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*Conference Paper No. 14*



EAFE 2015  
XXII Conference of the European Association  
of Fisheries Economists

Salerno (Italy), 28<sup>th</sup> - 30<sup>th</sup> April 2015

THE EUROPEAN FISHERIES FUND AND THE EU FISH PROCESSING INDUSTRY

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**ABSTRACT**

Considering that the focus of the European Fisheries Fund (EFF) was meant to be directed towards the fisheries and aquaculture primary sectors, the large amount of public money committed to fish processing and marketing under the EFF between 2007 and 2014 is a cause for concern for many EU policy makers. Yet, the EFF was aimed at supporting the sustainable development of the whole EU fisheries industry, of which fish processing is an important and often integrated component. In 2012, the EU fish processing sector generated almost twice the Gross Value Added (GVA) of the fishing fleet and five times that of aquaculture. Additionally, fish processing employed almost as many people as the fish catching sector and twofold as many as in the aquaculture industry. Although the amount of EFF money channelled into the fish processing sector in absolute terms is large compared to the fish catching and aquaculture sectors, in relative terms it is significantly lower. This study analysed the amount of EFF money averaged by unit of employment and unit of GVA. Overall the EU fish processing has received 54% less support per unit of employment and 70% less support per unit of Gross Value Added. At MS level, the aid per unit of GVA for processing and marketing has been higher only for Malta and per unit of employment only for Cyprus, Greece, Italy, Malta and Portugal.

Key words: seafood processing, structural support, fisheries

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## 1 Introduction

The EFF has underpinned the objectives of the Common Fisheries Policy (CFP) from 2007 to 2013, with a total EU budget of €4.3 billion. Its overarching aims have been to improve the sector's competitiveness and help it become environmentally, economically and socially sustainable. Funding has been delivered through a series of measures and actions designed to address the needs of the fisheries, aquaculture and processing sectors, including marketing and inland fishing, as well as those of areas dependent on fisheries in 27 Member States (Luxembourg is the only country excluded). These measures/actions were organised in six spending categories, i.e. fisheries (including small scale and inland), aquaculture, processing, measures of common interest, community development and technical assistance.

From 1 January 2007 to 31 May 2014, €3.4 billion of the total EU budget was committed, with Measure 2.3 - fish processing and marketing - accounting for the highest share (17%) compared to all other measures. At the Member State (MS) level, the share of EFF support committed for fish processing and marketing has varied largely but has been rather significant in most EU countries.

The high share of the EFF budget channelled outside the primary sector of fisheries and aquaculture has been a growing concern for the EU policy makers, as the sector of fish catching and aquaculture was considered the primary focal point of the EFF. On the other hand, the EFF was aimed at strengthening the competitiveness and supporting the sustainable development of the entire fisheries industry<sup>3</sup> of which the processing sector is a very important component. On average over the period 2008-2012, fish processing contributed around 60% of the Gross Value Added (GVA) and almost 40% of the employment (measured in number of full time equivalents, FTE) created by the EU fisheries industry. Furthermore, it employed around 85% of all women working in fish-related jobs in the EU.

Fish processing is also very important for the development of the fisheries sector in remote coastal areas where usually there are few other economic alternatives and this industry is often vertically integrated with fish supply. For example, fishermen and small fish farmers carry out processing using traditional methods, as a way to add value to the production or to diversify sources of income. It is also frequent in the coastal communities that household members not involved in harvesting are involved on the post-harvest side, perhaps working in processing plants or marketing and distributing the catch.

This study aims to provide information to help assess whether the concerns of the EU policy makers about the amount of public money channelled to the processing sector are justifiable. For this, the distribution of EFF resources within the three sub-sectors of the fisheries industry (i.e. fisheries, aquaculture and fish processing) was compared in relation to their socio-economic relevance, measured in terms of employment and GVA generated. The paper also provides a general introduction on the EFF support for fish processing and the other components of the industry. The analysis is carried out at MS level and contextualised through an overview of the recent trends in socio-economic performance and future challenges of the EU fish processing industry.

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<sup>3</sup> The "fisheries industry" (or "fisheries sector") refers to all productive sub-sectors of the fisheries and aquaculture sector, i.e. all types of input industry - including transport and other support services - capture fisheries, aquaculture, processing and marketing.

## 2 Methods, data and data limitation

The structure and economic performance of the EU fish processing sector and its socio-economic importance relative to the other components of the sector were analysed using data for the period 2008-2012 collected under the 2014 call for Data Collection Framework (DCF)<sup>4</sup>. Assessment of the challenges ahead for the industry is mostly based on results from the 2014 report on "The Economic Performance of the EU Fish Processing Industry" by the Scientific Technical and Economic Committee for Fisheries (STECF), which also relies on the most recent DCF data.

All analyses exclude landlocked MS (Austria, Czech Republic, Hungary, Luxembourg and Slovakia), as these are not requested to provide data under the DCF. In addition, due to incomplete time series data for several MS, some analyses only have partial coverage<sup>5</sup>.

The analyses presented concern fish processing industry as a whole. No analysis is provided at the level of single species, as DCF data are not disaggregated at this level. Furthermore, only the firms carrying out processing and preserving of fish and fish products as main activity are covered<sup>6</sup>, although these activities are carried out not only in specialized firms, but also in other types of facilities, such as factories processing other products, for example meat products, fish processing vessels and fish processing plants belonging to fisheries or aquaculture firms.

In Section 4, the amount of total public money (EU and national support) committed under the EFF for the fish processing sector in each EU MS is compared to the commitments for the entire industry in relation to the socio-economic importance of its three components. This analysis is based on the estimation of two indexes, one averaging the public aid for the fisheries sub-sectors per unit of employment, expressed in Full Time Equivalents (FTEs) and the other in terms of GVA generated:

$$\text{FTE Index} = \frac{\text{Aid processing}}{\text{FTE processing}} / \frac{\text{Aid all industry}}{\text{FTE all industry}}$$

$$\text{GVA Index} = \frac{\text{Aid processing}}{\text{GVA processing}} / \frac{\text{Aid all industry}}{\text{GVA all industry}}$$

Where:

*Aid processing* is the annual amount of total public commitments (average over the period 2007-2013) for Measure 2.3 (processing and marketing);

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<sup>4</sup> Commission Regulation (EC) No. 665/2008 of the 14 July 2008 and Commission Decision (2008/949/EC).

<sup>5</sup> Croatia and Greece are excluded from all trend analysis on the structure and economic performance of the EU fish processing sector, as no data is available for these two countries for the period 2008-2010 (data for Croatia are available only for 2011 and 2012, as it joined the EU only in 2012). Belgium is excluded from all analyses, due to data quality issues.

<sup>6</sup> Most DCF data on fish processing cover firms processing fish as a main activity, defined as being that accounting for more than 50% of the overall turnover generated by the enterprise. Only two variables (i.e. turnover and number of enterprises) are collected for the EU firms processing fish not as a main activity.

*FTE processing* is the number of full-time employees of the fish processing sector (average over the period 2008-2012);

*Aid all industry* is the annual amount of total public commitments (average over the period 2007-2013) for the following EFF measures: 2.3 (processing and marketing), 2.1 (aquaculture), 1.4 (small-scale coastal fishing), 1.5 (socio-economic compensations), 3.3 (fishing ports, etc.) and 3.6 (reassignment of vessels)<sup>7</sup>;

*FTE all industry* is the number of full-time employees of the fish catching, aquaculture and fish processing sectors (average over the period 2008-2012);

*GVA processing* is the annual GVA generated by the fish processing sector (average over the period 2008-2012);

*GVA all industry* is the annual GVA generated by the fish catching, aquaculture and fish processing sectors (average over the period 2008-2012);

The above indexes are estimated using two data sets: economic data from the DCF database and data on public EFF commitments on 32 May 2014 from a DG MARE database. Due to missing information<sup>8</sup>, the data behind the indexes cover the public commitments only partially (63% for all EFF measures and 77% for Measure 2.3). Furthermore, it is likely that DCF data do not refer to all EFF beneficiaries as it covers only the enterprises processing fish as a main activity. Therefore, the financial aid received by the sector per unit of employment and as share of GVA created may be overestimated.

