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# Analysis of Profitability of the EU Aquaculture Sector

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## **Summary**

In 2009, the EU aquaculture turnover was more than half of the EU fisheries turnover. Despite the growing importance and the high priority assigned by the EU policy to the development of aquaculture little attention has been given to the study the economic performance of the sector at EU level, and the few studies that have been carried out on this topic show different results. In this report we analyse by country, segment and main species, financial and accounting data for 2006, 2009 and 2010 of EU aquaculture companies, extracted from the Amadeus database. The analysis gives an additional perspective on the economic performance of the sector in respect of the 2012 report on EU Aquaculture from the Scientific, Technical and Economic Committee for Fisheries (STECF). The results show that in 2009 the overall profitability of the EU aquaculture was of +4.3%. The highest profitability was recorded by companies in the marine segment in respect of freshwater and shellfish. The comparison of data for the same companies between 2006, 2009 and 2010 indicates that after the economic downturn in 2009 aquaculture companies started to recover profits in 2010 in almost all segments and countries.

## Introduction

The EU (27) aquaculture production accounted in 2009 for 1.30 million tonnes<sup>1</sup> (EUROSTAT, 2011). The main species produced were mussels (blue and Mediterranean mussels), rainbow trout, Atlantic salmon, oysters, gilthead sea bream, common carp and European sea bass (EUROSTAT, 2011).

For the same year, FAO (2011) estimated the value of the EU aquaculture production at around 4.30 billion US\$, or 3.1 billion Euros.

STECF (2012) indicated that in the EU there are around 14-15,000 companies whose main activity is aquaculture production. In 2009 these companies generated a Gross Value Added of almost 270 million Euros. The turnover for the EU-22 aquaculture sector was of 3.33 billion Euros in 2009; that turns into 3.42 billion Euros when accounting also for the EU landlocked countries<sup>2</sup>. Based on these figures the turnover from the EU aquaculture sector represents more than half of the EU fisheries turnover<sup>3</sup>.

The growing importance of aquaculture and its potential to compensate for stagnating fishery supply and support income and employment in coastal and rural areas have been recognised by the EU policy. The reform of the Common Fishery Policy aims to boost the growth of the sector by setting strategic guidelines, common priorities and exchange of best practice and by giving prominence to aquaculture in the proposal for the European Maritime and Fisheries Fund.

The profitability of the aquaculture sector at EU level has been examined in a study by Ernst & Young et al. (2008) with reference to 2006 data, in a report by Framian (2009) also with reference to 2006 data and recently by STECF (2012) with reference to 2008 and 2009 data.

The analysis from Ernst & Young (2008) concluded that the economic performance of aquaculture companies was globally in line with the performance in agriculture but that the structure of the sector was still too fragmented and the size of companies too small to allow economies of scale. This fragmentation is reflected by the different stage of development of aquaculture in the comparison with the poultry and pork sector which went already through a process of consolidation in the 60'. Aquaculture, with the exception of more traditional segments of extensive and shellfish aquaculture is still a relatively young and dynamic industry which has started to intensify production only in the last 20 years and therefore has still to go through this process of consolidation.

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<sup>1</sup> 1.28 million tonnes following FAO data. Total EU-27 landings from capture fisheries (including inland waters) accounted for 5.07 million tonnes (EUROSTAT, 2011).

<sup>2</sup> The turnover from the 5 landlocked countries is approximated from their production value, based on FAO 2011.

<sup>3</sup> The fisheries turnover is estimated to be 6.5 billion Euros in 2009 (STECF, 2011a).

## Data

The main data source used in this study is the Amadeus database managed by Bureau van Dijk (2012). The database covers firm-level accounting data in a standardised financial format from 38 European countries. It includes financial information (balance sheet and profit and loss account), classification according to industry activity codes, legal form, legal status and a brief description of the main lines of activities for almost 9 million of companies. The data is collected mainly from national company registers and public balance declarations.

In the database the companies are classified with the three-digit NACE code (The European standard of industry classification). The NACE Rev 2 code 032 was used to select from the database the companies having aquaculture as their main economic activity.

