# SHORT TERM UPDATE

3-09

Quarterly Newsletter October 2009

Headlines Belgian Economy

Special Topic in this issue Measuring development progress beyond GDP



.be

# 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

After the escalation of the financial crisis in September 2008, the industrialised countries were pulled into a deep recession. The main uncertainty that currently surrounds economic forecasts concerns the robustness of the international economic recovery. In fact, monetary and fiscal policies have been able to stabilise the world economy more rapidly than expected, but it remains difficult to predict whether the economic recovery is able to withstand the fading out of the impact of the economic stimulus measures.

According to our September forecast, Belgian GDP growth should become slightly positive in the second half of 2009. In the course of 2010, economic growth should also be supported by domestic demand. Quarterly GDP growth should pick up further in the course of 2011 and reach 0.6%. This will result in annual GDP growth rates amounting to 0.4% in 2010 and 1.9% in 2011, after a drop of 3.1% this year.

Whereas total net job creation still amounted to 71 200 persons on average last year, 34 600 jobs should be lost this year. In 2010, job losses should add up to 58 900 on average. In 2011, a net job creation of 17 600 persons on average is expected. Given the evolution of the labour force, the number of unemployed (broad administrative definition) should increase by 53 900 persons this year, by 98 400 next year and a further 23 300 persons in 2011. As a result, the harmonized Eurostat unemployment rate (which is based on labour force surveys) is expected to reach 9.6 % in 2011, compared to 7% in 2008.

According to our inflation update of October, headline inflation (as measured by yoy growth of the national index of consumer prices) has become negative since May and should remain so until November 2009. The yoy decrease of the index results from the price evolution of a limited number of products and is temporary. Underlying inflation should cool down further as a reaction to weak economic activity and the gradual pass through of lower energy prices into the prices of other goods and services, but should remain clearly positive. This year, inflation should be zero on average, mainly due to the negative impact of energy prices. As oil prices should increase gradually, their negative impact on inflation should disappear, resulting in a rise in inflation to 1.3% in 2010, despite the decrease in underlying inflation (from 2% in 2009 to slightly above 1% in the second half of 2010).

Editorial Board stu@plan.be

Henri Bogaert Michel Englert Bart Hertveldt Igor Lebrun Jan van der Linden Filip Vanhorebeek Joost Verlinden

DTP & Web Publishing

Adinda De Saeger Geert Bryon Dominique van der Wal

Printed by

FPS Economy, S.M.E.s, Self-employed and Energy STU 3-09 was finalised on 6 October 2009

The Federal Planning Bureau (FPB) is a public agency under the authority of the Prime Minister and the Minister of Economy and Reform. The FPB has a legal status that gives it an autonomy and intellectual independence within the Belgian Federal public sector.

FPB activities are primarily focused on macroeconomic forecasting, analysing and assessing policies in the economic, social and environmental fields.





• Measuring development progress beyond GDP
• Economic Forecasts 2010-2011 • Summary of Economic Forecasts
Recent Economic Developments  General economic activity  Private consumption Business investment  Housing investment  Stock building  Foreign Trade  Labour market  Prices  Interest rates  Exchange rates  Tax indicators
• Sustainable development indicators, objectives and visions • The Belgian environment industry (1995-2005) • Transport emissions – Historic evolution and outlook • Alternative assessment of Belgian competitiveness • Impact of the financial crisis on Belgian potential output
• Recent history of major economic policy measures
Abbreviations

All FPB publications, mentioned in this STU, can be obtained either by sending a fax (+32 2 5077373) or by filling in the necessary form on our Internet site (http://www.plan.be).

# Measuring development progress beyond GDP

This special topic article describes three kinds of synthetic indicators complementing GDP: the Human Development Index, the Ecological Footprint with Biocapacity and, third, indicators based on Environmental Satellite Accounts. It shows that these indicators, among others, provide useful additional information on the human and environmental resource bases of development.

Since the seventies and the publication of the Club of Rome report, *The Limits to Growth*, debates on the measure development progress have been ongoing. They were recently revived with the international initiative, *Beyond GDP* <sup>1</sup>, launched by the European Commission and European Parliament, WWF, the Club of Rome and the OECD, and with the Communication, *GDP and Beyond - Measuring progress in a changing world*<sup>2</sup>. These debates are reflected in a 2008 Eurobarometer<sup>3</sup> showing a large consensus on the need to improve the variety of indicators. More than two thirds of citizens (77% in Belgium and 67% in the EU) support the idea that *national progress should be evaluated based equally on social, environmental and economic indicators*" rather than "mostly on money-based economic indicators.

In this context, new indicators have emerged since the eighties for measuring social progress and environmental challenges, as well as their interlinkages with economic performance. Those selected as examples in this article are "beyond GDP", i.e. they reflect a variety of important data that are not included in GDP. The complexity of this debate is illustrated here by going into these synthetic indicators in five areas: coverage, added-value and limitations, figures for Belgium, institutions that developed them and their accounting systems and finally their potential for guiding policy decision.

#### **The Human Development Index**



The Human development index (HDI) is an indicator of human capital that combines four indicators covering three key dimensions of human development: Health (life

expectancy at birth), Knowledge (adult literacy rate and gross enrolment ratio in education), and Standard of living (GDP per capita as a proxy, as logarithm of GDP per capita at purchasing power parity to US\$. The HDI "was created to re-emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth"<sup>4</sup>. An important use of

1. See website www.beyond-gdp.eu (accessed on September 29, 2009)

HDI is to compare the health and education performances of countries with similar standard of living. However, some key aspects of human development are not covered, such as political participation or knowledge acquired through channels other than formal education. Belgium has a high human development index: its HDI rose from 0.869 in 1980 to 0.948 in 2006. In 2006, the world average HDI was 0.747 and the 26 countries with low human development had an average HDI of 0.444.

The HDI was developed by the United Nations Development Programme (UNDP) and is published yearly in the UNDP's Human Development Report. The UNDP also developed other similar indicators, for example the human poverty index and the gender-related development index. HDI is computed using a simple methodology. The values obtained for each of the three key dimensions are normalised between 0 and 1 and so for the HDI, as the simple average of these three dimensions. Countries fall into one of three categories, "high", "medium" or "low" human development, depending on their level of HDI: above 0.8, between 0.5 and 0.8 or below 0.5 respectively.

#### The Ecological Footprint and Biocapacity indicators



The Ecological Footprint (EF) and Biocapacity (BC) indicators provide information on environmental flows and stocks. The EF provides information, at the level of a

country or a large territory, on pressures exerted by consumption and production activities on the environment, while BC provides information on the state of the environment. One of the strengths of the EF and BC is that several environmental issues are expressed in a single common unit, the global hectare (gha). The EF and BC do not, however, encompass all environmental issues. They exclude, for example, air, water and soil pollution, water use and non-renewable resources depletion. In 2003, the EF of Belgium was 6.1 gha per inhabitant (compared to the high-income countries' EF, 6.4), while the Belgian BC was 1.6 gha per inhabitant (compared to the worldwide available BC, 1.8). Belgium was thus in large ecological deficit in 2003 (more recent data not all available).

The EF and BC are developed by the non-governmental organisation, Global Footprint Network (GFN), using their own accounting system, which is completely different from the national accounts system. It has been launched only recently, and the methodology and data collection processes are still under development. The EF

European Commission, 2009, GDP and beyond: Measuring progress in a changing world, COM(2009)433

<sup>3.</sup> European Commission, 2008, Attitudes of European citizens towards the environment, Special Eurobarometer 295

UNDP, //hdr.undp.org/en/statistics/faq/question,69,en.html (accessed on September 29, 2009)

measures, in land and water area (in gha), the renewable resources and fossil energy embedded in the goods and services used by a population, as well as the land occupied by infrastructure. The BC measures, in gha too, the capacity of the land and water area (on the territory where this population lives) to produce the renewable resources taken into account in the EF. It depends, among other factors, on the technologies and production patterns used in each region. The comparison between the EF and the BC indicates whether a population shows an ecological surplus or deficit on its own territory.

#### **Indicators based on Environmental Satellite Accounts**



Environmental Satellite Accounts (ESA) provide detailed information on various environmental flows and stocks, such as eco-taxes, raw material flows, polluting

emissions and natural resources. Besides, in parallel to the ESA, Social and other Satellite Accounts are also being developed. As they use the same classification system as national accounts, the ESA allow the establishment of an explicit link between economic activity and environmental data, such as the emission of acidifying gases per sector. ESA show, for this example, that, between 1990 and 2002, total acidifying emissions decreased by 28% in Belgium, with a fall of 29% in the industry sector and of 19% in the households sector.

ESA are compiled by statistical authorities. The ESA methodology has progressively been developed and harmonised at the European level by Eurostat recommendations. A number of pilot satellite accounts have been produced in Belgium by the Federal Planning Bureau. Such studies only account for overall impacts on the environment. They do not differentiate, for example, between two goods produced with different methods such as fruits produced by either organic or intensive agriculture.

#### **GDP and beyond**

Like GDP, all global indicators reviewed here are developed according to international standards, to be used world-wide; they thus provide means for comparison between many countries of the world. Each of these synthetic indicators has advantages but also limitations, which call for caution in their use, especially when making these comparisons. Moreover there is scope for development and data improvement for all of them in order to increase their level of disaggregation and their coverage, so that they could measure a larger number of human or environmental capital assets.

