

Results and financial situation of firms in 2011

David Vivet

Introduction

Each year, in the December issue of the Economic Review, the National Bank describes the developments reflected in the annual accounts of non-financial corporations. By the autumn, the Central Balance Sheet Office already has a representative sample of annual accounts for the previous year. The conclusions based on that sample can therefore be fairly reliably extrapolated to the population as a whole.

This article is in four parts. Part 1 gives a brief description of the methodology and the population studied. Starting this year, the “head office activities” branch is excluded from the population because it significantly impacts the aggregate statistics but has only a marginal impact on the real economy.

Part 2 presents an extrapolation of the main items in the operating account for the 2011 financial year. The extrapolations concern value added, staff costs, depreciation and the operating result. Details are given according to company size, with a breakdown by the main branches of activity. This section also offers a regional analysis of the operating account, with a breakdown by sector of growth in the three Regions over the past decade.

Part 3 assesses the financial position of companies in terms of profitability and solvency. A section is devoted to recent changes regarding the notional interest deduction. Since taking effect, this measure has had a significant influence on companies’ financial structure.

Finally, Part 4 analyses recent inventory trends, which have played an important role in the cyclical fluctuations of the

past few years. The analysis focuses principally on their structure and turnover rate.

1. Methodology and description of the population

1.1 Methodology

Since the late 1970s, the Central Balance Sheet Office has collected the accounts of non-financial corporations. To that end, firms are required to submit their annual accounts using a standard form, no later than seven months after the end of the financial year. The data are then checked and adjusted if necessary to meet the required quality standards. By September, an analysis is then possible.

However, every year the population of annual accounts relating to the latest year considered, in this case 2011, is incomplete. The reason is that many sets of annual accounts are filed late or do not pass the arithmetical and logical checks conducted by the Central Balance Sheet Office.

To overcome this problem, a constant sample is used to estimate data for 2011. This year’s constant sample comprises firms which filed annual accounts for a 12-month financial year for both 2010 and 2011. The method consists in extrapolating the 2011 results on the basis of developments observed in the constant sample, which are assumed to be representative of those affecting the population as a whole. As verified in previous editions of this article, that assumption is broadly correct: in the vast

TABLE 1 COMPOSITION AND REPRESENTATIVENESS OF THE 2010-2011 CONSTANT SAMPLE

(sample drawn on 21 September 2012)

	Companies in the 2010-2011 sample	Total companies studied, 2010	Representativeness of the 2010-2011 sample (in %)	<i>p.m.</i> <i>Representativeness of the 2009-2010 sample</i>
Number of companies	242 474	316 951	76.5	58.0
Large firms	16 238	19 251	84.3	71.2
SMEs	226 236	297 700	76.0	56.8
Manufacturing industry	17 056	21 595	79.0	58.8
Non-manufacturing branches	225 418	295 356	76.3	57.6
Value added (€ million)⁽¹⁾	150 519	167 741	89.7	84.0
Large firms	118 818	126 389	94.0	93.2
SMEs	31 701	41 352	76.7	58.6
Manufacturing industry	43 724	46 834	93.4	94.1
Non-manufacturing branches	106 795	120 907	88.3	80.4

Source: NBB.

(1) For companies in the constant sample, the value added used is that of 2010.

majority of cases, the estimates give a good indication of the direction and scale of the actual movements.

This year's sample was drawn on 21 September 2012. It comprises 242 474 companies, or 76.5 % of the annual accounts filed in respect of financial year 2010 (see Table 1). In terms of value added, its representativeness is much higher, being 89.7 %. Compared with previous years, the Central Balance Sheet Office's new ICT system significantly improved the representativeness of the sample, especially with respect to smaller companies. As a reminder, last year's sample was drawn much later and covered 58 % of annual accounts and 84 % of value added.

1.2 Description of the population studied

In previous editions of this article, the population studied corresponded to all non-financial corporations as defined by the Central Balance Sheet Office. Starting this year, the population will exclude head office activities (NACE-BEL 70.100). This branch, previously made up of coordination centres, now contains several hundred companies that generally provide banking or treasury management services within a group of companies. In recent years, these companies have seen substantial capital inflows due to the creation of the notional interest deduction. Consequently, in 2010 the head office activities branch represented more than one-third of companies' equity capital, but barely more than 1 % of value added and employment. This means that this branch has a significant

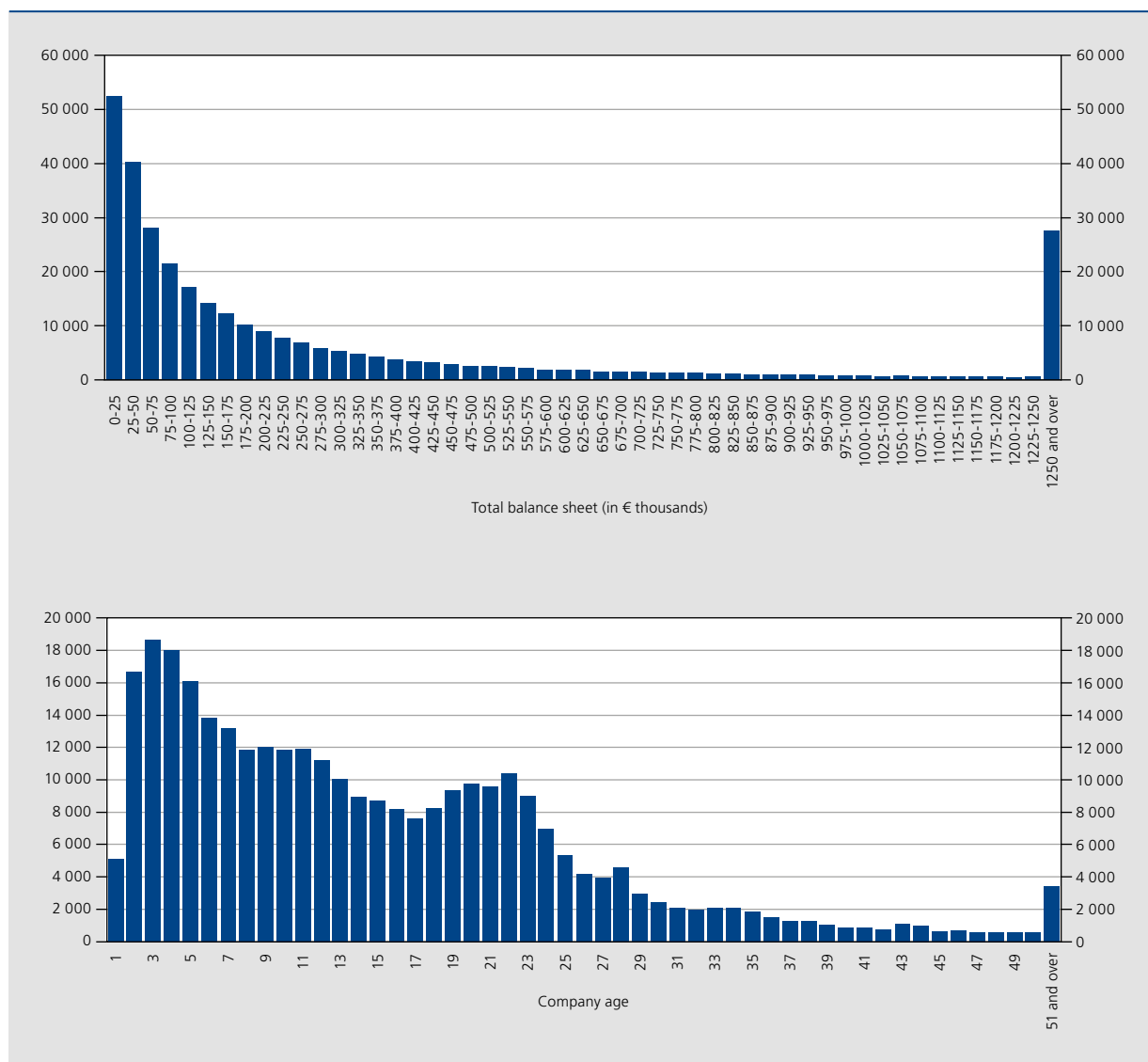
impact on certain aggregate financial statistics but a limited real economic impact. As a result, it has been definitively excluded from the statistics presented in this article. The population studied now corresponds to the PU400 group on the statistical CD-ROM published by the Central Balance Sheet Office.

Annex 1 sets out the NACE codes of the branches of activity covered. Sectoral categories are based on the NACE-BEL 2008 nomenclature. For presentation and interpretation purposes, the structure used in this article differs slightly from the official structure of the nomenclature.

The article also distinguishes between companies according to their size. In accordance with the Company Code, companies filing their annual accounts in the full format are regarded as large firms. Other companies, i.e. those filing their annual accounts in the simplified format, are regarded as SMEs.

In Belgium, virtually all businesses operating as a company are required to file annual accounts. As a result, the population studied includes a large number of small companies: in 2010 close to 30 % of companies (i.e. 93 000 observations) reported a total balance sheet of less than € 50 000 (see the first part of Chart 1). At the other extreme, the population also includes the country's largest companies: in 2010, just under 1 000 annual accounts had a total balance sheet of over € 100 million.

CHART 1 DISTRIBUTION OF ANNUAL ACCOUNTS AS A FUNCTION OF TOTAL BALANCE SHEET AND COMPANY AGE
(number of annual accounts, 2010)



Source: NBB.

The distribution of companies according to their age allows us to identify other characteristics of the population. For a given annual account, a company's age is defined as the difference between the closing date and the date on which the company was formed, as shown in the Crossroads Bank for Enterprises. That difference, expressed as a number of years, is rounded up to the next unit.

According to this definition, 43% of the companies studied (or 137 000 observations) have been operating

for fewer than ten years, and close to three-quarters of them (or 231 000 observations) have been operating for fewer than 20 years (see second part of Chart 1). As with size, the distribution according to age is clearly asymmetrical: 3 392 companies are more than 50 years old, and 102 were formed over a century ago. As a reminder, the oldest company studied is the real estate company Financière Patience Beaujonc (founded in 1860 under the name "Société anonyme des charbonnages de Patience et Beaujonc réunis"), followed by Compagnie Immobilière de Belgique ("Immobel", 1863) and Solvay (1863).

2. Trends in components of the operating result

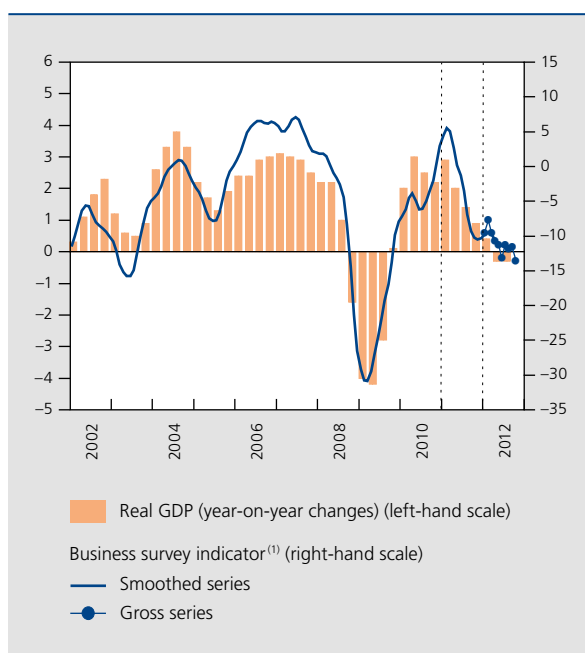
2.1 Economic climate

In 2011, international economic and financial conditions again exerted a strong, but mixed, influence on the Belgian economy. Building on the recovery that began in mid-2009, the consolidation of economic activity continued in early 2011: after averaging 2.4 % in 2010, year-on-year volume growth of GDP strengthened in the first quarter of the year under review. It lost a bit of momentum in the second quarter, before dipping sharply in the second half of the year as the business climate took a turn for the worse. Thus despite a strong start, the volume growth of GDP averaged 1.8 % in 2011 (see Table 2).

Just as their rebound drove the recovery two years earlier, exports of goods and services were among the first demand components to experience a cyclical slowdown. The slowdown was partly the result of weaker exports to neighbouring countries, but it was also due to markets outside of Europe. Over the full year 2011, growth in the volume of goods and services exports came to 5.5 %, compared with 9.6 % in 2010. The slower growth of exports affected the demand for imported goods and services, because scattered production chains require inputs from units in other countries. Overall, year-on-year growth in imports slowed from

CHART 2 QUARTERLY CHANGE IN GDP AND ECONOMIC INDICATOR

(data restated for seasonal variations and calendar effects, unless otherwise stated)



Source: NBB.

(1) Data restated for seasonal variations.

8.9 % in 2010 to 5.7 % in 2011. All in all, net exports' contribution to GDP growth was marginally negative (-0.1 percentage point).

TABLE 2 GDP AND PRINCIPAL EXPENDITURE CATEGORIES

(volume data restated for seasonal variations and calendar effects; percentage changes compared to the previous year, unless otherwise stated)

	2007	2008	2009	2010	2011
Final household consumption expenditure ⁽¹⁾	1.7	2.0	0.6	2.7	0.2
Final government consumption expenditure	1.9	2.7	1.9	0.7	0.8
Gross fixed capital formation	6.3	2.0	-8.4	-1.4	4.1
Companies	8.2	4.2	-10.2	-3.2	8.6
Housing	3.3	-2.7	-8.6	3.1	-5.3
Government	1.9	0.3	9.7	-3.1	5.3
Change in inventories ⁽²⁾	0.2	-0.1	-1.0	0.3	0.7
Net exports of goods and services ⁽²⁾	0.0	-0.9	-0.6	0.7	-0.1
Exports of goods and services	5.2	2.1	-11.1	9.6	5.5
Imports of goods and services	5.4	3.4	-10.6	8.9	5.7
GDP	2.9	1.0	-2.7	2.4	1.8

Source: NAI.