The annual data extracted from the Amadeus database<sup>4</sup> for the years 2009, 2010 and 2011 was combined with 2006 data from a previous report by Ernst & Young (2008), which was also based on the same database. The 2009 data refers to more than 1,000 companies (1,024) for a total turnover of almost 2.5 billion Euros, which represents 75% of the total EU-27 aquaculture sector turnover in 2009 (based on STECF report 2012)<sup>5</sup>.

For more than 800 companies (802) the data was available for both 2009 and 2010, and representing 67% of all EU-27 aquaculture sector turnover. For a smaller group of companies data was available for several years combinations from 2006 to 2011 (295 companies for the years 2006 and 2009; 239 companies for the years 2006, 2009 and 2010; 29 companies for the years 2006, 2009 and 2011).

Table 1 gives a summary of the data used in this study. Data is classified by single years (2006, 2009, 2010 and 2011) and years' combinations for which records were available for the same group of companies.

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<sup>4</sup> For 2011 data was only available for a reduced number of companies at this time stage.

<sup>5</sup> Other approaches to measure the representativeness of the panel are not so favourable, such as the number of companies (STECF, 2012, estimates between 14 and 15 thousand the number of companies in the sector).

Table 1: Summary of the main data available

Years	N. companies	Turnover ('000 €)	EBIT ('000 €)
2006		510	1,738,826
2009		1024	2,495,624
2010		996	2,513,175
2011		64	64,548
2006 & 2009		295	1,205,982
			1,365,321
2009 & 2010		802	2,223,027
			2,472,491
2009 & 2011		63	52,203
			125,357
2006, 2009 & 2010		239	1,129,880
			1,285,305
			1,444,959
2006, 2009 & 2011		29	27,484
			30,098
			39,352

## Methodology

The main variables extracted from the Amadeus database were *turnover*, *EBIT* and *number of employed persons*.

The *turnover* comprises all market sales of goods and services supplied to third parties (EC, 1998). The *EBIT* (EBIT, Earnings Before Interest and Taxes) or operating profit is a measure of a firm's profitability that excludes interest and income tax expenses, and is calculated by subtracting the operating expenses from the revenues.

The *EBIT to turnover ratio* (commonly referred as *EBIT ratio* or *EBIT margin*) gives an assessment of the profitability by comparing the earnings with the revenues and is indicating the percentage of the remaining revenues (earnings) after the operating expenses.

In the Economic Performance of the EU Aquaculture Sector report (STECF, 2012), EBIT was calculated, according to the Structural Business Statistics definition (EC, 1998), as follows:

$$\text{EBIT} = \text{Turnover} + \text{Other Income} + \text{Subsidies} - \text{Energy costs} - \text{Wages and salaries} - \text{Imputed value of unpaid labour} - \text{Livestock costs} - \text{Feed costs} - \text{Repair and maintenance} - \text{Other Operational costs} - \text{Depreciation of capital}.$$

It should be noted that the Amadeus data base does not take into account the *imputed value of unpaid labour*, but contains the *extraordinary costs/income*, which are not part from the operating expenses. This is because the Amadeus data base follows a strict financial-accounting perspective, while the STECF report follows a more economic perspective, since it is interested to know the contribution of the sector to the society (EC, 1998; STECF, 2012).

The attribution of companies to main segments (marine, freshwater, shellfish) was carried out on the basis of the NACE codes. Companies are classified on the basis of the last number of the NACE code between marine and freshwater aquaculture (A.3.2.1 stands for marine aquaculture, A.3.2.2 stands for freshwater aquaculture, while A3.2.0 is generically indicating aquaculture<sup>6</sup>). The main farmed species were identified looking at the narrative description of area of activity for each company when available from the Amadeus database.

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<sup>6</sup> 18 companies were classified A.3.2.0.

## Results

### General

In 2009, the overall profitability of the aquaculture sector measured by the *EBIT ratio*, was estimated to be 4.26%.

