

SHORT TERM UPDATE

1-13

Quarterly Newsletter
March 2013

Headlines Belgian Economy

Special Topic in this issue

Income inequality:
stability in Belgium, so far



Federal
Planning Bureau
Economic analyses and forecasts

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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 the summer of 2012, the European debt crisis has become less severe. Economic activity in the euro area now seems to be bottoming out and should start to pick up slowly in the course of 2013. Nevertheless, the euro area economy should still shrink slightly on an annual basis (-0.1%). This scenario remains highly uncertain. In particular, policy makers' decisiveness in tackling the euro crisis will be crucial to restoring confidence among investors, producers, and consumers.

Belgian economic growth should gradually pick up throughout this year (up to 0.3% qoq in 2013Q4), but remain limited to 0.2% on a yearly basis. Export growth should gradually accelerate, driven by the improving international economic situation. Household purchasing power should increase, but the pickup in private consumption remains limited as the rise in unemployment continues to weigh down on consumer confidence. Reduced profitability and a low capacity utilization rate will hold back business investment.

Employment should stabilize this year. Given the increase in the labour force, the number of unemployed (broad administrative definition) should rise by approximately 25 000 persons. The harmonised unemployment rate (Eurostat definition) should amount to 7.6% in 2013, compared to 7.2% in 2011.

Belgian inflation, as measured by the yoy growth rate of the national consumer price index, should cool from 2.8% in 2012 to 1% in 2013. This decline is mainly due to a decrease in energy prices, which are affected by both a drop in oil prices expressed in euro and the price reductions for gas and electricity some suppliers implemented at the beginning of this year.

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



Special Topic	3
• Income inequality: stability in Belgium, so far	
Economic Forecasts	5
• Economic forecasts 2013	
• Summary of Economic Forecasts	
The European Semester	8
• Pursuing the Europe 2020 Strategy in Belgium	
• Employment	
• Innovation	
• Climate and energy	
• Education	
• Poverty and exclusion	
• The procedure on the prevention and correction of macroeconomic imbalances	
• External Imbalances and Competitiveness	
• Internal imbalances indicators	
Recent Publications	20
• Long-term Sustainable Development Visions: Concepts, Applications, and Elaboration	
• Specification and estimation of a dynamic consumption allocation model	
• Machines that go 'ping': medical technology and health expenditure in OECD countries	
• Gender-specific effects of certain unemployment and pensions measures taken in 2012	
• Other Recent Publications	
Research in progress	23
Economic Policy Measures	24

Income inequality: stability in Belgium, so far

Monitoring income inequalities has been a concern in Belgian policy discussions for a long time. On the international scene, it became particularly sensitive after the outbreak of the financial and economic crisis of 2008. As a contribution to this debate, this article describes, using indicators to 2010, the income inequality in Belgium while comparing it to some neighbouring countries, and estimates the (re)distributional effects of direct taxes and social transfers in Belgium. It appears that so far the Belgian situation in this respect has remained stable.

The income concept used here is the annual household income of each person as indicated by the EU Survey of Income and Living Conditions (SILC), corrected for economies of scale resulting from consuming goods and services in a household context by dividing the household income by the number of equivalent household members. The SILC provides information on the gross and disposable income of households. The Gini coefficient is used here to measure income inequality, varying from zero when the income is equally distributed between persons to 100 when one person earns all the income. All indicators presented here refer to the year during which the income is earned.

Income inequality in Belgium and in some neighbouring countries

Table 1 presents the Gini of the disposable income of Belgium and some neighbouring countries in 2004, 2007, and 2010. In Belgium and the Netherlands, this indicator varied around 27. This is lower than the weighted average of this indicator for all EU Member States, which remained stable around 31. Between 2007 and 2010, the Ginis of Germany and France approximated the EU average. The Gini of the UK was the highest and fluctuated around 34.

Table 1 - Gini coefficient of the equivalent disposable household income in the EU27, Belgium, and some neighbouring countries in 2004, 2007, and 2010

	2004	2007	2010
EU27*	31	31	31
Belgium	28	28	26
France**	-	30	31
Germany**	-	30	29
Netherlands	27	28	26
United Kingdom	35***	33	33

Source: SILC, Eurostat

* estimates

** For methodological reasons data prior to 2007 are not taken into account.

*** Data refer to 2005.

These indicators should be interpreted with caution. Firstly, the value of publicly provided education and health services are not taken into account here. If they were, the income of families with children and elderly would increase and possibly influence the income distribution.

Secondly, the SILC maps the extremes of the income distribution incompletely. E.g., the sample design of the Belgian SILC excludes about 2-3% of the population, such as certain low income groups (itinerant populations, permanent camp residents, asylum seekers, persons sleeping rough) and collective households, such as the elderly living in residential homes.¹ Also, the SILC provides little information on capital income, which is a well-known problem in income surveys.

Thirdly, there is no information on the statistical significance of year-to-year changes of indicators based on the SILC, such as the Gini coefficient. Recent research on the Belgian SILC, however, did not find statistically significant differences in the Gini coefficients between 2003 and 2007.² Also, this study concluded (by comparing the Gini coefficients from the SILC with those from two older surveys) that since the mid-1980s the income inequality in Belgium has remained relatively stable. However, this does not necessarily imply income mobility stasis, because certain groups could have moved down the income ladder while others compensated this trend by moving up. This long-term stability of the income inequality in Belgium, as well as that of France, is confirmed by the OECD, unlike that of the UK, the Netherlands, and Germany, where it has risen since the mid-1980s.³

Finally, these Gini coefficients do not capture income level differences between countries. Indeed, two countries with equal Gini coefficients can differ with regard to the level of the equivalent disposable household income, which can be considered as a proxy of their living standards. To gain more insight in these differences, Table 2 presents the evolution of the median annual equivalent disposable household income derived from the SILC converted to Purchasing Power Standards and in constant prices for 2005 of Belgium and some neighbouring countries in 2004, 2007, and 2010. In Belgium, this indicator barely increased between 2004 and 2010.

1. Schockaert, S., et al., (2012), Armoede tussen de plooiën: Aanvullingen en correcties op EU-SILC voor verborgen groepen armen, HIVA-KU Leuven.