According to the EFF Regulation, only micro, small and medium-sized enterprises (SMEs), defined<sup>9</sup> as employing fewer than 250 persons and having an annual turnover not exceeding €50 million (and/or an annual balance sheet total not exceeding €43 million), and non-SMEs having less than 750 employees or turnover of less than €200 million could be granted support for their investments, with the SMEs eligible to receive a higher support (more information in Section 4). On the other hand, data on GVA and FTE used in the analysis referred to the entire DCF population and not only to the EFF beneficiaries. This discrepancy is expected to not have affected the estimation of the GVA and FTE indexes significantly as

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<sup>7</sup> Measure 2.2 (Inland fishing) is not included, as DCF data do not cover inland fishing. All the measures directed to the entire fisheries industry rather than specifically aimed at one of its three sub-sectors are also excluded. These are: Measures 3.1 (collective actions), 3.2 (protection and development of aquatic fauna and flora), 3.4 (new markets and promotion campaigns), 3.5 (pilot operations), 4.1 (development of fisheries areas) and 5.1 (technical assistance).

<sup>8</sup> DCF data are not available for the landlocked countries (Austria, Slovakia, Hungary, the Czech Republic and Luxembourg), which account for around 2% of the public spending under the EFF. Furthermore, as data for Poland, France, Latvia, Lithuania, Belgium and Greece are incomplete, these countries are also partially excluded. Poland and France account together for 28% of the total public spending (16% of the spending under Measure 2.3) and Latvia, Lithuania, Belgium and Greece for another 9%. Denmark and Croatia are also not part of the analyses, as data on EFF commitments for these countries are not available.

<sup>9</sup> The category of micro, small and medium-sized enterprises (SMEs) is defined by the Commission Recommendation 2003/361/EC of 6 May 2003.

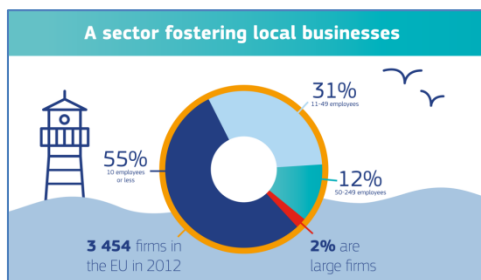
the majority of the enterprises surveyed under the DCF were most probably eligible to receive the support<sup>10</sup>.

### 3 Overview of the EU fish processing industry

Data on the structure, employment and economic performance of the EU fish processing sector are included in Table 2 and Table 3, while Table 4 presents figures on the contribution of fish processing to employment and GVA of the fisheries industry and of the whole food industry.

The countries of the EU form one of the main fish importing and processing region in the world. As the EU demand for fish products is much larger than what can be provided by the EU fish catching and aquaculture sectors, the EU is the largest importer of fish and fisheries products in the world, with Spain, France, Germany, Italy and the UK accounting for the major part of imports. In 2012, the EU seafood trade balance was equal to - 33,438 million tonnes of seafood, corresponding to - €14,111 billion.

There were about 3.4 thousand EU firms processing fish as a main activity in 2012 and a further 872 carried out fish processing “not as their main activity”<sup>11</sup>.



Although the distribution of firms by size category differs by MS, for most, firms with less than 10 employees represent at least half of the total and almost all the others have less than 250 employees. Over the 2008-2012 period, the number of firms decreased 5%, especially that of larger businesses (group with “50-249” employees).

The number of employees in fish processing in 2012 was just over 120 thousand; 20% less than in the fish catching sector and represent 5% of all people employed in the EU food industry<sup>12</sup>. Four countries – UK, Spain, France and Poland - accounted for almost 60% of all EU fish processing jobs. However, this sector is important for the employment in several other MS. For example, it contributes 39% of the overall employment in the food industry in Lithuania, 21% in Latvia and more than 10% in Denmark, Estonia, Ireland and Portugal.

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<sup>10</sup> In 16 out of 17 MS for which DCF data by size category were available, the average turnover of the enterprises with less than 250 employees resulted much lower than €50 million, and that of the larger firms lower than €200 million (Table 1: Average turnover of fish processing enterprises by size category and EU MS, 2012). The only exception is Denmark, where however the turnover of the enterprises all sizes also resulted lower than €200 million, indicating that in average these firms were also eligible for granting.

<sup>11</sup> The actual number is expected to be much higher, considering the difficulties in collecting these data and the fact that no data for this type of firms was reported for five MS (Belgium, Bulgaria, France, Germany and Portugal).

<sup>12</sup> The food industry is here defined as covering manufacture of food products, beverages and tobacco products, including fish processing and preserving.

The number of employees in the fish processing sector has declined by 5%<sup>13</sup> from 2008 to 2012, much less than in the fish catching (8%) and aquaculture (18%) sectors. This may be interpreted as a better resilience of employment in the fish processing sector to the economic crisis.

The total number of FTEs in the firms processing fish as a main activity was slightly more than 110 thousand. This is only 9% less than the total number of jobs in the sector, indicating a high share of full time workers. Several factors, such as local customs (and regulations) and the availability of raw products, have an impact on the type of employment, which indeed varies significantly across countries. The Dutch firms have the highest level of part-time employment (FTE/total employees = 69%), followed by the Lithuanian and Danish firms. Other countries, such as Romania and Bulgaria, employ mostly full-time workers. Over the period 2008-2012, the number of FTEs in the EU fish processing industry decreased 5%, equaling the decrease of the total number of jobs.

In 2012, in some EU MS the employment in fish processing was equally distributed between men and women, but in most, male or female employees were clearly predominant. For example, in the UK, Ireland and Finland, male employment was higher, while in Portugal and Poland men represented less than 35% of the total number of employees. At EU level, the share of employment by gender has remained stable over the years (45% of male vs. 55% of female), however this does not apply to all countries. In Spain, for instance, male employment has progressively increased (by 10% since 2008) in a sector traditionally dominated by women. The economic crisis, which has hit Spain particularly hard, has most probably contributed to this shift.

In 2012, the average annual wage in the fish processing sector (measured as cost of labour per FTE) was equal to €28,581, almost 60% more than the corresponding wage in the fish catching sector. Furthermore, from 2008 to 2012, the salary in fish processing has increased twice as much as in the fleet (16% vs. 8%). This means that the fish processing industry offers more favorable employment conditions than the rest of the fisheries industry. In the aquaculture sector, salaries have increased more, but aquaculture contributes only 15% of all EU fish-related jobs.

The average wage per FTE varies substantially by EU MS, with the Danish fish processing industry paying the highest salaries on average (€57 thousand), followed by the French (€51 thousand) and the Swedish (€50 thousand) industries. Such relatively high salaries earned in France and Sweden most probably depend largely on national regulations.

The average labour productivity of the EU fish processing sector (measured as gross value added per FTE) was equal to €58 thousand in 2012, 23% more than in 2008. The highest values were estimated for Malta (€173 thousand), Denmark and the UK, while the lowest for Croatia (€8.5 thousand).

In 2012, the EU fish processing sector generated approximately €6.4 billion of GVA. This is almost twice as much as the amount created by the fleet (€3.4 billion). Fish processing contributes around 60%

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<sup>13</sup> This figure does not include Croatia and Greece.



of the value added of the whole EU fisheries industry and between 50% to more than 90%, for most MS. The countries where it contributes less are Croatia, Cyprus, Italy, Malta and the Netherlands.

Fish processing accounted for 6% of the whole EU food industry GVA in 2012. For Denmark, Estonia, Malta, Spain and the UK, the average contribution to the GVA ranged between 10% and 20% and for Portugal it reached 46%.

The income generated by the EU fish processing industry in 2012 was almost €28 billion, 98% of which represented turnover. Overall the sector suffers from very low margins, which have decreased from 2008 to 2012 due to several factors, the most relevant of which have been the increases in energy costs and the availability of raw materials (STECF, 2014). Several are the challenges perceived by the industry for the coming years, some of which are summarised here below.

*Changes in consumer preferences* - The demand for sustainably harvested or farmed fish is growing. In the long term, sustainability is expected to become a license to produce. In addition, there is an increasing interest in knowing the origin of the food consumed. This is also the case for fish and fish products. Ensuring product sustainability and traceability implies additional costs of production and the whole value chain (including the processors) are challenged to keep these extra costs as low as possible.

*Unfamiliar fish species landed* - As a result of the discard ban introduced as part of the latest reform of the common fisheries policy<sup>14</sup>, many member states envisage large quantities of unfamiliar fish species being landed. The commercialisation of these species will represent a challenge for the sector, as consumers tend to favour more familiar species (many of which are mostly imported from third countries).

