



**Scientific, Technical and Economic  
Committee for Fisheries (STECF)**

**Report of the Working Group on the  
evaluation of data collected on the fish  
processing sector  
(SGECA 10-04)**

**Joint Working Group on Economic Affairs  
(SGECA), of the Scientific, Technical and  
Economic Committee for Fisheries  
(STECF)**

11-15 OCTOBER 2010, ISPRA

Edited by Ralf Doring and Jordi Guillen

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European Commission  
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#### **Contact information**

Address: TP 051, 21027 Ispra (VA), Italy  
E-mail: [stecf-secretariat@jrc.ec.europa.eu](mailto:stecf-secretariat@jrc.ec.europa.eu)  
Tel.: 0039 0332 789343  
Fax: 0039 0332 789658

<https://stecf.jrc.ec.europa.eu/home>  
<http://ipsc.jrc.ec.europa.eu/>  
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**COMMISSION STAFF WORKING DOCUMENT**

**REPORT ON THE EVALUATION OF DATA COLLECTED ON THE FISH  
PROCESSING SECTOR (SGECA-10-04)**

SUBGROUP ON ECONOMIC AFFAIRS (SGECA) OF THE SCIENTIFIC,  
TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF)

STECF OPINION EXPRESSED DURING THE PLENARY MEETING (PLEN-10-03)

**8-12 NOVEMBER 2010, BRUSSELS**

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## **1. Introduction**

STECF is requested to review the report of the STECF-SGECA-10-04 Working Group of October 11 – 15, 2010 (Ispra) meeting, evaluate the findings and make any appropriate comments and recommendations.

### **1.1. Terms of reference**

Taking the second DCR call for fish processing data, SGECA 10-04 is requested to analyse and comment on the data delivered and if possible economic performance of MS national fish processing sector. JRC shall compile the data into similar tables for each of the MS as far as possible.

SGECA 10-04 is especially requested to work on and comment on the following items:

1. Data Coverage and quality
2. Data Analysis and description:
  - a) National level (preparing a chapter for each MS)
  - b) EU level
3. Discussion of additional issues following the data analysis and especially analysis of cost structures and vulnerabilities
4. Comparison of parameters on the Processing industry collected under the DCR and DCF. Implications from the analysis for future data collection regulations.

### **1.2. STECF comments and conclusions**

Under the DCR and DCF regulations 22 MS are requested to deliver data on the processing industry. STECF was requested to analyse the data and to prepare an ‘Annual Economic Report (AER) on the European Union (EU) Fish Processing Industry’.

### **STECF observations, comments and recommendations**

The STECF-SGECA 10-04 report is the second report (the first was prepared by the STECF-SGECA 09-03 WG) on the economic performance of the fish processing industry. This time the TORs are concentrated on data analysis and what follows from that.

STECF notes that the process leading to the report improved. The call for data was earlier and the JRC staff was able to do more checking of the data in advance of the meeting. A common template for the national chapters was provided which improved the comparability.

STECF notes that there is in general substantial improvement especially with data delivery, data coverage and data quality. Only for Belgium the delivered data was in such a state that it makes no sense to include it in the EU overview.

STECF further notes that all MS delivered data and most of them in time. However, not every country was covered by an expert at the meeting and, therefore, some of the national chapters have to be prepared by participants at the meeting and discussed afterwards with national correspondents to improve the presentation of at least basic figures.

STECF recognises that SGECA 10-04 addressed all Terms of Reference. However, STECF notes that TOR 4 on the comparability between the DCR and DCF needs further discussions in the subgroup to get a better comparability between parameters/indicators. The data delivery for 2006/7 followed the DCR and the 2008 data was collected under the new DCF.

STECF notes that in some countries the number of companies is quite low (Cyprus and Malta). In the report for those countries only basic information (number of firms, employment and cost structure) are provided. Slovenia reported data from companies with fish processing not as main activity to avoid confidentiality issues. In this case there is a high proportion of other income. In countries with many firms with fish processing as main activity these type of companies normally are not included in the data delivery.

STECF notes that there are discrepancies between DCF and EUROSTAT data and there are several reasons for that. The most important one is that in many countries there is a threshold for companies to deliver data to the statistical offices mostly by setting a minimum number of employees by firm (10 or 20 in many cases). Under the DCF, data for smaller companies are also collected or further statistics are taken into account (like list of companies which have to deal with hygienically issues coming from processing fish).

STECF further notes that the DCF is more detailed in many cases and include indicators not collected by EUROSTAT.

STECF notes that the working group discussed the inclusion of an indicator for the sector's expectations on the future development of the companies. A possible indicator is the relation between net investment and depreciation. STECF **recommends** to test the utility of this indicator in next year's report.

STECF notes that in the DCF the NACE Code is wrong and **suggests** changing the code to 10.20.

STECF **recommends** deleting footnote 8 in Appendix 12 of Commission Decision 93/2010. The footnote refers to the DCR program (net, investment) and is by mistake adopted for the DCF program (total assets).

STECF also **recommends** deleting footnote 11 of Appendix 12 of Commission Decision 93/2010 because the footnote is not applicable for the fish processing industry since it relates to the fishing sector.

#### **Methodological issues arising from the report**

STECF notes that the definition of the population of fish processing companies causes inconsistencies between countries and possible misinterpretation of trends. According to the definition of NACE Code 10.20, companies are included on the basis of the main activities. Some MS use information from other sources to establish main activity, thus sometimes giving rise to inconsistencies. Furthermore, the selection criterion on main activity is based on turnover. This implies that for firms with several activities (not only related to fish processing), changes in the importance of these activities may result in firms being included in one year but not in the next.

STECF observes that the dependency question on raw material from the fishing fleet was one of the important information from the data delivery under the DCR but was not included in the DCF. STECF notes that collection of data on raw material is complicated.

STECF notes that without being able to analyse the linkages between the catching and processing sector there are further doubts on the value added of the data collection in the DCF compared to using data from official national statistics already available.

Having the lengthy discussion about this in mind before the revision of the DCR, STECF **recommends** to set up a separate STECF working group in 2011 to consider this issue, including other possibilities for establishing such a link. Therefore, the scope of the meeting shall be broader also taking any other possibilities into account (e.g. usefulness of the PRODCOM statistics in the MS). It is necessary for the success of this meeting that there is preparatory work ahead of the meeting and it seems also very valuable to invite experts from the industry.

STECF notes that the aim of this working group shall also be investigate the costs of including data collection on raw material or other additional sources in the DCF.

**2. ANNEX I. Report of SGECA 10-04**

SGECA 10-04: REPORT ON THE EVALUATION OF DATA COLLECTED ON THE FISH PROCESSING SECTOR.

**Ispira, 11-15<sup>th</sup> October 2010**

This report is the opinion of the expert working group on Economic Affairs (SGECA) and not of the Scientific, Technical and Economic Committee for Fisheries (STECF)

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

### **3. Introduction to SGECA-10-04 working group report**

#### **3.1. Background**

This SGECA-10-04 report, also known as the 2010 Annual Economic Report (AER) on the European Union (EU) Fish Processing Industry, is the second report of these characteristics that has been produced for the sector, after last year's SGECA-09-03 report. This report 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 at the overall EU level.

This publication includes:

- An overview on the data coverage and quality
- A detailed economic and structural overview of the processing sector of most of the countries required to deliver data
- A short overview on the EU level using indicators from the national chapters.
- Discussion of additional issues following the data analysis and especially analysis of cost structures and vulnerabilities.
- A comparison between the DCR and DCF data collection framework and consequences from the analysis for future data collection regulations.
- All the data delivered by the Member States in the appendix.

The report has been produced by fisheries economists from DG JRC and a working group of economic experts (SGECA 10-04) under the Scientific, Technical and Economic Committee for Fisheries (STECF), which convened 11<sup>th</sup>-15<sup>th</sup> of October 2010 in Ispra, Italy. The group consisted of 23 independent experts. The list of experts can be found in section 1.3.

The economic data used in this publication for 2006 and 2007 is collected within the framework of the Data Collection Regulation (DCR), cf. Council Regulations 199/2008, 1543/2000 and Commission Regulations 1581/2004 and 1639/2001. For the year 2008 collected data from the

new Data Collection Framework (DCF), Commission Regulation (EC) No. 665/2008 of the 14 July 2008 and Commission Decision (2008/949/EC) was used.

This EU fish processing industry data refers to the enterprises whose main activity is defined according to the Eurostat definition under NACE Code 15.20: ‘Processing and preserving of fish and fish products’.

This 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).

### **3.2. Terms of Reference**

Taking the second DCR call for fish processing data, SGECA 10-04 is requested to analyse and comment on the data delivered and if possible economic performance of MS national fish processing sector. JRC shall compile the data into similar tables for each of the MS as far as possible.

SGECA 10-04 is especially requested to work on and comment on the following items:

1. Data Coverage and quality
2. Data Analysis and description:
  - a) National level (preparing a chapter for each MS)
  - b) EU level
3. Discussion of additional issues following the data analysis and especially analysis of cost structures and vulnerabilities
4. Comparison of parameters on the Processing industry collected under the DCR and DCF. Implications from the analysis for future data collection regulations.

### **3.3. Participants**

STECF members

- Döring, Ralf (chair)

External Experts

- Avdic, Edo
- Beukers, Rik
- Cozzolino, Maria
- Davidjuka, Irina
- Desgranges, Caroline
- Ebeling, Michael
- Garrett, Angus
- Goti, Leyre
- Le Moing, Isabelle
- Lees, Janek
- Linde, Jonathan
- Malvarosa, Loretta
- Moura, Carlos
- Nielsen, Rasmus
- Pokki, Heidi
- Pienkowska, Barbara
- Razmislaviciute-Palioniene, Agne
- Stroie, Constantin

- Vassallo, Darcelle

#### JRC experts

- Guillen, Jordi
- Virtanen, Jarno
- Zanzi, Antonella

#### European Commission

- Calvo Santos, Angel Andres
- Tritten, Christian
- Vasilaki, Marousa

See Appendix II for contact details of the participants.

### **3.4. Glossary**

See section 8.1.3: Glossary of data requested and indicators.

### **3.5. Chairman comments**

The SGECA 10-04 meeting was the second one on the processing industry in the European Union. The basic idea was to have a first analysis of the 2008 data which were collected under the new DCF and to compare them with the data of 2006/07 collected under the DCR. Many parameters changed or were really defined for the first time. Great effort of the working group was allocated to the definitions for parameters and indicators. It may be necessary to go on with this exercise next year to have the possibility to include all data from 2006/7 in the time series. Some changes in the 2006/07 data were necessary to be comparable with the DCF data. The experts agreed to re-upload 2006/7 data following the DCF parameter definitions if this is possible. Next year with the addition of 2009 data a time series of four years will be available and this may allow us to draw first conclusions on the development of the industry over a reasonable time frame.

This year we were able to invite more experts to the meeting to improve the EU coverage and most countries delivered data before the meeting. However, not all of this data was of good quality and after the meeting changes were necessary for some countries.

The main work at the meeting was on the national chapters. As 2008 data following the DCF framework is more detailed a deeper analysis is possible and we tried to improve the national chapters. For next year a further improvement of the national chapters may be necessary but overall this year's structure shall allow us to give a comprehensive overview on the industry's performance.

#### **4. Data coverage and quality**

This is the second time that a report of these characteristics on the Fish Processing Industry has been produced for the sector, after last year's SGECA-09-03 report. This report compiles national statistics and gives an overview on the performance of the EU fish processing industry. The data used in this publication has been collected within the framework of the Data Collection Regulation (DCR) and the Data Collection Framework (DCF). The Data Call was issued on the 19<sup>th</sup> of August, and the deadline for the data submission was established on the 24<sup>th</sup> of September. The data call requested data for the years 2006 to 2008. From the 11<sup>th</sup> to the 15<sup>rd</sup> of October took place the SGECA-10-04 meeting in order to prepare this report.

Although the quality and coverage of the data reported under the DCF are the responsibility of the Member States, JRC undertake quality and coverage checking procedures on the data submitted. For this data call, the JRC introduced some new quality and coverage checking procedures, carried out both during the uploading procedure (ensuring codes and values corresponded with those specified in the data call) and afterwards.

##### ***Data coverage***

Out of the 27 countries that the EU is compounded, 5 of them do not have coastal waters, and were not included in the DCR framework (Austria, Czech Republic, Hungary, Luxembourg and Slovakia). Out of the remaining 22 countries that participated in the DCR framework Bulgaria and Romania became part of the EU in 2008, starting then the requisite to collect and report data under the DCR. Since economic data is collected for the previous year, then during 2008 it had to be collected 2007 data. Thus, Bulgaria and Romania should have reported data for 2007 and 2008.

All 22 Member States that were obliged provided data on the fish processing sector submitted some data. The Data call was answered by 17 countries before the deadline (77%), 3 countries submitted their data before the meeting (14%) and 2 countries submitted the data after the meeting (9%). However, it must be said that data from Cyprus and Malta (that submitted the data

after the meeting) presents confidentiality issues, due to the existence of less than 10 companies doing fish processing as main activity.

On the following table 2.1, there are presented for each Member State the dates of the first data submission and the date of the last data submission, as well as comments regarding the data and its submission process.

Table 2.1: Stages for data submissions and resubmissions

Country	First submission	Last submission	Comments
Belgium	01/10/10	5/11/10	Needed to raise the data
Bulgaria	24/09/10		
Cyprus	19/10/10		Sent by email. Data presents confidentiality issues
Germany	24/09/10	27/10/10	Minor corrections
Denmark	20/09/10	21/10/10	
Spain	23/09/10		Sent by email
Estonia	24/09/10	04/11/10	Minor corrections
Finland	15/09/10	14/10/10	Changes in parameters agreed at the meeting
France	21/09/10	28/09/10	
United Kingdom	23/09/10		
Greece	04/10/10		
Ireland	24/09/10		
Italy	13/09/10	15/10/10	Changes in parameters agreed at the meeting
Lithuania	23/09/10	13/10/10	Changes in parameters agreed at the meeting
Latvia	23/09/10		
Malta	22/10/10		Data presents confidentiality issues
The Netherlands	06/10/10	05/11/10	
Poland	24/09/10	26/10/10	Minor changes
Portugal	24/09/10	13/10/10	Changes in parameters agreed at the meeting
Romania	22/09/10		
Slovenia	20/09/10		
Sweden	17/09/10	22/11/10	Minor corrections

Highlighted in green it can be seen the Member States that uploaded the first data before the deadline (24<sup>th</sup> of September), highlighted in orange the Member States that uploaded the first data before the SGECA-10-04 meeting (11<sup>th</sup> of October), and in red the countries that uploaded the first data after the meeting.

On Appendix IV it can be seen the first and last dates of the data submitted by template for each Member State.

However, it should be considered that countries that have submitted data, not always have submitted all the variables they were requested.

In fact, there were created several templates to help the data uploading of the requested parameters. These templates for the data uploading are:

- Main06 & Main07: Templates of the main parameters for NACE 15.20 companies, collected under the DCR (for 2006 and for 2007).
- Price06 & Price07 and Turnover06 & Turnover07: Templates of the Price and Turnover per product for NACE 15.20 companies, collected under the DCR (for 2006 and for 2007)
- Raw06 & Raw07: Templates of the Raw materials per species for NACE 15.20 companies, collected under the DCR (for 2006 and for 2007)
- Main08: Template of the main parameters for NACE 15.20 companies, collected under the DCF (for 2008)
- Others08: Template of the parameters requested for companies doing fish processing, but not as main their activity, collected under the DCF (for 2008)

These templates for the data uploading correspond to the main socio-economic parameters collected for 2006, 2007 and 2008, and data on raw materials and products for 2006 and 2007 (see appendix III for a detail of these data templates).

On the following table 2.2, it is shown which of the previous templates has been submitted by each Member State.

Table 2.2: Data submitted by template for each Member State

Country	Main06	Main07	Main08	Others08	Price06	Price07	Raw06	Raw07	Turnover06	Turnover07	Total
Belgium	1	1	1		1	1	1	1	1	1	9
Bulgaria	-	1	1		-	1	-	1	-	1	5
Cyprus			1	1							2
Germany	1	1	1		1	1	1	1	1	1	9
Denmark	1	1	1		1	1	1	1	1	1	9
Spain	1	1	1								3
Estonia	1	1	1	1							4
Finland	1	1	1	1			1	1	1	1	8
France	1	1	1	1							4
United Kingdom	1	1	1	1							4
Greece	1	1						1		1	4
Ireland			1								1
Italy	1	1	1					1			4
Lithuania	1	1	1		1	1	1	1	1	1	9
Latvia	1	1	1		1	1			1	1	7
Malta	1	1	1								3
The Netherlands	1	1	1								3
Poland	1	1	1	1	1	1	1	1	1	1	10
Portugal	1	1	1	1	1	1	1	1	1	1	10
Romania	-		1		-		-		-		1
Slovenia		1	1	1		1		1		1	6
Sweden	1	1	1								3
TOTAL	17 (85.0%)	19 (86.4%)	21 (95.5%)	8 (36.4%)	7 (35.0%)	9 (40.9%)	7 (35.0%)	11 (50.0%)	8 (40.0%)	11 (45.5%)	118 (55.7%)

0: missing data  
1: data available  
-: data not requested

From previous table 2.2, it can be observed that the templates with the main socio-economic parameters are the ones that have been mostly updated, especially for 2008, where only Greece has failed to submit the required data. Data on raw materials and products for 2006 and 2007 has been provided by less than 50% of the Member States.

However, it should be taken into account that when the main socio-economic parameters were submitted, not always all parameters were reported. In fact, many Member States did not report capacity utilization (reported by 5 countries in 2006 and 8 countries in 2007) of the DCR parameters; instead for the DCF parameters, imputed value of unpaid labour was only reported by 6 countries and employment by gender was reported by 15 countries.

### ***Data quality***

The quality is being checked, both automatically in the uploading process and manually, by the experts during the SGECA-10-04 and the JRC before and after the meeting. As a result of these checks several data resubmission by Member States had to be done.

The main checks with other official data sources were performed against data reported by EUROSTAT. In fact, JRC and SGECA subgroup encouraged Member States to check the data to be submitted with other available official data, to ensure quality and homogeneity in the sources. In case of divergences, it was recommended that Member States should explain and justify in the national chapters the reasons for these divergences.

It has been found that these divergences with EUROSTAT are mainly due to 3 reasons:

- **Overcoverage:** Data in EUROSTAT is based only on companies registered as ‘Fish processing companies’ (according to NACE) as their main activity in the Business register. In some countries they have realized overcoverage of the target population. E.g. data reported under the DCR and DCF has also been compared with the veterinarian registers that certificate that the company can manufacture food products. This implies

that in this report (since it uses DCR and DCF data) only the companies that are doing real fish processing and are not dormant have been taken into account.

- Undercoverage: In some countries a threshold is applied in the official statistics' data collection used for the EUROSTAT database; where only companies above a certain number of employees are considered. However, we have tried to eliminate most of the thresholds for the DCR and DCF data (used in this report). Therefore, a better coverage should be expected from this report.
- Moreover, the data presented in this report has been checked by JRC and national experts, and corrected when necessary, during the elaboration of this report.

In addition, other data checks were performed testing the robustness of the parameters submitted, the consistency of several indicators (economic performance, salary per employee, running cost to turnover ratio, etc.) calculated with the parameters submitted and the consistency of these parameters and indicators calculated over time (for the period 2006-2008).

As a result of these checks, data from Belgium was not considered consistent enough, so Belgian data has been included in its national chapter, but not in the EU overview.

While due to confidentiality issues because of the low number of companies that do fish processing as main activity, we are only presenting in this report a reduced part of the data submitted by Cyprus and Malta, and some of the data presented for both countries has been rounded.

Moreover, it was decided to allow Member States the possibility to report some of the DCR parameters on a more disaggregated way for a better understanding of the parameters and calculation of the economic indicators. So, the DCR parameter "Income (Turnover)" could be reported as "Turnover", "Other Income", "Subsidies" and "Total Income"; instead of "Fixed costs" could be reported "Depreciation", "Financial costs" and "Extraordinary costs"; and instead of "Investment (assets)" could be reported "Total value of assets" and "Net investment".

## 5. National chapters

### 5.1. Belgium

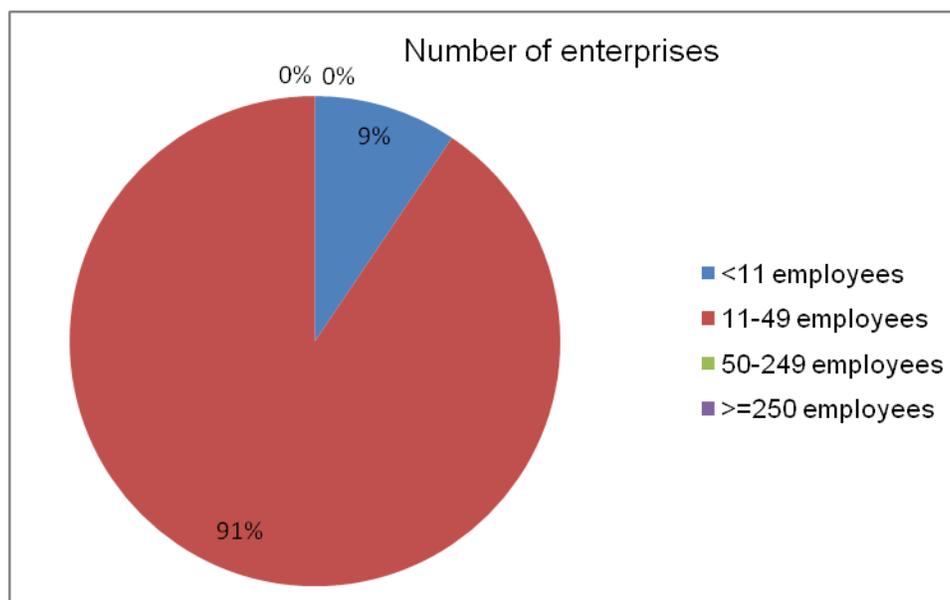
#### 5.1.1. Overview of the sector

The fish processing industry in Belgium generated a total turnover of about 2 365 Million Euros in 2008.

#### 5.1.2. Nature of the industry: concentration

Most of the companies in the Belgian fish processing sector have between 11 and 49 employees. There are no companies with more than 50 employees.

Figure 5.1: Size distribution of the Belgian fish processing industry



#### 5.1.3. Main products and main segments

#### 5.1.4. Dependency on domestic production

Fisheries products from Belgian origin only account for the 10% of the raw materials for the Belgian processing industry. 40% come from other EU countries and 26% from non EU countries. The remaining 25% comes from aquaculture, again mainly from EU and non EU countries.

#### 5.1.5. Socio-Economic performance indicators and competitiveness

Figure 5.2: Distribution of the operating costs in the Belgian fish processing industry

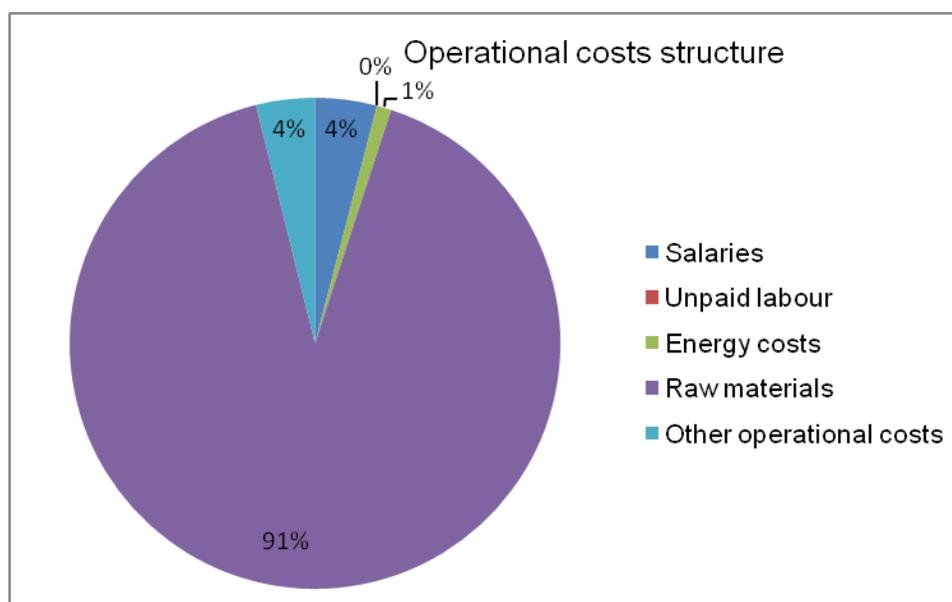
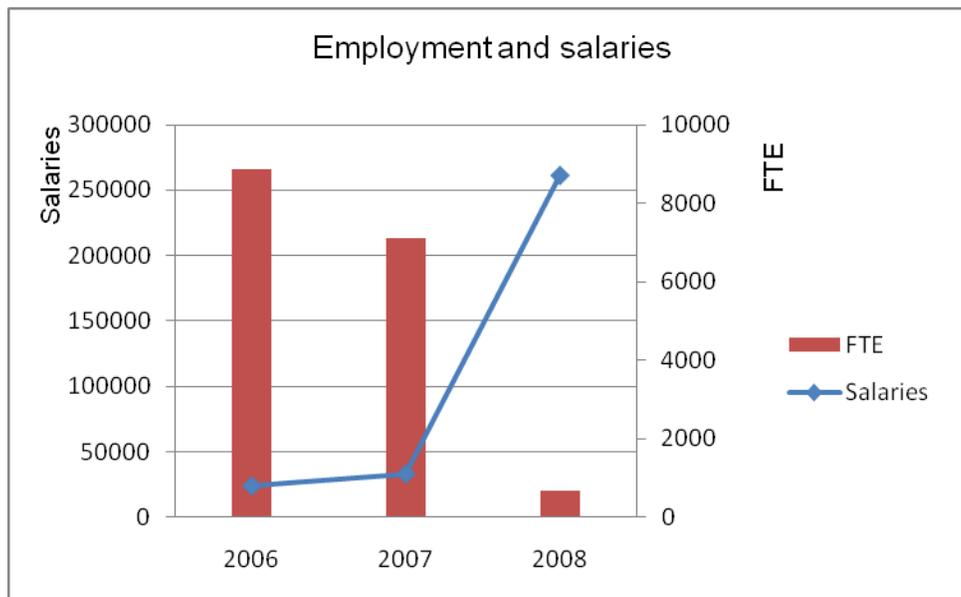


Table 5.1: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	5100	250	265
<i>Social indicators</i>			
Male employment			na
Female employment			na
Total employment	10084	7732	818

FTE	8868	7096	665
Salary per employee	24 077	33 251	261 035
Employment per firm	1.7	28.4	2.5
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	3 721 662	2 810 678	2 365 293
GVA ('000 €)	1 137 678	604 770	-1 709 241
OCF ('000 €)	924 160	368 829	-1 882 779
EBIT ('000 €)			-1 924 005
Net profit ('000 €)	854 718	255 915	-1 932 595
Return on Investment (in %)			-209.5%
Financial position (in %)	70%	21%	147%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	420	396	3 558
Net profit per FTE ('000 €)	96	36	-2 907
Turnover per firm	730	11 243	8 926
Running cost to turnover ratio in %	79.2%	88.6%	180.3%

Figure 5.3: Evolution of the employment and salaries in the Belgian fish processing industry



**5.1.6. Comment on sector's performance and possible development in the future**

**5.1.7. Comments on the data**

## 5.2. Bulgaria

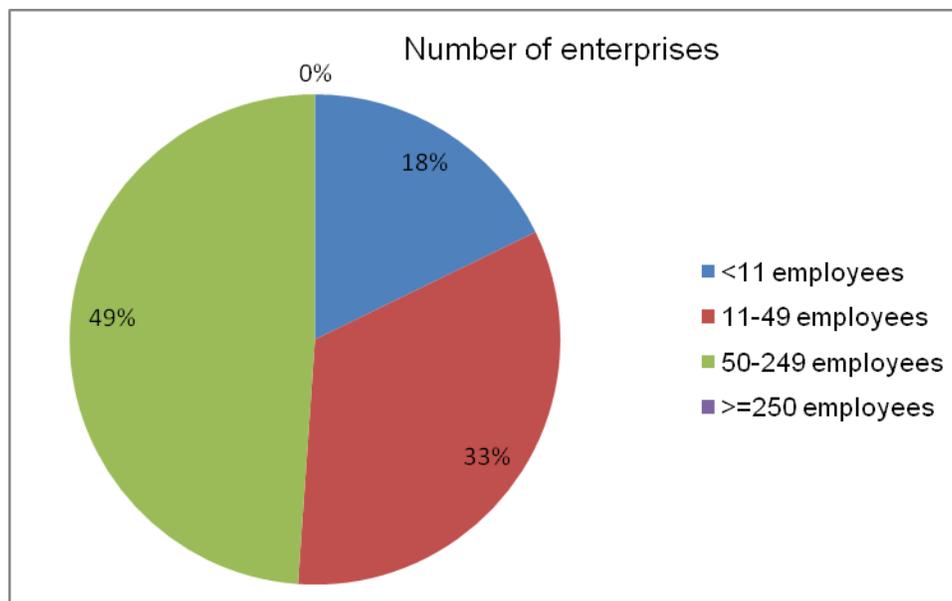
### 5.2.1. Overview of the sector

The seafood processing industry in Bulgaria consisted of 45 firms and generated a turnover of 49 million Euros and a total income of about 52 million Euros in 2008.

### 5.2.2. Nature of the industry: concentration

Of these 45 fish processing firms, there is an important fraction of them that are quite large, having between 50 and 249 employees (22 companies that represent the 49% of the total number of enterprises).

Figure 5.4: Size distribution of the Bulgarian fish processing industry



The number of enterprises has risen from 26 to 45 based on several reasons. Many enterprises were opened with the European pre-accession instruments like “SAPARD” and start operating in 2008. The second reason is that the National veterinary service re-registered all the enterprises and the list finally become full and reliable.

### 5.2.3. Main products and main segments

It is possible to have some information of the main products produced by the Bulgarian fish processing industry for 2006 and 2007, but not 2008, because this data was requested under the DCR.

Table 5.2: Main products

Main products	2006	2007	2006	2007
	Volume (tn)	Volume (tn)	Value ('000€)	Value ('000€)
Total fresh chilled	188	126	483	300
Total frozen	2 852	4 108	4 496	6 610
Salomns and trouts smoked	173	40	1 248	381
prepared food and tinned fish from mackerel	2 137	2 101	4 130	4 546
Total prepared food and tinned fish	3 159	3 396	6 488	6 941
Crayfish, mussels and other aquatic invertebrates prepared or tinned	1 256	4 978	1 334	4 385
Total	8 763	10 309	21 893	22 752

### 5.2.4. Dependency on domestic production

No data about the ratio between domestic and imported production was collected, but Bulgarian processing industry strongly depends on the import of fish raw material. The domestic production is compound mainly of rainbow trout and sprat.

### 5.2.5. Socio-Economic performance indicators and competitiveness

The significant profitability of the fish processing industry in Bulgaria seems to be due to the existence of an important margin between the operational costs and the turnover (the operational costs supposed just the 64% of the total turnover); while other countries normally have much lower margins, with the ratio between operational costs and turnover higher than 90%.

Inside the operational costs, the raw materials costs is the main costs, since it represents the 76% of all the operational costs, followed by salaries with just the 12%.

Figure 5.5: Distribution of the operating costs in the Bulgarian fish processing industry

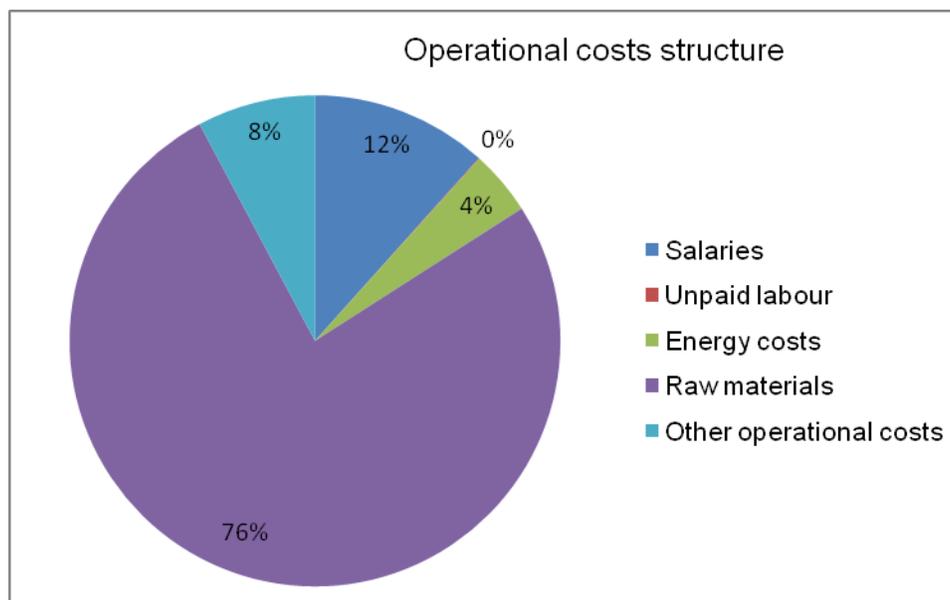


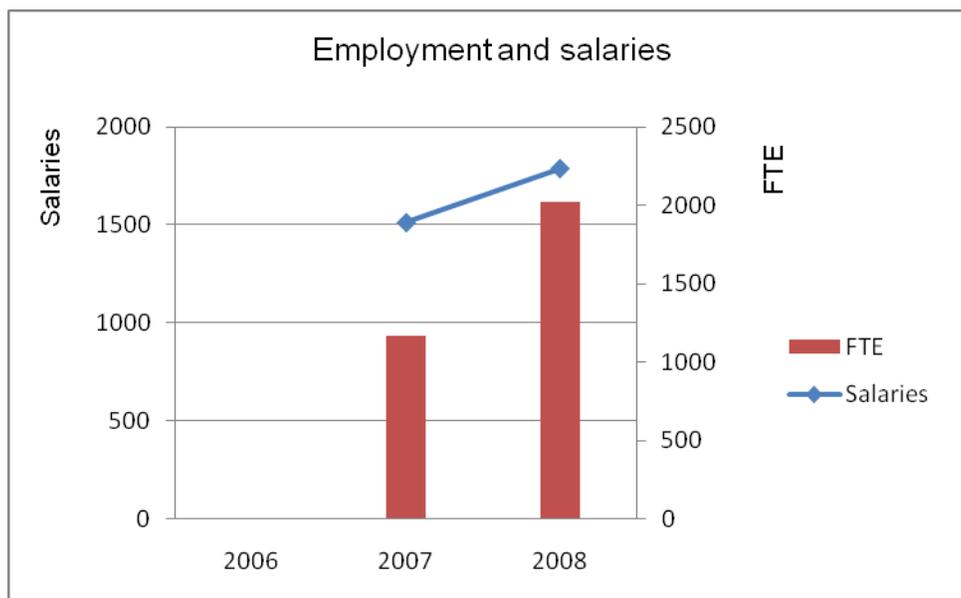
Table 5.3: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms		26	45
<i>Social indicators</i>			
Male employment		na	908
Female employment		na	1 116
Total employment		1 170	2 024
FTE		1 170	2 024
Salary per employee		1 513	1 788
Employment per firm		45	44.9
% of paid work		na	99.6 %
<i>Economic Performance indicators</i>			
Turnover ('000 €)		22 572	48 538
GVA ('000 €)		8 395	24 425

OCF ('000 €)		6 625	20 805
EBIT ('000 €)		na	17 891
Net profit ('000 €)		6 625	16 648
Return on Investment (in %)		na	38.3%
Financial position (in %)		123%	87%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)		19	24
Net profit per FTE ('000 €)		na	8.2
Turnover per firm ('000 €)		875	1 079
Running cost to turnover ratio (in %)		73.4%	63.8%

Annual salaries for the fish processing sector in Bulgaria have risen from 1,513 Euros in 2007 to 1,788 Euros. However, they are still quite far from the EU average salary.

Figure 5.6: Evolution of the employment and salaries in the Bulgarian fish processing industry



### 5.2.6. Comment on sector's performance and possible development in the future

### 5.2.7. Comments on the data

### 5.3. Cyprus

#### 5.3.1. Overview of the sector

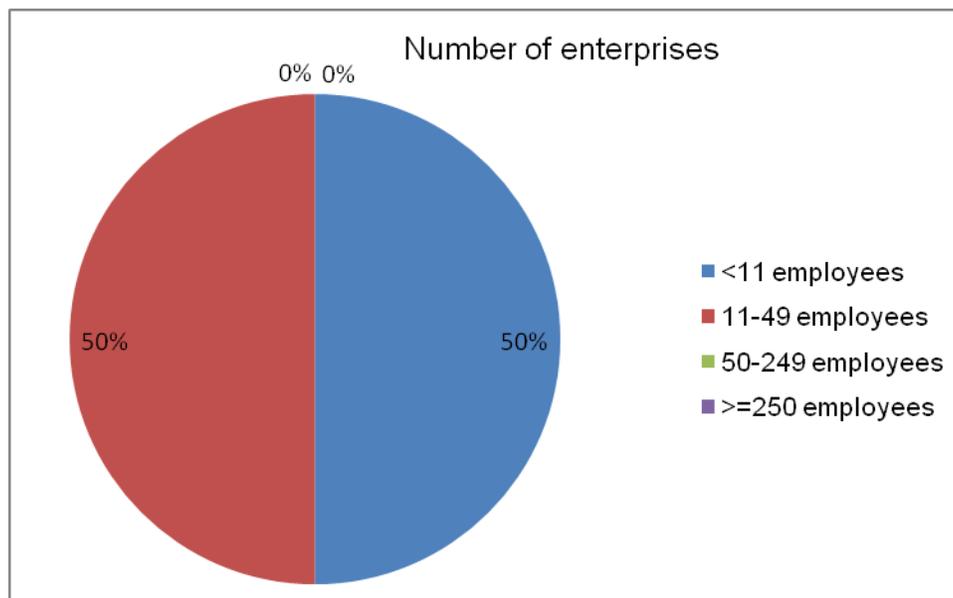
In Cyprus there are only 4 companies that do fish processing as main activity. Because of confidentiality issues due to this low number of companies, we are only going to present a small part of the data submitted by Cyprus.

There are also 13 other companies that do fish processing, but not as main activity. The total turnover from the fish processing activity (considering the companies that do it as main activity and the ones that is not their main activity) accounts for around 15 million Euros.

#### 5.3.2. Nature of the industry: concentration

The 4 companies that do fish processing as main activity are relatively small. 2 of them have 10 or less employees and the other 2 between 11 and 49.

Figure 5.7: Size distribution of the Cyprus fish processing industry



### 5.3.3. Main products and main segments

### 5.3.4. Dependency on domestic production

### 5.3.5. Socio-Economic performance indicators and competitiveness

The main operational costs for the fish processing industry in Cyprus are the salaries followed by the raw materials.

Figure 5.8: Distribution of the operating costs in the Cyprian fish processing industry

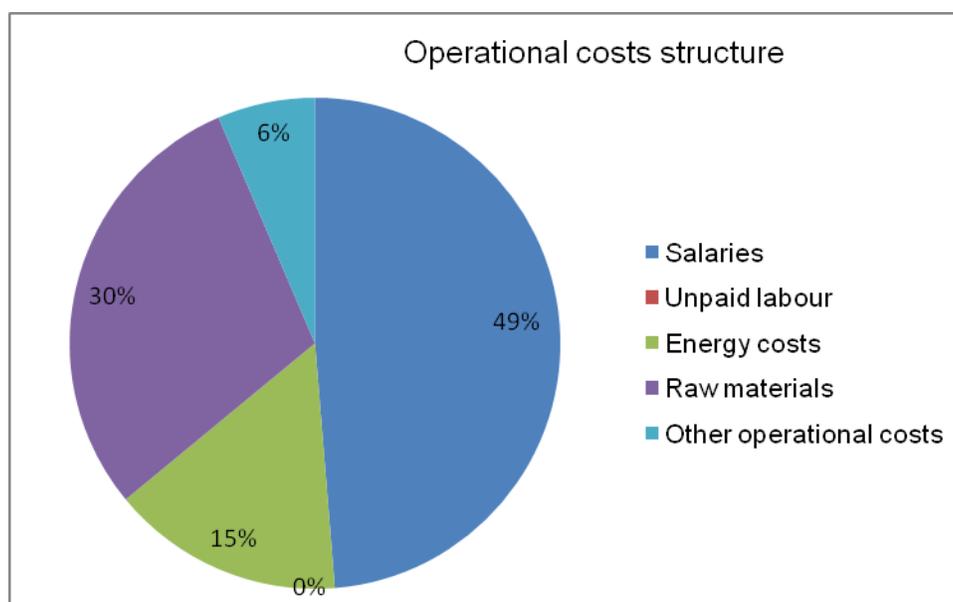


Table 5.4: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms			4
<i>Social indicators</i>			
Male employment			24
Female employment			32
Total employment			56
FTE			43

Salary per employee			16 000
Employment per firm			10.8
% of paid work			
<i>Economic Performance indicators</i>			
Turnover ('000 €)			15 000
GVA ('000 €)			
OCF ('000 €)			
EBIT ('000 €)			
Net profit ('000 €)			
Return on Investment (in %)			
Financial position (in %)			
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)			350
Net profit per FTE ('000 €)			
Turnover per firm			3 750
Running cost to turnover ratio in %			

### **5.3.6. Comment on sector's performance and possible development in the future**

#### **5.3.7. Comments on the data**

Because of confidentiality issues due to the low number of companies that do fish processing as main activity, we are only presenting a reduced part of the data submitted by Cyprus, and some of the data presented has been rounded.

## **5.4. Denmark**

### **5.4.1. Overview of the sector**

In 2008 there were 117 firms in the Danish fish processing industry. This was a decrease from 2007 of 11 firms corresponding to a 9 % decrease. The turnover decreased in the same period with 10% from a turnover of 1.9 billion Euros to a turnover of 1.7 billion Euros in 2008. The total amount of raw material used in the industry measured as output in terms of commodities from the industry (processed raw material) increased with 13% from 501 thousand tons to 566 thousand tons. The increase in production for human consumption and fishmeal and –oil was 18 % and 10 %, respectively. The Danish fish processing sector employed in total 4,147 full-time employees in 2008, which was a decreased of 6 % compared to 2007.

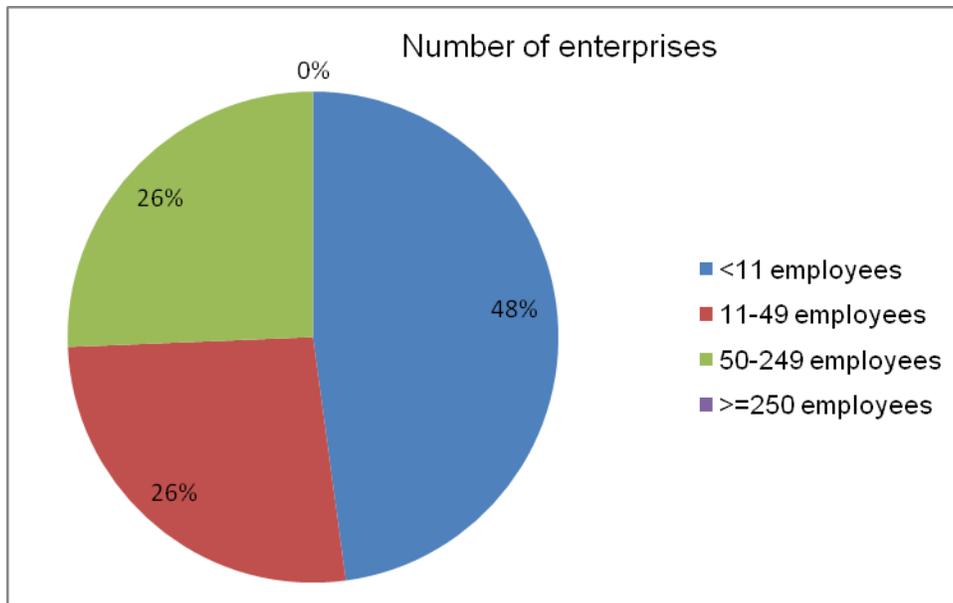
The structural development in the fish processing industry is characterized by a decline in the number of work places from 254 in 1995 to 157 in 2008. The number of full-time employees fell in the same period from 6 822 to 4 147. The average size of the workplace measured by the number of full-time employees fell, from 27 to 26 employees per work place.

### **5.4.2. Nature of the industry: concentration**

The Danish fish processing industry is mainly located around the most important harbors in Denmark. The most important areas in terms of value and volume of landings are the north and western parts of Jutland and some of the largest concentration of processing industry are located in these areas. Furthermore, some of the Danish islands are more depend on the local fisheries and processing industry, like Bornholm, because alternative job opportunities in these areas are low.

The Danish fish processing industry is dominated of small and middle sized firms, as can be seen on next figure.

Figure 5.9: Size distribution of the Danish fish processing industry



From the figure, it can be seen that there are 56 enterprises that have less than 10 full time employees, corresponding to 48 % of the enterprises in the Danish fish processing industry. 31 enterprises have between 10 and 49 employees and 30 have between 50 and 249 employees corresponding to 26 %. In Denmark there is no large fish processing company with more than 250 employees.

#### 5.4.3. Main products and main segments

Denmark is one of the world largest importer and exporter of fish and fish products. The Danish industry produces a large variety of different 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 how important they are for the industry.

The most important species for consumption in terms of volume is herring (30%) followed by Salmon (17%) and cod (16%). In terms of value the most important species is salmon (28%), cod (19%), and herring (12%). Production of cod was falling in both value and volume between 2006

and 2008 and the production of salmon has been increasing. The volume and value of herring has been increasing from 2007 to 2008.

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 2008 fish for reduction make up for 61% of the total Danish catch and 23% of the total value. The value and volume for fish for reduction was decreasing from 2006 to 2008.

Table 5.5: Raw materials as output

	2006	2007	2008	2006	2007	2008
	Volume (tn)	Volume (tn)	Volume (tn)	Value ('000€)	Value ('000€)	Value ('000€)
Herring	71 521	60 817	65 789	124 462	113 575	115 860
Cod	41 446	37 103	35 346	200 134	192 742	181 317
Salmon	16 735	17 958	36 430	163 038	176 210	262 769
Others	93 416	70 517	81 923	390 591	336 828	383 602
Total for consumption	223 118	186 395	219 489	878 360	819 220	943 548
Fish for reduction	409 281	314 739	346 460	323 925	262 366	276 613
Total	632 399	501 134	565 949	1 202 285	1 081 720	1 220 296

Source: Calculation based on data from Statistics Denmark.

The most important group of products for consumption, in terms of degree of processing, are prepared and preserved products, which account for 61% of the volume of processed products. Fresh fillet makes up for 20%, while smoked, salted and dried cover 13%, and frozen fillet 6%. In terms of value prepared and preserved products are also the most important with share of 57% while smoked products cover 24% of production value. Fresh and frozen fillet make up for 15 % and 4 %, respectively.

Taking fish for reduction into account fish meal and fish oil accounts for 61% of the total volume and 23 % of total value.

Table 5.6: Main products

	Volume (tn)			Value ('000€)		
	2006	2007	2008	2006	2007	2008
<i>Fresh fillet</i>	52 581	28 615	43 023	120 027	87 366	141 801
<i>Frozen fillet</i>	14 126	12 218	12 218	44 355	39 113	38 441
<i>Smoked</i>	26 367	24 707	28 578	205 108	209 274	227 823
<i>Prepared and preserved</i>	130 044	120 855	133 591	508 871	483 468	535 618
<b>Total for consumption</b>	223 118	186 395	219 489	878 360	819 220	943 548
<i>Fish meal fish oil</i>	409 281	314 739	346 460	323 925	262 366	276 613
<b>Total</b>	632 399	501 134	565 949	1 202 285	1 081 720	1 220 296

Source: Calculation based on data from Statistics Denmark.

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 (Prepared and preserved industry)
- Molluscs, Shrimps and Crustaceans
- Mixed production (mixed species)
- Salmonoids
- Fishmeal factories

The dependency on the selected species in each sub branches is high. The volume of Cod and flatfish correspond to 72% of the total amount produced in the subsector in 2008. Herring and mackerel 81%, Molluscs, Shrimp and Crustaceans 89%, Salmonoids 83% and fishmeal factories 100% fish for reduction.

The structure of the different sub branches are descript for 2008. The sub branch “Mixed production” was the most important sub branch with 917 full-time employees and a turnover of 0.5 billion Euros in 2008. The sub branch “Cod- and flatfish” was economically the second most

important with a turnover of 0.4 billion Euro and 853 full-time employees. The sub branch “Molluscs, Shrimps and Crustaceans” was the smallest with a turnover of 0.1 billion Euros and 189 full-time employees. In between was the sub branch “Salmonoids” with a turnover of 0.3 billion Euros and 1,075 fulltime employees, “Fishmeal factories” with a turnover of 0.2 billion Euro and 303 full-time employees and “Herring and mackerel” with 0.2 billion Euros in turnover and 746 full-time employees.

The sub branches with the highest profitability was “Molluscs, Shrimps and Crustaceans” with a profitability of 22 %, calculated as net profit divided by total assets. The profitability was lowest in the sub branch “Cod- and flatfish” with a negative profitability of -12 %. The profitability for the branches lying in between was between 2 % and minus 3 %. The profitability of the sub branch “Molluscs, Shrimps and Crustaceans” are relatively high, whereas the profitability in the sub branch “Cod- and flatfish” is very low.

#### **5.4.4. Dependency on domestic production**

In general the Danish fish processing industry are not dependent on domestic catches. The Danish fish processing industry buy and sell their product on the global market, which is a highly competitive market. Raw material for the industry is therefore bought from all over the world and the dependency of domestic catches is small. Nevertheless, the catches of cod, herring and mackerel have some importance.

The fish meal factories are the most dependent of domestic catches, but are they are also receiving raw material from other countries lying around Denmark, like Norway, Iceland, UK and Sweden.

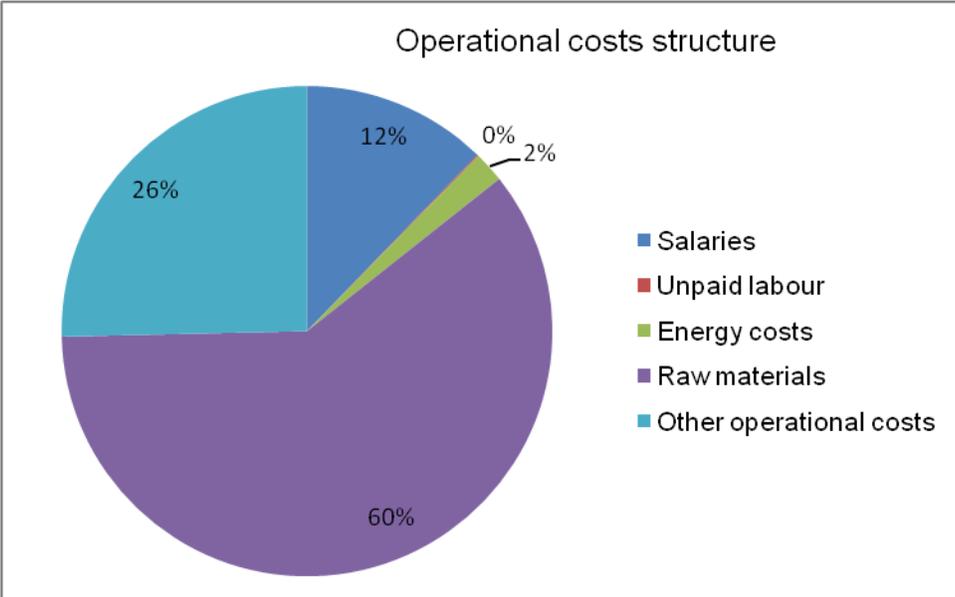
The salmon industry using fresh products in production are for most part dependent of the aquaculture production in Norway and UK, but frozen raw material for production are imported from all over the world, mostly Chile. The industry using fresh trout is for most part dependent on raw material from Norway and domestic production, but again frozen raw material are imported from all over the world.

The import to the Danish industry is dominated by Norway, because of the large amount of salmon going through Denmark to the European market. Other major exporters to Denmark are Sweden, Holland and UK. Also the export is dominated by salmon that are exported to especially Germany and France.

**5.4.5. Socio-Economic performance indicators and competitiveness**

The net profit of the Danish processing industry has been negative for the past three years. In figure 5.9 the distribution of running cost is shown. The largest cost item is the cost for raw material, which include cost for packaging. The cost for raw material covers 60 % of the total running cost. The second most important is other operational costs, which include other operational cost and resale commodities. Wages and salaries and energy costs cover 12 % and 2 %, respectively.

Figure 5.10: Distribution of the operating costs in the Danish fish processing industry



The running cost to turnover is close to 100 % or above in all three years, which implies that adding the payment of fixed cost will result in a negative profit for the industry as a whole. The turnover has been falling due to the falling numbers of enterprises in the industry, but the GVA has been increasing from 2006 to 2008. Nevertheless, the net profit and the return on investment

have been falling. The return on investment calculated based on the EBIT has increased from 1.0% to 1.1%; while the return on investment calculated based on the net profit has decreased from -1.1% to -2.3%.

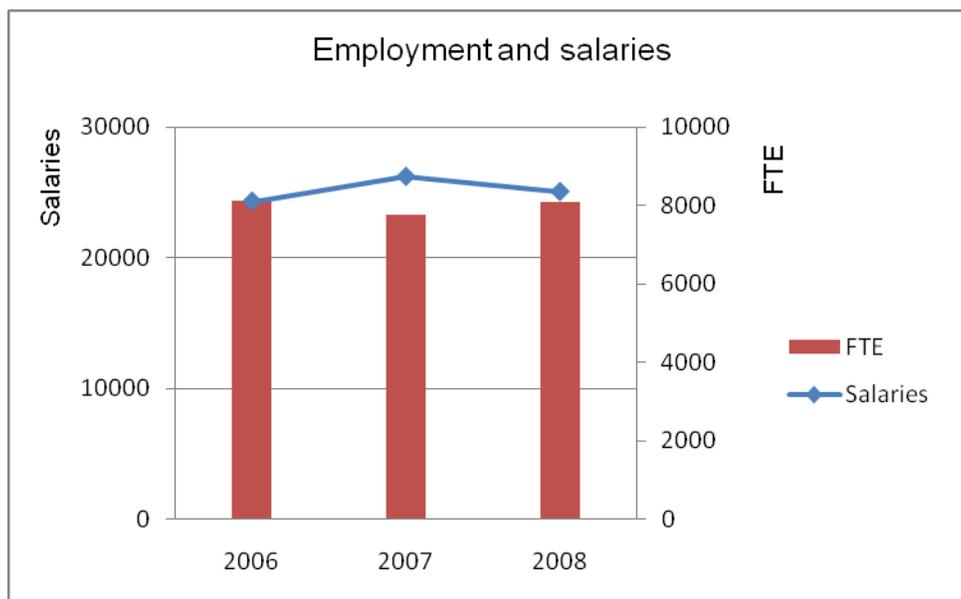
Table 5.7: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	124	128	117
<i>Social indicators</i>			
Male employment			2 146
Female employment			2 233
Total employment	na	na	4 379
FTE	4 414	4 428	4 147
Salary per employee (FTE)	44 612	45 863	48 789
Employment (FTE) per firm	35.8	34.7	37.4
% of paid work			99.3
<i>Economic Performance indicators</i>			
Turnover ('000 €)	2 047 641	1 891 183	1 702 640
GVA ('000 €)	242 098	222 550	256 634
OCF ('000 €)	45 183	19 469	55 789
EBIT ('000 €)	11.618	-15.683	14.827
Net profit ('000 €)	-12 778	-30 883	-26 228
Return on Investment (EBIT) (in %)	1.0%	-1.3%	1.1%
Financial position (in %)	na	na	34%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	464	427	411
Net profit per FTE ('000 €)	-2.9	-7.0	-6.7
Turnover per firm ('000 €)	16 513	14 775	14 552
Running cost to turnover ratio (in %)	100%	102%	96%

Despite these facts, the financial position (calculated as own capital divided by total assets) has improved for the industry as a whole from 21 % to 25 % between 2006 and 2008.

The total number of employed in the fish processing industry in Denmark was 4,379 of which 2,146 was men and 2,233 woman, corresponding to 49 % men and 51 % woman. The average salary per FTE has been increasing from 45 thousand euro per year to 48 thousand per year. The turnover per FTE has been falling from 464 to 411 from 2006 to 2008, and also the net profit has been falling from minus 3 to minus 6 thousand Euros per FTE.

Figure 5.11: Evolution of the employment and salaries in the Danish fish processing industry



#### 5.4.6. Comment on sector's performance and possible development in the future

The number of processing units has been decreasing from 68 in 2008 to 65 in 2009. The production of fish for human consumption decreased 11% in 2009 in relation to 2008. Production of fishmeal and oil are increasing from 2008 to 2009 with 3%. In 2009, the production based on flatfish and mackerel rose in relation to 2008, whereas production based on all other species fell.

Furthermore, the production of product forms; fresh and frozen filet, smoked, prepared and preserved products decreased from 2008 to 2009. Sales prices and raw material prices were on average increasing for most species, raw material prices however more than sales prices.

Profitability in the fish processing sector for consumption is expected to decline slightly in 2010 in most parts of the industry. Increased profitability is, however, expected for fish meal factories, because of the increased prices on fish meal and fish oil. These expectations are also due to the financial crisis, which causes declining demand for fish in Europe. In the traditional markets for fish species such as cod, flatfish and shrimp in Western Europe the demand are expected to fall due to declining purchasing power. The development must also be considered in conjunction with increased prices on raw material and expected price falls due to the high competition on the market on processed goods for most fish species.

The sub branch processing salmon are at the moment faces high prices on raw material, because of the collapse of the aquaculture sector in Chile. This will probably result in a negative result for this sub branch, because the price of the processed product will not be increasing as much as the price for raw material.

#### **5.4.7. Comments on the data**

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 Danish Institute 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.

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 three different statistics in Statistics Denmark; the Account Statistics, the Industry Commodities Trade Statistics, and the Raw Material Statistics, where data for Eurostat only covers data from the Account Statistics. The three statistics are combined to get more detailed information on the raw material use in the fish processing industry. Furthermore; combining the three statistics provide information on the species used in processing and information about what kind of product is produced and how much they are processed. The

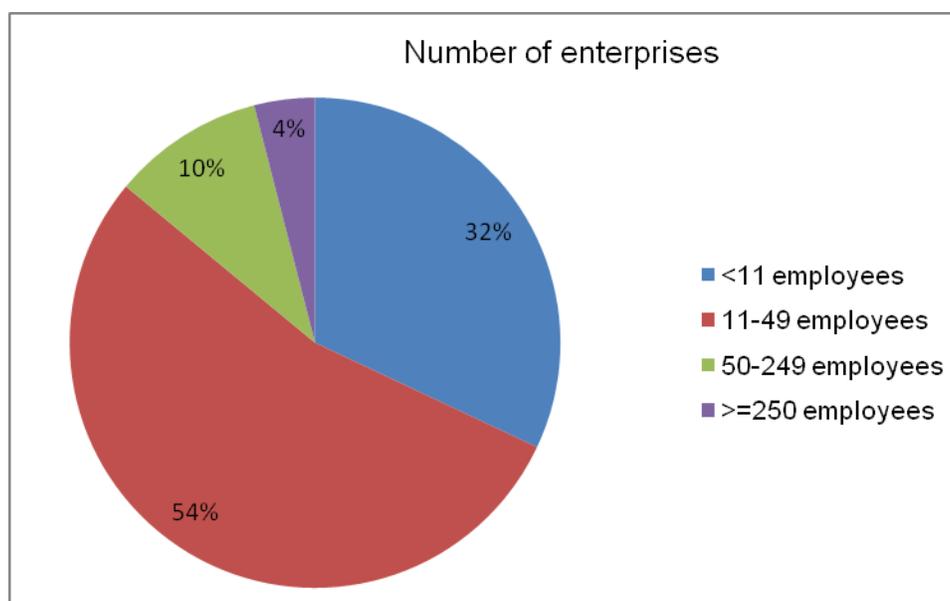
difference between the numbers reported to the DCF and DCR and Eurostat are only between 0 and 4 %.

## 5.5. Estonia

### 5.5.1. Overview of the sector

In 2008 there were 50 enterprises whose main activity was fish processing in Estonia. 86% of them were rather small having up to 49 employees. The number of total employees was 1936. More detailed data for enterprises by the size category is presented in Figure 5.12. The turnover of production was more than 116 million Euros in 2008. Additionally, there were also 9 enterprises that carried out fish processing but not as a main activity. Their turnover attributed to fish processing was almost 1 million Euros.

Figure 5.12: Size distribution of the Estonian fish processing industry



The fish processing sector in Estonia is largely dependent on export. The value of fish products were sold in 2008 was 105 million Euros and 74% of these were exported, see the Table 5.8.

Table 5.8: Fish products sales of the Estonian fish processing industry at current prices in 2004-2008

	2004	2005	2006	2007	2008

Total sales (mEUR)	88	90	97	88	105
Export (mEUR)	59	63	73	64	78
The share of export (%)	68	70	75	73	74

### 5.5.2. Nature of the industry: concentration

The geographical location and historic background have formed the Estonian fish processing industry into what it is today. During the soviet period, the Estonian fish processing sector was a large and well-developed branch of the national economy which produced a variety of fish products for the entire Soviet Union. Since the main markets were geographically far away, it was necessary to concentrate on the products which had long shelf life: different types of fish preserves and conserves.

Directly after Estonia regained independence in 1991, the eastern countries (e.g. Russia, Ukraine) remained as main market areas for fish products and this situation still persists. However, due to economical or political contingencies in the eastern countries, many fishing and processing enterprises in Estonia, are not oriented exclusively towards the eastern markets any more but also have turned look to the Western markets (e.g. Finland, Denmark, Sweden and Germany).

### 5.5.3. Main products and main segments

The main products in the Estonian fish processing industry in 2008 were frozen fish, preserves and conserves. But also smoked fish, fish fillets and ready-made products were represented in assortment, see the Table 5.9.

Table 5.9: Production of different fish products in the Estonian fish processing industry in 2004-2008

Product group (1000 tons)	2004	2005	2006	2007	2008
Frozen fish	32	40.3	40.3	36.5	30.3
Salted, spiced, dried, breaded	24.3	27.4	27	24.4	20.8
Canned fish	14.6	9.7	7.4	5.1	7.1
Smoked fish	3	3.3	3.1	3.6	3.8

Fresh or chilled fish, fillets, minced	4.3	4.1	5.4	3.5	3.3
Culinary (in oil, marinade, sauce)	1.7	1.3	1.3	2.9	1.5

In 2008 Estonia exported fish and shellfish into 49 countries; annual principal export value was approximately 101 million Euros. Top-5 export countries are listed in Table 5.10.

