

THE FINANCIAL PERFORMANCE OF EUROPEAN COMPANIES: A COMPARATIVE APPROACH

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The present study empirically examines the financial performance of European companies and tries to identify the profitability differences that exist between: enterprises with same profile, economic sectors and between several countries from the European Union. Based on data of the year 2009, the newest available on the BACH-ESD database, three financial performance main indicators are being calculated, namely: Return on Assets, Return on Equity and Net Margin. Results are discussed and compared with the ones obtained in former similar studies and some conclusions are drawn. The most performing sectors are found to be mining, quarrying, professional, scientific and technical activities, utilities and IT&C. The sectors that perform the worst are transport and storage, agriculture, accommodation and food service. As shown in other studies the most profitable and competitive companies in the sample belong to the Nederland, Belgium and Austria and the least profitable ones are situated in Italy and Portugal. As a complementary useful result of the study, the average values obtained for the three variables, in the various sectors considered, can be utilized for future comparisons, for assessing the financial performance of companies that belong to same sectors as those surveyed.

This paper is a dissemination of the results obtained by the author in the doctoral program “The financial performance of EU member states’ companies”, coordinator: Professor Carmen Corduneanu, PhD, carried out within West University of Timișoara, Romania, in the period October 2010- July 2012.

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1. Introduction

From the perspective of companies and their owners, obtaining profit is the ultimate objective and the main driver of company activity. Profit can be considered the result of all efforts made and the incentive necessary for sustaining further activity. Financial performance highlights the efficiency with which firms transform their revenue into income that can be afterwards distributed to shareholders. This mostly makes the difference between companies that are winners and those who are defeated in market competition. Companies that are not profitable usually end up being taken over by other more profitable ones or go bankrupt. However in terms of society as a whole, a very high profitability can signal a lack of competition in the market. Thus, if the profits outweigh by far the efforts made, the risks assumed and the value of introduced innovations, they might be the result of a lack of competition in the market, situation that adversely affects consumers and the general welfare of society.

The positive effects of financial performance are very numerous. Besides generously rewarding shareholders, profitable companies attract investments, from both foreign and domestic investors, and enhance the development of the sector in which they activate and of the economy as a whole. Profitability encourages companies to employ people, pay salaries and product goods and services. Profitable companies are those who pay high taxes and transfer a share of their profits to governments and allow means of living for country population. Financial performance is, in the same time the result of a large variety of factors (Gruian, 2010) including: company productivity,

efficiency, effectiveness, performing management, proper corporate governance, innovation and other external factors like: macroeconomic, monetary, fiscal and sectoral conditions.

The present study tries to explore in terms of financial performance the differences between European sectors and countries. It will also identify the most profitable and unprofitable industries and analyze if there are common under-performing or over-performing sectors, or sectoral performances of different countries are complementary and one country excels where another fails to succeed. The research will start with a literature review; which will present results of similar studies and mostly utilized measures of financial performance. It will continue with the empirical assessment of variables. The obtained results will be discussed and some conclusions will be drawn.

2. Literature review

The competitiveness and financial performance of European companies are the subjects of numerous studies. Most of them are financed by the European Commission through its Enterprise and Industry Directorate General. Studies are meant to highlight the past and present situation of microeconomic performance in the EU and identify the factors that influenced the way competitiveness and profitability evolved in the past period.

A recent study (European Commission, 2009) analyses the competitiveness and profitability of EU companies considering a sectoral approach. It also identifies the main sectoral drivers of performance. The period considered is 1995-2005 and the data used in the profitability analysis is from Bank for the Accounts of Companies Harmonized (BACH) and from the US Department of Commerce, Bureau of Economic Analysis. The study also verifies the similarities and differences between the US and the EU companies. A slight difference between UE and US profitability, measured by Return on Assets and Net Margin can be observed in the considered period. The EU recorded a higher profitability growth due to the dramatic lowering of corporate tax rates across the region, whereas the US saw no significant reduction in its corporate tax rate (European Commission, 2009: 18).

Authors of the same study consider that among the EU countries there is a wide disparity between the most profitable sectors and the least profitable ones. The best performing sectors are business services, utilities, mining and quarrying and other commodity based sectors and some manufacturing industries, especially the manufacture of coke, refined petroleum and nuclear fuel and the manufacture of pulp, paper and paper products which add value to the commodity producing industries of mining and forestry. At the other end of the hierarchy we can find land and air transportation, activities that had a negative average of net margin in the considered period. Other low performing industries are several manufacturing sectors, wholesale and retail trade, constructions, etc.

