7 million, an increase of 4% compared to 2008.

Frozen industry produced 103 998 tons in 2011, a decrease of 5% comparing with 2009, while the sales amount is to 84.3 thousand tons, with a value of €338.9 million in 2011. From 2010 to 2011 there was an decrease of 7% on sales by quantity but the value of sales get a surplus of 9% , which translates the increase in the average price per kilo, from 3.43 €/kg to 4.02 €/kg.

Salting and drying produced 59 thousand tons in 2011, a decrease of 1% over the previous year, while sales amount to 44.0 thousand tons, with a value of €255.8 million also in 2011. The main product of this industry is salted dried cod. The average price per kilo increased from 5.37 €/kg to 5.82 €/kg from 2010 to 2011.

Cannery and preparation produced 44.3 thousand tons in 2011, an increase of 5% over the previous year, while sales amount to 46.9 thousand tons, with a value of €200.1 million. The value of sales get a surplus of 13% over the previous year, but with a decrease of the average price per kilo, from 4.34 €/kg to 4.27€/kg.

Purchase of raw materials (fish and others) represented, in 2011, the largest share of the cost structure, with 80.8% of total costs, and representing 51% of the total income.

Labor costs are, historically, the second main cost item. In 2011 this costs amount to 11.1% of the total cost structure. In fact average salaries, after an increase from 2009 to 2010 of 21%, fall by 11% in 2011. This situation provides a better labor productivity that increased 15.8% in 2011, after a retraction of about 0.75% in 2010.

Energy cost represents about 2 to 3% of the turnover from 2009 to 2011. It represents about 4.2% of the total cost structure in 2011.

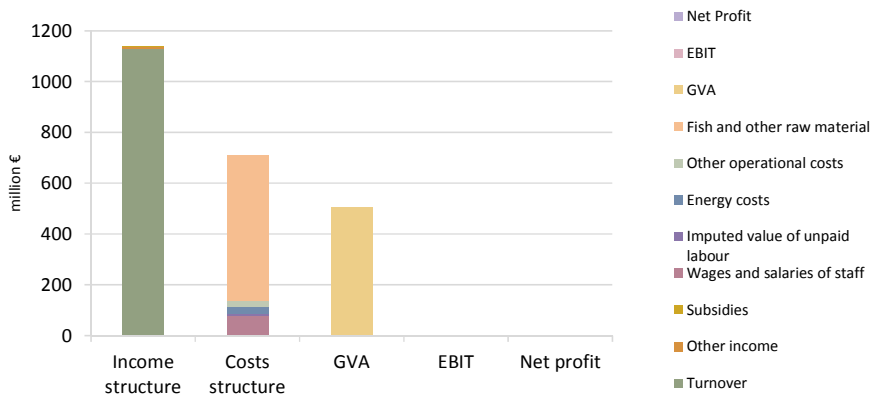


Figure 4.16.3: Portuguese economic performance of the fish processing industry sector, 2011

Table 4.16.2: Portuguese economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	1,090.8	100%	1,015.0	100%	1,089.2	100%	1,131.6	100%	▲ 4%	▲ 4%
Other income	3.5	0%	2.8	0%	3.2	0%	4.1	0%	▲ 27%	▲ 19%
Subsidies	3.7	0%	4.1	0%	2.7	0%	3.4	0%	▲ 25%	▼ -9%
Total Income	1,094.3	100%	1,017.8	100%	1,092.4	100%	1,135.7	100%	▲ 4%	▲ 4%
Expenditure (million €)										
Purchase of fish and other raw material for production	566.6	52%	541.8	53%	534.1	49%	574.1	51%	▲ 8%	▲ 1%
Wages and salaries of staff	70.5	6%	73.8	7%	76.5	7%	78.9	7%	▲ 3%	▲ 12%
Imputed value of unpaid labour	0.9	0%	0.8	0%	3.7	0%	4.5	0%	▲ 20%	▲ 406%
Energy costs	26.7	2%	25.8	3%	26.2	2%	29.6	3%	▲ 13%	▲ 11%
Other operational costs	1.3	0%	1.2	0%	18.9	2%	23.1	2%	▲ 22%	▲ 1627%
Total production costs	666.1	61%	643.4	63%	659.3	60%	710.2	63%	▲ 8%	▲ 7%
Capital Costs (million €)										
Depreciation of capital	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Financial costs, net	42.2	4%	27.7	3%	20.7	2%	25.8	2%	▲ 25%	▼ -39%
Extraordinary costs, net	4.8	0%	5.8	1%	0.0	0%	0.0	0%	0%	▼ -100%
Capital Value (million €)										
Total value of assets	1,034.8	95%	989.9	97%	1,054.3	97%	1,013.4	89%	▼ -4%	▼ -2%
Net Investments	43.8	4%	47.2	5%	30.5	3%	28.5	3%	▼ -6%	▼ -35%
Debt	745.8	68%	697.0	68%	735.3	67%	694.4	61%	▼ -6%	▼ -7%
Performance Indicators(million €)										
Gross Value Added	495.8	45%	444.9	44%	510.6	47%	505.5	45%	▼ -1%	▲ 2%
Operating Cash Flow	428.2	39%	374.3	37%	433.1	40%	425.5	37%	▼ -2%	▼ -1%
Earning before interest and tax										
Net Profit										
Capital productivity (%)	47.9		44.9		48.4		49.9			
Return on Investment (%)										
Financial Position (%)	72.1		70.4		69.7		68.5			
Future Expectation Indicator (%)	4.2		4.8		2.9		2.8			

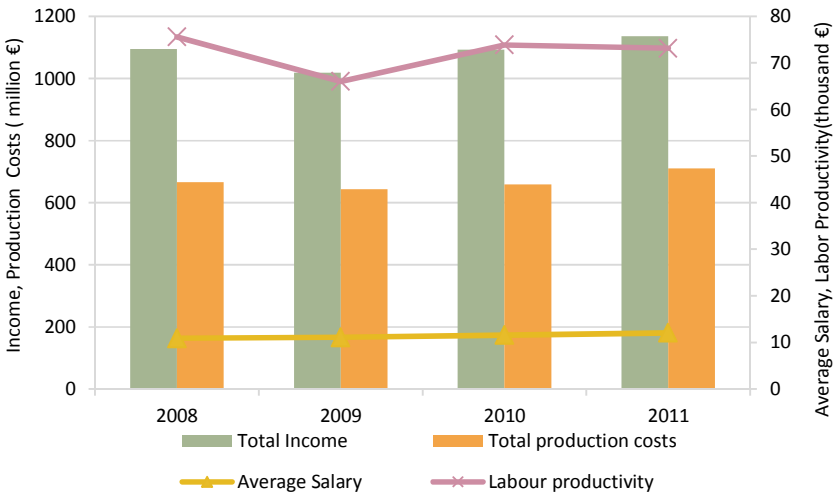


Figure 4.16.4: Income, costs, wages and labour productivity trends for the Portuguese fish processing industry sector overview, 2008-2011

4.16.3 Trends and drivers for change

The Portuguese fish processing industry still has an enormous dependency on imports in order to fulfil the demand for a huge consumption per capita. This dependency will continue in the near future, 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.

In general, same stability on structure and economic results is expected.

A possible menace is related to increasing prices of raw material, namely fish, due to decreasing catch volumes from the national fleet (sardine catches reduce from 55 thousand ton to 33 thousand ton in 2012).

4.17 ROMANIA

4.17.1 General overview of the Romanian fish processing industry sector

Romania started to collect data on processing for the 2008 year as at national level, as per the first year for National Program for Data Collection implementation. As per Table 4.17.1 the general overview of the sector reflects the dynamic of the sector in the time period 2008-2011. Related to the number of enterprises, having the mainly activity – Processing, the figures sow a variation in number from 13-in the first year, increasing up to 18-in the second year 2010, and a significant increasing in the third one-2011 year. This segmentation varies from 3 or 2 having less than 10 employees up to 7-in last year 2011, from 5 to 9 in the second year, and 7-in the last year – in the segment of 11-49 employees.

A constant evolution of companies in the segment 50-249 employees for the first 3 years and an increase of the number to 8 in 2011 year. The segment of the biggest scale over 250 employees is not relevant for the sector. This evolution is caused by the effects of the economic crisis starting with 2010, when the activity was influenced by the market contractions, for the whole national economy, and moreover the cuts of the people incomes. These aspects are over crossing for the all analyses could be done on the domestic processing companies' activity.

The first picture is that one reviling modification of the structure segments, so that in 2011 companies over 250 employees disappeared, the number of 50-249 employees increased from 5 to 8, and the companies having employees between 11-49 decreasing from 9 to 7, and finally the smaller sector-less than 10 employees-increasing from 2 to 7.

It is illustrating the efforts of the companies adapting to the economic difficulties and the market contraction, the result being the reduction of total number of total employees from 1,598 in 2010 to 1,181, in 2011, despite the increased number of companies from 18 in 2010 to 22 in 2011, which is registering a proportionate percentage for all three segments 32% for the both of its and 36% for the third one. The evolutions are illustrated in Table 4.17.1 and Figure 4.17.1.

Considering the different figures for 2010, it must be mentioned that Romania sent the data for the respective year by not having the possibility of making progress on a clear difference on assessing data from units with processing as main activity and non-main activity. Some companies having secondary activity – processing – were included in the figures for companies having main activity processing.

This is due to the lack of clarifying methods to separate these categories. Partially it is a question of domestic general provisions and also a need for better understanding and following the rules from the EC regulation. We are appreciating that both issues are necessary to be reviewed by the national authorities responsible in the mater and EC for making it clearer in the new legislation how to distinguish between companies with fish processing as main or non-main activity.

Table 4.17.1: Romanian fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	13	13	18	22	22%	69%
≤ 10 employees	3	3	2	7	250%	133%
11-49 employees	5	5	9	7	-22%	40%
50-249 employees	5	5	5	8	60%	60%
≥ 250 employees	0	0	2	0	-100%	0%
Employment (number)						
Total employees	513	572	1,598	1,181	-26%	130%
Male employees	206	230	681	612	-10%	197%
Female employees	307	342	917	569	-38%	85%
FTE	503	564	1,591	1,178	-26%	134%
Male FTE	201	224	677	610	-10%	203%
Female FTE	302	340	914	568	-38%	88%
Indicators						
FTE per enterprise	38.7	43.4	88.4	53.5	-39%	38%
Average wage (thousand €)	3.1	3.1	4.0	4.6	17%	52%
Labour productivity (thousand €)	42.4	42.5	454.4	26.4	-94%	-38%
Unpaid work (%)	24	23.5	3.9	5.3	36%	-78%

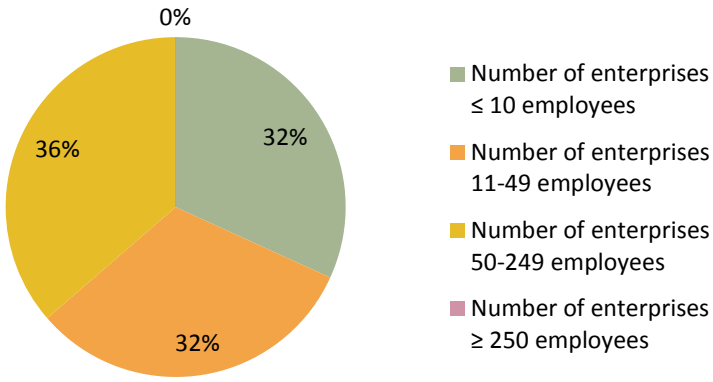


Figure 4.17.1: Size distribution of the Romanian fish processing enterprises, 2011

The evolutions are illustrated in Table 4.17.1 and Figure 4.17.2. Also the evolution confirm the trends on "investing" or continuing/maintaining/developing the activity in companies not so big, medium and small size, the only one existing company having over 250 employees reduced the number under this limit, so that in 2011 no company of this size are no more existing in the sector.

Concerning the socio-economic aspects, especially employment, the data in Figure 4.17.2 reveals the reduction of total number of employees in 2011 comparing with 2010.

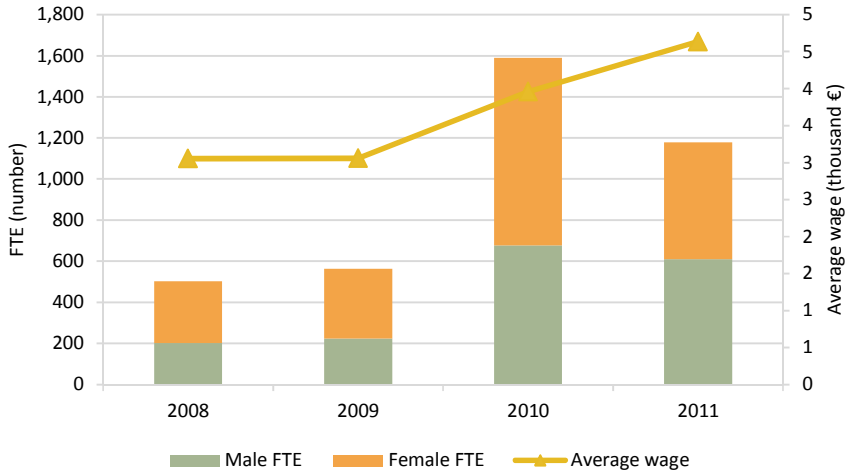


Figure 4.17.2: Romanian employment trends, 2008-2011

4.17.2 Economic performance of the Romania fish processing industry sector

The economic performance could be characterised having a good profitability in 2011. The Figure 4.17.3 shows the structures of total income of 67.9 mil euros (an increase of more than 20% comparing with 2008 – 28.7 mil Euros) out of which turnover and other income are the only elements, because, as mentioned above, no subsidies or other kind of state aid have been granted to the sector. The costs of the processing units, 18% represented by purchase of fish and other raw material (12.2 million euro) largely increased from 2008 to 2011. In 2011, total production costs represented 28% of the total income. These figures show the low level of salaries, as illustrated above, and the slight increase of the performance of the Romanian fish processing industry sector.

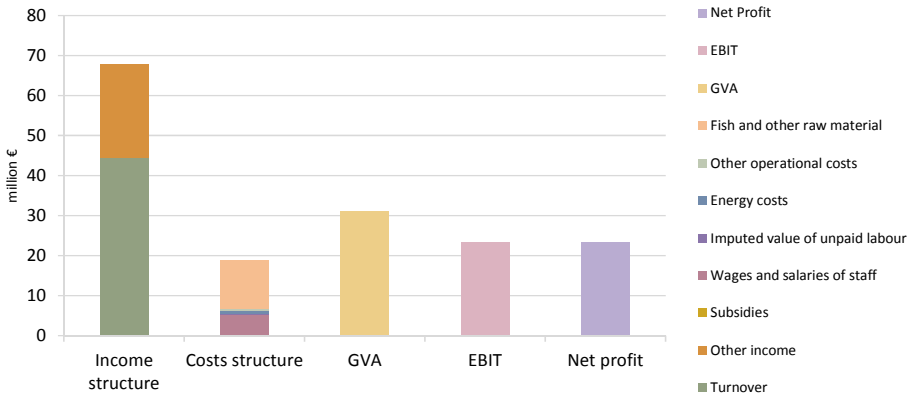


Figure 4.17.3: Romanian economic performance of the fish processing industry sector, 2011

It should be mentioned that despite the low level of wages and salaries of staff (the second structural element of production costs) the profitability of the sector is good. The “exceptional” figures for the year 2010 could be

explained in one single way: the results are due to the uncertainty to distinguish companies with main or non-main activities. This is an issue on which the legislation of EU and of the MS should be clarified more than it is nowadays.

As shown in Table 4.17.2, the profitability has a good level, despite the dimension of the sector (in terms of number of companies and number of employees), because the market is asking for fish products (Romania is importing huge quantities) and the activity is very closed to the marketing and trading sector, which – generally speaking – has a good profitability.

Table 4.17.2: Romanian economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	28.4	99%	31.9	99%	816.6	93%	44.5	66%	-95%	57%
Other income	0.3	1%	0.3	1%	60.2	7%	23.3	34%	-61%	7971%
Subsidies	0.0	0%	0.0	0%	0.1	0%	0.0	0%	-100%	0%
Total Income	28.7	100%	32.3	100%	876.9	100%	67.9	100%	-92%	136%
Expenditure (million €)										
Purchase of fish and other raw material for production	5.7	20%	6.4	20%	18.5	2%	12.2	18%	-34%	115%
Wages and salaries of staff	1.2	4%	1.3	4%	6.1	1%	5.2	8%	-15%	340%
Imputed value of unpaid labour	0.4	1%	0.4	1%	0.2	0%	0.3	0%	18%	-20%
Energy costs	0.2	1%	0.3	1%	2.3	0%	0.7	1%	-67%	230%
Other operational costs	1.2	4%	1.4	4%	72.9	8%	0.5	1%	-99%	-62%
Total production costs	8.6	30%	9.7	30%	99.9	11%	18.8	28%	-81%	118%
Capital Costs (million €)										
Depreciation of capital	0.6	2%	0.6	2%	44.6	5%	2.3	3%	-95%	314%
Financial costs, net	6.2	22%	7.0	22%	161.6	18%	0.0	0%	-100%	-100%
Extraordinary costs, net	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Capital Value (million €)										
Total value of assets	16.6	58%	19.0	59%	1022.0	117%	29.4	43%	-97%	77%
Net Investments	0.0	0%	3.4	10%	15.327	2%	1.033	2%	-93%	0%
Debt	14.2	49%	15.9	49%	469.9	54%	24.1	36%	-95%	70%
Performance Indicators(million €)										
Gross Value Added	21.3	74%	24.0	74%	723.0	82%	31.1	46%	-96%	46%
Operating Cash Flow	19.8	69%	22.2	69%	716.7	82%	25.7	38%	-96%	30%
Earning before interest and tax	19.2	67%	21.6	67%	672.1	77%	23.4	34%	-97%	22%
Net Profit	13.0	45%	14.6	45%	510.5	58%	23.4	34%	-95%	80%
Capital productivity (%)	128.5		126.4		70.7		105.9			
Return on Investment (%)	115.9		114.0		65.8		79.6			
Financial Position (%)	85.5		84.1		46.0		81.9			
Future Expectation Indicator (%)	-3.3		14.5		-2.9		-4.2			

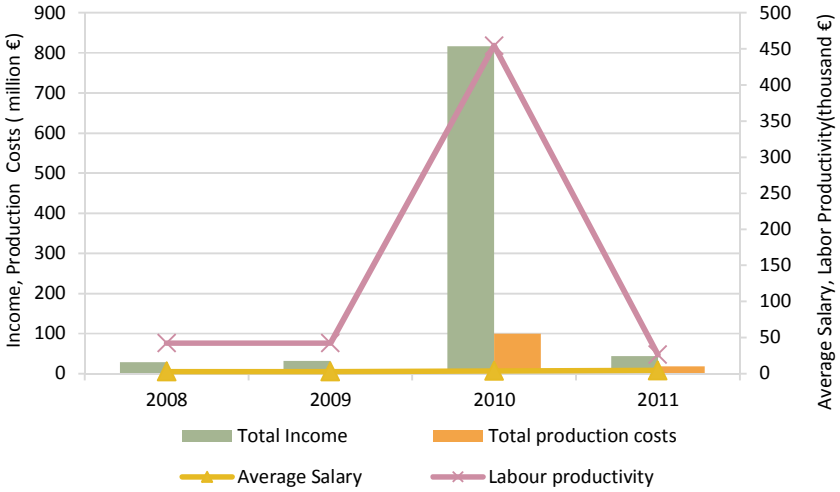


Figure 4.17.4: Income, costs, wages and labour productivity trends for the Romanian fish processing industry sector overview, 2008-2011

The structure of the capital value and income, costs, wages and labour productivity (see Table 4.17.2), reveals some realities, such as: tangible assets and their depreciation are the main position as percentage from total income – the productive assets have a big value and the depreciation quiet small that is because of small invested amount and net investments representing only 2% from total income. It is also interesting that the debt is a representative source for financing the activity of the companies on short terms basis. GVA, EBIT, and Net profit have very good values considering the lack of investments, low interest for a good qualification of the staff and the conditions on the domestic market evolution in the period 2008-2011, excepting the figures for 2010, as explained above. The evolution of on growing trends of the sector is illustrated in Figure 4.17.4 that shows an increase trend that is expected to be kept in the coming years. No additional comments (2010 year was the first year of taff budgetary measures token by the authorities and the demand on the market decrease dramatically, so no higher sells of the goods, resulting on increase of the production costs. The trend to increase the production it was expected in an increase of production and also for the following years, as a result of demand increase and a developing of the market opportunities related too. Don't forget the confusion on separating the companies on "main activity" and "secondary activity" processing, mentioned as above.