The HDI would not exist without GDP but it is a better measure of social progress. The pair EF and BC certainly

bring a vision of the size of the environmental challenge that GDP did not even try to measure, but these indicators cannot be interconnected. Conversely, ESA can reflect the coupling or decoupling between GDP growth and environmental degradation. It should, however, be kept in mind that none of them reflects a complete knowledge of human, natural and economic systems. The sheer complexity of these systems does not allow a comprehensive measurement of these capital assets.

#### Guiding sustainable development policy decisions

A key question about these emerging tools is whether or not they have the potential to guide strategic sustainable development policy decisions. As HDI design is mostly targeted on developing countries, it can be used by donor countries to support ODA policies or by recipient countries to formulate development objectives. From an overarching sustainable development perspective (including its social pillar), the value of 0.8 could be adopted as a minimum development goal. ESA could also provide indicators for designing decoupling objectives and monitoring sustainable consumption and production policies. By linking them with other information, such as consumer surveys, it is possible to evaluate households' consumption pressures on the environment or even differentiate those pressures by categories of households. This could contribute to developing synergies between policies, for example those to eradicate poverty and those to protect the environment.

How the EF and the BC could guide policy decisions is unclear because reducing the ecological deficit evaluated by these indicators cannot be connected clearly to key policy target, such as greenhouse gas emissions reduction rates. To reduce this deficit, public authorities could even be inclined to increase environmental pressures that are not taken into account in the EF and BC. For example, turning woodlands into monoculture forests would increase the capacity to produce renewable resources and hence the BC, but would damage biological diversity. However, owing to the apparent simplicity of the concepts, the pair EF and BC has been largely used until now as an awareness-raising tool.

#### Conclusion

None of these indicators is perfect but all can contribute to measuring and debating social and environmental goals beyond economic growth, to achieve sustainable change in society. To overcome limitations in terms of coverage, they can be included in a table of indicators, such as that proposed in the 5th Federal Report on Sustainable Development (see page 19), it argues that both synthetic indicators and a structured table of detailed indicators can be combined to measure progress in a changing world.

#### **Economic Forecasts 2010-2011**

# The euro area recession seems to have ended, but a strong recovery in the short run is unlikely...

After the escalation of the financial crisis in September 2008, the industrialised countries were pulled into a deep recession. In the US, Japan and the euro area, economic activity contracted sharply in 2008Q4 and 2009Q1. In 2009Q2, the fall in GDP was far more limited in most euro area countries. The two major member states, Germany and France, even posted positive economic growth rates, which was at least partly due to the recovery plans. During the last few months, several confidence indicators recovered somewhat from their troughs, but their current levels still point to particularly weak economic growth.

In the euro area as a whole, economic activity is projected to register positive but modest quarterly growth figures in the second half of 2009 and in the course of 2010. In 2010, annual GDP growth should amount to 0.8%, after -3.9% in 2009. In 2011, euro area economic growth is expected to regain momentum and reach 1.8%. The robustness of the recovery is the main uncertainty surrounding these forecasts. Monetary and fiscal policies have been able to stabilise the world economy more rapidly than expected, but it remains difficult to predict whether the economic recovery is able to withstand the fading out of the impact of the economic stimulus measures.

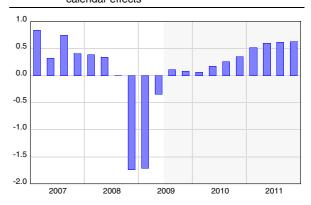
# ... as a result, the recovery of the Belgian economy will gradually take shape ...

Belgian economic activity was also severely hit in 2008Q4 and 2009Q1 (-1.7% in both quarters). In 2009Q2, the decrease in GDP remained limited to 0.3%. In the second half of 2009, economic growth, driven by exports, should become slightly positive. In the course of 2010, economic growth should also be supported by domestic demand, in particular by private consumption and by business and public investment. Quarterly GDP growth should pick up further in the course of 2011 and reach 0.6%. This will result in annual GDP growth rates amounting to 0.4% in 2010 and 1.9% in 2011, after a drop of 3.1% this year.

In line with foreign export markets, Belgian exports fell sharply in 2008Q4 and 2009Q1. In the second half of 2009, the volume of exports should recover slightly. On a yearly basis, this implies an unprecedented decrease of more than 15% in 2009. Spurred on by the recovery of the international economy, exports should increase by

1.5% and 4.1%, respectively, in 2010 and 2011, but should continue to grow at a slower pace than the export markets.

Graph 1 - Quarterly GDP growth
qoq growth rates, corrected for seasonal and
calendar effects



The drop in both domestic demand and exports should reduce the volume of imports this year by almost 14%. In 2010 and 2011, import demand should pick up in line with economic activity. The current account deficit should increase further in 2010 and 2011.

As wage indexation in 2009 partially reflects the high inflation rate of 2008, it largely exceeds inflation. Together with a number of federal and regional tax reductions, this has resulted in an increase in real disposable income of 1.5%, despite a decrease in employment and losses in other income components. In 2010, real disposable income should barely increase due to the deteriorating labour market situation and higher inflation. In 2011, purchasing power growth should be supported by the increase in employment, the rise in real wages before indexation and the increase in property income, and should amount to 2.1%.

In view of the banking crisis, the gloomy economic climate and negative wealth effects, households have cut back their spending during the last few quarters. The private consumption volume should stabilise in the second half of 2009, but the decline should amount to 0.9% in average annual terms. Households are spending a substantially smaller part of their disposable income, as a result of which the private savings rate has risen from 13.2% in 2008 to 15.1% in 2009. With an increase of 0.6% in 2010 and 1.9% in 2011, private consumption should evolve more in line with real disposable income. As a result, the savings rate will not fall back to the level seen before the financial crisis as high unemployment is expected to continue to weigh on consumer confidence.

The limited increase in household's real disposable income and the unfavourable employment evolution should curb housing investment until 2010Q4, in spite of a temporary VAT reduction for residential building. This will result in negative annual growth of 3.2% in 2009 and 4.6% in 2010. In the course of 2011, housing investment should regain momentum, but remain almost stable in annual average terms due to the low starting point at the beginning of 2011.

From mid-2008 onwards, business investment has been scaled back. Due to the economic downturn, which was accompanied by a strong fall in capacity utilisation rates, businesses feel little need to increase production capacity. The decline in business profitability and the tightened credit conditions also create a less attractive investment climate. Consequently, investment activity should contract further in the course of 2009 and only recover by mid-2010 owing to better demand prospects, resulting in a negative annual growth rate in 2009 (-4.9%) and in 2010 (-1.2%). An increase on an annual basis is not to be expected until 2011 (2.9%).

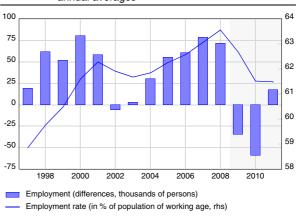
This year, public consumption and public investment partially compensate for the reduction in household and business expenditures. In 2010 and 2011, public investment growth should accelerate to 6.3% and 13.5%, respectively, thus supporting economic growth. The dynamism is largely due to local authorities' investments in anticipation of the municipal elections of 2012.

#### ... and the unemployment rate will continue to rise ...

The decline in domestic employment in 2009 (-0.8%) is far less pronounced than that in economic activity. In a deteriorating economic climate, many employers initially prefer a reduction in working hours, e.g. by appealing to the temporary unemployment scheme. Thus, the historically downward trend in average working hours is strengthened by cyclical circumstances. As the economic downturn persists, employers adjust their number of employees, which may lead to redundancies. This explains why domestic employment only started to diminish in 2009Q1.

As a result of the slow economic recovery and a modest increase in average hours worked per employee as from end 2009, employment should not increase before early 2011. Whereas total net job creation still amounted to 71 200 persons on average last year, 34 600 jobs should be lost this year. In 2010, job losses should add up to 58 900 on average. In 2011, a net job creation of 17 600 persons on average is expected.

Graph 2 - Evolution of employment and employment rate annual averages



The employment rate should drop from 63.6% in 2008 to 61.5% in 2010 and 2011. Given the evolution of the labour force, the number of unemployed (broad administrative definition) should increase by 53 900 persons this year, by 98 400 next year and by a further 23 300 persons in 2011. As a result, the harmonized Eurostat unemployment rate is expected to reach 9.6% in 2011, compared to 7% in 2008.

#### ... within a context of limited inflation

Crude oil prices plunged from more than USD 140 per barrel to somewhat less than USD 40 between July and December 2008. Since then, oil prices have gradually increased to more than USD 70 per barrel in August, but yoy growth in oil prices should remain negative until 2009Q4. Natural gas and electricity prices follow that evolution with some delay. Therefore, headline inflation in Belgium (as measured by yoy growth of the national index of consumer prices (NICP)) has become negative since May and should remain so until October 2009. The yoy decrease in the index results from the price evolution of a limited number of products and is temporary. Underlying inflation should cool down further as a reaction to weak economic activity and the gradual pass through of lower energy prices into the prices of other goods and services, but should remain clearly positive. This year, inflation should be zero on average, but as a result of increasing oil prices it should amount to 1.5% in 2010<sup>1</sup> and to 1.6% in 2011. The health index is not influenced by developments in petrol and diesel prices and therefore has a less pronounced profile than the NICP. The increase in the health index should amount to 0.6% in 2009, 1.2% in 2010 and 1.6% in 2011. The current pivotal index (112.72) should be exceeded in December 2010. The next pivotal index (114.97) will not be exceeded in 2011.