Table 5.10: Principal export values for main export countries for fish and aquatic invertebrates in 2006-2008

Country/EUR	2006	2007	2008
Ukraine	10853313	12135452	13858500
Russia	16791337	12259127	11341229
Finland	7470180	9175146	8282197
Sweden	6403891	4481953	5684421
Denmark	7442828	6640107	5253477

#### 5.5.4. Dependency on domestic production

Herring and sprat 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 occasionally 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). Due to its small size, the fish markets and processing enterprises do not depend on domestic aquaculture production.

In 2008 Estonia imported fish and shellfish from 39 countries; annual principal import value was around 94 million Euros. Top-5 import countries are listed in Table 5.11.

Table 5.11: Principal import values for main import countries for fish and aquatic invertebrates in 2006-2008

Country/EUR	2006	2007	2008
Latvia	2019118	6778599	10808146

Finland	5952260	9043823	8940397
Sweden	5753920	5601192	6194293
Denmark	9407084	7696012	5217851
Norway	7989445	3106213	3676792

### 5.5.5. Socio-Economic performance indicators and competitiveness

Instead of 57 in 2007 in 2008 the number of enterprises whose main activity was fish processing was 50 – a decrease of the 12%. Despite of that, the turnover of production increased approximately 18% and was more than 116 million Euros in 2008. All economic performance and productivity indicators showed positive trend comparing 2006 and 2008, see Table 5.12.

The total amount of net profit, GVA and OCF generated by the Estonian fish processing enterprises in 2008 was 1.7 million Euros, 25 million Euros and 6.9 million Euros respectively. Compared to the previous year all these performance indicators have increased.

Table 5.12: Socio-economic performance and competitiveness indicators in 2006-2008

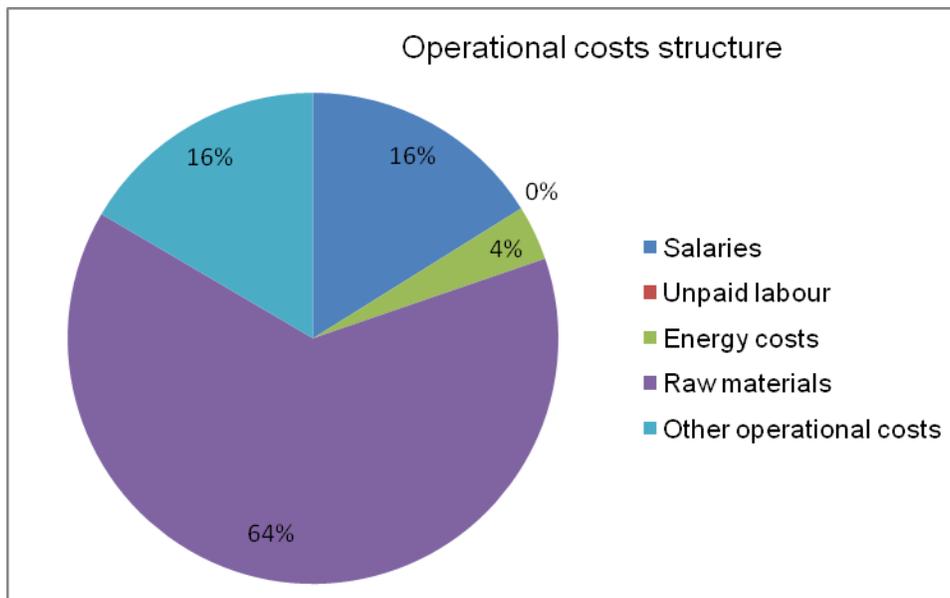
Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	55	57	50
<i>Social indicators</i>			
Male employment			na
Female employment			na
Total employment	2 370	2 103	1 936
FTE	2 151	1 932	1 864
Salary per employee (FTE)	7 169	9 040	9 759
Employment (FTE) per firm	43.1	36.9	38.7
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	110 084	98 845	116 524
GVA ('000 €)	19 528	23 756	25 099
OCF ('000 €)	4 107	6 291	6 908

EBIT ('000 €)	na	na	3 394
Net profit ('000 €)	-894	1 157	1 699
Return on Investment (in %)*	-1.7%	1.9%	2.6%
Financial position (in %)	33%	22%	40%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	51	51	63
Net profit per FTE ('000 €)	-0.4	0.6	0.9
Turnover per firm ('000 €)	2 002	1 734	2 330
Running cost to turnover ratio (in %)	98%	99%	97%

\*The Return on Investment has been calculated using the Net Profit, because the EBIT was not available for 2006 and 2007. The Return on Investment calculated using the EBIT for 2008 was 5.1%.

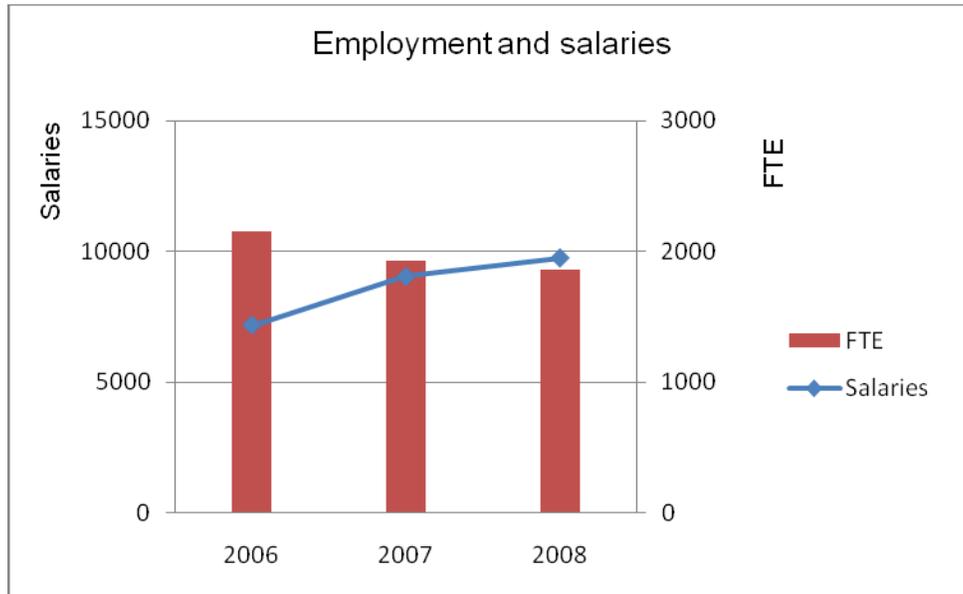
The total amount of production costs by the Estonian fish processing sector in 2008 was 112.8 million Euros. The bulk (64%) of this was formed by costs related purchase of fish and other raw material. The parts of labour and energy costs were 16% and 4% respectively. There were no extraordinary costs in 2008. See figure 5.13.

Figure 5.13: Distribution of the operating costs in the Estonian fish processing industry



The number of FTE in the Estonian fish processing sector in 2008 was 1864. In 2006 the same number was 2151, decreasing was 13%. At the same time salary per employee (FTE) increased 36% and reached to 9759 Euros in 2008. See figure 5.14.

Figure 5.14: Evolution of the employment and salaries in the Estonian fish processing industry



### 5.5.6. Comment on sector's performance and possible development in the future

Based on economic performance and productivity indicators the general situation of Estonian fish processing sector was good in 2008. The decrease in the number of primary enterprises refers to strong competition in the market. There may be two main reasons why enterprise has been forced to close. At first, as the fish stock is limited, enterprise is not capable to supply its manufacturing with raw material and secondly the disappearance of market. A reason for increasing of turnover and net profit in 2008 was the continuous rise in products prices.

The overall increasing of prices for goods and services in turn caused pressure for rise of wages in Estonia and entrepreneurs were compelled to offer more competitive incomes to prevent workers leaving. In 2009 the rise in total production volume is expected in fish processing sector. In order to stay competitive many Estonian fish processing enterprises have started to think much more about diversification and development of products assortment.

### **5.5.7. Comments on the data**

Overview concerning export-import and production volumes of different fish products is based on figures of the Statistics Estonia. Data for socio-economic performance originate from the financial statements of all fish processing enterprises and are collected by the Estonian Marine Institute. Detailed data about the input of raw material and gender distribution were not available.

## **5.6. Finland**

### **5.6.1. Overview of the sector**

There were 165 fish processing enterprises in Finland in 2008; 143 of them were processing fish as their main activity. These main activity enterprises processed fish with a production value of 160 million Euros. Turnover attributed to fish processing of the remaining 22 enterprises was also significant; about 10 million Euros. In 2007 fish processing enterprises produced 75 million kg of fish with a production value of 150 million Euros.

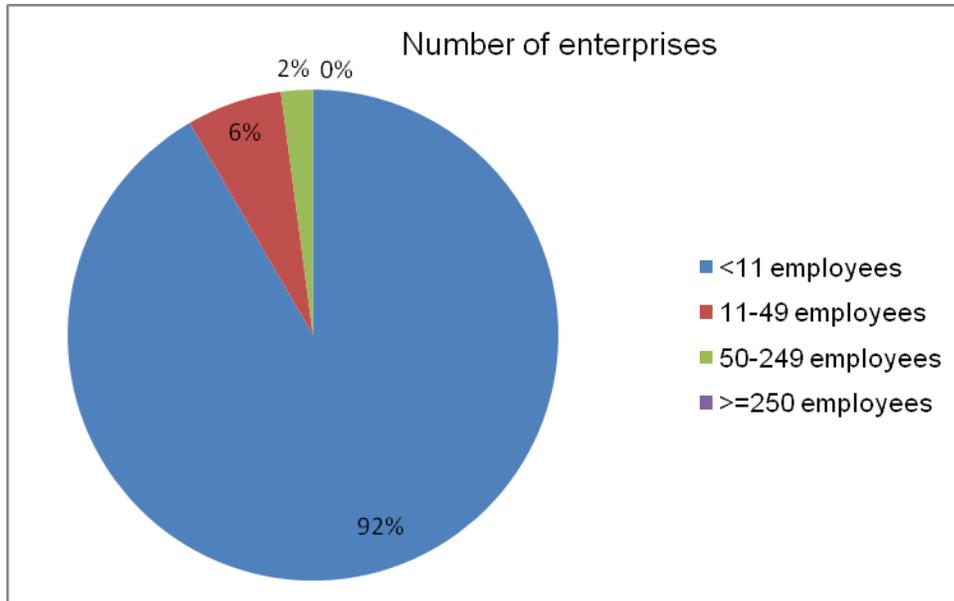
The industry employed 387 FTEs in 2008 and the employment remained in the same level than in 2007. Production in terms of volume processed increased steadily between 2003 and 2007. There has been a growth in production of around 15% between 2005 and 2007.

### **5.6.2. Nature of the industry: concentration**

The fish processing industry in Finland is highly concentrated in the sense that the 10% of the companies that had largest turnover produced almost 80% of the total revenue generated by the industry in 2008. The small enterprises valued by turnover (50% of the enterprises) accounted for only 3% of the total income of the fish processing industry.

Most of the main activity fish processing enterprises are micro enterprises employing less than 11 persons. These enterprises amount for 92% of all the enterprises in the industry. There are only 3 enterprises that employ more than 50 persons.

Figure 5.15: Size distribution of the Finnish fish processing industry



### 5.6.3. Main products and main segments

The main species for processing are Baltic herring, rainbow trout and salmon. The Finnish industry also processes various freshwater fish species. Herring is the most important species in terms of volume. Rainbow trout is the most important species in terms of value.

The main processing products are smoked (hot and cold smoked) products from rainbow trout, salmon and herring. There is also marked production of salted rainbow trout. Imported herring is produced as semi-preserved product. There is also a marked production on ready-to-eat food: especially using rainbow trout.

### 5.6.4. Dependency on domestic production

In fish processing industry, 72% of the main sources of raw material were domestic landings and aquaculture products. Farmed rainbow trout and salmon were the most important species for raw material in terms of value in 2007. Baltic herring was the most important species in terms of volume; 30 thousand tons was processed in 2007.

Table 5.13: Raw materials in 2007

Main raw materials	Volume (tn)
--------------------	-------------

Baltic herring	30 134
Rainbow trout	20 064
Salmon	13 998
Herring	4 962
European whitefish	2 245
Other	2 826
Total	74 229

Source FGFRI: Fish processing 2007. No data available on 2008.

The main market for Baltic herring is the Russian export market. About one third of the Finnish raw material is imported. Norwegian salmon was the most important imported species for processing in 2007. Together with rainbow trout they comprised the most important species in terms of value; production volumes for both species reached 34 thousand tons in 2007.

#### 5.6.5. Socio-Economic performance indicators and competitiveness

The total revenue of the Finnish processing industry was 161 million Euros in 2008 with a growth of 10% compared to the previous year. Gross value added increased by 25% to 33 million Euros in 2008 and also profitability increased. Gross cash flow doubled from 2007 and also net profit increased significantly. Return on investment increased from 1% in 2007 to 8% in 2008. The financial position of the processing enterprises remained unchanged.

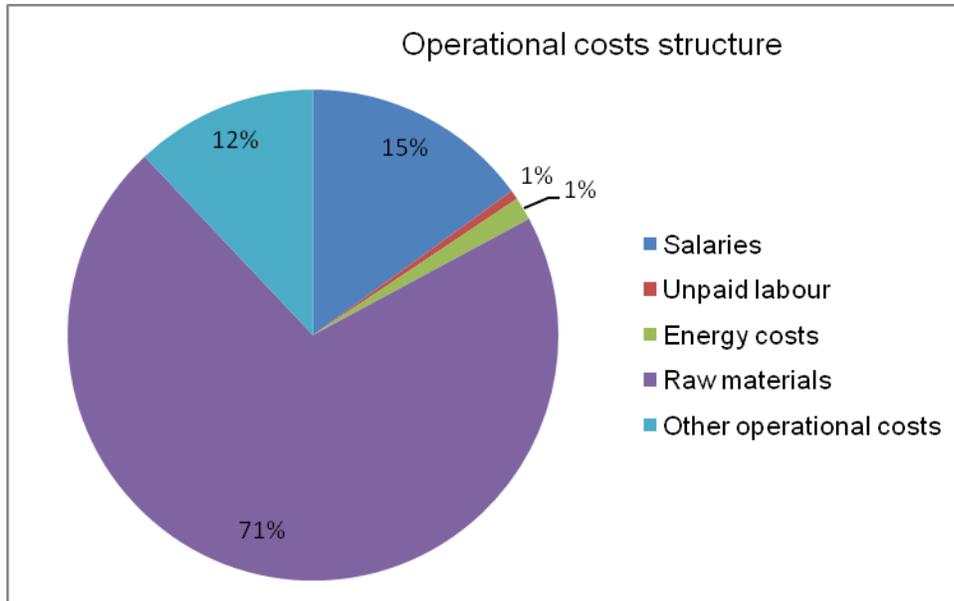
Table 5.14: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	142	146	143
<i>Social indicators</i>			
Male employment			510
Female employment			385
Total employment	832	908	895
FTE	646	683	682
Salary per employee (FTE)	31 560	33 085	34 787

Employment (FTE) per firm	4.5	4.7	4.8
% of paid work	95%	96%	96%
<i>Economic Performance indicators</i>			
Turnover ('000 €)	134 560	145 075	160 023
GVA ('000 €)	28 117	26 510	33 121
OCF ('000 €)	7 729	3 913	9 396
EBIT ('000 €)	4 731	593	5 874
Net profit ('000 €)	4 152	-993	3 642
Return on Investment (in %)	6.5%	0.9%	8.0%
Financial position (in %)	27%	22%	23%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	208	212	235
Net profit per FTE ('000 €)	6.4	-1.5	5.3
Turnover per firm ('000 €)	948	994	1 119
Running cost to turnover ratio (in %)	95%	98%	95%

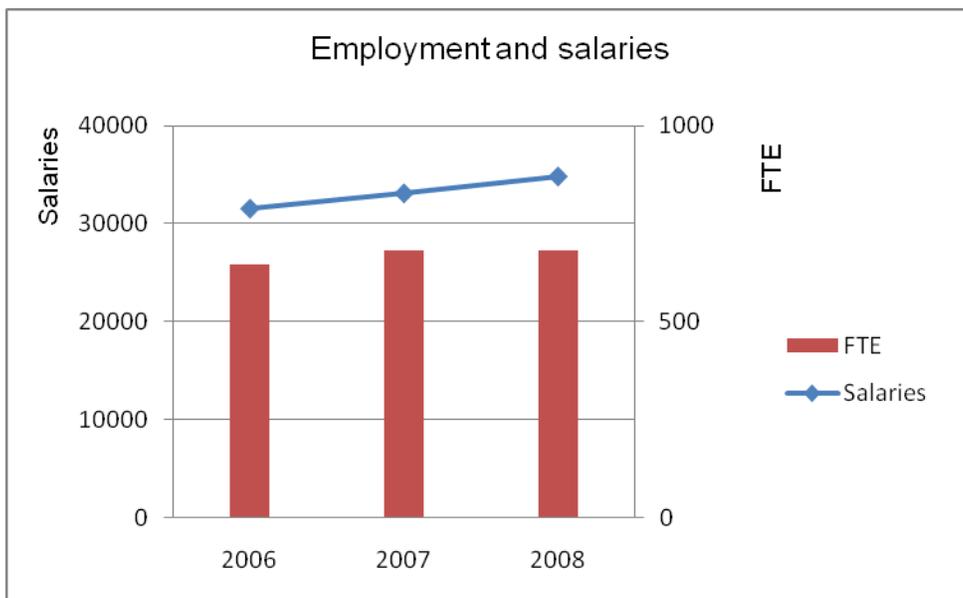
Increasing costs are affecting the profitability of the industry. Total running costs (excluding capital costs) were high in 2008 at around 95% of the turnover. Raw materials were the major cost item; they accounted for 71% of the total production costs. Total labour costs accounted for 16% of the total running costs.

Figure 5.16: Distribution of the operating costs in the Finnish fish processing industry



Although the number of enterprises increased slightly, employment remained in the same level than in 2007. Fish processing employed 682 FTEs in 2008 with an average of 4.8 FTE per firm. Salary per FTE has increased considerably. The productivity of labour in terms of turnover by FTE increased. Also net profit per FTE increased despite the increasing labour costs.

Figure 5.17: Evolution of the employment and salaries in the Finnish fish processing industry



#### **5.6.6. Comment on sector's performance and possible development in the future**

According to an Economic Outlook of Finnish Fishery Enterprises (2010) there was a slight revival in the economic development of the fisheries sector in 2009. Financial situation of the small fish processing enterprises improved in 2009 while the large enterprises assessed that their economical performance had not changed. The export trade livened up and income from the fisheries sector on the whole exceeded that of 2008. At the beginning of 2010, future prospects for entrepreneurs in the fisheries sector were more positive than before. Domestic demand for processed fish is expected to continue growing as well as the export of fish and fish products.

#### **5.6.7. Comments on the data**

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 statements and industrial statistics of SF. Financial data covers all enterprises that have fish processing as their main activity and that had turnover above 9 838 Euros in 2008. FGFRI carries out a survey on fish production every second year. The latest information available while writing the report was from 2007. The production survey is carried out as a stratified survey. The target population of the survey includes all enterprises in fish processing, also those enterprises that do not have fish processing as their main activity.

## **5.7. France**

### **5.7.1. Overview of the sector**

In France, two populations of fish processing industries are identified. In 2008: 214 companies are classified in N.ACE 1020Z and 51 companies fish processing is not the main activity.

For the whole population, the turnover attributed to the fish processing industry is 3 980 200 thousand Euros in 2008.

The turnover for the 1020Z population is 3 151 200 thousand Euros in 2008, and decreases between 2006 and 2008 Employment also decreases, from 13,829 in 2006 to 12,000 in 2008.

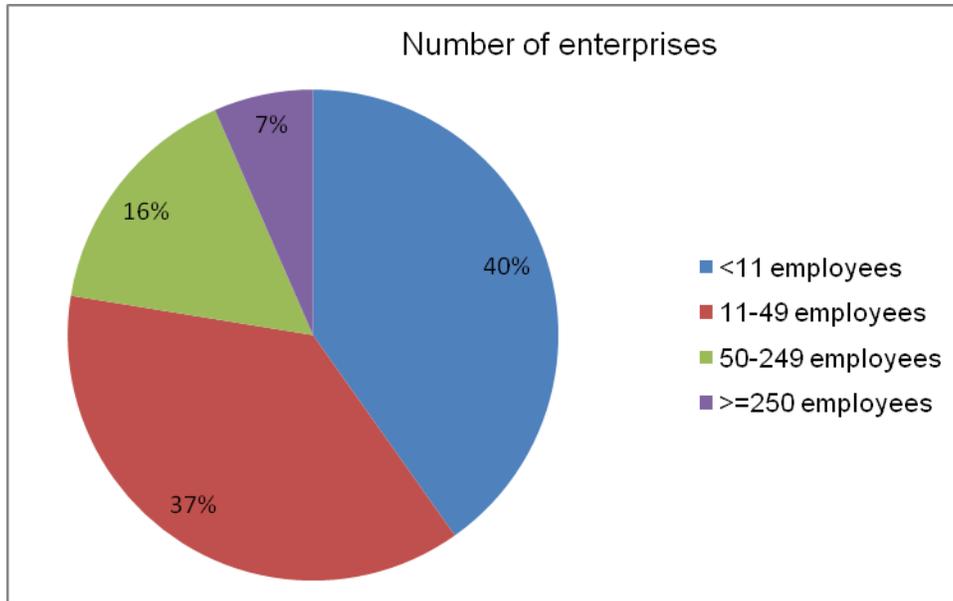
This chapter will present the 1020Z industries.

However, the missing data for France does not allow analysing in detail the French fish processing sector.

### **5.7.2. Nature of the industry: concentration**

The French fish processing industry is concentrated. In fact, in 2008, nearly 80% of businesses employ fewer than 50 people and 20 % of companies totalize 80% of the total turnover.

Figure 5.18: Size distribution of the French fish processing industry



### 5.7.3. Main products and main segments

In decreasing value, the main order segments are: cooked shrimps, surimi, smoked fish and salted fish, dried fish and frozen seafood, then canned fish.

### 5.7.4. Dependency on domestic production

Other fish, unidentified fish and other species are by volume and value the main imported aquatic products. Among the main species there are salmon, trout, eel, shrimp, tuna, cod and scallop.

In 2008, France imported 3 998 million Euros of aquatic products: Salmon, shrimp and tuna are the main species. France imports come mainly from Norway, UK and Spain. In 2008, France exported 1 406 million Euros of aquatic products. The exports are dominated by tuna (20%). Italy and Spain are main customers of France.

### 5.7.5. Socio-Economic performance indicators and competitiveness

No data on Other operational costs (together with missing data on other income, imputed value of unpaid labour, labour cost other material, raw material costs, packaging costs, extraordinary costs, among

others) has been provided for any of the years. This implies that economic performance indicators such as operating cash flow, EBIT, net profit or return on investment cannot be estimated.

Salaries, energy cost and raw materials represent a 66.1% of the total turnover. Unfortunately, no data has been submitted on other operational costs and imputed value of unpaid labour. So we cannot provide a clear estimation of the running cost to turnover ratio.

Figure 5.19: Distribution of the operating costs in the French fish processing industry

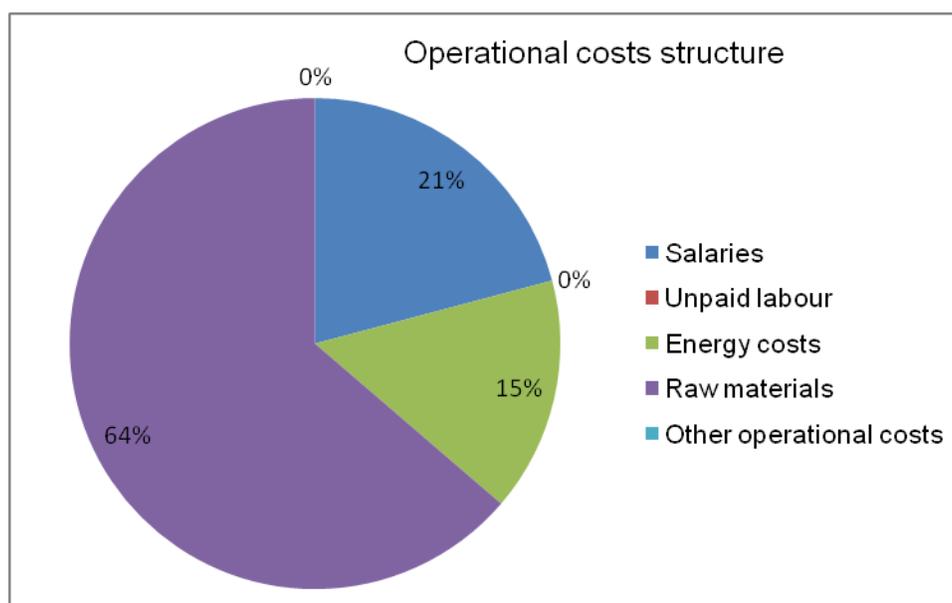


Table 5.15: Socio-economic performance and competitiveness indicators in 2006-2008

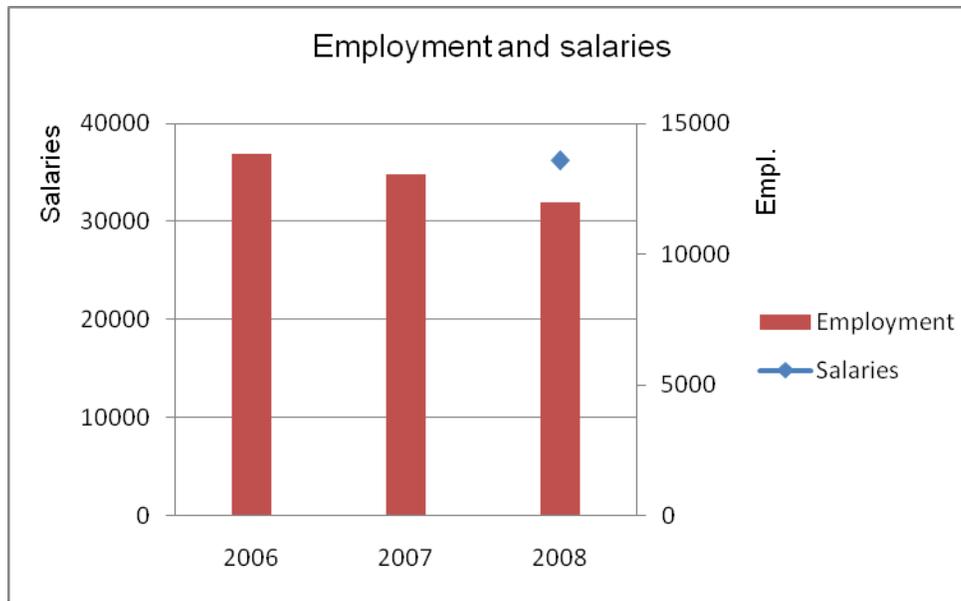
Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	209	209	214
<i>Social indicators</i>			
Male employment			na
Female employment			na
Total employment	13 829	13 059	12 000
FTE	na	na	na
Salary per employee	na	na	36 229
Employment per firm	66	62	56

% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	3 260 519	3 188 172	3 151 200
GVA ('000 €)	na	na	na
OCF ('000 €)	na	na	na
EBIT ('000 €)	na	na	na
Net profit ('000 €)	na	na	na
Return on Investment (in %)	na	na	na
Financial position (in %)	na	na	-7.2%
<i>Productivity indicators</i>			
Turnover per employee ('000 €)	236	244	263
Net profit per FTE ('000 €)	na	na	na
Turnover per firm ('000 €)	15 601	15 254	14 725
Running cost to turnover ratio (in %)	na	na	na

Salary per employee (in FTE), Employment (in FTE) per firm and Turnover per FTE could not be calculated because employment on FTE was not reported, so Salary per employee, Employment per firm and Turnover per employee had to be reported.

The number of enterprises increases moderately, while the number of employees decreases. From the productivity indicators, it can be seen that the Turnover per employee has been increasing for the whole period of analysis, while the Turnover per firm has been decreasing.

Figure 5.20: Evolution of the employment and salaries in the French fish processing industry



Employment has decreased from almost 14 thousand employees in 2006 to 12 thousand employees in 2008.

#### **5.7.6. Comment on sector's performance and possible development in the future**

According to consumer' panel it can be assumed that the consumption of processed fished will increase. French households buy more and more processed fish products such as smoked or salted fishes, and refrigerated or frozen products. Fish product innovations could also offer new outlets for an increasing demand.

#### **5.7.7. Comments on the data**

Data are collected by survey crossed by data bases from the National Statistics Institute and the administrative declarations. All the firms are surveyed: small companies with less than 20 employees and those with more than 20 employees

There are three sources for the survey:

1. The questionnaire is sent to all companies, including those with less than 20 people.
2. SIRENE file concerns only the companies above 20 people. Data from SIRENE concern employment and turnover come from companies which have published their balance sheet and account.

3. Financial published data file of companies employing more than 20 people who have published their balance sheet and account.

Few companies answer to this survey and answering rate for each variable are too low to be of significant interest.

## **5.8. Germany**

### **5.8.1. Overview of the sector**

The German Fish Processing Sector contains of around 280 enterprises (preliminary data for 2008). More than 90 % of the turnover is produced in the enterprises with 20 and more employees, which were 64 enterprises in 2008. The turnover for the above 20 employee enterprises in 2008 was 2 373 233 000 Euro and total employment was 8469 persons. The sector is, compared with the size of the German fishing fleet to other EU fleets, in an EU wide comparison quite large. 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.

### **5.8.2. Nature of the industry: concentration**

From the sectors around 280 enterprises around 200 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 (about 30) 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.

In terms of employment more than one quarter of the industry is located at Bremerhaven, the largest city at the German North Sea Coast. In the whole fishery sector, 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.

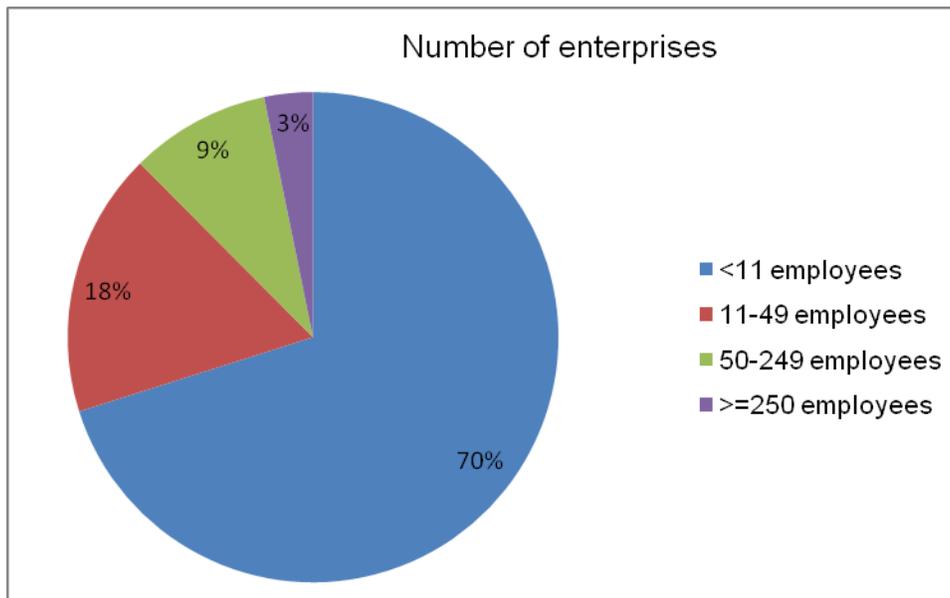
As stated the sector is very much dominated by the bigger companies. The following table may give an impression on this. Unfortunately the figures for 2008 are not available yet.

Table 5:16: Distribution of the number of enterprises, employment and turnover by firm size

Size class	2006			2007		
	No.	Employment	Turnover (`000 Euro)	No.	Employment	Turnover (`000 Euro)
0-9	196	342	80 017	197	361	94 605
10-49	52	1314	219 638	49	1246	194 410
50-249	23	2290	468 173	22	2493	518 831
250 and more	10	4709	1 451 980	9	4184	1 356 158
total	281	8655	2 219 808	277	8284	2 164 000

While for 2008 we can see on the following figure the distribution of the number of enterprises by firm size.

Figure 5.21: Size distribution of the German fish processing industry



### 5.8.3. Main products and main segments

The main products are fish fingers and breaded fish fillets. The production value ex works of this category in 2008 was 550 532 000 Euro, which means a large increase of 17 %. Processed herrings had a production value ex works of 255 871 000 Euro, which was almost the same as in

2007. Frozen fish fillets amounted to 154 053 000 Euro, a slight decrease compared to 2007. Fish salad also faced a slight decrease. The production volume and value of Smoked and dried salmon shows a sharp decrease of about 44% in terms of value and of about -34 % in terms of volume compared to 2006. This may reflect the economic crises, but is also due to increasing translocation of production facilities from Germany abroad.

Table 5:17: Main Products (Volume and Value)

Main products	2006 Volume (tn)	2007 Volume (tn)	2008 Volume (tn)	2006 Value (´000 Euro)	2007 Value (´000 Euro)	2008 Value (´000 Euro)
Fish fingers and breaded fish fillet	154 852	174 409	192 680	410 665	469 951	550 532
Herring processed and/or preserved	77 117	83 612	86 591	224 712	257 098	255 871
Frozen fish fillet	58 549	57 199	54 969	160 681	160 800	154 053
Smoked and dried Salmon	12 940	10 520	8 387	144 379	111 621	81 872
Fish Salad	31 120	27 469	25 671	127 977	122 617	119 010
Total	334 578	353 209	368 343	1 068 414	1 122 087	1 061 338
Sector total				1 657 175	1 711 299	1 786 404

Specific data for the raw material per species only for the processing sector are not available in a sufficient quality. For the whole German fish and sea food consumption of about 1.3 Million tonnes (i.e. 15.6 kg per capita) the main species are Alaska Pollack with Herring with and Salmon with in terms of catch volume with an increasing importance of imported pangasius fillets.

#### 5.8.4. Dependency on domestic production

The German fish processing sector as the whole fish sector does not rely very much on domestic products or landings. Only 19% (2008) of the total German fish market is covered by domestic or foreign landings of the German fleet (excluding fresh water fishery), imports stand for 81% of the total fish market in terms of volume (incl. export). In terms of import value the largest foreign supplier are Poland, followed by China, Denmark, Netherlands and Norway. The main species for the processing industry are the white fish species, followed by Alaska-Pollack and

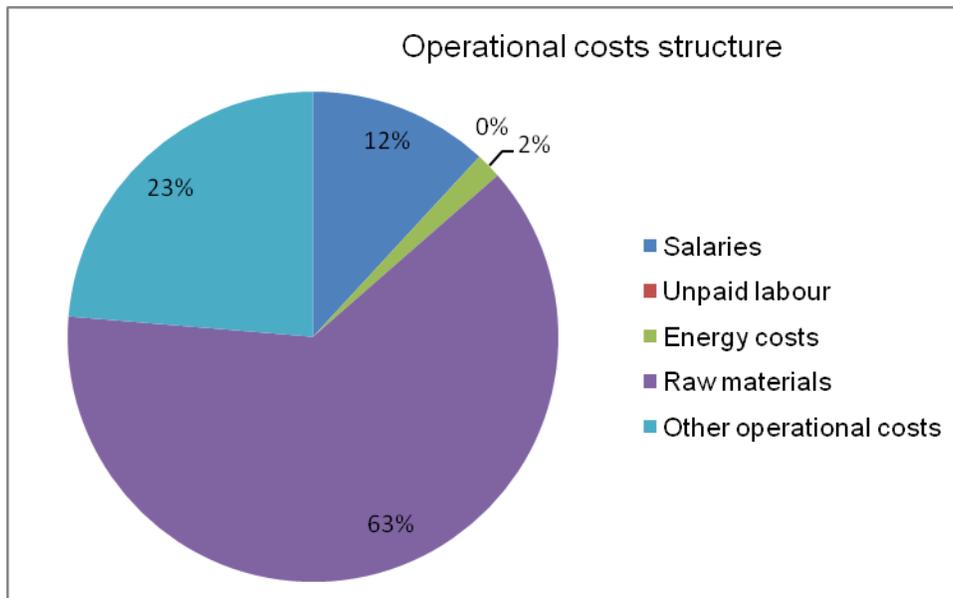
herring. Concerning species an increasing volume of pangasius as raw material for the processing industry can be noticed.

### 5.8.5. Socio-Economic performance indicators and competitiveness

As in most of the countries, the profitability of the sector is rather low. One of the main reasons for this low economic performance is the high running cost to turnover ratio, being the operating costs a 97.1% of the total turnover.

On next figure it can be seen the importance of the different operating costs, being the cost of buying raw materials the most important one.

Figure 5.22: Distribution of the operating costs in the German fish processing industry



On the following table there are reported in more detail the socio-economic performance and competitiveness indicators for the German fish processing industry for the period between 2006 and 2008.

It should be considered that on next table, there is data referring to all the fish processing enterprises in Germany (281 in 2008) and some other data to the enterprises with more than 20

employees (64 in 2008). The figures for 2008 are estimations, as new data are not available yet. Normally economic data refers to the companies with more than 20 employees, and when total data is reported, it is presented between brackets (see footnotes at the end of the table for a better understanding).

Table 5.18: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	62 (281)	60 (277)	64 (281)**
<i>Social indicators</i>			
Male employment	4 110	4 041	4 272
Female employment	4 297	3 793	4 197
Total employment	8 407	7 834	8 469
FTE	8 105	7 750	8 082
Salary per employee (FTE) *	34 048	33 728	33 511
Employment (FTE) per firm *	130.7	129.2	126.3
% of paid work	na	na	na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	2 096 940 (2 219 808)	2 064 373 (2 164 004)	2 366 517 (na)
GVA ('000 €) *	365 917	386 612	358 846
OCF ('000 €) *	89 959	125 222	88 007
EBIT ('000 €) *	43 053	71 896	47 243
Net profit ('000 €) *	26 372	50 520	28 251
Return on Investment (in %) *	8.1%	10.6%	8.1%
Financial position (in %) *	84.8%	84.7%	85.2%**
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	258.7 (273.9)	266.4 (279.2)	293.6 (na)
Net profit per FTE ('000 €) *	3.3	6.5	3.5
Turnover per firm ('000 €)	33 822	34 406	36 977

	(7 900)	(7 812)	(na)
Running cost to turnover ratio (in %) *	96.5%	94.3%	96.2%

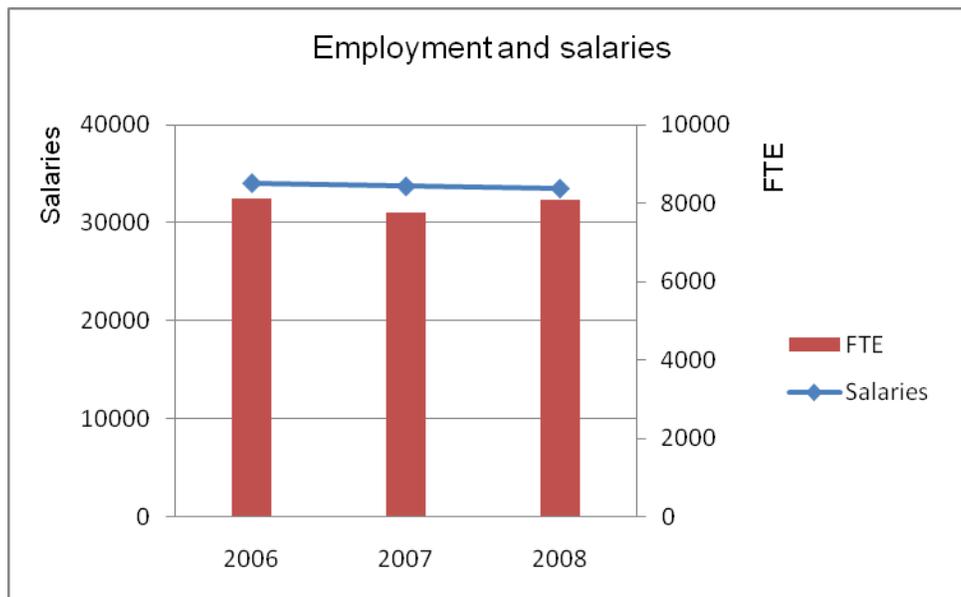
\* Data refers to the companies with more than 20 employees

\*\* Estimation, as new figures are not available at the moment.

It should also be considered that some taxes are not reported under the DCR or DCF regulations. This was decided in order to have comparable economic performance data between Member States, without depending on different taxation schemes. However, net profits and Return on Investment can be affected significantly when considering taxation. In Germany, indirect cost taxes accounted for 10 Million Euro in 2006, 15 Million Euro in 2007 and 11 Million Euro in 2008.

The sector is characterized by a stable number of enterprises. 2008 numbers show an increasing pressure on profit. The reason was increasing prices for raw material which could not be rolled over to the retail sector. While the employment is decreasing over the last 10 years, in 2008 a slight increase could be seen.

Figure 5.23: Evolution of the employment and salaries in the German fish processing industry



#### **5.8.6. Comment on sector's performance and possible development in the future**

The profit of the sector is under high pressure from the retail sector as well as from competitors especially from Poland and other new Baltic EU-countries. A movement of processing enterprises and activities from Germany to these new EU-countries can still be detected, financed 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.

#### **5.8.7. Comments on the data**

Except for the data on debt, financial position, raw material by species and total value of assets, which were asked for in an extra survey, all data are from different official statistics of the Federal Statistical Office (FSO) in Germany. Answering the questionnaire of the FSO is mandatory; answering the additional survey is voluntary. So the precision of the FSO data is quite higher than that of the other source. The calculation of the net profit does also not include data on indirect cost taxes, as they were not collected in the DCR and DCF and so it would not be comparable to the other countries. The amount of these taxes is 10 Million Euro for 2006, 15 Million for 2007 and 11 Million for 2008. The number of employees is the one of the 30<sup>th</sup> of September of the respective year.

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. Unfortunately data on total turnover of the entire sector, number of enterprises and employment are not available at the time this report was written, but it will be possible to include them in next year's report.

## 5.9. Greece

### 5.9.1. Overview of the sector

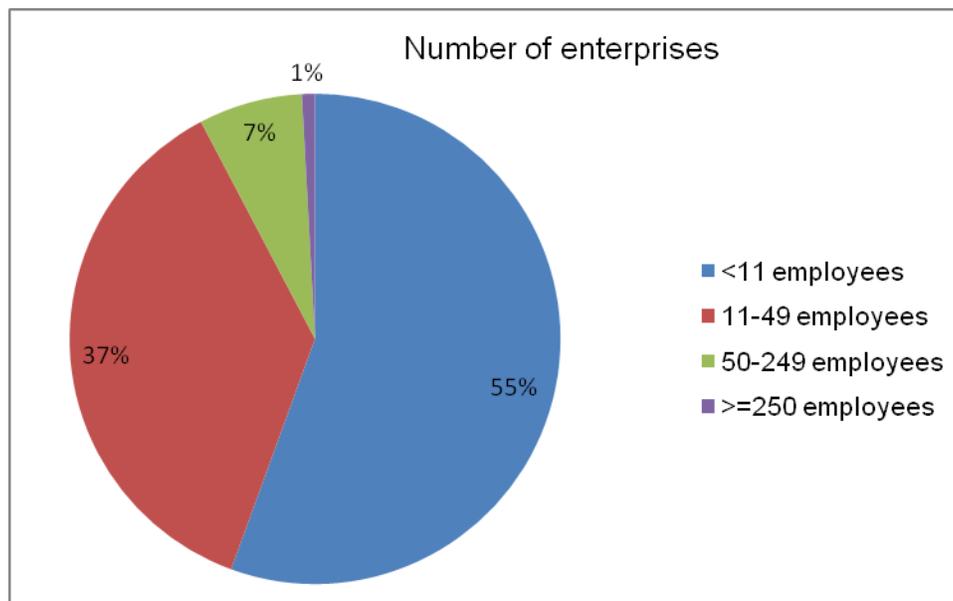
About 160 enterprises in Greece were involved in the processing sector of fisheries products in 2007. These enterprises are located either in areas with traditionally processing activities (Northern Greece) or in big landing sites and consumer centers (Athens, Thessaloniki, Kavala).

Unfortunately, so far, only 2006 and 2007 data has been submitted for the Greek fish processing industry.

### 5.9.2. Nature of the industry: concentration

The majority of the fish processing plants in Greece are classified as small industry ones, therefore engages small number of employees. From next figure it can be seen how the majority of them are classified as small industry ones (55% of the enterprises consisted of 10 employees or less, followed by the 37% of the enterprises with between 11 and 49 employees).

Figure 5.24: Size distribution of the Greek fish processing industry in 2006



### 5.9.3. Main products and main segments

Frozen products are the primary presentation of the raw material due to the long conservative live of the product. 67% of all raw materials are frozen, 27% are fresh and 5% are fillets. The fresh fish is originated mainly from local landings.

First provider of the Greek processing industry for 2006 is Community market (EU-25). However, due to the globalization of the markets and the variety of products, all markets contribute considerable amounts of raw material. 27% of the raw material comes from Greece, 10% from the rest of the EU, 19% from Africa, 8% from America, 7% from Asia, 7% from the rest of Europe, etc.

On next table it can be seen the main species used as raw materials in volume.

Table 5.19: Raw material in volume (tonnes)

Main Raw materials	2006	2007
	Volume (tn)	Volume (tn)
Sardine	na	4 176
Anchovy	7 819	4 687
Hake	5 118	4 204
Squid	9 487	9 730
Octopus	10 129	6 633
Total	85 320	58 265

The most significant part of the processing production is directed into the local market (79%). An important part is consumed in the rest of the European Union (16%), while a small percentage is addresses to some 3<sup>rd</sup> countries<sup>1</sup>.

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<sup>1</sup> Not all companies reported the destination of their product.

Table 5:20: Production of the processing sector in Greece according for 2006

Main products	2006	
	Volume (tn)	Value ('000€)
Salted	4 614	17 990
Canned	5 531	22 855
Smoked	1 252	9 396
Fillets	5 799	36 563
Fish preparations	269	1 045
Fresh	246	2 233
Frozen	62 348	272 817
Shell removal	684	2 868
Total	80 743	365 768

#### 5.9.4. Dependency on domestic production

#### 5.9.5. Socio-Economic performance indicators and competitiveness

When looking at the Greek fish processing data for 2007, once can realize that turnover represents only the 54.2% of the total income. The rest of the total income comes from Subsidies and Other income.

This leads to a good performance of the Greek fish processing industry; however, more than 45% of the income may not come from the fish processing activity. Thus, on the following table we have calculated the economic performance indicators only considering turnover and not the total income.

Moreover, from the data submitted it can be seen that there is an underestimation of the employment in (FTE terms). If employment in FTE terms would have been considered in the following table, then the salary per employee (in FTE terms) would be 92,878 Euros and the employees (in FTE terms) per firm would 2 in 2007. Thus, in order to have a more realistic output, it has been decided to estimate the indicators related to employment using the number of employees.

Figure 5.25: Distribution of the operating costs in the Greek fish processing industry in 2007

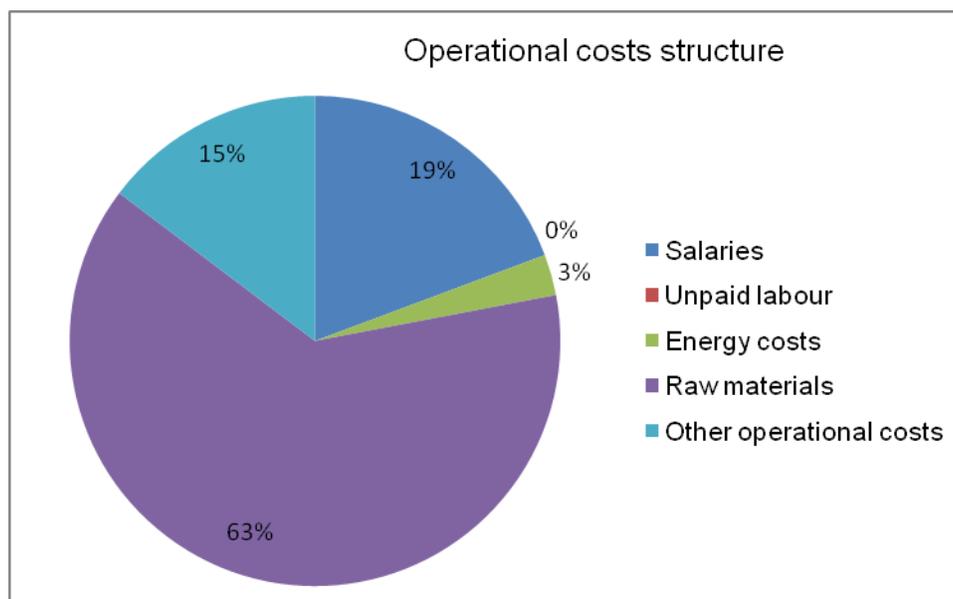


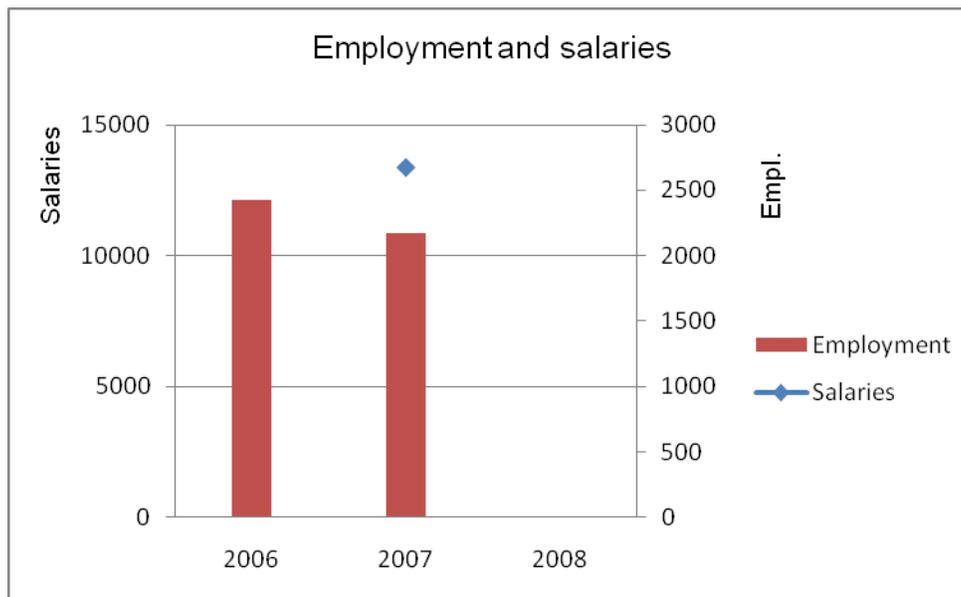
Table 5.21: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	135	160	na
<i>Social indicators</i>			
Male employment			na
Female employment			na
Total employment	2 422	2 175	na
FTE	248	313	na
Salary per employee	na	13 366	na
Employment per firm	17.9	13.6	na
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	na	186 719	na
GVA ('000 €)	na	65 164	na
OCF ('000 €)	na	36 093	na

EBIT ('000 €)	na	na	na
Net profit ('000 €)	na	-28 831	na
Return on Investment (in %)	na	na	na
Financial position (in %)	na	44%	na
<i>Productivity indicators</i>			
Turnover per employee ('000 €)	na	86	na
Net profit per employee ('000 €)	na	-13.3	na
Turnover per firm	na	1 167	na
Running cost to turnover ratio in %	na	80.7%	na

The salary per employee (in number of employees) was 13,366 Euros in 2007 and the total number of employees was 2,175, which supposed a reduction of the 10.2% in the employment from the previous year.

Figure 5.26: Evolution of the employment and salaries in the Greek fish processing industry



#### **5.9.6. Comment on sector's performance and possible development in the future**

#### **5.9.7. Comments on the data**

Unfortunately, so far, only 2006 and 2007 data has been submitted for the Greek fish processing industry.

## 5.10. Ireland

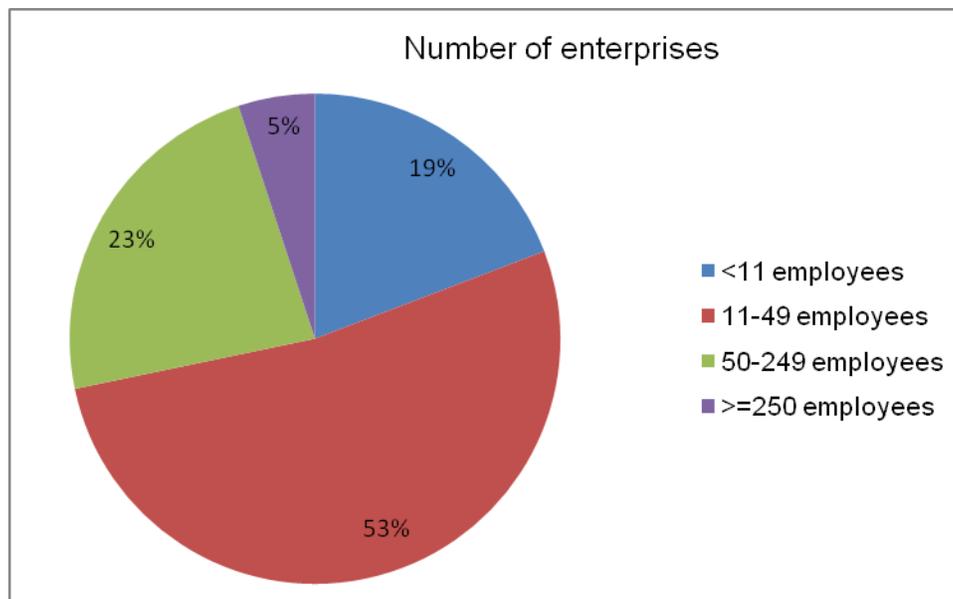
### 5.10.1. Overview of the sector

The Irish fish processing industry for 2008 consisted of 198 enterprises, produced a turnover of 426 866 thousand Euros and occupied 2,867 people.

### 5.10.2. Nature of the industry: concentration

Of these 198 enterprises that compounded the Irish fish processing industry in 2008, the majority (104) had between 11 and 49 employees.

Figure 5.27: Size distribution of the Irish fish processing industry



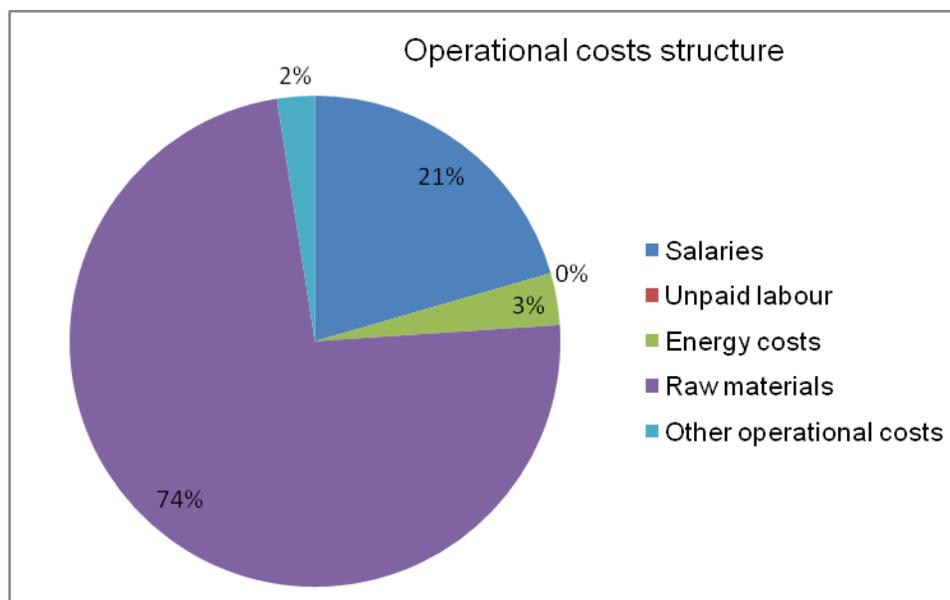
### 5.10.3. Main products and main segments

### 5.10.4. Dependency on domestic production

### 5.10.5. Socio-Economic performance indicators and competitiveness

The operational costs represent a 73.5% of the total turnover in the Irish fish processing industry for 2008. Inside the operational costs, the raw materials cost is the most important item, representing the 74% of the total operational costs, followed by salaries with a 21%.

Figure 5.28: Distribution of the operating costs in the Irish fish processing industry



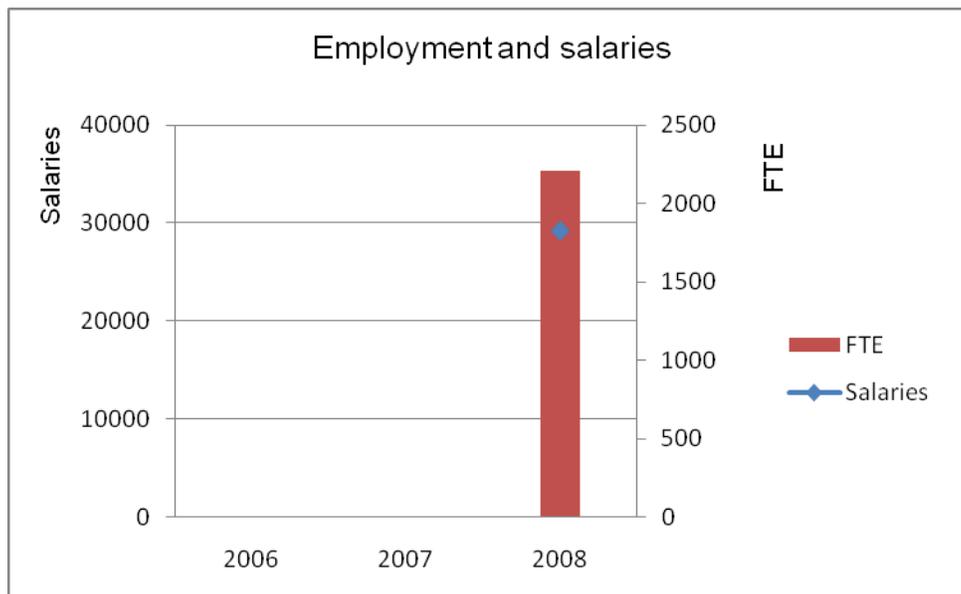
EBIT and net profits could not be estimated because Depreciation costs were not submitted for the Irish fish processing sector.

Table 5.22: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	na	na	198
<i>Social indicators</i>			
Male employment			na
Female employment			na
Total employment	na	na	2 867
FTE	na	na	2 205

Salary per employee (FTE)	na	na	29 193
Employment (FTE) per firm	na	na	11.1
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	na	na	426 866
GVA ('000 €)	na	na	177 662
OCF ('000 €)	na	na	113 290
EBIT ('000 €)	na	na	na
Net profit ('000 €)	na	na	na
Return on Investment (in %)	na	na	na
Financial position* (in %)	na	na	49%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	na	na	194
Net profit per FTE ('000 €)	na	na	na
Turnover per firm ('000 €)	na	na	2 156
Running cost to turnover ratio (in %)	na	na	73.5%

Figure 5.29: Evolution of the employment and salaries in the Irish fish processing industry



In 2008, the Irish fish processing industry occupied 2,867 people (2,205 in FTE terms), with an average annual salary of 29,193 Euros.

#### **5.10.6. Comment on sector's performance and possible development in the future**

#### **5.10.7. Comments on the data**

Only 2008 data has been reported, no 2006 or 2007 data.

## **5.11. Italy**

### **5.11.1. Overview of the sector**

At the end of 2008 the number of fish processing enterprises (preserved, frozen, chilled fish product and preparation of fish meals) registered in Italy was 376<sup>2</sup>. The number of people employed was about 7,750 persons, about 6,350 FTE. The turnover of the sector was, in 2008, about 3,150 million Euros that represents 99% of total income (around 3,190 million Euro). The Italian processing industry is characterized by a large production of tuna products, although there is also a significant presence of companies that process anchovies, sardines and shellfish. Over the last three years there has been a relocation of the processing firms of canned tuna. Some large companies produce overseas to cut operating costs of production, preferring to locate plants (production units) close to the fishing areas of raw materials. This has caused the presence in Italy of some firms that produce abroad and in Italy have only marketing and resale services.

### **5.11.2. Nature of the industry: concentration**

The fish processing industry is characterized by its dual organization in the market: on the one hand, there is the so-called modern sector, with a few large industrial companies, and second in traditional, highly atomized and formed mainly by micro, small and medium-sized enterprises, many of which are organized on a family basis.

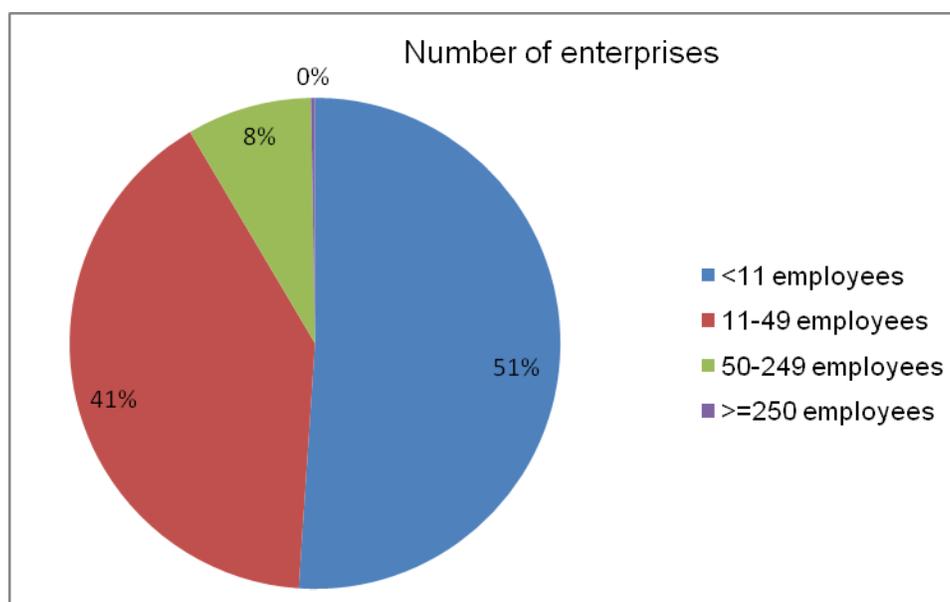
The fish processing enterprises are located for the 53% in the Southern Italy and in the islands, 20% in the Northeast, 18% in the central regions and only 8% in the Northwest. Indeed, the regions with the largest number of companies are Sicily (17%), Veneto (12%) and Campania (10%). The largest number of employees is found, however, in the North-East, that, from a general economic point of view, is the most productive Italian area. While on average the number of employees per fish processing enterprise is 21, in the north-eastern regions, as Friuli V. G. and Veneto, the number of employees per company is respectively, 38 and 30 units. As far

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<sup>2</sup> The Italian data collection programme excluded for 2006-2008 enterprises managed on a personal basis.

as the dimensional level, 52% of the total population are companies with up to a maximum of 10 employees (micro enterprises) while 92% is made up of small business (less than 50 employees, the sum of the classes <10 and 11-50). The classification of enterprises by legal status (the main legal forms were considered) shows a preponderance of a Ltd. form (74%) due to the prevalence of the small and medium enterprises. The statistics survey showed that the processing industry is an equal opportunity industry because the number of men and women employed in the sector is almost equivalent.

