

# SHORT TERM UPDATE

## 2-09

Quarterly Newsletter  
May 2009

Headlines Belgian Economy

Special Topic in this issue

The current account, market  
shares and competitiveness

# Quarterly Newsletter of the Federal Planning Bureau

*Short Term Update (STU) is the quarterly newsletter of the Belgian Federal Planning Bureau. It contains, in English, the main conclusions from the publications of the FPB, as well as information on new publications, together with an analysis of the most recent economic indicators.*

## HEADLINES BELGIAN ECONOMY

*The new medium-term economic outlook for Belgium has been drawn up in an international context that is heavily influenced by the financial crisis and the deep economic recession this has brought about. Belgian GDP should fall by nearly 4% in 2009, followed by zero growth in 2010 as the crisis subsides. In the wake of a worldwide recovery, Belgian GDP growth should start accelerating from 2011 onwards, resulting in average growth for the period 2011-2014 (2.3%) that is similar to the average of the past twenty years. Note that the global economic situation is beset with many uncertainties and, therefore, the outlook is surrounded with considerable risks, especially for the short term.*

*Households are expected to raise their precautionary savings dramatically in 2009, thus lowering their consumption compared to last year (-0.6%). Strongly unfavourable demand prospects, combined with a sharp drop in profitability and deteriorated external financing conditions will lead to a sharp contraction in business investment (-7.5%). Domestic demand should recover slightly in 2010 and more markedly from 2011 onwards. The volume of Belgian exports is expected to go down for two years in a row (-8.9% in 2009 and -0.6% in 2010) and the contribution of net exports to GDP growth should be largely negative. From 2011, Belgian export growth should be close to its historical growth rate (4.8%). After a peak in 2008 (4.5%), the inflation rate should fall to 0.3% on average in 2009. In the medium term, inflation is expected to pick up again, but to remain below 2%.*

*The effects on employment of the sudden fall in activity should materialise progressively: domestic employment should drop on average by 37 000 jobs this year and by 53 000 jobs next year. The recovery in 2011 should not be labour-intensive and employment is only expected to increase significantly from 2012 onwards (by a little more than 43 000 jobs a year on average). This evolution of employment, combined with an increase in the labour supply, should lead to a rise in unemployment of 194 000 units from 2009 to 2011. In the next three years, the unemployment rate (broad administrative definition) should go up from 11.8% to 15.2%. As from 2012, the unemployment rate should gradually decrease to reach 14.5% in 2014.*

*Under the assumption of constant policy, public sector accounts are expected to deteriorate markedly, with a net public financing requirement of 4.3% of GDP in 2009, widening to 5.6% of GDP in 2010. The end of the recession will not lead to a reduction in the deficit, which should peak at 6.1% of GDP in 2012 before slightly improving afterwards. As a result, Belgian public debt should again experience a snowball effect, going up from 89.3% of GDP in 2008 to 106% of GDP in 2014.*

*STU 2-09 was finalised on 27 May 2009*

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## The current account, market shares and competitiveness

Over the last few years, the Belgian current account surplus has turned into a deficit: it evolved from a sizeable surplus of 5.0% of GDP on average from 1994-2002 to -1.3% in 2008. Given the high degree of Belgian openness, it is particularly important to understand the reasons for these evolutions, which is the aim of this special topic.

As shown in the table below, over half of this reversal is attributable to the deterioration in the terms of trade (i.e. import prices increasing faster than export prices, mainly because of the surge in oil and other commodity prices). The outpacing of export volume growth (in part due to the deterioration of competitiveness) by import volume growth (driven by dynamic domestic demand) counts for a third of the deterioration of the current account. The decline in net factor income from abroad was of lesser importance.

### Contributions of the different components to the change in the current account balance 2002-2008

	In % of GDP	In % of the total deterioration in the current account
Current account balance	-6.3	100.0%
Net exports of goods and services	-5.5	86.9%
Volume effect	-2.1	33.2%
Terms of trade effect	-3.4	53.7%
Net factor income from the rest of the world	-0.7	11.6%
Net current transfers from the rest of the world	-0.1	1.3%

Source: INR, FPB

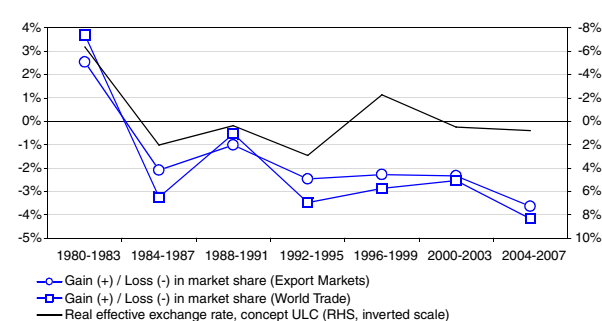
The relative weakness of Belgian export growth is of particular concern and is also noticeable in the evolution of Belgium's export market share, defined as the difference between export growth and the weighted growth in imports by our main trading partners (see Graph 1, concept export markets). Although the loss in market share is also a structural phenomenon, shared with many western countries, the Belgian market share loss became significantly larger in the period 2004-2007.

This evolution was in line with the worsening of competitiveness, measured by means of the unit labour cost (ULC)-based real effective exchange rate, or REER. Belgian ULCs, which consist of nominal wage costs and labour productivity, are thus related to a weighted average of our competitors' ULCs, expressed in a common currency. To a large extent, the deterioration of competitiveness was due to the appreciation of the euro against most other currencies, since unit labour costs increased scarcely any faster than those of our trading partners. However, the stabilisation of relative ULCs over 2000-2007 conceals a substantial increase in the latter three years, which is likely to continue in 2008 and 2009.

The increase over 2005-2009 is mainly attributable to the pronounced wage moderation seen in Germany.

From the graph below, however, it is clear that evolutions in competitiveness alone are insufficient for explaining market shares. Especially from 1995 onwards, competitiveness seems to lose in importance as an explanatory variable. In spite of a sizeable gain in competitiveness in the period 1996-1999, the loss in market share remained as large as in the previous period.

**Graph 1 - Evolution of market share (concept export markets & world trade<sup>1</sup>) and the REER, four-year averages**



Source: European Commission, FPB

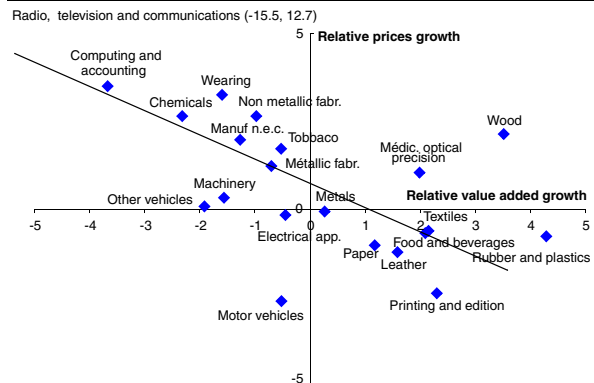
Other non-competitiveness-related or structural factors have hence also played a role in the evolution of our exports. One such structural factor is the geographical specialisation of exports, as can be seen in the difference between the two market share concepts in the graph above. A breakdown of Belgian exports by region shows that exports to emerging economies in Eastern Europe and Asia are too weak to reap the full benefits of those regions' sustained import growth and that the larger share of exports that still goes to the old EU Member States, which have slow import growth, acts as a drag on the market share. Another structural factor is the product mix of Belgian exports. Since the early 90s Belgium has been losing market share because of the fairly small share of ICT products in its exports, which are among the most dynamic components of world import growth. Until recently, this was also true for business services exports, in which Belgium underperforms its neighbours. The relatively weak global demand for motor vehicles has also led to market share losses as they are one of Belgium's main export products. However, these unfavourable developments were to some extent compensated for by chemical and pharmaceutical products, which are the country's most important export products and for which global demand has been strong.

1. The market share concept, "world trade", is defined as the difference between growth in Belgian exports and in world trade.

Belgian competitiveness could also be analysed by looking at the evolution of the share of Belgian industries in the total value added of the European Union (EU15). This sheds a different but complementary light to that given by the traditional approach, which is based on export market share. Indeed, the aim is not to gain export market shares if their content in local value added decreases when exporters make greater calls on foreign suppliers. The analysis based on value added takes this aspect into account.

Between 2000 and 2005, the relative position of Belgian manufacturing slightly deteriorated. This deterioration was due to the large number of industries recording weaker value added growth than the value added growth of the same industries in the EU15. This relative weakness of value added growth was concomitant with a faster increase in prices (of value added) in Belgian industries in comparison with their European counterparts, as illustrated by Graph 2, which links the average annual growth rate of the relative value added with that of relative prices. For most sectors, when the price increase is faster than the European one, the value added growth rate is lower than that of Europe.

**Graph 2 - Relative position of Belgian manufacturing in the EU15, average annual growth rate (%), 2000-2005**



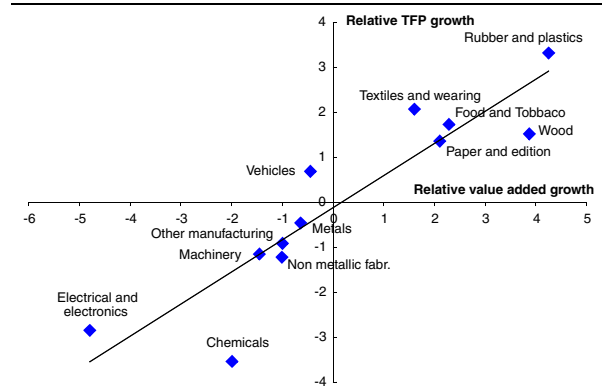
Source: EU Klems March 2008 release.

Prices increase when the unit cost of labour or of capital increases, all things being equal elsewhere. The unit cost increases when the hourly wage increases faster than labour productivity growth or when the compensation for one unit of capital increases faster than capital productivity growth.

The faster price increases in Belgian manufacturing are explained for almost two thirds of the change by a faster increase in the unit capital cost and for a little more than one third by a faster increase in the unit labour cost. These faster increases in unit costs are mainly due to weaker growth in labour productivity as well as in that of capital, resulting from a negative evolution of Total Factor Productivity (TFP). This TFP gathers a set of elements influencing productive efficiency such as innova-

tion capacity, return on scales, degree of competition, the regulatory framework, etc. The manufacturing industries that have recorded a deterioration in their relative position have not been as successful as their European competitors in using technological progress to improve their productive efficiency or to develop new products. This was particularly the case for chemicals and electrical and electronic equipment, as illustrated by Graph 3, which shows the positive relation between the average annual growth rate of the relative value added and the annual average growth rate of the relative TFP.

**Graph 3 - Relative growth of value added and TFP of Belgian manufacturing, average annual growth rate (%), 2000-2005**



Source: EU Klems, March 2008 release.

However, some industries - food and beverages, textiles, wood, paper, rubber and plastics and paper and publishing - were successful in recording an improvement in both their relative position and their relative TFP.

Between 2000 and 2005, the relative position of Belgian market services in the EU15 value added improved slightly despite the unfavourable price evolution. The faster price increase recorded by Belgian market services is due only to a faster increase in unit capital cost. Indeed, the other determinant of price evolution, unit labour cost, increased much more slowly in Belgium than in the EU15. This good relative performance of unit labour cost in Belgian market services is only explained by a faster increase in hourly productivity, with all Belgian market services increasing their capital intensity much more rapidly than their European counterparts.

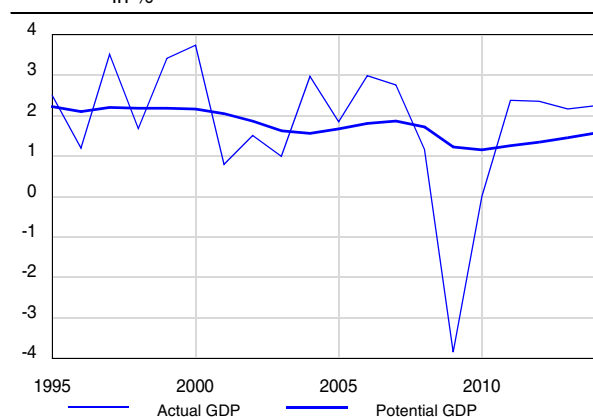
In conclusion, the deterioration in the current account was due to the surge in commodity prices, the appreciation of the euro, the adverse geographical orientation of our exports and the unfavourable export product mix, even though unit labour costs remained in line with those of our main trading partners. The alternative competitiveness measurement tool sheds light on the deterioration of the relative productivity growth of Belgian manufacturing, which was mainly due to the weakness of TFP growth.