*Dysfunctional market infrastructure* - The fish processing companies in the EU are mostly small production units (almost 60% of the firms processing fish as a main activity have less than 10 employees). This puts them at a disadvantage when facing buyers (retailers and traders), which are more concentrated and organised. In addition, in many EU MS the distribution network is highly fragmented, remote and often poorly developed. This results in a lack of reliable and regular supply of fish to processing companies which are not keen to place small batches of fish on the market.

*Loss of competitiveness resulting from low investments* - In several EU MS, the fish processing sector has a limited capacity to (re-)invest and/or little or no willingness to innovate. The resulting loss in competitiveness is perceived by the EU processors as one of the biggest challenges ahead. The uncertainty concerning their future activities is the main reason why the fish processing companies decide not to invest. One of their main concerns is the risk that costs may increase in the near future. Prices are highly variable because of the extreme dependency of the fishing industry on international market prices of fish and oil. Steep fluctuations of exchange rates due to the global economy are considered an additional threat.

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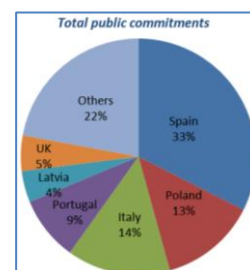
<sup>14</sup> <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52011PC0425>.

#### 4 European Fisheries Fund Support for the EU Fish Processing Sector

A large part of the public support received by the fisheries sector in the EU comes from the financing instruments of the CFP<sup>15</sup>. The EFF has underpinned the economic, environmental and social objectives of the CFP from 2007 to 2013, with a total EU budget of €4,305 million for the seven years of the programming period. All EU MS were eligible, but fund allocation has been particularly concentrated in the less developed regions (75% of the total, corresponding to €3,252 million, has been earmarked for ‘convergence objective’ regions, i.e. regions with a per capita gross domestic product below 75% of the Community average).

Under Measure 2.3 of the EFF (fish processing and marketing), businesses that process and market fishery and aquaculture products have been granted co-financing for several types of investments (construction of new establishments or extension, equipment or modernisation of existing ones). In principle, the aid has targeted firms manufacturing and/or selling products for human consumption. Manufacturers of fish meal and oil, however, were also allowed to apply for investments to remove harmful substances from the processed product or to process fish waste.

EFF support was based on the principle of co-financing, meaning that EU aid was granted complementary to other public subsidies and/or co-financing by the beneficiary firm, at a rate varying from one type of project to another. Between 1 January 2007 to 31 May 2014, €3,438 million of the EU budget (80% of the total EFF resources) and €2,120 million of national resources had been committed (Table 5). Public commitments for Measure 2.3 amounted to a rather significant share of the total (16%, corresponding to €890 million), with Spain alone contributing 32% of this share and Poland, Italy, Portugal, Latvia and the UK making up to 80% (see pie chart on the right).



As mentioned, Measure 2.3 has provided financial support to several types of investments; however 90% of the public commitments for this measure have been for investments for the construction, extension, equipment and modernisation of processing units (Table 6).

At MS level, the commitments for Measure 2.3 over the national total ranged from 1% for Belgium to almost 40% for Austria (Table 6). The land locked countries have committed a relatively high percentage of their EFF budget to processing and marketing, most probably as a result of the limited number of alternatives. Overall, in twelve EU MS, this share is higher than 15%, with Finland, Lithuania and Portugal committing more on measure 2.3 than on any other measure<sup>16</sup>.

<sup>15</sup> Support received under the EFF is only part of the total financial support received by the EU fish catching sector over the period 2007-2013. Fuel tax exemptions represent by far the largest part of total financial support received by the EU fish catching sector. For the period covered by the present analysis, it is estimated an annual support of around 1 billion euros<sup>15</sup> (European Parliament, 2013), more than 12 times the aid per year provided under the EFF.

<sup>16</sup> In most other EU MS, the largest share of the EFF resources was committed on Measure 1.1, i.e. permanent cessation of fishing activities (Spain, Greece, Ireland, Italy, Malta and Sweden), Measure 2.1, i.e. aquaculture (Austria, Bulgaria, Czech Republic, Hungary, Latvia, Romania and Slovakia) or Measure 3.3, i.e. Fishing ports landing sites and shelters (Cyprus, Slovenia and United Kingdom).

## 2.1 National support

As mentioned, the EFF was based on the principle of co-financing, meaning that funding from the European Union was granted complementary to other public subsidies from Member States and/or co-financing by the beneficiary firm. Overall, from the 1<sup>st</sup> of January 2007 to the 31<sup>st</sup> of May 2014, €2,120 million of national resources had been committed under the EFF.

The Country's share of public support varies across country. According to the EFF Regulation, the contribution of the total public expenditure co-financed by the EFF (EU support) was subject to ceilings, differentiated by type of region (75% in regions eligible under the Convergence objective and 50% in the other regions). Notwithstanding these limitations, MS were free to apply in the operational programme a uniform rate of co-financing by region at the level of measures. The contribution from the EFF to be provided per priority axis and to a specific operation was also subject to certain limits<sup>17</sup>.

Table 5 (column s) shows the rates of co-financing<sup>18</sup> for all EU MS, while the table on the right shows those corresponding to the main six countries in terms of public commitments for Measure 2.3. For the MS entirely eligible under the Convergence objective (e.g. Latvia and Poland) or entirely excluded (e.g. Belgium and Denmark), the rate of National co-financing corresponds to the minimum value set in the Regulation (50% for the non-convergence MS and 25% for the convergence). The only exception is represented by Finland which contributed 57% of the total public resources.

Country	Aid for convergence (% of total)*	Co-financing rate (%)
Spain	80%	36
Poland	100%	25
Italy	80%	45
Portugal	90%	30
Latvia	100%	25
UK	30%	45
<b>Avg. EU</b>	<b>80%</b>	<b>35</b>

\* Initial allocation of EFF aid (01/2007-12/2013)

For the countries with Convergence and non-Convergence regions (e.g. Greece and Italy), these rates, that range between 25% and 50%, provide an indication of how the available resources have been distributed between the two types of regions. For example, the 25% rate corresponding to Greece suggests that only operations eligible under the Convergence objective have been supported. On the other hand, the high rate of co-financing for Italy (45%) could be the result of most of the EFF resources going to non-Convergence regions, despite the 75% initial allocation to Convergence areas.

Among the MS with both regions eligible and not eligible under the Convergence objective, France is a peculiar case, as its rate of co-financing (53%) is higher than the maximum value expected (i.e. 50%, corresponding to all projects granted the contribution being in Convergence regions).

Table 5 (column k) shows the average share of National co-financing by country for all EFF measures. These values reflect mostly the initial distribution of resources between Convergence and non-Convergence regions and in fact are usually within the range 25%-50% (the only countries for which the national contribution is higher than 50% are Finland, France and the Netherlands). In most EU MS the

<sup>17</sup> The minimum contribution from the EFF per priority axis had to be 20% of the total public expenditure and the amount of support granted to an operation by the EFF had to be between 5% and 95% of the total public expenditure allocated for assistance to the operation.

<sup>18</sup> Calculated as national support/total public support (i.e. national + EU) using data on the commitments for the period 1st of January 2007 - 31th of May 2014.

share of national support under Measure 2.3 is similar to the relative contribution provided in average for all EFF measures; Portugal, Ireland and Germany co-financed Measure 2.3 more than in average, France and the Netherlands less.

## 2.2 Private contribution to EFF projects

The largest share of money committed for fish processing and marketing under the EFF is represented by private investments. The amount of private money committed for all measures between 1 January 2007 and 31 May 2014 was €2,548 million. The private commitments for Measure 2.3, €1,146 million, represented almost half of this total and around 56% of the total commitments under this measure (Table 5).

The limits of public contribution granted to an operation are set by the EFF Regulation and depend on the size of the enterprise. The EFF Regulation gives priority to SMEs. However, enterprises which are not SMEs and with fewer than 750 employees or turnover of less than €200 million, could also be granted more limited support for their investments (see table on the right).