The most widely used indicators of financial performance are Return on Assets, Return on Equity, and Net Margin. Return on assets (ROA) is one of the most utilized financial ratios. It values the efficiency with which the assets are utilized. ROA is calculated as the ratio between net profit and company's assets, on the basis of Balance sheet information (Achim, 2010: 353).

Return on Equity (ROE) shows the efficiency with which the capital brought by investors is utilized for obtaining profit. This is also an often utilized profitability indicator utilized especially by shareholders and also named financial profitability (Colasse, 2009: 72). It is calculated by dividing the net result of the activity to company's equity. This indicator is important especially for investors, because it helps them compare company's results with those of competitors.

Net Margin (NM) or profit margin is a profitability measure that shows company's ability to transform revenue into profit and control production costs. It assesses the effectiveness with which profit is generated from the revenue through the value add management process (Bull, 2008: 24). NM is a very good indicator for comparing companies in the same industry and is sometimes used to compare business sectors to observe the differences of profitability. Yet the value of the NM can differ very much depending on company's profile. Thus companies that

belong to the wholesale industry can have net margins under 5% and be very profitable because of their turnover. On the other hand companies that belong to services, information technology or other highly innovative sectors, can have a net margin of over 25-30%.

3. Research methodology

3.1. Sample and data selection

For the comparative study we will use data from BACH-ESD, the European database of aggregate information on non-financial corporations. Data is provided by the Central Balance-Sheet Data Offices from eight countries of the European Union (EU): Austria (AT), Belgium (BE), France (FR), Germany (DE), Italy (IT), Nederland, (NL), Portugal (PT) and Spain (ES).

The sample provided by the BACH-ESD database contains a relatively large number of companies from each of the participating countries, thus the data provided has a high level of confidence and quality. The database has been used recently by many other authors (e.g. European Commission, 2009: 134; Busuioc, 2009 and others). The data is also rigorously organized and can be broken into categories including 13 private economic sectors according to the NACE rev. 2 statistical classification (classes A-N), excluding the financial intermediation class (K). The database also provides a number of 28 rates from companies' annual accounts that refer to financial structure, cash-flow and profitability. For the present financial performance comparative study we considered data from the year 2009, the newest available in the database. We compare all eight countries and all 13 business sectors. We also consider all the companies regardless of size.

3.2. Variable definition

The variables analyzed in the present comparative study are: Return on Assets (ROA), Return on Equity (ROE) and Net Margin (NM).

1. $ROE = \text{Profit or loss of the year} / \text{Capital and reserves}$

The ROE indicator corresponds to Rate no. 12, found in the Operating costs, earning and profitability rates section of the BACH-ESD and does not require additional calculations.

2. $ROA = \text{Profit or loss of the year} / \text{Total Assets}$

The ROA rate is calculated in the present study by multiplying Rate no. 12 (ROE) by Rate no. 22 of the BACH-ESD database, which is the rate between Capital & reserves and Total Assets.

3. $NM = \text{Profit or loss of the year} / \text{Net turnover}$

NM is obtained by dividing the ROA indicator, calculated above to Rate no. 16 in the Operating costs, earning and profitability rates section of the database (Net turnover / Total Assets).

4. Variable calculation and comparative analysis

The calculated variables are presented in Table 1 (ROA), Table 2 (ROE) and Table 3 (NM). Average values presented on the table margins are obtained as a weighted average (W.A.) of the three indicators presented for countries and sectors, considering the size of the Value Added (VA) in each country and sector. Thus the profitability of larger sector has a more important impact on countries' economy average profitability than the impact of a smaller one. The same rule stands for the average profitability of business sectors.

