# Trends in the financial structure and results of firms in 2008

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#### Introduction

In the December issue of the Economic Review each year, the National Bank describes developments reflected in the annual accounts of non-financial corporations. By the Autumn, the Central Balance Sheet Office in fact already has a representative sample of the annual accounts for the previous year. The conclusions drawn on the basis of this sample can therefore be extrapolated relatively reliably to the population as a whole.

This article is composed of three sections. The first one briefly describes the methodology and sample used. The second section presents an extrapolation of the main profit and loss account items for the 2008 financial year. Finally, section 3 assesses the financial situation of companies as regards profitability, solvency and liquidity. In order to gain a better understanding of the different strata of the population, the perspective of the analysis has been widened this year to cover the entire range: apart from the medians, the first and third quartiles as well as the tenth and ninetieth percentiles are studied too.

Since the accounting year used by the vast majority of firms coincides with the calendar year, the data presented here mainly sum up the financial situation of enterprises for the whole period running from 1 January to 31 December 2008. Owing to the particularly contrasting cyclical pattern of the economy over that period, the analysis is somewhat blurred (cf. point 2). Nonetheless, the information gathered for this study gives some indication of firms' resistance capacity as they went into the recession.

# 1. Methodology and constant sample

The Central Balance Sheet Office has collected data on the account of non-financial corporations since the end of the 1970s. For that purpose, 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 adjusted if necessary in order to meet the required quality standards. So, by September, it is possible to carry out an initial analysis. However, each year, the nature of the data available for the latest financial year examined, in this case 2008, raises questions of methodology.

Owing to the fact that some firms are late in filing their annual accounts, the population relating to 2008 is incomplete. Moreover, those same firms generally tend to be in a structurally less favourable financial position than firms which file their accounts within the time allowed. Previous editions of this article have pointed up significant differences, notably in terms of profitability, solvency and liquidity, between firms according to the deadline for filing their annual accounts. In all probability, the data currently available for 2008 give an overly optimistic view of reality.

Because of these problems, the 2008 data are not directly comparable with those for previous years. In order to ensure comparability, the constant sample method has to be used. The sample for 2007-2008 is made up of firms

<sup>\*</sup> The author would like to thank Julien Bacquelaine for his help.

that filed annual accounts for both the 2007 and the 2008 financial year<sup>(1)</sup>. The method involves extrapolating the 2008 results on the basis of developments observed in the constant sample; so the 2008 figures are obtained by applying the rate of change of the sample statistics on the final figures for 2007. It is therefore assumed that the trends seen in the sample are representative of those affecting the population as a whole. As verified previously, this assumption is largely borne out since, in the vast majority of cases, the estimates give a good indication of the direction and scale of actual movements.

Table 1 compares, for the main profit and loss account balances, the growth figures obtained on the basis of the sample and the final outcomes noted for the whole population. Deviations of estimates are not very wide at all, especially when compared with the average changes in items. Furthermore, there is no systematic underestimation or over-estimation of actual developments. Finally, the quality of the estimate declines as one "scales down" the profit and loss account, because the financial and exceptional results are harder to predict.

- (1) In order to be included in the sample, firms must also meet the following conditions:
  - both sets of annual accounts relate to a financial year lasting 12 months;
     both sets of annual accounts met the quality requirements of the Central Balance Sheet Office;
  - the annual accounts relating to 2007 were filed before 31 August 2008;
  - the annual accounts relating to 2008 were filed before 31 August 2008.

TABLE 1 GROWTH RATE ESTIMATED ON THE BASIS OF THE CONSTANT SAMPLE AND ACTUAL GROWTH RATE, MAIN PROFIT AND LOSS ACCOUNT BALANCES

(percentages)

	2003	2004	2005	2006	2007	Deviation f	rom estimate
						Average	Standard deviation
Value added							
Constant sample	+3.4	+6.3	+3.9	+6.3	+4.8	+4.9	-
Actual	+4.3	+6.6	+4.6	+6.1	+4.1	+5.1	-
Difference	-0.9	-0.3	-0.7	+0.2	+0.7	-0.2	0.6
Net operating result							
Constant sample	+22.6	+24.3	+8.4	+9.2	+8.0	+14.5	-
Actual	+25.5	+26.5	+9.2	+9.3	+8.4	+15.8	-
Difference	-2.9	-2.2	-0.8	-0.1	-0.4	-1.3	1.1
Ordinary result							
Constant sample	+27.2	+26.2	+13.0	+11.7	+10.5	+17.7	-
Actual	+26.7	+24.9	+14.1	+9.1	+12.9	+17.5	-
Difference	+0.5	+1.3	-1.1	+2.6	-2.4	+0.2	1.8
Net result before tax							
Constant sample	+66.3	+2.2	+45.8	+5.1	+13.1	+26.5	-
Actual	+77.0	+2.3	+47.4	+3.8	+16.3	+29.4	-
Difference	-10.7	-0.1	-1.6	+1.3	-3.2	-2.9	4.2
Net result after tax							
Constant sample	+95.8	+0.5	+56.3	+5.1	+14.1	+34.4	-
Actual	+112.0	-0.1	+57.7	+3.6	+17.9	+38.2	-
Difference	-16.2	+0.6	-1.4	+1.5	-3.8	-3.9	6.4

Source: NBB.

TABLE 2 COMPOSITION AND REPRESENTATIVENESS OF THE CONSTANT SAMPLE 2007-2008

	Firms in the 2007-2008 sample	All non-financial corporations in 2007	Representativeness of the sample, in p.c.
Number of firms	167,892	286,498	58.6
Large firms	12,507	16,750	74.7
SMEs	155,385	269,748	57.6
Manufacturing industry	13,334	21,584	61.8
Non-manufacturing branches	154,558	264,914	58.3
Balance sheet total (millions of euro) <sup>(1)</sup>	1,051,580	1,179,508	89.2
Large firms	941,485	1,007,186	93.5
SMEs	110,094	172,322	63.9
Manufacturing industry	246,835	272,382	90.6
Non-manufacturing branches	804,744	907,125	88.7

Source: NBB.

(1) For firms in the constant sample, the balance sheet total taken into account is the figure for 2007

Table 2 describes the composition of the constant sample for 2007-2008, which covers 167,892 enterprises, or almost 58.6 p.c. of all annual accounts filed in 2007. The representativeness measured in terms of the balance sheet is much higher, reaching 89.2 p.c. This difference can be attributed to the fact that it is mainly small (or very small) firms that are missing from the sample. Industry is also better represented in terms of the balance sheet total (90.6 p.c.) since large firms are predominant in this sector.

As regards the distinction between firms according to their branch of activity, a new version of the European nomenclature was introduced on 1 January 2008<sup>(1)</sup>, which gave rise to the Belgian version NACE-BEL 2008. It is this one which is used in this article, instead of the NACE-BEL 2003 nomenclature. Since the data below are published at high levels of aggregation, this change does not alter the statistics in any great depth. Some of the figures are nevertheless no longer comparable with past data. Consequently, the new "information and communication" grouping contains activities that were not included before, such as telecommunications, publishing or computer activities. The groupings used and the corresponding NACE-BEL 2008 divisions are shown in Annex 2<sup>(2)</sup>.