"conomische vooruitzichten 2010-2011 - Prévisions économiques 2010-2011", INR/ICN, September 2009

Inflation forecasts for 2010 were recently revised downwards. See page 15 for more information.

# **Summary of Economic Forecasts**

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

Changes in volume (unless otherwise specified) (cut-off date of forecasts: 9 September 2009)

	2008	2009	2010	2011
Private consumption	0.9	-0.9	0.6	1.9
Public consumption	2.3	1.9	1.4	1.7
Gross fixed capital formation	5.5	-3.9	-1.5	3.1
Final national demand	2.0	-1.9	0.3	2.1
Exports of goods and services	2.2	-15.1	1.5	4.1
Imports of goods and services	3.3	-13.7	1.4	4.4
Net-exports (contribution to growth)	-0.9	-1.5	0.1	-0.2
Gross domestic product	1.1	-3.1	0.4	1.9
p.m. Gross domestic product - in current prices (bn euro)	344.21	336.60	342.55	355.37
National consumer price index	4.5	0.0	1.5	1.6
Consumer prices: health index	4.2	0.6	1.2	1.6
Real disposable income households	0.3	1.5	0.4	2.1
Household savings ratio (as % of disposable income)	13.2	15.1	14.8	14.9
Domestic employment (change in '000, yearly average)	71.2	-34.6	-58.9	17.6
Unemployment (Eurostat standardised rate, yearly average) [1]	7.0	8.2	9.4	9.6
Current account balance (BoP definition, as % of GDP)	-2.3	-2.5	-2.7	-2.9
Short term interbank interest rate (3 m.)	4.6	1.3	1.5	2.7
Long term interest rate (10 y.)	4.4	4.0	4.1	4.5

<sup>[1]</sup> Other unemployment definitions can be found on page 14

# Economic forecasts for Belgium by different institutions

	GDF	P-growth	li	nflation	Governm	ent balance	Date of update
	2009	2010	2009	2010	2009	2010	
Federal Planning Bureau [1]	-3.1	0.4	0.0	1.5[3]			09/09
INR/ICN [1]	-3.1	0.4	0.0	1.5			09/09
National Bank of Belgium [2]	-3.5	-0.2	0.1	1.3	-5.5	-6.0	06/09
European Commission [2]	-3.5	-0.2	0.3	1.2	-4.5	-6.1	04/09
OECD [2]	-4.1	-0.5	0.3	0.7	-4.6	-6.1	06/09
IMF [2]	-3.2	0.0	0.2	1.0	-5.9	-6.3	10/09
ING [1]	-3.0	1.0	0.2	1.3	-5.1	-5.3	09/09
Dexia [1]	-2.9	1.5	-0.1	1.3			08/09
KBC Bank [1]	-3.1	0.8	0.3	1.6	-5.3	-6.8	09/09
Deutsche Bank	-3.2	1.3	0.2	1.2	-5.0	-6.0	09/09
IRES [1]	-4.0	-0.2	0.2	1.4	-5.6	-6.3	07/09
Consensus Belgian Prime News [2]	-3.0	1.1	0.1	1.1	-4.7	-5.4	09/09
Consensus Economics [2]	-3.3	0.0	0.0	0.9			09/09
Consensus The Economist [2]	-3.3	0.7	0.3	1.0			09/09
Consensus Wirtschaftsinstitute [2]	-3.1	-0.6	0.6	0.2	-3.9	-4.5	04/09
Averages							
All institutions	-3.3	0.4	0.2	1.1	-5.0	-5.9	
International public institutions	-3.6	-0.2	0.3	1.0	-5.0	-6.2	
Credit institutions	-3.1	1.1	0.2	1.3	-5.0	-5.9	

<sup>[1]</sup> Inflation forecasts based on the evolution of the national index of consumer prices

<sup>[2]</sup> Inflation forecasts based on the evolution of the harmonised index of consumer prices

<sup>[3]</sup> Inflation forecasts for 2010 were recently revised downwards. See page 15 for more information.

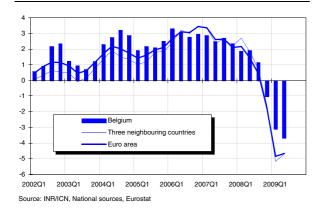
#### **General economic activity**

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

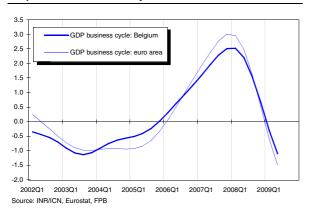
				YoY g	rowth rates,	in %		QoQ growth rates, in %					
	2007	2008	2008Q2	2008Q3	2008Q4	2009Q1	2009Q2	2008Q2	2008Q3	2008Q4	2009Q1	2009Q2	
Germany	2.6	1.0	2.0	0.8	-1.8	-6.7	-5.9	-0.6	-0.3	-2.4	-3.5	0.3	
France	2.3	0.3	1.0	0.1	-1.7	-3.5	-2.8	-0.4	-0.3	-1.4	-1.4	0.3	
Netherlands	3.6	2.0	3.2	1.7	-0.8	-4.2	-5.2	-0.1	-0.4	-1.1	-2.7	-1.1	
Belgium	2.6	1.0	1.9	1.1	-1.0	-3.1	-3.7	0.3	0.0	-1.7	-1.7	-0.3	
Euro area	2.7	0.6	1.4	0.4	-1.8	-4.9	-4.6	-0.4	-0.4	-1.8	-2.4	-0.1	
United States	2.1	0.4	1.6	0.0	-1.9	-3.3	-3.8	0.4	-0.7	-1.4	-1.6	-0.2	
Japan	2.3	-0.7	0.7	-0.3	-4.5	-8.4	-7.2	-0.7	-1.3	-3.4	-3.3	0.6	

<sup>[1]</sup> Adjusted for seasonal and calendar effects
Source: INR/ICN, National sources, Eurostat

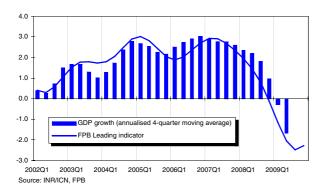
Graph 1 - GDP-growth (t/t-4), in %



Graph 2 - GDP business cycle



Graph 3 - GDP growth and leading indicator



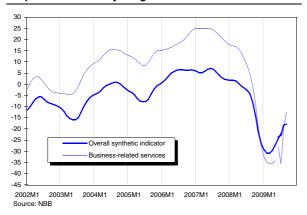
Following sharp declines of 1.4% and 1.6% in the previous quarters, US economic activity fell by only 0.2% in 2009Q2 as the fall in investment was much smaller, government consumption growth accelerated and net exports contributed strongly to economic growth. The end of destocking, the introduction of the 'cash for clunkers' scheme and the improvement in leading indicators should lead to (moderately) positive growth rates in the second half of this year.

The Japanese economy grew by 0.6% in 2009Q2, following four quarters of strongly negative growth. The recovery was primarily driven by exports, which are benefiting from the resurgent Chinese and other Asian economies. Private consumption rebounded temporarily owing to government premiums for cars and household appliances, but is likely to weaken again because of rising unemployment and negative wage growth. Moreover, business investment is depressed because of abundant idle capacity.

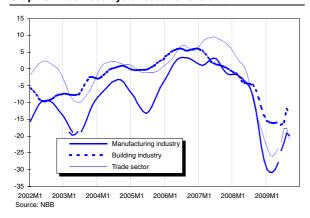
Euro area GDP declined by merely 0.1% in 2009Q2, following dramatic falls of 1.8% and 2.4% in the previous quarters. The reduction in investment and stocks constituted a drag on growth in 2009Q2, while private consumption increased owing to the introduction of the scrap premium in many countries and the fall in consumer prices. As the fall in imports was much larger than that in exports, net exports also contributed strongly positively to economic growth in 2009Q2.

France and Germany posted positive growth rates (+0.3%), while economic activity in Spain (-1.1%), Italy (-0.5%), the Netherlands (-1.1%), Belgium (-0.3%) and most other euro area countries continued to shrink. Forward-looking indicators point to slightly positive growth rates during the second half of the year in most euro area countries, although the German economy (driven by resurgent global demand) should continue to perform better than its Spanish (hurt by its imploding housing sector) and Italian (hampered by a structural loss in competitiveness) counterparts.

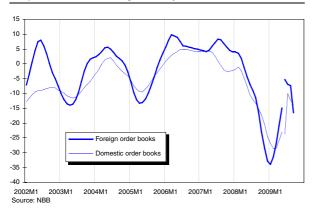
Graph 4 - Business cycle: global evolution



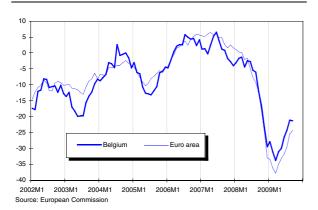
Graph 5 - Business cycle: sectoral evolution



Graph 6 - Manufacturing industry: order books



Graph 7 - Industrial confidence: international comparison



As mentioned in our previous issue, the composition of the overall synthetic indicator for the Belgian economy has changed recently. It now also contains the business-related services indicator. As the overall indicator is designed to be highly correlated with and to lead the Belgian business cycle, its composition does not necessarily reflect the structure of the Belgian economy. This explains why manufacturing industry, which represents only 31% of total value added in Belgium, is largely overrepresented in the indicator (a weight of 65%), at the expense of the trade sector (24% of value added) and business-related services (36% of value added). The weights of business-related services and the building industry both amount to 15% in the overall indicator, while that of the trade sector constitutes only 5%.