2. Horemans, J., et al., (2011), Inkomens- en loonongelijkheid op basis van enquêtegegevens 1985-2007. CSB Bericht: Centrum voor sociaal beleid Herman Deleeck.

3. OECD (2011), Divided we stand. p. 24.

In Germany and France, it has been situated at a higher but slowly decreasing level since 2007. In the Netherlands between 2004 and 2010, this indicator stayed above the level of Belgium, although it declined after 2007, as in the UK, where it fell below the level of Belgium.

Table 2 - Median annual equivalent disposable household income of Belgium and some neighbouring countries in 2004, 2007, and 2010 (in PPS in constant prices of 2005)

	2004	2007	2010
Belgium	15929	16070	16122
France*	-	16975	16586
Germany*	-	17298	16843
Netherlands	16261	18538	17550
United Kingdom	16894**	17935	14902

Source: own calculations based on SILC and HICP, Eurostat

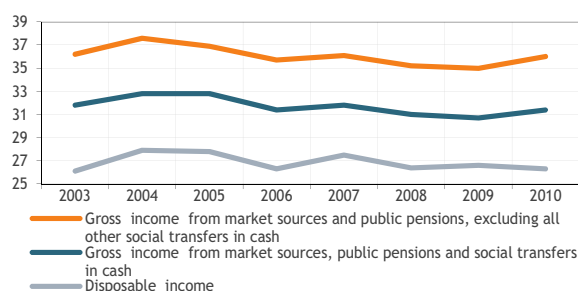
* For methodological reasons data prior to 2007 are not taken into account.

** Data refer to 2005.

Income redistribution in Belgium

To ensure an adequate living standard for all its citizens, the gross income from market sources (i.e. the income from paid work and capital) is redistributed in Belgium by income taxes and social security transfers. Between 2003 and 2010, the Gini coefficient of the gross income from market sources and public pensions, excluding all other social transfers in cash, varied around 36.¹ (Graph 1) When social transfers in cash before income tax are taken into account, the income inequality drops to 32 on average in the period considered. These transfers include unemployment, sickness, and disability benefits and education, family, and housing allowances. Finally, when tax withholdings and employee social security contributions levied on wages² are deducted from the gross income - which results in the disposable income - the average income inequality falls further to 27.

Graph 1 - Gini coefficient of three concepts of equivalent household income, Belgium 2003-2010



Source: calculations Statistics Belgium based on SILC

1. Atta-Darkua, V., Barnard, A., Distributional effects of direct taxes and social transfers (cash benefits) in Atkinson, A., Marlier, E., (2010) Income and living conditions in Europe, Eurostat p. 345-367.
2. Including income tax settlements and regularly paid inter-household cash transfers

Based on these SILC indicators, the income taxes and social transfers reduced the income inequality in Belgium by, on average, 25% between 2003 and 2010. Some additional words of caution apply here: the income tax and employee social security contributions transfers equal the difference between the gross and disposable income as provided by the Belgian SILC. They are a proxy of the actual paid income tax, which is only definitively determined two years after the year in which the income is earned and on which the SILC provides no information. Also, these redistribution effects disregard behavioural changes that would occur in the absence of the transfers considered.

Conclusion

As yet, the SILC data for Belgium show that there has been no salient change in the income inequality, in the living standard as measured by the equivalent disposable household income, and in the redistribution effect of income taxes and social transfers. There is no indication that the income inequality in Belgium and France has changed over a longer period in contrast to Germany, the Netherlands, and the UK, where it has increased since the mid-1980s. Finally, SILC data show that after 2007 German, French, and Dutch living standards as measured by their equivalent disposable household incomes were higher than those for Belgium, although a decreasing trend, particularly strong in the UK, is noticed. Whether this overall stability in Belgium will change is influenced by improvements in data collection and modelling techniques for income inequality and by the effects of the current financial and economic crisis on the income distribution of the next years.

To go further in the public debate on income inequality and redistribution, it thus seems necessary to invest in statistical capacity building. In particular investments are needed in mapping income distribution and income mobility (e.g. using administrative data) and in linking them to macroeconomic analyses. Furthermore, the scope of the debate should be widened to inequalities in other areas such as education or health, as recommended by the Stiglitz-Sen-Fitoussi commission. This would also contribute to the monitoring of international commitments, such as those of the UN Conference on Sustainable Development Rio+20 of June 2012, that strive for sustainable development approaches that address and reduce inequality as well as enhance social protection for all people.³

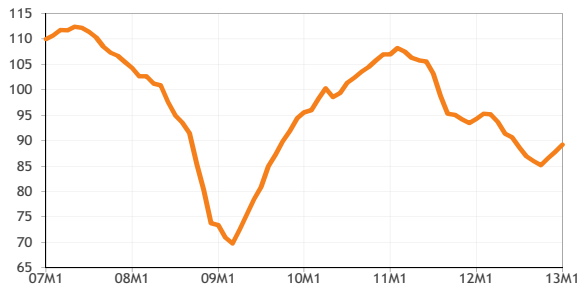
3. UN, Report of the UN - Conference on Sustainable Development, 2012, § 4, 107.

A slight decline in economic activity in the euro area in 2013...

After the summer of 2012, the European debt crisis has become less severe. The ECB's (conditional) willingness to buy unlimited amounts of government bonds from countries applying for European aid has helped alleviate tensions in the financial markets considerably. Due to persistent producer and consumer pessimism and a restrictive budgetary policy, it was assumed that the economy of the euro area as a whole contracted considerably in 2012Q4, resulting in negative annual GDP growth (-0.4%).

Economic activity in the euro area now seems to be bottoming out, as shown by a slight recovery in several confidence indicators recently, and should start to pick up slowly in the course of 2013. This recovery results from a gradual acceleration in worldwide economic growth, supported by the emerging economies, and from the further restoration of confidence owing to the improved situation in the financial markets. However, in 2013, the euro area economy should still shrink slightly on an annual basis (-0.1%).

