ECONOMIC IMPORTANCE OF THE BELGIAN PORTS :

Flemish maritime ports, Liège port complex and the port of Brussels – Report 2010

Working Paper Document

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July 2012 No 225

National Bank OF BELGIUM
Eurosystem

National Bank of Belgium
Limited liability company
RLP Brussels – Company's number: 0203.201.340
Registered office: boulevard de Berlaimont 14 – BE-1000 Brussels
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Jan Smets

Member of the Board of directors of the National Bank of Belgium

Layout: NBB Microeconomic Analysis
Cover: NBB AG – Prepress & Image

Published in July 2012

Abstract

This paper is an annual publication issued by the Microeconomic Analysis service of the National Bank of Belgium.

The Flemish maritime ports (Antwerp, Ghent, Ostend, Zeebrugge), the Autonomous Port of Liège and the port of Brussels play a major role in their respective regional economies and in the Belgian economy, not only in terms of industrial activity but also as intermodal centers facilitating the commodity flow.

This update paper[1] provides an extensive overview of the economic importance and development of the Flemish maritime ports, the Liège port complex and the port of Brussels for the period 2005 - 2010, with an emphasis on 2010. Focusing on the three major variables of value added, employment and investment, the report also provides some information based on the social balance and an overview of the financial situation in these ports as a whole. These observations are linked to a more general context, along with a few cargo statistics.

Annual accounts data from the Central Balance Sheet Office were used for the calculation of direct effects, the study of financial ratios and the analysis of the social balance sheet. The indirect effects of the activities concerned were estimated in terms of value added and employment, on the basis of data from the National Accounts Institute.

The developments concerning economic activity in the six ports in 2009 - 2010 are summarised in this table:

Changes from 2009 to 2010 (in percentages)	Value added (current prices)	Employment (Full-time Equivalents)	Investment (current prices)	Tonnage (metric tonnes)
Flemish maritime ports				
Direct	+ 11.2	- 3.5	- 12.0	+ 13.6
Indirect	+ 1.2	- 0.0		(seaborne)
Total	+ 6.2	- 1.6		
Liège port complex				
Direct	+ 3.4	- 7.1	- 67.0	+ 15.8
Indirect	- 1.2	+ 0.1		(inland)
Total	+ 1.1	- 2.8		
Port of Brussels				
Direct	+ 2.8	- 0.9	- 8.9	+ 9.3
Indirect	- 2.5	+ 1.3		(inland)
Total	+ 0.1	+ 0.3		
Belgian ports				
Direct	+ 10.2	- 3.7	- 18.8	+ 13.7
Indirect	+ 1.2	+ 0.0		
Total	+ 5.8	- 1.7		

[1] Update of Mathys C. (June 2011), *Economic importance of the Belgian ports: Flemish maritime ports, Liège port complex and the port of Brussels - Report 2009*, NBB, Working Paper No. 215 (Document series). All figures have been updated. This paper is available at the following address http://www.nbb.be/doc/ts/publications/wp/wp215En.pdf.

After the decline seen in 2009, maritime cargo traffic in the Flemish ports reversed the trend and recorded a rise in 2010. Direct value added increased in each of the four ports in Flanders. Both maritime and non-maritime branches as a whole are up. The only decrease in value added occurred in the maritime branches in the port of Ostend and the non-maritime branches of the port of Zeebrugge. Of the six ports, the port of Brussels recorded the strongest growth rate for value added in the maritime cluster, and the port of Ostend recorded the strongest increase in the non-maritime cluster.

Direct employment in the Flemish ports as a whole declined during the year 2010. This is true of both the maritime and non-maritime cluster.

Except for Zeebrugge, investment decreased in all the Flemish ports. The decline in investment was around 17 percent in the ports of Antwerp, Ghent and Ostend, whereas Zeebrugge recorded a growth rate of more than four-fifths in its investment levels in 2010.

The volume of cargo handled in the port of Liège increased in 2010. Direct value added rose slightly, whereas employment registered a significant decline. There were job losses in both maritime and non-maritime branches. In the non-maritime cluster, investment diminished substantially because of a lack of projects.

The volume of cargo handled at the port of Brussels rose in 2010. Both value added and employment increased in maritime branches. Value added in non-maritime branches remained steady but employment contracted. The downturn in investment recorded during 2009 continued throughout 2010.

This report provides a comprehensive account of these issues, giving details for each economic sector, although the comments are confined to the main changes that occurred in 2010.

Key words: branch survey, maritime cluster, subcontracting, indirect effects, transport, intermodality, public investments.

JEL classification: C67, H57, J21, L22, L91, L92, R15, R34 and R41.

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This paper was made with the technical support and the expertise of **Mr Marc Van Kerckhoven**.

Research results and conclusions expressed are those of the author and do not necessarily reflect the views of the National Bank of Belgium or any other institution to which the author is affiliated. All remaining errors are ours.

The author would like to thank her colleagues from the Microeconomic Information department for their assistance and support. Special thanks go to Messrs Philippe Quintin, head of department at the NBB, and George van Gastel, head of service at the NBB, for their support and their comments on this paper. The advice given by Luc Dresse, advisor in the Research and Statistics departments was also greatly appreciated.

Contents

Foreword

Every year the National Bank of Belgium publishes an update of the study of the economic importance of the Flemish maritime ports, the Liège port complex and the port of Brussels. Two aspects of the sector's economic impact are highlighted: the direct effects and the indirect effects. The former concern the activities resulting from the presence of maritime and non-maritime sectors in or near the ports, while the latter relate to the value added and employment generated by suppliers and subcontractors serving these sectors and based in Belgium.

For the second time in this study, the NACE-BEL 2008 code has been used to select and classify companies by sector. The new nomenclature for classifying economic activities, the NACE-BEL 2008, is part of a major revision of international and European classification system for economic activities and products (NACE Rev.2) done by the European Commission[2]. The change to the new NACE-BEL nomenclature was finished in this report.

The statistical data cover the period 2005 - 2010, but only the main developments recorded in the period 2009 - 2010 are discussed in detail. The number of annexes is limited to[3]:

- the detailed social balance sheet for 2010
- the list of NACE-BEL 2008 branches.

The methodology remains mainly unchanged: the criteria for selecting firms and the analysis are the same as in previous editions. An exception is made for the public sector. The selected public services are related to maritime activities, and therefore the public sector is now placed under the maritime cluster.

Following a brief introduction, the study is split into six parts devoted to the four Flemish maritime ports, the Liège port complex, and the port of Brussels. The principal trends identified in the "flash estimates" published in October 2011[4] differ from those in the report. Corrections specific to the individual companies that operate at the ports and the completion of the switch to NACE-BEL 2008 caused changes in trend sizes. For the six ports overall, direct value added moved a bit slower than what was indicated based on the "flash estimates" for 2010 and the decline of direct employment is more significant.

[2] For more information on the NACE-BEL 2008, please visit the "Statistics & Analyses" website of FPS Economy, SMEs, Self-employed and Energy (http://statbel.fgov.be/en/statistics/figures/)

[3] The details of the distribution of the indirect effects per sector and the breakdown of the results of firms according to their size are available on request. All requests can be addressed to microeconomic.analysis@nbb.be.

[4] See http://www.nbb.be/doc/TS/Enterprise/Press/2011/cp111017En.pdf.

Introduction

Objectives of the study and some comments on the methodology

The economic importance of the ports examined is analysed from three angles, namely the purely economic angle, and the social and financial angles. The study only covers firms belonging to branches of activity which have an economic link with the ports. That link is defined in relation to both a functional and a geographical criterion.

The main developments in the period 2005 - 2010 concern the study of the following variables:

- value added at current prices[5]: the value which a firm adds to its inputs during the financial year via the production process. The value added of a firm indicates its contribution to the wealth of the country or region (in percentages of GDP). In accounting terms, this is calculated as the sum of staff costs, depreciation and value adjustments, the operating profit or loss, provisions for liabilities and charges, and certain operating expenses;
- employment in full-time equivalents (FTE): the average workforce during the financial year. Direct employment only covers employees on the payroll of the businesses concerned, indirect employment also includes self-employed workers.
- investment at current prices[6]: this corresponds to the tangible fixed assets acquired during the year, including capitalised production costs.

The economic impact of the ports under review is described on the basis of these three variables. Employment and the social balance sheet are also taken into account in the analysis of the social impact. That section deals in particular with working time, labour costs, the extent to which use is made of external personnel, and the composition, movements and training of the labour force.

The financial analysis forms the third angle of the study; it is based on the examination of three financial ratios and a financial health indicator, using a model designed by the Bank[7]. The ratios in question are the return on equity after taxes, liquidity in the broad sense, and solvency.
The current edition presents a financial analysis of Belgian ports taken as a whole. Readers wishing to compare the financial ratios of an individual company with its sector ratios can find this information in the company reports published by the Central Balance Sheet Office. These company reports are composed of six parts[8], one of which is devoted to comparing the financial ratios of the company with those of its sector, and another of which is devoted to situating the company in one of the six categories of financial health based on its composite financial health indicator. This comparison is more relevant than a comparison based principally on geographic location, which would include a variety of business activities. The financial health indicator is based on Belgian companies' annual accounts. This indicator is designed as a weighted combination of variables, created by means of a model constructed in the same way as a failure prediction model. The model takes the form of a logistic regression discriminating between failing and non-failing companies. The indicator summarises each company's situation in a single value which takes account simultaneously of the solvency, liquidity and profitability dimensions.

The microeconomic data used were obtained from the annual accounts filed with the Central Balance Sheet Office[9] and from the statistics produced by the National Accounts Institute (NAI[10]). The most

[5] Unless otherwise stated, the text always indicates value added at current prices. Developments at constant prices are explicitly mentioned. Value added at constant prices is calculated by means of the deflator of gross value added.

[6] Unless otherwise stated, investment is always indicated at current prices in the text. Developments at constant prices are explicitly mentioned. Investment at constant prices is calculated by means of the deflator of gross fixed capital formation.

[7] See Vivet D. (2011), *Development of a financial health indicator based on companies' annual accounts* , NBB, Working Paper No. 213 (Document series), Brussels.

[8] The six parts of the company report are: identifying company information, a brief survey of the major elements of the annual accounts, a comparison of company ratios with those of its economic sector, a table of receipts and expenditure, a list of companies in the same economic sector, the company's positioning in one of the six pre-defined categories of financial health based on its composite financial health indicator.

[9] A service of the National Bank's Microeconomic Information Department. See www.nbb.be / Central Balance Sheet Office.

[10] The National Accounts Institute (NAI) set up by the law of 21 December 1994, links three institutions: the National Statistical Institute (NSI, now FPS Economy, SMEs, Self-employed and Energy – Directorate General of Statistics and Economic Information), the National Bank of Belgium and the Federal Planning Bureau. The NAI's duties include drawing up the real

recent annual accounts for the 2010 financial year included in this study were filed with the Central Balance Sheet Office in April 2012[11]. The figures for value added and employment, necessary to estimate the indirect effects up to 2010, are also published by the NAI after a certain time lag. The latest updates were included in the calculations, while the methodology remained unchanged. For more information, see the 2004 report published in June 2006[12].

The NACE-BEL 2008 classification has replaced the NACE-BEL 2003 for the purposes of selecting and ranking by sector the companies since the last year report. The NACE-BEL 2008 is the new classification system for economic activities employed by the Institute of National Accounts. The NACE-BEL 2008 is part of a major revision of international and European nomenclatures for economic activities and products (NACE Rev.2) done by the European Commission and approved by the European Parliament and the Council[13]. Mid 2011, National Accounts started to publish statistics in NACE-BEL 2008. Nevertheless, some data needed for the implementation of this study are still in NACE-BEL 2003 as for instance the input output table 2005 or the majority of the supply and use tables. The new National Accounts aggregates on the contrary exist only in NACE-BEL 2008. The fact that we find both NACE-BEL in our data oblige us to do some conversion and that process is open to enlarge the margin of error in our estimation of indirect effects. More than ever, the reader must keep in mind that indirect effects must be cautiously handled, more as a indicator of the importance of the ports for the national and local economy than as an absolute value.

For the past two years, indirect effects have been calculated for each port separately. For ports with economic linkages between them, a portion of the indirect effect calculated by port is cancelled out when the calculation is done at a more aggregate level, i.e. for a group of ports. The sum of the indirect effects by port is thus greater than the total indirect effects calculated for the ports as a whole.

The population included in this study was selected with the aid of NACE-BEL 2008. That has implications for the firms included, and for their allocation to the various segments. For instance, in the new nomenclature, firms involved in activities concerning sewerage and waste management are now included under industrial activities (other industries in our study). This switch to the new classification system also implied changes to the outport category, in particular. Some of the Nace codes previously included in this family disappeared, and were incorporated in broader definitions which no longer relate solely to maritime activities. This meant a reduction in the number of outport firms. Obviously, these changes were made for all the years presented in this study.

International environment

Global economic developments in 2010[14]

After having suffered its first contraction since the end of the Second World War, the global economy picked up in 2010. This recovery nevertheless turned out to be rather uneven between countries and was hardly favourable to employment. In the advanced economies, it was undermined by high unemployment rates, a precarious financial situation and concern about the outlook for public finances. It showed more strength in the emerging economies, thus triggering a surge in inflation and a risk of overheating. The upturn in the world economy was more pronounced during the first half of the year, showing signs of weakness later on. And the year 2011 brought confirmation that the upturn in the world economy was losing momentum, particularly in the case of the advanced nations where growth was halved.

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national accounts and the input-output tables which are needed to estimate the indirect effects. The latest available data for calculating the indirect effects in this study were the IOT for 2005 and the supply and use table for 2007.

[11] Belgian firms are required to submit their annual accounts to the Central Balance Sheet Office by no later than seven months following the end of the financial year. A high proportion of firms -mainly small businesses or those in difficulties- fail to meet the obligation by that date. In April 2012, that percentage was close to zero and the impact on the figures is minimal.

[12] The methodology is presented in the introduction by Lagneaux F. (2006), Economic importance of the Belgian ports: Flemish maritime ports and Liège port complex – report 2004, NBB, Working Paper nr. 86 (Document series) and set out in full in annexes 1 to 4. The study is available on the following address: http://www.nbb.be/doc/ts/publications/wp/wp86En.pdf.

[13] REGULATION (EC) No 1893/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 and amending Council Regulation (EEC) No 3037/90 as well as certain EC Regulations on specific statistical domains.

[14] Main source for the section: IMF, *World Economic Outlook (April 2012)*.

World output in the advanced economies increased by 3.2 % in 2010. However, in the euro area's case, this figure was a mere 1.9 % while the rate in the United States was 3 %. In view of the weak growth after the 2009 recession, the production capacities in the euro area countries were still under-utilised and unemployment remained high. The public debt burden got considerably heavier during the recession period, obliging states to start consolidation policies that kindle fears of a relapse. In the emerging economies and developing countries, the recovery has been much more dynamic, with a production growth rate of 7.3 %. It was Asia and Latin America that posted the strongest growth rates: in these regions, the economy has been running at full capacity, while the emerging economies of East Europe and the Commonwealth of Independent States are struggling to recover. However, the rise in commodity prices, and oil prices in particular, risks weighing heavily on progress in the emerging and developing nations.

World trade

After a 12 % decline in 2009, world goods trade picked up again spectacularly in 2010 to get back to its 2008 record level. The experts are nevertheless expecting less sharp rises in the next few years and do not expect to return to the pre-recession growth rates. These big downward and upward swings confirm the extension of global supply chains, with goods crossing national borders several times during the production process. All in all, the volume of goods exports throughout the world expanded by 14 % in 2010, an exceptionally rapid rate of increase. However, this recovery was more sustained during the first half of the year than the second. The suspension of fiscal stimulus measures, or even the launch of budgetary consolidation programmes in some countries, with the price of oil staying at a relatively high level and the persistence of unemployment curbed the recovery of world trade.

The increase in goods exports was stronger in the developing nations and the CIS members than in the developed countries[15]. As a result, developed nations' share in global merchandise exports has fallen back slightly and accounts for no more than 55 %. In 2010, the main goods-exporting countries were China, the United States and Germany. In Asia, real export growth driven by China and Japan, weighed in at 23 %. The price of natural resources went up in 2010, bringing in its wake an increase in the value of exports from producer countries that was not reflected in volume terms. By contrast, the price of manufactured products fluctuated very little in 2010. For this reason, there was a divergence of trends in value and volume terms.

The share of developed countries in total imports dropped by 4 % in the space of two years to 59 % of global imports in 2010.

Goods export growth in volume terms has been weaker in the euro area than in most of the advanced economies. In the developing and transition countries, the expansion in Asian developing nations was twice the growth of the Central and East European countries and more than twice the rates recorded in the Latin American and Caribbean countries. As regards merchandise imports in volume terms, on the other hand, among the developing and transition countries, it was the Latin American and Caribbean nations that enjoyed the biggest increase, followed closely by the Asian developing nations. As is the case with exports, the euro area is lagging behind in the import growth stakes. The expansion of merchandise imports expressed in volume terms was practically two percentage points higher in the developing and transition countries than in the advanced economies.

Maritime freight services market[16]

A recovery in world maritime trade was also noted during the year 2010, especially in the dry bulk and container transport sectors. It is thus estimated to have returned to or even exceeded 2008 volumes. This should nevertheless be put into perspective with the increase in capacity of the global fleet which is exerting downward pressure on transport prices. Volumes of dry bulk, general cargo and containers increased by more than 8 % in 2010. As for shipping of petroleum products, the year 2010 saw demand for transport increase by just under 4 % under the influence of trends in the world economy and the weather conditions during the year under review.

[15] Source: WTO, press release, World trade 2010, prospects for 2011. The figures are given in nominal terms here.

[16] Main source: United Nations Conference on Trade and Development (2011), *Review of Maritime Transport 2011*, UNCTAD New York and Geneva.

After falling back in 2009, demand for oil is estimated to have grown by 3 %. This rise is mainly attributable to the developing and transition economies, since oil demand has remained relatively stable in the advanced economies. In recent years, Chinese oil companies have been seeking more security of oil supply by multiplying and diversifying their overseas investment. This has also boosted demand for oil transport. In 2011, demand for oil in the OECD countries is expected to contract slightly, while growth in demand in the other countries is likely to fall. Volumes of oil shipped by sea in 2010 therefore expanded by more than 4 %. This has made it possible to absorb the fallout from the 2009 recession in the transport sector. West Asia is still the principal loading region, followed by the transition economies in Africa and the developing regions of America. North America, the Asian developing economies, Europe and Japan are the main unloading zones.

Production of natural gas hit a low point in 2009 and then began to rise again in 2010, on the back of the recovery of production in Russia, an increase in output in the United States and the jump in Qatar's gas production. In this country, a major project for supplying LNG to the United States, China and Dubai was completed. A shift in demand has nevertheless been observed from the United States to Asia, and most notably Japan. Consumption of natural gas has increased in some of the big consumer nations like the United States, Japan, Russia, and Iran. Expressed in cubic metres, the increase in consumption in the OECD countries is estimated to be around 6 % and in non- OECD countries 9 %, with this latter increase being sustained by the sharp rise in the regions of Europe/Eurasia and Asia. Transport of LNG by ship rose by 22 % in 2010, driven by a more than 50 % increase in Qatari production. By October 2010, there were 56 export terminal and 90 import terminal projects underway.

Overall, the year 2010 was a positive year for dry bulk transport. One of the explanatory factors behind this improvement is the recovery of steel production after the sharp contraction it suffered in 2009. But while world production of crude steel in 2010 exceeded the 2008 figures by far, this rebound was not evenly spread across all regions: the increase in production was mainly apparent in Asia and the Middle East, while the European Union, North and South America, the Commonwealth of Independent States are not thought to have entirely made up for lost volume. Another factor behind the growth of bulk transport is urban development in emerging economies like China and India. This urbanisation is bringing in its wake a rise in demand for shipping of products like steam coal and cereal products, among other things. One of the consequences of this trend is the expansion of the relative share held by coal and iron ore in bulk transport while bauxite and alumina shares are falling. As for grain transport, drought and fires in the Russian Federation, Ukraine and North America drove imports of cereals up in several regions. This increase in demand for cereals was met mainly by the United States and Argentina. One of the effects of this higher demand was the rise in food prices recorded in 2010. World trade in bauxite, alumina and phosphate grew by more than one-fifth, reflecting the upturn in industrial activity as well as the improvement in the economic climate and the grain trade. After the low point reached in 2009, trade in minor bulks also picked up in 2010. However, the expansion of these sectors is generally expected to slow down in 2011.

The upturn in the global economy enabled the market for container shipping to absorb the extra capacity brought in with new vessels during 2010 without an excessively harmful impact on return. Yet, while a sharp rise in volumes was observed for the first three quarters of 2010, the last quarter was already showing signs of this recovery running out of steam with a contraction of average load factors. The deterioration of market conditions was to be confirmed in 2011, a year in which the expansion of the cellular container ship fleet's capacity would exceed the increase in demand which, together with the rise in fuel costs, would exert downward pressure on yield. It can be noted that operators continued to use slow steaming in 2010 and the increase in demand mainly affected routes involving Asia, with volumes on transatlantic routes remaining quite low.

Structure of the world fleet

In 2011, the bulk carrier fleet grew in relative importance, largely at the expense of oil tankers and general cargo ships, even though the latter also saw their fleet expand. Expressed in deadweight tonnes, the bulk carrier fleet grew by more than 16 %, the oil tanker fleet by 5 % and container ships by just under 9 %. Bulk carriers account for 38 % of the world shipping fleet, oil tankers for 34 % and container ships 13 %. Overall, the capacity of the worldwide fleet expanded by 9 %.

The average size of ships increased even further in 2010. In the case of container ships, the average vessel capacity grew by more than 5 % during the course of the year 2010. Likewise, among dry bulk

transporters, there are also signs that the market for large carriers is expanding. For instance, the Brazilian mining group VALE ordered and started taking delivery of very large ore carriers (VLOCs). The "Vale Brasil", which is 362 metres long and has a capacity of 400 000 dwt[17], was the biggest ore-carrying vessel in the world at the time it was delivered in March 2011. Other VLOCs have since been added to the fleet, such as the "Vale Rio de Janeiro" and the "Vale Italia". But some other orders for bulk carriers have been cancelled or postponed in view of the uncertainty surrounding changes in bulk transport rates during the year 2010 and especially towards its end.

China is still the world's leading shipbuilding nation, followed by South Korea. Overall, the number and volume of new vessel orders increased in 2010 in comparison to 2009, in response inter alia to the drop in shipyard prices and the pick-up in traffic to and from Asia. However, these orders were not sufficient to offset deliveries and cancellations during the same year. All in all, order books shrank for oil tankers, bulk carriers and container ships. At the same time, the market for LNG carriers has remained depressed owing to the uncertainty about demand prospects in the coming years.

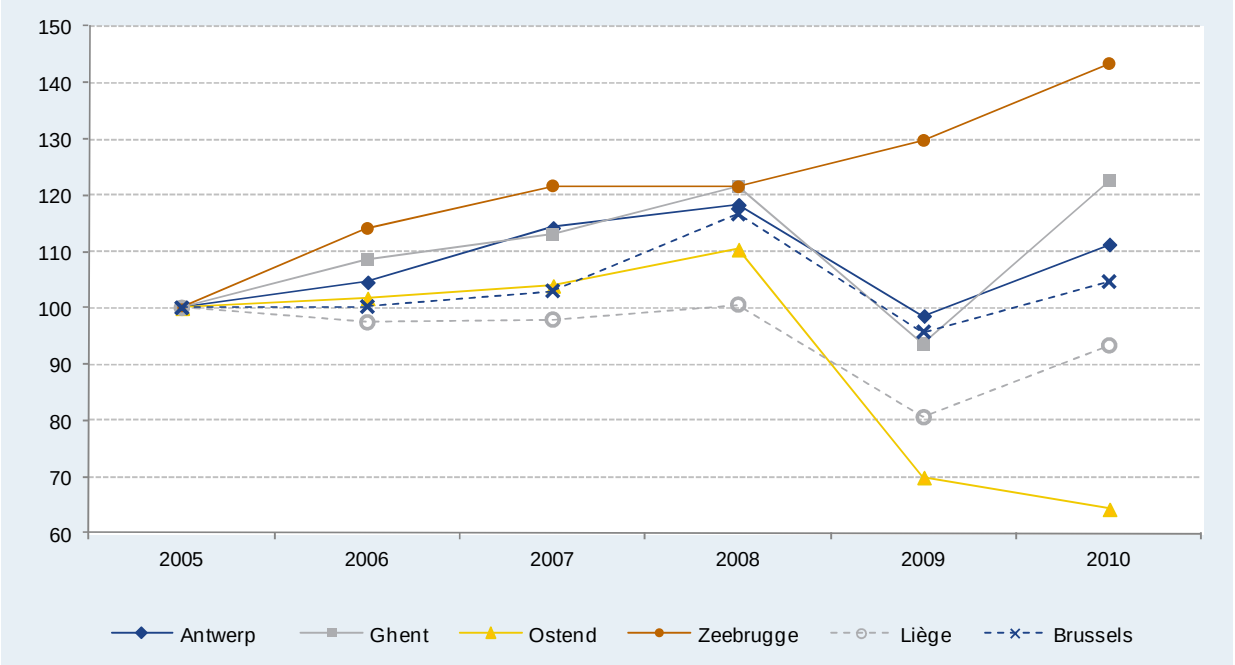
[17] Deadweight tons

1 ECONOMIC IMPORTANCE OF THE BELGIAN PORTS

After the downturn of 2009, the traffic in the Belgian ports, Ostend excluded, started again to increase. But despite this reversal of the trend, the ports viewed overall didn't manage to come back to the traffic achieved in 2008. For the year as a whole, value added raised at the six Belgian ports, viewed overall. However, employment and investment went on to decrease.

1.1 Traffic in the Belgian ports

CHART 1 **CARGO TRAFFIC IN THE BELGIAN PORTS**
(indices 2005 = 100)



Sources: *Jaaroverzicht 2010* of the Vlaamse Havencommissie, Port of Brussels and Autonomous Port of Liège.

After the low point of 2009, which only the port of Zeebrugge managed to avoid, traffic to and from the Flemish maritime ports taken as a whole has picked up again. The volume of goods loaded and unloaded in the port of Antwerp grew by 13 %, attributable mainly to the increase of containerised traffic. Volumes transshipped in the port of Ghent exceeded the figures of the previous record year 2008 thanks to a growth rate of 31 %, and particularly to a sharp rise in handled dry bulk cargo. However, the port of Ostend did not succeed in reversing the downward trend in its traffic and lost another 8 % of its traffic volume in 2010. The port of Zeebrugge had an exceptional year in 2010, approaching the 50 million tonne mark for transshippments within its boundaries.

Following the decline in 2009, container traffic in the Flemish maritime ports rebounded with a 15 % increase. The figures for 2010 were even higher than those for 2008. The port that enjoyed the strongest growth in 2010 was Ghent, with an increase in container traffic of one-third. The total weight of containers loaded and unloaded rose by 17 % at the port of Antwerp, and by 6 % in Zeebrugge, although the latter had not suffered any traffic loss in 2009. Expressed in twenty-foot equivalent units (TEU), Zeebrugge's growth rate is slightly faster than in tonne, in contrast to Antwerp's. As a result of this increase, the share of containers in the cargo transshipped in the Flemish ports grew by half a percent.

The port of Antwerp failed to get the tonnage of transshipped conventional general cargo back up significantly. This port recorded an increase of 700 000 tonnes, but it had lost 6.5 million tonnes the year before. The port of Ghent, on the other hand, posted its highest figure for 10 years, as did the port of Zeebrugge.

Liquid bulk, the only type of traffic not to have declined in 2009, is still on a steady upward path. The cargo volume loaded and unloaded in the Flemish ports increased by almost 4 % in 2010. Since 2005, this volume has grown by an average of 3.7 % per year in the Flemish maritime ports as a whole and has never lost ground. Looking at average developments in liquid bulk between 2005 and 2010 in the various Flemish ports, it is the port of Zeebrugge that emerges with the most sustained growth, running at an average annual rate of 12 %. However, for the year 2010 alone, liquid bulk traffic expanded the most in the port of Ghent at a rate of just under 14 %. Conversely, it fell back further in the port of Ostend to such a point that this type of traffic has become negligible for this port.

Dry bulk had been hit badly in 2009 with a decline of almost 32 %. During the course of 2010, it fared somewhat better with a rise of 22 %. The port of Ghent was more or less back to volumes transshipped in 2008, give or take a quarter of a million tonnes. By contrast, the other ports are still a long way off 2008 volumes. Looking at developments in dry bulk traffic over the last five years, the port of Antwerp has lost the most cargo with an annual average rate of decline of 6 %. In the case of Zeebrugge and Ostend, volumes of dry bulk transshipped are very close to those recorded in 2005. This means that all extra tonnage gained between 2005 and 2008, and particularly in 2008 for the port of Ostend and the two previous years in the case of Zeebrugge, could not be retained.

Roll-on roll-off traffic in the Flemish ports has regained some of the volume lost in 2009. While the port of Zeebrugge improved on its 2008 results but still fell short of 2007 levels, neither Ghent nor Antwerp managed to get back up to the volumes handled in 2008 even though the rate of growth registered for these two ports in 2010 was as much as 16 %. For the second year in a row, the port of Ostend saw a fall in its ro-ro traffic. On the back of a 30 % rise in the port of Zeebrugge, ro-ro traffic in the Flemish ports nevertheless grew by 17 % in the space of a year. However, the average over the last five years is still negative (-2 %).

TABLE 1 **MARITIME TRAFFIC IN THE FLEMISH PORTS IN 2010**
(in thousands of tonnes, unless otherwise stated)

	Antwerp	Ghent	Ostend	Zeebrugge	Total	Change from 2009 to 2010 (in p.c.)	Share in 2010 (in p.c.)
Containers	102,540	559	0	26,404	129,502	+ 15.1	49.8
Change 2009 - 2010 (p.c.)	*+ 17.5*	*+ 33.4*	-	*+ 6.1*			
Roll-on/roll-off[18]	3,725	1,539	3,396	12,396	21,056	+ 17.0	8.1
Conventional general cargo[19]	11,128	3,205	123	1,110	15,566	+ 13.7	6.0
Liquid bulk	40,996	4,240	6	7,997	53,238	+ 3.9	20.5
Dry bulk	19,780	17,714	1,410	1,694	40,598	+ 21.8	15.6
TOTAL	178,168	27,258	4,935	49,600	259,961	+ 13.6	100.0
Change 2009 - 2010 (p.c.)	*+ 12.9*	*+ 31.1*	*- 8.1*	*+ 10.6*			

Source: *Jaaroverzicht 2010* of the Vlaamse Havencommissie.

During the year 2010, the port of Liège - including the private ports - managed to exceed the 19 million tonne mark for goods transported by waterway and transshipped in the port. The 16 % increase in traffic can be explained in part by ArcelorMittal's Ougrée blast furnace starting up again and by the increase in volumes of construction materials and agricultural products loaded and unloaded on the different terminals of the Liège port complex.

The port of Brussels's own traffic volumes grew by 9 % in 2010, enabling it to post the second-best result ever, after the exceptional year of 2008. While the development of traffic has been positive in all the product categories, it has been most pronounced in agricultural products. Lastly, containerised traffic expressed in TEU expanded by one-third in the space of a year.

[18] Abbreviated as ro-ro. Horizontal handling of goods using wheeled equipment inside and outside the ship, unlike lo-lo (lift on/ lift-off), which entails vertical handling. The ro-ro data presented in this report do not take into account containerised cargo, this category of goods being included in the line entitled "containers".

[19] The term "general cargo" comprises the following categories: containerised goods, ro-ro and conventional general cargo.

1.2 Competitive position of the Belgian ports

To refine the analysis of the competitive position of the Flemish maritime ports, all cargo traffic is compared with that of the other ports in the Hamburg - Le Havre range[20]. The share of the four Flemish ports in that range was up very slightly, but was now close to 24 % in 2010. The increase in the volume transhipped was therefore slightly above the average for the range.

In the Hamburg – Le Havre range, the German ports of Bremen and Hamburg recorded strong growth in their traffic while the French ports of Le Havre and Dunkirk showed a decline. In the Netherlands, the port of Rotterdam and the Zeeland Seaports complex posted double-digit growth while the port of Amsterdam saw volumes down slightly.

In 2010, the **port of Rotterdam** consolidated its leading position in the Hamburg - Le Havre range. More specifically, it boosted its market share from 38.3 % in 2009 to 39.1 % a year later, on the back of an 11.1 % increase in traffic while the range as a whole expanded traffic volumes by 8.7 %. Bulk volumes transshipped in Rotterdam increased by 11 % and exceeded the 290 million tonne mark to reach 293.9 million. Transshipments of solid bulk, which had been hit badly in 2009, grew by more than a quarter but are still below 2008 volumes, at 84.6 million tonnes. Liquid bulk, on the other hand, is just short of 210 million tonnes now, well above the 2008 results.
Container traffic was up by 12 %, with the port benefiting in particular from the arrival of larger containers. General cargo excluding containers made up for half the traffic lost in 2009, although ro-ro traffic had grown more slowly.

The **port of Amsterdam** failed to reverse the negative trend in its traffic volumes in the first half of 2010. An upturn in volumes transshipped did not begin to be felt until the second half of the year. Yet it was not strong enough for the overall results for the year to be up on 2009 levels; in the end, a slight decline (-0.9 %) was noted. Liquid bulk traffic declined by 2 %. Oil, petroleum derivative products and liquefied gas were all down. Solid bulk, on the other hand, recorded an increase (+4 %). Cattle feed products, oilseeds and fertilisers showed some growth, while coal and ores continued on a downward path. Overall, transshipment of bulk, solid and liquid taken together, grew by half a percentage point. General cargo, including containers, contracted by almost one quarter. Ro-ro traffic was the only category to expand. The volume of containers loaded and unloaded in the port was once again halved. The reduction is even bigger when expressed in TEU (-70 %). Other general cargo shrank by 16 %.

The **Zeeland Seaports** complex has recovered almost all the traffic it had lost during the year 2009. The biggest increase in volumes transshipped was in the port of Terneuzen (+18.9 %), where even the 2008 figures were exceeded. The port of Vlissingen is only halfway back to its 2008 volumes. Registering a 9 % increase, liquid bulk remains the leading category of traffic in the port complex. Solid bulk comes hard on its heels, recording volumes slightly below those handled in 2008, even with a 12 % growth rate. Despite showing strong growth, containerised cargo traffic in the port is still quite small. As for ro-ro traffic, this category is still way behind its 2008 results. Lastly, general cargo traffic rose by just under 30 %. Although down slightly, petroleum products and petroleum derivatives still make up the port complex's top cargo category. Then come agricultural products, including forestry products whose share is growing, as is the share of the third category of goods: chemical products. 2010 was a big year for Zeeland Seaports with the inauguration of the "Scaldiahaven" harbour basin, a new development centre for the port complex.

