

# Quarterly Newsletter of the Federal Planning Bureau

*Short Term Update (STU) is the quarterly newsletter of the Belgian Federal Planning Bureau. It contains 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 two years of negative growth, the euro area economy should grow by 1.1% in 2014 and by 1.5% per year during 2015-2019. Belgian GDP growth remained limited to 0.2% last year. In 2014 and 2015, export growth ought to accelerate and domestic demand should pick up (after a decrease in the past two years), resulting in GDP growth of 1.4% and 1.8% respectively. Subsequently, Belgian GDP should grow at 1.6% on average.*

*After a decrease in 2013 (-0.2%), job creation is expected to remain limited in 2014 (+0.3% or 13 000 new jobs). Net job creation should become greater over the period 2015-2019, reaching 32 000 on average per year. The number of jobs in market services should increase by 192 000 units over the period while the number of jobs in manufacturing industry should continue its decline (-30 000 jobs). The number of unemployed persons (broad administrative concept) should start to decline in 2015. Their number should be reduced by 81 000 over the period 2015-2019. The unemployment rate is thus expected to decrease from 12% in 2014 to 10.8% in 2019.*

*Belgian headline inflation, which is measured by the national index of consumer prices, dropped to 1.1% in 2013 and should amount to 0.7% in 2014 due to lower energy prices. Energy prices should also slow down inflation in 2015 (1.1%), but to a lesser extent. In the context of a moderate rise in international energy prices, Belgian inflation ought to rebound, but not exceed 1.5% on average during the period 2016-2019.*

*The general government's deficit was significantly reduced to 2.6% of GDP in 2013, which is below the 3% threshold for the first time since 2009. In early June, the European Commission accordingly issued a recommendation to the EU Council to abrogate the excessive deficit procedure launched against Belgium in 2009. This result, obtained in spite of the unfavourable economic situation, is explained by structural as well as one-off budgetary measures. Without additional measures and despite higher economic growth and lower interest charges, the deficit should increase slightly to 2.7% in 2014 and 2.8% in 2015. The deficit should decline thereafter, from 2.5% of GDP in 2016 to 2.2% in 2019. Significant efforts would therefore be necessary to reach an actual surplus of 0.6% of GDP in 2017, as planned in the Stability Programme.*

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



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## Is medical technology a main driver of increasing health care expenditures?

The rising share of health care spending in terms of GDP across countries over the past decades has been matched by the proliferation of models that try to explain the phenomenon. These models differ in terms of the level of aggregation of the data used, their geographical scope, the explanatory variables used, their specification and the estimation methods. Unsurprisingly, the results and conclusions also vary wildly, both in terms of the relevant determinants and of the magnitude of their effects on health expenditure. One of the key factors behind these differences is the choice of variables that serve as proxies for medical technological progress. Since Weisbrod's seminal paper<sup>1</sup>, and maybe even more so after Newhouse's conjecture<sup>2</sup>, medical technology is considered one of the key drivers of rising health expenditure, possibly accounting for as much as fifty percent of the post-war growth in health spending. However, while there is a wide consensus among health economists about the impact of medical technology on costs, its effect has proven very difficult to quantify. This is mainly due to the difficulty of measuring technological progress, or finding suitable proxy variables.

### Empirical models explaining the observed rise in health spending

The set of variables used to explain health care spending usually contains income, indicators of the age composition of the population, the share of public spending in total spending and proxies for medical technology. The latter are defined alternatively as indicators of specific high-tech appliances such as CT or MRI scanners, medical or general R&D spending, weighted sums of time dummies or simply a time trend. All of these indicators have serious drawbacks. High-tech appliances represent specific medical technology and are therefore not necessarily representative of medical progress in general. R&D spending is an input in the innovation process, and translates only partially and with considerable lags into new applications and products. Time dummies and trends have the advantage of being non-specific, but this is also their weakness: their estimated contribution to health expenditures may reflect the effect of all kinds of other non-stationary variables.

A rather different approach to measuring the effect of medical technology is from Newhouse, who calculates its contribution as the difference between total observed growth and the effects of 'known' determinants such as

income, demographics, etc. This residual growth is attributed to medical technology (similar to Solow's macroeconomic growth accounting model) whereas it actually captures the effects of all omitted variables and the errors in the attributed effects of the included variables.

In a recent paper, Willemé and Dumont (2014)<sup>3</sup> suggested a new set of technology indicators that avoid many of the problems associated with the existing ones. The new variables are defined as the number of new drugs and devices approved annually by the US Food and Drug Administration. The drug approvals are subdivided into 'new drug applications' (NDA) and 'new molecular entities' (NME), the device approvals into 'pre-market notifications' (PMN) and pre-market approvals (PMA). NDA and PMN approvals are considered to represent 'incremental' medical innovation, while NME and PMA approvals represent 'radical' innovation. These variables have several advantages over the conventional indicators: they represent technology that is ready to be introduced in the marketplace (as opposed to R&D) and they represent actual technology (not just a time trend) but without being specific (as opposed to using, for example, scanners as an indicator). The use of US data on new drugs and medical devices to reflect medical technology in OECD countries in the study is prompted by the lack of sufficiently long time series for other countries. Despite differences in regulation between the US and other OECD countries, the leading role of the US in both manufacturing pharmaceuticals and medical devices and as a market is well-established<sup>4</sup>. As such, new medical technology marketed in the US is likely to be a good proxy of innovation in medical technology worldwide. Nevertheless, it would be preferable to use national approval data once they become available.

### Estimating the impact of medical technology

The new technology indicators have been introduced in a panel econometric model estimated for 18 OECD countries over the 1981-2012 period<sup>5</sup>. The model estimates real total per capita health expenditures as a function of income (per capita GDP in constant USD using Purchasing Power Parity conversion factors), financing (the

1. B. Weisbrod, 'The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care, and Cost Containment', *Journal of Economic Literature* 29, no. 2 (1 June 1991): 523-52.

2. Joseph P. Newhouse, 'Medical Care Costs: How Much Welfare Loss?', *The Journal of Economic Perspectives* 6, no. 3 (1 July 1992): 3-21.

3. P. Willemé and M. Dumont, 'Machines That Go 'Ping': Medical Technology and Health Expenditures in OECD countries.', *Health Economics*, forthcoming.

4. Fabio Pammolli et al., *Medical Devices Competitiveness and Impact on Public Health Expenditure* (University Library of Munich, Germany, July 2005), <http://ideas.repec.org/p/pramprapa/16021.html>.

5. Austria, Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands and Spain from the euro zone, and Australia, Canada, Denmark, Japan, Norway, Sweden, Switzerland, the United Kingdom and the United States from the rest of the world (including non-euro-zone European countries).

share of public and out-of-pocket spending in total spending), lifestyle (average Body Mass Index), the age composition of the population (the share of the age groups 65-74, 75-84 and 85+ in the population) and the capital stock of the four technology variables. The results confirm the importance of income, lifestyle and technology as the main drivers of health spending. An important result is that, although the overall effect of technology is positive, 'incremental' innovation is actually cost-saving. It confirms the potential savings that may be obtained by certain innovations by avoiding or reducing other expensive medical interventions, including surgery and hospitalization. In the context of new drug development, this phenomenon has been labeled the 'drug cost offset theory'.

The panel model results can be used to estimate the contributions of the various determinants to the observed growth of real per capita health spending over the past thirty years. Of course, the estimated effects are averages, based on the common model parameters estimated for the set of countries included in the study. The contributions nevertheless differ across countries since the independent variables are country-specific, with the exception of the technology variables. The following table summarises the results for a selection of OECD countries. The entries are the contributions of the model variables relative to the total historical growth rates explained by the model.

**Table 1 - Estimated contribution of the key drivers of total health spending (OECD, 1981-2009, selected countries)**

Country	Variable Income	Financing	Lifestyle (BMI)	Age composition	Technology
Belgium	27%	0%	10%	14%	49%
Germany	26%	-3%	15%	15%	48%
Netherlands	27%	4%	16%	10%	43%
France	21%	6%	10%	14%	49%
Ireland	51%	-2%	13%	7%	30%
Italy	12%	0%	6%	18%	63%
Australia	25%	-1%	28%	12%	36%
Switzerland	16%	7%	9%	17%	51%
Japan	25%	0%	10%	26%	39%
United Kingdom	31%	-1%	26%	7%	37%
United States	23%	7%	28%	7%	36%
Average (18 countries)	26%	1%	16%	13%	43%
Minimum (18 countries)	12%	-3%	6%	7%	30%
Maximum (18 countries)	51%	7%	28%	26%	63%

Note: Computations are based on shorter periods for some countries due to incomplete data.

The table reveals some quite interesting results. First, the calculations confirm technology to be the major driver of historical spending growth in the countries studied, accounting for as much as 43% of total growth on average. This average is calculated from the positive contribution of 'radical' innovation (+56%) and the cost-saving effect of 'incremental' innovation (-13%).

The second most important driver is income, followed by lifestyle and demographic ageing. The substantial contribution of lifestyle (BMI) confirms the reports in the literature about the health and economic burden of what has been described as the worldwide obesity epidemic. Not all countries are equally affected, and it is probably no surprise that the United States stand out (together with Australia, the UK and Canada). Demographic ageing also affects countries to differing degrees, according to the evolution of the age composition of their population. In Japan, a forerunner in demographic ageing, this effect accounts for 26% of historical growth. Finally, the financing variables contribute little to overall spending, except in Switzerland, France and the US (and to a lesser extent the Netherlands). The positive contribution in these countries is caused by a reduction in the share of out-of-pocket spending (as out-of-pocket spending itself has a negative effect on total spending).

Belgium appears to be quite average in terms of the contributions of the various explanatory variables. We seem to have a lower than average contribution of lifestyle to spending, suggesting obesity has not (yet) become as urgent a problem here as it has elsewhere. The relative impact of technology is slightly higher than average, while the contribution of income and ageing equals almost exactly the average of the 18 OECD countries covered in the panel.

## Conclusion

Medical technology is widely believed to be a major driver of growing health care expenditures in advanced economies. Following Newhouse's conjecture, as much as 50% of the historical growth in health spending is attributed to cost-increasing new medical applications. Empirical support for this claim has been difficult to obtain, however, mainly because of the difficulty in measuring technological progress or finding adequate proxies. In a recent study, new proxies for medical technology were proposed. They are based on the number of annual approvals of new applications by the American Food and Drug Administration, subdivided between 'incremental' and 'radical' innovation in new drugs and devices. The new proxies were tested in a panel model estimated for 18 OECD countries, and the results confirm the role of medical technology as a fundamental driver of health care spending. Other important determinants of total real per capita health expenditures are income, lifestyle and the age composition of the population. An obvious limitation of the study is its use of US FDA data as a proxy for medical progress in all OECD countries. While this choice is defensible (and inevitable), the model could be improved with the use of national approval data, once they become available in sufficiently long time series.

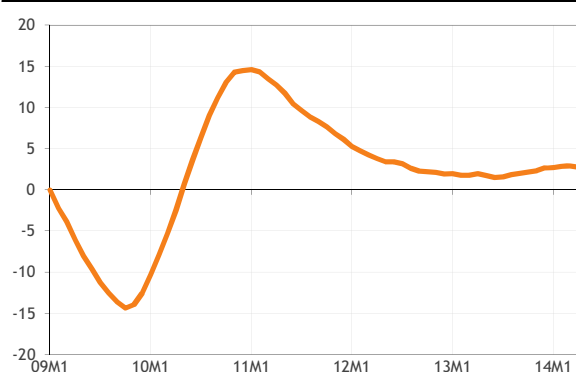
## Economic forecasts 2014-2015

The National Accounts Institute has transmitted the forecasts presented below to the Minister of Economic affairs. These short-term forecasts serve as the basis for preparing the budget for the year 2015. They were also used as the starting point for the medium-term projection (2014-2019) that was published on 25 June 2014 (see pages 7-8 of this STU).

### Gradual recovery of economic growth in the euro area

World economic growth decreased during the last two years but is expected to gain momentum in 2014 and 2015. The recovery is mainly fuelled by the US, where GDP should grow by 2.5% and 3.1% respectively, while growth in emerging markets should remain fairly stable. After two years of negative growth, the euro area economy should grow by 1.1% in 2014 and 1.5% in 2015 against the backdrop of an acceleration in world trade, a loose monetary policy and a fiscal policy that should weigh less on economic activity than in previous years. Nonetheless, the recovery is expected to be moderate, as several Member States are still facing high debt levels, scarce credit and high unemployment. Economic growth should nevertheless become positive in virtually all euro area countries as from 2014 (compared with only half of them in 2013). In addition, the so-far mainly export-led recovery is expected to be driven increasingly by domestic demand.