All indicators reached a trough in the course of 2009Q1 and have improved markedly since then. Despite a limited worsening in most indicators covered by the NBB survey, all indicators remain upward oriented. Current levels remain, however, far below historical averages and point to fairly meagre growth in the second half of the year.

While improvement was first seen in the components related to economic activity expectations, the reduction in pessimism has now spread to the assessment of current economic activity. However, employment-related indicators, although improved, generally remain close to their lows.

In line with its traditional behaviour, building industry sentiment reacted less to the business cycle than other sectors. The building sector also benefited from relatively low mortgage rates and the (temporary) reduction of VAT rates on construction from the beginning of 2009 (a measure from the Belgian recovery plan).

Throughout 2008, industrial confidence in Belgium and the euro area plummeted. In the first quarter of this year both dropped further to their lowest levels since the start of the series (1980). The decline in industrial confidence was somewhat more pronounced in the euro area than in Belgium. This difference in confidence levels has remained during the upturn in sentiment seen since 2009Q2. This is compatible with the evolution of yoy GDP growth, which amounted to -3.7% in Belgium and -4.7% in the euro area in 2009Q2. The main reason for the 'outperformance' of Belgium is to be found in Germany, which was hit particularly hard by the collapse of global demand.

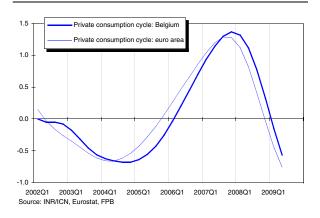
# **Private consumption**

Table 2 - Private consumption indicators

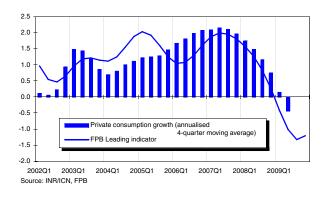
	2007	2008	2008Q4	2009Q1	2009Q2	2009Q3	2009M4	2009M5	2009M6	2009M7	2009M8	2009M9
New car registrations [1]	-0.3	2.1	-10.3	-15.3	-19.6	-7.6	-22.8	-21.6	-13.7	-8.5	-8.7	-5.7
Consumer confidence indicator [2]	-1.2	-11.3	-21.3	-22.7	-19.7	-13.0	-22.0	-19.0	-18.0	-17.0	-11.0	-11.0

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

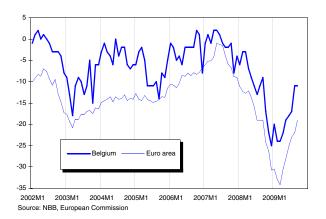
Graph 8 - Private consumption cycle



Graph 9 - Private consumption growth and leading indicator



Graph 10 - Consumer confidence: international comparison



Over the last few years, the Belgian and the euro area consumption cycle were highly correlated, although the Belgian cycle lagged the euro area cycle by one to two quarters. The last peak in the consumption cycle was reached in 2007Q3 in the euro area and in 2007Q4 in Belgium. In fact, private consumption growth in Belgium only turned negative in 2008Q4 after a stabilisation in the previous two quarters, while euro area private consumption had already started to decline in 2008Q2. It should not come as a surprise that the strongest declines (qoq growth of around -0.5%) were seen in 2008Q4 and 2009Q1, when the financial and economic crisis strongly affected the world economy.

In the course of 2009Q2, the decline in economic activity seemed to have come to a halt in the Western hemisphere. This was also seen in the development of private consumption, which stabilised in Belgium and grew by 0.2% in the euro area. The fact that consumption recovered more strongly in the euro area than in Belgium is probably due to the fact that many European countries (such as Germany, France, Italy and the Netherlands), in contrast to Belgium, set up car scrapping schemes to promote the replacement of old cars with new ones as part of their recovery plans. These schemes clearly had an effect: German new car registrations, for example, grew by 32% (yoy) from February to August 2009, while registrations in Belgium fell by 16% (yoy) during the same period.

Consumer confidence in Belgium as well as in the euro area plummeted during 2008Q4, bottomed out during 2009Q1 and has recovered since April 2009. The recovery was seen in all components of the indicator, but to a lesser extent in unemployment expectations as the (un)employment cycle typically lags the business cycle.

Belgian private consumption growth is expected to decline by 0.9% this year, which roughly matches the evolution of the FPB leading indicator. As households' disposable income is expected to continue to increase, this should bring about a significant rise in the savings rate, which is not expected to decline in the near future as high unemployment rates should temper the improvement in consumer confidence.

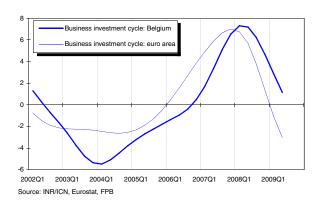
#### **Business investment**

Table 3 - Business investment indicators

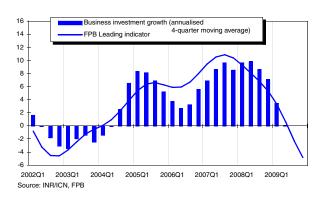
	2007	2008	2009	2008Q4	2009Q1	2009Q2	2009Q3	2009M5	2009M6	2009M7	2009M8	2009M9
Business survey, capital goods [2]												
Synthetic indicator	5.2	-6.7		-25.9	-30.7	-29.8	-25.3	-31.4	-24.8	-26.5	-25.8	-23.7
Order book appraisal	17.0	1.0		-19.3	-41.7	-47.3	-46.7	-49.0	-44.0	-46.0	-48.0	-46.0
Demand forecasts	9.0	-3.7		-25.0	-42.3	-35.7	-18.7	-44.0	-23.0	-26.0	-16.0	-14.0
Investment survey [1]	12.1	1.1	-11.8									
Capacity utilisation rate (s.a.) (%)	83.2	80.6		74.7	70.1	72.0						

<sup>[1]</sup> Change (%) compared to same period previous year; [2] Qualitative data

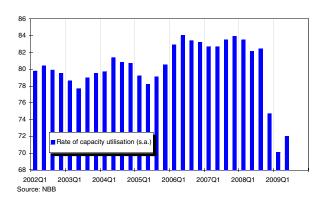
Graph 11 - Business investment cycle



Graph 12 - Business investment growth and leading indicator



Graph 13 - Capacity utilisation in manufacturing industry



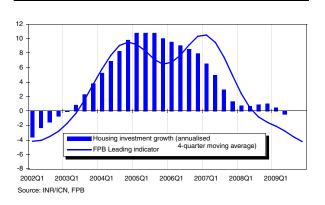
The euro area investment cycle peaked somewhat earlier and declined faster than the Belgian cycle. Consequently, euro area investment is already lower than its trend, while business investment in Belgium is still in above-trend territory. Trend-cycle decompositions of heavily fluctuating series, such as investment and (to a smaller extent) exports, should always be interpreted with caution for the most recent observations due to the presence of an end point bias in filters used to calculate the trend of a series. This problem has become even greater in view of the steep decline in investment due to the financial crisis and the subsequent recession.

Belgian business investment growth was remarkably strong in 2008: average qoq investment growth amounted to 0.5%, while it was clearly negative in the euro area (-1.4%). During the first half of 2009, investment continued to perform better in Belgium than in the euro area (average qoq growth of -1.5% and -3.3% respectively).

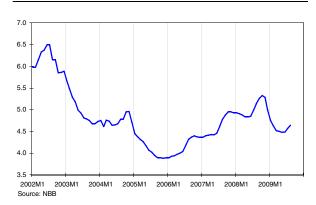
During the next few quarters, Belgian business investment growth is expected to remain subdued for some quarters as capacity utilisation rates in the manufacturing industry were historically low during the first half of 2009 (close to 70%, against 79% on average since 1980) due to plummeting demand. This profile is confirmed by most indicators that are summarised in the FPB leading indicator. Firstly, the investment survey in the manufacturing industries, which is held twice a year, shows that company directors plan to invest almost 12% less in 2008 than in 2009 (at current prices), which is the lowest figure seen in the Spring survey since 1993. Secondly, indicators for the capital goods sector coming from the monthly NBB business survey show that the improvement in the overall indicator is only due to more optimistic expectations, while the assessment of the current situation has hardly changed since March 2009. Moreover, it seems that it is still more difficult for companies to obtain external financing than before the financial crisis, mainly due to a tightening of credit conditions by financial institutions.

# **Housing investment**

Graph 14 - Housing investment growth and leading indicator



Graph 15 - Mortgage rate (%)



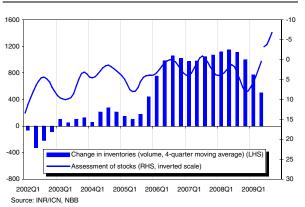
Housing construction boomed during the period 2003-2006, which resulted in a peak in housing investment as a share of GDP. Since 2005, this share has exceeded 5%, compared with 4.2% on average over the period 1980-2004. However, according to the latest quarterly national accounts, housing activity slowed considerably in the course of 2008 and turned negative from 2008Q4.