4.17.3 Trends and drivers for change

The overview of the sector, as well as the analyzes by segments may lead to some conclusions referring to trends and drivers for change, such as: recovering of the sector in 2011 should be followed by new opportunities for investments, in order to consolidate the labour productivity; the increasing demand for processing products in domestic market – unfortunately proved by the volume and value of processed fish products imported which remain at huge levels, comparing with domestic production – would create the background facilities and encourage the local producers; the sector is not so big, both: volume and value, as per the figures analyzed but is facing the huge "competition" of supermarkets chains, especially in the cities, where is concentrated the main segment of consumers. That's why national policy on developing processing sector has to pay more attention on marketing and trading of such a local products using the opportunities/facilities/pylons of the next EMFF on these directions. Also, the potential of the local aquaculture and, even fishery (marine and freshwater) must be reconsider in these purposes. The actual increasing trend

will be maintained and processing sector will have bigger contribution to the national economy growth if such measures will be enforced by the responsible authorities and a structure for processing units will be put in place, as well as market provisions, so that 2012 and 2013 will be more relevant for this type of industry.

4.18 SLOVENIA

4.18.1 General overview of the Slovenian fish processing industry sector

In 2011 there were 14 companies in the Slovenian fish processing sector. Between 2008 and 2011 the number of companies increased by 17%. In 2011 Slovenia had 8 companies with less than 10 employees, 3 companies with 11-49 employees and also three companies with 50-249 employees. Among them there are 7 companies with fish processing not as main activity. These companies generate 4.4 million Euros of turnover from fish processing, representing 12% of all turnover from fish processing activities.

In 2011 the turnover was 35.4 million Euros. Between 2008 and 2011 the turnover of Slovenian fish processing industry increased by 22 %.

The value of raw material decreased by 26 % from 2008 to 2011 and amounted 12.2 million Euros in 2011.

In the Slovenian fish processing sector was 379 employees in 2011. With respect to the gender of those in employment, women are predominated with 220 employees. According to the FTE there were 351 FTE employees in 2011. Among them were 203 women and 148 men. The level of employment increased between 2008 and 2011, with total employed increasing by 52% whiles the number of FTEs increased by 66% 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 2011 Slovenia imported 16,166 tonnes of fish and fish products, while the Slovenian volume of landings for this year amounted 719 tonnes. In the same year Slovenian aquaculture sector has produced 1,396 tonnes of fish and shellfish.

The main products in Slovenian fish processing industry are various fish cans, Tuna pate, squid – fresh or frozen, dried cod spread, Alaska Pollock and hake filet. Turnover from the Fish cans and tuna pate represents around 31 % of all turnovers from Slovenian fish processing sector.

Most Slovenian fish processing companies is located on the Slovenian coast, including the largest Slovenian company which employs 25% of all persons employed in processing industry and represents around 31% of all income. All companies which are located on the Slovenian coast represent 85% of all income of Slovenian fish processing industry.

In the years 2010 and 2011 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 while net profit has increased in 2010-2011. The structural changes made in Slovenian fish processing sector had impact also in Slovenian employment trends in period 2008-2011.

The total number of fish processing enterprises in the Slovenia was 14 in 2011. The vast majority of them had ten or fewer employees. Three enterprises had 11 to 49 employees and also 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 6% of the total numbers of full time employees. The segment between 10 and 49 employs 9% of the total number of FTE employees, whereas the segment between 50 and 249 employs 85% of the total numbers of full time employees in the Slovenian fish processing industry.

Total employment was 379 jobs and 351 FTEs in the Slovenian fish processing sector in 2011, see Table 4.18.1. The level of employment in the Slovenian fish processing sector has increased between 2010 and 2011. The total number employed increased by 42% between 2010 and 2011 while the number of FTEs increased by 50%. Of the total employees, 42% are men and 58% women.

Table 4.18.1: Slovenian fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	12	13	13	14	8%	17%
≤ 10 employees	7	9	8	8	0%	14%
11-49 employees	4	3	3	3	0%	-25%
50-249 employees	1	1	2	3	50%	200%
≥ 250 employees	0	0	0	0	0%	0%
Employment (number)						
Total employees	250	223	266	379	42%	52%
Male employees	105	93	110	159	45%	51%
Female employees	145	130	156	220	41%	52%
FTE	211	210	234	351	50%	66%
Male FTE	89	87	97	148	52%	67%
Female FTE	122	123	137	203	49%	66%
Indicators						
FTE per enterprise	17.6	16.2	18.0	25.1	39%	43%
Average wage (thousand €)	21.4	21.5	26.4	22.8	-14%	6%
Labour productivity (thousand €)	52.9	43.1	64.4	55.0	-15%	4%
Unpaid work (%)	4	3.6	1.1	0.7	-41%	-84%

Mean wage per employee in the Slovenian fishing processing industry amounted to €20,980 in 2011 and it was 16% higher from average wage in Slovenia in the same year, which was €18,101. Mean wage in fish processing sector increased by 6% from 2008 to 2011. Higher average wages are mainly due to increase minimum wage in Slovenia in 2009.

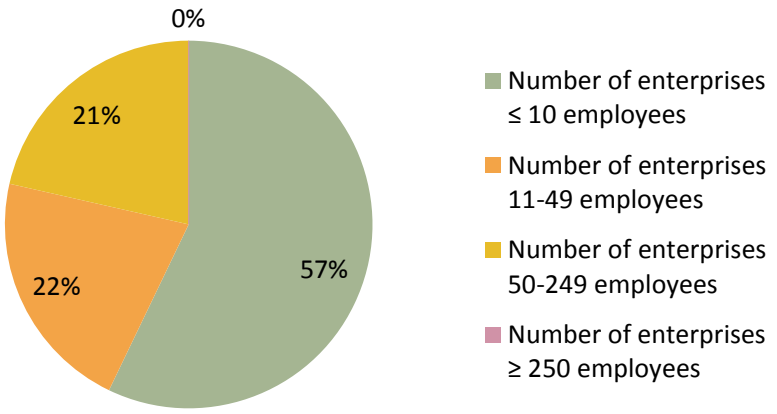


Figure 4.18.1: Size distribution of the Slovenian fish processing enterprises, 2011

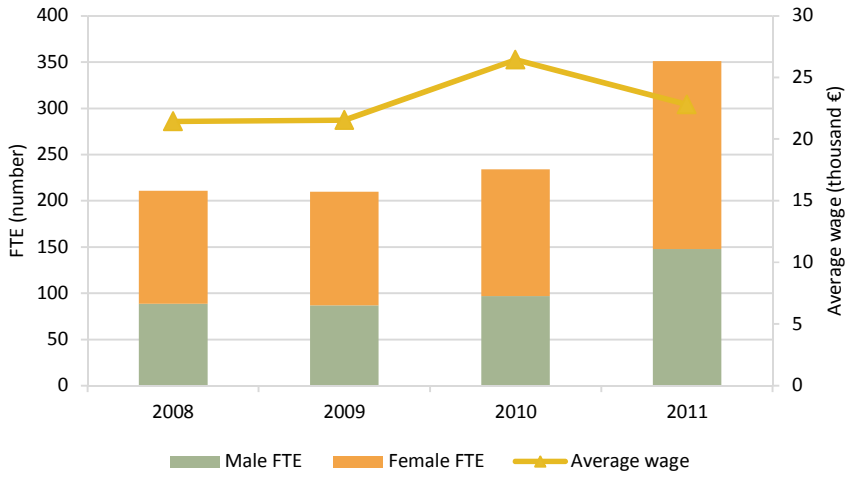


Figure 4.18.2: Slovenian employment trends, 2008-2011

4.18.2 Economic performance of the Slovenian fish processing industry sector

The total amount of income generated by the Slovenian fish processing industry, in 2011, was 63.8 million Euros. This consisted of 35.4 million in turnover and 28.4 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 – 44 %.

In the period between 2008 and 2011 the turnover has increase by 22 %, while the profit has increased by 169% in the same period.

The cost of raw material (fish) is the most important input in the processing industry, and covers 50% of the total running cost. Raw material costs decrease by 26% from 2008 to 2011. Two main species used in Slovenian fish processing sector are Mackerel and Tuna. The volume and value of Mackerel in 2011 was 1,720 tons and 3.35 million Euros while the volume and value of Tuna in 2011 was 598 tons and 2.7 million Euros. Wages and salaries of staff is the second most important cost item covers 33% of the total running cost. Other operational costs and Energy costs cover 11% and 5%, respectively.

GVA and OCF have increased for 73% and 60% between 2008 and 2011. We recorded also increasing of EBIT by 70% in the period from 2008 to 2011.

GVA per employee was 50,890 Euros (54,950 Euros per FTE employee) in 2011, which is above the Slovenian GVA per employee average of the same year – 37,512 Euros.

The Slovenian fish processing industry had an estimated value of assets of 32.2 million Euros and a return on investment of 30.6%.

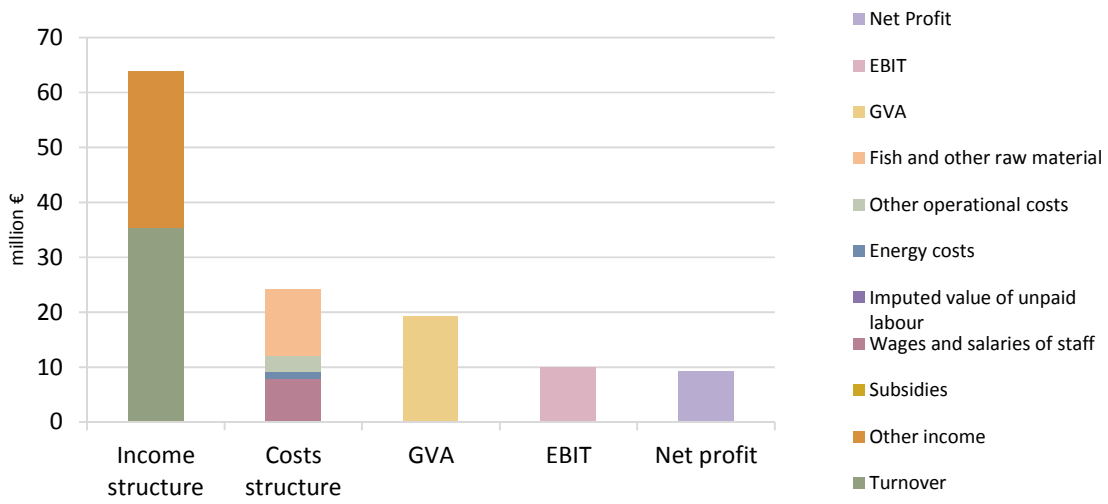


Figure 4.18.3: Slovenian economic performance of the fish processing industry sector, 2011

Table 4.18.2: Slovenian economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total turnover	2009	% of total turnover	2010	% of total turnover	2011	% of total turnover	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	29.0	12%	26.1	13%	28.6	43%	35.4	56%	24%	22%
Other income	209.6	88%	176.6	87%	37.3	57%	28.4	44%	-24%	-86%
Subsidies	0.4	0%	0.0	0%	0.1	0%	0.0	0%	-100%	-100%
Total Income	239.1	100%	202.8	100%	66.0	100%	63.8	100%	-3%	-73%
Expenditure (million €)										
Purchase of fish and other raw material for production	16.5	57%	15.6	60%	8.1	28%	12.2	34%	51%	-26%
Wages and salaries of staff	4.3	15%	4.4	17%	6.1	21%	8.0	22%	30%	84%
Imputed value of unpaid labour	0.2	1%	0.2	1%	0.1	0%	0.1	0%	-23%	-72%
Energy costs	0.6	2%	0.9	3%	0.9	3%	1.1	3%	27%	90%
Other operational costs	0.4	1%	0.6	2%	4.5	16%	2.8	8%	-37%	592%
Total production costs	22.0	76%	21.6	83%	19.6	69%	24.2	68%	23%	10%
Capital Costs (million €)										
Depreciation of capital	1.3	4%	1.4	5%	1.3	5%	1.4	4%	7%	13%
Financial costs, net	2.4	8%	0.4	2%	0.4	1%	0.7	2%	64%	-72%
Extraordinary costs, net	0.3	1%	0.9	3%	0.1	1%	0.0	0%	-70%	-87%
Capital Value (million €)										
Total value of assets	53.0	182%	28.0	107%	22.5	79%	32.2	91%	43%	-39%
Net Investments	0.8	3%	0.5	2%	0.302	1%	0.334	1%	10%	-56%
Debt	41.2	142%	12.8	49%	11.4	40%	14.0	40%	24%	-66%
Performance Indicators(million €)										
Gross Value Added	11.2	38%	9.1	35%	15.1	53%	19.3	54%	28%	73%
Operating Cash Flow	7.1	24%	4.5	17%	9.0	31%	11.3	32%	26%	60%
Earning before interest and tax	5.8	20%	3.2	12%	7.6	27%	9.8	28%	29%	70%
Net Profit	3.4	12%	2.7	10%	7.2	25%	9.2	26%	27%	169%
Capital productivity (%)	21.0		32.3		66.8		59.9			
Return on Investment (%)	10.9		11.3		33.9		30.6			
Financial Position (%)	77.8		45.7		50.4		43.6			
Future Expectation Indicator (%)	-1.0		-3.2		-4.6		-3.4			

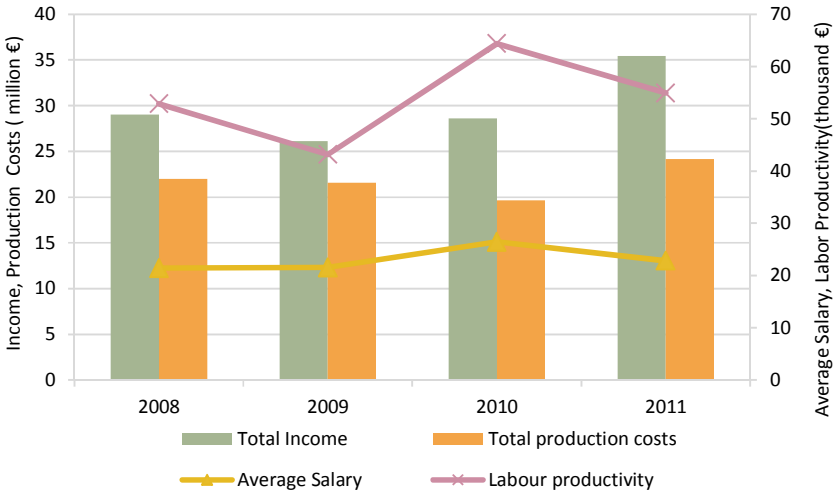


Figure 4.18.4: Income, costs, wages and labour productivity trends for the Slovenian fish processing industry sector overview, 2008-2011

4.18.3 Trends and drivers for change

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.

Due to scrapping in 2011 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.

4.18.3.1 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 2011 was fourteen. In June 2012 the questionnaires were sent to all enterprises.

In cases where a questionnaire, as the only source, was used the response rate was 79 %. 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 necessairly 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...).

4.19 SPAIN

4.19.1 General overview of the Spanish fish processing industry sector

The seafood processing industry is linked to the Spanish tradition at the same level as the fishery sector itself. With an initial focus on salted and canned fish and shellfish, due to old constrains in communications and logistics, it evolved after the 50's to become a widely diversified and innovative industry with an important share in the global market. The industry is mainly composed of medium size firms dominated by the canning sector and in a lesser extent by frozen and fresh processed seafood. Within the canning industry there are still an important number of traditional facilities, producing artisanal preserved seafood for the local and some other niche markets, resulting in interesting premium prices. However, the decline in competitiveness in the domestic market, due to the competition on prices with imported products, and the stagnation of the Spanish economy, has move the industry toward important strategic changes. The rise of exports in volume and value illustrates how the Spanish industry has pointed to market high quality and value added products in foreign markets. On the other hand, the amounts of processed seafood, used as raw materials in more specialized processes, has also risen, resulting in more efficiencies and savings for the industry.

The Spanish fish processing is a well-diversified industry in terms of segments and species. In 2010, the canned seafood segment, with a 48% of the total production, holds the first position in volume within the whole industry followed by frozen fish and shellfish, with a share of 35%. But in terms of value, canned seafood accounts for 57% of the total, while frozen only represents 28%. Fish products represented 65% of production volumes and 71% of total value recorded in 2010. Molluscs concentrated 20% of quantities and 19% of value in the same period. Crustaceans represent 6% of quantities and 8% of total value. The distribution of the production by species remained stable along the years, showing no changes in the composition of the in terms of species, but an increase of frozen products in confront of canned seafood (Fernández Polanco et al, 2012).

Table 4.19.1: Production and value of the Spanish fish processing industry according to product categories and species

		2008		2009		2010	
		Volume (M Tonne)	Value (thousand €)	Volume (M Tonne)	Value (thousand €)	Volume (M Tonne)	Value (thousand €)
Frozen	Hake	9,742	37,255	8,554	24,504	8,059	21,500
	Sardine	6,763	6,617	8,881	8,306	9,268	8,753
	Tuna	5,347	22,077	7,790	29,632	11,350	37,516
Canned	Tuna	267,820	1,175,370	230,572	1,192,063	243,912	1,299,873
	Sardine	23,043	90,401	21,302	83,859	18,332	80,147
	Mackerel	8,409	32,120	7,329	23,275	6,142	30,544
	Anchovy	8,707	105,955	8,683	108,636	9,604	112,603

Source: Instituto Nacional de Estadística. Encuesta Industrial de Productos (2011).

The most important fish species for the processing industry in terms of volumes and value are tunas of any of its different species. Tuna species have also increased their participation in the category of frozen fish, displacing hake as the most popular frozen species between 2008 and 2010. Sardine is another relevant fish species for the processing sector with an important supply for the canning industry, but also present in almost all product categories. Anchovy is an appreciated species by consumers which enlarges its value with processing whether canned or salted. Cephalopods are the most relevant category of species within molluscs for the Spanish processing industry. Octopus and cuttlefish are the two main species across frozen molluscs, while squids are in the top of the canned molluscs' production. Regarding bivalve molluscs, mussels are the dominant species in volume and value, with an important contribution from the production of local aquaculture. Shrimp and prawns are the bulk of processed crustaceans accumulating 94% of the category in volume and 87% in value. More than 80% of these products are imported from South America and Asia, and the most frequent product consists in frozen, raw and head on prawns and shrimps packed in Spain for distribution in the local and export markets.

The number of companies involved in the seafood processing industry in Spain went down by 10% in the period from 2008 to 2011, going from 572 to 513. The decrease was more pronounced in the segment of small companies, with less than 50 employees, which gathers more than 80% of the total industry. Within this segment 59 companies closed their activities since 2008, resulting in a decrease of 12.1%, while the number of companies over 50 employees remained unchanged in the same period. When considering the figures from the last two observed years, the downward trend persist in the smaller size companies, but seems to change in the case of large firms, indicating some recovery and a very small increase in the number of firms. Despite of the economic crisis affecting the country the decreases in activity were lower than the average in the rest of the national industrial sector.

As a consequence of the decrease in the number of companies, total employment also decreased by 7% between 2008 and 2011, but only 1% in the last two observed years. The trends of work destruction appear to be changing and there is a positive result in terms of full time employment, which increased 1% between 2010 and 2011. The rate of full time employment is quite high compared with other fishery related industries and surpasses 96% in almost all the observed years. The number of FTE per company has also increased by 8% since 2010, confirming the recovery of the industry despite of the effects of the financial crisis, and the consolidation of stable jobs by these companies. Average wages and labor productivity have also increased by 2 and 8% respectively from 2010 to 2011, as a result of the effort in increasing specialization and efficiency of the industry looking to provide the national and European markets with high quality and value products.

The impact of the processing industry on regional development and employment is of high relevance for the surrounding areas, in the coastal regions. Traditionally the canned industry has been one of the main engines, along with wild fishery and aquaculture, for welfare across these communities. The processing industry provides full time, more stable and better skilled jobs, which directly contributes to the improvement of the neighbourhood livelihood. To this extent, the fish processing industry is not just another economic activity, but also a relevant social welfare supporter.