*Table 2: Profitability (EBIT ratio) of the EU aquaculture sector by year*

Years	N. companies	Turnover ('000 €)	EBIT ('000 €)	EBIT ratio (%)
2006	510	1,738,826	189,675	10.91
2009	1024	2,495,624	106,318	4.26
2010	996	2,513,175	186,485	7.42
2011	64	64,548	5,245	8.13
2006 & 2009	295	1,205,982	139,042	11.53
		1,365,321	65,526	4.80
2009 & 2010	802	2,223,027	109,001	4.90
		2,472,491	185,331	7.50
2009 & 2011	63	52,203	2,798	5.36
		125,357	9,990	7.97
2006, 2009 & 2010	239	1,129,880	134,638	11.92
		1,285,305	65,661	5.11
		1,444,959	98,043	6.79
2006, 2009 & 2011	29	27,484	2,088	7.60
		30,098	2,133	7.09
		39,352	3,307	8.40

From table 2 it can be seen that 2009 was a negative year for the EU aquaculture sector since the profitability (*EBIT ratio*) was the lowest. The profitability was 10.91% in 2006, 7.42% in 2010 and 8.13% in 2011<sup>7</sup>.

This observation is confirmed by the profitability trend for companies where data is available for multiple years. In all groups the economic performance was lower in 2009 in respect of 2006, 2010

<sup>7</sup> The low number of companies for which data is available for 2011 require caution on the conclusions for this particular year.



and 2011. The results indicate that after the economic downturn in 2009 profits increased in 2010 and 2011. Indeed, the business volume (turnover) increased by more than 11.2% between 2009 and 2010; while for the period 2006-9 the growth was of 4.4% per year.

### *Profitability by segment*

The profitability of EU aquaculture by marine and freshwater environment was analysed looking at the NACE classification available from the Amadeus database while the companies involved in shellfish aquaculture were identified looking at the narrative description of the main business area of the company. This description was available only for a limited number of companies.

In 2006 there were 76 companies listed as shellfish producers for a total of 6 countries and 112 million Euros of turnover. For all these companies data was available for 2006 and 2009 while for only 55 of them data was available also for 2010 as can be seen from table 3.

*Table 3: Profitability (EBIT ratio) of the EU aquaculture sector by environment*

	N. companies	2006	2009	2010
Marine	111	12.9	5.2	7.0
Freshwater	67	10.2	4.8	6.5
Shellfish	55	4.5	3.2	3.3
TOTAL	238	11.9	5.1	6.8

The profitability by segment shows the same temporal evolution as the overall profitability with lower values in 2009 in respect of 2006 and 2010. In all years marine aquaculture has a higher profitability than freshwater and shellfish aquaculture.

The analysis of economic performance for the shellfish sector in the STECF report (STECF, 2012), included data for 10 countries and for more than 7 thousand companies, accounting for around 883 million Euros of turnover. The average turnover per company in this study was of 1.5 million Euros in respect to 0.1 million Euros of turnover in the STECF report. This indicates that the panel considered in this study has limited representativeness for the shellfish sector which is characterised by a strong diversity and the coexistence of both companies with high investments and sole or family run businesses.

### *Profitability by species/segment*

When looking at the main species produced, only data from 294 companies was available (out of the data from 1024 companies available for 2009 and 802 from 2009 and 2010). For certain species robustness of the estimates is poor since data refers to a reduced number of companies and has high variability.