(1) Final consumption expenditure of households and non-profit institutions.

(2) Contribution to the change in GDP.

Companies did not fully anticipate the slowing of external demand and so involuntarily accumulated unsold products and unused intermediate goods. In the economic surveys conducted by the Bank, this observation is confirmed by the large number of manufacturing industry managers reporting abnormally high inventory levels. As a result, inventories made a big contribution to GDP growth in 2011, equal to 0.7 of a percentage point. Recent inventory trends are analysed in Part 4 of this article.

Considering the drop in trade with the rest of the world, GDP growth relied almost entirely on domestic demand, more specifically on capital expenditure. Business investment in particular experienced its largest increase since 2007, gaining 8.6% over the full year 2011 after falling by a cumulative 13.1% over the previous two years. Public investment also rose considerably, up 5.3%, ahead of local elections. Government final consumption expenditure rose by 0.8%.

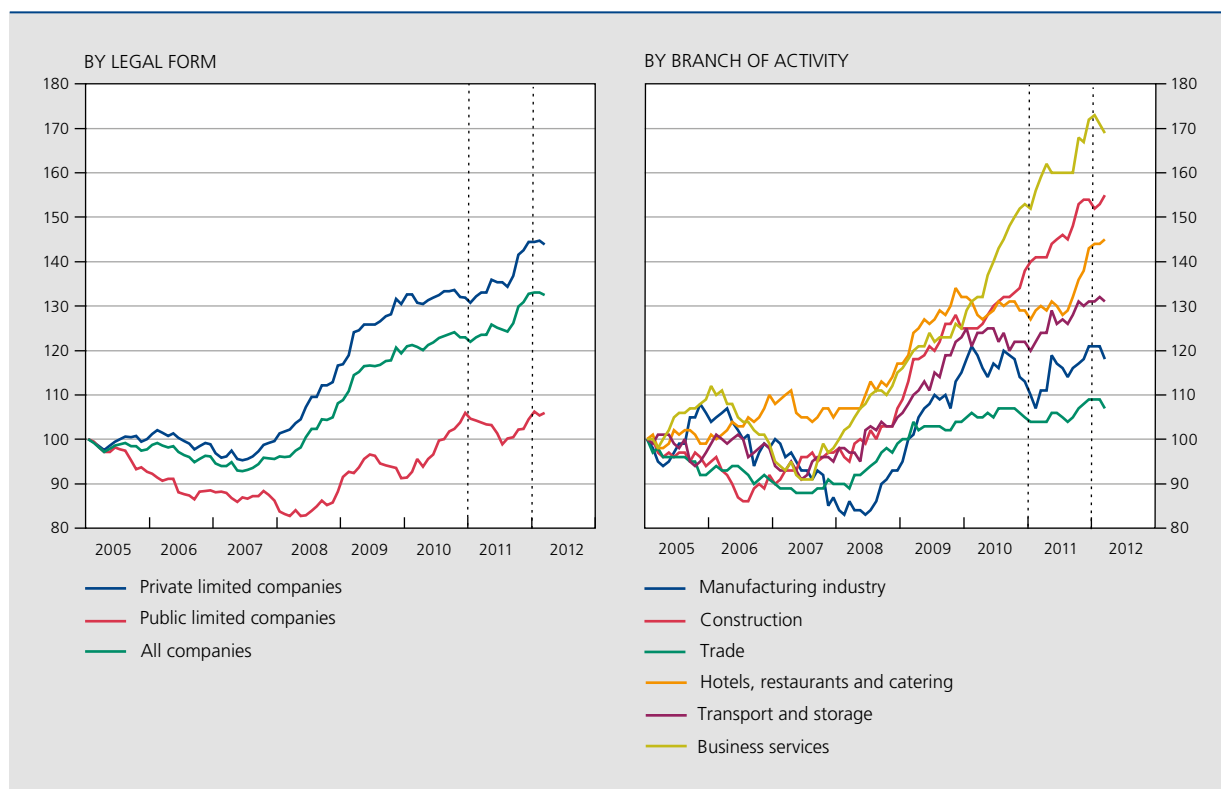
Conversely, household demand slowed in 2011. After growing by 2.7% in 2010 in the midst of the economic recovery, private consumption expenditure rose only 0.2%, which is well below the rates seen in the years

leading up to the crisis. Housing investment, which had picked up in 2010, contracted by 5.3%.

These macroeconomic developments were reflected in the vulnerability of Belgian companies, as is evident from the bankruptcies declared by the commercial courts to the Crossroads Bank for Enterprises (Chart 3). Whereas the increase in the number of bankruptcies was largely contained by the economic recovery in 2010 (+3%), it accelerated throughout 2011 (+8%). Most of the renewed vulnerability was felt over the final third of the year (+19% compared with the year-earlier period). Over the full year, the branches most exposed were business services (+13%), construction (+11%), and hotels, restaurants and catering (+11%). Conversely, the trade branch (+3%) was relatively unscathed.

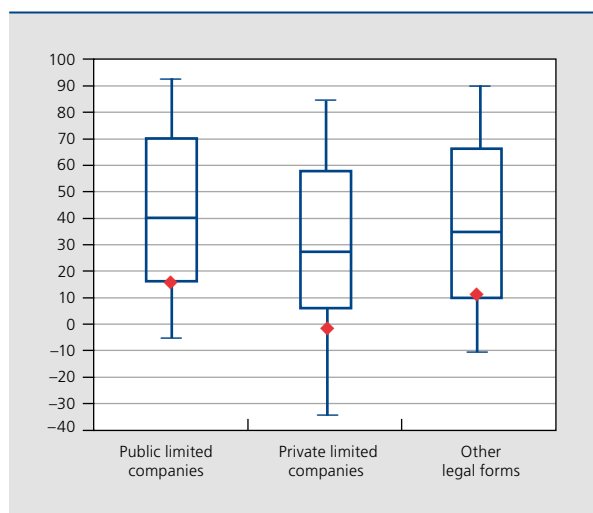
Most of these fluctuations were attributable to private limited companies, which as in previous years represented more than 75% of bankruptcies. Bankruptcies of public limited companies fell during the first half of 2011, then spiked in the second half. Over the full year, they fell marginally, down 1%. It is important to point out that, counter to the general trend, public limited companies experienced

CHART 3 NUMBER OF BUSINESS BANKRUPTCIES IN BELGIUM
(12-month moving average, indices January 2005=100)



Sources: FPS Economy, SMEs, Self-employed and Energy; own calculations.

CHART 4 BOX PLOTS OF DEGREE OF FINANCIAL INDEPENDENCE ACCORDING TO LEGAL FORM⁽¹⁾
(in %)



Source: NBB.

(1) The top and bottom ends of the boxes correspond to the 3rd and 1st quartile, respectively. The line inside the box corresponds to the median. The bottom end of the lower whisker and the top end of the upper whisker correspond to the 1st and 9th decile, respectively. Lastly, the red dot corresponds to the mean winsorised at the 1st and 99th percentiles.

a pronounced increase in bankruptcies in 2010 (+16%) at a time when economic conditions were improving.

In this respect, a look at recent years shows that public limited companies have been less immediately affected by the economic cycle. The negative correlation between quarterly GDP growth and the increase in bankruptcy numbers is much more pronounced for private limited companies (-0.87) than it is for public limited companies (-0.59). Among other explanations, public limited companies generally start from a more solid financial position, which makes them – at least temporarily – better able to absorb cyclical fluctuations. Overall, private limited companies' degree of financial independence is much more distributed towards the heavily negative values. For instance, we note that the 1st decile of private limited companies reaches -35% compared with -6% for public limited companies (see Chart 4).

2.2 General developments in the operating account

For the most part, the data presented in this article describe the situation of businesses for the period 1 January to 31 December 2011. Owing to the sharp contrast in economic conditions during that period, the offsetting effects between the first and second half of the year make analysis challenging. Even so, the collected data reveal the weakening economy's impact on companies' performance.

Over the full year 2011, the total value added created by non-financial corporations, i.e. the difference between sales revenues and the cost of goods and services supplied by third parties, rose 3.1% at current prices (see Table 3). The pace of growth was slower than in 2010, when value added rebounded by 5.5%. Two factors combined to cause this slowdown. On the one hand, purchases continued to rise strongly, mainly because of a significant rise in input prices. As a reminder, on average in 2011, energy commodity prices increased 31.3% and industrial commodity prices rose 14.3% (source: Belgostat). On the other hand, revenues fell slightly, even though companies managed to pass on a portion of the increased costs in their selling prices.

The value added a firm generates enables it to cover its operating expenses, the surplus being recorded as a net operating result. The latter reflects the routine commercial efficiency of the firm, leaving aside its financing policy and any exceptional items.

Staff costs usually make up the major part of the operating costs: in 2010 they represented 57% of the value added of non-financial companies. After two years of virtual stagnation, they bounced back in 2011, rising 4.8%. On the one hand, full-time equivalent employment increased 2.3%. On the other hand, hourly wages in the private sector rose 2.5% in 2011, compared with 0.7% in 2010. The indexing of salaries reflected the acceleration of inflation, which, as a reminder, was 3.1% in 2011, compared with 2.3% in 2010 and 0.0% in 2009.

After staff costs, the biggest operating expense items are depreciation and write-downs on tangible and intangible fixed assets. After slowing markedly in 2010, their growth picked back up in 2011 (+2.9%) as companies began to invest again. According to the quarterly national accounts, there was a particularly large amount of new investment in the first half, when companies still had a favourable outlook for demand and production capacity utilisation rates had climbed relatively high.

Net investment in tangible fixed assets rebounded by 6.6% in 2011 after contracting by a total of 12.4% over the two previous years. As a result, the investment rate of non-financial corporations (i.e. the ratio between acquisitions of tangible fixed assets and value added) bounced back in 2011 to 21.3%. However, it remains well below the record of 23.9% set in 2008.

For companies filing full-format accounts, the annex to the annual accounts permits an assessment of the intensity of research and development activities (R&D). In 2011, the percentage of companies involved in these

TABLE 3 TRENDS IN THE MAIN COMPONENTS OF THE OPERATING ACCOUNT
(current prices)

	Percentage changes compared to the previous year					In € million	
	2007	2008	2009	2010	2011 e	2011 e	In % of value added
Value added	4.8	2.6	-3.6	5.5	3.1	172 912	100.0
Staff costs	5.0	5.0	-0.3	0.6	4.8	98 484	57.0
Depreciation and write-downs ⁽¹⁾	5.9	6.4	6.2	1.9	2.9	31 536	18.2
Other operating expenses	-11.2	11.1	-5.2	2.9	5.1	10 794	6.2
<i>Total operating expenses</i>	<i>3.8</i>	<i>5.8</i>	<i>0.7</i>	<i>1.1</i>	<i>4.4</i>	<i>140 814</i>	<i>81.4</i>
Net operating result	8.7	-8.6	-21.2	28.7	-2.4	32 097	18.6

Source: NBB.

(1) On tangible and intangible fixed assets and start-up costs (item 630).

activities recovered to 4.3 %, up from 4.1 % in 2010. Net investment in R&D rose 14 %, from € 3.1 billion in 2010 to € 3.6 billion in 2011. This vigorous growth is chiefly attributable to the pharmaceutical industry, which every year represents more than half of R&D spending, and to technology industries.

Total operating costs, determined mainly by staff costs and depreciation, rose by 4.4 % in 2011, a much stronger increase than in the previous two years. Furthermore, as in 2008 and 2009, the increase in total operating costs exceeded the rise in value added.

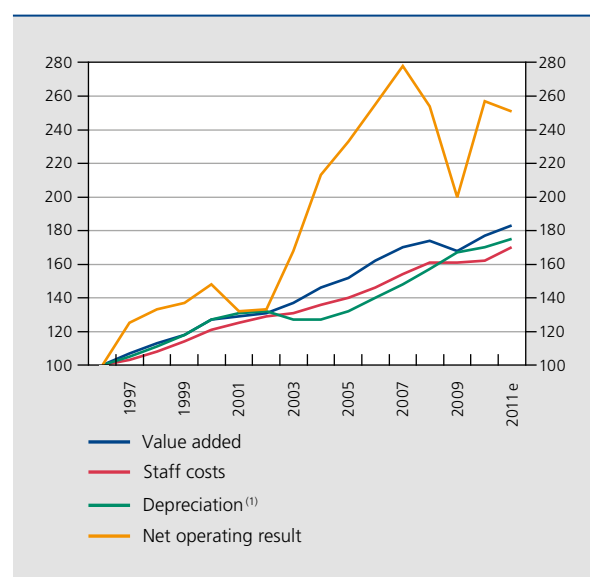
The combination of rising costs and weaker economic growth resulted in a slight decline in net operating result in 2011 (-2.4%) following the brisk rebound in 2010 (+28.7%). Net operating result thus came to just over € 32 billion. While this is below the level prior to the 2008-09 recession (€ 35.5 billion in 2007), it is important to keep in mind that the figure had more than doubled between 2001 and 2007.