Table 4.19.2: Spanish fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	572	585	552	513	-7%	-10%
≤ 10 employees	239	234	215	209	-3%	-13%
11-49 employees	247	267	253	218	-14%	-12%
50-249 employees	75	75	76	77	1%	3%
≥ 250 employees	11	9	8	9	13%	-18%
Employment (number)						
Total employees	19,737	19,331	18,581	18,390	-1%	-7%
Male employees						
Female employees						
FTE	19,094	18,449	17,590	17,702	1%	-7%
Male FTE						
Female FTE						
Indicators						
FTE per enterprise	33.4	31.5	31.9	34.5	8%	3%
Average wage (thousand €)	23.4	23.3	24.5	24.9	2%	6%
Labour productivity (thousand €)	62.7	70.5	70.2	75.3	7%	20%
Unpaid work (%)	0	0.0	0.0	0.0	0%	0%

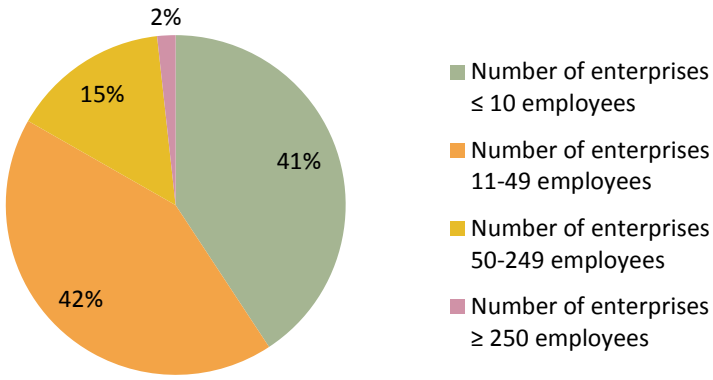


Figure 4.19.1: Size distribution of the Spanish fish processing enterprises, 2011

Figure 4.19.2: Spanish employment trends, 2008-2011

4.19.2 Economic performance of the Spanish fish processing industry sector

Despite of the economic crisis affecting the country, the national processing industry appears to manage quite well, and initial impacts on activity, recorded mainly between 2008 and 2009 seem to be overcome and surpassed. Recent figures and evolution show a strong and well organized industry, with the ability of generating profits for the companies and sustained jobs and incomes for the workers involved in this industry.

The vast majority of Spanish fish processing industry's income comes from sales turnover, indicating low diversification of investments and activities different to seafood processing in the observed firms. The ability of making profits for this industry relies in their performance at the local and export markets. Besides minor decrease in 2009, industry's turnover has been following an increasing trend in all the four years considered here. Direct subsidies and other incomes account for less than a 1% of total income. Revenues from activities different than seafood processing have been decreasing with a fall of 22% in the observed years. Subsidies seem not following a clear trend, with increases or decreases from one year to the other. In general terms, income structure does not show relevant differences in all the years analyzed.

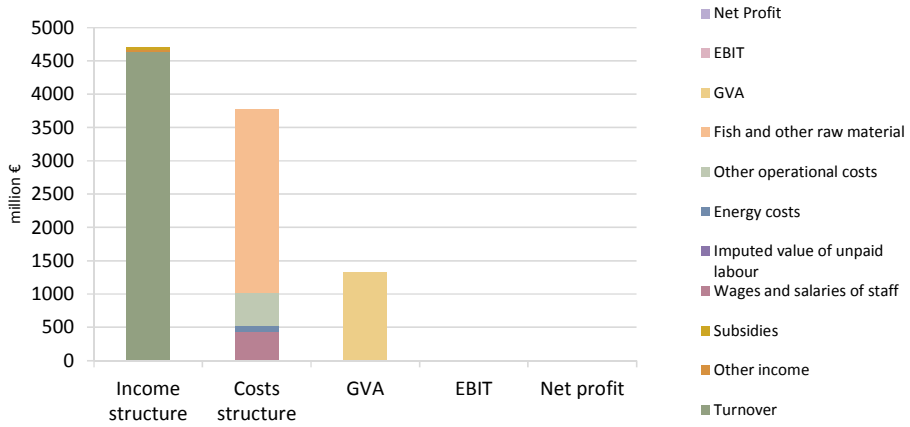


Figure 4.19.3: Spanish economic performance of the fish processing industry sector, 2011

Table 4.19.3: Spanish economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	4,148.2	99%	4,112.1	99%	4,256.1	99%	4,646.4	99%	▲ 9%	▲ 12%
Other income	29.2	1%	27.9	1%	22.7	1%	22.9	0%	▲ 1%	▼ -22%
Subsidies	25.0	1%	28.0	1%	28.4	1%	28.2	1%	▼ -1%	▲ 13%
Total Income	4,202.4	100%	4,168.0	100%	4,307.2	100%	4,697.4	100%	▲ 9%	▲ 12%
Expenditure (million €)										
Purchase of fish and other raw material for production	2,433.1	58%	2,282.7	55%	2,503.1	58%	2,744.5	58%	▲ 10%	▲ 13%
Wages and salaries of staff	446.6	11%	430.6	10%	430.1	10%	441.0	9%	▲ 3%	▼ -1%
Imputed value of unpaid labour										
Energy costs	69.4	2%	68.5	2%	70.7	2%	83.2	2%	▲ 18%	▲ 20%
Other operational costs	476.8	11%	487.6	12%	470.0	11%	508.2	11%	▲ 8%	▲ 7%
Total production costs	3,426.0	82%	3,269.3	78%	3,473.9	81%	3,776.8	80%	▲ 9%	▲ 10%
Capital Costs (million €)										
Depreciation of capital										
Financial costs, net	-107.4	-3%	-94.7	-2%	-50.9	-1%	-84.5	2%	▼ -66%	▲ 21%
Extraordinary costs, net	-13.5	0%	-6.4	0%	-3.4	0%	7.6	0%	▲ 324%	▲ 157%
Capital Value (million €)										
Total value of assets										
Net Investments	204.6	5%	125.6	3%	112.9	3%	80.5	2%	▼ -29%	▼ -61%
Debt										
Performance Indicators(million €)										
Gross Value Added	1,198.1	29%	1,301.3	31%	1,234.9	29%	1,333.5	28%	▲ 8%	▲ 11%
Operating Cash Flow	776.5	18%	898.7	22%	833.2	19%	920.7	20%	▲ 10%	▲ 19%
Earning before interest and tax										
Net Profit										
Capital productivity (%)										
Return on Investment (%)										
Financial Position (%)										
Future Expectation Indicator (%)										

Raw material purchases account for 58% of total production costs. A small decrease in raw material expenditure was recorded in 2009, linked with a slowdown in activity. But the evolution in the following years return to upward resulting in a 13% increase in the full period. Like it was the case of turnover, the highest increase was recorded in the last two years observed, when expenditure in fish and selfish purchases of the processing industry went from 2,503 to 2,744 million euro as a result of the increased levels of activity. The evolution of energy costs is consistent with that observed in the case of raw material purchases, and reinforces the idea of increasing activity in the industry. Wages and salaries account for around 10% of total operational costs, which reflects a less labor intensive industry compared with fisheries and aquaculture. Total salaries decreased in 2009 with regard to the previous year, but increased in the last two observed years, reaching similar levels to 2008.

The evolution of salaries is related with total employment, and firms' shutdowns between 2008 and 2009, but recovering in the following years due to increased average wages and productivity. Finally, other operational costs are not following a clear trend, with increases and decreases form year to year. Overall, these costs have increased 7% from 2008 and 8% between 2010 and 2011. It may also be related with the increases in activity, but the observed trend does not allow being conclusive.

Capital costs follow an irregular evolution, which may be related to the financial needs of the companies. Financial costs decreased in 2009 and 2010, but rose in 2011. Having no additional information it is not possible to assess whether these changes are related with new credits for operational purposes or renegotiation of existing debt. Extraordinary costs also show an irregular trend. Finally, net investments have decrease 61% from 2008 and 29% from 2010. The decrease in the investments may be related both with the crisis affecting industrial investments in the country, but also with modernization effort undertaken in the years previous to the crisis.

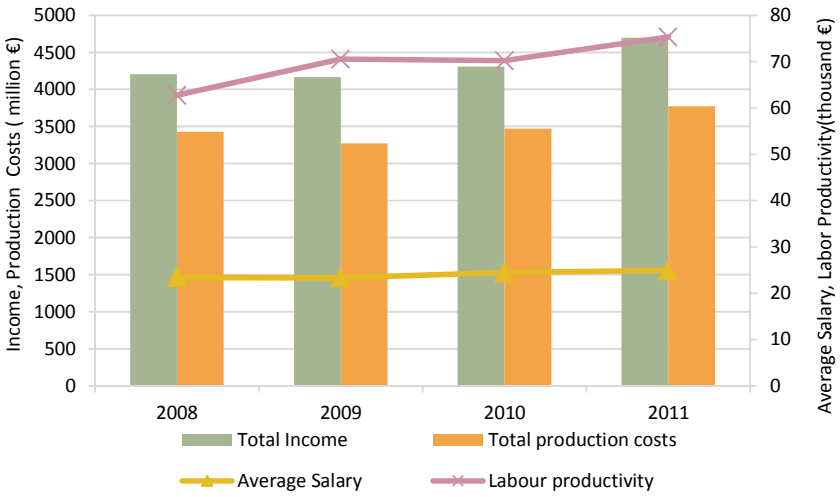


Figure 4.19.4: Income, costs, wages and labour productivity trends for the Spanish fish processing industry sector overview, 2008-2011

Gross added value is the only available indicator to assess the performance of the Spanish seafood processing industry. And this may not be the best indicator for this regard. The positive evolution of the GVA supports the idea written above about the recovery of the industry after 2009. It also indicates an improvement in the industry's ability of generating value.

4.19.3 Trends and drivers for change

Despite of the crisis, Spanish seafood processing remains a strong industry. Although the number of firms has decreased, this trend was more pronounced in the case of less efficient small firms, but increased in the segment of medium and large companies, moving to a more concentrated sector with better choices for developing relevant economies of scale. Total employment has also decreased, but FTE has recovered in 2011. The bulk of labor involved in the fish processing industry in Spain are full time workers, which makes realize on the stability of employment and skill levels in confront with the activities of fish production, where the ratio of

temporary employment is much higher. Increased productivity is also a result of a better qualified work among other factors.

Growing turnover consistent with the evolution of raw material purchases and energy costs, suggesting activity is increasing despite the reduction in the number of companies. The canned industry is a good example of improving market performance as internal consumption has kept on rising as well as exports. The industry has move into consumer orientation in the last years, with a successful effort in developing new products and presentations, covering a wide range of different consumers' segments.

Spanish consumer's preferences toward seafood are mainly focused on fresh and raw products. However, consumption of processed seafood is slowly but continuously increasing year after year. This trend differs when comparing frozen and canned seafood. While canned seafood is better accepted by consumers, which in many cases they are considered a traditional product; frozen fish faces some prejudice with regard expected product quality. These sorts of behaviors toward frozen fish also varies across species and are strongly dependent on the availability of fresh supply, and prejudices decrease when the main source of supply is frozen like penaeus shrimp, Alaska pollack or halibut.

The Spanish processing industry is strongly dependent of external trade, both for raw materials acquisitions and sales revenues. Despite the high levels of internal consumption, the industry, specially canned seafood, has targeted the markets of other developed countries in the EU, increasing value added and quality. As a result of the success in internationalization, the processing industry have resisted the crisis better than other industrial activities, and only in 2009 a significant fall in activity and revenues had put some uncertainties in the horizon. However, the industry soon recovered, and all main indicators show improvements in 2011 with regard the beginning of the recession.

Imports of raw materials have derived in some conflicts with local producers of the same species, being the case of Galician and Chilean mussels the most recent issues. Local producers sustain that cheaper Chilean mussels may make themselves loosing sales to the processing sector. This direct competition has not yet been clearly assessed by any ad-hoc analysis, but local authorities are concern about the issue and point to adequate labeling and geographic identifications as potential tools to be used in order to avoid negative effects on the local industry. Since there are no expectations of future increases in local seafood supply in the short and medium terms, the processing industry will keep relying on imports in order to sustain their production and income levels. The better the conflicts are managed, the more the benefits both for the processing and extractive industries.

Despite some isolated problems with product identification on regard species and geographic origin, both in frozen and canned seafood, the industry holds a good reputation across consumers and traders in the local markets, and several canned products like mussels, tuna or anchovies are pointed as a reference of quality in other EU countries.

4.19.3.1 References

Fernández Polanco et al (2012). *El Mercado de productos pesqueros en España*. Globefish Research Program, #106. FAO, Roma2

4.20 SWEDEN

4.20.1 General overview of the Swedish fish processing industry sector

The total number of enterprises operating in the Swedish processing industry increased from 301 to 327 during the period 2008 to 2011, 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 219, which can be compared to 177 enterprises in 2001. This can also be compared to an increase by 24 per cent 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 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 earlier 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.

During the studied period the total number of employees decreased slightly from 2,165 to 2,126 (with some variations during the years) and even the labour productivity decreased by a few per cent due to higher labour cost and a decrease in net profit.

Table 4.20.1: Swedish fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	214	217	219	219	0%	2%
≤ 10 employees	181	186	183	186	2%	3%
11-49 employees	26	26	30	26	-13%	0%
50-249 employees	7	5	6	7	17%	0%
≥ 250 employees	0	0	0	0	0%	0%
Employment (number)						
Total employees	2,165	1,991	2,007	2,126	6%	-2%
Male employees	1,187	1,116	1,112	1,202	8%	1%
Female employees	978	875	895	924	3%	-6%
FTE	1,691	1,616	1,793	1,837	2%	9%
Male FTE						
Female FTE						
Indicators						
FTE per enterprise	7.9	7.4	8.2	8.4	2%	6%
Average wage (thousand €)	46.0	42.3	45.7	48.3	6%	5%
Labour productivity (thousand €)	65.3	62.3	58.2	58.7	1%	-10%
Unpaid work (%)	1	2.8	0.0	0.0	-58%	-100%

Note: The data covers 3 segments, since the data in the third segment includes firms with more than 50 employees. FTE is not available by gender.

In 2011, total FTE in the Swedish processing industry was 1,837. Due to lower productivity and higher FTE, FTE per enterprise has increased by 6 per cent between 2008 and 2011. The fact that FTE is higher than the total number of employees indicates that several employees are working part time.

FTE development can only be studied on aggregated level, since no data is available by gender. However, between 2008 and 2011 total FTE increased by 9 per cent which can be compared to a decrease by 2 per cent in total employment. This development can probably be explained by the fact that more employees are working full time, and the increase in average wages may also have an impact on the development.

The FTE is an estimated value and achieved by using aggregated data from Statistics Sweden on "wages and salaries of the staff" and average salary of those working in fish processing. The average salary was approximately 45,000 € in 2008 and 48,000 € in 2011. All data includes social costs.

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 specialize and larger enterprises produce a wider range of products.

In 2011 a total of 219 enterprises operated in the fish processing industry. Many of the small companies were financially connected to the fishery operations, since they often processed their own landings. During 2011 a total of 85 per cent of the enterprises had less than ten employees (see Figure 4.20.1) and the relationship between the different segments was the same as in 2008. During the studied period, the use of unpaid labour declined, and towards the end of the period companies with at least 50 employees had no unpaid labour left. Therefore we only report imputed value for companies with less than 50 employees in 2010 and 2011.

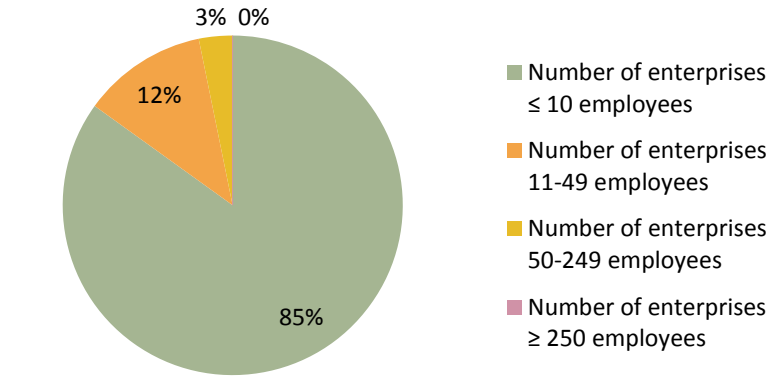


Figure 4.20.1: Size distribution of the Swedish fish processing enterprises, 2011
Note: The data covers 3 segments, since the data in the third segment includes firms with more than 50 employees.

As shown in Figure 4.20.2 the average wage level increased by 12 per cent during the period , 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. At the same time, FTE increased by 9 per cent which can be compared to a decrease by 2 per cent in total employment. This development can probably be explained by the fact that more employees are working full time, and the increase in average wages may also have an impact on the development.

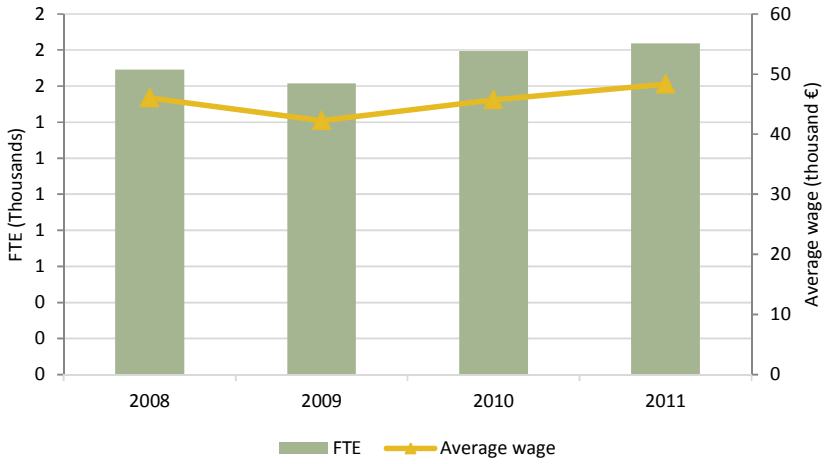


Figure 4.20.2: Swedish employment trends, 2008-2011

4.20.2 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 60 per cent of total operational costs in 2011. The industry is also dependent on raw material of the right quality and quantity. It 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 4.20.3 both EBIT and GVA are low since income has not increased at the same rate as costs (especially the costs for raw material and wages and salaries).

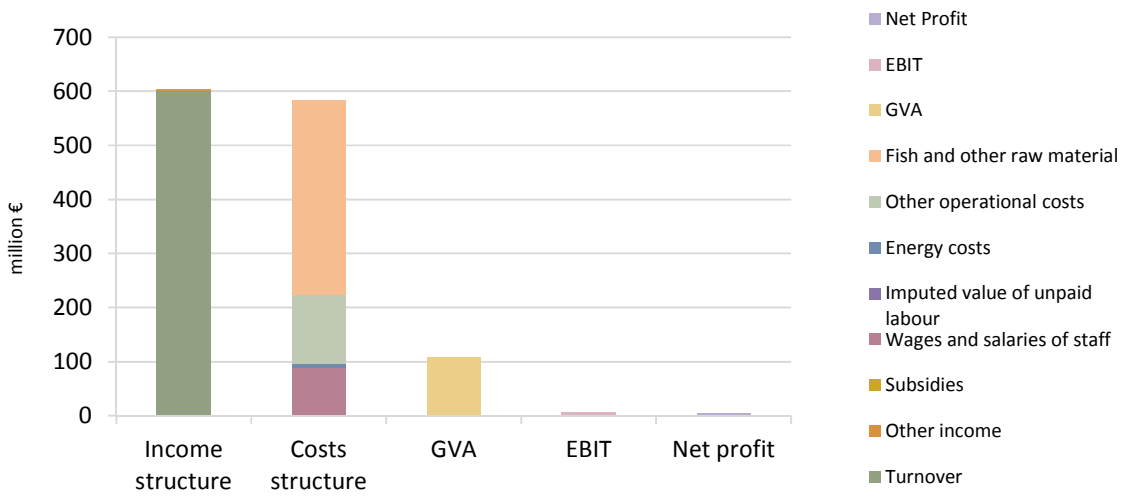


Figure 4.20.3: Swedish economic performance of the fish processing industry sector, 2011

Please note that the development of the economic performance (Figure 4.20.3 and Table 4.20.2) 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 one euro: 9.6055 SEK in 2008, 10.6213 SEK in2009, 9.5413 SEK in 2010 and 9.0355 SEK in 2011.