# 2. Movement in the main components of the profit and loss account

#### 2.1 General trends and cyclical context

The slowdown in economic activity that gradually took hold in 2007 continued at an even faster pace in the first half of 2008. In line with the escalation of financial tension and the weakening of international trade, this deceleration then led to a pronounced cyclical downturn at the end of 2008 and beginning of 2009 (chart 1). So, Belgium's annual GDP growth rate in 2008 (+0.8 p.c., table 3) conceals very contrasting cyclical trends. Detailed analyses of the economic background in 2008 can be found in various publications issued by the Bank (3).

Since the vast majority of annual accounts relate to periods that coincide with normal calendar years, the data presented in this article sum up the financial situation of enterprises for the whole period running from 1 January to 31 December 2008. In view of the rather varying state of the economy over this period, the analysis is blurred by offsetting effects between the first and the second part of the year. The information gathered nevertheless gives some indication of the firms' financial position, and thus their resistance capacity, as they went into the recession.

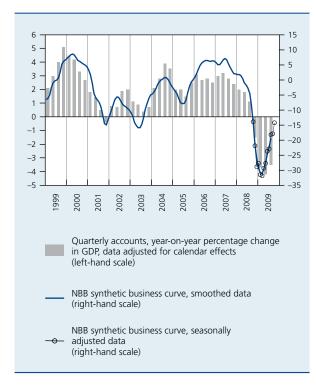
Against this backdrop, the value added of Belgian nonfinancial companies, i.e. the difference between sales revenues and the cost of goods and services supplied by

<sup>(1)</sup> See Regulation (EC) N°1893/2006 of the European Parliament and Council of 20 December 2006.

<sup>(2)</sup> For more detailed information on the NACE-BEL 2008 classification, go to http://statbel.fgov.be.

<sup>(3)</sup> See, for instance, the 2008 Annual Report or the June 2009 Economic Review.

#### CHART 1 GDP AND THE BUSINESS SURVEY INDICATOR



Sources: NAI, NBB.

third parties, rose by 1.8 p.c. in 2008, thus reaching nearly 164 billion euro at current prices (table 4). This is a marked slowdown on the five previous years, during which value added had grown at an average annual rate of 5.1 p.c. More than just a slackening of firms' sales volume, this slowdown can be explained by the sharp rise in the price of imported raw materials. Owing to the weakening of final demand, firms have not been able to pass the whole increase onto their sales prices.

The value added generated by a firm enables it to cover its operating expenses, with any surplus recorded as a net operating profit. This reflects the firm's current commercial efficiency, regardless of its financing policy and any exceptional items. Staff costs, which traditionally account for the lion's share of the operating expenses, came to nearly 94 billion euro in 2008, up by 4.9 p.c. The rise in staff costs thus clearly exceeded that of value added, something that had not been seen since 2002. On the one hand, the number of workers employed by nonfinancial companies expanded over the year 2008 as a whole. On the other hand, wage indexation impacted on wage costs owing to the acceleration of inflation. After staff costs, allocations to depreciation are the highest operating expenses. In 2008, for the second year in a row and as a result of strong gross fixed capital formation by firms, depreciation costs also grew at a faster pace than value added.

Mainly influenced by staff costs and depreciation, total growth in operating expenses thus increased at a faster pace than in 2007, rising by 6.0 p.c. Combined with the marked slowdown in value added, this trend turned into a 13.0 p.c. contraction in the net operating result, which came to nearly 31 billion euro. So, in 2008, non-financial corporations found it harder to generate profits from carrying out their normal business activity. Such a decline in operating profits has not been seen since 2001, but it should not be forgotten that it had doubled in the space of the previous five years, rising gradually from 17 billion euro in 2002 to more than 35 billion in 2007.

Putting these recent trends into a long-term perspective, chart 2 gives a detailed breakdown of value added between staff costs, depreciation and operating result. In contrast to the previous years, the share of value added allocated to staff costs rallied in 2008, gaining 1.7 percentage points. Depreciation costs gained half a percentage point, continuing the recovery begun in 2007. These increases were to the detriment of the net operating result, which fell back by 3.2 p.c. of value added.

TABLE 3 GDP AND MAIN CATEGORIES OF EXPENDITURE

(calendar adjusted data, by volume; percentage changes compared to the previous year, unless otherwise stated)

	2006	2007	2008
Household consumption expenditure <sup>(1)</sup>	1.8	1.6	1.0
Final consumption expenditure of general government	1.0	2.6	3.3
Gross fixed capital formation	2.7	5.7	3.8
Enterprises	4.5	8.7	6.1
Housing	3.4	-0.8	-1.6
General government	-12.4	3.6	3.4
p.m. Total final domestic expenditure	1.8	2.7	2.2
Change in inventories (2)	0.6	0.1	-0.2
Exports of goods and services	5.0	4.4	1.4
Imports of goods and services	4.7	4.4	2.7
p.m. Net exports of goods and services (2)	0.4	0.2	-1.0
GDP	2.8	2.8	8.0

Sources: NAI.

- (1) Including non-profit institutions serving households.
- (2) Contribution to the annual change in GDP, in percentage points.

TABLE 4 MAIN COMPONENTS OF THE PROFIT AND LOSS ACCOUNT (current prices)

	Per	centage chang	es compared	to the previous	year	Millions of euro	Percentages of value added
	2004	2005	2006	2007	2008 e	2008 e	2008 e
Value added	6.6	4.6	6.1	4.1	1.8	163,974	100.0
Staff costs	3.4	3.0	4.3	4.1	4.9	93,809	57.2
Depreciation and downward value adjustments (1)	0.7	3.7	5.3	5.2	4.9	27,737	16.9
Other operating expenses (–)	1.4	6.5	12.8	-10.8	18.9	11,440	7.1
Total operating expenses	2.7	3.4	5.2	3.0	6.0	133,117	81.2
Net operating result	26.5	9.2	9.3	8.4	-13.0	30,857	18.8
Financial income (+)	-12.4	-4.4	-9.1	18.5	38.3	62,408	38.1
Financial charges(–)	-15.9	-10.9	-13.3	15.2	31.5	44,213	27.0
Financial result	18.0	36.5	8.3	29.5	58.5	18,195	11.1
Ordinary result	24.9	14.1	9.1	12.9	4.5	49,052	29.9
Exceptional result $^{(2)}$						2,896	1.8
Net result before tax	2.3	47.4	3.8	16.3	-12.6	51,948	31.7
Taxes on profits(–)	11.5	10.9	4.7	8.2	-2.2	9,020	5.5
Net result after tax	-0.1	57.7	3.6	17.9	-14.6	42,928	26.2
p.m. Net result after tax excluding the exceptional result	29.2	15.0	10.3	14.1	6.1	40,032	24.4

Source: NBB

The movements in value added and operating results can also be compared with the Bank's business survey indicator, which measures business confidence (chart 3). Until August 2008, the indicator remained at a higher level than its long-term average. From September onwards, it fell back markedly, and in December reached its lowest level since 1980<sup>(1)</sup> – the start of the period in which the indicators have been calculated in their current form. These movements are reflected in the overall trends in value added and operating results, for which the 2008 figures feature among the worst for the last twenty-five years.