Figure 5.30: Size distribution of the Italian fish processing industry



### 5.11.3. Main products and main segments

The main segments of the Italian fish processing sector are:

- the canning sector (mainly tuna – around 87% of total canning production-, sardine and anchovies)
- and the thawed and freezing sector.

The canning sector can be considered the main segment of the Italian fish processing industry, mainly tuna preserved in oil and anchovies, salted or preserved in oil. As far as canned tuna, Italian industry is heavily dependent on import of raw materials. In 2008 around 37,000 tons of

loins of tuna and around 14,000 tons of whole tuna were imported (excluded bluefin tuna which is mainly destined to fresh consumption on foreigner markets, mostly Japanese ones).

Based on a recent report <sup>3</sup> in 2007 the total turnover of the Italian seafood canning industry amounted to 925 million euro (970 in 2008) while the thawed and freezing sector produced a total turnover of 125 million Euro.

Notwithstanding, the data collected under the DCF for the Italian fish processing sector do not follow any segmentation. This is why the business register (used to identify the population) does not allow to have the distinction between canning and freezing activities (the economic activity carried out by the firm is identified only by a single code that is generally 10.20).

Hence, the figures collected under DCR and DCF refer to the sector as a whole. In analysing this data it would be important to take into account that the dimension of the sector can be overestimated because in some cases the share of the “non-processing” activities is not so marginal.

#### **5.11.4. Dependency on domestic production**

Italian seafood processing and canned industries (mainly canned tuna) are almost totally dependent on imported raw materials. Taking into account the high dependence on imports, the price of raw materials played, also in 2008, a crucial role in leading the strategy of fish processing enterprises as far as the typology of raw materials to use, especially in a period of economic crisis. In 2008 imports of frozen tuna (cheaper raw material for canned tuna) continued to increase at the expense of tuna loins (+5% for imports of frozen tuna and -12% for tuna loins) even if tuna loins still represent the great part (68%) of raw materials for the canned tuna industry (fresh tuna has a marginal incidence - 0.2% - on the total volume of raw material).

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<sup>3</sup> Indicatori del sistema agroalimentare italiano 2008, ISMEA, September 2009.

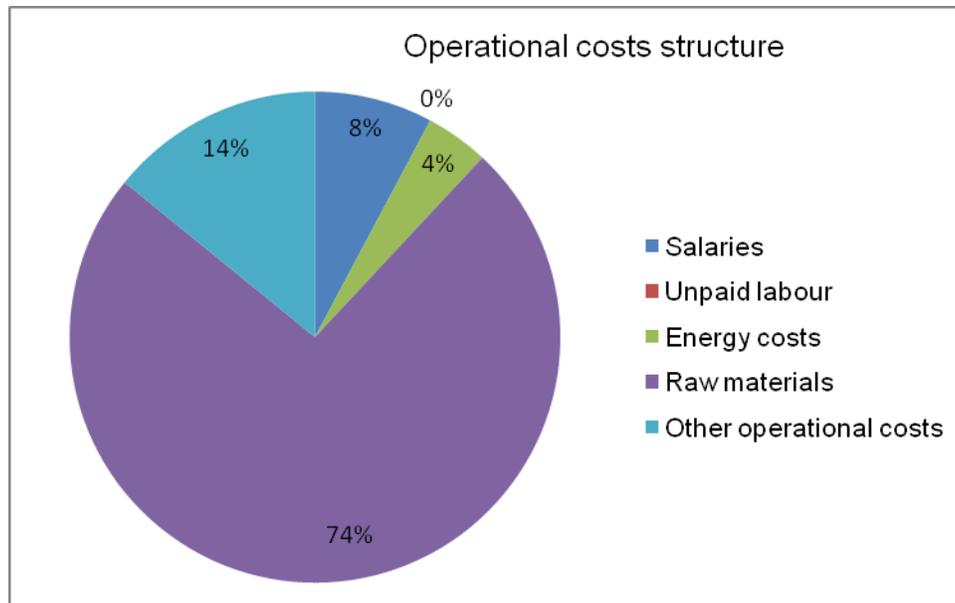
Spain remains the country's main supplier to Italy's processing and canned tuna: in 2008 over 39,500 tons were imported, representing 47% of national imports of fish products. As far as semi-manufactured products, e.g. loins of tuna, around 25% was imported from Colombia and ACP countries.

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. A larger percentage of processed trout has been sold in the national market. For the export market this species has been sold mainly in filled freezing. According to export data figures, in 2008 around 4,500 tons of fresh and freezing trout has been sold, and more than 60% has been absorbed by Austrian and German markets.

#### **5.11.5. Socio-Economic performance indicators and competitiveness**

Total production costs were equal to 3,125 million Euros, which means 99% of the turnover. Taking into account all the costs (production and fixed costs) - see figure below – the great amount of costs (more than 71%) is represented by purchase of raw materials and other products needed for the production. The second cost item by share on total costs is represented by labour costs (7.5% on the total). Energy costs impacted by 4%, while financial and depreciation costs respectively by 1.7% and 1.5%.

Figure 5.31: Distribution of the operating costs in the Italian fish processing industry



The value of the turnover of the sector was equal, in 2008, to 3,158 million Euros while the total income (turnover+ subsidies+ other income) amounted to around 3,200 million Euros showing an increase of +1.33% compared to the value of 2007 (2006-2007 data on income refer only to the overall value of income).

The GVA was equal, in 2008, to 312 million Euros. While increasing in 2007 if compared with 2006, in 2008 GVA shows a declining trend (-13%). This decrease is substantially due to an increase in production costs, especially costs for purchasing of raw material (+3%) not totally compensated by the % variation in the value of total income (only +1%).

The increase in production costs as well in labour costs (+3.5% compared to 2007) strongly impacted the performance of the industry whose OCF was equal, in 2008, to 69 million Euros (about -44% compared to 2007).

Earnings before interest and taxes (EBIT) was equal to about 20 million Euros in 2008, showing a decrease in the period 2006-2008.

The final net result of the sector (net profit after interest) was negative in 2008 (-45 million Euros).

Table 5.23: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	372	372	376
<i>Social indicators</i>			
Male employment			3 890.5
Female employment			3 859.5
Total employment	7 750	7 750	7 750
FTE	na	na	6 355
Salary per employee	29 314	30 332	31 396
Employment per firm	20.8	20.8	20.6
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	na	na	3 158 761
GVA ('000 €)	326 136	358 188	312 480
OCF ('000 €)	98 954	123 114	69 160
EBIT ('000 €)	35 511	62 273	19 691
Net profit ('000 €)	na	na	-35 204
Return on Investment (in %)	1.7%	2.9%	0.8%
Financial position (in %)	23%	24%	33%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	na	na	497
Net profit per FTE ('000 €)	na	na	-5.5
Turnover per firm ('000 €)	na	na	8 401
Running cost to turnover ratio (in %)	na	na	99.0%

The ability of the sector to reward investments (measured by the ROI, return on investment) shows a deterioration in 2008 compared to previous years. On the contrary the table shows an improvement in the financial position (measured as the ratio between own capital or equity and

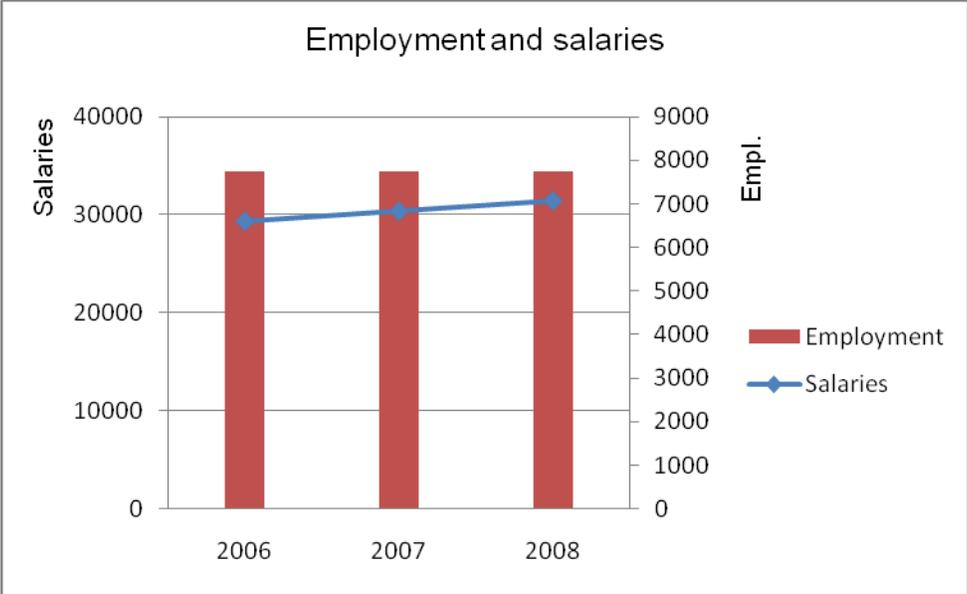
the borrowed capital or debt) substantially due to an increase of own capital (+50%). In any case the value of the financial position indicator in 2008, equal to 33%, is still representative of a situation of under-investment and of strong use of borrowed capital.

Employment in the Italian fish processing sector is distributed quite equally between males and females. Total employment amounted to 7,750 units in 2008 while FTE was equal to 6,355 units, about 82% of employed people.

The number of people employed per firm is on average equal to 21 units while the salary per employees is about 31 thousand Euros in 2008. The salary per employee and the employment per firm are not presented in FTE terms in the table, since only data on FTE is available for 2008. The salary per employee (in FTE) was 38 thousand Euros and the employment per firm is on average 17, in 2008.

As far as the productivity of the sector, in 2008 the turnover per firm and the turnover per FTE were equal, respectively, to 8,401 and 497 thousand Euros.

Figure 5.32: Evolution of the employment and salaries in the Italian fish processing industry



### **5.11.6. Comment on sector's performance and possible development in the future**

#### **5.11.7. Comments on the data**

A first point to stress as far as Italian data is that DCR and DCF data are not always comparable, mainly due to the lack of clear definition of parameters in the DCR. Italian DCR data on income refers to total income. Hence when comparing with DCF data (2008) it is necessary to take the sum of turnover, subsidies and other income. Secondly, in order to compare fixed costs in the 2006-2008 period it should be taken into account that Italian data collected under DCR (2006 and 2007 data) for fixed cost are represented only by depreciation costs while DCF data allows to have depreciation, financial and extraordinary costs separated. Hence, for Italy it is wrong to compare DCR fixed costs with the sum of depreciation, financial and extraordinary costs collected under DCF. This strongly influences the calculation of net profit because for 2006 and 2007 neither financial nor extraordinary costs are available. For these years only EBIT (earnings before interests and taxes) can be calculated. This is an important issue also for the calculation of ROI (return on investment). In the Italian case the ROI indicator cannot be calculated by using the net profit (as in the glossary) for 2006 and 2007 but only for 2008 (the alternative is to calculate ROI with EBIT).

Another important issue to stress as far as data is related to the way enterprises submit data for statistical and fiscal purposes which does not easily allow to identify the real dimension of the processing activity (as already outlined in the previous paragraph). Indeed most firms declaring “freezing and/or chilling” as their main economic activity they actually:

- produce frozen or chilled fish products but also provide marketing services as they sell, mainly to the large distribution channel, both their own and also finished products bought outside;
- do not make any processing activity: they just buy (mainly from abroad) frozen and chilled fish or fish products and re-sell on the national market;
- they just provide storage and transport services;
- they make a small processing, e.g. buy frozen fish fillets and make just packaging activities.

Furthermore Italian financial statements do not allow the distinction between revenues and costs from processing and other activities. In some cases it is quite impossible also for firms to separate processing items from the total.

This can create confusion from a data collection point of view in the sense that the dimension of the sector is probably overestimated (as data can include also commercial activities).

No comparison with Eurostat data is possible. Indeed Italian Structural Business Statistics are not published since 2002 because of confidentiality reasons.

## **5.12. Latvia**

### **5.12.1. Overview of the sector**

Fish processing in Latvia are well developed. In 2008 there were totally 109 registered economic active fish processing enterprises with 5.7 thousand of employment. The total Turnover and total Profit were 215 and 12.6 million Euros respectively. All fish processing enterprises are meeting to the European Union standards. The companies exported their products to more than 60 countries, but the inputs are imported from more than 70 countries. Fish processing is old Latvian tradition and family business especially for small processing enterprises which have less than 10 employees. For the most part of small fish processing enterprises the main production type is Fish, dried, salted or in brine, smoked fish. The most of fish processing enterprises are situated along the coasts of the Baltic Sea the Gulf of Riga.

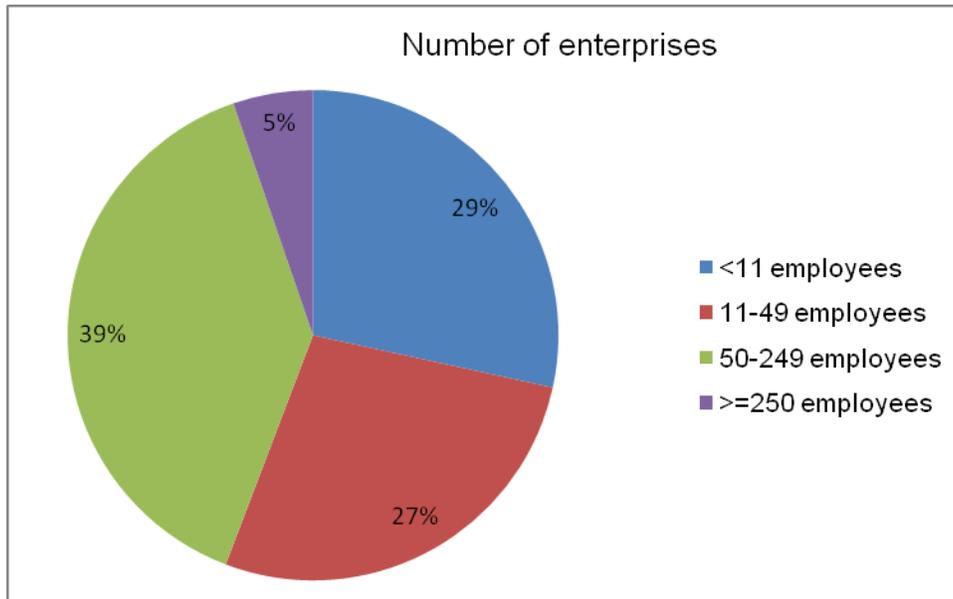
### **5.12.2. Nature of the industry: concentration**

The most of the fish processing enterprises are located in Riga and Roja cities. The high percent of the enterprises are also situated along the Latvian coast and in the Kurzeme 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.

### **5.12.3. Main products and main segments**

The number of fish processing factories decreased insignificantly from 109 in 2006 to 95 in 2008. Small and middle-sized firms dominate in Latvian fish processing industry. In 2008 there were 26 enterprises which had less than 10 employees, 27 enterprises in the segment 11< 49 employees and the biggest segment with 50-249 employees included 37 enterprises. There were only 5 enterprises with more than 250 employees. The number of full time employees significantly decreased from 7184 in 2006 to 5592 in 2008. The most part of the employees were females – 3.6 thousands. It was of about 1.5 thousands more than males.

Figure 5.33: Size distribution of the Latvian fish processing industry



Purchase of fish and other raw material for production have significant increasing from 133 million Euros in 2007 to 160 million Euros in 2008.

The most profitable production type was Prepared and canned fish which bring revenue about 86 in 2007 and 114 million Euros in 2008. Followed by the Fish, dried, salted or in brine, smoked fish - 18 million Euros, Fish frozen 10 million Euros respectively. The total fish production revenue including canned fish has increasing from 130 million Euros in 2007 to 173 million Euros in 2008. The total volume of the fish production also has increasing about 26 thousand tonnes in 2008 compared to the year 2007 and composed about 198 thousand tones. The highest volume was recorded for production type Fish frozen - 92 thousand tonnes in 2008. The Fish frozen contributes 50 percent to total volume of the main production types. The share of the most important product type Prepared and canned fish was 77 percent of total value and 39 percent of total volume for the main production types in 2008. The share of Fish, fresh and chilled was 10 percent.

#### **5.12.4. Dependency on domestic production**

Latvia imports fish products from 20 countries. The largest imports excluding canned fish are recorded from Denmark 8 million, Lithuania 13 million, Norway 11.7 million and Sweden 24.5 million Euros respectively. The total imports excluding canned fish (in) from EU was 61 million Euros in 2008 and its volume was 29 thousand tonnes. The total import excluding canned fish to the world countries was 80 million Euros with total volume 45 thousand tonnes. The total import excluding canned fish (has increasing) increased to 24 percent in 2008 compared with 2007. The most important fish products were frozen and chilled fish. The largest Canned fish import was recorded (for) from Lithuania with value 8 million Euros and of about 3.5 thousand tonnes. The Canned fish value import (to) from EU countries was 16.8 million Euros and value of about 6 thousand tonnes.

The main important export trade partners were Lithuania (with volume of about 7 thousand tonnes and value of about 15 million Euros), Belarus (with volume 23 thousand tonnes and value of about 8 million Euros), Denmark (with volume of about 4 thousand tonnes and value 7 million Euros), Estonia (with volume of about 5 thousand tonnes and value 14 million Euros) and France (with volume of about 3 thousand tonnes and value 9 million Euros). The export to EU countries excluding canned fish was 54 million Euro and 22.5 thousand tonnes. Total export in 2008 excluding canned fish was 69.7 million Euros with volume 74 thousand tonnes. The largest Canned fish exporters in 2008 were USA, Russia, and Estonia for which volume were recorded of about 5, 20, 11 thousand tonnes respectively and value of about 12, 18, 20 million Euros respectively. Total Canned fish export was 60 thousand tonnes with revenue 85 million Euro.

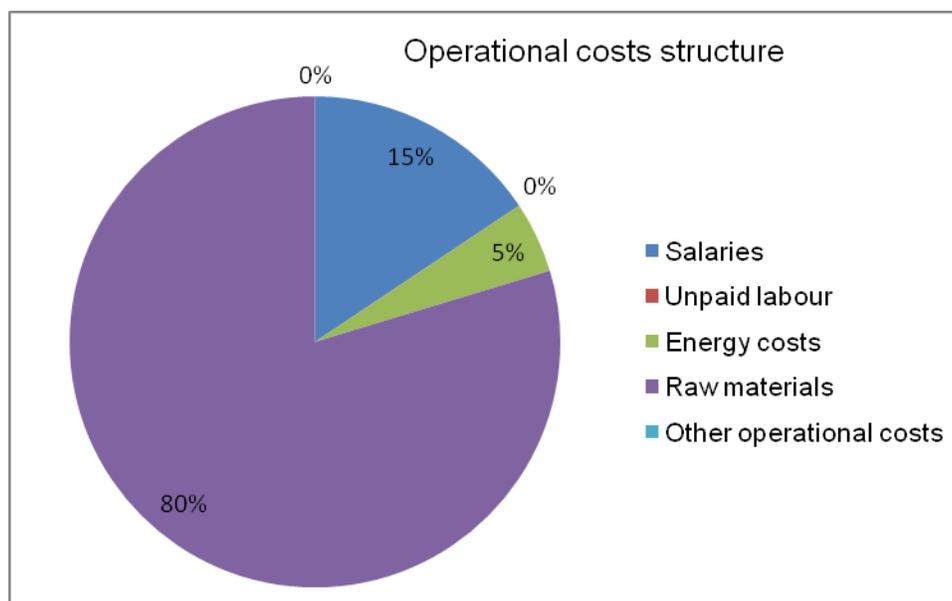
The main production types for export and import in 2008 were Dried, salted and smoked fish, Fish fillet, Frozen fish, Chilled fish.

The indices of the foreign trade balance of fish products and prepared and preserved fish, remained positive - 52 million Euros in 2008 but compared to 2007 however, it significantly decreased.

### 5.12.5. Socio-Economic performance indicators and competitiveness

Due to the missing variables is possible to comment only few of provided economic indicators for the whole period 2006 to 2008. The Turnover shows high growth from 165 million Euros in 2006 to 215 million Euros in 2008. The fish processing industry has a positive profit of about 12.5 million Euros in 2008.

Figure 5.34: Distribution of the operating costs in the Latvian fish processing industry



Especially, the lack of raw materials cost for 2006 and 2007 is major handicap for the analysis of the economic performance of both years, since raw materials is responsible for the 80% of the total operational cost (in 2008). And these operational (or running) costs represent a 93.6% of the total turnover in 2008.

Table 5.24: Socio-economic performance and competitiveness indicators in 2006-2008

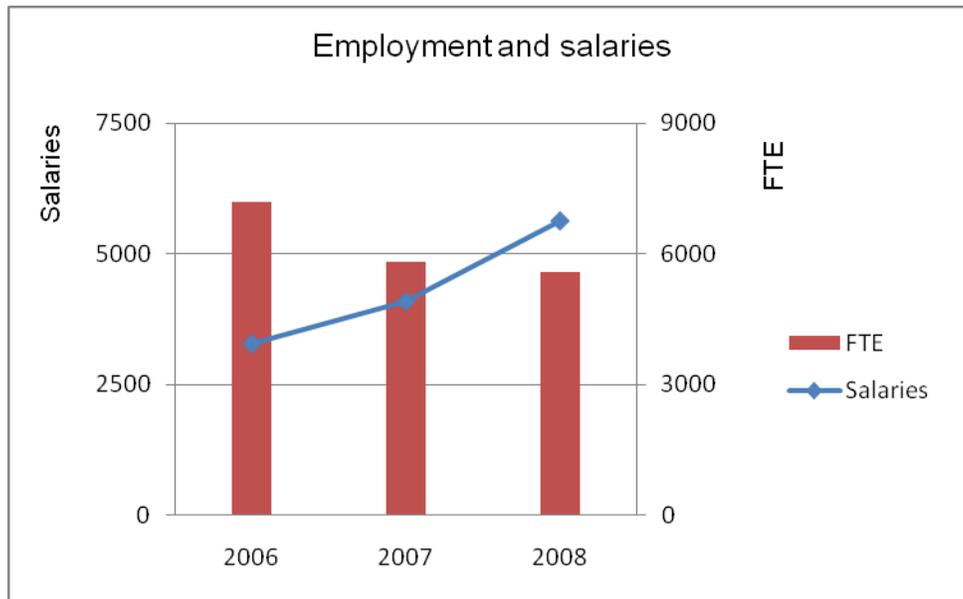
Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	109	109	95
<i>Social indicators</i>			
Male employment	na	na	2 149

Female employment	na	na	3 646
Total employment	7 498	6 151	5 795
FTE	7 184	5 803	5 592
Salary per employee (FTE)	3 286	4 093	5 631
Employment (FTE) per firm	65.9	53.2	58.9
% of paid work	na	na	na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	165 823	167 222	215 111
GVA ('000 €)	na	na	54 307
OCF ('000 €)	na	na	22 923
EBIT ('000 €)	na	na	14 508
Net profit ('000 €)	na	na	12 561
Return on Investment (in %)	na	na	13.0%
Financial position (in %)	32%	37%	34%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	23 082	28 816	38 467
Net profit per FTE ('000 €)	na	na	2 246
Turnover per firm ('000 €)	1 521	1 534	2 264
Running cost to turnover ratio (in %)	na	na	93.6%

When looking at the turnover per FTE and turnover per firm from the previous table, it can be seen an increase in the productivity for the period 2006-2008. Moreover, the return on investment (considering the EBIT) for 2008 is of the 13%; while considering the net profit, the return on investment is of the 11.2%.

Despite a reduction in the employment, in both number and FTE terms, the average salaries have been increasing from the whole period, as it can also be seen from the following figure.

Figure 5.35: Evolution of the employment and salaries in the Latvian fish processing industry



**5.12.6. Comment on sector’s performance and possible development in the future**

In the end of 2008 and in 2009 the fish processing industry received a negative impact from the global economic crisis, which led to significant decrease of fish production volumes. Some of Latvian fish processing companies used European financial funds to develop their enterprises. The owners used an additional funding to invest it in the new equipments and for modernization of the processing process and for productivity increasing.

**5.12.7. Comments on the data**

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, which have classification according to EU NACE Rev.2. group 03.1. The participation of the responders where are more than 10 employments is obligatory according to the Latvian national legislation. However, the participation in the survey is not obligatory for the small enterprises in the processing industry.

The data collection type was Census for all fish processing industry segments in 2008. Economic indicators for the Latvian fish processing industry were collected for the first time in 2006 and 2007. The type of data collection was Probability Sample Survey. The coverage was of about 70 percent.

There were only total values for Investments in 2006 and 2007. Some of costs data were missed such as Raw materials cost, Packaging cost, Other running costs, Fixed costs, Total production costs. It is not possible to provide the Raw material data by species because the data are provided by Latvian Statistical Bureau and are collected according to EU PRODCOM codification. The parameter production type cannot be requested for 2006-2007 by PRODCOM codification. PRODCOM codification system not specified to provide the Raw material data by species according to the statistic regulation.

Economic indicators for 2006 and 2007 could not be calculated due to the missing variables (especially raw materials cost that is the main cost item).

The system of economic data collection was developed and improved in 2008. There was full data coverage in 2008 for all enterprises and all economic parameters according to the DCF excluding Imputed value of Unpaid labour. The value of Imputed value of Unpaid labour has not been provided because the information which Latvian Statistical Bureau can request are based on the questionnaires/statistical forms and administrative sources were data are taken from bookkeeping balance. The variable Imputed value of Unpaid labour didn't exist in the balance sheet and also in the questionnaires form. This variable will be calculated when the clear methodology will be provided and official document describing the accepted method of calculation. The data for Raw material costs include Other operational costs. Other operational costs data cannot be divided for 2008. The Turnover data could not be provided for the enterprises doing fish processing but not with their main activity. There were only 6 enterprises in this group and the data were not provided for the confidentiality reasons.

All fish processing industry data for 2008 were provided by Central Statistic Bureau of Latvia in according to the definition in Appendix XII of COMMISSION DECISION (2008/949/EC)

Council Regulation (EC) No 199/2008 or Structural Business Statistics (SBS) definition  
Commission Regulation (EC) No 2700/98.

The fish processing industry data for 2006 and 2007 were collected and provided by Central Statistic Bureau of Latvia according to the Appendix XIX (Section K), Council Regulation (EC) No 1543/2000, and Commission Regulation (EC) No 1639/2001. The data for Turnover and average prices by production type were provided according to the Council Regulation (EES) No 3924/91 of 19 December 1991 on the establishment of a Community survey of industrial production, Commission Regulation (EC) No 912/2004, of 29 April 2004 implementing Council Regulation (EEC) No 3924/91 on the establishment of a Community survey of industrial production and Commission Regulation (EC) No 163/2010 of 9 February 2010 establishing for 2009 the “Prodcom list” of industrial products provided for by Council Regulation (EEC) No 3924/91.

## **5.13. Lithuania**

### **5.13.1. Overview of the sector**

The fish processing sector could be named as one of the most important sectors of the Lithuanian fisheries. 5013 employees are engaged in fish processing factories and only the production volumes of high-sea fishery of Lithuanian fishing fleet are higher than the production volumes of fish processing.

The fish processing volumes show the tendency to increase year by year, while the number of fish processing factories remains almost stable over the years. It indicates that the companies use more effectively their capacity. In 2008 and in 2006 there were 37 fish processing enterprises in Lithuania approved by the State food and Veterinary Service of the Republic of Lithuania and in 2007 the number of fish processing enterprises was 36. The volume of the production of Lithuanian fish processing enterprises was more than 83 thousand tons, the turnover –167 million Euros in 2008. Comparing the figures of the years 2006-2008 the volume of the production increased by 16% in 2007 and by 6% in 2008 whereas the turnover increased by 35% in 2007 and by 9% in 2008. The employment calculated in full time equivalent in the fish processing industry increased from 4039 in 2006 to 4088 in 2007 and decreased to 2912 in 2008, while number of persons employed decreased from 5035 in 2006 to 4632 in 2007 and increased to 5013 in 2008.

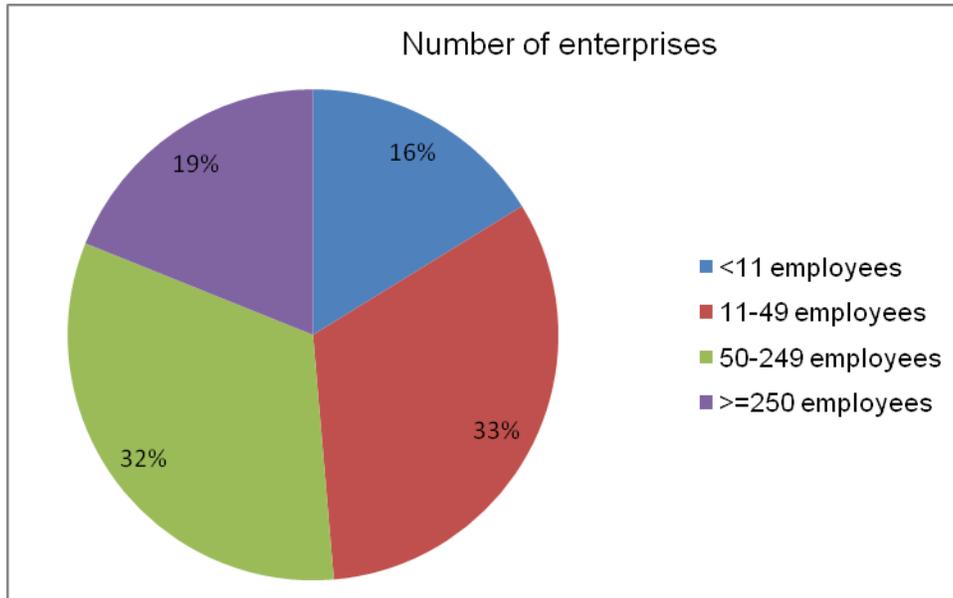
### **5.13.2. Nature of the industry: concentration**

The main Lithuanian fish processing plants are concentrated near the port or the biggest Lithuanian towns with a good infrastructure. More than one third of the fish processing plants (13 enterprises) are situated near the port of Klaipeda in Klaipeda district.

Nearly all companies are of local capital. Moreover, the biggest Lithuanian fish processing company owns the fish processing factories not only in Lithuania but also abroad, even in third

country – Russia. However this evaluation of data comprises only the factories located in Lithuania.

Figure 5.36: Size distribution of the Lithuanian fish processing industry



There is a balance between the numbers of small and medium or big companies by the number of employees. The two equally important groups of fish processing companies are of the sizes of 11-49 employees and of 50-249 employees – they cover one third of all companies each. It is interesting to notice that there is one fish processing company in Lithuania employing more than 1 000 people and 13 enterprises employing more than 100 people.

Lithuanian fish processing industry is characterised by a mix of companies, some with highly modern production facilities that deliver products of the best quality for EU and international markets, while others are less technically sophisticated, mostly oriented to Lithuanian market. It is not surprising that the modern companies usually are the biggest ones, the owners of which are able to ensure the permanent investment flows to their business.

A few small fish processing plants are owned by fishermen and process the caught inland or Baltic Sea fish. All the other plants do not have any capacity for fishery, their activities are

specialized only on fish processing and naturally trade as far as it concerns the purchase of raw material for processing and selling the products processed.

### 5.13.3. Main products and main segments

Almost all the Lithuanian fish processing companies are specialized to produce several groups of fish products; only few companies are specialized in the production of only one products group. However the medium and big companies (from 50 employees) produce near 90% of production both in volume and in value.

It is quite complicated to segment the data on raw material for processing by the fish species even if in Lithuania the assortment of species for processing probably is less varied than in south Europe countries. From Baltic Sea species cods and herrings are processed in Lithuania, from other species – farmed salmons, mackerels and other.

Main products of Lithuanian fish processing industry in 2008 were aromatized sea products (surimi products); the production of these products covered 28% of total volume of processed fish products. The salted fish products covered 18.5%, frozen fish products – 18.1%, smoked fish products – 10.4% of total volume of processed fish products. The smallest group of products (excluding non alimentary products) of Lithuania fish processing industry remains dried and withered fish products – 1.1% of total volume.

Table 5.25: Main products (in 1000 Euro)

Main products	2006	2007	2008
Aromatized sea products	1909	49851	53356
Frozen fish products	48711	35219	24613
Smoked fish products	27914	31748	34076
Salted and soused fish products	26894	27857	26571

Quite strange trend appears in the production of aromatized fish products which by value of production in 2007-2008 were in the first place and in 2006 it was far from being amongst the most important products. This appearance may be caused by the lack of information in the

sample of economic data, moreover the volume of production of aromatised products received from all the registered enterprises shows that these products are in the top of volumes processed since 2004.

The interesting situation is noticed while comparing the raw material costs and production volumes and values. In 2008 the raw material costs decreased by 16% while both the production volumes and the production values increased in the same time respectively by 6% and 14%. The presumption can be made that either the factories turned themselves to the cheaper raw material use or they were using raw material purchased in the previous year (storing possibilities).

#### **5.13.4. Dependency on domestic production**

Lithuanian fish processing industry is dependent on the imported raw material. Taking into account the volumes of the Lithuanian Baltic Sea and inland fishery (25 000 tons in 2008) and aquaculture (3 000 tons in 2008) it is evident that local supply do not cover the demand of relatively big fish processing industry. Furthermore the high-sea fleet in general does not land the catches in Lithuania, the domestic assortment of fish for processing is poor and also the main aquaculture product (95% of total aquaculture production) – carp – is in general not used for processing because of the local consumers traditions to buy carp live. Most of the fish caught by Lithuanian fishermen in Atlantic and Pacific Oceans is realized in the foreign markets, while only small part of it is used in Lithuanian fish processing plants. One of the main domestic species – Baltic cod – is used for processing in small companies; other domestic species are used for impermanent processing. The fish originating from inland fishery is usually smoked or dried by fishermen or in the small processing plants, situated near the fishing areas. These are the factors explaining why the raw material for processing comes mostly from imports.

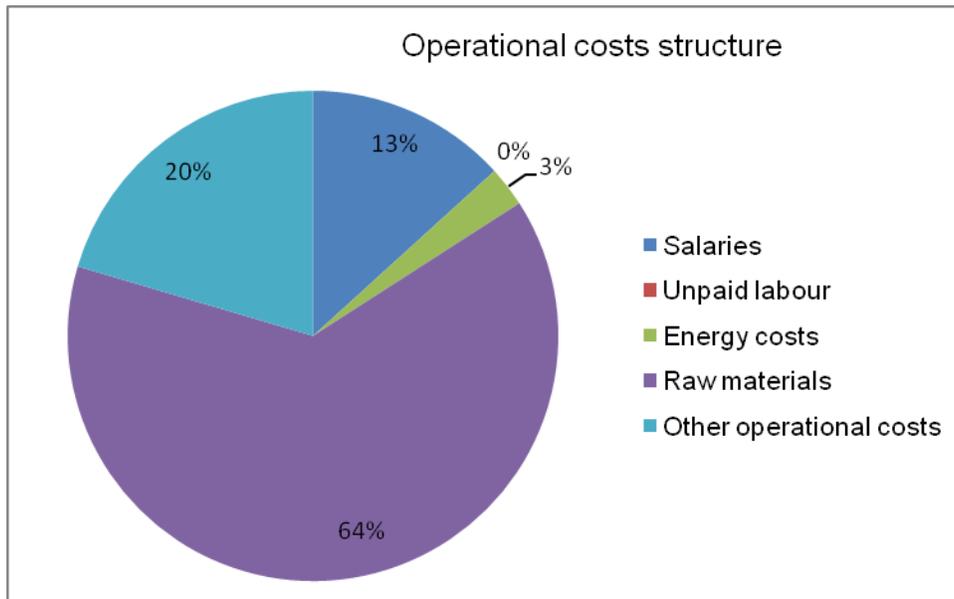
The analysis of the structure and directions of Lithuanian foreign trade in fish products capacitates to designate the countries providing raw material for Lithuanian fish processing industry. Assuming that the principal raw materials for fish processing are frozen fish products, fish fillets and meat, Norway, Vietnam, Iceland, Germany, Spain, Kazakhstan, USA, China, Argentine, Netherlands, and Faroe Islands can be indicated as the main partners in purchase of raw materials for fish processing of 2008. In the period of 2006-2008 the import of fish filet and

other fish meat covered more than 40% of the total volume of imported fish in each year. Frozen fish is also imported intensively: more than 30% of the total volume of imported fish products each year. Main imported species to process were Pacific salmons, herrings, sardines, mackerels, hakes, and pollack and certainly significant is the import of surimi raw material.

**5.13.5. Socio-Economic performance indicators and competitiveness**

Operational or production related costs share 92% of total fish processing industry costs. Comparing the data of 2006-2008 the total production costs in 2007 increased by 40% and in 2008 remained almost identical to the level of 2007. The increase of the costs in 2007 could be explained by increase of raw material costs by 75%, the more because that the raw material costs are the main segment in the production costs structure covering two thirds of total costs and that all the other production costs in 2007 decreased. It is also surprising that the energy costs increased by 89% in 2008 after the decrease by 56% in 2007 and it is doubtful that this could be explained only by the increase of fuel prices. The production-related cost structure in Lithuanian case does not include unpaid labour value and extraordinary costs; this is why the values of these both parameters are 0.

Figure 5.37: Distribution of the operating costs in the Lithuanian fish processing industry



The fixed cost comprised of capital depreciation and financial costs increased by 40% in 2008. That was directly related to the financial costs which rose up two times.

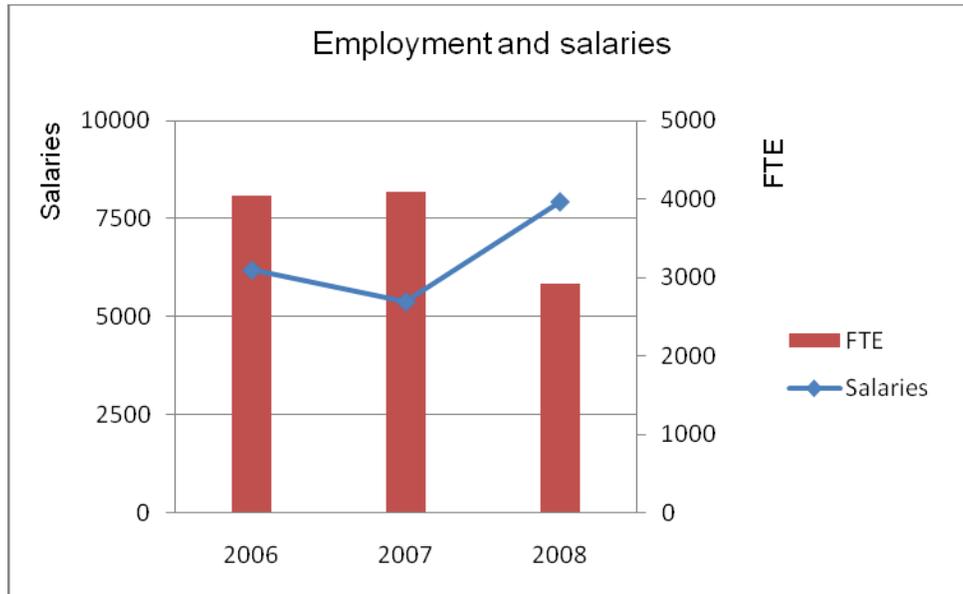
Table 5.26: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	37	36	37
<i>Social indicators</i>			
Male employment			1 583
Female employment			3 430
Total employment	5 034	4 632	5 013
FTE	4 039	4 088	2 912
Salary per employee (FTE)	6 190	5 383	7 930
Employment (FTE) per firm	109	114	79
% of paid work			100
<i>Economic Performance indicators</i>			
Turnover ('000 €)	131 353	177 516	194 874
GVA ('000 €)	34 194	27 546	71 832
OCF ('000 €)	9 194	5 539	48 739
EBIT ('000 €)	255	-1 229	41 855
Net profit ('000 €)	-3 791	-5 382	33 592
Return on Investment (in %)	0.2%	-0.7%	26.3%
Financial position* (in %)	57%	48%	48%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	33	43	67
Net profit per FTE ('000 €)	-0.9	-1.3	11.5
Turnover per firm ('000 €)	3 550	4 931	5 267
Running cost to turnover ratio (in %)	93.0%	96.9%	89.4%

In the fish processing factories 5013 people are employed, 68% of which are women. As it is already mentioned the number of persons employed decreased from 5035 in 2006 to 4632 in 2007 and increased to 5013 in 2008 while the employment calculated in full time equivalent

increased from 4039 in 2006 to 4088 in 2007 and decreased to 2912 in 2008. The value of turnover per FTE indicator lets state that the labour productivity is continually increasing every year and the turnover per firm signify the growing producing capacity of firms.

Figure 5.38: Evolution of the employment and salaries in the Lithuanian fish processing industry



The trend of variation in salaries and FTE demonstrate the inverse rate between these two parameters – both the labour cost and the salary per FTE are declining when the FTE is on the raise and conversely.

Almost all the fish processing enterprises are joint-stock companies; that is why it is presumed that no unpaid labour occurs in this sector and the paid labour rate is 100%. Actually few small fish processing companies are owned by private persons but in any case the unpaid labour probably existing in these companies is unessential in the context of all Lithuanian fish processing industry.

In 2008 it was started to collect data on subsidies, other income than turnover. Differently from subsidies which were 0, other income keeps a significant place in the income structure and covers more than 12% of total income of fish processing industry. This may explain the

appearance of the significant growth of GVA, OCF, net profit and return on investment indicators values in 2008. All these indicators for 2006-2007 were calculated on turnover ground (excluding other income) whereas the calculation of 2008 is based on the all income. Calculating the indicators of 2008 on the same ground as in 2007, the GVA indicator would be 44 million Euros, OCF – 21 million Euros, net profit –5 million Euros, return on investment – 3%.

Regardless of the increase of production and turnover Lithuanian fish processing enterprises incurred losses of 5382 thousand Euros equal to 3% of total turnover in 2007. Comparing with the indicators of 2006 the losses increased in one year by 42 percent. It was presumed that the year of 2008 would not be better than previous years in terms of profitability, by contraries in 2008 the companies had the profit of 33 million Euros (calculating on the turnover basis) or of 5 million Euros (calculating on the income basis).

#### **5.13.6. Comment on sector's performance and possible development in the future**

Regardless the profit in 2008 in the coming 2009-2010 years the fish processing sector may meet losses higher than in 2006-2007. The one presumptive reason of that would be the forthcoming economic crisis – decrease of production volumes, and deterioration of the production and product prices influenced by the decrease of consumption/demand. The other reason – presumptive increase of interests paid for loans because of further investment using credits in the processing and in business despite the fact that Lithuanian fish processing industry is already modern and higher quality oriented. It is also noteworthy that beginning from the year of 2009 the economic data will presumable reflect the investment using the financial assistance of European Fisheries Fund (EFF). This factor may affect the parameters of assets, the debt (the companies private contributions are usually borrowed), employment, even the number of companies. If the companies start to expand the business, the production related parameters as costs and turnover may increase, nevertheless the production costs structure should steady in the coming years. In the face of economic crisis all the costs probably will decrease but the cost structure should stay unchanged.

### **5.13.7. Comments on the data**

The data of 2008 for the evaluation of fish processing sector was collected by Fisheries department under the Ministry of Agriculture of the Republic of Lithuania and managed by Lithuanian Institute of Agrarian Economics. Since 2008 the Order of the Minister of Agriculture of the Republic of Lithuania on the fisheries statistics regulates the forms and the terms for the sector to submit the data under DCF. This could be the reason why the overall response rate on 2008 fish processing industry data was 54% after the response from 30% of enterprises in 2006 and 33% in 2007. It could be inferred that the national regulation on data submission rules for the sector justified itself and according to that the response rate should prompt jump up taking into account that the 2008 year was the first year reported under this new system.

Comparing the data of Eurostat with the DCF related data it is obvious that all the parameters starting from the number of fish processing enterprises are very different. For the evaluation under DCF only the enterprises indicated by State food and Veterinary Service of the Republic of Lithuania are covered whereas regarding the Eurostat data Lithuania should have two times more fish processing companies than counts State food and Veterinary Service approving the fish processing establishments. Consequently for the fish processing sector evaluation under DCF the Lithuania operates only the data especially collected for this purpose whereas data of Eurostat and Lithuanian statistics department are not used assuming that these data is far to reflect the real state of the fish processing in Lithuania.

## 5.14. Malta

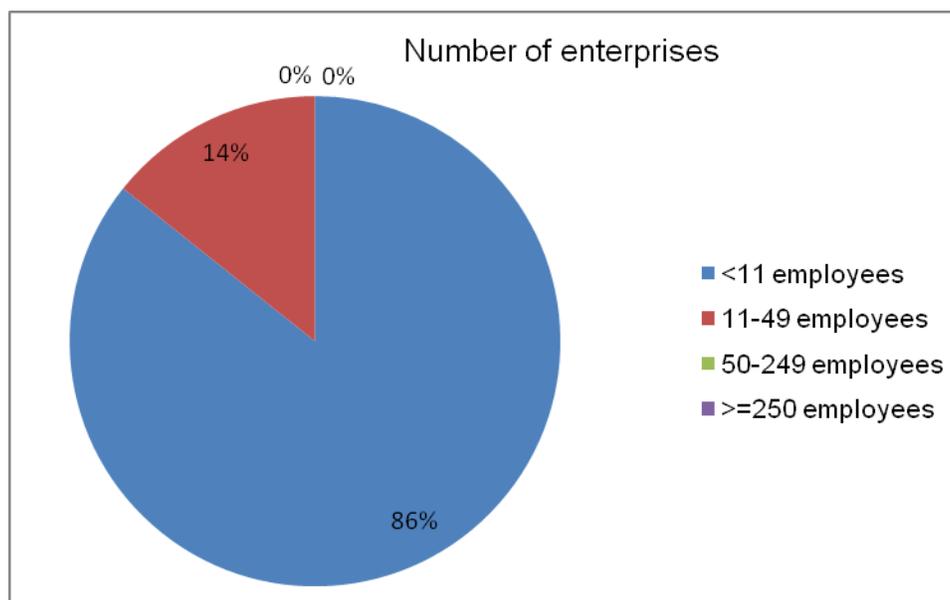
### 5.14.1. Overview of the sector

The fish processing industry in Malta is relatively small scale when compared to other Member States. The main reason is because the local catch is only around 1000 tonnes and usually consists of high-value fish which is consumed in its fresh state or indeed exported. The number of fish processors during the years 2006-2008 amounted to 7 enterprises and depend mostly on the processing of blue fin tuna, aquaculture produce and imported salmon.

### 5.14.2. Nature of the industry: concentration

There is no specific area where such enterprises are located, however almost all are located close to main ports. One of the fish processors is by far the largest compared to the other smaller fish processors. In fact, according to 2008 data, only one fish processor falls into the category of employing 11-49 employees, all the other 6 fish processors employ less than 11 employees.

Figure 5.39: Size distribution of the Maltese fish processing industry



### **5.14.3. Main products and main segments**

The Maltese fish processing industry is characterised by the distribution of a variety of species, however, according to the raw material data for 2006 and 2007 and as explained below tuna followed by salmon is by far the main product processed.

In the case of Atlantic blue fin tuna, it is exported fresh or frozen to Asian markets, mainly Japan. European sea bass and gilthead sea bream from aquaculture produce are exported mainly to central and north Italy, the main buyers being large supermarkets or hypermarket chains, as well as large wholesalers.

The four main species used as raw material in the Maltese fish processing industry are tuna (*Thunnus thynnus*), dolphin fish (*Coryphaena hippurus*), swordfish (*Xiphias gladius*) and salmon. In the year 2006 the amount of tonnes used amounted to 5493, 7, 11 and 56 tonnes respectively. In the year 2007 the same species used as raw materials amounted to 1041, 7, 11 and 59 tonnes respectively. The reason for the large difference between the amounts of tuna processed between the years 2006 and 2007 is due to the fact that in 2006 Malta bought a larger amount of fish for processing from tuna farms.

As from the year 2008, this type of data was not required to be collected for the purpose of the data collection framework and therefore it is not available for 2008.

### **5.14.4. Dependency on domestic production**

Fish processing in Malta relates mainly to tuna aquaculture harvesting and packing. There is also some limited activity relating to capture fish both local and imported, both fresh and frozen. In this case some activity in terms of slicing, filleting, portioning, rewrapping and smoking takes place.

### **5.14.5. Socio-Economic performance indicators and competitiveness**

The low economic performance in 2006 can be explained by the importance of the operating costs in comparison with the total turnover, but in 2007 and 2008 the economic performance improved since the ratio of the operating costs in comparison with the total turnover decreased.

The most important cost account inside the operating costs is the cost in raw materials, which supposed a 68% of the total operational costs in 2008.

Figure 5.40: Distribution of the operating costs in the Maltese fish processing industry

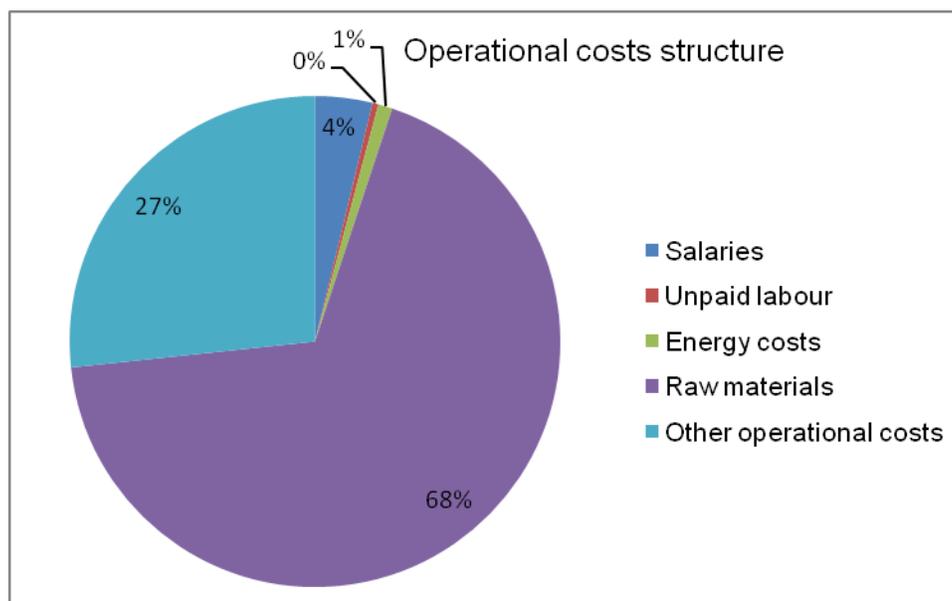


Table 5.27: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	7	7	7
<i>Social indicators</i>			
Male employment	na	na	53
Female employment	na	na	3
Total employment	67	112	56
FTE	67	112	40
Salary per employee (FTE)			33 000
Employment (FTE) per firm	9.6	16.0	5.7
% of paid work	na	na	90.5%
<i>Economic Performance indicators</i>			
Turnover ('000 €)			35 000

GVA ('000 €)			
OCF ('000 €)			
EBIT ('000 €)			
Net profit ('000 €)			
Return on Investment (in %)			
Financial position* (in %)			
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)			900
Net profit per FTE ('000 €)			
Turnover per firm ('000 €)			5 000
Running cost to turnover ratio (in %)			

The important variations in the employment, especially in FTE terms, lead to significant variations in most social and productivity indicators.

#### **5.14.6. Comment on sector's performance and possible development in the future**

The Maltese processing industry in 2008 generated more than 35,000 thousand Euros. There was a substantial decrease in revenue during the year 2007 when compared to both 2006 and 2008. This is due to the fact that there has been a decrease in tuna production from fish farms. The year which generated most turnover was the year 2008. The latter is also true for the turnover per FTE and the turnover per firm figures.

Employment in 2007 has been the highest amounting to 112 employees, while 2006 and 2008 had a total number of employees amounting to 67 and 56 employees respectively. The FTE for 2006, 2007 and 2008 amounted to 67, 112 and 40 FTEs respectively.

#### **5.14.7. Comments on the data**

Because of confidentiality issues due to the low number of companies that do fish processing as main activity, we are only presenting a reduced part of the data submitted by Malta, and some of the data presented has been rounded.

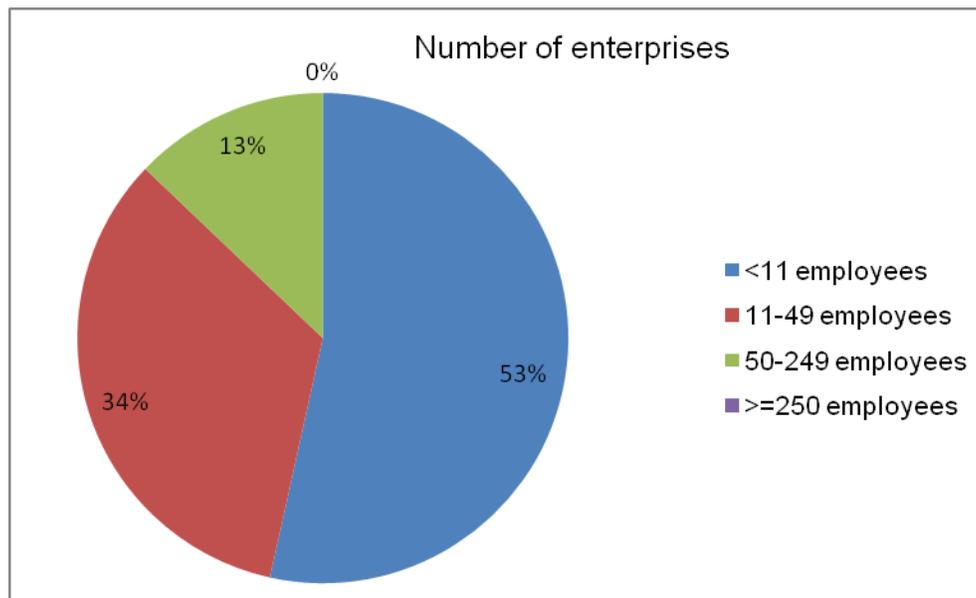
Data for the value of unpaid labour is important for Malta. This is because most of the enterprises are small and the owners themselves carry out most of the work in the enterprise. The value of unpaid labour is calculated by multiplying the estimated number of hours of unpaid labour derived from questionnaires and the average wage rate of the particular job done.

## 5.15. Netherlands

### 5.15.1. Overview of the sector

In 2008 the Dutch processing sector according to NACE code 10.20 consists of 101 companies. Turnover accounted to 712 million Euros, while the level of employment was 2,335 FTE. In The Netherlands, processing is often integrated with trading activities. There are about 300 companies that are involved in the processing and trading of fish and shellfish. Data are based on figures of the Dutch statistical agency about the processing industry. In 2008 economic data from 46 companies was collected and aggregated to the total number of companies in the Dutch fish processing industry. The sample contains small companies with less than 20 employees and larger companies with more than 20 employees.

Figure 5.41: Size distribution of the Dutch fish processing industry



### 5.15.2. Nature of the industry: concentration

In 2008 more than 85% of the fish processing companies have less than 50 working persons. Most of the fish processing companies are situated near coastal harbours or the borders of the

IJsselmeer. Shellfish production and processing is concentrated at Yerseke, in the most southwestern region of the Netherlands.

Nearly all processing companies sectors are facing a decreasing supply of raw materials from the North Sea. Most processing companies deal with this situation by shifting from domestic supply to the import of farmed fish. Farmed fish can provide a stable supply of raw material. Others companies are more focusing on international markets that offer better opportunities for their products.

### **5.15.3. Main products and main segments**

The main sources of raw material for the fish processing industry are flatfish, herring, shrimps and shellfish (especially mussels). The Netherlands still has an important position in the processing and trading of flatfish and roundfish. The supply of raw materials and the pressure put on the margins are seen as the main threats. The most important products are sole and plaice and other flatfish products, but also imported non European flatfish and roundfish species are a significant group of processed products. About 85% of the processed roundfish and flatfish in The Netherlands is exported. Italy, Germany, France, Spain and Belgium are the most important markets for roundfish and flatfish. Plaice is exported as frozen fillets and sole as whole fresh product.

The shellfish industry is mainly focusing on fresh mussels and oysters. Most of the large shellfish processing companies have integrated the farming and processing sector and are concentrated around Yerseke. More than 60% of the shellfish sector's sales are to countries outside the Netherlands. Belgium and France are the most important export markets for mussel companies. The four largest mussel processing companies have a large market share of almost 60%. The economic performance of the shellfish sector is relatively strong compared to other fishing sectors. Marketing factors such as the image of mussels and oysters as a traditional and regional product contribute to this position.

Other important market segments are the processing of herring for Dutch consumption and the smoking of salmon and eel. North Sea brown shrimp are an important sector in terms of value but the processing of brown shrimp is outsourced to peeling companies in Morocco.

#### **5.15.4. Dependency on domestic production**

Recent data about the input of raw material for the processing industry are not available. In 2005 the input of raw material was estimated at about 250,000 tonnes of raw material (flatfish, herring, salmon, shrimp and mussels). The availability of raw materials from the North Sea still is an important issue. The amount of imported farmed fish from Asia is still growing and the European market for whitefish becomes increasingly integrated. Also the high oil prices in 2008 put pressure on the auction prices.

Because of environmental regulations with respect to the fishing of mussel seed there is a limited supply of mussels. Opportunities for the growth of mussel seed fisheries are not very positive. Experiments to farm mussel seed have started and have to become an alternative for the fishing of mussel seed. In order to have enough raw material, mussel processing companies import raw material from Germany, Denmark, Ireland and Chile.

The smoking of salmon and processing of herring are depending on imports. Shrimps are based on domestic production but are often integrated with the importing of shrimps or prawns from Asia.

#### **5.15.5. Socio-Economic performance indicators and competitiveness**

Figure 5.42: Distribution of the operating costs in the Dutch fish processing industry

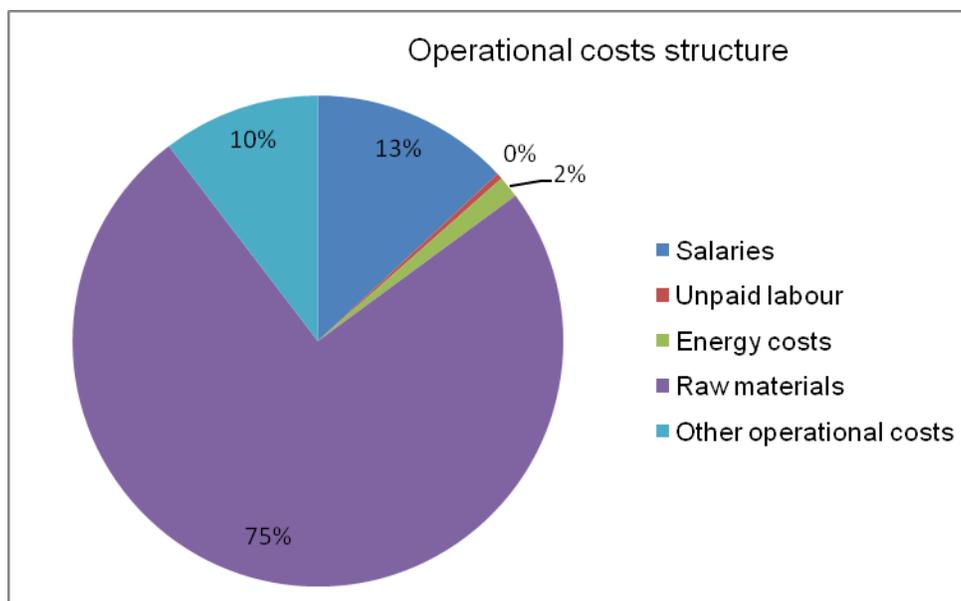
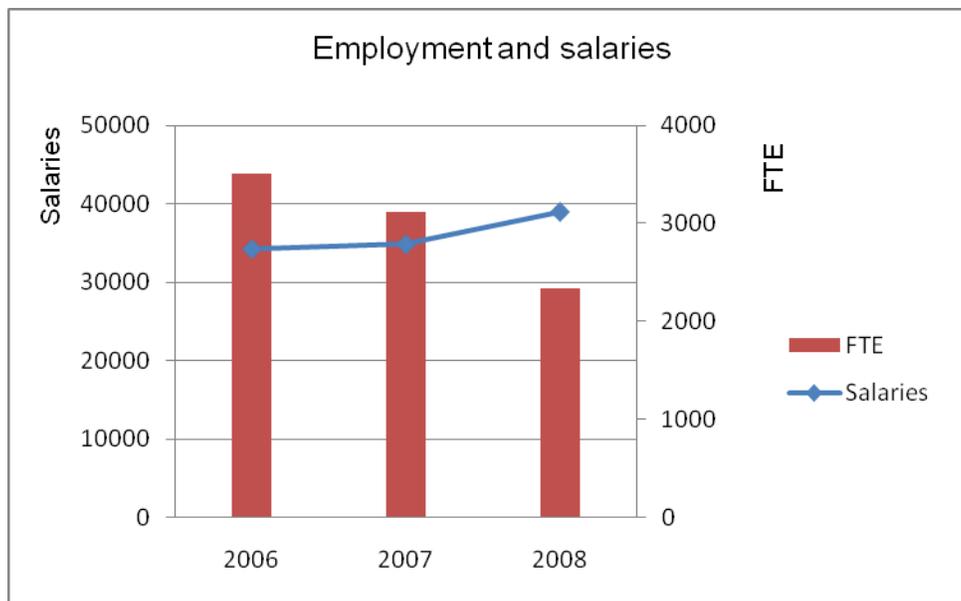


Table 5.28: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	112	124	101
<i>Social indicators</i>			
Male employment			
Female employment			
Total employment	4 151	3 723	2 953
FTE	3 501	3 120	2 335
Salary per employee (FTE)	34 268	34 850	38 927
Employment (FTE) per firm	31.3	25.2	23.1
% of paid work			97.1%
<i>Economic Performance indicators</i>			
Turnover ('000 €)	799 073	756 622	712 280
GVA ('000 €)	174 983	165 330	139 303
OCF ('000 €)	55 011	56 599	48 409
EBIT ('000 €)	32 646	39 723	32 334
Net profit ('000 €)	26 524	30 932	23 543

Return on Investment (in %)	na	na	3.2%
Financial position (in %)	70%	60%	43%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	228	243	305
Net profit per FTE ('000 €)	7.6	9.9	10.8
Turnover per firm ('000 €)	7 135	6 102	7 052
Running cost to turnover ratio (in %)	95.8%	96.1%	94.8%

Figure 5.43: Evolution of the employment and salaries in the Dutch fish processing industry



#### 5.15.6. Comment on sector's performance and possible development in the future

The decrease in the number of firms in the fish processing industry implicates a shift from companies that have fish processing as main economic activity to companies that are mainly involved in wholesale and trading. Also one major flatfish processor went bankrupt. Although the number of employees, turnover, gross added value and net profit decreased compared to 2008, the turnover per firm, turnover per FTE and net profit per FTE increased. A possible explanation for this is that the fish processing companies that switched to processing were forced by financial considerations. The processing companies that still have fish processing as main economic activity might be financially healthy. As flatfish stocks seem to recover and the

European quota for plaice increase in the next years, the number of fish processing companies might increase.