The **port of Hamburg** benefited from the dynamism of the German economy, especially from the export trade, and the recovery of markets in the Baltic region and East Europe; it saw strong growth in its traffic in 2010 (+9.8 %). However, with 121 million tonnes handled, the 2010 results are still below the volumes seen in 2007 and 2008. Goods arrivals in the port were up by 13 %, while the volume of goods going out grew by just over 5 %. General cargo including containers, which accounts for two-thirds of all cargo, was up by 10 %, doing marginally better than bulk. General cargo traffic consists primarily of containerised traffic (97 %) and this grew by more than 10 % in the space of a year. In spite of these trends, Asia is still the port of Hamburg's main trading region.

[20] For the purposes of this study, the range comprises the ports of Amsterdam, Antwerp, Bremen, Dunkirk, Ghent. Hamburg, Le Havre, Rotterdam, Zeebrugge, Ostend, and the Zeeland Seaports complex (port of Terneuzen and Flessingue).

TABLE 2 **TOTAL MARITIME TRAFFIC IN THE HAMBURG - LE HAVRE RANGE (INCLUDING OSTEND AND ZEELAND SEAPORTS)**

(in millions of tonnes,unless otherwise stated)

Port	2005	2006	2007	2008	2009	2010	Annual average change from 2005 to 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Average share in the range from 2005 to 2010 (in p.c.)	Share in 2010 (in p.c.)
Antwerp	160.1	167.4	182.9	189.4	157.8	178.2	+ 2.2	+ 12.9	16.2	16.2
Ghent	22.2	24.1	25.1	27.0	20.8	27.3	+ 4.2	+ 31.1	2.3	2.5
Ostend	7.7	7.8	8.0	8.5	5.4	4.9	- 8.5	- 8.1	0.7	0.4
Zeebrugge	34.6	39.5	42.1	42.0	44.9	49.6	+ 7.5	+ 10.6	3.9	4.5
Total Flemish ports	***224.5***	***238.8***	***258.1***	***266.9***	***228.8***	***260.0***	***+ 3.0***	***+ 13.6***	***23.1***	***23.7***
Amsterdam[21]	53.8	61.0	65.4	75.8	73.4	72.7	+ 6.2	- 0.9	6.3	6.6
Bremen	54.2	64.6	69.1	74.5	63.1	68.9	+ 4.9	+ 9.1	6.2	6.3
Dunkirk	53.4	56.6	57.1	57.7	45.0	42.71	- 4.4	- 5.1	4.9	3.9
Hamburg	125.7	134.9	140.4	140.4	110.4	121.2	- 0.7	+ 9.8	12.1	11.0
Le Havre	75.0	73.9	78.8	80.5	73.8	70.2	- 1.3	- 4.8	7.1	6.4
Rotterdam	370.3	381.8	409.1	421.1	387.0	429.9	+ 3.0	+ 11.1	37.5	39.1
Zeeland Seaports[22]	30.5	30.2	33.0	33.3	28.8	33.0	+ 1.6	+ 14.5	3.0	3.0
Total for the 12 ports	*987.5*	*1041.8*	*1110.9*	*1150.3*	*1,010.2*	*1,098.5*	*+ 2.2*	*+ 8.7*		
Total world traffic	*7,109.0*	*7,878.3*	*8,140.2*	*8,286.3*	*7,832.0*	*8,377.8*	*+ 3.3*	*+ 7.0*		
Share for the 12 ports in world traffic (in p.c.) ...	13.9	13.2	13.6	13.9	12.9	13.1				

Sources: For the traffic in the range: port authority data - including the port of Rotterdam statistics - and *Jaaroverzicht 2010* of the Vlaamse Havencommissie; for world traffic: Unctad, *Review of Maritime Transport 2011*.

The **port of Bremen** enjoyed an 9.1 % expansion in 2010. With traffic almost up to 69 million tonnes, it is now close to volumes handled in 2007 although still some way off its 2008 record. The annual number of ships berthing in the port continues to fall, although these vessels' tonnage was up by 3 % in 2010. Container ships obviously take up the lion's share, accounting for just over half of all arrivals. Bulk volumes transshipped rose by 15 % in a year while those for general cargo (including containers) were up by 8 %. The port of Bremen's main partner regions are the Far East, the Atlantic coast of North America, Russia and the Gulf of Mexico. Solid fuels (coal, coke, etc.) traffic expanded sharply in 2010 (+28 %). Likewise, mineral and scrap were up by 27 %. Metal products (ferrous and non-ferrous) registered slightly lower growth, with 22 %. Minerals and building materials declined. As far as vehicle traffic is concerned, numbers were up by one-third. The number of vehicles transshipped was up at the loading stage, while unloadings declined very slightly. Expressed in tonnes, their volume increased by just over a third.

Traffic in and out of the **port of Le Havre** was down by 4.8 % in 2010. It was the volume of solid bulk transshipped that declined the most (-12 %). Among this type of cargo, coal declined by 6 %, sand, gravel and stone fell by almost 30 %. Nevertheless, expressed in tonnage, the biggest reduction was registered in liquid bulk. Volumes of crude oil unloaded contracted by more than 3 million tonnes, loadings and unloadings of refined petroleum products stagnated while saturated fuel gas and other liquid bulk cargo expanded. In the general cargo category, containerised traffic expanded by a little under 4 % with slightly higher growth for traffic coming into the port. For this type of freight, the port of Le Havre's main trading region is Asia, followed by the American Continent. Ro-ro traffic expressed in volume terms (excluding containers) dropped by more than a third, but non-cross-Channel ro-ro ferry traffic was up sharply.

Traffic through the **port of Dunkirk** shrank by 5.1 % in 2010. Transshipments of liquid bulk in the port collapsed by a massive 55 % - a decline that can be explained by several factors. During the course of

[21] The figures stated here refer to the port of Amsterdam only, and not the entire complex which also includes the ports of Beverwijk, Velsen/IJmuiden and Zaanstad.

[22] Zeeland Seaports = Vlissingen and Terneuzen

the year, Société de Raffinerie de Dunkerque (SRD) and Polimeri Europa closed down their plants for maintenance and servicing as well as for the installation of a new production line. Despite the dispute over the refinery belonging to the Total group, its closure put an end to the traffic flows connected with it. Overall, heavy fuel oil traffic fell back to zero, while diesel declined by more than a third, and petrol slumped by four-fifths. Solid bulk, on the other hand, expanded considerably (+31 %). Transshipment of coal was up 9 % and that of ore 45 %. Cereals increased by almost two-thirds. Volumes of ore, sand and gravel handled in Dunkirk almost doubled. In the general cargo category, the number of containers expressed as TEU that were loaded in the port actually declined in 2010 but their tonnage expanded (6 %). By contrast, roll-on roll-off ferry traffic was down by 10 %. All in all, general cargo shrank by 5 %.

The year 2010 enabled the **port of Duisburg** to regain a good part of the traffic it had lost during the previous year. Containerised traffic, which had proved to be quite resilient in 2009, hit a new record. Transshipment of coal in the port's facilities was almost back to 2008 levels, but that of steel, on the other hand, remained well below these figures. There is nevertheless room for optimism in view of the rise in loadings and unloadings of mineral oils and chemicals. The port authorities have been encouraged by this sign of growth to continue their investment policy, notably in the areas of transshipment capacity and the port and rail infrastructure.

Ports de Paris continued to gain ground in 2010 (+3.2 %) and its waterway traffic is fast approaching the 21 million tonne mark. The reasons behind this growth lie on the loadings side, since unloadings are stagnant. River and maritime traffic also posted very good results (+23 %) over the same period. Volumes of agricultural products transported by waterway and handled in the Parisian region's ports rose by 21 %, those of metal products by 45 % and ores and scrap by 37 %. Chemicals were up by 12 % and building materials, which is by far the biggest category, by 1 % as a result of higher rubble and debris volumes. By contrast, energy products were down by 12 % and containers by 7 %. If the analysis is limited to container traffic by waterway expressed in TEU, the figure is slightly down even though the number of maritime container ships is on the rise. Development of Ports de Paris looks after the scope of the sustainable mobility and environmental protection objectives set by the French government.

Table 3 reveals the major impact of the year 2010 on traffic at the inland ports. The port of Duisburg recorded the strongest growth at nearly 43 %. The ports of Liège and Brussels experienced smaller increase, with rates of 16 and 9 % respectively. In contrast, at the Ports of Paris, traffic was up by 3,2 %, the smallest growth. But the traffic of this port didn't decline in 2009.

TABLE 3 **CARGO TRAFFIC BY SHIP IN THE PORTS OF DUISBURG, PARIS, LIÈGE AND BRUSSELS**
(in thousands of tonnes,unless otherwise stated)

Port	2005	2006	2007	2008	2009	2010	Annual average change from 2005 to 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)
Duisburg[23]	49,100	50,300	52,900	51,000	34,500	49,200	+ 0.0	+ 42.6
Paris	20,781	22,257	21,921	19,778	20,214	20,865	+ 0.1	+ 3.2
Liège[24]	20,461	19,932	20,033	20,578	16,484	19,095	-1.4	+ 15.8
Brussels	4,191	4,200	4,317	4,889	4,011	4,385	+ 0.9	+ 9.3

Sources: Port of Duisburg, Autonomous Port of Paris, Autonomous Port of Liège and Port of Brussels.

1.3 Direct and indirect value added in the Belgian ports

Following the contraction of the Belgian economy in 2009, the volume of gross domestic product grew by 2.3 % in 2010. The revival in activity was particularly strong in industry and energy, following the sharp fall in 2009. Market services likewise made up for the losses recorded in 2009. Imports and exports expanded strongly. The volume of labour (number of hours worked) increased in 2010, but the

[23] The traffic considered here is the total of the cargo handled in all Duisburg Ports, thus, totalling the duisport Group and the private company ports.

[24] The traffic considered here is the total of the cargo handled on the public and the private quays.

impact on the number of employees was smaller, with employment growing by 0.8 %. However, paid employment in industry contracted for the second consecutive year.25

The value added created in the Belgian ports was up by 10.2 % in 2010. The port of Antwerp, which had seen the steepest fall in 2009, recorded the strongest growth in 2010 at nearly 13 %. In the ports of Ghent and Ostend, growth came to almost 10 %. The other three ports - Zeebrugge, Brussels and Liège – saw more modest expansion, with rates in the region of 3 %. In the ports of Antwerp and Ghent, developments in the maritime cluster were very similar to those in the non-maritime cluster. In the port of Antwerp, a few sectors of activity (or segments) saw a decline in value added: shipbuilding and repair, the public sector, fishing, energy and road transport. In the port of Ghent, growth in the maritime cluster was driven by cargo handling, while in the non-maritime cluster the main engine of growth was industry. In the port of Ostend, there was a decline in value added in the maritime cluster, attributable notably to port construction and dredging. In the non-maritime cluster, value added expanded thanks to industry and other logistic services, as trade and land transport declined. Conversely, in the port of Zeebrugge, value added increased in the maritime cluster, with growth in almost all segments, whereas it declined in the non-maritime cluster. In the latter, industry contracted, mainly on account of electronics, together with trade and other logistic services. In the port of Liège, both clusters recorded growth. Industry expanded, though the picture varied greatly from one sector of activity to another. Value added was down in land transport and other logistic services. In the port of Brussels, the maritime cluster recorded a steep rise in value added. In the non-maritime cluster, there was a significant rise in valued added in trade, whereas industry and other logistic services recorded a decline.

Following the 2009 contraction, indirect value added was 1.2 % up, at € 14.3 billion. In 2010, the value added generated indirectly by the port activity therefore regain the levels achieved in 2008, when the figure peaked before declining as a result of the crisis. However, that figure needs to be taken as just a guide, because indirect value added is calculated on the basis of various estimates or even approximations. Indeed, owing to the changes concerning Nace in the national accounts, the calculation of the indirect effects entailed a redistribution according to Nace 2003 of certain aggregates published in Nace 2008. Moreover, in the absence of detailed data, the last year also has to be estimated on the basis of an approximation. More than ever, the reader must keep in mind that indirect effects must be cautiously handled, more as a indicator of the importance of the ports for the national and local economy than as an absolute value.

The population of the firms located outside the ports underwent profound changes as a result of the switch to Nace-bel 2008. A number of Nace categories formerly included in the outport were no longer taken into consideration. The geographical approach based on the narrow or broad sense of a number of NACE-Bel branches has been adapted. And it was necessary to revise the entire outport series. The value added of businesses located outside the ports increased by 10 % in one year. The pattern was not the same in all segments. Thus, the segment comprising auxiliary services for transport by waterway remained stable. Shipping companies recorded a strong rise in value added, as the ocean-going vessels sector succeeded in restoring its performance, while inland navigation declined. Fishing expanded while shipbuilding and repair contracted.

By volume, the direct value added of the Belgian ports was up by 8.3 %. The total value added of the ports was 5.8 % up, disregarding the price effect. In volume, the growth was 4.0 %. The volume of indirect value added contracted with 0.6 %, and thus moderated the growth of the total value added. The share of direct value added in Belgium's GDP was up by 0.3 percentage point at 4.7 %. Total value added represented 8.7 % of Belgium's GDP (+0.1 percentage point).

[25] See National accounts: detailed accounts and tables 2001 - 2010, National Accounts Institute, October 2011.

TABLE 4 **VALUE ADDED IN THE BELGIAN PORTS**

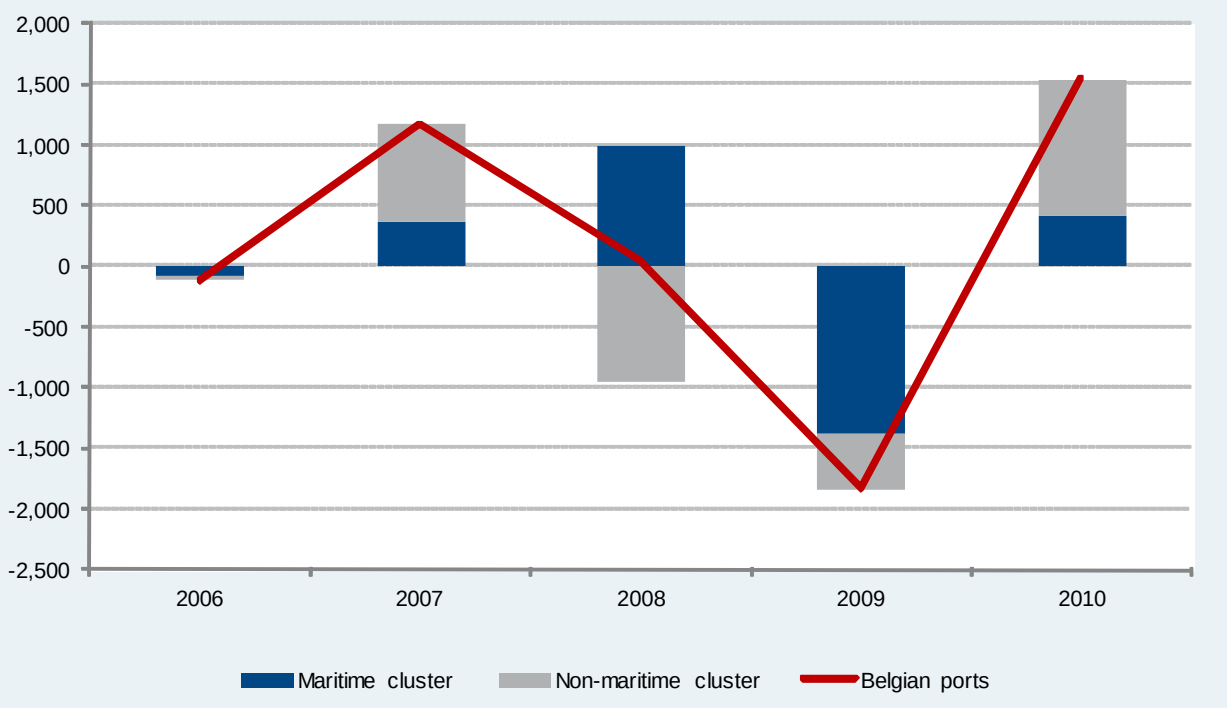
(in € million - current prices)

	2005	2006	2007	2008	2009	2010	Relative share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**15,869.2**	**15,757.0**	**16,844.0**	**16,905.0**	**15,078.0**	**16,617.7**	**100.0**	**+ 10.2**	**+ 0.9**
Antwerp	9,404.4	9,159.5	9,839.8	10,161.1	8,704.5	9,821.7	59.1	+ 12.8	+ 0.9
Ghent	3,406.9	3,493.9	3,771.5	3,299.2	3,139.0	3,434.9	20.7	+ 9.4	+ 0.2
Ostend	387.9	402.6	430.6	472.7	451.2	494.5	3.0	+ 9.6	+ 5.0
Zeebrugge	825.0	856.9	920.1	1,010.6	928.3	951.2	5.7	+ 2.5	+ 2.9
Liège	1,244.2	1,263.4	1,368.1	1,419.4	1,316.8	1,362.1	8.2	+ 3.4	+ 1.8
Brussels	600.8	580.7	513.9	542.0	538.1	553.3	3.3	+ 2.8	- 1.6
Outside the ports (p.m)[26] ...	*91.0*	*53.6*	*59.5*	*98.8*	*80.9*	*116.0*	-	*+ 43.3*	*+ 5.0*
2. INDIRECT EFFECTS	**12,514.1**	**13,271.4**	**13,857.8**	**14,315.9**	**14,183.5**	**14,349.1**	-	**+ 1.2**	**+ 2.8**
TOTAL VALUE ADDED	**28,383.3**	**29,028.4**	**30,701.9**	**31,220.9**	**29,261.4**	**30,966.8**	-	**+ 5.8**	**+ 1.8**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs) [27].

CHART 2 **CHANGE IN DIRECT VALUE ADDED**

(in € million, current prices)



Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

[26] The firms in certain maritime branches may be selected from anywhere in the country, since their definition is sufficient in itself to link them to the port activity. These are branches directly connected with the activity of the seaports. Their results are therefore allocated among the Flemish ports, using the formula for the allocation of value added per branch. For each year and for each branch, this formula is calculated on the basis of the ratio between the direct value added generated in a given Flemish port and the direct value added generated in all the Flemish maritime ports. The line "Outside the ports (p.m.)" included in the tables 4, 5 and 6 collates these data, which are also allocated respectively in the tables showing value added, employment and investment in chapters 2 to 5 on the line entitled "Allocation (p.m.)".

[27] This methodological framework entails that some data, such as those related to foreign firms, are not taken into account.

1.4 Direct and indirect employment in the Belgian ports

Direct employment was down by 3.7 % in 2010 and total employment including indirect effects dropped by 1.7 %. Indirect employment remained stable, boosted by the number of workers at national level but depressed by the contraction in the ports. The segments where the largest number of job creations were construction, port construction and dredging, and other land transport. Job losses were highest, at over 500 units, in the metalworking industry, car manufacturing, and cargo handling.

In the port of Antwerp, cargo handling and car manufacturing suffered particularly heavy job losses, but road transport, the metalworking industry, trade, shipping agents and forwarders, and shipbuilding and repair were also hard hit. In the port of Ghent, car manufacturing and the metalworking industry alone account for around two-thirds of the decline in employment at the port. The port of Ostend lost more jobs in the maritime cluster than in the non-maritime cluster. Almost all maritime activities were affected, except port construction and dredging, and port trade. Conversely, the port of Zeebrugge saw the number of employees in the non-maritime cluster fall much more sharply than in the maritime cluster, although the latter recorded cuts in almost all segments. There was a substantial fall in employment in shipping companies, and in electronics, other industries, road transport and other logistic services. Employment in the Liège port complex was down in all maritime cluster segments. In the non-maritime cluster, only fuel production, chemicals, construction and other industries recorded a rise in employment. In the port of Brussels, employment expanded or remained steady in all maritime cluster segments. In the non-maritime cluster it was relatively stable in industry and land transport, but declined in trade and other logistic services.

TABLE 5 **EMPLOYMENT IN THE BELGIAN PORTS**
(FTE)

	2005	2006	2007	2008	2009	2010	Relative share in 2010	Change from 2009 to 2010	Annual average change from 2005 to 2010
							(in p.c.)	(in p.c.)	(in p.c.)
1. DIRECT EFFECTS	**119,382**	**120,226**	**122,304**	**123,426**	**120,251**	**115,812**	**100.0**	**- 3.7**	**- 0.6**
Antwerp	61,716	62,725	63,918	63,754	62,582	60,509	52.2	- 3.3	- 0.4
Ghent	26,974	27,285	27,421	27,890	27,048	26,185	22.6	- 3.2	- 0.6
Ostend	4,357	4,526	4,723	4,898	5,027	4,931	4.3	- 1.9	+ 2.5
Zeebrugge	10,224	10,401	10,573	11,053	10,770	10,145	8.8	- 5.8	- 0.2
Liège	11,344	10,791	11,131	11,228	10,483	9,742	8.4	- 7.1	- 3.0
Brussels	4,768	4,498	4,539	4,603	4,341	4,300	3.7	- 0.9	- 2.0
Outside the ports (p.m.)[28] ..	*1,717*	*2,271*	*2,342*	*2,448*	*2,463*	*2,344*	-	*- 4.8*	*+ 6.4*
2. INDIRECT EFFECTS	**141,909**	**146,359**	**152,390**	**156,206**	**146,052**	**146,093**	-	**+ 0.0**	**+ 0.6**
TOTAL EMPLOYMENT	**261,292**	**266,585**	**274,694**	**279,631**	**266,304**	**261,905**	-	**- 1.7**	**+ 0.0**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

In 2010, the workers employed in the Belgian ports represented 2.9 % of Belgian domestic employment[29]. That is a drop with 0.2 percentage point after three years of unchanged shares. Altogether (including indirect employment), the Flemish ports accounted for 10.2 % of employment in Flanders, and the Belgian ports represented 6.6 % of employment in Belgium. These last two figures are 0.2 percentage points down against 2009.

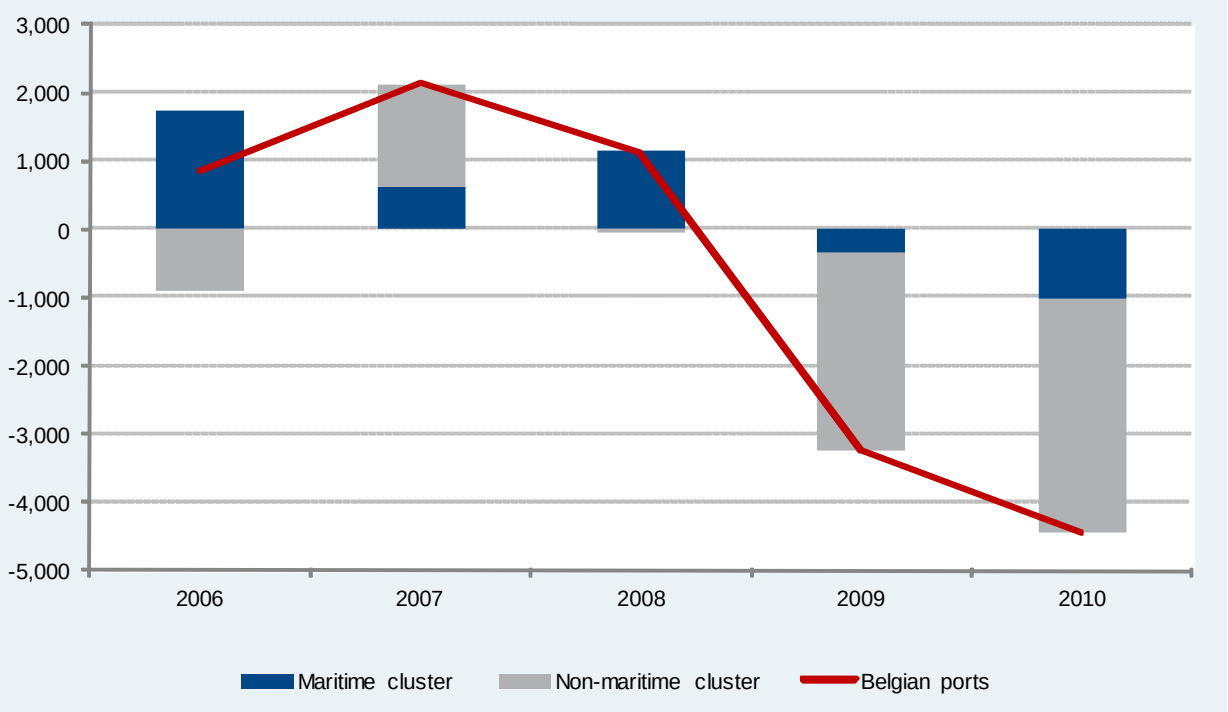
In companies located outside the ports, employment was down by 4.8 %. This decline affected all sectors of activity other than fishing, but the latter had previously recorded three consecutive years of falling employment.

[28] These figures stand for the activity of the maritime enterprises located outside the port limits and are divided among the flemish ports according to the breakdown of value added.

[29] Source: National Accounts Institute (2011), *National accounts. Detailed accounts and tables 2001-2010*.

Indirect employment was steady despite a reduction in direct employment. There were few significant variations between branches. Indirect employment declined in some business services, but expanded in other segments such as trade, construction, metalworking and chemicals.

CHART 3 **CHANGE IN DIRECT EMPLOYMENT**
(FTE)



Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

1.5 Investment in the Belgian ports

Direct investment in the ports was down by 18,8 %. Investment in the ports was down sharply in 2010 for the second consecutive year. In the maritime cluster, the largest fall in the amount invested was attributable to the shipping company segment. In the non-maritime cluster, following a particularly depressed year in 2009, land transport saw investment expand. Conversely, in industry and other logistic services investment was down by more than a quarter. In industry, the segments most affected were energy and other industries. Although its decline was smaller in relative terms, investment in trade was down to its lowest level in six years.

In the port of Antwerp, it was mainly the maritime cluster - comprising shipping companies - that recorded a steep drop in investment. In the non-maritime cluster, investment in energy was down, but 2009 had been a fairly exceptional year for that segment. Other logistic services also saw a sharp fall. Trade and land transport were up. In the port of Ghent, investment declined in both clusters, but it was the non-maritime cluster that recorded the most dramatic reductions: investment in trade, industry and road transport was down by between 15 and 20 %. In the Ostend maritime cluster, investment in the public sector – which had been particularly high in 2009 – recorded a steep decline. Overall, investment in this cluster was down by 35 %. Conversely, investment in the non-maritime cluster recorded a rise, attributable to industry and land transport. The port of Zeebrugge is atypical, with investment growing by 87 %. Investment in cargo handling tripled to over € 100 million. It expanded in practically all segments of the maritime cluster, and where it did not, the reductions were minimal. In the non-maritime cluster, trade, industry, land transport and other logistic services recorded growth ranging from 10 to 150 %. While the food industry, the biggest segment in this cluster in 2009, was down by half, energy – which was only just behind – recorded a rise of more than 150 %. In contrast, the Liège port complex suffered a two-thirds decline in investment in 2010. The maritime cluster and other logistic services were up, but now represent barely 4 % of the total. The fall in investment in industry, the biggest segment, mirrors the overall situation, and trade and land transport were down by a fifth and a quarter respectively against the 2009 figures. Finally, the port of Brussels did not escape the investment cuts, but the reduction was

small. Investment in the maritime cluster expanded, as it did in land transport and other logistic services. Conversely, trade – the port's biggest segment in 2009 – was down by over 30 %.

The amount invested by firms located outside the ports increased sharply. Although this rise concerned all segments of activity, investment by shipping companies rose dramatically. That is due mainly to the order for two LNG carriers with a capacity of over 10,000 cubic metres built in Korea and now in service, operating under the Belgian flag.

TABLE 6 **INVESTMENT IN THE BELGIAN PORTS**
(in € million - current prices)

	2005	2006	2007	2008	2009	2010	Relative share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
Antwerp	3,901.7	2,504.4	3,336.2	3,622.7	2,958.3	2,460.7	67.3	- 16.8	- 8.8
Ghent	364.9	395.5	723.5	721.4	614.6	510.7	14.0	- 16.9	+ 7.0
Ostend	97.7	76.2	155.0	182.1	120.1	99.3	2.7	- 17.3	+ 0.3
Zeebrugge	408.7	310.6	315.4	272.6	181.6	340.4	9.3	+ 87.4	- 3.6
Liège	141.4	163.1	345.3	437.0	564.5	186.3	5.1	- 67.0	+ 5.7
Brussels	58.8	90.6	55.9	76.1	63.2	57.6	1.6	- 8.9	- 0.4
Outside the ports (p.m.)[30]	*117.3*	*155.2*	*242.3*	*210.7*	*275.3*	*538.2*	-	*+ 95.5*	*+ 35.6*
DIRECT INVESTMENT	**4,973.4**	**3,540.4**	**4,931.3**	**5,311.8**	**4,502.4**	**3,655.0**	-	**- 18.8**	**- 6.0**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office and on surveys).

1.6 Breakdown of the variables by company size[31]

Note that the distribution of the firms according to size depends on the format of the annual accounts filed by the firms. Thus, companies submitting their annual accounts to the Central Balance Sheet Office in the full format are considered to be large firms. The SME category covers companies submitting their annual accounts in an abbreviated format. In 2010, large firms represented 38.5 % of the total number of firms, 95.6 % of value added and 93.5 % of investment. In terms of jobs, they employ 92.3 % of workers. The representativeness of large firms for these three figures has therefore hardly changed at all over a year.

TABLE 7 **BREAKDOWN OF FINDINGS IN THE BELGIAN PORTS IN 2010**

Ports	Number of firms[32]		Direct value added (in € million)		Direct employment (FTE)		Direct investment (in € million)	
	Large firms	SMEs	Large firms	SMEs	Large firms	SMEs	Large firms	SMEs
Antwerp	800	1,019	9,290.2	317.2	53,446	3,450	1,875.7	90.3
Ghent	263	294	3,286.7	119.0	24,269	1,401	409.5	51.7
Ostend	48	164	391.2	49.0	3,346	669	71.7	10.6
Zeebrugge	136	263	736.2	92.1	6,850	1,258	249.7	21.9
Liège	99	85	1,334.2	27.9	9,367	375	180.7	5.6
Brussels	113	229	493.3	56.1	3,435	784	47.5	10.1
Outside the ports	35	332	56.9	59.1	1,780	564	495.5	42.7
TOTAL	**1,494**	**2,386**	**15,588.7**	**720.4**	**102,494**	**8,501**	**3,330.3**	**232.8**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office and on surveys).

[30] These figures stand for the activity of the maritime enterprises located outside the port limits and are divided among the flemish ports according to the breakdown of value added.

[31] Enterprises are deemed large if they use the full model to file their annual accounts.

[32] For each port, this is the number of firms located in the port zone. A firm may in fact be recorded in more than one port. The results of the public sector are not included in this table.

1.7 Social balance sheet in the Belgian ports[33]

The social balance sheet presents a coherent set of data on various aspects of employment in firms: composition of the workforce, staff rotation, type of employment contracts, standard of education, working time, labour costs, job promotion measures and training efforts. The results presented below concerning direct employment in the six Belgian ports are not exhaustive. The figures are based on a constant sample[34] relating to the period 2008 - 2010. The detailed figures for 2010 are shown in Annex 1. The national data is calculated from a constant sample of filed annual accounts with the Central Balance Sheet Office. The findings per individual port, on the other hand, are based on the study's population.

1.7.1 Working time and labour costs

This trend in employment is not in line with the results at national level. Yet it has highlighted major divergences between branches of activity, notably a contraction of staff numbers in the industry and to a lesser extent in information and communication. Employment developments in the Belgian ports are largely influenced by the dominant sectors in these ports. While, taken individually, all the ports record a fall in the average number of employees on the staff register, the ports of Ghent and Ostend posted an increase in the number of hours actually worked.

Staff costs in the Belgian ports taken as a whole are on the rise. They nevertheless remain fairly stable in Zeebrugge and are coming down in Liège and Brussels. But there has been a rise in annual average staff costs per full-time equivalent (FTE) and average staff costs per hour worked for the ports as a whole. This corresponds to the general trend at national level. The port of Brussels is marked by a fall in annual costs per FTE. Average costs per hour worked are coming down in the ports of Liège and Brussels and are stable in the ports of Ostend and Zeebrugge. The port of Antwerp, on the other hand, is strongly influencing the upward trend.

TABLE 8 **HOURS WORKED AND ASSOCIATED COSTS OF INTERNAL HUMAN RESOURCES**
(reduced population: constant population)
(percentage change compared with the previous year, unless otherwise stated)

	2008	2009	2010
Change in the average number of employees on the staff register (p.c.)		*-3.4*	*-3.8*
Change in the number of hours actually worked (p.c.)		*-8.6*	*-0.3*
Change in staff costs (p.c.)		*-5.8*	*+4.6*
Average number of hours worked per annum per full-time equivalent *(hours)*	*1,532*	*1,450*	*1,502*
Average annual staff costs per full-time equivalent *(euros)*	*69,523*	*67,743*	*73,616*
Average staff costs per hour worked *(euros)*	*45*	*47*	*49*

Source: NBB (full presentation accounts only).

1.7.2 Composition of the workforce

The proportion of white-collar workers in the Belgian maritime ports has increased to the detriment of blue-collar workers. This tendency has been confirmed in all the ports examined individually except Brussels. The male/female proportion remains stable in all the ports except Ostend, where the share of male workers is rising slightly. The percentage of full-time staff is shrinking in all the ports except Zeebrugge. Among male staff, the proportion of those with secondary education qualifications is shrinking in the ports taken as a whole. Within the female ranks, the proportion of those with diplomas of higher education is increasing. However, the individual findings for each port show a divergence of trends.

[33] The national data mentioned were taken from P. Heuse and H. Zimmer (2011). The comparisons are merely an indication, since only firms filing their social balance sheet for a period of 12 months ending on 31 December were taken into account in that study. This is a smaller population.

[34] The constant sample was determined on the basis of the firms which filed full-format accounts throughout the period 2008 - 2010, and completed the items in the social balance sheet required for this study. The constant sample comprises 926 firms and 99,159 FTE's, or 24.4 % of the firms considered for this study in 2010 and 85.6 % of the direct employment calculated in this study.