4.1. Return on assets

Table 1: Return on Assets, year 2009

NACE CODE	NAME OF NACE SECTION	COUNTRY								
		AT	BE	DE	ES	FR	IT	NL	PT	W.A.
A	Agriculture, forestry and fishing	1,36%	1,07%	n.a.	0,12%	1,19%	0,71%	2,11%	-0,56%	1,07%
B	Mining and quarrying	6,30%	10,22%	0,45%	4,22%	10,69%	5,03%	26,89%	3,08%	15,32%
C	Manufacturing	6,22%	5,47%	1,24%	0,31%	1,68%	0,28%	3,92%	0,83%	1,74%
D	Electricity, gas, steam and air conditioning supply	4,13%	2,81%	6,37%	4,94%	2,58%	4,43%	2,58%	3,37%	4,38%
E	Water supply; sewerage, waste management & remediation act.	1,72%	0,81%	3,13%	3,17%	2,66%	1,18%	0,27%	1,25%	2,23%
F	Construction	4,75%	2,94%	3,31%	-0,23%	4,28%	0,98%	4,23%	0,19%	3,04%
G	Wholesale & Retail trade; repair of motor vehic. & motorcyc.	4,05%	3,48%	4,99%	3,64%	3,67%	0,75%	4,69%	2,17%	3,48%
H	Transportation and storage	-1,92%	1,08%	0,99%	0,35%	0,70%	0,90%	1,12%	-0,71%	0,63%
I	Accommodation and food service activities	2,08%	1,19%	-1,04%	-0,73%	2,71%	-0,90%	3,72%	-1,65%	1,18%
J	Information and communication	5,06%	4,09%	2,25%	9,10%	5,50%	1,33%	4,18%	4,43%	4,13%
L	Real estate activities	0,47%	1,42%	1,45%	-0,24%	2,18%	0,81%	n.a.	0,35%	1,61%
M	Professional, scientific and technical activities	7,72%	2,68%	4,11%	6,39%	3,93%	1,33%	9,10%	3,20%	4,47%
N	Administrative and support service activities	2,13%	1,31%	3,55%	1,88%	1,65%	0,51%	2,07%	1,95%	1,66%
	W.A.	3,87%	3,45%	2,37%	2,83%	2,80%	0,91%	5,34%	1,41%	2,68%

Source: BACH-ESD database, authors' calculations

We analyze the ROA indicator first because it is the most appropriate for financial performance measurement. Unlike ROE, ROA considers all capital invested in the business, regardless its provenience. In the present case the value of ROA indicator varies from a minimum of -1.92% in the transportation and storage sector of the Austrian economy to a maximum of 26.89% in the mining and quarrying sector of the Dutch economy. Its values vary across countries and industries. The best values for ROA belongs mostly to the mining and quarrying sector, which had the best financial performance in the context of the economic and financial crisis that generated a strong growth of the raw metals demand and price. Thus The Nederland and other European countries like Belgium, Austria and Italy achieved a very high performance in the mining sector during the year 2009 due to these international conjunctures.

The second best performing sector was the one including professional, scientific and technical activities, which had an average ROA of 4.47% on overall. Best performing companies of this sector belong to The Nederland, Austria (which performed best in this sector) and Spain. Other sectors of the European with good results are utilities, information, communications and commerce. Average value of ROA for the companies included in the sample is 2.68%. This is a relatively low figure but it is acceptable considering the effects of the economic and financial crisis. We can also note that some business sectors were more affected by the crisis than others. The ones that had the lowest profitability are transportation and storage, agriculture, hotels and restaurants, real estate and even manufacturing. If we consider the overall performance of countries we can see that the most competitive ones managed to maintain the highest profitability levels. These countries are The Nederland, Austria and Belgium. Other countries with a lower level of competitiveness suffered dramatically low levels of financial performance (e.g. Italy and Portugal).