#### **5.15.7. Comments on the data**

Because of the integration of processing and trading it is difficult to allocate economic data to the processing industry solely. The estimated turnover of all Dutch processing and wholesaling companies in 2005 was 2.7 billion euro. Furthermore 0.9 billion euro in fish products was shipped through Dutch main ports. From the data it appears as if some fish processing companies have gone bankrupt, but they switched from processing to wholesaling as main economic activity. Detailed information about the input of raw material for the fish processing sector is not available. Collection of these data is difficult and requires more intensive data collection, such as face-to-face interviews.

## **5.16. Poland**

### **5.16.1. Overview of the sector**

The Polish fish processing industry includes two types of business: preliminary processing i.e. separating of raw materials' edible parts and proper processing – processing into highly processed products. The structural development in the fish processing industry is characterised by an increasing number of companies involved in fish processing listed by the General Veterinary Inspectorate. In 2008, 280 processing companies were listed, compared with 269 in 2007, and 242 in 2006. Most of them defined the primary production under the NACE Code 10.20. (205 in 2008, 187 in 2007 and 189 of them in 2006). The remaining ones were involved in fish business, but as a secondary activity (53 in 2006, 82 in 2007 and 75 in 2008).

Mainly German, Norwegian and Danish capitals are involved in fish processing in Poland. There is a gradual consolidation of the industry. The strongest companies have started the process of building capital groups, gradually taking over the weaker firms.

The sector is characterized by a continuous increase of production, sales and employees. In 2008, the volume of production of fish processing industry defined as a main activity increased to 386.7 thousand tonnes (7%). The turnover increased to 1.44 billion Euros in 2008 (17%). The employment also increased by 11% to 16 355 employees.

A key driver of sales of the sector was a growing export. The share of revenues from direct exports in total sales accounted for more than 50% of the value of products sold. The internal market was also growing. Household fish and fish product average monthly consumption increased by 7% to 0.48 kg per capita, according to Household Budget Surveys conducted by the Central Statistical Office.

The sector is characterized by the increase in investment activity in recent years due to the activities aimed at improving competitiveness in foreign and domestic markets. The investments

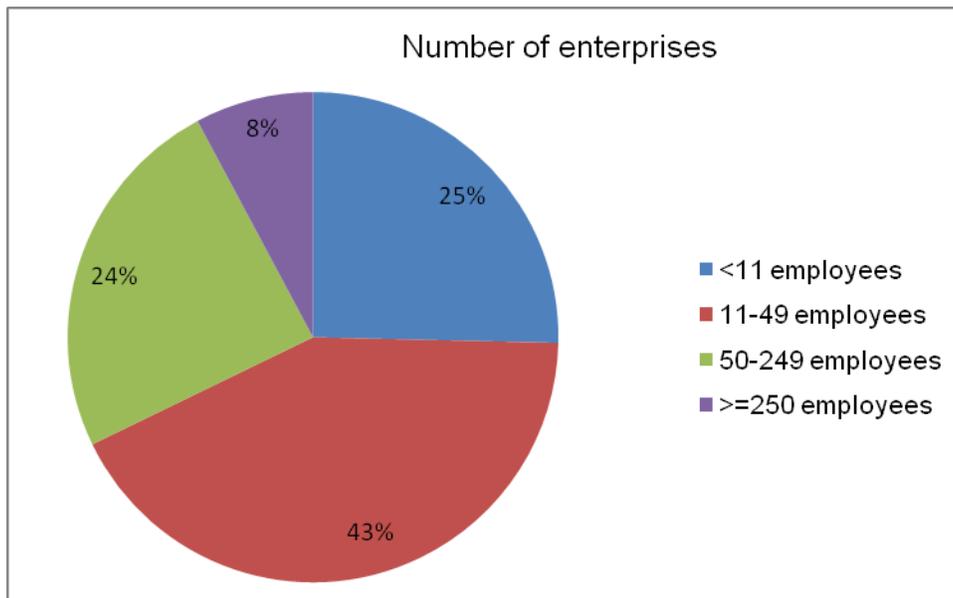
were supported by grants under the Sectoral Operational Programme "Fisheries and Processing" 2004-2006.

### 5.16.2. Nature of the industry: concentration

The fish processing industry in Poland is highly concentrated. In 2008, 16 out of 205 enterprises have  $\geq 250$  employees. This part of the whole sector stands for 64 % of the whole sector turnover and 54 % of the whole sectors employment. 50 enterprises with 50-249 employees contribute 24 % of the sectors sales and 34% of all employees are employed in this size segment. Most of the enterprises are middle-sized and small firms (135) with 49 and less employees. They have a 12% share in both the turnover and employment.

About 60% of Polish fish processing industry is located in the coastal region in Pomorskie and Zachodniopomorskie voivodeships. The turnover of companies operating in the coastal voivodeships constitutes 68% of revenues in fish processing. These companies also employ 66% of workers in the fish processing industry.

Figure 5.44: Size distribution of the Polish fish processing industry



### 5.16.3. Main products and main segments

The most important output of species for processing industry in terms of volume is herring (29%) followed by salmon (18%), sprats (11%), cod (10%) and mackerel (8%). In terms of value the most important species is salmon (38%), herring (16%), cod (14%) and mackerel (6%).

The output of cod was falling in both value and volume between 2006 and 2007, the output of salmon, herring, sprats was increasing and the output of mackerel was stable.

Table 5.29: Raw materials

Raw Materials	2006		2007	
	Value ('000 €)	Volume (tonnes)	Value ('000 €)	Volume (tonnes)
Herring	91 078	96 966	97 360	111 543
Salmon	220 878	52 779	232 533	68 121
Cod	92 034	45 176	85 733	39 380
Sprat	7 767	40 442	8 577	42 288
Mackerel	38 362	30 661	37 583	31 429
Alaska Pollock	23 857	17 150	26 817	21 143
Flounder	5 686	11 364	6 077	9 409
Rainbow trout	24 042	10 558	25 278	13 174
Other fish	79 068	46 762	95 463	52 508
Total	582 772	351 858	615 420	388 995

Based on many different species, Polish fish processing industry produces a large variety of different products. In 2008, production increased to 386.7 thousand tonnes (7%) and its value increased to 1 215 million Euros (16%). As in the previous years, the most important group of products are prepared and preserved fish with the share of 50% of the volume and 40% of the value of total production. Production of the prepared and preserved fish increased by 8% in volume and 23% in value. The main products in the group are processed or preserved herring with about 50% both volume and value of processed products. Smoked products cover 20% of the volume and 37% of the value of processed products. The production of smoked fish

increased by 17% in volume and 22% in value. Smoked salmon was the main product in the group with the share of 37% of the volume and 72% of the value of smoked products.

Frozen filets covered 8% of the volume and 10% of the value of total production and fresh filets 7% and 8%, respectively. Production of frozen filets decreased by 12% in volume and 6% in value. Production of fresh filets increased by 5% in volume and 18% in value.

Table 5.30: Main products

Main products	2006		2007		2008	
	Value (‘000 €)	Volume (tonnes)	Value (‘000 €)	Volume (tonnes)	Value (‘000 €)	Volume (tonnes)
Fresh fillets	72 041	25 052	81 682	26 468	96 752	27 862
Frozen fillets	117 296	82 051	104 910	28 653	98 291	25 128
Prepared or preserved fish	393 829	179 390	407 506	177 872	500 395	192 077
Smoked fish	343 161	64 344	365 822	65 303	445 068	76 370
Total production	1 005 874	395 150	1 047 612	361 103	1 215 555	386 665

#### 5.16.4. Dependency on domestic production

In general the Polish fish processing industry is not dependent on domestic catches and aquaculture. In 2008, Baltic catch amounted to 95 thousand tonnes and aquaculture production was about 35 thousand tonnes. The Baltic basic catch were sprat (59%), herring (18%), cod (11%), and flounder (10%). Carp, the main aquaculture species (16 thousand tonnes) was generally sold alive but rainbow trout (16 thousand tonnes) was raw material for the processing. Polish deep-sea fishery sold their catches in foreign markets.

Limited ability to harvest fish from the Baltic Sea and limited production of aquaculture means that imports played a dominant role in the supply of raw materials. In 2008, Poland imported 434 thousand tonnes of fish and fish products, 15% higher than a year earlier. The value of imports amounted to 878 million EUR, 21% higher than a year earlier. 80% of imported fish and fish products were raw materials for fish processing. Herring is the most important fish species, in terms of volume, imported from abroad to Poland, which bought 97 thousand tonnes. Imports

of salmon exceeded 75 thousand tonnes, pangasius 44 thousand tonnes, Alaska Pollock 38 thousand tonnes, mackerels 36 thousand tonnes and cod 23 thousand tonnes. Poland imported fish products from 92 countries. Most of them were imported from Norway (120 thousand tonnes), Denmark (50 thousand tonnes), China (49 thousand tonnes), Vietnam (46 thousand tonnes), Germany (27 thousand tonnes), Iceland (22 thousand tonnes) and the Netherlands (21 thousand tonnes).

#### **5.16.5. Socio-Economic performance indicators and competitiveness**

The global economic crisis, which worsened in the second half of 2008, did not affect negatively the fish processing industry in Poland. The processing industry's Economic Performance indicators are good. The turnover increased to 1.44 billion Euros (17%). A key driver of sales of the fish processing was growing exports, which total value increased by 15% over the previous year. The internal market was also growing and household fish and fish product average monthly consumption increased by 7%.

The contribution of fish processing to the national economy, measured by GVA indicator, increased in 2008 by 22.1% and amounted to 236.2 million Euros. The amount of cash a company generates from its operations, measured by OCF indicator, increased by 23.7%.

The increase in financial costs of foreign capital, by nearly 800%, caused the reduction in net profit by 48%, lower rates of net profit per FTE and return of investment.

The increase in loans and credits to finance the investment led also to a reduction of the financial position rate.

The purchases of fish and other raw materials, including purchasing of fish and other goods for resale in the same condition, had the largest share (67%) in the cost structure. Fixed costs (depreciation, financial costs, balance of extraordinary costs and gains) had the 5% share of total costs. Depreciation had the greatest share of the fixed costs (45%).

Figure 5.45: Distribution of the operating costs in the Polish fish processing industry

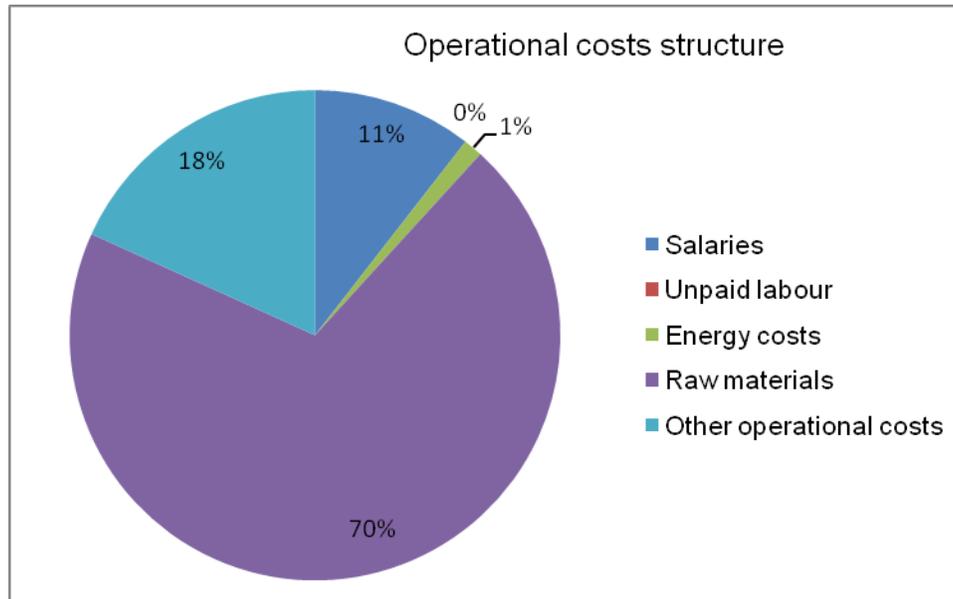


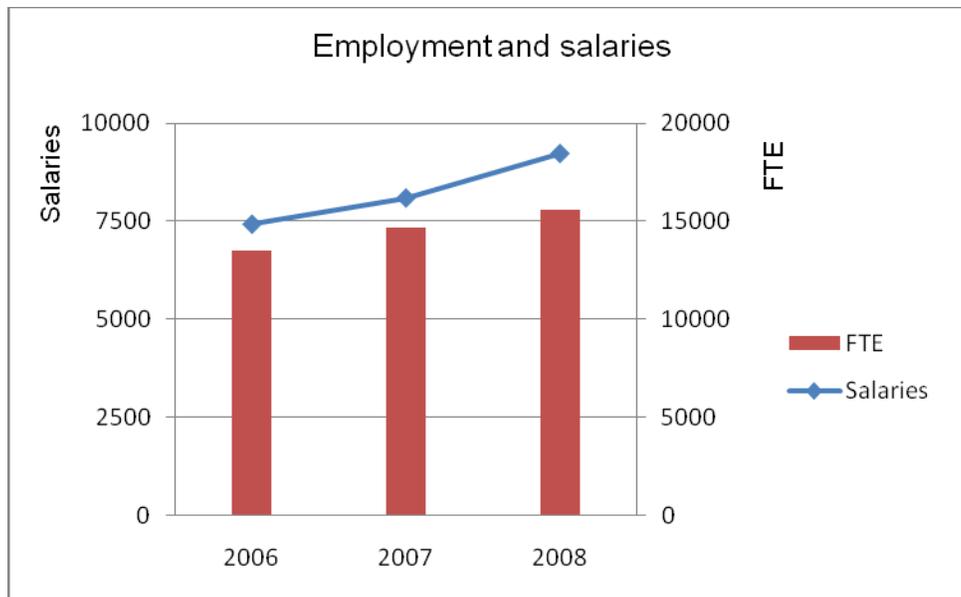
Table 5.31: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	189	187	205
<i>Social indicators</i>			
Male employment	4 676	5 039	5 291
Female employment	10 039	10 807	11 064
Total employment	14 715	15 846	16 355
FTE	13 469	14 660	15 577
Salary per employee (FTE)	7 424	8 090	9 222
Employment (FTE) per firm	71.3	78.4	76.0
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	1 087 312	1 231 120	1 441 309
GVA ('000 €)	141 529	193 423	236 207
OCF ('000 €)	41 534	74 824	92 552
EBIT ('000 €)			61 758
Net profit ('000 €)	16 426	46 781	24 443

Return on Investment (in %)			6.2%
Financial position (in %)	73%	67%	60%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	81	84	935
Net profit per FTE ('000 €)	1.2	3.2	1.6
Turnover per firm ('000 €)	5 753	6 584	7 031
Running cost to turnover ratio (in %)	97.3%	95.3%	94.8%

The return on investment considering the EBIT can only be calculated for 2008 and shows a positive profitability of 6.2%. While the return on investment considering net profits can be calculated for all years, being 2.8%, 6.6% and 2.5% respectively.

Figure 5.46: Evolution of the employment and salaries in the Polish fish processing industry



Employment in fish processing increases annually. In 2008, processing plants employed 16,355 persons, representing an increase of 3% over the previous year, but about 11% compared to 2006. The majority of the employed (63%) are women. The full-time equivalent employees were 15,577 and increased by 6% compared to the previous year and 16% compared to 2006. In 2008, wages in fish processing amounted to 144,723 thousand Euros, representing an increase of 24% compared to 2007 and of 57% compared to 2006.

#### **5.16.6. Comment on sector's performance and possible development in the future**

A further development of the fish processing industry in Poland is expected. In 2008, the production of new processing plants has begun, such as, for example, Royal Greenland in Koszalin and Nord Capital in Rekowo Górne, which have not fully utilized their production capacity in the initial period of the activity yet. The construction of a new fish processing factory is planned.

The process of adjusting to the changing market will be continued. On the one hand, the consolidation process of the sector leaders will be continued, and on the other hand, the number of small companies approved to direct sales will increase.

Investment will probably be limited due to the late start of the operational program "Sustainable development of fisheries sector and coastal fishing areas 2007-2013", in which 105 million are planned for subsidies for investment in fish processing.

The global economy improvement, particularly in Germany – the main market for fish products from Poland, will increase the processing of fish in the country.

#### **5.16.7. Comments on the data**

The data refers to fish processing companies approved by the General Veterinary Inspectorate:

- companies qualified 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 III Section VIII Fishery Products.
- companies qualified 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).

## **5.17. Portugal**

### **5.17.1. Overview of the sector**

Portugal is a country that consumes a large amount of fish per capita. With around 56 Kg/person/year, it is one of the biggest consumer in Europe, next to Iceland (and worldwide, after the leader Japan) and the higher in UE. Still, there are very particular differences over the industry productive segments (subsectors).

The importance of fish industry is obvious. First, because the cannery subsector is almost 100% depending of the national small pelagic suppliers (and close to zero in tuna), and this is one important export issue toward national food products. Second, the salted cod consumption is very high, and a great part of it is prepared in Portuguese factories. Finally, frozen and primary processing is another subsector that covers a major part of the fish and fish products for national demand and exports as well.

With 155 active processing units (132 enterprises), the production is over 170 000 ton per year, with a turnover of about 1 400 million Euros.

More than 7 000 people work directly at the plants, mostly women work force (about 4 500).

### **5.17.2. Nature of the industry: concentration**

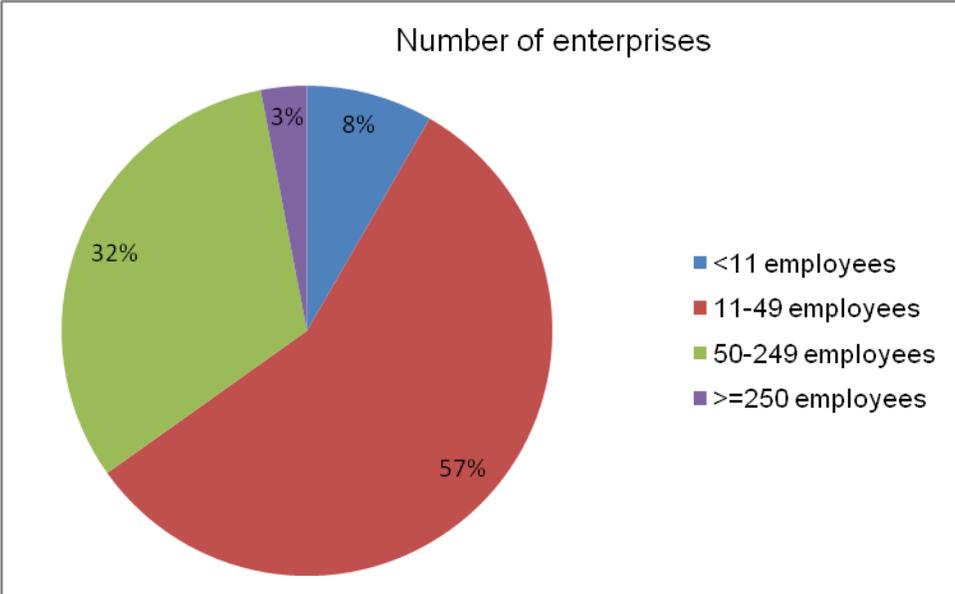
Portuguese fish processing industry can be divided in 4 main segments: Preparation, frozen, cannery and salting and drying.

The characteristics of the Portuguese mainland coast were the origin of the coastal communities settlement. Fishing communities are generally concentrated around urban areas, depending both on access to the sea and on shelter conditions (ports) and developing nearby concentrated industries.

This situation provided conditions for the concentration of the cannery industry next to the major national ports (the most frequent resource in Atlantic waters are the small pelagic, like sardine and horse-mackerel) and, in time, became one of the most important items for Portuguese exports. Cannery is concentrate mainly around Matosinhos (North), in Algarve (South) and Peniche (Center).

Also the economic history is the back bone for one of the most important concentration on fish industry in national and international terms: the salting and drying cod is most concentrated near the almost only port for the external fleet (Aveiro). The final product is mainly consumed by domestic market.

Figure 5.47: Size distribution of the Portuguese fish processing industry



**5.17.3. Main products and main segments**

Table 5.32: Production by products and segment

Main products	2006	2007	2008 <sup>4</sup>
	ton	Ton	ton
Dry salted cod	41 426	33 984	36 574
Sardine frozen	23 936	19 836	5 631
Sardine cannery	20 225	27 937	18 351
Aquatic invertebrates frozen, dried, salted or marinated	11 705	11 802	12 359
Crustacea	4 896	3 311	--
Tuna cannery	5 143	4 689	12 060
Red-fish fresh and frozen	6 441	7 636	4 535
Horse Mackerel frozen	3 416	16 642	--
Hake fillet frozen	3 305	3 229	--
Hake frozen	13 823	12 734	8 761
Total preparation	12 399	2 786	<sup>5</sup>
Total Frozen	115 317	100 708	90 277
Total Salted and Dried	56 241	45 017	45 211
Total Cannery	37 365	47 669	41 645
<b>Total products from processing industry</b>	<b>221 322</b>	<b>196 180</b>	<b>177 134</b>

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<sup>4</sup> 2008 data is provisional data from INE publication, Fisheries statistics 2009. 2006 and 2007 is data collected under DCR. Therefore comparisons between 2008 and 2006-2007 aren't reliable for this item.

<sup>5</sup> Preparation data included in Total Cannery.

Figure 5.48: Enterprise distribution, by main segment (subsector)

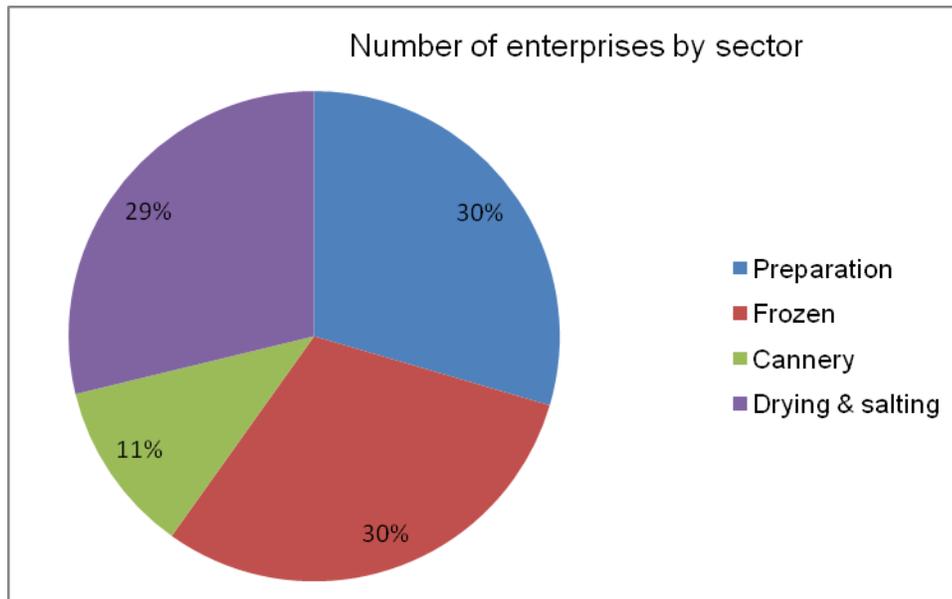


Table 5.33: Sells by Industry, by products and segment:

Main products in t and 1000 Euro	2006		2007		2008 <sup>6</sup>	
	Ton	000€	ton	000€	ton	000€
<b>Total Preparation</b>	12 399	27 078	2 786	11 428	<sup>7</sup>	
<b>Total Frozen</b>	115 317	344 577	100 708	214 933	72 291	278 186
<b>Total Salted and Dried</b>	56 241	365 144	45 017	353 809	36 227	253 935
<b>Total Cannery</b>	37 365	126 426	47 669	164 078	40 258	160 760
<b>Total products from processing industry</b>	<b>221 322</b>	<b>863 226</b>	<b>196 180</b>	<b>744 249</b>	<b>148 776</b>	<b>692 881</b>

<sup>6</sup> 2008 data is provisional data from INE publication, Fisheries statistics 2009. 2006 and 2007 is data collected under DCR. Therefore comparisons between 2008 and 2006-2007 aren't reliable for this item.

<sup>7</sup> Preparation data included in cannery segment.

#### 5.17.4. Dependency on domestic production

Table 5.34: Imports of raw material:

Main products in t and 1000 Euro	2006		2007 <sup>8</sup>	
	Ton	000€	ton	000€
Total imports from processing industry	189 664	580 382	151 145	536 190
% of imports regarding total raw material	68%	81%	61%	81%

Table 5.35: Import dependency on raw material by segment

	2006		2007 <sup>9</sup>	
	Import	Domestic	Import	Domestic
Preparation	55%	45%	68%	32%
Frozen	54%	46%	54%	46%
Cannery	40%	60%	40%	60%
Salting and Drying	93%	7%	91%	9%

Table 5.36: Raw material by segment

Main raw materials in t	2006	2007 <sup>10</sup>
Cod frozen	64 580	26 498
Cod wet salted	41 115	38 008
Hake frozen	19 414	15 614
Chub Mackerel frozen	18 532	23 701
Chub Mackerel fresh	12 700	18 088

<sup>8</sup> There is no data available for this item for 2008, under DCF regulation.

<sup>9</sup> No data is available for 2008.

<sup>10</sup> There is no data available for this item for 2008, under DCF regulation.

Sardine fresh	34 706	41 855
Sardine frozen	18 706	16 510
Cod dried salted	10 561	7 543
Red fish frozen	6 773	7 707
Cuttlefish, carpet shells and other invertebrate	6 751	8 301
Squid frozen	3 834	3 522
Tuna frozen	2 787	2 700
Others	39 752	36 835
<b>Total</b>	<b>280 211</b>	<b>246 882</b>

Table 5.37: Main partners in trade (imports) by type of product<sup>11</sup>:

Type of product	Zone					
	UE		3rd countries			
Fresh	55%	Spain	76%	45%	India	21%
		France	6%		Mozambique	10%
		Greece	4%		Argentina	10%
		Sweden	4%		Vietnam	7%
		UK	2%		South Africa	5%
					Senegal	3%
					Brazil	2%
Cannery	92%	Spain	81%	8%	Moroccos	21%
		Germany	8%		Equador	17%
		France	3%		South Korea	16%
		Netherlands	2%		Chile	13%
					Vietnam	2%
					Peru	2%
Frozen	81%	Spain	80%	19%	EUA	41%
		Netherlands	7%		Russia	27%

<sup>11</sup> Main source: Fisheries Statistics 2009 – INE.

		Denmark	5%		South Africa	5%
Salted and dried	63%	Sweden	47%	37%	Norway	33%
		Netherlands	26%		Iceland	24%
		Spain	12%		China	18%

### 5.17.5. Socio-Economic performance indicators and competitiveness

Figure 5.49: Distribution of the operating costs in the Portuguese fish processing industry

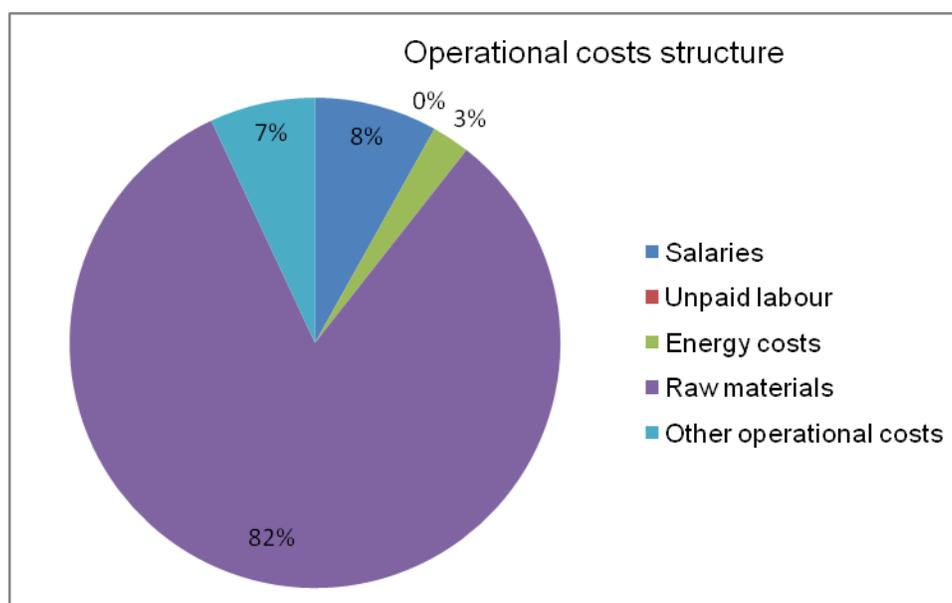


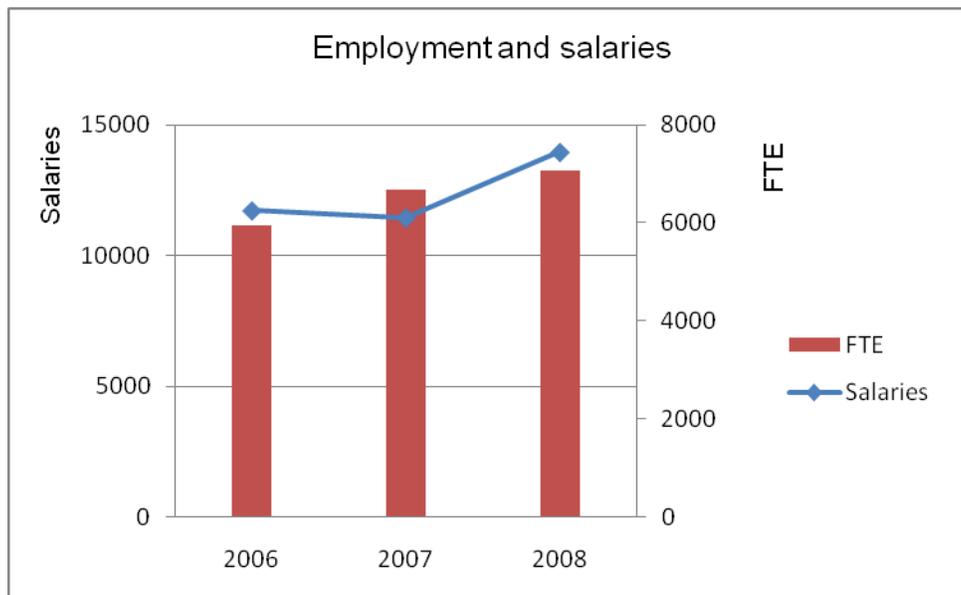
Table 5.38: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms <sup>12</sup>	141	147	132
<i>Social indicators</i>			
Male employment	2 054	2 195	2 496
Female employment	3 888	4 468	4 571
Total employment	5 942	6 663	7 067

<sup>12</sup> Only includes firms with fish processing as main activity.

FTE	5 942	6 663	7 067
Salary per employee (FTE)	11 724	11 453	13 953
Employment (FTE) per firm	42.1	45.3	53.5
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	1 308 784	1 338 396	1 455 181
GVA ('000 €)	156 492	151 264	384 003
OCF ('000 €)	86 828	74 951	285 399
EBIT ('000 €)	54 759	43 003	243 438
Net profit ('000 €)	na	na	na
Return on Investment (in %)	11.5%	9.1%	22.0%
Financial position* (in %)	28%	46%	45%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	220.3	200.9	205.9
Net profit per FTE ('000 €)	9.2	6.5	34.4
Turnover per firm ('000 €)	9.3	9.1	11.0
Running cost to turnover ratio (in %)	95.1%	96.3%	83.7%

Figure 5.50: Evolution of the employment and salaries in the Portuguese fish processing industry



#### **5.17.6. Comment on sector's performance and possible development in the future**

*changes in inputs: domestic/imports*

The Portuguese fish processing industry has an enormous dependency on imports, and that dependency will continue in the near future. Only cannery still depends more on domestic production (for sardine and mackerel, while tuna has high dependency on third country imports). For the salting and drying subsector the dependency will be the same for the next years. It isn't expected that aquaculture can provide an alternative in the next years, even there is same raw material that came from that kind of origin.

*on profitability (total vs average); changes in profitability*

This item cannot be compared due to significant differences between DCR (2006-2007) and DCF(2008) values.

*changes in inputs: domestic/imports*

Domestic market shows slow growth rate after some decrease in cannery due to the international market situation and, more recently, to the evolution of international cod price: changes on international market for cod supply brought instability, but also opportunity; China is now seen as an important participant in the cod business.

*other reasons for changes: general economic, policy issues*

After the approval of the EU structural funds, enterprises restart the flux of investments (same were projects that were already started with the previous).

#### **5.17.7. Comments on the data**

Unless otherwise indicated in the text, data was collected by a questionnaire to all processing industry, main and secondary. Secondary activity data was not considered for the present document.

The number of enterprises differs from Eurostat data. Eurostat data is collected by the registered main activity code of the enterprise. During the survey it was noticed that some enterprises, although having their main activity registered as fish processing, were not really transforming

fish. For example, some freezers that only store and sell frozen fish, without doing any transformation. These units/enterprises were not taken into account. Furthermore, for the DCR/DCF data collection production units are crosschecked with veterinary data. As only licensed units can transform fish, if a unit is not licensed from veterinary to do transformation of fish then it is not taken into account. The differences in the population might lead to some differences between data in Eurostat and data collected under DCF regulation.

## 5.18. Romania

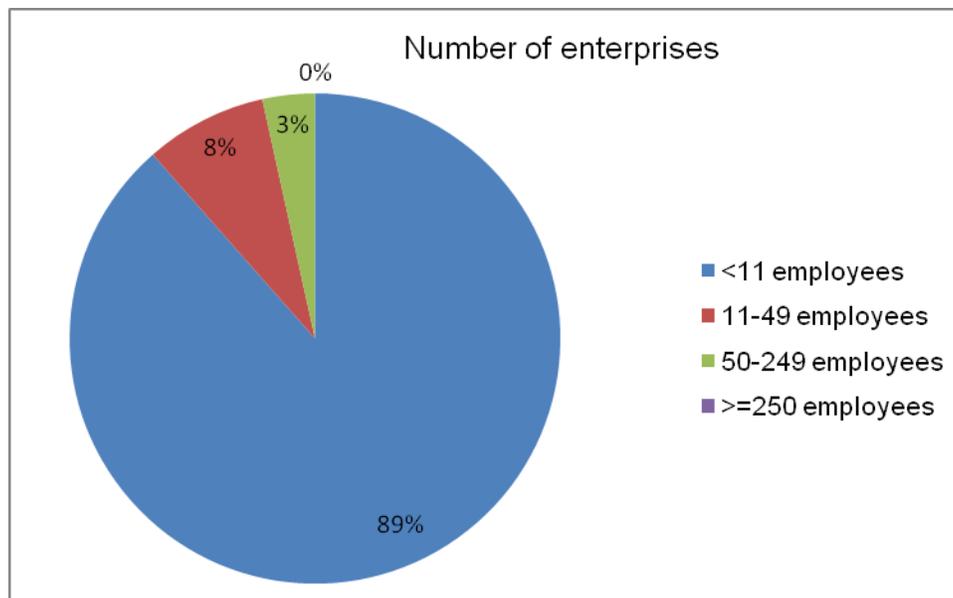
### 5.18.1. Overview of the sector

Romania mentions that 2008 is the first year on implementation for data collection programme. The processing industry in Romania comprises 87 units in 2008 with a total turnover of 21,492 thousand Euros. The industry is located in principle cities of the country close to consumers having chains for supplies. This is a significant advantage of a relative low level of running costs.

### 5.18.2. Nature of the industry: concentration

The lack of available capital for investments in such industry for the valorization of the domestic fisheries raw materials is the cause of actual concentration of transforming units in small production pending to the international super markets chains, for more than 85 %. This mainly units have less than 10 employees. Considering the number of the companies bigger than 10 employees not all of them are in full utilization, due to the effects of the economic crisis and the dependence of the imported raw materials.

Figure 5.51: Size distribution of the Romanian fish processing industry



### **5.18.3. Main products and main segments**

The main products are represented by pre-cooked fish – 1,746 tonnes, marinate – 1,733 tonnes, smoked fish – 767 tonnes, from a total production of 4,964 tonnes. The production of canned products is only 71 tonnes, as well as the production of salads – 15 tonnes. The total of fish species transformed is 6,540 to, 40 % providing from import.

### **5.18.4. Dependency on domestic production**

The processing production in 2008 is depending on 60 % of domestic production – fishing and aquaculture. The total processed quantity is 6,540 tonnes, out of which: asian carp – 2,100 tonnes, carp - 900 tonnes and catfish – 850 tonnes. The main imported species are represented by: salmon 750 tonnes, cod 650 tonnes, seabream – 52 tonnes, pangassius – 110 tonnes and various species of *cyprinidae* – 300 tonnes. The imported species is 40% from the total processed quantity. The main sources countries for import are: Norway, UK, Hungary, Greece, Bulgaria and Poland.

### **5.18.5. Socio-Economic performance indicators and competitiveness**

In Romania no subsidies for fishery sector – fishing, aquaculture, including processing – were granted by the government. No other income than related to processing activity have been reported, as per data collected from the production units of the sector.

The main operational costs are salaries (66% of the total operational costs) and raw material (38%), as can be seen in the figure below.

The number of employed workers is referring only to full time or part time equally, the total is 929. No calculation or data reported for FTE. The employment per firm shows the fact the actual situation – the sector is not with a big importance in the Romanian economy. It is related with the way of diversification of the population consumption. The concentration in the international chains super markets explains also the fact that the total unprofitability is supported from other activities of these trading companies.

Figure 5.52: Distribution of the operating costs in the Romanian fish processing industry

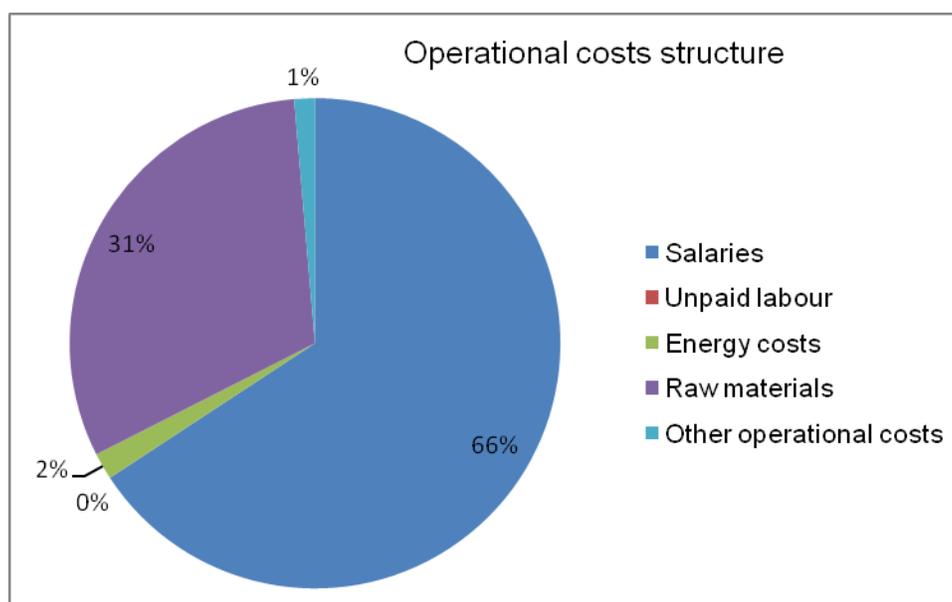


Table 5.39: Socio-economic performance and competitiveness indicators in 2006-2008

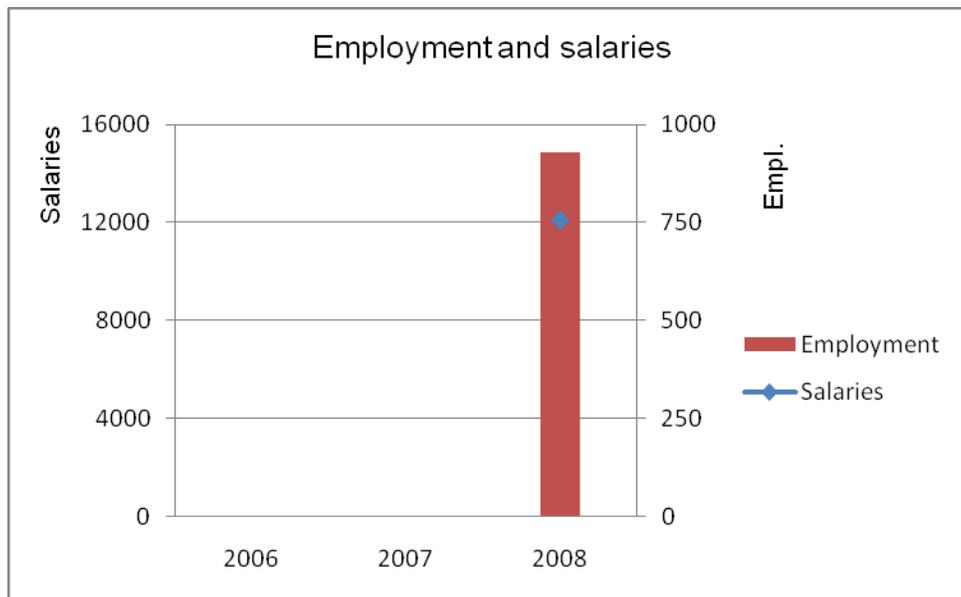
Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms			87
<i>Social indicators</i>			
Male employment			386
Female employment			543
Total employment			929
FTE			na
Salary per employee			12 108
Employment per firm			10.7
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)			21 492
GVA ('000 €)			15 634
OCF ('000 €)			4 386
EBIT ('000 €)			3 567
Net profit ('000 €)			-3 198

Return on Investment (in %)			8.0%
Financial position* (in %)			na
<i>Productivity indicators</i>			
Turnover per employee ('000 €)			23
Net profit per per employee ('000 €)			-3.4
Turnover per firm ('000 €)			248
Running cost to turnover ratio in %			79.6%

Salary per employee (in FTE), Employment (in FTE) per firm and Turnover per FTE could not be calculated because employment on FTE was not reported, so Salary per employee, Employment per firm and Turnover per employee had to be reported.

It should be noted that the return on investment considering EBIT is 8%. However when considering net profits to calculate the return on investment, the profitability falls to -7.2%.

Figure 5.53: Evolution of the employment and salaries in the Romanian fish processing industry



#### 5.18.6. Comment on sector's performance and possible development in the future

The loss per total sector is not significant comparing with the total activity of those companies. It is also an explanation caused by the percentage of raw material imported, as well as the

decreasing of the general consumption in the country, as a first influence of the economic crises. That does not exclude a significant recovering for the 2009 year, despite the fact that number of units is decreased, but a concentration on increasing the offer to the population, as an alternative for other products shows a bigger amount on the total turnover of the sector. Also the quality of data collected and processed by a specialized researching institute are more reliable in the year 2009.

#### **5.18.7. Comments on the data**

The collection of data in 2008, the first year of implementation of such programme, encountered some difficulties on obtaining the basic information for the sector. The answers to the questionnaires received from the targeting units had missing some indicators, so the entire appreciation and evaluation should be reduced to the data presented in the above mentioned table. The missing data do not allow the calculation of some indicators such as: financial position (no figures for loans/borrowed capital were reported), turnover per FTE (no calculation of FTE).

Romania should assure the collection of all data required under DCF. The decisions of the administration (National Agency for Fisheries and Aquaculture) are not addressing to the processing sector. All acting decisions (management, marketing, staff etc.) are the attribute of the owners of this production units, the entirely sector is a private one.

## 5.19. Slovenia

### 5.19.1. Overview of the sector

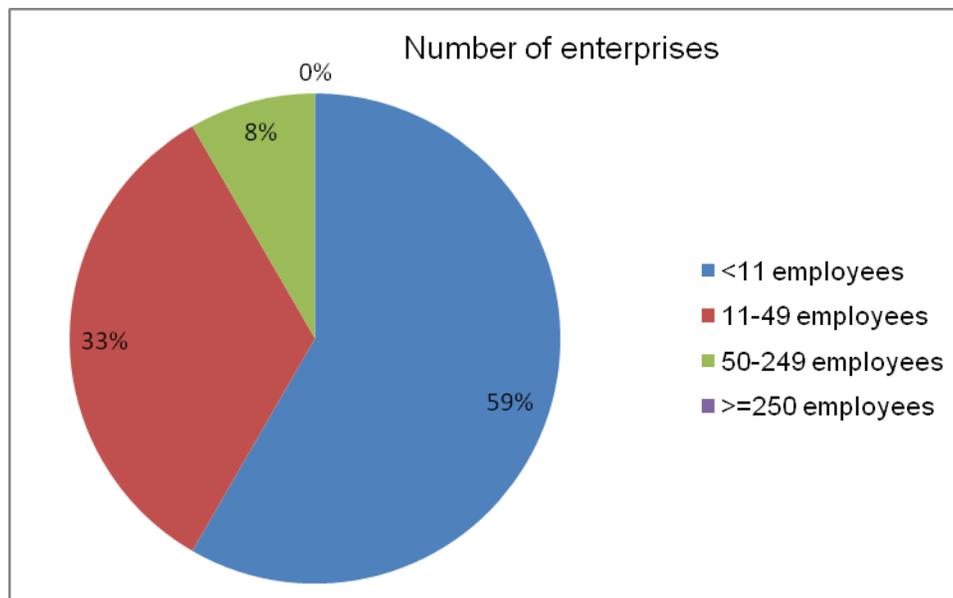
In 2007 there were 11 companies and in 2008 there were 12 companies in the Slovenian fish processing sector. Between 2007 and 2008 the number of companies increased by 9%. In 2007 the turnover was 25,761 thousand Euros, in 2008 increased by 12.7% and amounted 29,037 thousand Euros.

The value of raw material increased by 11.3% from 2007 to 2008 and it was 14,789 thousand Euros in 2007 and 16,454 thousand Euros in 2008. In the Slovenian fish processing sector was 213 FTE employees in 2007 and 211 in 2008. Employment was therefore reduced by 0.9%.

### 5.19.2. Nature of the industry: concentration

Most Slovenian fish processing companies is located on the Slovenian coast, including the largest Slovenian company which employing 38% of all persons employed in processing industry and representing around 40% of all income.

Figure 5.54: Size distribution of the Estonian fish processing industry



All companies located on the Slovenian coast represent 77% of all the income.

### **5.19.3. Main products and main segments**

In the case of Raw material per species (tonnes) and Income (turnover) per product only six companies are compiled the data, others are opinions that this is a trade secret. That is the reason that we do not have these data from the largest Slovenian company which produced fish pates and various fish cans (sardines, tuna, anchovies, mackerel filets ...). Disregarding the largest Slovenian company, the main products in Slovenian fish processing industry in 2007 are Tuna pate (12% of all income), squid – fresh or frozen (3% of all income), dried cod spread (1.6% of all income), Alaska Pollock (1% of all income) and hake filet (0.9% of all income).

### **5.19.4. Dependency on domestic production**

Slovenian fish processing industry mainly depends on imports of raw materials. In 2008 Slovenia imported 16 371 tonnes of fish and fish products, while the Slovenian volume of landings for this year amounted less than 690 tonnes. In the same year Slovenian aquaculture sector has produced 1,318 tonnes of fish and shellfish.

### **5.19.5. Socio-Economic performance indicators and competitiveness**

The total amount of income generated by the Slovenian fish processing industry, in 2008, is 239 million Euros. This consists of 29 million in turnover, 210 million in other income, and 0.04 million in direct subsidies.

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 very large share of other income in total income – 87.7 %.

The number of firms has increased by 9 % in the period between 2007 and 2008, consequently the turnover has increase by 13 % in the same period. Despite the increased value of turnover, profit has decreased in 2008 by 26.9% compared to 2007 and amounted 3.61 million Euros.

Reasons for decreased profits are in high inflation in the first half of the year 2008 in Slovenia and, consequently, lower purchasing power of consumers and in the economic crisis that occurred in the second half of the year.

Figure 5.55: Distribution of the operating costs in the Slovenian fish processing industry

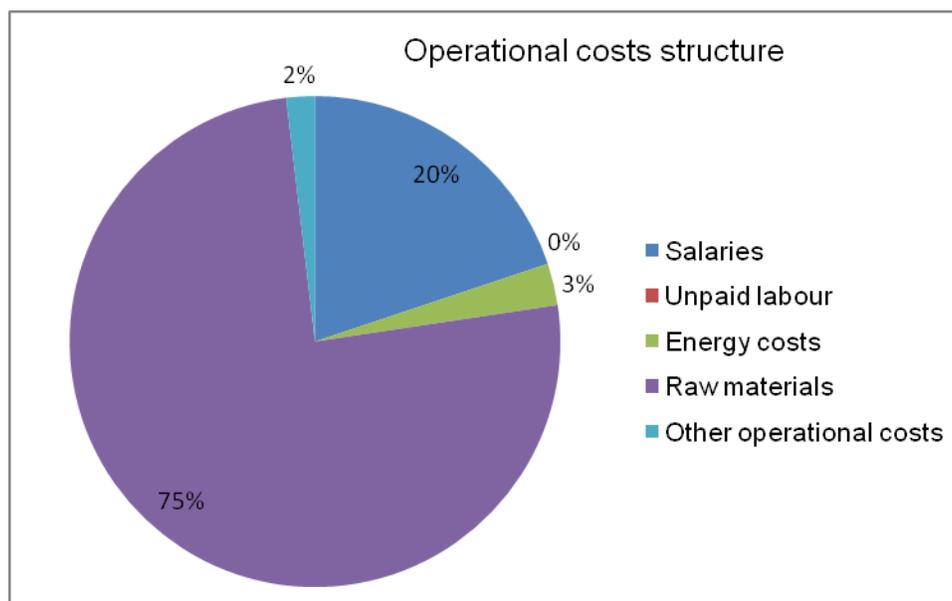


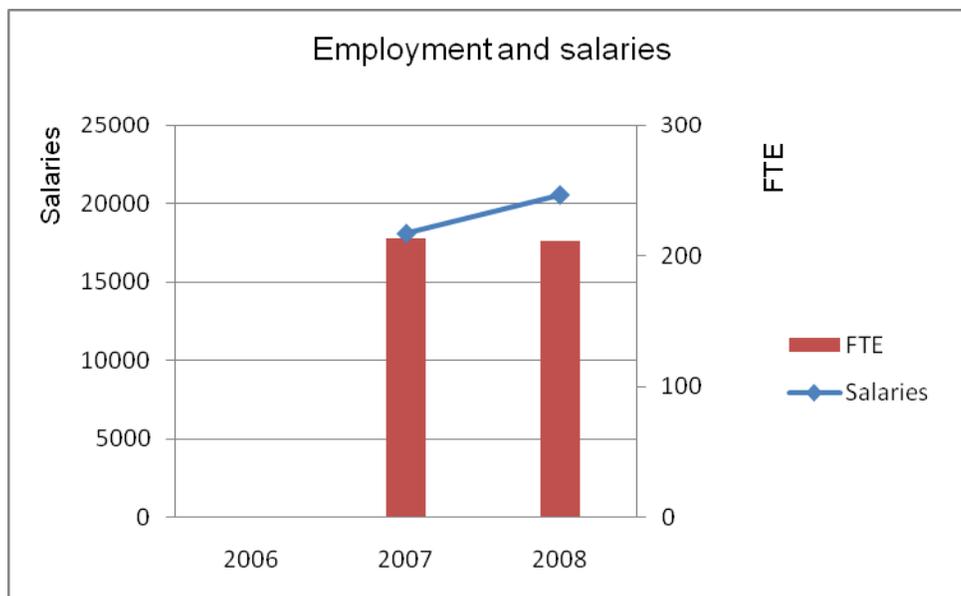
Table 5.40: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms		11	12
<i>Social indicators</i>			
Male employment		na	na
Female employment		na	na
Total employment		241	250
FTE		213	211
Salary per employee (FTE)		15 974	17 321
Employment (FTE) per firm		19.3	17.6
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)		25 761	29 037

GVA ('000 €)		9 818	11 572
OCF ('000 €)		5 969	7 242
EBIT ('000 €)		4 690	5 976
Net profit ('000 €)			3 610
Return on Investment (in %)			6.8%
Financial position* (in %)		180%	28%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)		121	138
Net profit per FTE ('000 €)		n.a	17,1
Turnover per firm (000 €)		2 342	2 420
Running cost to turnover ratio (in %)		76.8%	75.1%

The total number of employees has increase by 3.7 %, while the number of FTE employees decreased by 0.88 % between 2007 and 2008. Wages and salaries of staff has also increased by 12.5 % in the same period.

Figure 5.56: Evolution of the employment and salaries in the Slovenian fish processing industry



GVA per employee was 46,288 Euros in 2008, which is above the Slovenian GVA per employee average of the same year – 34,253 Euros. In the Slovenian fish processing industry the salary per

employee, in 2008, was 17,321 Euros, which is also above the Slovenian average of 16,598 Euros in the same year. GVA has increase by 15 % between 2007 and 2008. We recorded also increasing of OCF by 16.4 % in the period from 2007 to 2008.

#### **5.19.6. Comment on sector's performance and possible development in the future**

Slovenia consumes 9.6 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 the resulting increased competition we can expect a fall in prices of fish products and thus lower profits.

#### **5.19.7. Comments on the data**

According to the data from Veterinary Administration of the Republic of Slovenia (VURS), in 2008, fourteen companies are authorized for processing of fish and other marine organisms in Slovenia. From this list were excluded two companies which do not process fish in practice.

Target populations, in 2008, are therefore all companies who have a license for the processing of fish and the processing involved in practice. The number of such enterprises in Slovenia is twelve. In June 2009 the questionnaires were sent to all twelve enterprises and they all also returned the questionnaire. Therefore, the response was 100%. In the case of Raw material per species (tonnes) and Income (turnover) per product only six companies are compiled the data, others are opinions that this is a trade secret.

Economic data on the fish processing industry are collected from accounting records – AJPES and through questionnaires that are sent to all processing companies in Slovenia.

Slovenia has a few processing companies that are entirely committed to fishery products. Most companies do have different types of processing activities, of which fish may be one, but not necessarily the most important one. This was taken into account when we putting together the questionnaires and in the subsequent analysis of the data provided. Because of the large

differences between turnover and total income, only turnover was used in calculating the indicators (GVA, OCF...).

The national programme for collection of economic data for the processing industry combines information from three main resources:

- Questionnaire information returned from processing companies on a voluntary basis,
- The Central Statistical Office of Slovenia,
- The annual accounts of business enterprises.

The data collected from all sources are combined in such a way that a complete set of accounting items is compared for each business enterprise.

Indicator GVA of the DCR data for Slovenia is different from those who is calculated from the EUROSTAT data. The calculated value of GVA from DCR data for 2007 is little more than 10 million Euros and the value of GVA from EUROSTAT data is 4.3 million of Euros. Difference occurred because of better data coverage in the DCR data.

## 5.20. Spain

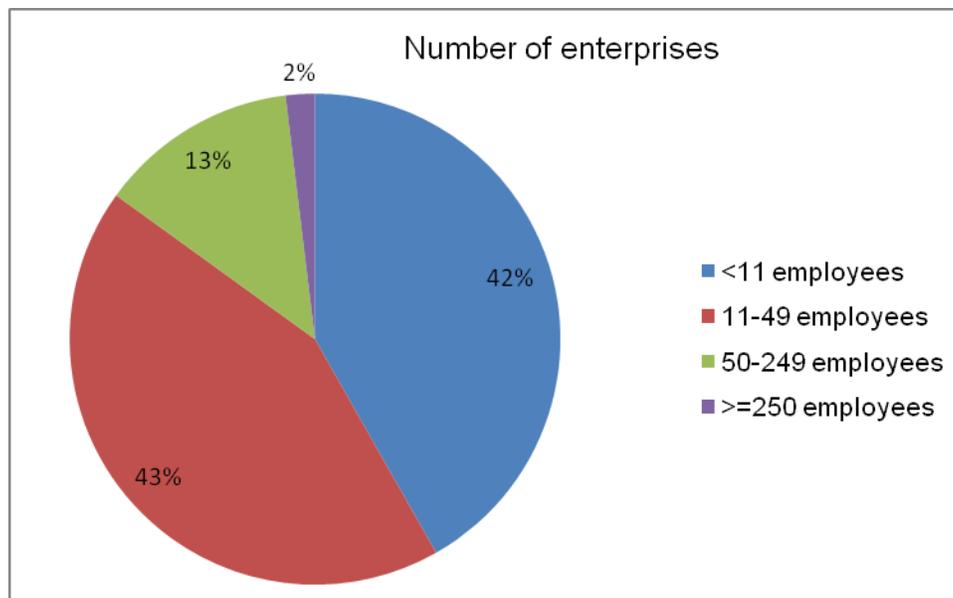
### 5.20.1. Overview of the sector

The fish processing sector in Spain was formed by a total of 572 firms in 2008, with an overall turnover of 4 148 million Euros for that year. No data was made available for production volume or value. In 2008 the use of raw materials has continued to increase as in the period 2006/2007 but at a lower rate (2.80% as compared to a 4.82% increase in 2007). The total value of the raw materials employed was of 2 433 million Euros. In terms of employment the industry amounts to 19 094 FTE, breaking the slight upward trend of the previous year by diminishing by 11% the number of FTE employed.

### 5.20.2. Nature of the industry: concentration

According to 2008 data the total number of firms has been reduced from 620 to 572, even below the level of 2006. The category of firms with less than 10 employees is the only one that becomes slightly larger (4% increase), while there have been strong decreases in the number of firms in all other categories (15%, 11% and specially 27% for over 250 employees)

Figure 5.57: Size distribution of the Spanish fish processing industry



The industry structure remains concentrated on the micro and SME sizes. There is still a large segment of micro and small firms (486 in total) and two representative groups of medium firms (75) and large firms (11). As in the previous year data, available data is not segmented by firm size and thus the share of total production cannot be allocated.

### **5.20.3. Main products and main segments**

Tuna, mussels, sardines, shellfish and anchovy are the main products of the Spanish canning industry. However there is no disaggregated data on the share of each species in raw materials nor its origin, for 2006, 2007 or 2008.

As to final production, there is no data for 2006-2007. Data on final production for 2008 is issued from the Industrial Survey of Products (EIAP, Encuesta Industrial de Productos) under NACE Rev 2 categories. This data is available from the General Sea Fisheries Secretariat website. As an indication, value of production for 2008 is 3 568 million Euros and production totals 720 928 tonnes. The main product categories by single species are canned tuna (267 820 tonnes), canned anchovies (8 707 tonnes) and frozen hake (9 742 tonnes).

### **5.20.4. Dependency on domestic production**

Spain produces a significant proportion of its canned tuna using whole frozen tuna as raw material. However the trend for using imported tuna from Latin America remained.

The Spanish canning industry has also significant links with the Italian processing sector, with Spanish companies processing tuna for the Italian market in their canneries in Galicia. This becomes evident from the increase in Italian imports of canned tuna from Spain year by year.

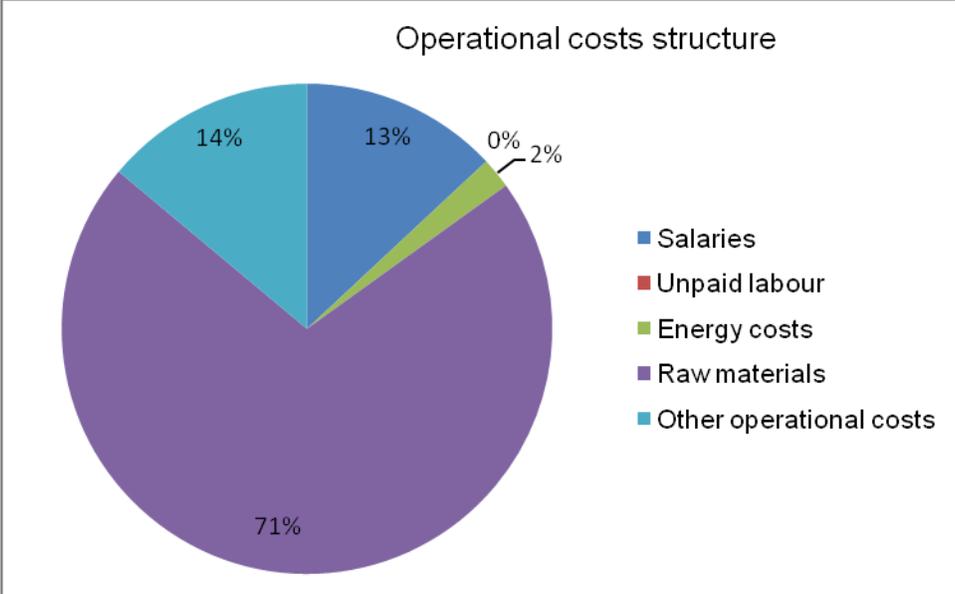
Mussel, sardine, shellfish and anchovy are processed on a seasonal basis, and these products are bought to the artisanal/coastal fleet and aquaculture sector in the north coast. A typical example of this is the shellfish processing industry in Galicia and the anchovy canning in the North coast. Therefore the link between artisanal fisheries, mussel aquaculture and processing industry

remains a remarkable aspect of dependency on national raw material. Though, according to the processing industry association there is an increasing trend towards imported raw materials.