Over the long term, moreover, the increase in operating result has been much more robust than that of other aggregates: over the past 15 years, it has climbed by 151 %, compared with 83 % for value added, 70 % for staff costs and 75 % for depreciations and write-downs (see Chart 5). It was chiefly after the 2001-02 economic downturn that operating result decoupled from the other components.

These trends have had repercussions on the breakdown of value added. Between 1996 and 2011, the share of net

operating result in value added increased by 5.1 points, from 13.5 % to 18.6 %. The flip side of this increase was, for the most part, the decrease in the share of staff costs, which fell from 61.4 % to 57 % over the same period. The share of depreciation and write-downs has been relatively stable, falling just 0.8 of a point since 1996.

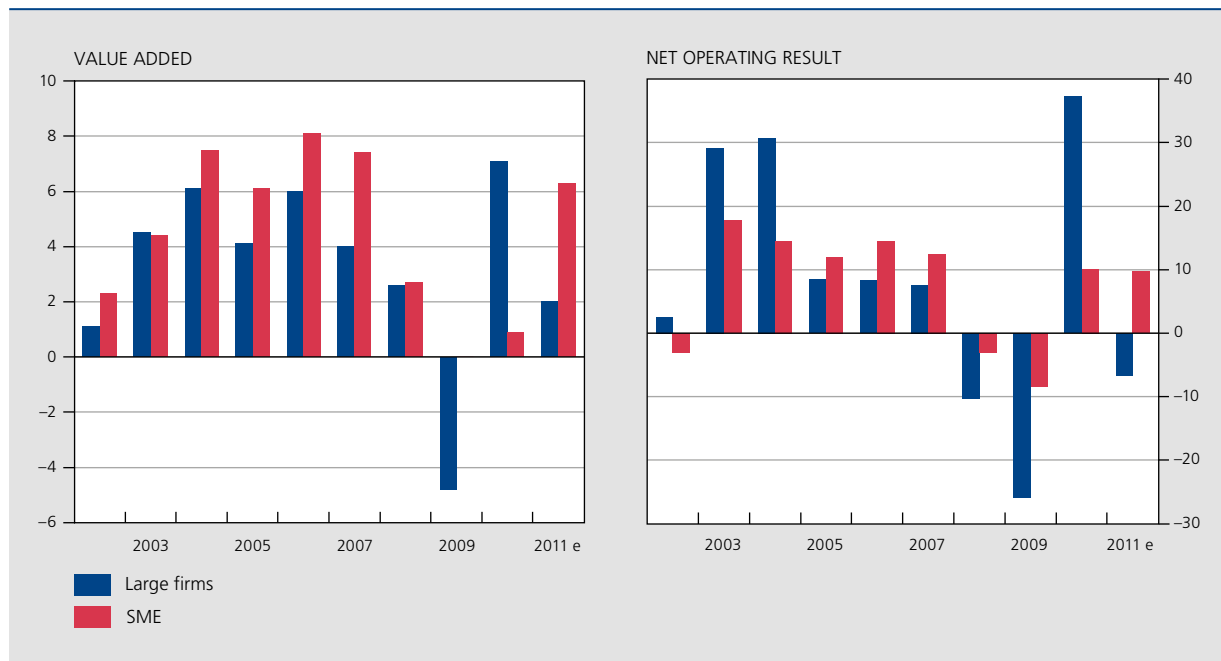
CHART 5 TRENDS IN THE MAIN COMPONENTS OF THE OPERATING ACCOUNT OVER THE PAST 15 YEARS
(indices 1996=100)



Source: NBB.

(1) On tangible and intangible fixed assets and start-up costs (item 630).

CHART 6 VALUE ADDED AND NET OPERATING RESULT BY SIZE OF FIRM
(percentage change compared to the previous year)



Source: NBB.

Lastly, overall trends must be broken down according to company size. As shown in Chart 6, SMEs exhibited much more favourable operating account trends in 2011: their value added rose 6.3%, compared with 2.0% for large firms. Similarly, whereas the operating result of large firms contracted by 6.8%, the operating result of SMEs increased by 9.7%. Large firms were thus significantly more affected by the economic weakening in 2011, but they also benefited much more from the recovery of 2010.

In general, large firms are more sensitive to business cycles because they are more focused on industrial activities and international trade. As a reminder, the manufacturing industry and wholesale trade – the most cyclical branches of the economy – currently represent 47% of the value added of large firms, compared with 22% of the value added of SMEs.

2.3 Results per branch of activity

2.3.1 Manufacturing industry

In 2011, the slowdown in trade and rise in commodity prices undermined industry's wealth creation: manufacturing value added stagnated (-0.2%) after rebounding strongly in 2010 (+8.2%). While growth in most branches

remained positive, in some cases it slowed considerably, especially in metalworking, chemicals and metallurgy. The pharmaceutical industry experienced a sharp correction (-13.5%) by comparison with the substantial revenues of 2010, linked to, among other things, royalties and the flu pandemic vaccine.

Overall, industrial activity is still not back to where it was before the financial crisis: in 2011 the value added of manufacturing branches was still 2.5% below the 2007 peak. From a longer-term perspective, the manufacturing industry's share of total value added has fallen from 37.5% in 1996 to 27% in 2011.

Even though activity was flat, staff costs rose 2.8% in 2011, a pace well above that observed in the three previous years. This trend is attributable to the rise in hourly wage costs (see above) and the slight rebound in the number of workers. After dipping slightly in 2010 (-0.3%), depreciation rose 1.8% in 2011, reflecting brisk net acquisitions of tangible (+10%) and intangible fixed assets (+18.8%). As we emphasised above, these new investments took place primarily during the first half of 2011. The manufacturing industry's operating costs were also marked by a much diminished reduction in value of the inventories of pharmaceutical activities. This decrease helped limit the overall rise in operating costs to 1.3%.

TABLE 4 VALUE ADDED AND OPERATING RESULT PER BRANCH OF ACTIVITY
(percentage changes compared to the previous year)

	Value added		Net operating result		<i>p.m.</i> Branch's share, in % of total value added in 2011 e
	2010	2011 e	2010	2011 e	
Manufacturing industry	8.2	-0.2	54.7	-6.1	27.0
of which:					
Agri-food industries	-2.0	0.8	-6.7	-11.5	4.0
Textiles, clothing and footwear	2.6	-4.3	100.7	-22.0	0.8
Wood, paper and printing	-0.6	2.6	23.4	5.9	1.8
Chemical industries	13.5	2.1	107.4	0.5	4.0
Pharmaceutical industries	13.4	-13.5	2.1	-37.8	2.8
Metallurgy and metalworking	12.2	2.1	n.s.	-21.1	3.9
Metal manufactures	14.2	0.1	110.7	14.8	5.3
Non-manufacturing branches	4.5	4.3	20.9	-0.9	73.0
of which:					
Wholesale trade	9.5	2.6	61.1	-7.3	13.0
Retail trade	4.2	3.9	11.3	2.4	6.5
Transport and storage	1.4	0.6	n.s.	-148.0	8.4
Hotels, restaurants and catering	6.3	4.3	189.6	8.3	1.9
Information and communication	3.1	2.6	0.6	2.4	7.0
Real estate activities	1.2	5.3	-3.8	5.5	2.9
Business services	4.8	6.8	16.2	6.5	13.6
Energy, water and waste	6.7	6.1	11.1	6.8	6.0
Construction	1.2	6.1	7.2	0.1	7.5
Total	5.5	3.1	28.7	-2.4	100.0

Source: NBB.

Following a robust recovery in 2010 (+54.7%), lower value added combined with higher costs to reduce the manufacturing industry's operating result by 6.1% in 2011. The biggest contractions were seen in the pharmaceutical industry (-37.8%), metallurgy (-21.1%), textiles (-22.0%) and agri-food (-11.5%).

2.3.2 Non-manufacturing branches

Economic developments caused a shift in growth from the branches most dependent upon external demand to those most focused on the domestic market, among them most of the non-manufacturing branches. Unlike industry, these branches posted value added growth in 2011 (+4.3%) on a par with that of 2010 (+4.5%).

The most pronounced increase in activity was seen in business services, which were buoyed principally by temporary

employment and recruitment agencies. Conversely, certain non-manufacturing branches turned in a mixed performance in 2011 owing to their significant exposure to industrial activity, chiefly transport and wholesale trade.

In construction and real estate, growth strengthened materially in 2011 following a relatively sluggish 2010. Construction was bolstered by local public authorities' investments and renovation work, which again benefited from incentives. In general, in recent years the Belgian real estate market has been spared the kind of severe correction that hit Ireland and Spain.

Unlike in 2010, the increase in non-manufacturing branches' staff costs (+5.5%) outpaced that of value added in 2011. To begin with, the number of employees rose by 3%, amplifying the rebound that began in 2010 (+1.5%). In addition, as in industry, rising inflation had

an impact on index-linked salaries. The growth in depreciation was very close to the level posted a year earlier (+3.3 %).

After taking into account other cost components, total operating costs rose 5.6% in 2011, which was a clear acceleration compared with the previous two years. As a result, the net operating result of the non-manufacturing branches fell marginally (-0.9%). However, this result masks significant disparities between branches: whereas operating result declined in wholesale trade and actually plunged in transport, it increased in the vast majority of other non-manufacturing branches.

2.3.3 Sector trends since 2007

Chart 7 shows sectoral trends since the onset of the financial crisis. It compares the growth in value added and that of net operating result between 2007 and 2011.

In general, it appears that branch trends have depended largely on their exposure to global economic conditions.

2.3.3.1 Manufacturing industry

Thus, the two branches that have lost the most ground since 2007 are textiles and metallurgy. Textiles have long had to deal with international competition, particularly from low-cost countries. Metallurgy, on the other hand, was especially affected by the impact of the 2008-09 recession, such as the closing of certain production units.

Conversely, value added increased substantially in the pharmaceutical industry. To begin with, its production has continued to increase in recent years. Furthermore, because the industry relies on innovation, its rate of value added (the ratio of value added to revenues) is significantly higher than those of other industrial branches: in 2010, the pharmaceutical industry's value added accounted for 46.2% of revenues, compared with 19.3% for all other manufacturing branches.

Agri-food also held up better than most other industrial branches. It was bolstered by its focus on the domestic market, reflected in an export rate among the lowest of the industrial branches.

Other branches, such as metal manufactures and chemicals, posted more lukewarm results. In metal manufactures, strong momentum in certain technological industries was offset by the repercussions of multiple restructurings. In chemicals, companies had to deal with very divergent market conditions, largely stemming from the nature of their production processes.

2.3.3.2 Non-manufacturing branches

In keeping with the long-term trend, recent cyclical developments have generally been much kinder to non-manufacturing branches.

The energy, water and waste branch experienced the most pronounced increases in value added and operating result. This performance is primarily attributable to electricity (which represents two-thirds of the branch's value added) and water. To a lesser extent, business services, real estate, retail trade, hotels and restaurants also generated above-average growth. These branches have all benefited from relatively firm domestic demand since 2008. In addition, it is worth noting that over the long term, the trend towards outsourcing non-core tasks has stimulated the growth of certain service branches, especially that of business services.

Wholesale trade, by contrast, was directly affected by fluctuations in international trade, which influences the vast majority of its sub-branches. However, some activities held up better, particularly those linked to food, chemical and pharmaceutical products.

In construction, even though business grew for most of its sub-branches, operating result has fallen slightly since 2007 owing to certain specialised segments, notably those linked to industry and transport. In more traditional activities (electrical work, plumbing and insulation), however, operating result continued to climb, even in 2008 and 2009.