**Graph 1 - World trade (YoY growth rates in %) 12-month moving average**



Source: CPB

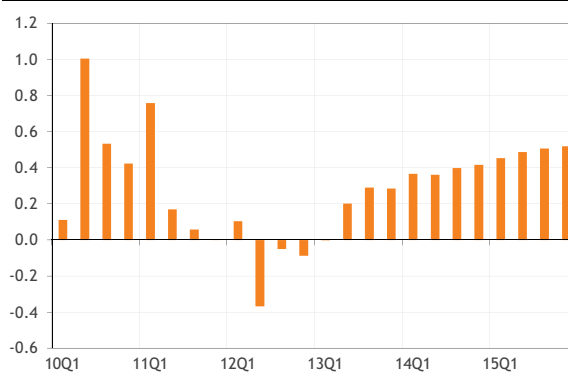
The above-described scenario involves several risks. Inflation in the euro area is currently very low due to the low rate of capacity utilisation and the appreciation of the euro. A new negative demand shock could hence tilt the euro area into deflation. Likewise, disappointing economic growth or new concerns about the European banking sector could reignite the euro crisis. Finally, a number of emerging economies are faced with interest rate rises and capital outflows, in particular due to the

planned normalisation of US monetary policy. This raises uncertainty about their growth prospects and, thus, those of the global economy.

### Belgian economic growth increasingly driven by domestic demand

After several quarters of negative growth, the Belgian economy started to recover in 2013Q2 (+0.2% qoq) owing to a pick-up in exports. During the second half of 2013, GDP growth amounted to 0.3% on average against the background of a European economic recovery. However, due to an unfavourable starting point, annual growth in Belgian GDP remained limited to 0.2% last year. In 2014 and 2015, export growth should accelerate and domestic demand should pick up (after a decrease for the past two years), resulting in GDP growth of 1.4% and 1.8% respectively.

**Graph 2 - Quarterly GDP growth (qoq growth rates, corrected for seasonal and calendar effects)**



Source: INR/ICN, FPB

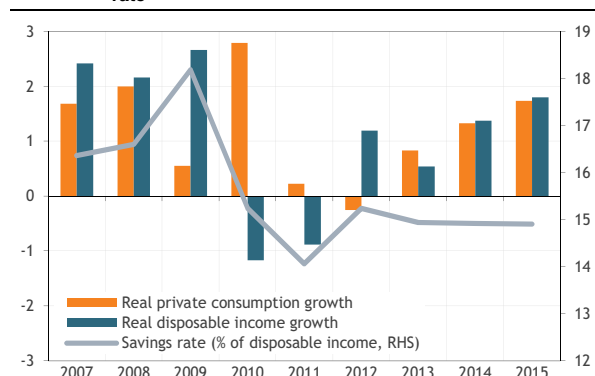
Belgian exports should benefit from the gradual European economic upturn and grow by 2.3% in 2014 and 3.6% in 2015. However, net exports should only slightly contribute to economic growth (respectively, by 0.2 and 0.1 %-point), due to the simultaneous acceleration in import demand. Together with lower oil prices and the appreciation of the euro against a number of other currencies (causing import prices to grow less rapidly than export prices), this should reduce the Belgian current account deficit.

Private consumption increased more than households' real disposable income in 2013. Due to the gradual improvement in consumer confidence, households saved a smaller part of their income (14.9%, compared with 15.2% in 2012). Consumer confidence stopped rising by the end of 2013 but should hold steady owing to the improved situation in the labour market. Consequently, a stabilisation of the savings rate (which is at a historically low level) is likely. In line with the evolution of real dis-



posable income, private consumption ought to increase by 1.3% in 2014 and 1.7% in 2015. The restoration of consumer confidence, the increase in purchasing power and low mortgage rates should also allow for a slight recovery in housing investment (growth of 1.4% and 2.4%), following a decrease for several years.

**Graph 3 - Private consumption, disposable income and saving rate**



Source: INR/ICN, FPB

Business investment recovered somewhat in the course of 2013, but not enough to compensate for the fall in the course of 2012. On an annual basis, business investment hence still declined by 0.5%. The increase in business confidence (owing to improved demand prospects, among other factors) and the rise in the industrial capacity utilisation rate (which reached its historical average) should increase the need for investment in expansion. Moreover, firms' credit conditions have become more relaxed. Business investment ought to increase by 2.6% and 3.4% in 2014 and 2015 respectively.

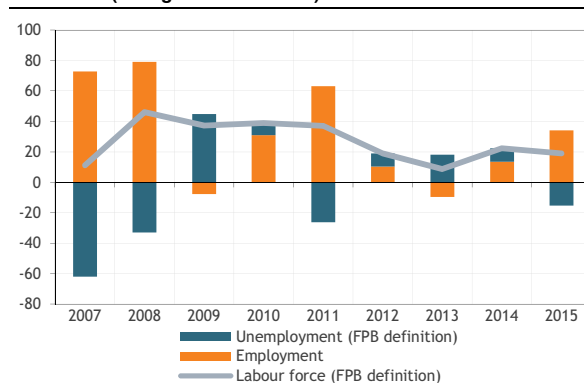
Taking into account all known measures, the annual volume growth of public consumption should amount to 1.1% in 2014 and 0.8% in 2015. The growth profile of public investment is largely determined by local authorities' infrastructure projects. After a 12% decrease over the period 2013-2014, public investment should expand by 3.8% in 2015.

**Slight decrease in unemployment in 2015**

In 2013, domestic employment decreased by 9 700 units on an annual basis. The improvement in the business cycle should lead to a net increase in the number of jobs. This increase should remain limited to 13 700 units (0.3%) in 2014 and 34 300 units (0.8%) in 2015 due to the catching-up of labour productivity and average working time. Both factors decreased during the recent period of weak economic activity and thus limited the number of job losses. Considering the evolution of the labour force, the number of unemployed persons (broad administrative definition) should increase by 8 800 units this year, but go down by 15 200 units next year. The harmonised Eurostat unemployment rate for Belgium

should decline from 8.5% in 2014 to 8.3% in 2015.

**Graph 4 - Evolution of employment and unemployment (changes in thousands)**



Source: NR/ICN, RVA/ONEM, FPB

**Persistently low inflation**

Belgian headline inflation, which is measured as the yoy growth rate of the national index of consumer prices (NICP), dropped to 1.1% in 2013 and should amount to 0.7% in 2014 due to lower energy prices. Domestic energy prices benefit from both lower price quotations on the international markets and increased competition in the domestic gas and electricity market. Moreover, the VAT rate on home electricity has been lowered as from April 2014. These elements should also slow down inflation in 2015, but to a lesser extent, while underlying inflation should stabilise on an annual basis. Therefore, the NICP should rise by 1.1% in 2015.

The increase in the health index, which is not affected by price developments in alcoholic beverages, tobacco products, petrol and diesel, should amount to 0.7% in 2014 and 1.2% in 2015. Consequently, the current pivotal index for public wages and social benefits (101.02) should be crossed in December 2014. The next pivotal threshold (103.04) is not expected to be crossed in 2015.

*“Economische vooruitzichten 2014-2015 / Prévisions économiques 2014-2015”, INR/ICN, press release, June 2014.*

## Economic outlook 2014-2019

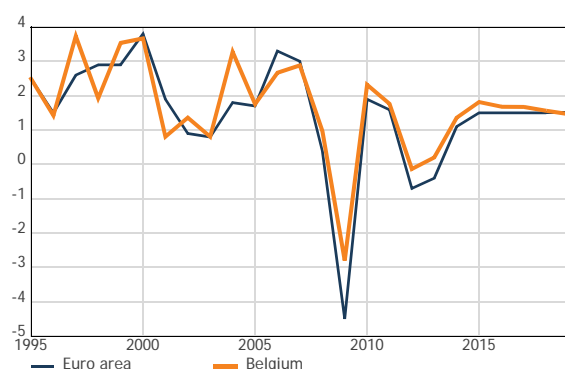
The Economic outlook takes the Economic forecasts 2014-2015 (see previous pages) as a starting point and extends the analysis into the medium term (2016-2019), while also providing an explicit account of industry developments and public finances over the whole period.

### The world recovery is expected to be confirmed in the medium term

The international scenario assumes that world GDP will expand at a rate slightly below 4% during the period 2016-2019, implying, in most advanced economies, that output gaps will be closed in 2019 at the earliest. Consequently, euro area and EU economic growth should reach, on average, 1.5% and 1.9% respectively over the same period. Inflation in the euro area should pick up only gradually, from 1.3% in 2016 to 1.6% in 2019.

### Economic growth recorded in Belgium should be slightly higher than the euro area average

Graph 1 - GDP growth in Belgium and in the euro area (growth rate in %)

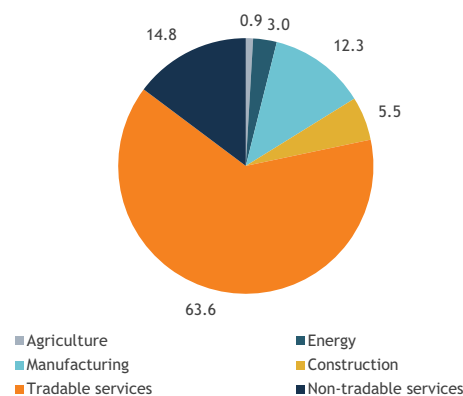


Belgian potential export markets are assumed to increase at an annual rate of 4.9% during the period 2016-2019, resulting in export growth of 3.7%. All components of domestic expenditure – except public consumption – should also record fairly solid growth rates: private consumption should rise by 1.5% annually while total investment ought to expand by 2.5% on average per year. This expansion in domestic demand should be accompanied by a 3.7% increase in imports, explaining the limited contribution of net exports to economic growth (0.1 %-points annually). Under these circumstances, the current account surplus (in National Accounts terms) should remain small, hovering around 0.5% of GDP. On the whole, Belgian GDP should grow by 1.6% on average over the period 2016-2019, improving the modest performance recorded in recent years (1.0% on average during 2010-2013).

### Almost all industries should benefit from the recovery

Over the period 2014-2019, manufacturing industry should record annual average growth rates of about 1.6%. Value added in the construction industry (annual growth of 1.8%) should benefit from the upswing in housing investment. Market services should grow at the same speed while agriculture (1.1%), energy (0.8%) and non-market services (0.8%) are expected to lag behind. Hence, the share of manufacturing industry in total value added should be almost stabilised (from 12.4% in 2013 to 12.3% in 2019 in nominal terms), which represents a structural break with the downward trend registered in the last forty years; the share of market services should be on the rise again but less prominently than in the last decade (57.9% in 2000, 62.5% in 2013 and 63.6% in 2019 in nominal terms).

Graph 2 - Structure of value added in nominal terms (in %)



### Wage and price inflation should remain relatively subdued

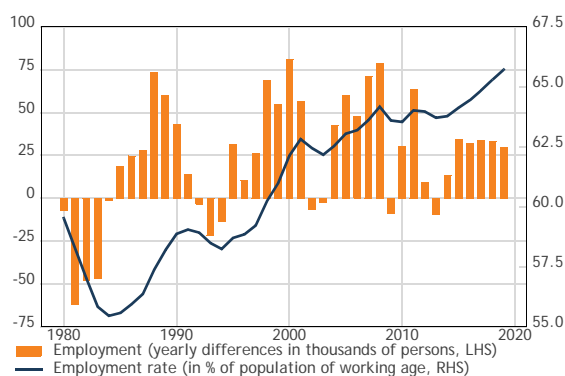
Nominal hourly gross wages in the private sector should increase by 2.5% annually on average. With labour productivity gains approximating 1% per year, real unit labour costs should grow by 1.5% per year on average over the period 2016-2019. This relatively moderate wage growth is one of the factors explaining why the economic recovery should go hand in hand with a limited rise in headline inflation, from 1.4% in 2016 to 1.6% in 2019.

### Significant decline in the number of unemployed

Net job creation should amount to 32 000 per year over the period 2016-2019. The number of jobs in market services should increase by 150 000 units over this period.

od while the decline in manufacturing industry is expected to remain limited to 23 000. The employment rate should hence increase from 64.1% in 2015 to 65.7% by 2019. According to the definition adopted in the Europe 2020 strategy, the employment rate should amount to 69.2% in 2019, which still represents a significant discrepancy from the objective of 73.2% that the Belgium has set for 2020.

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



The increase in the working age population (15-64) is expected to decelerate markedly from 2017 onwards and even to turn negative in 2019. Thanks to a positive contribution coming from participation rate increases, the labour force should nonetheless grow by 62 000 persons over the period 2016-2019 but weaken considerably by the end of this period. This phenomenon, combined with the job creation, should lead to a decline in the number of unemployed of 66 000, reducing the unemployment rate (FPB definition based on administrative data) from 12.2% in 2015 to 10.8% in 2019. The unemployment rate, as measured by the Eurostat definition, should decline to 7.3% in 2019 from 8.3% in 2015.