**5.20.5. Socio-Economic performance indicators and competitiveness**

The total production costs of the Spanish processing sector in 2008 amounted to 3 426 million Euros, a very similar magnitude to 2007 and representing 83% of the total turnover of the sector. Regarding the total costs (both fixed and variable) the cost structure was clearly dominated by the expenditure in raw materials (71%) followed by the labour costs (14%). A similar proportion of expenditure to that of labour costs went to energy costs (13%). Finally, other operational costs and extraordinary costs amounted to less than of 3% of the total costs.

Figure 5.58: Distribution of the operating costs in the Spanish fish processing industry



In addition to the reduction in the number of firms and employees, the Spanish processing sector worsened its performance with regard to most performance indicators. Turnover per FTE has remained stable (with a slight increase of 2%) while turnover in absolute terms, Gross Value Added, Operating Cash-flow and net profit have all decreased (-9%, -26%, -35% and -34% respectively).

Table 5.41: Socio-economic performance and competitiveness indicators in 2006-2008

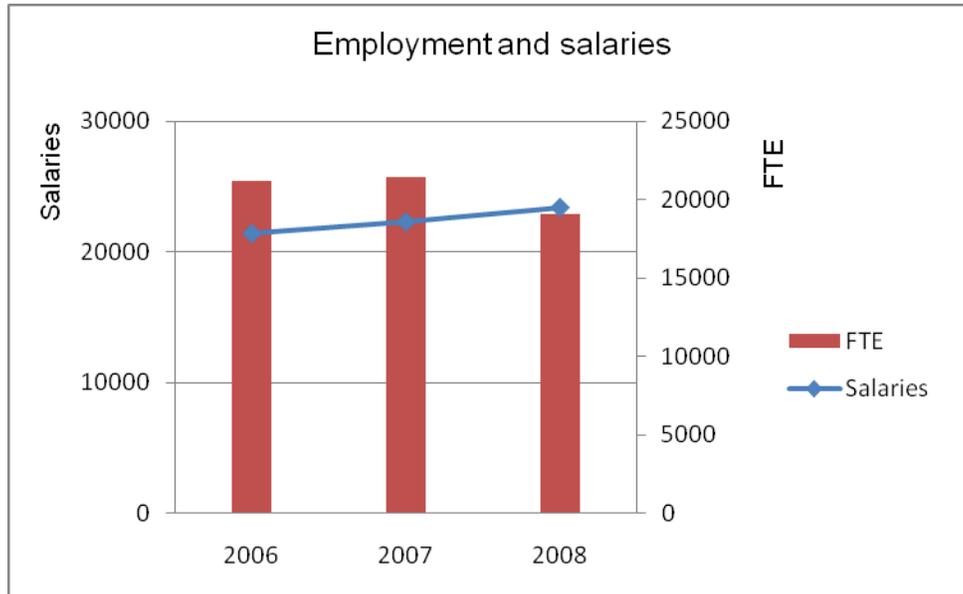
Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	592	620	572
<i>Social indicators</i>			
Male employment			na
Female employment			na
Total employment	22 248	22 798	19 737
FTE	21 221	21 418	19 094
Salary per employee (FTE)	21 401	22 296	23 392
Employment (FTE) per firm	35.8	34.5	33.4
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	4 296 355	4 549 564	4 148 244
GVA ('000 €)	1 499 427	1 628 854	1 198 075
OCF ('000 €)	1 045 271	1 151 312	751 431
EBIT ('000 €)	917 476	1 023 688	na
Net profit ('000 €)	876 862	969 648	644 030
Return on Investment (in %)	na	na	na
Financial position* (in %)	na	na	na
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	202	212	217
Net profit per FTE ('000 €)	40.4	44.4	35.0
Turnover per firm	7 257	7 338	7 252
Running cost to turnover ratio in %	76.1%	75.1%	82.6%

\*All data was presented by Spain directly in DCF format (see section on data below)

The number of people employed in the Spanish processing industry in 2008 was 19 737 (19 094 in FTE), representing a decrease of 13% from the previous year. The total number of employees falls below the average of the previous five years, which was above 22 000 employees and

21 000 FTE. The salary per employee has continued the upward trend from the previous years, with a 4.91% increase, slightly below the average increase of the previous five years.

Figure 5.59: Evolution of the employment and salaries in the Spanish fish processing industry



#### 5.20.6. Comment on sector's performance and possible development in the future

The economic performance of the sector has been deteriorated both by the financial situation and by international competition. The Spanish processing sector as a whole has seen its financial costs increase substantially in 2008 and its performance indicators deteriorate, despite a reduction in the number of firms and employees. The industry acknowledges the higher unit labour costs in Spain as one of the factors drawing back competitiveness, and relies on cost reductions and innovation as a way forward.

After the closure of Bay of Biscay anchovy fishery, more and more imports from Mediterranean and Pacific anchovy have been entering the processing channels. This represents a threat to the link of national coastal purse seiner fishing anchovy with the fishing industry, as it is uncertain that the processing industry will return to process Bay of Biscay anchovy when the fishery reopens. The recent reopening of the anchovy fishery in the Gulf of Biscay may change this situation but its effect remains to be seen.

As stated for the tuna industry by FAO “The previous advantages for the producers, i.e. the low labour costs, different management policies for industry, and an abundance of tuna landings, are now more volatile because of the high mobility of capital and the major role played by increasing economies of scale” (“Recent developments in the tuna industry”, FAO, Rome, 2010) which altogether make competition for the Spanish processing firms increasingly harder.

#### **5.20.7. Comments on the data**

The main data problems are big changes in the value of some variables coinciding with the change from DCR to DCF, which receive no comments on the Spanish annual report. These changes include a decrease in more than 3 000 in the number of employees, with 4 large firms no longer present, while for example the turnover remains stable. On the financial side, financial costs have increased a 99%, subsidies have increased a 49%, investment has increased a 52%, etc. These changes in scale create some doubts as to the quality of the data or the methodology employed. The change from NACE rev1 to NACE rev 2 categories should not imply any change in the scale of the data. The only comment given in the annual report is that the transition from has caused a delay in the availability of the data from 2008 to the first quarter of 2010.

The data for 2006, 2007 and 2008 was presented only in 2008 (DCF) format which made it difficult to allocate 2006 and 2007 items to categories that did not exist in DCR. The variable headings were not translated which adds difficulty to the analysis of the data as there is a limited number of experts with the adequate language capabilities. However, some of the data submitted was at a higher detail than requested.

Data for some variables such as debt and total value assets were not provided which made it impossible to calculate some performance indicators as return on investment or financial position. This type of indicators is especially relevant when there is a situation of high competition and the increase in financial costs as that of the Spanish processing industry.

## 5.21. Sweden

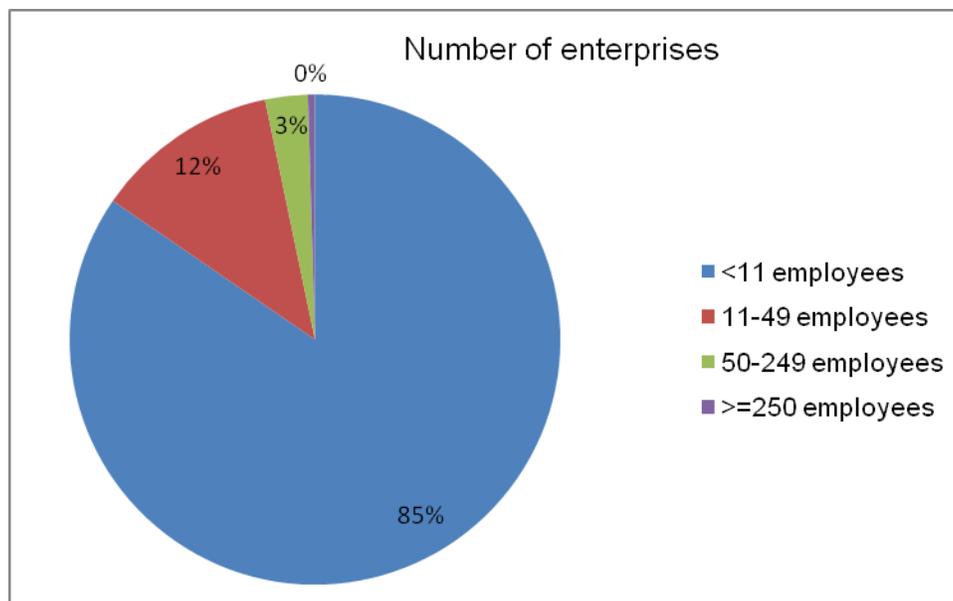
### 5.21.1. Overview of the sector

From 2001 to 2008 the number of enterprises operating in the Swedish processing industry increased from 177 to 214, an increase that were most significant in the smaller enterprises. The number of FTE decreased from 1 858 to 1 773 although it fluctuated during the period. The net turnover increased with 34 % to a total of 519 million Euros. The Swedish processing industry is mainly located to the west and the south coast of Sweden, as is the major part of the fishing fleet.

### 5.21.2. Nature of the industry: concentration

In 2008 a total of 214 firms operated in the fish processing industry in Sweden. Small-scale business are the most common and especially firms with only the owner working for the firm (zero FTE), these firms amounts 106 in 2008 which is a significant increase since 2001.

Figure 5.60: Size distribution of the Swedish fish processing industry



The Swedish fish processing industry is to a major extent located at the west coast and to some extent on the south coast. This pattern follows the same pattern as the concentration of the

fishing fleet. The processing industry in the county of Västra Götaland (west coast) accounted for 67 % of the net turnover in 2008, followed by the counties of Blekinge 9.0 %, Halland 5.8 % and Skåne 3.3 % of the total net turnover. The same pattern is displayed in number of enterprises and number of employees. But in the recent years a number of enterprises have developed along the north coast of the Baltic Sea.

### **5.21.3. Main products and main segments**

The Swedish processing industry produces a wide range of products, ranging from filleted herring and cod to prepared dishes, caviar substitutes and various smoked products. The main part of the income comes from various form of products made from herring and cod. But sprat, salmon, haddock, mackerel and shrimps is also important species for the Swedish processing industry. The sector itself is very heterogeneous with both small family businesses processing their own landings and larger enterprises with an industrial production.

Due to the nature of the data the only segmentation possibilities today is by the size of the business. Segmentation by species or product is currently not available. Although the relationship between business size and diversification exists since smaller enterprises tend to specialise whereas larger enterprises produce a wider range products.

### **5.21.4. Dependency on domestic production**

In Swedish waters there are insufficient quantities of fish of the correct size or quality to satisfy the requirements of the Swedish processing industry need for raw material. The processing industry is therefore highly dependent on imported raw material. Approximately 70 - 80 % of the input raw material in the processing industry is imported where Norway is the largest trading partners. Farmed salmon from Norway stand out as the most imported raw material used by the Swedish processing industry. Since traditional species has become more expensive the industry also has started to import from countries such as Chile and New Zealand to acquire different fish species. Data on trade patterns and domestic landings displays a clear pattern where domestic landings are decreasing and the imports of fish that is fresh, frozen or primarily processed is increasing. Dependency of domestic production depends itself on the size of the enterprise.

Smaller family enterprises are more dependent on local landings than larger enterprises. The export of the same goods has been increasing as well but at slower rate.

The supply of raw material to the processing industry from domestic aquaculture amounts to approximately 4 percent of the supply from domestic landings measures in weight. However, measured in value, domestic aquaculture amounted to almost one third of domestic landings. The supply of raw material from domestic aquaculture is expected to increase in the future but not to an extent that it will affect the importance of imported raw material. Rather, imported raw material is likely to play an even bigger part for the fish processing industry in the future.

**5.21.5. Socio-Economic performance indicators and competitiveness**

The performance of the Swedish process industry is highly dependent on the prices of raw material which amounts to 54 % of the total operational costs. The prices have fluctuated heavily throughout the years. The dependence of imports also makes the industry affectable to fluctuations in exchange rates.

Figure 5.61: Distribution of the operating costs in the Swedish fish processing industry

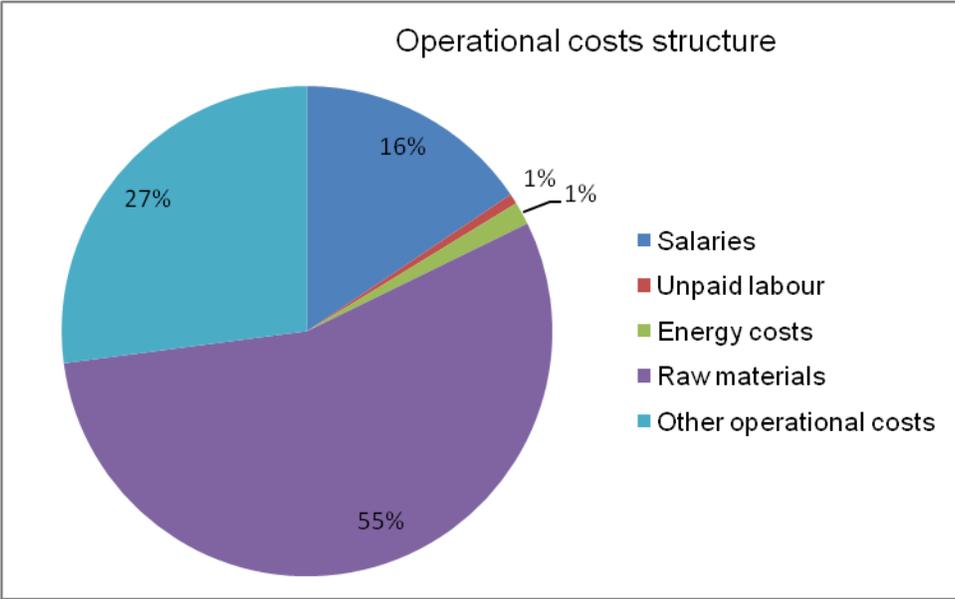


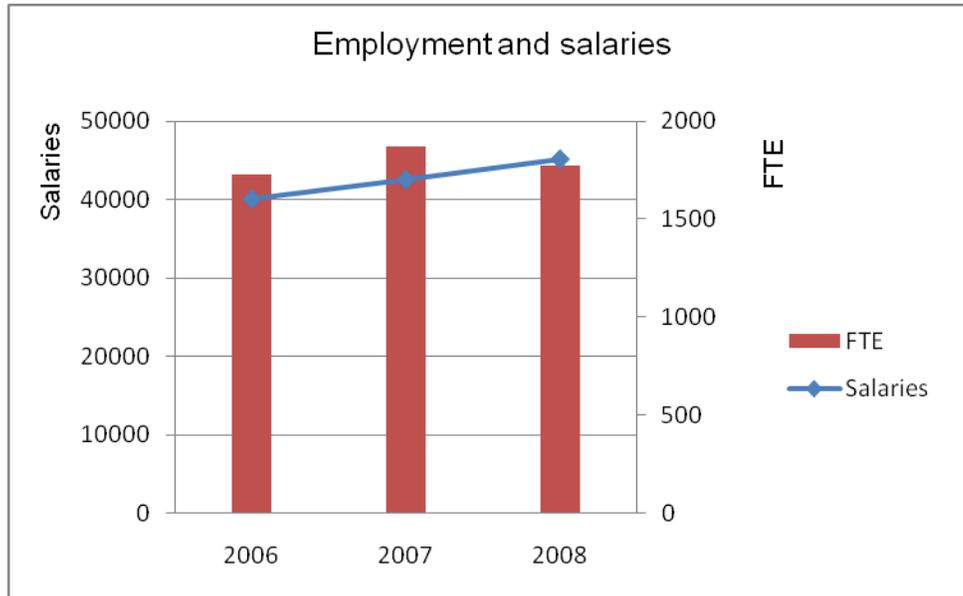
Table 5.42: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	208	219	214
<i>Social indicators</i>			
Male employment			1 215
Female employment			1 001
Total employment	2 282	2 377	2 216
FTE	1 724	1 867	1 773
Salary per employee (FTE)	40 106	42 556	45 157
Employment (FTE) per firm	8.3	8.5	8.3
% of paid work			95.8%
<i>Economic Performance indicators</i>			
Turnover ('000 €)	514 050	537 165	519 302
GVA ('000 €)	108 537	115 697	110 630
OCF ('000 €)	39 394	36 641	30 567
EBIT ('000 €)	27 075	23 236	18 254
Net profit ('000 €)	20 357	15 695	19 054
Return on Investment (in %)	5.3%	5.4%	4.6%
Financial position* (in %)	65%	53%	57%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	298	288	293
Net profit per FTE ('000 €)	11.8	8.4	10.7
Turnover per firm ('000 €)	2 471	2 453	2 427
Running cost to turnover ratio (in %)	93.5%	94.3%	94.8%

Previous figures show a fairly stable development 2006-2008. Performance measured as OCF, EBIT and Return on Investment decreased somewhat from 2006 to 2007 while GVA, number of employees and number of firms increased. The decrease was due to a more rapid increase of cost than turnover. In 2008 however, there was a slight decrease in the figures just mentioned except for net profits which increased. The increase in net profits was due to higher financial earnings in

2008 than 2007, which resulted in a positive financial result (financial yield minus financial costs) which added to EBIT.

Figure 5.62: Evolution of the employment and salaries in the Swedish fish processing industry



#### 5.21.6. Comment on sector's performance and possible development in the future

The Swedish fish processing industry has shown a steady increase in net turnover from 2001 to 2007 both in totals and on average. Net profits has been fluctuating during the same period but displays a positive trend. In 2008 however, the indicators shows a slight decline for the industry as a whole as turnover, gross value added (GVA), Return on Investment (ROI), EBIT, number of firms and FTE all decreased compared to 2007. Despite this decline net profit increased, but due to higher financial earnings rather than increase in turnover. The weakening of the market due to the financial crisis in 2008 is a probable factor that might have affected the performance of the processing industry negatively, especially from a socio-economic perspective. Investments decreased with 17 percent in 2008 compared to 2007 which is one indication of the enterprises view of the future and also reflects access to loan capital. It should be mentioned that the Swedish currency weakened to the EURO with 4 percent 2007-2008 measured as a yearly average while it was fairly stable 2007-2006. It means that the decrease in turnover 2007-2008 is practically eliminated and the declines in the economic performance indicators are less

significant, if measured in Swedish currency. However, inflation is not accounted for in the calculations which in Sweden were 1, 2 % higher in 2008 compared 2007 measured as a yearly average (source: Statistics Sweden, Consumer Price Index).

The Swedish fish processing industry is to a large extent affected by such issues as customer behaviour and global development and supply of raw materials. Demand for fish products is expected to increase and will require that more and more raw material needs to be imported. The industries also need to plan its production which means that they have to combine domestic raw material with raw material from other countries. On the whole an increased competition for raw material is expected and the industry therefore may have to invest in foreign operations to ensure supply. Increased competition will be an incentive for enterprises to reduce cost. Incentives for cost reductions combined with an expected increase in customer demand, especially for highly processed products, are reasons for enterprises to outsource production to regions with low labour costs and easier access to raw materials.

#### **5.21.7. Comments on the data**

The Swedish data in this report are bought by the Swedish Board of Fisheries from Statistics Sweden and reported by Swedish Board of Fisheries. The reported data are is as indicated in Commission Decision 2008/949/ appendix XII and consistent with the same data reported to Eurostat by Statistics Sweden.

The calculations of indicators from the data collected under the data collection framework might differ from figures reported to Eurostat due to different methods of calculation. For example the GVA reported to Eurostat is slightly lower than the calculations in this report, 2% in 2006 and less than 1% in 2008 and 2007. At last, energy costs are included in other running costs for 2006.

## 5.22. United Kingdom

### 5.22.1. Overview of the sector

In the UK fish processing industry there are 525 businesses processing seafood or salmon (460 seafood businesses and 65 businesses processing salmon (including trout)). These businesses show total employment of 42,505 of which 60% of which are male and 40% of which are female. This translates into 20,086 Full Time Equivalent (FTE) positions. Although the UK longer term trend has shown a reduction in the size of the fish processing industry, 2008 figures show slightly more seafood businesses compared to 2007.

### 5.22.2. Nature of the industry: concentration

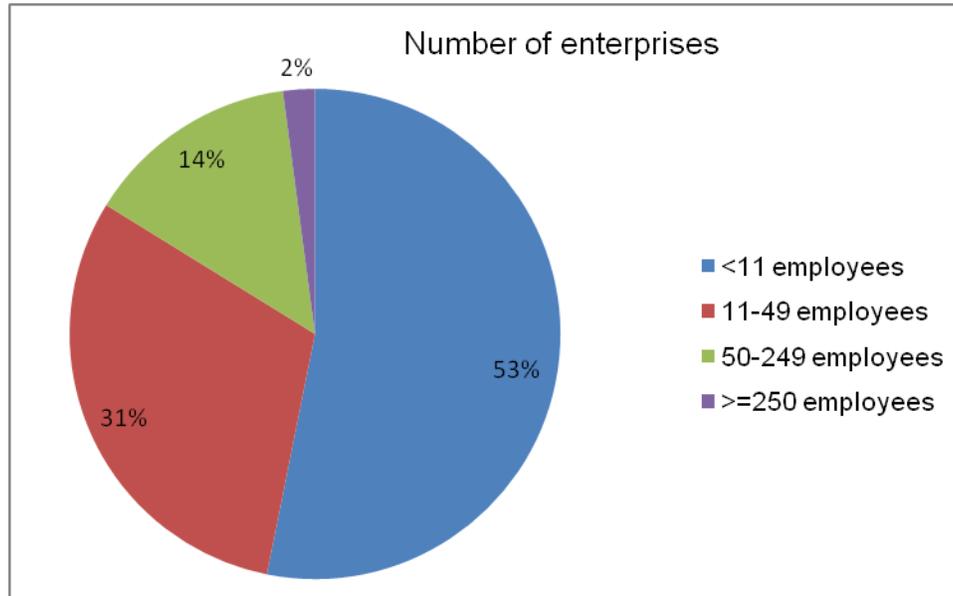
The industry in the UK can be characterised as having a large number of small single site businesses and a small number of large multi-site businesses.

Table 5.43: Size distribution of the British fish processing industry

FTE size band	No of enterprises	No of FTEs
Less than 10	279	1,512
11-49	161	3,542
50-249	74	7,329
250 and above	11	7,703
Total	525	20,086

In seafood the industry is concentrated in two geographical areas: Humberside in England and Grampian in North Scotland. These are still the most significant areas in terms of employment and the number of processing units with Humberside providing 27% of total industry employment and Grampian providing 23% with several of the largest processing companies being based in these areas. In salmon the majority of processing units and employment is concentrated in Scotland, this area accounts for 80% of all salmon processing jobs and 75% of salmon processing units. Longer term trends in the geographical distribution reveal a reasonably stable industry; more dynamic trends appear in the nature of business activity.

Figure 5.63: Size distribution of the British fish processing industry



### 5.22.3. Main products and main segments

The main products produced by the industry include:

- Whitefish fillets (cod, haddock, Pollock): fresh, frozen, breaded
- Shellfish (warm and cold water prawns, nephrops): fresh, frozen, breaded
- Pelagic species (herring, mackerel): fresh, frozen, smoked
- Added value products including ready meals.

The UK industry can be segmented into major processing activities: primary, secondary and mixed (primary and secondary) processing. For seafood business units (rather than enterprises) the majority are undertaking primary processing (46%), with 42% undertaking mixed processing, and 12% undertaking only secondary processing. In contrast salmon business units undertake mostly mixed processing (54%), with 23% primary and 23% secondary.

The main market segments of importance to the processing industry are: retail, food service and exports. Of seafood processing sale value, the retail market accounts for 57%, food service/wholesale represents 23%, and exports 12%. For salmon processors, sales are estimated

to be around 600 million pounds with key markets being the UK domestic market and export markets in the USA and France.

#### **5.22.4. Dependency on domestic production**

The UK seafood processing industry is heavily reliant on imported raw material. Of the estimated 1.1 million tonnes supply required by seafood processors, imports represent 61% of this volume. The remainder is largely landings from the domestic fleet with a very small minority drawn from domestic aquaculture. In contrast, salmon processing relies heavily on domestic aquaculture production, estimated by the industry<sup>13</sup> to be over 138,000 tonnes in 2008, supported by imports.

The choice over sourcing policy is influenced by a number of factors. Often the size of the processing business is an important factor. Historically the larger seafood processors have been more likely to rely on imported material using domestic supply as a supplement. An important driver behind this is the large volume of available and reliable products required by their customers; for example multiple retailers. In contrast, smaller processors are often reliant on local supply from domestic landings. The ability of smaller processors, who are largely engaged in primary processing activity, to flexibly channel material to a wide range of customers allows them to cope with variability inherent in this supply route. Medium sized processors are often in a conflicting situation, contracted to customers demanding product availability and having a greater reliance on multiple supply routes to ensure volumes.

Over many years, the processing of whitefish material has seen a decline in available domestic landings and in parallel an increasing reliance on imported material. In contrast the processing of shellfish has seen an increase in domestic landings, particularly Nephrops, scallops and crab and an increase in imported cold and warm water prawns (following a growing taste for these species in the UK). The processing of pelagic material is largely reliant on domestic landings with very little imports and are therefore susceptible to changes in Total Allowable Catch (TAC). Salmon

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<sup>13</sup> Scottish Salmon farming industry research report. Scottish Salmon Producers Organisation. 2008. p7.

processing relies largely on domestic aquaculture but this is supplemented with imports from Sweden, Faroes, Norway and the USA. For whitefish and shellfish, some of the more important species imported into the UK and the main source countries are set out below (see Table X).

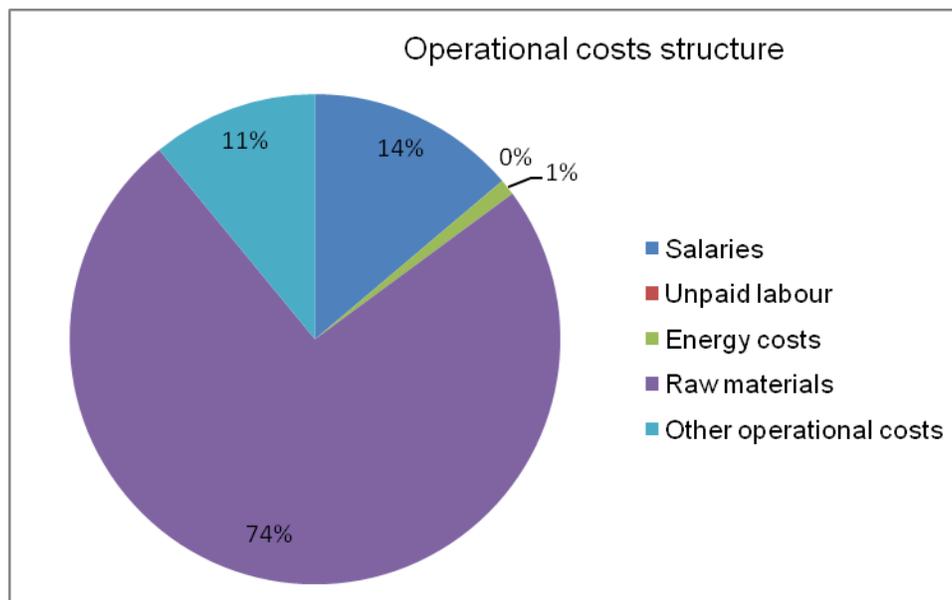
Table 5.44: Key species, source countries and key markets

Type	Species	Source countries	Key markets
Whitefish:	Cod	Iceland, China, Denmark	UK
	Haddock	Iceland, Norway, Faroes	UK
	Pollock	Germany, USA	UK
	Coley	Faroes, Iceland, Norway	UK
Shellfish	Warm water prawns	Indonesia, India, Thailand, Ecuador, Honduras, China	UK
	Cold water prawns	Denmark, Greenland, Iceland, Norway	UK
	Nephrops	UK	Italy, France, Spain
	Scallops	UK	Italy, France, Spain
	Crabs	UK	Spain, France
Pelagic	Herring	UK	Netherlands, Germany, Russia
	Mackerel	UK	Russia, Netherlands
	Salmon	UK, Sweden, Faroes, Norway, USA	UK, France, USA

#### 5.22.5. Socio-Economic performance indicators and competitiveness

The cost structure for the UK processing industry is illustrated in Figure X. Performance data on the processing industry reveals the dominance of raw material costs and also the importance of wages and salaries, which account for 72% and 13% of costs respectively. Costs items which may directly affect the businesses through fluctuation, such as energy, depreciation and financial costs (including interest) represent a small proportion of overall costs (1%). Other operational costs (which would include items such as transport, water charges, packaging) represent 11% of costs.

Figure 5.64: Distribution of the operating costs in the British fish processing industry



The socio-economic indicators for 2008 highlight greater numbers of firms, employment and turnover figures when compared to 2007. The principle reason for these differences is the inclusion of salmon processing in this year's data. Despite the differences in aggregate values, some comparisons and some notable contrasts can be made, using ratio values in economic and productivity indicators. Higher turnover is associated with a higher Gross value added (GVA) but a lower figure for Gross capital flow (GCF) in the 2007-08 period. When comparing 2007 and 2008 the results reveal a marked difference in operating profit (EBIT) which is 63% higher in 2008. In contrast the return on investment of the processing businesses in 2008 is much lower: 1.34% compared to 1.68%. In comparing the cost structure between 2007 and 2008, the data shows a slightly higher (of the order of 1%) in the share of running costs to turnover.

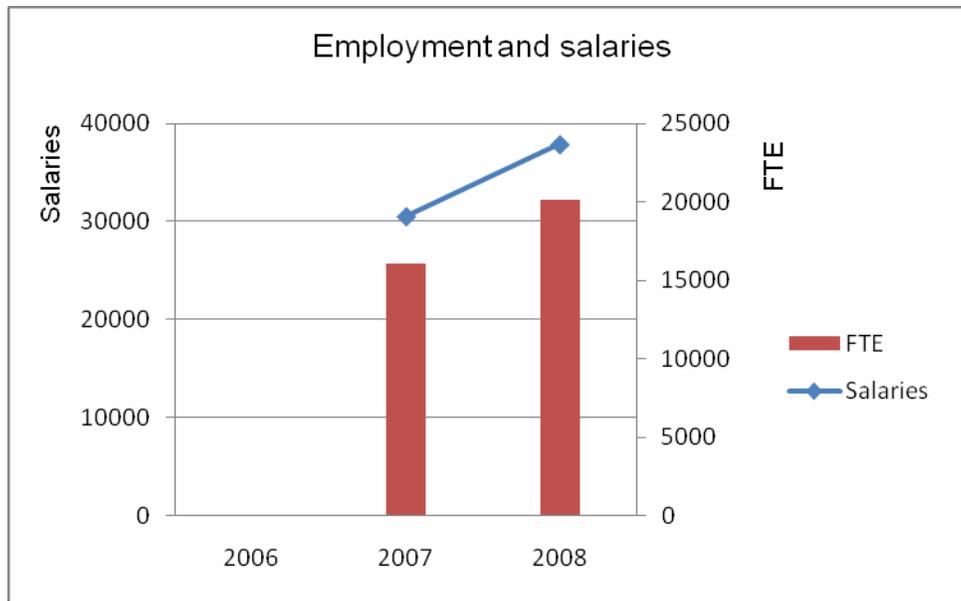
Table 5.45: Socio-economic performance and competitiveness indicators in 2006-2008

Indicator	2006	2007	2008
<i>Structural indicators</i>			
No of firms	na	454	525
<i>Social indicators</i>			
Male employment			25 503

Female employment			17 002
Total employment	na	na	42 505
FTE	na	16 041	20 086
Salary per employee (FTE)	na	30 503	37 864
Employment (FTE) per firm	na	35.3	38.3
% of paid work			na
<i>Economic Performance indicators</i>			
Turnover ('000 €)	na	3 525 473	5 601 137
GVA ('000 €)	na	607 737	858 404
OCF ('000 €)	na	118 445	97 868
EBIT ('000 €)	na	8 703	14 208
Net profit ('000 €)			-66 337
Return on Investment (in %)	na	1.7%	1.3%
Financial position (in %)	na	555%	186%
<i>Productivity indicators</i>			
Turnover per FTE ('000 €)	na	220	279
Net profit per FTE ('000 €)	na	na	-3.3
Turnover per firm ('000 €)	na	7 765	10 669
Running cost to turnover ratio (in %)	na	96.6%	98.3%

The total number of employees in the UK processing industry is 42, 505 of which 60% are male and 40% female. Compared to 2007, the number of FTEs in the industry has increased from 16,041 to 20, 086 (see figure X). As with other indicators, this reflects the inclusion of salmon processing businesses in the 2008 data. Notwithstanding this, the data shows the turnover per FTE in the industry to have increased from 240,000 Euros to 279,000 Euros.

Figure 5.65: Evolution of the employment and salaries in the British fish processing industry



**5.22.6. Comment on sector’s performance and possible development in the future**

The processing industry has for a long period operated with very tight profit margins. This makes UK processing businesses especially sensitive to changes in input prices, such sensitivities can have an important effect on profitability and return on investment.

The increase in running costs as a share of turnover between 2007 and 2008 are revealing. Notwithstanding the addition of salmon companies this year, there are notable changes in the cost structure between 2007 and 2008. As a share of costs, 2008 results reveal an increasing share of raw material costs, and slight reductions in energy and other running costs whilst salaries as a share of costs remain stable.

A number of contributing factors have influenced the increase in raw material costs in the UK in the 2008 period. Fuel price increases play an important role as does the performance of the wider economy; the financial crisis in the latter part of the year most notably. High fuel prices are an important component in the cost of catching activity as well as the transportation of raw material. The latter is likely to have been particularly influential given the reliance of UK processors on imports. The financial crisis caused significant disruption to the industry, for example for

importers this led to an increase in insurance costs, and changes in UK exchange rate made imports more expensive, particularly for shellfish importers.

The slight reduction in other running costs may be the result of a more general trend of outsourcing production to low cost countries and efficiency gains arising from industry consolidation in recent years.

#### **5.22.7. Comments on the data**

This data is not based on processing activity as defined by Eurostat/NACE codes. The UK Annual Business Inquiry has a number of shortcomings, in its methodology and estimates, makes it ill suited to providing an overview of UK fish processing activity. UK statistics suggest, for example, there are only 343 enterprises concerned with the processing and preserving of fish, crustaceans and molluscs. Such shortcomings have meant that the UK Government commissions primary research to establish a profile of the UK fish processing industry.

Seafish conducts data collection on behalf of the UK Government. The data collection takes the form of a census survey of all UK processors followed by a subsequent financial sample survey. This census survey defines a processing company as being a company which in some way materially changes the fish. More specifically included in the scope of the data collection are companies: of any size; engaged in any type of processing (primary, secondary, mixed); that process any type of fish: demersal fish, shell fish, cephalopods, exotic fish, pelagic fish, salmon; that also carry out other fish-related activities such as trading in which 50% or more of the turnover is generated from seafood / salmon processing (with the exception of collecting employment data from all fish processing companies). Excluded from the scope are: Companies engaged in farming and distribution only; Processors located in Isle of Man and Channel Islands; Financial analysis of businesses processing a wide range of food, of which fish is a small volume. The financial data collection uses the results of the financial survey and data from UK business accounts (available from Companies House).

## 6. European Overview: Summary economic performance of the EU fish processing industry

### 6.1. Overview of the sector

On next table 6.1, there are presented the main indicators for the fish processing industry by country, in order to offer an overview of the whole European sector.

In 2008, the fish processing sector in the EU had more than 3,800 companies that accounted for around 26 thousand million Euros of turnover and more than 4.3 thousand million Euros of Gross Added Value. Showing a profitability (based on the return on investment calculated from the EBIT) of the 5.6%.

The fish processing industry gave job to around 150 thousand people in the whole Europe, with an annual average wage of around 26 thousand Euros. The turnover per employee (in FTE terms) was of around 223 thousand Euros during 2008.

Table 6.1: European overview by country 2008

	Turnover (‘000 €)	Number of Firms	Employment	GVA (‘000 €)	ROI (%)	Turnover/FTE (‘000 €)	Wage (FTE) (‘000 €)
Belgium ***							
Bulgaria	48 538	45	2 024	24 425	38.3	24	1 788
Cyprus *	15 000	17	43			300	16 000
Denmark	1 702 640	117	4 379	256 634	1.1	411	48 789
Estonia	116 525	50	1 936	25 099	2.6	63	9 759
Finland	160 023	143	895	33 121	8.0	235	34 787
France	3 151 200	214	12 000			263	36 229
Germany	2 366 517	281	8 469	358 846	8.1	293	33 511
Greece **	186 719	160	2 175	65 164		86	13 366
Ireland	426 866	198	2 867	177 662		194	29 193
Italy	3 158 761	376	7 750	312 480	0.8	497	38 288

Latvia	215 111	95	5 795	54 307	13.0	38	5 631
Lithuania	194 874	37	5 013	71 832	26.3	67	7 930
Malta *	35 000	7	56			900	33 000
Netherlands	712 280	101	2 953	139 303	3.2	305	38 927
Poland	1 441 309	205	16 355	236 207	6.2	93	9 222
Portugal	1 455 181	132	7 067	384 003	22.0	206	13 953
Romania	21 492	87	929	15 634	8.0	23	12 108
Slovenia	29 037	12	250	11 572	6.8	138	20 523
Spain	4 148 244	572	19 737	1 198 075		217	23 392
Sweden	519 302	214	2 216	110 630	4.6	293	45 157
United Kingdom	5 601 137	525	42 505	858 404	1.3	279	37 864
Total	25 705 757	3 588	145 414	4 333 398	5.6	223	25 894

\* Only reported a fraction of the data and some of the data presented has been rounded.due to confidentiality reasons

\*\* 2007 data

\*\*\* Belgian data was not considered robust enough to be included in the EU overview.

When comparing figures from the EU fish processing sector and the EU fishing fleet we can realize the actual importance of the sector. Based on data from the 2010 AER of the EU fishing fleet (and using previous years' data for Member States that did not submit data for 2008), in 2008 the turnover of the EU fishing fleet is estimated around 6.5 thousand million Euros, the Gross Added Value around 3 thousand million Euros, around 135 thousand fishermen employed and generally with an annual average wage lower than the one at the fish processing sector.

## 6.2. Comments on the data

There are no significant issues with the data that may halt this analysis. All Member States have submitted most of the requested data.

Only data from Cyprus and Malta has not been presented in detail due to the low number of companies that may harm confidentiality of the companies. Belgian data was not considered

robust enough to be included in the EU overview, but it is reported on the national chapter and on the Appendix V. Greece only submitted, so far, 2006 and 2007 data, but not 2008 data.

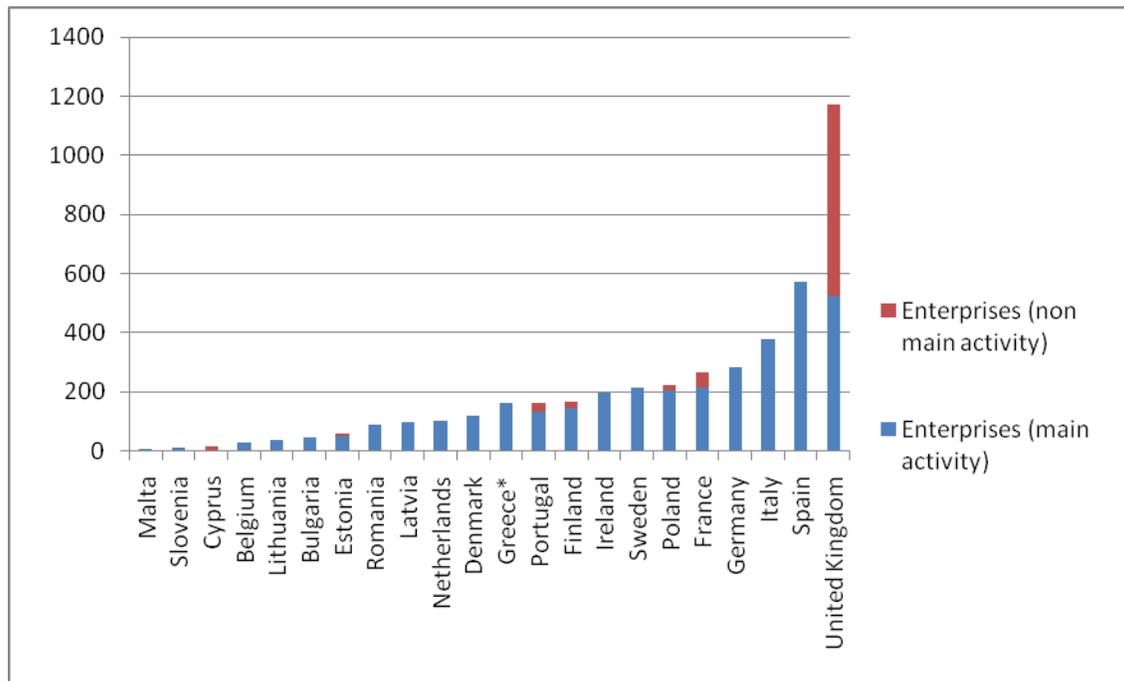
The missing parameters from some Members States have implied that not all indicators can be estimated for all Member States, but this is detailed on the National chapters.

### 6.3. Nature of the industry: concentration

In 2008, the fish processing sector in the EU had more than 3,700 companies that did fish processing as their main activity. Moreover, it was also reported that around 800 companies did fish processing but not as their main activity.

Since only 8 countries reported data on the companies that are doing fish processing but not as their main activity, and the difficulties to collect this information, it is expected that this number is much higher in reality. It is understandable that in future years the number of companies that do fish processing but not as their main activity will increase, because of more Member States reporting this data and better coverage.

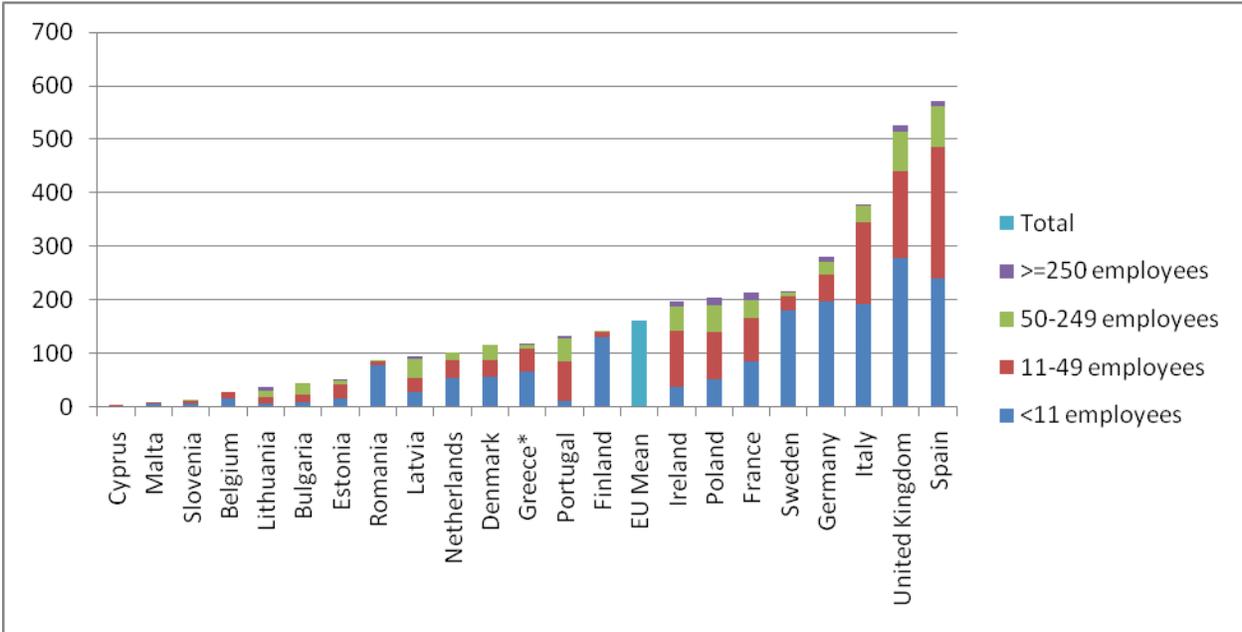
Figure 6.1: Number of enterprises, classified as doing fish processing as main activity or not



It can be seen on previous figure that in the United Kingdom there were less companies doing fish processing as their main activity than the ones doing fish processing but not as their main activity. Similar situation takes place in Cyprus. However, in the other 6 countries that reported data on companies doing fish processing but not as their main activity it is just a small fraction of the total of companies.

On figure 6.2, we take a look at the number of companies classified by the number of employees (in FTE terms) by country for the companies that do fish processing as main activity.

Figure 6.2: number of companies classified by size



From the previous figure 6.2, it can be seen that the small companies (with 10 employees or less and between 11 and 49 employees) are the most common ones in Europe.

**6.4. Main products and main segments in the EU**

Not a lot of information was available, since data on products is not further collected under the DCF. Eurostat’s PRODCOM data could be used to obtain some estimators. But the quality Eurostat’s PRODCOM for several Member States has been criticized.

## **6.5. Dependency on EU domestic production**

Not a lot of information was available, since data on raw materials is not further collected under the DCF. Eurostat's PRODCOM data could be used backwards to obtain some estimators. But already other SGECA groups have recommended the elaboration of a study to assess the feasibility of collecting this kind of data.

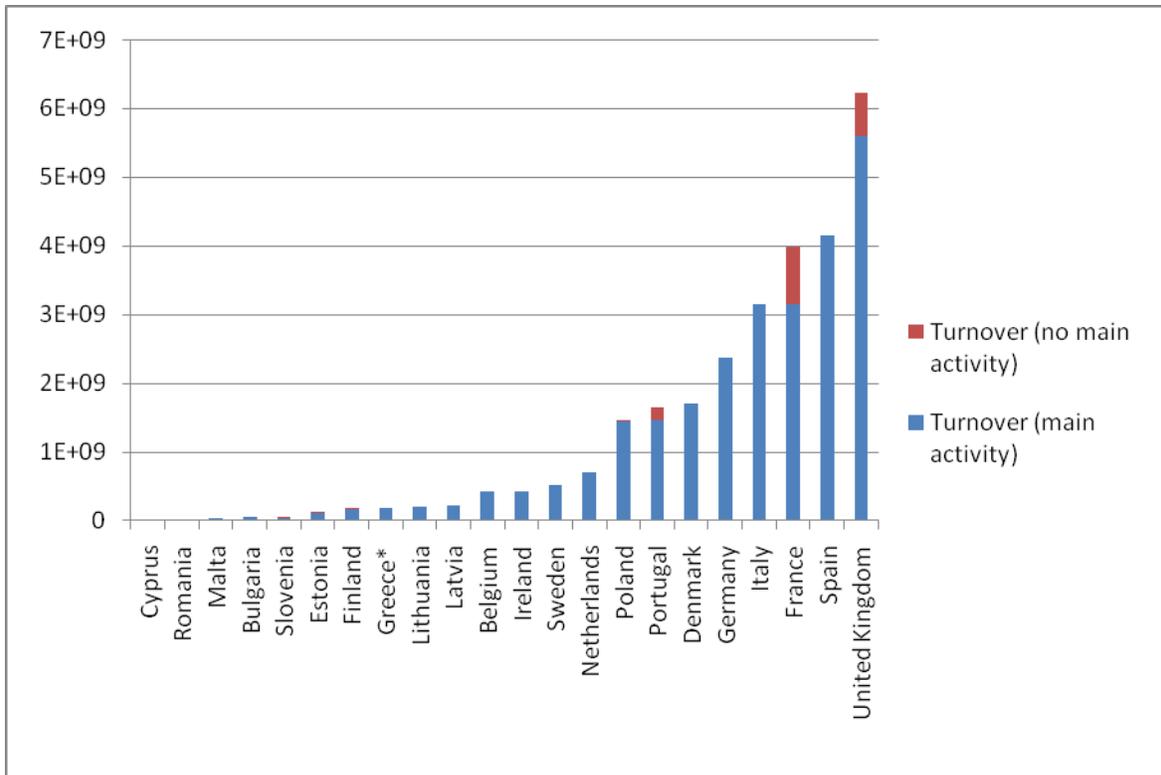
## **6.6. Socio-economic performance and competitiveness**

### *Economic performance*

#### Turnover

In 2008, the fish processing sector in the EU had more than 3,700 companies that did fish processing as their main activity. These companies accounted for around 26 thousand million Euros of turnover. While the other 800 companies that did fish processing but not as their main activity accounted for a turnover of 1.7 thousand million Euros.

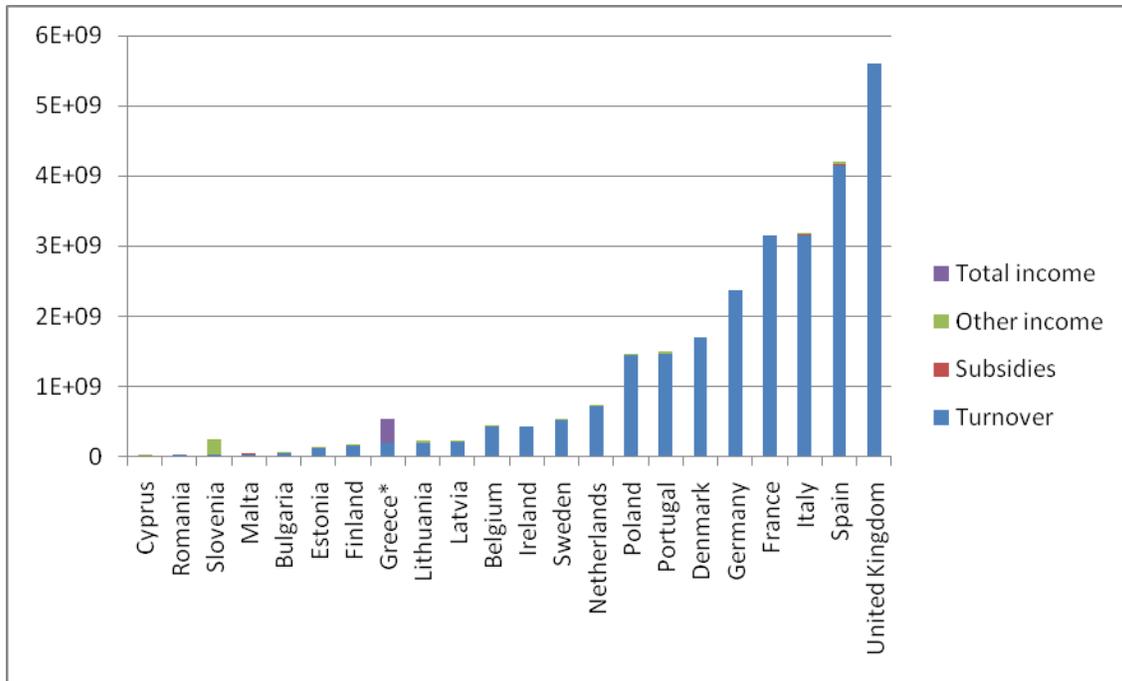
Figure 6.3: Turnover by companies (main and not main activity)



It can be seen on previous figure that even though in the United Kingdom there were less companies doing fish processing as their main activity than the ones doing fish processing but not as their main activity, the income coming from the companies that fish processing is the main activity is much higher.

On figure 6.4, we take a look at the origin of the income for the companies that do fish processing as main activity.

Figure 6.4: Origin of the income by country



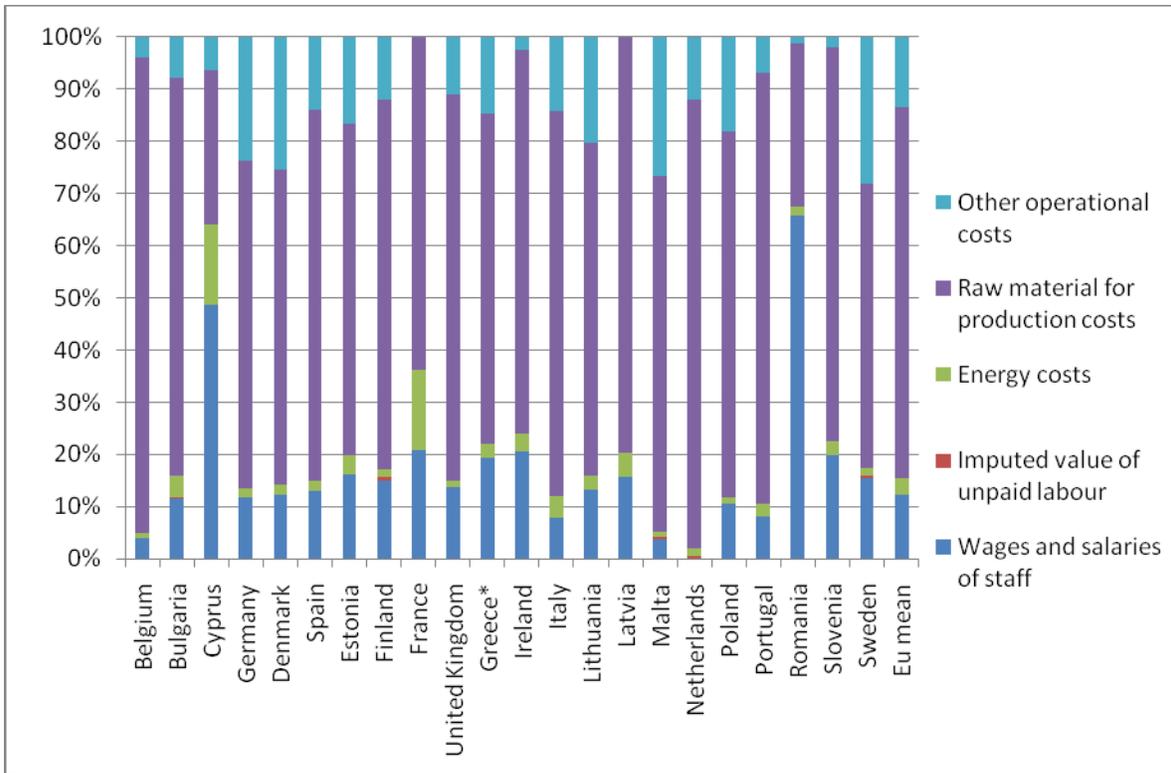
Most of the income of the EU fish processing industry is coming from turnover. Only in Slovenia, a significant amount is coming from Other income, because there are also considered in the data companies that do fish processing but not as their main activity, in order to avoid confidentiality issues.

### Cost structure

The main cost item in the operational cost is by far the cost of the raw materials. It is followed by the salaries and other operational costs (that includes packaging).

On figure 6.5, it is presented the operational costs structure for the companies that do fish processing as main activity.

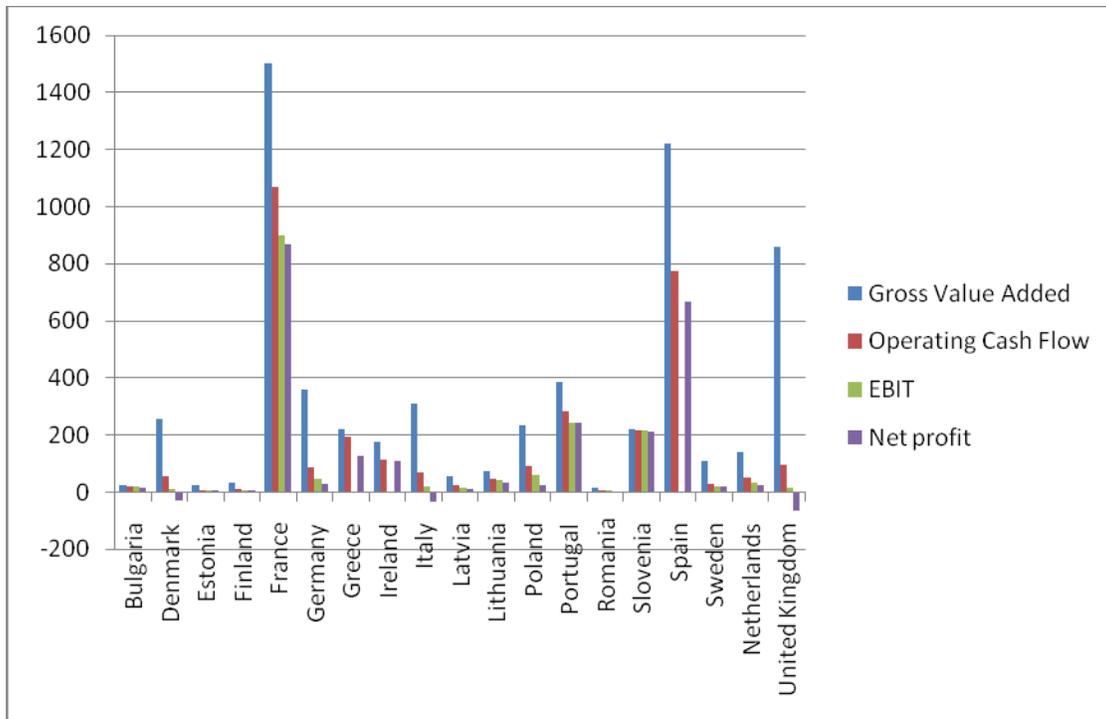
Figure 6.5: Distribution of the operating costs in the fish processing industry



### Economic performance indicators

On figure 6.6, there are presented the economic performance indicators: Gross Added Value, Operating Cash Flow, Earnings before interests and taxes (EBIT) and Net profits for the companies that do fish processing as main activity.

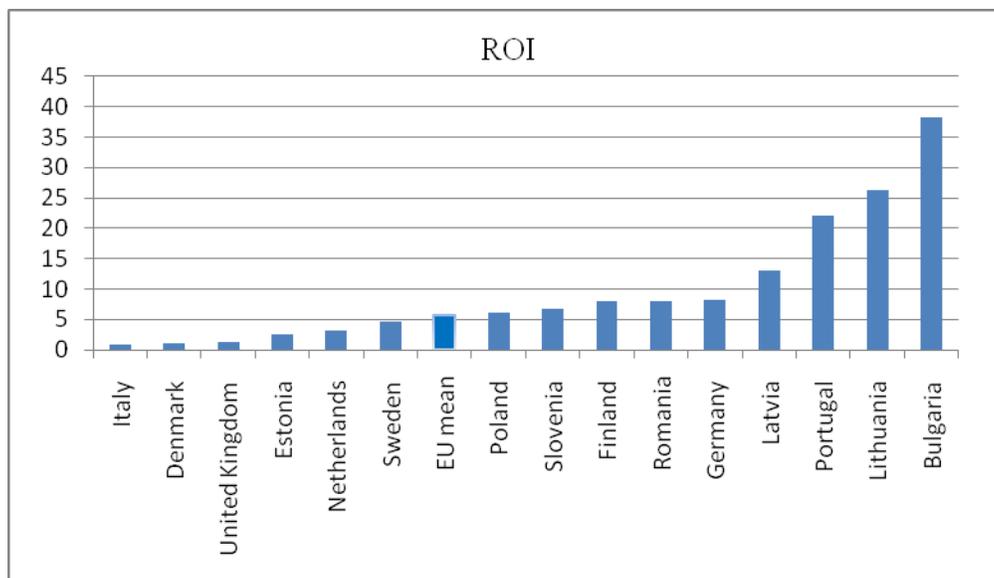
Figure 6.6: Economic performance indicators (in Million Euros)



### Return on Investment

In 2008, the fish processing sector in the EU reported a profitability (based on the return on investment calculated from the EBIT) of the 5.6%.

Figure 6.7: ROI by Member State



The calculation of the return of investment using the net profit lead to lower profitability levels, since it is additionally considering the financial costs. However, since financial costs are not related to the operational nature of the processing industry, it was decided to calculate the ROI using the EBIT to show strictly the performance of the sector.

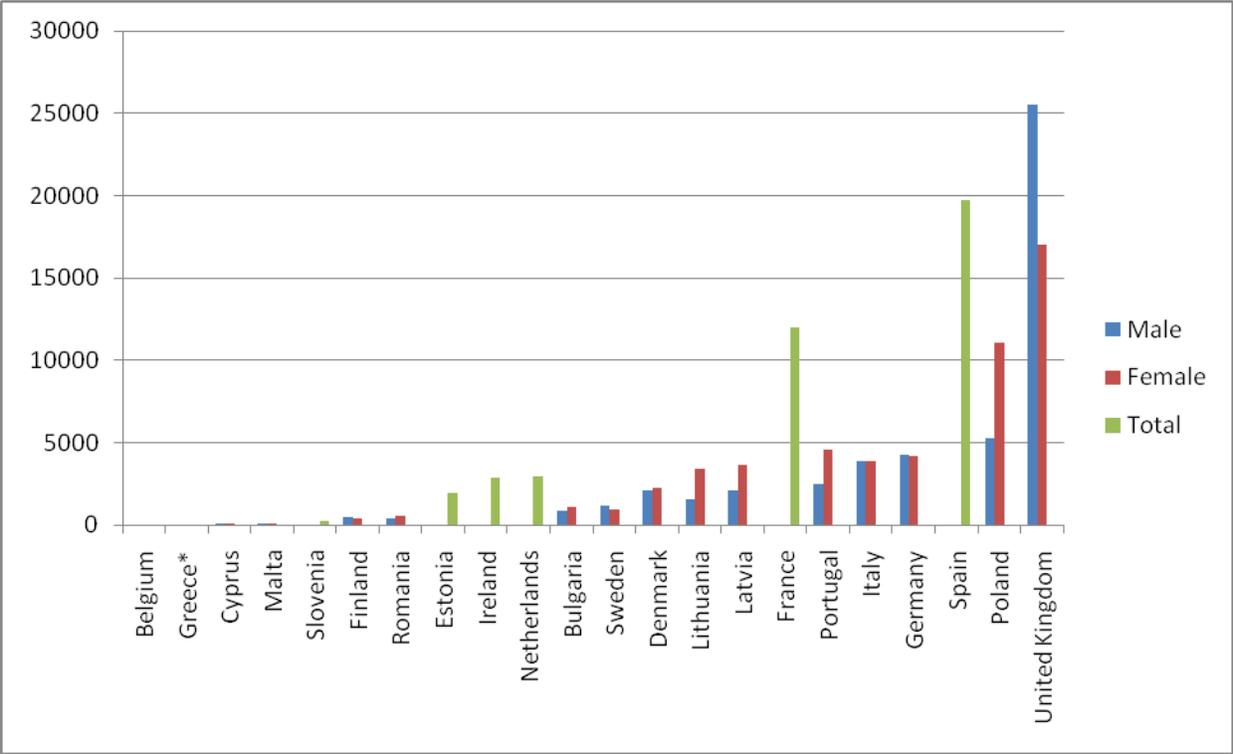
**Social aspects**

The fish processing industry gave job to around 150 thousand people in the whole Europe, with an annual average wage of around 26 thousand Euros.