Economic forecasts 2009-2014

The new economic outlook for Belgium for the period 2009-2014 has been drawn up in an international context that is heavily influenced by the financial crisis and the deep economic recession this has brought about. The international macroeconomic scenario from 2010 onwards is based on an analysis of previous financial crises. It is assumed that the crisis will not be followed by a strong economic recovery. This means that the loss of economic activity due to the current crisis is not completely compensated at the end of the projection period. It should be noted, however, that this scenario involves an exceptionally high degree of uncertainty.

Due to the collapse of international trade, the Belgian economy has plunged into its worst post-war recession. Belgian GDP should fall by nearly 4% in 2009. The crisis should only gradually come to an end, implying a zero growth rate for the Belgian economy in 2010. In the wake of a worldwide recovery, Belgian GDP growth should start accelerating from 2011 onwards, resulting in an average growth rate for the period 2011-2014 (2.3%) that is similar to the average of the past twenty years, although higher than that of the last six years. Note that during the period 2011-2014, GDP growth should largely exceed the potential GDP growth. However, a negative output gap is expected to persist until the end of the projection period.

**Graph 1 - Actual and potential GDP growth in %**

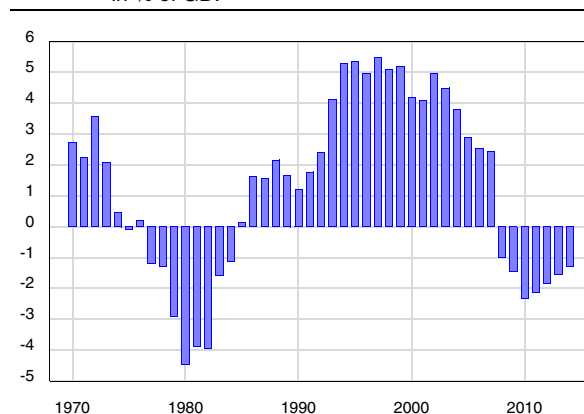


As the economic recession is weighing heavily on consumer confidence, households are expected to raise their precautionary savings dramatically in 2009, thus lowering their consumption in comparison to last year (-0.6%). Strongly unfavourable demand prospects, combined with a sharp cut in profitability and a tightening of external financing conditions should lead to a sharp contraction in business investment (-7.5%). Domestic demand should therefore contract significantly in 2009 (-1.6%) in spite of the support of public consumption (+2%) and public investment (+1.2%). Domestic demand should recover slightly in 2010, despite a further

decline in residential and business investment. As of 2011, domestic demand should rise at an average yearly rate of just above 2% as its various components regain their trend growth.

The volume of Belgian exports is expected to go down for two consecutive years: very markedly in 2009 (-8.9%) and less so in 2010 (-0.6%). At the same time, the fall in imports, guided by the decline in final demand, should be less marked, leading to a strongly negative contribution of net exports to GDP growth in 2009 and 2010. From 2011 onwards, Belgian export growth should be close to its historical growth rate (4.8%). The discrepancy between the growth rate of potential export markets and the volume of exports reflects the persistent and significant loss of market shares in the medium term. Notwithstanding the clear rise in the volume of imports as of 2011 (4.5%), the contribution of net exports to GDP growth is expected to be slightly positive (0.2%-points) on average between 2011 and 2014. The current external balance, which registered a deficit in 2008, will remain largely negative in 2009, despite the fall in energy prices on the international market. The external balance should improve in the medium term, but a deficit should persist.

**Graph 2 - Current external balance in % of GDP**

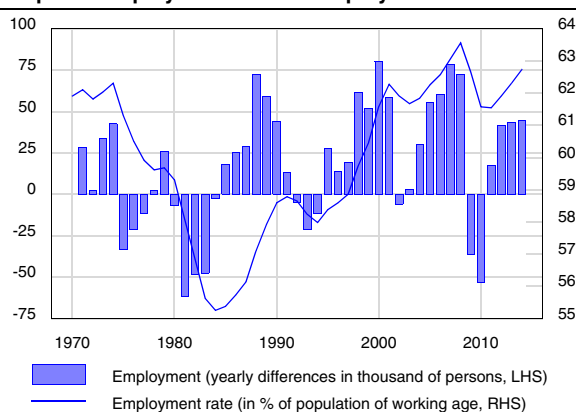


After reaching a peak in 2008 (4.5%), the inflation rate, as measured by the national consumer price index, should amount to 0.3% on average in 2009, partly as a result of the dramatic decrease in energy prices. In the medium term, inflation should start rising again while remaining below the 2% threshold.

The effects on employment of the sudden fall in activity should materialise gradually: domestic employment should drop by 37 000 jobs on average this year and, more drastically, by 53 000 jobs next year. The recovery in 2011 should not be labour-intensive and the number of employed persons should increase only as from 2012 onwards (a little more than 43 000 a year). The labour

supply should grow by 229 000 units over the 2009-2014 period as a result of demographic evolutions (net migration) and increasing activity rates of women aged between 25 and 49 and of men and women aged 50 or more. The evolution of employment, combined with the increase in labour supply, should lead to a rise of 194 000 in the number of unemployed persons over 2009-2011. In three years, the unemployment rate (broad administrative definition) should go up from 11.8% to 15.2%, i.e. the highest level since World War II. As from 2012, unemployment should slowly decrease to reach 14.5% in 2014.

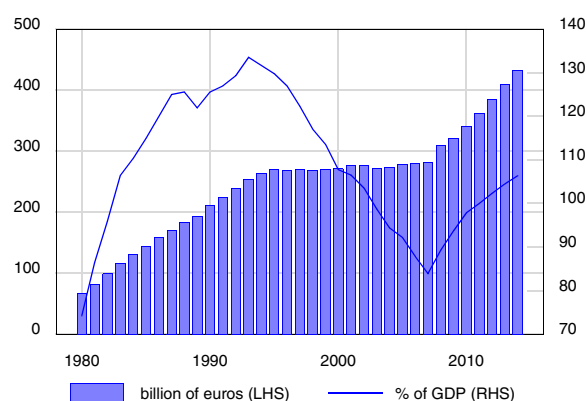
**Graph 3 - Employment and the employment rate**



The GHG emissions target set by the Kyoto Protocol should be widely reached, partly because of the severe contraction in activity in the branches of industry from 2009 to 2011. During the 2008-2012 period, GHG emissions should amount to 125.7 million tons of CO<sub>2</sub> equivalent on average, i.e. a level far under the maximum, set at 134.8 million tons. Even so, the objectives for the reduction in energy consumption and GHG emissions by 2020 that are set for Belgium in the European Climate-Energy Package constitute a new challenge.

The widening government deficit during the recession is in line with the European Commission's recommendations to let the automatic stabilizers work freely and to take budgetary measures to support economic activity. The overall government deficit should reach 4.3% of GDP (14.8 billion euro) in 2009 and 5.6% of GDP (19.4 billion euro) in 2010. Nevertheless, the end of the recession will not lead to a reduction in the deficit, which should peak at 6.1% of GDP in 2012 and improve slightly afterwards. Under the assumption of constant policy, the primary balance should become negative in 2009 and the steady decrease in interest payments that started 20 years ago should come to an end next year. The Belgian public debt should again be subject to a snowball effect and go up from 89.3% of GDP at the end of 2008 to 106% of GDP in 2014. All levels of government are expected to contribute to the deterioration of the budget. However, more than half of the public deficit will be run by the federal government, notably as a result of the growing alternative financing of social security, which should itself curb the social security deficit.

**Graph 4 - Public debt**



*“Perspectives économiques 2009-2014 / Economische vooruitzichten 2009-2014”, FPB, May 2009.*

**Key figures for the medium- term economic outlook**

period averages, changes in volume unless otherwise stated	1997-2002	2003-2008	2009-2014
Potential export market	6.9	6.6	3.0
Private consumption	2.1	1.4	1.1
Public consumption	2.1	1.6	2.0
Gross fixed capital formation	2.9	4.8	0.7
Stock building (contribution to GDP growth)	-0.1	0.2	0.0
Final domestic demand	2.1	2.4	1.2
Exports	4.6	3.6	1.6
Imports	4.3	4.1	1.9
Net exports (contribution to GDP growth)	0.4	-0.3	-0.4
GDP	2.4	2.1	0.9
Private consumption prices	1.6	2.8	1.5
Real disposable income households	1.5	0.8	1.7
Domestic Employment (annual changes in '000)	43.9	48.7	9.5
Unemployment, FPB definition <sup>a</sup>			
-thousands	643.8	600.5	771.8
-% of labour force	13.3	11.8	14.5
Current account balance (% of GDP) <sup>a</sup>	5.0	-1.0	-1.3
General Government financing capacity (% of GDP) <sup>a</sup>	-0.1	-1.2	-5.8

a.End of period

## Summary of Economic Forecasts

### Economic forecasts for Belgium by the Federal Planning Bureau

Changes in volume (unless otherwise specified) (cut-off date of forecasts: 15 April 2009)

	2007	2008	2009	2010
Private consumption	2.1	0.9	-0.6	0.3
Public consumption	2.3	2.7	2.0	1.7
Gross fixed capital formation	6.2	4.3	-5.4	-0.9
Final national demand	3.3	2.4	-1.6	0.6
Exports of goods and services	4.0	2.2	-8.9	-0.6
Imports of goods and services	4.6	3.6	-6.4	0.2
Net-exports (contribution to growth)	-0.4	-1.2	-2.4	-0.7
Gross domestic product	2.8	1.2	-3.8	0.0
p.m. Gross domestic product - in current prices (bn euro)	334.92	345.67	342.10	347.79
National consumer price index	1.8	4.5	0.3	1.7
Consumer prices: health index	1.8	4.2	1.1	1.5
Real disposable income households	2.8	0.0	2.3	-0.1
Household savings ratio (as % of disposable income)	13.7	13.0	15.3	14.9
Domestic employment (change in '000, yearly average)	77.4	71.6	-36.6	-53.2
Unemployment (Eurostat standardised rate, yearly average) [1]	7.5	7.1	8.2	9.6
Current account balance (BoP definition, as % of GDP)	1.7	-2.5	-2.9	-3.8
Short term interbank interest rate (3 m.)	4.3	4.6	1.3	0.6
Long term interest rate (10 y.)	4.3	4.4	3.9	4.0

[1] Other unemployment definitions can be found on page 14

### Economic forecasts for Belgium by different institutions

	GDP-growth		Inflation		Government balance		Date of update
	2009	2010	2009	2010	2009	2010	
Federal Planning Bureau [1]	-3.8	0.0	0.3	1.7	-4.3	-5.6	05/09
INR/ICN [1]	-1.9	.	0.7	.	.	.	02/09
National Bank of Belgium [2]	-1.9	.	0.5	.	-3.3	.	02/09
European Commission [2]	-3.5	-0.2	0.3	1.2	-4.5	-6.1	04/09
OECD [2]	-0.1	.	1.9	.	-1.3	.	11/08
IMF [2]	-3.8	0.3	0.5	1.0	-4.7	-5.6	04/09
ING [1]	-3.1	0.3	0.5	1.3	-3.6	-4.0	05/09
BNP Paribas [2]	-3.7	-0.9	0.1	0.9	-5.0	-6.5	05/09
Dexia [1]	-2.4	1.5	0.4	1.3	.	.	05/09
KBC Bank [1]	-3.1	0.6	0.2	1.5	-3.5	-4.5	03/09
Deutsche Bank	-3.1	0.1	0.4	1.3	-4.7	-6.3	05/09
IRES [1]	-2.6	.	0.5	.	-3.8	.	04/09
Consensus Belgian Prime News [2]	-2.4	0.8	0.7	1.4	-3.3	-3.9	03/09
Consensus Economics [2]	-3.0	0.1	0.6	1.4	.	.	05/09
Consensus The Economist [2]	-3.0	0.2	0.6	1.4	.	.	05/09
Consensus Wirtschaftsinstitute [2]	-3.1	-0.6	0.6	0.2	-3.9	-4.5	04/09
<b>Averages</b>							
All institutions	-2.8	0.2	0.6	1.2	-3.8	-5.2	
International public institutions	-2.5	0.1	0.9	1.1	-3.5	-5.9	
Credit institutions	-3.0	0.4	0.4	1.3	-4.0	-5.0	