4.2. Return on Equity

Table 2: Return on Equity, year 2009

NACE CODE	NAME OF NACE SECTION	COUNTRY								
		AT	BE	DE	ES	FR	IT	NL	PT	W.A.
A	Agriculture, forestry and fishing	3,20%	3,52%	n.a.	0,25%	1,74%	2,02%	6,36%	-1,71%	2,47%
B	Mining and quarrying	25,25%	17,06%	2,26%	14,15%	17,98%	12,40%	171,61%	8,01%	79,01%
C	Manufacturing	17,25%	11,18%	4,18%	0,82%	4,75%	0,80%	6,68%	2,37%	4,53%
D	Electricity, gas, steam and air conditioning supply	10,09%	7,17%	21,38%	11,79%	8,57%	11,09%	7,29%	11,27%	12,94%
E	Water supply; sewerage, waste management & remediation act.	6,47%	2,10%	9,18%	9,06%	9,76%	3,97%	0,99%	6,26%	7,23%
F	Construction	21,71%	5,63%	20,77%	-1,16%	17,71%	4,09%	13,38%	0,93%	12,19%
G	Wholesale & Retail trade; repair of motor vehic. & motorcyc.	13,29%	8,64%	16,10%	9,71%	11,09%	2,88%	11,85%	6,92%	10,28%
H	Transportation and storage	-6,19%	2,81%	3,52%	0,74%	2,67%	2,84%	2,37%	-5,67%	1,86%
I	Accommodation and food service activities	11,86%	3,23%	-3,43%	-1,89%	8,32%	-2,60%	9,30%	-5,75%	3,59%
J	Information and communication	13,15%	10,54%	4,82%	29,57%	15,79%	4,67%	17,93%	12,43%	12,82%
L	Real estate activities	1,21%	3,65%	4,59%	-0,52%	6,25%	1,88%	n.a.	1,35%	4,73%
M	Professional, scientific and technical activities	21,95%	3,95%	13,79%	14,18%	8,54%	5,56%	17,97%	4,99%	9,94%
N	Administrative and support service activities	6,64%	3,60%	16,25%	6,74%	5,76%	2,00%	6,14%	8,62%	5,87%
	Weighted average	11,79%	7,63%	8,01%	8,28%	8,46%	2,85%	19,17%	3,90%	8,32%

Source: BACH-ESD database, authors' calculations

The second indicator considered for the assessment of financial performance is Return on Equity. Even if we present it to be the second indicator of profitability, it is of most importance to shareholders because they are interested in how well company management has used their funds to make profit, and not directly interested of how efficiently managers used the borrowed capital. Values obtained for the ROE deepen the differences between the companies included in the sample. From a sectoral point of view the mining and quarrying industry leads by far with a huge profitability average of almost 80%. This is strongly influenced by the favorable international conjuncture of the mining industry and the high competitiveness of the Dutch mining sector. We do not exclude the fact that these results can be influenced by the variable sample of companies provided by the BACH-ESD database. Yet all European companies in the mining sector obtained very good results in terms of profitability, with the exception of Germany.

Consequent with the ROA results European companies had good financial results in terms of ROE in the utilities sector, information and communications and recorded low performances in transport and storage, agriculture and hotels and restaurants. A notable difference is observed in the construction sector, where the equity invested by shareholders represents a relatively low proportion in the total investment. This transforms the 3.04% economic profitability in a higher financial profitability of 12.19% for investors that activated in this sector.

Considering the overall countries' financial performance measured by ROE The Nederland and Austria are still the first two countries. At the other end Italy and Portugal are the worst performers with a ROE rate well below the 8.32% average.

4.3. Net margin

Table 3: Net Margin, year 2009

NACE CODE	NAME OF NACE SECTION	COUNTRY								
		AT	BE	DE	ES	FR	IT	NL	PT	W.A.
A	Agriculture, forestry and fishing	2,02%	1,11%	n.a.	0,18%	2,76%	0,99%	2,90%	-1,58%	1,82%
B	Mining and quarrying	3,91%	70,84%	1,12%	50,58%	16,31%	9,48%	13,44%	6,33%	12,33%
C	Manufacturing	4,99%	8,42%	1,14%	0,38%	1,35%	0,30%	8,98%	0,98%	2,11%
D	Electricity, gas, steam and air conditioning supply	4,43%	5,89%	4,46%	14,07%	8,35%	5,57%	5,15%	14,35%	7,32%
E	Water supply; sewerage, waste management & remediation act.	2,88%	3,25%	8,08%	10,42%	4,51%	2,61%	0,68%	5,54%	5,53%
F	Construction	3,39%	4,97%	2,91%	-0,54%	3,85%	1,43%	3,24%	0,43%	2,84%
G	Wholesale & Retail trade; repair of motor vehic. & motorcyc.	2,09%	2,07%	1,48%	2,36%	1,57%	0,46%	3,66%	1,67%	1,77%
H	Transportation and storage	-2,18%	1,81%	1,10%	1,41%	1,14%	3,13%	2,34%	-2,22%	1,42%
I	Accommodation and food service activities	2,95%	2,60%	-0,49%	-1,83%	2,31%	-1,55%	5,12%	-3,47%	0,95%
J	Information and communication	4,36%	8,13%	5,46%	12,98%	6,67%	2,86%	9,00%	7,19%	6,80%
L	Real estate activities	4,00%	19,67%	8,89%	-2,17%	15,09%	1,86%	n.a.	3,18%	11,55%
M	Professional, scientific and technical activities	6,60%	37,63%	3,37%	136,44%	18,74%	1,30%	12,48%	16,09%	16,47%
N	Administrative and support service activities	1,66%	2,24%	2,98%	2,13%	1,57%	0,59%	2,14%	2,56%	1,75%
	Weighted average	3,09%	7,80%	2,35%	4,37%	4,14%	1,45%	6,44%	2,91%	3,79%