TABLE 9 **INTERNAL WORKFORCE AT THE END OF THE FINANCIAL YEAR**
(reduced population: constant population)
(share as percentage of the total)

	2008	2009	2010
By professional category			
White-collar	*41*	*41*	*43*
Blue-collar	*56*	*55*	*54*
Other staff	*3*	*4*	*4*
By sex			
Males	*84*	*84*	*84*
Females	*16*	*16*	*16*
By working time			
Full-time	*91.9*	*90.9*	*90.3*
Part-time	*8.1*	*9.1*	*9.7*
By educational level			
Males			
Primary education (p.c.)	*20.5*	*19.3*	*20.3*
Secondary education (p.c.)	*58.7*	*57.5*	*55.3*
Higher non-university education (p.c.)	*14.8*	*15.7*	*16.4*
University education (p.c.)	*6.0*	*7.5*	*8.0*
Females			
Primary education (p.c.)	*9.4*	*8.6*	*8.0*
Secondary education (p.c.)	*51.7*	*49.2*	*46.5*
Higher non-university education (p.c.)	*28.2*	*29.8*	*31.8*
University education (p.c.)	*10.7*	*12.4*	*13.7*

Source: NBB (full presentation accounts only).

1.7.3 External staff

The share of external staff in total employment was up in 2010, as was their number of hours actually worked. This tendency has so far not been confirmed in the port of Antwerp where the proportion of external staff and their number of hours actually worked are declining. In the ports of Liège, Ghent and Ostend, the increase in the number of hours actually worked exceeded the 40 % mark. It was also in Liège where costs have risen fastest.

TABLE 10 **HIRED TEMPORARY STAFF AND STAFF PLACED AT THE ENTERPRISE'S DISPOSAL**
(reduced population: constant population)
(percentage change compared with the previous year, unless otherwise stated)

	2008	2009	2010
Share of external staff in total employment (on the basis of the number of hours actually worked) *(share as percentage of the total)*	13.4	12.3	13.0
Change in the number of hours actually worked		- 17.1	+ 6.4
Change in costs		- 25.7	+ 17.5

Source: NBB (full presentation accounts only).

1.7.4 Staff turnover

As in 2009, staff turnover was negative in 2010, contrary to the results at national level. The number of departures was greater than the number of entries in all the ports except for Ostend, where there was almost no difference. The causes of staff departures from the company are still mainly classed in the "other reasons"[35] category. A drop in the cases of early retirement and a rise in redundancies can nevertheless be noted. The proportion made up by staff taking retirement remains unchanged. The proportion of redundancies in the total is lowest in Liège and highest in Zeebrugge, under the influence of staff movements in cargo handling and other industries. In the ports of Antwerp and Zeebrugge, the

[35] Spontaneous departures, death in service, expiry of the period of fixed-term contracts, provided that they are not immediately followed by a new contract and the completion of the work for which the contract was concluded.

proportion of redundancies in the reasons for departures was over thirty percent, which is far higher than the national figures that point to a decline in the proportion of redundancies as the reason behind staff leaving between 2009 and 2010, down to only 13.3 % of the total in 2010.

TABLE 11 **STAFF TURNOVER**
(reduced population: constant population)
(share as percentage of the total,unless otherwise stated)

	2008	2009	2010
Net number of staff hired during the year *(FTE)*	+ 760	- 5,540	- 3,359
Staff leaving, by reason for termination of contract			
Retirement	*3.9*	*4.9*	*4.9*
Early retirement	*10.2*	*12.6*	*8.1*
Dismissal	*13.8*	*22.2*	*27.9*
Other reason	*72.1*	*60.6*	*59.1*

Source: NBB (full presentation accounts only).

1.7.5 Training[36]

A smaller percentage of firms reported training activities in 2010. Nevertheless, this percentage is still well above - more than double - the national average. The rate of participation in training is still higher among male staff members. The net cost per hour of training continued to rise in 2010. This trend is in line with developments noted at national level. The number of hours of training per person continues to fall, just as is the case at national level. The end-result is a decline in the percentage of hours worked actually spent training and in the share of training costs in total staff costs. It should be noted that the training course participation rate is not falling in the ports of Ghent, Liège and Brussels.

TABLE 12 **EFFORTS DEVOTED TO FORMAL TRAINING**
(reduced population: constant population)
(share as percentage of the total,unless otherwise stated)

	2008	2009	2010
P.c. of firms reporting training on the social balance sheet	54.2	57.5	56.4
Participation rate	53.4	54.5	52.6
Males	*54.9*	*55.6*	*53.6*
Females	*45.8*	*49.4*	*47.9*
Number of hours' training per person *(hours)*	47.7	34.7	32.8
Males (hours)	*48.5*	*35.5*	*33.6*
Females (hours)	*42.8*	*30.3*	*28.2*
Training costs per hour (euros)	55.1	58.5	64.2
Males (euros)	*54.3*	*58.8*	*64.4*
Females (euros)	*60.3*	*56.7*	*62.8*
P.c. of the number of hours worked devoted to training	1.7	1.3	1.2
Training costs as a percentage of total staff costs	2.0	1.6	1.5

Source: NBB (full presentation accounts only).

1.8 Financial ratios in the Belgian ports

The ratios presented below show the net return on equity after tax, liquidity in the broad sense, and solvency. The first ratio concerns the firms' ability to generate profits, and to give shareholders an idea of the firm's return after tax. The second ratio shows the firm's ability to mobilise in due time the cash resources that it needs in order to meet its short-term liabilities. Finally, the third ratio gives an idea of

[36] Here, training is meant in the formal sense, i.e. courses in premises reserved for that purpose, within the firm or outside. For example, on-the-job training, mentoring and self-training study are outside the scope of the social balance sheet.

the firm's ability to honour all its financial commitments in the short and long term. This section gives information on the movement in the ratios for the six Belgian ports together[37].

The study of the financial ratios is based on a constant sample [38] composed for the years 2008 to 2010. Consequently, the firms studied in the financial section of this report are not the same as those in the constant sample of the previous report, which may explain some discrepancies between the figures in the two publications. To permit comparison with the national data, i.e. all Belgian non-financial corporations, the same calculation method – namely globalisation – was used.

The net return on equity of firms in the Belgian ports recovered from the decline in 2009 at the Belgian ports viewed overal. Nevertheless, the picture varies from port to port. In the ports of Antwerp and Ostend, it remains quite steady. In the ports of Brussel, Liege and Zeebrugge, the improvement is significant. The ports' net return on equity still far exceeds the national average. However, the growth in net return on equity after taxes in the port of Ghent is quite exceptional. Here, the ratio is well up on the previous year mainly as a result of larger profits in the industrial sectors, notably chemicals, and in cargo handling and other logistic services. It is also worth noting that several companies have realized capital gains from the sale of assets. In the port of Antwerp, an improvement in the maritime cluster has been offset by a deterioration in the non-maritime cluster. Turning to the port of Ostend, a slight improvement can be noted in industry but a deterioration in land transport and the maritime sector. The port of Zeebrugge has seen a sharp increase in the ratio in industry and the maritime cluster. Conversely, the ratio for the port of Liège is declining in both industry and trade. As for Brussels, the net profitability ratio is rising considerably in other services and in the trade sector, but it is falling in the maritime cluster as a result of the suspension of the BILC project.

The ratio of liquidity in the broad sense remained relatively stable in 2010, while rising at the national level. It actually picked up in the ports of Antwerp, Liège and Brussels. Conversely, it saw a net deterioration in the ports of Ghent and Zeebrugge. In the port of Ostend, the ratio is continuing on a slow upward path. In the port of Antwerp, industry has made a major contribution to the higher ratio, unlike the port of Ghent where short-term debt has expanded strongly in this sector. In the port of Zeebrugge, it is industry again that has posted a net decline in its liquidity ratio. In the Liège port complex, the maritime sector has helped keep the ratio steady, since the metalworking industry registered a sharp deterioration in its ratio. In Brussels, the ratios for both the clusters are up.

TABLE 13 **FINANCIAL RATIOS IN THE BELGIAN PORTS FROM 2008 TO 2010**
(reduced population: constant population)

Ports	Return on equity after taxes (in p.c.)			Liquidity in the broad sense			Solvency (in p.c.)		
	2008	2009	2010	2008	2009	2010	2008	2009	2010
Antwerp	21.9	15.9	16.0	0.75	0.88	0.96	33.0	36.3	37.6
Ghent	9.1	7.0	28.1	1.28	1.29	0.90	46.7	45.2	36.1
Ostend	10.3	10.1	11.0	1.25	1.27	1.30	46.2	46.9	48.0
Zeebrugge	9.5	5.1	8.8	1.03	1.22	1.07	46.9	51.8	51.1
Liège	9.7	6.1	9.9	1.07	1.19	1.36	39.2	43.9	46.4
Brussels	8.4	1.2	6.0	1.11	1.10	1.27	29.8	30.5	33.4
Belgian ports	**15.7**	**14.1**	**15.6**	**0.80**	**0.93**	**0.92**	**34.7**	**37.4**	**37.0**
Non-financial corporations[39]	**7.0**	**7.7**	**8.6**	**1.10**	**1.14**	**1.19**	**40.3**	**41.9**	**41.7**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

[37] Note that readers wishing to compare the financial ratios of a firm with those in the sector where it operates can find that information in the company file published by the Central Balance Sheet Office.

[38] The constant sample composed for the study of the ratios includes all firms which filed their annual accounts in 2008, 2009 and 2010 and whose annual accounts items meet the conditions for the calculation of these ratios. For example, for the purpose of calculating profitability, the financial year must comprise 12 months and the equity must be strictly positive. This constant sample covers 2,359 firms, € 15,083.1 million of value added and 98,538 FTEs, or 62.1 % of the firms considered for the Belgian ports in 2010, 90.4 % of the direct value added and 85.1 % of the direct employment examined here.

[39] See "*Results and financial structure of firms in 2010"*,Vivet D. NBB, Economic review, December 2011, Brussels.

The solvency ratio came down slightly in 2010. The decrease was larger in the ports than at national level and was particularly marked in the port of Ghent. In the ports of Antwerp, Ostend, Liège and Brussels, this ratio was even seen to rise. In the case of Antwerp, the progress concerned both the maritime and non-maritime cluster. The same goes for the port of Ostend. In the port of Liège, solvency is deteriorating in the maritime sector but the non-maritime cluster is showing signs of improvement thanks to industry. Contrary to the port of Brussels where the ratio is getting worse in trade, industry and other logistic services. In the port of Ghent, on the other hand, the solvency ratio is increasing in the maritime cluster and land transport and falling in all the other sectors, particularly in industry. In the port of Zeebrugge, the rise of the ratio in the maritime cluster has been offset by a decline in the non-maritime cluster and more specifically in industry and other logistic services.

1.9 Financial health in the Belgian ports

The financial health indicator is designed as a weighted combination of variables, created by means of a model constructed in the same way as a failure prediction model. The model takes the form of a logistic regression discriminating between failing and non-failing companies. The definition of failure is based on a legal criterion, namely that a company is considered to have failed if it has faced bankruptcy or judicial administration in the past.

The indicator summarises each company's situation in a single value which takes account simultaneously of the solvency, liquidity and profitability dimensions. Those dimensions are complementary in the establishment of a financial diagnosis, as a high debt level, for example, may be offset by a plentiful cash flow, and vice versa. The indicator also takes account of the companies' age and size, particularly through interaction variables.

The indicator constitutes a strictly financial assessment of the companies at a given moment. That assessment is based on data from the annual accounts, and therefore disregards any other fundamental elements, such as development prospects, competition, management calibre or shareholders' willingness to provide financial support. In that respect, it must be regarded as one of the factors enabling an overall appraisal of a firm's situation.

The financial health classes are to be used in the enterprise files compiled by the Central Balance Sheet Office.[40] The sample of firms for which the financial health index was calculated is naturally much smaller than in the national study. Consequently, the results are more volatile. The result for a particular firm can therefore be obtained from the company file[41] and compared to the distribution of firms by financial health class in the ports, or in Belgium as a whole.

TABLE 14 **FINANCIAL HEALTH IN THE BELGIAN PORTS - IN % OF THE NUMBER OF COMPANIES**
(reduced population)

	2005	2006	2007	2008	2009	2010
Class 1	7.6	8.5	8.7	10.1	11.3	11.2
Class 2	18.7	19.3	20.7	19.6	20.4	21.0
Class 3	16.7	17.6	18.1	18.8	16.2	18.7
Class 4	17.4	16.6	17.2	16.2	16.0	14.8
Class 5	24.0	23.0	20.8	21.2	20.5	20.8
Class 6	9.9	9.8	9.2	8.3	9.6	8.0
Class 7	3.9	3.2	3.6	3.9	3.7	3.5
Class 8	1.1	1.3	0.9	1.2	1.2	1.2
Class 9	0.4	0.5	0.6	0.5	0.7	0.6
Class 10	0.2	0.2	0.2	0.3	0.5	0.2
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

[40] See Vivet D. (2011), Development of a financial health indicator based on companies' annual accounts , NBB, Working Paper No. 213 (Document series), Brussels.

[41] The company file compares the financial position of an entreprise with the financial position of the activity sector the enterprise belongs to. For more information, see introduction.

TABLE 15 **FINANCIAL HEALTH IN THE BELGIAN PORTS - IN % OF WORKERS ENTERED IN THE STAFF REGISTER**[42]
(reduced population)

	2005	2006	2007	2008	2009	2010
Class 1	12.2	10.6	6.9	7.9	7.4	13.8
Class 2	22.3	31.8	39.8	33.0	32.4	29.0
Class 3	26.0	23.9	25.9	27.9	25.5	30.9
Class 4	17.1	14.6	14.2	11.3	18.0	12.7
Class 5	18.6	15.9	10.6	16.7	13.2	10.7
Class 6	2.9	2.1	2.1	2.3	2.4	2.0
Class 7	0.8	0.8	0.4	0.5	0.7	0.5
Class 8	0.1	0.2	0.1	0.3	0.1	0.2
Class 9	0.0	0.1	0.1	0.0	0.1	0.1
Class 10	0.0	0.0	0.0	0.1	0.2	0.0
TOTAL	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

[42] Full-time equivalents (item 9087)

2 PORT OF ANTWERP

2.1 Port developments[43]

The year 2010 also gave Antwerp's port a chance to make up for part of the volume lost in 2009, although not completely. While the reduction in traffic in 2009 was slightly under 32 million tonnes, its increase in 2010 was 12.9 %, a gain of a little over 20 million tonnes. One of the difficulties in getting back to the volumes handled in 2008 almost certainly lies in general cargo excluding containers where growth was approximately 700 000 tonnes in 2010 after a drop of around 6.5 million tonnes. Among this type of merchandise, the iron and steel category enjoyed exactly the same positive trend in 2010 (+12.9 %) while non-ferrous metals and paper and cellulose continued their decline.

Likewise, solid bulk still fell short of its 2008 volumes. Even though it had lost more than a third of its traffic in 2009, or almost ten million tonnes, it recorded an 13.8 % growth rate in 2010, that is, 2.4 million tonnes. Once again, commodities that are used inter alia in the metalworking industry were found to be lagging behind. Ore regained one-eighth of what it had lost in 2009. Coal, on the other hand, continued to contract with a further drop of 1 million tonnes (-16.3 %). By contrast, cereals exceeded 2008 volumes, posting their best result for the last seven years. Fertilisers also put on very strong growth and seem to have halted the downward trend observed over the last five years for this product category.
Liquid bulk continued to grow, with transshipments coming in just under the 41 million tonne mark. Oil traffic also expanded, although traffic in petroleum derivative products did not manage to keep up the 2009 volumes and was back down to figures closer to the 2008 results. Bulk chemicals enjoyed a sharp increase of 19 % and now exceed 10 million tonnes, setting a new record.
Ro-ro traffic excluding containers increased by 16.7 %, which helped it to recover a little over 40 % of the volumes lost in 2009.
Containerised traffic expressed in twenty-tonne equivalents was up by 15.9 %, almost regaining the volumes transshipped in 2008. Loading and unloading full containers showed faster growth than for empty ones. Trade with South America and Africa in 2010 was up on 2008 levels. For Central and North America, Europe, the Far and Middle East as well as the Near East, the figures remain slightly below that. The port's main partner region is still Europe, followed closely by the Near East.

The first meetings and general assembly were held in 2010 on Antwerp's "Total Plan" for a more competitive port. In view of the recession, the Port Authority and Alfaport joined forces to encourage thinking about the future of the port. One of the desired objectives was to set out a shared vision for the organisation and future development of the port. Revolving around ten common themes - four main lines of supply chain thinking and six port community consolidation themes - working groups composed of private and public sector stakeholders carried out analyses and then came up with proposals. These proposals subsequently provided inspiration for the launch of several initiatives.

At the same time, the port is continuing to invest in order to safeguard its competitive edge.
The deepening of the Scheldt Estuary, which had been the subject of long negotiations, notably between the Netherlands and the Flemish Region, finally became reality in 2010. This project, which was completed in December 2010, raised the draught threshold from 13.10 metres to 15.2 metres for container ships leaving the port. The tide windows for this type of vessel have thus been widened by one hour.

During the course of the year 2010, the Van Cauwelaert lock was thoroughly renovated. The sluice-gates have been replaced along with their barriers and opening mechanisms. A tunnel for the cables has been installed and a new building to house the machinery has been constructed. Access routes to the lock have also been modernised. In the same year, the construction of a second lock at Kallo (Waasland) was approved, so as not to hinder the future development of this zone of the port, since the first sluice can no longer cope with any increase in traffic volumes.

In 2010, direct value added increased by 12.8 %, representing a volume growth of 10.9 %. Total value added (direct and indirect) was up by 7.5 % . Direct value added represented 4.8 % of the GDP of the Flemish region, or 0.3 percentage point more than in 2009; total value added expanded from 9,2 to

[43] Sources: Lloyd Special Report *Port of Antwerp - Overview 2010* and *Annual Report 2010* of the Antwerp Port Authority.

9.5 % in 2010. The share of direct and total value added in Belgian GDP was 2.8 and 5.4 % respectively.

Direct employment in the port of Antwerp fell by 3.3 % in 2010. The smaller decline in indirect employment resulted in a loss of 2.0 % for the total employment. In the year under review, direct and total employment represented respectively 2.6 and 6.4 % of employment in the Flemish Region. Employment represented 1.5 (direct) and 3.7 % (total) of Belgian employment. Both figures were down by 0.1 percentage point compared to the previous year.

CHART 4 **CHANGE IN DIRECT VALUE ADDED**
(in € million, current prices)

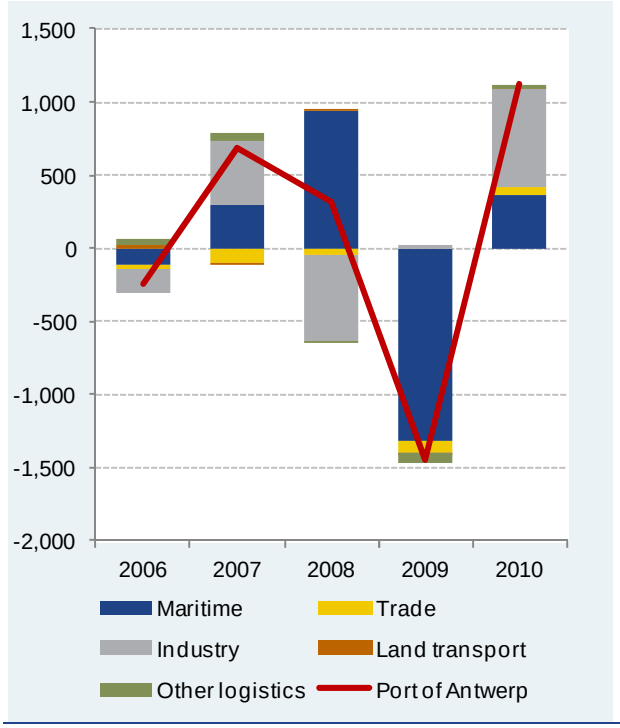
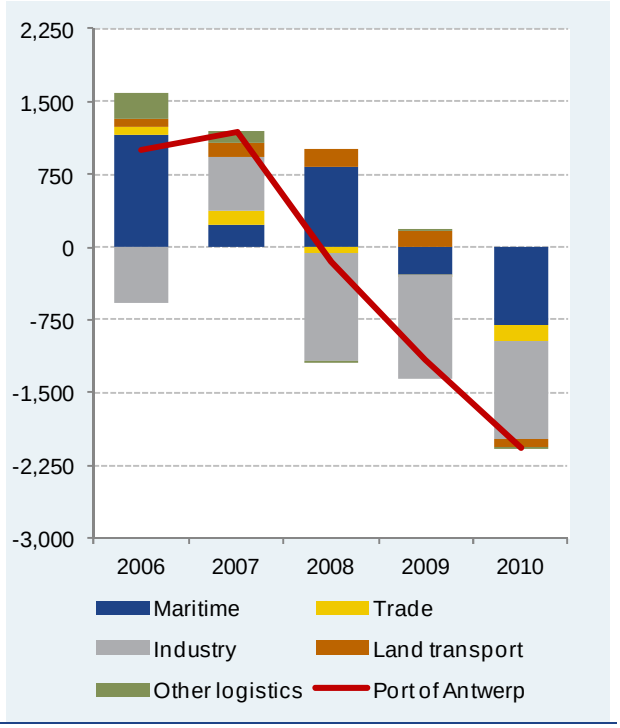


CHART 5 **CHANGE IN DIRECT EMPLOYMENT**
(FTE)



Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

2.2 Value added

Direct value added in the port of Antwerp increased about 13 % in both the maritime and non-maritime clusters. In the former, only the shipbuilding and repair segment registered a major contraction of value added. After the value added of the shipping companies figures reached a low point in the year 2009, they saw a partial recovery in 2010. In the non-maritime cluster, energy and road transport were the only segments to post a downward trend in their value added. In the trade sector, it was up by 9.3 %, a good result although not enough to get back to 2008 levels. Industry is now showing its best figures for the last six years. However, they conceal the fact that part of the value added was derived from the closure of the General Motors assembly plant. The chemicals industry has confirmed the recovery of value added already observed in 2009. Value added is picking up in fuel production, too. Value added in land transport remains stable but is going up in other logistic services despite very divergent trends within this category.

TABLE 16 **VALUE ADDED AT THE PORT OF ANTWERP FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**9,404.4**	**9,159.5**	**9,839.8**	**10,161.1**	**8,704.5**	**9,821.7**	**100.0**	**+ 12.8**	**+ 0.9**
MARITIME CLUSTER	***3,029.7***	***2,910.2***	***3,208.8***	***4,149.5***	***2,831.8***	***3,189.0***	***32.5***	***+ 12.6***	***+ 1.0***
Shipping agents and forwarders	481.6	497.2	522.2	589.9	554.3	563.2	5.7	+ 1.6	+ 3.2
Cargo handling	1,130.4	1,189.2	1,246.8	1,355.7	1,160.7	1,244.6	12.7	+ 7.2	+ 1.9
Shipping companies	971.5	749.7	919.4	1,578.8	583.4	814.1	8.3	+ 39.5	- 3.5
Shipbuilding and repair	40.4	44.3	42.5	59.2	56.4	47.2	0.5	- 16.4	+ 3.1
Port construction and dredging	71.4	78.7	111.4	177.8	103.0	139.5	1.4	+ 35.5	+ 14.3
Fishing	0.4	1.0	0.8	1.0	1.6	1.3	0.0	- 14.9	+ 25.5
Port trade	12.5	12.7	13.3	17.1	17.1	18.2	0.2	+ 6.8	+ 7.8
Port authority	203.8	216.2	226.4	236.0	219.6	225.6	2.3	+ 2.8	+ 2.1
Public sector	117.6	121.4	126.0	134.0	135.8	135.1	1.4	- 0.5	+ 2.8
Allocation (p.m.)	*54.3*	*25.4*	*29.3*	*64.4*	*49.6*	*79.2*	-	*+ 59.5*	*+ 7.8*
NON-MARITIME CLUSTER	***6,374.7***	***6,249.2***	***6,631.1***	***6,011.6***	***5,872.6***	***6,632.7***	***67.5***	***+ 12.9***	***+ 0.8***
TRADE	973.1	951.0	844.7	797.8	711.7	777.9	7.9	+ 9.3	- 4.4
INDUSTRY	4,826.7	4,660.7	5,098.6	4,509.9	4,524.8	5,193.2	52.9	+ 14.8	+ 1.5
Energy	191.9	223.0	261.2	349.7	448.5	435.1	4.4	- 3.0	+ 17.8
Fuel production	1,126.0	1,026.6	1,061.1	1,054.9	766.3	947.1	9.6	+ 23.6	- 3.4
Chemicals	2,663.4	2,515.2	2,602.9	2,259.3	2,541.2	2,655.7	27.0	+ 4.5	- 0.1
Car manufacturing	444.3	479.1	690.1	326.3	261.1	609.2	6.2	+ 133.3	+ 6.5
Electronics	6.8	6.0	8.5	8.5	16.1	16.7	0.2	+ 3.6	+ 19.8
Metalworking industry	168.6	175.6	206.0	219.8	190.4	197.7	2.0	+ 3.8	+ 3.2
Construction	92.6	103.8	119.6	117.7	127.3	142.9	1.5	+ 12.2	+ 9.1
Food industry	34.6	40.4	48.6	54.8	49.0	60.4	0.6	+ 23.2	+ 11.8
Other industries	98.6	91.1	100.4	118.9	124.8	128.4	1.3	+ 2.9	+ 5.4
LAND TRANSPORT	214.7	240.9	233.8	251.0	250.8	251.0	2.6	+ 0.1	+ 3.2
Road transport	114.3	130.2	131.3	139.1	123.5	119.8	1.2	- 3.0	+ 0.9
Other land transport	100.4	110.7	102.5	111.8	127.3	131.2	1.3	+ 3.1	+ 5.5
OTHER LOGISTIC SERVICES	360.1	396.6	454.0	452.9	385.3	410.6	4.2	+ 6.6	+ 2.7
2. INDIRECT EFFECTS	**8,092.6**	**8,629.6**	**8,982.4**	**9,133.7**	**9,184.5**	**9,402.6**	**-**	**+ 2.4**	**+ 3.0**
MARITIME CLUSTER	***2,912.7***	***3,055.4***	***3,079.0***	***3,419.9***	***3,308.9***	***3,409.5***	***-***	***+ 3.0***	***+ 3.2***
NON-MARITIME CLUSTER	***5,179.9***	***5,574.2***	***5,903.4***	***5,713.7***	***5,875.6***	***5,993.1***	***-***	***+ 2.0***	***+ 3.0***
TOTAL VALUE ADDED	**17,497.0**	**17,789.1**	**18,822.2**	**19,294.8**	**17,888.9**	**19,224.3**	**-**	**+ 7.5**	**+ 1.9**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

Highlights in the maritime cluster in 2010[44]:

- One of the heavyweights behind the growth of value added in cargo handling is M.S.C. Home Terminal, which handled 15 % more containers in 2010 than in 2009.
- Value added in the shipbuilding and repair segment has been adversely affected by the bankruptcy of Scheepvaart- en Konstruktiebedrijf and by a drop in value added at Antwerp Ship Repair.
- Among the shipping companies, Safmarine Container Lines boosted its value added significantly in 2010. The company managed to turn around the losses it had incurred in 2009 into operating profits. On the other hand, value added generated by Bocimar International plummeted on the back of higher purchases of goods and services and a decline in other operating profits.
- Despite a huge drop in value added at Inter Ferry Boats after its restructuring plan was put in place and following the winding up of Hapag Lloyd Belgium, the shipping agents and forwarders segment showed strong resilience.
- In the dredging sector, Belgian company Dredging International saw its value added expand by more than one-third.

Highlights in the non-maritime cluster in 2010:

- Despite the loss made by Firma Léon Van Parijs, value added in the trade segment rose by 9.3 % thanks mainly to three companies: Kuwait Petroleum (Belgium), Pioneer Europe and Solvin.
- After a year with particularly weak value added in 2009, value added figures at both Exxonmobil Petroleum & Chemical and Belgian Refining Corporation were more in line with the results of the previous years.
- Chemicals industry company Lanxess enjoyed exceptional growth in its turnover, both for caprolactam (+42 %) and rubber chemicals (+56 %). Demand for these products is on the rise, driven by the favourable economic developments noted in 2010.
- In the car manufacturing segment, the sharp increase in value added comes from the compensation that General Motors Belgium and GM Automotive Services Belgium had to pay out to their staff owing to the closure of the Antwerp assembly plant.

TABLE 17 VALUE ADDED TOP 10 AT THE PORT OF ANTWERP IN 2010[45]

Ranking	Company name	Sector
1	B.A.S.F. ANTWERPEN	Chemicals
2	EXXONMOBIL PETROLEUM & CHEMICAL	Fuel production
3	KUWAIT PETROLEUM (BELGIUM)	Trade
4	GENERAL MOTORS BELGIUM	Car manufacturing
5	ELECTRABEL	Energy
6	SAFMARINE CONTAINER LINES	Shipping companies
7	ANTWERP PORT AUTHORITY	Port authority
8	TOTAL RAFFINADERIJ ANTWERPEN	Fuel production
9	EVONIK DEGUSSA ANTWERPEN	Chemicals
10	M.S.C. HOME TERMINAL	Cargo handling

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

2.3 Employment

Direct employment in the port of Antwerp fell by 2.8 % in the maritime cluster and by 3.7 % in the non-maritime cluster. In the former, it was the cargo handlers who lost the most jobs expressed as full-time equivalents, although, in percentage terms, it was the shipbuilding and repair segment that suffered the biggest losses. The only branch of activity that has posted growth since 2005 is port construction and dredging; in 2010, it recorded the biggest increase of the whole cluster.

In the non-maritime cluster, trade slumped by 7 %, after having held up well in 2009. In the industrial sector, only two segments posted positive growth: electronics and construction. All the other segments lost between 0.1 and 5.1 % of their workforces, with the exception of the food industry and especially car

[44] Commentary based on annual accounts filed and published annual reports.

[45] The top ten tables are based on information from annual accounts, surveys, annual reports and allocation formulas based on regional statistics. In this edition, no individual figures are published as accurate 2010 data could not be obtained for all companies.

manufacturing which plummeted by almost 20 % following the closure of the factory owned by the General Motors group. Employment in road transport shrank by 9 %, while the other land transport segment continues to expand.

Highlights in the maritime cluster in 2010:

- Several firms in the cargo-handling sector have put cost-control plans into place involving staff cuts. The most notable names include DP World and Antwerp Euroterminal. Some companies, such as NYK Logistics, posted a reduction in their turnover and, consequently, in their staff too. But the situation was quite the reverse for others, like M.S.C. Home Terminal, which saw an expansion in both business and workforce.
- Among the shipping companies, Cobelfret Bulk Carriers added two handymax for dry bulk to its fleet during the course of 2010. These two ships were directly leased under a "time charter" contract. Smit Transport Belgium has taken delivery of two new ships as well: "Union Fighter" and "Union Boxer". Staff numbers are on the rise in both companies.
- Several freight forwarders and shipping agents have registered a reduction in their staff numbers, namely Cetraco, MSC Belgium, Ahlers Belgium. Some of the operational activities of OCCL Benelux were transferred to a foreign firm within the same group. On the other hand, higher employment was recorded by some other companies like Maxx Intermodal Systems or CMA CGM Belgium nv which merged with Franco Belgian Agencies.
- In the field of port construction and dredging, one company - Dredging International - still managed to have a very busy year in 2010, notably with work carried out in Antwerp, Kruibeke, Ghent, Ostend and Dilsen-Stokkem. The number of FTEs in this segment increased for the fifth year running.
- The shipbuilding and repair segment has been badly hit by the bankruptcy of Scheepvaart-en Konstruktiebedrijf.

Highlights in the non-maritime cluster in 2010:

- On the trade front, employment at Pioneer Europe shrank by around 60 full-time equivalent posts in 2010. Renault V.I. Belgique had launched a new organisation the year before which enabled it to cut staff costs during the year under review. Moreover, Univeg Services Antwerp was taken over by another firm called Univeg Import.
- In car manufacturing, as part of the wider restructuring of the group, General Motors stopped making cars in Belgium. The closure of the assembly line in the port of Antwerp brought job losses at General Motors Belgium and GM Automotive Services Belgium of almost 650 FTEs in 2010.
- In the metalworking industry, employment was badly hit by Antwerp Container Engineering ceasing its activities.
- In the electronics sector, the expansion of Fabricom Maintenance's business in its new workshop at Zwijndrecht has helped this segment gain a lot of ground.
- Many road hauliers cut their staff in 2010. However, the bankruptcy of Anné Gebroeders and the departure of another company, Jules Renard, made the figures even worse.