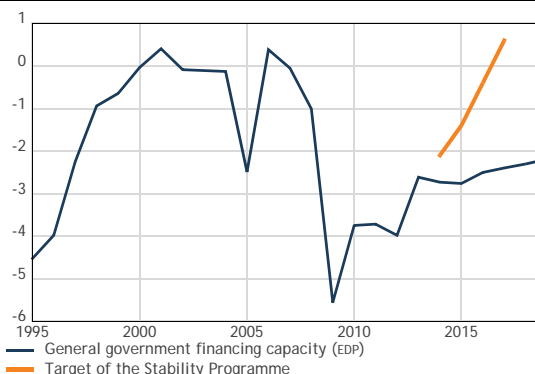
**General government deficit should remain below 3% of GDP**

In 2013, the general government deficit was reduced significantly to reach 2.6% of GDP, i.e. below the 3% threshold for the first time since 2009. In early June, the European Commission accordingly issued a recommendation to the EU Council to abrogate the excessive deficit procedure launched against Belgium in 2009. This result, obtained in spite of the unfavourable economic situation, is explained by structural as well as one-off budgetary measures. In the absence of new measures and notwithstanding better economic growth and lower interest payments, the deficit is expected to increase slightly (2.7% in 2014 and 2.8% in 2015). Thereafter, the deficit should decline gradually, from 2.5% of GDP in 2016 to 2.2% in 2019.

The Belgian Stability Programme is targeting a structural budget surplus of 0.75% of GDP by 2017, which trans-

lates into an actual balance of 0.6% of GDP. The gap between this objective and the deficit in 2017, assuming unchanged policy (2.4% of GDP), amounts to 3.0% of GDP. Reducing such a gap by budgetary measures alone represents a considerable challenge.

**Graph 4 - General government financing capacity (as a percentage of GDP)**



After reaching 101% of GDP in 2013, the public debt ratio should increase further in 2014 before declining very slowly to return below the 100% threshold by 2017. European legislation, however, requires Belgium to reduce its public debt ratio by 2% of GDP per year, after a transitional period of three years following the exit from the excessive deficit procedure.

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

Period averages, changes in volume unless otherwise stated

	2002-2007	2008-2013	2014-2019
Potential export market	6.3	1.9	4.8
Private consumption	1.2	1.0	1.5
Public consumption	1.6	1.3	1.0
Gross fixed capital formation	3.1	-1.2	2.4
Stock building (contribution to GDP growth)	0.6	-0.2	0.0
Final domestic demand	1.5	1.0	1.1
Exports	3.9	1.7	3.5
Imports	3.8	1.8	3.4
Net exports (contribution to GDP growth)	0.3	0.0	0.1
GDP	2.1	0.4	1.6
Real national gross income	1.9	-0.1	1.6
Private consumption prices	2.3	1.9	1.4
Real disposable income - households	0.9	0.7	1.6
Domestic employment (annual changes in thousands)	35.4	27.2	29.3
Unemployment, FPB definition <sup>a</sup>			
- thousands	633.5	654.5	582.4
- % of labour force	12.4	12.4	10.8
Current account balance (% of GDP) <sup>a</sup>	3.9	-0.2	0.6
General government financing capacity, EDP def. (% of GDP) <sup>a</sup>	-0.1	-2.6	-2.2
Public indebtedness (% of GDP) <sup>a</sup>	84.0	101.1	98.0

a. End of period



## Summary of economic forecasts

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

Changes in volume (unless otherwise specified) (publication date: 25 June 2014)

	2012	2013	2014	2015
Private consumption	-0.3	0.8	1.3	1.7
Public consumption	1.4	0.6	1.1	0.8
Gross fixed capital formation	-2.0	-1.5	1.6	3.2
Final national demand	-0.6	-0.3	1.2	1.7
Exports of goods and services	1.8	1.9	2.3	3.6
Imports of goods and services	1.3	1.3	2.1	3.6
Net-exports (contribution to growth)	0.5	0.6	0.3	0.2
Gross domestic product	-0.1	0.2	1.4	1.8
p.m. Gross domestic product - in current prices (bn euro)	375.88	382.82	392.72	405.99
National consumer price index	2.8	1.1	0.7	1.1
Consumer prices: health index	2.6	1.2	0.7	1.2
Real disposable income households	1.2	0.5	1.3	1.7
Household savings ratio (as % of disposable income)	15.2	14.9	14.9	14.8
Domestic employment (change in '000, yearly average)	9.4	-9.7	13.6	34.2
Unemployment (Eurostat standardised rate, yearly average) [1]	7.6	8.4	8.5	8.3
Current account balance (BoP definition, as % of GDP)	-1.9	-1.6	-1.0	-0.9
Short term interbank interest rate (3 m.)	0.6	0.2	0.3	0.2
Long term interest rate (10 y.)	3.0	2.4	2.2	2.3

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

### Economic forecasts for Belgium by different institutes

	GDP growth		Inflation		Government balance		Date of update
	2014	2015	2014	2015	2014	2015	
Federal Planning Bureau	1.4	1.8	0.7	1.1	-2.7	-2.8	06/14
INR/ICN	1.4	1.8	0.7	1.1	.	.	06/14
National Bank of Belgium	1.3	1.6	0.9	1.3	-2.6	-2.8	06/14
European Commission	1.4	1.6	0.9	1.3	-2.6	-2.8	05/14
OECD	1.5	1.9	0.8	1.0	-2.1	-1.2	05/14
IMF	1.2	1.2	1.0	1.1	-2.4	-2.1	04/14
ING	1.3	1.6	1.3	2.0	-2.4	-1.6	02/14
BNP Paribas Fortis	1.2	1.2	0.8	1.3	-2.3	-1.9	06/14
Belfius	1.4	1.7	0.9	1.3	.	.	05/14
KBC	1.2	1.6	0.9	1.5	.	.	05/14
Deutsche Bank	1.4	1.6	1.1	1.5	-2.5	-2.6	06/14
Oxford Economics	1.2	1.3	0.9	1.3	-2.9	-2.5	06/14
IRES	1.7	.	0.7	.	-2.3	.	04/14
Belgian Prime News	1.3	1.4	1.2	1.5	-2.5	-1.8	04/14
Consensus Economics	1.2	1.5	1.0	1.5	.	.	06/14
Consensus The Economist	1.2	1.4	1.1	1.5	.	.	06/14
Consensus Wirtschaftsinstitute	1.4	1.7	1.2	1.4	-2.6	-2.5	04/14
<b>Averages</b>							
All institutions	1.3	1.6	0.9	1.4	-2.5	-2.2	
International public institutions	1.4	1.6	0.9	1.1	-2.4	-2.0	
Credit institutions	1.3	1.5	1.0	1.5	-2.4	-2.0	

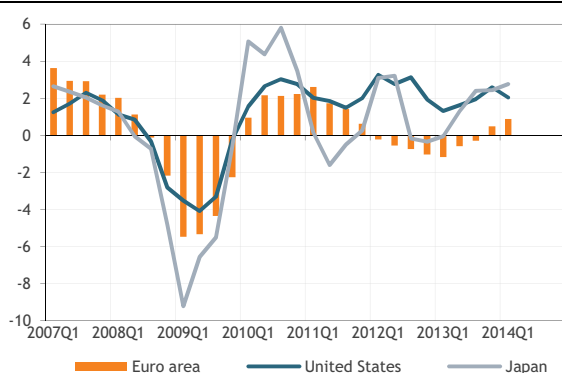
## General economic activity

**Table 1 - GDP growth rates (in %) [1]**

			YoY growth rates, in %					QoQ growth rates, in %				
	2012	2013	2013Q1	2013Q2	2013Q3	2013Q4	2014Q1	2013Q1	2013Q2	2013Q3	2013Q4	2014Q1
Germany	0.9	0.5	-0.3	0.5	0.6	1.4	2.3	0.0	0.7	0.3	0.4	0.8
France	0.4	0.4	-0.2	0.7	0.3	0.8	0.8	0.0	0.6	-0.1	0.2	0.0
Netherlands	-1.3	-0.8	-1.3	-1.9	-0.8	0.9	-0.3	-0.2	0.0	0.1	1.0	-1.4
Belgium	-0.1	0.2	-0.5	0.1	0.4	0.8	1.2	0.0	0.2	0.3	0.3	0.4
Euro area	-0.6	-0.4	-1.2	-0.6	-0.3	0.5	0.9	-0.2	0.3	0.1	0.3	0.2
United States	2.8	1.9	1.3	1.6	2.0	2.6	2.0	0.3	0.6	1.0	0.7	-0.2
Japan	1.4	1.5	0.0	1.3	2.4	2.4	2.8	1.3	0.7	0.3	0.1	1.6

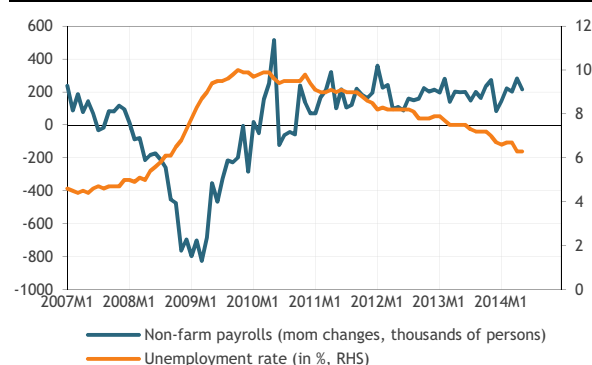
[1] Adjusted for seasonal and calendar effects  
Source: INR/CN, National sources, Eurostat

**Graph 1 - GDP growth (YoY growth rates, in %)**



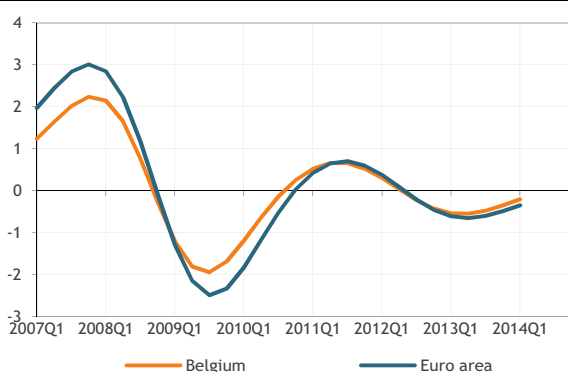
Source: Eurostat, National sources

**Graph 2 - us labour market situation**



Source: us Bureau of Labor Statistics

**Graph 3 - GDP business cycle (deviation from trend in %)**



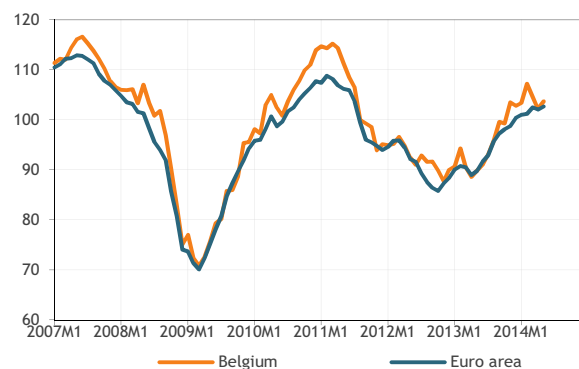
Source: INR/CN, Eurostat, FPB

After strong economic growth in the second half of last year, the US economy contracted by 0.2% in 2014Q1. This was, however, primarily due to temporary factors as an exceptionally cold winter led to the closure of shops, factories and construction sites. Furthermore, inventories weighed down heavily on GDP growth (-0.4 %-point) as they had grown vigorously in the two previous quarters. Private consumption grew at a strong pace in 2014Q1, which was partly due to a surge in healthcare spending as the expansion of health coverage under the Affordable Care Act began to take effect. In 2014Q2, US economic growth is expected to bounce back forcefully as several monthly indicators point to the temporary nature of the weakness in economy activity. Non-farm payroll growth, e.g., was strong in the previous four months, leading to a 0.4 %-point drop in the unemployment rate. Manufacturing and consumer confidence have also risen considerably recently.