*Table 4: Profitability (EBIT ratio) of the EU aquaculture sector by segment*

Species	N. companies	2009			2010		
		Turnover	EBIT	EBIT margin	Turnover	EBIT	EBIT margin
		(‘000 €)	(‘000 €)	(%)	(‘000 €)	(‘000 €)	(%)
Eel	3	5,719	412	7.2	5,644	100	1.8
Seabream, seabass, turbot	95	796,196	29,500	3.7	912,706	13,873	1.5
Carp	15	22,374	1,249	5.6	22,992	949	4.1
Shellfish	55	82,128	2,661	3.2	89,307	2,979	3.3
Sturgeon	1	23,001	565	2.5	23,854	546	2.3
Pisciculture	15	164,591	10,182	6.2	172,126	39,772	23.1
Lake fish	1	1,803	131	7.2	2,308	252	10.9
Replenishment	2	792	-12	-1.5	815	-5	-0.6
Salmon	3	121,063	19,033	15.7	143,735	37,681	26.2
Tuna	1	10,380	731	7.0	9,865	-1,343	-13.6
Trout	48	57,258	1,209	2.1	61,607	3,238	5.3
Non Available	563	937,722	43,340	4.6	1,027,532	87,288	8.5
TOTAL	802	2,223,027	109,002	4.9	2,472,491	185,331	7.5

From table 4 it can be observed that even if the overall profitability increased from 2009 to 2010, the profitability of eel, sea bream, sea bass and turbot, carp segments decreased between these two years. More detailed data by activity and country for the year 2009 is given in Annex.

### *Profitability by country*

From table 5 it can be observed that for countries with a relatively high number of companies, the profitability of the aquaculture sector diverges slightly from the overall profitability (EBIT ratio of

4.3%). While most countries have profitability between 4 and 10%, South-Western countries presented worst results (Portugal -3.2%, Spain -1.7% and France 0.5%).

*Table 5: Profitability (EBIT ratio) of the EU aquaculture sector by country for 2009*

Country	N. companies (Number)	Turnover (‘000 €)	EBIT (‘000 €)	EBIT margin (%)	Employees (Number)
Bulgaria	6	2,624	290	11.0	150
Cyprus	2	17,561	1,308	7.4	180
Czech Republic	25	55,282	3,968	7.2	922
Denmark	4	55,202	7,093	12.8	123
Estonia	10	1,654	99	6.0	23
Finland	28	27,087	2,461	9.1	158
France	197	227,907	1,190	0.5	1,248
UK	16	530,232	51,417	9.7	1,540
Greece	82	718,067	31,847	4.4	3,769
Hungary	35	29,047	2,485	8.6	482
Ireland	1	726	14	2.0	8
Italy	98	209,130	3,266	1.6	1,456
Latvia	2	745	745	100.0	28
Lithuania	2	1,131	210	18.6	47
Netherlands	2	83,734	-1,056	-1.3	6
Poland	7	5,251	553	10.5	119
Portugal	36	28,123	-901	-3.2	269
Romania	255	102,261	5,305	5.2	1,872
Slovakia	5	10,908	-140	-1.3	68
Slovenia	1	1,197	25	2.1	15
Spain	155	358,395	-6,164	-1.7	2,090
Sweden	55	29,359	2,306	7.9	179
Total	1,024	2,495,624	106,318	4.3	14,752

A possible explanation for the high turnover per employee in the Netherlands is that the two companies examined are also involved in the distribution and processing of seafood; in this case it is

logical to expect a large volume/rotation of products, which leads to a high turnover but also high costs as can be seen from their negative EBIT. This indicator is not a desired measure of labour productivity, but of gross value added per employee (STECF, 2011b).

Another surprising value is the 100% in the EBIT ratio for Latvia. This result relates to two freshwater aquaculture companies with a total of 28 employees, but no other information about the companies is known, nor is detailed data for this country available from the STECF report (STECF, 2012).

Table 6 shows the profitability by country and year giving the possibility to understand which countries have recovered from the 2009 downturn.

*Table 6: Profitability (EBIT ratio) of the EU aquaculture sector by country for 2009 and 2010*