Belgian residential investment is expected to contract even more in the course of 2009, but to a lesser extent than in several EU Member States where house prices were largely overvalued (such as the UK, Spain and Ireland). The contraction should be limited somewhat in Belgium thanks to the temporary VAT reduction for residential construction (only in 2009) and to the recent fall in mortgage rates (from 5.3% in September 2008 to 4.5% in 2009Q2).

The downturn in housing investment is basically confirmed by the FPB leading indicator, which has gone down since the beginning of 2007 and does not point to a recovery before the end of 2009. 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 decelerated in the course of 2008 and even more in 2009Q1. This evolution went hand in hand with an increasing number of company directors (from September 2008 until 2009Q1) wishing to reduce their stock levels due to significantly worsened demand prospects.

After a decline in the level of stocks during 2009Q2, the contribution of stocks to economic growth should remain close to zero during the second half of this year as the fall in economic activity should come to a halt. Nevertheless, stocks are expected to drag economic growth down by about 1%-point in 2009 as the strong increase in the level of stocks in 2008 should not be repeated.

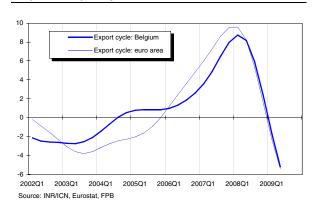
### Foreign Trade

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

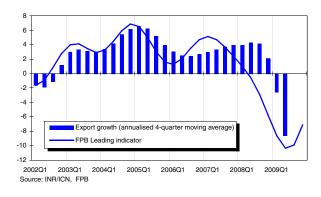
	2007	2008	2008Q3	2008Q4	2009Q1	2009Q2	2009M1	2009M2	2009M3	2009M4	2009M5	2009M6
Exports - value [1]	5.7	6.6	11.0	-6.9	-20.9	-25.1	-23.5	-22.3	-17.1	-27.5	-24.1	-23.6
Imports - value [1]	6.0	12.3	18.7	-2.5	-19.8	-26.7	-22.0	-19.3	-18.1	-29.7	-25.7	-24.6
Exports - volume [1]	2.7	1.7	4.2	-9.3	-18.3	-19.6	-22.0	-19.6	-13.3	-22.9	-19.5	-16.4
Imports - volume [1]	4.0	3.5	6.9	-6.2	-14.8	-18.1	-18.8	-13.8	-11.7	-22.6	-17.3	-14.2
Exports - price [1]	2.9	4.7	6.5	2.4	-3.2	-6.8	-1.9	-3.3	-4.4	-6.0	-5.7	-8.7
Imports - price [1]	2.0	8.5	11.0	3.6	-5.8	-10.5	-4.0	-6.3	-7.2	-9.1	-10.1	-12.2

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

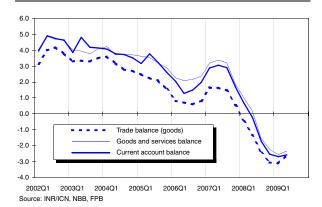
Graph 17 - Export cycle



Graph 18 - Export growth and leading indicator



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



The Belgian and European export cycle both reached a peak in 2008Q1. Since then, the decline in the export cycles has been very quick and pronounced. The Belgian as well as the euro area export cycles are clearly in below-trend territory. Just as in the case of business investment, it should be kept in mind that the trend-cycle decomposition is quite tricky in view of the huge decline in exports from 2008Q4 to 2009Q2. Within the euro area, the steepest drops in exports were seen in Germany (which is specialised in capital goods for which demand fell particularly rapidly) and Italy (which is suffering from structural competitiveness problems).

In line with the steep fall in world trade, Belgian exports plunged by 7% in 2008Q4 and by a stunning 10.7% in 2009Q2, easily the strongest quarterly decline since the start of the series. Belgian export markets, a weighted average of our main trading partners' import growth, declined strongly as well in this period but to a lesser extent than exports, resulting in an extension of Belgian export market share losses. The stabilisation of world trade in 2009Q2 significantly smoothed the drop in Belgian exports. In the second half of 2009, Belgian exports should start to recover, albeit at a moderate pace. This is confirmed by the FPB leading indicator and by the export orders component of the Belgian business confidence indicator (see page 9); these have bottomed out, but are still at a relatively low levels.

In spite of the fact that export volumes have gone down more strongly than import volumes since the beginning of this year, the deficit in the Belgian current account surplus is not expected to deteriorate further as the terms of trade (export price growth compared to import price growth) registered a noticeable improvement. This is mainly due to the fall in oil prices, which ought to remain some 30% below its average level in 2008, and in prices of other raw materials.

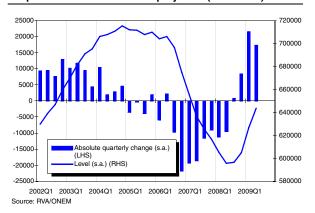
#### Labour market

Table 5 - Labour market indicators

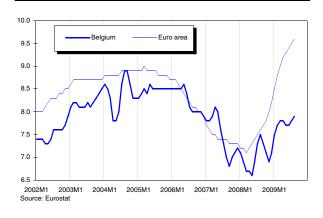
	2007	2008	2008Q3	2008Q4	2009Q1	2009Q2	2009M3	2009M4	2009M5	2009M6	2009M7	2009M8
Unemployment [1][2]	633.5	600.5	596.5	604.8	626.4	643.8	635.7	639.0	642.9	649.4	649.4	653.8
Unemployment rate [2][3]	12.5	11.8	11.7	11.8	12.3	12.6	12.4	12.5	12.6	12.7	12.7	12.8
Unemployment rate-Eurostat [3][4]	7.5	7.0	7.4	7.0	7.7	7.7	7.8	7.8	7.7	7.7	7.8	7.9

[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

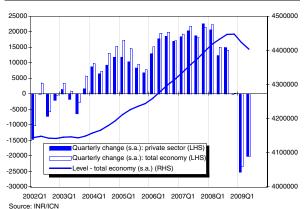
Graph 20 - Evolution of unemployment (incl. older)



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



Graph 22 - Evolution of domestic employment



Subsequent to the breaking out of the financial crisis, qoq activity growth in the market sector fell from -0.1% in 2008Q3 to a dramatic -1.9% in both 2008Q4 and 2009Q1 and remained negative (-0.5%) in 2009Q2. Market sector employment grew qoq at 0.4% in 2008Q3, stabilized in 2008Q4 and dropped by -0.6% in 2009Q1. The last figure was slightly worse than expected, and seems to be related to a sharp decrease in interim worker employment.

Still, this means that the bulk of the fall in activity has so far been absorbed by a decrease in labour productivity. Labour hoarding by firms has been accompanied by substantial reductions in average hours worked per employed person (-1.1% in 2008Q4 and -0.7% in 2009Q1 according to the quarterly national accounts). In its turn, this has been tied in with firms relying heavily on government subsidized programmes for working time reduction, notably the 'temporary unemployment scheme', which allows them to temporarily shift blue-collar workers from the payroll to the unemployment agency's budget. This measure may help to preserve employment (or at the very least postpone lay-offs) and hence deepen (or extend in time) the drop in productivity. To a certain extent, however, it merely shifts the drop in production per employee from hourly productivity decreases towards labour time reduction, hence acting as a short-term income support for firms, relieving them of superfluous hours payable.

The increase in broad administrative unemployment in 2009Q1 (3.4% growth qoq) was slightly lower than expected, given the relatively sharp drop in employment. Moreover, contrary to expectations, the rate of increase in unemployment dropped somewhat in 2009Q2 (2.6% growth qoq) and may have dropped further in 2009Q3. This may point either to a (temporary) slow-down in the rate of job destruction and/or a pro-cyclical reaction of activity rates in some gender/age groups to the worsening economic environment.

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

			1				1					
	2007	2008	2008Q4	2009Q1	2009Q2	2009Q3	2009M4	2009M5	2009M6	2009M7	2009M8	2009M9
Consumer prices: all items	1.82	4.49	3.49	1.62	-0.30	-1.22	0.60	-0.37	-1.10	-1.68	-0.78	-1.19
Food prices	3.62	5.82	4.46	3.53	1.33	-0.33	2.04	1.27	0.69	-0.46	-0.17	-0.36
Non food prices	1.01	5.95	3.57	-0.39	-3.74	-4.59	-2.30	-3.79	-5.09	-5.64	-3.56	-4.54
Services	1.89	2.01	3.06	3.29	3.46	2.69	3.79	3.35	3.23	2.81	2.52	2.75
Rent	1.79	1.90	1.98	2.09	2.10	2.08	2.04	2.02	2.23	2.27	1.90	2.06
Health index	1.77	4.22	4.07	2.57	0.70	-0.50	1.53	0.69	-0.11	-0.67	-0.20	-0.62
Brent oil price in USD (level)	72.5	96.9	54.8	44.3	58.8	68.2	50.5	57.3	68.5	64.6	72.6	67.5