The fiscal stimulus package in Japan, worth 10.3trn JPY, propelled the economy to firm growth rates in the first half of 2013. However, GDP growth slowed down significantly during the second half of the year due to a slowdown in private consumption growth combined with export weakness. In 2014Q1, the Japanese economy soared by 1.5% (qoq) on the back of a surge in private consumption as Japanese consumers frontloaded their purchases ahead of a sales tax increase (from 5% to 8%) on 1 April. Investment and exports proved to be quite strong, but the latter's effect on GDP growth was neutralised by vigorous import growth. The carry-forward of consumption is likely to lead to (strongly) negative economic growth in 2014Q2, which seems to be confirmed by the steep fall in retail sales in April (-13.7%). Nonetheless, the government has created a new fiscal stimulus package to mitigate the downward effect of the VAT rate hike on economic activity.<sup>1</sup>

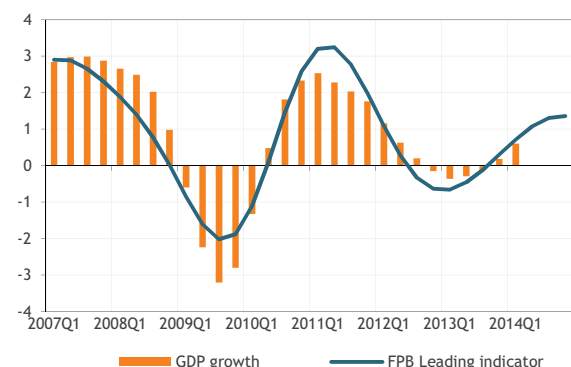
1. The last time Japan raised its VAT rate (in 1997) the economy entered a recession, although the Asian crisis also played a role at that time.

**Graph 4 - Economic sentiment indicator (indices, average 1990-2011=100)**



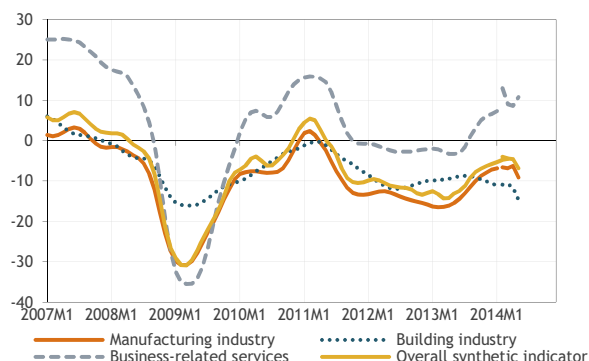
Source: European Commission

**Graph 5 - Belgian GDP growth and leading indicator (YoY growth rates of 4-quarter moving averages)**



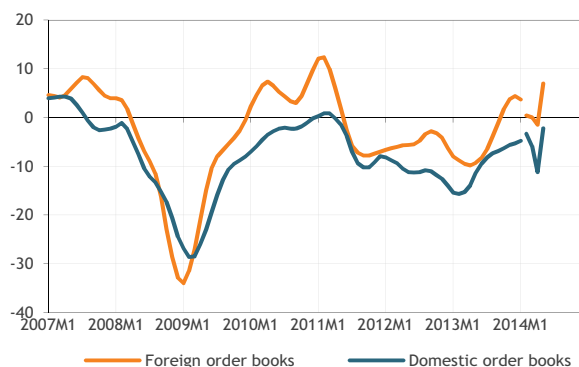
Source: INR/ICN, FPB

**Graph 6 - Belgian business cycle indicator (indices)**



Source: NBB

**Graph 7 - Manufacturing industry: order books (business survey indices)**



Source: NBB

Following meagre growth rates of 0.1% and 0.2% in the previous two quarters, euro area GDP growth proved to be disappointingly low again in 2014Q1 (0.2%). The disappointment (relative to expectations) was due to the performance of France (0.0%), Italy (-0.1%), Portugal (-0.7%), Finland (-0.4%) and the Netherlands (-1.5%). It should be noted that the latter's plunge in economic activity was mainly due to the exceptionally warm winter, which led to lower production of natural gas and lower growth of consumption and exports on the demand side. In spite of the Dutch economy's moderate weight in euro area GDP (6.5%), this subtracted 0.1 %-point from euro area GDP growth. Austria (0.3%), Spain (0.4%) and Belgium (0.4%) posted positive growth rates, but the strongest performance came from Germany, where GDP rose by 0.8% on the back of the mild winter weather, which boosted construction investment in particular. The expansion of the German economy is broad-based, however, with increases in all demand components.

Considerable improvement in economic sentiment (Graph 4) points to a firming of economic growth in the euro area in the coming quarters. During the latest six months, the improvement in the ESI, which depends on business as well as consumer confidence, was driven mainly by increasing consumer confidence, while other indicators roughly stabilised. However, the improvement in confidence since the end of 2012 has been broad-based as almost all sub-indicators of the ESI for the euro area are now well above their long-term average. Only the construction confidence indicator remains stuck at very low levels compared to historical standards, a situation that is seen in many euro area countries, with the exception of Germany, where construction confidence largely exceeds its historical average.

Belgian economic growth is expected to continue to slightly outpace eurozone GDP growth, as it has done since the outbreak of the financial crisis. Up until recently, this was confirmed by the ESI (Graph 4), which recovered more vigorously in Belgium than in the euro area. During the last two months, however, Belgian confidence indicators have weakened somewhat. This is mainly related to the forward looking components of business cycle indicators, while indicators with respect to current economic activity (e.g. the assessment of order books on Graph 7) have continued to improve. It remains to be seen whether indicators are temporarily going through a soft spot. The FPB leading indicator (Graph 5), which takes into account this recent worsening of sentiment, is still in line with our scenario of a gradual economic recovery during the rest of 2014.

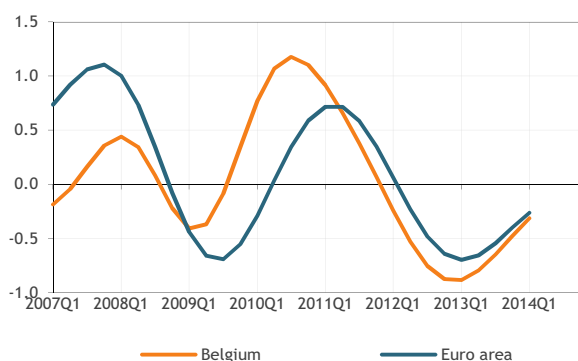
## Private consumption

**Table 2 - Private consumption indicators**

	2012	2013	2013Q2	2013Q3	2013Q4	2014Q1	2013M12	2014M1	2014M2	2014M3	2014M4	2014M5
New car registrations [1]	-14.9	-0.1	2.9	-2.0	-3.4	-0.4	12.3	-2.2	1.6	-0.5	0.5	-3.5
Consumer confidence indicator [2]	-15.8	-14.4	-19.0	-11.7	-5.7	-5.3	-5.0	-4.0	-4.0	-8.0	-9.0	-6.0

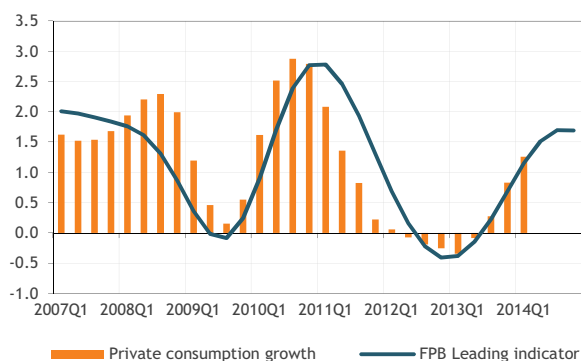
[1] Change (%) compared to same period previous year; [2] Qualitative data  
Source: NBB, Febiac

**Graph 8 - Private consumption cycle (deviation from trend, in %)**



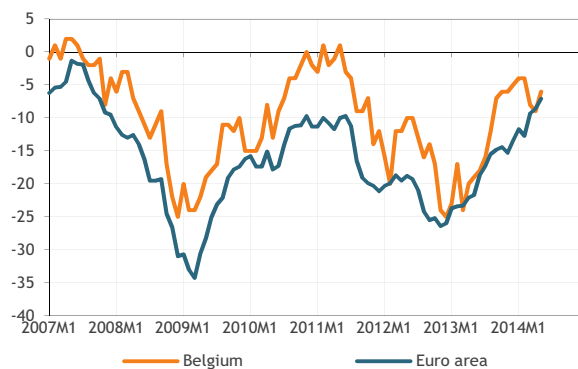
Source: INR/ICN, Eurostat, FPB

**Graph 9 - Private consumption growth and leading indicator (YoY growth rates of 4-quarter moving averages)**



Source: INR/ICN, FPB

**Graph 10 - Consumer confidence: international comparison (indices)**



Source: NBB, European Commission

Private consumption cycles in Belgium and the euro area reached a trough in 2013Q1 and increased during the most recent four quarters. After two years of sub-par growth (average qoq growth rate of -0.1%), Belgian qoq private consumption growth has accelerated to an average of 0.4% since 2013Q1. A similar, though less dynamic, growth profile was seen in the euro area, with average qoq growth rates of -0.3% in 2011 and 2012 and a quasi-stabilisation of private consumption afterwards.

According to the latest national accounts, Belgian private consumption registered an increase of 0.8% in 2013. Due to an improvement in consumer confidence in 2013, the rise in the savings rate of households seen in 2012 came to a halt in 2013, when it roughly stabilised. According to the FPB leading indicator, private consumption should be able to maintain its performance of recent quarters and increase by more than 1% on average in 2014.

Consumer confidence increased much faster in Belgium than in the euro area during the second half of 2013 on the back of a more optimistic assessment of general economic prospects and the expected development of the labour market. During March and April, however, Belgian consumer confidence fell significantly due to the announcement of several closures of large factories that will lead to a significant number of job losses. In May, Belgian consumer confidence was again upward oriented, although the assessment of the general economic situation is still more pessimistic than in the beginning of 2014. In the euro area, consumer confidence continues to increase gradually as it has improved markedly during recent months in some peripheral euro area countries that were still struggling with extremely low confidence levels at the end of 2013.

Although car purchases represent a fairly limited part of total private consumption expenditure, they do offer an indication of the willingness of consumers to spend money on major purchases. The quasi-stabilisation (compared to 2013) of car registrations during the first five months of this year shows that consumers are still somewhat hesitant to buy costly goods.

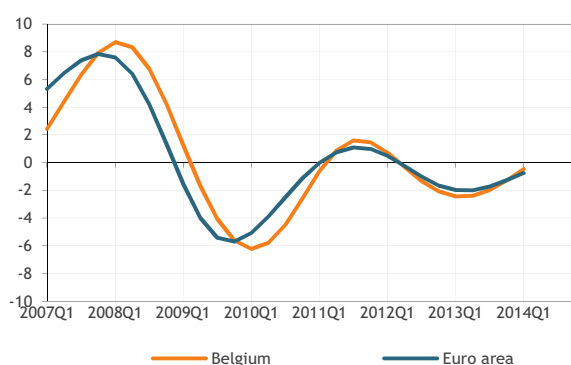
## Business investment

**Table 3 - Business investment indicators**

	2012	2013	2014	2013Q2	2013Q3	2013Q4	2014Q1	2014M1	2014M2	2014M3	2014M4	2014M5
Business survey, capital goods [2]												
Synthetic indicator	-8.7	-8.5	.	-12.3	-7.3	-2.7	-7.9	-3.3	-8.1	-12.4	-8.6	-12.7
Order book appraisal	-29.7	-23.7	.	-29.9	-18.8	-13.0	-14.0	-12.1	-14.2	-15.9	-23.0	-32.3
Demand forecasts	-4.0	-0.6	.	2.2	-7.3	-0.6	-2.2	-1.8	-1.5	-3.2	10.6	0.5
Investment survey [1]	3.7	-2.0	9.2									
Capacity utilisation rate (s.a.) (%)	76.7	76.8	.	76.1	77.1	79.0	79.1					

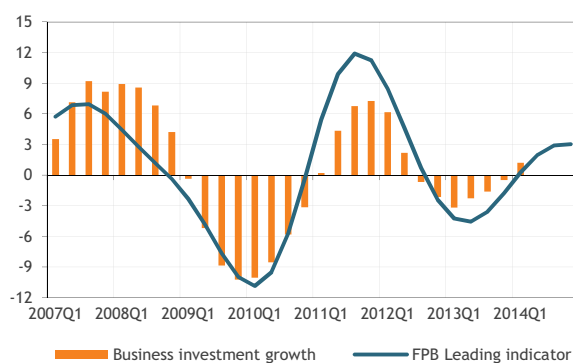
[1] Change (%) compared to same period previous year; [2] Qualitative data  
Source: NBB

**Graph 11 - Business investment cycle (deviation from trend, in %)**



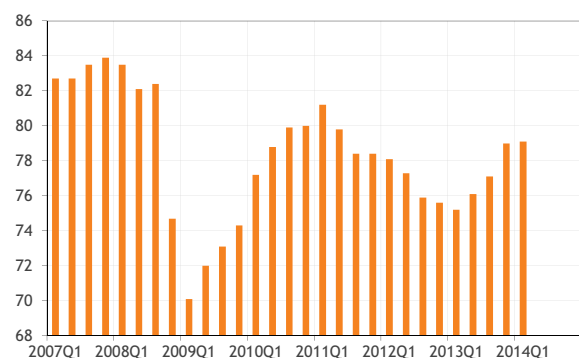
Source: INR/ICN, Eurostat, FPB

**Graph 12 - Business investment growth and leading indicator (YoY growth rate of 4-quarter moving averages)**



Source: INR/ICN, FPB

**Graph 13 - Capacity utilisation in manufacturing industry (rate of capacity utilisation, in %)**



Source: NBB

The financial crisis made investment in both Belgium and the euro area fall from 8% above to about 6% below its trend level by the beginning of 2010. In the course of 2010 and the first half of 2011, business investment recovered swiftly in line with the general business cycle (see Graph 3). From 2011Q2 until 2013Q1, however, the Belgian and the euro area economies initially lost momentum and subsequently entered into a recession. This made business investment fall by well over 5% in Belgium and the euro area. The recession ended in 2013Q2, leading to a recovery in investment that almost reached its trend level (i.e. the investment cycle was close to zero) by 2014Q1.