TABLE 18 **EMPLOYMENT AT THE PORT OF ANTWERP FROM 2005 TO 2010**

(FTE)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010	Change from 2009 to 2010	Annual average change from 2005 to 2010
							(in p.c.)	(in p.c.)	(in p.c.)
1. DIRECT EFFECTS	**61,716**	**62,725**	**63,918**	**63,754**	**62,582**	**60,509**	**100.0**	**- 3.3**	**- 0.4**
MARITIME CLUSTER	***26,273***	***27,431***	***27,667***	***28,498***	***28,206***	***27,410***	***45.3***	***- 2.8***	***+ 0.9***
Shipping agents and forwarders	6,457	6,665	6,788	6,940	6,805	6,608	10.9	- 2.9	+ 0.5
Cargo handling	14,079	14,849	14,918	15,249	14,858	14,350	23.7	- 3.4	+ 0.4
Shipping companies	740	872	949	1,048	1,100	1,080	1.8	- 1.9	+ 7.8
Shipbuilding and repair	666	670	608	794	829	711	1.2	- 14.2	+ 1.3
Port construction and dredging	525	543	562	646	699	784	1.3	+ 12.2	+ 8.4
Fishing	13	17	14	15	20	18	0.0	- 10.5	+ 7.6
Port trade	154	159	156	169	192	200	0.3	+ 4.6	+ 5.4
Port authority	1,646	1,647	1,640	1,631	1,659	1,680	2.8	+ 1.2	+ 0.4
Public sector	1,993	2,009	2,032	2,007	2,044	1,979	3.3	- 3.1	- 0.1
Allocation (p.m.)	*1,082*	*1,520*	*1,602*	*1,719*	*1,755*	*1,633*	-	*- 6.9*	*+ 8.6*
NON-MARITIME CLUSTER	***35,443***	***35,294***	***36,251***	***35,256***	***34,376***	***33,099***	***54.7***	***- 3.7***	***- 1.4***
TRADE	2,304	2,395	2,532	2,476	2,476	2,302	3.8	- 7.0	- 0.0
INDUSTRY	26,977	26,400	26,945	25,833	24,763	23,760	39.3	- 4.0	- 2.5
Energy	949	914	946	1,036	1,101	1,075	1.8	- 2.4	+ 2.5
Fuel production	2,676	2,597	2,641	2,650	2,721	2,701	4.5	- 0.7	+ 0.2
Chemicals	11,099	10,912	10,940	10,917	10,655	10,641	17.6	- 0.1	- 0.8
Car manufacturing	6,087	5,851	5,934	4,608	3,806	3,055	5.0	- 19.7	- 12.9
Electronics	123	100	130	128	206	253	0.4	+ 22.7	+ 15.5
Metalworking industry	3,339	3,310	3,591	3,606	3,276	3,108	5.1	- 5.1	- 1.4
Construction	1,412	1,426	1,384	1,378	1,427	1,484	2.5	+ 4.0	+ 1.0
Food industry	483	469	453	459	478	395	0.7	- 17.3	- 3.9
Other industries	809	822	925	1,052	1,093	1,048	1.7	- 4.1	+ 5.3
LAND TRANSPORT	3,443	3,516	3,666	3,840	4,000	3,908	6.5	- 2.3	+ 2.6
Road transport	1,653	1,730	1,831	1,942	1,924	1,750	2.9	- 9.0	+ 1.1
Other land transport	1,789	1,786	1,835	1,898	2,076	2,158	3.6	+ 4.0	+ 3.8
OTHER LOGISTIC SERVICES	2,719	2,983	3,107	3,107	3,137	3,128	5.2	- 0.3	+ 2.8
2. INDIRECT EFFECTS	**85,729**	**88,476**	**90,959**	**91,890**	**86,245**	**85,327**	**-**	**- 1.1**	**- 0.1**
MARITIME CLUSTER	***32,326***	***32,468***	***33,061***	***34,000***	***32,553***	***32,987***	***-***	***+ 1.3***	***+ 0.4***
NON-MARITIME CLUSTER	***53,403***	***56,008***	***57,899***	***57,890***	***53,692***	***52,340***	***-***	***- 2.5***	***- 0.4***
TOTAL EMPLOYMENT	**147,445**	**151,201**	**154,877**	**155,644**	**148,828**	**145,836**	**-**	**- 2.0**	**- 0.2**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

TABLE 19 EMPLOYMENT TOP 10 AT THE PORT OF ANTWERP IN 2010

Ranking	Company name	Sector
1	B.A.S.F. ANTWERPEN	Chemicals
2	BNRC GROUP	Other land transport
3	PUBLIC SECTOR	Public sector
4	ANTWERP PORT AUTHORITY	Port authority
5	GENERAL MOTORS BELGIUM	Car manufacturing
6	EXXONMOBIL PETROLEUM & CHEMICAL	Fuel production
7	PSA ANTWERP	Cargo handling
8	M.S.C. HOME TERMINAL	Cargo handling
9	ELECTRABEL	Energy
10	TOTAL RAFFINADERIJ ANTWERPEN	Fuel production

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

2.4 Investment

Investment in the port of Antwerp was down by 16.8 % in 2010. In the maritime cluster it fell by a fifth. The decline was particularly steep in the case of shipping companies, where investment is at its lowest level for six years, but cargo handling firms also recorded a fall. Conversely, in port construction and dredging, investment was up. In the non-maritime cluster, investment was 10 % down. While land transport has remained steady and trade has expanded, investment in industry and other logistic services has contracted. In industry, there were fairly wide variations between segments. Two major segments – fuel production and chemicals – recorded a rise but the decline in the other segments was sufficient to result in a reduction for industry as a whole.

Highlights in the maritime cluster in 2010:

- In the cargo handling segment, Oiltanking Stolthaven Antwerp is continuing to develop its infrastructure, notably its storage capacity and development of the terminal for the loading and unloading of barges and ships. Antwerp Distribution and Product Operations invested almost € 20 million, mainly in machinery, equipment, installations and buildings. PSA Antwerp also invested € 20 million in 2010, chiefly in rolling stock and spreaders. Tabaknatie acquired a new 46 hectare site on the Left Bank and began developing it in April 2010.
- ITC Rubis Terminal Antwerp constructed a new terminal with a capacity of 100,000 cubic metres in Antwerp for the storage and handling of a wide range of liquid chemicals, gases and petroleum products. The new terminal is located on the Left Bank of the River Scheldt. Construction of the first phase actually started in November 2010. The terminal will have a deep-water jetty with 7 berths, capable of handling large size chemical tankers, coasters and barges, as well as rail and truck handling facilities.
- Among the shipping companies, Safmarine cut back its investment in 2010. In contrast, Conti-Lines took delivery of a new vessel, the "CL Antwerp". Bocimar International took delivery of five new ships but immediately sold three of them. In the end, the capesize vessels "Mineral New York" and "Mineral Stonehenge" joined its fleet in July and December respectively. At Euronav, investment was down sharply: one ship, "Eugenie", was delivered at the beginning of the year and several others were sold. Express and Exmar Shipping have evidently reached the end of a series of investments and did not embark on any additional investments in 2010.
- In the case of shipping agents and forwarders, the completion of major investments by Katoen Natie Bulk Terminal implies a reduction for the segment.
- In the port construction and dredging segment, DEME brought into service the" Samson" backacter, specially designed for heavy work. The company also has additional vessels under construction.

TABLE 20 **INVESTMENT AT THE PORT OF ANTWERP FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
MARITIME CLUSTER	***2,871.2***	***1,473.6***	***1,922.4***	***2,479.1***	***2,012.6***	***1,610.6***	***65.5***	***- 20.0***	***- 10.9***
Shipping agents and forwarders	40.7	55.6	72.3	107.3	69.0	50.8	2.1	- 26.5	+ 4.5
Cargo handling	654.8	351.9	569.6	682.7	638.6	567.7	23.1	- 11.1	- 2.8
Shipping companies	2,004.2	878.4	1,014.3	1,355.7	1,031.8	644.5	26.2	- 37.5	- 20.3
Shipbuilding and repair	3.0	4.0	4.6	7.8	6.6	12.1	0.5	+ 83.4	+ 31.9
Port construction and dredging	44.1	88.8	170.5	189.7	178.7	264.1	10.7	+ 47.8	+ 43.1
Fishing	0.0	0.1	0.2	0.2	0.2	0.9	0.0	n.	+ 146.9
Port trade	0.8	0.8	1.9	2.5	1.7	0.9	0.0	- 45.5	+ 2.9
Port authority	51.4	42.7	61.9	91.6	44.7	33.9	1.4	- 24.2	- 8.0
Public sector	72.2	51.3	27.2	41.5	41.4	35.7	1.4	- 13.8	- 13.2
Allocation (p.m.)	*87.5*	*115.2*	*184.2*	*162.6*	*214.8*	*458.9*	-	*+ 113.7*	*+ 39.3*
NON-MARITIME CLUSTER	***1,030.5***	***1,030.8***	***1,413.9***	***1,143.6***	***945.7***	***850.0***	***34.5***	***- 10.1***	***- 3.8***
TRADE	43.6	50.3	58.9	62.7	39.2	43.4	1.8	+ 10.6	- 0.1
INDUSTRY	875.1	873.9	1,229.9	925.9	755.5	705.3	28.7	- 6.6	- 4.2
Energy	99.5	74.1	42.6	60.0	119.5	75.0	3.0	- 37.2	- 5.5
Fuel production	174.4	144.1	166.3	200.2	185.4	199.6	8.1	+ 7.6	+ 2.7
Chemicals	506.4	573.0	939.5	572.1	357.6	367.4	14.9	+ 2.7	- 6.2
Car manufacturing	57.3	33.1	29.2	18.9	9.7	6.0	0.2	- 38.9	- 36.4
Electronics	0.0	1.2	0.4	0.3	2.0	0.1	0.0	- 93.0	+ 27.6
Metalworking industry	6.1	9.6	7.1	10.6	10.5	11.9	0.5	+ 13.5	+ 14.2
Construction	11.2	17.5	17.9	22.1	23.3	19.0	0.8	- 18.4	+ 11.1
Food industry	7.8	8.3	12.6	20.8	11.1	12.7	0.5	+ 14.5	+ 10.1
Other industries	12.3	12.9	14.3	21.1	36.3	13.6	0.6	- 62.7	+ 2.0
LAND TRANSPORT	48.5	41.8	40.9	55.7	33.5	34.0	1.4	+ 1.4	- 6.9
Road transport	16.0	18.6	21.0	35.9	12.5	18.0	0.7	+ 43.7	+ 2.4
Other land transport	32.5	23.1	19.8	19.8	21.0	16.0	0.6	- 23.8	- 13.3
OTHER LOGISTIC SERVICES	63.3	64.9	84.2	99.4	117.4	67.4	2.7	- 42.6	+ 1.2
DIRECT INVESTMENT	**3,901.7**	**2,504.4**	**3,336.2**	**3,622.7**	**2,958.3**	**2,460.7**	**100.0**	**- 16.8**	**- 8.8**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office and on surveys).

Highlights in the non-maritime cluster in 2010:

- In the trade segment, Kuwait Petroleum (Belgium) is still the most active investor.
- In chemicals, B.A.S.F. Antwerpen invested a substantial amount again in 2010, spending a total of € 146.6 million on tangible fixed assets. Among its significant investments, the company mentions the new sulphuric acid production plant, the Deacon project (facility for recycling HCl into chlorine) and investments in site infrastructures.
- In the energy segment, Electrabel invested less in 2010. The Lanxess cogeneration unit entered service in 2010. One of the Kallo power station units was closed down.
- In the fuel production segment, the Antwerp Terminal & Processing Company site received investment totalling around € 100 million, to be used for continuing work on the storage facilities and communications, improving the wharf area, doubling the storage capacity and further optimising the bitumen-related operations.However, Exxonmobil Petroleum & Chemical is still the principal investor in this segment.
- The reduction in investment in other land transport is attributable essentially to the BNRC group.

TABLE 21 INVESTMENT TOP 10 AT THE PORT OF ANTWERP IN 2010

Ranking	Company name	Sector
1	DREDGING, ENVIRONMENTAL AND MARINE ENGINEERING	Port construction and dredging
2	BOCIMAR INTERNATIONAL	Shipping companies
3	B.A.S.F. ANTWERPEN	Chemicals
4	EXXONMOBIL PETROLEUM & CHEMICAL	Fuel production
5	ELECTRABEL	Energy
6	ITC RUBIS TERMINAL ANTWERP	Cargo handling
7	SEA-TANK TERMINAL ANTWERP	Cargo handling
8	SAFMARINE CONTAINER LINES	Shipping companies
9	TOTAL RAFFINADERIJ ANTWERPEN	Fuel production
10	DREDGING INTERNATIONAL	Port construction and dredging

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

3 PORT OF GHENT

3.1 Port developments[46]

The port of Ghent recorded a spectacular increase in its traffic volumes in 2010 with a growth rate as high as 31.1 %. It thus beat its previous record from 2008, even though there was little change in the number of maritime vessels docking in the port in 2010. This is evidence of the current trend towards an increase in vessel size. Containers, which had shown a slight decline in 2009, were up by a third. Ro-ro traffic, down in both 2008 and 2009, increased by 16.2 % and thus made up some of the lost ground. Conventional goods traffic also enjoyed strong growth (+35.9 %), reaching its highest level for ten years, an even better score than in 2008.
Dry bulk now accounts for 65 % of Ghent's traffic, after seeing a 36.7 % increase in a year. Transshipment of liquid bulk increased by 13.8 %, taking this type of transport over the 4 million tonne mark, its best result over the last ten years.

Solid fuels practically doubled in the space of a year and now account for more than 15 % of all cargo transhipped in the port. However, the biggest category is still ore and metal residues which widened the gap with the other categories of goods through an increase of 57.6 %. It now makes up 22 % of all cargo freight loaded and unloaded in the port of Ghent; unloaded cargoes took up the lion's share, accounting for more than three-quarters of the volumes handled. The third biggest category was foodstuffs, down by 10 % and the only other category along with agricultural products to see a fall. Petroleum products were up by 28 % with a very strong increase in incoming goods. Crude minerals and building materials rose by almost one quarter.
The main countries among the port of Ghent's trading partners are Brazil mainly for ores and fruit juice, Russia for metallic products and coal, Sweden with the ro-ro traffic and also Great Britain.

The volume of traffic transported on the inland waterways expanded by one quarter. Virtually all categories of goods recorded growth, with the exception of fertilizers which fell back slightly (-7 %). Already very small in 2009, ro-ro traffic stopped altogether. Bulk and containers both posted growth rates of around 25 %. Liquid bulk and conventional traffic nevertheless showed slower growth.

After 14 years of construction work, the Kluizendok was officially inaugurated in November 2010. In all, the construction of the Kluizendok is estimated to have cost € 195.6 million, 155.2 million of which were borne by the Flemish Region. At the end of December, it already had 13 concessionnaires, carefully selected according to traffic criteria, employment and value added. Alongside the more traditional industrial activities, the port of Ghent strives to provide space for logistical and distribution services and encourage diversification within the port, mainly thanks to the biochemicals industry. Among other things, it is also worth noting that a new terminal has been set up for liquid bulk on the northern inner harbour. In order to ensure efficient modal transport, rail infrastructure has been built around the Kluizendok terminal, too.

Direct value added of the port of Ghent increased by 9.4 % (+7.5 % by volume). With the indirect effects included, total value added was up by 3.2 %. In 2010, the share of direct and total value added in Flemish GDP amounted to 1.7 and 3.7 % respectively. In comparison with 2009, with a share of 1.0 % in Belgian GDP, a small 0.1 percentage point improvement was recorded. The share of total value added in Belgian GDP remained stable at 2.1 %.

Direct employment of the firms in the port of Ghent declined by 3.2 % in 2010. As a result of the positive evolution of the indirect employment (+3.1 %), total employment grew with 0.6 % in 2010. The proportion of direct and total employment in Flemish employment was 1.1 and 3.0 % respectively, the former figure being down by 0.1 percentage point against 2009. In relation to employment in Belgium, the shares remainded stable at 0.7 and 1.7 % respectively.

[46] Sources: *Jaaroverzicht 2010* of the Vlaamse Havencommissie and *Annual Report 2010* of the Ghent Port Authority.

CHART 6 **CHANGE IN DIRECT VALUE ADDED**
(in € million, current prices)

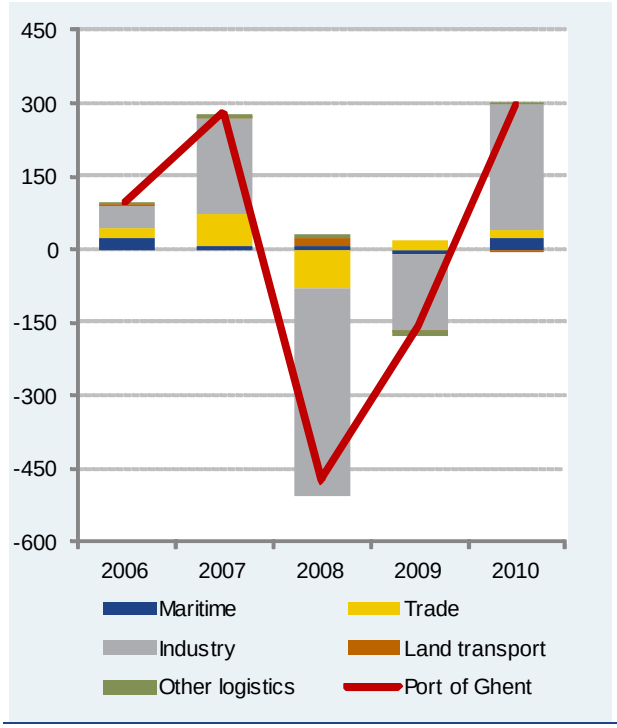
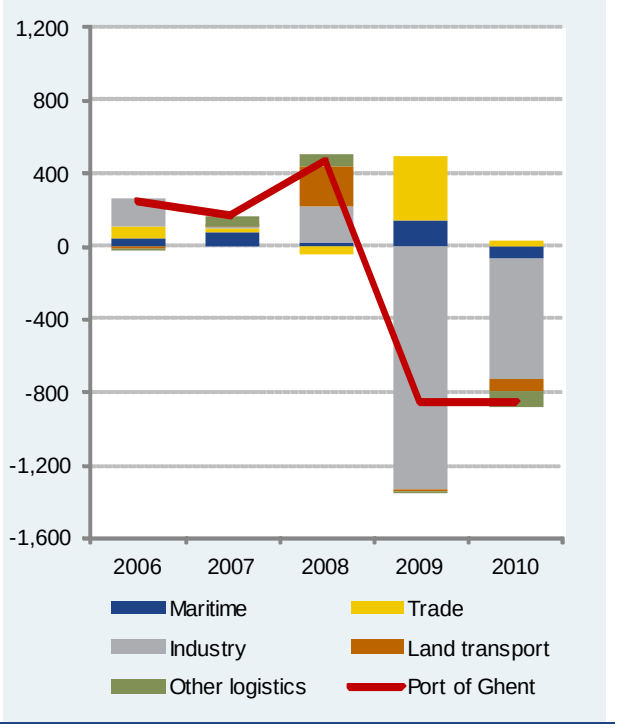


CHART 7 **CHANGE IN DIRECT EMPLOYMENT**
(FTE)



Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

3.2 Value added

Direct value added in the port of Ghent rose by 9.4 % in 2010. The non-maritime cluster showed the biggest increase. In the maritime cluster, it was mainly the cargo handlers providing the growth. In the non-maritime cluster, value added in trade, industry and other logistic services expanded, while in land transport, it was down 7 %. In industry, it was only in the other industries segment that value added fell. In all the other segments, it grew at a rate varying from 5 to 60 %. With the exception of the metalworking industry, value added in all these segments taken individually in 2010 was at its highest point for the last six years.

Highlights in the maritime cluster in 2010:

- The growth of dockers' activity in the Port of Ghent and at DSV Solutions (Automotive) had a highly positive influence on value added of the cargo handling segment.

Highlights in the non-maritime cluster in 2010:

- Trade benefited from an improvement of both Total Belgium and Oiltanking Ghent's results. On the other hand, Honda Europe and Belgium Shell suffered a deteroriation in their value added.
- In the chemicals industry, the Oleon group saw a very rapid recovery of demand (and thus turnover) and an increase in raw material prices largely due to growth of the Asian market. Overall, value added produced by the company was up sharply. Kronos Europe also enjoyed a big increase in turnover and an improvement in its operating margins, which in turn had a positive impact on its value added.
- In car manufacturing, Volvo Cars, Volvo Group Belgium and Plastal all registered a net increase in their value added.
- Turning to the other industries segment, despite higher volumes produced, Stora Enso Langerbrugge saw its operating profits fall mainly as a result of a drop in the sales price combined with a rise in the purchase price of recycled paper.
- In the construction industry, Belgian firm Denys enjoyed strong growth in its turnover and its operating profits.
- In the food industry, value added was boosted by US agri-food giant Cargill.

TABLE 22 **VALUE ADDED AT THE PORT OF GHENT FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**3,406.9**	**3,493.9**	**3,771.5**	**3,299.2**	**3,139.0**	**3,434.9**	**100.0**	**+ 9.4**	**+ 0.2**
MARITIME CLUSTER	***236.9***	***255.3***	***262.6***	***272.5***	***262.4***	***284.5***	***8.3***	***+ 8.4***	***+ 3.7***
Shipping agents and forwarders	45.1	51.6	58.9	55.7	51.1	50.8	1.5	- 0.5	+ 2.4
Cargo handling	143.0	152.3	144.9	151.5	146.8	167.0	4.9	+ 13.8	+ 3.2
Shipping companies	9.4	8.3	10.8	15.9	14.0	13.7	0.4	- 1.7	+ 7.8
Shipbuilding and repair	4.1	4.4	5.2	4.9	4.8	5.1	0.1	+ 6.1	+ 4.8
Port construction and dredging	0.0	0.0	-0.1	-0.1	-1.1	-0.7	0.0	- 37.6	n.
Fishing	0.0	0.0	0.0	0.0	0.0	0.0	0	n.	n.
Port trade	6.4	5.1	5.2	3.4	3.4	3.1	0.1	- 9.0	- 13.6
Port authority	16.6	18.6	22.3	24.0	23.6	25.5	0.7	+ 7.8	+ 8.9
Public sector	12.2	15.0	15.5	17.2	19.7	19.9	0.6	+ 1.0	+ 10.3
Allocation (p.m.)	*8.5*	*2.2*	*2.6*	*10.1*	*9.4*	*9.2*	-	*- 2.0*	*+ 1.5*
NON-MARITIME CLUSTER	***3,170.0***	***3,238.6***	***3,508.9***	***3,026.7***	***2,876.6***	***3,150.4***	***91.7***	***+ 9.5***	***- 0.1***
TRADE	764.2	782.0	848.5	769.2	788.0	804.5	23.4	+ 2.1	+ 1.0
INDUSTRY	2,287.5	2,335.5	2,532.0	2,105.7	1,949.5	2,208.4	64.3	+ 13.3	- 0.7
Energy	48.7	61.3	71.5	84.4	99.0	106.4	3.1	+ 7.5	+ 16.9
Fuel production	6.6	5.0	11.0	9.3	32.9	52.2	1.5	+ 58.7	+ 51.2
Chemicals	281.9	296.3	316.2	319.4	254.2	336.0	9.8	+ 32.2	+ 3.6
Car manufacturing	628.3	655.2	660.7	645.7	569.8	674.4	19.6	+ 18.4	+ 1.4
Electronics	40.5	57.7	60.7	59.0	62.8	70.9	2.1	+ 12.8	+ 11.9
Metalworking industry	1,013.8	935.3	1,098.2	666.6	618.9	652.4	19.0	+ 5.4	- 8.4
Construction	70.1	78.5	76.3	89.6	86.7	101.7	3.0	+ 17.4	+ 7.7
Food industry	60.4	65.1	76.4	65.8	63.6	88.2	2.6	+ 38.8	+ 7.9
Other industries	137.3	181.1	161.0	165.8	161.7	126.2	3.7	- 22.0	- 1.7
LAND TRANSPORT	54.5	56.3	56.5	70.3	68.7	63.9	1.9	- 7.0	+ 3.2
Road transport	37.9	39.6	43.4	54.1	50.4	46.0	1.3	- 8.6	+ 4.0
Other land transport	16.6	16.7	13.1	16.1	18.3	17.9	0.5	- 2.4	+ 1.5
OTHER LOGISTIC SERVICES	63.9	64.8	72.0	81.6	70.4	73.5	2.1	+ 4.4	+ 2.9
2. INDIRECT EFFECTS	**3,611.1**	**3,754.1**	**3,884.4**	**4,003.4**	**4,032.4**	**3,967.5**	**-**	**- 1.6**	**+ 1.9**
MARITIME CLUSTER	***334.8***	***345.1***	***308.8***	***319.7***	***341.6***	***340.9***	***-***	***- 0.2***	***+ 0.4***
NON-MARITIME CLUSTER	***3,276.3***	***3,409.1***	***3,575.6***	***3,683.7***	***3,690.9***	***3,626.6***	***-***	***- 1.7***	***+ 2.1***
TOTAL VALUE ADDED	**7,018.0**	**7,248.0**	**7,655.9**	**7,302.7**	**7,171.4**	**7,402.4**	**-**	**+ 3.2**	**+ 1.1**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

TABLE 23 VALUE ADDED TOP 10 AT THE PORT OF GHENT IN 2010

Ranking	Company name	Sector
1	ARCELORMITTAL BELGIUM	Metalworking industry
2	TOTAL BELGIUM	Trade
3	VOLVO CARS	Car manufacturing
4	VOLVO GROUP BELGIUM	Car manufacturing
5	BELGIAN SHELL	Trade
6	TAMINCO	Chemicals
7	STORA ENSO LANGERBRUGGE	Other industries
8	EDF LUMINUS	Energy
9	HONDA EUROPE	Trade
10	DENYS	Construction

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

3.3 Employment

Direct employment in the port of Ghent contracted by 3.2 %, this is the second year of decreasing for six years. This reduction has affected the maritime cluster as well as the non-maritime cluster. In the maritime cluster, cargo handling lost 80 FTE jobs. In the non-maritime cluster, trade has resisted the trend fairly well and even managed to expand, but employment is falling in industry, land transport and other services. In industry, car manufacturing and metalworking shed the greatest number of jobs.

Highlights in the maritime cluster in 2010:

- Several companies in the cargo-handling segment saw their workforce shrink in 2010. This was notably the case with Ghent Handling and Distribution and even Euroports Terminals Gent, the latter having decided to reduce its staff numbers during the 2009 recession. Conversely, DSV Solutions (Automotive) has seen its business grow and has increased its employee numbers.
- In the shipping agents and forwarders' segment, companies like Movianto Belgium for instance saw their staff numbers grow, while others, like DSV Solutions, witnessed a reduction in their workforce.

Highlights in the non-maritime cluster in 2010:

- The increase in employment in the trade sector is partly attributable to ArcelorMittal FCE Belgium and to the expansion of Stora Enso Belgium.
- The drop in employment in the car manufacturing segment stems largely from several different companies: Volvo Cars, Johnson Controls Automotive, Tower Automotive Belgium and Volvo Group Belgium.
- In the metalworking industry, ArcelorMittal Belgium put in place its 'Plan 2009' providing for cuts in the workforce to the tune of 987 full-time equivalents over a 3-year period (until end-2011), through natural wastage, (early) retirement programmes and a voluntary redundancy programme. Between the end of 2008 and end-2010, 700 employees left the company under this plan.
- Employment rose in the construction sector thanks to the arrival of a new firm, Ekvador.
- In the other services segment, General Industrial Assistance Cataro shed staff in the face of falling turnover. But several other companies also cut back on staff numbers; among these were Jacobs Belgie nv and Labo Van Vooren.
- Only three firms operating in land transport recorded an increase in the number of full-time equivalents that they employed.

TABLE 24 EMPLOYMENT AT THE PORT OF GHENT FROM 2005 TO 2010

(FTE)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**26,974**	**27,285**	**27,421**	**27,890**	**27,048**	**26,185**	**100.0**	**- 3.2**	**- 0.6**
MARITIME CLUSTER	***2,745***	***2,853***	***2,899***	***2,924***	***3,081***	***3,001***	***11.5***	***- 2.6***	***+ 1.8***
Shipping agents and forwarders	555	617	671	635	552	551	2.1	- 0.2	- 0.1
Cargo handling	1,583	1,665	1,646	1,691	1,921	1,841	7.0	- 4.1	+ 3.1
Shipping companies	93	59	63	76	73	78	0.3	+ 6.5	- 3.6
Shipbuilding and repair	72	75	84	73	76	79	0.3	+ 2.9	+ 1.8
Port construction and dredging	0	0	0	0	0	0	0.0	n.	n.
Fishing	0	0	0	0	0	0	0	n.	n.
Port trade	36	27	25	34	37	31	0.1	- 16.6	- 3.2
Port authority	148	150	150	150	155	160	0.6	+ 3.0	+ 1.5
Public sector	259	261	260	265	267	262	1.0	- 1.9	+ 0.3
Allocation (p.m.)	*185*	*263*	*233*	*254*	*269*	*252*	-	*- 6.1*	*+ 6.5*
NON-MARITIME CLUSTER	***24,229***	***24,433***	***24,522***	***24,966***	***23,966***	***23,183***	***88.5***	***- 3.3***	***- 0.9***
TRADE	1,930	1,996	2,021	1,977	2,325	2,354	9.0	+ 1.3	+ 4.0
INDUSTRY	20,703	20,867	20,873	21,076	19,748	19,090	72.9	- 3.3	- 1.6
Energy	225	289	277	320	283	285	1.1	+ 0.6	+ 4.8
Fuel production	59	52	59	79	87	91	0.3	+ 4.3	+ 9.0
Chemicals	2,098	2,038	2,116	2,116	1,946	1,953	7.5	+ 0.4	- 1.4
Car manufacturing	8,812	8,824	8,751	8,862	8,082	7,711	29.4	- 4.6	- 2.6
Electronics	734	714	728	708	647	614	2.3	- 5.2	- 3.5
Metalworking industry	6,278	6,348	6,288	6,200	5,840	5,575	21.3	- 4.5	- 2.3
Construction	970	1,010	977	1,094	1,227	1,272	4.9	+ 3.7	+ 5.6
Food industry	480	490	562	590	604	600	2.3	- 0.6	+ 4.5
Other industries	1,046	1,102	1,116	1,106	1,033	989	3.8	- 4.3	- 1.1
LAND TRANSPORT	782	774	777	989	977	915	3.5	- 6.3	+ 3.2
Road transport	486	505	542	716	679	620	2.4	- 8.7	+ 5.0
Other land transport	295	270	235	273	298	295	1.1	- 1.0	- 0.0
OTHER LOGISTIC SERVICES	814	796	852	923	917	825	3.1	- 10.1	+ 0.3
2. INDIRECT EFFECTS	**37,917**	**39,504**	**42,109**	**44,126**	**40,876**	**42,155**	**-**	**+ 3.1**	**+ 2.1**
MARITIME CLUSTER	***3,789***	***3,609***	***3,666***	***3,618***	***3,711***	***3,732***	***-***	***+ 0.6***	***- 0.3***
NON-MARITIME CLUSTER	***34,128***	***35,894***	***38,443***	***40,508***	***37,165***	***38,424***	***-***	***+ 3.4***	***+ 2.4***
TOTAL EMPLOYMENT	**64,891**	**66,789**	**69,530**	**72,016**	**67,924**	**68,340**	**-**	**+ 0.6**	**+ 1.0**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

TABLE 25 EMPLOYMENT TOP 10 AT THE PORT OF GHENT IN 2010

Ranking	Company name	Sector
1	ARCELORMITTAL BELGIUM	Metalworking industry
2	VOLVO CARS	Car manufacturing
3	VOLVO GROUP BELGIUM	Car manufacturing
4	DENYS	Construction
5	DSV SOLUTIONS(AUTOMOTIVE)	Cargo handling
6	HONDA EUROPE	Trade
7	STORA ENSO LANGERBRUGGE	Other industries
8	GE INDUSTRIAL BELGIUM	Electronics
9	TAMINCO	Chemicals
10	TOWER AUTOMOTIVE BELGIUM	Car manufacturing

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

3.4 Investment

Investment in the port of Ghent is down in both the maritime and the non-maritime cluster. In the maritime cluster there was a 7.6 % fall, originating mainly in the cargo handling segment and to a lesser extent in the port authority. In the non-maritime cluster, trade, industry, land transport and other logistic services recorded lower investment, but the biggest fall occurred in industry. The metalworking industry and electronics were the only segments where investment held up.

Highlights in the maritime cluster in 2010:

- In the cargo handling segment, investment by Ghent Transport & Storage, which in 2010 inaugurated its new tank terminal at the Kluizendok and acquired cranes (including a LHM 400 crane with 24 cbm grab) was not enough to counterbalance the ending of certain investment projects in other companies.
- In the shipping agents and forwarders segment, Tailormade Logistics moved into new premises in 2010, rented under a leasing contract. As a result, the segment remained steady.

Highlights in the non-maritime cluster in 2010:

- In trade, the main investors are Ghent Coal Terminal and Espabel Trading.
- In the energy segment, Ackermans & van Haaren and Electrabel invested in converting a coal-fired unit at the Rodenhuize power station into a 100 % biomass unit. The new unit has an output of 180 MW. In addition, after the conversion it will reduce CO2 emissions by 1.2 million tons annually. In the new unit, coal has been fully replaced by wood pellets.
- In 2010, Stora Enso Langerbrugge, the main investor in the "Other industries" segment, started up its new multifuel combined heat and power plant.
- In the Food industry and in Road transport, most companies cut their investment.
- In the construction segment there were no major projects to compensate for the reduced investment at Ghent Warehousing System.

TABLE 26 **INVESTMENT AT THE PORT OF GHENT FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
MARITIME CLUSTER	***88.6***	***95.3***	***140.4***	***110.3***	***113.9***	***105.3***	***20.6***	***- 7.6***	***+ 3.5***
Shipping agents and forwarders	2.3	5.0	10.0	5.9	3.1	10.3	2.0	+ 236.1	+ 34.7
Cargo handling	39.3	44.7	65.9	49.8	69.1	53.5	10.5	- 22.5	+ 6.4
Shipping companies	9.0	7.8	10.6	20.9	11.7	11.5	2.3	- 1.2	+ 5.2
Shipbuilding and repair	0.2	0.5	0.5	0.6	0.8	3.5	0.7	+ 328.3	+ 76.3
Port construction and dredging	0.0	0.0	0.0	0.1	0.0	0.0	0.0	n.	n.
Fishing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	- 100.0
Port trade	0.2	0.1	0.2	0.0	0.0	0.0	0.0	n.	- 100.0
Port authority	20.8	16.8	27.0	19.3	21.6	15.2	3.0	- 29.4	- 6.0
Public sector	16.7	20.6	26.2	13.7	7.7	11.2	2.2	+ 45.7	- 7.7
Allocation (p.m.)	*17.1*	*22.2*	*29.6*	*25.7*	*32.6*	*38.3*	-	*+ 17.5*	*+ 17.6*
NON-MARITIME CLUSTER	***276.4***	***300.2***	***583.1***	***611.1***	***500.7***	***405.4***	***79.4***	***- 19.0***	***+ 8.0***
TRADE	32.8	25.7	40.7	48.0	41.8	34.5	6.8	- 17.4	+ 1.0
INDUSTRY	226.0	232.7	510.3	533.7	429.4	344.5	67.4	- 19.8	+ 8.8
Energy	8.6	4.8	61.1	125.4	166.9	115.4	22.6	- 30.8	+ 68.0
Fuel production	1.2	14.1	72.0	55.9	11.7	3.0	0.6	- 74.6	+ 20.5
Chemicals	34.1	42.8	76.5	65.1	35.5	33.6	6.6	- 5.3	- 0.3
Car manufacturing	80.5	56.4	114.6	97.7	54.6	52.7	10.3	- 3.6	- 8.1
Electronics	3.0	3.2	5.2	6.3	3.0	5.1	1.0	+ 69.4	+ 11.3
Metalworking industry	63.9	61.7	113.4	74.6	54.8	58.8	11.5	+ 7.3	- 1.6
Construction	7.0	14.3	12.8	16.3	20.7	11.5	2.2	- 44.7	+ 10.3
Food industry	6.0	20.5	29.4	29.9	20.9	9.6	1.9	- 54.3	+ 9.8
Other industries	21.6	15.0	25.4	62.5	61.1	54.8	10.7	- 10.4	+ 20.5
LAND TRANSPORT	6.0	13.6	14.5	15.9	11.1	9.4	1.8	- 15.0	+ 9.6
Road transport	3.5	10.6	12.2	12.3	9.9	3.7	0.7	- 62.8	+ 1.2
Other land transport	2.5	3.0	2.3	3.5	1.2	5.7	1.1	+ 398.2	+ 18.3
OTHER LOGISTIC SERVICES	11.6	28.3	17.6	13.5	18.4	17.0	3.3	- 7.5	+ 8.0
DIRECT INVESTMENT	**364.9**	**395.5**	**723.5**	**721.4**	**614.6**	**510.7**	**100.0**	**- 16.9**	**+ 7.0**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office and on surveys).