[1] Inflation forecasts based on the evolution of the national index of consumer prices

[2] Inflation forecasts based on the evolution of the harmonised index of consumer prices



## General economic activity

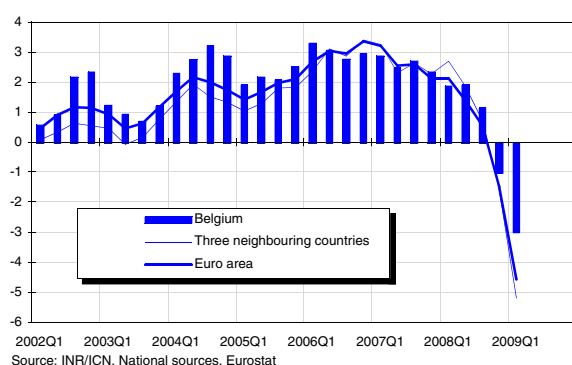
**Table 1 - GDP growth rates, in % [1]**

			YoY growth rates, in %					QoQ growth rates, in %				
	2007	2008	2008Q1	2008Q2	2008Q3	2008Q4	2009Q1	2008Q1	2008Q2	2008Q3	2008Q4	2009Q1
Germany	2.6	1.0	2.8	2.0	0.8	-1.8	-6.9	1.5	-0.5	-0.5	-2.2	-3.8
France	2.3	0.3	1.9	1.0	0.1	-1.7	-3.2	0.4	-0.4	-0.2	-1.5	-1.2
Netherlands	3.5	2.1	4.2	3.4	1.8	-0.8	-4.5	0.9	-0.1	-0.5	-1.2	-2.8
Belgium	2.6	1.0	1.9	1.9	1.1	-1.0	-3.0	0.4	0.3	0.0	-1.7	-1.6
Euro area	2.6	0.6	2.1	1.4	0.5	-1.5	-4.6	0.7	-0.3	-0.3	-1.6	-2.5
United States	2.0	1.1	2.5	2.1	0.7	-0.8	-2.6	0.2	0.7	-0.1	-1.6	-1.6
Japan	2.3	-0.7	1.3	0.6	-0.2	-4.5	-9.1	0.8	-0.9	-0.6	-3.8	-4.0

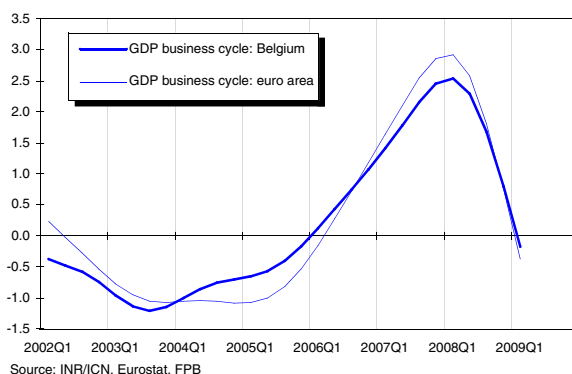
[1] Adjusted for seasonal and calendar effects

Source: INR/ICN, National sources, Eurostat

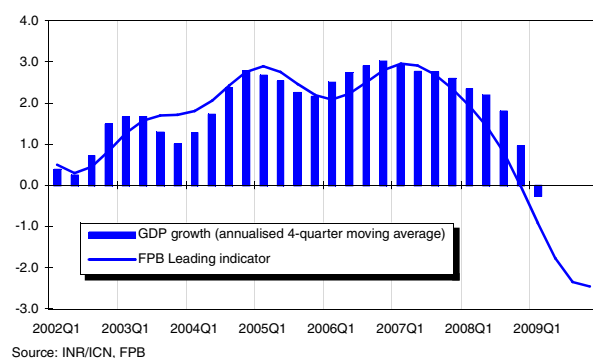
**Graph 1 - GDP-growth (t/t-4), in %**



**Graph 2 - GDP business cycle**



**Graph 3 - GDP growth and leading indicator**



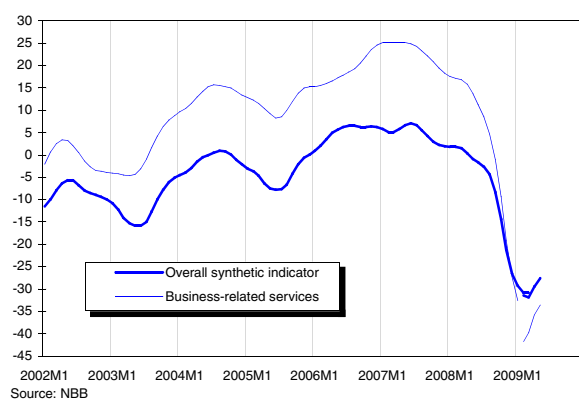
The US economy continued to contract rapidly in 2009Q1 (-1.6% qoq). The decline was led by a plunge in investment (in both construction and equipment) and a massive inventory reduction, while consumer spending increased after a decline during the previous two quarters. In spite of a record fall in exports, net exports contributed positively to GDP growth as imports declined even faster. Leading indicators are pointing more and more to a stabilisation of or even a slight recovery in economic activity in the second half of the year.

Japan's GDP shrank by 4% in 2009Q1, the worst growth figure since the start of the series in 1955. The pace of decline in private consumption intensified, while investment and exports plunged. As economic activity had already declined during the previous quarters (with a notable contraction of 3.8% in 2008Q4), Japan's GDP was 9% lower in 2009Q1 than a year earlier.

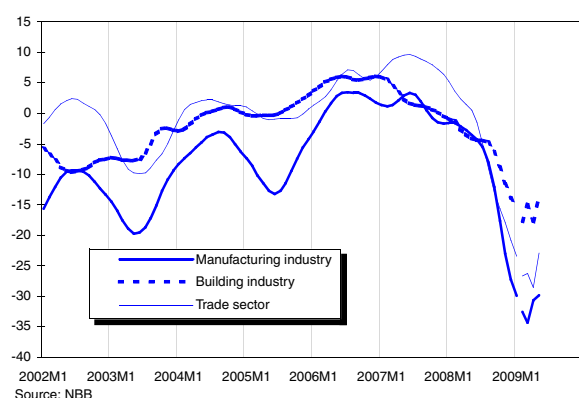
The euro area recession intensified markedly in 2009Q1 (-2.5% following -1.6% in 2008Q4). The dramatic fall in euro area GDP was led by a 3.8% contraction in export-dependent Germany. The slump was also particularly severe in the Netherlands (-2.8%), Italy (-2.4%) and most of all Slovakia (-11.2%). Belgium (-1.6%), Portugal (-1.5%) and France (-1.2%) suffered relatively less and reported a smaller contraction in economic activity than in the previous quarter. Forward-looking indicators point to a further contraction of economic activity in 2009Q2 in both Belgium and the rest of the euro area, but the rate of decline should diminish.

The methodology behind the calculation of the synthetic indicators in the NBB business survey has changed since April 2009. In the past, all monthly indicators in the survey, except those related to price evolutions, were taken into account to construct the (synthetic) indicators for the manufacturing, building, trade and business-related services sector. From April onwards, however, the number of indicators used for this purpose has been restricted in order to improve the correlation of the synthetic indicators with economic activity and to reduce statistical noise in the series.

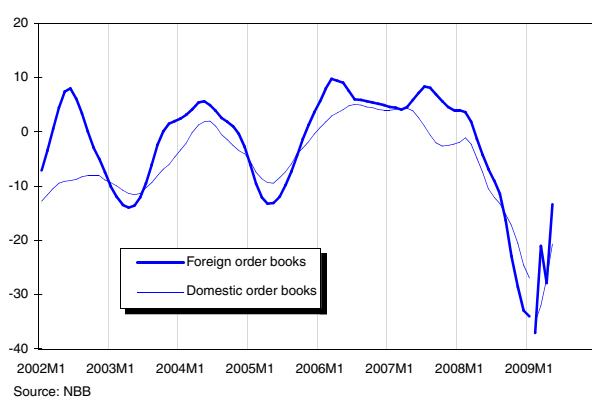
**Graph 4 - Business cycle: global evolution**



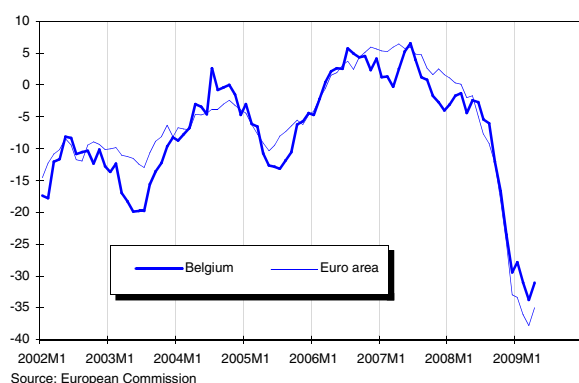
**Graph 5 - Business cycle: sectoral evolution**



**Graph 6 - Manufacturing industry: order books**



**Graph 7 - Industrial confidence: international comparison**



Another novelty is the integration of the business-related services indicator in the calculation of the overall synthetic indicator. This indicator now has a weight of 15% in the overall indicator, while the weights of manufacturing industry and the trade sector have been revised downwards.

These methodological changes have been applied to the whole sample of the NBB business survey and affect the evolution of indicators in Graphs 4 and 5. Indicators in Graph 7, which are calculated by the EC, are not affected.

During 2009Q1, all indicators continued to decline at the same pace as during the second half of last year. Since March 2009, however, most indicators have recovered slightly, which suggests that economic activity has reached its bottom. This should be seen as an indication that qoq economic growth will be close to zero in 2009Q3 rather than in 2009Q2, as the evolution of GDP within 2009Q1 probably implies a negative carry over for growth in 2009Q2. Moreover, it should be kept in mind that even with the limited recovery in the last few months, most indicators are still at very low levels.

The worsening of sentiment since mid-2007 has been seen in all sectors covered by the NBB business survey, although the building industry seems to have suffered less than the other sectors. This is probably due to the relatively low mortgage rates since 2004 and the (temporary) reduction in VAT rates on new construction since the beginning of 2009, which is a measure from the Belgian Recovery Plan.

A look at the indicators behind the sectoral curves reveals that sentiment in all sectors has reacted as one would expect on the basis of economic theory, i.e. a (limited) improvement was first seen in economic activity expectations, followed by the assessment of current economic activity and finally by employment-related indicators.

Industrial confidence has dropped less in Belgium than in the euro area. This is somewhat at odds with the past when the euro area cycle was generally less volatile due to the so-called aggregation effects. However, it is compatible with the evolution of GDP growth, which also came down less in Belgium than in the euro area. This is mainly due to the heavy downturn in the export-dependent German economy.