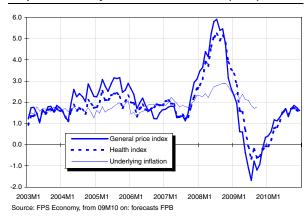
Source: FPS Economy, Datastream

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

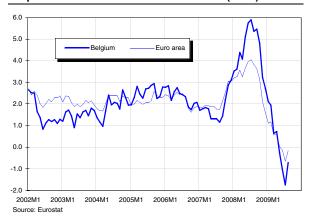
	2009M1	2009M2	2009M3	2009M4	2009M5	2009M6	2009M7	2009M8	2009M9	2009M10	2009M11	2009M12
Consumer prices: all items	111.36	111.74	111.10	111.33	111.25	111.04	110.97	111.31	111.02	111.12	111.29	111.62
Consumer prices: health index	111.45	111.75	111.07	111.17	110.96	110.50	110.48	110.66	110.46	110.68	110.84	111.17
Moving average health index	111.27	111.38	111.38	111.36	111.24	110.93	110.78	110.65	110.53	110.57	110.66	110.79
	2010M1	2010M2	2010M3	2010M4	2010M5	2010M6	2010M7	2010M8	2010M9	2010M10	2010M11	2010M12
Consumer prices: all items	111.83	112.42	112.40	112.59	112.68	112.73	112.86	112.78	112.90	113.17	113.23	113.42
Consumer prices: health index	111.36	111.97	111.92	112.10	112.17	112.20	112.32	112.21	112.32	112.61	112.67	112.87
Moving average health index	111.01	111.34	111.61	111.84	112.04	112.10	112.20	112.23	112.26	112.37	112.45	112.62

Source: Observations (up to 09M9): FPS Economy; forecasts: FPB

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



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



After plummeting during 2008Q4, the Brent oil price level (in USD as well as in EUR) increased gradually from January to June, but its yoy growth rates remained around -50%. While motor fuel and heating oil prices immediately reflect oil price movements, natural gas and electricity prices generally react to oil price developments with a time-lag and thus declined during the first half of this year. Yoy growth rates for food prices have also come down significantly since 2008Q4 due to the decrease in commodity prices. This development was reinforced by the strong decline in fresh fruit and vegetables prices during the summer. Headline inflation declined from 5.9% in July 2008 to -1.7% in July 2009. In line with the development in yoy oil price growth, inflation should turn positive in December 2009 after seven months of negative inflation and gain strength in the course of 2010.

Underlying inflation recently slowed to below 2%, which is due to the pass-through of lower oil prices to prices of other goods and services and to the economic recession. As economic growth is expected to remain subdued during the next few quarters, underlying inflation is expected to weaken further and to start increasing again by the end of 2010.

In 2009 and 2010, headline inflation should amount to 0% and 1.3%, while the health index should increase by 0.6% and 1.2% respectively. The current pivotal index for public wages and social benefits (112.72) should not be exceeded in 2010.

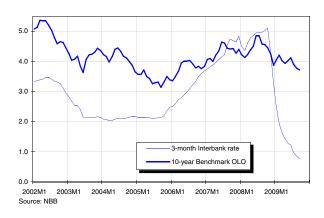
#### **Interest rates**

Table 8 - Interest rates

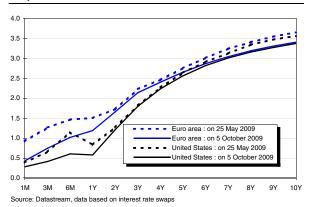
	2007	2008	2008Q4	2009Q1	2009Q2	2009Q3	2009M4	2009M5	2009M6	2009M7	2009M8	2009M9
Short-term money market rates (3 i	months)											
Euro area (Euribor)	4.28	4.63	4.21	2.02	1.31	0.87	1.42	1.29	1.23	0.97	0.86	0.77
United States	5.27	2.97	2.82	1.08	0.62	0.30	0.89	0.57	0.39	0.35	0.30	0.25
Japan	0.76	1.05	1.44	0.72	0.58	0.43	0.67	0.59	0.47	0.48	0.45	0.35
Long-term government bond rates	(10 years)											
Belgium	4.32	4.40	4.19	4.09	4.03	3.80	3.94	4.03	4.12	3.90	3.77	3.72
Germany	4.23	3.99	3.49	3.10	3.37	3.33	3.18	3.39	3.54	3.36	3.33	3.29
Euro area	4.31	4.24	3.94	3.72	3.86	3.69	3.74	3.84	3.99	3.77	3.66	3.64
United States	4.63	3.65	3.22	2.71	3.30	3.50	2.90	3.29	3.71	3.53	3.58	3.39
Japan	1.67	1.48	1.42	1.27	1.44	1.34	1.43	1.44	1.45	1.34	1.38	1.31

Source: Datastream

Graph 25 - Interest rate levels in Belgium, %



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



The US Federal Reserve has kept the target federal funds rate within a range of 0-0.25% since the end of last year. Although tensions in financial markets have eased considerably and economic activity appears to be bottoming out, it seems that the current level of the federal funds rate remains warranted for an extended period as high unemployment rates and low capacity utilisation rates should keep a firm lid on prices. Financial markets are hence anticipating the first rate increases only in the course of 2010.

Since its latest rate cut, in May 2009, the ECB's main policy rate has remained at 1%. In contrast with the Fed, the ECB has not embarked on an extensive programme of quantitative easing, limiting itself to the buying of covered bonds (for a limited amount). As in the US, the first policy tightening is expected in the course of 2010.

The interbank risk premium, paid above policy rates, has all but disappeared in the major economies. Interbank rates in the euro area have even declined to below policy rates due to the huge provision of liquidity by the ECB to the banking system.

The continuous improvement of leading indicators and better than expected economic growth figures in 2009Q2 pushed US long-term interest rates from 2.9% in April to 3.6% in August. In the course of September, US long-term interest rates decreased to 3.3%. These relatively low rates probably indicate that financial markets are not convinced that downside risks associated to the economic outlook have disappeared. In the euro area long-term interest rates have remained broadly stable over the last few months. Interest rate spreads between Germany and the other euro area countries, however, have come down considerably. For Belgium, e.g., the interest rate premium has declined by about 30 basis points between April and August.

### Exchange rates

Table 9 - Bilateral exchange rates

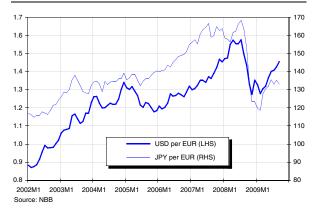
	2007	2008	2008Q4	2009Q1	2009Q2	2009Q3	2009M4	2009M5	2009M6	2009M7	2009M8	2009M9
USD per EUR	1.371	1.471	1.318	1.304	1.362	1.430	1.320	1.366	1.401	1.408	1.427	1.457
UKP per EUR	0.685	0.797	0.843	0.909	0.879	0.872	0.897	0.886	0.856	0.861	0.863	0.892
JPY per EUR	161.3	152.3	126.6	122.1	132.6	133.8	130.5	132.0	135.5	133.0	135.4	133.1

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

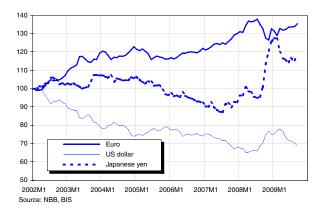
	2007	2008	2008Q4	2009Q1	2009Q2	2009Q3	2009M4	2009M5	2009M6	2009M7	2009M8	2009M9
Euro	105.6	112.6	109.2	111.0	112.0	113.5	111.5	111.8	112.8	112.9	113.1	114.4
Growth rate [1]	5.0	6.6	-4.5	1.6	1.0	1.3	-0.7	0.3	0.8	0.1	0.1	1.2
US dollar	93.5	90.0	98.2	100.0	96.1	91.5	99.5	95.3	93.5	93.0	91.5	90.0
Growth rate [1]	-5.0	-3.7	10.5	1.9	-3.8	-4.8	-2.0	-4.2	-1.9	-0.6	-1.5	-1.7
Japanese yen	88.6	101.0	117.7	122.5	113.4	114.7	114.3	113.7	112.3	114.7	113.2	116.2
Growth rate [1]	-5.0	14.0	23.6	4.1	-7.4	1.1	-2.9	-0.5	-1.2	2.1	-1.3	2.7

[1] Change (%) compared to previous period Source: BIS. NBB

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



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



In the second half of last year the euro tumbled against the dollar (from 1.58 dollars per euro in July to 1.27 in November 2008) as the latter benefited from its safe haven status during the turmoil in the financial markets. This year, the euro has recovered about half of the ground lost (to 1.46 in September) as risk aversion in financial markets has receded considerably and as the low US interest rates encourage investors to use the dollar to fund carry trades (i.e. selling the dollar to finance activities in other, higher-yielding currencies).

In the last quarter of 2008, the British pound depreciated heavily against the euro (-20%). This year the pound has made up a considerable part of this loss. However, its appreciation vis-à-vis the euro seems to have stopped in August as economic growth in 2009Q2 in the UK proved to be more negative (-0.7%) than expected, while the euro area economy (-0.1%) performed better than expected. Moreover, the Bank of England unexpectedly decided to drive up its policy of quantitative easing (out of fear that the recession will last longer than anticipated).

The nominal effective exchange rate of the euro has more or less followed the evolution of the EUR/USD exchange rate over the last year, i.e. a strong depreciation at the height of the financial crisis and a gradual appreciation so far this year, bringing it almost back to its pre-crisis level. In 2009 so far, the euro has appreciated against the US dollar, the Japanese yen and the majority of the other Asian currencies; while it lost value against the currencies of the UK, Switzerland and the Nordic countries.