In line with the trend of the last few years, the financial result picked up once again in 2008 (+58.5 p.c.), to reach more than 18 billion euro. Financial income was once again boosted by income from financial fixed assets and current assets, including loans granted to subsidiaries.

In gross terms, the major increase in financial income and financial charges can be mainly attributed to a concomitant rise in income and charges from foreign currency transactions. Despite being significant in absolute value terms, movements in these transactions largely offset each other. The exceptional result was sharply down in 2008, after having been inflated by large capital gains on realisation of fixed assets. Lastly, influenced by developments in net operating results, taxes on profits were down in 2008 (–2.2 p.c.), for the first time since 2003.

Once all these components are aggregated, the net result of non-financial corporations totalled some 43 billion euro in 2008, which was 14.6 p.c. down on 2007. Owing to the increasingly volatile impact of the exceptional result,

<sup>(1)</sup> On tangible and intangible fixed assets and formation costs (item 630).

<sup>(2)</sup> There is very little point in calculating a percentage change for this aggregate, which may be either positive or negative and, besides, is not easy to estimate reliably. The figure for 2008 corresponds to the sum of the exceptional results known at the time of writing this article.

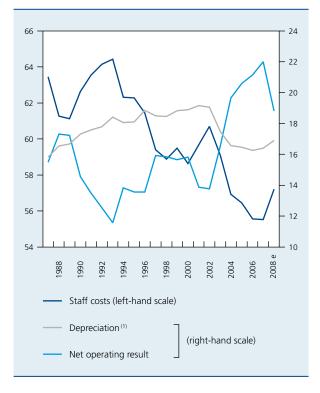
<sup>(1)</sup> The indicator continued its downward trend in the early months of 2009, before picking up again.

table 4 also gives details of the net result after removing exceptional items, variations in which tend to be more representative of companies' regular performance. In 2008, this totalled more than 40 billion euro, up 6.1 p.c. on its 2007 record.

#### 2.2 Results by branch of activity

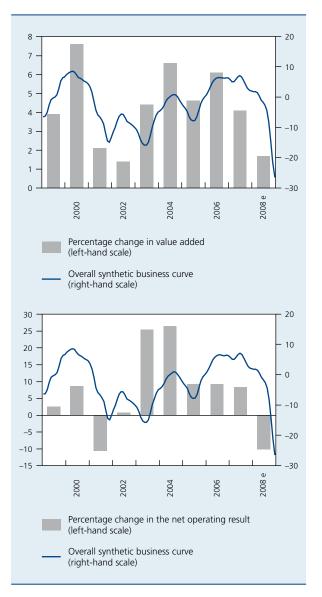
It was in the manufacturing industry that the cyclical downturn was the most marked. Value added in the manufacturing branches declined by 5.1 p.c. in 2008, accelerating the decline started in 2007. Most branches contributed to this development, caused mainly by the weakening of demand and the rise in the price of raw materials. The drop in manufacturing value added was particularly sharp in the iron and steel industry, base chemicals, car manufacturing and refining. In line with this lower generation of wealth, staff costs and industrial depreciation expenses rose slightly. Consequently, operating results suffered a very sharp correction (–26.5 p.c.), totalling 7.7 billion euro.

CHART 2 BREAKDOWN OF VALUE ADDED (percentages of value added)



Source: NBB.
(1) On tangible and intangible fixed assets and formation costs (item 630).

CHART 3 VALUE ADDED, NET OPERATING RESULT AND BUSINESS SURVEY INDICATOR



Source: NBB.

In the non-manufacturing branches, which generate slightly over three-quarters of the value added of non-financial companies, the decline in activity was more moderate over the whole of 2008, with a growth rate of 4.7 p.c., compared with 6.4 p.c. the year before. For example, while the construction industry contributed heavily to the economic downturn in other euro area countries, like Spain and Ireland, there was only a very slight weakening of activity in this sector in Belgium over the year 2008 as a whole. In the trade sector, on the other hand, value added stagnated, while the operating result dropped considerably, with wholesale trade weighing heavily on this trend. Overall, the operating result of the

TABLE 5 VALUE ADDED AND NET OPERATING RESULT BY BRANCH OF ACTIVITY

(current prices, percentage changes compared to the previous year)

_	Value	e added	Net oper	ating result	p.m. Percentage share of the branches in total
_	2007	2008 e	2007	2008 e	value added in 2008 e
Manufacturing industry	-1.0	-5.1	0.5	-26.5	27.7
of which:					
Agricultural and food industries	-0.1	6.1	-3.7	6.6	4.1
Textiles, clothing and footwear	-0.4	-11.3	4.1	-58.6	1.0
Wood, paper products and printing	2.5	0.8	8.9	-25.1	2.1
Chemicals and pharmaceuticals	-9.8	-11.9	-23.6	-51.3	5.7
Metallurgy and metalworking	13.6	-18.4	47.5	-65.7	4.1
Metal manufactures	-5.8	-1.0	-4.1	22.3	5.6
Non-manufacturing branches	6.4	4.7	12.1	-7.3	72.3
of which:					
Wholesale and retail trade	8.9	0.3	-1.7	-16.5	21.6
Transportation and storage	2.8	6.5	22.0	10.0	9.2
Accommodation and food service activities	5.7	2.9	14.8	-13.7	1.7
Information and communication	1.6	1.7	29.0	12.8	7.0
Real estate activities	1.4	2.6	28.3	11.7	2.5
Other service activities	9.1	11.5	2.0	-2.2	14.6
Energy, water supply and waste	2.2	5.9	-0.5	-6.5	5.1
Construction	9.6	9.1	18.8	7.7	7.6

Source: NBB

non-manufacturing branches contracted by 7.3 p.c. in 2008. But it should be pointed out that it had more than doubled over the five previous years.

Chart 4 maps out movements in the components of the operating result over the last few years, for the manufacturing industry and the non-manufacturing branches. The profit and loss account figures are broken down by size and by sector in Annex 1.