Country	2009			N. companies	2010		
	Turnover	EBIT	EBIT margin		Turnover	EBIT	EBIT margin
	(‘000 €)	(‘000 €)	(%)		(‘000 €)	(‘000 €)	(%)
Bulgaria	2,624	290	11.0	6	4,003	1,150	28.7
Cyprus	17,561	1,308	7.4	2	18,960	1,235	6.5
Czech Republic	46,241	3,082	6.7	20	47,820	2,259	4.7
Denmark	55,202	7,093	12.8	4	64,815	24,128	37.2
Estonia	988	115	11.7	8	1,222	17	1.4
Finland	13,679	1,392	10.2	14	15,881	2,625	16.5
France	168,298	2,651	1.6	141	177,438	5,673	3.2
UK	528,076	52,604	10.0	15	614,427	116,765	19.0
Greece	704,610	32,058	4.5	76	808,643	8,014	1.0
Hungary	27,921	2,455	8.8	31	29,967	1,847	6.2
Italy	167,702	4,823	2.9	80	196,437	3,738	1.9
Latvia	745	745	100.0	2	734	734	100.0
Lithuania	1,131	210	18.6	2	1,183	330	27.9
Netherlands	45,844	-2,394	-5.2	1	34,880	-314	-0.9
Poland	3,529	419	11.9	2	3,797	215	5.7
Portugal	17,857	-1,275	-7.1	28	35,518	3,716	10.5
Romania	99,854	4,948	5.0	217	50,463	2,862	5.7
Slovakia	10,709	-204	-1.9	4	6,370	-205	-3.2
Slovenia	1,197	25	2.1	1	1,347	105	7.8

Spain	290,007	-2,838	-1.0	117	341,587	9,266	2.7
Sweden	19,252	1,497	7.8	31	16,997	1,171	6.9
Total	2,223,027	109,002	4.9	802	2,472,491	185,331	7.5

From table 6 it can be seen that overall profitability increased in Portugal, Spain and France while worsened in Czech Republic, Greece, Hungary and Italy.

Overall the turnover from the aquaculture sector has increased by 11.2% from 2009 to 2010. While the turnover from the aquaculture sector in most EU countries has increased, for the Netherlands, Romania, Slovakia and Sweden it has significantly decreased. More detailed data on EBIT margin by segment and country for the year 2009 and 2010 is given in Annex.

## Discussion

The profitability of the EU aquaculture sector for 2009 estimated in this study is 4.26%, which is significantly higher than the STECF report (STECF, 2012).

STECF (2012) estimated the profitability based on the Return on Investment (ROI) of the EU aquaculture sector of -1.58% (calculated using data from 16 Member States) for 2009. The EBIT of the EU aquaculture sector was -28,226 thousand Euros (data from 16 countries) in 2009 (STECF, 2012). This would correspond to an EBIT ratio of -1.0% (for the 16 Member States).

As stated in the STECF report (STECF, 2012), the overall negative results are driven by the important losses of the Spanish and Maltese aquaculture sectors. In fact, for the 16 countries having estimates of the EBIT in the STECF report, 12 had profits (a positive EBIT) and only 4 had losses (negative EBIT).

Reasons for the discrepancies between this study and the STECF report (STECF, 2012) could be attributed to:

- the lack of Maltese data in this study;
- the fact this study is based on panel data from 1,024 mostly medium and large size companies rather than on a statistical sampling including part time and small companies;
- different treatment in the two studies for “Imputed value of unpaid labour” and “extraordinary costs/income”;
- the data of Spanish companies in this study presenting a better economic performance in respect of the Spanish data in the STECF report;

- the fact that economic accounts in the Amadeus database does not allow a separation of the area of business related to aquaculture production from other activities within the same company.

In this study data from Malta is not included while in the STECF report it had a negative impact on the overall EU profitability (STECF, 2012). There is also missing data from Austria, Belgium, Germany and Luxemburg; however, this should not represent a major issue considering that these five countries represent less than 4% of the total EU turnover in aquaculture (FAO, 2011).

The STECF report (STECF, 2012) included the Imputed value of unpaid labour” as a cost, but not the “extraordinary costs/income”. This can partially explain the lower profitability in the STECF report where imputed value of unpaid labour was considered as a cost. This difference can be very large in certain segments that are very labour intensive, such a shellfish gathering. By not considering the “Imputed value of unpaid labour” and adding the “extraordinary costs/income” on the EBIT, in order to harmonise the indicator with the one extracted from the Amadeus data base, the EBIT would be 9,029 thousand Euros and the EBIT ratio 0.3%.