TABLE 27 INVESTMENT TOP 10 AT THE PORT OF GHENT IN 2010

Ranking	Company name	Sector
1	ELECTRABEL	Energy
2	ARCELORMITTAL BELGIUM	Metalworking industry
3	STORA ENSO LANGERBRUGGE	Other industries
4	VOLVO CARS	Car manufacturing
5	GHENT TRANSPORT AND STORAGE	Cargo handling
6	GHENT PORT AUTHORITY	Port authority
7	PUBLIC SECTOR	Public sector
8	VOLVO GROUP BELGIUM	Car manufacturing
9	TAMINCO	Chemicals
10	KRONOS EUROPE	Chemicals

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

4 PORT OF OSTEND

4.1 Port developments[47]

Traffic in the port of Ostend, expressed in tonnage, contracted by 8.1 % in 2010, down for the second year running. But not all types of transport were affected by this decline. Passenger car traffic expanded by one-third and thus saw its best performance for the last seven years. As regards passenger transport, a 7 % growth rate can be noted thanks to LD-Lines. From April 2010, LD-Lines and Transeuropa Ferries began a cooperation pact, with the former company accepting passengers from the second. This provided a new outlet for passenger transport while Transeuropa Ferries wanted to concentrate its core business on freight transport.
On the other hand, the year 2010 was disappointing on the cruise front as only six cruise liners called into Ostend, after the port saw several cancellations. Roll-on-roll-off traffic in that year consisted of just one ferry link, the Ostend to Ramsgate line. This route showed very clear signs of improvement from the month of September onwards. Nevertheless, it was not alone able to make up for the loss of traffic due to the departure of the Cobelfret shipping company in mid-2009. Between 2009 and 2010, ro-ro freight traffic shrank by 14.3 %.
Other goods traffic (general cargo) grew by 8.3 % in 2010, mainly thanks to the transport of agri-food products. However, this business has since moved away.

Ostend's new port access channel, which is both deeper and wider, has been open to traffic since February 2010. The alignment of the access road with the Montgomery dock is now 143° compared with 128° before. The new course of the channel makes access to the port much easier and enables vessels 200 metres long and with a carrying capacity of 10,000 deadweight tonnes to call at the port. The refurbishment of the port's entrance also requires two new jetties to be built. These will guarantee vessels' safe access to the port. Work on the jetty began in 2009. But work on the west jetty only started after the access channel was finished. The east jetty will stretch 600 metres into the sea and will have an esplanade as well.

AG Haven Oostende, the port authority, is continuing to invest in the renewable energy market. This policy requires it to maximise management of the space available in the port and to reinforce the docks so that they can reach a load-bearing capacity of 20 tonnes/m^2. The Plassendale 1 zone has been chosen for this project. Its location close to the canal will make it possible for heavy materials to be brought in via the waterway for the assembly work. It was with this project in mind that a company called Renewable Energy Base Oostende (Rebo) has been set up. This company runs the only dock with a heavy-load-bearing capacity within a radius of 200 km. But other infrastructure at the Zeewezendok are also at the refurbishment planning stage. Rebo is in charge of marketing the infrastructure in 2012.

The direct value added produced by the port of Ostend was up by 9.6 % in 2010 (7.7 % by volume). Total value added, which includes the part generated upstream of the firms under review, increased by 7.4 %. Direct and total value added in 2010 represented 0.2 and 0.5 % respectively of the GDP of the Flemish Region. In 2010, the share of direct and total value added in Belgian GDP amounted to 0.1 and 0.3 % respectively.

Direct employment in the port of Ostend dropped 1.9 %. The total of direct and indirect employment was down by 1.5 % in 2010. As in the previous year, the workforce in the firms under review at the port corresponded to 0.2 % of employment in the Flemish Region. Total employment – direct plus indirect employment – came to 0.4 % of Flemish employment. In 2010, direct and total employment represented 0.1 and 0.2 % respectively of Belgian employment.

[47] Sources: *Jaaroverzicht 2010* of the Vlaamse Havencommissie and *Annual Report 2010* of the Ostend Port Authority.

CHART 8 **CHANGE IN DIRECT VALUE ADDED**
(in € million, current prices)

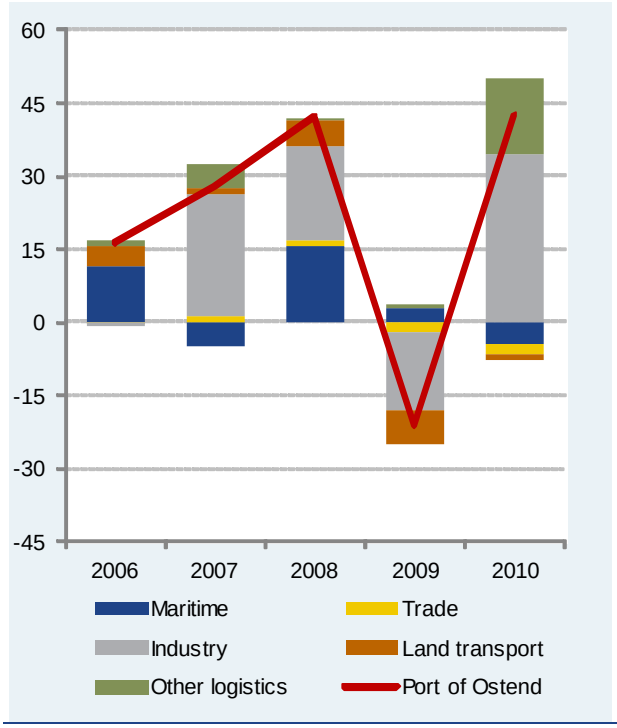
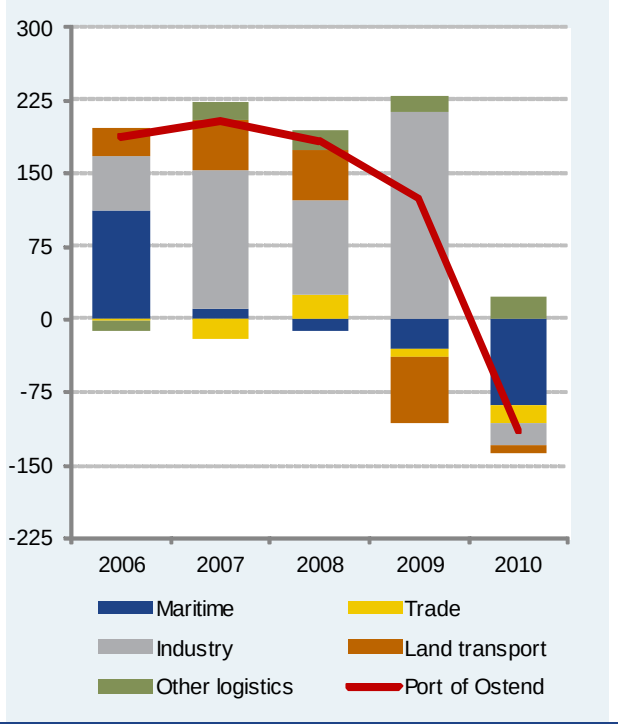


CHART 9 **CHANGE IN DIRECT EMPLOYMENT**
(FTE)



Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

4.2 Value added

Direct value added in the port of Ostend expanded by 9.6 % in 2010. The growth was driven by the non-maritime cluster since value added in the maritime declined by 2.7 %. It is principally the port construction and dredging segment that was behind this contraction. In the non-maritime cluster, value added came down in both trade and land transport while it was up in industry and other logistic services. In the industrial sector, value added in the energy segment more than doubed, while in metalworking, it made up some lost ground.

Highlights in the maritime cluster in 2010:

- The departure of TerminalCo did not affect the cargo-handling segment too much, mainly thanks to the growth of value added at Ter Polder, the maritime division of Belgian Group Verhelst.
- In the shipbuilding and repair sector, local company Noordzee Kranen en Transport managed to turn around its gross margins and thus its value added figures.
- However, in the fisheries sector, Morubel saw a continued erosion of its value added.
- As for the port construction and dredging segment, value added generated by Baggerwerken Decloedt en zoon was down, despite higher turnover figures, on account of the pressure exerted by operating costs on gross margin.

Highlights in the non-maritime cluster in 2010:

- The increase in value added in the energy segment was mainly attributable to two companies, namely Electrawinds Biomassa and Electrawinds Biostoom. The biomass firm enjoyed a higher gross profit margin while the second company registered a sharp rise in its turnover accompanied by a corresponding increase in operating profits.
- With a more favourable economic climate in the metalworking industry segment in 2010, Daikin Europe's turnover and operating profits recovered.
- In the other industries segment, Metco Recycling posted a big decline in its gross margin after seeing the sales price of its products fall sharply as a result of the recession.
- The higher value added in the other logistic services segment was largely due to a sharp rise in operating profits at Electrawinds following the sale of stakeholdings.

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TABLE 28 **VALUE ADDED AT THE PORT OF OSTEND FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**387.9**	**402.6**	**430.6**	**472.7**	**451.2**	**494.5**	**100.0**	**+ 9.6**	**+ 5.0**
MARITIME CLUSTER	***135.1***	***145.2***	***140.7***	***156.4***	***158.7***	***154.4***	***31.2***	***- 2.7***	***+ 2.7***
Shipping agents and forwarders	3.0	3.1	3.7	3.7	5.2	5.2	1.1	- 0.1	+ 11.6
Cargo handling	7.7	8.1	6.1	7.4	2.9	2.8	0.6	- 2.8	- 18.4
Shipping companies	2.8	0.8	-1.0	9.0	0.2	0.2	0.0	+ 38.4	- 39.8
Shipbuilding and repair	12.3	12.1	13.8	11.6	12.6	13.4	2.7	+ 6.5	+ 1.8
Port construction and dredging	31.8	39.7	30.2	41.9	55.4	47.7	9.7	- 13.8	+ 8.5
Fishing	35.2	38.6	41.4	35.7	36.7	38.5	7.8	+ 4.8	+ 1.8
Port trade	0.2	0.2	0.2	0.3	0.4	0.4	0.1	+ 5.1	+ 14.0
Port authority	5.2	4.3	4.7	4.6	3.0	3.2	0.6	+ 5.9	- 9.4
Public sector	36.8	38.2	41.6	42.1	42.4	42.9	8.7	+ 1.3	+ 3.1
Allocation (p.m.)	*10.4*	*11.9*	*13.3*	*10.3*	*10.1*	*11.4*	-	*+ 13.1*	*+ 1.9*
NON-MARITIME CLUSTER	***252.8***	***257.4***	***290.0***	***316.3***	***292.5***	***340.1***	***68.8***	***+ 16.3***	***+ 6.1***
TRADE	17.3	17.3	18.4	19.7	17.5	15.9	3.2	- 9.5	- 1.7
INDUSTRY	210.0	209.4	234.8	253.7	238.0	272.4	55.1	+ 14.5	+ 5.3
Energy	1.6	5.1	3.7	-6.1	13.6	28.5	5.8	+ 110.1	+ 78.4
Fuel production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Chemicals	37.0	33.5	33.3	34.5	38.5	39.3	8.0	+ 2.2	+ 1.2
Car manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Electronics	0.7	0.6	0.7	1.0	1.0	1.2	0.2	+ 27.2	+ 13.4
Metalworking industry	150.1	151.6	175.8	203.0	154.9	174.5	35.3	+ 12.6	+ 3.1
Construction	4.8	5.1	5.8	5.8	15.6	16.1	3.3	+ 2.8	+ 27.5
Food industry	7.7	6.4	6.7	6.1	6.2	5.3	1.1	- 15.6	- 7.2
Other industries	8.2	7.1	8.7	9.4	8.1	7.5	1.5	- 8.3	- 2.0
LAND TRANSPORT	20.8	24.6	25.6	31.0	24.0	23.0	4.6	- 4.4	+ 2.1
Road transport	18.2	21.6	22.9	28.9	24.0	23.0	4.6	- 4.4	+ 4.7
Other land transport	2.5	3.0	2.7	2.1	0.0	0.0	0.0	n.	- 100.0
OTHER LOGISTIC SERVICES	4.7	6.1	11.2	11.9	13.0	28.9	5.8	+ 122.5	+ 43.8
2. INDIRECT EFFECTS	**338.6**	**366.9**	**382.7**	**426.4**	**418.8**	**439.7**	**-**	**+ 5.0**	**+ 5.4**
MARITIME CLUSTER	***118.5***	***132.1***	***109.7***	***131.9***	***134.9***	***128.1***	***-***	***- 5.0***	***+ 1.6***
NON-MARITIME CLUSTER	***220.0***	***234.8***	***273.0***	***294.4***	***283.9***	***311.6***	***-***	***+ 9.8***	***+ 7.2***
TOTAL VALUE ADDED	**726.5**	**769.5**	**813.4**	**899.1**	**870.0**	**934.2**	**-**	**+ 7.4**	**+ 5.2**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

TABLE 29 VALUE ADDED TOP 10 AT THE PORT OF OSTEND IN 2010

Ranking	Company name	Sector
1	DAIKIN EUROPE	Metalworking industry
2	BAGGERWERKEN DECLOEDT EN ZOON	Port construction and dredging
3	PUBLIC SECTOR	Public sector
4	PROVIRON FUNCTIONAL CHEMICALS	Chemicals
5	ELECTRAWINDS	Other services
6	ELECTRAWINDS BIOSTOOM	Energy
7	ELECTRAWINDS BIOMASSA	Energy
8	MORUBEL	Fishing
9	BELGIAN NAVY	Public sector
10	ALGEMENE ONDERNEMINGEN SOETAERT	Construction

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

4.3 Employment

Employment in the port of Ostend contracted by 1.9 % in 2010. The maritime cluster was the worst hit with a drop of 3.7 %, a reduction which mainly affected cargo-handling and the public sector. The port construction and dredging segment is the only area in the maritime cluster where a rise in the number of jobs was noted. In the main sectors of the non-maritime cluster, it was only in other logistic services that employment rose. The decline in land transport (-2.8 %) and in industry has nevertheless remained fairly limited, despite a net fall in employment being registered in the chemicals industry.

Highlights in the maritime cluster in 2010:

- The fall in employment in cargo handling is largely concentrated in the hands of two companies, namely Oostendse Sleepsvaartmaatschappij and TerminalCo.
- The Belgian Navy has also cut back its presence in the port of Ostend.
- In the fishing segment, one company, Rederij Jacomina, has gone into bankruptcy, while another, Exploitatie Vismijn Oostende, has reduced its staff numbers.

Highlights in the non-maritime cluster in 2010:

- In Autumn 2010, the chemicals industry was hit by the decison by the Bonar Xirion to cease production. The company's board of directors has consequently launched the collective redundancy procedure under the "Renault Law" and laid off staff under the factory closure plan. A social programme has been put in place for the workers.
- In the same sector, Proviron Basic Chemicals has also reduced the size of its workforce.

TABLE 30 **EMPLOYMENT AT THE PORT OF OSTEND FROM 2005 TO 2010**

(FTE)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**4,357**	**4,526**	**4,723**	**4,898**	**5,027**	**4,931**	**100.0**	**- 1.9**	**+ 2.5**
MARITIME CLUSTER	***2,067***	***2,162***	***2,165***	***2,146***	***2,121***	***2,042***	***41.4***	***- 3.7***	***- 0.2***
Shipping agents and forwarders	46	43	50	55	72	68	1.4	- 5.9	+ 8.0
Cargo handling	154	162	173	154	127	97	2.0	- 23.5	- 8.8
Shipping companies	24	25	6	34	1	1	0.0	- 6.8	- 43.7
Shipbuilding and repair	233	246	257	236	232	227	4.6	- 1.9	- 0.5
Port construction and dredging	353	350	328	352	348	352	7.1	+ 1.1	- 0.1
Fishing	453	500	500	486	486	478	9.7	- 1.6	+ 1.1
Port trade	3	3	4	5	6	6	0.1	+ 12.3	+ 13.5
Port authority	42	42	47	46	44	40	0.8	- 8.8	- 1.0
Public sector	759	792	799	778	805	772	15.7	- 4.1	+ 0.3
Allocation (p.m.)	*164*	*176*	*172*	*148*	*138*	*144*	-	*+ 3.7*	*- 2.6*
NON-MARITIME CLUSTER	***2,290***	***2,364***	***2,558***	***2,753***	***2,906***	***2,889***	***58.6***	***- 0.6***	***+ 4.8***
TRADE	204	203	183	208	201	194	3.9	- 3.3	- 1.0
INDUSTRY	1,724	1,778	1,922	2,018	2,232	2,210	44.8	- 1.0	+ 5.1
Energy	5	12	22	34	50	59	1.2	+ 16.3	+ 66.4
Fuel production	0	0	0	0	0	0	0.0	n.	n.
Chemicals	421	397	417	416	440	393	8.0	- 10.7	- 1.3
Car manufacturing	0	0	0	0	0	0	0.0	n.	n.
Electronics	10	10	11	12	12	23	0.5	+ 88.3	+ 16.8
Metalworking industry	1,060	1,125	1,222	1,293	1,322	1,317	26.7	- 0.4	+ 4.4
Construction	94	102	103	103	223	235	4.8	+ 5.4	+ 20.1
Food industry	75	78	87	88	107	105	2.1	- 2.2	+ 6.9
Other industries	59	52	62	73	77	78	1.6	+ 1.6	+ 5.6
LAND TRANSPORT	287	317	369	421	352	342	6.9	- 2.8	+ 3.6
Road transport	242	268	320	385	352	342	6.9	- 2.8	+ 7.2
Other land transport	45	49	49	35	0	0	0.0	n.	- 100.0
OTHER LOGISTIC SERVICES	75	65	84	105	121	143	2.9	+ 18.6	+ 13.7
2. INDIRECT EFFECTS	**4,297**	**4,384**	**4,347**	**4,900**	**4,506**	**4,459**	**-**	**- 1.0**	**+ 0.7**
MARITIME CLUSTER	***1,856***	***1,853***	***1,477***	***1,884***	***1,303***	***1,241***	***-***	***- 4.8***	***- 7.7***
NON-MARITIME CLUSTER	***2,441***	***2,531***	***2,870***	***3,016***	***3,203***	***3,219***	***-***	***+ 0.5***	***+ 5.7***
TOTAL EMPLOYMENT	**8,654**	**8,910**	**9,069**	**9,798**	**9,533**	**9,390**	**-**	**- 1.5**	**+ 1.6**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

TABLE 31 EMPLOYMENT TOP 10 AT THE PORT OF OSTEND IN 2010

Ranking	Company name	Sector
1	DAIKIN EUROPE	Metalworking industry
2	PUBLIC SECTOR	Public sector
3	BAGGERWERKEN DECLOEDT EN ZOON	Port construction and dredging
4	BELGIAN NAVY	Public sector
5	PROVIRON FUNCTIONAL CHEMICALS	Chemicals
6	CLEMACO CONTRACTING	Shipbuilding and repair
7	ALGEMENE ONDERNEMINGEN SOETAERT	Construction
8	EUROPEAN FREIGHT SERVICES	Road transport
9	NATRAJACALI	Food industry
10	MAENHOUT LOGISTICS	Road transport

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

4.4 Investment

In 2010, investment in the port of Ostend was concentrated mainly in the port construction and dredging segment and the energy industry. Investment in the maritime cluster was down by a third, mainly because of the return to more normal levels in the public sector after last year, when work had been carried out in order to improve access to the port. In the non-maritime cluster, investment is up in industry, steady in land transport and down in trade and other logistic services. In trade, the decline from 2009 to 2010 is small; nevertheless, investment in this segment has fallen to its lowest level for six years.

Highlights in the maritime cluster in 2010:

- Although the sums committed are down slightly, Baggerwerken Decloedt en zoon is still the biggest investor in the port construction and dredging segment.
- In the fishing segment, several companies invested in 2010, thus giving the segment a good boost.

Highlights in the non-maritime cluster in 2010:

- The surge in investment in the energy segment is due partly to Electrawinds Biostoom and Electrawinds Greenpower Oostend. The Greenpower plant is Ostend's third biomass project. This production unit, operational since early 2011, uses waste animal or vegetable fats.
- In the construction segment, Algemeen Onderneming Soetaert invested particularly in cranes and floating equipment in 2010. It is the segment's largest investor.
- In other logistic services, the main investor is Electrawinds.

TABLE 32 **INVESTMENT AT THE PORT OF OSTEND FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
MARITIME CLUSTER	***45.1***	***37.9***	***84.8***	***87.4***	***75.9***	***49.2***	***49.5***	***- 35.2***	***+ 1.7***
Shipping agents and forwarders	0.8	0.8	1.8	1.5	1.3	0.4	0.4	- 70.9	- 14.3
Cargo handling	1.1	1.5	0.9	2.1	0.6	0.6	0.6	+ 7.4	- 10.0
Shipping companies	13.6	1.0	24.4	3.0	0.0	0.2	0.2	+ 308.8	- 58.2
Shipbuilding and repair	0.5	1.7	1.9	2.0	1.3	1.3	1.3	- 7.3	+ 20.1
Port construction and dredging	11.9	10.3	39.6	55.7	28.9	24.8	25.0	- 14.1	+ 15.9
Fishing	5.9	6.6	7.2	5.9	5.3	8.9	9.0	+ 69.7	+ 8.5
Port trade	0.1	0.1	0.0	0.0	0.0	0.0	0.0	+ 36.7	- 19.0
Port authority	7.2	1.6	4.0	3.0	1.6	0.9	0.9	- 43.9	- 34.4
Public sector	4.1	14.1	4.9	14.1	37.0	12.1	12.2	- 67.2	+ 24.1
Allocation (p.m.)	*1.6*	*2.5*	*3.2*	*2.8*	*3.1*	*5.0*	-	*+ 60.0*	*+ 26.0*
NON-MARITIME CLUSTER	***52.6***	***38.3***	***70.2***	***94.7***	***44.2***	***50.2***	***50.5***	***+ 13.5***	***- 0.9***
TRADE	6.3	3.8	6.3	4.1	2.6	2.3	2.3	- 13.2	- 18.5
INDUSTRY	38.1	26.0	48.8	80.9	31.1	39.9	40.2	+ 28.5	+ 0.9
Energy	16.9	2.4	7.0	56.3	8.9	21.4	21.5	+ 140.6	+ 4.8
Fuel production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Chemicals	7.8	7.5	25.4	7.1	1.8	3.5	3.6	+ 94.5	- 14.6
Car manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Electronics	0.1	0.0	0.1	0.0	0.1	0.1	0.1	- 52.4	- 0.7
Metalworking industry	10.4	10.1	11.3	13.1	14.3	7.1	7.1	- 50.5	- 7.4
Construction	0.6	1.2	1.3	1.1	4.0	5.2	5.2	+ 29.5	+ 54.8
Food industry	0.7	3.3	0.5	0.7	0.2	0.6	0.6	+ 141.1	- 2.3
Other industries	1.6	1.4	3.1	2.6	1.7	2.1	2.1	+ 23.0	+ 4.6
LAND TRANSPORT	5.4	5.6	8.7	4.4	1.8	2.1	2.1	+ 19.6	- 16.9
Road transport	3.5	3.6	7.4	4.4	1.8	2.1	2.1	+ 19.6	- 9.3
Other land transport	1.9	1.9	1.3	0.0	0.0	0.0	0.0	n.	- 100.0
OTHER LOGISTIC SERVICES	2.8	2.9	6.3	5.3	8.7	5.9	5.9	- 32.8	+ 15.9
DIRECT INVESTMENT	**97.7**	**76.2**	**155.0**	**182.1**	**120.1**	**99.3**	**100.0**	**- 17.3**	**+ 0.3**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office and on surveys).

TABLE 33 INVESTMENT TOP 10 AT THE PORT OF OSTEND IN 2010

Ranking	Company name	Sector
1	BAGGERWERKEN DECLOEDT EN ZOON	Port construction and dredging
2	ELECTRAWINDS GREENPOWER OOSTENDE	Energy
3	PUBLIC SECTOR	Public sector
4	DAIKIN EUROPE	Metalworking industry
5	ELECTRAWINDS	Other services
6	ALGEMENE ONDERNEMINGEN SOETAERT	Construction
7	ELECTRAWINDS BIOSTOOM	Energy
8	PROVIRON FUNCTIONAL CHEMICALS	Chemicals
9	THIJS-CONTAINERS	Other industries
10	ELECTRAWINDS BIOMASSA	Energy

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

5 PORT OF ZEEBRUGGE

5.1 Port developments[48]

Traffic in the port of Zeebrugge continued to expand in 2010 (+10.6 %). The volume of containers transshipped in the port rose by 6.1 %. This category of traffic has been growing constantly since 2002, despite the economic recession in 2009; between 2005 and 2010, it grew on average by 11.1 % per year. However, the port saw a slowdown in growth during the second half of the year 2010. It was trade with the rest of Europe that expanded the most during the year under review. This trade accounts for almost three-fifths of all transshipments. In descending order of size, Europe is followed by destinations in the Middle East and Far East. The port was able to benefit from the start-up in the autumn of a second PSA - Zeebrugge International Port - terminal situated in the northern part of the Albert II dock. Container traffic accounts for 53.2 % of the port's total traffic.

Ro-ro traffic, which had fallen sharply in 2009, picked up well in 2010 with a 30.3 % increase. Traffic to and from Great Britain, which had been badly hit in 2009, was a lot more vigorous in 2010. The same can be said of intra-European traffic. The number of new vehicles transshipped rose by as much as one quarter to reach 1.6 million units.
The volume of liquid bulk remained stable in 2010. Transshipment of liquefied natural gas declined slightly but that was offset by the increase in that of refined oil products. Dry bulk expanded by 6 % but this was not enough to make up for the loss in 2009. Other general cargo enjoyed an expansion of more than 25 %, thus reaching the highest level for the last ten years even though it is still fairly low-volume traffic for the port of Zeebrugge.

The port's activity has been shored up by several private sector projects.
In 2010, the PSA group refurbished the Zeebrugge International Port terminal. Initially, this terminal will be able to handle 500,000 twenty-foot-equivalent units (TEUs) a year and it offers a good quay length of 700 metres. It is also equipped with new cranes as high as 130 m, which can handle ships with a width of 26 rows of containers and have a lifting capacity of 80 tonnes. Upon completion of the project, it will reach an annual capacity of 1.5 million TEUs and have a quay 1,500 metres long.
At the end of the first quarter of 2010, the seventh tugboat belonging to a company called URS[49] was launched. The m/s Smit Tiger is one of the most powerful tugboats of its kind in the world. It has pulling power of 80 tonnes. So, Zeebrugge now has one of the newest and most modern tugboat fleets, which is obviously justified given the size of the container ships and the LNG tankers that the port serves.
Following the drop in traffic with the United Kingdom, Cobelfret scrapped its Ipswich - Zeebrugge route in April. Cargoes transshipped on this route have been transferred onto routes to and from Purfleet and Killingholme.
The year 2010 also saw Seabridge complete construction and start-up of a huge warehouse with surface area of 20,000 m^2 and a storage capacity for 450,000 bags of coffee on behalf of coffee-trading specialist Efico. Moreover, this storehouse enables the coffee to be dried, sorted, mixed and bagged while ensuring traceability and the good environmental conditions necessary for these operations.
International Car Operator (ICO) and German Rhenus Holding Company formed a joint venture to set up and manage the Zeebrugge Breakbulk Terminal, which is intended for various conventionals (steel, project cargoes, agricultural products, etc.). It is located in the ICO terminal on the north side of inner port.

In 2010, the go-ahead was also given for a potential second enhancement of the LNG terminal's capacity. At the beginning of 2011, gas company Fluxys launched the so-called binding phase procedure that consists of a market consultation by offering a solid range of services that interested firms can secure on long basis.

The direct value added of the port of Zeebrugge was 2.5 % up against 2009 (+0.7 % by volume). As a result of less indirect value added, the total value added declined by 0.3 %. As in previous years direct value added represented 0.5 of Flemish GDP, whereas total value added fell 0.1 percentage point to 0.8 %. In relation to Belgian GDP, the figures for 2010 remained unchanged at 0.3 and 0.5 % respectively.

[48] Sources: *Annual Report 2010* of the Zeebrugge Port Authority and *"Port of Zeebrugge news" of APZI & MBZ*.

[49] URS: Unie van Redding- en Sleepdienst (Union for Rescuing and Towing Services)

Direct employment at the port of Zeebrugge was down by 5.8 % in 2010. Indirect employment dropped by 8.1 %. The proportion of direct and total employment in Flemish employment diminished 0.1 percentage point to 0.4 and 0.9 % respectively. The share of direct employment in Belgian employment remained stable at 0.3 %, whereas the share of total employment dropped from 0,6 to 0.5 %.

CHART 10 **CHANGE IN DIRECT VALUE ADDED**
(in € million, current prices)

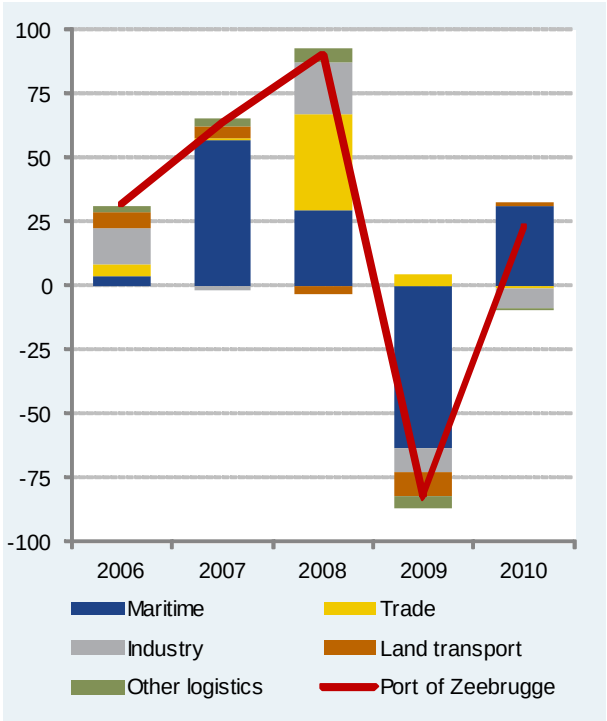
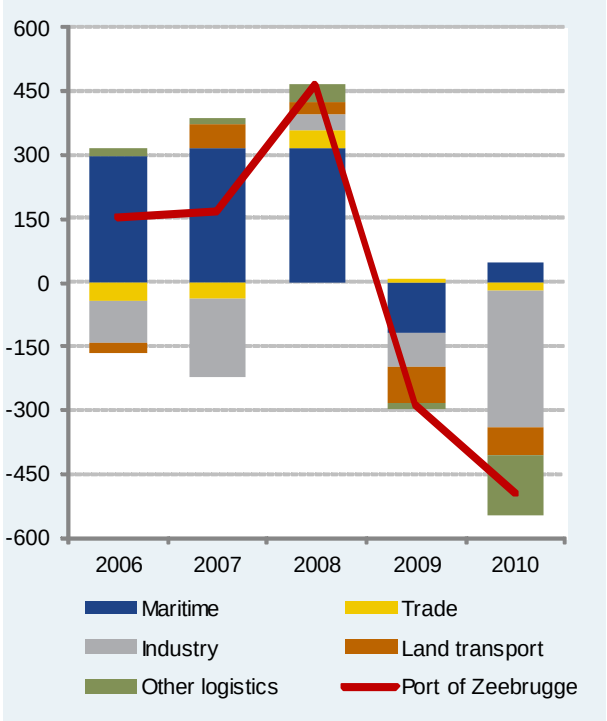


CHART 11 **CHANGE IN DIRECT EMPLOYMENT**
(FTE)



Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

5.2 Value added

Direct value added in the port of Zeebrugge was up 6.9 % in the maritime cluster but down by 1.8 % in the non-maritime cluster. In the former, only shipping agents and freight forwarders reported a decline. All the other segments posted an increase, including cargo handlers whose value added once again exceeded the € 200 million mark. In the non-maritime cluster, the change in value added, negative in trade and other logistic services, positive in land transport, hovered around one million euro. In industry, on the other hand, the contraction was slightly bigger, thanks mainly to the electronics segment where value added slumped by almost a quarter.

Highlights in the maritime cluster in 2010:

- The cargo-handling segment benefited from the arrival of Seabridge, a company belonging to the Efico group that has developped a green coffee supply chain. Its coffee processing, loading and distribution centre located in Zeebrugge has been up and running since the beginning of 2010. 450.000 Coffee bags can be stored in the 200.000 m^2 warehouse, where electricity is generated by green energy produced by roof photovoltaic panels
- Among the shipping companies, Cobelfret Ferries has reported an improvement in economic conditions in 2010 compared with 2009. However, this improvement was much more keenly felt in terms of volume than price. Overall, the company's turnover increased by more than ten percent, while operational costs grew at a slower pace.
- The shipping agents and freight forwarders segment was badly hit by the receivership of United European Car Carriers. Still in the same segment, the higher turnover at ECS European Containers was not enough to stem the erosion of its gross margins following fierce price competition on the market during the recession. So, value added generated by the company fell sharply.
- The increase in value added in the port construction and dredging segment came mainly from a company called Depret whose business activities expanded in 2010.