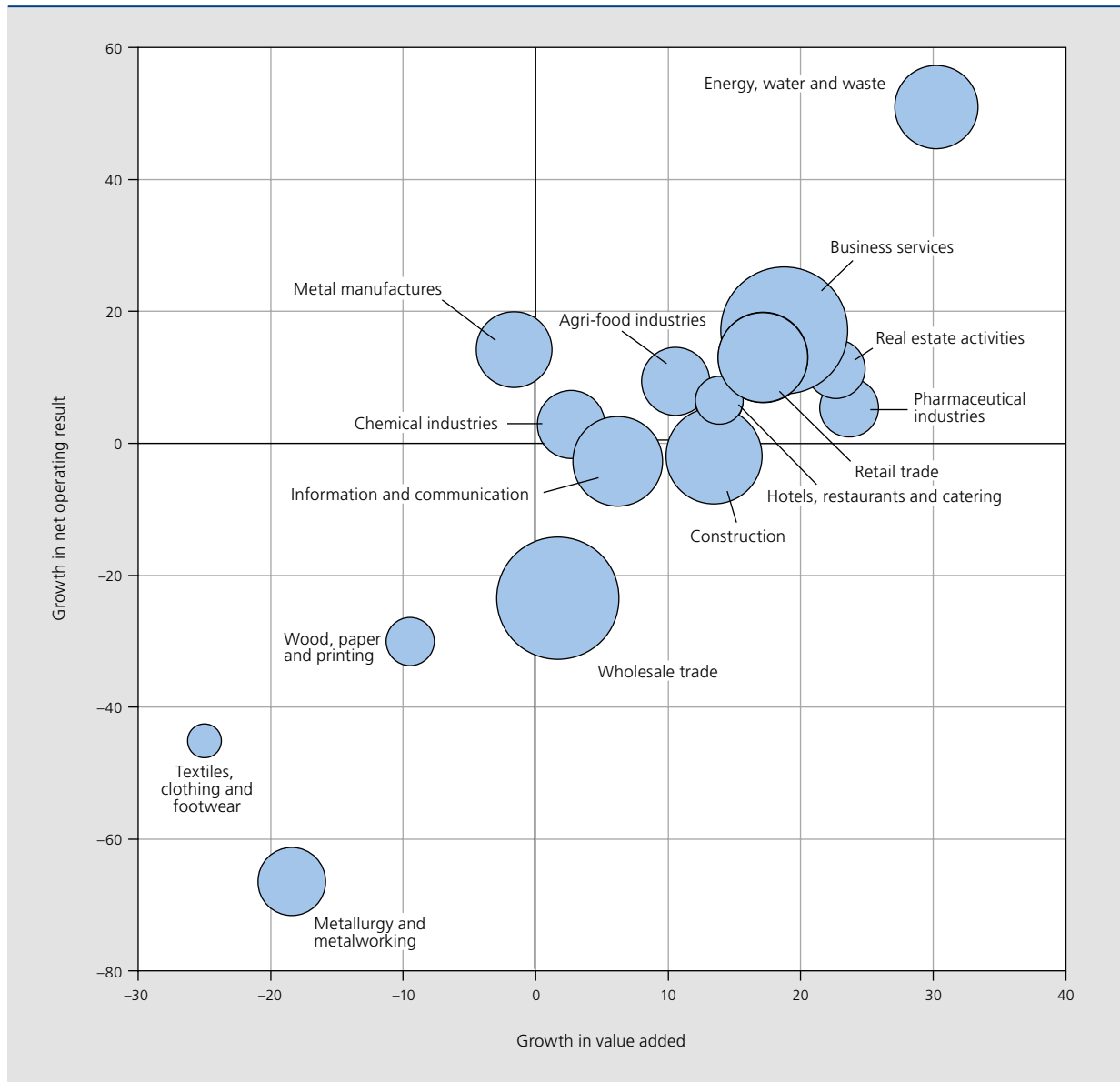
The information and communication category also turned in mixed results. On the one hand, weaker margins in telecommunications and troubles at certain publishing companies worked to undermine profitability. On the other hand, growth remained robust in IT activities, particularly in programming, consulting and data processing.

Lastly, it is important to note that virtually all branches of the economy experienced growth in the four years leading up to 2008 and that, overall, the growth was much more rapid than during the period 2007-11: total value added and net operating result rose by respectively 24.2% and 65.3% in 2003-07, compared with 7.6% and -9.5% in 2007-11.

2.4 Regional perspective

This section breaks down the sectoral contributions to growth in value added in each region for the period 2001-11.

CHART 7 TRENDS IN VALUE ADDED AND OPERATING RESULT BETWEEN 2007 AND 2011 ⁽¹⁾
(in %)



Source: NBB.

(1) Circle size is proportional to each branch's share of total value added in 2011.

2.4.1 Methodology

For the purposes of the regional analysis, the annual accounts are broken down according to the Region where the firms are located. The regional breakdown of the annual accounts is based on data from the National Accounts Institute (NAI).

Single-region firms, i.e. companies whose registered office and operating establishment(s) are located in one and the same Region, are automatically assigned to a Region. For

multi-region firms, the annual accounts items are broken down in proportion to the number of jobs in each Region, which amounts to assuming that jobs are proportionate to the items in the accounts. Multi-region firms represent just over a quarter of total value added (see below), so that this assumption does not affect the main part of the regional breakdown. The National Accounts Institute also uses the proportional method for compiling the regional accounts.

The implications of this method were spelled out in detail in the December 2011 Economic Review. It was pointed

TABLE 5 REGIONAL STRUCTURE OF VALUE ADDED IN 2011
(in % of the total, unless otherwise stated)

	Brussels	Flanders	Wallonia	Belgium
Manufacturing industry	9.4	30.5	29.7	27.0
of which:				
Agri-food industries	1.7	4.5	4.2	4.0
Textiles, clothing and footwear	0.3	1.1	0.3	0.8
Wood, paper and printing	0.5	2.1	2.0	1.8
Chemical industries	1.4	4.9	3.3	4.0
Pharmaceutical industries	0.9	2.4	5.4	2.8
Metallurgy and metalworking	0.6	4.3	5.0	3.9
Metal manufactures	3.0	6.0	5.2	5.3
Non-manufacturing branches	90.6	69.5	70.3	73.0
of which:				
Wholesale trade	15.0	13.4	10.1	13.0
Retail trade	5.2	6.0	9.0	6.5
Transport and storage	5.6	9.1	8.1	8.4
Hotels, restaurants and catering	3.6	1.5	1.6	1.9
Information and communication	15.4	5.4	5.5	7.0
Real estate activities	5.3	2.5	2.0	2.9
Business services	18.6	13.4	10.3	13.6
Energy, water and waste	10.2	4.6	7.1	6.0
Construction	4.4	8.1	8.2	7.5
Total	100.0	100.0	100.0	100.0
<i>p.m. Total value added in 2011 (in € million)</i>	<i>27 110</i>	<i>109 704</i>	<i>36 093</i>	<i>172 907</i>

Source: NBB.

out that, because the Brussels-Capital Region is a metropolitan area, it is highly specialised in non-manufacturing branches (more than 90 % of its value added, see Table 5), particularly telecommunications, IT services, business services and real estate. On the other hand, construction and transport are less developed in the capital.

Flanders and Wallonia are generally more similar to one another in their regional structure, with a much larger proportion of manufacturing industry, in the order of 30 %. Nevertheless, there are still structural differences between the two Regions in several respects. For example, in the chemical and pharmaceutical industries category, Wallonia is active mainly in pharmaceuticals while Flanders is more involved in basic chemicals. Comparatively speaking, the wholesale trade is also more developed in Flanders, particularly in commodities and industrial products. Lastly, in metal manufactures, the

automobile industry is mostly concentrated in Flanders, whereas Wallonia has a much more developed aerospace industry.

Apart from these sectoral differences, it should be noted that the proportion of value added generated by SMEs is lower in Brussels (16 %) than in Flanders (26 %) and Wallonia (27 %). In terms of the number of businesses, on the other hand, Brussels has more very small firms: 35 % of Brussels firms generate value added of less than € 10 000, compared with 23 % of Flemish firms and 25 % of those in Wallonia.

Since these structural differences have a direct influence on regional trends, the data presented below must be interpreted with caution. In particular, the findings for Brussels firms must be considered in the light of their specific features.

2.4.2 Sector contributions between 2001 and 2011

2.4.2.1 Manufacturing industry (Table 6)

Brussels is the only Region where manufacturing value added declined over the past 10 years (–25.3%). As we pointed out above, however, the Brussels Region is not very dependent upon industrial activities, so the downturn has had only a limited impact on its economy. Most of the manufacturing sub-branches made negative contributions to Brussels' growth, but the most heavily negative came from metal manufactures, owing to restructuring in the automobile industry.

By contrast, manufacturing value added increased in Flanders and Wallonia between 2001 and 2011, by respectively 16.1% and 19.5%. In both Regions, the vast majority of sub-branches contributed positively to growth, with the key exception of the textile industry.

The contributions of metallurgy and refining ("other manufacturing branches") were much more significant in the north of the country. There, metallurgy notably benefited from its more advantageous location and greater demand for steel, while the Region's refining activities were supported by rising oil prices.

Conversely, Walloon metallurgy businesses were hit particularly hard by the recent economic slowdown and

thus contributed almost no growth over the period under review. The pharmaceutical industry, on the other hand, made a substantial contribution to Walloon growth as a result of rising sales and margins, which have climbed even in recent years.

2.4.2.2 Non-manufacturing branches (Table 7)

In the non-manufacturing branches, Brussels stands out because of the substantial contribution of business services (more specifically legal activities, leasing and security) and energy, two categories that play key roles in the capital's economy. To a lesser extent, the hotels, restaurants and catering category and real estate activities also made larger contributions than in the other two Regions. By contrast, wholesale trade, transport and construction had much more limited, or even negative, contributions.

Business services, driven by its principal sub-branches (temporary employment agencies, consulting, legal and accounting services, engineering, security and cleaning, etc.), were also the biggest contributors to non-manufacturing growth in Flanders and Wallonia. Compared with Brussels, the two Regions had a much more pronounced contribution from wholesale trade. A detailed analysis reveals some regional differences within this branch: in Flanders, its growth was driven primarily by trade in commodities and industrial products, whereas in Wallonia, the biggest contribution came from trade in pharmaceutical products.

TABLE 6 SECTOR CONTRIBUTIONS TO GROWTH IN MANUFACTURING INDUSTRY VALUE ADDED BETWEEN 2001 AND 2011
(in percentage points of the total change, unless otherwise mentioned)

	Brussels		Flanders		Wallonia	
	Contribution	Rank	Contribution	Rank	Contribution	Rank
Agri-food industries	0.2	2	4.3	1	5.4	2
Textiles, clothing and shoes	–3.4	5	–2.4	8	–1.2	8
Wood, paper and printing	–3.8	6	0.1	7	–0.2	6
Chemical industry	–4.1	7	2.2	6	3.4	4
Pharmaceutical industry	–0.4	3	3.1	3	8.1	1
Metallurgy and metalworking	–1.9	4	3.4	2	0.4	5
Metal manufactures	–13.3	8	2.7	4	4.1	3
Other manufacturing branches	1.5	1	2.7	5	–0.4	7
Total⁽¹⁾	–25.3		16.1		19.5	
<i>p.m. Manufacturing industry's share of regional value added in 2011 (in %)</i>		9.4		30.5		29.7

Source: NBB.

(1) Percentage change between 2001 and 2011, at current prices.

TABLE 7 SECTOR CONTRIBUTIONS TO GROWTH IN NON-MANUFACTURING BRANCH VALUE ADDED BETWEEN 2001 AND 2011
(in percentage points of the total change, unless otherwise stated)

	Brussels		Flanders		Wallonia	
	Contribution	Rank	Contribution	Rank	Contribution	Rank
Wholesale trade	-0.7	10	8.2	2	8.1	2
Retail trade	1.9	3	4.7	5	6.7	4
Transport and storage	0.3	9	5.2	4	2.7	8
Hotels, restaurants and catering	1.1	5	1.0	10	1.3	10
Information and communication	0.8	8	4.1	6	3.5	7
Real estate activities	0.9	6	1.7	9	1.4	9
Business services	4.9	1	11.3	1	9.0	1
Energy, water and waste	3.9	2	1.9	8	4.1	6
Construction	0.9	7	5.7	3	5.1	5
Other non-manufacturing branches	1.9	4	3.5	7	7.6	3
Total⁽¹⁾	15.9		47.2		49.5	
<i>p.m. Non-manufacturing branches' share of regional value added in 2011 (in %)</i>	<i>90.6</i>		<i>69.5</i>		<i>70.3</i>	

Source: NBB.

(1) Percentage change between 2001 and 2011, at current prices.

Flanders is furthermore characterised by transport-related activities (particularly storage and related services), which is primarily attributable to the dedicated infrastructure located in the Region. Lastly, the relatively significant contribution of "other non-manufacturing branches" in Wallonia stems mostly from companies supplying auxiliary financial services, such as those specialising in international payment systems and financial data transmission.

3. Trends in the financial situation of firms

The financial analysis which follows is based on the theory of interpretation of the annual accounts, from which several ratios have been borrowed. They are defined in detail in Annex 2.

The financial ratios are presented in the form of global figures and medians. The globalised ratios are obtained by taking the sum of the numerators of all companies and dividing it by the sum of their denominators. The median is the central value in an ordered distribution: for a given ratio, 50% of firms have a ratio above the median and 50% have a ratio below the median.

The two measures are complementary since they focus on different points of interest. Since it takes account of the weight of each firm in the numerator and in the denominator, the globalised figure primarily reflects the situation of the largest firms. In contrast, by indicating the position of the central firm, the median reflects the picture for the population as a whole: it is in fact influenced equally by every firm, regardless of size.

For a statistical analysis of financial ratios, the micro-economic measurement of the median is much more preferable than a simple average. With a simple average, distributions are affected by a certain number of extreme values which, while not meaningful, have a considerable influence on the average. For example, in the case of return on equity, the median and the globalised figure for large firms are respectively 7% and 6%, whereas the average is -97% (see Table 8). This discrepancy is attributable to the extreme ends of the distribution: the minimum ratio is -1.7 million percent, the maximum 74.7 thousand percent. In the vast majority of cases, these types of aberrant values are attributable to a small numerator, which may imply a particularly pronounced volatility. In this case, both the minimum and the maximum ratio involve a numerator equal to € 1. The rarity of these occurrences is confirmed by the much less extreme values seen in

TABLE 8 DISTRIBUTION OF FINANCIAL RATIOS
(in %)

	Return on equity ⁽¹⁾		Degree of financial independence	
	Large firms	SME	Large firms	SME
Maximum	74 706	2 486 200	100	100
99th percentile	346	399	100	100
3rd quartile	19	23	63	62
Median	7	6	34	31
Average	-97	-31	-1 566	-3 703
1st quartile	0,0	-4	14	8
1st percentile	-320	-486	-1 319	-1 515
Minimum	-1 702 462	-1 878 700	-8 439 000	-696 783 600
Globalised figure	6	8	43	37

Source: NBB.