Graph 1 - Economic sentiment indicator: euro area (index, long-term average=100)



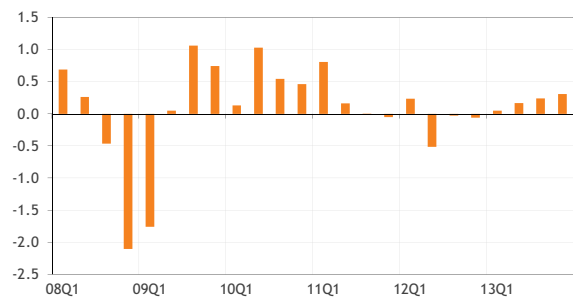
Source: European Commission

The international scenario remains highly uncertain. In particular, policy makers' decisiveness in tackling the euro crisis will be crucial to restoring confidence among investors, producers, and consumers. A resurgence of tensions in the financial markets may endanger the baseline scenario. On the other hand, if confidence improves more rapidly than expected, growth may prove to be higher.

... as a result of which the Belgian economy should grow only slightly this year

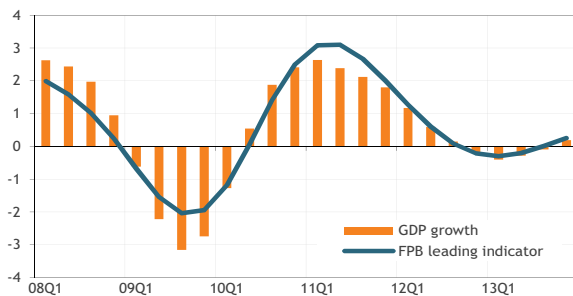
The weakening of the Belgian business cycle showed up in the second semester of 2011 and persisted in 2012. In 2012Q2, economic activity even contracted by 0.5%. Against the backdrop of a modest upswing in the international economy, Belgian economic activity should gradually pick up throughout this year (up to 0.3% in 2013Q4), driven by exports, resulting in a decrease in economic activity in 2012 (-0.2%) and a slight recovery in 2013 (0.2%). In spite of limited export growth, net exports should contribute positively to economic growth in both years as imports grow only slightly due to subdued domestic demand.

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



Source: INR/ICN, FPB

Graph 3 - Quarterly GDP growth (qoq growth rates, 4-quarter moving averages)

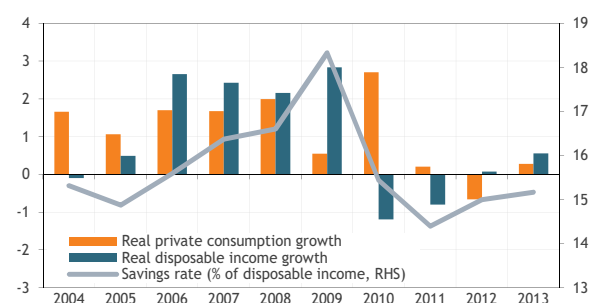


Source: INR/ICN, FPB

Belgian exports weakened from 2012Q2 onward due to the slowdown of foreign markets. In 2013, export growth should gradually accelerate, driven by the improving international economic situation, and register a (modest) annual growth comparable to that of 2012. This year, net exports should contribute positively to economic growth by 0.1 %-point, which, combined with lower oil prices, will reduce the current account balance deficit.

Notwithstanding the weakness of the business cycle and the budgetary consolidation measures, household purchasing power should increase in 2012 and 2013, which partially reflects an indexation of wages and social benefits exceeding inflation. However, consumer confidence has fallen sharply since mid-2011, due especially to fears of rising unemployment. Consequently, in 2012 private consumption decreased for the first time in two decades (-0.7%) and the household savings rate rose to 15%. Housing investment shrank substantially for the second year running (-3%). As high unemployment continues to weigh down on consumer confidence, households should save a larger fraction of their income in 2013, resulting in a limited pickup in private consumption (0.3%), and housing investment should again register negative annual growth (-1.6%).

Graph 4 - Private consumption, disposable income and savings rate



Source: INR/ICN, FPB

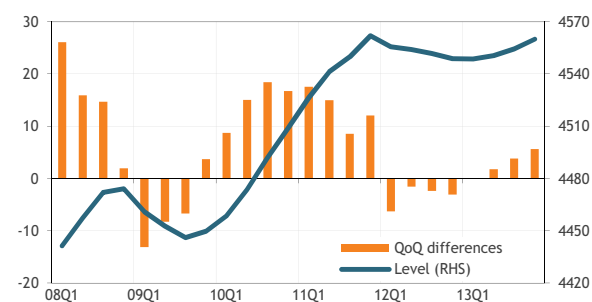
Since mid-2011, business investment has been under pressure as a result of disappointing sales prospects. Business confidence declined sharply throughout 2011 and remained low in 2012. Reduced profitability and the declining capacity utilization rate also contributed to the unfavourable investment climate. Although business investment held up reasonably well in 2012, with 0.6% growth, it should decrease by 0.4% this year.

Taking into account all known measures, the annual volume growth of public consumption should remain limited to 0.9% in 2013. The growth profile of public investment is largely determined by the cycle of local authorities' infrastructure projects. Having increased by 7.9% over the period 2011-2012, public investment should shrink by 7.4% in 2013.

Unemployment continues to rise

As a result of the economic slowdown, domestic employment started to decrease in the course of 2012 (but, on an annual basis, ended up 7 700 persons higher than in 2011). The lack of dynamism on the labour market caused unemployment to rise by 8 500 persons.

Graph 5 - Quarterly evolution of employment (thousands of persons, corrected for seasonal effects)



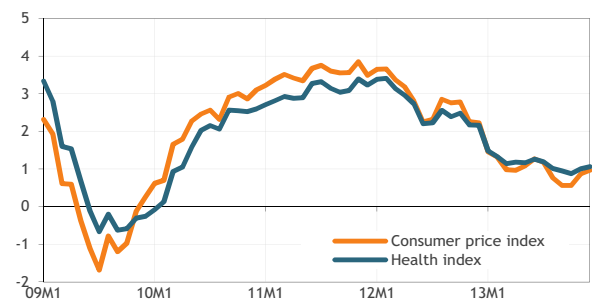
Source: INR/ICN, FPB

On an annual basis, employment should stabilize this year. Given the increase in the labour force, the number of unemployed (broad administrative definition) should rise by approximately 25 000 persons. The harmonised Eurostat unemployment rate (based on labour force surveys) should amount to 7.6% in 2013, compared to 7.2% in 2011.