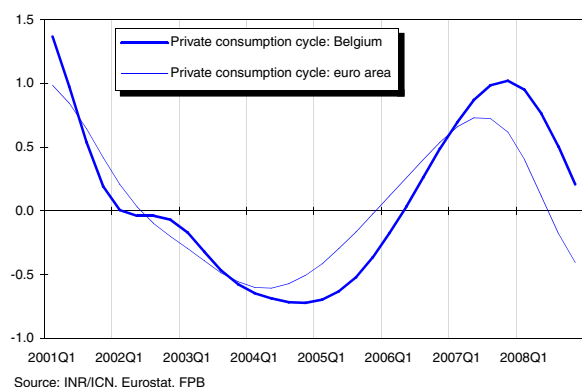
## Private consumption

**Table 2 - Private consumption indicators**

	2007	2008	2008Q2	2008Q3	2008Q4	2009Q1	2008M12	2009M1	2009M2	2009M3	2009M4	2009M5
Turnover (VAT) - retail trade [1]	4.9	6.3	6.5	7.3	4.9	.	5.8	8.1	-4.6	.	.	.
New car registrations [1]	-0.3	2.1	11.2	-0.1	-10.3	-15.3	-7.8	-16.1	-17.9	-11.9	-22.8	.
Consumer confidence indicator [2]	-1.2	-11.3	-9.0	-11.0	-21.3	-22.7	-25.0	-20.0	-24.0	-24.0	-22.0	-19.0

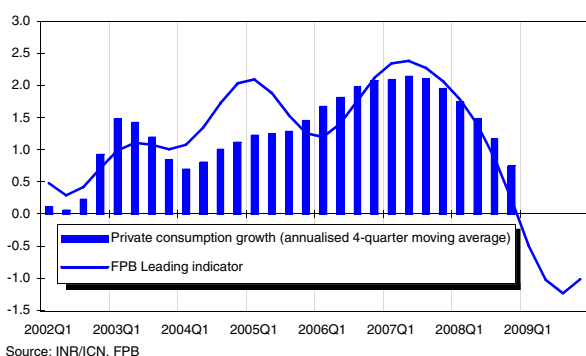
[1] Change (%) compared to same period previous year; [2] Qualitative data  
Source: DGSG, NBB, Febiac

**Graph 8 - Private consumption cycle**



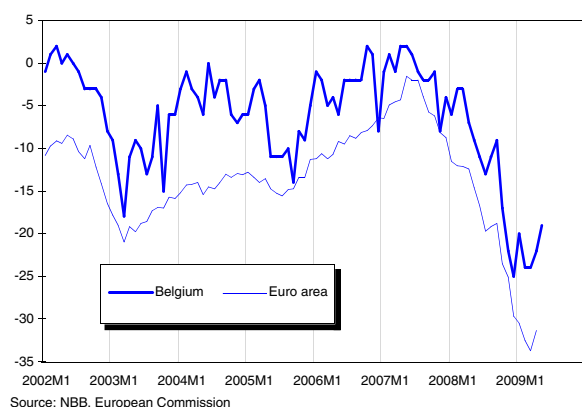
Source: INR/ICN, Eurostat, FPB

**Graph 9 - Private consumption growth and leading indicator**



Source: INR/ICN, FPB

**Graph 10 - Consumer confidence: international comparison**



Source: NBB, European Commission

The Belgian and as well as the euro area private consumption cycles weakened in the course of 2008, indicating below-trend growth. In 2008Q4, both cycles were close to zero, which implies that private consumption is close to its trend level.

According to the latest national accounts, Belgian private consumption growth slowed from 2.1% in 2007 to 0.9% in 2008. The quarterly profile points to growth in 2008 being attributable to a relatively strong performance in the course of 2007 - which led to a positive carry-over - and in 2008Q1, as private consumption stabilised in the two following quarters and fell by 0.6% in 2008Q4. This profile matches the development in Belgian consumer confidence that fluctuated around a high level from the beginning of 2006 until 2008Q1 and weakened strongly afterwards, mainly due to a worsening of consumers' labour market unemployment prospects.

As shown by the FPB leading indicator, private consumption is expected to register a negative annual growth rate in 2009. The recent evolution of (quantitative) consumption indicators already points to a further decline in private consumption in 2009Q1. Growth rates (yoy) of retail sales went down clearly during the second half of 2008 and even became negative in February 2009. However, it should be noted that the deceleration in inflation and the fact that 2008 was a leap year can partially account for these developments. New car registrations for the first months of this year are far below the 2008 figures. Although the car industry has been severely hit by the current recession, part of the negative yoy growth rates is linked to the boost from the biennial motor show in Brussels that had pushed car sales in 2008 to an all-time high. Compared to 2007, car sales were only 9% lower for the first four months of this year.

In the euro area, consumer confidence during 2009Q1 reached its lowest level since the start of the survey in 1985, while Belgian consumer confidence approached the levels registered in 1993 without going significantly lower. Consumer confidence seems to have stabilised at these low levels, which mainly reflects the fact that labour market prospects have stopped worsening since February.

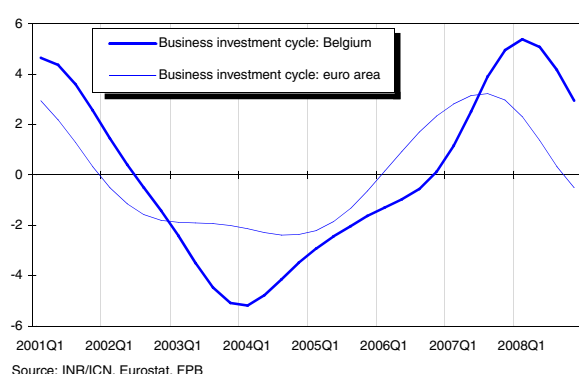
## Business investment

**Table 3 - Business investment indicators**

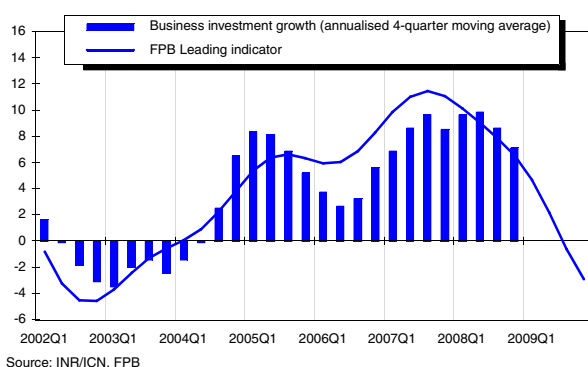
	2007	2008	2009	2008Q2	2008Q3	2008Q4	2009Q1	2008M10	2008M11	2008M12	2009M1	2009M2
Investment (VAT) [1]												
Industrial companies	12.2	2.6	.	5.8	-1.1	0.9	.	3.4	10.6	-6.1	-11.6	-13.0
Non-industrial companies	12.4	11.3	.	19.5	7.7	6.3	.	10.9	3.7	5.3	-23.4	-5.3
Total companies	12.7	8.7	.	15.5	5.3	4.7	.	9.3	5.7	1.2	-19.9	-8.3
Investment survey [1]	12.1	-3.1	3.0									
Capacity utilisation rate (s.a.) (%)	83.2	80.6	.	82.1	82.4	74.7	70.1					

[1] Change (%) compared to same period previous year  
Source: DGSSB, NBB

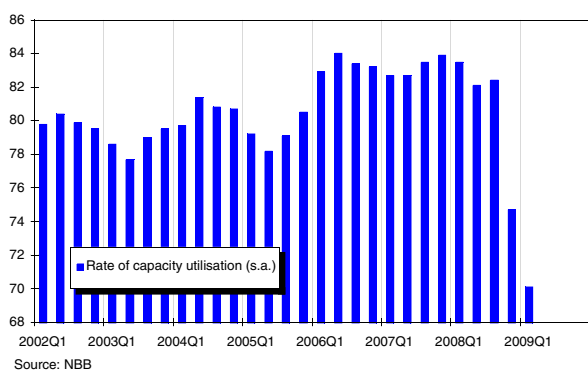
**Graph 11 - Business investment cycle**



**Graph 12 - Business investment growth and leading indicator**



**Graph 13 - Capacity utilisation in manufacturing industry**



Unlike in the euro area, where the investment cycle has developed in line with the GDP cycle (see Graph 2), the Belgian business investment cycle seemed to lag the business cycle during the previous two years. While Belgian GDP was around its trend level in 2008Q4, business investment was still about 3% above its trend.

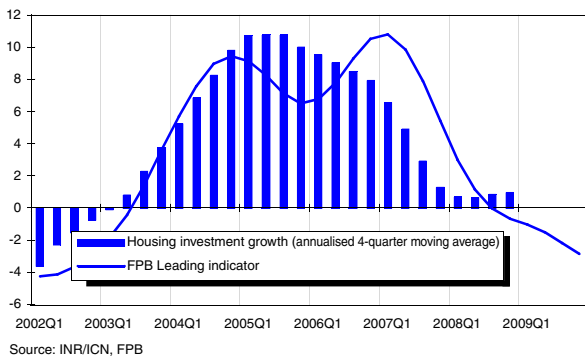
Although annual Belgian GDP growth fell from 2.8% in 2007 to 1.1% in 2008, business investment growth resisted well and amounted to 8.6% and 7.4%, respectively (unadjusted figures). As investment grew faster than GDP (at current prices) for the fifth consecutive year, the investment rate reached 15.2% in 2008, compared to 12.6% in 2003. This brought the investment rate in 2008 to the same level as in 1990, which was the highest level registered over the last 30 years.

VAT-based investment statistics reveal that the strong performance of investment in 2008 was mainly due to non-industrial companies, while industrial companies seem to have reduced their investment expenditures since mid-2008.

All available indicators point to strong negative business investment growth in 2009, which should not come as a surprise in view of the current recession. VAT-based statistics point to a noticeable decline during the first months of 2009, while the capacity utilisation rate in manufacturing industry declined in 2009Q1 to the lowest level (70.1%) registered since the start of the survey in 1980, which is far below its historical average of 79%. Indicators from the monthly NBB business survey for the investment goods industry also plunged to record lows, which explains the strong decline in the FPB leading indicator. The growth rate from the investment survey held twice a year in the manufacturing industry is a little more optimistic, but that survey was held in Autumn 2008 and economic prospects have significantly worsened since then. Moreover, company directors tend to be overly optimistic with respect to their investment intentions.

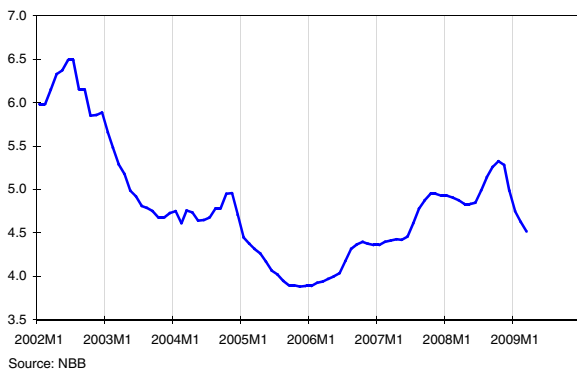
## Housing investment

**Graph 14 - Housing investment growth and leading indicator**



Housing construction expanded rapidly during the period 2003-2006, which resulted in an average volume growth of 7.8% and a historically high share in nominal GDP. In 2007 and 2008, residential investment volume growth slowed markedly to 1.3% and 1.0%, respectively. On a quarterly basis, housing activity stagnated in 2008Q2-Q3, before turning slightly negative in 2008Q4.

**Graph 15 - Mortgage rate (%)**

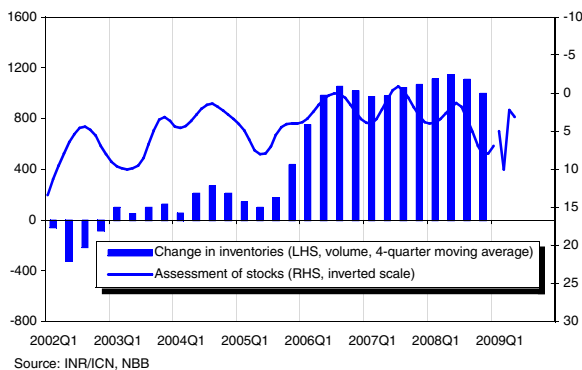


In 2009, Belgian residential investment is expected to contract, but to a much lesser extent than in several EU Member States where house prices have been largely overvalued (such as the UK, Spain and Ireland). Moreover, the contraction should be limited somewhat in Belgium thanks to the temporary VAT reduction on residential construction. Mortgage rates will not be supportive, as they increased from a historically low 3.9% at the end of 2005 to 5.3% in September 2008, although they lowered again somewhat to 4.5% in March.

The cooling in housing investment is largely confirmed by the FPB leading indicator, which has slowed down considerably since the beginning of 2007. Most of the housing investment indicators, such as the total amount of mortgage applications and indicators from the architects' survey, have gone down since mid-2006. They all lead the development of housing investment by about four quarters.