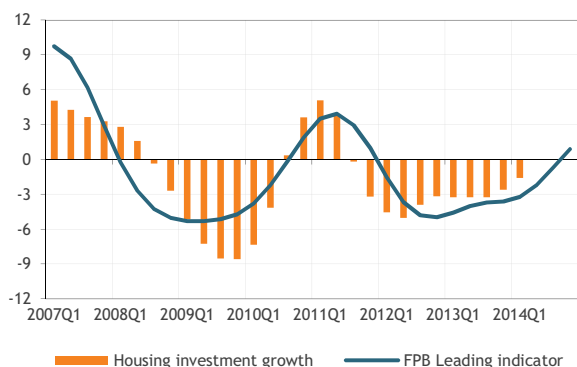
According to the latest national accounts, Belgian business investment increased by 0.5% per quarter on average in the course of 2013. Nonetheless, it declined by 0.5% on average in 2013 as compared to 2012 due to a sizeable negative carry-over effect from 2012. The investment rate (business investment in % of GDP at current prices) continued to decline to 12.8% in 2013 (compared to 13.3% in 2011 and 14.4% in 2008).

After the vigorous qoq increase of 2.2% in 2014Q1, most indicators point to a further, although less dynamic, expansion of business investment in the course of 2014. Firstly, the capacity utilisation rate in manufacturing industry increased to 79.1% in 2014, which is close to its historical average. This signals a growing need to invest, not only to replace existing machinery but also to expand production capacity. Secondly, the latest investment survey, held in Autumn 2013, shows that company directors in the manufacturing industry plan to invest 9.2% more (at current prices) this year than in 2013. However, it should be taken into account that this figure is generally subsequently revised downwards. Finally, indicators for the capital goods industry increased in the course of 2013, but declined during the first months of this year.



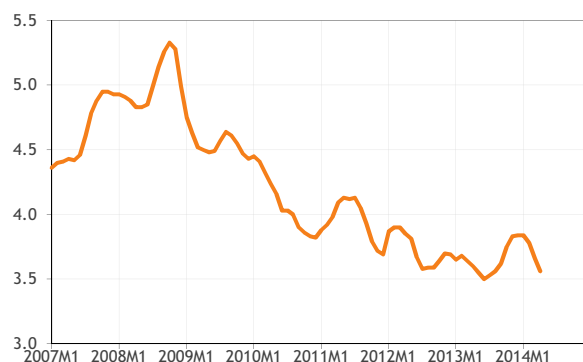
## Housing investment

**Graph 14 - Housing investment growth and leading indicator (YoY growth rates of 4-quarter moving averages)**



Source: INR/ICN, FPB

**Graph 15 - Mortgage rate (over 10 years initial rate fixation, in %)**



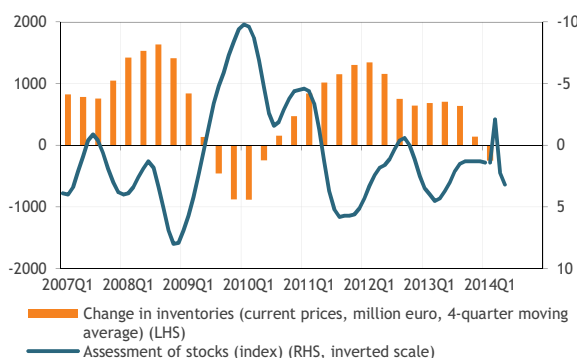
Source: NBB

Belgian residential investment contracted strongly for the fifth time in six years in 2013 (-2.6%), and reached a level that is nearly 16% lower than its peak in 2007. The decline pushed down the nominal residential-investment-to-GDP ratio from 6.5% in 2007 to 5.5% in 2013, which corresponds to its average of the preceding 20 years.

Housing investment acted as a drag on economic growth until mid-2013, with a modest recovery starting in the second half of last year (qoq growth rates of 0.4% in each quarter) and continuing in 2014Q1 (0.3%). The end of the downturn is confirmed by the FPB leading indicator, which declined from mid-2011 and reached a trough by the end of 2012. The indicator points to a further but modest pick-up in the residential investment growth cycle. Some of its components (building permits and the total value of mortgage applications) lead the development of housing investment by three to four quarters. Housing investment should also be supported by the historically low (nominal) mortgage rate and by improved consumer confidence.

## Stock building

**Graph 16 - Stock building indicators**



Source: INR/ICN, NBB

As changes in inventories can take on positive as well as negative values, the series that can be calculated using chain-linked volume indices does not provide any useful information and is no longer published in the quarterly national accounts. Therefore, changes in inventories are only shown at current prices in Graph 16. However, their contribution to real GDP growth can be derived as a residual, taking the contributions of other demand components into account.

Against the background of weak demand, changes in inventories dragged down economic growth by 0.5 %-point in 2012 and by 0.6 %-point in 2013. This drag should become much smaller in 2014. Business confidence has improved and fewer entrepreneurs have been considering their stock levels as excessive since 2013Q2.

## Foreign trade

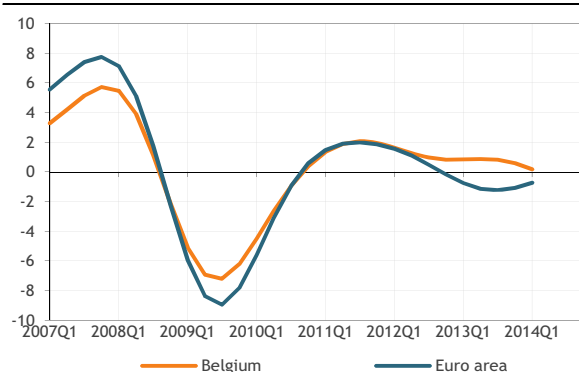
**Table 4 - Belgium - Trade statistics (goods, intra/extrastat, national concept)**

	2012	2013	2013Q1	2013Q2	2013Q3	2013Q4	2013M9	2013M10	2013M11	2013M12	2014M1	2014M2
Exports - value [1]	1.2	1.9	-2.9	2.1	4.0	4.8	7.7	4.1	2.5	8.3	5.2	4.7
Imports - value [1]	1.2	0.3	0.0	1.3	1.5	-1.6	6.3	-2.3	-5.5	3.7	0.7	-0.7
Exports - volume [1]	-1.8	2.5	-3.5	3.2	4.4	6.2	8.3	6.6	2.9	9.5	7.1	4.1
Imports - volume [1]	-3.6	0.7	-1.4	1.1	2.7	0.4	5.4	1.7	-3.4	3.2	2.9	-0.1
Exports - price [1]	3.0	-0.5	0.6	-1.0	-0.4	-1.3	-0.6	-2.3	-0.4	-1.1	-1.8	0.6
Imports - price [1]	5.0	-0.4	1.4	0.2	-1.2	-1.9	0.8	-4.0	-2.1	0.5	-2.1	-0.7

[1] Change (%) compared to same period previous year

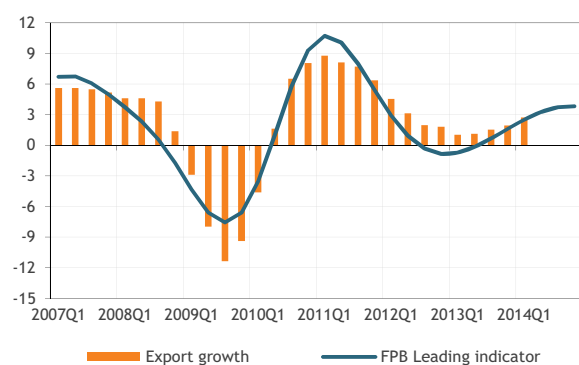
Source: INR/ICN

**Graph 17 - Export cycle (deviation from trend, in %)**



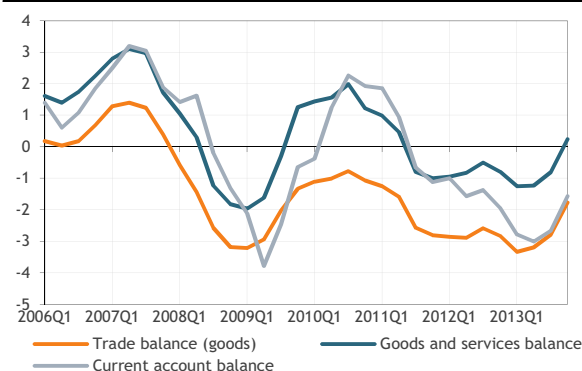
Source: INR/ICN, Eurostat, FPB

**Graph 18 - Export growth and leading indicator (YoY growth rate of 4-quarter moving averages)**



Source: INR/ICN, FPB

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



Source: INR/ICN, NBB, FPB

In spite of a slide in world trade growth, the Belgian export cycle has remained fairly stable since mid-2012, thereby opening up a gap with the European export cycle, which continued to decline. By the end of last year, the two export cycles were converging towards zero, implying a closing of the gap between effective exports and their trend.

Within the euro area, exports proved to be strongest in Spain and Portugal in 2013 as these countries made headway in cutting labour costs and became more competitive. This was not the case in Italy, leading to yet another year of disappointing exports. German export growth remained below the euro zone average last year, but this came after two years of outstanding export performances.

In spite of still feeble economic growth in the euro area, Belgian exports rose strongly in 2013Q2 and 2013Q3. Exports subsequently stagnated in the final quarter of last year and apparently declined substantially in 2014Q1. This decline is hard to tally with the import growth evolution of our trading partners (on which our exports depend). While import growth stagnated in the Netherlands and declined in the UK, it rose strongly in our two main export destinations, Germany and France (together comprising 35% of Belgian exports).

Regardless of the surprising reading in 2014Q1, export growth should turn positive again in the second quarter of this year and ought to accelerate beyond this point, in line with the expected acceleration of economic growth in the euro area. This scenario seems to be confirmed by our leading indicator (Graph 18).

Last year, export growth outpaced import growth in volume terms while lower international oil prices and the appreciation of the euro suppressed import prices. Both factors explain the substantial improvement in the current account deficit. The improvement is likely to continue in 2014 (as already indicated by the readings in January and February) although a return to balance is still some way off, despite a limited surplus on the goods and services balance in 2013.

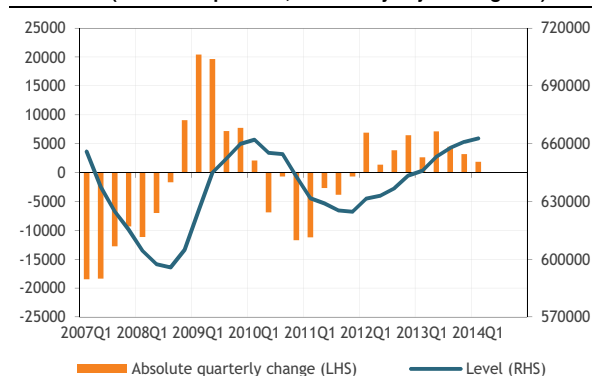
## Labour market

**Table 5 - Labour market indicators**

	2012	2013	2013Q2	2013Q3	2013Q4	2014Q1	2013M12	2014M1	2014M2	2014M3	2014M4	2014M5
Unemployment [1][2]	636.3	654.5	653.3	657.8	661.0	662.9	661.7	663.3	662.6	662.8	661.4	660.4
Unemployment rate [2][3]	12.1	12.4	12.4	12.4	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
Unemployment rate-Eurostat [3][4]	7.6	8.4	8.4	8.4	8.4	8.5	8.4	8.5	8.5	8.5	8.5	.