Inflation cools to 1% in 2013

Belgian inflation, as measured by the yoy growth rate of the national consumer price index, should cool from 2.8% in 2012 to 1% in 2013. This change is mainly due to a decrease in energy prices, which are affected by both a drop in oil prices expressed in euro and the price reductions for gas and electricity some suppliers implemented at the beginning of this year. Moreover, price reductions during sales periods will henceforth be included in the index. The increase in the health index, which is not affected by petrol and diesel price developments, should slow down somewhat less distinctly, from 2.6% in 2012 to 1.1% in 2013. The current pivotal index of public wages and social benefits (122.01) should not be crossed this year.

Graph 6 - Monthly evolution of inflation (yoy growth rates in %)



Source: INR/ICN, FPB

“Economische begroting 2013 – Budget économique 2013”, INR/ICN February 2013.

Summary of economic forecasts

Economic forecasts for Belgium by the different institutions

	GDP growth		Inflation		Government balance		Date of update
	2013	2014	2013	2014	2013	2014	
Federal Planning Bureau	0.2	.	1.0	.	.	.	02/13
INR/ICN	0.2	.	1.0	.	.	.	02/13
National Bank of Belgium	0.0	.	1.6	.	.	.	12/12
European Commission	0.2	1.5	1.6	1.5	-3.0	-3.2	02/13
OECD	0.5	1.6	1.8	1.6	-2.3	-1.7	11/12
IMF	0.3	1.0	1.9	1.4	-2.3	-1.5	10/12
ING	0.2	1.1	1.5	1.9	-2.4	-1.5	03/13
BNP Paribas Fortis	0.0	1.0	1.3	1.3	-2.5	-1.6	03/13
Belfius	0.5	.	1.8	.	.	.	02/13
KBC	0.5	1.5	1.0	1.7	-2.4	-2.5	02/13
Deutsche Bank	0.0	1.0	1.8	1.7	-3.3	-2.6	01/13
Oxford Economics	-0.2	1.0	2.1	2.1	-3.0	-2.2	02/13
IRES	0.3	.	1.5	.	-2.5	.	01/13
Belgian Prime News	0.3	.	1.9	.	-2.3	.	01/13
Consensus Economics	0.1	1.2	1.9	2.0	.	.	02/13
Consensus The Economist	0.2	1.1	1.9	1.9	.	.	03/13
Consensus Wirtschaftsinstitute	0.1	.	1.7	.	-2.7	.	10/12
Averages							
All institutions	0.2	1.2	1.6	1.7	-2.6	-2.1	
International public institutions	0.3	1.4	1.8	1.5	-2.5	-2.1	
Credit institutions	0.2	1.1	1.6	1.7	-2.6	-2.1	

Economic forecasts for the euro area by different institutions

	GDP growth		Inflation		Government balance		Date of update
	2013	2014	2013	2014	2013	2014	
European Commission	-0.3	1.4	1.8	1.5	-2.8	-2.7	02/13
OECD	-0.1	1.3	1.6	1.2	-2.8	-2.6	11/12
IMF	-0.2	1.0	01/13
ING	-0.3	1.2	1.7	1.7	-2.8	-2.4	03/13
BNP Paribas Fortis	-0.5	0.8	1.7	1.3	-2.6	-1.8	03/13
Belfius	0.1	.	1.8	.	.	.	02/13
KBC	0.0	1.4	1.7	1.8	.	.	01/13
Deutsche Bank	-0.3	1.1	1.6	1.6	-2.7	-2.3	01/13
Morgan Stanley	-0.5	0.9	1.5	1.8	-2.9	-2.8	01/13
Oxford Economics	-0.2	1.1	1.9	1.5	-2.6	-2.1	02/13
Consensus AIECE	0.3	.	1.8	.	.	.	11/12
Consensus Economics	-0.2	1.0	1.8	1.7	.	.	02/13
Consensus The Economist	-0.2	0.8	1.9	1.8	.	.	03/13
Consensus Wirtschaftsinstitute	0.1	.	1.8	.	-2.6	.	10/12
Averages							
All institutions	-0.2	1.1	1.7	1.6	-2.7	-2.4	
International public institutions	-0.2	1.2	1.7	1.4	-2.8	-2.7	
Credit institutions	-0.2	1.0	1.7	1.7	-2.8	-2.3	

The European Semester

In the European Semester, the European Council provides policy advice on macroeconomic and structural policy matters. In the following pages, the different components of the European Semester are explained briefly with an emphasis on structural policy matters. The most important indicators used in this process are presented for Belgium and its main trading partners.

At the end of 2011, the European Union defined the different components of the “European Semester” as follows: the broad economic policy guidelines, the employment guidelines, the stability and convergence programmes (SCP), the national reform programmes (NRP) and the monitoring of macroeconomic imbalances (MIP). These components all aim to ensure closer coordination of economic policies and the sustained convergence of the economic performance of the EU Member States. The European Council assesses these programmes and provides policy advice on macrofiscal and macrostructural issues. The advice takes the form of country-specific recommendations.

In April of each year, each Member State must submit two programmes: an NRP and an SCP. The first one is on macrostructural issues and the second one on macrofiscal issues. These programmes are integrated to the extent that they use the same macroeconomic projections and are consistent with respect to the measures that are taken into account.

The Belgian NRP contains an overview of the main macrostructural measures that the governments in Belgium have taken over a 12-month period (from April to March) in the areas that are covered by the Europe 2020 strategy (employment, R&D and innovation, climate and energy, education and social inclusion). This overview includes progress towards the targets set by the Belgian governments. In addition, it provides an overview of the main measures taken in response to the country-specific recommendations (CSR) that Belgium has received the previous year. The areas covered require a strong collaboration of the federal government with the governments of the Regions. The advice of social partners and civil society is also taken into account.

Apart from a macroeconomic scenario and a list of budgetary measures, the Belgian SCP contains a medium-term budgetary projection assuming unchanged policies, a projection of public finances that is consistent with the medium-term objective set by the European Council and the measures to obtain this objective. More-

over, the budgetary strategy contains objectives for the different entities (the federal level, the Regions and the Communities).