## Stock building

**Graph 16 - Stock building indicators**



According to the quarterly national accounts, stock building did not play a role in the weakening of economic growth between 2007Q4 and 2008Q2. This was (on average) also the case in 2008H2, leading to a zero contribution of inventories to economic growth in 2008, against 0.3%-points in 2007. However, the number of company directors willing to reduce their stock levels has increased considerably in 2008Q4 and 2009Q1. This should not come as a surprise as the current recession has firmly reduced the probability of unexpected rises in demand. Therefore, stocks are expected to exert a drag on economic growth this year.

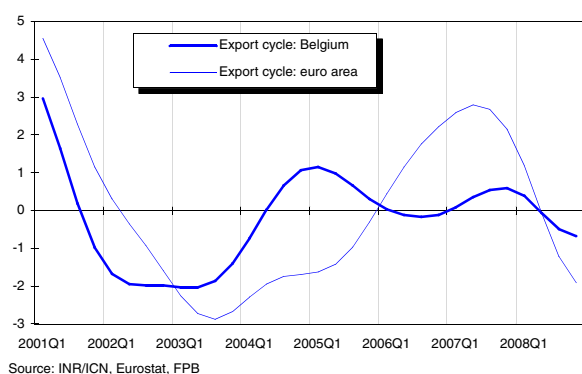
## Foreign Trade

**Table 4 - Belgium - Trade statistics (goods, intra/extrastat, national concept)**

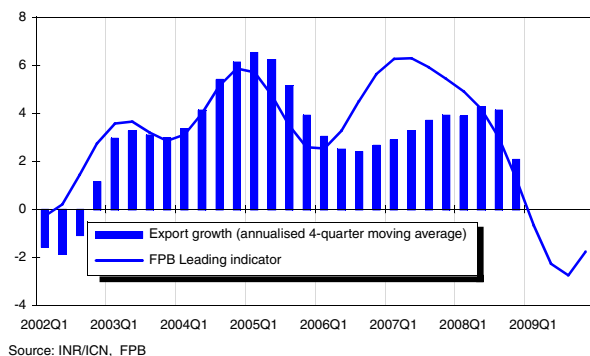
	2007	2008	2008Q1	2008Q2	2008Q3	2008Q4	2008M9	2008M10	2008M11	2008M12	2009M1	2009M2
Exports - value [1]	5.7	6.9	7.8	15.1	11.0	-5.8	15.0	2.2	-12.1	-8.2	-19.4	-22.0
Imports - value [1]	6.0	12.5	14.1	20.6	18.7	-2.0	23.1	7.4	-7.2	-6.9	-21.4	-19.7
Exports - volume [1]	2.7	2.0	2.8	9.6	4.2	-8.5	8.3	-3.5	-14.6	-7.8	-17.0	-19.3
Imports - volume [1]	4.0	3.6	3.9	10.1	6.9	-5.9	11.1	-0.4	-10.7	-6.9	-18.1	-14.0
Exports - price [1]	2.9	4.8	4.9	5.0	6.5	2.8	6.2	5.9	2.9	-0.5	-2.9	-3.4
Imports - price [1]	2.0	8.5	9.9	9.5	11.0	3.9	10.7	7.8	4.0	0.0	-4.0	-6.7

[1] Change (%) compared to same period previous year  
Source: INR/ICN

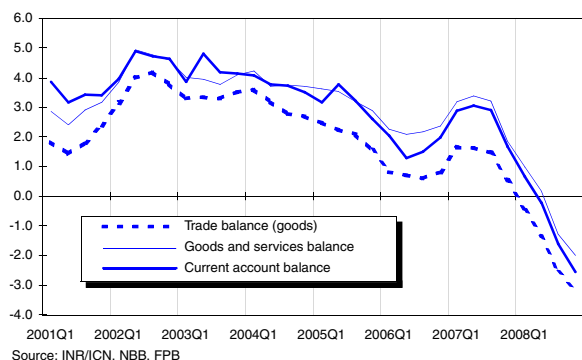
**Graph 17 - Export cycle**



**Graph 18 - Export growth and leading indicator**



**Graph 19 - Belgian foreign balances (4 quarters cumul,% of GDP)**



Once again substantial revisions of export volumes in the latest quarterly national accounts have altered the shape of the Belgian export cycle for the last two years. Instead of remaining on a rising path until 2008Q3 (see STU 1-09), the export cycle had already peaked at the end of 2007 and has been on a steadily declining path ever since. In contrast with the European export cycle, the downturn was fairly moderate. Euro area exports were pulled down particularly by the collapse in German exports, which are suffering badly from the slump in world trade.

While Belgian exports still registered an average qoq growth rate of 1% in the first three quarters of last year, they plunged by 7% in 2008Q4 in line with the deep plunge in world trade. On an annual basis, world trade growth is now expected to decline by some 15% this year, which would make it the deepest downturn since World War II. Moreover, economic activity in the euro area declined steeply (-2.5%) in 2009Q1. It is hence clear that Belgian exports are bound to decline substantially again in the beginning of this year. This is confirmed by the FPB leading indicator and by the export orders component of Belgian business confidence (see page 9), which has recovered somewhat since March but is still at a relatively low level.

The Belgian current account balance evolved from a sizeable surplus of almost 5% of GDP in 2002Q2 to a substantial deficit (2.5% of GDP in 2008Q4). Over half of this reversal is attributable to the deterioration in the terms of trade (i.e. import prices increasing faster than export prices, mainly because of the surge in commodity prices). The outpacing of export volume growth (in part due to the deterioration of competitiveness) by import volume growth (driven by dynamic domestic demand) accounts for a third of the deterioration in the current account. The decline in the net factor income from abroad was of lesser importance.

## Labour market

**Table 5 - Labour market indicators**

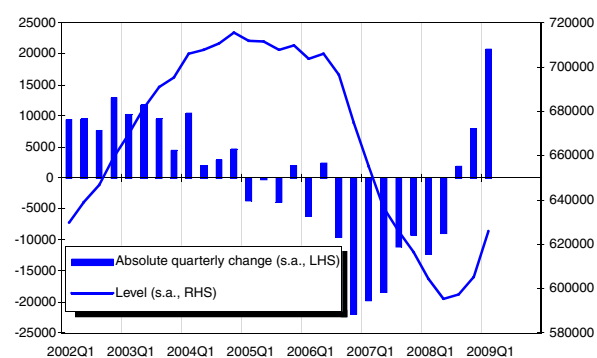
	2007	2008	2008Q2	2008Q3	2008Q4	2009Q1	2008M11	2008M12	2009M1	2009M2	2009M3	2009M4
Unemployment [1][2]	633.5	600.5	595.4	597.3	605.2	626.0	605.2	611.7	618.3	624.9	634.7	637.8
Unemployment rate [2][3]	12.5	11.8	11.7	11.7	11.8	12.2	11.9	12.0	12.1	12.2	12.4	12.4
Unemployment rate-Eurostat [3][4]	7.5	7.0	6.7	7.3	7.0	7.2	6.9	6.9	7.1	7.2	7.3	.

[1] Level in thousands, s.a.; [2] Broad administrative definition; [3] In % of labour force, s.a.

[4] Recent figures are based on administrative data and may be subject to revision

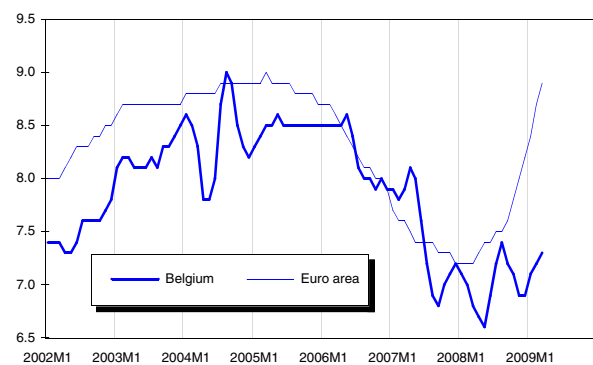
Source: RVA/ONEM, FPS Employment, Eurostat, FPB

**Graph 20 - Evolution of unemployment (incl. older)**



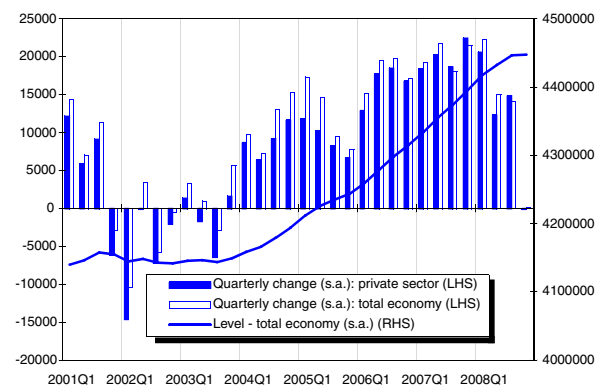
Source: RVA/ONEM

**Graph 21 - Harmonised unemployment rates (% of labour force)**



Source: Eurostat

**Graph 22 - Evolution of domestic employment**



Source: INR/ICN

Subsequent to the breaking out of the financial crisis, qoq activity growth in the market sector fell from -0.1% in 2008Q3 to -1.7% in 2008Q4. In comparison, the decrease in qoq market employment growth (from 0.4% to 0%) has been far less dramatic so far, confirming earlier evidence of widespread labour hoarding by firms in response to the sharp decrease in activity. In its turn, labour hoarding has been tied in with substantial reductions in average hours worked per employee (-1.6% in 2008Q4 according to the quarterly national accounts), notably in manufacturing and in construction.

In these industries, involuntary reductions in hours worked have given way to massive increases in the number of blue-collar workers receiving government support to compensate for the income losses incurred ('temporary unemployment programme'). In 2008Q4, approximately 20% of blue-collar employees in manufacturing and construction received at least partial income support from the programme. This figure soared to 33% in 2009Q1. As for the entire market sector, the proportion of blue-collar employees on temporary unemployment rose from 12% to 22% between these two quarters. In full time equivalent units, the scheme now covers up to 8% of blue-collar market sector employment. Recently, the government decided to put a similar scheme into place for white-collar workers, to become operational in summer.

Labour hoarding has allowed the immediate impact of the economic crisis, in terms of lay-offs, largely to be limited to the fringe area of temporary and interim workers. Consequently, the broad administrative unemployment rate increased only slightly in 2008Q4: from 11.7% to 11.8%. However, it climbed to 12.2% on average in 2009Q1, and - despite the near-stabilization in April - is expected to maintain or even step up its rate of increase in this and the next quarter since larger parts of the regular workforce will inevitably be affected by the slump.