(1) Excluding exceptional results.

the 1st and 99th percentiles. The discrepancy between the average and the median is even more pronounced in the degree of financial independence. While this ratio has an upper bound of 100, its lower extremity dips down well into negative territory.

3.1 Profitability

In previous editions of this article, profitability was primarily assessed on the basis of the net return on own funds. This figure, also referred to as return on equity, divides the net result after tax by the equity capital. This ratio indicates the return which shareholders receive after deduction of all expenses and taxes. From a strictly financial standpoint, it is thus the ultimate measure of profitability.

In recent years, owing mainly to the creation of the notional interest deduction (see section 3.3.2), the globalised version of the ratio has been undermined by the massive increase in equity capital. Thus, as a complement to return on equity, this section presents some other profitability measures: net margin on sales, return on operating assets, and return on total assets.

The net margin on sales is equal to the ratio of net operating result to revenues. It expresses the commercial performance of a business unit, independent of financing, exceptional results and tax considerations. For SMEs, the ratio can only be calculated if revenues are reported in the annual accounts.

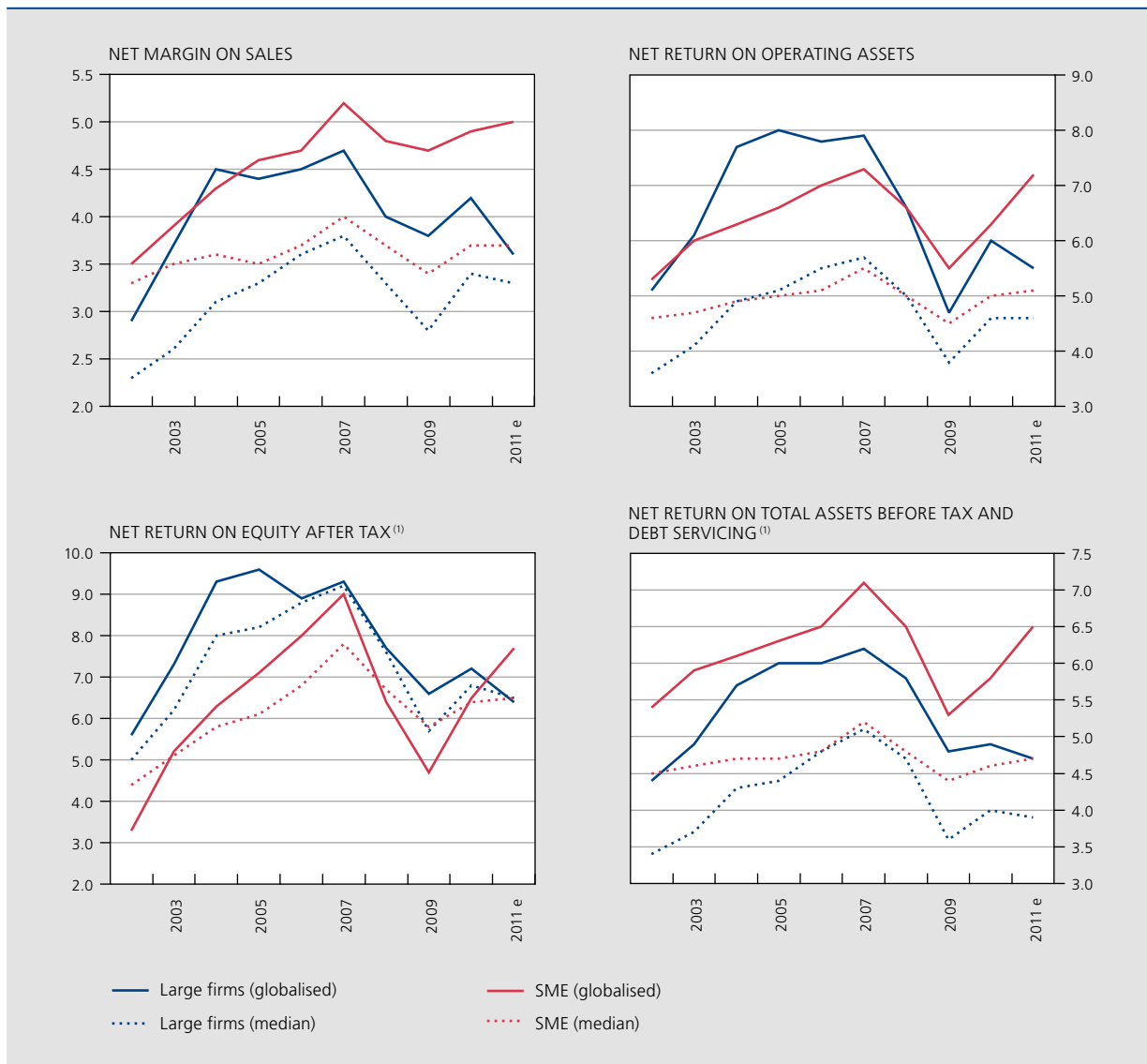
The net return on operating assets is the ratio of net operating result to operating assets. The latter are defined as the sum of non-financial fixed assets, inventories, receivables at less than one year and adjustment accounts⁽¹⁾. Other assets are regarded as financial assets and are not included in the ratio's denominator. Thus, the ratio expresses commercial performance relative to the balance sheet items directly involved in operations.

Lastly, the net return on total assets before taxes and debt interest measures the firm's profitability relative to all of the resources at its disposal. Profits are considered before taxes and debt interest so as to be independent of taxation and financing structure. As a result, the ratio is sometimes called "economic return".

Chart 8 shows the trend in the four ratios we have defined here. In 2011, by every measure, SMEs' profitability continued the recovery that began in 2010. Over the past two years combined, SME profitability has made a sizeable recovery when measured by the globalised ratios, in some cases returning to the levels seen before the 2008-2009 recession. Conversely, the profitability of large firms contracted in 2011, causing three of the four globalised ratios to fall below the low point of 2009. Large firms notably saw their margins plummet in 2011, especially in the branches most exposed to the global economy and higher commodity prices (i.e. the manufacturing industry, transport and wholesale trade).

(1) This is the definition proposed in Ooghe and Van Wymeersch (2006), *Traité d'analyse financière*, Intersentia, Antwerp-Oxford.

CHART 8 PROFITABILITY TRENDS
(in %)



Source: NBB.
(1) Excluding exceptional results.

Regardless of company size, globalised profitability generally proved to be greater than median profitability. This is largely attributable to the weaker profitability of small companies, which weighs on the median figure but has only a negligible impact on the globalised figure.

3.2 International comparison

The BACH (Bank for the Accounts of Companies Harmonised) database contains harmonised statistics compiled from the annual accounts of non-financial companies in nine European countries. It was created in 1987 by

the European Committee of Central Balance-Sheet Data Offices (ECCBSO), in collaboration with the European Commission, in order to compare the financial structure and performances of companies at the international level.

BACH aggregates balance sheet and income statement items by branch of activity and by size category. In 2010 it was merged with the European Sectoral references Database (ESD), which contains dispersion and globalisation statistics for 28 financial ratios.

These data are harmonised using a detailed comparative study of national accounting systems. This study led to

CHART 9 NET MARGIN ON SALES IN LARGE FIRMS⁽¹⁾⁽²⁾
(medians, in %)



Source : NBB.

(1) In the BACH database, large firms are defined as those with revenues over € 50 million.

(2) The number of firms in brackets is for 2010.

the creation of a table for converting between national models and a single model common to all countries, directly based on the one established by the fourth European Company Law Directive on the annual accounts of companies.

To give an idea, Chart 9 presents the median changes in net margin on sales in industry and construction for six ECCBSO member countries up to 2010 (most recent available year). In virtually every country, industrial companies' margins fell in 2008 and 2009, then rebounded in 2010. In construction, margins have been much more stable in recent years, except in Spain, where companies have been hit by a bursting real estate bubble.

It is worth noting that the completeness and representativeness of the populations are directly dependent upon the national systems for collecting annual accounts. Whereas the population covers all commercial firms in Belgium and Portugal, the scope is sometimes much more limited in other countries. This is why the number of firms is listed in the key to Chart 9.

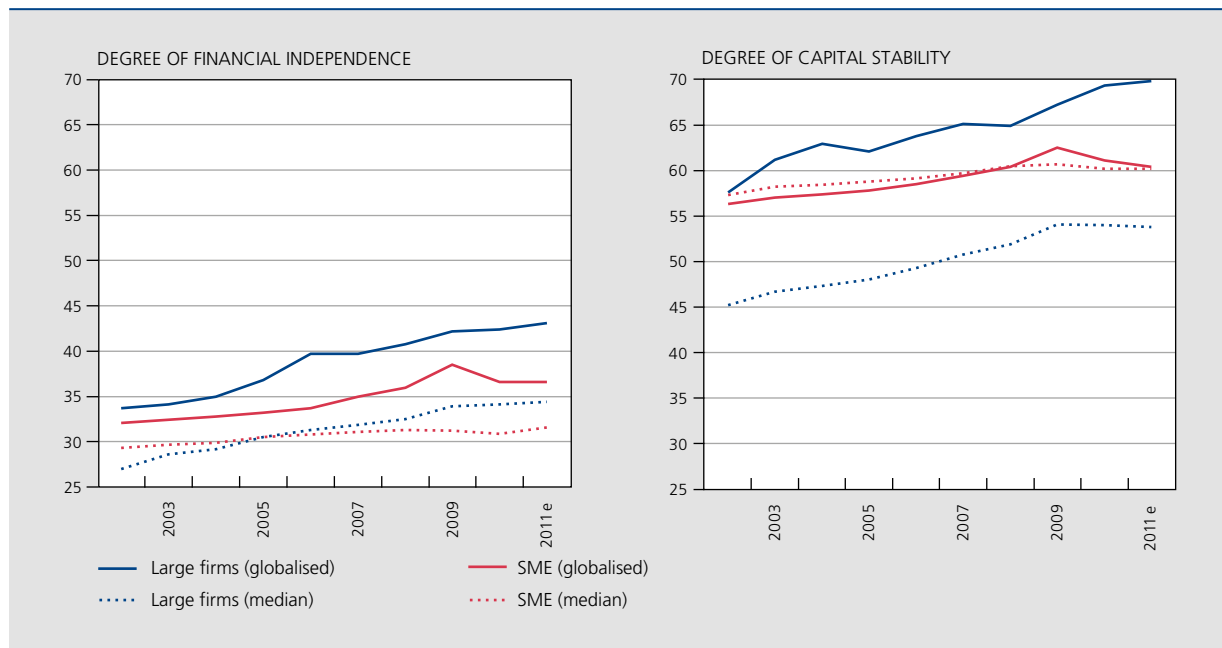
3.3 Solvency

Solvency concerns the ability of firms to honour their short- and long-term liabilities. In this article, it is assessed according to four concepts: the degree of financial independence, the stability of equity capital, the degree to which borrowings are covered by cash flow, and interest charges on financial debts.

3.3.1 Financial independence and capital stability

The degree of financial independence is equal to the ratio between the equity and the total liabilities. If the ratio is high, the firm is independent of borrowings, and that has two positive effects: first, interest charges are low and therefore do not weigh heavily on profits; second, new debts can easily be contracted if necessary, on good terms. The degree of financial independence can also be interpreted as a measure of the financial risk incurred by the firm, since the remuneration of third parties is fixed, in contrast to the firm's results, which fluctuate over time.

CHART 10 FINANCIAL INDEPENDENCE AND CAPITAL STABILITY
(in %)



Source : NBB.

In 2011, the globalised ratio for large firms increased 0.7 point to 43.1 %, whereas the ratio for SMEs stabilised at 36.6 % (see Chart 10). The entire distribution again experienced an upward movement: the median ratio for large firms rose 0.3 point, that of SMEs, 0.7 point. These movements are part of a long-term trend that has been strengthened, since 2005, by the creation of the notional interest deduction (see section 3.3.2).

While Chart 10 gives the image of steadily improving solvency, a detailed look at the distribution paints a more nuanced picture. Thus, the increase has primarily benefited the most solvent strata of the population, and numerous companies have gone against the majority tide, particularly among the SME group. We note, for example, that over the past ten years, the first decile of SMEs experienced a significant deterioration (-12.7 points). This kind of development results in a steady increase in the percentage of companies with negative equity: the figure rose from 15.4 % in 2002 to 17.3 % in 2011.

Another measure of solvency is the degree of capital stability. This ratio divides the sum of equity capital, provisions and long-term debt by total liabilities. It expresses the stability of the funds which the firm can draw upon to develop its activities. As shown in Chart 10, the ratio has been rising over the past decade, especially for large

firms. Conversely, short-term indebtedness fell over the same period. This change in the financing structure can be considered favourable, because it limits the risks inherent in short-term debt. Furthermore, work related to the model of financial health developed by the Bank shows that short-term debt is a much better predictor of bankruptcy than long-term debt.

3.3.2 The notional interest deduction

In recent years, financial independence has received a boost from the notional interest deduction. This measure was created by the Law of 22 June 2005 and took effect in tax year 2007. It allows companies to deduct from taxable income a fictitious amount of interest, calculated based on their "adjusted" equity capital. The goal of the measure is to reduce the difference in the tax treatment of debt and equity financing. The law also aims to offer an alternative to the disappearance of the special tax schedule for Belgian coordination centres⁽¹⁾, which the European Commission deemed incompatible with rules governing State assistance.