The macroeconomic imbalances procedure aims to identify, prevent and, if necessary, correct macroeconomic imbalances. This is a new procedure and follows from the large imbalances observed over past years in many Member States. Further on in this article, more information about the procedure is given and its first application in 2012 is described. The indicators included in the scoreboard on which the procedure is based are presented for Belgium and its three neighbouring countries.

The first full cycle of the European Semester took place over the past year; so at the beginning of this year, a new cycle started. The results for Belgium for the first cycle are described below. As mentioned, one of the key outcomes of the cycle is the decision by the European Council on the CSRs. The six CSRs that Belgium received in 2012 are summarised in Table 1.

Table 1 - Main points of the country-specific recommendations for Belgium, 2012

1 Budget	Implement 2012 budget; specify measures for 2013 budget; adjust fiscal framework (budgetary targets at federal and sub-federal levels).
2 Sustainability of public finances	Improve long-term sustainability. Implement reform of pre-retirement and pension schemes; increase effective retirement age.
3 Financial markets	Stimulate increase in capital of weakest banks.
4 Labour market	Reform system of wage bargaining and wage indexation.
5 Taxation	Shift taxes from labour to, for example, environmental taxes; pursue reform of unemployment benefit system; boost interregional labour mobility; extend activation efforts.
6 Competition	Strengthen competition in retail sector and in network industries.
7 Climate	Enhance progress towards reaching targets for non-ETS greenhouse gas emissions.

Source: Council of the European Union, Council recommendation on the National Reform Programme 2012 of Belgium and delivering a Council opinion on the Stability Programme of Belgium, 2012-2015, 6 July 2012.

In the following pages, more information is given on, respectively, the Europe 2020 strategy and the macroeconomic imbalances procedure.

Pursuing the Europe 2020 Strategy in Belgium

The European strategy for “smart, sustainable and inclusive growth” sets out objectives in the areas of employment, research & development and innovation, education, climate and energy, and social inclusion. For each of these five areas, targets for 2020 are set for pre-defined indicators for the EU as a whole and for each Member State. In the next few pages, progress towards these targets in Belgium is analysed.

Table 2 gives the EU and Belgian targets for each of the indicators in the five areas. When the Belgian governments set their objectives, they were presented in the NRP as “ambitious” at the time. Indeed, the projected improvements were often in contrast with the observed trend over previous years. Moreover, the economic situation is not making matters easier: the evolution of many indicators is at least partly dependent on the evolution of the economy. Therefore, because observations are often showing a deterioration, the level of ambition of the targets has even increased.

To judge the observed evolution, one can compare the recent evolution with the trajectory needed to obtain the target. Alternatively, one can compare the observed evolution with the trend over a longer-term period. It is also possible to compare the observed evolution in Belgium with the observed evolution in other European countries that are also subject to a similar economic environment.

In the next few pages, all the headline indicators used in the Europe 2020 strategy are presented for Belgium and the EU27 with a comparison to their targets. In many cases, only two values for the indicators have been observed since the targets were set. Nevertheless, some general conclusions can already be given.

For some indicators, the observed evolution is “on track” with regard to the targets, or even surpassing the trajectory. This is the case for energy consumption from renewable sources and the indicator that measures tertiary education.

For some other indicators, the observed evolution remains within the trend that was observed over past years and therefore falls short of the trajectory towards the targets. This is the case for the employment rate, the indicators on R&D spending, greenhouse gas emissions, and the indicator on energy consumption.

Finally, some indicators show a deteriorating situation, even though an improvement was targeted. This is observed for the indicator on poverty (the share of the population facing a risk of poverty or social inclusion). It comes as no surprise that this indicator is particularly sensitive to the economic cycle.

Table 2 - Targets to be reached by 2020 in the Europe 2020 strategy

		EU-target	Belgian target
Employment	Share of population aged 20-64 that should be employed	75%	73.2%
R&D and innovation	Share of GDP that is invested in R&D	3%	2.82% (3%*)
Climate and Energy	Non-ETS emissions with 2005 as the base year		-15%
	Share of gross final energy consumption from renewable sources	20%	13%
	Maximum level of Primary energy consumption (Mtoe)**	1474	43.6
Education	Share of early school leavers	10%	9.5%
	Share of population aged 30-34 with tertiary level education	40%	47%
Social inclusion	Share of population at risk of poverty and exclusion	18.7%	15.8%

*: including fiscal incentives

**: this target is indicative

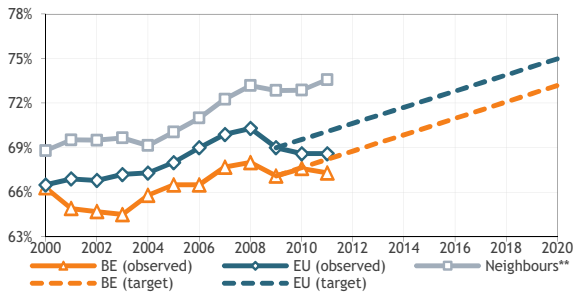
The table shows the recent evolution in Belgium of the Europe 2020 indicators and its comparison to the targets.

Table 3 - Europe 2020 indicators for Belgium

	Belgian target	Observed figure in 2010	Observed figure in 2011
Share of population aged 20-64 that should be employed	73.2%	67.6%	67.3%
Share of GDP that is invested in R&D	2.82%	2.0%	2.04%
Non-ETS emissions with 2005 as the base year	-15%	1.7%	-6.9%
Share of gross final energy consumption from renewable sources	13%	5.1%	5.1%
Primary energy consumption (Mtoe)	43.6	53.9	52.0
Share of early school leavers	9.5%	11.9%	12.3%
Share of population aged 30-34 with tertiary level education	47%	44.4%	42.6%
Share of population at risk of poverty and exclusion	15.8%	20.8%	21.0%