# 3. Changes in the financial situation of firms

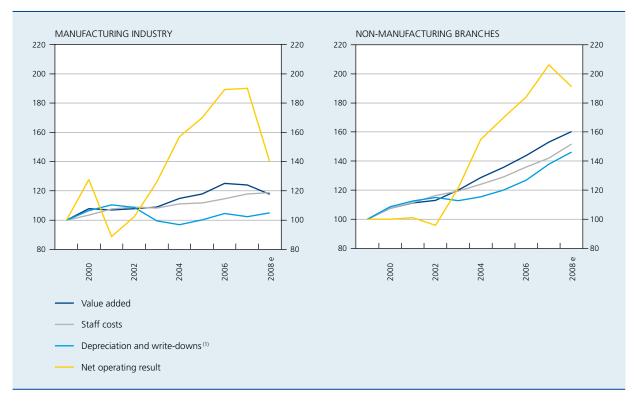
The financial analysis that follows is based on the theory of interpretation of the annual accounts, from which several ratios have been taken. The financial ratios are presented in global form and as medians. The globalised ratios are obtained by taking the sum of the numerators

for all firms and dividing it by the sum of their denominators. The median is the central value in an ordered distribution: for a given ratio, 50 p.c. of firms have a ratio above the median and 50 p.c. have a ratio below it. The two measures, which respond to different concerns, are complementary. Since it takes account of each firm according to its real weight in the numerator and the denominator, the globalised ratio primarily reflects the situation of the largest firms. In contrast, by indicating the situation of the central firm, the median reflects the movement in the population in general: as the median is influenced equally by each of the firms, regardless of size.

This year, in order to get a better understanding of the different strata of the population, the perspective of the analysis has been widened to cover the entire distribution: the median data are supplemented by the first and third quartiles (Q1 and Q3) as well as by the tenth and ninetieth percentiles (P10 and P90).

CHART 4 CHANGES IN THE COMPONENTS OF THE NET OPERATING RESULT

(current prices, indices 1999 = 100)



Source: NBB

(1) On tangible and intangible fixed assets and formation costs (item 630).

#### 3.1 Profitability

Profitability concerns firms' ability to generate profits. It can be assessed by using the net return on own funds. The latter, also referred to as the return on equity (ROE), is the net profit after tax divided by equity capital. This ratio expresses the return obtained by shareholders, after deduction of all expenses and taxes. Over a sufficiently long period, the return on equity has to exceed the return on a risk-free investment in order to provide shareholders with a risk premium.

The year 2008 brought a sharp correction in the return on equity (chart 5). The globalised ratio came to 6.3 p.c. for large enterprises (compared with 9.7 p.c. in 2007) and 9.3 p.c. for SMEs (compared with 12.5 p.c.). This decline is above all attributable to the deterioration of company profits in an unfavourable economic climate. For some years now, the ratio has also been curbed by a sharp growth in equity capital, mainly reflecting the introduction of the tax allowance for risk capital ("notional interest"). Moreover, as table 6 shows, the cyclical downturn weighed heavily on the profitability of

all branches of activity. In 2008, the most profitable big firms were to be found in the agri-food industry, transport, storage and construction. The best-performing SMEs were active in the chemicals industry, metal manufactures, business services and construction, among others.

The spread between the yield on government bonds and firms' profitability is an interesting yardstick for assessing the risk premium passed onto shareholders. While this spread had tended to widen in favour of shareholders between 2003 and 2007, it narrowed sharply in 2008, as a result of the falling performance of firms and, secondarily, the slight rise in the linear bond benchmark rate (rising from 4.35 p.c. in 2007 to 4.44 p.c. in 2008). As far as the globalised ratios are concerned, the risk premium worked out at 1.8 p.c. in 2008 (compared with 5.2 p.c. in 2007) for large firms and 4.8 p.c. (compared with 8.0 p.c.) for SMEs. From the investor's point of view, investing in shares lost its attraction compared with risk-free investments. This comparison should of course be weighed up carefully since, on the one hand, shares and government bonds are different financial instruments and, on the

TABLE 6 RETURN ON EQUITY, BY BRANCH OF ACTIVITY (1) (percentages)

		Large firms			SMEs	
-	2006	2007	2008 e	2006	2007	2008 €
- Manufacturing industry	13.6	15.2	9.9	10.4	11.8	9.4
of which:						
Agricultural and food industries	8.7	14.8	9.3	7.5	7.5	5.1
Textiles, clothing and footwear	11.5	8.1	1.4	2.6	5.5	2.2
Wood, paper products and printing	3.3	6.0	3.7	8.8	11.1	7.5
Chemicals and pharmaceuticals	12.6	8.7	4.8	205.8	78.4	62.2
Metallurgy and metalworking	12.1	21.2	2.0	14.4	15.6	13.1
Metal manufactures	14.6	12.6	7.3	14.4	12.4	11.2
Ion-manufacturing branches	7.7	7.9	5.3	11.2	12.5	9.3
of which:						
Wholesale and retail trade	15.6	11.9	6.1	11.8	12.2	10.3
Transportation and storage	5.0	7.7	8.3	10.8	14.2	9.2
Accommodation and food service activities	14.5	5.8	2.6	1.7	3.5	2.0
Information and communication	12.3	20.4	3.5	14.8	12.4	11.1
Real estate activities	9.3	11.6	2.8	7.4	8.8	5.9
Other service activities	4.1	4.8	4.7	15.2	16.5	11.4
Energy, water supply and waste	10.9	8.4	4.5	10.2	8.2	5.8
Construction	16.3	16.0	12.7	12.5	13.9	11.9

Source: NBB.
(1) Globalised ratios.

other hand, the vast majority of firms examined here are not listed on the stock exchange.

The drop in median profitability in 2008 underlines the fact that the deterioration in the economic climate affected all Belgian firms. Table 7 widens the angle of the analysis by presenting the detailed distribution of the net profit ratio of total assets before tax and debt servicing. This ratio has the advantage of being independent of firms' financing structure, and is therefore also referred to as the "return on assets". It is better for analysing the extreme ranges of the distribution because it is available for all firms, unlike the return on equity which can only be calculated in the case of positive equity capital.

The values for the tenth percentiles and the first quartiles show that, every year, many firms actually incur losses. In 2008, more than one quarter of all SMEs had a negative ratio, and 10 p.c. had a ratio below –13.8 p.c. These firms

are relatively small-sized: in 2007, the 24 p.c. of companies (SMEs and large firms alike) showing a negative return on assets accounted for 11 p.c. of employment in all non-financial corporations and 7 p.c. of their balance sheet total. Moreover, as one moves down to the low-profitability strata of the population, the ratio increases less over time, and even declines. As a result, the interquartile ranges (i.e. the difference between Q3 and Q1) have widened since 1999.

TABLE 7 DISTRIBUTION OF THE NET RETURN ON TOTAL ASSETS BEFORE TAX AND DEBT SERVICING (percentages)

	1999	2004	2005	2006	2007	2008 e	Difference 1999-2008 e
Large firms							
P90	20.0	22.6	23.2	23.9	24.3	23.2	+3.2
Q3	9.9	11.5	11.9	12.6	13.0	12.2	+2.3
Q2	4.0	4.5	4.7	5.1	5.5	4.9	+0.9
Q1	0.7	0.8	1.0	1.3	1.5	1.2	+0.5
P10	-6.1	-6.6	-5.6	-4.6	-4.4	-6.8	-0.6
Interquartile range	9.2	10.7	10.9	11.3	11.4	11.0	+1.8
SMEs							
P90	24.0	25.5	25.8	26.4	27.8	27.0	+3.0
Q3	12.2	12.9	12.9	13.3	14.1	13.3	+1.1
Q2	5.2	5.1	5.1	5.3	5.7	5.3	+0.1
Q1	0.0	-0.4	-0.4	-0.2	0.0	-0.3	-0.3
P10	-10.3	-12.9	-13.0	-12.5	-11.6	-13.8	-3.5
Interquartile range	12.2	13.3	13.3	13.5	14.1	13.6	+1.4

Source: NBB.