The Law of 22 June 2005 also scrapped the 0.5 % registration fee for contributions to companies⁽²⁾. It also

(1) As a reminder, the tax schedule for coordination centres applied to companies formed to manage financial flows within a multinational group.

(2) This elimination targets nearly all cases of capital increases, with the notable exception of the contribution of a place of residence.

TABLE 9 EFFECTIVE INTEREST RATE APPLICABLE IN THE NOTIONAL INTEREST DEDUCTION (in %)

Tax year	Base rate	Higher SME rate
2007	3.442	3.942
2008	3.781	4.281
2009	4.307	4.807
2010	4.473	4.973
2011	3.800	4.300
2012	3.425	3.925
2013	3.000	3.500

Source: NBB.

contains several measures aimed at ensuring fiscal neutrality. According to the estimates presented during parliamentary work on the legislation⁽¹⁾, the principal offsetting provision has to do with the exemption for realised capital gains, for which only the net amount (after fees incurred in their realisation) is now exempt. Other offsetting measures include the elimination of the deduction for investment (with the chief exception of investments in environmental conservation) and the abolition of the tax credit for new shareholders' equity.

The venture capital tax deduction applies to all companies subject to Belgian corporation tax or non-resident corporation tax, except for companies that enjoy certain exemption schemes. Furthermore, SMEs that continue to use the investment reserve scheme may not benefit from the notional interest deduction.

The equity capital to take into consideration is the figure that appears in the annual accounts, adjusted for a certain number of amounts. These adjustments are basically aimed at avoiding duplicate use and certain abuses. Any change in equity capital occurring during the tax period is taken into account on a pro-rata basis.

The fictitious interest rate applied to the adjusted equity capital figure is equal to the average rate on 10-year OLO bonds issued by the Belgian government in the next-to-last year preceding the tax year. This means, for example, that for the 2007 tax year, it was the average rate in 2005

(1) See Chamber of Representatives of Belgium (2005), Parliamentary document 51 1778/04 of 31 May.

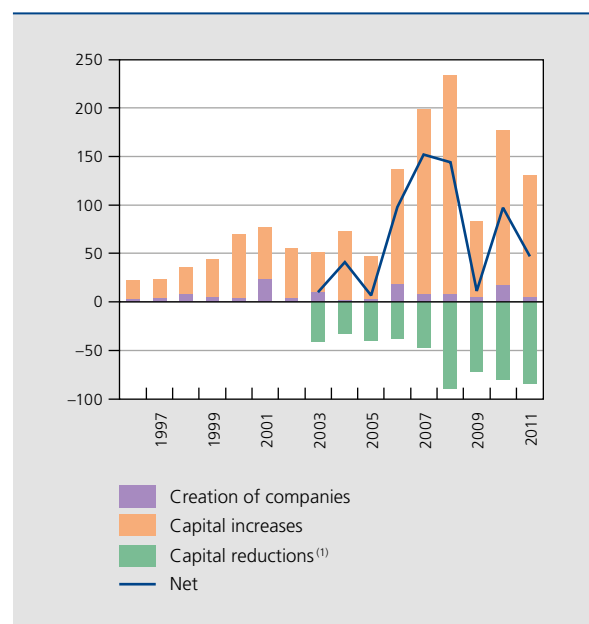
(2) The deferred interest not yet deducted before 2013 will remain available for a maximum of seven years. However, the maximum amount that can be deducted per tax year will be limited to 60 % of taxable income (except for the first million euros in profits).

that applied, i.e. 3.442 %. For SMEs, the rate is increased by 0.5 percentage point.

Table 9 shows applicable rates since 2007. They increased through 2010 due to the progressive rise in OLO yields. Since then, various provisions have reduced the measure's impact. For tax years 2011 and 2012, the rate was capped at 3.800 %. This is a maximum rate, so the effective rate calculated based on OLO yields may be lower, as was the case in 2012. From 2013 onwards, the cap will be lowered to 3.000 %. Had there not been a limit, the effective rate would have exceeded 4 % for 2013. Lastly, a measure has been adopted preventing companies from carrying interest amounts that exceed the taxable base forward into later years from 2013 onwards⁽²⁾.

It is now acknowledged that the adoption of the notional interest deduction has resulted in a pronounced increase in the equity capital of Belgian companies. Net capital contributions, i.e. the difference between the growth in capital resulting from capital increases and the creation of companies on the one hand, and the contraction in capital resulting from capital reductions on the other hand, reached record levels between 2006 and 2008 (see Chart 11). In recent years, more than 60 % of net contributions have come from abroad and have thus strengthened the equity capital of Belgian companies in

CHART 11 CHANGE IN EQUITY CAPITAL OF BELGIAN COMPANIES (in %)



Source: NBB.

(1) Capital reductions have only been recorded since 2003.

consolidated terms. Capital contributions began to subside from 2009. Running at full steam in the early years undoubtedly diminished some of the measure's potential. In addition, capping the deduction rate and removing the deferral option further reduced its appeal.

3.3.3 Coverage of borrowings by cash flow

Repayment potential can be measured by the degree to which borrowings are covered by cash flow, i.e. the percentage of debts which the firm could repay by allocating the whole of the year's cash flow to that purpose. The inverse of that ratio gives the number of years which it would take to repay all the debts if the cash flow remained constant.

The trend in coverage of borrowings was mixed in 2011. The globalised ratio for large firms again fell slightly due to the combined effect of weaker cash flow (-1.5%) and increased borrowings (+2.5%). The globalised ratio for SMEs, on the other hand, continued the recovery that began in 2010 as a result of increased cash flow (+10.4%), which again outpaced growth in borrowings (+5.9%). Median ratios indicate a stabilisation of the distribution for both types of companies in 2011.

A joint analysis of financial independence and coverage of borrowings also shows that, while SMEs are generally less financially independent than large firms, they have a greater repayment potential.

3.3.4 Financing costs

The average interest charges on financial debts can be used to assess the cost of recourse to external sources of funding. The ratio divides charges on debts by the sum of short- and long-term financial debt. The ratio is no longer calculated for SMEs because their income statements make it impossible to pinpoint the charge on debt⁽¹⁾.

Over 2009 and 2010, as a result of euro area monetary policy easing, the globalised ratio of large firms declined substantially, from 5.9% to 3.7%. The median ratio also fell, but to a lesser extent, from 6.2% to 4.9%.

In 2011 the globalised ratio picked back up slightly as a result of monetary policy tightening throughout most of the year. In early 2011, to prevent upward pressure on price stability from materialising at a time when economic activity was just getting going again, the ECB Governing Council raised key interest rates on two occasions. After being held at a historical low of 1% for two years, the principal key rate was raised to 1.25% on 7 April and 1.50% on 7 July. Late in the year, following a downward revision in growth forecasts, the Governing Council lowered the principal key rate to 1.25% on 3 November, then 1% on 8 December⁽²⁾.

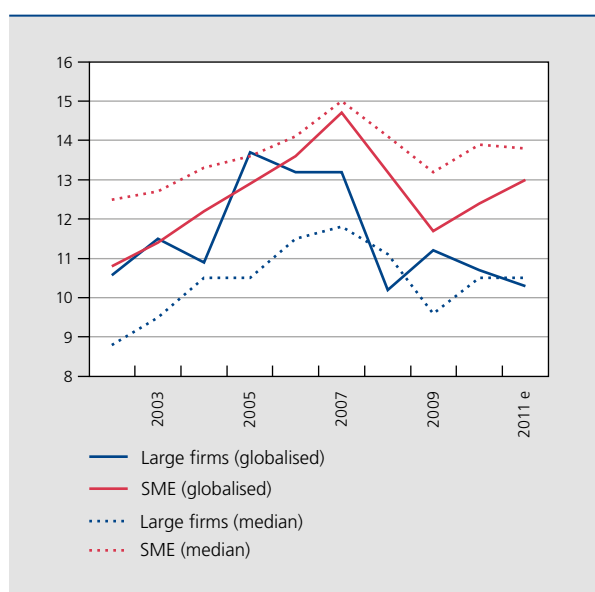
The median ratio again fell slightly in 2011, reflecting a majority of companies' lesser exposure to the monetary policy decisions taken over the course of the year.

It is also worth noting that, according to a qualitative survey conducted by the Bank, companies continued to have a positive overall view of borrowing conditions in the first half of the year, but that this view began to deteriorate from the third quarter onward. Managers' more negative view was motivated by the caps on lending and guarantees adopted by the banks; on the other hand, their view of interest rates improved marginally.

Lastly, the ratio drawn from the annual accounts may be compared with the financing cost calculated based on MIR surveys and data on corporate bond yields. These financing costs are calculated monthly and weighted by outstandings. It is interesting to note that their trend over the period is similar to that of the ratio drawn from the annual accounts.

CHART 12 DEGREE TO WHICH BORROWINGS ARE COVERED BY CASH FLOW

(in %)

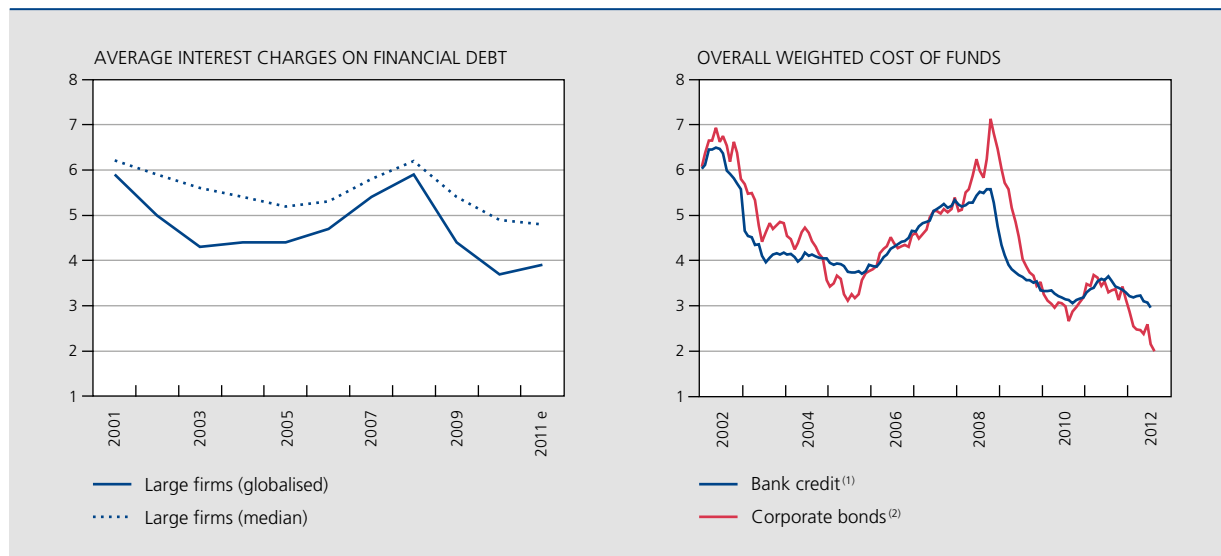


Source : NBB.

(1) In the simplified format, charges on debt are encompassed in the "financial charges" line (item 65).

(2) For more details on ECB monetary policy in 2011, see the Bank's annual report.

CHART 13 FINANCING COSTS
(in %)



Sources: NBB, Thomson Reuters Datastream.

(1) Weighted average rate applied by Belgian banks on loans to businesses, as reflected in the MIR survey. The weighting is based on amounts outstanding for different types of credits.

(2) Yield of an index of euro-denominated bonds issued by non-financial corporations in the euro area, all maturities combined; index weighted by outstandings.

4. Recent inventory trends

4.1 Inventory size and composition

This section discusses recent inventory trends. We define inventory as goods used in the course of companies' operations, either to be consumed when they are used, or to be sold as-is or following a production process.

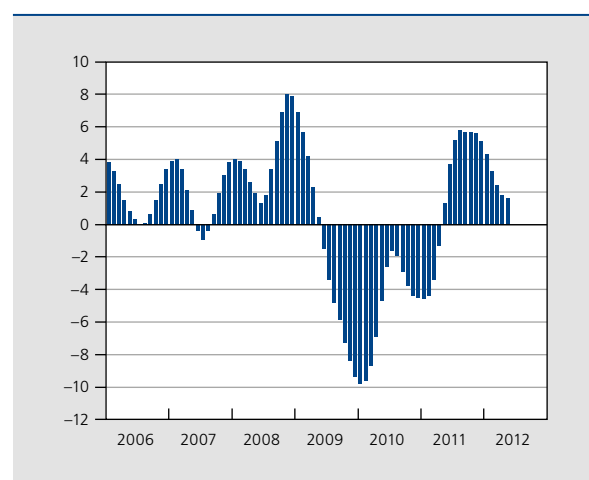
In operating a business, inventory management is an ongoing challenge subject to competing constraints. On the one hand, the business must avoid overstocking so as not to tie up funds unnecessarily. On the other hand, it must have enough inventory on hand so that it does not run out. The cyclical fluctuations of recent years, in which inventories have played an important role, illustrate this dilemma.

For example, more than one-third of the decline in GDP in 2009 was attributable to massive inventory draw-downs by companies after the start of the recession. In the economic surveys conducted by the Bank, this procyclical trend was visible in the historically high number of managers reporting below-normal inventory levels (Chart 14). In 2011, conversely, inventory rebuilding was accountable for over one-third of GDP growth. As explained in section 2.1, companies did not fully anticipate

the economic slowdown that took place over the course of 2011 and so involuntarily accumulated unused or unsold goods. This is confirmed by the clear increase, in 2011, of the number of managers reporting above-normal inventory levels.