For example, if you compare the turnover in 2008 and 2009 it was at a similar level in Swedish krona, but decreased by 10 per cent when presented in euro. During the same period the costs of raw material increased by 11 per cent in krona, but were almost the same when expressed in euro.

The development (2008-2011) of the Swedish economic performance of the fish processing sector is shown in Table 4.20.2. Beneath the table the most interesting variables are commented.

Table 4.20.2: Swedish economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	519.8	99%	467.2	99%	567.5	99%	599.4	99%	6%	15%
Other income	3.7	1%	3.6	1%	3.9	1%	3.4	1%	-13%	-10%
Subsidies	0.3	0%	0.3	0%	0.5	0%	0.5	0%	6%	90%
Total Income	523.6	100%	470.8	100%	571.4	100%	602.8	100%	5%	15%
Expenditure (million €)										
Purchase of fish and other raw material for production	271.9	52%	272.8	58%	327.1	57%	360.8	60%	10%	33%
Wages and salaries of staff	76.8	15%	66.4	14%	82.0	14%	88.8	15%	8%	16%
Imputed value of unpaid labour	1.0	0%	1.9	0%	0.0	0%	0.0	0%	-55%	-100%
Energy costs	7.4	1%	6.5	1%	8.5	1%	7.6	1%	-11%	3%
Other operational costs	133.5	26%	90.6	19%	130.9	23%	126.0	21%	-4%	-6%
Total production costs	490.7	94%	438.2	93%	548.6	96%	583.2	97%	6%	19%
Capital Costs (million €)										
Depreciation of capital	12.3	2%	10.5	2%	12.5	2%	12.7	2%	2%	3%
Financial costs, net	0.8	0%	0.1	0%	0.6	0%	1.7	0%	158%	109%
Extraordinary costs, net	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0%	0%
Capital Value (million €)										
Total value of assets	401.3	77%	344.5	73%	355.8	62%	441.8	73%	24%	10%
Net Investments	9.5	2%	9.8	2%	11.4	2%	12.4	2%	9%	31%
Debt	254.8	49%	206.0	44%	233.7	41%	246.0	41%	5%	-3%
Performance Indicators(million €)										
Gross Value Added	110.5	21%	100.6	21%	104.4	18%	107.9	18%	3%	-2%
Operating Cash Flow	32.9	6%	32.6	7%	22.8	4%	19.6	3%	-14%	-40%
Earning before interest and tax	20.6	4%	22.1	5%	10.3	2%	6.9	1%	-34%	-67%
Net Profit	19.8	4%	22.0	5%	9.7	2%	5.2	1%	-46%	-74%
Capital productivity (%)	27.5		29.2		29.3		24.4			
Return on Investment (%)	5.1		6.4		2.9		1.6			
Financial Position (%)	63.5		59.8		65.7		55.7			
Future Expectation Indicator (%)	-0.7		-0.2		-0.3		-0.1			

4.20.2.1 Income

The Swedish processing industry has shown a steady increase in net turnover since 2001. With the exception of 2009 both turnover and total income increased every year during the period, both when expressed in euros and in krona, but, due to exchange rates, the increase was larger when expressed in euros. The turnover increased by 15 per cent 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 74 million euro in 2008 to 97 million euro in 2011, which is an increase by 30 per cent. If turnover is aggregated for the enterprises where fish processing is their main activity and the ones where it is not, total turnover increased from 593 million euro in 2008 to 696 million euro in 2011.

The variable “subsides” shows a very large percentage change, but from extremely low values. The variable is the only one collected by surveys, and variations can likely be explained by differences in structures of the enterprises that are included in the survey.

When it comes to subsidies from the European Fisheries Fund, the Swedish processing industry has mainly received subsidies under Articles 34 and 35 (investments in 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 per cent of the received subsidies amounted to less than 1 million krona (approximately 100,000 euro) and approximately 15 per cent to less than 100,000 krona (approximately 10,000 euro). The subsidies can be divided into two subcategories, “other investments” and “environmental improvement investments”. Examples of “other investments” are investment in or purchase of ice machines, fish smokers, vacuum machines, packaging solutions and expansion of cold storage. When it comes to investments that fall under "environmental improvement investment”, some examples are energy efficiency measures, modernization of production, and water purification. The processing industry has also received subsidies for MSC certification and the Swedish KRAV certification, for marketing surveys and for marketing campaigns etc.

4.20.2.2 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 per cent 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 4.20.2 this expenditure increased by 33 per cent between 2008 and 2011, but if it had been presented in krona the increase would have been less, only 25 per cent.

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 per cent 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 (Norweigan spring spawing herring), prawn (cooked and peeled), roe and farmed salmon has 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 per cent of Sweden’s total import of fish and other seafood during 2011 came from EU27, which is a decrease by 1.5 per cent compared to 2008.

The processing industry imports most of its raw material at reduced tariffs within the framework of autonomous tariff quotas (ATQs), other import quotas and tariff suspensions[1]. 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

[1] Suspensions doesn´t exist for fish and fisheries products after 2012.

industry has had to store their raw materials in order to ensure a stable supply throughout the year. This increases their production costs.

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 per cent. In 2011 this import accounted for 40 per cent of the total Swedish import of fishery products. After the EU accession Sweden has become a transit country for Norwegian fish, and especially salmon. In 2007, 15 per cent of total EU import of fish and fishery products entered Sweden. In 2011 this share had increased to 58 per cent. According to Swedish estimates nearly 80 per cent 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.

Norway is Sweden's most important trading partner when it comes to import of fish and other seafood, but imports also come from other third countries like China, Russia, Vietnam and the United States. Among EU Member States, Sweden imports mostly from Denmark, the Netherlands, Germany and Finland. 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.

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 Norway and the United States, and inside the EU the most important trading partners are Finland, Germany, Denmark and France.

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. 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 2012. The number of vessels decreased by 10 per cent (144 vessels), while total GT and kW of the fleet declined by 32 per cent and 20 per cent, respectively, during the same period. An 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. Total volume of landings also declined between 2008 and 2011, the major reason being decreased quotas for pelagic species.[2]

Staff costs added up to 15 per cent of total operational costs during the whole studied period, even if the expenditure increased by 16 per cent between 2008 and 2011 (in euro). However, if this development was presented in krona the increase would have been 11 per cent, 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 analyze 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.

4.20.2.3 Performance Indicators

Almost all of the indicators show a declining trend since 2001. The largest change occurred in 2009 when the krona was weak compared to the euro. The weakening of the market has also been affected by the financial crisis in 2009. Net profit has fluctuated since 2001, but displays a negative trend especially during the studied

[2] Source: EU Member States DCF data submissions

period 2008-2011. The decrease in net profit in recent years 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 fear 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.

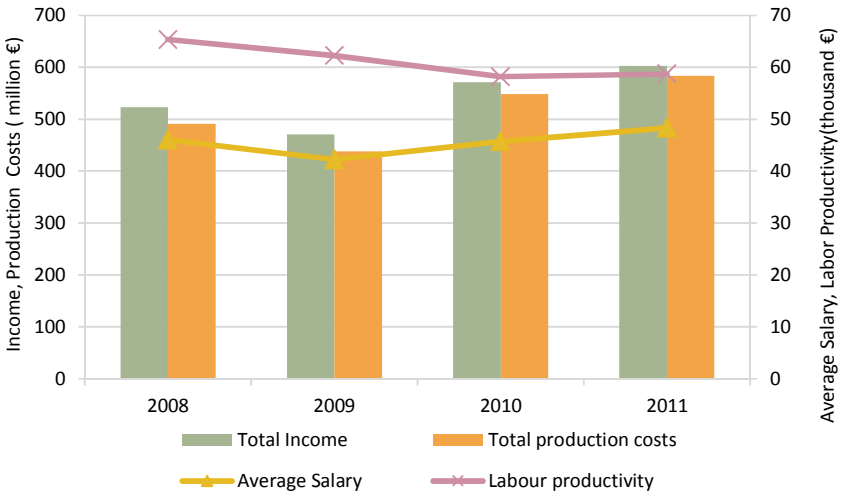


Figure 4.20.4: Income, costs, wages and labour productivity trends for the Swedish fish processing industry sector overview, 2008-2011

4.20.3 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. At the same time, net profit has fluctuated and displays a clear negative trend especially during the studied period 2008-2011. Most of the indicators suggest a decline for the industry as a whole since gross value added (GVA), return on investment (ROI) and EBIT (earnings before interest and taxes) all were lower in 2011 compared to 2008. However, net investments increased by 33 per cent between 2008 and 2011 which is an indication that the enterprises have a positive view of the future, besides indicating access to capital. Notable is also that turnover for the fish processing industry (including enterprises that do not have fish processing as their main activity) increased by 17 per cent between 2008 and 2011.

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 there will be a new Common Fisheries Policy for the EU, which aims to create a more sustainable sector. In the future, fishing and aquaculture are to be sustainable ecologically, economically as well as socially. The ambition is that the new policy will increase the sector's creditability 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. Non-certified products are today hard to place on the market since consumer awareness has increased, which of course has been picked up by the retailing chains. There is a risk that consumers will prefer other protein-rich food than fish and other sea food, if the sector's creditability is low. Hopefully, clearer labelling of for example origin and

traceability will increase the sector's creditability. 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 per cent of total operational costs, the development of this variable is very important for the sector's economic performance. However, the processing industry fear a negative reaction from consumers if they were to increase their own prices too quickly, which means that they 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 per cent 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 for the processing industry. 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.

The 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.

Finally, the development of the krona is also of great importance for the processing industries' economic performance. If the data in this chapter was recalculated 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 one euro: 9.6055 SEK (2008), 10.6213 SEK (2009), 9.5413 SEK (2010) and 9.0355 SEK (2011).

4.20.3.1 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 shows 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.

4.21 UNITED KINGDOM

4.21.1 General overview of the UK fish processing industry sector

In 2011 there was an estimated 426 UK seafood companies whose majority of turnover came from processing either seafood or salmon. These businesses employed at total of around 18,600 Full Time Equivalents (FTEs). The contraction in the size of the industry is reflected by the decreasing trend in number of businesses, FTEs and turnover in recent years. The combined turnover of the 426 companies (turnover from all activities, not just processing activity) was approx. €7,500 million euro in 2011, around 8% lower than in 2009, while the number of seafood companies and FTEs both decreased by around 8% from 2008 figures. A combination of lower turnover and higher operating costs, particularly raw material costs have placed additional financial pressure on the industry, resulting in lower average wages and tighter profit margins.

The distribution of processing activity across the UK remains consistent with previous years. There is continued dominance of processing activity in the Humberside and North East Scotland (Grampian) areas and rather modest levels of processing activity in more rural outlying areas such as Northern Ireland, Highlands and Islands and South West England. Primary processing has seen the sharpest decline in terms of number of units. Mixed processing units accounts for the largest concentration of activity in all regions with the exception of Humberside. Concentrations of secondary processing units have taken place in Humberside, North England and the South/Midlands/Wales regions. The profile of salmon processing units and employment by region reveals the continued dominance of Scotland, particularly outside the Grampian area.

Socio-economic indicators reveal a steady decrease in FTEs, despite a generally fluctuating trend in the number of processing companies. The fluctuations in the total number of businesses are the result of several factors – they are partly due to uncertainties relating to the population data, as well as the fact that some new companies have formed during the period whilst others have ceased trading. Many companies have consolidated or changed practices, moving away from processing activity towards seafood trading, retail or specialising as importers or exporters. Additionally, some businesses no longer meet the definition of 'seafood processor', as the proportion of their turnover attributed to processing has decreased to below 50%, while other companies who previously did not qualify as a processor now do so as their turnover attributed to processing is now greater than 50%.

Compared to 2008, the number of FTEs has decreased from 20,200 to 18,600. The mean wage was approx. €34,500 thousand in 2011, a decrease of approx. 9% compared to 2008 but roughly the same as those wage paid in 2008, however this most likely related to the pound to euro exchange rate, which changed quite considerably following the start of the economic crisis in 2009. The data suggest that the majority of FTEs in the UK seafood processing sector are male employees (59% of total FTE in 2011), a proportion which is relatively stable during the period analysed.

Table 4.21.1: UK fish processing industry sector overview, 2008-2011

Variable	2008	2009	2010	2011	Δ (2010-11)	Δ (2008-11)
Structure (number)						
Total enterprises	460	463	419	426	2%	-7%
≤ 10 employees	222	234	206	222	8%	0%
11-49 employees	153	151	136	135	-1%	-12%
50-249 employees	70	63	62	54	-13%	-23%
≥ 250 employees	15	15	15	15	0%	0%
Employment (number)						
Total employees						
Male employees						
Female employees						
FTE	20,197	19,637	19,049	18,572	-3%	-8%
Male FTE	12,119	11,782	11,810	10,995	-7%	-9%
Female FTE	8,078	7,854	7,239	7,577	5%	-6%
Indicators						
FTE per enterprise	43.9	42.4	45.5	43.6	-4%	-1%
Average wage (thousand €)	41.1	45.7	43.4	41.4	-5%	1%
Labour productivity (thousand €)	86.7	90.9	90.7	85.0	-6%	-2%
Unpaid work (%)	17	16.7	16.7	16.7	0%	0%

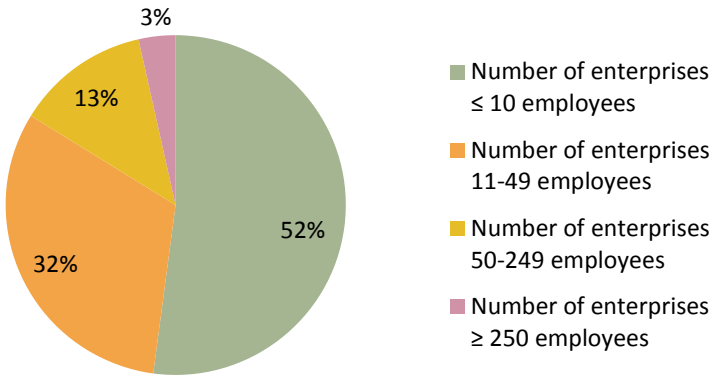


Figure 4.21.1: Size distribution of the UK fish processing enterprises, 2011

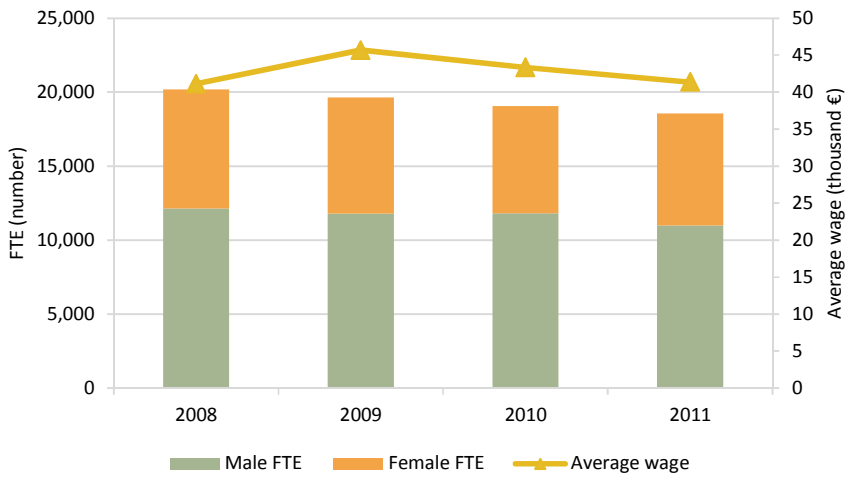


Figure 4.21.2: UK employment trends, 2008-2011

4.21.2 Economic performance of the UK fish processing industry sector

The cost structure of the UK seafood and salmon processing sector is illustrated in Figure 4.21.3. The dominance of raw material costs is clearly revealed, with this item accounting for 62% of total income in 2011. Wages and Salaries represent 8.5% of total income. Cost items such as energy and other operational costs (such as transport, water charges, packaging etc) represented a combined 17% of total income. Comparison with the same items in 2008 reveals that most cost items a proportion of income remained relatively stable.

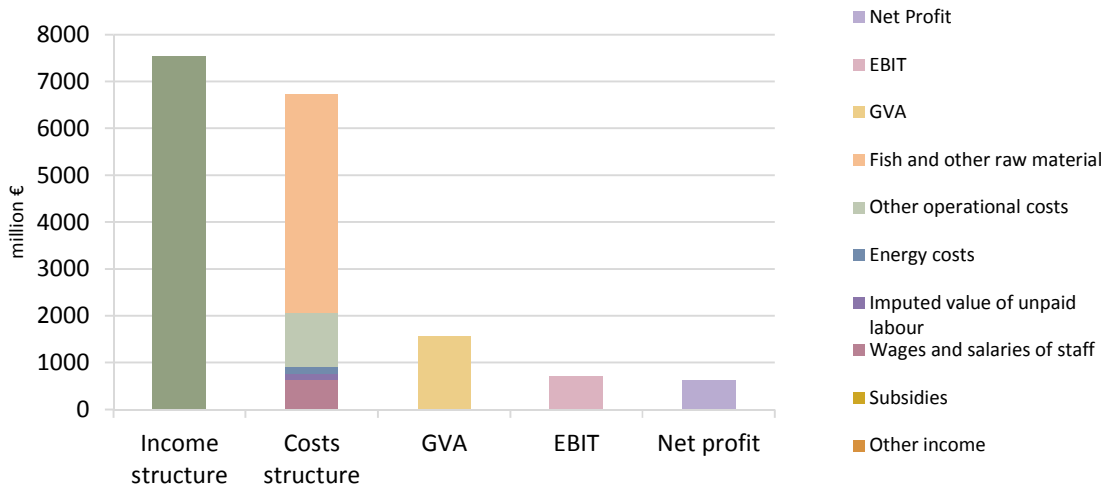


Figure 4.21.3: UK economic performance of the fish processing industry sector, 2011

Economic and productivity indicators are shown in Table 4.21.2. The data reveals that economic performance in 2011 decreased for all economic indicators (turnover (-3%), gross value added (-9%), operating cash flow (-10%), EBIT (-9%) and net profit (-7%)) compared with previous years. Lower turnover in 2011 and increased costs are associated with lower gross value added whilst a substantial decrease in operating cash flow can be seen in comparison with previous year's figures. EBIT, net profit and Return on investment have shown considerable decreases during 2009-2011. Gross added value data for 2011 suggests labour productivity weakened over the period analysed and in particular between 2010 and 2011. The same trend is also true for capital productivity, which has decreased each year from 2009 onwards.