#### 3.2 Solvency

Solvency concerns the ability of firms to honour their commitments, whether short- or long-term. This article analyses it on the basis of two concepts: the degree of financial independence and the extent to which borrowings are covered by the cash flow.

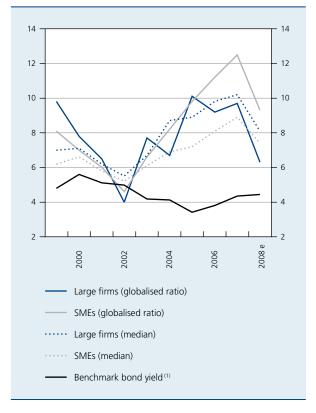
The degree of financial independence is equal to the ratio between equity capital and total liabilities. If the ratio is high, the firm is independent of borrowings, which has two beneficial effects: on the one hand, financial expenses are low and therefore do not weigh heavily on profits; on the other hand, if necessary, the firm can easily contract new debts on favourable terms. The degree of financial independence can also be interpreted as a measure of the firm's financial risk, since the remuneration of third parties is fixed, unlike the firm's results which fluctuate over time.

In 2008, the globalised financial independence ratio reached 47.6 p.c. for large firms and 36.6 p.c. in the case of SMEs (chart 6). In the space of ten years, the ratio for large firms has gained almost 9 points, and that for SMEs 4.6 points. In the last few years, this upward trend has continued as a result of the new tax allowance

for risk capital (as mentioned above), which has helped push up the ratio since the 2005 reporting year. As the medians indicate, improvements in solvency were seen across the whole spectrum of non-financial corporations. The analysis of the whole distribution (table 8) nevertheless suggests that, over the last decade, the gains have been greater in the most solvent strata of the population. Consequently, as in the case of profitability, the interquartile ranges have gradually widened (+7.3 points for large firms, +5.9 points for SMEs). Moreover, in the case of small firms, the stagnation of Q1 and the marked deterioration of P10 show that a large fraction of the population has not benefited from the upward trend.

The degree of financial independence and its reciprocal, the debt level, provide a picture of the general balance of the assets and liabilities. This yardstick is necessary to diagnose solvency, but it has to be backed up by other variables, particularly those concerning firms' ability to repay their debts. The degree to which borrowings are covered by cash flow, which measures the proportion of debts that the firm could repay by allocating the whole of the year's cash flow to paying them back, indicates the firm's repayment capability. The converse of that ratio indicates the number of years which it would take to repay all the debts at a constant cash flow. The information supplied by this

CHART 5 RETURN ON EQUITY AND BENCHMARK BOND YIELD (1)
(percentages)



Source: NBB.

(1) Gross rate for the benchmark bond (ten-year government linear bonds).

ratio supplements that provided by the ratio of financial independence, as a high level of indebtedness may very well be mitigated by a substantial repayment capability, and vice versa.

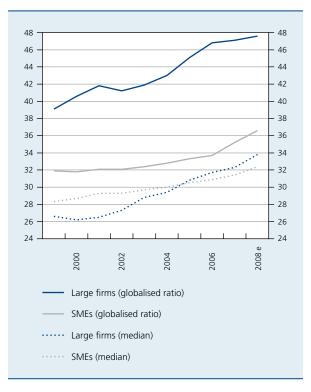
In 2008, the globalised cover rate of borrowings was eroded across the board, under the combined effect of the contraction in cash flow and the rise in debts (chart 7). In globalised terms, the ratio came to 10 p.c. for large firms and 13.4 p.c. for SMEs. The branches which had the strongest influence on this development were chemicals, telecommunications, the agri-food industry and real estate. Moreover, this weakening of the cover rate affected the whole population (see the medians).

Combining financial independence and the degree to which borrowings are covered, chart 8 points up some slight sectoral differences in solvency. It also shows to what extent the choice of measure (the median or globalised ratio) can influence the outcome. In globalised terms, while industry tends to have a heavier debt

burden than the services branches, at the same time it is in a better position to repay its debts. Cash flow cover of borrowings nevertheless declined across the board in 2008. The solvency ratio tends to be relatively more stable over time, since it is made up of stock variables, which are by nature less volatile. If the two criteria are taken into account, the branches with the best solvency ratios in 2008 were the chemicals and pharmaceuticals industries, metal manufactures, transport and storage, as well as other service-related activities. The low globalised level of indebtedness in these branches is largely due to the so-called "activities of head office", which have benefited from significant capital injections in recent years.

The image presented by the medians varies considerably. In most of the branches surveyed, median financial independence ratios are below their globalised equivalent. The cash flow coverage ratio, on the other hand, is generally higher, and especially in 2008 following the drop in globalised ratios. Generally speaking, the median firms therefore compensate for their debt through a higher repayment capability.

CHART 6 DEGREE OF FINANCIAL INDEPENDENCE (percentages)



Source : NBB.

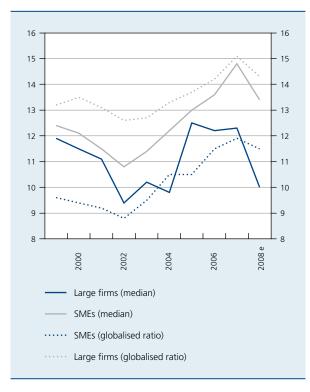
TABLE 8 DISTRIBUTION OF THE DEGREE OF FINANCIAL INDEPENDENCE (percentages)

	1999	2004	2005	2006	2007	2008 e	Difference 1999-2008 e
Large firms							-
P90	78.4	82.3	83.3	84.5	85.8	87.4	+9.0
Q3	51.4	55.9	57.0	58.4	59.8	62.4	+11.0
Q2	26.6	29.4	30.8	31.7	32.3	33.8	+7.2
Q1	10.6	11.7	12.4	13.5	13.8	14.3	+3.7
P10	0.4	0.0	0.1	0.5	0.7	0.6	+0.2
Interquartile range	40.8	44.2	44.6	44.8	46.1	48.1	+7.3
SMEs							
P90	83.3	84.5	84.6	85.1	85.7	87.0	+3.7
Q3	56.7	59.1	59.7	60.0	61.0	62.9	+6.2
Q2	28.3	30.0	30.5	30.9	31.4	32.4	+4.1
Q1	8.9	8.6	8.8	8.7	9.1	9.2	+0.3
P10	-15.4	-20.1	-20.7	-20.9	-19.8	-23.8	-8.4
Interquartile range	47.9	50.4	50.9	51.3	52.0	53.8	+5.9

Source: NBB

CHART 7 DEGREE TO WHICH BORROWINGS ARE COVERED BY CASH FLOW

(percentages)