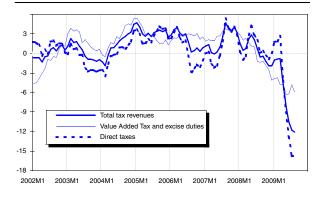
#### Tax indicators

Table 11 - Tax revenues (1)

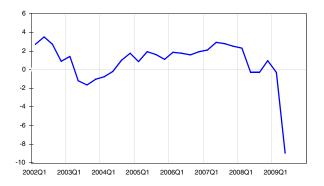
	2007	2008	2008Q3	2008Q4	2009Q1	2009Q2	2009M3	2009M4	2009M5	2009M6	2009M7	2009M8
Total [2], of which:	5.1	2.5	3.0	-0.4	-2.6	-28.8	-11.4	-23.7	-37.6	-28.8	-15.1	-6.4
Direct taxes, of which:	4.8	4.5	4.9	3.3	1.1	-41.3	-8.4	-35.0	-53.1	-42.2	-23.4	-2.9
Withholding earned income tax (PAYE)4.4 5.5		5.5	6.6	9.9	-1.9	-36.8	-12.8	-39.6	-32.7	-37.7	-20.9	9.9
Prepayments	6.5	-1.7	0.6	-13.2		-33.0	-	-28.7			-28.1	
Value Added Tax and excise duties	5.3	0.2	1.7	-5.1	-4.9	-6.6	-12.3	-1.5	-18.7	-0.7	0.9	-9.0

<sup>[1]</sup> 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)



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

After a much smaller decrease in 2008Q4 and 2009Q1, total tax revenues in 2009Q2 collapsed (-28.8%) as compared to the same period in the previous year. Most tax categories contributed to this evolution in the context of the business cycle downturn. The fall was reinforced by tax cutting decisions and measures from the December 2008 stimulus package to support the cash accounts of businesses.

The largest dive in 2009Q2 was observed in direct taxes. Both PAYE withholding personal income tax and corporate income tax prepayments were affected, with, however, somewhat different explanations.

PAYE revenue is strongly affected by the possibility for temporary deferral by employers of withholding tax on wages: tax on wages for March to August may be paid with a 3-month delay. The weak tax income in 2009Q2 will thus be partly offset by stronger receipts in Q4. This shift aside, PAYE revenue in the coming quarters will be slowed by the time lag in the relation between business cycle developments and employment. Labour cost reductions in the form of exemptions from payments of PAYE have also weighed on tax revenue.

Corporate income tax prepayments, both in April 2009 (first due date for advance payments, representing about 40% of the annual total) and in July 2009 (second due date) were about one third lower than in the corresponding periods in 2008. This directly reflects the worsening of business profitability, as does the fall in the revenue from the tax on dividends. Note that the notional interest deduction introduced in 2006 may cause an over-reaction of corporate income tax revenues to the cycle.

VAT is also suffering from the economic recession (which is coupled with an increase in the household saving ratio), as well as registration duties (due to the contraction of the real estate market), customs duties (given the slumping world trade), inheritance taxes and others.

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

# Sustainable development indicators, objectives and visions

The publication of the fifth Federal Report on sustainable development implements the Belgian Act of 5 May 1997 on the Coordination of Federal Sustainable Development Policy. This Report contributes to the debate on the role and choice of indicators and objectives for measuring the development of a country and for the implementation of that strategic process. It studies a set of sustainable development indicators (SDI) that shows to what extent living conditions in Belgium are heading towards sustainable development strategic objectives (SDSO). The Report also studies these strategic objectives in the context of long term visions of society.

The first part of this federal Report is a strategic appraisal of 88 SDIs for Belgium. Indicators on driving forces, such as consumption and production, and on pressures that these driving forces exert on the capitals of development (human, environmental and economic capitals) registered some progress towards their SDSOs between 2000 and 2007. Indicators on the state of the three capitals, however, registered very few improvements between 2000 and 2007. Finally, indicators of policy responses, in this case public expenditures on R&D and development aid, are far from reaching their targets.

The definitions of SDSOs used in this report are based on existing political agreements at world, European or Belgian levels. Such objectives are most often defined independently from each other, without referring to a coherent long-term vision of society. But can these objectives be reached simultaneously? How can the consistency between them be ensured? These questions are discussed and the Report underlines that the answers provided so far by the authorities remain vague.

The second part of this federal Report is a contribution to the debate on tools for measuring the long-term development trends of a country. The Report discusses the use of two categories of such tools: synthetic indicators and sets of indicators.

A large number of synthetic indicators have been proposed to complement GDP. This Report reviews indica-

tors based on Environmental Satellite Accounts, the Human Development Index, the Ecological Footprint and Biocapacity indicators, and also indicators of implementation of sustainable development plans.

A structured set of 88 indicators is also proposed in the second part of the Report. A large number of indicators is indeed required to appraise a vast and complex domain such as the development of a country. A subset of 18 indicators, corresponding to political priorities, provides an overview. These 88 or even 18 indicators cannot be summarised by one synthetic indicator: neither by aggregating them (lack of common measurement unit) nor by compounding them (arbitrary weights and an unreadable formula).

Based on the appraisal of tools for measuring the progress of a country, this Report makes, among others, the following general recommendations: to adopt several synthetic indicators and, simultaneously, a set of more detailed SDI indicators; to take account of the interconnection of many SD issues when elaborating the set of SDIs; to define monitoring indicators and include them explicitly in all new policy decisions; and to improve the quality and coherence of data collected at all levels in Belgium.

Based on the appraisal of a number of synthetic indicators, this Report also recommends, inter alia: the inclusion of indicators on public debt and other public finance indicators in the SDI's; and to develop Environmental Satellite Accounts on a regular basis, even before it becomes a European obligation.

"Indicateurs, objectifs et visions de développement durable, 5ème Rapport fédéral sur le développement durable", "Indicatoren, doelstellingen en visies van duurzame ontwikkeling, 5de Federaal Rapport inzake duurzame ontwikkeling", Task Force on Sustainable Development, 2009. The Report comes with a Synthesis Report and a presentation folder.

The Report exists in French and Dutch.

#### The Belgian environment industry (1995-2005)

Recent years have seen a growing interest in the economic potential of environmental protection activities. The protection of the environment necessitates the development, production and marketing of a host of environmentally friendly products and production processes, the development of the skills needed to use them, environmental legislation, an administration to keep track of these developments, etc. All these activities are provided for by the environment industry. This study investigates the development of the environment industry in Belgium between 1995 and 2005.

The OECD defines the environment industry as follows:

- The environmental goods and service industry consists of activities which produce goods and services to measure, prevent, limit, minimise or correct environmental damage to water, air and soil, as well as problems related to waste, noise and ecosystems.
- This includes cleaner technologies, products and services that reduce environmental risk and minimise pollution and resource use.

During the period 1995-2005, the number of organisations (businesses, non-profit organisations, public administrations) identified as performing such environmental activities, and thus considered to be part of the Belgian environment industry, expanded by 44%. Their combined turnover increased by 22% at constant prices, while employment generated by the Belgian environment industry increased by 40%. As a consequence, the share of the environment industry in total Belgian employment increased from 1.5% in 1995 to 2% in 2005. Its share in total output at current prices, however, decreased from 2.4% to 2.2%. This decrease is entirely due to a considerable fall in environmental turnover in 2005. In 2004 the share of the environment industry in total output had been as high as 2.5%.

The majority of the organisations belonging to the Belgian environment industry are small, in the sense that they employ less than 10 people. Just over 60% of the total number of firms belong to this category. Just over 30% of the firms are medium sized, with 10 to 99 employees. The remaining 7% are large companies, with at least 100 employees.

The firms constituting the Belgian environment industry belong to a wide array of different industries. The industries traditionally considered to be environmental, namely the recycling industry (NACE 37) and the sewage and refuse disposal industry (NACE 90), represent only 34% of the total number of firms, 20% of total environmental turnover, and just over 15% of environmental employment. Limiting a study of the environmental industry to these two economic categories would lead to a severe underestimation of its size and importance. No less than 40% of environmental turnover and almost 30% of environmental employment is generated by firms belonging to the manufacturing industries, although they only account for 11% of the total number of environmental firms. The other business activities industry (NACE 74) accounts for 17% of the number of environmental firms, 11% of environmental turnover and 14% of environmental employment. Public administration plays an important role in environmental employment as well, with a share of 17%. Its share in environmental turnover is limited to 6%, corresponding exactly to its share in the total number of environmental organisations.

There is a definite preponderance of enterprises providing environmental services as opposed to those manufacturing environmental goods and those constructing and installing environmental equipment (86% against 14%). This preponderance is somewhat less pronounced when environmental turnover and employment are considered (75-80% against 25-20%).

The Belgian environment industry (1995-2005), L. Janssen, G. Vandille, Working Paper 07-09, June 2009

# Transport emissions – Historic evolution and outlook

Transport is a major source of greenhouse gas and air pollutant emissions and plays an important role in their evolution. Transport emissions are closely monitored and their future evolution is integrated into the FPB transport model, PLANET. The publication uses a decomposition analysis to compare the projected evolution of the emissions in the base scenario of the PLANET model to the base scenario of two other models and to put these in a historic perspective. The analysis focuses on Tank-to-Wheel emissions and is limited to three modes: road transport, railways and inland navigation.