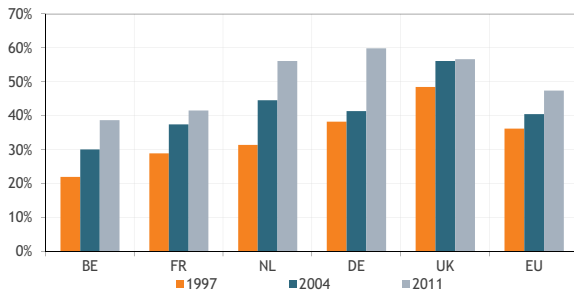
Employment

Graph 1 - Total employment rate*



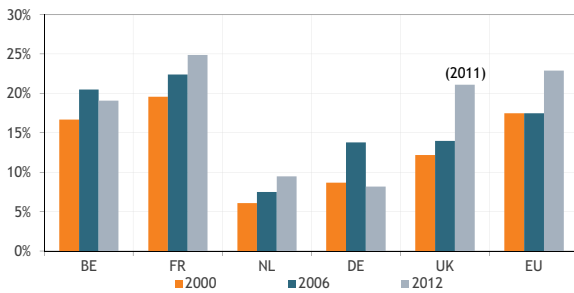
Source: Eurostat (Labour Force Survey)
 * The number of persons aged 20 to 64 in employment, divided by the total population of the same age group.
 ** Average of Germany, France and the Netherlands, weighted by GDP shares.

Graph 2 - Employment rate of older workers*



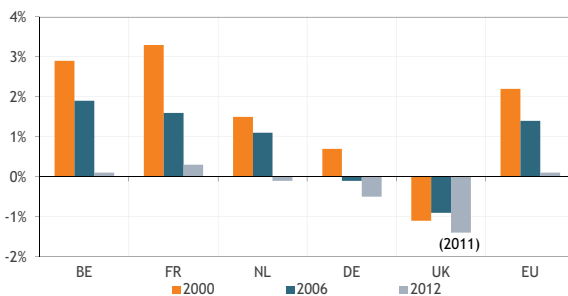
Source: Eurostat (Labour Force Survey)
 * The number of persons aged 55 to 64 in employment, divided by the total population of the same age group.

Graph 3 - Youth unemployment rate (-25 years)



Source: (Labour Force Survey)

Graph 4 - Unemployment rate, gender gap females-males



Source: Eurostat (Labour Force Survey)

In spite of the clear increase in the employment rate over the last two decades, the Belgian labour market indicators remain far from the European targets. After rising sharply during the second half of the nineties, the Belgian employment rate remained stable at around 65% until 2004. In 2008, it peaked at 68%, only to slide back to 67.1% in 2009 as a result of the recession. Although Belgium's employment rate rose more than the EU27 rate between 1997 and 2011, it still stood 1.3 %-points below the European average in 2011. Belgium's target for the Europe 2020 strategy is 73.2%.

While the Belgian male employment rate has remained stable at around 74% over the last decade, but around 73% since 2009, the Belgian female employment rate has been increasing continuously since the beginning of the nineties and is catching up with the European average. In 2011, it amounted to 61.5%, which is still 0.8 %-points below the European average.

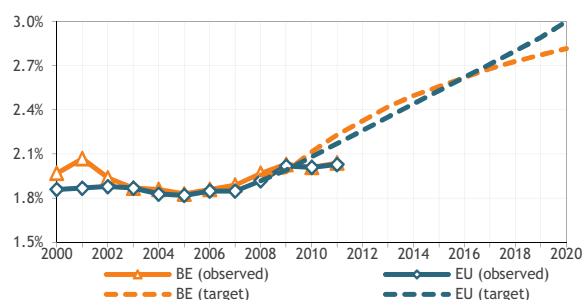
The Belgian employment rate for older workers has been rising continuously since the mid-nineties and converging gradually to the EU27 average. However, at 38.7% in 2011, as against 47.4% in the EU27, it is still one of the lowest in Europe.

At the beginning of the last decade, youth unemployment increased in many European countries. This increase can be explained by weak economic growth. In Belgium this factor countered efforts to improve young peoples' inclusion, notably through the measures of the Generation Pact. Although the Belgian youth unemployment rate fell between 2004 and 2008 (to 18%), it went up again to 22.4% in 2010 (as in most European countries). At 19.1% in 2012, it is 3.8 %-points lower than the EU27 average.

As far as the gap between the male and female unemployment rates is concerned, a downward trend can be noted across Europe. The gender-linked difference in Belgian unemployment rates decreased clearly from the end of the nineties. In 2004, it went up again and stabilised at about 2%. It decreased to 1.1% in 2008 and to 0.1% in 2012, which was the same level as that of the EU27.

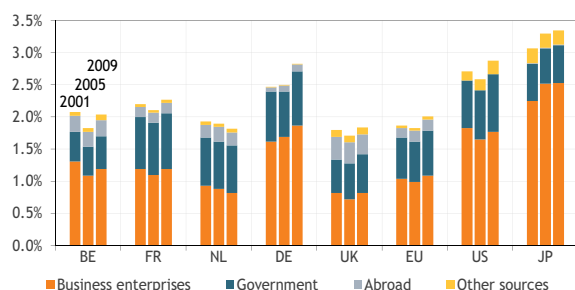
Innovation

Graph 5 - Gross domestic expenditure on R&D* (% of GDP)



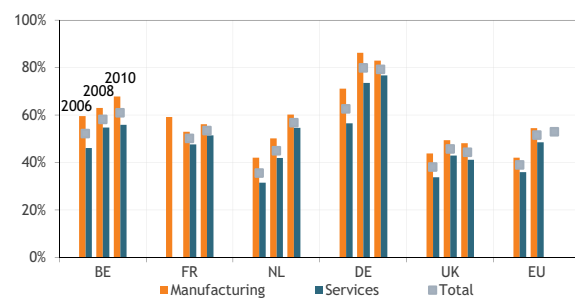
Source: Eurostat (Europe 2020 Indicators)
 * This usual measure of R&D expenditure do not include the cost of fiscal incentives for R&D investments.