Table 4.21.2: UK economic performance of the fish processing industry sector, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Income (million €)										
Turnover	7408.5	100%	8222.7	100%	7810.3	100%	7544.8	100%	-3%	2%
Other income										
Subsidies										
Total Income	7408.5	100%	8222.7	100%	7810.3	100%	7544.8	100%	-3%	2%
Expenditure (million €)										
Purchase of fish and other raw material for production	4641.7	63%	5293.2	64%	4623.1	59%	4663.3	62%	1%	0%
Wages and salaries of staff	692.4	9%	747.7	9%	688.2	9%	640.3	8%	-7%	-8%
Imputed value of unpaid labour	138.5	2%	149.5	2%	137.6	2%	128.1	2%	-7%	-8%
Energy costs	161.1	2%	157.5	2%	208.9	3%	133.4	2%	-36%	-17%
Other operational costs	853.9	12%	986.6	12%	1250.0	16%	1170.2	16%	-6%	37%
Total production costs	6487.6	88%	7334.4	89%	6907.8	88%	6735.2	89%	-2%	4%
Capital Costs (million €)										
Depreciation of capital	109.7	1%	114.9	1%	103.8	1%	84.2	1%	-19%	-23%
Financial costs, net	157.1	2%	140.2	2%	122.0	2%	94.5	1%	-23%	-40%
Extraordinary costs, net										
Capital Value (million €)										
Total value of assets	1032.2	14%	852.1	10%	864.7	11%	906.7	12%	5%	-12%
Net Investments	23.1	0%	20.1	0%	16.758	0%	74.814	1%	346%	224%
Debt	466.9	6%	638.1	8%	314.8	4%	322.4	4%	2%	-31%
Performance Indicators(million €)										
Gross Value Added	1751.8	24%	1785.5	22%	1728.4	22%	1577.9	21%	-9%	-10%
Operating Cash Flow	920.9	12%	888.3	11%	902.6	12%	809.6	11%	-10%	-12%
Earning before interest and tax	811.3	11%	773.4	9%	798.8	10%	725.4	10%	-9%	-11%
Net Profit	654.2	9%	633.3	8%	676.7	9%	630.8	8%	-7%	-4%
Capital productivity (%)	169.7		209.5		199.9		174.0			
Return on Investment (%)	78.6		90.8		92.4		80.0			
Financial Position (%)	45.2		74.9		36.4		35.6			
Future Expectation Indicator (%)	-8.4		-11.1		-10.1		-1.0			

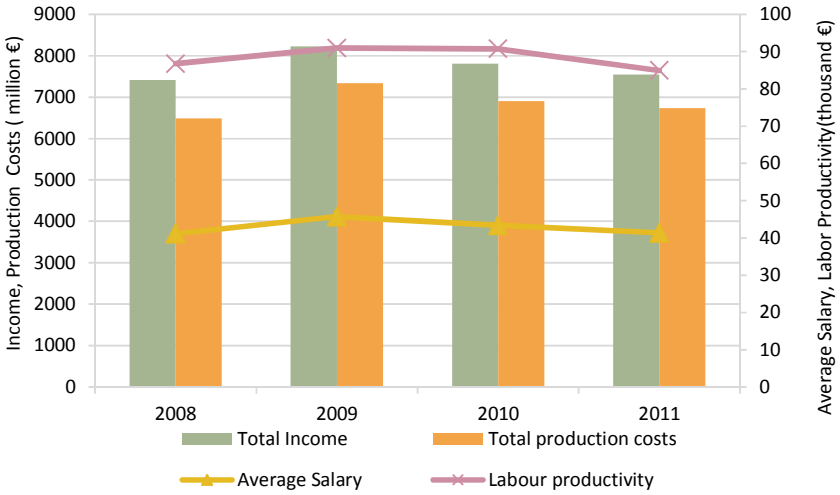


Figure 4.21.4: Income, costs, wages and labour productivity trends for the UK fish processing industry sector overview, 2008-2011

4.21.3 Trends and drivers for change

The UK fish processing industry has decreased in size in recent years. Across the UK the average size of processing units (in terms of FTE category) has increased since the mid 90's, with the majority of the increases having taken place from the mid 2000's onwards. In recent years UK processing units have been confronting many issues affecting business and financial performance. Higher volume units have been operating against tight margins with limited scope for price increases while lower volume units have become particularly exposed to supply volatility. Markets have been relatively flat with traditional peaks not as high and supplies have become increasingly irregular, with resulting higher distribution and transport costs. Credit control and late payment have become more of an issue, particularly for small and medium sized units, while fuel and energy costs have become a particular concern for medium sized units following the credit crunch in 2009. Overall, a combination of lower turnover and higher operating costs, particularly raw material costs have placed additional financial pressure on the industry, resulting in lower average wages and tighter profit margins.

5 SPECIAL REQUEST: DATA COLLECTION ON RAW MATERIAL

5.1 Background for the proposed study

There is already a longer history of integrating data collection of raw material by species. Originally it was part of the DCR, but then skipped for the DCF due to the argument of serious problems to collect the data. In an attempt to reinforce the usefulness of fish processing industry data collection for policy advising, it is recommended to include data on raw materials which are used by the EU fish processing industry. Data on raw materials purchased from European fishing companies may provide information on outlets and ex-vessels prices which may be of interest for the fleet policy, while data on imported raw materials should provide information on sourcing (including intra-firm trade) which may be of interest for the external side of the CFP. Furthermore, in order to have the connection to the fleet and to evaluate impacts of management measures for the fleet on the fish processing industry it was already proposed several times to have a study on the feasibility of collecting data on volume and value of raw material (see e.g. SGECA 10-03/SGECA 10-04/PGECON 2013). The study shall evaluate the feasibility of data collection on raw material by species and origin (catches/aquaculture and domestic/EU/Non-EU), also assess the consequences of including semi-processed products (problem of double counting, etc.).

The selection of countries for the study shall be done by several criterions, leading to different country groups. Those criterions might be:

- Market size
- Production volume
- Important main products (relevant for European market)
- Main regions, in order to have a cross over approach by commodity and country/area
- Countries with established data collection and countries with less developed data collection on raw materials

The study shall take into consideration existing data collection in order to assess the possibility to link these sources, as there are EU market observatory, trade statistics, Prodcom statistics, control regulation, input-output tables, data from producer associations, EU traceability regulation. Some fish and fisheries products are used in the pet and farming sector, maybe also in the cosmetical and pharmaceutical sector. The proposed study shall also assess the volume of fisheries and aquaculture products going into these sectors and the importance of those purchasers. Furthermore, small size enterprises maybe more linked to regional production of fisheries products or an integrated enterprises, e.g. aquaculture producers with processing facilities. This should also be taken into account.

In general it was agreed that such a study needs some effort in order to produce reliable results. In some countries data maybe already exists, whereas in other countries a new survey has to be established. This leads to the assumption that for the duration of 18 month 1 full-time employee per country is needed including the time for reporting.

Terms of References of the study

- Investigate the volume and value of raw materials by species that are used in the fish processing industry in each MS and investigate their source (catches/aquaculture) and origin (domestic/EU/Non-EU). Raw materials should not only include fish but also other aquatic species.
- Investigate the type of processed material used in the fish processing industry in each MS
- Assess the link of domestic production and imports
- Investigate the price of raw materials used in the processing sector of each MS

- Investigate percentage of income account from processing and from other activities (selling)
- Assess the importance of raw material from fisheries and aquaculture in other sectors, e.g. pet food industry, farming, cosmetics and pharmaceutical industry
- Evaluate the relevance of non main fish processors for the demand of fisheries products
- Take markets and value chains into consideration in order to indentify main drivers and substitution products qualitatively
- Assess the feasibility of linking the raw material used in the fish processing industry to the fishing sector or aquaculture sector by MS
- Estimate the cost of permanent data collection of raw materials used in the fish processing industry

Durations of the study: 18 months

Budget: 1100k

5.2 EWG Conclusion

EWG 13-15 strongly supports the conduction of a study on the data collection for raw material.

6 ADDITIONAL REQUESTS AND EWG INITIATIVES

6.1 Data collection on the fish processing industry in the DCMAP

The DCF aims at establishing a solid basis for scientific analyses of fisheries and for providing the formulation of sound scientific advice for the implementation of the Common Fisheries Policy (Commission Regulation 665/2008). The European fish processing industry occupies a central place within the European seafood supply chains and exerts therefore a strong influence on many realms which are targeted by the CFP, in particular as regards market organisation (ex-vessel prices, intra-EU trade and consumer information) and foreign fisheries policy (international fishing agreements and extra-EU trade, including autonomous tariff quotas).

Opposite to the data collection on economic data for the fishing fleet and marine aquaculture, the fish processing industry is obliged to deliver data under the structural business statistics (SBS) to EUROSTAT. Therefore, it is often argued that an additional data collection under the DCF and in the future under the new DCMAP may not be necessary. However, the DCF includes extra variables and requirements for more detailed data than the SBS (see also table 7.1.2). Examples are:

- Employment by gender
- Data collection also for companies which have fish processing not as main activity
- Data collection for companies with less than 10 employees
- Liabilities and assets
- Imputed value of unpaid labour
- Data on raw material (proposed for DCMAP)

Two examples from Member States (Spain and Greece) may show the relevance and importance of having a data collection on fish processing including raw material information.

Spain

The EU processing industry is a well diversified sector, manufacturing different product categories from a wide range of species. In order to supply the raw material needs of the industry several sources have to be used. Besides local *catches* and aquaculture, in special molluscs, the industry needs continuous supply of fish and other seafood from third countries. In the last years the composition of fishery imports have increased the levels of processing, indicating that exporting countries are moving from raw fish to semi processed products. While these trade flows do not directly affect the fleet effort and yields in the present, they may be conditioning the future performance of the EU fleet, by driving the trends in catches for certain species, and forcing an increased level of technology in onboard handling.

When studying the sources of raw materials for the EU processing sector, all sources have to be considered in order to assess the impact of the processing industry on local fisheries and aquaculture. The volumes and values of three sources have to be adequately estimated, but also the different species and commodities within all of them. Further, qualitative knowledge of the kind of raw and semi processed products the industry in incorporating in their processes, quality standards and requirements as well as the different levels of processing the EU industry is demanding to the local and foreign producers.

Greece

In the past 10 to 15 years, the total amount of raw material available for processing (not including freezing) in Greece has drastically decreased, while raw material for freezing purposes has drastically increased. On top, for the same period, the origin of the raw material has totally changed. For example, while in 1998

companies bought the main quantities of raw material from the domestic auctions, in 2011 they imported the majority of raw material (mostly pre-frozen). It's not clear whether these facts are related to the local production by fishing vessels or to changes of the consumer preferences. Nevertheless these changes directly affect the local fleet and the availability of the raw material for the processing sector.

6.1.1 EWG Suggestions and Conclusions

There are several good reasons why the fish processing sector shall be in the DCMAP. To allow a lower effort for several of the indicators the new list of variables is closer to SBS and the additional ones should often not be collected yearly. EWG 13-15 suggests collecting raw material data and the data on regional importance plus economic status of regions only twice in the time of the DCMAP (see also ch. 7.2).

The EWG 13-15 further concludes that fish processing data collection shall stay, therefore, in the DCMAP but addition of raw material data would really improve usefulness of the information.

6.2 Comments on the new DCMAP

The regulation on the data collection framework (DCF) runs out at the end of 2013. On request of the EC STECF has started with the discussion of possible variables in the new DCMAP (Data collection multi-annual plan) at the EWG 13-05 meeting in Varese in June 2013. The EWG also proposed a list of variables for the collection of economic data from the fish processing industry.

EWG 13-15 was asked to review this list and make necessary comments. This comments and the proposed changes for the specific list of indicators for the fish processing sector will then again discussed at the meeting on the revision of the DCMAP (EWG 13-18).

In the following the Appendix XIV of the report of EWG 13-05 with the recommended suggestion for revision for the next DCMAP meeting (EWG 13-18) is included.

Table 6.2.1: Appendix XIV (original list from EWG 13-05)

List of economic variables for the processing industry sector

Variable group	Variable	Specification	Unit	C=Core O=Optional
Income	Turnover		Euro	C
	Subsidies		Euro	C
	Other income		Euro	C
	Financial income			
	Extraordinary income			
Labour Costs	Personnel costs		Euro	C
	Value of unpaid labour[3]		Euro	C
	Payment for external agency workers		Euro	O
Energy costs	Energy costs		Euro	C

Variable group	Variable	Specification	Unit	C=Core O=Optional
Raw material	Purchase of fish By species By origin The raw material costs will be then part of the other operational costs (following SBS)		kg	O
Other operational costs	Other operational costs		Euro	C
Capital costs[5]	Depreciation of capital		Euro	C
	Financial costs		Euro	C
Extraordinary costs	Extraordinary costs		Euro	C
Capital value[8]	Total value of assets (including cash?)		Euro	C
Net Investments	Net Investments[9]		Euro	C
Debt[10]	Debt		Euro	C
Employment	Number of persons employed	By Gender	Number	C
	FTE National[11]	By Gender[12]	Number	C
	Unpaid labour	By Gender	Number	C
Number of enterprises	Number of enterprises	By size category where the number of persons employed (16.11.0)is: 1. ≤ 20 2. 21 – 49 3. 50 - 249 4. > 250	Number	C
Social indicators	Employment By age			C
	Employment by employment status			C
	Employment by education level			O
	Employment by nationality			O

In relation to the above suggested changes in appendix XIV, the EWG 13-15 has the following comments and proposes several changes.

In general, the definition of the indicators which shall be collected should follow the Structural Business Statistics (SBS) to create a data collection that are as comparable as possible between the European member states. Furthermore, the table provided for the annex of the regulation should also follow the way how indicators are defined and calculated in the SBS. This is to avoid future confusion and problems when calculating parameters/indicators such as net profit, EBIT etc.

1. According to the above mentioned structure it is suggested that extraordinary income and financial income is moved down in the table to its original position (see annex 2). Extraordinary income and financial income should not a part of the calculated “Total income” for the industry. As an example they are not include when calculating indicators like Gross Value Added.

2. The name “Other operational cost” is suggested to change to “Raw material and other operational cost”. This is to indicate that the cost of raw material is a part of the “Other operational costs”. However, with the importance of the raw material costs compared to the total operational costs it may be considered to keep it separately.
3. Collection of Raw Material in volume (kg)

The use of raw material in volume should be collected to establish the link between the primary sector and the fish processing industry.

The name “Purchase of fish” does not cover the purchase of raw materials from the aquatic environment. The definition should be broadening to include fish, crustaceans and molluscs. If it becomes relevant aquatic plants and animal should also be included. The data should be collected by species. The data should also be collected by origin in the sense that it should be possible to distinguish between

- “Domestic” produced raw material purchased by the industry
- “Intra EU” produced raw materials
- “Extra EU” produced raw materials
- “Aquaculture” produced raw materials
- “Fisheries” produced raw materials

4. The calculation of “Net profit” should be checked to secure that the calculation used is according to SBS and Eurostat.
5. It should be checked if the new rules of accounting include “Extraordinary income” and “Extraordinary cost” according to SBS and EUROSTAT. If this is no longer the case and the economic indicator is no longer a part of the official accounting rules it should be excluded from the data collection.
6. There have been some discussions about how to calculate the “Net investment”. According to SBS all investments are valued prior to (i.e. gross of) value adjustments, and before the deduction of income from disposals. To find the “net investment” this should be corrected for value adjustments and deduction of income from disposals.
7. The indicator “Total value of assets” should be changed to “Balance sheet total”. This is to comply with the SBS and to avoid confusion on whether or not monetary assets should be included in this indicator. In the parameter “Balance sheet total” both physical and monetary assets are included.
8. Segmentation on numbers of persons employed per enterprise.

The segmentation should not be changed because this segmentation is according to SBS structure.

Annual structural business statistics with a breakdown by size-class are the main source of data for an analysis of SMEs. A limited set of the standard SBS variables (number of enterprises, turnover, persons employed, value added, etc.) is available mostly down to the 3-digit (group) level of the activity classification (NACE), based on criteria that relate to the number of persons employed in each enterprise. The number of size-classes available varies according to the activity under consideration. However, the main classes used for presenting the results are:

- Micro enterprises: with less than 10 persons employed;
- Small enterprises: with 10-49 persons employed;
- Medium-sized enterprises: with 50-249 persons employed;
- Large enterprises: with 250 or more persons employed.

Additionally, the number of SMEs can be reported:

- Small and medium sized enterprises (SMEs): with 1-249 persons employed;

Furthermore, it is valuable to have comparable time series data. Changing the segmentation will create problems of comparison.

9. External workers variable (Optional)

It is proposed to separate a new variable from the item other production costs, i.e. value of services by external agency workers. In some countries purchase of services from external worker agencies forms already a relevant part of the workforce, e.g. in Germany a sum of about 8% of total salaries and wages are paid to external worker agencies. This means that the value added produced by the production factor "labour" does not show up in the processing sector but in the service sector. It also means that labour productivity figures are maybe misleading as well. This may lead to wrong interpretations. In order to avoid problems it is proposed to report the value of payments to agencies for external workers explicitly. As it shall be already collected under the SBS regulation, no extra effort is needed. As it is only relevant if it exceeds a certain threshold, it is further proposed to implement a threshold of e.g. 6% of payments and social contribution of active employees. If the value of the external service is higher, Member States shall report this item separately. This is also a relevant information on socio-economic working conditions in the respective country.

Social indicators

The suggested parameters listed at social indicators are according to Regulation 295/2008 of the European parliament and the council - on the structural business statistics (SBS) and Commission regulation 2700/1998 definition of characteristics for the Structural Business Statistics parameters - not collected.

The group felt hat adding new indicators to the data collection would create great problems for all members and many doubted that collecting these data would be possible. Furthermore, the objectives behind the collection of these parameters for the industry were not clear.

The group found that the inclusion of the social parameters listed is not of the most pressing importance to the processing industry and the inclusion of these parameters will not create any value added to the data collection.

As an alternative the following social indicators are suggested using NUTS level 2 and 3 data:

- Regional Importance of the industry
- Economic status of fisheries dependent region

Spatial assessment

EWG 13-15 discussed the usefulness applicability of the proposed new socio-economic indicators "age of employees", "Education level of employees", "nationality of employees" and "employment status". The age structure is considered as very important for fisheries, while gender is more important for aquaculture and fish processing where women are more involved in the production. Employment by gender is already collected under DCF. As the other indicators aim to assess the vulnerability of employees by political measures or economic development, the group discussed this issue and agreed, that it is not education level (skills and competences are more relevant) or nationality of employees (people can have a domestic nationality but are still more affected as they belong to a certain ethnicity) nor employment status (people can also become unemployed if they have a full permanent contract quite easily if the business has serious problems, maybe with some more transactions costs) that gives answer to the question. EWG 13-15 argues

that in the case of the processing industry it is more relevant to look at the economic development in the region where the employment takes place in order to assess if laid off employees can find a new job easily. This leads to a more regional approach by looking at the region where the relevant jobs are sited.

Due to the new regional approach in fisheries management and possible necessity to analyze spatial distribution of fisheries, aquaculture and fish processing, e.g. according to the latter argument, it is recommended to evaluate the possibility to report data on spatial distribution of some socio-economic indicators (e.g. employment, value added, number of vessels/farms/enterprises, value of production). This should not lead to the collection of additional information and could be done twice during the seven year programming period as there is no need to do it annually. The necessity of this kind of data presentation and administrative disaggregation level (NUTS 2 or NUTS 3) should be assessed and justified on the regional level depending on the needs of end users.

Member States shall present a report with existing data in order to answer the question of fisheries dependency of certain areas/regions of their country. Of course, this includes in particular coastal communities which are a target of European policy. The methods and disaggregation level shall be up to the Member State, but the report shall include all three sectors fishing, aquaculture and processing and their contribution on regional development and economic prosperity.

This should enable assessment of whether there are sufficient other job opportunities in the region if parts of the sector are affected by a political measure or economic relevant event (quota decrease, import stop of a certain species). Furthermore, this means that data on contribution of the raw material by species may be included in that exercise.

Table 6.2.2: Corrected - Appendix XIV

List of economic variables for the processing industry sector

Variable group	Variable	Specification	Unit	C=Core O=Optional	SBS
Income	Turnover		Euro	C	12 11 0
	Subsidies		Euro	C	-
	Other income		Euro	C	-
Labour Costs	Personnel costs		Euro	C	13 31 0 Personnel costs = wages and salaries 13 32 0 (Wages and salaries) 13 33 0 (Social security costs)
	Value of unpaid labour[3]		Euro	C	-
	Payment for external agency workers		Euro	O	-
Energy costs	Energy costs*		Euro	C	20 11 0
Raw material	Purchase of fish, crustaceans and molluscs	By species By origin (See recommendation)	kg	O	-

Variable group	Variable	Specification	Unit	C=Core O=Optional	SBS
Other operational costs	Raw material and other operational costs		Euro	C	-
Capital cost, net[5]	Depreciation of capital		Euro	C	-
	Financial income		Euro	C	-
	Financial cost		Euro	C	-
Extraordinary costs,	Extraordinary income		Euro	O	-
Net	Extraordinary costs		Euro	O	-
Capital value[8]	Balance sheet total		Euro	C	-
Net Investments	Net Investments[9]		Euro	C	-
Debt[10]	Liabilities		Euro	C	-
Employment	Number of persons employed	By Gender	Number	C	16 11 0 (No. of persons employed) 16 13 0 (Number of employees) 16 12 0
	FTE National[11]	By Gender[12]	Number	C	16 14 0
	Unpaid labour	By Gender	Number	C	-
Number of enterprises	Number of enterprises	By size category where the number of persons employed (16.11.0)is: 1. < 10 2. 10 – 49 3. 50 - 249 4. > 250	Number	C	11 11 0
Socio-economic indicators	Regional Importance of the industry	Number of enterprises		C	-
		Number of persons employed		C	-
	Economic status of fisheries dependent region	Average GDP per capita in the region in relation to National GDP per capita		C	-

6.2.1 EWG Conclusions

EWG 13-15 strongly suggests a meeting to be arranged with EUROSTAT on the definition of variables to ensure similar definitions. This can also be done by inviting EUROSTAT to the EWG 13-18 which will take place in Brussels at the end of November 2013.