The Spanish profitability in 2009 was estimated to be -14.8% in the STECF report, while in this analysis it was estimated to be -1.7%. The fact that in this study Spanish companies present a better economic performance would indicate a data quality issue for Spanish data in the STECF report.

Overall the companies forming the panel in this study have a higher representativeness in terms of percentage of turnover than the data used to estimate the profitability in the STECF report (STECF, 2012). The STECF report was based on data from 16 Member States and was not covering freshwater aquaculture and data from Austria, Belgium, Czech Republic, UK, France, Greece, Hungary Latvia, Lithuania, Luxemburg and Slovakia.

The turnover of the selected companies in this study in many cases exceeds the value of production reported in FAO statistics for specific segments and countries. This indicates that a relevant proportion of the turnover of the examined companies is generated from other activities than the domestic aquaculture production, such as production of juveniles, production of feedstuff, fishing activities, direct commercialization of sea food products and production in foreign countries.

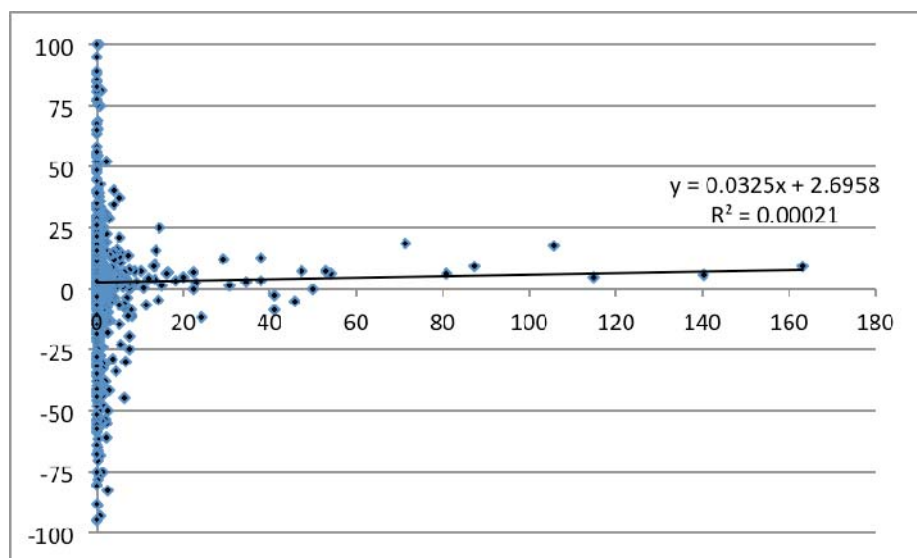
The consideration of data from the panel while representing a large share of the EU aquaculture turnover<sup>8</sup> could constitute a bias if profitability is shown to be dependent (affected) from the turnover. There could be some economies of scale so that the largest companies, with highest turnover could exploit and obtain larger profits. To check for the presence of this potential bias in Figure 1 the

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<sup>8</sup> Moreover, data from the smallest companies presents more problems due to the lack of certain parameters or very low scale.

profitability is plotted against the turnover. The figure shows that there is a higher variability on the profitability for smaller companies with smaller turnover. The almost flat trend line and its very small  $R^2$  indicate that there is no significant relation between profitability and turnover for the EU aquaculture companies. On the basis of this observation it can be concluded that the panel data uses in the analysis should not suffer of a bias linked to an overrepresentation of large companies.

*Figure 1: Relation between profitability and turnover of the EU aquaculture companies for 2009; x-axis turnover and y-axis EBIT ratio*



STECF (2012) also estimated that direct subsidies accounted for 22.3 million Euros in 2009 (data from 17 MS); without these subsidies the profitability instead of -1.58% (data from 16 MS) would have been of -2.84% (data from 16 MS). Therefore, direct subsidies have a positive trend on the EU aquaculture sector, but their effect is rather limited.