TABLE 34 **VALUE ADDED AT THE PORT OF ZEEBRUGGE FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**825.0**	**856.9**	**920.1**	**1,010.6**	**928.3**	**951.2**	**100.0**	**+ 2.5**	**+ 2.9**
MARITIME CLUSTER	***422.6***	***427.3***	***483.7***	***513.7***	***450.8***	***482.1***	***50.7***	***+ 6.9***	***+ 2.7***
Shipping agents and forwarders	40.0	42.7	48.8	51.4	55.2	41.0	4.3	- 25.7	+ 0.5
Cargo handling	169.0	165.1	196.0	212.0	185.0	201.6	21.2	+ 9.0	+ 3.6
Shipping companies	28.4	25.9	36.2	49.5	9.3	21.0	2.2	+ 124.9	- 5.8
Shipbuilding and repair	8.0	8.3	8.3	8.6	7.8	9.3	1.0	+ 19.9	+ 3.1
Port construction and dredging	11.0	10.9	12.8	13.6	13.8	18.9	2.0	+ 37.2	+ 11.4
Fishing	49.6	46.1	47.6	44.3	44.7	49.4	5.2	+ 10.6	- 0.1
Port trade	0.4	0.4	0.5	0.6	0.6	0.6	0.1	+ 6.2	+ 9.4
Port authority	22.1	26.1	29.1	31.1	31.8	33.5	3.5	+ 5.5	+ 8.7
Public sector	94.1	101.7	104.5	102.6	102.7	106.7	11.2	+ 3.9	+ 2.5
Allocation (p.m.)	*17.8*	*14.2*	*14.3*	*14.0*	*11.8*	*16.2*	-	*+ 37.0*	*- 1.9*
NON-MARITIME CLUSTER	***402.5***	***429.6***	***436.4***	***497.0***	***477.5***	***469.1***	***49.3***	***- 1.8***	***+ 3.1***
TRADE	42.3	46.8	47.8	85.5	90.2	89.2	9.4	- 1.1	+ 16.1
INDUSTRY	267.4	281.1	279.4	299.6	290.2	282.7	29.7	- 2.6	+ 1.1
Energy	56.6	56.3	53.0	80.0	92.1	97.6	10.3	+ 6.0	+ 11.5
Fuel production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Chemicals	23.6	27.2	28.9	29.4	27.6	30.2	3.2	+ 9.7	+ 5.1
Car manufacturing	1.3	1.1	0.4	0.5	0.3	0.4	0.0	+ 20.9	- 21.9
Electronics	77.8	89.9	74.7	71.8	71.9	54.1	5.7	- 24.7	- 7.0
Metalworking industry	10.2	10.0	9.5	8.4	7.1	9.0	0.9	+ 26.8	- 2.5
Construction	38.6	38.3	44.6	40.0	35.4	34.1	3.6	- 3.8	- 2.5
Food industry	27.1	23.9	30.3	32.9	22.9	27.1	2.8	+ 18.1	+ 0.0
Other industries	32.1	34.4	38.1	36.7	32.9	30.2	3.2	- 8.3	- 1.2
LAND TRANSPORT	72.6	79.0	83.7	80.4	70.7	72.0	7.6	+ 1.9	- 0.2
Road transport	59.7	63.8	69.3	64.9	56.5	58.4	6.1	+ 3.5	- 0.4
Other land transport	12.9	15.2	14.3	15.5	14.2	13.6	1.4	- 4.3	+ 1.2
OTHER LOGISTIC SERVICES	20.1	22.7	25.5	31.4	26.4	25.1	2.6	- 4.9	+ 4.6
2. INDIRECT EFFECTS	**628.7**	**658.8**	**719.6**	**760.8**	**754.8**	**726.8**	**-**	**- 3.7**	**+ 2.9**
MARITIME CLUSTER	***337.1***	***348.1***	***375.2***	***382.6***	***365.2***	***366.2***	***-***	***+ 0.3***	***+ 1.7***
NON-MARITIME CLUSTER	***291.6***	***310.7***	***344.4***	***378.2***	***389.7***	***360.6***	***-***	***- 7.5***	***+ 4.3***
TOTAL VALUE ADDED	**1,453.7**	**1,515.8**	**1,639.7**	**1,771.5**	**1,683.2**	**1,678.0**	**-**	**- 0.3**	**+ 2.9**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

Highlights in the non-maritime cluster in 2010:

- The expansion of value added in the energy segment is largely attributable to the increase in turnover and gross profit margins at Fluxys.
- The decision to halt the pilot project for television set production at Philips Innovative Applications' plant led to a sharp drop in value added in the electronics industry segment.
- The halting of production at the Uco Yarns factory in Bruges had a negative impact on value added in the other industries segment.
- The improved value added figures in the food industry was largely the result of a change in accounting methodology for business at P.B.I. Fruit Juice Company which switched over from a system of sales-purchase accounting to a production remuneration structure.
- In the other logistic services segment, a big drop in value added generated in the port of Zeebrugge by G4S Security Services was observed.

TABLE 35 VALUE ADDED TOP 10 AT THE PORT OF ZEEBRUGGE IN 2010

Ranking	Company name	Sector
1	BELGIAN NAVY	Public sector
2	FLUXYS LNG	Energy
3	PHILIPS INNOVATIVE APPLICATIONS	Electronics
4	TOTAL BELGIUM	Trade
5	ZEEBRUGGE PORT AUTHORITY	Port authority
6	CONTAINER HANDLING ZEEBRUGGE	Cargo handling
7	PUBLIC SECTOR	Public sector
8	FLUXYS	Energy
9	MARINE HARVEST PIETERS	Fishing
10	INTERNATIONAL CAR OPERATORS	Cargo handling

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

5.3 Employment

The year 2010 brought a decline in employment in the port of Zeebrugge in both the maritime and non-maritime clusters. As regards the maritime cluster, it was the shipping companies who were the main victims, whether in terms of FTEs or percentages. In the non-maritime cluster, employment in the electronics industry segment has been cut by more than a third, i.e. 200 FTEs. But employment in the other industries has also declined sharply. In this cluster, only metalworking and energy are expanding their workforce. Employment in road transport is falling, as it is in the other Flemish maritime ports. In other logistic services, staff numbers dropped by as much as 37 % with the loss of 137 FTEs.

Highlights in the maritime cluster in 2010:

- It is worth recalling that, on 30 October 2009, International Car Operators (ICO) took over the Zeebrugge Shipping & Bunkering Cy, Combined Terminal Operators, Antwerp Car Processing Center and Accessory Plant Zeebrugge. These takeovers led to major shifts in staff between companies during the course of 2010, without, however, having any real impact on overall employment in the ports.
- In the cargo-handling segment, Wallenius Wilhemsen Logistics Belgium observed a sharp increase in the number of units imported and exported from its terminal. Furthermore, business in its technical service for both heavy goods vehicles and cars expanded considerably following the arrival of new clients. This led to a major increase in staff numbers which could partially offset the reduction in staff employed by other handlers.
- Employment in the shipping companies segment was badly affected by the loss of Dart Line.
- The shipping agents and forwarders' segment registered the departure of the Zeebrugge Shipping & Bunkering Cy following the reorganisation of the group.

TABLE 36 **EMPLOYMENT AT THE PORT OF ZEEBRUGGE FROM 2005 TO 2010**

(FTE)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**10,224**	**10,401**	**10,573**	**11,053**	**10,770**	**10,145**	**100.0**	**- 5.8**	**- 0.2**
MARITIME CLUSTER	***5,376***	***5,698***	***6,017***	***6,349***	***6,241***	***6,161***	***60.7***	***- 1.3***	***+ 2.8***
Shipping agents and forwarders	422	517	575	546	551	528	5.2	- 4.1	+ 4.6
Cargo handling	2,119	2,270	2,548	2,750	2,705	2,673	26.4	- 1.2	+ 4.8
Shipping companies	78	138	181	220	229	178	1.8	- 22.3	+ 17.9
Shipbuilding and repair	151	139	139	131	131	134	1.3	+ 2.6	- 2.3
Port construction and dredging	166	168	171	189	180	177	1.7	- 1.4	+ 1.3
Fishing	765	707	664	637	603	606	6.0	+ 0.5	- 4.5
Port trade	8	8	9	10	9	9	0.1	- 4.3	+ 0.9
Port authority	145	141	144	141	138	133	1.3	- 3.6	- 1.8
Public sector	1,519	1,609	1,587	1,725	1,695	1,722	17.0	+ 1.6	+ 2.5
Allocation (p.m.)	*287*	*312*	*335*	*326*	*301*	*315*	-	*+ 4.9*	*+ 1.9*
NON-MARITIME CLUSTER	***4,848***	***4,703***	***4,556***	***4,704***	***4,529***	***3,984***	***39.3***	***- 12.0***	***- 3.9***
TRADE	654	613	578	618	626	607	6.0	- 3.0	- 1.5
INDUSTRY	2,661	2,561	2,375	2,414	2,332	2,010	19.8	- 13.8	- 5.5
Energy	124	118	117	122	114	127	1.3	+ 11.2	+ 0.5
Fuel production	0	0	0	0	0	0	0.0	n.	n.
Chemicals	240	232	244	267	260	240	2.4	- 7.8	- 0.1
Car manufacturing	25	19	15	12	12	10	0.1	- 15.4	- 17.1
Electronics	765	769	565	571	552	352	3.5	- 36.2	- 14.4
Metalworking industry	184	161	147	147	140	144	1.4	+ 3.1	- 4.8
Construction	503	444	457	442	461	450	4.4	- 2.4	- 2.2
Food industry	320	320	321	326	323	303	3.0	- 6.1	- 1.1
Other industries	499	499	509	527	471	385	3.8	- 18.2	- 5.1
LAND TRANSPORT	1,222	1,199	1,255	1,285	1,201	1,134	11.2	- 5.6	- 1.5
Road transport	993	953	999	1,022	968	908	9.0	- 6.2	- 1.8
Other land transport	229	246	257	263	232	225	2.2	- 2.9	- 0.4
OTHER LOGISTIC SERVICES	312	330	347	388	370	233	2.3	- 37.1	- 5.7
2. INDIRECT EFFECTS	**8,848**	**9,920**	**10,772**	**11,405**	**11,344**	**10,424**	**-**	**- 8.1**	**+ 3.3**
MARITIME CLUSTER	***4,500***	***5,632***	***6,369***	***6,753***	***6,565***	***6,173***	***-***	***- 6.0***	***+ 6.5***
NON-MARITIME CLUSTER	***4,347***	***4,288***	***4,403***	***4,652***	***4,779***	***4,251***	***-***	***- 11.0***	***- 0.4***
TOTAL EMPLOYMENT	**19,072**	**20,321**	**21,345**	**22,458**	**22,114**	**20,569**	**-**	**- 7.0**	**+ 1.5**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

Highlights in the non-maritime cluster in 2010:

- Turning to the chemicals industry, Pemco Brugge is undergoing restructuring.
- In construction, Prebuild Belgium has gone into liquidation.
- In electronics, the impact of the decision taken by the Philips group in 2009 to halt the pilot project for production of television sets at Philips Innovative Applications in Bruges was felt on staff numbers with the loss of 170 units in 2010.
- In the other industries segment, closure of the industrial spinning plant has triggered implementation of a social plan for employees and workers at the Bruges factory Uco Yarns.
- A number of firms in the road transport segment cut back their staff numbers in 2010.
- In other logistic services, the reorganisation within G4S Security Services led to a reduction in staff working at the Zeebrugge site.

TABLE 37 EMPLOYMENT TOP 10 AT PORT OF ZEEBRUGGE IN 2010

Ranking	Company name	Sector
1	BELGIAN NAVY	Public sector
2	PUBLIC SECTOR	Public sector
3	MARINE HARVEST PIETERS	Fishing
4	C.RO PORTS ZEEBRUGGE	Cargo handling
5	PHILIPS INNOVATIVE APPLICATIONS	Electronics
6	CONTAINER HANDLING ZEEBRUGGE	Cargo handling
7	INTERNATIONAL CAR OPERATORS	Cargo handling
8	BNRC GROUP	Other land transport
9	I.V.B.O.	Other industries
10	WALLENIUS WILHELMSEN LOGISTICS ZEEBRUGGE	Cargo handling

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

5.4 Investment

The port of Zeebrugge saw a steep rise in investment in 2010 (+87.4 %). In the maritime cluster, investment more than doubled, and in cargo handling it tripled. Few segments in this cluster are experiencing any fall in investment, and any reductions are minimal in terms of value. In the non-maritime cluster, the expansion of investment in trade could even appear rather insignificant compared to what is happening in industry, land transport and other logistic services. In industry, the energy sector recorded the strongest rise in investment, both in percentage terms and in value. Overall, the non-maritime recorded a 59.3 % rise.

Highlights in the maritime cluster in 2010:

- Zeebrugge International Port, which is new to the cargo handling segment, invested large sums in rolling stock (straddle carriers), cranes, site improvements and forklifts. This company is primarily responsible for the dramatic growth of investment in cargo handling. C.RO Ports Zeebrugge also invested substantial amounts in land and buildings.
- In the shipping agents and forwarders' segment, Cobelfret Containers – which manages several sites - acquired 1750 new containers in 2010.
- In the fishing segment, Marine Harvest Pieters is following its master plan adopted in 2009, which is boosting its investment.

TABLE 38 **INVESTMENT AT THE PORT OF ZEEBRUGGE FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
MARITIME CLUSTER	***290.6***	***179.3***	***203.4***	***138.6***	***105.9***	***219.8***	***64.6***	***+ 107.5***	***- 5.4***
Shipping agents and forwarders	11.4	10.2	8.3	7.3	6.4	17.0	5.0	+ 167.0	+ 8.3
Cargo handling	127.4	129.1	78.9	49.0	36.0	108.1	31.8	+ 200.2	- 3.2
Shipping companies	123.1	13.1	63.9	2.5	1.6	10.3	3.0	+ 546.9	- 39.1
Shipbuilding and repair	1.0	0.6	0.5	4.8	1.1	1.0	0.3	- 10.8	+ 1.3
Port construction and dredging	1.0	1.4	1.9	2.1	2.0	2.1	0.6	+ 5.1	+ 16.8
Fishing	3.5	5.4	7.7	12.9	10.3	14.0	4.1	+ 35.2	+ 32.2
Port trade	0.1	0.1	0.0	0.1	0.1	0.1	0.0	- 33.0	- 13.0
Port authority	9.5	11.4	21.6	30.4	27.3	34.2	10.1	+ 25.2	+ 29.1
Public sector	13.7	8.0	20.7	29.5	21.0	32.9	9.7	+ 56.6	+ 19.2
Allocation (p.m.)	*11.1*	*15.3*	*25.3*	*19.6*	*24.7*	*35.9*	-	*+ 45.2*	*+ 26.4*
NON-MARITIME CLUSTER	***118.1***	***131.3***	***112.0***	***133.9***	***75.7***	***120.6***	***35.4***	***+ 59.3***	***+ 0.4***
TRADE	6.2	9.3	3.9	6.1	9.6	10.6	3.1	+ 10.5	+ 11.2
INDUSTRY	83.9	94.8	67.3	84.4	49.6	72.1	21.2	+ 45.5	- 3.0
Energy	49.1	61.1	34.7	38.3	14.8	37.4	11.0	+ 152.8	- 5.3
Fuel production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Chemicals	3.5	2.0	2.9	5.3	1.7	3.1	0.9	+ 83.0	- 2.3
Car manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	- 56.2	- 1.1
Electronics	10.1	12.8	4.5	7.6	5.9	7.5	2.2	+ 26.7	- 5.8
Metalworking industry	0.9	0.9	3.4	1.2	0.9	0.3	0.1	- 61.4	- 18.0
Construction	4.5	6.3	7.3	7.8	6.3	6.7	2.0	+ 6.8	+ 8.5
Food industry	6.5	5.9	8.5	18.9	14.9	6.8	2.0	- 54.7	+ 0.8
Other industries	9.3	5.7	5.9	5.3	5.1	10.3	3.0	+ 103.3	+ 1.9
LAND TRANSPORT	23.3	19.1	26.4	28.2	10.2	25.5	7.5	+ 150.1	+ 1.8
Road transport	19.2	13.3	21.2	25.7	9.0	15.1	4.4	+ 68.2	- 4.7
Other land transport	4.1	5.8	5.2	2.6	1.2	10.4	3.1	+ 752.4	+ 20.6
OTHER LOGISTIC SERVICES	4.7	8.1	14.3	15.2	6.3	12.4	3.6	+ 95.0	+ 21.4
DIRECT INVESTMENT	**408.7**	**310.6**	**315.4**	**272.6**	**181.6**	**340.4**	**100.0**	**+ 87.4**	**- 3.6**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office and on surveys).

Highlights in the non-maritime cluster in 2010:

- Fluxys is one of the companies behind the growth of investment in energy. In recent years, in connection with the environmental permit for work relating to the first extension of the GNL Terminal at Zeebrugge, Fluxys has examined whether it was feasible to supplement the regasification installations with an Open Rack Vaporizer (ORV). This returns liquefied natural gas to the gaseous state by using the heat from sea water, and can achieve considerable cuts in energy consumption while reducing carbon dioxide and nitrogen dioxide emissions. In 2009, Fluxys decided to invest in the construction of an Open Rack Vaporizer. The competent authorities granted the environmental permit for the ORV project in July 2010, and work started in the autumn of 2010.
- The rise in investment in electronics is due essentially to Phillips Innovative Applications.
- In other logistic services, GEMS International stepped up its investment concerning a series of international projects, notably by renovating vessels (Albatros 1 and Investigator).
- In the road transport segment, DD Trans invested in 2010 in vehicles, ICT, plant and buildings.
- In 2010, in the other industries segment, Intergemeentelijk samenwerkingsverband voor Vuilverwijdering en- verwerking in Brugge en Ommeland (IVBO) undertook to invest in a new turbine following a viability study. This installation is scheduled to become operational in 2012. Other investments were also made in waste water treatment and waste disposal.

TABLE 39 INVESTMENT TOP 10 AT THE PORT OF ZEEBRUGGE IN 2010

Ranking	Company name	Sector
1	ZEEBRUGGE INTERNATIONAL PORT	Cargo handling
2	ZEEBRUGGE PORT AUTHORITY	Port authority
3	PUBLIC SECTOR	Public sector
4	FLUXYS	Energy
5	BNRC GROUP	Other land transport
6	COBELFRET CONTAINERS	Shipping agents and forwarders
7	I.V.B.O.	Other industries
8	C.RO PORTS ZEEBRUGGE	Cargo handling
9	FLUXYS LNG	Energy
10	GEMS INTERNATIONAL	Other services

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

6 LIÈGE PORT COMPLEX

6.1 Port developments[50]

After a very gloomy year in 2009, waterway traffic in the Autonomous Port of Liège expanded afresh, but the port has not fully regained its 2008 volumes. This strong growth was made possible notably as a result of the blast furnance at ArcelorMittal's Ougrée steelworks starting up again. Hence, the volume of ores transshipped in the Autonomous Port tripled, while lignite and coal volumes rose by 36 %. On the back of this increase, the share of ore traffic, which in 2009 had only accounted for 4 % of all merchandise handled in the port, rose again to 10 % in 2010. Lignite and coal were back to their 2008 share, which is a little higher than that for ores. Loadings and unloadings of coke, refined petroleum products, other conventional and containers and chemical products increased only very slightly. In the case of metals, the increase was 11 %. For the non-metallic mineral product category, which includes building materials, growth was as much as one-fifth. This category was the biggest of all in 2010, taking up 37 % of all traffic, compared with 20 % for the coke and refined petroleum products category. By contrast, transshipments of ancillary raw materials and waste, wood and wood products were down by half. One of the reasons for these reductions is the reopening of the blast furnace. With this furnace back in service, the slag can be supplied on site and no longer necessarily has to be imported. Last but not least, agricultural products, already on the rise in 2009, posted a spectacular increase of 183 %. The BioWanze biofuels factory is one of the main explanatory factors behind this growth.

The number of coastal vessels calling into the port of Liège grew by 9 units, bringing the total up to 87 units. This is an expansion of almost 12 %, while the volume of goods transported rose by 23 % to reach a total of 144 507 tonnes. Work on the Lanaye locks, which began in 2011, is expected to lead to a further improvement in these results. This work should enable a significant increase in the capacity of the sluice complex, which, with its key location on the Dutch border, between the river Meuse and the Albert canal, is the gateway to the entire Dutch and German inland waterway networks, and thus to the huge port of Rotterdam and to the Rhine basin. It currently consists of three locks: two with a gauge of 600 tonnes one with a gauge of 2 000 tonnes. Construction of a fourth lock, 225 metres long by 25 metres wide, will enable powerful boats or loads as big as 9 000 tonnes to pass through. This project involves an investment to the tune of € 120 million, 84 million of which will be borne by Wallonia, 27 million by the European Union and 9 million by the Netherlands. Furthermore, it further improves access by waterway to and from the future Trilogiport logistics platform planned further upstream on the Albert canal. Another point is that work on increasing the gauge of the Ivoz-Ramet lock, in the Liège region, has also started. This is the busiest hydraulic structure on the Wallonian inland waterway network.

The direct value added of the Liège port complex in 2010 presented a growth of 3.4 % (+1.7 by volume). The smaller contribution of the indirect effects reduced the growth of total value added to 1.1 % (-0.6 % by volume). The share of direct total value added in the GDP of the Walloon Region and the Belgian GDP remained stable at 1.6 and 0.4 % respectively. Total value added of the Liège port complex accounted for 3,2 % of the GDP of the Walloon Region. The share of total value added in Belgian GDP remained stable for the sixth consecutive year at 0.8 %.

Direct employment in the Liège port complex recorded a decline of 7.1 %. It represented 0.9 % of domestic employment in the Walloon Region of 2010, a drop with 0.1 percentage point for the second consecutive year. Total employment represented 2.4 % of Walloon employment, a drop with 0.3 percentage point compared to the year 2007. In relation to employment in Belgium, the shares dropped with 0.1 percentage point to 0.2 % (direct employment) and 0.6 % (total employment).

[50] Sources: Lloyd Special Report *Annuaire du Port Autonome de Liège 2009-2010 and Press release 9 February 2011* from the Liège Port Authority.

CHART 12 **CHANGE IN DIRECT VALUE ADDED**
(in € million, current prices)

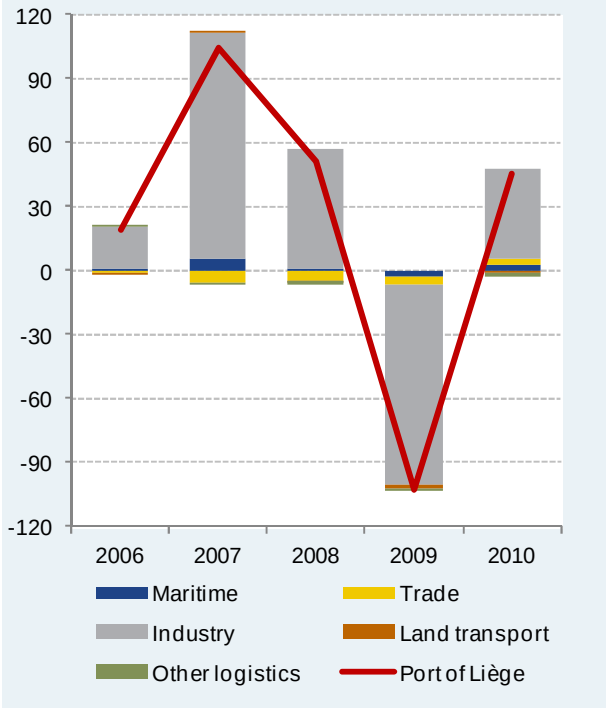
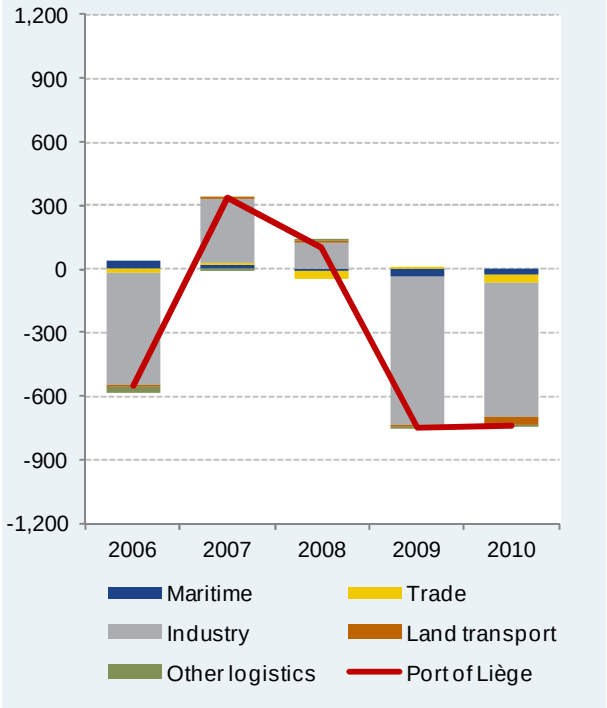


CHART 13 **CHANGE IN DIRECT EMPLOYMENT**
(FTE)



Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

6.2 Value added

Value added in the Liège port complex rose by 3.4 % in 2010. The maritime cluster expanded by just under 10 %, while the non-maritime cluster's growth rate exceeded the 3 % mark. In the maritime cluster, it was the shipping agents and forwarders' segment that put on the most growth. In the non-maritime cluster, value added has recovered in trade unlike in land transport and other logistic services which were still posting negative growth for the fourth or fifth year running. Higher value added in industry was not enough to fully offset the decline seen in 2009. However, the energy segment confirmed the excellent results posted in 2009 and the chemicals industry doubled its value added.

Highlights in the maritime cluster in 2010:

- Value added in the shipping agents and forwarders' segment expanded strong, partly as a result of the performance of Magetra, a firm whose turnover was well up on 2009 levels and very nearly back to pre-crisis turnover levels (2008). However, there was a proportionate increase in the cost of goods and services, including subcontracting, too, and consequently, gross operating margins remained stable. The upward trend in these various items led to a significant recovery of operating profits.

TABLE 40 **VALUE ADDED IN THE LIÈGE PORT COMPLEX FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**1,244.2**	**1,263.4**	**1,368.1**	**1,419.4**	**1,316.8**	**1,362.1**	**100.0**	**+ 3.4**	**+ 1.8**
MARITIME CLUSTER	***25.4***	***26.1***	***31.9***	***32.3***	***29.0***	***31.8***	***2.3***	***+ 9.8***	***+ 4.6***
Shipping agents and forwarders	5.3	6.3	8.5	8.5	9.2	11.6	0.9	+ 26.6	+ 17.0
Cargo handling	13.3	13.1	16.0	15.5	13.9	13.8	1.0	- 0.3	+ 0.8
Shipping companies	4.3	4.1	4.5	5.7	3.4	3.9	0.3	+ 14.6	- 2.0
Shipbuilding and repair	0.6	0.5	0.6	0.6	0.4	0.3	0.0	- 8.0	- 11.2
Port construction and dredging	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Fishing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Port trade	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Port authority	1.9	2.1	2.2	2.1	2.1	2.1	0.2	- 1.5	+ 2.0
Public sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
NON-MARITIME CLUSTER	***1,218.8***	***1,237.2***	***1,336.2***	***1,387.1***	***1,287.9***	***1,330.3***	***97.7***	***+ 3.3***	***+ 1.8***
TRADE	92.3	91.4	85.8	81.3	77.9	80.7	5.9	+ 3.6	- 2.7
INDUSTRY	1,098.5	1,118.3	1,223.9	1,281.0	1,186.9	1,229.5	90.3	+ 3.6	+ 2.3
Energy	228.6	256.9	305.8	342.0	450.5	453.1	33.3	+ 0.6	+ 14.7
Fuel production	0.0	0.0	-4.1	-3.9	-10.7	-5.3	-0.4	- 50.9	n.
Chemicals	110.1	100.9	104.8	192.4	62.3	126.5	9.3	+ 103.2	+ 2.8
Car manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Electronics	9.4	9.9	7.2	8.6	7.7	8.6	0.6	+ 10.9	- 1.7
Metalworking industry	556.7	507.0	598.4	506.5	453.6	427.7	31.4	- 5.7	- 5.1
Construction	126.8	175.3	142.6	151.2	143.6	132.9	9.8	- 7.4	+ 0.9
Food industry	30.4	25.0	22.5	29.7	25.1	20.9	1.5	- 17.0	- 7.3
Other industries	36.5	43.3	46.7	54.5	54.9	65.0	4.8	+ 18.3	+ 12.2
LAND TRANSPORT	10.3	9.6	9.9	9.7	8.3	6.8	0.5	- 18.8	- 8.0
Road transport	8.2	8.1	8.6	8.6	7.2	5.7	0.4	- 20.6	- 7.0
Other land transport	2.0	1.6	1.3	1.1	1.1	1.0	0.1	- 6.9	- 12.6
OTHER LOGISTIC SERVICES	17.7	18.0	16.7	15.1	14.7	13.3	1.0	- 9.2	- 5.5
2. INDIRECT EFFECTS	**1,130.3**	**1,131.1**	**1,238.5**	**1,365.7**	**1,323.1**	**1,307.2**	**-**	**- 1.2**	**+ 3.0**
MARITIME CLUSTER	***45.7***	***46.1***	***48.0***	***51.2***	***51.4***	***50.3***	***-***	***- 2.0***	***+ 1.9***
NON-MARITIME CLUSTER	***1,084.6***	***1,085.1***	***1,190.5***	***1,314.6***	***1,271.7***	***1,256.9***	***-***	***- 1.2***	***+ 3.0***
TOTAL VALUE ADDED	**2,374.6**	**2,394.5**	**2,606.6**	**2,785.1**	**2,639.9**	**2,669.3**	**-**	**+ 1.1**	**+ 2.4**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

Highlights in the non-maritime cluster in 2010:

- In the trade sector, the rise in operating profits at Total Belgium and the reorganisation together with a change in business activity at Intramet have had a positive effect on value added for the segment as a whole.
- In other industries, improved gross margins and the development of Intradel's business had a very positive impact on the company's value added. Another company, Uvelia, also became operational.
- After two atypical years - 2008 and 2009 - for chemicals firm Prayon, the year 2010 was characterised by a revival of product demand. Production capacity utilisation rates remained at a very high level throughout the year. Value added generated by the company increased considerably.
- Turning to the construction segment, Cimenteries CBR saw a drop in its value added in 2010 following a reduction in turnover, wages and gross operating margins. Still in the same segment, since Carmeuse had not been able to repeat in 2010 the gains it had made previously on the sale of CO2 emission quotas, operating profits fell, bringing value added down with them.
- In 2010, value added generated by ArcelorMittal Upstream in the metalworking industry was at its lowest level for five years.
- Finally, the road transport segment was hit by the bankruptcy of Société des travaux généraux.

TABLE 41 VALUE ADDED TOP 10 AT THE LIÈGE PORT COMPLEX IN 2010

Ranking	Company name	Sector
1	ELECTRABEL	Energy
2	ARCELORMITTAL BELGIUM	Metalworking industry
3	ARCELORMITTAL LIÈGE UPSTREAM	Metalworking industry
4	EDF LUMINUS	Energy
5	PRAYON	Chemicals
6	COCKERILL MAINTENANCE & INGENERIE	Metalworking industry
7	TOTAL BELGIUM	Trade
8	CARRIERES ET FOURS A CHAUX DUMONT-WAUTIER	Construction
9	CIMENTERIES CBR CEMENTBEDRIJVEN	Construction
10	INTRADEL	Other industries

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

6.3 Employment

Employment in the Liège port complex shrank by about 7 % in 2010 in both the maritime and non-maritime clusters. Direct employment expressed as FTEs is now at its lowest level for the last six years. In the maritime cluster, the biggest job losses were in shipping companies but employment numbers were down in all segments. In the non-maritime cluster, employment in several segments (trade, the metalworking industry, the food industry and road transport) fell by more than 10 %. Other segments like the chemicals industry or construction showed more resilience, and fuel production even rose sharply.

Highlights in the maritime cluster in 2010:

- Among the shipping companies, human resources restructuring carried out by SOMEF in 2009 led to a reduction in the average number of FTEs working for the firm in 2010.

Highlights in the non-maritime cluster in 2010:

- In trade, the decision by Intramet Metal Center - now named Foncière Engis - to wind up its steel distribution business brought a reduction in staff. Conversely, the transfer of IMS Belgium's headquarters to Engis had a positive impact on employment. Both corporates are members of the group International Metal Service. The bankruptcy of Technimaint wiped out part of the segment's employment base.
- Although the blast furnace operated for part of the year, employment at ArcelorMittal Liège Upstream shrank considerably. Still in the metalworking industry, weak order books obliged Cockerill Maintenance & Ingénierie to reduce its workforce.
- In road transport, the bankruptcy of Société des Travaux Généraux led to a marked drop in employment, too.

TABLE 42 EMPLOYMENT IN THE LIÈGE PORT COMPLEX FROM 2005 TO 2010

(FTE)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**11,344**	**10,791**	**11,131**	**11,228**	**10,483**	**9,742**	**100.0**	**- 7.1**	**- 3.0**
MARITIME CLUSTER	***361***	***396***	***420***	***415***	***381***	***355***	***3.6***	***- 6.9***	***- 0.3***
Shipping agents and forwarders	71	98	112	109	107	100	1.0	- 6.1	+ 7.1
Cargo handling	168	176	179	174	165	158	1.6	- 4.2	- 1.3
Shipping companies	72	71	78	78	63	52	0.5	- 18.5	- 6.6
Shipbuilding and repair	12	12	13	14	9	9	0.1	- 0.2	- 5.6
Port construction and dredging	0	0	0	0	0	0	0.0	n.	n.
Fishing	0	0	0	0	0	0	0.0	n.	n.
Port trade	0	0	0	0	0	0	0.0	n.	n.
Port authority	37	40	39	39	37	36	0.4	- 2.7	- 0.5
Public sector	0	0	0	0	0	0	0.0	n.	n.
NON-MARITIME CLUSTER	***10,983***	***10,395***	***10,711***	***10,813***	***10,103***	***9,387***	***96.4***	***- 7.1***	***- 3.1***
TRADE	354	337	343	300	311	276	2.8	- 11.1	- 4.8
INDUSTRY	10,231	9,707	10,003	10,131	9,429	8,794	90.3	- 6.7	- 3.0
Energy	1,082	1,148	1,209	1,265	1,300	1,283	13.2	- 1.3	+ 3.5
Fuel production	0	0	0	13	92	128	1.3	+ 39.5	n.
Chemicals	1,016	1,004	1,003	1,060	1,071	1,078	11.1	+ 0.7	+ 1.2
Car manufacturing	0	0	0	0	0	0	0.0	n.	n.
Electronics	147	144	146	134	120	116	1.2	- 3.4	- 4.5
Metalworking industry	6,221	5,730	5,992	6,046	5,253	4,594	47.2	- 12.6	- 5.9
Construction	1,093	1,009	1,002	953	905	917	9.4	+ 1.3	- 3.5
Food industry	164	148	115	102	90	76	0.8	- 15.5	- 14.2
Other industries	509	524	536	558	597	601	6.2	+ 0.7	+ 3.4
LAND TRANSPORT	174	163	176	177	170	127	1.3	- 25.1	- 6.1
Road transport	138	138	153	158	152	110	1.1	- 27.4	- 4.4
Other land transport	36	25	23	19	18	17	0.2	- 5.6	- 13.9
OTHER LOGISTIC SERVICES	224	189	189	205	193	190	2.0	- 1.4	- 3.2
2. INDIRECT EFFECTS	**15,986**	**15,936**	**16,733**	**16,531**	**15,465**	**15,479**	**-**	**+ 0.1**	**- 0.6**
MARITIME CLUSTER	***788***	***829***	***883***	***862***	***739***	***709***	***-***	***- 4.0***	***- 2.1***
NON-MARITIME CLUSTER	***15,198***	***15,106***	***15,850***	***15,668***	***14,726***	***14,770***	***-***	***+ 0.3***	***- 0.6***
TOTAL EMPLOYMENT	**27,330**	**26,727**	**27,865**	**27,758**	**25,948**	**25,221**	**-**	**- 2.8**	**- 1.6**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

TABLE 43 EMPLOYMENT TOP 10 AT THE LIÈGE PORT COMPLEX IN 2010

Ranking	Company name	Sector
1	ARCELORMITTAL BELGIUM	Metalworking industry
2	ARCELORMITTAL LIÈGE UPSTREAM	Metalworking industry
3	ELECTRABEL	Energy
4	COCKERILL MAINTENANCE & INGENERIE	Metalworking industry
5	PRAYON	Chemicals
6	CIMENTERIES CBR CEMENTBEDRIJVEN	Construction
7	INTRADEL	Other industries
8	EDF LUMINUS	Energy
9	CARRIERES ET FOURS A CHAUX DUMONT-WAUTIER	Construction
10	SEGAL	Metalworking industry

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

6.4 Investment

Investment in the Liège port complex was 67 % down in 2010. The maritime cluster recorded an increase, due mainly to the shipping agents and forwarders' segment. In contrast, the non-maritime cluster recorded a very sharp fall in investment (-67 %), partly because several major projects reached the completion phase, such as the one at Biowanze. Investment in other logistic services doubled, whereas it was down by a fifth in trade and by a quarter in land transport. But in these three segments the amounts involved are considerably smaller than in industry, where investment slumped by 68.6 %.