EWG 13-15 concludes that social indicators should be reported twice in the reporting period and that MS define the regions in the national programme (this should be based on NUTS classification).

EWG 13-15 also concludes to consider that the indicators for the regional importance shall be combined with information on aquaculture activities and information on the fishing fleet in those regions.

EWG 13-15 suggests making the delivery of data on extraordinary costs and income optional as these data is in many MS not relevant and in cases where it is relevant it should be reported.

6.3 Data delivery at segment level

In the data call for the processing industry 2013 member states were asked for the first time to voluntarily provide economic data on segment level. The segmentation followed the size categories by persons employed of the companies: < 10, 10 – 49, 50 – 249, and > 250.

As this delivery was not mandatory, the EWG decided not to include these data in the national chapters. The editors then decided to report data disaggregated by size category for three countries (France, Portugal, and Romania). For these countries the experts at the EWG meeting provided some explanations to the data.

The present chapter also contains information on the usefulness of segmentation (as this is common for e.g. the fishing fleet).

There are two points of view on segmentation in the fish processing industry. On the one hand the main view is segmentation by number of employees and on the other hand the commodity point of view and segmentation by type of processed products.

Segmenting by number of employees can help to understand the process of consolidation of production and employment in the fish processing industry. In the Polish case in terms of number the fish processing industry is dominated by small and micro sized firms but in case of volume and value of production by companies greater or equal than 250 employees. This segmentation will also help to examine different target markets for different types of firms: the smaller one sell products mainly for the local market but the biggest mainly for exports. In addition, small businesses are most likely directly related to the national fisheries but large mainly rely on imported raw material. There is also a common segmentation by employment in the EU.

Segmentation by type of products can help to examine the geography of production of different types of processed products and also to show what the main products for each country are. It can be difficult to clear divide companies by each category of product, because one company often produces a variety of processed products from variety of fish species. However, the companies could be divided by main production, for example canned fish producers, producers of fish fillets and delicacy products etc.

Selection of the type of segmentation in fish processing industry is dependent on the needs of the end-users. When the fish processing industry is heterogeneous, it would be interesting to study the sectors segmentation to see if the development differs between segments. This can best be done for countries that have a large industry with many enterprises in each segment. The development in different segments could produce an interesting picture of the sectors structural change. For example, if small enterprises form a larger group, which in turn can increase capacity by exploiting economies of scale. On the other hand, small enterprises are usually more flexible and can easier adapt to changes.

However, if one country only has a few enterprises in a segment there may be confidentiality issues for data of separate enterprises. Therefore if data on segment level will be reported, it might be better that only three segments are used since it might be hard for several countries to report data for enterprises that have more than 250 employees (less than three companies). Another problem is that when one country has very few enterprises in one segment or if one segment has very low values, the percentage change might be misleading. For example, if you compare the economic indicators for Sweden by segments there

are for some segments increases with several hundred per cent since the values of the calculations are based on are very low number of enterprises.

If data should be reported for segments it also depends on how reliable the data are. If the data on individual level are reliable and there is no problem with confidentiality, it would be preferable to include data on segments in the report. On the other hand, if the data aren´t reliable it would be problematic to report data for segments.

Overview of the French fish processing industry sector by size category

The number of enterprises in each size category followed different patterns since 2008 (see the national chapter for France): 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 stabilized since then and the number of big enterprises (more than 250 employees) has increased from 13 to 16. On the other hand, the number of people employed in all the four categories has increased From 2008 to 2011.

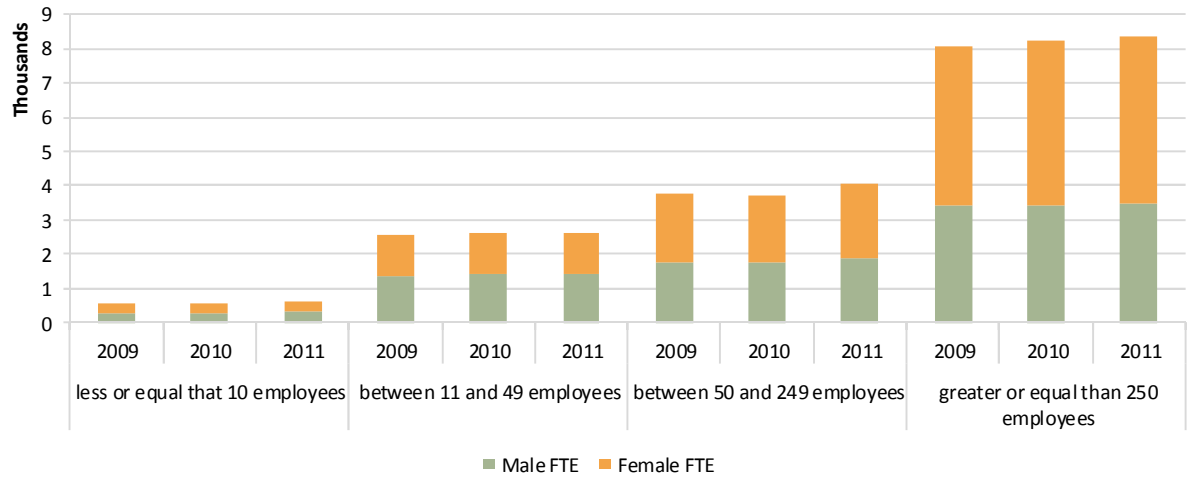


Figure 6.3.1: French employment trends by size category: 2008-2011

The distribution of total turnover, total production costs, total value of assets and employment (FTE) between the four size categories is stable since 2009. A change of the distribution appeared between 2008 and 2009, when the share of the medium enterprises (between 50 and 249 enterprises) was reduced; this is due to the fall of the number of enterprises in this category which decreased by 14% from 43 to 37 in one year. In 2011, the big company category, which encompasses 16 enterprises this year, cumulates 58.7% of the turnover.

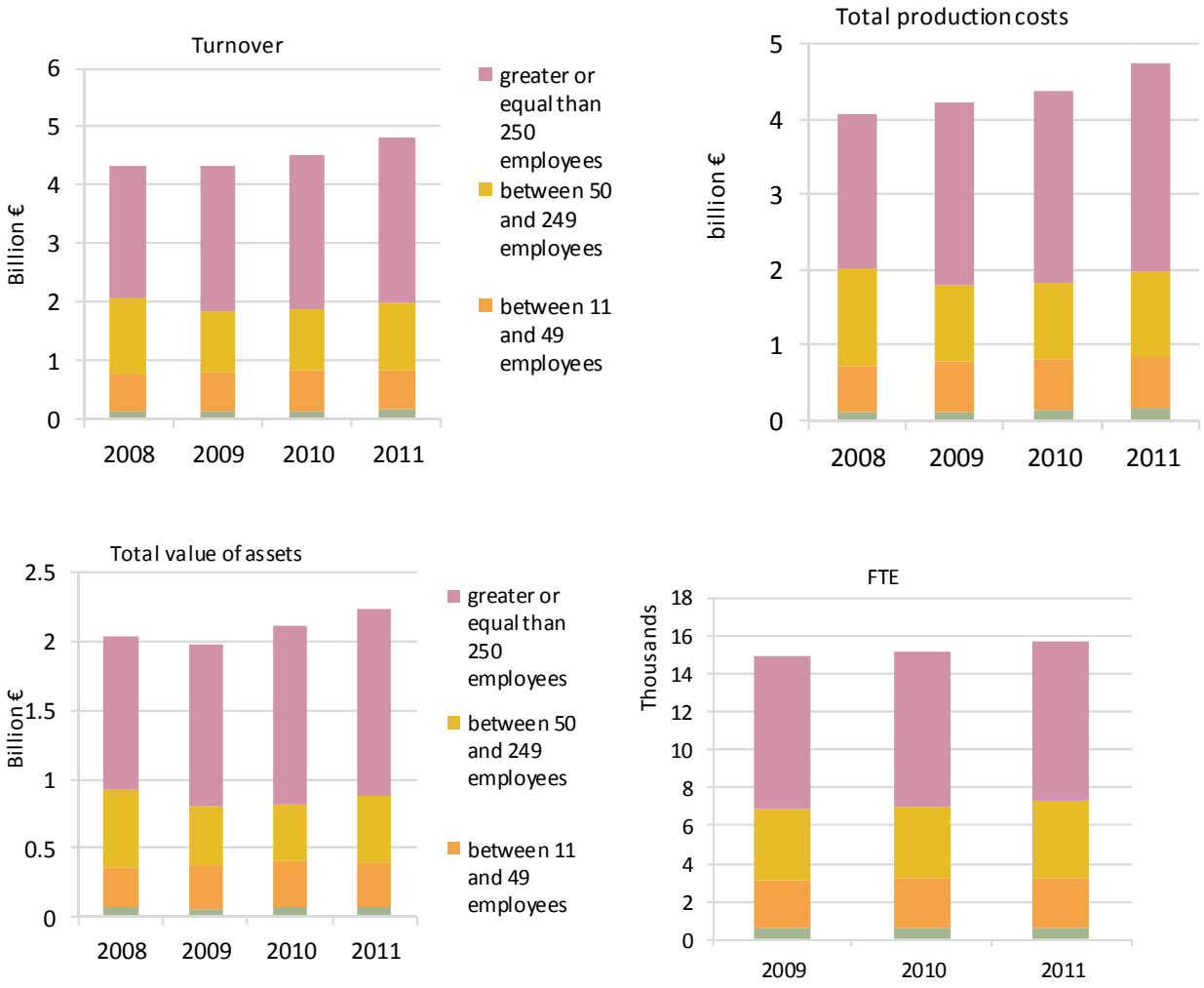


Figure 6.3.2: Economic performance of the French fish processing industry sector by size category: 2008-2011

All the categories of companies have experienced an increase of their total income between 2008 and 2011, except the medium enterprises (50 to 249 employees) whose turnover decreased by 13%. However, the gross added value of this category of enterprises did not decreased so much (-4%) during the same period, while it decreased by 11% for the very small enterprises (less than 10 employees), remained stable for big enterprises (more than 250 employees) and increased by 24% for the small enterprises (10 to 49 employees).

Table 6.3.1: Economic performance of the French fish processing industry sector by size category, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Less or equal that 10 employees										
Total Income	118.5	100%	115.9	100%	136.2	100%	155.3	100%	0.1	31%
Gross Value Added	27.4	23%	26.5	23%	27.2	20%	24.5	16%	-10%	-11%
Operating Cash Flow	5.0	4%	4.0	3%	4.8	4%	-0.5	0%	-110%	-110%
Earning before interest and tax	-5.1	4%	3.1	3%	2.8	2%	-0.5	0%	-119%	90%
Net Profit	-3.4	3%	2.8	2%	3.3	2%	-0.1	0%	-102%	98%
Between 11 and 49 employees										
Total Income	649.3	100%	680.8	100%	690.2	100%	756.0	100%	10%	16%
Gross Value Added	153.8	24%	127.7	19%	120.9	18%	191.0	25%	58%	24%
Operating Cash Flow	50.1	8%	21.1	3%	15.4	2%	81.7	11%	431%	63%
Earning before interest and tax	-28.6	4%	16.3	2%	-4.4	1%	65.7	9%	1586%	330%
Net Profit	-26.7	4%	17.0	2%	-2.8	0%	67.6	9%	2488%	354%
Between 50 and 249 employees										
Total Income	1,332.2	100%	1,053.8	100%	1,043.4	100%	1,159.7	100%	11%	-13%
Gross Value Added	197.8	15%	170.5	16%	169.8	16%	190.1	16%	12%	-4%
Operating Cash Flow	32.1	2%	36.2	3%	25.3	2%	-2.3	0%	-109%	-107%
Earning before interest and tax	-49.9	4%	25.9	2%	-16.8	2%	-60.6	5%	-261%	-21%
Net Profit	-45.4	3%	28.5	3%	-14.2	1%	-56.8	5%	-299%	-25%
Greater or equal than 250 employees										
Total Income	2,273.2	100%	2,529.7	100%	2,670.9	100%	2,885.8	100%	8%	27%
Gross Value Added	520.3	23%	480.2	19%	493.6	18%	537.7	19%	9%	3%
Operating Cash Flow	213.9	9%	103.9	4%	112.6	4%	123.0	4%	9%	-42%
Earning before interest and tax	324.1	14%	61.2	2%	96.7	4%	91.0	3%	-6%	-72%
Net Profit	319.7	14%	65.3	3%	104.0	4%	91.1	0.0	-12%	-72%

The pattern of the evolution of the total income is similar for all categories of enterprises, except the medium enterprises (50 to 249 employees) whose total income dropped by 21% between 2008 and 2009 and then increased again. This change of the level of total income for this category in 2009 is mainly due to the fall of the number of enterprises which decreased by 14% (from 43 to 37) in one year. The gross added value is rather stable for each category, except the small enterprises (10 to 49 employees), whose gross added value increased by 24% between 2008 and 2011. The net profits are stable but low and sometimes negative. The major changes of the net profit evolution pattern concern the small enterprises (10 to 59 employees) whose net profit increased from a negative value in 2010 to almost €68 million in 2011, and the big enterprises whose net profit decreased by 80% between 2008 and 2009. The late change of the level of net profit earned by big companies explains the global trend of net profit for the whole French seafood industry during the period 2008-2011.

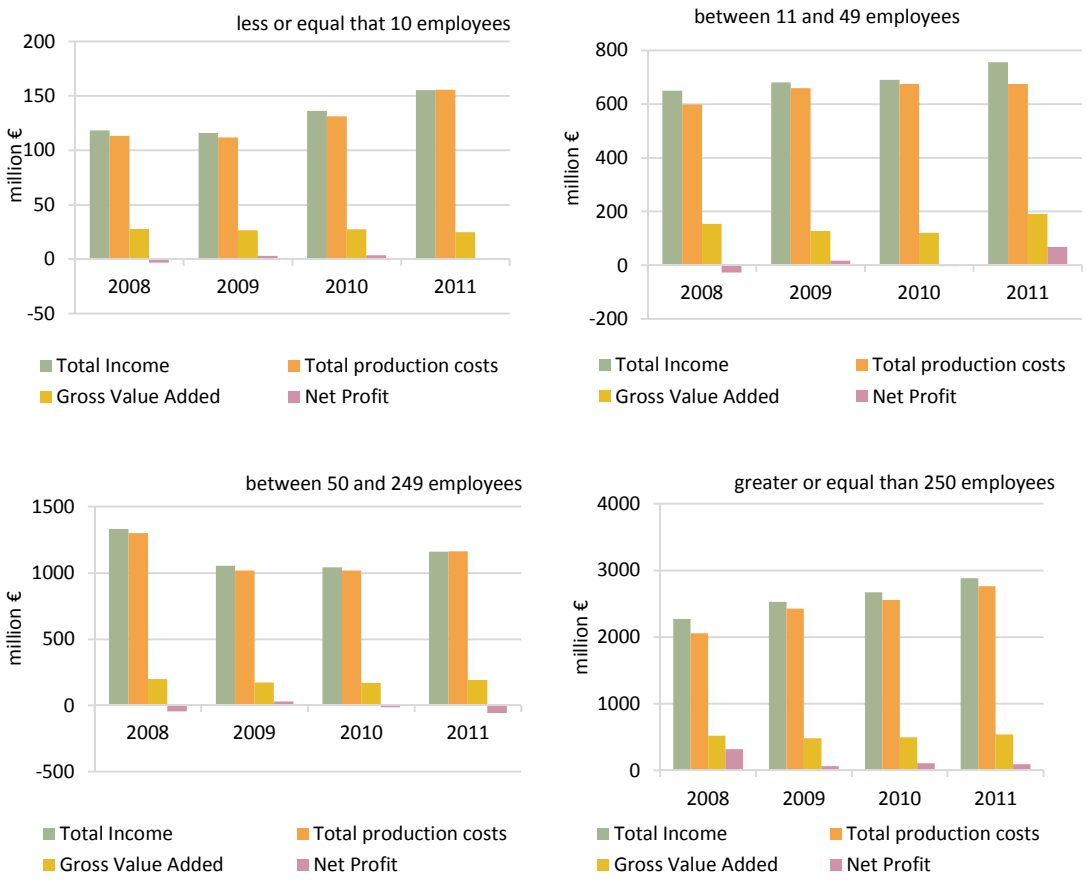


Figure 6.3.3: Trend in main economic performance indicators by size category, 2008-2011

The cost structure is similar for all size categories except the medium enterprises (50 to 249 employees) which present a higher share of purchase of fish and other raw material than the other categories (50% instead of 35%). This 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).

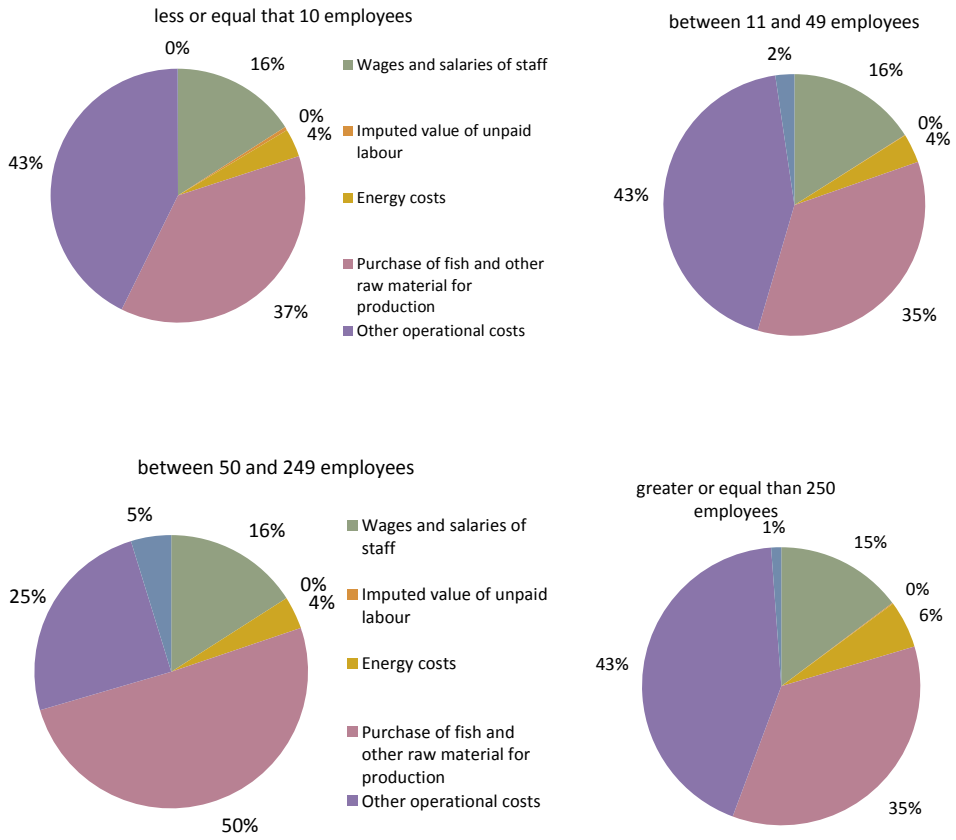
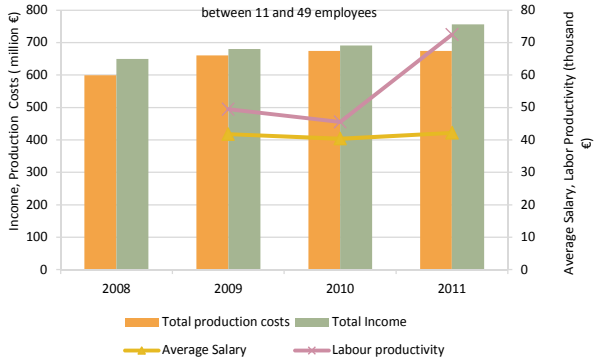


Figure 6.3.4: Cost structure of the French fish processing industry sector by size category: 2011

Over the period 2008-2011, labour productivity has decreased in the very small companies, increased in the small and medium companies and remained stable in the big companies. The average salary is stable for all size categories, except the big company category, where it has continuously increased since 2009. Thus, the rise of the average salary which has been observed for the whole French seafood industry is mainly due to the evolution pattern of the salary in the big companies, which employ, alone, 53% of the workers (FTE) of the industry.