Region	SMEs	Large enterprises
Non convergence regions	40	20
Convergence regions	60	30
Outlying Greek islands	60	60
Outermost regions	75	75

The amount of private co-financing<sup>19</sup>, for measure 2.3 has been considerable higher than the average for all the EFF measures (Table 5, columns t & l). The explanation is that, contrarily to the share of national co-financing, which varies by type of region (i.e. convergence and non-convergence) but not by measure, the minimum percentage of private investments over the total eligible costs is linked to the measure and some important ones, such as the scrapping and the temporary cessation of fishing activities, do not require any private support<sup>20</sup>.

Country	Private investment	
	Measure 2.3	Other measures
Spain	58	13
Poland	46	19
Italy	48	15
Portugal	53	22
Latvia	42	20
UK	65	35
<b>Avg. EU</b>	<b>56</b>	<b>23</b>

This means that the overall amount of private investments under the EFF in each country mostly depends on which measures have been activated and how the resources have been initially distributed across the measures, while it does not depend on where the projects have been financed (meaning in convergence or non-convergence areas).

<sup>19</sup> Calculated as private support/(public support + private support), using data on the commitments for the period 1st of January 2007 - 31th of May 2014.

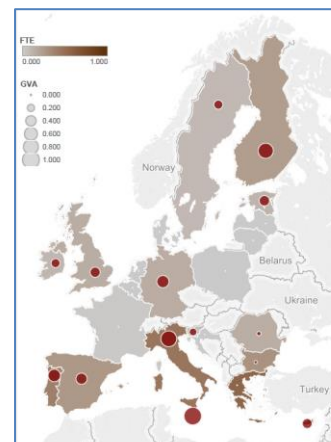
<sup>20</sup> The EFF Regulation divides the operations in four groups, having different limits for the total financial public contribution. For Group 1 (e.g. public aid for permanent cessation of fishing activities), the maximum financial public contribution is up to 100%; for Group 2 (e.g. investment on board fishing vessels) up to 40%-50%, depending on the region; for Group 3 (e.g. collective actions) up to 60%-80%, depending on the region; for Group 4 (e.g. eligible measures in processing and marketing) 40%-75%, depending on the region (Details can be found in Annex II of COUNCIL REGULATION (EC) No 1198/2006 of 27 July 2006 on the European Fisheries Fund).

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32006R1198>

### 2.3 A comparison with the financial support for the fish catching and aquaculture sectors

The large amount of public money going into fish processing and marketing under the EFF (€890 million) has been a concern for the EU policy makers, as the primary sector of fisheries and aquaculture was considered the focal point of the EFF. On the other hand, the EFF was aimed at supporting the development of the whole EU fisheries industry, of which fish processing is an important, as well as strongly integrated, component.

In order to assess whether or not the concerns of the EU policy makers are justifiable, the financial aid for fish processing has been compared to that for the whole fisheries industry in relation to the socio-economic importance of its three components (i.e. fish catching, aquaculture and fish processing). The analysis is based on the estimation of two indexes, one averaging the public aid for the fisheries sub-sectors per unit of employment (FTE) and the other in terms of Gross Value Added (GVA). The table below presents the values of these indexes for the six main countries in terms of total commitments for Measure 2.3, while Table 7 shows the values for all the EU countries. The results of the analysis can be also visualised in the map on the right, which is based on the two indexes after being standardised to range from 0 to 1<sup>21</sup>.



Country	Aid/fte (€/number)				Aid/GVA (%)			
	Processing (A)	Fish catching & aquaculture	Processing, fish catching & aquaculture (B)	FTE Index (A/B)	Processing (C)	Fish catching & aquaculture	Processing, fish catching & aquaculture (D)	GVA Index (C/D)
Spain	2,286	2,681	2,555	0.89	3.3	12.0	6.8	0.48
Poland	1,102	-	-	-	6.9	-	-	-
Italy	3,701	2,221	2,469	1.50	5.7	7.1	6.7	0.85
Portugal	1,679	1,134	1,282	1.31	2.3	7.1	4.1	0.57
Latvia	1,105	-	-	-	14.2	-	-	-
UK	330	984	610	0.54	0.3	2.4	0.8	0.41
<b>Average EU</b>	<b>1,141</b>	<b>2,480</b>	<b>2,062</b>	<b>0.55</b>	<b>2.0</b>	<b>7.2</b>	<b>4.7</b>	<b>0.42</b>

Note: Aid corresponds to the annual average of total public money committed over the period 1st of January 2007 - 31th of May 2014 under the EFF

The interpretation of the indexes is rather straightforward, the higher their value the higher the unit financial support for fish processing in comparison to the whole industry. For example, the value 0.54 for the FTE Index in the UK indicates that the amount of public money per FTE committed for the fish processing sector is around half that committed for the whole fisheries industry. The value 0.41 for the GVA index, instead, indicates that the sum committed for the fish processing sector per unit of GVA generated by this industry is 40% the unit amount committed for the whole industry.

<sup>21</sup> The following formula was used for standardisation:  $f(x) = \frac{x - \text{Min.value}}{\text{Max.value} - \text{Min.value}}$



The analysis shows that, although the amount of public money committed for fish processing and marketing under the EFF is high in absolute terms, it is lower than that for the whole industry in almost all EU MS, when averaged per unit of FTE and GVA. Per unit of GVA, results are higher only for Malta and per FTE only for Cyprus, Greece, Italy, Malta and Portugal. In Italy for example, €3.701 per full-time employer have been committed each year during the period 2007-2013 for the fish processing sector, against €2.221 for the fish catching and aquaculture sectors and €2.469 for the entire industry.

As discussed in Section 2, DCF data for fish processing relate only to firms processing fish as a main activity and most probably do not cover the population of beneficiaries of the EFF support entirely. As a consequence, the average aid per FTE and unit of GVA has most probably been overestimated, especially for those EU MS where a large part of the fish processing activities is carried out in non-specialized firms. Examples are the Mediterranean countries, where the fisheries industry is more artisanal and the actors mostly apply pluri-activity strategy rather than specialising on a specific stage of the supply chain. To overcome this issue within the possible limits of data availability<sup>22</sup>, an indicative value of the GVA generated by the non-specialised firms was estimated from their turnover<sup>23</sup>. While this additional GVA did not change significantly the values of the GVA Index for Italy and Portugal, it halved those for Cyprus and Malta making the aid per unit of GVA lower than that for the whole industry also in these two countries (Table 7, column k).

As also seen in Section 2, the financial aid for the whole industry used in the calculation of the two indexes cover only the EFF measures directed to one or the other sub-sector of the fisheries industry (i.e. fish processing, fish catching and aquaculture), while it excludes Measure 2.2 (Inland fishing) and all measures directed to the entire fisheries industry<sup>24</sup>. Table 7 (columns l to n) presents the values assumed by the two indexes when the commitments for these transversal measures are also included in the estimation. These values are of course lower than those estimated without these additional measures and the difference is rather marked for the countries where the common measures represent a large share of public commitments, such as Germany, Finland and the Netherlands.

## 5 Conclusions

Measure 2.3 represents the highest share of the total budget committed under the EFF between 1 January 2007 and 31 May 2014. Some policy makers question whether an excessive amount of public money is being devoted to the processing and marketing of fish, stating that the main focus of the structural support for fisheries is the primary sector of fisheries and aquaculture.

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<sup>22</sup> Data on turnover of the enterprises processing fish not as a main activity are gathered under the DCF but usually provided by 18 out of 23 MS.

<sup>23</sup> The formula used for the estimation ( $GVA \text{ non specialised firms} = \text{Turnover non specialised firms} * \frac{GVA \text{ specialised firms}}{\text{Turnover specialised firms}}$ ) is based on the very rough assumption that the share of value added to turnover over the reference period for the non-specialised firms was the same as for the specialised ones.

<sup>24</sup> Measures 3.1 (collective actions), 3.2 (protection and development aquatic fauna and flora), 3.4 (new markets and promotion campaigns), 3.5 (pilot operations), 4.1 (development of fisheries areas), 5.1 (technical assistance).

The EFF financial support was aimed at strengthening the competitiveness and supporting the sustainable development of the entire fisheries industry of which the processing sector is a very important component. In 2012, the EU fish processing sector generated approximately €6.4 billion of GVA; 6% of the GVA created by the whole food industry, almost twice the GVA of the fishing fleet and five times that of aquaculture. In most EU MS, this sector contributes between 50% to more than 90% of the value added of the fisheries industry and in several of them contributes largely also to the GVA of the whole food industry. Fish processing is very important also in terms of employment. The number of people working in the processing industry is only 20% less than those in the fish catching sector and represents 5% of all people employed in the EU food industry.