Not all employment data has been disaggregated by gender. On next figure we present the employment by gender and total when there is no gender distinction done.

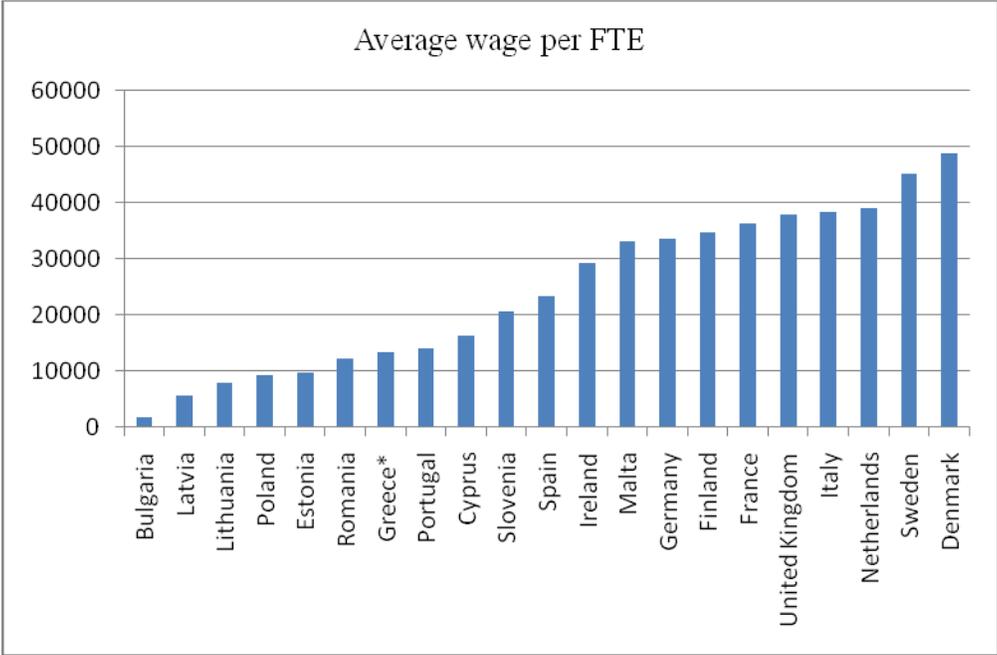
**Employment**

Figure 6.8: Employment by gender



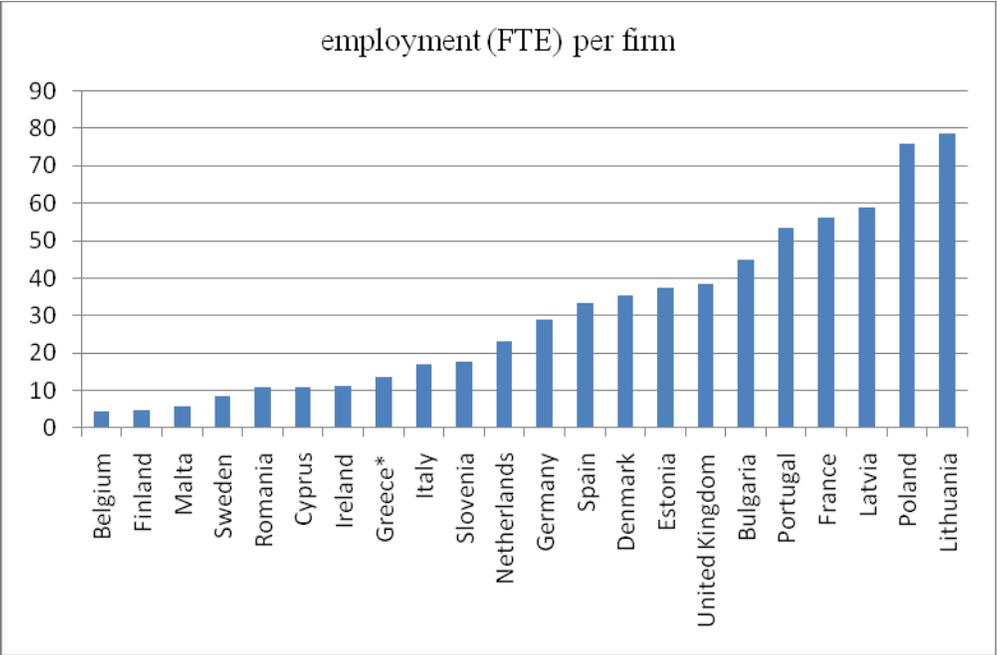
At this level of information it seems that there are no major differences in employment by gender in the European fish processing sector, since male employment represents the 49% and female employment represents the 51%.

Figure 6.9: Average wage per FTE (when possible)



From previous figure it can be seen that there are still important differences in the average salaries received in fish processing workers of the different Member States. In general, new Member States have lower average salaries.

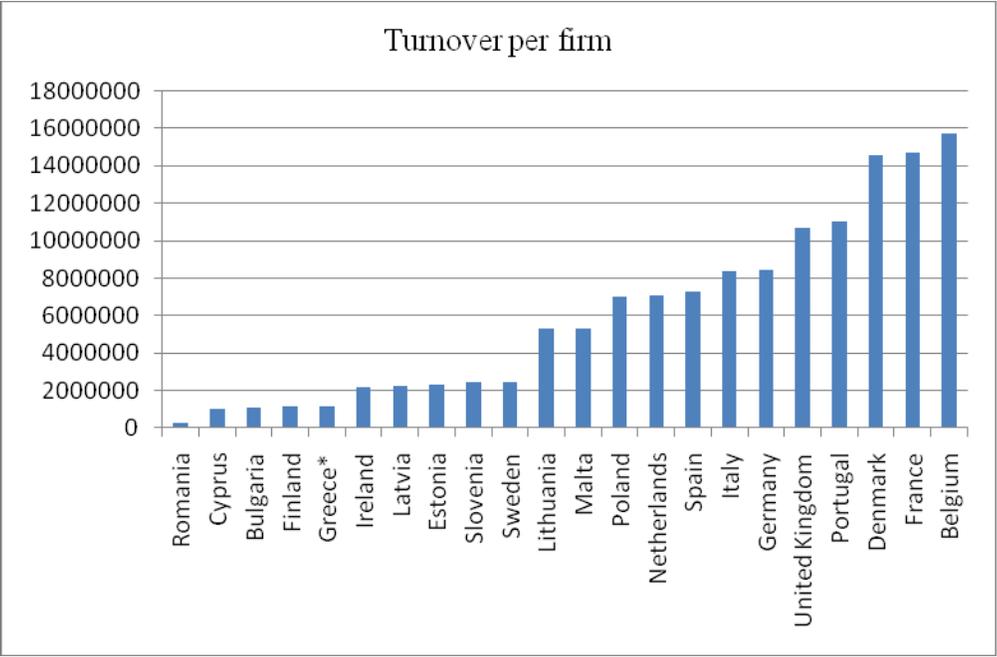
Figure 6.10: Employment (in FTE when possible) per firm



It is difficult to obtain conclusions from previous figure 6.10 since some Member States did not report data for the smallest fish processing companies.

***Productivity performance***

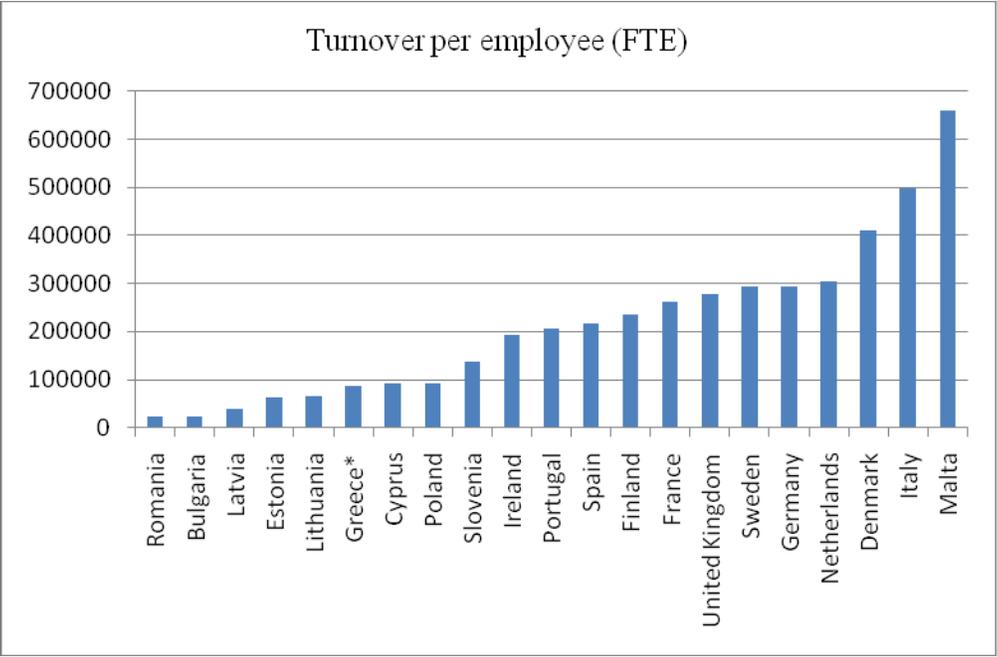
Figure 6.11: Turnover per firm



From previous and following figures it can be seen that there are still important differences in the productivity on the fish processing sector in the different Member States.

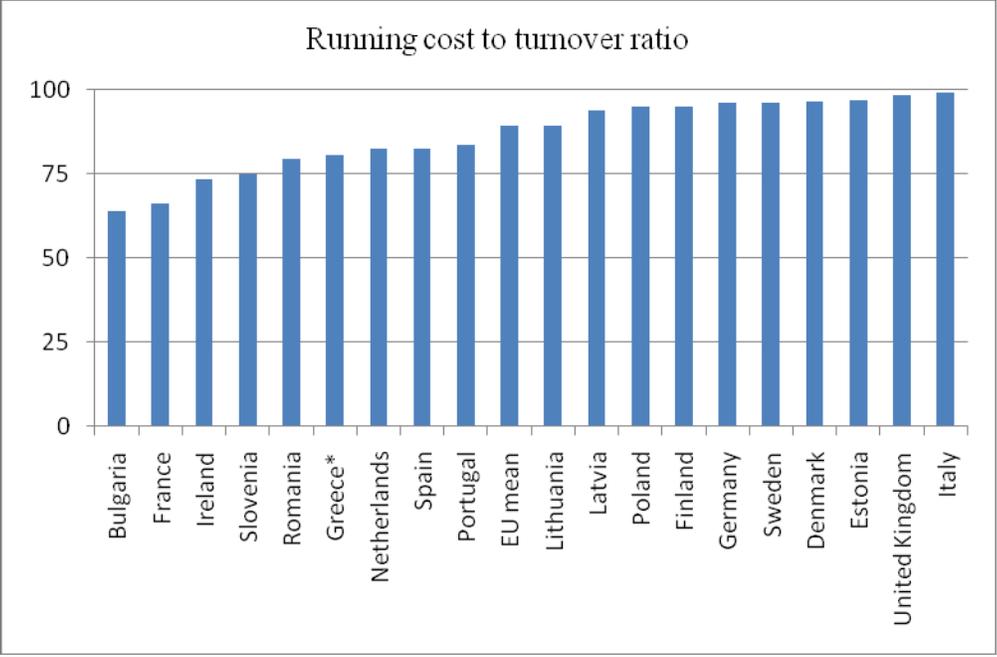
However, it should be also taken into account that it is difficult to obtain conclusions from previous figure 6.11 since some Member States did not report data for the smallest fish processing companies.

Figure 6.12: Turnover per employee (in FTE terms when possible)



The EU fish processing sector has an average productivity of more than 250 thousand Euros of turnover per employee.

Figure 6.13: Running cost to turnover ratio



The EU fish processing sector has a running cost to turnover ratio of around 90%. This implies that the operational costs are very high in comparison with the turnover, and so the sector is working with very narrow margins.

#### **6.7. Comment on sector's performance and possible development in the future**

We have seen that the fish processing sector in the EU had more than 3,800 companies that accounted for around 26 thousand million Euros of turnover and more than 4.3 million Euros of Gross Added Value in 2008. Showing a profitability (based on the return on investment calculated from the EBIT) of the 5.6%. The fish processing industry gave job to around 150 thousand people in the whole Europe, with an annual average wage of around 26 thousand Euros. The turnover per employee (in FTE terms) was of around 223 thousand Euros during 2008.

It is very difficult to make a temporal analysis from the data we currently have, due to the change in the parameters submitted due to the change in the regulation, and the missing data for some years for several countries. But our perception from the available data is that the fish processing industry has been increasing in terms of turnover, despite the global and sectorial situations.

In fact, the sector is suffering of very low margins and they continue to decrease due to increases in the raw materials and energy costs that cannot be translated into price increases due to the high negotiation power of the retail sector. Moreover, the current economic crisis has affected the sector in very different ways, from a shift in the consumer's demand for cheaper products to increasing the difficulty to obtain credit.

On next section "Additional data analysis (cost structures, vulnerabilities etc.)" it is presented with a higher level of detail the circumstances that affect the sector's performance and its possible development in the future.

## **7. Additional data analysis (cost structures, vulnerabilities etc.)**

### **7.1. Background: the economic crisis**

The current economic crisis originated in December 2007 in the United States, spreading to most industrialized countries, and has caused a pronounced deceleration of the economic activity. Even though some economists claim that the recession is over, its effects are still clear on the economy.

This global recession was caused, or at least triggered, by various imbalances in the economy, such as an increase in oil and food prices. But mainly due to an extended period of cheap and easy available credit that were used to finance high levels of consumption leading to inflation, an indebted economy and a financial and a housing bubbles. However, once interest rates began to rise in 2006–2007, housing prices started to drop moderately and refinancing became more difficult, that resulted to the bursting of the housing bubble and the financial crisis.

The financial crisis started with the collapse of sub-primes, financial instruments that banks use to pool their various loans into securities and marketed around the world, and by doing so they are off-loading to others. This exposed other risky loans and over-inflated asset prices. With stock markets and housing prices declining and the inter-bank loan market almost frozen, important investment and commercial banks suffered important losses that lead some of them to bankruptcy. Most governments responded with interventions containing public financial assistance and bailouts to the financial system and economic stimulus measures.

Several countries in Europe facing high indebtment levels had to reduce their expenditure, in what is known as the 2010 European sovereign debt crisis. This crisis has mostly impacted Greece, Ireland, Portugal, Italy, and Spain. Governments often run large budget deficits, especially coming from a situation of economic boom with cheap and easy available credit, and exacerbated with the financial crisis measures that required important levels of public expenditure. But with the economic and financial crisis, economic sectors have been affected and revenues have fallen together with more difficulties to borrow money in the international market.

This, in conjunction with some irregularities in reporting public deficit figures in Italy and especially Greece have lead rating agencies to downgrade the rate of several government debts, which has resulted in more difficulties to borrow money and higher interest rates. Moreover, depreciating their own currencies is not the solution anymore, since these countries are in the Euro zone (using the Euro as currency) and so they cannot do the monetary policy on their own. Thus, several European countries had to impose a number of austerity measures, including public sector wage reductions.

The economic and financial crisis has resulted in a decrease in the general level of consumption and demand, a reduction of the international trade, high food and oil prices compared to levels five or ten years ago, instability in the financial system, more difficulties to borrow money, and there has been an increase in the unemployment and job insecurity. While the sovereign debt crisis and following austerity measures have jeopardized future economic growth, at least at the levels seen before the economic crisis.

## **7.2. Characterisation of the Fish Processing sector**

First of all we should admit that it is very difficult to draw general conclusions for the fish processing sector since it is very heterogeneous. There are big differences on:

- the size of the companies (from family businesses to international companies with large processing plants),
- the products elaborated that depends on the species used as raw materials, the processes and geographical areas,
- the origin of the raw materials that can be from landings, imports or aquaculture.

Moreover, these three topics are often interrelated. So, it is possible to find a certain degree of regional specialisation, (being salmon and herring predominant in the north and tuna, anchovy, mussels and clams in the south of Europe). With, salmon and tuna used for processing mostly originating from imports and even some stages of the production take place in third countries. Besides, normally small companies tend to base the supply of raw materials from local landings,

but large companies often have to turn to imports in order to have a regular supply for their processing plants.

Unfortunately, we are not able to characterise these different segments on the fish processing sector, since not all the necessary data at the required level of disaggregation is collected/requested. However, we must admit that current data requirements are not always easy to meet, and not all requested data is submitted. This happens because not all data is available, sometimes there is not willingness to collaborate and finally due to confidentiality reasons when the sector is small.

However, for the overall sector it is clear that during the last years there has been an increase in the production costs, especially on the raw materials and energy costs. This increase has worsened the economic performance of the sector that suffers from very low margins. It should be taken into account that the operating costs represent more than 90% of the turnover, where raw materials are the major cost item in the operating costs.

The economic crisis has caused a lower (or a shift) in the demand for fish. Consumption has been relatively stable but expenditure has decreased. This has resulted in an increase in the demand for cheaper products.

The sector is suffering a very high competition from extra-EU imported products, but also from intra-EU trade. Moreover, there is an increasing share in the distribution of fish processing products through supermarkets and discounts at the retail level, which is dominated by large companies. While there is a lack of (or at least very low) concentration in the processing industry. All this, together with the fact that products are quite homogeneous and that price is the major driver in the purchasing decisions, makes the market of fish processing products very competitive and fish processor have very little bargaining power. Consequently, increases in the cost of inputs (production costs) cannot be transmitted to increases in prices, and margins further deteriorate. Even though, some parts of the industry will be disadvantaged through greater exposure to these developments compared to other parts of the sector.

### **7.3. How the crisis has affected the Fish Processing sector**

In 2008 the global financial crisis seriously affected the trading conditions in which seafood processors operate. Processors faced multiple impacts; directly on business operations and from impacts elsewhere in the supply chain. The general volatility in trading conditions heightened business risks in supply, markets, trading partners as well as risks arising from competitors. The degree to which these impacts translated into positive or negative performance for businesses were, of course, contingent on particular circumstances.

With the financial crisis affecting consumer confidence, there were new buying patterns in, and between, certain markets. Some consumers reflected the uncertainty in their purchasing choices through, for example switching from fresh to frozen products, or from food service (eating out) to retail (eating in).

The response of the financial sector to the crisis had an important bearing for many businesses, not just seafood processors. Credit tightening meant short term borrowing was more difficult to access with implications on cash flow for some businesses. An unwillingness to underwrite transactions through insurance provision had implications for export and import activities, indeed in some cases refusal to provide guarantees, halted trading activity.

Exchange rate fluctuations created further uncertainty in international trading. For example weaknesses in domestic currency against major currencies allowed exporters to gain, whilst importers suffered from increased costs of buying goods or services from overseas.

The general increase in uncertainty heightened business exposure to risk, however the profile of this risk was not homogeneous. Different sub systems faced particular risk profiles. For example processors with a narrow supply base may have faced greater risks compared to those reliant on a wider set of suppliers. Likewise processors relying on very few customers may also have found themselves in a higher risk position for example from customers defaulting on payments or pressure to reduce margins.

Similarly the capability of processors to counteract, or take advantage of, certain risk areas and ongoing developments was not homogeneous. Scale of operation may have played an important role in this. For example, with an ability to negotiate forward contracts on finance, supplies, and the like, larger processors may have been insulated from certain developments. In contrast smaller processors may have found their ability to negotiate with banks to be limited and having to operate with reduced working capital. Furthermore, mid-sized processors may have experienced difficulty in reducing overheads by a limited ability to upscale or downscale operations.

#### **7.4. Forward tensions and choice points**

In the last decades, EU seafood supply is not able to fully feed the consumers' demand and this gap between consumption and internal supply will continue to increase. So, there is an increased dependence on imports (both, of raw materials and finished products for final consumption).

This may raise a dilemma, about whether it should be aimed to protect the current sector with duties and quotas to the imports, or it would be better to liberalise the sector. Both options would benefit different profiles of company. But, we should be aware that it is very difficult to obtain any results with this debate since in the current context, this trade decisions are subject to the agreements taken on the World Trade Organisation, and it intends to liberalise international trade. In consequence, this gives little autonomy to Member States and the EU to settle their own trade policies. However, the implementation of quality and sanitary standards and controls continues to be a key issue in order to maintain the high standards of seafood products and to avoid health risks. The use of required minimum social standards in the Third countries' companies producing processed seafood products for its import to the EU seems to be an issue that should be discussed in the future.

There are opportunities for developing new processing activities based on imported pre-processed raw materials, especially with emerging species like pangasius; similar to what already happened in northern Europe with salmon years ago.

One of the recurrent solutions that have been given to the fish processing sector is to increase the concentration of the sector, either by vertical integration or investing in new locations. Many companies have already moved part of their production abroad, but some have just outsourced the production in order to reduce costs. It should be considered that these practices can have negative implications on the industrial development of the origin areas. Moreover, companies often face a trade-off, when considering whether to expand, between trying to obtain economies of scale and having enough flexibility in order to adapt the company to the changing environment. Furthermore, with current conditions, it does not seem easy to grow due to the low margins that the industry is facing, the difficulties to borrow money, the need of raw materials and skilled workers, etc.

Finally, considering such a competitive sector, with an increasing share of imports from developing countries, it seems not easy to compete on prices. In contrast, looking at consumer's habits and their trends it seems more feasible to focus on the differentiation of the product. This product differentiation requires monitoring of consumer buying habits and being proactive on product development, maybe on more elaborated recipes: ready meals, delicatessen products, etc.

Another issue that should be analysed at the company level (even at the product-market level) is whether promotion and eco-labelling can be beneficial, since both promotion and eco-labelling have certain costs, and it will be depending on the product and the market that these practices may prove profitable.

In order to conclude, just to repeat that it should be clear that there are no general recipes that suit everyone, especially on such a heterogeneous sector.

## **8. Comparison of parameters on the Processing industry collected under the DCR and DCF. Implications from the analysis for future data collection regulations.**

Data on the fish processing sector (NACE code 10.20) was collected for 2006 and 2007 under the DCR regulation; while data collected for 2008 was done under the DCF regulation.

The parameters collected under both regulations, DCR and DCF, are similar, but not always the same. Moreover, sometimes for these parameters no clear definitions are provided on the regulations. The lack of definitions in the DCR has been recognized before and STECF / SGECA 06-01: Report of the Working Group on Processing Industry and Aquaculture: Review of Economic Issues. The recommendations made are in line of those in DCF. However, the discrepancy between the regulations has led to situations where Member States are reporting different things under the same heading. Because of this, it was allocated an important amount of time and effort to solve issues related to the comparability of the parameters reported under both regulations and the consistency between Member States.

Furthermore, the data collected have been checked with other official data sources, mainly Eurostat data, and also here it has been tried to find a common approach and when deviations are present, it has been explained why the data reported by this group is preferred.

### **8.1. Data collected under the DCR and the DCF**

The Commission Regulation (EC) No. 1639/2001 established the previous minimum and extended Community programmes for the collection of data in the fisheries sector (The Data Collection Regulation (DCR)) and lays down detailed rules for the application of Council Regulation (EC) No 1543/2000. This regulation is the predecessor of the newly established Data Collection Framework (DCF).

While the Commission Regulation (EC) No. 665/2008 of the 14 July 2008 establishes the Data Collection Framework (DCF), a Community framework for the collection, management and use

of data in the fisheries sector and support for scientific advice regarding the Common Fisheries Policy (CFP).

Under this regulation the European Commission requires Member States to collect data on Biological and Economic aspects of many European fisheries and related fisheries sectors. The Commission Decision (2008/949/EC) of the 6 November 2008 describes in detail the Multiannual Community Programme to support the DCF regulation.

### 8.1.1. Data collected under the DCR (2006-2007)

The data to be collected under the Data Collection Regulation is specified on Section K and Appendix XIX of the Commission Regulation No 1639/2001 of the 25<sup>th</sup> of July 2001, on establishing the minimum and extended Community programmes for the collection of data in the fisheries sector and laying down detailed rules for the application of Council Regulation (EC) No 1543/2000.

Table 8.1: Data collected under the DCR regulation

General description	General description
Raw material	Total and per species (tones)
Income (turnover)	Total and per product
Production costs: <ul style="list-style-type: none"> <li>• labour</li> <li>• energy</li> <li>• raw material (value)</li> <li>• packaging</li> <li>• other running costs</li> </ul>	Total and per category cost
Fixed costs	Average costs, calculated from investment
Financial position	Share of own/borrowed capital
Investment (asset)	<ul style="list-style-type: none"> <li>• Historical</li> <li>• Replacement</li> <li>• Insurance</li> </ul>
Prices/product	Value, tonne
Employment	Numbers/ FTE
Capacity utilisation	Annual average

### 8.1.2. Data collected under the DCF (2008)

The economic variables to be collected for the processing industry sector under the Data Collection are specified on section B of the Chapter IV and on Appendix XII of the Commission

Decision 2008/949/EC of the 6<sup>th</sup> of November 2008, on Adopting a multiannual Community programme pursuant to Council Regulation (EC) No 199/2008 establishing a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy.

Table 8.2: Data collected under the DCF regulation

<b>Variable group</b>	<b>Variable</b>	<b>Unit</b>
Income	Turnover	EUR
	Subsidies	EUR
	Other income	EUR
Personnel costs	Wages and salaries of staff	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

### 8.1.3. Glossary of data requested and indicators

#### DCR parameters

##### *Income (turnover)*

The DCR regulation requested to deliver “Income (Turnover)” as one indicator. However, it was not clear on the regulation whether it was ask to provide the income or the turnover.

So, countries reported either turnover or income. Even though, at the SGECA-06-01 meeting, it was recommended that under indicator “Income (turnover)” turnover should be reported. It was also recommended at the SGECA-06-01 meeting to report other income separately.

Being aware of this issue, for this 2010 data call, it has been made possible that Member States could upload either Turnover or Total income (or both), so that there were no further misunderstandings and correct calculations could be performed. During the SGECA-10-04 meeting it was decided to also allow the possibility to report Subsidies and Other income, for a better calculation of the economic indicators.

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 extra-ordinary 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).

France and Lithuania reported only Turnover. Italy and Greece (for 2006) reported only Total Income. And Belgium, Bulgaria, Germany, Denmark, Estonia, Finland, Latvia, The Netherlands, Poland, Portugal, Sweden and Slovenia reported both, turnover and total income.

### ***Production costs***

The “Production costs” are considered the sum of labour costs, energy costs, raw material costs, packaging costs and other running costs.

### ***Labour costs***

“Labour costs” are equivalent to the 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, dependent 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).

All Member States confirmed that labour costs included “wages and salaries” and “social security costs”. Only Finland reported that they were including imputed value of unpaid value in the submitted labour costs for 2006 and 2007.

### ***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 materials or for resale without transformation should be excluded. The figure should be given in value only. (Structural Business Statistics (SBS) Code 20 11 0, Commission Regulation (EC) No 2700/98).

All experts reported that the Member States are also including electricity costs on this cost item. Moreover, it was identified that it could be possible that fuel costs are placed in the raw materials and consumables account and electricity costs on the services. Italy explained that they are estimating these costs from both accounts.

### ***Raw material cost (value)***

“Raw material cost” is the cost of the unfinished goods purchased by a manufacturer in order to sell them, normally after some elaboration.

“Raw material cost”, “Packaging costs” and “Other running 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).

### ***Packaging costs***

“Packaging costs” account for the costs of the ancillary materials used to pack and wrap the products.

“Raw material cost”, “Packaging costs” and “Other running 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 running costs***

“Other running costs” accounts for other operational costs than “Raw material cost” and “Packaging costs”.

“Raw material cost”, “Packaging costs” and “Other running 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).

### ***Fixed costs***

The DCR regulation requested to deliver “Fixed costs” as one indicator. It was not specified on the regulation what cost accounts should be included. However, SGECA 06-01 recommended changes in the regulation and specified the definitions that followed those made in DCF. “Fixed costs” were suggested to be changed to “Depreciation”. Also it was recommended to include the parameters: Financial costs (net), Extraordinary costs (net) and taxes.

Despite SGECA-06-01 guidelines some Member States have not applied them on the data collected under the DCR regulation. It has happened that Member States were reporting either “Depreciation” or “Depreciation” + “Financial costs” or “Depreciation” + “Financial costs” + “Extraordinary costs”.

On the DCF regulation this has been solved since it is requested disaggregated “Depreciation”, “Financial costs” and “Extraordinary costs”. During the SGECA-10-04 meeting it was decided to also allow the possibility to report for the DCR regulation period, data disaggregated on “Depreciation”, “Financial costs” and “Extraordinary costs”, for a better understanding of the parameters and calculation of the economic indicators.

### ***Raw material***

“Raw materials” accounts for the volume of the unfinished goods purchased by a manufacturer in order to provide finished goods. In the DCR regulation it should be reported by species and total.

### ***Financial position***

Financial position is estimated as the ratio of own capital and borrowed capital (SGECA-09-03).

This indicator is directly collected under the DCR regulation.

DCR: Own Capital / Borrowed Capital

### ***Investment (asset)***

This parameter corresponds to the Balance sheet total of the Structural Business Statistics.

This variable 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).

However, this indicator proved to be confusing, and some Member States (Latvia, Malta and Greece) reported “Net investment” instead of the “Total value of assets”. So, during the SGECA-10-04 meeting it was decided to allow Member States the possibility to report also the “Net investments” for the DCR regulation period, in order to be clearer with the parameters requested and avoid confusions.

### ***Prices/product***

In the DCR regulation it is asked the prices (in Euro per tonne) of the finished goods should be reported by product.

### ***Employment (total)***

“Employment (total)” refers to the number of people employed (includes 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 those 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).

All experts reported that the Member States are also including voluntary workers under this heading. However, minor divergences were observed on the way employment is measured. Poland, Romania, Lithuania, Sweden, Slovenia and Finland consider the average number of workers during the year. While Germany, Italy, France, Latvia, Malta and Estonia measure the number of employees at a certain time of year. No information was provided for Finland, Spain and Greece.

### ***Employment (FTE)***

The “Employment (FTE)” refers to the number of full time equivalent (methodologies to calculate one FTE varies between the countries) (SGECA-09-03). 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).

The FTE is normally calculated considering the total number of working hours in the sector divided by the average working hours of a full-time employee. Only Portugal declared that it was calculated considering the Full time and part time workers per month.

### ***Capacity utilization***

“Capacity utilization” refers to the extent to which the sector actually uses its installed productive capacity. Thus, it refers to the relationship between actual output that 'is' produced with the installed equipment and the potential output which 'could' be produced with it, if capacity was fully used.

### ***Number of firms***

The “Number of firms” is a count of the number of enterprises active during at least a part of the reference period (SGECA-09-03).

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 a part of the reference period. (Structural Business Statistics (SBS) Code 11 11 0, Commission Regulation (EC) No 2700/98).

Both definitions are similar. However, there are often some divergences with Eurostat data. This is mostly due to the use of the Veterinary list (which is necessary to commercialise with food products) to update the business register and so companies that are dormant or focusing on other products have been excluded.

### **DCF parameters**

#### ***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 extra-ordinary 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 paid to the sector. And it should include direct payments, but excludes social benefit payments and indirect subsidies.

### ***Other income***

“Other income” refers to other operating income that is not reported under “Turnover” or “Subsidies”.

### ***Wages and salaries of staff***

“Wages and salaries of staff” is equivalent to the “Labour costs” in the old DCR, and to the “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, dependent 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).

All Member States confirmed that “Labour costs” included “Wages and salaries” and “Social security costs”.

### ***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 those 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 receive 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 materials or for resale without transformation should be excluded. The figure should be given in value only. (Structural Business Statistics (SBS) Code 20 11 0, Commission Regulation (EC) No 2700/98).

All experts reported that the Member States are also including electricity costs on this cost item. Moreover, it was identified that it could be possible that fuel costs are placed in the raw materials

and consumables account and electricity costs on the services. Italy explained that they are estimating these costs from both accounts.

### ***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 operational costs” corresponds to other running costs than “Raw material cost”. In the DCF regulation “Packaging costs” should be included in “Other operational costs”.

“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” is the interest costs of capital. “Interest payable and similar charges, with a separate indication of those concerning affiliated undertakings” in the Fourth Council Directive 78/660/EEC, art. 23, item C.13.

***Extraordinary costs, net***

“Extraordinary costs, net” is the difference between “Extraordinary income” and “Extraordinary charges”.

“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)

The group also recommended deleting footnote 8 in Appendix 12 of Commission Decision 93/2010. The footnote refers to the DCR program (net, investment) and is by mistake adopted for the DCF program (total assets).

*Total accumulated value of all net investments in the enterprise at the end of the year.*

### ***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 1 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***

“Debts” account for provisions and long- and short-term debt (STECF meeting SGECA 06-01).

### ***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 those 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).

All experts reported that the Member States are also including voluntary workers under this heading. However, minor divergences were observed on the way employment is measured. Poland, Romania, Lithuania, Sweden, Slovenia and Finland consider the average number of workers during the year. While Germany, Italy, France, Latvia, Malta and Estonia measure the number of employees at a certain time of year. No information was provided for Finland, Spain and Greece.

Under the DCR regulation the number of employees should be reported by gender.

### ***FTE National***

“FTE national” refers to the number of full time equivalent (methodologies to calculate one FTE varies between the countries) (SGECA-09-03).

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).

The FTE is normally calculated considering the total number of working hours in the sector divided by the average working hours of a full-time employee. Only Portugal declared that it was calculated considering the Full time and part time workers per month.

Under the DCR regulation, reporting the number of FTE national by gender is optional.

The group also recommended deleting footnote 11 of Appendix 12 of Commission Decision 93/2010 because the footnote is not applicable for the fish processing industry since it refers to fisheries:

*Methodology should be as discussed in the report of Study FISH/2005/14, 'LEI WAGENINGENUR Coordinator, 2006. Calculation of labour including full-time equivalent (FTE) in fisheries Study No FISH/2005/14, 142 p'.*

***Number of enterprises:***

The “Number of enterprises” parameter corresponds to a count of the number of enterprises active during at least a part of the reference period (SGECA-09-03).

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 a part of the reference period. (Structural Business Statistics (SBS) Code 11 11 0, Commission Regulation (EC) No 2700/98).

Both definitions are similar. However, there are often some divergences with Eurostat data. This is mostly due to the use of the Veterinary list (which is necessary to commercialise with food products) to update the business register and so companies that are dormant or focusing on other products have been excluded.

Moreover, under the DCF regulation, the number of companies should be reported by size category where the number of persons employed (in FTE) (Structural Business Statistics (SBS) Code 16 14 0, Commission Regulation (EC) No 2700/98) is ( $\leq 10$ ; 11-49; 50-249 and  $> 250$ ).

## **Indicators**

### ***Salary per employee (FTE)***

The salary per employee ratio shows the mean salary an employee is receiving on this sector. It includes the salaries themselves and the social security costs.

It is calculated as the ratio between “Wages and salaries of staff” (“Labour costs” when considering DCR data) and the “Number of employees in full time equivalent”.

### ***Employment per firm (FTE)***

The employment per firm 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 paid work***

The percentage of paid work shows the importance paid (and unpaid work) in the sector.

It is calculated as the ratio of the “Wages and salaries of staff” by the sum of “Wages and salaries of staff” and the “Imputed value of unpaid labour”.

This indicator can only be calculated with DCF data because “Imputed value of unpaid labour” was not collected under the DCR regulation.

### ***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 fully 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.

Thus, Gross Value Added is calculated using the DCR and DCF data. During the SGECA-10-04 meeting it was decided that “Turnover” and “Other Income” could be reported disaggregated on a voluntary basis. In those cases that “Turnover” and “Other Income” have not been reported disaggregated for the DCR data, then the calculation would be considering “Total income” as the closest approximation to the sum of “Turnover” and “Other Income”.

DCR:  $GVA = \text{Total Income} - \text{Energy costs} - \text{Raw materials (value)} - \text{Packaging costs} - \text{Other running costs}$ .

In those cases that “Turnover” and “Other Income” have been reported disaggregated for the DCR data, then the calculation would be:

DCR:  $GVA = \text{Turnover} + \text{Other Income} - \text{Energy costs} - \text{Raw materials (value)} - \text{Packaging costs} - \text{Other running costs}$ .

DCF:  $GVA = \text{Turnover} + \text{Other Income} - \text{Energy costs} - \text{Raw materials costs} - \text{Other Operational costs}$ .

### ***Operating Capital Flow (OCF)***

"Operating Cash Flow" refers to the amount of cash a company generates from its operations. In SGECA-09-03 the Gross Capital Flow (should be Operating Cash Flow) measures in which magnitude and in which way capital flows, i.e. in to or out of the firm.

DCR:  $\text{Total income} - \text{Energy costs} - \text{Labour costs} - \text{Raw materials (value)} - \text{Packaging costs} - \text{Other running costs} - \text{Depreciation}$ .

In those cases that “Turnover” and “Other Income” have been reported disaggregated for the DCR data, then the calculation would be:

DCR:  $\text{Turnover} + \text{Other Income} - \text{Energy costs} - \text{Labour costs} - \text{Raw materials (value)} - \text{Packaging costs} - \text{Other running costs} - \text{Depreciation}$ .

DCF:  $\text{Turnover} + \text{Other Income} - \text{Energy costs} - \text{Labour costs} - \text{Raw materials costs} - \text{Other Operational costs}$

### ***Earnings Before Interest and Tax (EBIT)***

“Earnings before interest and taxes (EBIT)” or “Operating profit” is a measure of a firm's profitability that excludes interest and income tax expenses. Defined in SGECA-09-03 as Income minus all production costs minus depreciation.

“Earnings Before Interest and Tax” is calculated using the DCR and DCF data. During the SGECA-10-04 meeting it was decided that “Turnover” and “Other Income” could be reported disaggregated on a voluntary basis. In those cases that “Turnover” and “Other Income” have not

been reported disaggregated for the DCR data, then the calculation would be considering “Total income” as the closest approximation to the sum of “Turnover” and “Other Income”.

During the SGECA-10-04 meeting it was also opened the possibility to report the DCR period data disaggregated on “Depreciation”, “Financial costs” and “Extraordinary costs” on a voluntary basis. If “Depreciation” was not reported disaggregated under the DCR, then this indicator cannot be calculated for 2006 and 2007.

DCR: Total income – Energy costs – Labour costs - Raw materials (value) – Packaging costs – Other running costs – Depreciation.

In those cases that “Turnover” and “Other Income” have been reported disaggregated for the DCR data, then the calculation would be:

DCR: Turnover + Other Income – Energy costs – Labour costs - Raw materials (value) – Packaging costs – Other running costs – Depreciation.

DCF: Turnover + Other Income – Energy costs – Labour costs – Raw materials costs– Other Operational costs – Depreciation.

### ***Net Profit***

“Net Profit” corresponds to the income minus all production costs minus depreciation and interest costs (SGECA-09-03).

“Net Profit” is calculated using the DCR and DCF data. During the SGECA-10-04 meeting it was decided that “Turnover” and “Other Income” could be reported disaggregated on a voluntary basis. In those cases that “Turnover” and “Other Income” have not been reported disaggregated for the DCR data, then the calculation would be considering “Total income” as the closest approximation to the sum of “Turnover” and “Other Income”.

During the SGECA-10-04 meeting it was also opened the possibility to report the DCR period data disaggregated on “Depreciation”, “Financial costs” and “Extraordinary costs” on a voluntary basis. If “Depreciation” and “Financial costs” were not reported disaggregated under the DCR regulation, then this indicator is calculated for 2006 and 2007 using “Fixed costs”. If

both parameters “Depreciation” and “Financial costs” were reported then the “Net Profit” is calculated using both of them, as in the DCF regulation.

DCR: Total income – (Energy costs + Labour costs + Raw materials (value) + Packaging costs + Other running costs) – Fixed costs.

In those cases that “Turnover” and “Other Income” have been reported disaggregated for the DCR data, then the calculation would be:

DCR: Turnover + Other Income – (Energy costs + Labour costs + Raw materials (value) + Packaging costs + Other running costs) – Fixed costs.

DCF: Turnover + Other Income – (Energy costs + Labour costs + Raw materials costs + Other Operational costs) – Depreciation – Financial costs.

### ***Return on Investment (ROI)***

SGECA-09-03 defined “Return on Investment” as 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.

DCR: EBIT / Total Investments

DCF: EBIT / Total Value of Assets

However, when the “Earnings Before Interest and Tax (EBIT)” could not be calculated, then “Net Profits” have been used as an approximation of the “Earnings Before Interest and Tax (EBIT)” to estimate the “Return on Investment”.

### ***Financial Position***

Financial position is estimated as the ratio of own capital and borrowed capital (SGECA-09-03). This indicator was collected under the DCR regulation. STECF - SGECA 06-01 recommended the data collection to be including several indicators from the balance sheet: Net capital, Debts, Total liabilities (=Total assets: capital value), Total gross investments (replacing Investments:

assets). Thus, it was proposed that financial position could be accounted based on these collected parameters and the “Financial position” indicator as such could be removed from the list. These guidelines are in line of DCF.

At the SGECA-06-01 meeting it was initially proposed the indicator share of borrowed capital that can be calculated from the balance sheet (total debts/total liabilities); however, afterwards it was considered better to report the current indicator. On the DCR regulation, the financial position was requested to be reported as: Own Capital / Borrowed Capital. While on DCF regulation it can be estimated as: (Total Assets – Debts) / Debts.

***Turnover per FTE (or Employee):***

This indicator measures the average turnover per employee (or FTE). It could be used to make comparisons between segments and different Member States.

DCR: Turnover / FTE (or Number of Employees)

DCF: Turnover / FTE (or Number of Employees)

***Net Profit per FTE (or Employee):***

This indicator measures the average net profit per employee (or FTE). It could be used to make comparisons between segments and different Member States.

DCR: Net Profit / FTE (or Number of Employees)

DCF: Net Profit / FTE (or Number of Employees)

***Running Cost to Turnover Ratio in %***

This indicator shows how much of the turnover (income) that is consumed by production costs.

DCF: (Energy costs + Labour costs + Raw materials (value) + Packaging costs + Other running costs) / Turnover

DCF: (Energy costs + Labour costs + Raw materials costs + Other Operational costs) / Turnover

**8.1.4. Differences between data collected under the DCR and the DCF**

The data collection under the DCF regulation is a substantial improvement to its previous DCR regulation. There are STECF / SGECA recommendations for the DCR regulation that are in line

with the DCF regulation. These definitions in the DCF regulation are clearer and these more detailed parameters allow a more comprehensive analysis.

However, there are some indicators collected under the DCR regulation that under the DCF regulation are not further required: “Raw materials in total and per species”, “Packaging costs”, “Financial position”, “Capacity utilization”, “Prices per product” and “Income (turnover) per products and totals”.

While others parameters have been slightly modified, often to provide more disaggregated information. So, under the DCR regulation it was requested to report “Income (Turnover)”, while under the DCF regulation it is requested to report “Turnover”, “Subsidies” and “Other Income”; same happens with “Fixed costs” where under the DCF it is reported “Depreciation”, “Financial costs” and “Extraordinary costs”; and for “Labour costs” that now is collected “Wages and salaries of the staff” and “Imputed value of unpaid labour”. In this context, also employment measured in “Number of persons employed” and “FTE National” is reported by gender (optional for the “FTE National”).

While there are also new parameters collected under the DCF, such as “Debts” and “Net investments”.

We are going now to discuss reasons for the removal of some of the parameters under the DCF, one by one. And the issues with DCR parameters “Income (Turnover)”, “Fixed costs” and “Investment (assets)”, that make us to decide the possibility to report more parameters on a voluntary basis.

### ***Raw materials***

“Raw materials” is an important indicator, because it can provide a link between the fishing fleet and processing sector.

However, on the SGECA-06-01 it was decided not to collect it anymore due to the difficulties in its collection and the possible use of EUROSTAT's PRODCOM data to estimate backwards the volume of raw materials:

*“The participants explained their difficulties in collection raw material and its equivalent in fresh weight. Two difficulties were highlighted: As fish and intermediate fish products are used as input, the conversion of product weight into live weight using a great variety of conversion factors creates an extremely high burden and it can be questioned whether such an effort is justified. On the other hand it is very difficult to avoid the problem of double counting without having sufficient information on origin of inputs and the destination of intermediate inputs because of “middle men”.*

*On the other hand, raw material use is seen as a key indicator to link the fishery sector and its management policies with the processing industry. Therefore, the group proposes that member countries use industrial commodity statistics (such as the standardised and EC wide harmonised PRODCOM classification) and derive “backward” raw material use applying suitable conversion factors. Since the quality of output statistics differs among member states, member states should not be limited to the “backward” approach but can apply alternative estimation procedures. The group recommends that additional national surveys to find a suitable procedure to estimate raw material use be carried out including its origin. Alternatively, Member States have to ensure that PRODCOM based fish processing statistics are of an appropriate quality to carry out such an estimation procedure.”*

SGECA 10-03, also reflected the difficulties in collecting “raw materials” data, but highlighted the importance of this indicator:

*“In terms of data coverage, SGECA 10-03 observed that parameters more difficulties to be submitted have been raw materials per species, products price and capacity utilization. SGECA observed that these parameters have been excluded from the DCF with the 2008 revision, because of the difficulties in their estimation. SGECA considered that quality of these data is also difficult to assess, therefore, it recommended not to use them in the analysis.*

*SGECA 10-03 also observed that the exclusion of the variable “raw materials per species” affects the general utility of the inclusion of the processing sectors in the DCF because the link with the catch sector cannot be evaluated anymore. However, SGECA 10-03 was aware of the complexity of the issue that should take into account also the origin of raw materials (imported or not, marine species or inland, etc.).”*

SGECA 10-04, as SGECA 10-03 did, recommends launching a study. Because it has not been tried to use PRODCOM data, since the quality of the PRODCOM data for some Member States is largely questioned. Thus, the study should analyse the feasibility to collect data on “Raw materials” and eventually indicate appropriate methodologies.

### ***Packaging costs***

“Packaging costs” was collected under the DCR regulation. This parameter accounted for the costs of the ancillary materials used to pack and wrap the products.

In the SGECA-06-01 meeting it was decided not to report this indicator disaggregated.

*“Packaging cost as a separate indicator has been removed since it was not found to be an essential indicator.”*

Thus, under the DCF regulation “Packaging costs” are not reported disaggregated and it should be included in “Other operational costs”.

### ***Financial Position***

This indicator was collected under the DCR regulation. However, on the DCF regulation is not collected anymore because, as already recommended under the SGECA-06-01, the indicator can be calculated from the parameters collected.

SGECA 06-01 proposed the definition of financial position to be:

*“The indicator share of borrowed capital can be calculated from the balance sheet (total debts/total liabilities), hence it can be removed from the list.”*

However, for the DCR regulation “Financial position” was collected and reported as the ratio of own capital and borrowed capital (SGECA-09-03). And on the DCF regulation “Financial position” can be estimated as:  $(\text{Total Assets} - \text{Debts}) / \text{Debts}$ .

### ***Capacity utilization***

“Capacity utilization” refers to the extent to which the sector actually uses its installed productive capacity.

In the SGECA-06-01 meeting it was decided not to report this indicator.

*“This indicator was not found to be essential to achieve the objectives and therefore removed from the list.”*

### ***Prices/product***

In the DCR regulation it was asked the prices (in Euro per tonne) of the finished goods to be reported by product.

In the SGECA-06-01 meeting it was decided not to further report this indicator.

*“This indicator was not found to be essential to achieve the objectives and therefore removed from the list.”*

One of the reasons is that this data should be available through PRODCOM data. However, PRODCOM data has not been used because the quality of the PRODCOM data for some Member States is largely questioned.

### ***Turnover (Income) per product***

In the DCR regulation it was asked the turnover (value in Euro) of the finished goods, to be reported by product.

In the SGECA-06-01 meeting it was decided not to further report this indicator.

*“To calculate profit only total income is needed; as it was difficult to obtain turnover on a per product basis it has been removed from the list.”*

One of the reasons is that this data should be available through PRODCOM data. However, PRODCOM data has not been used because the quality of the PRODCOM data for some Member States is largely questioned.

### **Turnover / Income**

The DCR regulation requested to deliver “Income (Turnover)” as one indicator. However, it was not clear on the regulation whether it was asked to provide the income or the turnover. STECF / SGECA 06-01 recommended that turnover should be reported under the indicator “Income (turnover)”. It was also recommended to report other income separately.

Being aware that not all counties have followed the recommendation, in 2010 data call, it has been made possible that Member States could upload disaggregated (on a voluntary basis) for DCR data (2006 and 2007) “Turnover”, “Total income”, “Subsidies” and “Other income”, for a better calculation of the economic indicators.

### ***Fixed costs***

The DCR regulation requested to deliver “Fixed costs” as one indicator. However, it was not specified on the regulation what cost accounts should be included. STECF / SGECA 06-01 clarified the definitions to be in line with those in DCF regulation, where it is requested “disaggregated Depreciation” and “Financial costs”. To allow MS to follow these guidelines it was decided in the SGECA-10-04 meeting to give a possibility to report for the DCR period, data disaggregated on “Depreciation”, “Financial costs” and “Extraordinary costs”, for a better understanding of the parameters and calculation of the economic indicators.

### ***Investment (asset)***

Despite a clarification on this indicator in SGECA 06-01, this indicator proved to be confusing, and some Member States (Latvia, Malta and Greece) for this DCR’s parameter, “Investment (assets)”, reported “Net investment” instead of the “Total value of assets”. So, during the SGECA-10-04 meeting it was decided to allow Member States the possibility to report also the

“Net investments” for the DCR regulation period, in order to be clearer with the parameters requested and avoid confusions.

#### **8.1.5. Differences between data collected under the DCR and the DCF regulations and other EU official data sources (EUROSTAT’s SBS and PRODCOM)**

The other EU official data, apart from the one collected under the DCR and DCF regulations is the Structural Business Statistics (SBS) and the Production of manufactured goods data (PRODCOM) from EUROSTAT.

A major concern of the previous Fish Processing (SGECA 09-03) report was that the data presented differed from EUROSTAT data.

SGECA encourages Member States to check the data to be submitted with other available official data, to ensure quality and homogeneity in the sources. In case of divergences, SGECA recommends that Member States should explain and justify in this report (national chapters) the reasons for these divergences.

It has been found that these divergences with EUROSTAT are mainly due to 3 reasons:

- **Overcoverage:** Data in EUROSTAT is based only on companies registered as ‘Fish processing companies’ (according to NACE) as their main activity in the Business register. In some countries they have realized overcoverage of the target population. E.g. data reported under the DCR and DCF has also been compared with the veterinarian registers that certificate that the company can manufacture food products. This implies that in this report (since it uses DCR and DCF data) only the companies that are doing real fish processing and are not dormant have been taken into account.
- **Undercoverage:** In some countries a threshold is applied in the official statistics’ data collection used for the EUROSTAT database; where only companies above a certain number of employees are considered. However, we have tried to eliminate most of the thresholds for the DCR and DCF data (used in this report). Therefore, a better coverage should be expected from this report.

- Moreover, the data presented in this report has been checked by JRC and national experts, and corrected when necessary, during the elaboration of this report.

Furthermore, the DCF regulation collects several parameters that are not included in the EUROSTAT database. These are:

- Employment by gender, for the employment measured in “Number of persons employed” and optional for the “FTE National”.
- Subsidies
- The total value of assets
- Imputed value of unpaid labour
- Number of companies is reported by size category where the number of persons employed is ( $\leq 10$ ; 11-49; 50-249 and  $>250$ ).

This allows that in this report we can further analyse issues regarding: i) the gender balance in the sector, ii) the nature of the industry and its concentration, iii) the importance by Member State of subsidisation in the sector, iv) having more adequate economic performance indicators (such as Return On Investment), etc. Finally, it should also be taken into account that the data is reported accompanied with figures and comments from national and JRC experts.

## **8.2. Implications from the analysis for future data collection regulations**

As we have already shown, the data collection under the DCF regulation has significantly improved from the previous DCR regulation.

However, we believe that there is still room for improvement in the current DCF regulation. Even though, there are clearer definitions (in comparison to the DCR regulation) for more detailed parameters, there are still some requested parameters that need further specification (see section 8.1.3 for a detailed overview of the parameters requested).

Moreover, there are some indicators collected under the DCR regulation that under the DCF regulation they are not further required: “Raw materials in total and per species”, “Packaging

costs”, “Financial position”, “Capacity utilization”, “Prices per product” and “Income (turnover) per products and totals” (for more details see section 6.1.4).

As we have already discussed on previous section, “Raw materials” is an important indicator that is not further collected. The raw material could be an important link between the fishing fleet and the processing sector. Moreover, in order to fully benefit from this parameter, and to have a clearer link with the fishing fleet and other sectors, this parameter should take into account also the origin of raw materials (wild or farmed, imported or not, marine species or inland, etc.), as recommended by SGECA 10-03.

Hence, SGECA 10-04, following SGECA 10-03 recommendations, recommends launching a study. This study should analyse the feasibility to collect data on “Raw materials” and eventually indicate appropriate methodologies. One source of information could be EUROSTAT’s PRODCOM data, and estimate backwards the volume of raw materials. But the quality of the PRODCOM data for some Member States is largely questioned. So, if we want to use this source the quality of the data must be highly improved.

Furthermore, the inclusion of the following parameters and indicators in future regulations were additionally discussed:

- To include changes in the stocks if possible, in order to properly calculate some economic indicators,
- To report income variables by size category where the number of persons employed (in FTE) is ( $\leq 10$ ; 11-49; 50-249 and  $>250$ ), as already done for the number of enterprises, so that the nature of the industry and its concentration can be better specified.
- Maybe some data could be reported disaggregated by type of processing.
- To provide some information on where companies are based, so that it is possible to have a picture of the regional importance,
- To have some information on the products produced. A source of information could be EUROSTAT’s PRODCOM data, but, as already explained, the quality of the PRODCOM

data for some Member States is largely questioned. Moreover, this information at a spatial level could be very interesting.

- To have some information on the imports and exports of raw materials and semi-processed fish products, so that better information on the origin of the products and outsourcing practices is available.
- It was also discussed the possibility that some of the indicators currently calculated, from the data submitted, could be directly calculated and submitted by Member States. For example, Turnover per number of employees or GVA- directly in the regulation with a method to calculate it.

## 9. Appendix

### Appendix I Declarations of Experts

Declarations of invited experts are published on the STECF web site on <https://stecf.jrc.ec.europa.eu/home> together with the final report.

## Appendix II Contact Details of the Participants

Name	Address	Telephone number	email
STECF members			
Döring, Ralf (chair)	vTI-Federal Research Institute for Rural Areas Forests and Fisheries Palmaille 9 Hamburg 22767 Germany	+49 (0)40 38905- 185	ralf.doering@vti.bund.de
External Experts			
Avdic, Edo	Fisheries Research Institute Župančičeva 9 Ljubljana 1000 Slovenia		edo.avdic@zzrs.si
Beukers, Rik	LEI Wageningen UR P.O. Box 29703 2502 The Hague The Netherlands	+3170 335 8372	rik.beukers@wur.nl
Ebeling, Michael	vTI-Federal Research Institute for Rural Areas Forests and Fisheries Palmaille 9 Hamburg 22767 Germany	+49 (0)40 38905- 186	michael.ebeling@vti.bund.de
Goti, Leyre			leyregoti@gmail.com
Malvarosa, Loretta	Irepa onlus via San Leonardo, trav. Migliaro Salerno Italia	tel. 0039 089 338978 fax 0039 089 330835	malvarosa@irepa.org
Moura, Carlos	DGPA Avenida Brasilia 1499-030 Lisboa Portugal	+351 213 035 811	cmoura@dgpa.min- agricultura.pt
Nielsen, Rasmus	Institute of Food and Resource Economics University of Copen- hagen Rolighedsvej 25 1958 Frederiksberg Denmark	+45 35 33 22 93	rn@foi.dk
Pokki, Heidi	Finnish Game and		Heidi.Pokki@rktl.fi

	Fisheries Research Institute Viikinkaari 4 Helsinki FI-0079 Finland		
Razmislaviciute-Palioniene, Agne	Fisheries Department under the Ministry of Agriculture of the Republic of Lithuania Lelevelio str. 6, LT-01103 Lithuania	+37052398406	agner@zum.lt
JRC experts			
Guillen, Jordi	Joint Research Centre (JRC).	+39 0332 78 5383	jordi.guillen@jrc.ec.europa.eu
Virtanen, Jarno	Joint Research Centre (JRC).	+39 0332 78 9614	jarno.virtanen@jrc.ec.europa.eu
Zanzi, Antonella	Joint Research Centre (JRC).	+39 0332 78 6694	antonella.zanzi@jrc.ec.europa.eu
European Commission			
Calvo Santos, Angel Andres	DG Fisheries and maritime affairs	+32 229 93630	Angel-Andres.CALVOSANTOS@ec.europa.eu
Tritten, Christian	DG Fisheries and maritime affairs		Christian.TRITTEN@ec.europa.eu
Vasilaki, Marousa	Joint Research Centre (JRC).	+39 0332 78 9329	Marousa.VASILAKI@ec.europa.eu

## **Appendix III: Data templates**

Table A3.1: Main06 & Main07: Templates of the main parameters for NACE 15.20 companies, collected under the DCR (2006 and 2007).

Variable	Value	Unit	Year	Sample	Population	Achieved sample rate	Sampling strategy	Precision level	Comments
Raw materials total		Tonnes	2006						
Total income		EURO	2006						
Turnover		EURO	2006						
Subsidies		EURO	2006						
Other income		EURO	2006						
Labour costs		EURO	2006						
Energy costs		EURO	2006						
Raw material for production costs		EURO	2006						
Packaging costs		EURO	2006						
Other running costs		EURO	2006						
Total Production costs		EURO	2006						
Fixed costs		EURO	2006						
Depreciation of capital		EURO	2006						
Financial costs, net		EURO	2006						
Extraordinary costs, net		EURO	2006						
Investment (assets): Historical		EURO	2006						
Investment (assets): Replacement		EURO	2006						
Investment (assets): Insurance		EURO	2006						
Net Investments		EURO	2006						
Total employees		Number	2006						
FTE		Number	2006						
Number of enterprises		Number	2006						
Financial position (Share of own/borrowed capital)		Number	2006						
Capacity utilisation		%	2006						





Table A3.4: Main08: Template of the main parameters for NACE 15.20 companies, collected under the DCF (2008)

Variable	Value	Unit	Year	Sample	Population	Achieved sample rate	Sampling strategy	Precision level	Comments
Turnover		EURO	2008						
Subsidies		EURO	2008						
Other income		EURO	2008						
Total income		EURO	2008						
Wages and salaries of staff		EURO	2008						
Imputed value of unpaid labour		EURO	2008						
Energy costs		EURO	2008						
Purchase of fish and other raw material for production		EURO	2008						
Other operational costs		EURO	2008						
Depreciation of capital		EURO	2008						
Financial costs, net		EURO	2008						
Extraordinary costs, net		EURO	2008						
Total value of assets		EURO	2008						
Net Investments		EURO	2008						
Debt		EURO	2008						
Male employees		Number	2008						
Female employees		Number	2008						
Total employees		Number	2008						
Male FTE		Number	2008						
Female FTE		Number	2008						
FTE		Number	2008						
Number of enterprises <11 employees		Number	2008						
Number of enterprises 11-49 employees		Number	2008						
Number of enterprises 50-249 employees		Number	2008						
Number of enterprises >=250 employees		Number	2008						

Table A3.5: Others08: Template of the parameters requested for companies doing fish processing, but not as main their activity, collected under the DCF (2008)

<b>Variable</b>	<b>Value</b>	<b>Unit</b>	<b>Year</b>	<b>Sample</b>	<b>Population</b>	<b>Achieved sample rate</b>	<b>Sampling strategy</b>	<b>Precision level</b>	<b>Comments</b>
Number of enterprises (non main activities)		EURO	2008						
Turnover attributed to fish processing		EURO	2008						

## **Appendix IV: Data coverage**

Table A4.1: Date of the first upload by template and Member State

Country	Price06	Price07	Main06	Main07	Others08	Main08	Raw06	Raw07	Turnover06	Turnover07
Belgium	01/10/10	01/10/10	01/10/10	01/10/10		01/10/10	01/10/10	01/10/10	01/10/10	01/10/10
Bulgaria	-	24/09/10	-	24/09/10		24/09/10	-	24/09/10	-	24/09/10
Cyprus					26/10/10	26/10/10				
Germany	24/09/10	24/09/10	24/09/10	24/09/10		24/09/10	24/09/10	24/09/10	24/09/10	24/09/10
Denmark	20/09/10	20/09/10	20/09/10	20/09/10		20/09/10	20/09/10	20/09/10	20/09/10	20/09/10
Spain			23/09/10	23/09/10		23/09/10				
Estonia			24/09/10	24/09/10	24/09/10	24/09/10				
Finland			15/09/10	15/09/10	15/09/10	16/09/10	15/09/10	15/09/10	15/09/10	15/09/10
France			21/09/10	22/09/10	24/09/10	21/09/10				
United Kingdom			23/09/10	23/09/10	23/09/10	23/09/10				
Greece			04/10/10	04/10/10				04/10/10		04/10/10
Ireland						24/09/10				
Italy			13/09/10	13/09/10		13/09/10		13/09/10		
Lithuania	23/09/10	23/09/10	23/09/10	24/09/10		23/09/10	23/09/10	24/09/10	23/09/10	23/09/10
Latvia	23/09/10	23/09/10	23/09/10	23/09/10		23/09/10			23/09/10	23/09/10
Malta			22/10/10	22/10/10		22/10/10				
The Netherlands			06/10/10	07/10/10		06/10/10				
Poland	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10
Portugal	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10	24/09/10
Romania	-		-			22/09/10	-		-	
Slovenia		21/09/10		20/09/10	20/09/10*	20/09/10		20/09/10		20/09/10
Sweden			17/09/10	17/09/10		17/09/10				

\*Data included with the companies doing fish processing as main activity in order to avoid confidentiality issues.