## Prices

**Table 6 - Inflation rates: change compared to the same period in the previous year, in %**

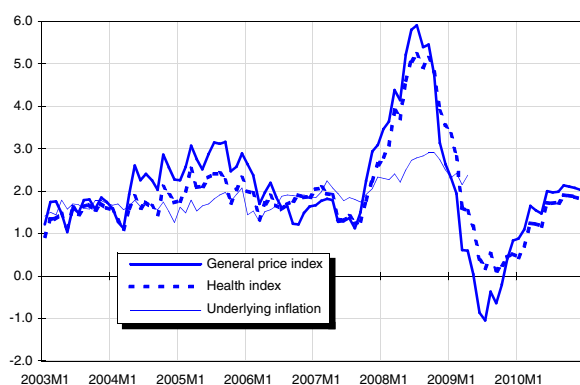
	2007	2008	2008Q2	2008Q3	2008Q4	2009Q1	2008M11	2008M12	2009M1	2009M2	2009M3	2009M4
Consumer prices: all items	1.82	4.49	5.05	5.59	3.49	1.62	3.14	2.63	2.32	1.93	0.62	0.60
Food prices	3.62	5.82	6.58	6.80	4.46	3.53	4.19	3.64	3.94	3.64	3.01	2.04
Non food prices	1.01	5.95	7.41	7.78	3.57	-0.39	2.86	1.97	1.09	0.04	-2.25	-2.30
Services	1.89	2.01	1.25	2.36	3.06	3.29	3.08	3.08	3.11	3.64	3.11	3.79
Rent	1.79	1.90	1.91	1.90	1.98	2.09	2.06	2.04	2.24	2.00	2.04	2.04
Health index	1.77	4.22	4.46	5.10	4.07	2.57	3.89	3.54	3.34	2.80	1.60	1.53
Brent oil price in USD (level)	72.5	96.9	121.5	114.7	54.8	44.3	52.6	39.8	43.4	43.0	46.5	50.5

Source: FPS Economy, Datastream

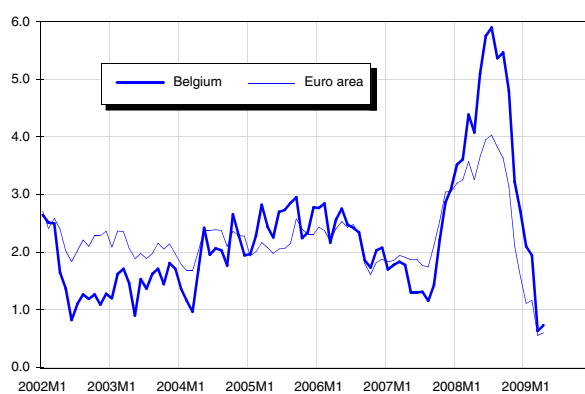
**Table 7 - Monthly inflation forecasts (cut-off date: 30 April)**

	2009M1	2009M2	2009M3	2009M4	2009M5	2009M6	2009M7	2009M8	2009M9	2009M10	2009M11	2009M12
Consumer prices: all items	111.36	111.74	111.10	111.33	111.70	111.31	111.69	111.76	111.64	111.93	111.96	112.19
Consumer prices: health index	111.45	111.75	111.07	111.17	111.49	111.02	111.41	111.45	111.30	111.58	111.59	111.82
Moving average health index	111.27	111.38	111.38	111.36	111.37	111.19	111.27	111.34	111.29	111.43	111.48	111.57
	2010M1	2010M2	2010M3	2010M4	2010M5	2010M6	2010M7	2010M8	2010M9	2010M10	2010M11	2010M12
Consumer prices: all items	112.34	112.96	112.93	113.05	113.34	113.53	113.89	113.97	114.02	114.28	114.28	114.46
Consumer prices: health index	111.94	112.54	112.45	112.53	112.79	112.94	113.32	113.38	113.43	113.69	113.67	113.86
Moving average health index	111.73	111.97	112.19	112.36	112.58	112.68	112.89	113.11	113.27	113.45	113.54	113.66

Source: Observations (up to 09M4): FPS Economy; forecasts: FPB

**Graph 23 - Monthly inflation evolution in % (t/t-12)**

Source: FPS Economy, from 09M5 on: forecasts FPB

**Graph 24 - Harmonised inflation rates in % (t/t-12)**

Source: Eurostat

Belgian inflation has been influenced by some counter-acting factors in the last two quarters. On the one hand, inflation in services has been influenced upwards as the pass-through of the steep rise in oil prices during the first half of 2008 to non-energy goods and services has not come to an end, yet. On the other hand, yoy growth rates of food prices have come down significantly and non-food prices are now lower than one year ago. These product categories are influenced by the fall in commodity prices of food and energy products, respectively.

Belgian consumer price inflation is expected to turn negative from June to October, mainly due to the price evolution of gas and electricity, which reflects crude oil price movements with a delay of about six months. After this, inflation rates should pick up somewhat in line with the contribution of energy prices to inflation. Underlying inflation is expected to decline significantly during the second half of this year and to remain subdued next year in view of the significantly negative output gap.

Belgian inflation is expected to amount to 0.3% in 2009 and 1.7% in 2010. The health index, which is not affected by the price evolution of motor fuels, alcoholic beverages and tobacco products, should rise by 1.1% in 2009 and 1.5% in 2010. The current pivotal index for public wages and social benefits (112.72) should be exceeded by the moving average of the health index in July 2010.



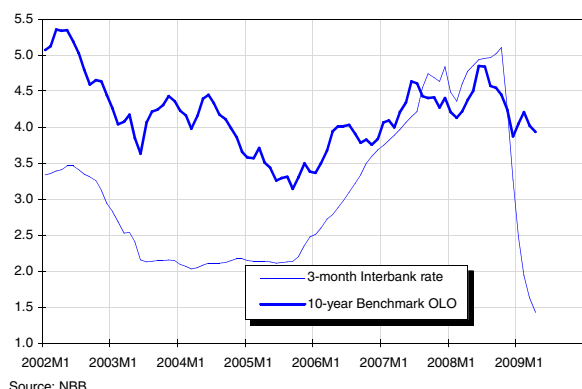
Interest rates

Table 8 - Interest rates

	2007	2008	2008Q2	2008Q3	2008Q4	2009Q1	2008M11	2008M12	2009M1	2009M2	2009M3	2009M4
<b>Short-term money market rates (3 months)</b>												
Euro area (Euribor)	4.28	4.63	4.86	4.98	4.21	2.02	4.24	3.27	2.48	1.94	1.64	1.42
United States	5.27	2.97	2.76	3.06	2.82	1.08	2.36	1.77	1.02	1.16	1.07	0.89
Japan	0.76	1.05	0.95	0.91	1.44	0.72	1.50	1.35	0.77	0.63	0.76	0.67
<b>Long-term government bond rates (10 years)</b>												
Belgium	4.32	4.40	4.58	4.66	4.19	4.09	4.24	3.87	4.05	4.21	4.02	3.94
Germany	4.23	3.99	4.26	4.27	3.49	3.10	3.54	3.04	3.08	3.15	3.06	3.18
Euro area	4.31	4.24	4.44	4.52	3.94	3.72	3.98	3.60	3.72	3.76	3.69	3.74
United States	4.63	3.65	3.87	3.85	3.22	2.71	3.49	2.40	2.46	2.85	2.81	2.90
Japan	1.67	1.48	1.61	1.51	1.42	1.27	1.46	1.30	1.24	1.29	1.30	1.43

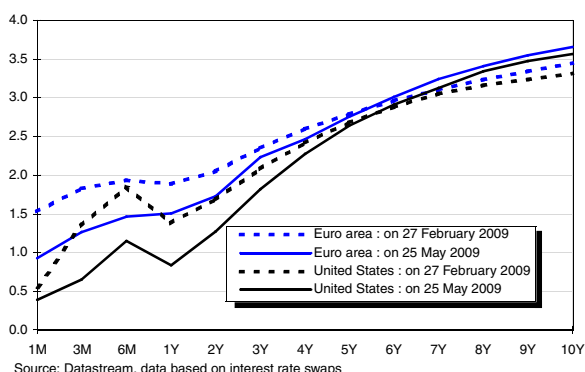
Source: Datastream

Graph 25 - Interest rate levels in Belgium, %



Source: NBB

Graph 26 - Yield curves for the euro area and the US



Source: Datastream, data based on interest rate swaps

The US Federal Reserve has kept the target rate for the federal funds rate within a range of 0-0.25% and will continue to do so for an extended period. Besides purchasing agency debt and mortgage backed securities to provide support for mortgage lending and housing markets, it has lately started to buy US treasuries.

Since the beginning of 2009, the ECB has cut its main policy rate by 150 basis points to 1% in May. Recently it announced plans to implement unconventional monetary measures, such as the purchase of a relatively small amount of covered bonds as part of its quantitative easing to stimulate the economy.

The interbank risk premium, paid above official policy rates, which had soared at the height of the financial panic in 2008Q4, has come down strongly owing to governments' bank capital injections, state guarantees for bank loans and the ebbing of the fear of a systemic crisis.

Since the start of the year, US long term interest rates have started to rise again as investors have become less risk averse owing to the improvement in economic indicators and the apparent stabilisation of financial markets. The rise was arrested only briefly in mid-March when the Fed announced it would start to buy US treasuries. The effect of this measure faded very quickly, however, as markets realised that the Fed's move would be swamped by the huge extra issuance of government bonds and economic data turned out to be less negative than anticipated. European long-term interest rates have remained very stable since the end of last year as the effects of the additional issuance of government bonds and the significant worsening in economic prospects balanced each other out. Meanwhile, long-term interest rate spreads between Germany and the other euro area countries have come down considerably owing to the decline in risk aversion.

## Exchange rates

**Table 9 - Bilateral exchange rates**

	2007	2008	2008Q2	2008Q3	2008Q4	2009Q1	2008M11	2008M12	2009M1	2009M2	2009M3	2009M4
USD per EUR	1.371	1.471	1.562	1.503	1.318	1.304	1.274	1.353	1.327	1.279	1.305	1.320
UKP per EUR	0.685	0.797	0.793	0.795	0.843	0.909	0.831	0.911	0.919	0.888	0.921	0.897
JPY per EUR	161.3	152.3	163.5	161.7	126.6	122.1	123.4	123.3	119.8	118.8	127.7	130.5

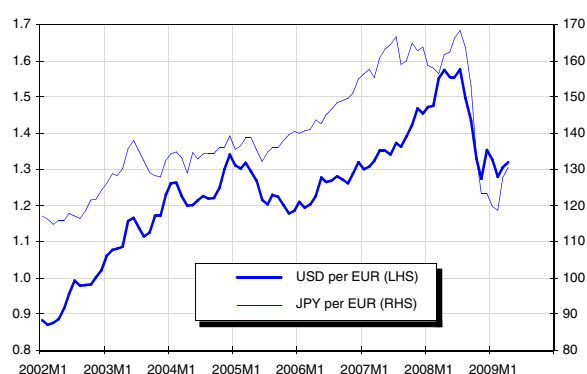
**Table 10 - Nominal effective exchange rates (2000=100)**

	2007	2008	2008Q2	2008Q3	2008Q4	2009Q1	2008M11	2008M12	2009M1	2009M2	2009M3	2009M4
Euro	105.6	112.6	115.5	114.3	109.2	111.0	106.9	112.0	111.1	109.0	112.3	111.5
Growth rate [1]	5.0	6.6	3.5	-1.0	-4.5	1.6	-0.8	4.8	-0.8	-1.9	3.0	-0.7
US dollar	93.5	90.0	85.8	88.9	98.2	100.0	100.1	97.8	98.0	100.7	101.5	99.5
Growth rate [1]	-5.0	-3.7	-1.3	3.5	10.5	1.9	3.1	-2.4	0.3	2.7	0.8	-2.0
Japanese yen	88.6	101.0	95.5	95.2	117.7	122.5	118.3	123.5	125.1	124.9	117.7	114.3
Growth rate [1]	-5.0	14.0	-0.3	-0.3	23.6	4.1	6.4	4.4	1.3	-0.1	-5.8	-2.9

[1] Change (%) compared to previous period

Source: BIS, NBB

**Graph 27 - Euro-dollar and euro-yen bilateral exchange rates**

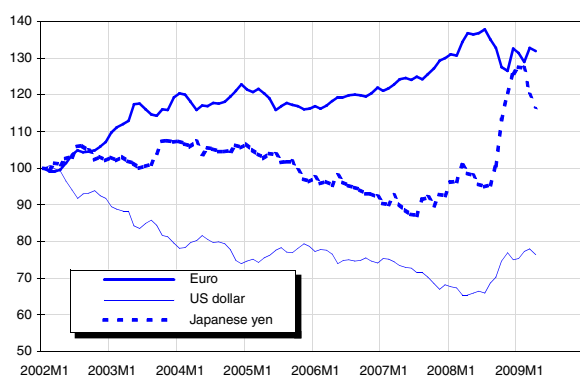


Source: NBB

The euro depreciated considerably against the dollar in 2008Q4 as it became clear that the economic recession in the euro area would be at least as serious as in the US and as the dollar benefited from its safe haven status during the financial turmoil. Since the start of the year, the EUR/USD exchange rate has lacked a clear direction.

Since the financial crisis erupted in full force with the demise of Lehman Brothers, the Japanese yen has appreciated considerably against the US dollar as increased risk aversion has gone hand in hand with a cutback in the carry trade (lending money in Japanese yen at very low interest rates and buying higher yielding currencies). Extreme exchange rate volatility made the carry-trade strategy uneconomic and resulted in heavy buying of yen. From March onwards, however, the trend has been reversed due to the stabilisation in financial markets.