Not only does the processing industry contribute a large share of the value added and employment created by the fisheries industry, it also has an important role in the development of coastal communities as the fish processing firms are often located in remote coastal areas with few other economic and employment alternatives. Furthermore, being employed in the fish processing sector rather than in the rest of the industry is also more attractive in most EU MS, as jobs are usually better paid.

In view of the above, it is clear that the financial support for the processing sector is extremely important to achieve the social and economic objectives of the EU's structural policy for fisheries. Strengthening the EU seafood processing is also important for improving gender equality and increasing female employment, as this sector employs around 85% of all women working in fish-related jobs in the EU. Furthermore, it can be beneficial also for the fish catching and aquaculture sectors in many MS, as the supply chain is often vertically integrated or the parties cooperate.

To further investigate whether the concerns of the policy makers are justified, the EFF financial aid for the fish processing sector was compared to that for the entire fisheries industry (i.e. fish catching, aquaculture and fish processing) in relation to the socio-economic importance of its three components (measured in terms of contribution to the GVA and the employment).

Data showed that the amount of money committed for processing, although large in absolute terms, result significantly lower than that for fish catching and aquaculture in relative terms (i.e. averaged by FTE and GVA), which gives reasons to the policy makers to be less concerned about the amount of money channeled outside the primary sector of fish catching and aquaculture. Overall fish processing has received 54% less support per FTE and 70% less support per GVA. The financial aid per unit of GVA committed for processing and marketing has been higher only for Malta and per unit of employment only for Cyprus, Greece, Italy, Malta and Portugal. When considering also the firms processing fish not as a main activity in the calculation of the GVA Index, the estimated values of the index remain almost the same for Italy and Portugal, while halve for Cyprus and Malta (no data for Greece on these additional firms). This indicates that only in Italy and Portugal the financial aid for fish processing has been higher than that for the rest of the industry when averaged by GVA.

**Table 1: Average turnover of fish processing enterprises by size category and EU MS, 2012**

Country*	N. employees ≤ 10				N. employees 11-49				N. employees 50-249				N. Employees ≥ 250			
	FTE (N.)	Turnover (million €)	Firms (N.)	Avg. Turnover (million €)	FTE (N.)	Turnover (million €)	Firms (N.)	Avg. Turnover (million €)	FTE (N.)	Turnover (million €)	Firms (N.)	Avg. Turnover (million €)	FTE (N.)	Turnover (million €)	Firms (N.)	Avg. Turnover (million €)
Belgium	916	420.6	206	2.0	686	241.8	28	8.6	601	163.5	5	32.7	-	-	1	-
Croatia	14	0.4	4	0.1	97	11.6	6	1.9	870	31.7	9	3.5	-	-	1	-
Denmark	178	94.7	57	1.7	802	530.0	30	17.7	2,019	1,385.3	19	72.9	-	-	-	-
France	555	153.7	133	1.2	2,694	655.1	108	6.1	4,455	1,247.6	39	32.0	8,267	2,805.2	15	187.0
Greece	460	27.7	107	0.3	799	98.1	34	2.9	796	107.0	6	17.8	-	-	-	-
Ireland	333	35.5	87	0.4	1,201	358.7	58	6.2	1,144	262.2	19	13.8	-	-	-	-
Latvia	128	6.1	48	0.1	780	35.1	29	1.2	2,052	96.0	18	5.3	2,397	89.6	6	14.9
Lithuania	6	0.5	5	0.1	142	9.3	11	0.8	1,195	51.8	12	4.3	2,192	229.3	5	45.9
Malta	36	21.5	4	5.4	17	8.0	2	4.0	-	-	-	-	-	-	-	-
Netherlands	-	-	35	-	745	269.0	33	8.2	1,724	506.4	16	31.6	-	-	-	-
Poland	267	25.5	54	0.5	1,537	195.6	77	2.5	5,092	486.8	49	9.9	8,192	1,226.8	16	76.7
Portugal	105	28.9	91	0.3	1,010	204.9	46	4.5	3,619	653.4	39	16.8	1,574	190.8	4	47.7
Romania	11	0.5	2	0.2	224	9.5	7	1.4	545	20.3	5	4.1	-	-	-	-
Slovenia	26	2.4	10	0.2	17	2.6	2	1.3	264	27.3	3	9.1	-	-	-	-
Spain	784	169.1	178	0.9	4,952	878.8	229	3.8	7,201	1,892.5	71	26.7	4,461	1,592.9	9	177.0
Sweden	375	93.6	190	0.5	488	174.8	25	7.0	968	344.8	8	43.1	-	-	-	-
United Kingdom	843	243.3	166	1.5	3,059	933.7	133	7.0	6,616	1,715.8	64	26.8	7,337	2,116.7	12	176.4

\* No data on turnover by segment available for CYP, EST, FIN, DEU, ITA, BGR

Data source: data submissions under the DCF 2014 call for data concerning the EU fish processing industry (MARE/A3/(2014))

**Table 2: Structure and employment of the EU fish processing industry sector, by EU MS, 2012**

	Number of enterprises processing fish ...					Average salary (thousand €)	Labour productivity (thousand €)	Employees			FTE		
	... as a main activity, by segment*				... NOT as a main activity			Total (Number)	Male (%)	Female (%)	Total (Number)	Male (%)	Female (%)
	≤10	11-49	50-249	≥250									
<b>BEL</b>	206	28	5	1		47.9	93.9	2,492	58%	42%	2,202		
<b>BGR</b>	6	2	2	0		2.4	36.7	252	33%	67%	252	33%	67%
<b>CYP</b>	0	0	0	0	9	14.5	47.5	56	64%	36%	56	64%	36%
<b>DEU</b>	171	56	15	8		36.2	40.2	7,010	55%	45%	6,664		
<b>DNK</b>	57	30	19	0	5	57.0	98.0	3,409	53%	47%	2,999	54%	46%
<b>ESP</b>	178	229	71	9	0	25.1	73.4	18,324	47%	53%	17,399	47%	53%
<b>EST</b>	31	21	8	1	11	10.3	15.8	1,861	35%	65%	1,816	35%	65%
<b>FIN</b>	131	13	2	0	27	39.9	56.7	930	61%	39%	781	61%	39%
<b>FRA</b>	133	108	39	15		51.3	68.1	16,184	45%	55%	15,971	46%	54%
<b>GBR</b>	166	133	64	12	247	34.2	96.9	19,070	57%	43%	17,855	58%	42%
<b>GRC</b>	107	34	6	0	7	10.9	24.4	2,330	50%	50%	2,055	52%	48%
<b>HRV</b>	4	6	9	1	24	12.7	8.5	1,365	55%	45%	1,231	57%	43%
<b>IRL</b>	87	58	19	0	29	28.2	41.4	3,342	67%	33%	2,678	67%	33%
<b>ITA</b>	372	144	21	0	231	42.7	75.5	6,197	52%	48%	5,223	52%	48%
<b>LTU</b>	5	11	12	5	3	8.5	17.3	4,451	33%	67%	3,536	34%	66%
<b>LVA</b>	48	29	18	6	2	6.1	10.4	5,781	34%	66%	5,357	34%	66%
<b>MLT</b>	4	2	0	0	2	14.7	172.8	56	73%	27%	53	74%	26%
<b>NLD</b>	35	33	16	0	64	41.8	55.5	3,567			2,469		
<b>POL</b>	54	77	49	16	61	10.3	16.0	15,972	33%	67%	15,088	34%	66%
<b>PRT</b>	91	46	39	4		12.0	66.8	6,823	32%	68%	6,308	32%	68%
<b>ROU</b>	2	7	5	0	24	3.2	37.3	780	50%	50%	780	50%	50%
<b>SVN</b>	10	2	3	0	6	17.1	33.3	354	42%	58%	306	42%	58%
<b>SWE</b>	190	25	8	0	120	50.2	66.9	2,135	57%	43%	1,831		
<b>Total**</b>	2,088	1,094	430	78	872	28.6	57.8	122,741	46%	54%	112,911	46%	54%

\* segments are defined in terms of number of employees

\*\* The contribution of male and female employment to the total is estimated subtracting from the total the employment figures of the countries for which data by gender are not available