Table A4.2: Date of the last upload by template and Member State

Country	Price06	Price07	Main06	Main07	Others08	Main08	Raw06	Raw07	Turnover06	Turnover07
Belgium	01/10/10	01/10/10	05/11/10	05/11/10		05/11/10	01/10/10	01/10/10	05/11/10	05/11/10
Bulgaria	-	24/09/10	-	24/09/10		24/09/10	-	24/09/10	-	24/09/10
Cyprus					26/10/10	26/10/10				
Germany	24/09/10	24/09/10	27/10/10	27/10/10		22/10/10	24/09/10	24/09/10	24/09/10	24/09/10
Denmark	20/09/10	20/09/10	21/10/10	21/10/10		05/10/10	20/09/10	20/09/10	20/09/10	20/09/10
Spain			23/09/10	23/09/10		23/09/10				
Estonia			04/11/10	04/11/10	04/11/10	04/11/10				
Finland			14/10/10	14/10/10	15/09/10	14/10/10	15/09/10	15/09/10	15/09/10	15/09/10
France			28/09/10	28/09/10	24/09/10	24/09/10				
United Kingdom			23/09/10	23/09/10	23/09/10	23/09/10				
Greece			04/10/10	26/10/10				04/10/10		04/10/10
Ireland						24/09/10				
Italy			15/10/10	15/10/10		01/10/10		13/09/10		
Lithuania	23/09/10	23/09/10	13/10/10	13/10/10		11/10/10	24/09/10	24/09/10	23/09/10	23/09/10
Latvia	23/09/10	23/09/10	23/09/10	23/09/10		23/09/10			23/09/10	23/09/10
Malta			22/10/10	22/10/10		22/10/10				
The Netherlands			05/11/10	05/11/10		05/11/10				
Poland	24/09/10	24/09/10	26/10/10	26/10/10	24/09/10	21/10/10	24/09/10	24/09/10	21/10/10	21/10/10
Portugal	13/10/10	13/10/10	13/10/10	13/10/10	10/10/10	10/10/10	10/10/10	10/10/10	13/10/10	13/10/10
Romania	-		-			22/09/10	-		-	
Slovenia		21/09/10		20/09/10	20/09/10*	20/09/10		20/09/10		20/09/10
Sweden			22/11/10	22/11/10		22/11/10				

\*Data included with the companies doing fish processing as main activity in order to avoid confidentiality issues.

## Appendix V: Data

## Belgium

Parameter	Units	2006	2007	2008
Turnover	EURO	3721662000	2810677857	2365293141
Subsidies	EURO			0
Other income	EURO			16646764
Total income	EURO	3871064000	2860185000	2381939905
Wages and salaries of staff	EURO			173538429
Imputed value of unpaid labour	EURO			
Labour costs	EURO	213518000	235941429	173538429
Energy costs	EURO	17174000	36058571	40760917
Purchase of fish and other raw material for production	EURO	2282886000	1904511429	3885365430
Packaging costs	EURO	164992000	47811429	
Other running costs	EURO	268334000	267033571	
Other operational costs	EURO	433326000	314845000	165054473
Total Production costs	EURO	2946904000	2491356429	4264719250
Depreciation of capital	EURO			41225661
Financial costs, net	EURO			8590283
Extraordinary costs, net	EURO			7982185
Fixed costs	EURO	69441940	112913571	57798129
Investment (assets): Historical	EURO	1661456000	2047694286	
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			918469311
Net Investments	EURO			323490171
Debt	EURO			371561979
Male employees	NUMBER			
Female employees	NUMBER			
Total employees	NUMBER	10084	7732	818
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER	8868	7096	665
Number of enterprises <11 employees	NUMBER			25
Number of enterprises 11-49 employees	NUMBER			240
Number of enterprises 50-249 employees	NUMBER			0
Number of enterprises >=250 employees	NUMBER			0
Number of enterprises	NUMBER	5100	250	265
Raw materials total	TONNES	572662000	181292143	
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	NUMBER	70	21	147.2
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EUR	1137678000	604770000	-1709240915
Operating Cash Flow (OCF)	EUR	924160000	368828571	-1882779345
Earnings Before Interest and Tax (EBIT)	EUR	924160000	368828571	-1924005006
Net profit (PRN)	EUR	854718060	255915000	-1932595289
Net Profit to Assets (PRN/ASS)	%	51.4	12.5	-210.4
EBIT to Assets (EBIT/ASS)	%	55.6	18.0	-209.5
Employment per firm (EPN)	EUR	2.0	30.9	3.1
FTE per firm (FPN)	EUR	1.7	28.4	2.5

Turnover per firm (TPN)	EUR	729737.6	11242711.4	8925634.5
Turnover per FTE (TPF)	EUR	419673.2	396109.5	3557848.3
Turnover per employee (TPE)	EUR	369066.0	363505.8	2892405.0
Net profit per FTE (PPF)	EUR	96382.3	36066.2	-2906988.9
Net profit per employee (PPE)	EUR	84759.8	33097.6	-2363279.3
Running cost to turnover ratio (RPT)	%	79.2	88.6	180.3
Salary per FTE	EUR	24077	33251	261035
Salary per employee	EUR	21174	30514	212212
Percentage of paid work	%			

Raw Materials	Eur_Value	Ton_Value	Year
Fisheries products of Belgian origin		6481.95	2006
Fisheries products of foreign origin, EU		18258.22	2006
Fisheries products of foreign origin, non-EU		3893.08	2006
Aquaculture products of Belgian origin	31628.93	228.8	2007
Aquaculture products of foreign origin, EU	28892.13	4135.35	2007
Aquaculture products of foreign origin, non-EU	10063	1916.7	2007
Fisheries products of Belgian origin	12363.39	2463.46	2007
Fisheries products of foreign origin, EU	67065.31	10063.56	2007
Fisheries products of foreign origin, non-EU	46771	6573.05	2007

As methodology a questionnaire is used, the data source are the replies of the companies.

Product	Value	Weight	Year	Price	Population	Sample	Sampling strategy
Prepared or preserved sardines, sardinella, brisling and sprat, whole or in pieces but not minced	0	0	2007	0	404	35	C
Fresh or chilled fish livers and roes	0	0.58	2007	0	404	35	C
Frozen fish livers and roes	0	0	2007	0	404	35	C
Prepared or preserved anchovies, whole or in pieces but not minced	0	0	2007	0	404	35	C
Other inedible products of fish, crustaceans, molluscs and other aquatic invertebrates	0	61.3	2007	0	404	35	C
Flours, meals and pellets of fish, crustaceans, molluscs and other aquatic invertebrates, unfit for human consumption	0	0	2007	0	404	35	C
Prepared or preserved mackerel, whole or in pieces but not minced	0	0	2007	0	404	35	C
Fish fillets in batter or breadcrumbs, including fish fingers	0	0	2007	0	404	35	C
Caviar (sturgeon roe)	0	0	2007	0	404	35	C
Frozen fish meat without bones (excluding fillets)	0	0	2007	0	404	35	C
Flours, meals and pellets of fish, fit for human consumption; fish livers and roes, dried, smoked, salted or in brine	0	0	2007	0	404	35	C
Fish fillets, dried, salted or in brine, but	0	0	2007	0	404	35	C

not smoked								
Smoked herring (including fillets)	0	0	2007	0	404	35	C	
Caviar substitutes	0	0	2007	0	404	35	C	
Dried fish, salted fish, fish in brine, but excluding fillets	0	0	2007	0	404	35	C	
Other smoked fish (including fillets)	419.25	128.51	2007	3.26	404	35	C	
Frozen whole fresh water fish	7.8	1.7	2007	4.59	404	35	C	
Prepared or preserved tuna, skipjack and bonito, whole or in pieces but not minced	2268	474	2007	4.78	404	35	C	
Other preparations of fish	11993	2468	2007	4.86	404	35	C	
Frozen crustaceans	35174	7200	2007	4.89	404	35	C	
Crustaceans, frozen; molluscs and other aquatic invertebrates, frozen, dried, salted or in brine	38695	7812	2007	4.95	404	35	C	
Other prepared or preserved fish, but excluding fish fingers	7716	1526.16	2007	5.06	404	35	C	
Fish, otherwise prepared or preserved; caviar and caviar substitutes from fish eggs	24604	4836.16	2007	5.09	404	35	C	
Prepared or preserved herring, whole or in pieces but not minced	743	142	2007	5.23	404	35	C	
Scallops and mussels, frozen, dried, salted or in brine	3349	585	2007	5.72	404	35	C	
Other prepared and preserved products of crustaceans, mollusks and other aquatic invertebrates	30677.3	5195.1	2007	5.91	404	35	C	
Other aquatic invertebrates, frozen, dried, salted or in brine	172	27	2007	6.37	404	35	C	
Frozen fish fillets	47257.81	6514.48	2007	7.25	404	35	C	
Fish, fish fillets, other fish meat, fish livers and roes, frozen	59242	8044.39	2007	7.36	404	35	C	
Frozen whole salt water fish	11976.39	1528.21	2007	7.84	404	35	C	
Prepared or preserved salmon, whole or in pieces but not minced	1884	226	2007	8.34	404	35	C	
Fish, dried, salted or in brine; smoked fish; meal, powder or pellets of fish fit for human consumption	5474.83	591.69	2007	9.25	404	35	C	
Fish, fish fillets, other fish meat, fish livers and roes, fresh or chilled	56800.05	6100.61	2007	9.31	404	35	C	
Fresh or chilled fish fillets and other fish meat without bones	56800.05	6100.03	2007	9.34	404	35	C	
Smoked salmon (including fillets)	5055.58	463.18	2007	10.91	404	35	C	

As methodology a questionnaire is used, the data source are the replies of the companies

Product	Price	Value	Weight	Year	Sample	Population	Achieved sample rate	Sampling strategy
Crustaceans, frozen; molluscs and other aquatic invertebrates, frozen, dried, salted or in brine	5.0	38695	7812	2007	235	33	0	C
Fish, dried, salted or in brine; smoked fish; meal, powder or pellets of fish fit for human consumption	9.3	5474.8	591.7	2007	235	33	0	C
Fish, fish fillets, other fish meat, fish livers and roes, fresh or chilled	9.3	56800.1	6100.6	2007	235	33	0	C
Fish, fish fillets, other fish meat, fish livers and roes, frozen	7.4	59242	8044.4	2007	235	33	0	C

Fish, otherwise prepared or preserved; caviar and caviar substitutes from fish eggs	5.1	24604	4836.2	2007	235	33	0	C
Flours, meals and pellets of fish, crustaceans, molluscs and other aquatic invertebrates, unfit		0	0	2007	235	33	0	C
Other inedible products of fish, crustaceans, molluscs and other aquatic invertebrates		0	61.3	2007	235	33	0	C
Other prepared and preserved products of crustaceans, molluscs and other aquatic invertebrates	5.9	30677.3	5195.1	2007	235	33	0	C

As methodology a questionnaire is used, the data source are the replies of the companies

## Bulgaria

Parameter	Units	2006	2007	2008
Turnover	EURO		22752000	48538308
Subsidies	EURO			663020
Other income	EURO			2582166
Total income	EURO		23314678	51783494
Wages and salaries of staff	EURO			3604015
Imputed value of unpaid labour	EURO			15530
Labour costs	EURO		1769976	3619545
Energy costs	EURO		724724	1320359
Purchase of fish and other raw material for production	EURO		12967420	23624308
Packaging costs	EURO			
Other running costs	EURO		1227287	
Other operational costs	EURO		1227287	2413781
Total Production costs	EURO		16689407	30977993
Depreciation of capital	EURO			2914369
Financial costs, net	EURO			1243461
Extraordinary costs, net	EURO			131524
Fixed costs	EURO			
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			46676335
Net Investments	EURO			3132038
Debt	EURO			24958181
Male employees	NUMBER			908
Female employees	NUMBER			1116
Total employees	NUMBER		1170	2024
Male FTE	NUMBER			908
Female FTE	NUMBER			1116
FTE	NUMBER		1170	2024
Number of enterprises <11 employees	NUMBER			8
Number of enterprises 11-49 employees	NUMBER			15
Number of enterprises 50-249 employees	NUMBER			22
Number of enterprises >=250 employees	NUMBER			0
Number of enterprises	NUMBER		26	45
Raw materials total	TONNES		11082	
Capacity utilisation	%		71.6	
Financial position (Share of own/borrowed capital)	%		123.0	87.0
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EURO		8395247	24425047
Operating Cash Flow (OCF)	EURO		6625271	20805501
Earnings Before Interest and Tax (EBIT)	EURO			17891132
Net profit (PRN)	EURO			16647671
Net Profit to Assets (PRN/ASS)	%			35.7
EBIT to Assets (EBIT/ASS)	%			38.3
Employment per firm (EPN)	NUMBER		45.0	45.0
FTE per firm (FPN)	NUMBER		45.0	45.0

Turnover per firm (TPN)	EURO		875076.9	1078629.1
Turnover per FTE (TPF)	EURO		19446.2	23981.4
Turnover per employee (TPE)	EURO		19446.2	23981.4
Net profit per FTE (PPF)	EURO			8225.1
Net profit per employee (PPE)	EURO			8225.1
Running cost to turnover ratio (RPT)	%		73.4	63.8
Salary per FTE	EURO		1513	1788
Salary per employee	EURO		1513	1788
Percentage of paid work	%			99.6

Raw Materials	Eur_Value	Ton_Value	Year	Sample	Population	Achieved sample rate	Sampling strategy	Precision level
Hake	1767573	708	2007	26	26	100	C	4
Harring	677973	251	2007	26	26	100	C	4
Mackerel	6454462	2761	2007	26	26	100	C	4
Marine invertebrates	7654074	2365	2007	26	26	100	C	4
Rainbow trout	497950.7	219	2007	26	26	100	C	4
Salmon	7815.61	59	2007	26	26	100	C	4
Sprat	1242690	886	2007	26	26	100	C	4
Sturgeon caviar	93566.41	0.3	2007	26	26	100	C	4
total	18648188	7322.3	2007	26	26	100	C	4
Tuna	252082.8	73	2007	26	26	100	C	4

Product	Value	Weight	Price	Year	Population	Sample	Sampling strategy
Total frozen	6610000	4108	1609	2007	26	26	C
Total prepared food and tinned fish	6941000	3396	2044	2007	26	26	C
prepared food and tinned fish from mackerel	4546000	2101	2164	2007	26	26	C
Total fresh chilled	300000	126	2381	2007	26	26	C
Salomns and trouts smoked	381000	40	9525	2007	26	26	C
Caviar	183000	0.3	610000	2007	26	26	C
Total	22752000	10309	2207	2007	26	26	C

## **Cyprus**

Because of confidentiality issues due to the low number of companies that do fish processing as main activity, we are not reporting here any of the data submitted by Cyprus.

## Denmark

Parameter	Units	2006	2007	2008
Turnover	EURO	2047640726	1891183333	1702640054
Subsidies	EURO			0
Other income	EURO			5333737
Total income	EURO	2102400000	1946598522	1697306317
Wages and salaries of staff	EURO			200845161
Imputed value of unpaid labour	EURO			1483669
Labour costs	EURO	196915188	203080645	202328831
Energy costs	EURO	40447043	35459274	33181317
Purchase of fish and other raw material for production	EURO	1365211644	1267161104	990912366
Packaging costs	EURO	74837146	69458385	
Other running costs	EURO	379805780	351970027	
Other operational costs	EURO	454642926	421428412	416578763
Total Production costs	EURO	2057216801	1927129435	1643001277
Depreciation of capital	EURO	33565188	35152285	40961694
Financial costs, net	EURO	24396102	15199597	41055242
Extraordinary costs, net	EURO	-2102419	-197177	2267204
Fixed costs	EURO			
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO	1131777688	1229707124	
Investment (assets): Insurance	EURO			
Total value of assets	EURO			1218420968
Net Investments	EURO			34348790
Debt	EURO			908548656
Male employees	NUMBER			2146
Female employees	NUMBER			2233
Total employees	NUMBER	4440	4441	4379
Male FTE	NUMBER			2040
Female FTE	NUMBER			2107
FTE	NUMBER	4414	4428	4147
Number of enterprises <11 employees	NUMBER			56
Number of enterprises 11-49 employees	NUMBER			31
Number of enterprises 50-249 employees	NUMBER			30
Number of enterprises >=250 employees	NUMBER			0
Number of enterprises	NUMBER	124	128	117
Raw materials total	TONNES	632399	501134	
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%	21.0	20.3	34.1
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EUR	242098387	222549731	256633871
Operating Cash Flow (OCF)	EUR	45183199	19469086	54305040
Earnings Before Interest and Tax (EBIT)	EUR	11618011	-15683199	13343347
Net profit (PRN)	EUR	-12778091	-30882796	-27711895
Net Profit to Assets (PRN/ASS)	%	-1.1	-2.5	-2.3
EBIT to Assets (EBIT/ASS)	%	1.0	-1.3	1.1
Employment per firm (EPN)	NUMBER	35.8	34.7	37.4
FTE per firm (FPN)	NUMBER	35.6	34.6	35.4

Turnover per firm (TPN)	EUR	16513231.7	14774869.8	14552479.1
Turnover per FTE (TPF)	EUR	463896.9	427096.5	410571.5
Turnover per employee (TPE)	EUR	461180.3	425846.3	388819.4
Net profit per FTE (PPF)	EUR	-2894.9	-6974.4	-6682.4
Net profit per employee (PPE)	EUR	-2877.9	-6954.0	-6328.4
Running cost to turnover ratio (RPT)	%	100.5	101.9	96.5
Salary per FTE	EUR	44612	45863	48789
Salary per employee	EUR	44350	45729	46204
Percentage of paid work	%			99.3

Raw Materials	Eur_Value	Ton_Value	Year	Sample	Population
Codfish	200134408.6	41446	2006	124	124
Fish for reduction	323924731.2	409281	2006	124	124
Flatfish	10887096.77	1097	2006	124	124
Herring	124462365.6	71521	2006	124	124
Mackerel	66666666.67	15143	2006	124	124
Mussels	23387096.77	7210	2006	124	124
Other	168010752.7	51246	2006	124	124
Salmon	163037634.4	16735	2006	124	124
Shrimps	121639785	18722	2006	124	124
Codfish	192741935.5	37103	2007	128	128
Fish for reduction	262365591.4	314739	2007	128	128
Flatfish	13037634.41	1170	2007	128	128
Herring	113575268.8	60817	2007	128	128
Mackerel	59274193.55	13704	2007	128	128
Mussels	15188172.04	5401	2007	128	128
Other	147580645.2	36261	2007	128	128
Salmon	176209677.4	17959	2007	128	128
Shrimps	101747311.8	13981	2007	128	128

Product	Price	Value	Weight	Year	Sample	Population
202209000	136.1	388709.7	2856.37	2006	124	124
203221100	630.6	2233333	3541.76	2006	124	124
207139900	4598.9	257123.7	55.91	2006	124	124
207147000	948.4	3915860	4128.77	2006	124	124
302112000	650.2	2039516	3136.91	2006	124	124
302118000	1379.1	5533199	4012.21	2006	124	124
302120000	2617.4	19712634	7531.45	2006	124	124
302211000	66.5	352688.2	5304.54	2006	124	124
302213000	2.5	35349.46	14352.2	2006	124	124
302220000	51.9	228897.9	4410.11	2006	124	124
302230000	3.5	59946.24	17280.55	2006	124	124
302299000	5.2	43682.8	8330.05	2006	124	124
302329000	1.8	13172.04	7484.12	2006	124	124
302361000	3.3	24731.18	7521.65	2006	124	124

302400000	2922.4	1930242	660.5	2006	124	124
302501000	2673.0	12310081	4605.29	2006	124	124
302620000	21.5	85215.05	3967.92	2006	124	124
302630000	129.2	367069.9	2840.04	2006	124	124
302640000	117.1	223924.7	1912.09	2006	124	124
302652000	55.4	467069.9	8434.06	2006	124	124
302660000	0.3	5241.94	18588.42	2006	124	124
302691900	4.0	20295.7	5104.55	2006	124	124
302693100	199.5	460618.3	2309.23	2006	124	124
302694100	0.1	134.41	1947.95	2006	124	124
302695100	67.2	36290.32	540.42	2006	124	124
302696100	95.6	546102.2	5712.54	2006	124	124
302696800	1.1	6451.61	5694.27	2006	124	124
302698100	29.1	337231.2	11590.69	2006	124	124
302699900	202.5	850403.2	4198.86	2006	124	124
302700000	168.0	1638844	9754.85	2006	124	124
303212000	679.6	2002823	2947.02	2006	124	124
303218000	1215.1	5007796	4121.16	2006	124	124
303220000	2289.1	14122043	6169.27	2006	124	124
303311000	424.2	439247.3	1035.5	2006	124	124
303320000	28.6	50537.63	1767.42	2006	124	124
303397000	28.8	185752.7	6439.68	2006	124	124
303500000	937.8	432258.1	460.94	2006	124	124
303601100	0.8	1344.09	1734.3	2006	124	124
303743000	659.9	1215054	1841.24	2006	124	124
303760000	7.3	157392.5	21679.4	2006	124	124
303793500	43.9	454166.7	10354.92	2006	124	124
303798100	53.3	118817.2	2228.38	2006	124	124
303799800	84.7	541935.5	6397.54	2006	124	124
303809000	1445.7	5360753	3708.14	2006	124	124
304101300	2023.1	17124866	8464.6	2006	124	124
304101500	142.1	556720.4	3917.15	2006	124	124
304101700	105.7	988440.9	9350.05	2006	124	124
304101900	138.1	1336425	9674.21	2006	124	124
304103100	4184.8	33892204	8098.9	2006	124	124
304103300	2986.9	9106048	3048.65	2006	124	124
304103800	24057.8	34069624	1416.16	2006	124	124
304109100	2.7	2688.17	995.62	2006	124	124
304109700	17228.1	17390054	1009.4	2006	124	124
304109800	1711.9	5579570	3259.33	2006	124	124
304201300	478.8	3143280	6564.65	2006	124	124
304201500	0.1	134.41	1445.25	2006	124	124
304201700	44.6	227285	5090.48	2006	124	124
304202100	9.4	55510.75	5894.11	2006	124	124
304202900	2336.0	12995430	5563.11	2006	124	124
304203100	822.9	2287231	2779.52	2006	124	124
304203300	494.1	2484946	5029.36	2006	124	124
304203500	10.5	57930.11	5497.26	2006	124	124
304204500	42.5	198655.9	4674.15	2006	124	124
304205300	159.4	721236.6	4525.26	2006	124	124
304205800	14.5	33870.97	2333.84	2006	124	124
304207100	559.7	3842339	6865.6	2006	124	124

304207300	13.5	67204.3	4981.79	2006	124	124
304207500	1287.2	1604032	1246.14	2006	124	124
304208500	370.7	918682.8	2478.3	2006	124	124
304209100	1.9	9274.19	4787.92	2006	124	124
304209400	1107.2	8754704	7906.86	2006	124	124
304901000	144.0	431989.3	3000.18	2006	124	124
304902200	5407.5	5145968	951.64	2006	124	124
304903800	250.0	411559.1	1646.03	2006	124	124
304903900	11.0	31182.8	2839.96	2006	124	124
304904100	231.3	290053.8	1253.94	2006	124	124
304904500	55.6	161962.4	2911.53	2006	124	124
304909700	274.0	459677.4	1677.76	2006	124	124
305200000	147.5	384543	2607.16	2006	124	124
305301100	5198.9	33295161	6404.31	2006	124	124
305301900	1398.0	7975134	5704.71	2006	124	124
305303000	4.7	2822.58	602.09	2006	124	124
305309000	55.2	276612.9	5014.01	2006	124	124
305410000	8690.5	88271774	10157.32	2006	124	124
305420000	52.5	368145.2	7008.02	2006	124	124
305491000	523.4	7028898	13429.46	2006	124	124
305493000	119.2	915322.6	7677.46	2006	124	124
305494500	4846.9	48545027	10015.69	2006	124	124
305495000	323.1	6108737	18908.75	2006	124	124
305498000	487.5	3419355	7014.13	2006	124	124
305610000	4508.4	8495161	1884.3	2006	124	124
305620000	8.8	30510.75	3460.45	2006	124	124
305695000	2.1	537.63	259.98	2006	124	124
306121000	539.6	5684005	10533.41	2006	124	124
306129000	32.7	400403.2	12256.74	2006	124	124
306131000	2158.5	3739113	1732.29	2006	124	124
306135000	5.1	71774.19	14201.46	2006	124	124
306193000	266.1	2568145	9652.1	2006	124	124
306199000	8.7	8333.33	960.61	2006	124	124
306229100	0.4	13440.86	30616.99	2006	124	124
306231000	4.9	20833.33	4223.26	2006	124	124
306243000	38.8	143817.2	3702.34	2006	124	124
306248000	0.2	1478.49	6372.82	2006	124	124
306291000	73.9	686693.6	9293.96	2006	124	124
306293000	1444.9	16067473	11120.4	2006	124	124
306299000	23.3	206451.6	8863.63	2006	124	124
307101000	72.6	451209.7	6215.18	2006	124	124
307109000	182.8	1277554	6989	2006	124	124
307291000	87.8	472446.2	5378.49	2006	124	124
307311000	561.2	1457124	2596.4	2006	124	124
307391000	583.2	1622984	2782.98	2006	124	124
307490100	7.5	27956.99	3712.25	2006	124	124
307600000	19.3	12365.59	640.31	2006	124	124
307910000	62.6	509946.2	8140.51	2006	124	124
307991800	0.3	940.86	3484.67	2006	124	124
408198900	52.7	271908.6	5155.94	2006	124	124
511911001	12568.1	2005242	159.55	2006	124	124
511911009	144117.1	21288978	147.72	2006	124	124

703109000	0.1	268.82	1828.69	2006	124	124
910999900	0.2	940.86	6230.86	2006	124	124
1504209000	106575.8	65032527	610.2	2006	124	124
1604110000	238.7	3392339	14212.8	2006	124	124
1604129101	270.2	355376.3	1315.06	2006	124	124
1604129102	2688.5	11732930	4364.13	2006	124	124
1604129103	21.1	167876.3	7965.66	2006	124	124
1604129109	328.6	1441129	4386.12	2006	124	124
1604129902	206.1	410349.5	1990.7	2006	124	124
1604129903	18396.9	41992204	2282.57	2006	124	124
1604129905	14241.4	23711425	1664.97	2006	124	124
1604129909	6884.4	11641667	1691.01	2006	124	124
1604139000	791.1	1005780	1271.42	2006	124	124
1604151101	14811.8	65677151	4434.1	2006	124	124
1604160000	170.7	240725.8	1410.17	2006	124	124
1604191000	0.6	3629.03	5652.7	2006	124	124
1604199100	21710.4	91295968	4205.18	2006	124	124
1604199200	3.0	17607.53	5940.46	2006	124	124
1604199300	86.7	320967.7	3700.47	2006	124	124
1604199500	1270.9	4537634	3570.46	2006	124	124
1604199800	8672.7	43476210	5012.98	2006	124	124
1604200500	390.0	2099194	5382.22	2006	124	124
1604201000	159.3	835215.1	5243.39	2006	124	124
1604205009	1009.8	3923925	3885.75	2006	124	124
1604207000	0.6	4166.67	7246.38	2006	124	124
1604209000	6420.7	18542876	2887.98	2006	124	124
1604309000	3462.0	19806989	5721.3	2006	124	124
1605100000	12.1	60752.69	5016.32	2006	124	124
1605201009	5956.5	43834274	7359.03	2006	124	124
1605209101	1.6	11962.37	7347.89	2006	124	124
1605209109	7942.1	52278091	6582.43	2006	124	124
1605209909	4821.5	25529973	5295.02	2006	124	124
1605400000	1774.2	16835484	9489.32	2006	124	124
1605901100	2734.7	12190995	4457.81	2006	124	124
1605901900	4475.6	11254704	2514.7	2006	124	124
1605909000	89.2	224328	2515.59	2006	124	124
1701129000	1.0	672.04	707.41	2006	124	124
1902209900	23.9	87096.77	3639.5	2006	124	124
2001901000	143.5	399865.6	2785.82	2006	124	124
2001909901	2.4	9408.6	3867.08	2006	124	124
2103909001	1.8	5510.75	3120.47	2006	124	124
2104109000	964.4	1798522	1864.86	2006	124	124
2301200000	286535.4	2.55E+08	888.96	2006	124	124
2309909906	16171.8	4235081	261.88	2006	124	124
2501009100	6.0	806.45	134.41	2006	124	124
202209000	134.5	390457	2901.95	2007	128	128
203221100	519.7	1433737	2758.77	2007	128	128
207139900	132.0	21505.38	162.86	2007	128	128
207147000	619.2	2645968	4273.26	2007	128	128
300321800	1153.5	5240995	4543.66	2007	128	128
302112000	652.7	1597715	2448.03	2007	128	128
302118000	1175.7	5392742	4586.73	2007	128	128

302120000	3317.4	21511828	6484.49	2007	128	128
302211000	39.2	238440.9	6085.62	2007	128	128
302213000	2.6	40053.76	15311.07	2007	128	128
302220000	88.0	392204.3	4455.96	2007	128	128
302230000	3.2	59811.83	18726.31	2007	128	128
302299000	4.8	43951.61	9105.37	2007	128	128
302361000	1177.7	521774.2	443.05	2007	128	128
302400000	2862.8	2097043	732.52	2007	128	128
302501000	2329.2	12888575	5533.39	2007	128	128
302620000	14.0	63440.86	4537	2007	128	128
302630000	39.9	114381.7	2865.42	2007	128	128
302640000	871.3	1240188	1423.39	2007	128	128
302652000	21.1	193682.8	9188.42	2007	128	128
302660000	0.1	2284.95	20585.1	2007	128	128
302691900	2.1	12231.18	5934.59	2007	128	128
302693100	187.6	441129	2351.72	2007	128	128
302694100	0.2	672.04	2934.69	2007	128	128
302695100	64.9	45430.11	699.74	2007	128	128
302696100	120.1	728360.2	6066.89	2007	128	128
302696800	1.2	6989.25	5705.51	2007	128	128
302698100	11.4	102822.6	9043.32	2007	128	128
302699900	183.2	630779.6	3442.35	2007	128	128
302700000	96.6	685080.7	7095.6	2007	128	128
303213000	1472.5	4008199	2722.09	2007	128	128
303220000	3906.8	15957527	4084.56	2007	128	128
303311000	335.3	933333.3	2783.83	2007	128	128
303510000	282.3	270026.9	956.58	2007	128	128
303529000	530.2	1801613	3397.99	2007	128	128
303718000	8.8	10080.65	1143.45	2007	128	128
303743000	544.9	1090860	2002.02	2007	128	128
303760000	5.7	86827.96	15153.22	2007	128	128
303798100	1.9	14919.35	7770.5	2007	128	128
303809000	1178.5	6097984	5174.54	2007	128	128
304111000	2.7	23790.32	8746.44	2007	128	128
304191300	2372.7	18386962	7749.33	2007	128	128
304191500	19.9	115591.4	5812.41	2007	128	128
304191700	83.0	543548.4	6549.72	2007	128	128
304191900	39.4	286962.4	7287.75	2007	128	128
304193100	3087.4	28340457	9179.51	2007	128	128
304193300	2415.9	8346909	3454.94	2007	128	128
304193500	5.1	64381.72	12676.06	2007	128	128
304193900	10106.6	17870430	1768.19	2007	128	128
304199700	9656.3	9032527	935.4	2007	128	128
304199900	825.7	4397043	5325.29	2007	128	128
304291300	610.2	3970027	6506.13	2007	128	128
304291500	22.3	156317.2	7003.46	2007	128	128
304291700	17.8	89516.13	5028.43	2007	128	128
304292900	2033.8	13252285	6516.1	2007	128	128
304293100	396.7	1031586	2600.18	2007	128	128
304293300	4.1	48655.91	11931.32	2007	128	128
304293500	0.0	134.41	6720.43	2007	128	128
304295300	291.8	1116398	3825.44	2007	128	128

304297100	449.0	3580645	7975.12	2007	128	128
304297300	4.9	38575.27	7843.69	2007	128	128
304297500	2078.7	2301882	1107.35	2007	128	128
304298500	121.4	369489.3	3043.57	2007	128	128
304299100	3.3	6854.84	2074.08	2007	128	128
304299900	873.2	6461828	7400.39	2007	128	128
304992100	1.4	268.82	195.22	2007	128	128
304992300	4644.2	4050941	872.26	2007	128	128
304993300	67.8	203897.9	3006.1	2007	128	128
304993900	258.4	1414113	5472.06	2007	128	128
304994100	15.0	18817.2	1253.39	2007	128	128
304994500	44.0	238306.5	5416.06	2007	128	128
304999900	280.3	724059.1	2583.39	2007	128	128
305200000	37.3	404435.5	10835.22	2007	128	128
305301100	3919.2	26171774	6677.79	2007	128	128
305301900	1205.6	7416129	6151.31	2007	128	128
305309000	47.9	215322.6	4494.88	2007	128	128
305410000	9010.1	95076075	10552.13	2007	128	128
305420000	39.4	228629	5800.12	2007	128	128
305491000	716.1	9473387	13229.29	2007	128	128
305493000	145.3	938440.9	6460.78	2007	128	128
305494500	5329.2	53498925	10038.76	2007	128	128
305495000	272.7	5306317	19458.73	2007	128	128
305498000	229.8	2674731	11639.79	2007	128	128
305610000	3754.5	7935349	2113.54	2007	128	128
306121000	596.1	6639247	11138.28	2007	128	128
306129000	24.9	222177.4	8927.09	2007	128	128
306131000	36.7	83333.33	2271.72	2007	128	128
306135000	18.8	269758.1	14375.6	2007	128	128
306193000	704.6	7833602	11117.03	2007	128	128
306199000	1.9	1881.72	995.62	2007	128	128
306229100	0.2	6854.84	30601.96	2007	128	128
306231000	0.1	672.04	6109.48	2007	128	128
306243000	26.1	124731.2	4787.59	2007	128	128
306248000	0.8	14112.9	18448.24	2007	128	128
306291000	201.9	1956720	9693.84	2007	128	128
306293000	525.2	6804570	12955.51	2007	128	128
306299000	56.2	340994.6	6067.74	2007	128	128
307101000	23.1	165322.6	7165.2	2007	128	128
307109000	744.4	4905780	6590.3	2007	128	128
307291000	68.6	391532.3	5706.8	2007	128	128
307311000	1771.4	3464785	1955.95	2007	128	128
307391000	59.6	171236.6	2873.29	2007	128	128
307490100	1.8	10887.1	6171.82	2007	128	128
307600000	10.6	7123.66	668.89	2007	128	128
307910000	4.0	24462.37	6177.37	2007	128	128
307991800	0.0	134.41	4978.1	2007	128	128
408198900	54.4	295430.1	5434.6	2007	128	128
511911001	9390.0	1776210	189.16	2007	128	128
511911009	123923.4	17035753	137.47	2007	128	128
910999900	1.2	7123.66	5991.3	2007	128	128
1101009000	8.3	7526.88	911.47	2007	128	128

1504209000	119414.6	75274194	630.36	2007	128	128
1604110000	238.8	2913844	12201.36	2007	128	128
1604129101	102.9	298118.3	2896.43	2007	128	128
1604129102	2282.7	10680376	4678.89	2007	128	128
1604129103	21.8	175672	8054.66	2007	128	128
1604129109	319.1	1372715	4301.51	2007	128	128
1604129902	404.2	688575.3	1703.75	2007	128	128
1604129903	22057.2	49664113	2251.61	2007	128	128
1604129905	10601.0	17402554	1641.6	2007	128	128
1604129909	4854.6	9790457	2016.73	2007	128	128
1604139000	900.3	984677.4	1093.7	2007	128	128
1604141600	92.7	538978.5	5815.29	2007	128	128
1604149000	4.8	4301.08	896.06	2007	128	128
1604151100	13679.9	59192876	4326.99	2007	128	128
1604160000	24.2	35349.46	1461.2	2007	128	128
1604199100	22648.9	1.02E+08	4491.25	2007	128	128
1604199300	70.8	300537.6	4245	2007	128	128
1604199500	813.6	3857124	4740.89	2007	128	128
1604199800	7874.5	40152823	5099.11	2007	128	128
1604200500	488.9	2289651	4683.48	2007	128	128
1604201000	254.0	1409677	5549.47	2007	128	128
1604205009	2311.7	8718548	3771.54	2007	128	128
1604209000	8951.2	31775000	3549.8	2007	128	128
1604309000	939.3	8409543	8953.35	2007	128	128
1605100000	89.5	449865.6	5024.13	2007	128	128
1605201009	4854.9	43056855	8868.66	2007	128	128
1605209101	303.5	3325538	10958.05	2007	128	128
1605209109	6133.3	41448790	6758.04	2007	128	128
1605209909	2689.6	13874731	5158.75	2007	128	128
1605400000	1369.1	13536022	9886.69	2007	128	128
1605901100	3578.5	10380645	2900.87	2007	128	128
1605901900	1822.9	4792876	2629.19	2007	128	128
1605909000	76.6	212096.8	2768.6	2007	128	128
1701129000	1.0	672.04	640.04	2007	128	128
1902209900	29.2	116397.9	3986.91	2007	128	128
1905409005	10.6	12231.18	1153.89	2007	128	128
2001901000	219.4	573252.7	2613.39	2007	128	128
2001909901	2.3	8736.56	3870.87	2007	128	128
2103909001	3.1	12768.82	4103.09	2007	128	128
2103909007	21.6	90322.58	4178.31	2007	128	128
2104109000	1035.4	1998925	1930.52	2007	128	128
2301200000	175419.0	1.82E+08	1035.49	2007	128	128
2309909907	19904.3	5465323	274.58	2007	128	128
2501009100	4.2	537.63	128.01	2007	128	128
4819100000	3.2	2553.76	808.66	2007	128	128

Product name is the commodity number from the Commodity Nomenclature 2009. Sampling strategy is census.

## Estonia

Parameter	Units	2006	2007	2008
Turnover	EURO	110084491	98845372	116524891
Subsidies	EURO			430910
Other income	EURO			2737046
Total income	EURO	112074956	104219064	119692847
Wages and salaries of staff	EURO			18190399
Imputed value of unpaid labour	EURO			
Labour costs	EURO	15420730	17465008	18190399
Energy costs	EURO	3558792	3536423	4070574
Purchase of fish and other raw material for production	EURO	68821022	59994759	71848848
Packaging costs	EURO			
Other running costs	EURO	20167129	16932178	
Other operational costs	EURO	20167129	16932178	18674499
Total Production costs	EURO	107967673	97928368	112784320
Depreciation of capital	EURO			3514982
Financial costs, net	EURO			1694170
Extraordinary costs, net	EURO			
Fixed costs	EURO	5001470	5133575	5209152
Investment (assets): Historical	EURO	53302315	60843889	
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			66264875
Net Investments	EURO			9071619
Debt	EURO			47231537
Male employees	NUMBER			
Female employees	NUMBER			
Total employees	NUMBER	2370	2103	1936
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER	2151	1932	1864
Number of enterprises <11 employees	NUMBER			16
Number of enterprises 11-49 employees	NUMBER			27
Number of enterprises 50-249 employees	NUMBER			5
Number of enterprises >=250 employees	NUMBER			2
Number of enterprises	NUMBER	55	57	50
Raw materials total	TONNES	85000	75000	
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%	33	22	40.3
Number of enterprises (non main activities)	NUMBER			9
Turnover attributed to fish processing	EURO			835963
Gross Value Added (GVA)	EUR	19528013	23755704	25098926
Operating Cash Flow (OCF)	EUR	4107283	6290696	6908527
Earnings Before Interest and Tax (EBIT)	EUR			3393545
Net profit (PRN)	EUR	-894187	1157121	1699375
Net Profit to Assets (PRN/ASS)	%	-1.7	1.9	2.6
EBIT to Assets (EBIT/ASS)	%			5.1
Employment per firm (EPN)	NUMBER	43.1	36.9	38.7
FTE per firm (FPN)	NUMBER	39.1	33.9	37.3

Turnover per firm (TPN)	EUR	2001536.2	1734129.3	2330497.8
Turnover per FTE (TPF)	EUR	51178.3	51162.2	62513.4
Turnover per employee (TPE)	EUR	46449.2	47002.1	60188.5
Net profit per FTE (PPF)	EUR	-415.7	598.9	911.7
Net profit per employee (PPE)	EUR	-377.3	550.2	877.8
Running cost to turnover ratio (RPT)	%	98.1	99.1	96.8
Salary per FTE	EUR	7169	9040	9759
Salary per employee	EUR	6507	8305	9396
Percentage of paid work	%			

## Finland

Parameter	Units	2006	2007	2008
Turnover	EURO	134560000	145075000	160023000
Subsidies	EURO			635000
Other income	EURO			615000
Total income	EURO	135425000	146280000	161273000
Wages and salaries of staff	EURO			22803000
Imputed value of unpaid labour	EURO			922000
Labour costs	EURO	20388000	22597000	23725000
Energy costs	EURO	2990000	3096000	2309000
Purchase of fish and other raw material for production	EURO	90027000	99744000	107556000
Packaging costs	EURO	6568000	9277000	
Other running costs	EURO	7723000	7653000	
Other operational costs	EURO	14291000	16930000	18287000
Total Production costs	EURO	127696000	142367000	151877000
Depreciation of capital	EURO	2998000	3320000	3522000
Financial costs, net	EURO	579000	1586000	2232000
Extraordinary costs, net	EURO	-59000	-419000	-617000
Fixed costs	EURO	3577000	4906000	5137000
Investment (assets): Historical	EURO	73013000	66421000	
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			73645000
Net Investments	EURO			3077000
Debt	EURO			56706000
Male employees	NUMBER			510
Female employees	NUMBER			385
Total employees	NUMBER	832	908	895
Male FTE	NUMBER			389
Female FTE	NUMBER			293
FTE	NUMBER	646	683	682
Number of enterprises <11 employees	NUMBER			131
Number of enterprises 11-49 employees	NUMBER			9
Number of enterprises 50-249 employees	NUMBER			3
Number of enterprises >=250 employees	NUMBER			0
Number of enterprises	NUMBER	142	146	143
Raw materials total	TONNES	38600	49900	
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%	27.0	22.0	29.9
Number of enterprises (non main activities)	NUMBER			22
Turnover attributed to fish processing	EURO			10270600
Gross Value Added (GVA)	EUR	28117000	26510000	33121000
Operating Cash Flow (OCF)	EUR	7729000	3913000	9396000
Earnings Before Interest and Tax (EBIT)	EUR	4731000	593000	5874000
Net profit (PRN)	EUR	4152000	-993000	3642000
Net Profit to Assets (PRN/ASS)	%	5.7	-1.5	4.9
EBIT to Assets (EBIT/ASS)	%	6.5	0.9	8.0
Employment per firm (EPN)	NUMBER	5.9	6.2	6.3

FTE per firm (FPN)	NUMBER	4.5	4.7	4.8
Turnover per firm (TPN)	EUR	947605.6	993664.4	1119042.0
Turnover per FTE (TPF)	EUR	208297.2	212408.5	234637.8
Turnover per employee (TPE)	EUR	161730.8	159774.2	178796.6
Net profit per FTE (PPF)	EUR	6427.2	-1453.9	5340.2
Net profit per employee (PPE)	EUR	4990.4	-1093.6	4069.3
Running cost to turnover ratio (RPT)	%	94.9	98.1	94.9
Salary per FTE	EUR	31560	33085	34787
Salary per employee	EUR	24505	24887	26508
Percentage of paid work	%			96.1

Raw Materials	Eur_Value	Ton_Value	Year	Sample	Population
Baltic herring		18742	2006	142	142
Bream		1	2006	142	142
Burbot		9	2006	142	142
Catfish		28	2006	142	142
Char		156	2006	142	142
Cod		5	2006	142	142
Cyprinid fish		7	2006	142	142
Eel		2	2006	142	142
Flounder		4	2006	142	142
Halibut		49	2006	142	142
Herring		2329	2006	142	142
Mackerel		57	2006	142	142
Perch		226	2006	142	142
Pike		166	2006	142	142
Pike perch		88	2006	142	142
Rainbow trout		6390	2006	142	142
Red fish		381	2006	142	142
Saithe		21	2006	142	142
Salmon		7349	2006	142	142
Smelt		64	2006	142	142
Sprat		1301	2006	142	142
Sturgeon		96	2006	142	142
Trout		3	2006	142	142
Vendace		243	2006	142	142
Whitefish		904	2006	142	142
Baltic herring		27539	2007	146	146
Bream		5	2007	146	146
Burbot		1	2007	146	146
Char		81	2007	146	146
Cyprinid fish		28	2007	146	146
Eel		1	2007	146	146
European Whitefish		775	2007	146	146
Flounder		3	2007	146	146
Halibut		51	2007	146	146
Herring		3776	2007	146	146
Mackerel		74	2007	146	146

Perch		200	2007	146	146
Pike		183	2007	146	146
Pike perch		194	2007	146	146
Rainbow trout		11037	2007	146	146
Red fish		162	2007	146	146
Saithe		5	2007	146	146
Salmon		4950	2007	146	146
Smelt		52	2007	146	146
Sprat		1	2007	146	146
Trout		1	2007	146	146
Vendace		778	2007	146	146

Product	Price	Value	Weight	Year	Sample	Population
Cold smoked fish		5237009		2006	142	142
Fish fillets, frozen		497383		2006	142	142
Fresh fillets		35931936		2006	142	142
Hot smoked fish		14308052		2006	142	142
Other		8875631		2006	142	142
Other fresh fish		1992731		2006	142	142
Other frozen fish		17785548		2006	142	142
Preserved fish		1587119		2006	142	142
Raw spiced or salted fish		4727875		2006	142	142
Ready to eat product		4442645		2006	142	142
Roe		2981003		2006	142	142
Semipreserved fish		34284018		2006	142	142
Whole fish, frozen		1909050		2006	142	142
Cold smoked fish		5646247		2007	146	146
Fresh fillets		38739786		2007	146	146
Frozen fish fillets		536250		2007	146	146
Hot smoked fish		15426135		2007	146	146
Other		9569205		2007	146	146
Other fresh fish		2148450		2007	146	146
Other frozen fish		19175375		2007	146	146
Preserved fish		1711142		2007	146	146
Raw spiced or salted fish		5097328		2007	146	146
Ready to eat product		4789809		2007	146	146
Roe		3213950		2007	146	146
Semipreserved fish		36963094		2007	146	146
Whole frozen fish		2058229		2007	146	146

## France

Parameter	Units	2006	2007	2008
Turnover	EURO	3260519000	3188172000	3151200000
Subsidies	EURO			
Other income	EURO			
Total income	EURO	3260519000	3188172000	3151200000
Wages and salaries of staff	EURO			434745000
Imputed value of unpaid labour	EURO			
Labour costs	EURO			434745000
Energy costs	EURO			321629700
Purchase of fish and other raw material for production	EURO	1544168000	1320682000	1327482000
Packaging costs	EURO			
Other running costs	EURO			
Other operational costs	EURO			
Total Production costs	EURO	1544168000	1320682000	2083856700
Depreciation of capital	EURO			168939000
Financial costs, net	EURO			31088000
Extraordinary costs, net	EURO			
Fixed costs	EURO			200027000
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			1308000000
Net Investments	EURO			
Debt	EURO			1409180000
Male employees	NUMBER			
Female employees	NUMBER			
Total employees	NUMBER	13829	13059	12000
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER			
Number of enterprises <11 employees	NUMBER			86
Number of enterprises 11-49 employees	NUMBER			80
Number of enterprises 50-249 employees	NUMBER			34
Number of enterprises >=250 employees	NUMBER			14
Number of enterprises	NUMBER	209	209	214
Raw materials total	TONNES			
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%			-7.2
Number of enterprises (non main activities)	NUMBER			51
Turnover attributed to fish processing	EURO			829000000
Gross Value Added (GVA)	EUR			
Operating Cash Flow (OCF)	EUR			
Earnings Before Interest and Tax (EBIT)	EUR			
Net profit (PRN)	EUR			
Net Profit to Assets (PRN/ASS)	%			
EBIT to Assets (EBIT/ASS)	%			
Employment per firm (EPN)	NUMBER	66.2	62.5	56.1

FTE per firm (FPN)	NUMBER			
Turnover per firm (TPN)	EUR	15600569.4	15254411.5	14725233.6
Turnover per FTE (TPF)	EUR			
Turnover per employee (TPE)	EUR	235774.0	244136.0	262600.0
Net profit per FTE (PPF)	EUR			
Net profit per employee (PPE)	EUR			
Running cost to turnover ratio (RPT)	%			
Salary per FTE	EUR			
Salary per employee	EUR			36229
Percentage of paid work	%			

## Germany

Parameter	Units	2006	2007	2008
Turnover (more than 20 employees)	EURO	2096940000	2064373000	2373233000
Turnover (all companies)	EURO	2219808000	2164004000	
Subsidies	EURO			0
Other income	EURO			-1251000
Total income	EURO	2112786000	2071475000	2371982000
Wages and salaries of staff	EURO			270839000
Imputed value of unpaid labour	EURO			
Labour costs	EURO	275958000	261390000	270839000
Energy costs	EURO	35403000	39236000	38846000
Purchase of fish and other raw material for production	EURO	1222256000	1251049000	1433529000
Packaging costs	EURO			
Other running costs	EURO	489210000	394578000	
Other operational costs	EURO	489210000	394578000	540761000
Total Production costs	EURO	2022827000	1946253000	2283975000
Depreciation of capital	EURO	46906000	53326000	40764000
Financial costs, net	EURO	16681000	21376000	18992000
Extraordinary costs, net	EURO			
Fixed costs	EURO			
Investment (assets): Historical	EURO	531614507	679984731	
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			586172840
Net Investments	EURO			50864000
Debt	EURO			316533333
Male employees	NUMBER			4272
Female employees	NUMBER			4197
Total employees	NUMBER	8407	7834	8469
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER	8105	7750	8082
Number of enterprises <11 employees	NUMBER			197
Number of enterprises 11-49 employees	NUMBER			49
Number of enterprises 50-249 employees	NUMBER			26
Number of enterprises >=250 employees	NUMBER			9
Number of enterprises (all companies)	NUMBER	281	277	281
Number of enterprises (more than 20 employees)	NUMBER	62	60	64
Raw materials total	TONNES	473361	472600	
Capacity utilisation	%	78.1	81.6	
Financial position (Share of own/borrowed capital)	%	84.8	84.7	85.2
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EUR	365917000	386612000	358846000
Operating Cash Flow (OCF)	EUR	89959000	125222000	88007000
Earnings Before Interest and Tax (EBIT)	EUR	43053000	71896000	47243000
Net profit (PRN) (more than 20 employees)	EUR	26372000	50520000	28251000
Net Profit to Assets (PRN/ASS)	%	5.0	7.4	4.8

EBIT to Assets (EBIT/ASS)	%	8.1	10.6	8.1
Employment per firm (EPN) (all companies)	NUMBER	29.9	28.3	30.1
Employment per firm (EPN) (more than 20 employees)	NUMBER	135.6	130.6	132.3
FTE per firm (FPN) (all companies)	NUMBER	28.8	28.0	28.8
FTE per firm (FPN) (more than 20 employees)	NUMBER	130.7	129.2	126.3
Turnover per firm (TPN) (all companies)	EUR	7899672.6	7812288.8	
Turnover per firm (TPN) (more than 20 employees)	EUR	33821612.9	34406216.7	37081765.6
Turnover per FTE (TPF) (more than 20 employees)	EUR	258721.8	266370.7	293644.3
Turnover per employee (TPE) (more than 20 employees)	EUR	249427.9	263514.6	280225.9
Net profit per FTE (PPF) (more than 20 employees)	EUR	3253.8	6518.7	3495.5
Net profit per employee (PPE) (more than 20 employees)	EUR	3136.9	6448.8	3335.8
Running cost to turnover ratio (RPT) (more than 20 employees)	%	96.5	94.3	96.2
Salary per FTE (more than 20 employees)	EUR	34048	33728	33511
Salary per employee (more than 20 employees)	EUR	32825	33366	31980
Percentage of paid work	%			

The amount of indirect cost taxes 10 Million Euro for 2006, 15 Million for 2007 and 11 Million for 2008.

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. Unfortunately data on total turnover of the entire sector, number of enterprises and employment are not available at the time this report was written, but it will be possible to include them in next year's report.

Raw Materials code	Eur_Value	Ton_Value	Year	Sampling strategy
15	102000	0	2006	PSS
1511	10673000	0	2006	PSS
1512	6191000	0	2006	PSS
1513	10556000	0	2006	PSS
1520	6.24E+08	0	2006	PSS
1530	89789000	0	2006	PSS
1540	48612000	0	2006	PSS
1550	19288000	0	2006	PSS
1580	83214000	0	2006	PSS
24	5965000	0	2006	PSS
5	3.01E+08	0	2006	PSS
900	30387000	0	2006	PSS
15	101836	0	2007	"
1511	10655842	0	2007	"
1512	6181047	0	2007	"
1513	10539030	0	2007	"
1520	6.23E+08	0	2007	"
1530	89644650	0	2007	"
1540	48533849	0	2007	"

1550	19256992	0	2007	"
1580	83080221	0	2007	"
24	5955410	0	2007	"
5	3.01E+08	0	2007	"
900	30338148	0	2007	"

Product	Value	Weight	Price	Year	Sampling strategy
10201600 - Frozen fish livers and roes	0	0	0	2006	C
10204100 - Flours, meals and pellets of fish or of crustaceans, molluscs or other aquatic invertebrates,	0	0	0	2006	C
10202580 - Other prepared or preserved fish, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2006	C
10203400 - Prepared or preserved crustaceans, molluscs and other aquatic invertebrates			0	2006	C
10202570 - Fish fillets in batter or breadcrumbs including fish fingers (excluding prepared meals and dishes)			0	2006	C
10202300 - Dried fish, whether or not salted; fish, salted but not dried; fish in brine (excluding fillets, smoked)	0	0	0	2006	C
10201200 - Fresh or chilled fish livers and roes	0	0	0	2006	C
10202590 - Prepared or preserved fish (excluding whole or in pieces and prepared meals and dishes)			0	2006	C
10202520 - Prepared or preserved herrings, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2006	C
10203100 - Frozen crustaceans, frozen flours, meals and pellets of crustaceans, fit for human consumption	0	792.08	0	2006	C
10201360 - Frozen whole fresh water fish	0	0	0	2006	C
10204200 - Inedible fish products (including fish waste	0	0	0	2006	C
10202560 - Prepared or preserved anchovies, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2006	C
PRCCODE/DECL			0	2006	"
10202550 - Prepared or preserved mackerel, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2006	C
10203300 - Other aquatic invertebrates (striped venus, jellyfish, etc), frozen, dried, smoked, salted or in brine;			0	2006	C
10202200 - Flours, meals and pellets of fish, fit for human consumption; fish livers and roes, dried, smoked, salted or in brine	0	0	0	2006	C
10202630 - Caviar (sturgeon roe)	0		0	2006	C
10202540 - Prepared or preserved tuna, skipjack and Atlantic bonito, whole or in pieces			0	2006	C
10202510 - Prepared or preserved salmon, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2006	C
10202530 - Prepared or preserved sardines, sardinella, brisling and sprats, whole or in pieces			0	2006	C
10203200 - Molluscs (scallops, mussels, cuttle fish, squid and octopus), frozen, dried, smoked, salted or in brine			0	2006	C
10201400 - Frozen fish fillets	160680770	58548.81	2744.39	2006	C
10202450 - Smoked herrings (including fillets)	7961178	2399.56	3317.76	2006	C
10202100 - Fish fillets, dried, salted or in brine, but not smoked	1186709	302.85	3918.43	2006	C
10201500 - Frozen fish meat without bones (excluding	7541905	1559.96	4834.68	2006	C

fillets)					
10201330 - Frozen whole salt water fish	21516671	4322.8	4977.49	2006	C
10201100 - Fresh or chilled fish fillets and other fish meat without bones	60155972	8728.16	6892.17	2006	C
10202480 - Smoked fish (including fillets) (excluding Pacific, Atlantic and Danube salmon, herrings)	52460089	5636.76	9306.77	2006	C
10202420 - Smoked Pacific, Atlantic and Danube salmon (including fillets)	144378500	12940.36	11157.23	2006	C
10202660 - Caviar substitutes	27720355	1561.44	17753.04	2006	C
10203400 - Prepared or preserved crustaceans, molluscs and other aquatic invertebrates(dishes)			0	2007	C
10204200 - Inedible fish products	0	0	0	2007	C
10203200 - Molluscs (scallops, mussels, cuttle fish, squid and octopus), frozen, dried, smoked, salted or in brine			0	2007	C
10201100 - Fresh or chilled fish fillets and other fish meat without bones	0	7661.07	0	2007	C
10202550 - Prepared or preserved mackerel, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2007	C
10202560 - Prepared or preserved anchovies, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2007	C
10203300 - Other aquatic invertebrates (striped venus, jellyfish, etc),			0	2007	C
PRCCODE/DECL			0	2007	C
10202510 - Prepared or preserved salmon, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2007	C
10202520 - Prepared or preserved herrings, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2007	C
10202530 - Prepared or preserved sardines, sardinella, brisling and sprats, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2007	C
10201600 - Frozen fish livers and roes	0		0	2007	C
10202630 - Caviar (sturgeon roe)	0	0	0	2007	C
10202200 - Flours, meals and pellets of fish, fit for human consumption; fish livers and roes, dried, smoked, salted or in brine	0		0	2007	C
10202540 - Prepared or preserved tuna, skipjack and Atlantic bonito, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2007	C
10204100 - Flours, meals and pellets of fish or of crustaceans, molluscs or other aquatic invertebrates, unfit for human consumption	0		0	2007	C
10202300 - Dried fish, whether or not salted; fish, salted but not dried; fish in brine (excluding fillets, smoked)	0		0	2007	C
10202570 - Fish fillets in batter or breadcrumbs including fish fingers (excluding prepared meals and dishes)			0	2007	C
10202590 - Prepared or preserved fish (excluding whole or in pieces and prepared meals and dishes)			0	2007	C
10202580 - Other prepared or preserved fish, whole or in pieces (excluding minced products and prepared meals and dishes)			0	2007	C
10201360 - Frozen whole fresh water fish	0		0	2007	C
10203100 - Frozen crustaceans, frozen flours, meals and pellets of crustaceans, fit for human consumption	0		0	2007	C
10201200 - Fresh or chilled fish livers and roes	0		0	2007	C
10201400 - Frozen fish fillets	160800396	57199.2	2811.24	2007	C
10202450 - Smoked herrings (including fillets)	6253754	1703.1	3671.99	2007	C
10202100 - Fish fillets, dried, salted or in brine, but not smoked	1473660	376.92	3909.78	2007	C
10201330 - Frozen whole salt water fish	8686867	2047.48	4242.71	2007	C

10201500 - Frozen fish meat without bones (excluding fillets)	10224686	1945.74	5254.9	2007	C
10202480 - Smoked fish (including fillets) (excluding Pacific, Atlantic and Danube salmon, herrings)	51850572	5728.04	9052.06	2007	C
10202420 - Smoked Pacific, Atlantic and Danube salmon (including fillets)	111620524	10520.33	10609.98	2007	C
10202660 - Caviar substitutes	13536278	690.63	19599.9	2007	C

All data are from Prodcorn and therefor collected exhaustively

## Greece

Parameter	Units	2006	2007	2008
Turnover	EURO		186719177	
Subsidies	EURO			
Other income	EURO			
Total income	EURO	365767600	344368703	
Wages and salaries of staff	EURO			
Imputed value of unpaid labour	EURO			
Labour costs	EURO		29070888	
Energy costs	EURO		4066912	
Purchase of fish and other raw material for production	EURO		95346486	
Packaging costs	EURO		14158878	
Other running costs	EURO		7983197	
Other operational costs	EURO		22142075	
Total Production costs	EURO		150626360	
Depreciation of capital	EURO			
Financial costs, net	EURO			
Extraordinary costs, net	EURO			
Fixed costs	EURO		64923704	
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			
Net Investments	EURO			
Debt	EURO			
Male employees	NUMBER			
Female employees	NUMBER			
Total employees	NUMBER	2422	2175	
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER	248	313	
Number of enterprises <11 employees	NUMBER			
Number of enterprises 11-49 employees	NUMBER			
Number of enterprises 50-249 employees	NUMBER			
Number of enterprises >=250 employees	NUMBER			
Number of enterprises	NUMBER	135	160	
Raw materials total	TONNES	85300	58265	
Capacity utilisation	%		41.4	
Financial position (Share of own/borrowed capital)	%		44.0	
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EURO		222813230	
Operating Cash Flow (OCF)	EURO		193742342	
Earnings Before Interest and Tax (EBIT)	EURO			
Net profit (PRN)	EURO		128818638	
Net Profit to Assets (PRN/ASS)	%			
EBIT to Assets (EBIT/ASS)	%			
Employment per firm (EPN)	NUMBER	17.9	13.6	

FTE per firm (FPN)	NUMBER	1.8	2.0
Turnover per firm (TPN)	EURO		1166994.9
Turnover per FTE (TPF)	EURO		596546.9
Turnover per employee (TPE)	EURO		85847.9
Net profit per FTE (PPF)	EURO		411561.1
Net profit per employee (PPE)	EURO		59227.0
Running cost to turnover ratio (RPT)	%		80.7
Salary per FTE	EURO		92878
Salary per employee	EURO		13366
Percentage of paid work	%		

Raw Materials	Eur_Value	Ton_Value	Year
Anchovy	13408076	4687	2007
Angler	619091	129	2007
Atlantic bonito	173977	21	2007
Atlantic mackerel	5749712	1579	2007
Broadtail squid	2370555	800	2007
Chub mackerel	779478	306	2007
Combers	5661365	1323	2007
Common dentex	756039	128	2007
Common Pandora	866564	213	2007
Cuttlefish	7223127	2272	2007
European eel	680100	567	2007
Grey mullets	77500	4	2007
Hake	12693797	4204	2007
Herring	1296895	504	2007
King clip	451310	223	2007
Lobsters	2026209	145	2007
Musky octopus	4171800	1123	2007
Mussels	4933376	2035	2007
Octopus	30672086	6633	2007
Other	14624944	6610	2007
Pangasius	613200	180	2007
Pink shrimps	8311032	1207	2007
Redfishes	4402736	1338	2007
Red mullet	844197	246	2007
Red porgy	1083954	280	2007
Round sardinella	151179	362	2007
Salmons	1496450	607	2007
Sardine	8024654	4176	2007
Shrimps	9375545	1373	2007
Smoothhands	5316646	1955	2007
Soles	3887156	1106	2007
Squid	23380614	9730	2007
Surimi	201280	26	2007
Swordfish	496013	86	2007
Trouts	3626490	1169	2007
Tunas	6012237	874	2007
White grouper	196793	46	2007