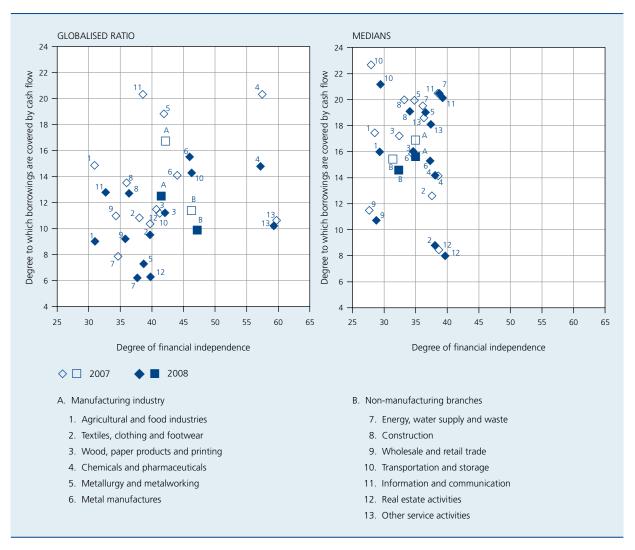
Source : NBB.

#### 3.3 Liquidity

Liquidity means the capacity of firms to mobilise the cash resources needed to meet their short-term commitments. It is traditionally assessed as the liquidity ratio in the broad sense. This ratio, derived from the concept of the net working capital, compares the total assets realisable and available (stocks, claims at up to one year, cash investments, liquid resources and accruals and deferrals) with the short-term liabilities (debts at up to one year and accruals and deferrals). The higher the liquidity in the broad sense, the more capable the firm of meeting its short-term financial commitments. In addition, when the ratio is higher than 1, the net working capital is positive.

In 2008, the globalised ratio came to 1.25 for large firms and 1.24 for SMEs (chart 9). While the ratio for SMEs remained virtually unchanged, that for large firms saw a sharp correction, on account of financial flows between subsidiaries of the same group. These transfers took the shape of write-downs or debt increases in respect of affiliated companies. The medians follow the same continuity seen in previous years, namely on an upward path, bearing witness to the fact that globalised variations are not necessarily representative of the majority of firms.

CHART 8 DEGREE OF FINANCIAL INDEPENDENCE AND CASH FLOW COVERAGE OF BORROWINGS, PER BRANCH OF ACTIVITY (percentages)



Source: NBB

Lastly, as with profitability and solvency, the dispersion in ratios has widened over the last ten years: the ratio has increased in the most liquid strata of the corporate population while stagnating or contracting in the least liquid layers (table 9).

There are occasionally objections to the fact that the accounting ratios do not necessarily represent corporate financial reality. Likewise, the interpretation of some of these ratios is sometimes called into question because of the way in which they are calculated. This is the case of the liquidity ratio in the broad sense, which leaves itself wide open to criticism because it takes account of the balance of assets and liabilities on the closing day of the accounting year. Because of this, it may

not give a true and fair view of the liquidity position over the whole financial year. These criticisms need to be put into perspective. The observation actually shows that a ratio such as liquidity in the broad sense is greatly influenced by the likelihood of default. This, at least, emerges from an analysis based on the annual accounts for the financial years 1996, 1997 and 1998, among which corporate bankruptcies over the following years have been detected. A firm is considered to be in default if it is facing bankruptcy or legal settlement. From one accounting year to the next, defaulting firms thus defined account for less than 2 p.c. of the annual accounts filed, and the vast majority (more than 98 p.c.) of them are SMEs.

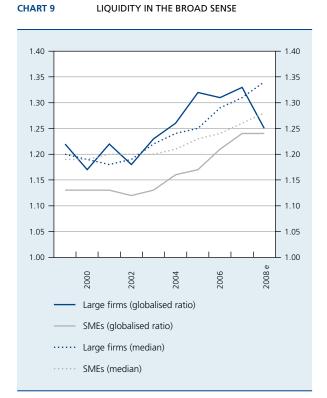
Take, for example, the annual accounts for reporting year N. Each annual account is given a code depending on how close in time a default is:

- D1: annual accounts of a company defaulting in N+1;
- $-\,$  D2: annual accounts of a company defaulting in N+2;

- ...

- D7: annual accounts of a company defaulting in N+7;
- ND: annual accounts of a non-defaulting company<sup>(1)</sup>.

By using this typology, it can be seen that the medians deteriorate as the likelihood of default approaches, the same observation also applying to the entire distribution, including the first and third quartiles (chart 10). To sum up, although the ratios do not enable a perfect assessment of companies' accounting position, they are statistically significant as regards financial risk-taking.



Source: NBB.

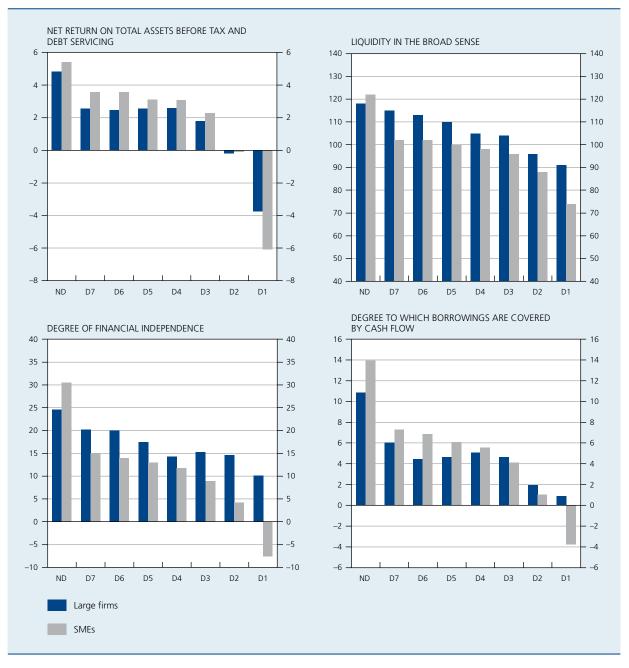
(1) Over the seven following calendar years.

TABLE 9 DISTRIBUTION OF LIQUIDITY IN THE BROAD SENSE

	1999	2004	2005	2006	2007	2008 e	Difference 1999-2008 e
Large firms							
P90	3.84	4.51	4.74	5.40	5.73	6.54	+2.70
Q3	1.80	1.99	2.05	2.14	2.19	2.34	+0.54
Q2	1.20	1.24	1.25	1.29	1.31	1.34	+0.14
Q1	0.94	0.92	0.94	0.96	0.96	0.96	+0.02
P10	0.48	0.42	0.43	0.45	0.44	0.42	-0.06
Interquartile range	0.87	1.07	1.11	1.18	1.23	1.38	+0.51
SMEs							
P90	4.99	5.77	5.90	6.07	6.42	7.18	+2.19
Q3	2.10	2.29	2.35	2.38	2.46	2.61	+0.51
Q2	1.19	1.21	1.23	1.24	1.26	1.28	+0.09
Q1	0.69	0.64	0.65	0.67	0.68	0.67	-0.02
P10	0.22	0.19	0.19	0.20	0.20	0.19	-0.03
Interquartile range	1.41	1.65	1.69	1.72	1.78	1.94	+0.53

Source: NBB.