The two other studied models are the PRIMES model and the TREMOVE model. The latter was specifically conceived for the analysis of the impact of transport and environmental measures on transport emissions. The historic evolution of transport emissions is based on the

emission inventories drawn up in the framework of international treaties.

In 2007, transport emitted 27% more greenhouse gases than in 1990. Transport was responsible for 19% of the greenhouse gas emissions in Belgium. While total  $\rm CO_2$  emissions in Belgium decreased by 8% between 1990 and 2007, emissions by transport increased by 26%. Over the 2005-2030 period, the growth of  $\rm CO_2$  emissions should slow down. The scenarios give a different evolution of  $\rm CO_2$  emissions that should range between a decrease of 2% and an increase of 18%. These differences can be explained by different assumptions on transport demand growth, the evolution of average fuel consumption by cars and the share of biofuels.

Gasoline cars are the main source of transport emissions

of NMVOC and CO. Emissions of these air pollutants more than halved between 1990 and 2007. The decline of NMVOC and CO transport emissions is the combined effect of the growing share of diesel cars and more stringent emissions standards. In 2007, transport was responsible for a quarter of NMVOC emissions and a third of CO emissions in Belgium. The scenarios project a growing share of diesel in road transport and a progressive decrease in emission factors for road vehicles. CO and NMVOC emissions should decrease respectively by 40-75% and 50-70%. The magnitude of the reductions mainly depends on the assumed evolution of emission factors for cars and trucks.

Thanks to stricter emission standards,  $NO_x$  emissions by transport decreased by a third between 1990 and 2007. In 2007, transport accounted for half the emissions in Belgium. The scenarios predict a further decrease in emissions of 40-56% over the period 2005-2030. The projected reductions depend not only on the assumed reduction in emission factors but also on the projected transport growth.

Transport emissions of particle matter (PM) fell by 19% between 2000 and 2007 and were reduced less than the total emissions in Belgium. The scenarios project a further decline in PM emissions of 63-71%. The differences can be explained by different assumptions on the evolution of the emission factors.

The successive reductions of the maximum sulfur content of road fuels forced  $SO_2$  emissions down by 86% between 1990 and 2007. In 2007, transport was responsible for 1% of the total emissions in Belgium. In the future, emissions should continue to fall. The projected reductions vary between 27 and 79%, depending on the assumptions for the sulfur content of fuels.

The decomposition analysis of the main factors influencing future transport emissions proved to be a powerful tool for explaining the differences between the base scenarios.

"Vervoeremissies – Historische evolutie en vooruitzichten", B. Hoornaert, Working Paper 08-09, July 2009.

#### **Alternative assessment of Belgian competitiveness**

This paper investigates the relationship between the relative positions, in terms of value added and relative prices, of Belgian manufacturing and market services in the European Union over 1970-2005. Relative prices are then broken down into relative unit costs of production factors. The analysis goes further by decomposing relative unit labour cost into relative hourly wages and relative productivity. Finally, relative productivity is broken down into relative capital deepening, relative labour composition effect and relative total factor productivity.

The re-appearance of a current account deficit during the last few years has again focused attention on the determinants of competitiveness. In order to provide a complementary light to the traditional approach, which is based on the analysis of relative export performances, an alternative approach is developed in this Working Paper. This approach is based on the evolution of the share of Belgian industries in the total value added of the European Union (EU15). Indeed, the aim is not to gain export market shares if the content of exports in local value added decreases because exporters make greater calls on foreign suppliers. The reason for maintaining the competitive position of an economy is, indeed, rooted in the need to keep value added creation inside the country's borders in order to guarantee economic growth.

The first determinant of relative value added is relative value added deflators. The intuitive assumption, based

on economic theory, is that decreasing prices below European ones allows industries to increase the share of European value added created in Belgium. The econometric results indicate that, over 1970-2005, this was indeed the case for manufacturing and market services. This negative relationship was, however, more pronounced for manufacturing industries than for market services, which confirms the assumption that competition is more pronounced for manufacturing than for market services.

The second series of determinants is linked to the main components of value added price evolution: the unit costs of production factors, labour and capital. The effect of relative unit labour cost is econometrically significant for manufacturing and for market services, with a higher elasticity for manufacturing than for market services.

The third series of determinants is obtained by the decomposition of the relative unit labour cost into relative hourly wages and relative productivity. Relative productivity is clearly the main determinant for manufacturing, with an elasticity equal to double the elasticity of relative hourly wages.

The last series of determinants is based on the identification of the three factors influencing productivity growth: capital deepening, labour composition effect and total factor productivity (TFP). The results underline the importance of relative TFP as a determinant of the relative European position of manufacturing and market services.

From an economic policy point of view, the analysis shows that the law in favour of the promotion of growth and the safeguarding of competitiveness has allowed a stabilisation of relative wages. Econometric results justify the implementation of this law with the importance of the relative unit labour cost elasticity. These results also underline the importance of taking into account the two parts of labour cost: the hourly wage and produc-

tivity. In the long run, policies designed to promote productivity and, in particular, TFP gains have a larger impact than wage moderation policies. However, these policies are more difficult to define and implement. A better understanding of TFP determinants in order to define the most efficient instruments could therefore be a crucial step forward in any future research programme.

"Alternative assessment of Belgian competitiveness", C. Kegels, Working Paper 09-09, September 2009.

# Impact of the financial crisis on Belgian potential output

The concepts of potential growth and the output gap are important tools, respectively, for assessing the supply-side capacity of an economy and evaluating the state of the business cycle. They have also become an essential ingredient of the European fiscal surveillance process. In this Working Paper we compare, in the context of the financial crisis, revisions of potential output for Belgium made recently by the Federal Planning Bureau and international organizations. Those comparisons aim at highlighting the uncertainty associated with those revisions as well as having a better understanding of some of the channels through which the crisis may reduce potential output.

One way of measuring the impact of the financial crisis on potential GDP is to compare estimates made before and after the onset of the crisis. Comparing potential growth estimates, as published in the FPB's Economic Outlook for the Belgian economy in May 2008 and 2009, reveals important downward revisions as potential growth is reduced by almost 1%-point in 2009 as well as in 2010. Notably, potential growth for the years before 2009 has also been reduced, reflecting the view that the economic growth experienced during the years preceding the breaking out of the financial crisis was in fact unsustainable. On the whole, the cumulated potential output loss is estimated at around 7%-points of GDP by 2017, compared to the pre-crisis trajectory. The output gap estimates have also been revised considerably for the past: while in 2008 business cycle conditions were considered as neutral for the years 2006-2007, they now appear to have been very favourable.

Those results are fully in line with the estimates produced for Belgium by the European Commission, which supposes, through the use of univariate time series methods, a progressive re-emergence of long-run historical patterns for capital accumulation and total factor

productivity. The OECD has a different approach. Firstly, it refuses to review the past, considering that a large positive output gap before the outbreak of the crisis would be in contradiction to the absence of substantial upward pressure on core inflation. Secondly, it considers only the consequences of the shock, i.e. a reduction in the equilibrium level of the capital stock and an increase in the structural unemployment rate through hysteresis-type effects. As a matter of consequence, OECD estimates for potential growth and the output gap are very different from the ones produced by the FPB or the European Commission.

Another way of quantifying the effects of the financial crisis on potential GDP is to use model simulations. The S3BE model developed recently by the FPB is well suited for this purpose as GDP is computed as the contribution of the different production factors. Simulations with the model show that a permanent shock of 150 basis points on the risk premium combined with a shock on the structural unemployment rate as a consequence of hysteresis-type effects will lower GDP by 4.7% in the long run. The difference with the above-mentioned output loss of 7%-points can essentially be explained by the fact that, in the S3BE model, total factor productivity is exogenous and consequently not influenced by the simulated shocks while in the Economic Outlook, a slower pace of total factor productivity growth is accounted for.

"Impact de la crise financière sur le PIB potentiel de la Belgique",

I. Lebrun, Working Paper 10-09, September 2009.

# Recent history of major economic policy measures

September 2009

Complementing the 2009-2013 Stability Programme, the Belgian authorities reaffirmed their commitment to balancing the general government budget by 2015, which requires a (now revised) adjustment of 6.7% of GDP as compared to a constant policy scenario. As an interim target, the 2012 deficit should be limited to 4.4% of GDP, of which 3.7% is a GDP deficit at the federal level (central government and social security) and 0.7% is a GDP deficit for the other public entities (Regions, Communities and local authorities all together).

July 2009

The Competition Council approved the take-over of low-cost telecoms provider, Scarlet, by the incumbent, Belgacom, subject to the condition that Scarlet's optical fibre network would be hived off. The network has now been sold to Syntigo, which is the ICT subsidiary of the railway incumbent, NMBS/SNCB.

Also concerning the railways, the Federal Government approved four bills that would transpose EU Directives 2007/59, 2008/57 and 2008/110 into Belgian law. The directives concern, respectively, the certification of train-staff, interoperability and safety.

June 2009

Post Danmark sold its stake in the postal incumbent, De Post/La Poste, to CVC Capital Partners. It did so as a consequence of its merger with Swedish Posten AB. CVC now owns 50% minus one share of the incumbent. The selling-off does not influence the co-operation between De Post/La Poste and Post Danmark.

May 2009

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 2009

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 2009

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.

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

ECB European Commission
ECB European Central Bank

EU European Union

FÉBIAC 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

USD 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)