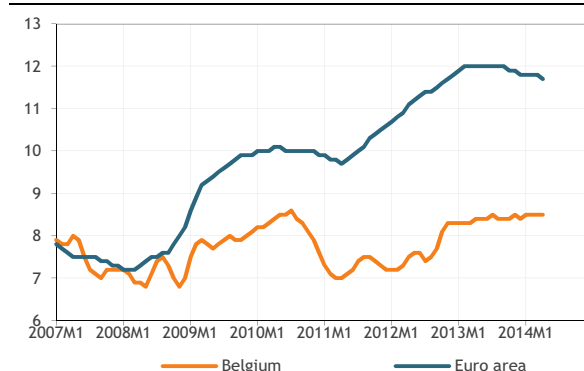
[1] Level in thousands, s.a.; [2] Broad administrative definition; [3] In % of labour force, s.a.; [4] Recent figures are based on administrative data and may be subject to revision  
Source: RVA/ONEM, FPS Employment, Eurostat, FPB

**Graph 20 - Evolution of unemployment (incl. older) (number of persons, seasonally adjusted figures)**



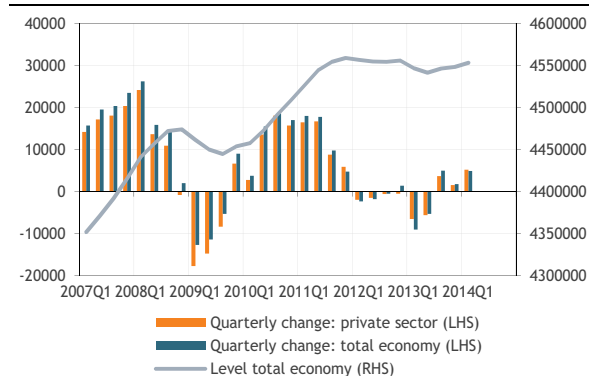
Source: RVA/ONEM

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



Source: Eurostat

**Graph 22 - Evolution of domestic employment (number of persons, seasonally adjusted figures)**



Source: INR/ICN

With activity continuing to pick up, private sector employment growth turned slightly positive in the second half of 2013 (qoq growth rate of 0.1% on average). However, the industry breakdown still presents a very mixed picture, with job losses in road transport now having ceased and employment through interim services even accelerating towards the end of last year, while employment in manufacturing, construction, banking and wholesale trade has shown virtually no sign of recovery yet. Moreover, employment growth in the publicly subsidized voucher system for household-type services – which had been a major engine of private sector job growth in the past decade – has tended to decelerate lately. Finally, fiscal consolidation measures still affect public employment negatively and may now also be contributing to the fact that job growth in health services seems to have become somewhat less robust.

Broad administrative unemployment has been rising for nine successive quarters now, but at an ever decreasing pace since 2013Q3. The latest monthly figures point to a stabilization or possibly even a slight decrease in unemployment in 2014Q2, confirming the gradual improvement in employment growth. It is expected that employment growth will accelerate and unemployment diminish further in the second half of this year, but not sufficiently rapidly to avoid a yearly average increase in unemployment in 2014 due to the largely negative carry-over from 2013.

Still on a yearly average basis, the labour force grew by a mere 0.17% in 2013, considerably less than originally expected. This is related to a large downward revision in the estimated growth of the population of working age, itself resulting from less immigration following measures to tighten conditions for obtaining residence permits for family reunifications or for humanitarian reasons. Also, considerable downward pressure persists on activity rates in the younger and middle age bands, whereas recent policy measures aimed at tightening entry conditions for various early retirement schemes seem to have had a slightly less expansive impact on activity rates in the older age brackets than previously expected. However, labour force growth picked up in the second half of last year and is expected to maintain this pace throughout the current year.

## Prices

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

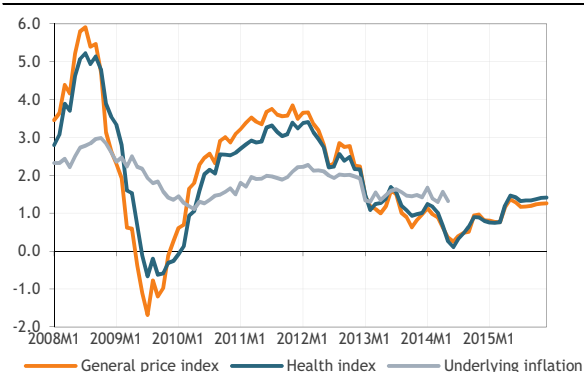
	2012	2013	2013Q2	2013Q3	2013Q4	2014Q1	2013M12	2014M1	2014M2	2014M3	2014M4	2014M5
Consumer prices: all items	2.84	1.11	1.26	1.14	0.80	1.00	0.97	1.14	0.97	0.89	0.62	0.36
Food prices	2.99	3.62	4.76	3.76	2.28	1.19	2.27	1.92	1.06	0.59	1.02	-0.55
Non food prices	2.74	-0.80	-0.85	-0.82	-1.15	-0.33	-0.83	-0.48	-0.29	-0.22	-1.38	-0.90
Services	3.17	2.31	2.14	2.34	2.66	2.50	2.71	2.76	2.44	2.29	2.97	2.33
Rent	1.52	1.28	1.25	1.22	1.38	2.16	1.47	2.04	2.22	2.23	1.97	2.10
Health index	2.65	1.24	1.45	1.27	0.97	1.15	1.01	1.25	1.17	1.02	0.67	0.26
Brent oil price in USD (level)	111.7	108.7	102.6	110.4	109.4	108.3	110.8	108.4	108.9	107.5	107.8	109.6

Source: FPS Economy, Datastream

**Table 7 - Monthly inflation forecasts**

	2014M1	2014M2	2014M3	2014M4	2014M5	2014M6	2014M7	2014M8	2014M9	2014M10	2014M11	2014M12
Consumer prices: all items	100.50	100.66	100.72	100.41	100.30	100.36	100.61	100.64	100.72	101.07	101.17	101.18
Consumer prices: health index	100.60	100.75	100.79	100.44	100.29	100.31	100.57	100.58	100.68	101.08	101.18	101.21
Moving average health index	100.37	100.51	100.64	100.65	100.57	100.46	100.40	100.44	100.54	100.73	100.88	101.04
	2015M1	2015M2	2015M3	2015M4	2015M5	2015M6	2015M7	2015M8	2015M9	2015M10	2015M11	2015M12
Consumer prices: all items	101.31	101.44	101.49	101.57	101.67	101.65	101.79	101.83	101.92	102.32	102.44	102.46
Consumer prices: health index	101.36	101.50	101.56	101.65	101.76	101.74	101.90	101.93	102.03	102.47	102.60	102.64
Moving average health index	101.21	101.31	101.41	101.52	101.62	101.68	101.76	101.83	101.90	102.08	102.26	102.44

Source: Observations (up to 14M5): FPS Economy; forecasts: FPB

**Graph 23 - Monthly inflation evolution (YoY growth rates, in %)**

Source: FPS Economy, from 14M6 on: forecasts FPB

**Graph 24 - Harmonised inflation rates (YoY growth rates, in %)**

Source: Eurostat

Belgian headline inflation, as measured by the yoy growth rate of the national CPI, has declined almost uninterruptedly since the beginning of 2012. This decline is mainly due to the development of energy prices, which is influenced by two factors. Firstly, the yoy growth rate of crude oil prices expressed in EUR has gone down from around 40% on average in 2011 to -6% in 2013. Secondly, price competition on the gas and electricity market has increased markedly since 2012. This can be seen from the large number of supplier switches and a large decline in the market share of the dominant supplier. Moreover, several factors have had a downward influence on inflation recently, such as taking the price reductions during sales periods into account to calculate the national CPI from 2013 onwards, the very low prices for fresh fruit and vegetables and the reduction in the VAT rate (from 21 to 6%) on electricity since April 2014.

Headline inflation is expected to increase gradually during the next year and a half as the temporary downward effect of the VAT rate change and low fresh food prices will disappear and as underlying inflation should creep up in the course of 2015 due to an acceleration in economic growth and a rise in unit labour costs.

All in all, average headline inflation should amount to 0.7% in 2014 and 1.1% in 2015. The health price index should increase by 0.7% and 1.2% respectively. The current pivotal index should be crossed in December 2014, implying an adjustment (of 2%) to the higher cost of living of social benefits in January 2015 and public wages in February 2015.

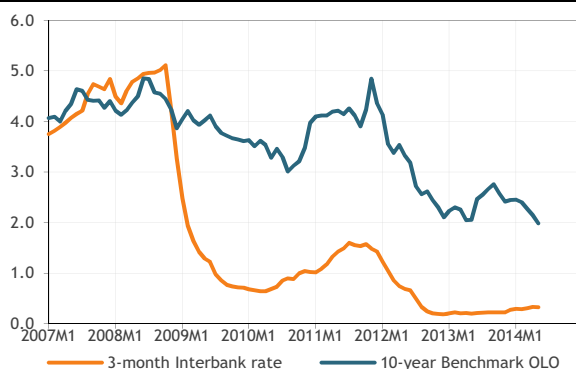
## Interest rates

**Table 8 - Interest rates**

	2012	2013	2013Q2	2013Q3	2013Q4	2014Q1	2013M12	2014M1	2014M2	2014M3	2014M4	2014M5
<b>Short-term interbank rates (3 months)</b>												
Euro area (Euribor)	0.57	0.22	0.21	0.22	0.24	0.29	0.28	0.29	0.29	0.30	0.33	0.33
United States	0.43	0.27	0.28	0.26	0.24	0.24	0.24	0.24	0.24	0.23	0.23	0.23
Japan	0.19	0.15	0.16	0.15	0.14	0.14	0.15	0.14	0.14	0.14	0.14	0.14
<b>Long-term government bond rates (10 years)</b>												
Belgium	2.99	2.40	2.19	2.66	2.48	2.37	2.45	2.45	2.40	2.27	2.15	1.98
Germany	1.55	1.62	1.41	1.78	1.79	1.68	1.85	1.79	1.65	1.59	1.53	1.40
Euro area	3.22	2.71	2.53	2.85	2.74	2.49	2.78	2.66	2.48	2.34	2.23	2.09
United States	1.78	2.33	1.98	2.70	2.74	2.75	2.90	2.85	2.70	2.72	2.69	2.54
Japan	0.85	0.71	0.73	0.76	0.64	0.63	0.67	0.68	0.60	0.60	0.62	0.60

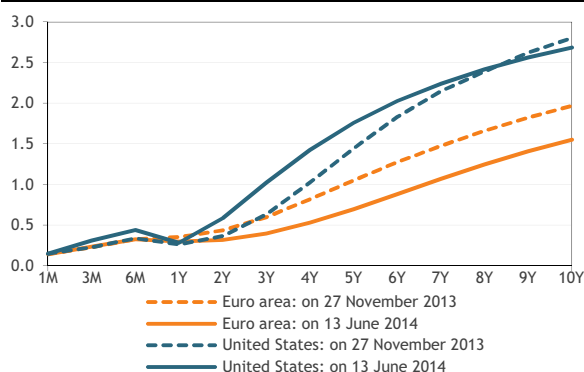
Source: Datastream

**Graph 25 - Interest rate levels in Belgium (in %)**



Source: NBB

**Graph 26 - Yield curves for the euro area and the us (interest rate swap yields, in %)**



Source: Datastream

The continuous slide in inflation in the euro area, partly a consequence of the strong euro, ignited talk about the risk of deflation in the euro area. While deflation, defined as a situation where price level declines occur across a significant number of countries, across a significant number of goods and in a self-fulfilling way, is still some way off, the risk is that one major negative shock might suffice to tilt the euro area into deflation. As inflation is expected to remain low, the ECB felt obliged to lower the deposit rate to -0.1%, hence charging banks for keeping money at the ECB. It furthermore offered EUR 400bn of cheap four-year loans to encourage banks to lend more to credit-starved SMEs. While the Danish experience shows that negative deposit rates might not spur bank lending much, it is likely to weaken the euro, hence lowering disinflationary pressures.

The US Federal Reserve has reduced the monthly amount of purchases of mortgage backed securities and US treasuries from 85 bn to 45bn USD, but it has also made clear that the end of quantitative easing (QE) does not imply an interest rate hike in the near term. It abandoned the previously stated threshold of 6.5% for the unemployment rate (currently at 6.3%) below which it would start to raise its policy rate. Markets are now banking on a first rate hike only in the middle of 2015.

When the Federal Reserve merely hinted at a possible reduction in the pace of QE in early May 2013, long-term interest rates rose strongly worldwide in the subsequent months. This year so far, long-term interest rates in both the US and the euro area have declined substantially, which has to do mostly with the expectation of a postponement in monetary tightening (Fed) or a new monetary loosening (ECB). Disappointing growth in 2014Q1 and the low level of inflation have also weighed on bond yields. As interest rates in the euro area have risen less in 2013 and declined more in 2014 (compared to the US), the long-term interest rate of the euro area as a whole is now below the US long-term rate. The Belgian long-term interest rate reached a new record low in May (1.98%).