Product	Price	Value	Weight	Year
Anchovy		3027		2007
Angler		8972		2007
Atlantic bonito		15816		2007
Atlantic mackerel		5256		2007
Broadtail squid		3441		2007
Chub mackerel		3957		2007
Combers		4175		2007
Common dentex		5861		2007
Common Pandora		4207		2007
Cuttlefish		3378		2007
European eel		2173		2007
Grey mullets		12917		2007
Hake		3086		2007
Herring		3803		2007
King clip		2119		2007
Lobsters		14683		2007
Musky octopus		3810		2007
Mussels		2441		2007
Octopus		4805		2007
Other		2402		2007
Pangasius		3407		2007
Pink shrimps		8156		2007
Redfishes		3356		2007
Red mullet		3532		2007
Red porgy		3650		2007
Round sardinella		436		2007
Salmons		3164		2007
Sardine		2149		2007
Shrimps		6899		2007
Smoothhands		2854		2007
Soles		3613		2007
Squid		2485		2007
Surimi		8387		2007
Swordfish		6442		2007
Trouts		4691		2007
Tunas		8676		2007
White grouper		4577		2007

## Ireland

Parameter	Units	2006	2007	2008
Turnover	EURO			426866000
Subsidies	EURO			
Other income	EURO			
Total income	EURO			426866000
Wages and salaries of staff	EURO			64371393
Imputed value of unpaid labour	EURO			
Labour costs	EURO			64371393
Energy costs	EURO			10714337
Purchase of fish and other raw material for production	EURO			230678386
Packaging costs	EURO			
Other running costs	EURO			
Other operational costs	EURO			7811648
Total Production costs	EURO			313575764
Depreciation of capital	EURO			
Financial costs, net	EURO			2689255.8
Extraordinary costs, net	EURO			
Fixed costs	EURO			2689255.8
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			250741088
Net Investments	EURO			7043289
Debt	EURO			168185204
Male employees	NUMBER			
Female employees	NUMBER			
Total employees	NUMBER			2867
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER			2205
Number of enterprises <11 employees	NUMBER			38
Number of enterprises 11-49 employees	NUMBER			104
Number of enterprises 50-249 employees	NUMBER			46
Number of enterprises >=250 employees	NUMBER			10
Number of enterprises	NUMBER			198
Raw materials total	TONNES			
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%			49.1
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EURO			177661629
Operating Cash Flow (OCF)	EURO			113290236
Earnings Before Interest and Tax (EBIT)	EURO			
Net profit (PRN)	EURO			
Net Profit to Assets (PRN/ASS)	%			
EBIT to Assets (EBIT/ASS)	%			
Employment per firm (EPN)	NUMBER			14.5

FTE per firm (FPN)	NUMBER			11.1
Turnover per firm (TPN)	EURO			2155888.9
Turnover per FTE (TPF)	EURO			193590.0
Turnover per employee (TPE)	EURO			148889.4
Net profit per FTE (PPF)	EURO			
Net profit per employee (PPE)	EURO			
Running cost to turnover ratio (RPT)	%			73.5
Salary per FTE	EURO			29193
Salary per employee	EURO			22453
Percentage of paid work	%			

## Italy

Parameter	Units	2006	2007	2008
Turnover	EURO			3158760842
Subsidies	EURO			6083932
Other income	EURO			30031555
Total income	EURO	3114821783	3152921558	3194876329
Wages and salaries of staff	EURO			243320475
Imputed value of unpaid labour	EURO			
Labour costs	EURO	227182149	235074115	243320475
Energy costs	EURO	146580968	150597384	130179548
Purchase of fish and other raw material for production	EURO	2246012451	2242747057	2310101115
Packaging costs	EURO			
Other running costs	EURO	396092634	401388621	
Other operational costs	EURO	396092634	401388621	442115332
Total Production costs	EURO	3015868202	3029807177	3125716470
Depreciation of capital	EURO	63442637	60841430	49469153
Financial costs, net	EURO			54895113
Extraordinary costs, net	EURO			9920065
Fixed costs	EURO			114284331
Investment (assets): Historical	EURO	2059458792	2182966900	
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			2353038245
Net Investments	EURO			245588547
Debt	EURO			1767358090
Male employees	NUMBER			3890.5
Female employees	NUMBER			3859.5
Total employees	NUMBER	7750	7750	7750
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER			6355
Number of enterprises <11 employees	NUMBER			192
Number of enterprises 11-49 employees	NUMBER			152
Number of enterprises 50-249 employees	NUMBER			31
Number of enterprises >=250 employees	NUMBER			1
Number of enterprises	NUMBER	372	372	376
Raw materials total	TONNES		491369.48	
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%	23.0	24.0	33.1
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EURO	326135730	358188495	312480334
Operating Cash Flow (OCF)	EURO	98953582	123114380	69159859
Earnings Before Interest and Tax (EBIT)	EURO	35510945	62272950	19690706
Net profit (PRN)	EURO			-35204407
Net Profit to Assets (PRN/ASS)	%			-1.5
EBIT to Assets (EBIT/ASS)	%	1.7	2.9	0.8
Employment per firm (EPN)	NUMBER	20.8	20.8	20.6

FTE per firm (FPN)	NUMBER			16.9
Turnover per firm (TPN)	EURO			8400959.7
Turnover per FTE (TPF)	EURO			497051.3
Turnover per employee (TPE)	EURO			407582.0
Net profit per FTE (PPF)	EURO			-5539.6
Net profit per employee (PPE)	EURO	4582.1	8035.2	-4542.5
Running cost to turnover ratio (RPT)	%			99.0
Salary per FTE	EURO			38288
Salary per employee	EURO	29314	30332	31396
Percentage of paid work	%			

Raw Materials	Eur_Value	Ton_Value	Year
ANE		135317.2	2007
CRU		12699.29	2007
CTL		43632.58	2007
ELE		803.81	2007
FIN		68605.12	2007
HKE		9184.56	2007
MOL		40317.28	2007
MSM		28996.67	2007
MTS		193.2	2007
PIL		12988.49	2007
SVE		27924.05	2007
SWO		1159.89	2007
TRO		7626.3	2007
YFT		101921.1	2007

## Latvia

Parameter	Units	2006	2007	2008
Turnover	EURO	165823320	167222108	215111477
Subsidies	EURO			106727
Other income	EURO			9086033
Total income	EURO	169645440	180483608	224304236
Wages and salaries of staff	EURO			31490838
Imputed value of unpaid labour	EURO			
Labour costs	EURO	23609974	23751538	31490838
Energy costs	EURO	9155396	8095504	9422503
Purchase of fish and other raw material for production	EURO			160467400
Packaging costs	EURO			
Other running costs	EURO			
Other operational costs	EURO			
Total Production costs	EURO			201380741
Depreciation of capital	EURO			8415980
Financial costs, net	EURO			1944697
Extraordinary costs, net	EURO			1165
Fixed costs	EURO			10361842
Investment (assets): Historical	EURO	11337715	8446947	
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			112026974
Net Investments	EURO			6716306
Debt	EURO			83719127
Male employees	NUMBER			2149
Female employees	NUMBER			3646
Total employees	NUMBER	7498	6151	5795
Male FTE	NUMBER			2073
Female FTE	NUMBER			3519
FTE	NUMBER	7184	5803	5592
Number of enterprises <11 employees	NUMBER			27
Number of enterprises 11-49 employees	NUMBER			26
Number of enterprises 50-249 employees	NUMBER			37
Number of enterprises >=250 employees	NUMBER			5
Number of enterprises	NUMBER	109	109	95
Raw materials total	TONNES			
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%	32.0	37.0	33.8
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EURO			54414333
Operating Cash Flow (OCF)	EURO			22923495
Earnings Before Interest and Tax (EBIT)	EURO			14507516
Net profit (PRN)	EURO			12562819
Net Profit to Assets (PRN/ASS)	%			11.2
EBIT to Assets (EBIT/ASS)	%			13.0
Employment per firm (EPN)	NUMBER	68.8	56.4	61.0

FTE per firm (FPN)	NUMBER	65.9	53.2	58.9
Turnover per firm (TPN)	EURO	1521314.9	1534147.8	2264331.3
Turnover per FTE (TPF)	EURO	23082.3	28816.5	38467.7
Turnover per employee (TPE)	EURO	22115.7	27186.2	37120.2
Net profit per FTE (PPF)	EURO			2246.6
Net profit per employee (PPE)	EURO			2167.9
Running cost to turnover ratio (RPT)	%			93.6
Salary per FTE	EURO	3286	4093	5631
Salary per employee	EURO	3149	3861	5434
Percentage of paid work	%			

Product	Price	Value	Weight	Year	Sample	Population
Inedible fish products (including fish waste; excluding whalebone and whalebone hair, coral and similar materials, shells and cuttle-bone, unworked or simply prepared/natural sponges)	40.28	283750.7	7045	2006	16	16
Frozen whole salt water fish	223.28	6127184	27441	2006	13	13
Dried fish, whether or not salted; fish, salted but not dried; fish in brine (excluding fillets, smoked)	795.25	4070630	5119	2006	15	15
Prepared or preserved fish (excluding whole or in pieces and prepared meals and dishes)	1178.38	8682759	7368	2006	23	23
Prepared or preserved sardines, sardinella, brisling and sprats, whole or in pieces (excluding minced products and prepared meals and dishes)	1232.8	70843677	57466	2006	33	33
Prepared or preserved mackerel, whole or in pieces (excluding minced products and prepared meals and dishes)	1403.34	3617714	2578	2006	10	10
Smoked fish (including fillets) (excluding Pacific, Atlantic and Danube salmon, herrings)	1610.71	6676635	4145	2006	23	23
Prepared or preserved crustaceans, molluscs and other aquatic invertebrates (excluding chilled, frozen, dried, salted or in brine, crustaceans, in shell, cooked by steaming or boiling) (excluding prepared meals and dishes)	1670.25	580821.9	348	2006	4	4
Other prepared or preserved fish, whole or in pieces (excluding minced products and prepared meals and dishes)	1830.44	1099484	601	2006	8	8
Prepared or preserved herrings, whole or in pieces (excluding minced products and prepared meals and dishes)	1978.97	6927906	3501	2006	23	23
Smoked herrings (including fillets)	2011.17	197752.1	98	2006	6	6
Fish fillets, dried, salted or in brine, but not smoked	2021	814374.6	403	2006	6	6
Frozen fish fillets	3864.36	11351872	2938	2006	8	8
Prepared or preserved salmon, whole or in pieces (excluding minced products and prepared meals and dishes)	5036.12	2308990	458	2006	14	14
Inedible fish products (including fish waste; excluding whalebone and whalebone hair, coral and similar materials, shells and cuttle-bone, unworked or simply prepared/natural sponges)	47.25	259906	5501	2007	14	14
Frozen whole salt water fish	274.34	7174620	26153	2007	12	12
Fresh or chilled fish fillets and other fish meat without bones	810.49	420139.6	518	2007	5	5
Dried fish, whether or not salted; fish, salted but not dried; fish in brine (excluding fillets, smoked)	997.19	3649605	3660	2007	14	14
Prepared or preserved mackerel, whole or in	1314.84	5802486	4413	2007	16	16

pieces (excluding minced products and prepared meals and dishes)						
Prepared or preserved fish (excluding whole or in pieces and prepared meals and dishes)	1326.54	8472681	6387	2007	22	22
Prepared or preserved sardines, sardinella, brisling and sprats, whole or in pieces (excluding minced products and prepared meals and dishes)	1352.73	63219227	46735	2007	36	36
Prepared or preserved herrings, whole or in pieces (excluding minced products and prepared meals and dishes)	1616.75	8024279	4963	2007	31	31
Smoked fish (including fillets) (excluding Pacific, Atlantic and Danube salmon, herrings)	1837.86	6463782	3517	2007	21	21
Fish fillets, dried, salted or in brine, but not smoked	2276.59	644300.6	283	2007	4	4
Other prepared or preserved fish, whole or in pieces (excluding minced products and prepared meals and dishes)	2310.14	1760365	762	2007	9	9
Smoked herrings (including fillets)	2782.87	173943	63	2007	5	5
Frozen fish fillets	3751.67	10251526	2733	2007	7	7
Prepared or preserved salmon, whole or in pieces (excluding minced products and prepared meals and dishes)	5017.22	4631390	923	2007	14	14

## Lithuania

Parameter	Units	2006	2007	2008
Turnover	EURO	131353422	177515753	194874302
Subsidies	EURO			0
Other income	EURO			28157292
Total income	EURO	131353422	177515753	223031594
Wages and salaries of staff	EURO			23093236
Imputed value of unpaid labour	EURO			0
Labour costs	EURO	25000111	22006769	23093236
Energy costs	EURO	5588263	2434468	4612082
Purchase of fish and other raw material for production	EURO	75110065	131555104	110990150
Packaging costs	EURO	3753937	3621620	
Other running costs	EURO	12707335	12358554	
Other operational costs	EURO	16461272	15980174	35597479
Total Production costs	EURO	122159711	171976515	174292947
Depreciation of capital	EURO	8938910	6767816	6884086
Financial costs, net	EURO	4046087	4153041	8262872
Extraordinary costs, net	EURO			
Fixed costs	EURO			15146959
Investment (assets): Historical	EURO	115716401	182813916	
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			159229625
Net Investments	EURO			23559660
Debt	EURO			107579005
Male employees	NUMBER			1583
Female employees	NUMBER			3430
Total employees	NUMBER	5035	4632	5013
Male FTE	NUMBER			845
Female FTE	NUMBER			2067
FTE	NUMBER	4039	4088	2912
Number of enterprises <11 employees	NUMBER			6
Number of enterprises 11-49 employees	NUMBER			12
Number of enterprises 50-249 employees	NUMBER			12
Number of enterprises >=250 employees	NUMBER			7
Number of enterprises	NUMBER	37	36	37
Raw materials total	TONNES	80482	94072	
Capacity utilisation	%	62	76	
Financial position (Share of own/borrowed capital)	NUMBER	57.0	48.0	48.0
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EURO	34193822	27546007	71831882
Operating Cash Flow (OCF)	EURO	9193711	5539238	48738646
Earnings Before Interest and Tax (EBIT)	EURO	254801	-1228578	41854560
Net profit (PRN)	EURO	-3791287	-5381619	33591688
Net Profit to Assets (PRN/ASS)	%	-3.3	-2.9	21.1
EBIT to Assets (EBIT/ASS)	%	0.2	-0.7	26.3
Employment per firm (EPN)	NUMBER	136.1	128.7	135.5

FTE per firm (FPN)	NUMBER	109.2	113.6	78.7
Turnover per firm (TPN)	EURO	3550092.5	4930993.1	5266873.0
Turnover per FTE (TPF)	EURO	32521.3	43423.6	66921.1
Turnover per employee (TPE)	EURO	26088.1	38323.8	38873.8
Net profit per FTE (PPF)	EURO	-938.7	-1316.4	11535.6
Net profit per employee (PPE)	EURO	-753.0	-1161.8	6700.9
Running cost to turnover ratio (RPT)	%	93.0	96.9	89.4
Salary per FTE	EURO	6190	5383	7930
Salary per employee	EURO	4965	4751	4607
Percentage of paid work	%			

Raw Materials	Eur_Value	Ton_Value	Year	Sample	Population	Achieved sample rate
Atlantic herring		18886.81	2006	11	37	30
Bream		328.28	2006	11	37	30
Carp		24.76	2006	11	37	30
Chub mackerel		2602.35	2006	11	37	30
Cod		6646.25	2006	11	37	30
Herring		1521.93	2006	11	37	30
Other fish species		45744.56	2006	11	37	30
Pike		49.08	2006	11	37	30
Pike - perch		160.73	2006	11	37	30
Salmon		2549.89	2006	11	37	30
Sprat		1967.35	2006	11	37	30
Atlantic herring		24951	2007	12	36	33
Bream		491	2007	12	36	33
Carp		48	2007	12	36	33
Chub mackerel		2781	2007	12	36	33
Cod		7283	2007	12	36	33
Herring		1099	2007	12	36	33
Other fish species		51655	2007	12	36	33
Pike		47	2007	12	36	33
Pike - perch		26	2007	12	36	33
Salmon		4341	2007	12	36	33
Sprat		1350	2007	12	36	33

Product	Price	Value	Weight	Year	Sample	Population
Non alimentary fish products	533	2551852	4788	2006	31	37
Other fish products	656	290301.8	443	2006	31	37
Gastronomic fish products	1062	7105175	6692	2006	31	37
Aromatized sea products	1597	41170069	25784.78	2006	31	37
Salted and soused fish products	1636	18639825	11397	2006	31	37
Canned and preserves fish paste	1661	23422.07	14	2006	31	37
Canned and preserved fish with sauces	1676	890566.7	531	2006	31	37
Alive and fresh fish	2469	12437	5.04	2006	31	37

Frozen fish products	2541	35147554	13830	2006	31	37
Chilled fish products	3240	2676975	826	2006	31	37
Canned and preserved fish natural	3480	483022.6	139	2006	31	37
Smoked fish products	3866	18829467	4870	2006	31	37
Canned and preserved fish with oil	3886	1711329	440	2006	31	37
Dried and withered fish products	4119	1821427	442	2006	31	37
Non alimentary fish products	91	512162.1	5626	2007	30	36
Dried and withered fish products	1303	1428041	1096	2007	30	36
Gastronomic fish products	1602	18655326	11643	2007	30	36
Salted and soured fish products	1683	27851225	16544	2007	30	36
Canned and preserves fish paste	1997	127594.8	64	2007	30	36
Aromatized sea products	2353	49891667	21205	2007	30	36
Frozen fish products	2404	35237655	14659	2007	30	36
Canned and preserved fish with oil	3022	2586981	856	2007	30	36
Chilled fish products	3173	2839690	895	2007	30	36
Smoked fish products	4114	31740744	7715	2007	30	36
Canned and preserved fish natural	4326	222037.9	51	2007	30	36
Canned and preserved fish with sauces	4441	2572661	579	2007	30	36
Other fish products	5529	3849969	696	2007	30	36

## **Malta**

Because of confidentiality issues due to the low number of companies that do fish processing as main activity, we are not reporting here any of the data submitted by Malta.

## Netherlands

Parameter	Units	2006	2007	2008
Turnover	EURO	799073000	756622000	712280000
Subsidies	EURO			1610000
Other income	EURO			11386000
Total income	EURO	820387000	784005000	725276000
Wages and salaries of staff	EURO			88232000
Imputed value of unpaid labour	EURO			2662000
Labour costs	EURO	119972000	108731000	90894000
Energy costs	EURO	9739000	13167000	9734000
Purchase of fish and other raw material for production	EURO	539444000	520654000	504476000
Packaging costs	EURO			
Other running costs	EURO	96221000	84855000	
Other operational costs	EURO	96221000	84855000	70153000
Total Production costs	EURO	765376000	727406000	675257000
Depreciation of capital	EURO	22365000	16876000	16075000
Financial costs, net	EURO	6122000	8791000	8791000
Extraordinary costs, net	EURO	390000	-19936000	0
Fixed costs	EURO	28487000	25667000	24866000
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			1023829000
Net Investments	EURO			-421871000
Debt	EURO			718354000
Male employees	NUMBER			
Female employees	NUMBER			
Total employees	NUMBER	4151	3723	2953
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER	3501	3120	2335
Number of enterprises <11 employees	NUMBER			54
Number of enterprises 11-49 employees	NUMBER			34
Number of enterprises 50-249 employees	NUMBER			13
Number of enterprises >=250 employees	NUMBER			0
Number of enterprises	NUMBER	112	124	101
Raw materials total	TONNES			
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	NUMBER	70	60	43
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EUR	174983000	165329000	140913000
Operating Cash Flow (OCF)	EUR	55011000	56598000	50019000
Earnings Before Interest and Tax (EBIT)	EUR	32646000	39723000	33944000
Net profit (PRN)	EUR	26524000	30932000	25153000
Net Profit to Assets (PRN/ASS)	%			2.5
EBIT to Assets (EBIT/ASS)	%			3.3
Employment per firm (EPN)	EUR	37.1	30.0	29.2

FTE per firm (FPN)	EUR	31.3	25.2	23.1
Turnover per firm (TPN)	EUR	7134580.4	6101790.3	7052277.2
Turnover per FTE (TPF)	EUR	228241.4	242507.1	305045.0
Turnover per employee (TPE)	EUR	192501.3	203229.1	241205.6
Net profit per FTE (PPF)	EUR	7576.1	9914.1	10772.2
Net profit per employee (PPE)	EUR	6389.8	8308.4	8517.8
Running cost to turnover ratio (RPT)	%	95.8	96.1	94.8
Salary per FTE	EURO	34267.9	34849.7	38926.8
Salary per employee	EURO	28902	29205	30780
Percentage of paid work	%			97.1

## Poland

Parameter	Units	2006	2007	2008
Turnover	EURO	1087311892	1231120358	1441308619
Subsidies	EURO			5354318
Other income	EURO			12411207
Total income	EURO	1099632742	1248378968	1459074144
Wages and salaries of staff	EURO			143655568
Imputed value of unpaid labour	EURO			
Labour costs	EURO	99994866	118599470	143655568
Energy costs	EURO	13072878	14237081	17122308
Purchase of fish and other raw material for production	EURO	753324019	811461961	956686964
Packaging costs	EURO	80449724	86791414	
Other running costs	EURO	111256949	142465087	
Other operational costs	EURO	191706673	229256501	249057611
Total Production costs	EURO	1058098436	1173555013	1366522451
Depreciation of capital	EURO			30783862
Financial costs, net	EURO			37343356
Extraordinary costs, net	EURO			-18792
Fixed costs	EURO	25108242	28043080	68108426
Investment (assets): Historical	EURO	592546010	712873642	
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			991666524
Net Investments	EURO			88355087
Debt	EURO			619870619
Male employees	NUMBER	4676	5039	5291
Female employees	NUMBER	10039	10807	11064
Total employees	NUMBER	14715	15846	16355
Male FTE	NUMBER			5326
Female FTE	NUMBER			10251
FTE	NUMBER	13469	14660	15577
Number of enterprises <11 employees	NUMBER			52
Number of enterprises 11-49 employees	NUMBER			87
Number of enterprises 50-249 employees	NUMBER			50
Number of enterprises >=250 employees	NUMBER			16
Number of enterprises	NUMBER	189	187	205
Raw materials total	TONNES	351858	388995	
Capacity utilisation	%	81.8	80.8	
Financial position (Share of own/borrowed capital)	NUMBER	73.2	67.0	60.0
Number of enterprises (non main activities)	NUMBER			17
Turnover attributed to fish processing	EURO			24948578
Gross Value Added (GVA)	EUR	141529172	193423425	236207261
Operating Cash Flow (OCF)	EUR	41534306	74823955	92551693
Earnings Before Interest and Tax (EBIT)	EUR			61767831
Net profit (PRN)	EUR	16426064	46780875	24424475
Net Profit to Assets (PRN/ASS)	%	2.8	6.6	2.5
EBIT to Assets (EBIT/ASS)	%			6.2
Employment per firm (EPN)	NUMBER	77.9	84.7	79.8

FTE per firm (FPN)	NUMBER	71.3	78.4	76.0
Turnover per firm (TPN)	EUR	5752973.0	6583531.3	7030773.8
Turnover per FTE (TPF)	EUR	80727.0	83978.2	92528.0
Turnover per employee (TPE)	EUR	73891.4	77692.8	88126.5
Net profit per FTE (PPF)	EUR	1219.5	3191.1	1568.0
Net profit per employee (PPE)	EUR	1116.3	2952.2	1493.4
Running cost to turnover ratio (RPT)	%	97.3	95.3	94.8
Salary per FTE	EUR	7424	8090	9222
Salary per employee	EUR	6795	7485	8784
Percentage of paid work	%			100.0

Raw Materials	Eur_Value	Ton_Value	Year	Sample	Population
Alaska pollack	23856798	17150	2006	120	189
Blue grenadier	3144357	1309	2006	120	189
Cod	92034395	45176	2006	120	189
Flounder	5685721	11364	2006	120	189
Hake	7517056	4138	2006	120	189
Halibut	2595549	1064	2006	120	189
Herring	91078339	96966	2006	120	189
Mackerel	38361534	30661	2006	120	189
Northern prawn	287250.7	3348	2006	120	189
Other fish	44241716	27388	2006	120	189
Pangas	14635027	6647	2006	120	189
Perch	2960908	999	2006	120	189
Pikeperch	2391206	723	2006	120	189
Rainbow trout	24041942	10558	2006	120	189
Saithe	1294874	1146	2006	120	189
Salmon	2.21E+08	52779	2006	120	189
Sprat	7766780	40442	2006	120	189
Total	5.83E+08	351858	2006	120	189
Alaska pollack	26817031	21143	2007	151	187
Blue grenadier	5161694	2991	2007	151	187
Bream	481486.4	1153	2007	151	187
Cod	85733277	39380	2007	151	187
Flounder	6076750	9409	2007	151	187
Hake	7183683	3745	2007	151	187
Halibut	2610884	1370	2007	151	187
Herring	97359648	111543	2007	151	187
Mackerel	37583450	31429	2007	151	187
Northern prawn	1632344	4133	2007	151	187
Other fish	54604118	26653	2007	151	187
Pangas	16472870	9485	2007	151	187
Perch	5067685	1605	2007	151	187
Rainbow trout	25277955	13174	2007	151	187
Saithe	2247958	1373	2007	151	187
Salmon	2.33E+08	68121	2007	151	187
Sprat	8576843	42288	2007	151	187
Total	6.15E+08	388995	2007	151	187

Includes raw material provides for inward processing

Product	Price	Value	Weight	Year	Sample	Population
Flours; meals and pellet not to consumption	0.25	3222234	12677.5	2006	120	189
Frozen sprat	0.25	723837.9	2926	2006	120	189
Smoked sprat	1.61	1928900	1196.3	2006	120	189
Smoked herring (including fillet)	1.69	1357119	803	2006	120	189
Fish fingers (including fish fillets in butter)	1.72	15220424	8854	2006	120	189
Fish salted or in brine	1.86	36643086	19704	2006	120	189
Prepared or preserved tunas, skipjack and bonito excluding smoked, dried, salted, in brine)	2.08	29356246	14091	2006	120	189
Prepared or preserved herring excluding smoked, dried, salted, in brine)	2.2	2.31E+08	104628	2006	120	189
Smoked mackerel	2.26	32365127	14296.8	2006	120	189
Frozen alaska pollock fillets	2.49	17492749	7032	2006	120	189
Prepared or preserved mackerels excluding smoked, dried, salted, in brine)	2.52	23615981	9370	2006	120	189
Prepared or preserved sardins, sprats excluding smoked, dried, salted, in brine)	2.69	2887574	1074	2006	120	189
Frozen flounder fillets	3.08	5696527	1847.2	2006	120	189
Fresh or chilled cod fillet	5.69	19294155	3388.1	2006	120	189
Prepared or preserved crustaceans, molluscs	6.77	2119459	312.95	2006	120	189
Smoked trout	7.69	19246156	2502.9	2006	120	189
Smoked salmon (including fillets)	10.73	2.18E+08	20352	2006	120	189
Fresh or chilled perch fillet	13.21	1823045	138	2006	120	189
Flours; meals and pellet not to consumption	0.19	3198494	16531.7	2007	151	187
Frozen sprat	0.3	1411000	4774	2007	151	187
Smoked sprat	1.21	2885271	2383.8	2007	151	187
Smoked herring (including fillet)	1.75	1263446	722	2007	151	187
Fish fingers (including fish fillets in butter)	1.85	9938182	5374	2007	151	187
Fish salted or in brine	1.98	36244945	18326.2	2007	151	187
Prepared or preserved tunas, skipjack and bonito excluding smoked, dried, salted, in brine)	2.15	24564712	11407	2007	151	187
Smoked mackerel	2.15	40924148	19047.2	2007	151	187
Prepared or preserved herring excluding smoked, dried, salted, in brine)	2.16	2.15E+08	99466.2	2007	151	187
Frozen flounder fillets	2.9	2856675	985	2007	151	187
Prepared or preserved mackerels excluding smoked, dried, salted, in brine)	3.03	24699580	8142	2007	151	187
Frozen alaska pollock fillets	3.05	32348468	10623.3	2007	151	187
Fresh or chilled cod fillet	5.1	15076935	2955.9	2007	151	187
Smoked trout	5.23	37315564	7134	2007	151	187
Frozen cod fillet	5.27	66398790	12592.9	2007	151	187
Prepared or preserved crustaceans, molluscs	7.02	4375532	623.49	2007	151	187
Fresh or chilled perch fillet	11.11	3178370	286	2007	151	187
Smoked salmon (including fillets)	12.42	2.41E+08	19410.6	2007	151	187

## Portugal

Parameter	Units	2006	2007	2008
Turnover	EURO	1308784460	1338396559	1455181341
Subsidies	EURO			
Other income	EURO			47775279
Total income	EURO	1331656132	1363520897	1502956620
Wages and salaries of staff	EURO			98603960
Imputed value of unpaid labour	EURO			
Labour costs	EURO	69663141.5	76313021	98603960
Energy costs	EURO	20596776.91	24495797	30405082
Purchase of fish and other raw material for production	EURO	1073142936	1091230474	1003940190
Packaging costs	EURO			
Other running costs	EURO	81424916.87	96530615	
Other operational costs	EURO	81424916.87	96530615	84608098
Total Production costs	EURO	1244827771	1288569908	1217557330
Depreciation of capital	EURO	32069692.1	31948295	41961697
Financial costs, net	EURO			
Extraordinary costs, net	EURO			
Fixed costs	EURO			
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO	474633015	474131125	
Investment (assets): Insurance	EURO			
Total value of assets	EURO			1107864805
Net Investments	EURO			41154888
Debt	EURO			766227144
Male employees	NUMBER	2054	2195	2496
Female employees	NUMBER	3888	4468	4571
Total employees	NUMBER	5942	6663	7067
Male FTE	NUMBER			2496
Female FTE	NUMBER			4571
FTE	NUMBER	5942	6663	7067
Number of enterprises <11 employees	NUMBER			11
Number of enterprises 11-49 employees	NUMBER			75
Number of enterprises 50-249 employees	NUMBER			42
Number of enterprises >=250 employees	NUMBER			4
Number of enterprises	NUMBER	141	147	132
Raw materials total	TONNES	280211	246882	
Capacity utilisation	%	64	75	
Financial position (Share of own/borrowed capital)	%	28.0	46.0	44.6
Number of enterprises (non main activities)	NUMBER			29
Turnover attributed to fish processing	EURO			194920277
Gross Value Added (GVA)	EURO	156491502.6	151264011	384003250
Operating Cash Flow (OCF)	EURO	86828361.11	74950990	285399290
Earnings Before Interest and Tax (EBIT)	EURO	54758669.01	43002694	243437593
Net profit (PRN)	EURO			
Net Profit to Assets (PRN/ASS)	%			22.0
EBIT to Assets (EBIT/ASS)	%	11.5	9.1	22.0
Employment per firm (EPN)	NUMBER	42.1	45.3	53.5

FTE per firm (FPN)	NUMBER	42.1	45.3	53.5
Turnover per firm (TPN)	EURO	9282159.3	9104738.5	11024101.1
Turnover per FTE (TPF)	EURO	220259.9	200870.0	205912.2
Turnover per employee (TPE)	EURO	220259.9	200870.0	205912.2
Net profit per FTE (PPF)	EURO	9215.5	6454.0	34447.1
Net profit per employee (PPE)	EURO	9215.5	6454.0	34447.1
Running cost to turnover ratio (RPT)	%	95.1	96.3	83.7
Salary per FTE	EURO	11724	11453	13953
Salary per employee	EURO	11724	11453	13953
Percentage of paid work	%			

Raw Materials (PRODCOM code)	Eur_Value	Ton_Value	Year	Sample	Population	Achieved sample rate	Sampling strategy
152001130000	601767	108	2006	62	141	44	NSS
152001200000	9689778	3707	2006	62	141	44	NSS
152001210110	43520497	19414	2006	62	141	44	NSS
152001210120	20320245	6773	2006	62	141	44	NSS
152001210130	2892440	1437	2006	62	141	44	NSS
152001210140	10695930	2711	2006	62	141	44	NSS
152001210150	3171020	1219	2006	62	141	44	NSS
152001210160	8231784	1105	2006	62	141	44	NSS
152001210170	2344608	1021	2006	62	141	44	NSS
152001210180	26240	15	2006	62	141	44	NSS
152001210190	378446	235	2006	62	141	44	NSS
152001210210	490471	551	2006	62	141	44	NSS
152001210220	293002	107	2006	62	141	44	NSS
152001210230	2545623	976	2006	62	141	44	NSS
152001210240	1317646	530	2006	62	141	44	NSS
152001210300	16980687	18532	2006	62	141	44	NSS
152001210400	10075646	18706	2006	62	141	44	NSS
152001210500	2.01E+08	64580	2006	62	141	44	NSS
152001210600	7544196	2787	2006	62	141	44	NSS
152001210900	8876658	3984	2006	62	141	44	NSS
152001290000	6391755	2874	2006	62	141	44	NSS
152001370100	1.93E+08	41115	2006	62	141	44	NSS
152001370200	60987490	10561	2006	62	141	44	NSS
152001400000	1934836	1309	2006	62	141	44	NSS
152001530100	30628548	6206	2006	62	141	44	NSS
152001530990	3263495	1193	2006	62	141	44	NSS
152001559100	7399193	3834	2006	62	141	44	NSS
152001559200	7096285	1810	2006	62	141	44	NSS
152001559900	13714993	6751	2006	62	141	44	NSS
152001800000	1352401	436	2006	62	141	44	NSS
50111200100	15362972	34706	2006	62	141	44	NSS
50111200200	3943926	12700	2006	62	141	44	NSS
50111200300	1222759	2457	2006	62	141	44	NSS
50111200400	742152	120	2006	62	141	44	NSS
50111200900	7246565	2231	2006	62	141	44	NSS

50112100200	62146	26	2006	62	141	44	NSS
50112100300	283220	12	2006	62	141	44	NSS
50112100500	11445	6	2006	62	141	44	NSS
50112100900	5439637	1599	2006	62	141	44	NSS
50112300000	6037032	1543	2006	62	141	44	NSS
50121200100	867738	144	2006	62	141	44	NSS
50121200200	264510	56	2006	62	141	44	NSS
50121200300	42991	24	2006	62	141	44	NSS
152001130000	739885	93	2007	74	147	50	NSS
152001200000	18474920	6434	2007	74	147	50	NSS
152001210110	48821415	15614	2007	74	147	50	NSS
152001210120	20843798	7707	2007	74	147	50	NSS
152001210130	9775686	1551	2007	74	147	50	NSS
152001210140	12062182	2584	2007	74	147	50	NSS
152001210150	8380202	2159	2007	74	147	50	NSS
152001210160	1887798	354	2007	74	147	50	NSS
152001210170	2458644	802	2007	74	147	50	NSS
152001210180	79339	17	2007	74	147	50	NSS
152001210190	268588	130	2007	74	147	50	NSS
152001210210	1472281	1412	2007	74	147	50	NSS
152001210220	56908	17	2007	74	147	50	NSS
152001210230	1727819	545	2007	74	147	50	NSS
152001210240	3454449	1092	2007	74	147	50	NSS
152001210300	20796765	23701	2007	74	147	50	NSS
152001210400	11249468	16510	2007	74	147	50	NSS
152001210500	92540261	26498	2007	74	147	50	NSS
152001210600	6690784	2700	2007	74	147	50	NSS
152001210900	5506528	2001	2007	74	147	50	NSS
152001290000	3575244	1935	2007	74	147	50	NSS
152001370100	2.29E+08	38008	2007	74	147	50	NSS
152001370200	39365028	7543	2007	74	147	50	NSS
152001400000	159228	69	2007	74	147	50	NSS
152001530100	19976210	4048	2007	74	147	50	NSS
152001530990	4460540	1361	2007	74	147	50	NSS
152001559100	8001612	3522	2007	74	147	50	NSS
152001559200	11622701	2380	2007	74	147	50	NSS
152001559900	14460711	8301	2007	74	147	50	NSS
152001800000	1013736	346	2007	74	147	50	NSS
50111200100	22903474	41855	2007	74	147	50	NSS
50111200200	7374198	18088	2007	74	147	50	NSS
50111200300	1219453	2017	2007	74	147	50	NSS
50111200900	10093958	1950	2007	74	147	50	NSS
50112100200	10539	4	2007	74	147	50	NSS
50112100300	434486	14	2007	74	147	50	NSS
50112100500	38865	8	2007	74	147	50	NSS
50112100900	4550286	1293	2007	74	147	50	NSS
50112300000	11235801	1757	2007	74	147	50	NSS
50121200100	1067798	189	2007	74	147	50	NSS
50121200200	125686	25	2007	74	147	50	NSS
50121200300	66631	36	2007	74	147	50	NSS
50121200900	258300	212	2007	74	147	50	NSS

Product code	Price (E/Kg)	Value	Weight	Year	Sample	Population	Achieved sample rate	Sampling strategy
152001800000	0.03	684	27	2006	62	141	44	NSS
152001700000	0.03	7841	296	2006	62	141	44	NSS
152001210300	0.56	5680180	10178	2006	62	141	44	NSS
152001210400	0.73	17383635	23936	2006	62	141	44	NSS
152001290300	0.97	275821	285	2006	62	141	44	NSS
152001414300	1.12	81521	73	2006	62	141	44	NSS
152001210210	1.14	3882283	3416	2006	62	141	44	NSS
152001413400	1.55	1139640	736	2006	62	141	44	NSS
152009900000	1.61	13323824	8301	2006	62	141	44	NSS
152001414200	2.2	11158995	5070	2006	62	141	44	NSS
152001370400	2.48	3920076	1583	2006	62	141	44	NSS
152001210190	2.55	682711	268	2006	62	141	44	NSS
152001270700	2.59	12940	5	2006	62	141	44	NSS
152001210110	2.65	36563743	13823	2006	62	141	44	NSS
152001603000	2.67	6893552	2586	2006	62	141	44	NSS
152001559000	2.73	31937261	11705	2006	62	141	44	NSS
152001413300	2.85	13355642	4680	2006	62	141	44	NSS
152001210130	2.86	7152526	2500	2006	62	141	44	NSS
152001210900	2.97	20620364	6932	2006	62	141	44	NSS
152001210170	2.98	2559432	859	2006	62	141	44	NSS
152001270600	3	9917888	3305	2006	62	141	44	NSS
152001413200	3.05	24627673	8074	2006	62	141	44	NSS
152001270500	3.12	3091477	991	2006	62	141	44	NSS
152001210180	3.24	42069	13	2006	62	141	44	NSS
152001413900	3.26	818017	251	2006	62	141	44	NSS
152001210150	3.28	3649505	1111	2006	62	141	44	NSS
152001290100	3.35	552985	165	2006	62	141	44	NSS
152001230000	3.36	77236	23	2006	62	141	44	NSS
152001210240	3.4	3536349	1040	2006	62	141	44	NSS
152001210600	3.43	493421	144	2006	62	141	44	NSS
152001210120	3.48	22390784	6441	2006	62	141	44	NSS
152001417000	3.67	1135572	309	2006	62	141	44	NSS
152001413100	3.76	25334967	6735	2006	62	141	44	NSS
152001210500	3.85	7623408	1982	2006	62	141	44	NSS
152001290600	3.95	10712421	2709	2006	62	141	44	NSS
152001290400	3.95	23688	6	2006	62	141	44	NSS
152001419000	3.98	785028	197	2006	62	141	44	NSS
152001370300	4.01	9576966	2391	2006	62	141	44	NSS
152001210230	4.01	2083830	520	2006	62	141	44	NSS
152001415900	4.01	36593596	9115	2006	62	141	44	NSS
152001270900	4.09	1912471	468	2006	62	141	44	NSS
152001370900	4.3	313647	73	2006	62	141	44	NSS
152001290900	4.36	2342794	537	2006	62	141	44	NSS
152001370100	4.47	10152959	2269	2006	62	141	44	NSS
152001290700	4.48	725066	162	2006	62	141	44	NSS
152001415100	4.54	3465031	764	2006	62	141	44	NSS
152001370202	4.59	38565247	8394	2006	62	141	44	NSS
152001210140	4.64	7302203	1573	2006	62	141	44	NSS

152001415200	4.68	3083644	659	2006	62	141	44	NSS
152001553000	4.7	2140951	456	2006	62	141	44	NSS
152001290500	4.84	2441224	504	2006	62	141	44	NSS
152001414400	4.87	1747889	359	2006	62	141	44	NSS
152001270300	4.94	325824	66	2006	62	141	44	NSS
152001270400	4.95	2819171	570	2006	62	141	44	NSS
152001413700	5.03	2315467	460	2006	62	141	44	NSS
152001270100	5.16	299120	58	2006	62	141	44	NSS
152001530000	5.35	26211960	4896	2006	62	141	44	NSS
152001210220	5.9	188932	32	2006	62	141	44	NSS
152001130000	6.12	465076	76	2006	62	141	44	NSS
152001605000	6.51	2272780	349	2006	62	141	44	NSS
152001435000	6.52	2740399	420	2006	62	141	44	NSS
152001370200	7.29	302532657	41526	2006	62	141	44	NSS
152001270200	7.37	1627745	221	2006	62	141	44	NSS
152001290200	7.76	94140952	12135	2006	62	141	44	NSS
152001250000	8.18	2159926	264	2006	62	141	44	NSS
152001210160	8.49	6941289	818	2006	62	141	44	NSS
152001190000	9.23	1725868	187	2006	62	141	44	NSS
152001290800	10.26	2051776	200	2006	62	141	44	NSS
152001411000	10.62	414334	39	2006	62	141	44	NSS
152001330000	16.52	82609	5	2006	62	141	44	NSS
152001416000	17.22	17220	1	2006	62	141	44	NSS
152001370201	0.59	640909	1087	2007	74	147	50	NSS
152001210300	0.59	9866190	16642	2007	74	147	50	NSS
152001210400	0.93	18470219	19836	2007	74	147	50	NSS
152001210210	1.15	4891108	4268	2007	74	147	50	NSS
152001230000	1.21	255917	212	2007	74	147	50	NSS
152001559000	1.7	20070509	11801	2007	74	147	50	NSS
152001414300	1.75	126312	72	2007	74	147	50	NSS
152001413500	1.83	12818	7	2007	74	147	50	NSS
152001413400	2.45	2273191	929	2007	74	147	50	NSS
152001414200	2.46	9656019	3933	2007	74	147	50	NSS
152001210600	2.49	438717	176	2007	74	147	50	NSS
152001210190	2.62	298219	114	2007	74	147	50	NSS
152001210110	2.64	30339460	11501	2007	74	147	50	NSS
152001413300	2.72	18582182	6833	2007	74	147	50	NSS
152001210120	2.75	20221201	7364	2007	74	147	50	NSS
152001210900	2.78	25226739	9085	2007	74	147	50	NSS
152001290300	2.79	592277	212	2007	74	147	50	NSS
152001290400	2.82	67562	24	2007	74	147	50	NSS
152001415200	2.92	5810299	1991	2007	74	147	50	NSS
152001210130	2.98	3181500	1069	2007	74	147	50	NSS
152001210230	3.02	1242957	412	2007	74	147	50	NSS
152001413900	3.1	68282	22	2007	74	147	50	NSS
152001270600	3.12	10082354	3229	2007	74	147	50	NSS
152001370400	3.17	1872863	591	2007	74	147	50	NSS
152001413200	3.17	36755684	11603	2007	74	147	50	NSS
152001210170	3.2	2284434	713	2007	74	147	50	NSS
152001800000	3.25	1369907	421	2007	74	147	50	NSS
152001270400	3.27	16360	5	2007	74	147	50	NSS
152001190000	3.5	1880679	538	2007	74	147	50	NSS

152001415100	3.54	5106059	1442	2007	74	147	50	NSS
152001413100	3.59	27902302	7781	2007	74	147	50	NSS
152001603000	3.59	1956052	545	2007	74	147	50	NSS
152001414100	3.68	3678	1	2007	74	147	50	NSS
152001210240	3.68	4056738	1102	2007	74	147	50	NSS
152001290900	3.68	3180787	864	2007	74	147	50	NSS
152001210150	3.74	6568452	1757	2007	74	147	50	NSS
152001210180	3.89	15566	4	2007	74	147	50	NSS
152001290100	3.93	1201980	306	2007	74	147	50	NSS
152001290600	4.02	4958329	1233	2007	74	147	50	NSS
152001415900	4.21	42910045	10191	2007	74	147	50	NSS
152001605000	4.31	6125837	1422	2007	74	147	50	NSS
152001270700	4.37	8739	2	2007	74	147	50	NSS
152001210140	4.43	5732725	1293	2007	74	147	50	NSS
152001370900	4.56	1202902	264	2007	74	147	50	NSS
152001270300	4.6	276262	60	2007	74	147	50	NSS
152001413700	4.74	3611598	762	2007	74	147	50	NSS
152001417000	4.81	558274	116	2007	74	147	50	NSS
152001270500	4.81	28887	6	2007	74	147	50	NSS
152009900000	4.86	4799636	987	2007	74	147	50	NSS
152001270900	5	829927	166	2007	74	147	50	NSS
152001290700	5.03	567918	113	2007	74	147	50	NSS
152001210220	5.04	35307	7	2007	74	147	50	NSS
152001370300	5.06	1624857	321	2007	74	147	50	NSS
152001530000	5.11	16934417	3311	2007	74	147	50	NSS
152001290500	5.35	2299911	430	2007	74	147	50	NSS
152001290800	5.38	188207	35	2007	74	147	50	NSS
152001414400	5.41	2046056	378	2007	74	147	50	NSS
152001553000	5.42	330848	61	2007	74	147	50	NSS
152001290200	5.55	3604322	649	2007	74	147	50	NSS
152001270200	5.79	2329085	402	2007	74	147	50	NSS
152001270800	5.83	139943	24	2007	74	147	50	NSS
152001359000	6.15	430486	70	2007	74	147	50	NSS
152001370302	6.16	467962	76	2007	74	147	50	NSS
152001210500	6.24	12209759	1958	2007	74	147	50	NSS
152001270100	6.25	199884	32	2007	74	147	50	NSS
152001130000	6.31	485983	77	2007	74	147	50	NSS
152001210160	6.43	1291737	201	2007	74	147	50	NSS
152001419000	7.48	2512004	336	2007	74	147	50	NSS
152001370100	8.03	85843921	10690	2007	74	147	50	NSS
152001370200	8.16	221675080	27162	2007	74	147	50	NSS
152001370202	8.41	39939488	4747	2007	74	147	50	NSS
152001411000	10.17	162768	16	2007	74	147	50	NSS
152001330000	12.3	110697	9	2007	74	147	50	NSS
152001250000	13.72	397996	29	2007	74	147	50	NSS
152001416000	15.2	790271	52	2007	74	147	50	NSS

## Romania

Parameter	Units	2006	2007	2008
Turnover	EURO			21492362
Subsidies	EURO			0
Other income	EURO			0
Total income	EURO			21492362
Wages and salaries of staff	EURO			11248717
Imputed value of unpaid labour	EURO			
Labour costs	EURO			11248717
Energy costs	EURO			301008
Purchase of fish and other raw material for production	EURO			5324558
Packaging costs	EURO			
Other running costs	EURO			
Other operational costs	EURO			232776
Total Production costs	EURO			17107059
Depreciation of capital	EURO			818576
Financial costs, net	EURO			6765545
Extraordinary costs, net	EURO			
Fixed costs	EURO			7584121
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			44695150
Net Investments	EURO			3215000
Debt	EURO			7285986
Male employees	NUMBER			386
Female employees	NUMBER			543
Total employees	NUMBER			929
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER			
Number of enterprises <11 employees	NUMBER			77
Number of enterprises 11-49 employees	NUMBER			7
Number of enterprises 50-249 employees	NUMBER			3
Number of enterprises >=250 employees	NUMBER			0
Number of enterprises	NUMBER			87
Raw materials total	TONNES			
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%			513.4
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EURO			15634020
Operating Cash Flow (OCF)	EURO			4385303
Earnings Before Interest and Tax (EBIT)	EURO			3566727
Net profit (PRN)	EURO			-3198818
Net Profit to Assets (PRN/ASS)	%			-7.2
EBIT to Assets (EBIT/ASS)	%			8.0
Employment per firm (EPN)	NUMBER			10.7

FTE per firm (FPN)	NUMBER			
Turnover per firm (TPN)	EURO			247038.6
Turnover per FTE (TPF)	EURO			
Turnover per employee (TPE)	EURO			23134.9
Net profit per FTE (PPF)	EURO			
Net profit per employee (PPE)	EURO			-3443.3
Running cost to turnover ratio (RPT)	%			79.6
Salary per FTE	EURO			
Salary per employee	EURO			12108
Percentage of paid work	%			

## Slovenia

Parameter	Units	2006	2007	2008
Turnover	EURO		25761012	29036882
Subsidies	EURO			418624
Other income	EURO			209609697
Total income	EURO		238086471	238646579
Wages and salaries of staff	EURO			4330292
Imputed value of unpaid labour	EURO			
Labour costs	EURO		3849833	4330292
Energy costs	EURO		378245	600518
Purchase of fish and other raw material for production	EURO		14788967	16454382
Packaging costs	EURO		522773	
Other running costs	EURO		252549	
Other operational costs	EURO		775322	409990
Total Production costs	EURO		19792367	21795182
Depreciation of capital	EURO			1265542
Financial costs, net	EURO			2366549
Extraordinary costs, net	EURO			347336
Fixed costs	EURO		1278648	3979427
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO		3468162	
Investment (assets): Insurance	EURO		60326	
Total value of assets	EURO			52990398
Net Investments	EURO			755291
Debt	EURO			41214002
Male employees	NUMBER			
Female employees	NUMBER			
Total employees	NUMBER		241	250
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER		212.8	211
Number of enterprises <11 employees	NUMBER			7
Number of enterprises 11-49 employees	NUMBER			4
Number of enterprises 50-249 employees	NUMBER			1
Number of enterprises >=250 employees	NUMBER			0
Number of enterprises	NUMBER		11	12
Raw materials total	TONNES		2539.53	
Capacity utilisation	%		74	
Financial position (Share of own/borrowed capital)	%		180	28.6
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EUR		9818478	11571992
Operating Cash Flow (OCF)	EUR		5968645	7241700
Earnings Before Interest and Tax (EBIT)	EUR		4689997	5976158
Net profit (PRN)	EUR			3609609
Net Profit to Assets (PRN/ASS)	%			6.8
EBIT to Assets (EBIT/ASS)	%			11.3
Employment per firm (EPN)	NUMBER		21.9	20.8
FTE per firm (FPN)	NUMBER		19.3	17.6

Turnover per firm (TPN)	EUR		2341910.2	2419740.2
Turnover per FTE (TPF)	EUR		121057.4	137615.6
Turnover per employee (TPE)	EUR		106892.2	116147.5
Net profit per FTE (PPF)	EUR			17107.2
Net profit per employee (PPE)	EUR			14438.4
Running cost to turnover ratio (RPT)	%		76.8	75.1
Salary per FTE	EUR		18091	20523
Salary per employee	EUR		15974	17321
Percentage of paid work	%			

Raw Materials	Eur_Value	Ton_Value	Year	Sample	Population
ALK - Alaska pollock	2.08	107.9	2007	6	11
ANE - European anchovy	1.45	2.8	2007	6	11
BFT - bluefin tuna	4.03	267.7	2007	6	11
BSS - sea bass; cleaned	5	11.2	2007	6	11
COD - cod fish	18.2	3.9	2007	6	11
CTC - common cuttlefish	3	5.2	2007	6	11
dried cod-fish	18	4.3	2007	6	11
EDT - musky octopus	3.88	1.3	2007	6	11
gilthead; cleaned	4.9	5.15	2007	6	11
gilthead; filet	8.8	1.1	2007	6	11
hake; filet	2.14	72.9	2007	6	11
hake; headless	1.28	13.5	2007	6	11
MSM - Mediterranean mussel	2.57	26.6	2007	6	11
OCC - octopus	4.55	4.3	2007	6	11
PEN - white shrimp - Panaeus	4.9	1	2007	6	11
PIL - European pilchard	1.9	6.05	2007	6	11
RED - redfish	2.68	7.3	2007	6	11
RKQ - mussel Anadara spp.	4.1	1	2007	6	11
SAL - Atlantic salmon	4.34	47	2007	6	11
SBG - gilthead	3.74	3.1	2007	6	11
sea bass; filet	8.9	1.5	2007	6	11
seafood	2.8	15	2007	6	11
shrimp	2.28	20.7	2007	6	11
SMD - shark	1.69	20.3	2007	6	11
SQR - squid	2.17	178.2	2007	6	11
squid; frozen	1.4	78	2007	6	11
YFT - yellowfin tuna	16	1.8	2007	6	11

Product	Price	Value	Weight	Year	Sample	Population
Alaska pollock	2570	261626	101.8	2007	6	11
cleaned frozen squids	5100	397800	78	2007	6	11
dried cod spread	11175	415039.5	37.14	2007	6	11
European pilchard	3100	2914	0.94	2007	6	11

gilthead	7860	17292	2.2	2007	6	11
gilthead cleaned	6400	30720	4.8	2007	6	11
gilthead filet	11800	12980	1.1	2007	6	11
hake - filet	2660	223174	83.9	2007	6	11
hake - headless	2110	34182	16.2	2007	6	11
marinated anchovies	11120	8562.4	0.77	2007	6	11
marinated musky octopus	17510	2801.6	0.16	2007	6	11
redfish	4020	27014.4	6.72	2007	6	11
seabass cleaned	7670	54993.9	7.17	2007	6	11
seabass filet	12000	18000	1.5	2007	6	11
seafood	3500	52500	15	2007	6	11
shark	2930	61266.3	20.91	2007	6	11
shrimps	5450	13897.5	2.55	2007	6	11
squid	6020	376370.4	62.52	2007	6	11
Tuna pate	4710	3112180	660.76	2007	6	11

## Spain

Parameter	Units	2006	2007	2008
Turnover	EURO	4296355000	4549564000	4148244000
Subsidies	EURO	16069000	16851000	25030000
Other income	EURO	17792000	17578000	29167000
Total income	EURO	4330216000	4583993000	4202441000
Wages and salaries of staff	EURO			446644000
Imputed value of unpaid labour	EURO			
Labour costs	EURO	454156000	477542000	446644000
Energy costs	EURO	56432000	68792000	69436000
Purchase of fish and other raw material for production	EURO	2257923000	2366728000	2433079000
Packaging costs	EURO			
Other running costs	EURO			
Other operational costs	EURO	500365000	502768000	476821000
Total Production costs	EURO	3268876000	3415830000	3425980000
Depreciation of capital	EURO	127795000	127624000	
Financial costs, net	EURO	40614000	54040000	107401000
Extraordinary costs, net	EURO	34914000	39083000	13478000
Fixed costs	EURO			
Investment (assets): Historical	EURO			
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			
Net Investments	EURO			204628000
Debt	EURO			
Male employees	NUMBER			
Female employees	NUMBER			
Total employees	NUMBER	22248	22798	19737
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER	21221	21418	19094
Number of enterprises <11 employees	NUMBER			239
Number of enterprises 11-49 employees	NUMBER			247
Number of enterprises 50-249 employees	NUMBER			75
Number of enterprises >=250 employees	NUMBER			11
Number of enterprises	NUMBER	592	620	572
Raw materials total	TONNES			
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%			
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EURO	1499427000	1628854000	1198075000
Operating Cash Flow (OCF)	EURO	1045271000	1151312000	751431000
Earnings Before Interest and Tax (EBIT)	EURO	917476000	1023688000	
Net profit (PRN)	EURO	876862000	969648000	644030000
Net Profit to Assets (PRN/ASS)	%			
EBIT to Assets (EBIT/ASS)	%			
Employment per firm (EPN)	NUMBER	37.6	36.8	34.5
FTE per firm (FPN)	NUMBER	35.8	34.5	33.4

Turnover per firm (TPN)	EURO	7257356.4	7338006.5	7252174.8
Turnover per FTE (TPF)	EURO	202457.7	212417.8	217253.8
Turnover per employee (TPE)	EURO	193112.0	199559.8	210176.0
Net profit per FTE (PPF)	EURO	40482.1	44451.9	35040.3
Net profit per employee (PPE)	EURO	38613.4	41761.1	33898.8
Running cost to turnover ratio (RPT)	%	76.1	75.1	82.6
Salary per FTE	EURO	21401	22296	23392
Salary per employee	EURO	20413	20947	22630
Percentage of paid work	%			

## Sweden

Parameter	Units	2006	2007	2008
Turnover	EURO	514049857	537164679	519301927
Subsidies	EURO			265293
Other income	EURO			3728428
Total income	EURO	520209089	543103244	523030355
Wages and salaries of staff	EURO			76739678
Imputed value of unpaid labour	EURO			3323136
Labour costs	EURO	69143110	79451141	80062814
Energy costs	EURO		8522178	7387759
Purchase of fish and other raw material for production	EURO	306706648	300672858	271621963
Packaging costs	EURO			
Other running costs	EURO	104965314	118211047	
Other operational costs	EURO	104965314	118211047	133390731
Total Production costs	EURO	480815072	506462583	492463267
Depreciation of capital	EURO	12318680	13404686	12312636
Financial costs, net	EURO	6717886	7541165	-799476
Extraordinary costs, net	EURO			
Fixed costs	EURO	12318681	13404686	11513160
Investment (assets): Historical	EURO	506417272	428504016	
Investment (assets): Replacement	EURO	6374697	1910212	
Investment (assets): Insurance	EURO	58026	29838	
Total value of assets	EURO			400922222
Net Investments	EURO			9457880
Debt	EURO			254576289
Male employees	NUMBER			1187
Female employees	NUMBER			978
Total employees	NUMBER			2216
Male FTE	NUMBER			
Female FTE	NUMBER			
FTE	NUMBER	1724	1867	1773
Number of enterprises <11 employees	NUMBER			181
Number of enterprises 11-49 employees	NUMBER			26
Number of enterprises 50-249 employees	NUMBER			6
Number of enterprises >=250 employees	NUMBER			1
Number of enterprises	NUMBER	208	219	214
Raw materials total	TONNES			
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	NUMBER	65	53	57
Number of enterprises (non main activities)	NUMBER			
Turnover attributed to fish processing	EURO			
Gross Value Added (GVA)	EUR	108537127	115697162	110629902
Operating Cash Flow (OCF)	EUR	39394017	36246020	30567088
Earnings Before Interest and Tax (EBIT)	EUR	27075337	23235975	18254452
Net profit (PRN)	EUR	20357451	15694810	19053928
Net Profit to Assets (PRN/ASS)	%	4.0	3.7	4.8
EBIT to Assets (EBIT/ASS)	%	5.3	5.4	4.6
Employment per firm (EPN)	EUR			10.4

FTE per firm (FPN)	EUR	8.3	8.5	8.3
Turnover per firm (TPN)	EUR	2471393.5	2452806.8	2426644.5
Turnover per FTE (TPF)	EUR	298172.8	287715.4	292894.5
Turnover per employee (TPE)	EUR			234342.0
Net profit per FTE (PPF)	EUR	11808.3	8406.4	10746.7
Net profit per employee (PPE)	EUR			8598.3
Running cost to turnover ratio (RPT)	%	93.5	94.3	94.8
Salary per FTE	EUR	40106	42556	45157
Salary per employee	EUR			36129
Percentage of paid work	%			95.8

## United Kingdom

Parameter	Units	2006	2007	2008
Turnover	EURO		3525473224	5601136858
Subsidies	EURO			
Other income	EURO			
Total income	EURO		3525473224	5601136858
Wages and salaries of staff	EURO			760536130
Imputed value of unpaid labour	EURO			
Labour costs	EURO		489292000	760536130
Energy costs	EURO		58704949	58355048
Purchase of fish and other raw material for production	EURO		2285880638	4082026154
Packaging costs	EURO			
Other running costs	EURO		573150273	
Other operational costs	EURO		573150273	602351938
Total Production costs	EURO		3407027860	5503269270
Depreciation of capital	EURO		109741712	83659770
Financial costs, net	EURO			80545058
Extraordinary costs, net	EURO			
Fixed costs	EURO			164204828
Investment (assets): Historical	EURO		519290696	
Investment (assets): Replacement	EURO			
Investment (assets): Insurance	EURO			
Total value of assets	EURO			1062785365
Net Investments	EURO			158506879
Debt	EURO			371807691
Male employees	NUMBER			25503
Female employees	NUMBER			17002
Total employees	NUMBER			42505
Male FTE	NUMBER			12052
Female FTE	NUMBER			8034
FTE	NUMBER		16041	20086
Number of enterprises <11 employees	NUMBER			279
Number of enterprises 11-49 employees	NUMBER			161
Number of enterprises 50-249 employees	NUMBER			74
Number of enterprises >=250 employees	NUMBER			11
Number of enterprises	NUMBER		454	525
Raw materials total	TONNES		472442	
Capacity utilisation	%			
Financial position (Share of own/borrowed capital)	%		555.0	185.8
Number of enterprises (non main activities)	NUMBER			647
Turnover attributed to fish processing	EURO			622348540
Gross Value Added (GVA)	EURO		607737364	858403718
Operating Cash Flow (OCF)	EURO		118445364	97867588
Earnings Before Interest and Tax (EBIT)	EURO		8703652	14207818
Net profit (PRN)	EURO			-66337240
Net Profit to Assets (PRN/ASS)	%			-6.2
EBIT to Assets (EBIT/ASS)	%		1.7	1.3
Employment per firm (EPN)	NUMBER			81.0
FTE per firm (FPN)	NUMBER		35.3	38.3

Turnover per firm (TPN)	EURO		7765359.5	10668832.1
Turnover per FTE (TPF)	EURO		219778.9	278857.8
Turnover per employee (TPE)	EURO			131776.0
Net profit per FTE (PPF)	EURO			-3302.7
Net profit per employee (PPE)	EURO			-1560.7
Running cost to turnover ratio (RPT)	%		96.6	98.3
Salary per FTE	EURO		30503	37864
Salary per employee	EURO			17893
Percentage of paid work	%			

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### **Abstract**

This SGECA-10-04 report, also known as the 2010 Annual Economic Report (AER) on the European Union (EU) Fish Processing Industry, is the second report of these characteristics that has been produced for the sector, after last year's SGECA-09-03 report. This report 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 at the overall EU level. The data used in this publication has been collected within the framework of the Data Collection Regulation (DCR) and the Data Collection Framework (DCF).

In 2008, the fish processing sector in the EU had more than 3,800 companies that accounted for around 26 thousand million Euros of turnover and more than 4.3 million Euros of Gross Added Value. Showing a profitability (based on the return on investment calculated from the EBIT) of the 5.6%.

The fish processing industry gave job to around 150 thousand people in the whole Europe, with an annual average wage of around 26 thousand Euros. The turnover per employee (in FTE terms) was of around 223 thousand Euros during 2008.

The sector is suffering from very low margins due to increases in the raw materials and energy costs that cannot be translated into price increases. Moreover, the current economic crisis has affected the sector in very different ways, from a shift in the consumer's demand for cheaper products to increasing the difficulty to obtain credit.

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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.