CHART 10 MEDIAN PROFITABILITY, SOLVENCY AND LIQUIDITY ACCORDING TO PROXIMITY OF DEFAULT



Source: NBB.

## Conclusion

This article describes the financial situation of Belgian enterprises over the period running from 1 January to 31 December 2008 as a whole. Because of the particularly contrasting economic trends over that period, the analysis is somewhat blurred. The information gathered nevertheless gives some indication of the resistance capacity of firms as they went into the recession.

For the year 2008 as a whole, the value added generated by Belgian non-financial corporations grew by 1.8 p.c., to reach almost 164 billion euro at current prices. This is a marked slowdown from the five previous years, during which value added had expanded at an annual average rhythm of 5.1 p.c. More than just a slackening of firms' sales volume, this slowdown can be explained first and foremost by the sharp rise in the price of imported raw

materials. Owing to the weakening of final demand, firms have not been able to pass the whole increase onto their sales prices.

Driven by staff costs and depreciation, growth in total operating expenses picked up, rising by 6.0 p.c. compared with 2007. Combined with the slowdown in value added, this trend turned into a 13.0 p.c. contraction in the net operating result. Such a decline in operating profits has not been seen since 2001 but it should not be forgotten that it had doubled in the space of the previous five years, rising gradually from 17 billion euro in 2002 to more than 35 billion in 2007.

Taking account of the other components making up the profit and loss account (namely, financial results and extraordinary items as well as taxes), the net operating result of non-financial corporations amounted to some 43 billion euro in 2008, which works out at a 14.6 p.c. drop on 2007.

The financial position of firms showed a contrasting picture as at 31 December 2008. As a result of the deterioration of the economic climate, profitability and coverage of borrowings by cash flow dropped across the board. On the other hand, the degree of financial independence followed the upward trend of the last few years, after new equity capital injections. And lastly, liquidity positions generally continued to improve although they actually worsened in very large enterprises, reflecting financial transfers between affiliated companies.

Finally, an analysis of the ratio distribution showed that a large proportion of firms are in an unfavourable financial situation. For instance, each year, almost one quarter of all the firms surveyed incur losses. These firms are mostly SMEs. It also emerges from the analysis that the ratio distribution has widened over time: overall, the ratios are improving in the best-off segments of the corporate population, while they are stagnating or even worsening in the lower levels.

## Annex 1

44,213 18,195 9,020 163,974 27,737 30,857 62,408 49,052 2,896 51,948 42,928 40,032 11,571 2008 9,735 125,615 35,459 46,940 37,716 26,442 33,632 12,525 59,465 9,225 50,241 161,074 11,481 2007 29,205 8,868 42,625 10,913 41,589 122,000 38,072 9,562 51,152 8,527 2006 8,189 11,145 8,145 8/9/6 33,699 38,133 49,278 23,882 115,927 29,944 145,871 2005 27,419 37,829 5,999 33,419 33,425 26,078 139,503 23,023 112,084 43,829 7,347 26,071 2004 44,975 26,765 20,178 22,858 109,147 21,680 32,686 6,587 26,099 130,827 8,963 5,921 2003 43,015 125,294 108,025 21,128 2002 ALL NON-FINANCIAL CORPORATIONS: MAIN COMPONENTS OF THE PROFIT AND LOSS ACCOUNT 17,145 17,343 18,782 23,821 2001 19, 168 29,620 25,272 21,606 101,875 2,825 22,862 28,096 6,491 18,781 3,515 17,628 21,143 94,917 26,940 5,822 15,321 1999  $\widehat{\bot}$  $\bigcirc$  $\bigcirc$  $\bigcirc$  $\widehat{\pm}$ 1  $\widehat{\pm}$ excluding the exceptional result (millions of euro) tax Other operating expenses Total operating expenses Net result before tax Net operating result Net result after Net result after tax **Exceptional result** Financial charges Ordinary result Financial income Taxes on profits Financial result Value added Depreciation TABLE p.m.

Source: NBB

LARGE FIRMS: MAIN COMPONENTS OF THE PROFIT AND LOSS ACCOUNT (millions of euro) TABLE 2

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008 e
Value added	87,246	93,840	95,281	96,425	100,653	107,082	111,521	117,617	121,731	122,668
Staff costs         (-)	52,865	26,007	58,142	58,935	608'09	62,558	64,228	66,645	69,423	72,392
Depreciation(-)	15,704	16,919	17,465	17,494	16,388	16,152	16,581	17,310	18,158	19,045
Other operating expenses(-)	5,317	6,483	7,345	6,389	7,262	7,236	7,800	8,979	2,668	9,355
Total operating expenses	73,886	79,409	82,951	83,818	84,459	85,945	88,610	92,934	95,249	100,792
Net operating result	13,360	14,431	12,330	12,607	16,194	21,137	22,911	24,683	26,482	21,876
Financial income(+)	24,291	34,035	35,850	45,112	48,175	41,826	39,736	35,646	41,710	58,621
Financial charges(-)	19,697	26,677	27,828	39,678	41,517	34,382	30,291	25,543	29,580	39,325
Financial result	4,594	7,358	8,022	5,435	6,658	7,444	9,445	10,103	12,129	19,296
Ordinary result	17,954	21,789	20,352	18,041	22,852	28,582	32,356	34,785	38,611	41,172
Exceptional result	4,875	2,035	873	-3,185	5,345	-852	9,865	7,852	10,293	869
Net result before tax	22,829	23,823	21,225	14,856	28,198	27,730	42,221	42,637	48,904	42,041
Taxes on profits(-)	4,274	4,724	4,615	4,353	4,793	5,368	5,968	6,092	6,511	6,249
Net result after tax	18,555	19,099	16,609	10,503	23,405	22,362	36,253	36,545	42,393	35,792
p.m. Net result after tax excluding the exceptional result	13,680	17,064	15,737	13,689	18,059	23,214	26,388	28,694	32,100	34,923

5,109

10,562 2,714 7,848 5,615

2,232

-1,235 8,515 2,436 6,079 19,300 7,833 1,933 8,039 2,427 3,662 6,804 4,368 29,066 1,711 2006 27,318 3,408 -1,256 2,177 4,879 1,878 7,033 2,152 5,777 1,279 7,056 3,600 7,301 2005 17,415 1,979 3,716 3,448 -1,445 2,858 32,421 6,872 1,852 26,139 6,282 2,003 4,837 859 5,696 2004 3,913 2,119 30,174 24,688 5,486 -1,573 576 4,488 1,794 2,694 16,517 3,457 6,471 1,701 1,884 2003 -1,575 3,337 3,087 1,803 1,804 1,284 28,870 4,662 1,762 3,608 1,631 521 2002 6,213 4,815 1,629 3,150 -1,346 1,863 2,172 23,434 1,805 3,469 4,035 999 1,606 2001 14,979 1,544 2,942 -1,254 1,766 2,507 1,717 5,943 22,466 4,737 1,688 3,483 4,273 790 2000 -1,079 4,268 2,560 3, 189 1,548 2,563 1,446 21,031 1,481 4,111 1,641 922 SMES: MAIN COMPONENTS OF THE PROFIT AND LOSS ACCOUNT 1999  $\widehat{\pm}$  $\widehat{\mathbf{L}}$  $\widehat{\bot}$  $\widehat{\bot}$  $\widehat{\bot}$ 1  $\widehat{\pm}$ tax excluding the exceptional result (millions of euro) Staff costs ..... Value added ..... Other operating expenses Total operating expenses Net result before tax p.m. Net result after Net operating result Net result after tax **Exceptional result** Financial charges Financial income Ordinary result Taxes on profits Financial result Depreciation TABLE 3