Highlights in the non-maritime cluster in 2010:

- During 2010, SOMEF invested mainly in plant and machinery.
- The shipping agents and forwarders segment benefited from the installation of MPR Logistics at Ougrée.
- In cargo handling, CTB Magemon – which has now become Euroports Inland Terminals – invested in 2010 primarily in vehicles (forklifts, tractors, dump trucks), site and office development and improvements concerning security and the environment. The Petroleum Products Storage and Transport Company also continued to invest..

Highlights in the non-maritime cluster in 2010:

- In the trade segment, the biggest investor is Belgomazout-Liège which invested in installing a new tank with a capacity of 30,000 cubic metres.
- As Uvelia - the unit which recovers energy from household and similar waste - has been operational since 2010, investment in the other industries segment fell sharply.
- In chemicals, the substantial rise in investment at Imerys Mineraux Belgique – which took over distribution activities in 2010 – and at SILOX, concerning the revamping of the hydro sulphite plant, did not entirely offset the reduction in investment at Prayon. This segment recorded a fall in investment.
- The reduced investment at ArcelorMittal Liège Upstream and Cockerill Maintenance & Ingenerie had an impact on the total for the segment.
- In other logistic services, the biggest investor is PRAY-LION which amended its company object and took over the activities of Prayon in the development of lithium iron phosphate. The company purchased and established facilities to enable it to carry out the necessary work relating to its new activity. It has since changed its name to beLife.

TABLE 44 **INVESTMENT IN THE LIÈGE PORT COMPLEX FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010	Change from 2009 to 2010	Annual average change from 2005 to 2010
							(in p.c.)	(in p.c.)	(in p.c.)
MARITIME CLUSTER	***3.5***	***5.4***	***5.1***	***10.3***	***2.7***	***3.7***	***2.0***	***+ 34.1***	***+ 0.7***
Shipping agents and forwarders	0.3	0.4	1.0	4.2	0.3	1.1	0.6	+ 265.3	+ 32.9
Cargo handling	2.6	4.1	3.1	4.4	2.2	1.9	1.0	- 9.8	- 6.0
Shipping companies	0.3	0.1	0.8	0.7	0.2	0.3	0.2	+ 56.5	- 0.8
Shipbuilding and repair	0.0	0.1	0.1	0.1	0.0	0.0	0.0	n.	n.
Port construction and dredging	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Fishing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Port trade	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Port authority	0.3	0.7	0.1	0.9	0.1	0.3	0.2	+ 276.5	- 0.1
Public sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
NON-MARITIME CLUSTER	***137.9***	***157.7***	***340.1***	***426.7***	***561.8***	***182.6***	***98.0***	***- 67.5***	***+ 5.8***
TRADE	4.9	5.1	7.2	3.3	6.4	5.0	2.7	- 21.7	+ 0.4
INDUSTRY	128.5	145.3	327.6	417.3	552.2	173.3	93.0	- 68.6	+ 6.2
Energy	19.9	36.7	55.5	41.5	131.5	63.4	34.1	- 51.8	+ 26.1
Fuel production	0.0	11.8	91.1	142.8	51.8	24.0	12.9	- 53.6	n.
Chemicals	29.4	21.1	28.3	41.8	41.3	32.2	17.3	- 21.9	+ 1.8
Car manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Electronics	0.6	1.2	0.7	0.6	0.3	0.5	0.3	+ 48.6	- 3.2
Metalworking industry	44.5	29.8	63.1	59.6	36.0	25.1	13.5	- 30.2	- 10.8
Construction	23.8	27.7	23.7	23.0	14.0	20.1	10.8	+ 43.5	- 3.3
Food industry	2.9	3.2	4.5	3.7	1.4	1.0	0.6	- 27.5	- 18.5
Other industries	7.4	13.6	60.5	104.3	275.8	6.8	3.7	- 97.5	- 1.6
LAND TRANSPORT	2.6	4.5	2.5	4.4	1.7	1.3	0.7	- 26.6	- 13.8
Road transport	1.3	3.7	1.7	3.6	0.9	0.7	0.4	- 23.6	- 12.0
Other land transport	1.3	0.9	0.8	0.8	0.8	0.6	0.3	- 29.8	- 15.6
OTHER LOGISTIC SERVICES	1.8	2.7	2.8	1.7	1.5	3.1	1.6	+ 110.0	+ 10.8
DIRECT INVESTMENT	**141.4**	**163.1**	**345.3**	**437.0**	**564.5**	**186.3**	**100.0**	**- 67.0**	**+ 5.7**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office and on surveys).

TABLE 45 INVESTMENT TOP 10 IN THE LIÈGE PORT COMPLEX IN 2010

Ranking	Company name	Sector
1	ELECTRABEL	Energy
2	BIOWANZE	Fuel production
3	ARCELORMITTAL BELGIUM	Metalworking industry
4	PRAYON	Chemicals
5	IMERYS MINERAUX BELGIQUE	Chemicals
6	EDF LUMINUS	Energy
7	SOCIETE INDUSTRIELLE LIEGEOISE DES OXYDES	Chemicals
8	INTRADEL	Other industries
9	CARRIERES ET FOURS A CHAUX DUMONT-WAUTIER	Construction
10	CARMEUSE	Construction

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

7 PORT OF BRUSSELS

7.1 Port developments[51]

Over the year 2010, the port of Brussels managed to regain part of the traffic it had lost in 2009. The 9 % increase in volumes transshipped brought the port's waterway traffic up to a bit more than it was in 2007, to 4 385 000 tonnes. It thus recorded the second best result of the last fifteen years. Yet, the two main product categories in the port which together accounted for more than four-fifths of total traffic, namely construction materials and petroleum products, expanded only very slightly; the former by 3 % and the latter by 6 %. As a result, the relative share of construction materials has shrunk from 55 % to 52 % in the space of a year, while that of petroleum products has come down by 1 percentage point to 26 %. Agricultural products, on the other hand, increased by a half. Transshipment of foodstuffs and minerals and ores expanded by 14 and 13 % respectively. The general cargo category transported by container, grew by 26 %. Expressed in twenty-foot equivalents, the port of Brussels' container terminal handled 34 % more than in 2009; just coming under the 18 000 twenty-foot-equivalent mark.

The port of Brussels' main partner country is still the Netherlands, even though the Dutch market share was down 4 % in 2010. This country continues to play an important role in the supply of oil products and sand to the port of Brussels. However, the other Belgian ports, including the port of Antwerp, are also involved in this trade as well as transport of miscellaneous (by containers) and metal products.

The port of Brussels inaugurated its two refurbished locks in September 2010. During the renovation work, particular attention was paid to integrating these sites into the city of Brussels surroundings.
Also in 2010, clean-up work on the polluted cokeworks site at Marly (Carcoke) was completed. The site, located at the northern entrance to the capital, has a surface area of 12 hectares. It is intended to host a multimodal logistics centre comprising 65 000 m^2 of warehouses with access to the waterway. The task of cleaning up the site, a project costed at € 22.5 million, has been contracted out to an association set up temporarily by three firms: Katoen Natie, Jan de Nul and Envisan. The underground water still has to be cleaned up: work on this nevertheless started in 2010 and is expected to continue until 2025. The Katoen Natie group is site concessionnaire for 45 years. The project will be implemented gradually in line with requirements. Direct access to the multimodal centre by waterway will require the construction of a by-pass around the site. The port of Brussels will be in charge of this.

The direct value added of the port of Brussels was up by 2.8 % in 2010 (1.0 % by volume). The share of direct and total value added in the GDP of the Brussels Capital Region was 0.8 and 1.6 % respectively. Their share in the national GDP stabilised at 0.2 and 0.3 % respectively.

Employment in the port of Brussels declined by 0.9 % in 2010. The share of direct and total employment in the employment in the Brussels Region remained at the same level, with 0.7 and 1.7 % respectively. Also the share in Belgian domestic employment remained unchanged at 0.1 % for direct and 0.3 % for total employment.

[51] Sources: *Annual Report 2010* of the Brussels Port Authority.

CHART 14 **CHANGE IN DIRECT VALUE ADDED**
(in € million, current prices)

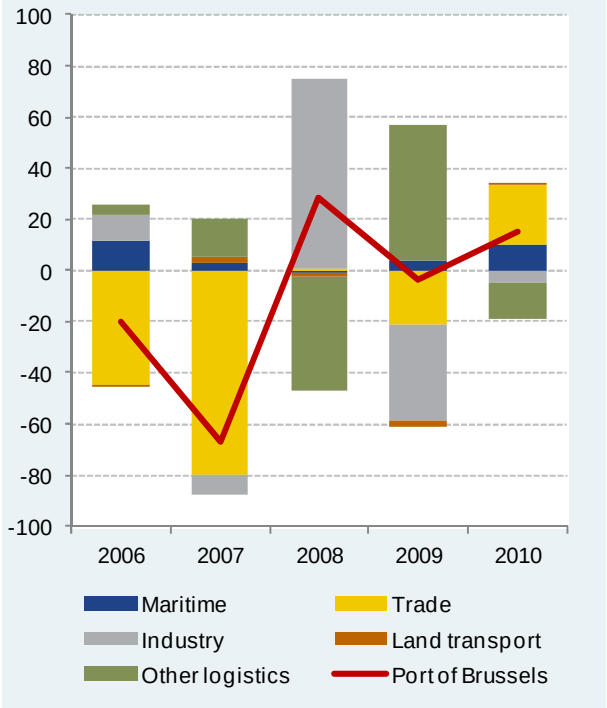
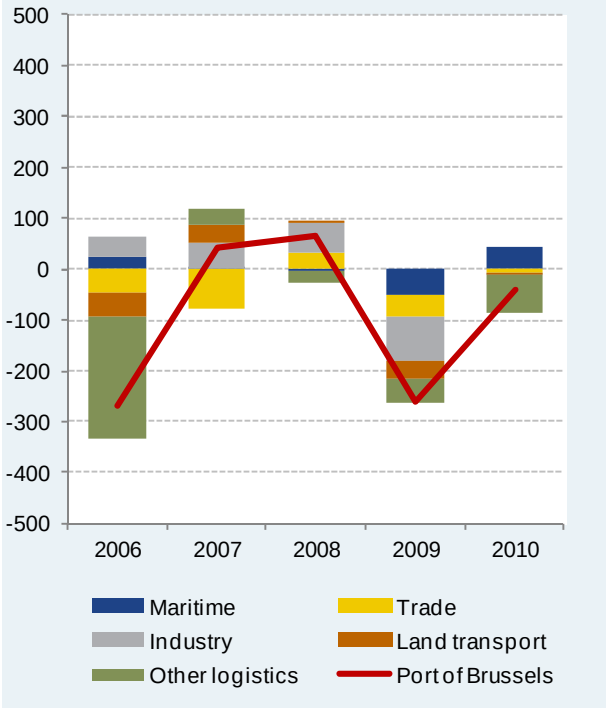


CHART 15 **CHANGE IN DIRECT EMPLOYMENT**
(FTE)



Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

7.2 Value added

Direct value added in the port of Brussels expanded by 2.8 %. In the non-maritime cluster, the growth rate was only 1 % while it rose by more than 28 % in the maritime cluster. Here, only the port trade and port authority segments suffered a downward trend. In the non-maritime cluster, value added declined in industry, mainly on the back of a considerable drop in the food industry and in the other logistic services. At the same time, it held steady in land transport and rose in the trade sector.

Highlights in the maritime cluster in 2010:

- In the shipping agents and forwarders' segment, Xpedys enjoyed an exceptional year in 2010 largely thanks to the excellent performance of the French and German car manufacturing industries. The tonnage transported by the company was up by 26 % on 2009. Xpedys also acts as an agent for the Belgian rail group BNRC and is therefore involved in marketing, operational back-up, invoicing and collection of sums due for B-Cargo traffic. In 2010, fees and commissions earned from this business increased by more than a fifth. Xpedys also saw an expansion of its dry bulk transport business, notably grain transport.

Highlights in the non-maritime cluster in 2010:

- In the trade sector, both Solvin and Scania Belgium have provided important contributions to the growth of value added.
- The decline of activity in the chemicals sector and the fall in profits at Peptisyntha had a negative effect on value added generated in this industrial segment.
- In the other industries segment, three main firms - Sita Recycling Services, Aquiris and George et compagnie - contributed to the growth of value added.
- An almost 25 % drop in the average price of wheat used in the food industry led to a reduction in turnover and profits at Ceres.
- The fall in value added in the Solvay group had a negative impact on the other logistic services segment.

TABLE 46 **VALUE ADDED AT THE PORT OF BRUSSELS FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**600.8**	**580.7**	**513.9**	**542.0**	**538.1**	**553.3**	**100.0**	**+ 2.8**	**- 1.6**
MARITIME CLUSTER	***18.7***	***30.2***	***33.5***	***32.3***	***36.4***	***46.8***	***8.5***	***+ 28.4***	***+ 20.1***
Shipping agents and forwarders	11.4	13.2	11.8	18.4	23.3	31.8	5.7	+ 36.4	+ 22.8
Cargo handling	8.3	9.1	11.7	10.6	6.6	8.5	1.5	+ 29.6	+ 0.6
Shipping companies	0.0	0.0	0.0	1.1	0.2	0.5	0.1	+ 122.9	- 463.0
Shipbuilding and repair	0.0	0.1	0.1	0.1	0.0	0.0	0.0	+ 152.8	n.
Port construction and dredging	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Fishing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Port trade	0.8	0.7	0.6	0.6	0.7	0.7	0.1	- 3.1	- 3.1
Port authority	-5.7	2.9	4.9	-2.3	1.8	1.4	0.3	- 21.5	- 175.4
Public sector	4.0	4.2	4.4	3.8	3.9	3.9	0.7	+ 0.5	- 0.6
NON-MARITIME CLUSTER	***582.0***	***550.6***	***480.4***	***509.7***	***501.7***	***506.5***	***91.5***	***+ 1.0***	***- 2.7***
TRADE	296.0	251.3	171.7	172.4	151.6	175.0	31.6	+ 15.4	- 10.0
INDUSTRY	78.0	88.6	80.8	155.0	116.7	111.7	20.2	- 4.3	+ 7.4
Energy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Fuel production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Chemicals	10.7	10.9	10.8	11.6	10.2	7.0	1.3	- 31.6	- 8.1
Car manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Electronics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Metalworking industry	1.8	1.0	1.2	1.0	1.1	0.6	0.1	- 46.9	- 20.2
Construction	29.7	33.8	35.1	36.3	34.7	34.2	6.2	- 1.5	+ 2.8
Food industry	17.8	13.3	8.8	15.3	21.5	15.2	2.7	- 29.6	- 3.1
Other industries	18.1	29.6	24.9	90.8	49.2	54.8	9.9	+ 11.5	+ 24.8
LAND TRANSPORT	23.8	22.7	24.5	23.1	21.5	21.6	3.9	+ 0.7	- 1.9
Road transport	23.8	22.7	24.5	23.1	21.3	21.6	3.9	+ 1.1	- 1.9
Other land transport	0.0	0.0	0.0	0.0	0.1	0.1	0.0	- 53.0	n.
OTHER LOGISTIC SERVICES	184.3	187.9	203.4	159.2	212.0	198.2	35.8	- 6.5	+ 1.5
2. INDIRECT EFFECTS	**570.2**	**562.8**	**523.0**	**566.5**	**572.0**	**557.8**	**-**	**- 2.5**	**- 0.4**
MARITIME CLUSTER	***42.9***	***57.2***	***64.0***	***60.9***	***68.5***	***88.5***	***-***	***+ 29.3***	***+ 15.6***
NON-MARITIME CLUSTER	***527.4***	***505.6***	***459.1***	***505.5***	***503.5***	***469.3***	***-***	***- 6.8***	***- 2.3***
TOTAL VALUE ADDED	**1,171.0**	**1,143.5**	**1,036.9**	**1,108.5**	**1,110.1**	**1,111.1**	**-**	**+ 0.1**	**- 1.0**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

TABLE 47 VALUE ADDED TOP 10 AT THE PORT OF BRUSSELS IN 2010

Ranking	Company name	Sector
1	SOLVAY	Other services
2	TOTAL BELGIUM	Trade
3	INEOS SERVICES BELGIUM	Other services
4	SOLVIN	Trade
5	AQUIRIS	Other industries
6	XPEDYS	Shipping agents and forwarders
7	INERGY AUTOMOTIVE SYSTEMS RESEARCH	Other services
8	SPIE BELGIUM	Construction
9	CERES	Food industry
10	SCANIA BELGIUM	Trade

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

7.3 Employment[52]

Employment in the Port of Brussels has declined slightly, as the increase in the maritime cluster was not enough to completely offset the reduction in the non-maritime cluster. Here, both industry and land transport remained stable. There was a slight contraction of employment in trade. But in other logistic services, it fell back by almost 7 %. Here, it is worth pointing out that Solvay, which had previously been classified under the chemicals industry, is now listed in other logistic services following a change in its NACE classification[53] decided by National Accounts in light of the company's recent business activities. The cargo-handling segment benefited from the arrival of a new establishment, while the shipping agents and forwarders profited from the growth of Xpedys and the setting up of a new company.

Highlights in the maritime cluster in 2010:

- DD Shipping's development of a new establishment at the port of Brussels led to considerable growth in employment among cargo handlers.
- The establishment of Sotiaux International helped boost employment in the shipping agents and forwarders segment, but at the same time the Sotiaux group shed jobs in other segments.

Highlights in the non-maritime cluster in 2010:

- In the trade sector, the decision by two companies - Van Waasdijk and Mayer - to move their offices had a negative impact on employment.
- In the chemicals industry, Peptisyntha had set up a restructuring plan in mid-2009 in order to adapt to difficulties generated by the loss of a major contract and the impact of the financial crisis. A redeployment unit had been set up with the assistance of a specialised firm for a duration of six months ending in 2010 in order to help 32 employees find another job either within the Solvay group or elsewhere.
- In the construction segment, SPIE Belgium had a difficult year in 2010, having to cut back production volumes and, consequently, staff numbers too.
- The other services segment benefited from an increase in staff at Sita Recycling Services.
- In the other services segment, Solvay cut back its workforce following the sale of its pharmaceuticals business and the stake in Inergy Automotive Systems.
- In the same segment, Brink's Belgium, a company specialized in transportation of valuables, went bankrupt.

[52] For the calculation of the employment figures data from the annual accounts and the results of the enquiries done by the "Observatoire bruxellois du marché du travail et des qualifications" for the study "*Poids socio-économique des entreprises implantées sur le site du port de Bruxelles"* (2010) were used.

[53] Classification by code of activity

TABLE 48 **EMPLOYMENT AT THE PORT OF BRUSSELS FROM 2005 TO 2010**

(FTE)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
1. DIRECT EFFECTS	**4,768**	**4,498**	**4,539**	**4,603**	**4,341**	**4,300**	**100.0**	**- 0.9**	**- 2.0**
MARITIME CLUSTER	***530***	***555***	***557***	***554***	***504***	***548***	***12.7***	***+ 8.7***	***+ 0.7***
Shipping agents and forwarders	164	170	162	171	171	190	4.4	+ 11.3	+ 3.0
Cargo handling	146	152	163	171	116	140	3.3	+ 21.4	- 0.8
Shipping companies	0	0	0	0	0	0	0.0	n.	n.
Shipbuilding and repair	0	3	3	2	0	0	0.0	n.	n.
Port construction and dredging	0	0	0	0	0	0	0.0	n.	n.
Fishing	0	0	0	0	0	0	0.0	n.	n.
Port trade	6	6	6	5	5	6	0.1	+ 9.3	- 1.0
Port authority	114	124	123	122	130	130	3.0	- 0.5	+ 2.7
Public sector	100	100	100	82	82	82	1.9	+ 0.0	- 3.9
NON-MARITIME CLUSTER	***4,238***	***3,943***	***3,982***	***4,049***	***3,837***	***3,753***	***87.3***	***- 2.2***	***- 2.4***
TRADE	1,387	1,341	1,263	1,295	1,252	1,244	28.9	- 0.6	- 2.1
INDUSTRY	1,061	1,101	1,151	1,209	1,122	1,121	26.1	- 0.1	+ 1.1
Energy	0	0	0	0	0	0	0.0	n.	n.
Fuel production	0	0	0	0	0	0	0.0	n.	n.
Chemicals	98	104	104	96	73	41	0.9	- 44.5	- 16.2
Car manufacturing	0	0	0	0	0	0	0.0	n.	n.
Electronics	0	0	0	0	0	0	0.0	n.	n.
Metalworking industry	28	19	18	18	19	8	0.2	- 58.1	- 21.9
Construction	524	552	579	572	561	552	12.8	- 1.6	+ 1.0
Food industry	170	167	162	150	151	153	3.6	+ 1.1	- 2.1
Other industries	241	259	289	374	318	368	8.6	+ 15.6	+ 8.8
LAND TRANSPORT	404	355	391	394	360	359	8.3	- 0.3	- 2.4
Road transport	404	355	391	394	358	358	8.3	+ 0.0	- 2.4
Other land transport	0	0	0	0	2	1	0.0	- 52.4	n.
OTHER LOGISTIC SERVICES	1,386	1,146	1,177	1,151	1,104	1,028	23.9	- 6.8	- 5.8
2. INDIRECT EFFECTS	**6,806**	**6,086**	**6,125**	**6,323**	**5,694**	**5,768**	**-**	**+ 1.3**	**- 3.3**
MARITIME CLUSTER	***967***	***957***	***975***	***1,020***	***856***	***982***	***-***	***+ 14.7***	***+ 0.3***
NON-MARITIME CLUSTER	***5,839***	***5,129***	***5,150***	***5,304***	***4,838***	***4,786***	***-***	***- 1.1***	***- 3.9***
TOTAL EMPLOYMENT	**11,574**	**10,584**	**10,663**	**10,926**	**10,035**	**10,068**	**-**	**+ 0.3**	**- 2.7**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office, and the Belgian IOTs).

TABLE 49 EMPLOYMENT TOP 10 AT THE PORT OF BRUSSELS IN 2010

Ranking	Company name	Sector
1	SOLVAY	Other services
2	SPIE BELGIUM	Construction
3	CERES	Food industry
4	SITA RECYCLING SERVICES	Other industries
5	SCANIA BELGIUM	Trade
6	BRUSSELS PORT AUTHORITY	Port authority
7	INEOS SERVICES BELGIUM	Other services
8	ZIEGLER	Road transport
9	SOLVIN	Trade
10	PUBLIC SECTOR	Public sector

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

7.4 Investment

Investment in the maritime cluster of the port of Brussels increased by 8.5 %. That figure masks a fall in investment in the port authority segment, counterbalanced by increased investment in the shipping agents and forwarders segment. In contrast, investment in the non-maritime cluster was down by 15.8 %. Trade and industry recorded a decline, as did almost all the industrial segments, whereas land transport and other services recorded an increase. Altogether, direct investment in the port of Brussels fell by 8.9 %.

Highlights in the maritime cluster in 2010:

- Almost all cargo handling companies increased their investment in 2010.
- The port authority continues to invest in the port. The "fixed assets under construction" item is up. This item in fact includes the work on decontamination of the groundwater for Carcoke and major projects (CSC) such as the Molenbeek sluices and the installation of sheet pilings, on which substantial progress was made in 2010.
- In the shipping agents and forwarders segment, Xpedys undertook major maintenance and repairs to vehicles, recording the cost on the assets side of the balance sheet.

Highlights in the non-maritime cluster in 2010:

- In the trade segment, Croix Chatelain acquired an additional warehouse. Starfruit company invested in other fixed assets. Havelange purchased machinery for its equipment hire business.
- In the construction segment, Etablissements Rigobert, which recently moved into the port area, invested in land and construction.
- In the food industry, Ceres invested in installations (flour silo aeration), security and keeping its existing facilities up to standard.
- In other logistic services, Solvay remains the principal investor.

TABLE 50 **INVESTMENT AT THE PORT OF BRUSSELS FROM 2005 TO 2010**

(in € million - current prices)

Sectors	2005	2006	2007	2008	2009	2010	Share in 2010 (in p.c.)	Change from 2009 to 2010 (in p.c.)	Annual average change from 2005 to 2010 (in p.c.)
MARITIME CLUSTER	***6.6***	***5.9***	***6.5***	***21.2***	***17.9***	***19.4***	***33.6***	***+ 8.5***	***+ 23.9***
Shipping agents and forwarders	1.2	0.9	0.6	4.2	4.5	9.7	16.9	+ 115.3	+ 51.8
Cargo handling	0.9	0.9	0.3	1.1	0.1	0.7	1.2	+ 585.2	- 6.1
Shipping companies	0.0	0.2	0.0	0.0	0.0	0.0	0.1	+ 225.7	n.
Shipbuilding and repair	0.0	0.0	0.0	0.0	0.0	0.0	0.1	n.	n.
Port construction and dredging	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Fishing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Port trade	0.0	0.1	0.1	0.0	0.0	0.0	0.0	n.	n.
Port authority	4.5	3.8	5.5	15.8	13.2	8.9	15.4	- 32.7	+ 14.8
Public sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
NON-MARITIME CLUSTER	***52.2***	***84.8***	***49.4***	***54.9***	***45.4***	***38.2***	***66.4***	***- 15.8***	***- 6.0***
TRADE	21.9	27.9	16.4	18.4	21.9	15.2	26.4	- 30.5	- 7.0
INDUSTRY	12.0	43.9	20.9	17.5	14.4	12.0	20.8	- 17.0	+ 0.0
Energy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Fuel production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Chemicals	2.0	1.8	3.3	2.0	0.8	0.4	0.7	- 50.9	- 28.6
Car manufacturing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Electronics	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.	n.
Metalworking industry	0.1	0.1	0.2	0.2	0.1	0.0	0.1	- 68.9	- 13.7
Construction	2.7	2.7	3.7	3.7	7.0	5.2	9.0	- 26.0	+ 14.1
Food industry	3.5	3.5	1.2	0.7	4.3	3.4	6.0	- 20.3	- 0.5
Other industries	3.6	35.9	12.4	10.9	2.2	2.9	5.0	+ 35.0	- 4.2
LAND TRANSPORT	2.3	1.3	2.1	4.7	1.1	1.1	2.0	+ 7.9	- 13.5
Road transport	2.3	1.3	2.1	4.7	1.0	1.1	1.9	+ 15.1	- 14.0
Other land transport	0.0	0.0	0.0	0.0	0.1	0.0	0.1	- 64.6	n.
OTHER LOGISTIC SERVICES	16.0	11.6	10.0	14.3	8.0	9.9	17.1	+ 23.5	- 9.2
DIRECT INVESTMENT	**58.8**	**90.6**	**55.9**	**76.1**	**63.2**	**57.6**	**100.0**	**- 8.9**	**- 0.4**

Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office and on surveys).

TABLE 51 INVESTMENT TOP 10 AT THE PORT OF BRUSSELS IN 2010

Ranking	Company name	Sector
1	XPEDYS	Shipping agents and forwarders
2	BRUSSELS PORT AUTHORITY	Port authority
3	SOLVAY	Other services
4	STARFRUIT COMPANY	Trade
5	HAVELANGE	Trade
6	CERES	Food industry
7	ETABLISSEMENTS RIGOBERT	Construction
8	SITA RECYCLING SERVICES	Other industries
9	BINJE ACKERMANS	Trade
10	CROIX CHATELAIN	Trade

Source: NBB. The estimates for the multi-regional firms are based on surveys, annual reports and allocation formulas based on regional statistics.

8 SUMMARY

After a year of contraction in most Belgian ports, with only the port of Zeebrugge managing to maintain growth, traffic began rising again in 2010 in all the ports except Ostend, which was unable to compensate for the loss of traffic resulting from the closure of shipping routes to the United Kingdom. The port of Ghent recorded the strongest expansion, even exceeding the volume transhipped in 2008; the ports of Antwerp, Liège and Brussels fell short of the 2008 volumes despite significant growth. Container traffic and general cargo increased in all the Flemish ports. The same applies to solid bulk. Liquid bulk recorded a more modest increase in the quantities transhipped. Following a particularly lacklustre year in 2009, ro-ro traffic picked up in 2010, except at the port of Ostend. However, the ro-ro figures are still below the level prevailing in the years preceding the decline. The improvement in traffic was apparent mainly in the first half of the year, as growth in the second half was already slowing down for certain types of traffic.

CHART 16 **CHANGE IN DIRECT VALUE ADDED**
(in € million, by volume)

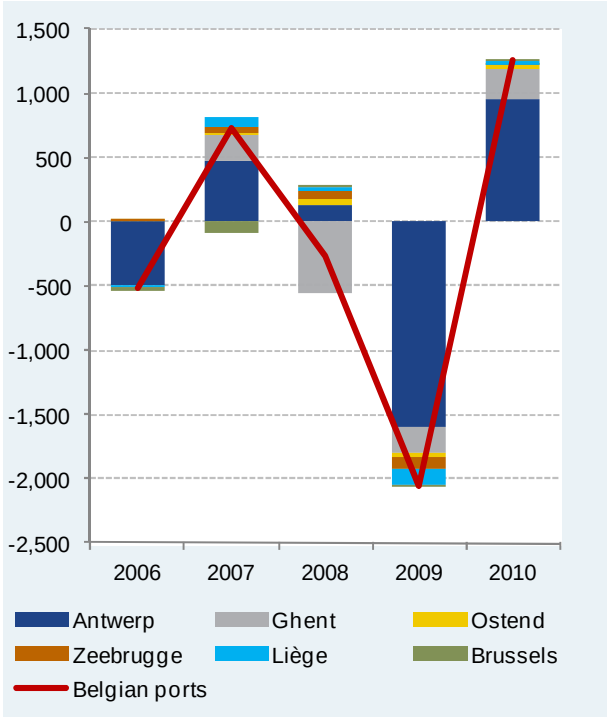
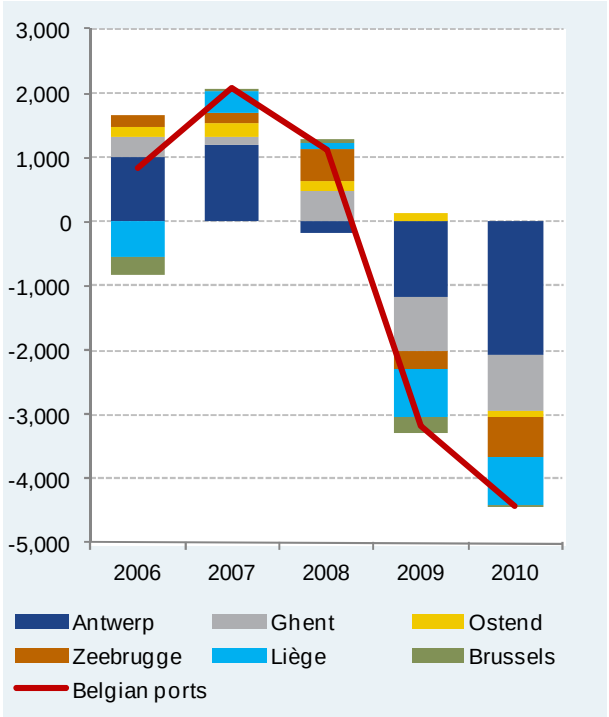


CHART 17 **CHANGE IN DIRECT EMPLOYMENT**
(FTE)



Source: NBB (calculations based on the Belgian accounts filed with the Central Balance Sheet Office).

Following a significant fall in 2009, the Belgian ports recorded a 10.2 % rise in direct value added in 2010. All the ports achieved higher value added, with growth ranging from 2.5 % at the port of Zeebrugge to 12.8 % for the port of Antwerp. The ports of Ghent and Ostend increased their value added by over 9 %, while the ports of Liège and Brussels saw a more moderate rise, of around 3 %. For the ports taken as a whole, there was an increase in both the maritime and the non-maritime clusters. In the former, the only segment of activity to contract is shipbuilding and repair. In all other segments of activity, value added is increasing, especially in the case of shipping companies and port construction and dredging. After two consecutive years of decline, the value added in trade, industry and other logistic services increased again, as did that in fuel production. The energy, chemicals, construction and food industry segments recorded their highest figures in six years. Conversely, in land transport, and more especially road transport, value added continues to fall.

In contrast to value added, the decline in direct employment in the Belgian ports recorded in 2009 persisted in 2010, with a 3.7 % fall in full-time equivalents. These job losses affected all the ports, the Liège port complex and the port of Zeebrugge being the hardest hit, with a decline in employment well in excess of the port average. In 2009 several companies had introduced economy measures entailing staff cuts, and these continued to have an impact in 2010. In the maritime cluster, only port construction

and dredging, port trade and port authorities recorded an increase in employment. The job losses are particularly severe in shipbuilding and repair, at close to 9 %, and to a lesser extent in shipping companies, with a figure of over 5 %. In the non-maritime cluster, only a few segments are seeing an increase in the number of full-time equivalents: fuel production, construction and other land transport. In the other segments, job losses range between 0.7 and 12.7 %, the latter figure applying to electronics. The segments most affected also include car manufacturing, road transport, and the metalworking industry.

Direct investment was down for the second consecutive year in the Belgian ports. Only the port of Zeebrugge, where investment had declined in 2009, achieved an increase in 2010. Although this fall applies to both clusters, it is the non-maritime cluster that is seeing the biggest reduction. The level of investment in fact varies widely across the different segments of the maritime cluster: some segments record a strong increase while others see a sharp fall. In the non-maritime cluster, investment in land transport is increasing. The amount of investment in trade is the lowest for six years. In industry and other logistic services, investment is down by more than a quarter. In industry, investment has risen in only two segments : chemicals and electronics. In the other segments, investment is down by between 8.9 and 76.3 %. Overall, the value of investment in 2010 is similar to the 2006 figure.