(i.e. The Netherlands for number of employees, The Netherlands, Sweden and Germany for FTE)

Data source: data submissions under the DCF 2014 call for data concerning the EU fish processing industry (MARE/A3/(2014))

**Table 3: Economic performance of the EU fish processing sector, by EU MS, 2012**

	Income				Expenditure						Capital costs (million €)			Capital value (million €)			Performance indicators							
	Turnover (million €)	Total income (million €)	Turnover from fish processing (NOT being main activity)		Tot. Costs (million €)	Cost items as a share of total costs (%)					Depreciation of capital	Financial costs, net	Extraordinary costs, net	Total value of assets	Net Investments	Debt	Gross Value Added (million €)	Operating Cash Flow (million €)	Earning before interest and tax (million €)	Net Profit (million €)	Capital productivity (%)	Return on Investment (%)	Financial Position (%)	Future Industry Expectations (%)
			Million €	% of total turnover		Raw material	Wages and salaries	Other operational costs	Energy costs	Unpaid labour														
<b>BEL</b>	825.9	830.8			727.8	64.6%	14.5%	18.9%	2.0%	0.0%	21.2	11.6	2.0	388.7	37.9	337.1	206.9	103.0	81.8	70.2	53.2%	21.0%	86.7%	4.3%
<b>BGR</b>	7.2	9.7			1.0	11.6%	58.8%	11.5%	17.1%	1.0%	0.0	0.3	0.0	8.5	0.0	5.8	9.2	8.7	8.7	8.3	109.1%	102.3%	68.3%	0.0%
<b>CYP</b>	7.4	8.7	5.7	43.6%	6.8	77.1%	11.9%	6.2%	4.8%	0.0%	2.3	0.3	0.0	5.5	0.4	3.6	2.7	1.9	-0.4	-0.6	48.1%	-6.4%	64.2%	-33.2%
<b>DEU</b>	2,040.4	2,051.8			2,025.3	63.3%	11.9%	22.5%	2.2%	0.0%	40.8	13.4	0.0	392.3	28.4	222.8	267.6	26.5	-14.3	-27.7	68.2%	-3.7%	56.8%	-3.2%
<b>DNK</b>	2,010.0	2,029.7			1,906.7	61.7%	8.9%	27.7%	1.6%	0.1%	35.5	9.3	0.1	1,221.6	31.2	700.7	293.9	123.0	87.5	78.2	24.1%	7.2%	57.4%	-0.4%
<b>ESP</b>	4,533.2	4,603.5			3,738.0	73.0%	11.6%	13.2%	2.2%	0.1%		53.8	-3.6		88.5		1,276.5	865.5						
<b>EST</b>	143.2	147.8	4.7	3.2%	137.8	66.9%	13.5%	16.8%	2.7%	0.0%	4.5	0.8		89.2	3.1	45.6	28.6	9.9	5.4	4.6	32.1%	6.1%	51.2%	-1.6%
<b>FIN</b>	264.7	266.6	83.5	24.0%	253.3	73.1%	11.9%	13.3%	1.3%	0.4%	5.8	1.9	-0.2	123.6	12.5	86.9	44.3	13.3	7.5	5.6	35.9%	6.1%	70.3%	5.4%
<b>FRA</b>	4,861.6	5,001.3			4,722.0	43.8%	17.3%	33.2%	5.7%	0.1%	66.8	-7.2	0.6	2,551.9	170.9	1,366.8	1,087.4	279.2	212.4	219.7	42.6%	8.3%	53.6%	4.1%
<b>GBR</b>	5,009.5	5,092.8	654.5	11.6%	3,926.7	69.8%	14.1%	13.1%	1.5%	1.4%	70.0	41.3	55.8	1,114.8	127.1	382.4	1,729.7	1,166.1	1,096.1	1,054.8	155.2%	98.3%	34.3%	5.1%
<b>GRC</b>	232.9	233.6	1.1	0.5%	205.1	68.7%	10.5%	14.5%	5.9%	0.4%	6.6	23.3	2.8	510.6	1.4	294.0	50.1	28.5	21.9	-1.3	9.8%	4.3%	57.6%	-1.0%
<b>HRV</b>	48.0	80.2	24.3	33.6%	80.8	26.6%	19.4%	48.1%	5.9%	0.0%	7.5	4.3	0.1	174.9	22.7	73.9	10.5	-0.5	-8.0	-12.3	6.0%	-4.6%	42.3%	8.7%
<b>IRL</b>	656.5	667.6	22.2	3.3%	629.1	73.6%	11.4%	12.7%	1.7%	0.6%	15.9	3.6	2.6	199.6	19.4	75.6	110.8	38.4	22.6	18.9	55.5%	11.3%	37.9%	1.7%
<b>ITA</b>	2,557.0	2,582.3	222.3	8.0%	2,387.3	73.4%	8.9%	13.4%	3.9%	0.4%	65.6	31.3	-9.7	2,247.8	-7.2	1,569.0	394.2	195.1	129.4	98.1	17.5%	5.8%	69.8%	-3.2%
<b>LTU</b>	290.8	347.6	3.1	1.0%	316.4	68.8%	9.5%	19.3%	2.3%	0.0%	6.7	-1.0	0.0	186.2	9.1	112.9	61.3	31.2	24.5	25.6	32.9%	13.2%	60.6%	1.3%
<b>LVA</b>	226.7	238.0			213.2	60.1%	15.4%	20.0%	4.5%	0.0%	6.2	2.2	0.0	143.4	20.6	104.3	55.9	24.7	18.6	16.3	39.0%	12.9%	72.7%	10.1%
<b>MLT</b>	29.6	29.6	0.0	0.2%	21.2	84.5%	3.5%	9.0%	2.8%	0.2%	0.3	0.1	6.3	7.7	8.5	5.7	9.2	8.4	8.1	8.0	118.9%	105.3%	74.0%	106.3%
<b>NLD</b>	775.4	779.3	2,548.3	76.7%	745.5	74.4%	13.8%	10.5%	1.3%	0.0%	17.4	-4.4	-0.3	595.2	23.9	326.0	136.9	33.8	16.4	20.8	23.0%	2.8%	54.8%	1.1%
<b>POL</b>	1,934.8	1,952.9	114.0	5.6%	1,857.1	72.6%	8.4%	17.6%	1.3%	0.0%	41.2	7.1	0.0	1,217.6	61.7	752.7	241.8	95.8	54.6	47.5	19.9%	4.5%	61.8%	1.7%
<b>PRT</b>	1,078.0	1,085.6			736.4	83.1%	9.6%	2.5%	4.1%	0.7%			0.0	976.3	39.7	623.8	421.6	349.2				43.2%	63.9%	
<b>ROU</b>	30.4	43.4	4.3	12.4%	16.7	78.9%	14.0%	4.1%	2.2%	0.8%	0.8	0.0	0.0	20.0	1.1	16.6	29.1	26.6	25.8	25.8	146.0%	129.5%	83.0%	1.4%
<b>SVN</b>	32.3	32.3	2.1	6.1%	27.3	41.0%	19.2%	34.6%	5.1%	0.1%	1.3	0.7	0.2	27.7	0.4	17.5	10.2	5.0	3.7	3.0	36.8%	13.3%	63.2%	-3.3%
<b>SWE</b>	613.2	622.7	111.9	15.4%	591.5	60.6%	15.5%	22.7%	1.1%	0.0%	13.3	5.3	0.0	409.7	8.9	251.7	122.4	31.3	18.0	12.8	29.9%	4.4%	61.4%	-1.1%
<b>Total*</b>	27,382.5	27,907.0	3,802.2	32.2%	24,545.3	64.9%	12.6%	19.4%	2.9%	0.3%	408.4	208.6	54.7	12,224.1	672.3	7,038.0	6,394.0	3,361.7	1,738.5	1,606.1	41.9%	15.5%	57.6%	1.2%

\* Belgium is excluded

Notes: Except for the data in the third and fourth columns, all data refer to firms which process fish as a main activity

Figures for Belgium are presented in red due to the questionable quality

Data source: data submissions under the DCF 2014 call for data concerning the EU fish processing industry (MARE/A3/(2014))



**Table 4 - Contribution of fish processing to employment and GVA of the fisheries industry (average for the period 2008-2012) and of the whole food industry (2012)**