**Graph 28 - Nominal effective exchange rates (2001M1=100)**



Source: NBB, BIS

From 2002 onwards, the nominal effective exchange rate of the euro appreciated almost continuously until July 2008. Since then the nominal effective euro has shed some 4%, which was primarily due to a significant depreciation against the dollar (-16%), the Swiss franc (-6.5%) the yen (-23%) and the Chinese yuan (-16%). Against the British pound, the Swedish krona, the Norwegian krone and most eastern European currencies, however, the euro continued to gain ground in this period.

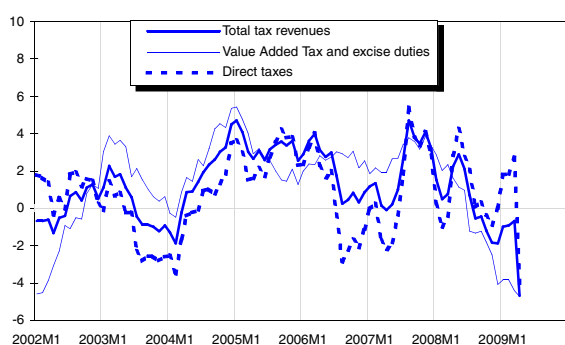
## Tax indicators

**Table 11 - Tax revenues (1)**

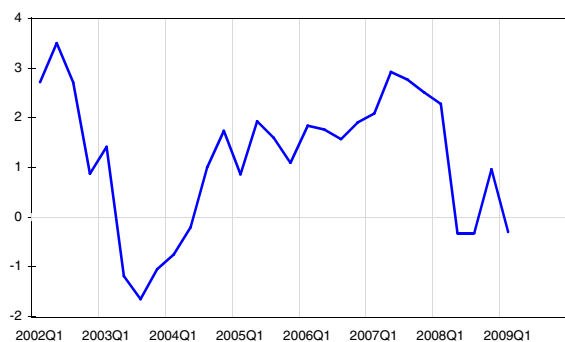
	2007	2008	2008Q2	2008Q3	2008Q4	2009Q1	2008M11	2008M12	2009M1	2009M2	2009M3	2009M4
Total [2], of which:	5.1	2.5	11.6	3.0	-0.4	-1.8	-0.2	-0.4	3.3	-4.1	-7.1	-24.9
Direct taxes, of which:	4.8	4.5	16.6	4.9	3.3	1.1	3.5	5.9	8.3	-3.7	-8.4	-35.0
Withholding earned income tax (PAYE)	4.4	5.5	0.5	6.6	9.9	-1.9	6.5	10.9	4.4	0.3	-12.8	-39.6
Prepayments	6.5	-1.7	11.5	0.6	-13.2	.	.	-15.5	.	.	.	-28.7
Value Added Tax and excise duties	5.3	0.2	4.0	1.7	-5.1	-2.9	-1.4	-9.3	-0.1	-4.6	-4.4	-5.1

[1] Change (%) compared to same period previous year; [2] Total received by federal government, excl Source: FPS Finance

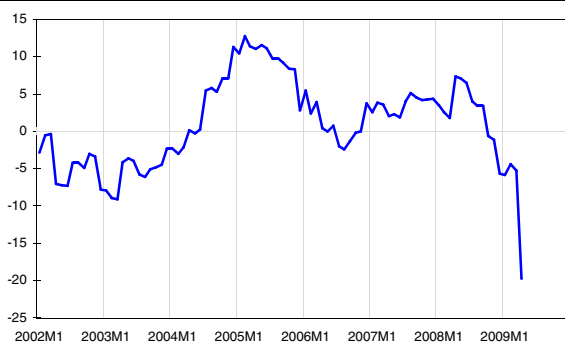
**Graph 29 - Real tax revenues (3)**



**Graph 30 - Real withholding earned income tax (PAYE) (4)**



**Graph 31 - Real prepayments (3)**



[3] Change (%) over past 12 months, compared to previous 12 month period, deflated by consumer price index

[4] Change (%) over past 4 quarters, compared to previous 4 quarter period, deflated by consumer price index

Total tax revenues in 2009Q1 recorded a nominal decrease of 1.8%, as compared to the same period in the previous year, after a 0.4% decrease in 2008Q4. Most tax categories contributed to this negative evolution in the context of the business cycle downturn.

The largest decreases were observed in VAT (due to a decrease in gross collection, delayed reimbursements have remained quite stable up to now), registration duties (which are suffering from the contraction of the real estate market), prepayments (affected by the deterioration of prospects for profitability) and customs duties (due to the contraction of world trade), but there were also decreases in inheritance taxes, road taxes and taxes on capital revenue.

Corrected for tax-cutting measures, notably the extension of the lump sum reduction in personal income tax in the Flemish region, PAYE personal income tax revenues are performing somewhat better due to the fact that there is generally a time lag in the effect of business cycle developments on employment. Note that total direct taxes receipts have been temporarily inflated due to an administrative delay, as compared to the previous year, in refunding personal income tax (by assessment).

The evolution of tax revenues in April and prospects for the coming months are gloomy in the absence of a rapid economic recovery and taking the measures decided by the authorities in the stimulus package into account. It includes a possibility for temporary deferral by employers of payment of PAYE withholding tax on wages: tax on March to August wages may be paid with a 3 months delay, implying probable weak tax income for the Treasury in 2009Q2 (compensated by stronger receipts in 2009Q4). Also, VAT refunds by the government will be structurally faster (from extending the scope of the monthly refund regime). Labour cost reductions in the form of exemptions from payments of withholding tax on wages will also weigh on labour tax income.

## S3BE: A Small Supply-Side Model for the Belgian Economy

The Federal Planning Bureau produces model-based short-term macroeconomic forecasts and medium-term projections for the Belgian economy. It also constructs long-term scenarios of age-related budgetary expenditures. However, in this context, the underlying scenario regarding productivity and employment growth beyond the medium-term horizon is generated using a normative approach. This working paper presents a new small supply-side model for the Belgian economy with the objective of working out long-term macroeconomic scenarios.

In order to measure the level of potential output, international institutions such as the OECD or the European Commission have developed methodologies that rely on a production function. The CPB Netherlands Bureau for Economic Policy has also worked out its own method to assess the growth potential of the Dutch economy and progressive refinements have led to the construction of a fully-fledged model.

The theoretical structure of the model presented in our paper draws heavily on the Dutch version. The model is articulated around a CES production function with constant returns to scale and labour-augmenting technical progress that determines, together with the cost of labour and the user cost of capital, demand for labour and capital. Monopolistic competition implies that the value added price deflator is obtained as a mark-up on top of factor prices. Combined with a wage bargaining framework, profit maximization by firms entails that the equilibrium rate of employment can be expressed as a function of the tax wedge (including terms of trade effects), the replacement rate, the mark-up and real cost of capital. By assuming adjustment rigidities for capital stock,

the model also allows for a progressive convergence to the steady state.

Values for the structural parameters are obtained through simultaneous econometric estimation of a labour demand equation, a value added price equation and a wage equation using Belgian quarterly data for the private sector over the period 1985-2007. By adding a few bridge-equations, the model can be solved recursively based upon assumptions regarding the evolution of import prices, terms of trade, tax levels, labour efficiency, the labour force and exogenous categories of employment.

A number of exogenous shocks imposed on the model permits identification of its main properties. The simulations show that the level of economic activity is not influenced by the level of inflation but only by relative prices. This implies that there exists no trade-off in the model between inflation and unemployment. At the steady state, value added growth is determined by the evolution of labour efficiency, the labour force, taxation on labour, the terms of trade and the real cost of capital. In the absence of changes in relative prices and taxation levels, employment growth will be given by the evolution of the labour force, and productivity growth by the increase in labour efficiency. The pace at which the economy moves to the new steady state after a shock is determined by the speed of adjustment of capital to its desired level.

*“S3BE: un modèle macroéconomique de long terme pour l'économie belge”,  
I. Lebrun, Working Paper 3-09, April 2009.*

## Belgian public sector employment from an international perspective

This paper falls within the framework of debates and reflection on the efficiency of the public sector. Evaluation of this efficiency assumes a conflict between effectiveness, in terms of services produced, and the resources employed. This paper examines the question of resources, focusing on an aspect that is essential to the size of the public sector - i.e. employment - without examining the question of effectiveness. In concrete terms, this paper aims to evaluate the size of public sector employment in Belgium using an international comparison.

Belgium had 807 000 jobs in the general government sector in 2007: 142 000 jobs in the central government sub-sector, 349 000 in federate entities government,

286 000 in local government and 30 000 in social security funds. In Belgium, the general government sector principally comprises the public administration (425 000 jobs) as well as state education (331 000 jobs); however, unlike many countries, it does not include healthcare-related employment because this falls fully within other sectors. Therefore, principally because of international differences in the sectoral classification of healthcare, there are difficulties in comparing general government sector employment.

The same does not go for employment in the public administration. In Belgium, public administration employment, relative to the total population, amounts to 4 per 100 inhabitants, which is the highest proportion among

the members of the OECD with a comparable level of economic development: the average is 3 employees per 100 inhabitants in 2006 (in number of hours worked annually, the finding is the same: 64 hours per inhabitant in Belgium, compared to an average of 50 hours). Furthermore, the level of employment for Belgium has registered an increase in recent times, while the average for the comparison countries has tended to settle down (between 1995 and 2006, the number of employees per 100 inhabitants has increased by 0.4 in Belgium while it has reduced by 0.1 for the average). We note that public administration employment, relative to overall employment, amounts to 9.9% in Belgium, as opposed to 6.2% on average for the comparison countries in 2006.

Within the public administration, total "pure" public services pay (namely the public administration, excluding defence and public order and safety), of the order of 3.9% of GDP in Belgium, is the highest among the members of the OECD with a comparable level of economic development, for which the average is at 2.5% of GDP, in

2006. This position at the top of the ladder is explained by the number of jobs. In fact, the average level of salary (per employee) in the public administration is lower in Belgium than on average; the proportion of employment of over-50s in the public administration, which is lower in Belgium (27.9%) than on average (30.4%), possibly contributes to this discrepancy. It should be noted, however, that purchases of goods and services (in the case of "pure" administration services, as in the other functions) are lower in Belgium than on average, which may indicate a trend to a lower use of sub-contracting.

The rate of employment in the public administration does not seem to be influenced by the size of a country's population. By contrast, total general government sector pay, excluding education and health, tends to represent a greater percentage of GDP, the higher the degree of decentralisation in a country.

*"L'emploi public belge dans une perspective internationale", L. Laloy, Working Paper 4-09, April 2009.*

## Competitiveness of the Belgian economy

Over the last few years, the Belgian current account surplus has turned into a deficit. Given the high degree of Belgian openness, it is important to understand the reasons for this evolution. The working papers presented below deal with this matter using two different methods of analysis. For more detailed information see also the special topic of this issue of the STU.

### Market shares, competitiveness and the current account

The Belgian current account evolved from a sizeable surplus in the period 1994-2000 to a deficit in 2008. Over half of this reversal is attributable to the deterioration in the terms of trade. The outpacing of export volume growth by import volume growth counts for a third of the deterioration of the current account. The decline in net factor income from abroad was of lesser importance.

The relative weakness of Belgian export growth is of particular concern and is also noticeable in the evolution of Belgium's export market share (defined as the difference between export and export market growth), which deteriorated markedly. This was partly due to the worsening of competitiveness (measured by means of the real effective exchange rate), which itself resulted mostly from the appreciation of the euro, since Belgian unit labour costs increased scarcely faster than those of our trading partners. However, the stabilisation of relative ULCs over 2000-2007 concealed a substantial increase in the latter three years, which is likely to continue for 2008

and 2009.

Competitiveness evolutions alone are, however, insufficient for explaining market shares. From 1995 onwards, especially, competitiveness has seemed to lose in importance as an explanatory variable. In spite of a sizeable gain in competitiveness over the period 1996-1999, the loss in market share remained as large as in the previous period.

Other non-competitiveness or structural factors, such as the export product mix, have also played a role in the evolution of market shares.

*"Market shares, competitiveness and the current account", B. De Ketelbutter, Working Paper 6-09, May 2009.*

### The relative position of the Belgian economy in Europe

This working paper analyses the link between the evolution of the relative position and the evolution of the relative prices of Belgian manufacturing and market services in the European Union over the period 2000-2005 in order to shed a complementary light to that given by the traditional approach on the recent deterioration of the Belgian current account.