Graph 6 - R&D expenditure by source of funds (% of GDP)



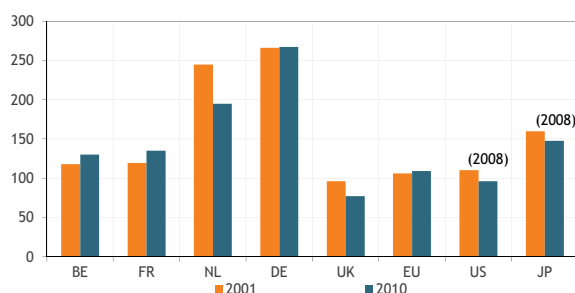
Source: Eurostat (Research and Development), Belgian Science Policy
 * No source of funds available for 2010 and 2011.

Graph 7 - Rate of innovation (% of enterprises with innovation activities **)



Source: Eurostat (Community Innovation Survey)
 * Product, process, ongoing or abandoned innovation and for 2008 and 2010 also organisational and marketing innovation.
 ** NACE Rev.2: C for manufacturing; G46, H, J58, J61, J62, J63, K and M71 for services; total includes manufacturing, services and Sections B, D, E.

Graph 8 - Patent applications at the EPO* (per million inhabitants)



Source: Eurostat (Patent Statistics)
 * Data on patent applications to the EPO are made available as final up to 2008; 2009 and 2010 data are estimated.

Innovation, as a major source of productivity growth, plays an important role in economic growth. It also helps to address social challenges such as health problems and environmental degradation. Inside the Europe 2020 framework, the quantitative objective assigned to the EU is to reach an R&D intensity of at least 3% at the 2020 horizon. Each Member State has to announce an objective compatible with the European Union target. Belgium set the objective to raise R&D expenditure to 3% of GDP in 2020. This expenditure includes the cost of the 75% payroll tax exemption for researchers. The cost of this fiscal measure is estimated at approximately 0.18% of GDP in 2020, which means an objective of 2.82% of GDP for R&D expenditure (Graph 5). A new Europe 2020 headline indicator on high-growth innovative enterprises will soon complement the R&D intensity indicator.

In 2011, R&D intensity in Belgium (2.04% of GDP) was equivalent to the EU27 average (2.03% of GDP) and to the Dutch intensity, but was much lower than the performances of France, Germany, the USA and Japan. After a fall in Belgian R&D intensity from 2001, a slight increase has been observed since 2006, except in 2010.

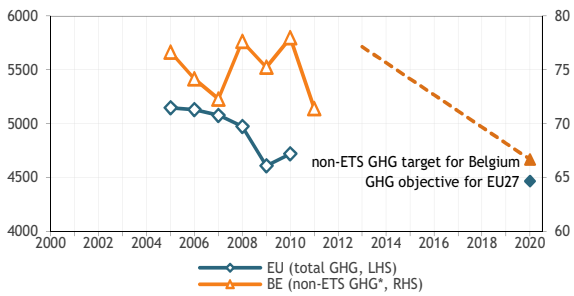
Belgian firms financed R&D at a level of 1.19% of GDP in 2009, which was above the EU27 average. R&D intensity financed by the public authorities reached 0.51% of GDP, which was significantly below the European average but has been on an increasing trend since 2007. Finally, funds from abroad constitute an important source of financing of R&D activities in Belgium, as illustrated in Graph 6.

Although R&D is an important input, it is far from being the only determinant of innovation. The innovation rate allows the effects of firm's innovation efforts, related or not related to R&D, to be captured. As shown in Graph 7, Belgium is relatively well-positioned in terms of the innovation rate in manufacturing as well as in services. In 2010, the innovation rate of Belgian firms (60.9%) was above that of the EU27 (52.9%) and also above that of its neighbouring countries, with the main exception of Germany (79.3%).

The number of patent applications is an indicator of the intellectual property protection conferred on innovation. In 2010, the number of patent applications to the European Patent Office from Belgium slightly decreased but remained above the European average (109.2). With 130.2 patent applications per million inhabitants, Belgium was close to France (135.3), but below Germany (267.5), the Netherlands (195.3), and Japan in 2008 (148.1).

Climate and energy

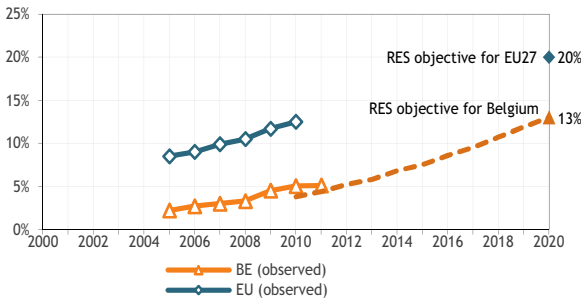
Graph 9 - Greenhouse gas emissions (GHG) (Mt)



Source: Eurostat (Europe 2020 indicators) and the Belgian Regions (GHG inventories)
 * ETS = Emissions Trading Scheme

In order to achieve the EU’s target of a 20% reduction in greenhouse gas (GHG) emissions by 2020 compared to 1990, the Climate-Energy legislative package includes two main elements: the revised EU Emissions Trading System (ETS) Directive and a decision setting a binding GHG emission target for each Member State in sectors not covered by the EU ETS. For ETS sectors, there is no national target but there is a cap on EU GHG emissions. For non-ETS sectors, Belgium’s target is a 15% reduction in GHG emissions by 2020 compared to 2005. Total GHG emissions in the EU were below the 1990 level by 15% in 2010 whereas Belgium’s GHG in the non-ETS sectors were 7% below the 2005 level in 2011. In Graph 9, the dotted line shows the path towards the reduction target.

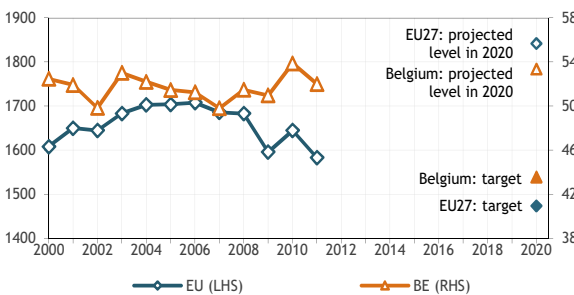
Graph 10 - Share of renewables (RES) in gross final energy consumption



Source: - National renewable energy action plan of Belgium (NREAP): 2005 and indicative trajectory
 - Eurostat: Belgium 2006-2008 and EU27 2006-2009
 - Report of Belgium on progress in the promotion and use from renewable sources: Belgium 2009-2010

Directive 2009/28/EC on renewable energy sets targets for each individual Member State such that the EU will reach a share of gross final energy consumption from renewable energy sources of 20% by 2020 and a share from renewable energy of 10% in the transport sector specifically. The overall target for the share of energy from renewable energy sources for Belgium is 13%. The share of gross final energy consumption from renewable energy sources increased steadily: from 8.5% to 12.5% in the EU over the period 2005-2010, and from 2.2% to 5.1% in Belgium over the period 2005-2011. The recent development of renewables is faster than indicated in Belgium’s national renewable energy action plan, which provides an indicative path towards the target (shown by a dotted line in Graph 10).