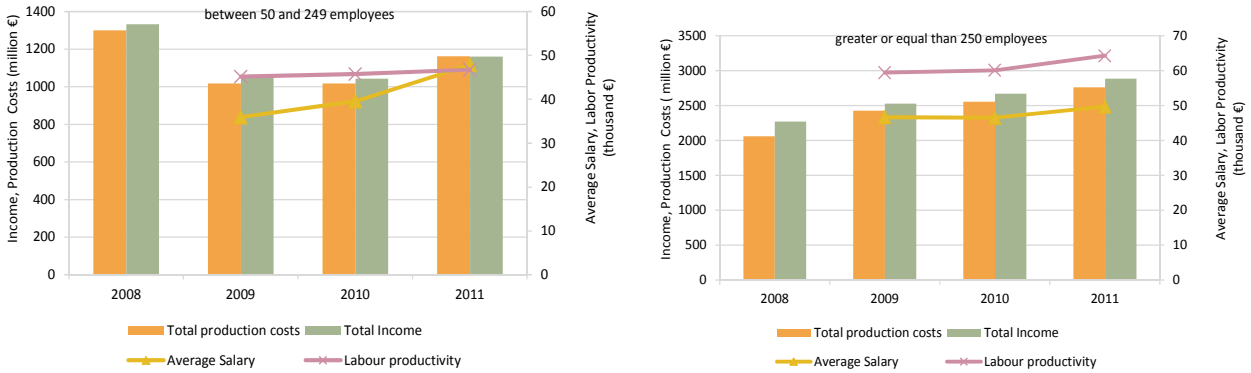


Figure 6.3.5: Income, costs, wages and labour productivity trends, by size category: 2008-2011

Overview of the Portuguese fish processing industry sector by size category

Less or equal that 10 employees

Total of 82 companies, 44% of total, with 145 workers (42% women) in 2011. Annual average wage was €9495 in 2011.

Total income of €15.0 million, decreased -4% in 2010 and again in 2011, but in absolute figures not in a very relevant amount (€0.6 million).

With €145 million in 2011 in this segment, GVA shorten from 2009 to 2010 (-19%) but recovered in 2011 (11%).

Production costs (without purchase of fish) are €1.7 million in this segment, rising considerable (153%) comparing 2009 and 2010, and recovering in 2011 (-56%).

Between 11 and 49 employees

Total of 58 companies, 32% of total , with 1354 workers (57% women) in 2011. Annual average wage was €12070 in 2011.

Total income in 2011 of €277.8 million became stable since 2008, with a light increase from 2010 to 2011 (1%).

With 268 M€ in 2011 to this segment, GVA decreased from 2009 to 2011, yet getting slower through the years: -8% from 2009 to 2010 and -0.9% to 2011.

Production costs (without purchase of fish) reach €24.9 million in this segment, rising about 17% per year between 2009 and 2011.

Between 50 and 249 employees

Total of 41 companies, 22% of total, with 3904 workers (65% women) in 2011. Annual average wage was €12352 in 2011.

Total income in 2011 of €672.9 million with some increase from 2010 to 2011 (0.4%), cutting an accumulated decreased since 2009 (4%).

With 662.3 M€ in 2011 to this segment GVA increased 16% from 2009 to 2010 and stable around 0.6% in last year.

Production costs (without purchase of fish) represents €25.2 million in this segment, rising considerable in 2010 comparing with 2009 (38%), and again in 2011 (4%).

Greater or equal than 250 employees

Total of 4 companies, 2% of total, with 1911 workers (79% women) in 2011. Annual average wage was €11661 in 2011.

Total income in 2011 of €170.0 million and increasing 29% comparing with the previous year.

With 164.1 M€ in 2011 to this segment GVA increased 28% from 2010 to 2011, after a decreased of 6% between 2009 and 2010.

Production costs (without purchase of fish) are €25.2 million in this segment, rising in 2010 comparing with 2009 (16%), and again very considerable in 2011 (44%).

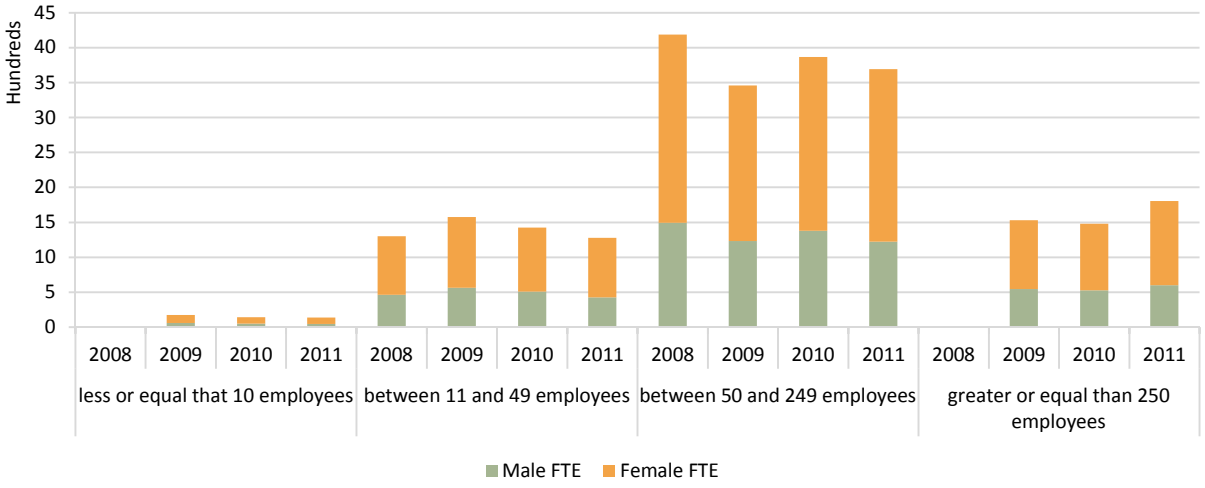
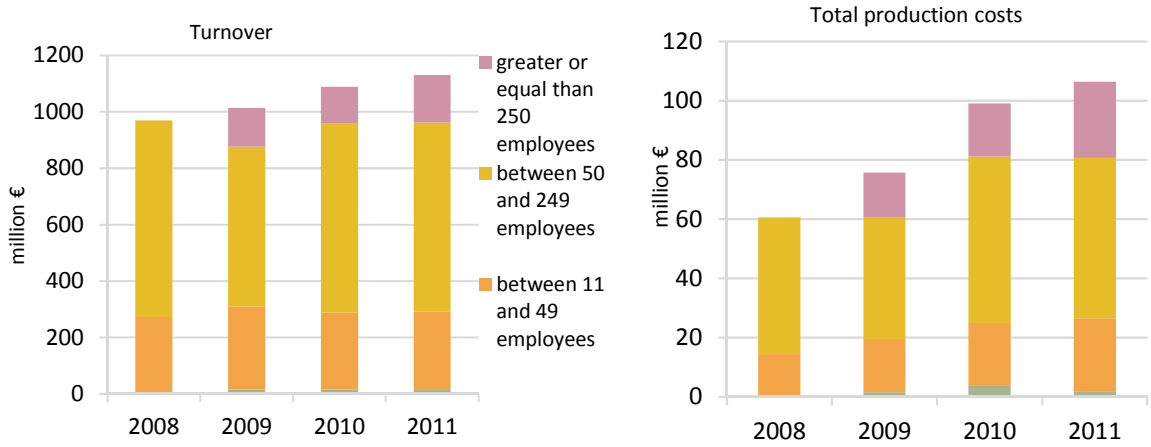


Figure 6.3.6: Portuguese employment trends by size category: 2008-2011



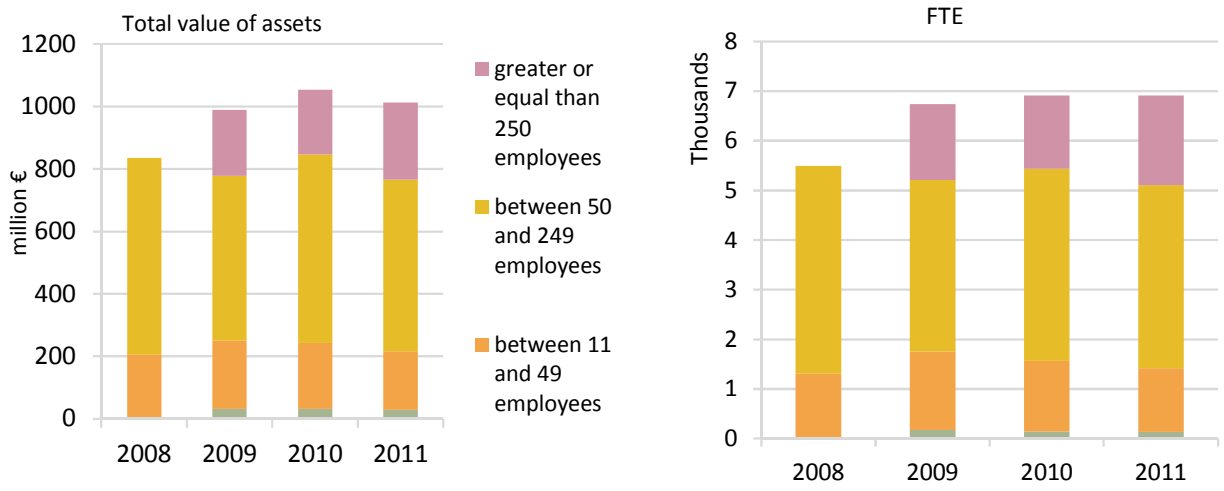


Figure 6.3.7: Economic performance of the Portuguese fish processing industry sector by size category: 2008-2011

Table 6.3.2: Economic performance of the Portuguese fish processing industry sector by size category, 2008-2011

Variable	2008	% of total income	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2008-11)
Less or equal that 10 employees										
Total Income			16.2	100%	15.6	100%	15.0	100%	▼ -4%	
Gross Value Added			16.2	100%	13.1	84%	14.6	97%	▲ 11%	
Operating Cash Flow			14.6	90%	11.6	75%	13.3	89%	▲ 14%	
Earning before interest and tax										
Net Profit										
Between 11 and 49 employees										
Total Income	273.2	100%	295.2	100%	275.3	100%	277.8	100%	▲ 1%	▲ 2%
Gross Value Added	272.3	100%	294.3	100%	270.9	98%	268.3	97%	▼ -1%	▼ -1%
Operating Cash Flow	258.7	95%	277.1	94%	254.2	92%	252.9	91%	▬ 0%	▼ -2%
Earning before interest and tax										
Net Profit										
Between 50 and 249 employees										
Total Income	699.1	100%	567.9	100%	670.1	100%	672.9	100%	▬ 0%	▼ -4%
Gross Value Added	697.0	100%	565.6	100%	658.4	98%	662.3	98%	▲ 1%	▼ -5%
Operating Cash Flow	653.0	93%	527.0	93%	613.9	92%	618.7	92%	▲ 1%	▼ -5%
Earning before interest and tax										
Net Profit										
Greater or equal than 250 employees										
Total Income			138.5	100%	131.5	100%	170.0	100%	▲ 29%	
Gross Value Added			136.4	98%	128.4	98%	164.1	97%	▲ 28%	
Operating Cash Flow			123.2	89%	113.6	86%	144.3	85%	▲ 27%	
Earning before interest and tax										
Net Profit										

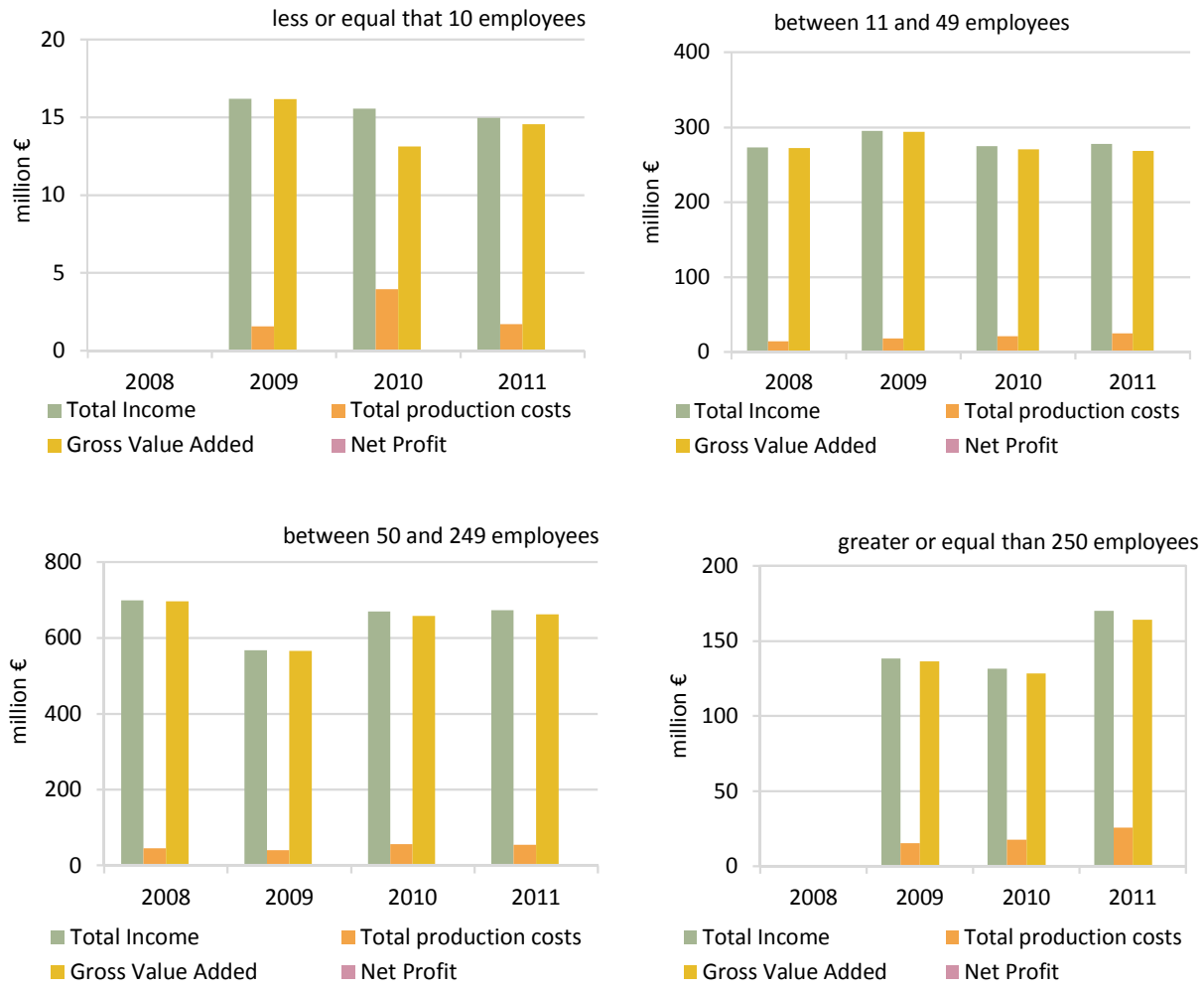
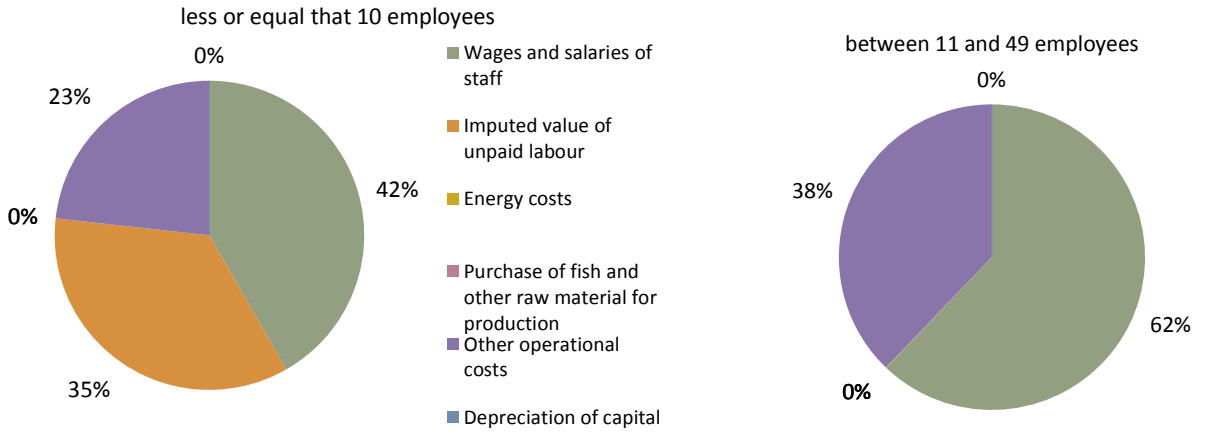


Figure 6.3.8: Trend in main economic performance indicators by size category, 2008-2011



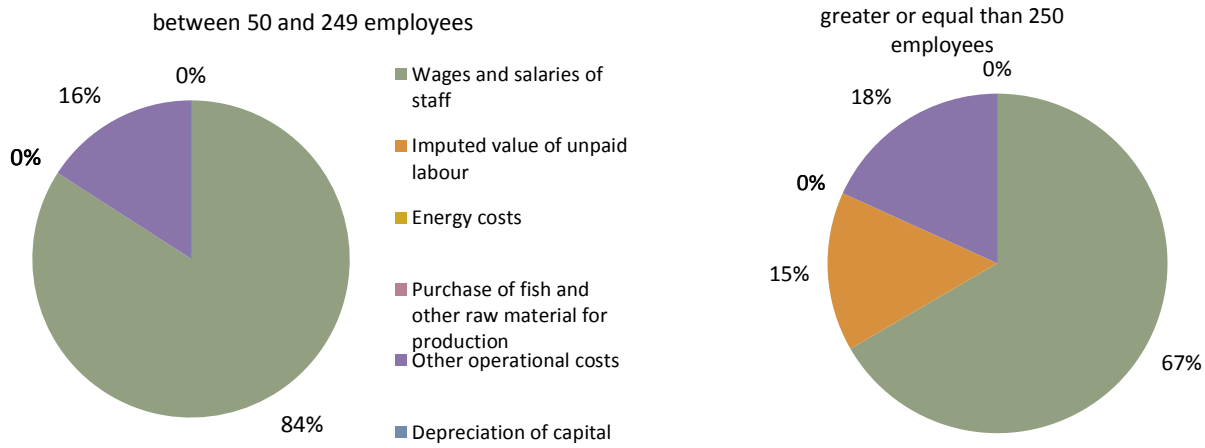


Figure 6.3.9: Cost structure of the Portuguese processing industry sector by size category: 2011

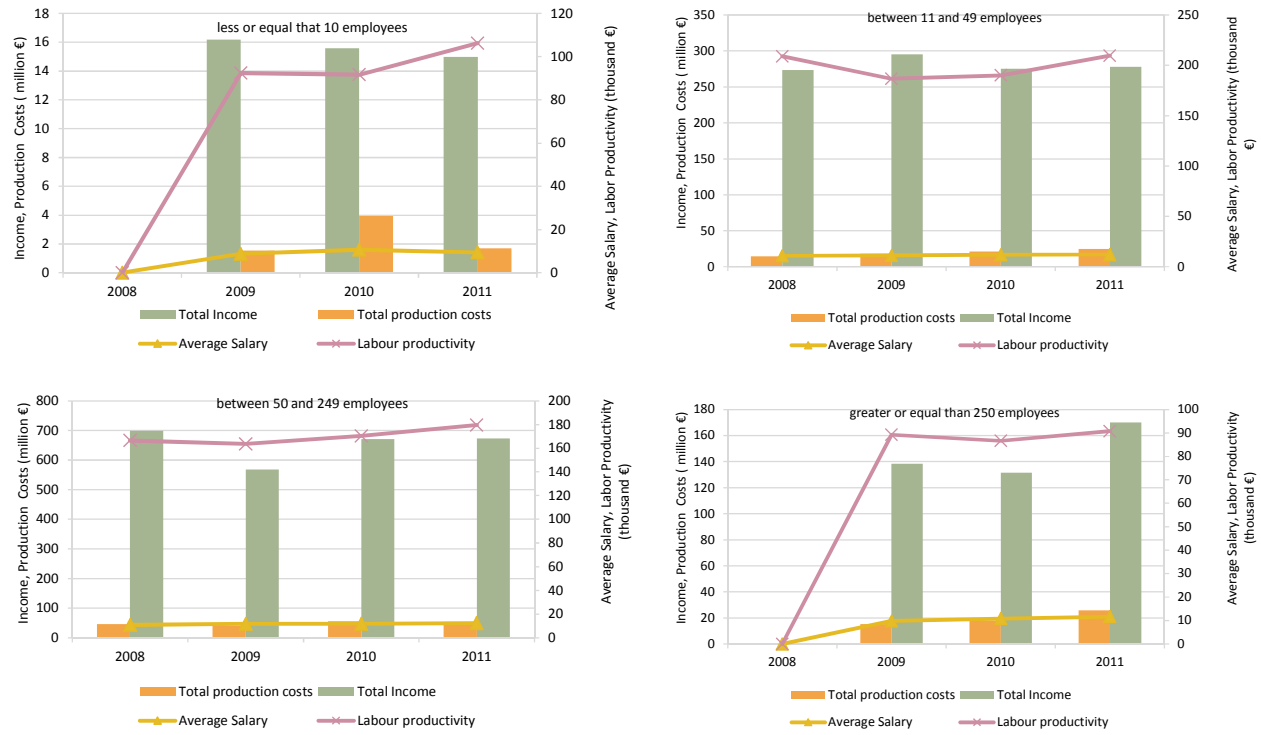


Figure 6.3.10: Income, costs, wages and labour productivity trends, by size category: 2008-2011

Overview of the Romanian fish processing industry sector by size category

The economic performance of Romania fish processing industry sector is strictly linked with the structure by size category, where the companies with 11-49 employees and 50-249 employees represent 32%, the first category and 36%, the second category. Consequently total turnover and total of assets belong to this both categories, as well as the total production costs, see the Figure 4.18.6. This have, also, as per analyzes, a consequence of having inside of both segments the biggest number of employees.