Compared with Europe, Belgian manufacturing is relatively specialised in metals, chemicals, textiles, food and


beverages, motor vehicles and the paper industry. In contrast, it is relatively weakly specialised in high tech activities such as computer and communications equipment.

Over 2000-2005, the relative position of Belgian manufacturing inside the EU15 slightly deteriorated. This evolution was concomitant with an unfavourable evolution of the relative value added deflator, mainly caused by a faster growth in the unit capital cost and, for a little less than one third of the change, by a faster growth in the unit labour cost. These faster increases in unit costs of production were partly due to slower growth in the productivity of labour as well as in that of capital. This slower growth was itself caused by a weaker contribution of total factor productivity (TFP) to Belgian manufacturing than to European manufacturing. Those manufacturing industries with a deteriorating relative position were not as successful as their European counterparts in using technical progress to improve their efficiency or to introduce new products.

Inside the EU15, Belgian market services are relatively specialised in insurance, wholesale trade, businesses services, financial intermediation, storage and logistics, inland and air transport and other financial activities.

Over 2000-2005, the relative position of Belgian market services in the EU15 improved slightly despite an unfavourable evolution in relative prices. This faster increase in prices found its origin in a faster increase in the unit capital cost of Belgian services than in the EU15 on average. Indeed, the other determinant of price evolution, the unit labour cost, increased much more slowly in Belgium than in the EU15. This good performance was only due to the faster growth in productivity, with all Belgian market services recording a capital deepening that was larger than that of their European counterparts.

The same analysis may be implemented in terms of production rather than in terms of value added. The comparison of the results of the two analyses indicates that Belgian manufacturing industries increased their intermediary consumption faster than the same industries in the EU15, leading to the conclusion that there is a growing call on outsourcing. The opposite trend is visible for market services. They may have benefited from this greater manufacturing outsourcing.

 *“La position relative de l'économie belge en Europe”,  
B. Biatour et C. Kegels,  
Working Paper 5-09, April 2009.*

## Fiscal Stabilisation Plans and the Outlook for the World Economy

[This policy-oriented research paper presents a summary discussion of the effectiveness of fiscal policy measures in times of world-wide synchronised cyclical downturns and credit constraints. The document also provides a tentative medium-term projection for the major economic areas of the world over the period 2009-2015.](#)

This document presents and discusses three main issues. First, the effectiveness of fiscal multipliers. Second, the possible effects of the fiscal stimulus plans as devised and currently implemented in the euro area and the United States. Third, a tentative outlook for the world economy over the period 2009-2015.

Section A presents the basic textbook fiscal multipliers and explains why, in a general case, public spending multipliers should be expected to be larger than tax cut multipliers and why fiscal multipliers can be expected to be relatively larger for large and closed economies than for small and open economies.

Section B goes on to present the relative effectiveness of fiscal and monetary policy in the traditional IS-LM framework, showing that though monetary policy can be effective in stimulating and economy in a usual context, standard monetary policy loses its effectiveness in low inflation, low interest rate environments. The sec-

tion also presents a discussion of policy effectiveness and policy options in times of liquidity traps that are accompanied by credit crunches.

Section C presents a number of issues regarding the design and implementation of effective fiscal stabilisation programmes, highlighting the importance of timing, temporality, targeting, contingency, credibility and coordination.

Section D then presents and compares the fiscal multipliers as found in the literature, and resulting from empirical evaluations using alternative methodologies and assumptions. The multipliers that are presented result from narrative record approaches, (S)VAR models, macroeconomic models, DSGE and General Equilibrium models. Section E. presents evidence from NIME, the Federal Planning Bureau's macroeconomic world model, on the properties of fiscal multipliers in the euro area. Four different types of stimulus measures are tested: an increase in public consumption of goods and services, investment incentives targeted at the private business sector, a reduction in social security contributions and a reduction in indirect taxation.

Sections F and G present evaluations carried out with the NIME model of the fiscal stimulus plans put in place

in the euro area and the United States, respectively.

Finally, section H presents a tentative medium-term projection for the world economy over the period 2009-2015. The section also discusses the concept of, and various measurement issues related to, potential output and output gaps. This last section also presents an assessment of the major risks and uncertainties surround-

ing the baseline projection for the world economy.

*“Fiscal Stabilisation Plans and the Outlook for the World Economy. Do counter-cyclical fiscal measures offer any hope of recovery for the world economy? An evaluation of fiscal policy effectiveness in the face of a global recession.”*

*P. Van Brusselen,*

*NIME Policy Brief 01-2009, April 2009.*

## Other Recent Publications

February 2009

“Indicatorentabel over duurzame ontwikkeling - op basis van 11 jaar federale rapportering / Tableau d'indicateurs de développement durable - basé sur 11 ans de rapportage fédéral”

TFDD/TFDO

Economic Outlook 2009-2014, May 2009

“Perspectives économiques 2009-2014-  
Economische vooruitzichten 2009-2014”

Economic Outlook 2009, February 2009

“Prévisions économiques 2009 -  
Economische vooruitzichten 2009”

Planning Paper 107, February 2009

“Langetermijnvooruitzichten voor transport in België: referentiescenario/Perspectives à long terme de l'évolution des transports en Belgique: projection de référence”

B. Hertveldt, B. Hoornaert, I. Mayeres

Working Paper 2-09, February 2009

“Le système d'innovation en Wallonie”

B. Biatour, C. Chatelain and C. Kegels

Working Paper 1-09, January 2009

“The impact of offshoring on employment in Belgium”

B. Michel

## Research in Progress

### Wage formation

New approaches based on detailed micro-data are being developed to better understand determinants of wage formation in Belgium and increase accuracy of related forecasts.

contact: [labour@plan.be](mailto:labour@plan.be)

### Determinants of total factor productivity growth in Belgium

Research is under way to look into two specific determinants of total factor productivity (TFP) growth in Belgium: innovation through R&D and market competition.

contact: [productivity@plan.be](mailto:productivity@plan.be)

### General equilibrium modelling

A general equilibrium model (GEM) for Belgium is under construction. The model will be a long-term model with a particular emphasis on the link between transport and the economy.

contact: [transport@plan.be](mailto:transport@plan.be)

### Input-output tables

The FPB is preparing Input-Output tables for 2005. These are compiled using the Economic System of Accounts ESA95, and will be methodologically comparable to the tables for 1995 and 2000. The National

Accounts Institute will transmit the data to Eurostat. The tables should be available in a 60-commodity disaggregation by the summer of 2009.

contact: [inputoutput@plan.be](mailto:inputoutput@plan.be)

### The long-term budgetary and social challenges of ageing

Different aspects of the long-term dynamics of acute health care, long-term care and pension expenditure are being scrutinized. A long-term model is being used to project the budgetary consequences of ageing in different macroeconomic and demographic scenarios, notably in the framework of policy processes aimed at designing budgetary objectives (at national and European levels). Furthermore, the social dimension of pension benefits is being investigated using micro approaches, in particular a microsimulation model.

contact: [maltese@plan.be](mailto:maltese@plan.be)

### Employment in the civil service

The question of whether the level and the structure of employment in government bodies in Belgium is appropriate has been raised regularly. A research project at FPB has been initiated to address this question.

contact: [pubfin@plan.be](mailto:pubfin@plan.be)

## Recent history of major economic policy measures

May 09

The ECB lowered its main policy rate by 25 basis points to 1%.

KBC received from the federal government, on payment of a fee, a state guarantee on its CDO exposure. The Flemish government injected an additional EUR 1.5 billion capital into KBC in the form of debt securities.

Three subsidised systems for reducing the working time of white-collar workers have been made available in 2009 and may be prolonged until mid-2010. The implementation of these systems requires collective labour agreements at sectoral or firm level or is subject to approval by review boards representing trade unions and employer federations.

- (1) Any firm that grants a reduction in working time of 20% or 25% for all white-collar workers or well-identified categories of white-collar workers is granted with cuts in employers' social security contributions, of which saving at least 75% has to be passed on to the employees.
- (2) Firms that face a significant drop in turnover (20%) or that have parked a significant proportion of their blue-collar workforce in temporary unemployment (20%), may grant part-time sabbaticals (20% or 50%) on an individual basis. In return, the employees are entitled to allowances, paid out by the National Employment Office (RVA, ONEM) and optionally topped up by the employer.
- (3) Alternatively, subject to the same conditions on turnover or blue-collar workforce in temporary unemployment as given above, firms may resort to full-time or half-time collective suspensions of labour contracts. The suspensions are restricted in time. In return, the employees are entitled to allowances, which are paid out by the National Employment Office (RVA, ONEM) and compulsarily topped up by the employer.

April 09

The ECB lowered its main policy rate by 25 basis points to 1.25%.

The update of the Belgian Stability programme aims at a balanced budget by 2015, requiring a 5% adjustment of GDP as compared to a constant policy scenario.

The federal government approved a draft royal decree transposing European Directive 2007/58 on the market opening of international passenger railway services. In short, the decree defines the concept of international passenger services, gives operators access to the network, guarantees capacity allocation to operators, and works out a system to judge on the international character of passenger services.

Two measures were taken on electronic communications.

First, it was decided to issue a fourth mobile network concession. It will consist of a GSM licence and a UMTS licence, which will be auctioned separately after summer.

Second, an on-line tariff simulator was introduced to stimulate competition.

March 09

The ECB lowered its main policy rate by 50 basis points to 1.5%.

Further measures following the Suez-GdF merger were taken. Publigas, a holding owned by local authorities, sold its stake in the former gas trading monopoly, Distrigas, to the Italian majority owner, ENI. The latter company now owns 99% of Distrigas shares and has made an offer for the remainder. Publigas used part of the EUR 1.5 billion revenue from the sale to gain a majority stake in the gas TSO Fluxys. The federal government did not obtain a golden share in Suez-GdF. Instead a permanent committee will be established between Suez-GdF and the Belgian and French ministers of energy.

January 2009

The ECB lowered its main policy rate by 50 basis points to 2.0%.

The Flemish government injected EUR 2bn capital into KBC in the form of debt securities.

A more complete overview of "Recent history of major economic policy measures" is available on the FPB web site (<http://www.plan.be>)



Abbreviations for names of institutions used in this publication

BIS	Bank for International Settlements
CPB	Netherlands Bureau for Economic Policy Analysis
CRB/CCE	Centrale Raad voor het Bedrijfsleven / Conseil Central de l'Economie
DGSB	FPS Economy - Directorate-General Statistics Belgium
EC	European Commission
ECB	European Central Bank
EU	European Union
FEBIAC	Fédération Belge des Industries de l'Automobile et du Cycle "réunies"
FPB	Federal Planning Bureau
FPS Economy	Federal Public Service Economy, S.M.E.s, Self-employed and Energy
FPS Employment	Federal Public Service Employment, Labour and Social Dialogue
FPS Finance	Federal Public Service Finance
IMF	International Monetary Fund
INR/ICN	Instituut voor de Nationale Rekeningen / Institut des Comptes Nationaux
IRES	Université Catholique de Louvain - Institut de Recherches Economiques et Sociales
NBB	National Bank of Belgium
OECD	Organisation for Economic Cooperation and Development
RSZ/ONSS	Rijksdienst voor Sociale Zekerheid / Office national de la Sécurité Sociale
RVA/ONEM	Rijksdienst voor Arbeidsvoorziening / Office national de l'Emploi

Other Abbreviations

BoP	Balance of Payments
CPI	Consumer Price Index
EUR	Euro
GDP	Gross Domestic Product
JPY	Japanese yen
LHS	Left-hand scale
OLO	Linear obligations
qoq	Quarter-on-quarter, present quarter compared to previous quarter of s.a. series
RHS	Right-hand scale
s.a.	Seasonally adjusted
t/t-4	Present quarter compared to the corresponding quarter of the previous year
t/t-12	Present month compared to the corresponding month of the previous year
UKP	United Kingdom pound
USD	United States dollar
VAT	Value Added Tax
yoy	Year-on-year, i.e. t/t-4 (for quarters) or t/t-12 (for months)