## Conclusions

The profitability of 4.26% in 2009 measured with the EBIT margin was the lowest of all years analysed; the profitability was 10.91% in 2006, 7.42% in 2010 and 8.13% in 2011. Accordingly, STECF (2012) showed a low profitability for both 2008 and 2009. The ROI was - 3.09% (data from 12 MS) in 2008; while was - 3.56% in 2009 (data from the 12 MS for which data is available in 2008).

The low economic performance in 2008 and 2009 could be attributed to the economic crisis that hit the EU in 2008-2009. The results of this study indicate that companies started to recover profits in 2010 in almost all segments and countries.

Especially, South-Western countries (Portugal, Spain and France) have shown the worst economic performance. A possible explanation is that these countries were particularly affected by reductions in their internal demand for seafood due to the economic crisis. Being countries with high seafood consumption the impact of a reduction in internal demand was particularly relevant on the domestic aquaculture production. Other countries like Greece, also affected by the economic crisis, had the profitability of their aquaculture industry less worsened thanks to a higher percentage of their production being exported and/or because they were expanding their production abroad.

This study by considering a selected panel of companies has lower statistical representativeness in respect of the more rigorous and comprehensive data collection under the EU Data Collection Framework. In particular small companies and the shellfish sector may be underrepresented. Despite this limitation the panel has an overall high coverage in terms of turnover (75%) and includes also freshwater aquaculture. The availability of data for individual companies over time gave the unique opportunity of examining the trend of performance during last years. The indications emerging from this study offer a more positive outlook on the economic performance of EU aquaculture sector which appears to recover profitability after the 2009 crises. The findings of this study while not meant to substitute the assessment of economic performance for EU aquaculture by the STECF may represent a useful point of reference especially in this phase of initial implementation of the EU Data Collection Framework for aquaculture.



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## Annex

### *Turnover, EBIT and EBIT margin and companies in 2009 by activity and country*

		Turnover	EBIT	EBIT margin	Employees	Companies
Country	activity	('000 €)	('000 €)	(%)	(Number)	(Number)
Bulgaria	No Available	2624	290	11	150	6
Cyprus	Bar, dorade, Turbot	5555	804	14.5	30	1
Cyprus	No Available	12007	503	4.2	150	1
Czech Republic	Carpe	10625	496	4.7	153	3
Czech Republic	Conchyliculture	2104	398	18.9	38	1
Czech Republic	No Available	42553	3074	7.2	731	21
Denmark	Truite	107	16	14.6	3	1
Denmark	No Available	55095	7077	12.8	120	3
Estonia	Anguille	370	5	1.3	2	1
Estonia	Truite	344	63	18.4	4	3
Estonia	No Available	940	31	3.3	17	6
Finland	Pisciculture	1234	56	4.5	7	1
Finland	Truite	14803	1741	11.8	68	9
Finland	No Available	11050	664	6	83	18
France	Bar, dorade, Turbot	15741	-456	-2.9	132	5
France	Carpe	3267	6	0.2	17	4
France	Conchyliculture	66734	2061	3.1	311	37
France	Pisciculture	1455	9	0.6	3	2
France	Repeuplement	792	-12	-1.5	8	2
France	Truite	45323	-193	-0.4	156	26
France	No Available	94595	-224	-0.2	621	121
UK	Pisciculture	140176	8301	5.9	392	1
UK	Saumon	121063	19033	15.7	380	3
UK	No Available	268993	24083	9	768	12
Greece	Bar, dorade, Turbot	661772	30044	4.5	3448	62
Greece	Conchyliculture	5137	60	1.2	2	1
Greece	Pisciculture	6538	450	6.9	50	1
Greece	Thon	10380	731	7	25	1
Greece	Truite	1761	-99	-5.6	18	1
Greece	No Available	32479	662	2	226	16
Hungary	Carpe	8482	747	8.8	190	8
Hungary	Truite	295	36	12.4	6	1
Hungary	No Available	20270	1701	8.4	286	26
Ireland	No Available	726	14	2	8	1
Italy	Bar, dorade, Turbot	55532	3543	6.4	381	15
Italy	Conchyliculture	32752	-1327	-4.1	480	29