Figure 6.3.11: Romanian employment trends by size category: 2008-2011

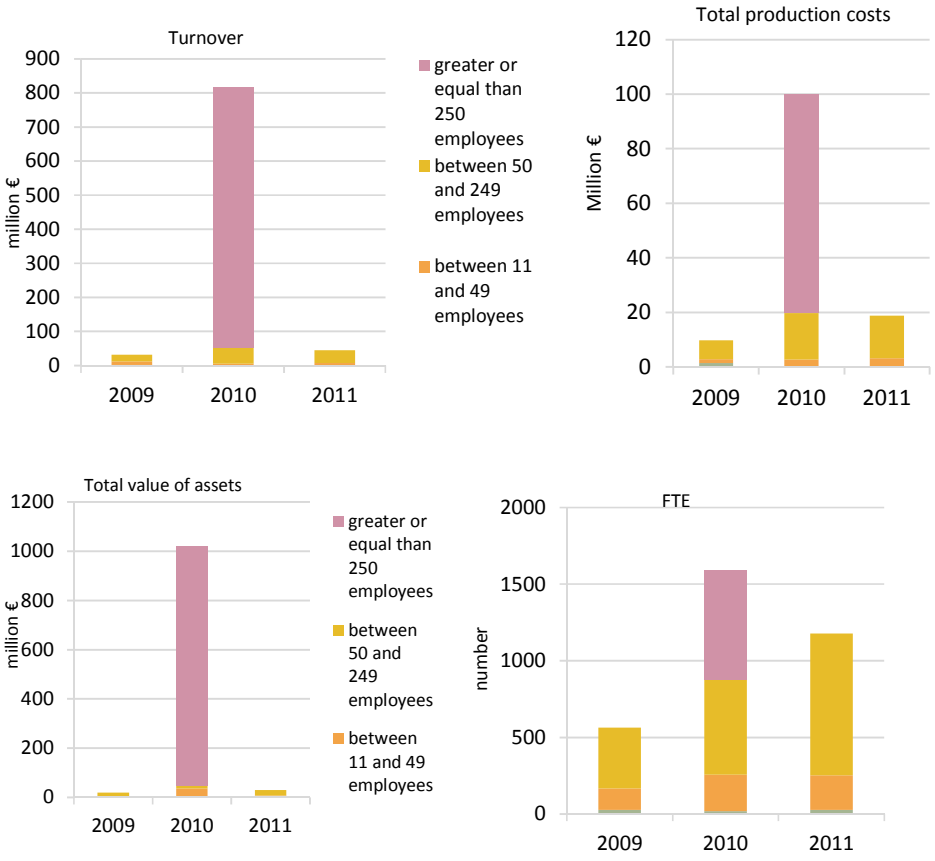


Figure 6.3.12: Economic performance of the Romanian fish processing industry sector by size category: 2008-2011

In conclusion, excluding the year of 2010, as a characteristic of Romania structure of processing industry is that one the segments with 1-10 and 11-49 employees have the biggest importance as in what consists in total turnover, total costs, total value of assets and, as explained above, total employees as number and FTE.

Table 6.3.3: Economic performance of the Romanian fish processing industry sector by size category, 2009-2011

Variable	2009	% of total income	2010	% of total income	2011	% of total income	Δ (2010-11)	Δ (2009-11)
Less or equal that 10 employees								
Total Income	2.1	100%	0.5	100%	0.3	100%	-47%	-87%
Gross Value Added	1.1	50%	0.5	99%	0.2	71%	-62%	-81%
Operating Cash Flow	0.7	31%	0.5	91%	0.2	59%	-66%	-75%
Earning before interest and tax	0.5	26%	0.5	88%	0.2	57%	-66%	-71%
Net Profit	0.5	26%						
Between 11 and 49 employees								
Total Income	10.1	100%	5.2	100%	7.2	100%	39%	-29%
Gross Value Added	9.2	91%	3.1	59%	4.6	65%	52%	-49%
Operating Cash Flow	8.7	86%	2.5	49%	4.1	57%	64%	-53%
Earning before interest and tax	8.3	83%	1.8	34%	3.7	51%	109%	-56%
Net Profit	8.1	80%	0.6	11%	3.7	51%	552%	-55%
Between 50 and 249 employees								
Total Income	19.7	100%	48.0	100%	37.1	100%	-23%	88%
Gross Value Added	13.7	70%	34.5	72%	26.3	71%	-24%	91%
Operating Cash Flow	12.9	65%	31.0	64%	21.4	58%	-31%	66%
Earning before interest and tax	12.7	65%	29.3	61%	19.6	53%	-33%	54%
Net Profit	6.0	30%	28.0	58%				
Greater or equal than 250 employees								
Total Income			762.9	100%				
Gross Value Added			684.9	90%				
Operating Cash Flow			682.8	89%				
Earning before interest and tax			640.6	84%				
Net Profit			481.5	63%				

Due to the some uncertainties in the regulation and data call the up-loaded data are containing information from non main activity processing in the same figures for data main activity processing units, because some of those companies have also other activities and it was enough clear the percentage in the total activities for processing one or other indicator qualifying the companies for one category or other one for 2010. Next transmission of data, for 2011, doesn't include data for non main activity processing units, this data have transmitted in the separate file required. Also, because the year 2008 was the first year of implementation by Romania of such a Program Data Collection, wasn't very clear the necessity to structure the data by segments of size companies, the data are up dated in data base for the whole sector, and consequently the analyzes should be done starting with 2009 data collected and transmitted accordingly.

Table 4.18.3 is showing the fact that the profitability is different among to the segments of the sector. The 1-10 employees companies faced a lot of problems starting with 2010, comparing with 2009, due to their inability to adapt to effects produced by economic crisis, decrease of salaries and wages in domestic economy, being more affected by those phenomenas, and the profitability indicators have a decreasing trend. For the two main segments – companies with 10-49 and 50-249 employees – the most representative ones for the Romania processing industry the profitability indicators look better, with a

slight decrease in 2011 comparing with 2009, reflecting the effects produced in the domestic economy by the economic crisis, and the recovering trend. This trend is expected to be kept in the following years.

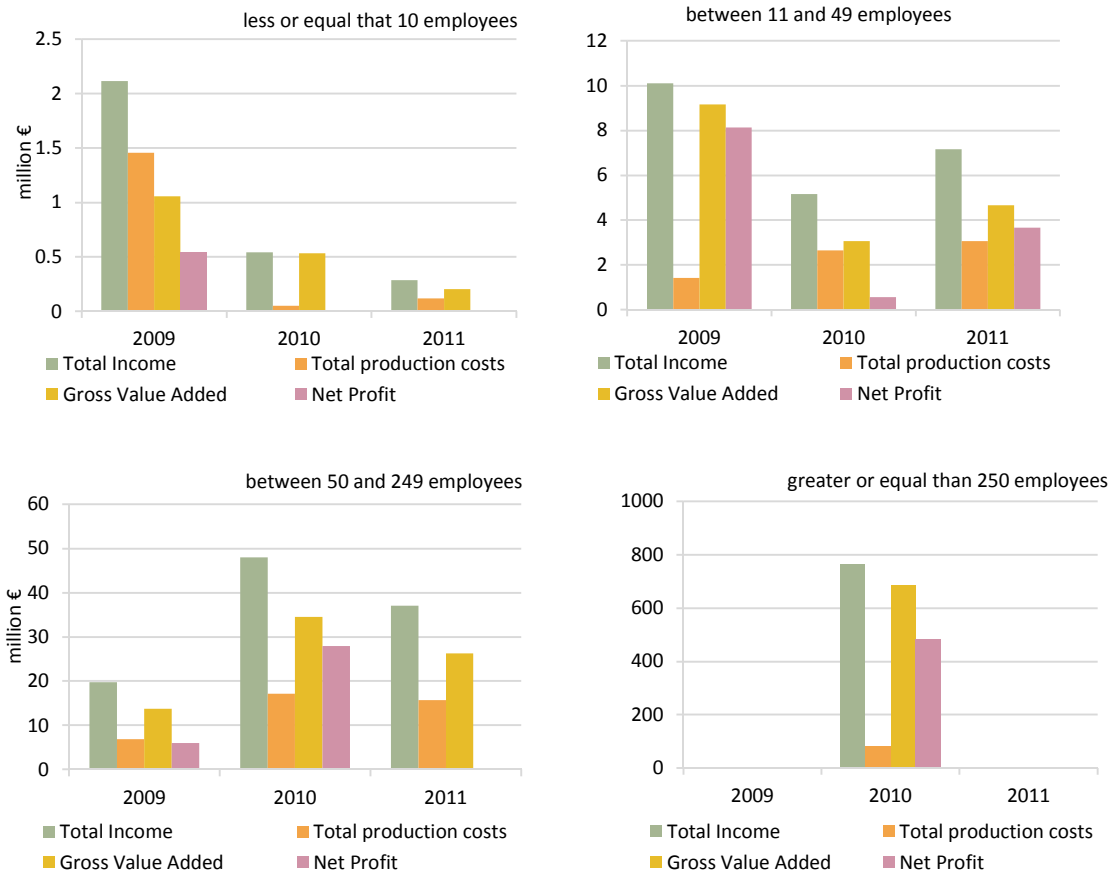
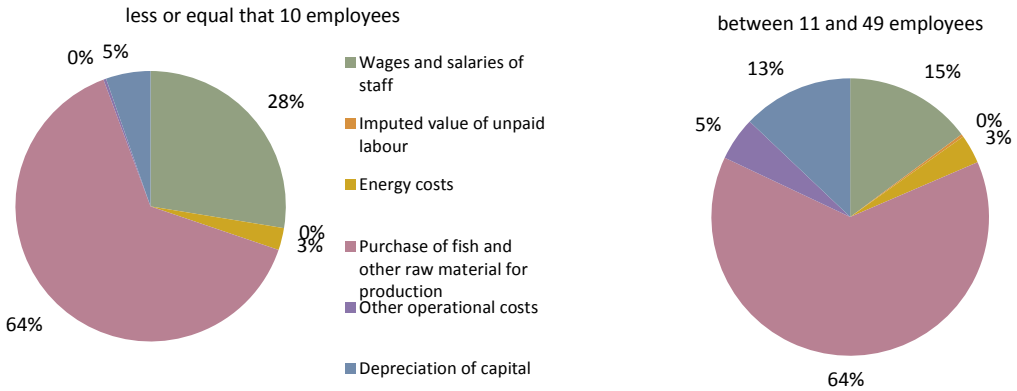


Figure 6.3.13: Trend in main economic performance indicators by size category, 2009-2011

The analyze is showing in Figure 4.18.7 that between these two segments are some differences consisting in the fact that the companies of 11-49 employees have the most consistent share considering the values for total income, gross added value and total production costs, but a less net profit, comparing with the net profit obtained by companies having 1-49 employees. Total production costs in the segment 49-250 employees determinate a low net profit.



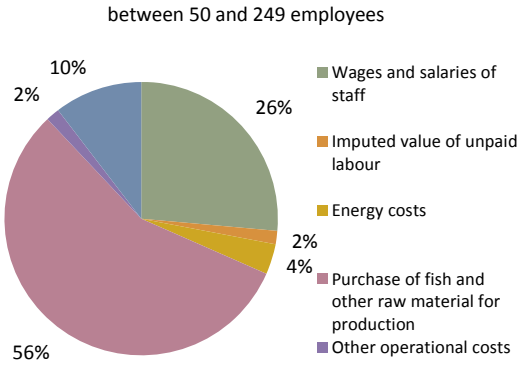


Figure 6.3.14: Cost structure of the Romanian fish processing industry sector by size category: 2011

Cost structure of the Romania fish processing industry by size category in 2011 confirm the trends mentioned above, see Figure 4.18.8. In the segment 1-10 employees the costs related to purchase of fish and raw material are obviously the main costs percentage 69%, because of the size of companies, instead to have significant costs for wages and salaries-28%, because of the small number of employees. The structure of costs for the other two main segments 11-49 and 20-249 are similar with some differences: 69% for purchase of fish and raw materials for production and other operational costs in segment 11-49, versus total costs for purchase of fish and raw materials for production and other operational costs in segment 50-249-58%; related to wages and salaries 15% in segment 11-49, versus the same costs, including unpaid labour, in segment 50-249 – 28% confirm the low interest for investment or, better said, the lack of opportunities for that because the bank-financial sector is not friendly with processing sector (specially high rates interest).

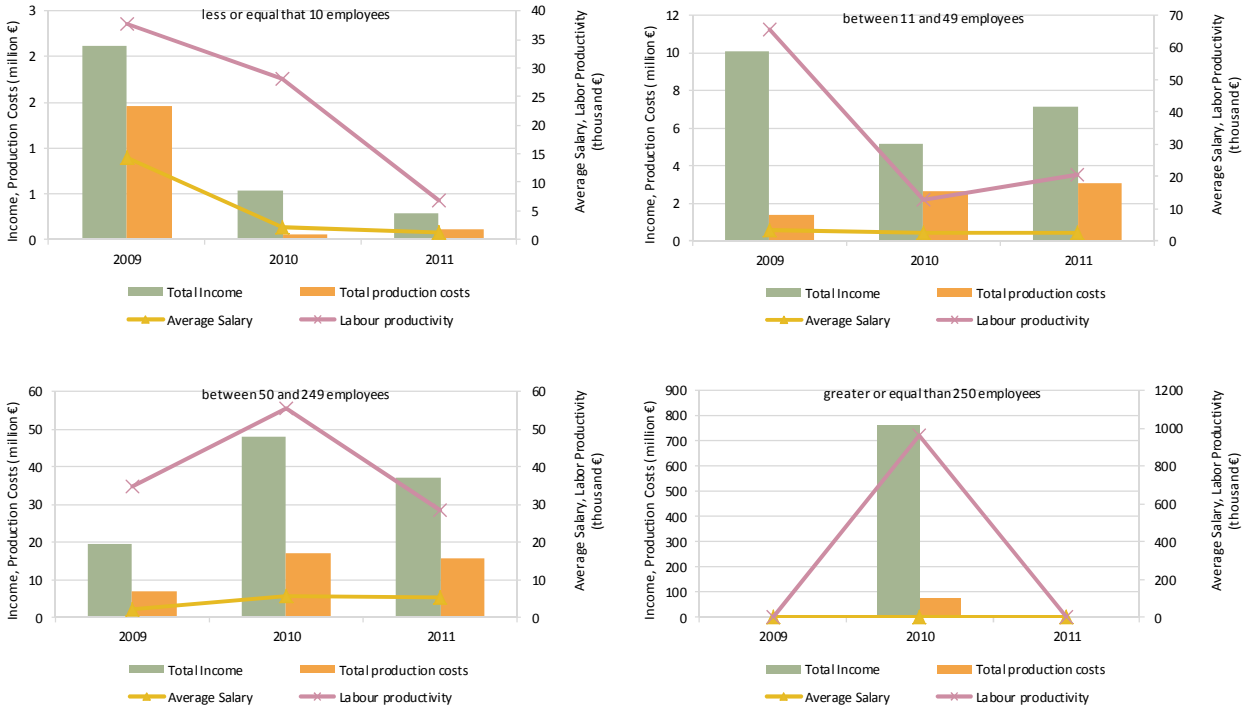


Figure 6.3.15: Income, costs, wages and labour productivity trends, by size category: 2008-2011

Considering the income, costs, wages and labour productivity for all three existing segments(less than 10, 11-49 and 50-249 employees companies) it could be observed the similarity of evolution during the analyzed period, as per the Figure 4.18.9. Total income, costs, are declining because of the difficult period passed. Average salary is remaining more or less at the same level between the segments, but a having a significant increase from 3.1 thousand in 2008 to 4.6 thousand in 2011, reflecting the slight growth of the sector and its profitability; despite the fact the labour productivity have a descendent trend, confirming the lack of investments in the sector.

6.3.1 EWG Conclusion

The question of a data delivery on the segment level needs further investigation as it seems more useful for the analysis of main driver and trends in the industry to use segmentation following products instead of number of employees. However, as the EWG proposes to include new socio-economic variables in the DCMAP dealing with location and concentration of the industry the segmentation by number of employees may be also possible to extract from that data.

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.

Average salary = (Wages and salaries + Imputed value of unpaid labour) / 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”.

$$Percentage\ of\ unpaid\ work\ (\%) = \frac{Imputed\ value\ of\ unpaid\ labour}{Labour\ costs} * 100$$

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 = Turnover + Other Income - Energy costs - Purchase of fish and other raw material for production - Other Operational costs.

Operating Cash Flow (OCF)

"Operating Cash Flow" refers to the amount of cash a company generates from its operations.

Operating Cash Flow = Turnover + Other Income + Subsidies - Energy costs - Wages and salaries - Imputed value of unpaid labour - Purchase of fish and other raw material for production - 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) x 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 then 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:

http://stecf.jrc.ec.europa.eu/data-reports

8.2 EWG-13-15 List of Participants

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/ewg1315

List of background documents:

1. EWG-13-15 – Doc 1 - Declarations of invited and JRC experts (see also section 8.2 of this report – List of participants)
2. Scientific, Technical and Economic Committee for Fisheries (STECF) – Review of DC MAP – Part 2 (STECF-13-12). 2013. Publications Office of the European Union, Luxembourg, EUR 26095 EN, JRC 83566, XXX pp.

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Abstract

The 2013 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); cf. Council regulation (European Commission (EC) No 199/2008 of 25th February 2008).
The fish processing sector in the EU had appr. 3,500 companies with fish processing as main activity that accounted for around 29.4 thousand million Euros of turnover and more than 6 thousand million Euros of Gross Added Value (GVA) in 2011. The fish processing industry provided employment to around 100 thousand people in the whole of Europe.
The available data suggests a deterioration of the economic performance over the years. In 2011 GVA and net profit generated by the fish processing industry (for which data exists) were respectively 2% and 7% less than in 2008. Compared to 2010 both indicators fell significantly (-10% GVA and -30% net profit). However, there are differences between countries as some report improving indicators while others report decreasing numbers. On a first look at 2012/13 compared to 2010/11 many experts report a similar development, in some countries the situation improved in others not.
Overall the sector is suffering from very low margins and they continue to decrease due to increases in the raw materials and 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 decreases. 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 2013.

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The Scientific, Technical and Economic Committee for Fisheries (STECF) has been established by the European Commission. The STECF is being consulted at regular intervals on matters pertaining to the conservation and management of living aquatic resources, including biological, economic, environmental, social and technical considerations.

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