CHART 14 ASSESSMENT OF INVENTORY LEVELS IN THE MANUFACTURING INDUSTRY

(balance of "above normal" and "below normal" responses, data seasonally adjusted and smoothed)



Source: NBB.

TABLE 10 SECTORAL BREAKDOWN OF INVENTORIES AND ORDERS IN PROGRESS

(2011, in € million, unless otherwise stated)

	Inventories at year-end	In % of total	<i>p.m.</i> Inventories in % of value added ⁽¹⁾
Manufacturing industry	24 885	30.3	53.7
of which:			
Agri-food industries	3 139	3.8	45.3
Textiles, clothing and footwear	1 187	1.4	83.9
Wood, paper and printing	1 173	1.4	37.1
Chemical industries	3 176	3.9	45.7
Pharmaceutical industries	2 285	2.8	47.2
Metallurgy and metalworking	5 046	6.2	75.9
Metal manufactures	4 863	5.9	53.7
Non-manufacturing branches	57 150	69.7	45.2
of which:			
Wholesale trade	19 333	23.6	84.7
Retail trade	7 527	9.2	66.1
Transport and storage	2 552	3.1	17.8
Hotels, restaurants and catering	283	0.3	8.7
Information and communication	1 049	1.3	8.7
Real estate activities	4 156	5.1	83.1
Business services	2 696	3.3	11.7
Energy, water and waste	2 187	2.7	21.6
Construction	9 713	11.8	73.7
Total	82 036	100.0	47.5

Source: NBB.

(1) In % of calculated for companies with an accounting year of 12 months.

Inventory size and composition differs considerably from one branch to the next, as a function of the operating cycle. In an industrial company, it looks like this:

Purchases → Inventory → Processing → Inventory → Sales

In a wholesale or retail trade company, it looks like this:

Purchases → Inventory → Sales

In a services company, finally, the nature of the business means that inventory levels are low.

Table 10 shows the sectoral distribution of inventories as reported in the annual accounts. Most inventories are concentrated in wholesale and retail trade (32.7 % of the total in 2011), manufacturing industry (30.3 %) and

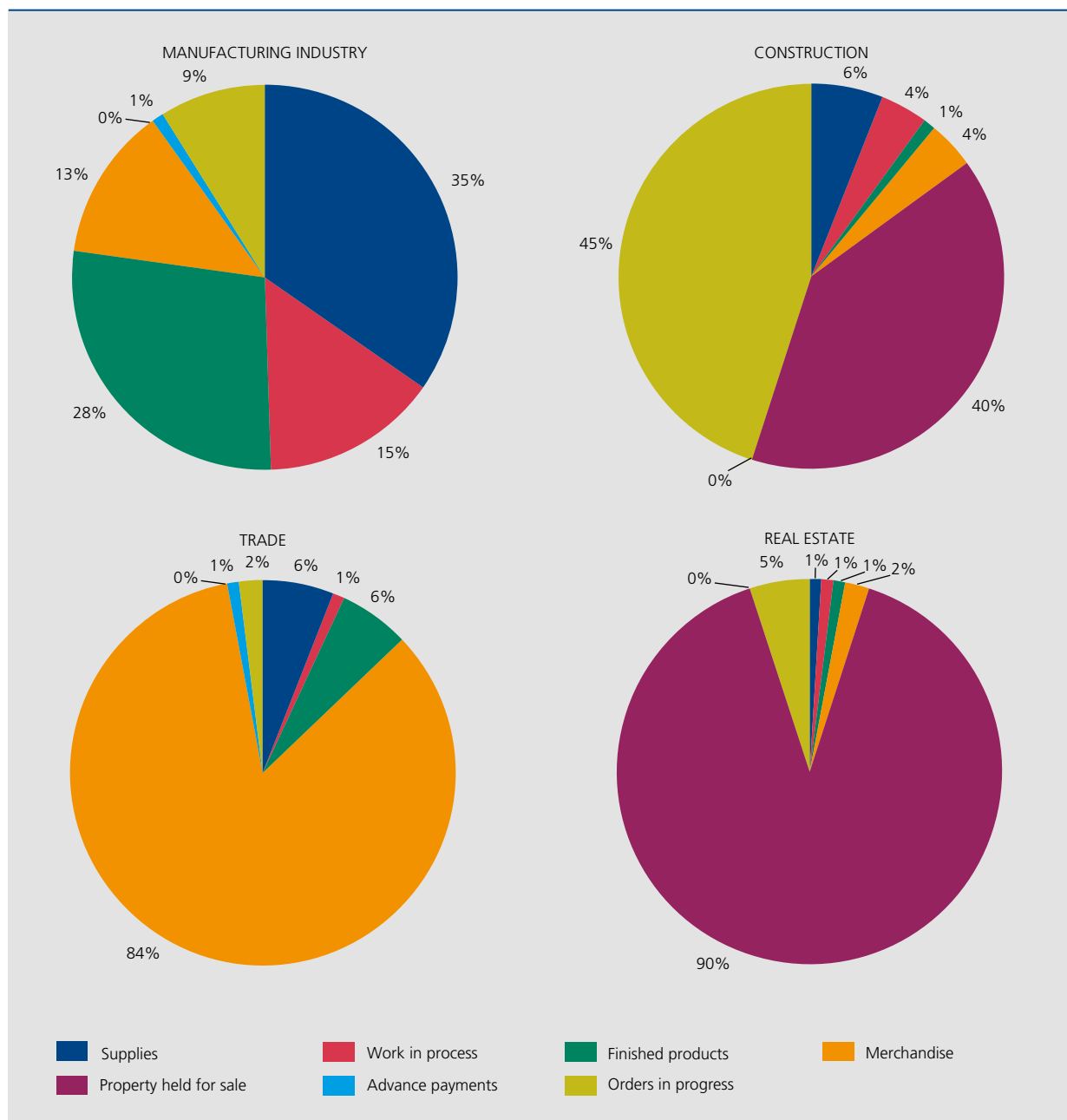
construction (11.9 %). Excluding trade and real estate, the services branches are naturally characterised by relatively low inventory levels: in hotels and restaurants, telecommunications and business services, inventories at year-end represent less than 12 % of value added. The proportion is much higher in wholesale trade (84.7 %), retail trade (66.1 %), real estate (83.1 %), construction (73.7 %), and manufacturing industry (53.7 %).

Analysis of inventories based on the annual accounts depends upon the type of format submitted by the companies. SME accounts merely distinguish between inventories and orders in progress, whereas the accounts of large firms distinguish among the following sub-items: supplies, work in process, finished products, merchandise, properties held for sale, and advance payments.

Briefly, these items are defined as follows:

- supplies include raw materials and consumables;
- works in process are products made by the company that have not yet reached the stage of finished product;
- finished products are products that are made by the company for sale and are ready for sale, including sellable semi-finished products;
- merchandise are tangible goods purchased by the company to be resold as-is or after minor alterations;
- properties held for sale are buildings that the company has bought or built with the intention of selling them;
- advance payments are payments made on inventories that the supplier has not yet delivered;
- Contracts in progress include work being performed, products being made, and services being delivered that were specifically ordered by a third party and have not yet been fully received or delivered.

CHART 15 BREAKDOWN OF INVENTORIES AND CONTRACTS IN PROGRESS PER BRANCH OF ACTIVITY
(2011, large firms)



Source: NBB.

Annex 3 presents the breakdown of inventories among these items for all of the population studied. In 2011, the total amount of inventories and contracts in progress was just over € 82 billion, of which € 60 billion at large firms and € 22 billion at SMEs. According to large firms' accounts, merchandise was the principal component (42 % of the total), ahead of supplies (18.7 %), finished products (13.2 %), contracts in progress (10.9 %), properties held for sale (7.3 %) and work in process (7.3 %). Advance payments represented a very small proportion of the total (0.6 %).

The breakdown of inventories is the most diversified in industry (see Chart 15). The manufacturing branches stand out because of their much greater share of supplies, finished products and work in process inventories. In construction, almost all of the inventory was made up of contracts in progress and properties held for sale. Lastly, trade and real estate were highly specialised in, respectively, merchandise and properties held for sale.

4.2 Recent trends

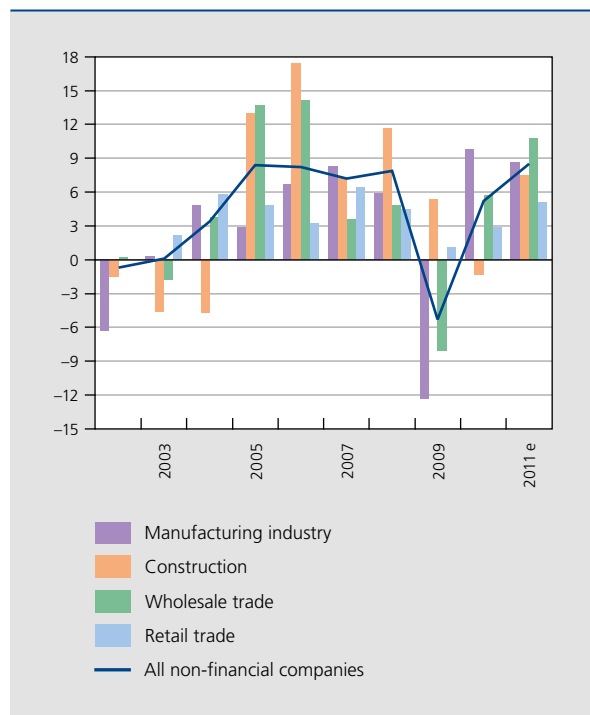
This section describes the recent trends seen in industry, construction and trade, the most significant branches in terms of inventories. Since the onset of the financial crisis, inventories have not fluctuated by much in retail trade or construction. Changes have been much more pronounced in industry and wholesale trade. Due to their exposure to variations in world trade, these two branches reduced inventories substantially in 2009, then rebuilt them in 2010 and 2011. It is worth noting that the pharmaceutical industry is the only manufacturing branch in which inventories have steadily increased in recent years, even during the 2008-09 recession.

The way companies manage their stocks can be discerned by looking at their turnover ratios, which measure how quickly inventory is used and replaced. We generally distinguish between two separate ratios: purchased inventory turnover and produced inventory turnover. These ratios can only be calculated using full-format accounts.

Purchased inventory turnover relates to supplies, merchandise, property held for sale⁽¹⁾ and advance payments. The ratio is calculated by dividing the cost of supplies and merchandise (item 60 in the income statement) by the total value of these inventories recorded as balance sheet assets.

Produced inventory turnover relates to work in process, finished products and contracts in progress⁽²⁾. The ratio is calculated by dividing the cost of goods sold by the total value of these inventories recorded as balance sheet

CHART 16 TRENDS IN INVENTORIES AND CONTRACTS IN PROGRESS PER BRANCH OF ACTIVITY
(percentage changes compared to the previous year)



Source : NBB.

assets. The cost of goods sold is used rather than the selling price because inventories themselves are recorded at cost price.

It should be noted that turnover ratios are not entirely without ambiguity. From a strictly financial standpoint, a high turnover is favourable because it means that inventories are liquid, which minimises storage costs and the risk of obsolescence. However, a high turnover rate can also mean that inventory levels are inadequate, giving rise to disruptions and frequent ordering, the cost of which can exceed the savings on storage costs.