	Fish processing as a part of the fisheries sector				Fish processing as a part of the food industry	
	GVA (%)	FTE (%)	Employees (%)	Female FTE (%)	GVA (%)	Employees (%)
Belgium	-	-	-	-	0.06	0.05
Bulgaria	0.87	0.16	0.09	0.60	0.01	0.00
Croatia	0.04	0.40	0.22	0.64	-	-
Cyprus	0.17	0.05	0.04	0.20	0.01	0.01
Denmark	0.53	0.62	0.66	0.95	0.19	0.12
Estonia	0.74	0.77	0.46	0.98	0.10	0.13
Finland	0.55	0.55	0.30	0.77	0.02	0.02
France	-	0.46	0.35	0.73	0.06	0.05
Germany	0.82	0.83	0.80	0.99	0.01	0.01
Greece	-	0.03	0.03	0.19	0.02	0.04
Ireland	0.50	0.46	0.39	0.85	0.03	0.13
Italy	0.30	0.17	0.14	0.73	0.02	0.01
Latvia	-	-	-	-	-	0.39
Lithuania	-	-	-	-	0.09	0.21
Malta	0.37	0.12	0.11	0.42	0.18	0.03
Netherlands	0.44	0.53	0.49	0.93	0.02	0.05
Poland	-	-	-	-	-	0.06
Portugal	0.63	0.28	0.26	0.86	0.46	0.13
Romania	0.93	0.28	0.24	0.57	0.01	0.01
Slovenia	0.75	0.72	0.67	0.96	0.05	0.04
Spain	0.59	0.32	0.23	0.81	0.10	0.08
Sweden	0.59	0.59	0.49	0.92	0.05	0.04
United Kingdom	0.75	0.57	0.55	0.95	0.14	0.10

Data source: data submissions under the DCF 2014 call for data concerning the EU fish processing industry, the EU aquaculture sector and the EU fishing fleet (MARE/A3/(2014)), Eurostat data on the food industry

**Table 5: Total amount of money committed under the EFF from the 1st of January 2007 to the 31th of May 2014, by EU MS (values in million euros)**

Member State	Allocation of EFF aid (01/2007-12/2013)				Commitments (01/2007-05/2014)																
	a	b	c	d	All measures							Measure 2.3 (processing and marketing)									
					e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u
Conv.	Non conv.	Total (a+b)	MS % of total	EFF	National	Private	Total Public (e+f)	Total (h+g)	MS % of total public	National % of total public (f/h)	Private % of total aid (g/i)	EFF	National	Private	Total public (m+n)	Total (o+p)	MS % of total public (%)	National % of total public (n/p)	Private % of total aid (o/q)	Public aid for Measure 2.3 as a % of total aid (p/h)	
Austria	0.2	5.1	5.3	0%	5.2	5.1	24.2	10.4	34.6	0%	49	70	2.1	2.1	9.7	4.1	13.8	0%	50	70	40
Belgium		26.3	26.3	1%	24.6	22.0	25.4	46.6	72.0	1%	47	35	0.4	0.4	3.1	0.7	3.8	0%	50	81	2
Bulgaria	80.0		80.0	2%	44.3	14.2	22.2	58.5	80.7	1%	24	28	4.1	1.4	3.5	5.5	9.0	1%	25	39	9
Cyprus		19.7	19.7	0%	18.7	17.4	9.4	36.1	45.4	1%	48	21	1.1	1.1	3.3	2.2	5.4	0%	50	60	6
Czech Republic	27.1		27.1	1%	25.7	8.6	23.9	34.3	58.2	1%	25	41	1.5	0.5	2.7	2.1	4.7	0%	25	57	6
Denmark		133.7	133.7	3%		0.0	0.0			0%				0.0	0.0			0%			
Estonia	84.6		84.6	2%	88.4	29.5	78.5	117.8	196.3	2%	25	40	14.3	4.8	26.2	19.1	45.3	2%	25	58	16
Finland		39.4	39.4	1%	33.3	43.5	74.0	76.8	150.7	1%	57	49	8.2	10.7	44.9	19.0	63.9	2%	57	70	25
France	34.3	181.8	216.1	5%	210.4	465.5	313.3	675.8	989.1	12%	69	32	11.5	13.1	46.4	24.6	71.0	3%	53	65	4
Germany	96.9	59.0	155.9	4%	104.2	56.3	116.6	160.5	277.2	3%	35	42	15.1	11.1	76.9	26.2	103.0	3%	42	75	16
Greece	176.8	31.0	207.8	5%	142.8	46.5	35.1	189.3	224.4	3%	25	16	13.7	4.6	21.9	18.2	40.2	2%	25	55	10
Hungary	34.3	0.6	34.9	1%	30.2	10.2	24.7	40.4	65.1	1%	25	38	2.4	0.8	2.4	3.2	5.6	0%	25	43	8
Ireland		42.3	42.3	1%	36.0	17.8	33.2	53.8	86.9	1%	33	38	4.0	4.0	23.2	8.0	31.2	1%	50	74	15
Italy	318.3	106.1	424.3	10%	325.0	276.1	202.4	601.1	803.5	11%	46	25	69.6	56.9	116.3	126.5	242.8	14%	45	48	21
Latvia	125.0		125.0	3%	133.5	44.5	62.0	178.1	240.0	3%	25	26	28.8	9.6	27.6	38.4	65.9	4%	25	42	22
Lithuania	54.7		54.7	1%	47.6	15.2	24.2	62.8	87.0	1%	24	28	14.3	4.8	18.7	19.1	37.7	2%	25	49	30
Malta	8.4		8.4	0%	7.9	2.7	7.1	10.6	17.6	0%	25	40	1.9	0.6	5.0	2.5	7.5	0%	25	67	23
Netherlands		48.6	48.6	1%	52.5	80.3	106.1	132.8	238.8	2%	60	44	1.3	1.0	4.9	2.3	7.2	0%	43	68	2
Poland	734.1		734.1	17%	666.5	222.2	276.3	888.7	1165.0	16%	25	24	88.5	29.5	99.3	117.9	217.2	13%	25	46	13
Portugal	223.9	22.5	246.5	6%	218.7	69.4	144.6	288.1	432.7	5%	24	33	55.2	23.4	86.9	78.6	165.5	9%	30	53	27
Romania	230.7		230.7	5%	153.7	51.2	155.8	204.9	360.7	4%	25	43	16.3	5.4	14.5	21.7	36.1	2%	25	40	11
Slovakia	12.7	1.0	13.7	0%	10.6	3.7	11.7	14.3	26.1	0%	26	45	3.1	1.1	4.3	4.2	8.6	0%	26	51	29
Slovenia	21.6		21.6	1%	18.6	6.2	5.9	24.7	30.6	0%	25	19	2.9	1.0	2.6	3.9	6.5	0%	25	40	16
Spain	945.7	186.2	1,131.9	26%	870.3	467.5	551.3	1337.8	1889.1	24%	35	29	185.1	103.6	399.3	288.8	688.1	32%	36	58	22
Sweden		54.7	54.7	1%	56.5	50.0	52.4	106.4	158.8	2%	47	33	5.1	5.1	22.4	10.2	32.6	1%	50	69	10
United Kingdom	43.2	94.7	137.8	3%	112.9	94.7	167.4	207.5	375.0	4%	46	45	23.8	19.5	80.1	43.3	123.5	5%	45	65	21
<b>Total</b>	<b>3,252.4</b>	<b>1,026.3</b>	<b>4,304.9</b>	<b>100%</b>	<b>3,438.2</b>	<b>2,120.1</b>	<b>2,547.6</b>	<b>5,558.3</b>	<b>8,106.0</b>	<b>100%</b>	<b>38</b>	<b>31</b>	<b>574.2</b>	<b>315.9</b>	<b>1,146.0</b>	<b>890.1</b>	<b>2,036.0</b>	<b>100%</b>	<b>35</b>	<b>56</b>	<b>16</b>

Data source: DG MARE database on EFF commitments

**Table 6 - Distribution by Axis of the total amount of EFF money committed from the 1st of January 2007 to the 31th of May 2014, by EU MS**