## Exchange rates

**Table 9 - Bilateral exchange rates**

	2012	2013	2013Q2	2013Q3	2013Q4	2014Q1	2013M12	2014M1	2014M2	2014M3	2014M4	2014M5
USD per EUR	1.286	1.328	1.306	1.325	1.361	1.371	1.370	1.362	1.367	1.383	1.381	1.373
UKP per EUR	0.811	0.849	0.851	0.854	0.841	0.828	0.837	0.827	0.825	0.832	0.825	0.815
JPY per EUR	102.7	129.6	128.9	131.0	136.8	140.8	141.9	141.5	139.5	141.5	141.5	139.8

**Table 10 - Nominal effective exchange rates (2010=100)**

	2012	2013	2013Q2	2013Q3	2013Q4	2014Q1	2013M11	2013M12	2014M1	2014M2	2014M3	2014M4
Euro	93.2	98.4	97.7	98.9	100.2	100.8	99.5	100.9	100.6	100.5	101.3	101.0
Growth rate [1]	-6.1	5.7	0.7	1.3	1.3	0.6	-0.4	1.4	-0.4	-0.1	0.8	-0.3
US dollar	97.3	100.2	101.1	101.1	99.9	101.4	100.2	100.5	101.6	101.4	101.1	100.6
Growth rate [1]	3.3	2.9	2.4	0.0	-1.2	1.5	1.1	0.3	1.2	-0.2	-0.3	-0.5
Japanese yen	108.4	87.9	87.5	87.1	84.4	82.6	85.0	81.9	81.9	83.4	82.8	82.2
Growth rate [1]	2.6	-18.9	-5.6	-0.5	-3.1	-2.1	-1.8	-3.6	0.1	1.8	-0.8	-0.7

[1] Change (%) compared to previous period

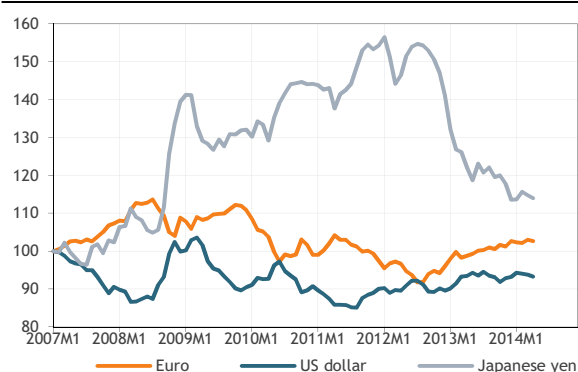
Source: BIS, NBB

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



Source: NBB

**Graph 28 - Nominal effective exchange rates (indices, 2006M1=100)**



Source: NBB, BIS

The euro has appreciated against the US dollar since August 2012, when ECB president Draghi said he would stand behind the euro no matter what. As speculations about the possible end of the euro faded, investors returned to the euro area. The repayment of the LTRO loans by the banking sector furthermore led to a shrinkage in the size of the ECB's balance sheet, while the Fed's continued to grow as tapering only entailed a slowing down in the creation of dollars. The pace of appreciation of the euro against the dollar slowed in 2014 and even reversed in the past few weeks as markets were taking a substantial loosening of monetary policy in the euro area into account, while the Fed is close to ending its QE policy. The actual easing of euro area monetary policy exerted further downward pressure on the euro.

The same evolution goes for the euro in nominal effective terms, i.e. an appreciation since mid-2012 and an apparent topping out in the past few months. Compared to a year ago, the euro appreciated by some 4% against the US dollar, 6% against the Chinese yuan and 9% against the Japanese yen.

Against emerging market currencies, it gained more ground as these countries were hit by capital flight when the Fed signalled it would curb its QE policy. The biggest appreciations (of 50% or more) were seen against the Ukrainian hryvnia, the Venezuelan bolivar and the Argentine peso.

The major exception to the euro's strength against most currencies was the British pound, which has to do with the UK economy's strong growth performance and its excellent near-term outlook. Hence a relatively rapid tightening of monetary policy is expected in the UK, while the first rate increase in the euro area is not seen before the end of 2016.

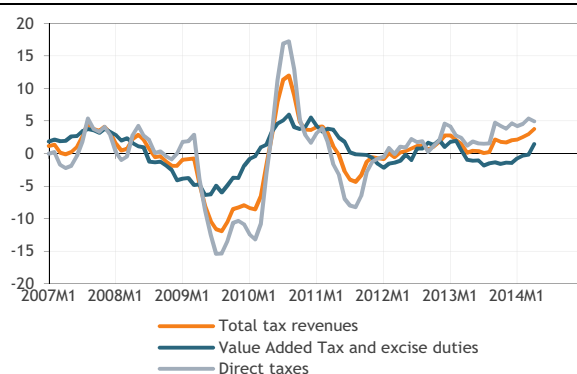
## Tax indicators

**Table 11 - Tax revenues [1]**

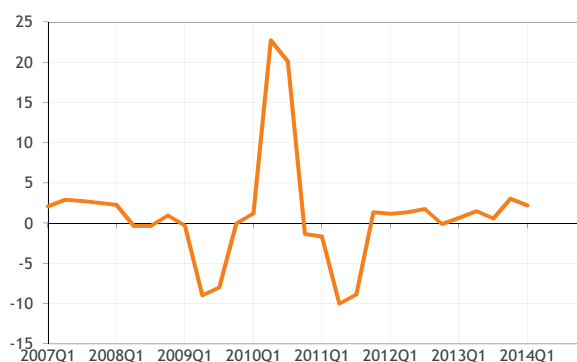
	2012	2013	2013Q2	2013Q3	2013Q4	2014Q1	2013M11	2013M12	2014M1	2014M2	2014M3	2014M4
Total [2], of which:	5.7	3.2	2.1	6.3	6.1	1.5	6.0	10.4	1.2	4.3	-0.5	2.0
Direct taxes, of which:	7.5	5.9	6.0	8.9	11.0	-1.4	3.9	22.3	-3.3	-0.8	1.6	-4.1
Withholding earned income tax (PAYE)	2.7	4.2	5.6	0.8	6.3	0.2	-22.5	18.4	-4.4	0.2	7.6	0.4
Prepayments	-0.5	1.3	2.2	0.9	0.2	.	.	-0.2	.	.	.	2.0
Value Added Tax and excise duties	3.8	-0.3	-3.5	2.4	0.7	5.0	8.4	-2.0	9.6	11.8	-3.3	6.3

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

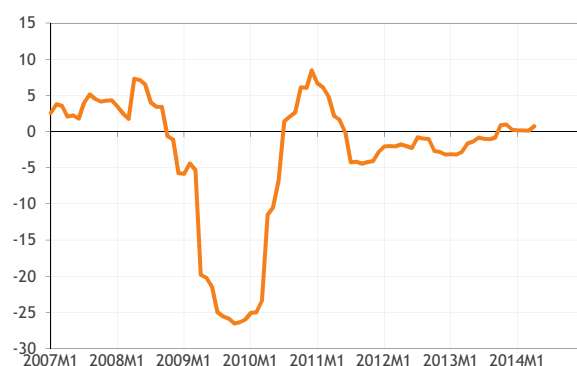
**Graph 29 - Real tax revenues [3]**



**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

Tax revenue growth slightly recovered during the second half of 2013, with the trough of the business cycle being reached in 2013Q2. On an annual base, tax revenue in 2013 was up 3.2% in nominal terms compared to 2012. This progression is also attributable to discretionary measures. The 2013 budget introduced an increase in the withholding tax rate on dividends and interest, changes to the tax amnesty regulations, adjustments to the corporate tax system and increases in excise duties and in taxation on life insurance investment premiums. The Budget adjustment in July 2013 led to the creation of a “fairness tax” on corporate businesses, increased taxes on financial institutions and introduced new increases in excise duties. Some of these measures will have additional impacts in 2014, alongside new measures such as the imposition of VAT on lawyers’ services.

The slowdown in tax revenue collected by the federal government in 2014Q1 is mainly related to changes in the rhythm of the assessment of direct taxes and to a statistical break (in early 2014, the Walloon Region took over the collection of taxes on vehicles).

PIT revenue remains constrained by the zero growth rate of real wages imposed by the government for 2013-2014 and by the slow progress of employment (with a further decrease in the public sector). Moreover, in 2014, as was the case in 2013, the indexation of the progressive PAYE scales (based on the previous year’s higher inflation) exceeds wage and replacement income indexation. Figures for prepayments in April 2014 (first due date) show a nominal yoy increase of 2.0%, which, although below expectations, represents a better performance than in previous periods. Up to now, wage moderation and an improvement in the terms of trade have not yet translated into higher business profitability.

VAT revenues tend to develop in line with the business cycle, but they currently suffer from low price inflation. The VAT rate on electricity consumption of households will be reduced to 6%, down from 21% (as from April 2014), which will weigh on revenue. Taxation on interest earnings is adversely affected by low interest rates and the persistent attractiveness of untaxed savings accounts.

## When the lights go out: the monetary impact of a large scale blackout in Belgium

The power landscape is growing ever more complex due to, among other things, legislation and targets defined at several levels which tend to influence (and sometimes contradict) one another. One can wonder if the different economic agents can still see the wood for the trees and if the lights will stay on all the time. The first in line to worry is the federal government, since it carries the responsibility of permanently guaranteeing the security of supply. In times of increased electricity production by variable energy sources<sup>1</sup> (solar PV, wind) and of distorted investment signals, how to guarantee security of supply is not obvious. The absence of investment in sufficient reserve capacity and – in the worst case scenario – inadequacy of generation capacity may lead to soaring societal costs. This Working Paper focuses on the specific event of things going wrong in spite of all initiatives and mechanisms put in place: a national blackout paralyzing the entire Belgian economy for one hour and its price tag are scrutinised.

Recent events point to the possibility that Belgium's current electricity system might not be totally immune to failures. On top of that, attracting new investment in power capacity seems arduous given past and future market conditions. Hence one cannot exclude the system not being able to withstand a potential breakdown at some point. Under such circumstances, terms such as "security of supply" and "system reliability" gain importance and lead utilities, grid operators and governments alike to devote time and resources to reflecting on the optimal level of supply and system reliability. This paper is intended to contribute to the debate by determining the monetary impact of a blackout on the national territory of Belgium.

In order to identify the magnitude of the damage that the Belgian society may experience following a complete blackout, a simulation tool is used that was developed by the Energieinstitut of Linz (Austria). This tool, called the Black-out Simulator, was built under the Seventh EU Framework Programme. It allows calculation of the monetary impact of a blackout on different geographical scales (European Union, 27 Member States and provinces). Using this methodology, the cost of a one-hour blackout in Belgium during a winter working day<sup>2</sup> while all companies are active is estimated to be

around EUR 120 million. Compared to a rough estimate of what could be the hourly GDP, this damage represents over half of what is being produced nationally in one hour. Industry seems to be hurt the most, with estimated damage of some EUR 60 million, followed by the tertiary sector, with some EUR 50 million. Households, although not 'true creators' of economic value, also bear the consequences of a large scale power deficit. Their main loss is related to the fact that they can no longer spend their leisure time as they had originally planned. Loss of leisure means loss of utility, in this case amounting to EUR 6 million (representing 5% of the total societal damage).

Compared to the national (not delivered) electricity bill (+/-EUR 1.9 million), the damage borne by society is significantly larger. The value of lost load (VOLL), a term that is often used in the literature to designate the true value of electricity that cannot be consumed due to a power outage, equals EUR 8.3/kWh. Put next to the average price households pay per kWh of electricity consumed, the VOLL is approximately 40 times higher; for industry, even 80 times.

Spatial allocation of this damage points to a difference in costs in densely populated and economically very active regions on the one hand (such as Antwerp or the Brussels Capital Region) and sparsely populated and less economically active regions on the other (such as Luxembourg).

After 5pm, the damage strongly decreases to reach a level that equals half of the working hours' loss: around EUR 60 million would be wasted when a blackout occurs between 9pm and 6am. During this period, households assume a bigger proportion of the damage (14%).

Next to the Black-out Simulator results, three alternative methods are applied, leading to an interval of societal damage of between EUR 61 million (using a GDP-based methodology) and EUR 278 million (using a methodology developed by the French transmission system operator RTE).

*"Belgische black-outs berekend. Een kwantitatieve evaluatie van stroompannes in België",  
D. Devogelaer,  
Working Paper 3-14, March 2014*

1. The concept 'variable' is used to mark irregular (non-dispatchable), intermittent production.  
2. Between 8am and 5pm

## Macrosectoral analysis of the impact of a VAT increase

This study was commissioned by the Central Economic Council (CEC), and in particular by the 'Construction' Special Advisory Commission. It presents the sectoral results of a report that was produced in 2011 by the National Bank of Belgium and the Federal Planning Bureau. As requested by the CEC, we comment here in detail on the impact of a VAT increase without additional measures, (variant 1) and the impact of a VAT increase with transitional neutralization of the effect of that increase on indexation (variant 2).