Italy	Esturgeon	23001	565	2.5	109	1
Italy	Truite	2469	123	5	6	2
Italy	No Available	95376	361	0.4	480	51
Latvia	No Available	745	745	100	28	2
Lithuania	No Available	1131	210	18.6	47	2
Netherlands	No Available	83734	-1056	-1.3	6	2
Poland	No Available	5251	553	10.5	119	7
Portugal	Bar, dorade, Turbot	1740	-334	-19.2	24	4
Portugal	Conchyliculture	1432	152	10.6	8	2
Portugal	Pisciculture	1732	-327	-18.9	29	4
Portugal	Truite	1081	35	3.2	15	1
Portugal	No Available	22138	-428	-1.9	193	25
Romania	No Available	102261	5305	5.2	1872	255
Slovakia	Truite	1843	43	2.3	38	1
Slovenia	No Available	1197	25	2.1	15	1
Spain	Anguille	3865	247	6.4	14	1
Spain	Bar, dorade, Turbot	77966	-4486	-5.8	383	15
Spain	Conchyliculture	4170	4	0.1	47	6
Spain	Pisciculture	7946	1442	18.1	65	3
Spain	Truite	5352	112	2.1	48	8
Spain	No Available	259095	-3482	-1.3	1533	122
Sweden	Anguille	1484	161	10.8	6	1
Sweden	Pisciculture	10122	685	6.8	53	12
Sweden	Poisson de lac	3791	510	13.4	43	2
Sweden	Truite	4986	84	1.7	28	13
Sweden	No Available	8977	866	9.7	49	27

*EBIT margin and companies in 2009 and 2010 by segment and country*

	Freshwater			Marine		
	EBIT margin 09	EBIT margin 10	companies	EBIT margin 09	EBIT margin 10	companies
	(%)	(%)	(Number)	(%)	(%)	(Number)
Bulgaria	9.2	29.4	5	22.3	22.2	1
Cyprus				7.4	6.5	2
Czech Republic	9.4	5.8	16	-20.6	3.5	1
Denmark	15.5	38.5	2	12.0	36.4	2
Estonia	11.7	1.4	8			
Finland	10.1	17.1	10	11.4	9.5	4
France	0.4	2.7	50	1.8	3.3	91
UK				10.0	19.0	15
Greece	16.0	13.2	1	4.5	1.0	75
Hungary	9.0	6.3	25	1.0	1.4	6
Italy	5.1	6.2	13	1.3	-1.5	54
Latvia	100.0	100.0	2			
Lithuania	18.6	27.9	2			
Netherlands				-5.2	-0.9	1
Poland	11.9	5.7	2			
Portugal	-0.2	0.4	2	-7.6	10.8	26
Romania	4.7	5.4	205	29.3	21.7	12
Slovakia	-1.9	-3.2	4			
Slovenia				2.1	7.8	1
Spain	-0.6	4.1	24	-1.0	2.5	93
Sweden	8.0	6.7	24	5.0	8.5	7
TOTAL	5.6	9.2	395	4.8	7.4	391

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Title: Analysis of Profitability of the EU Aquaculture Sector

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## Abstract

In 2009, the EU aquaculture turnover was more than half of the EU fisheries turnover. Despite the growing importance and the high priority assigned by the EU policy to the development of aquaculture little attention has been given to the study the economic performance of the sector at EU level, and the few studies that have been carried out on this topic show different results. In this report we analyse by country, segment and main species, financial and accounting data for 2006, 2009 and 2010 of EU aquaculture companies, extracted from the Amadeus database. The analysis gives an additional perspective on the economic performance of the sector in respect of the 2012 report on EU Aquaculture from the Scientific, Technical and Economic Committee for Fisheries (STECF). The results show that in 2009 the overall profitability of the EU aquaculture was of +4.3%. The highest profitability was recorded by companies in the marine segment in respect of freshwater and shellfish. The comparison of data for the same companies between 2006, 2009 and 2010 indicates that after the economic downturn in 2009 aquaculture companies started to recover profits in 2010 in almost all segments and countries.

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