2,215

2,067 30,366 **8,977** 3,404

8,981 3,786 4,887 -1,101 7,880 2,027 2,027 2,771 7,136

> 4,052 -648 8,330

8,692

20,015

41,306

2008 e

2007

Source: NBB

MANUFACTURING INDUSTRY: MAIN COMPONENTS OF THE PROFIT AND LOSS ACCOUNT (millions of euro)

TABLE 4

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008 e
Value added	38,549	41,559	41,240	41,615	41,970	44,300	45,456	48,278	47,808	45,393
Staff costs(-)	23,678	24,481	25,474	25,798	25,644	26,313	26,462	27,144	27,924	28,111
Depreciation(-)	7,838	8,346	8,651	8,530	7,798	7,593	7,846	8,198	8,019	8,235
Other operating expenses(–)	1,498	1,658	2,203	1,621	1,555	1,695	1,744	2,464	1,343	1,313
Total operating expenses	33,014	34,485	36,328	35,948	34,997	35,602	36,053	37,806	37,285	37,659
Net operating result	5,535	7,074	4,912	5,667	6,974	8,698	9,404	10,471	10,522	7,734
Financial income (+)	3,266	4,480	4,198	5,114	5,954	6,747	6,456	8,423	10,662	14,514
Financial charges(–)	3,465	4,740	5,075	5,259	5,337	5,536	5,444	2,660	6,675	8,384
Financial result	-199	-259	-876	-145	617	1,210	1,013	2,763	3,986	6,130
Ordinary result	5,335	6,815	4,036	5,522	7,591	806'6	10,417	13,234	14,509	13,864
Exceptional result	730	1,024	82	-187	743	330	7,034	2,250	3,979	1,163
Net result before tax	90'9	7,839	4,121	5,334	8,334	10,238	17,450	15,484	18,488	15,027
Taxes on profits(–)	1,824	2,226	1,846	1,766	1,851	2,095	2,266	2,269	2,289	2,302
Net result after tax	4,242	5,613	2,275	3,568	6,483	8,144	15,185	13,215	16,199	12,725
p.m. Net result after tax excluding the exceptional result	3,512	4,589	2,190	3,756	5,740	7,814	8,151	10,965	12,220	11,562

Source: NBB.

ITS OF THE PROFIT AND LOSS ACCOUNT NON-MANUFAC

COMPONEN	
ANUFACTURING BRANCHES: MAIN COMPONEN	
ON-MANUFACTURING	

TABLE 5

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008 e
Value added	73,996	79,484	82,290	83,679	88,857	95,203	100,415	106,444	113,266	118,581
Staff costs(-)	43,282	46,505	48,260	50,316	51,682	53,659	52,905	58,800	61,514	669'59
Depreciation(-)	13,356	14,516	15,027	15,362	15,061	15,430	16,036	16,945	18,423	19,542
Other operating expenses(–)	5,265	6,370	6,770	668'9	7,408	7,393	7,934	8,448	8,392	10,218
Total operating expenses	61,903	062'390	70,057	72,077	74, 150	76,482	79,875	84,193	88,330	95,458
Net operating result	12,093	12,093	12,233	11,602	14,707	18,721	20,540	22,250	24,937	23,123
Financial income (+)	22,506	31,243	33,456	41,760	44,105	37,082	35,432	29,650	34,452	47,893
Financial charges(–)	18,792	24,880	25,903	37,756	39,638	32,293	28,256	23,545	26,957	35,828
Financial result	3,714	6,363	7,553	4,004	4,468	4,789	7,176	6,105	7,495	12,065
Ordinary result	15,808	18,457	19,786	15,607	19,174	23,510	27,716	28,355	32,432	35,188
Exceptional result(+)	2,067	1,800	1,353	-2,477	5,178	-323	4,111	7,313	8,546	1,733
Net result before tax	20,875	20,257	21,139	13,130	24,352	23, 187	31,827	35,668	40,978	36,921
Taxes on profits(-)	3,998	4,265	4,632	4,390	4,736	5,253	5,879	6,259	986'9	6,718
Net result after tax	16,877	15,992	16,507	8,739	19,616	17,934	25,948	29,410	34,041	30,204
p.m. Net result after tax excluding the exceptional result	11,809	14,192	15,154	11,217	14,438	18,257	21,837	22,097	25,495	28,470

Source: NBB.

# Annex 2

### SECTORAL GROUPINGS

	NACE-BEL 2008 divisions
– Manufacturing industry	10-33
of which:	
Agricultural and food industries	10-12
Textiles, clothing and footwear	13-15
Wood, paper products and printing	16-18
Chemicals and pharmaceuticals	20-21
Metallurgy and metalworking	24-25
Metal manufactures	26-30
Non-manufacturing branches	01-09, 35-82, 85.5 and 9 <sup>(1</sup>
of which:	
Wholesale and retail trade	45-47
Transportation and storage	49-53
Accommodation and food service activities	55-56
Information and communication	58-63
Real estate activities	68
Other service activities	69-82
Energy, water supply and waste	35-39
Construction	41-43

<sup>(1)</sup> Except 64, 65, 75, 94, 98 and 99.

# Annex 3

#### DEFINITION OF THE RATIOS

	Item numbers allocated	
	full format	abbreviated format
1. Return on equity		
Numerator (N)	9904	9904
Denominator (D)	10/15	10/15
Conditions for calculation of the ratio: 12-month financial year $10/15 > 0^{(1)}$		
2. Net return on total assets before tax and debt servicing		
Numerator (N)	9904 + 650 + 653 - 9126 + 9134	9904 + 65 - 9126 + 67/77
Denominator (D)	20/58	20/58
12-month financial year		
3. Degree of financial independence		
Numerator (N)		10/15
Denominator (D)	10/49	10/49
4. 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 = $N/D \times 100$		
Condition for calculation of the ratio: 12-month financial year		
5. Liquidity in the broad sense		
Numerator (N)	3 + 40/41 + 50/53 + 54/58 + 490/1	3 + 40/41 + 50/53 + 54/58 + 490/1
Denominator (D)	42/48 + 492/3	42/48 + 492/3

<sup>(1)</sup> Condition valid for the calculation of the median but not for the globalised ratio.