Source: BACH-ESD database, author's calculations

In terms of Net Margin the hierarchy of countries and sectors changes slightly. The sector that brings the highest profits compared to its turnover is the one that refers to professional, scientific and technical activities. Although profits in this sector represent a smaller proportion of companies' assets and equity, they represent a higher proportion of turnover. Thus if the turnover would be higher, this sector would have the biggest potential. The mining and quarrying sector also has a high profit margin, but this is still a modest figure compared to the very high performances in terms of ROA and ROE. This proved that the high performances of this sector were strongly based on the high turnover achieved. High performances can also be encountered in the real estate activities, another service sector that produces higher profits compared to turnover. Other performing industries are utilities, information and communications. Poorest results were obtained in the hotels and restaurants services sector, transportation, wholesale, retail trade and even manufacturing, sectors mostly influenced by the economic and financial crisis. If we consider the countries included in the sample, the best results in terms of NM were obtained by Belgium, followed closely by The Nederland. Poorest performing countries, consequent with previous results obtained in this study, are Italy and Portugal.

For a better understanding of study results we will also present them as diagrams (Figures 1, 2).

Figure 1: The financial performance of European sectors

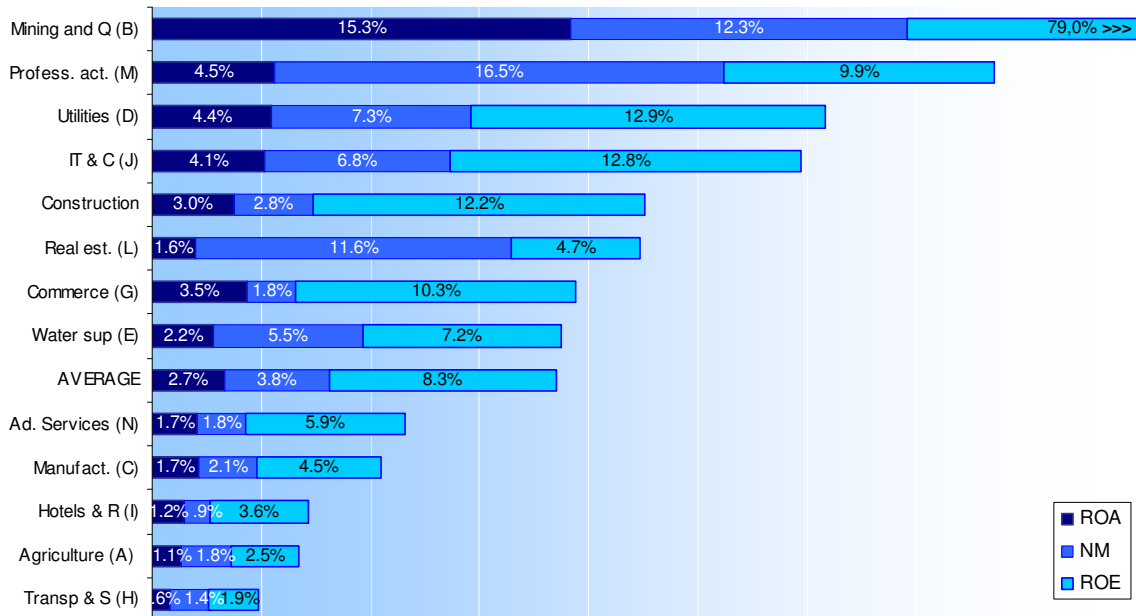
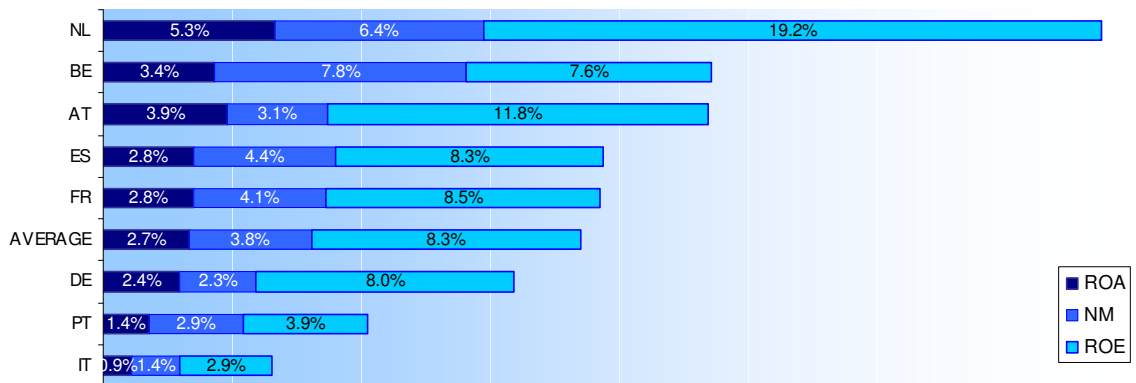