For each variant, the shock in the model represents a fixed percentage of the GDP in the baseline simulation (i.e. 0.5% of GDP, approximately EUR 1.8 billion in the first year): the shock simulated in year  $t$  is maintained during the whole seven-year simulation period. The variants were produced with HERMES, an econometric model used for medium-term macrosectoral simulations. The aim of this exercise is not to deliver results in absolute levels but to measure the specific impact of various measures. The results are thus reported as a deviation relative to the baseline.


At the macroeconomic level, a VAT increase (not neutralized in the index) has a direct impact on prices and triggers an upward spiral of prices and wages that becomes self-sustaining owing to the increase in unit labour costs. For enterprises, an increase in costs means a slight erosion of their competitiveness on the foreign markets and thus of their exports. Households, which bear the main burden of this indirect tax, experience a significant loss in purchasing power due to price increases and job losses, leading to a decrease in private consumption and in residential investments. The decreasing domestic demand also leads to a drop in imports. In total, GDP should be reduced by 0.3% over the medium-term and employment should fall by 25 000 persons.

Under the second variant, which includes a transitional neutralization of the effect of a VAT increase on indexation (neutralisation introduced in year  $t$ ), the impact of the VAT increase on prices and costs is reduced, but leads in the medium-term to a downturn in economic activity that is identical to that calculated in the first variant. On the one hand, exports stabilize (due to a slower increase in costs), but on the other hand, private consumption decreases more sharply (despite a less significant drop in employment) because of the lack of wage indexation which weighs more on the disposable income of households. Similarly, the fall in investments, especially in housing investments, is stronger. Despite an identical decline in activity, job losses are smaller.

As for branches of the economy, the VAT increase has a negative impact on economic activity and employment in all branches. But branches that have production more broadly oriented towards domestic demand experience a greater impact. Over the medium term, the volume of production is expected to decrease by 0.6% in the 'credit & insurance' branch, by 0.52% in the 'energy' branch, by 0.51% in the building sector and by 0.42% in the consumer goods industry. The decrease is identical or even stronger under variant 2, except for the consumer goods industry. The combination of an increase in unit labour costs and of a significant decline in domestic demand is particularly harmful for these branches.

For the branches that are more oriented towards foreign trade, the negative impact of a VAT increase on their production volume is less pronounced. Even if their unit labour costs increase, their market (volume of trade worldwide) by assumption should remain unchanged compared to the baseline. External demand is not affected, unlike domestic demand. It is for these reasons that the fall in production is systematically weaker under the second variant since only the unit labour costs, which increase less rapidly, play a role.

As regards job losses, the ranking differs compared to that for output losses. Besides the cost/price and demand effects, another factor comes into play: the capital intensity of the branch. Over the medium term, the largest job losses occur in the (labour intensive) building sector (-1.07%), followed by the other market services, the retail trade, hotels and restaurants and credit and insurance. By contrast, the energy sector, whose production is strongly affected, loses only 0.04% of its jobs compared to the baseline. Under the variant with transitional neutralization of the impact of a VAT increase on wage indexation, job losses are, quite logically, smaller but still significant in the building sector (-0.71%).

 *"Analyse macro-sectorielle des effets d'une hausse de la TVA",  
L. Masure,  
Working Paper 4-14, June 2014*

## A new version of the MODTRIM model

This Working Paper describes the new version of MODTRIM II, the quarterly macroeconomic model developed at the FPB for short-term forecasting. The FPB's short-term macroeconomic forecasts are published three times a year and are usually referred to as the "economic budget", as they are used by the Belgian federal government to set up its budget and to perform budgetary control exercises. While the model has retained the same overall architecture and underlying structure since the early 1990s, the main differences relative to the 2003 version, described in Working Paper 6-03, are highlighted.


The model aims to produce forecasts for the main categories of expenditures in the quarterly national accounts (with a separate modelling of prices and volumes) as well as for the accounts of the institutional sectors. The objective of this Working Paper is not to provide a complete user's guide for the model, but to focus on the specification and estimation results of the behavioural equations for the private sector. As the forecasting horizon of the model is six to eight quarters, fluctuations in economic activity are assumed to be driven predominantly by changes in aggregate demand. The main behavioural equations for the different expenditure categories (private consumption, housing investment, business investment, exports and imports), for wage-earning employment as well as for the main deflators, are presented in the Working Paper.

MODTRIM is a structural model, which has the advantage (compared to a purely statistical approach) that the forecasts result from the interaction of economic mechanisms. This makes the forecasts of the key variables easier to explain. If possible, long-run structural relationships between the variables as well as short-term dynamics are established econometrically

using an error-correction mechanism, so that variables react to past disequilibria. To illustrate this adjustment process, tables are provided which present, for each (semi-)elasticity, the transition path to its long-term value.

Compared to the 2003 version of the behavioural equations, priority has been given to empirical validation. For instance, the strong assumptions on labour, capital demand and the deflator of value added implied by the use of a Cobb-Douglas production function have been abandoned. Another change concerns export and import prices, for which a distinction is now made between energy and non-energy products. Moreover, due to the increasing importance of financial variables in the real economy, the impact of interest rates on investment decisions has been carefully tested and taken into account when empirically validated. Finally, in order to limit the sample to officially published national accounts and to be able to obtain coefficients over only one monetary policy regime, behavioural equations have been estimated on a sample starting in 1995Q1 at the earliest.

The structural approach also makes the model appropriate for risk scenario and sensitivity analyses, as required by the new European Directive on budgetary frameworks. A few simulation results are presented in the paper to examine the response of the complete model to exogenous shocks or policy adjustments.

 *"A new version of the MODTRIM II. An overview of the model for short-term forecasts",  
B. De Ketelbutter, L. Dobbelaere, I. Lebrun, F. Vanhorebeek,  
Working Paper 5-14, June 2014*

## Other Recent Publications

Outlook, version of March 2014

"Perspectives économiques 2014-2019 /  
Economische vooruitzichten 2014-2019"

Outlook, March 2014

"Perspectives démographiques 2013-2060, population, ménages et quotients de mortalité prospectifs /  
Demografische vooruitzichten 2013-2060, bevolking, huishoudens en prospectieve sterftekansen"

Outlook, February 2014

"Economische vooruitzichten 2014 /  
Prévisions économiques 2014"

Working Paper 2-14, February 2014

"Dépenses des ménages et transport",  
C. Daubresse



Planning Paper 114, February 2014

“Administratieve lasten in België voor het jaar 2012/  
Les charges administratives en Belgique pour  
l’année 2012”,  
Ch. Kegels

January 2014

“De maatschappelijke betekenis van de gezond-  
heidszorg”,  
K. Van den Bosch, P. Willemé

## Research in progress

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

The long-term model is used to project the budgetary consequences of ageing. For acute health care and long-term care public expenditure, new models were introduced in 2014. The first, notably, takes into account explicitly the impact of technological progress. The social dimension of pension benefits is investigated using a microsimulation model.

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

### Employment and retirement 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 frequently. A research project at FPB addresses this question, including the implications of public employment dynamics on public pensions, and the composition and dynamics of civil servant pensions.

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

### Macroeconomic, budgetary and GHG emissions prospects

Using a consistent modelling approach, medium-term macroeconomic and budgetary prospects - taking the 6th State reform into account - as well as the evolution of greenhouse gas (GHG) emissions are being investigated. A consistent regional-national version of the model developed in collaboration with experts from the regional governments of Brussels, Flanders and Wallonia is generating regional results.

Contact: [hermes@plan.be](mailto:hermes@plan.be)

### Economic drivers of migration flows

Modelling migration flows in population projections is recognized as a challenge. Although economic theory demonstrates the importance of economic drivers for some migration flows, these results are barely used in population projections. An ongoing research project aims at including some econometric results about these drivers in the FPB demographic model.

Contact: [demo@plan.be](mailto:demo@plan.be)

### Offshoring

The FPB is continuing to work on offshoring. The project describes the level and evolution over time of offshoring of activities carried out in Belgium, as

well as the impact on employment and productivity. The analysis is made on an industry-level, as well as on data for individual companies.

Contact: [bm@plan.be](mailto:bm@plan.be)

### Innovation

Innovation is a key determinant of productivity growth. A comprehensive publication on this subject is planned. Particular attention will be given to public policy that will facilitate innovation leading to the creation of economic activity and jobs.

Contact: [ck@plan.be](mailto:ck@plan.be)

### Transport modelling

The FPB model on transport demand for passengers and goods PLANET will be further developed by introducing a regional dimension. The aim is to present the 2015 outlook for transport demand a new version of the model. As regional governments have the competence for major issues affecting transport demand, a correct modelling of transport demand requires a development of the regional dimension.

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

### Long-term energy outlook

Publication of an energy outlook for Belgium up to 2050, including a reference scenario, is planned for November 2014. The study of alternative policy scenarios is intended subsequently.

Contact: [dg@plan.be](mailto:dg@plan.be)

### Indicators complementing GDP

The FPB received the mission to develop and publish indicators on quality of life, human development, social progress and sustainability of the economy (Act of 14 March 2014). This set should consist of a limited number of indicators. As these indicators have to measure the evolution towards goals for society, the FPB's experience in sustainable development indicators will be useful in constructing the set of indicators complementing GDP.

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## Recent history of major economic policy measures

June 2014	<p>Belgium's general government deficit was brought down to 2.6% of GDP in 2013. For this reason and others, the European Commission recommended that the EU Council of Ministers close the excessive deficit procedure initiated in 2009 against Belgium.</p> <p>A number of institutes were added to the list of scientific institutions that are eligible for the federal R&amp;D wage subsidies.</p> <p>The ECB lowered its main refinancing rate by 10 basis points to 0.15%.</p>
May 2014	<p>In the context of guaranteeing gender neutrality, a requirement was introduced that firms employing 50 workers or more document the company's wage structure biennially.</p>
April 2014	<p>In a 2014-2017 update to the Stability Programme, the Belgian authorities considered reducing the headline deficit to 2.1% of GDP in 2014 by improving the structural balance by 0.5% of GDP, as compared to 2013. Over the period 2015-2017, the structural balance will be further improved by 0.7% of GDP per year so that the MTO (medium term objective), a surplus of 0.75% of GDP in structural terms, is reached in 2017 (one year later than planned in the previous update of the Stability Programme). It will be located in Entity I (federal level, including social security) while Entity II (federated and local entities) will a balanced budget.</p> <p>The wage subsidy for the non-profit sector (Sociale Maribel) was increased retroactively as from January 2014 to compensate for the rise in labour costs caused by the harmonization of blue-collar and white-collar worker regulations.</p> <p>Postal incumbent bpost entered the BEL20 stock market index. The company is state owned for 50% of the shares plus one, the remainder having been floated in June 2013.</p>
March 2014	<p>Following a government decision taken in December 2013, electricity transmission system operator (TSO) Elia was given the task of installing generation capacity that could secure supply in times of shortage. The capacity should amount to 800 MW and be available for three years starting 1 November 2014.</p> <p>The Belgian and Italian gas TSOs - Fluxys and Snam, respectively - decided to manage their foreign pipelines jointly. This will create a significant player in European gas transport. The pipelines concerned run through France, Germany and some other countries, the latter in particular eastbound from Italy.</p>
February 2014	<p>Existing employers' SSC cuts for specific jobs (art performers, domestic helpers, daytime child carers) and employment statuses (subsidised labour contracted by local authorities, art.60 social aid job programmes) will be brought inside the general framework of employers' SSC cuts (Proposal of Law 3.354).</p>
January 2014	<p>The parameters of the three-stage increase (2015, 2017 and 2019) in employers' SSC cuts (across the board and targeting low-wage employment), wage subsidies for night and shift work and the tax credit for workers eligible for the low-wage employees' SSC cuts were made explicit by a draft of proposal of law.</p> <p>The severance conditions for blue-collar and white-collar workers will be gradually harmonized. The agreement also spells out the severance payments to be paid by the National Employment Office to blue-collar workers to compensate for the rise in labour costs caused by the unified statute of blue-collar and white-collar workers.</p> <p>Railway incumbent NMBS Groep/Groupe SNCB was reorganised. Infrastructure and train operations became separate entities (Infrabel and NMBS/SNCB, respectively) instead of being under a single holding. Both entities are state owned and draw all their staff from a joint third entity, called HR-Rail.</p>
December 2013	<p>Measures to secure electricity generation capacity were taken. First, a procedure for the procurement of new power plants was established, supporting partial public financing. Second, it was announced that the proceeds of the operating-life extension of one of the Tihange nuclear plants will be used to fund flexible offshore wind farm capacity. Third, the Minister of Energy received the competence to order the TSO to install reserve capacity when shortages are foreseen.</p> <p>CVC Capital Partners floated the remainder of its stake in the postal incumbent Bpost, which was slightly less than 20%. Because of this transaction, the state becomes the only significant shareholder, making – according to certain commentators – the company prone to stronger political interference.</p>

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)