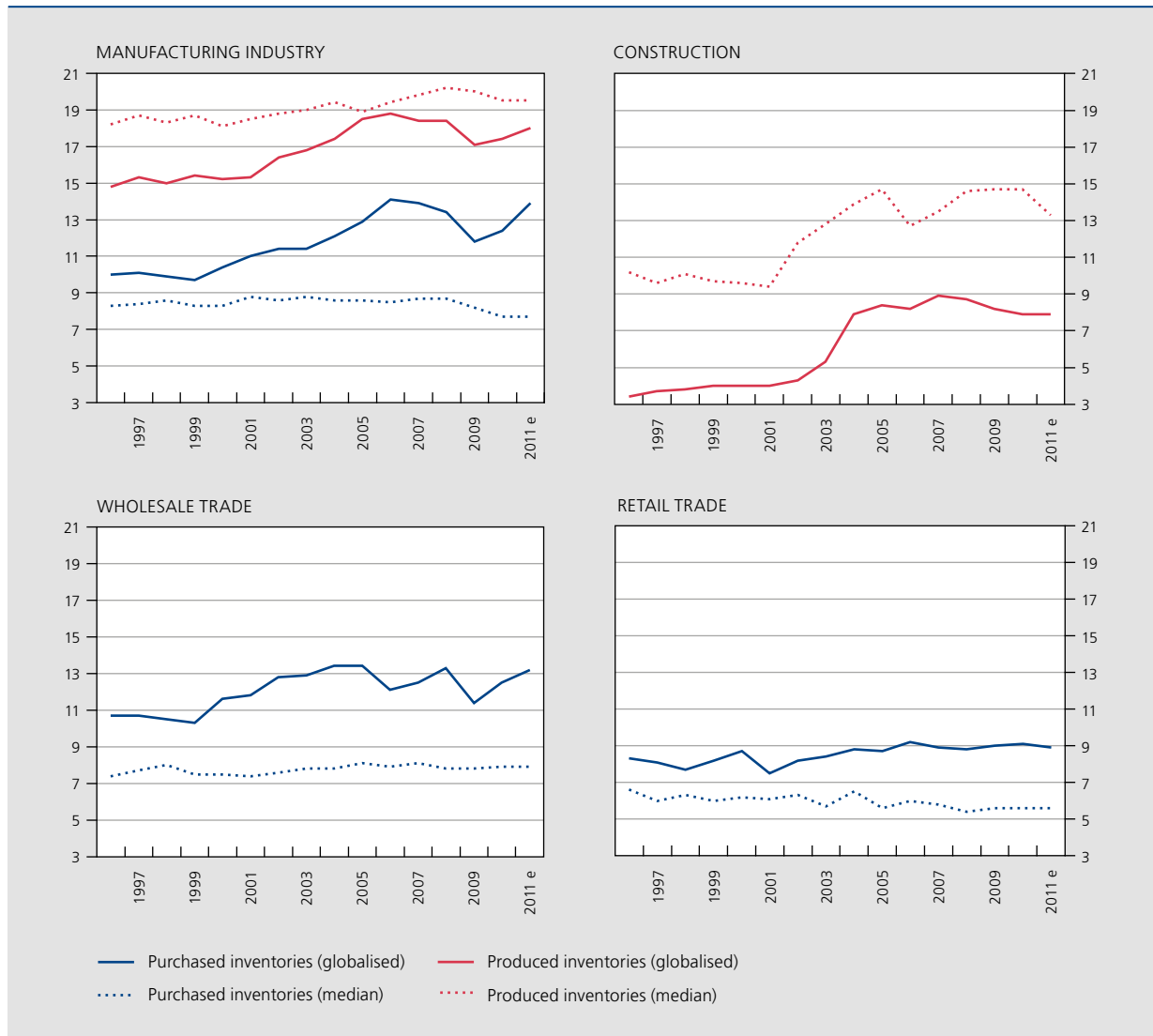
Chart 17 shows trends in the ratios. In trade and construction, only one of the two ratios is calculated. As shown in Chart 15, inventories in these two branches are highly specialised, respectively in purchased inventories and produced inventories.

In industry, the globalised turnover of both inventory categories rose significantly between the end of the 1990s and the mid-2000s, meaning that for a given level of

(1) Except for construction companies.

(2) As well as properties held for sale for construction companies.

CHART 17 INVENTORY TURNOVER PER BRANCH OF ACTIVITY
(in %)



Source: NBB.

activity, inventories fell. This trend reflects stricter inventory management marked by, among other things, the rising popularity of strategies such as just-in-time. Turnover then declined as a result of the 2008-09 recession and because companies had a hard time anticipating business trends. The recovery of globalised turnover in 2010 and 2011, however, shows that inventory management had adapted to the new economic conditions. Overall, over the past 15 years, globalised turnover increased significantly in the manufacturing industry. It climbed from 10.0 to 13.9 for purchased inventories and from 14.8 to 18.0 for produced inventories. In median terms, purchased inventory turnover was flat over the period, whereas produced inventory turnover rose from 18.2 to 19.7.

A change took place in construction in the early 2000s. At the request of the Belgian Construction Association, companies were authorised to record on their balance sheets the net balance between the amount of contracts in progress and that of advance payments on orders. This exemption from general accounting practices was granted by the Economic Affairs Minister in order to bolster construction companies' solvency, given that advance payments are recorded as borrowings. Solvency is a criterion in the awarding of public contracts, so Belgian construction companies had been at a disadvantage because the adjustment was already allowed in neighbouring countries. As a result of the exemption, the amount of orders in progress declined significantly in the branch, which boosted both

the globalised and median turnover ratios. Excluding this regulatory influence, inventory turnover was relatively stable over the past 15 years.

In wholesale trade, the globalised ratio followed trends similar to those observed in industry, although to a lesser extent. The ratio's trend can be irregular, because purchasing volumes are sometimes inflated by buy and sell deals that do not accurately represent real business activity. The median ratio remained particularly stable over the period, which means that most companies did not alter their inventory management significantly.

Lastly, in retail trade, inventory turnover remained very stable over the period covered. The globalised ratio improved marginally before stabilising from 2006 onwards, whereas the median ratio eroded a bit over the course of the past 15 years.

Still, it is important to note that the degree of turnover is heavily dependent upon companies' business activities. In construction, for example, owing to the longer operating cycle, produced inventories are greater in proportion to the volume of activity than they are in industry. We also note substantial differences among the manufacturing branches. For example, turnover is higher in agri-food because the branch deals in perishable goods.

Conclusion

over the full year 2011, the total value added of non-financial corporations rose 3.1% in current prices. This was a slowdown compared with 2010, when the figure rebounded by 5.5%. Two factors combined to cause the slowdown. On the one hand, purchases continued to increase robustly, due notably to the significant rise in commodity prices. As a reminder, energy commodity prices increased on average by 31.3% in 2011, and industrial commodity prices rose by an average of 14.3%. Furthermore, sales growth fell marginally, even though companies were able to pass on a portion of the higher costs in their selling prices.

At the same time, staff costs rose sharply in 2011 under the impact of job growth and higher hourly wages. Depreciation picked back up amid renewed investment. Overall, operating costs rose by 4.4% in 2011, a much faster pace than in either of the previous two years. This combination of rising costs and less robust activity caused a slight drop in net operating result in 2011 (-2.4%) following the vigorous recovery in 2010 (+28.7%). Overall, company performances were thus affected by the

economic downturn, which got progressively worse from the second half of 2011.

An analysis by company size shows that trends were clearly more favourable to SMEs: their value added increased by 6.3% in 2011, compared with 2.0% for large firms. Similarly, large firms' operating result fell by 6.8%, while that of SMEs rose by 9.7%. So, while large firms were much more affected by the economic downturn, it must be kept in mind that they benefited much more from the 2010 recovery. Large firms are generally more sensitive to economic cycles because they are more present in industrial activities and international trade.

These trends had implications for company profitability. By every available measure, SME profitability in 2011 continued the recovery that began in 2010. Over the past two years, SMEs' recovery has been particularly notable with respect to globalised ratios, to the extent that in certain cases ratios are back to levels last seen before the 2008-09 recession. Conversely, the profitability of large firms contracted in 2011 to the extent that multiple ratios fell below the low point of 2009. Large firms notably saw their margins fall in 2011, especially in the branches most exposed to international conditions and higher commodity prices (i.e. the manufacturing industry, transport and wholesale trade).

Analysis of sector trends since the onset of the financial crisis shows that branches gained or lost ground largely as a function of their degree of exposure to fluctuations in world trade. For example, the two branches that have fallen the furthest since 2007 are textiles and metallurgy. Textiles have long had to deal with international competition, particularly from low-cost countries. Metallurgy, on the other hand, was especially affected by the impacts of the 2008-2009 recession, such as the closing of certain production units. Conversely, value added increased substantially in the pharmaceutical industry because of continued production growth and the branch's high rate of value added. Building on long-term trends, cyclical fluctuations in recent years have generally been more favourable to the non-manufacturing branches. The biggest performance improvements were generated by the energy and water branches. To a lesser extent, business services, real estate, retail trade, hotels and restaurants also posted above-average growth. Overall, these branches have benefited from relatively firm domestic demand since 2008.

The article also discusses sector contributions to the growth of each of Belgium's three Regions over the period 2001-2011. This breakdown reveals a certain number of regional specificities. For example, Flanders stands out for the larger contributions made by transport, metallurgy,

refining and trade in commodities and industrial goods. In Wallonia, the pharmaceutical industry and auxiliary financial services made much bigger contributions than in the other two Regions. Lastly, owing to the specific nature of its economy, Brussels was supported solely by the services sector – particularly business services – energy, and, to a lesser extent, real estate, hotels and restaurants. By contrast, wholesale trade, transport and construction made much more limited contributions in the capital city.

The last part of the article describes recent inventory developments. With respect to turnover, the most significant fluctuations in recent years have taken place in the

manufacturing industry. Within this category, globalised turnover increased significantly between the end of the 1990s and the mid-2000s, meaning that for a given level of activity, inventories fell. This trend reflects stricter inventory management marked by, among other things, the rising popularity of strategies such as just-in-time. Turnover then declined as a result of the 2008-2009 recession and because companies had a hard time anticipating business trends. The recovery of globalised turnover in 2010 and 2011, however, shows that inventory management had adapted to the new economic conditions. In other branches of activity, inventory turnover remained fairly flat over the period.

Annex 1

SECTORAL GROUPINGS

	NACE-BEL 2008 divisions
Manufacturing industry	10-33
of which:	
Agri-food industries	10-12
Textiles, clothing and footwear	13-15
Wood, paper products and printing	16-18
Chemical industries	20
Pharmaceutical industries	21
Metallurgy and metalworking	24-25
Metal manufactures	26-30
Non-manufacturing branches	01-09, 35-82, 85.5 and 9⁽¹⁾
of which:	
Wholesale trade ⁽²⁾	46
Retail trade ⁽²⁾	47
Transportation and storage	49-53
Accommodation and food service activities	55-56
Information and communication	58-63
Real estate activities	68
Business services ⁽³⁾	69-82
Energy, water supply and waste	35-39
Construction	41-43

(1) Except 64, 65, 70100, 75, 94, 98 and 99.

(2) Excluding automobiles and motorcycles.

(3) Excluding head office activities (70100).

Annex 2

DEFINITION OF THE RATIOS

	Item numbers allocated	
	in the full format	in the abbreviated format
1. Net margin on sales		
Numerator (N)	9901 + 9125	9901 + 9125
Denominator (D)	70 + 74 – 740	70
Ratio = N/D × 100		
Condition for calculation of the ratio:		
Simplified format: 70 > 0		
2. Net return on operating assets		
Numerator (N)	9901	9901
Denominator (D)	20 + 21 + 22/27 + 3 + 40/41 + 490/1	20 + 21 + 22/27 + 3 + 40/41 + 490/1
Ratio = N/D × 100		
Conditions for calculation of the ratio:		
12-month financial year		
20 + 21 + 22/27 + 3 + 40/41 + 490/1 > 0 ⁽¹⁾		
3. Return on equity, excluding exceptional result		
Numerator (N)	9904 – 76 + 66	9904 – 76 + 66
Denominator (D)	10/15	10/15
Ratio = N/D × 100		
Conditions for calculation of the ratio:		
12-month financial year		
10/15 > 0 ⁽¹⁾		
4. Net return on total assets before tax and debt servicing, excluding exceptional result		
Numerator (N)	9904 + 650 + 653 – 9126 + 9134 – 76 + 66	9904 + 65 – 9126 + 67/77 – 76 + 66
Denominator (D)	20/58	20/58
Ratio = N/D × 100		
Condition for calculation of the ratio:		
12-month financial year		
5. Degree of financial independence		
Numerator (N)	10/15	10/15
Denominator (D)	10/49	10/49
Ratio = N/D × 100		
6. Degree of capital permanence		
Numerator (N)	10/15 + 16 + 17	10/15 + 16 + 17
Denominator (D)	10/49	10/49
Ratio = N/D × 100		

(1) Condition valid for the calculation of the median but not for the globalised ratio.

DEFINITION OF THE RATIOS (continued)

	Item numbers allocated	
	in the full format	in the abbreviated format
7. Degree to which borrowings are covered by cash flow		
Numerator (N)	9904 + 630 + 631/4 + 6501 + 635/7 + 651 + 6560 – 6561 + 660 + 661 + 662 – 760 – 761 – 762 + 663 – 9125 – 780 + 680	9904 + 631/4 + 635/7 + 656 + 8079 + 8279 + 8475 – 8089 – 8289 – 8485 – 9125 – 780 + 680
Denominator (D)	16 + 17/49	16 + 17/49
Ratio = N/D × 100		
Condition for calculation of the ratio:		
12-month financial year		
8. Average interest expense on financial debt		
Numerator (N)	650	
Denominator (D)	170/4 + 42 + 43	
Ratio = N/D × 100		
Condition for calculation of the ratio:		
12-month financial year		
9. Purchased inventory turnover		
Numerator (N)	60	
Denominator (D)	30/31 + 34 + 35 ⁽¹⁾ + 36	
Ratio = N/D × 100		
Condition for calculation of the ratio:		
12-month financial year		
10. Produced inventory turnover		
Numerator (N)	60/64 – 71 – 72 – 740 – 9125	
Denominator (D)	32 + 33 + 35 ⁽²⁾ + 37	
Ratio = N/D × 100		
Condition for calculation of the ratio:		
12-month financial year		

(1) Except for construction companies.

(2) Only for construction companies.

Annex 3

DETAIL OF INVENTORIES AND ORDERS IN PROGRESS RECORDED AS BALANCE SHEET ASSETS (2011)

	In € million	In % of the total
Simplified formats		
Inventories	20 791	93.0
Orders in progress	1 572	7.0
Total	22 362	100.0
Full formats		
Inventories	53 193	89.1
Supplies	11 149	18.7
Work in process	4 350	7.3
Finished products	7 901	13.2
Merchandise	25 072	42.0
Property held for sale	4 344	7.3
Advance payments	377	0.6
Orders in progress	6 480	10.9
Total	59 674	100.0
All non-financial companies		
Inventories	73 984	90.2
Orders in progress	8 052	9.8
Total	82 036	100.0

Source: NBB.