LIST OF ABBREVIATIONS

BNRC	Belgian National Railway Company
EU	European Union
FTE	Full-time equivalent
GDP	Gross Domestic Product
IOT	Input-Output Table
NAI	National Accounts Institute
NBB	National Bank of Belgium
NSI	National Statistical Institute, now FPS Economy, SMEs, independent Professions and Energy - Directorate General of Statistics and Economic Information
SMEs	Small and medium-sized enterprises
SUT	Supply and Use Table
TEU	Twenty-foot Equivalent Unit

CONVENTIONAL SIGNS

-	the datum does not exist or is meaningless
n.	not available
p.c.	per cent
p.m.	pro memoria

ANNEX 1: DETAILED SOCIAL BALANCE SHEET IN 2010

TABLE 52 **DETAILED SOCIAL BALANCE SHEET OF THE BELGIAN PORTS - 2010**
(reduced population: constant population)

Sectors	AVERAGE NUMBER OF EMPLOYEES																			
	Number			Hours actually worked (1)			Personnel costs (2)			Hired temporary staff			At the enterprise's disposal							
	full-time	part-time	total	full-time	part-time	total	full-time	part-time	total	number	hours	costs	number	hours	costs					
	1001	1002	1003	1011	1012	1013	1021	1022	1023	1501	1511	1521	1502	1512	1522					
MARITIME CLUSTER	***28,350***	***2,620***	***30,325***	***41.9***	***2.7***	***44.7***	***1,673.7***	***115.5***	***1,789.4***	***1,835***	***3.50***	***97.0***	***6,601***	***11.16***	***488.7***					
Shipping agents and forwarders	5,597	1,123	6,418	8.8	1.2	10.1	329.9	52.9	383.1	550	1.04	25.8	450	0.76	29.2					
Cargo handling	17,221	1,095	18,085	23.4	1.0	24.4	949.9	42.5	992.4	1,124	2.16	63.3	6,132	10.37	458.2					
Shipping companies	1,008	77	1,064	2.4	0.1	2.5	78.2	5.8	84.0	14	0.03	0.8	4	0.01	0.3					
Shipbuilding and repair	555	57	595	0.8	0.1	0.9	31.0	2.1	33.1	29	0.06	1.6	5	0.01	0.3					
Port construction and dredging	1,229	60	1,276	2.4	0.1	2.5	106.8	3.6	110.4	17	0.03	0.9	0	0.00	0.0					
Fishing	564	101	641	0.8	0.1	1.0	26.2	3.7	29.9	83	0.15	3.6	0	0.00	0.0					
Port trade	107	11	115	0.2	0.0	0.2	7.5	0.5	7.9	2	0.00	0.1	0	0.00	0.0					
Port authority	2,068	96	2,131	3.0	0.1	3.1	144.1	4.4	148.6	15	0.03	1.0	10	0.02	0.7					
Public sector	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.					
NON-MARITIME CLUSTER	***63,309***	***7,016***	***68,430***	***95.7***	***7.9***	***103.6***	***5,069.7***	***409.2***	***5,480.5***	***3,096***	***6.69***	***174.4***	***466***	***0.77***	***32.7***					
TRADE	4,363	675	4,825	7.0	0.7	7.7	309.0	35.3	344.3	241	0.47	12.3	65	0.12	4.8					
INDUSTRY	50,302	4,801	53,791	74.7	5.4	80.1	4,181.5	294.6	4,476.1	2,448	4.60	143.1	157	0.26	13.2					
Energy	2,645	229	2,822	3.9	0.3	4.2	270.7	18.4	289.1	27	0.05	1.4	0	0.00	0.0					
Fuel production	2,679	321	2,920	4.4	0.4	4.8	353.6	30.1	383.7	35	0.07	2.3	3	0.01	0.9					
Chemicals	12,812	1,557	13,916	19.0	1.8	20.8	1,205.4	112.0	1,317.4	297	0.56	20.0	13	0.02	0.8					
Car manufacturing	10,121	926	10,757	14.2	1.0	15.2	879.3	41.4	920.7	1,093	2.07	61.1	1	0.00	0.0					
Electronics	1,040	155	1,158	1.6	0.2	1.7	69.5	8.2	77.7	79	0.15	4.7	0	0.00	0.0					
Metalworking industry	13,306	871	13,970	19.7	1.0	20.7	937.8	51.1	988.9	440	0.80	29.3	37	0.06	4.5					
Construction	3,462	284	3,672	5.3	0.3	5.6	202.9	13.3	216.2	115	0.21	6.7	10	0.02	0.6					
Food industry	1,396	190	1,533	2.1	0.2	2.3	88.1	8.2	96.3	151	0.29	7.5	90	0.15	6.0					
Other industries	2,841	269	3,043	4.5	0.3	4.8	174.1	11.9	186.0	211	0.40	10.2	3	0.01	0.4					
LAND TRANSPORT	4,964	870	5,645	8.0	1.0	9.0	259.8	38.0	297.9	206	1.31	10.2	118	0.18	5.6					
Road transport	2,767	254	2,949	4.8	0.3	5.1	134.6	9.5	144.0	202	1.31	10.0	116	0.18	5.4					
Other land transport	2,197	616	2,696	3.2	0.7	3.9	125.3	28.6	153.8	4	0.01	0.2	2	0.00	0.2					
OTHER LOGISTIC SERVICES	3,679	670	4,169	6.0	0.8	6.8	319.3	41.2	362.1	202	0.32	8.7	126	0.21	9.0					
Other services																				
TOTAL	**91,659**	**9,636**	**98,755**	**137.6**	**10.6**	**148.3**	**6,743.4**	**524.7**	**7,269.9**	**4,931**	**10.19**	**271.4**	**7,067**	**11.94**	**521.4**					

Source: NBB. The figures are based on a constant sample of firms which filed full-format accounts throughout the period 2008 - 2010.

TABLE 52 *(continued)* **DETAILED SOCIAL BALANCE SHEET OF THE BELGIAN PORTS - 2010**
(reduced population: constant population)

Sectors	NUMBER OF PERSONS EMPLOYED AT THE END OF THE YEAR														
	Number			Men			Women			Number		Men			
	full-time	part-time	total (in FTE)	full-time	part-time	total (in FTE)	full-time	part-time	total (in FTE)	White-collar	Blue-collar	primary	secon-dary	higher	university
	1051	1052	1053	1201	1202	1203	1211	1212	1213	1343	1323	12003	12013	12023	12033
MARITIME CLUSTER	***28,054***	***2,551***	***29,897***	***23,334***	***917***	***23,977***	***4,719***	***1,634***	***5,920***	***11,859***	***17,414***	***8,481***	***11,449***	***2,763***	***1,274***
Shipping agents and forwarders	5,563	1,069	6,344	3,453	209	3,597	2,110	860	2,747	5,472	777	284	2,080	976	248
Cargo handling	17,071	1,083	17,854	15,327	551	15,722	1,745	532	2,132	3,645	13,960	6,851	7,497	928	446
Shipping companies	954	74	1,006	795	16	804	160	58	202	516	347	177	336	207	84
Shipbuilding and repair	501	48	534	482	40	509	19	8	24	109	424	50	412	41	7
Port construction and dredging	1,276	62	1,324	1,152	17	1,164	124	45	159	652	669	240	241	388	295
Fishing	515	96	586	358	31	382	157	65	204	185	383	99	206	59	18
Port trade	105	13	115	88	4	91	17	9	24	90	23	3	57	21	10
Port authority	2,068	107	2,135	1,680	49	1,707	388	58	428	1,190	832	778	620	143	166
Public sector	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.
NON-MARITIME CLUSTER	***61,279***	***7,046***	***66,434***	***53,827***	***3,885***	***56,677***	***7,452***	***3,161***	***9,757***	***29,100***	***34,493***	***7,919***	***33,102***	***10,470***	***5,140***
TRADE	4,327	684	4,800	3,293	220	3,443	1,033	464	1,357	3,009	1,638	338	1,903	798	357
INDUSTRY	48,342	4,848	51,875	43,223	2,849	45,289	5,119	2,000	6,586	20,787	28,574	5,243	27,915	8,268	3,864
Energy	2,620	229	2,797	2,006	65	2,056	614	164	741	1,890	0	22	817	699	519
Fuel production	2,674	325	2,918	2,324	207	2,479	350	118	439	2,343	514	118	844	843	674
Chemicals	12,855	1,549	13,946	11,714	981	12,400	1,140	567	1,546	6,970	6,067	566	7,961	2,864	1,008
Car manufacturing	8,242	931	8,907	7,280	655	7,754	962	276	1,153	1,649	7,006	1,334	5,178	1,014	228
Electronics	1,046	151	1,158	824	64	870	222	87	288	498	655	108	511	202	50
Metalworking industry	13,277	920	13,970	12,267	521	12,663	1,011	398	1,308	4,530	9,244	1,740	8,324	1,652	946
Construction	3,433	283	3,642	3,216	159	3,332	218	124	310	1,166	2,416	551	2,125	499	157
Food industry	1,377	191	1,516	1,126	73	1,177	251	118	340	564	905	146	780	158	93
Other industries	2,818	270	3,021	2,466	124	2,559	352	147	462	1,177	1,765	658	1,375	337	188
LAND TRANSPORT	4,902	853	5,572	4,460	629	4,962	442	224	610	1,731	3,755	2,147	2,299	360	155
Road transport	2,729	237	2,900	2,465	111	2,546	263	126	353	637	2,231	992	1,435	102	17
Other land transport	2,174	617	2,672	1,995	518	2,415	179	99	257	1,094	1,524	1,155	865	258	138
OTHER LOGISTIC SERVICES	3,708	660	4,188	2,851	187	2,983	857	473	1,205	3,573	527	191	985	1,044	764
TOTAL	**89,333**	**9,597**	**96,332**	**77,162**	**4,802**	**80,654**	**12,171**	**4,795**	**15,677**	**40,959**	**51,907**	**16,400**	**44,552**	**13,233**	**6,414**

Source: NBB. The figures are based on a constant sample of firms which filed full-format accounts throughout the period 2008 - 2010.

TABLE 52 *(continued)* **DETAILED SOCIAL BALANCE SHEET OF THE BELGIAN PORTS - 2010**
(reduced population: constant population)

Sectors	NUMBER OF PERSONS EMPLOYED			TRAINING				ENTERED			RESIGNED		
	Women			Men				Women					
	primairy	secon-dary	higher university	number	hours (1)	costs (2)	number	hours (1)	costs (2)	Number (in FTE)	Indefinite period	Number (in FTE)	Indefinite period
	12103	12113	12133	5801	5802	5803	5811	5812	5813	2053	2103	3053	3103
MARITIME CLUSTER	***690***	***3,353***	***1,396***	***7,364***	***0.21***	***11.8***	***2,238***	***0.05***	***2.2***	***5,347***	***3,941***	***5,494***	***4,222***
Shipping agents and forwarders	138	1,750	709	1,112	0.03	0.8	923	0.01	0.6	1,451	1,146	1,455	1,187
Cargo handling	391	1,151	409	4,105	0.11	7.3	753	0.02	0.8	2,050	1,791	2,257	2,044
Shipping companies	4	80	81	171	0.01	0.6	78	0.00	0.2	839	123	828	133
Shipbuilding and repair	2	18	4	89	0.00	0.1	5	0.00	0.0	64	52	136	125
Port construction and dredging	1	48	74	998	0.04	1.9	95	0.00	0.2	671	619	556	506
Fishing	47	121	30	200	0.00	0.1	115	0.00	0.1	126	106	125	115
Port trade	0	11	8	14	0.00	0.0	4	0.00	0.0	11	11	11	10
Port authority	108	174	81	676	0.02	1.0	265	0.01	0.4	136	93	127	102
Public sector	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.	n.
NON-MARITIME CLUSTER	***557***	***3,920***	***3,579***	***1,689***	***36,580***	***1.26***	***83.3***	***5,895***	***0.18***	***12.2***	***8,454***	***5,238***	***11,665***	***9,111***
TRADE	67	731	407	141	1,607	0.04	1.9	713	0.02	0.8	784	584	909	708
INDUSTRY	362	2,477	2,581	1,166	31,263	1.03	70.0	4,358	0.13	8.8	5,654	3,313	8,575	6,877
Energy	1	148	402	190	1,826	0.11	10.7	668	0.03	2.3	221	134	276	173
Fuel production	3	44	221	170	2,225	0.12	12.4	324	0.01	1.0	238	173	270	223
Chemicals	26	429	787	304	9,727	0.26	20.8	1,278	0.03	2.9	1,138	585	1,191	782
Car manufacturing	185	557	313	98	3,874	0.18	3.6	520	0.02	0.5	876	438	3,306	3,157
Electronics	33	159	69	27	429	0.01	0.4	113	0.00	0.1	127	84	128	113
Metalworking industry	56	620	387	244	9,435	0.27	17.6	870	0.02	1.2	1,729	1,022	2,032	1,422
Construction	5	132	136	38	1,648	0.04	1.7	140	0.00	0.2	557	420	562	476
Food industry	27	204	81	28	684	0.01	0.8	181	0.00	0.2	235	141	231	151
Other industries	26	184	186	67	1,416	0.03	2.1	263	0.01	0.4	534	315	580	379
LAND TRANSPORT	98	346	108	58	2,219	0.15	7.7	247	0.02	1.0	1,195	799	1,308	918
Road transport	60	227	50	17	382	0.01	0.5	63	0.00	0.1	971	642	1,061	734
Other land transport	38	119	58	41	1,837	0.14	7.2	184	0.02	0.9	225	156	247	183
OTHER LOGISTIC SERVICES	30	366	483	325	1,490	0.04	3.6	577	0.02	1.7	819	543	873	609
TOTAL	**1,247**	**7,274**	**4,976**	**2,143**	**43,945**	**1.48**	**95.0**	**8,133**	**0.23**	**14.4**	**13,801**	**9,179**	**17,159**	**13,333**

Source: NBB. The figures are based on a constant sample of firms which filed full-format accounts throughout the period 2008 - 2010.

(1) The time actually worked in terms of millions of hours.

(2) The personnel costs and training costs in terms of € million.

ANNEX 2: LIST OF NACE-BEL BRANCHES [54]

TABLE 53 **LIST OF NACE-BEL BRANCHES (NACE-BEL 2008)**

SUT	NACE-BEL	Cluster	Sector	AN	GN	OO	ZB	LG	BR	Definition
03A	03110	MA	VI	*	*	*	*	*	*	Marine fishing
08A	08121	IN	AI					*		Quarrying of gravel
08A	08122	IN	AI	*						Quarrying of sand
08A	08910	IN	AI			*				Mining of chemical and fertiliser minerals
08A	08990	IN	AI		*					Other mining and quarrying n.e.c.
09A	09900	IN	AI	*						Support activities for other mining and quarrying
10A	10130	IN	VO		*		*			Production of meat and poultry meat products
10B	10200	MA	VI			*	*			Processing and preserving of fish, crustaceans and molluscs
10C	10320	IN	VO				*			Manufacture of fruit and vegetable juice
10D	10410	IN	VO	*	*					Manufacture of oils and fats
10E	10510	IN	VO	*	*	*	*	*	*	Operation of dairies and cheese making
10E	10520	IN	VO						*	Manufacture of ice cream
10F	10610	IN	VO					*	*	Manufacture of grain mill products
10H	10810	IN	VO					*		Manufacture of sugar
10H	10820	IN	VO		*	*	*		*	Manufacture of cocoa, chocolate and sugar confectionery
10I	10890	IN	VO		*		*			Manufacture of other food products n.e.c.
10J	10910	IN	VO		*		*	*		Manufacture of prepared feeds for farm animals
11A	11010	IN	VO		*					Distilling, rectifying and blending of spirits
11A	11060	IN	VO	*						Manufacture of malt
13A	13100	IN	AI			*	*			Preparation and spinning of textile fibres
13B	13929	IN	AI	*		*				Manufacture of other textiles, except wearing apparel
16A	16100	IN	AI		*	*			*	Sawmilling and planing of wood
16A	16230	IN	AI	*	*			*	*	Manufacture of other builders' carpentry and joinery
16A	16240	IN	AI	*	*	*	*	*	*	Manufacture of wooden containers
17A	17120	IN	AI		*		*			Manufacture of paper and paperboard
17A	17210	IN	AI		*			*		Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
17A	17290	IN	AI	*						Manufacture of other articles of paper and paperboard
18A	18120	IN	AI	*	*	*	*	*	*	Other printing
18A	18130	IN	AI	*	*	*		*	*	Pre-press and pre-media services
19A	19200	IN	PE	*	*	*	*	*	*	Manufacture of refined petroleum products
20A	20110	IN	CH	*	*					Manufacture of industrial gases
20A	20120	IN	CH		*			*		Manufacture of dyes and pigments
20B	20130	IN	CH	*	*	*		*		Manufacture of other inorganic basic chemicals
20A	20140	IN	CH	*	*	*	*	*	*	Manufacture of other organic basic chemicals
20A	20150	IN	CH	*	*		*	*		Manufacture of fertilisers and nitrogen compounds
20A	20160	IN	CH	*	*		*			Manufacture of plastics in primary forms
20A	20170	IN	CH	*						Manufacture of synthetic rubber in primary forms
20C	20200	IN	CH	*						Manufacture of pesticides and other agrochemical products
20D	20300	IN	CH	*			*	*		Manufacture of paints, varnishes and similar coatings, printing ink and mastics
20F	20520	IN	CH		*					Manufacture of glues
20F	20590	IN	CH	*	*			*		Manufacture of other chemical products n.e.c.
20G	20600	IN	CH			*				Manufacture of man-made fibres
21A	21100	IN	CH	*						Manufacture of basic pharmaceutical products
21A	21201	IN	CH	*			*			Manufacture of medicines
22A	22110	IN	CH	*						Manufacture of rubber tyres and tubes; retreating and rebuilding of rubber tyres
22A	22190	IN	CH	*	*		*			Manufacture of other rubber products
22B	22210	IN	CH	*				*		Manufacture of plastic plates, sheets, tubes and profiles
22B	22220	IN	CH	*	*			*		Manufacture of plastic packing goods
22B	22290	IN	CH		*	*	*	*	*	Manufacture of other plastic products
23A	23110	IN	CS		*		*			Manufacture of flat glass
23A	23120	IN	CS		*		*		*	Shaping and processing of flat glass
23B	23322	IN	CS					*		Manufacture of tiles and construction products, in baked clay

[54] The nomenclature in this list is in accordance with the NACE-Bel revision having taken place in 2008 (Rev.2).

TABLE 53 *(continued)* **LIST OF NACE-BEL BRANCHES (NACE-BEL 2008)**

SUT	NACE-BEL	Cluster	Sector	AN	GN	OO	ZB	LG	BR	Definition
23C	23510	IN	CS	*	*			*	*	Manufacture of cement
23C	23520	IN	CS					*		Manufacture of lime and plaster
23D	23610	IN	CS		*		*	*	*	Manufacture of concrete products for construction purposes
23D	23620	IN	CS	*						Manufacture of plaster products for construction purposes
23D	23630	IN	CS	*	*	*	*	*	*	Manufacture of ready-mixed concrete
23D	23640	IN	CS	*				*		Manufacture of mortars
23D	23700	IN	CS		*	*	*			Cutting, shaping and finishing of stone
23D	23990	IN	CS	*	*					Manufacture of other non-metallic mineral products n.e.c.
24A	24100	IN	ME	*	*	*	*	*	*	Manufacture of basic iron and steel and of ferro-alloys
24A	24200	IN	ME					*		Manufacture of tubes, pipes, hollow profiles and related fittings, of steel
24B	24310	IN	ME					*		Cold drawing of bars
24B	24510	IN	ME		*	*				Casting of iron
25A	25110	IN	ME	*	*		*			Manufacture of metal structures and parts of structure
25A	25120	IN	ME		*		*	*		Manufacture of doors and windows of metal
25A	25210	IN	ME	*						Manufacture of central heating radiators and boilers
25A	25290	IN	ME	*	*	*		*	*	Manufacture of other tanks, reservoirs and containers of metal
25A	25300	IN	ME	*	*			*		Manufacture of steam generators, except central heating hot water boilers
25A	25501	IN	ME	*	*		*		*	Forging of metal
25B	25610	IN	ME	*	*		*	*	*	Treatment and coating of metals
25B	25620	IN	ME	*	*	*	*	*		Machining
25C	25930	IN	ME	*						Manufacture of wire products, chain and springs
25C	25940	IN	ME	*	*			*		Manufacture of fasteners and screw machine products
25C	25999	IN	ME		*		*	*	*	Manufacture of other fabricated metal articles
26A	26110	IN	MP				*	*		Manufacture of electronic valves and tubes and other electronic components
26B	26300	IN	MP				*			Manufacture of communication equipment
26B	26400	IN	MP	*	*		*			Manufacture of consumer electronics
26C	26510	IN	MP	*	*	*				Manufacture of instruments and appliances for measuring, testing and navigation
27A	27110	IN	MP	*	*	*	*	*	*	Manufacture of electric motors, generators and transformers
27A	27120	IN	MP	*	*		*			Manufacture of electricity distribution and control apparatus
27B	27510	IN	MP					*		Manufacture of electric domestic appliances
27B	27900	IN	MP	*				*		Manufacture of other electrical equipment
28A	28110	IN	ME	*	*					Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
28A	28120	IN	ME	*						Manufacture of fluid power equipment
28A	28220	IN	ME	*			*			Manufacture of lifting and handling equipment
28A	28250	IN	ME	*	*	*	*	*	*	Manufacture of non-domestic cooling and ventilation equipment
28A	28291	IN	ME				*			Manufacture of packing-machines
28A	28295	IN	ME	*					*	Manufacture of filter equipment
28A	28299	IN	ME		*		*			Manufacture of other general-purpose machinery n.e.c.
29A	29100	IN	AU	*	*	*	*	*	*	Manufacture of motor vehicles
29B	29201	IN	AU	*						Manufacture of bodies (coachwork) for motor vehicles
29B	29202	IN	AU	*						Manufacture of trailers and semi-trailers and caravans
29B	29320	IN	AU	*	*			*		Manufacture of other parts and accessories for motor vehicles
30A	30110	MA	SB	*		*				Building of ships and floating structures
30B	30200	IN	AI					*		Manufacture of railway locomotives and rolling stock
32B	32990	IN	AI	*			*			Other manufacturing n.e.c.
33A	33110	IN	ME	*			*			Repair of fabricated metal products
33A	33120	IN	ME	*	*		*	*		Repair of machinery
33A	33150	MA	SB	*	*	*	*	*	*	Repair and maintenance of ships and boats
33A	33170	IN	ME	*						Repair and maintenance of other transport equipment
35A	35110	IN	EN	*	*	*	*	*	*	Production of electricity
35B	35220	IN	EN				*			Distribution of gaseous fuels through mains
37A	37000	IN	AI	*					*	Sewerage
38A	38110	IN	AI		*			*		Collection of non-hazardous waste
38A	38219	IN	AI	*	*	*	*	*	*	Other processing and disposal of non-hazardous waste
38B	38310	IN	AI					*	*	Dismantling of wrecks

TABLE 53 *(continued)* **LIST OF NACE-BEL BRANCHES (NACE-BEL 2008)**

SUT	NACE-BEL	Cluster	Sector	AN	GN	OO	ZB	LG	BR	Definition
38B	38321	IN	AI		*					Sorting of non-hazardous waste for recycling
38B	38322	IN	AI	*	*	*	*	*	*	Recovery of waste metal
38B	38323	IN	AI	*	*		*	*	*	Recovery of inert waste
39A	39000	IN	AI	*			*			Remediation activities and other waste management services
41A	41102	IN	CS	*	*	*	*		*	Non-residential development projects
41A	41203	IN	CS	*	*	*	*	*	*	Construction of other non-residential buildings
42A	42110	IN	CS	*	*	*	*	*	*	Construction of roads and motorways
42A	42130	IN	CS		*	*				Construction of bridges and tunnels
42A	42211	IN	CS		*					Construction of water and gas supply networks
42A	42219	IN	CS	*						Civil engineering works relating to fluids n.e.c.
42A	42220	IN	CS	*	*					Construction of utility projects for electricity and telecommunications
42A	42911	MA	DR	*	*	*	*			Dredging
42A	42919	MA	DR	*	*	*	*	*	*	Construction of water projects, except dredging
43A	43110	IN	CS	*	*	*	*	*	*	Demolition
43A	43120	IN	CS	*	*		*	*	*	Site preparation
43B	43211	IN	CS	*	*	*	*	*	*	Electrical engineering installations in buildings
43B	43221	IN	CS	*		*	*	*	*	Plumbing
43B	43222	IN	CS	*	*		*	*	*	Heat and air conditioning installation
43B	43291	IN	CS	*						Insulation work activities
43C	43320	IN	CS	*	*	*	*		*	Joinery installation
43C	43341	IN	CS	*	*		*	*	*	Painting of buildings
43D	43910	IN	CS	*	*	*	*		*	Roofing activities
43D	43999	IN	CS	*	*	*	*	*	*	Other specialised construction activities
45A	45111	CO	CO	*	*		*	*	*	Wholesale of cars and light motor vehicles
45A	45191	CO	CO	*			*		*	Wholesale of other motor vehicles (> 3,5 ton)
45A	45193	CO	CO	*						Retail sale of other motor vehicles (> 3,5 ton)
45A	45202	CO	CO	*	*	*	*	*		Maintenance and general repair of motor vehicles
45A	45205	CO	CO	*			*		*	Tyre specialists
45A	45310	CO	CO	*	*	*	*	*	*	Wholesale trade and intermediary of motor vehicle parts and accessories
46A	46110	CO	CO	*						Agents involved in the sale of agricultural raw materials, live animals, textile raw materials and semi-finished goods
46A	46120	CO	CO	*					*	Agents involved in the sale of fuels, ores, metals and industrial chemicals
46A	46140	CO	CO	*				*	*	Agents involved in the sale of machinery, industrial equipment, ships and aircraft
46A	46170	CO	CO	*	*		*			Agents involved in the sale of food, beverages and tobacco
46A	46180	CO	CO	*	*		*	*	*	Agents specialised in the sale of other particular products
46A	46190	CO	CO	*	*			*	*	Agents involved in the sale of a variety of goods
46A	46216	CO	CO	*	*		*	*	*	Wholesale of animal feeds and agricultural raw materials
46A	46319	CO	CO	*		*	*		*	Wholesale of fruit and vegetables, except potatoes
46A	46332	CO	CO	*						Wholesale of edible oils and fats
46A	46349	CO	CO	*	*	*	*	*	*	Wholesale of alcoholic and other beverages, general assortment
46A	46381	CO	CO	*	*	*	*		*	Wholesale of fish, crustaceans and molluscs
46A	46389	CO	CO	*	*	*	*	*	*	Wholesale of other food n.e.c.
46A	46391	CO	CO				*		*	Non-specialised wholesale of frozen food
46A	46392	CO	CO	*		*	*		*	Non-specialised wholesale of non-frozen food, beverages and tobacco
46A	46412	CO	CO	*	*		*		*	Wholesale trade in household textiles and bedding
46A	46423	CO	CO	*	*		*	*	*	Wholesale trade in clothing other than work clothes and underwear
46A	46431	CO	CO	*	*	*	*	*	*	Wholesale trade in domestic electrical appliances and audio and video equipment
46A	46442	CO	CO		*		*		*	Wholesale of cleaning materials
46A	46460	CO	CO	*	*	*	*	*	*	Wholesale of pharmaceutical goods
46A	46499	CO	CO	*	*	*	*	*	*	Wholesale of other household goods n.e.c.
46A	46510	CO	CO	*	*		*		*	Wholesale of computers, computer peripheral equipment and software
46A	46620	CO	CO	*	*		*		*	Wholesale of machine tools
46A	46630	CO	CO	*		*		*	*	Wholesale of mining, construction and civil engineering machinery
46A	46693	CO	CO	*	*	*	*	*	*	Wholesale trade in electrical equipment, including installation materials

TABLE 53 *(continued)* **LIST OF NACE-BEL BRANCHES (NACE-BEL 2008)**

SUT	NACE-BEL	Cluster	Sector	AN	GN	OO	ZB	LG	BR	Definition
46A	46694	CO	CO	*					*	Wholesale trade in lifting and transport equipment
46A	46695	CO	CO	*			*			Wholesale trade in pumps and compressors
46A	46699	CO	CO	*	*	*	*	*	*	Wholesale of other machinery and equipment n.e.c
46B	46710	CO	CO	*	*	*	*	*	*	Wholesale of solid, liquid and gaseaous fuels and related products
46A	46720	CO	CO	*	*		*	*	*	Wholesale of metals and metal ores
46A	46731	CO	CO	*	*	*	*	*	*	Wholesale of construction materials, general assortment
46A	46732	CO	CO	*	*	*	*	*	*	Wholesale of wood
46A	46733	CO	CO		*		*		*	Wholesale trade in wallpapers, paints and household textiles
46A	46741	CO	CO	*	*		*			Wholesale of hardware
46A	46751	CO	CO	*	*	*	*	*	*	Wholesale of industrial chemical products
46A	46769	CO	CO	*	*		*			Wholesale trade in other intermediate products n.e.c.
46A	46772	CO	CO		*		*	*	*	Wholesale trade in iron and steel scrap and non-ferrous scrap metals
46A	46900	MA	CP	*	*	*	*	*	*	Non-specialised wholesale trade
47A	47230	CO	CO	*		*	*		*	Retail sale of fish, crustaceans and molluscs in specialised stores
47B	47300	CO	CO	*	*	*	*	*	*	Retail sale of automotive fuel in specialised stores
47A	47410	CO	CO	*	*		*		*	Retail sale of computers, peripheral units and software in specialised stores
47A	47521	CO	CO	*	*	*	*	*	*	Specialist retail trade in building materials and DIY supplies, general range
47A	47781	CO	CO	*	*	*	*	*	*	Specialist retail trade in fuels other than road fuel
49A	49200	TR	TP	*	*	*	*	*	*	Freight rail transport
49C	49410	TR	WE	*	*	*	*	*	*	Freight transport by road, except removal
49C	49420	TR	WE	*					*	Removal services
49C	49500	TR	WE	*			*			Transport via pipelines
50A	50200	MA	RE	*	*	*	*	*	*	Sea and coastal freight water transport
50B	50400	MA	RE	*	*	*	*	*		Inland freight water transport
52A	52100	MA	GO	*	*	*	*	*	*	Warehousing and storage, including refrigerating
52A	52210	LO	AD	*		*	*		*	Service activities incidental to land transportation
52A	52220	MA	GO	*	*	*	*	*	*	Service activities incidental to water transportation
52A	52241	MA	GO	*	*	*	*	*	*	Cargo handling in sea ports
52A	52249	MA	GO	*	*	*	*	*	*	Cargo handling except sea ports
52A	52290	MA	SE	*	*	*	*	*	*	Other transportation support activities
53A	53200	TR	WE	*	*	*			*	Other postal and courier activities
62A	62010	LO	AD	*	*	*	*	*	*	Computer programming activities
66A	66210	LO	AD	*	*		*			Risk and damage evaluation
66A	66220	LO	AD	*	*	*	*	*	*	Activities of insurance agents and brokers
66A	66290	LO	AD		*					Other activities auxiliary to insurance and pension funding
68B	68203	LO	AD	*	*	*	*	*	*	Renting and operating of own or leased non residential real estate, except lands
68A	68321	LO	AD	*	*	*	*			Management of residential real estate on a fee or contract basis
68A	68322	LO	AD	*	*	*				Management of non-residential real estate on a fee or contract basis
69A	69201	LO	AD	*			*	*	*	Accountants and fiscal advisors
70A	70100	LO	AD	*	*	*	*	*	*	Activities of head offices
70A	70220	LO	AD	*	*	*	*	*	*	Business and other management consultancy activities
71A	71121	LO	AD	*	*	*	*	*	*	Engineering activities and related technical consultancy, except surveyor
71A	71209	LO	AD	*	*		*		*	Other technical testing and analysis
72A	72190	LO	AD			*			*	Other research and experimental development on natural sciences and engineering
73A	73110	LO	AD	*	*	*	*	*	*	Advertising agencies
77A	77120	LO	AD	*	*	*	*	*	*	Renting and leasing of trucks
77C	77320	LO	AD	*	*		*		*	Renting and leasing of construction and civil engineering machinery and equipment
77C	77340	LO	AD	*	*	*	*		*	Renting and leasing of water transport equipment
77C	77399	LO	AD	*	*		*	*	*	Renting and leasing of other machinery, equipment and tangible goods
80A	80100	LO	AD	*	*	*	*		*	Private security activities
81A	81100	LO	AD	*	*		*	*	*	Combined facilities support activities
81B	81220	LO	AD	*	*	*	*	*	*	Other building and industrial cleaning activities
81B	81290	LO	AD	*		*				Other cleaning activities

TABLE 53 *(continued)* **LIST OF NACE-BEL BRANCHES (NACE-BEL 2008)**

SUT	NACE-BEL	Cluster	Sector	AN	GN	OO	ZB	LG	BR	Definition
82A	82110	LO	AD	*	*		*	*	*	Combined office administrative service activities
82A	82920	LO	AD	*	*					Packaging activities
82A	82990	LO	AD	*	*	*	*	*	*	Other business support service activities n.e.c.
84B	84220	MA	PU	*	*	*	*		*	Defence activities
94A	94110	LO	AD	*	*	*			*	Activities of business and employers membership organisations

Source:NBB.

The asteriks denote the presence of the activity branches in the ports for at least one year over the period 2005 - 2010. For instance the branch 52241 (Cargo handling in sea ports) is or was present in the six ports, at the same time or at least one year in each of these ports between 2005 and 2010, while the branch 30110 (Building of ships and floating structures) was only present in Antwerp and Ostend.

Legend:

Port code	Port	Port code	Port
AN	Port of Antwerp	ZB	Port of Zeebrugge
GN	Port of Ghent	LG	Liège port complex
OO	Port of Ostend	BR	Port of Brussels

Cluster code	Cluster definition	Sector code	Sector definition
MA	Maritime	SE	Shipping agents and forwarders
		GO	Cargo handling
		RE	Shipping companies
		SB	Shipbuilding and repair
		DR	Port construction and dredging
		VI	Fishing
		CP	Port trade
		HB	Port authority
		PU	Public sector
CO	Trade	CO	Trade
IN	Industrie	EN	Energy
		PE	Fuel production
		CH	Chemicals
		AU	Car manufacturing
		MP	Electronics
		ME	Metalworking industry
		CS	Construction
		VO	Food industry
		AI	Other industries
TP	Land transport	WE	Road transport
		TP	Other land transport
LO	Other logistic services	AD	Other services

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