	Axis 2 - Aquaculture, inland fishing, processing and marketing of fishery and aquaculture products				Axis 1 - Measures for the adaptation of the fishing fleet	Axis 3 - Measures of common interest	Axis 4 - Sustainable development of fisheries areas	Axis 5 - Technical assistance
	Measure 2.3 - Fish processing and marketing		Measure 2.1 - Measures for the adaptation of the fishing fleet	Measure 2.2 - Inland fishing				
	Actions 1 + 2	Actions 3 + 4						
Austria	33.2%	6.3%	59.1%	0.3%	0.0%	0.2%	0.0%	0.9%
Belgium	0.9%	0.6%	0.7%	0.0%	56.9%	32.4%	6.2%	2.3%
Bulgaria	9.2%	0.0%	43.5%	0.0%	8.3%	22.6%	14.9%	1.5%
Cyprus	5.8%	0.0%	5.0%	0.0%	37.0%	44.7%	4.3%	3.1%
Czech Republic	6.0%	0.0%	55.4%	0.0%	0.0%	34.6%	0.0%	4.0%
Denmark	-	-	-	-	-	-	-	-
Estonia	16.2%	0.0%	13.9%	1.8%	17.1%	24.1%	21.4%	5.5%
Finland	24.7%	0.0%	15.7%	8.4%	4.4%	36.1%	9.2%	1.6%
France	4.0%	1.5%	6.1%	0.1%	32.8%	53.8%	1.2%	0.4%
Germany	14.0%	0.5%	13.2%	0.3%	1.3%	59.2%	9.4%	2.2%
Greece	8.1%	1.5%	2.1%	1.2%	34.5%	37.2%	10.6%	4.8%
Hungary	7.9%	0.0%	86.0%	0.3%	0.0%	0.2%	0.0%	5.6%
Ireland	11.1%	0.0%	1.8%	0.0%	77.5%	8.9%	0.7%	0.1%
Italy	21%*		7.7%	0.1%	44.1%	18.6%	3.4%	4.6%
Latvia	21.5%	0.0%	23.1%	0.1%	19.5%	23.2%	8.3%	4.3%
Lithuania	29.8%	0.2%	24.1%	7.4%	9.0%	10.6%	13.1%	5.7%
Malta	11.7%	11.7%	0.0%	3.9%	37.7%	29.5%	0.0%	5.5%
Netherlands	2.0%	0.5%	6.0%	2.0%	28.1%	42.5%	13.7%	5.2%
Poland	12.8%	0.4%	15.7%	0.4%	18.4%	25.3%	23.9%	3.1%
Portugal	23.8%	1.5%	9.5%	0.0%	21.9%	33.9%	5.9%	3.5%
Romania	11%*		73.4%	0.1%	1.2%	9.4%	2.6%	2.7%
Slovenia	15.8%	0.0%	18.0%	0.0%	8.3%	37.8%	10.8%	9.3%
Slovakia	29.2%	0.0%	60.6%	0.0%	0.0%	5.0%	0.0%	5.3%
Spain	17.7%	3.6%	6.0%	0.0%	42.1%	25.0%	3.4%	2.2%
Sw eden	8.9%	0.1%	9.2%	0.6%	25.1%	37.3%	14.4%	4.3%
United Kingdom	19.2%	1.9%	7.2%	0.0%	12.2%	50.4%	7.2%	1.8%
<b>EU average</b>	<b>15.0%</b>	<b>1.7%</b>	<b>14.4%</b>	<b>0.4%</b>	<b>27.6%</b>	<b>28.5%</b>	<b>9.3%</b>	<b>3.1%</b>

Legend:

Action 1: Increasing the processing capacity (construction of new units and/or extension of existing units)

Action 2: Construction, extension, equipment and modernisation of processing units;

Action 3: Construction of new marketing establishment

Action 4: Modernisation of existing marketing establishments

Data source: DG MARE database on EFF commitments

**Table 7: The EFF support for fish processing in comparison to the rest of the fisheries industry**

	Processing			Fish catching & aquaculture		Processing, fish catching and aquaculture			FTE Index	GVA index	GVA index (with non-specialised firms)*	FTE Index	GVA index	GVA index (with non-specialised firms)*
	a	b	c	d	e	f	g	h	i	j	k	l	m	n
	Aid/FTE (€/number)	Aid/GVA (%)	Aid/GVA (%) (with non-specialised firms)*	Aid/FTE (€/number)	Aid/GVA (%)	Aid/FTE (€/number)	Aid/GVA (%)	Aid/GVA (%) (with non-specialised firms)*	(a/f)	(b/g)	(c/h)			
Belgium	54	0.07	-	-	-	-	-	-	-	-	-	-	-	-
Bulgaria	1,471	8.05	-	2,159	4.12	1,507	58.64	-	0.98	0.14	-	0.75	0.11	-
Cyprus	5,450	18.56	7.26	3,799	0.53	3,879	47.27	37.24	1.41	0.39	0.19	1.25	0.35	0.17
Denmark	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Estonia	1,500	11.32	11.19	11,038	0.70	3,680	26.69	26.46	0.41	0.42	0.42	0.22	0.22	0.22
Finland	3,635	6.74	5.56	5,724	0.11	4,581	8.54	7.65	0.79	0.79	0.73	0.49	0.49	0.45
France	229	0.39	0.40	3,422	-	1,959	-	-	0.12	-	-	0.08	-	-
Germany	531	1.13	1.16	3,294	0.06	992	2.08	2.14	0.54	0.54	0.54	0.20	0.20	0.20
Greece	1,205	3.99	3.98	-	-	-	-	-	-	-	-	-	-	-
Ireland	427	0.69	0.66	1,741	0.03	1,141	2.04	2.00	0.37	0.34	0.33	0.32	0.29	0.29
Italy	3,701	5.67	5.37	2,221	0.07	2,469	6.66	6.55	1.50	0.85	0.82	1.26	0.71	0.69
Latvia	1,105	14.22	-	-	-	-	-	-	-	-	-	-	-	-
Lithuania	848	3.77	3.75	-	-	-	-	-	-	-	-	-	-	-
Malta	7,008	6.35	3.85	1,557	0.06	2,208	6.24	7.84	3.17	1.02	0.49	2.04	0.65	0.31
Netherlands	129	0.22	0.08	2,754	0.03	1,395	2.06	1.34	0.09	0.11	0.06	0.03	0.04	0.02
Poland	1,102	6.92	6.68	-	-	-	-	-	-	-	-	-	-	-
Portugal	1,679	2.35	1.93	1,134	0.07	1,282	4.13	3.77	1.31	0.57	0.51	0.99	0.43	0.39
Romania	3,353	1.70	1.56	7,665	1.34	6,453	10.63	10.52	0.52	0.16	0.15	0.45	0.14	0.13
Slovenia	2,128	4.48	3.94	20,927	0.52	7,473	16.42	14.88	0.28	0.27	0.26	0.22	0.21	0.21
Spain	2,286	3.25	3.44	2,681	0.12	2,555	6.80	8.02	0.89	0.48	0.43	0.68	0.36	0.33
Sweden	809	1.40	1.27	4,602	0.08	2,367	4.08	3.84	0.34	0.34	0.33	0.16	0.16	0.16
United Kingdom	330	0.35	0.33	984	0.02	610	0.85	0.81	0.54	0.41	0.40	0.37	0.28	0.27

Note: Aid refers to the total public money committed over the period 1st of January 2007 - 31th of May 2014 under the EFF measures:

- Columns a, b & c: Measure 2.3 (processing and marketing)
- Columns d & e: Measure 2.1 (aquaculture) 1.4 (small-scale coastal fishing), 1.5 (socio-economic compensations), 3.3 (fishing ports, etc.) and 3.6 (reassignment of vessels);
- Columns f, g & h: Measures 2.3 (processing and marketing), 2.1 (aquaculture), 1.4 (small-scale coastal fishing), 1.5 (socio-economic compensations), 3.3 (fishing ports, etc.) and 3.6 (reassignment of vessels);
- Columns l, m & n: the indexes are calculated using similar formula as for columns i to k. However the financial aid for "processing, fish catching and aquaculture" used in the formula includes the measures directed to the whole fisheries industry (Section 2, footnote 6 for details)

\* The GVA of firms processing fish not as a main activity is estimated based on DCF data on turnover, which are not available for all EU MS

Data source: JRC analysis based on DCF data concerning the EU fish processing industry, the EU aquaculture sector and the EU fishing fleet (MARE/A3/(2014)) and on DG MARE data on EFF commitments

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