Figure 2: The financial performance of European countries



5. Conclusions, limitations and future research

Financial performance can be measured in various ways. In the present study we assessed it at a mezzo and macroeconomic level based on data from microeconomic level, more precisely, from the harmonized annual financial statements of a sample of European companies.

Several important differences have been identified between the thirteen non-financial economic sectors and between the eight developed countries considered. This article shows the strengths and weaknesses of the European economy. Thus as we can clearly see from the graphs above, the most performing sectors are mining and quarrying; professional, scientific and technical activities, utilities and IT&C. The sectors that perform the worst are transport and storage, agriculture, accommodation and food service activities. As shown in other studies the most profitable and competitive companies in the sample belong to the Nederland, Belgium and Austria and the least profitable ones are situated in Italy and Portugal. Yet the results refer to the average values recorded by countries' companies. One should consider that there are performing and underperforming companies in every country but averages values for the considered samples are the ones presented above.

Results can also be interpreted in the sense that some industries are more vulnerable in times of economic and financial crisis (transport and storage, agriculture, accommodation and food

services, manufacturing). Moreover countries that are less competitive suffer stronger overall decreases in economy due to economic crises. These conclusions are also in line with other research on the same topic.

Present study also offers average national and sectoral rates for profitability measurement and comparison in the year 2009. These values can be used as reference points for other studies that have the similar topics.

This study also has some limitations. The accuracy and relevance of the results are limited to the quality and exhaustiveness of the data provided by the BACH-ESD database. More details about this database can be obtained from the internet link in the bibliography. Other limitations refer to the short period considered, of only one year and the influence of economic and financial conditions in the year considered. Future studies could consider a larger number of countries, a longer period of time and a more detailed classification of the economic activities. They could also try to examine in depth the factors that caused the performance differences.

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References

1. Achim, Monica Violeta. *Analiză economico-financiară*, second edition, Cluj-Napoca: Risoprint Publishing, 2010
2. Bull, Richard, *Financial Ratios*, Oxford: CIMA Publishing, 2008
3. Busuioc, Loredana. *Analiza performanțelor agenților economici pe plan național și european*, PhD thesis, Bucharest: Academy of Economic Studies, 2009
4. Colasse, Bernanrd. *Analiza financiară a întreprinderii*, trad.: Neculai Tabără, Iași: Tipo Moldova, 2009
5. Gruian, Claudiu-Marian. “What do we mean by ”Company Performance”?” *Annals of “Constantin Brâncuși” University of Tîrgu Jiu, Economy Series*, 4(2010), 243- 255
6. *** European Commission. *Sectoral Growth Drivers and Competitiveness in the European Union*, Luxembourg: Office for Official Publications of the European Communities, 2009
7. *** Bank for the Accounts of Companies Harmonized – European Sectoral references Database, <http://www.bachesd.banque-france.fr/>, Accessed April 20, 2011