Graph 11 - Primary energy consumption (Mtoe)

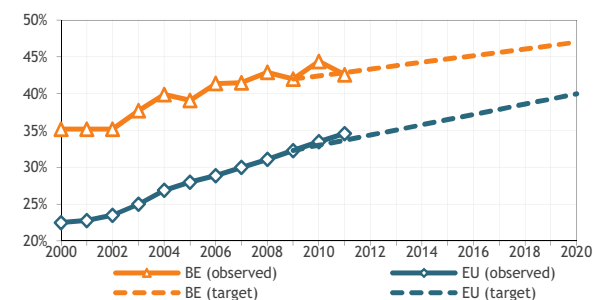


Source: Eurostat (Energy statistics), Belgium’s NRP 2011 and EC (DG Energy, PRIMES baseline 2007)

Reducing energy consumption is another main goal of the European Union. In this respect, the EU agreed on the target of saving 20% of its primary energy consumption compared to projections for 2020. For Belgium, the objective is 18%, as indicated in the National Reform Programme of 2011. The reference projection referred to in the EU ‘energy efficiency’ objective is the 2007 baseline from the energy model PRIMES. Graph 11 shows the progress towards the objectives for 2020. After the increase recorded in 2010, primary energy consumption dropped in Belgium and in the EU in 2011. In 2011, the EU was more than halfway to its energy efficiency target whereas the gap between Belgium’s primary energy consumption and the 2020 objective did not reduce significantly, with the level of consumption remaining close to the average over the period 2000-2010.

Education

Graph 12 - Tertiary educational attainment*

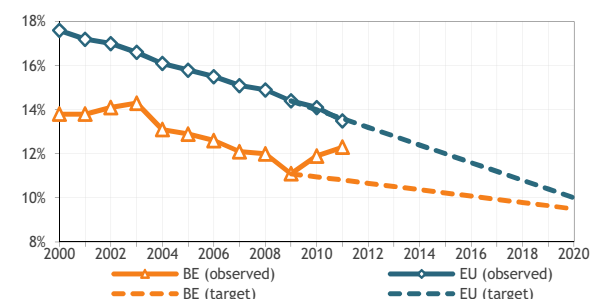


Source: Eurostat (Europe 2020 indicators)

* Share of the population aged 30-34 years who have successfully completed tertiary-level education (ISCED 1997: level 5-6)

Human capital is generally considered to be an important determinant of innovation, productivity, economic growth, and well-being. Investing in education is essential in view of the rising demand for high-skilled workers, e.g. due to globalisation and technological change. Matching the rising demand with an increase in the relative supply of high-skilled workers permits opportunities and challenges to be addressed, employability to be improved, and avoidance of the surge in wage inequality witnessed in countries where the number of university graduates has fallen short of the number required by the labour market.

Graph 13 - Early leavers from education and training*



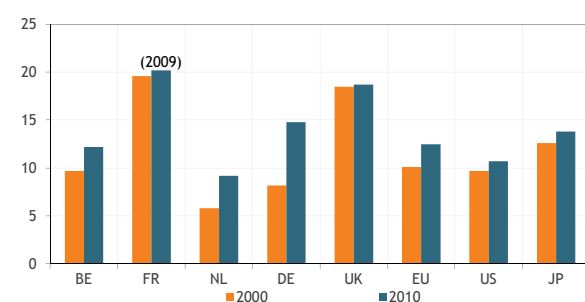
Source: Eurostat (Europe 2020 indicators)

* Share of the respondents aged 18-24 who attained a low level of education or training, and who have declared that they have not received any education or training in the four weeks preceding the survey (ISCED 1997: 0-2 or 3c-short)

Education takes a prominent position in the Europe 2020 strategy. The European Commission recommends increasing the proportion of young people with a tertiary degree from less than a third to 40% and cutting the school dropout rate from the current 15% to 10%. The targets concern the EU as a whole and Member States have been asked to set their own targets in line with past experience and the overall EU targets.

The share of the population aged between 30 and 34 that has completed tertiary or equivalent education has increased considerably in Belgium since 2000, reaching 42.6% in 2011, i.e. above the EU target for 2020 and well above the EU27 average of 34.6% (see Graph 12). In 2011, Belgium ranked 9th out of all EU Member States. For 2020, the Belgian government has set its target at 47%.

Graph 14 - Graduates in science and technology*



Source: Eurostat (Education statistics)

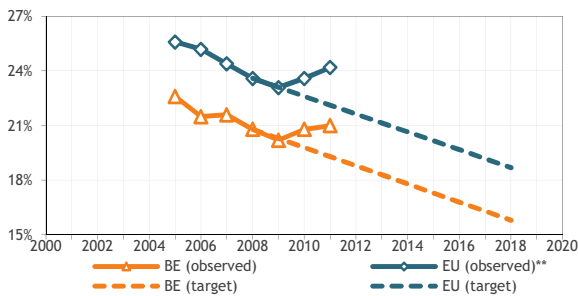
* Number of persons per 1 000 of population aged 20-29 who graduated in science and technology at post-secondary level during the given year (ISCED 1997: 5 and above)

The dropout rate, i.e. the share of the population aged between 18 and 24 years leaving school without having finished secondary education was 12.3% in Belgium in 2011 (see Graph 13). Though below the EU27 average of 13.5%, Belgium only held 19th position in 2011 and the rate, moreover, had increased from an 11.1% low in 2009. The 2020 target for Belgium has been set at 9.5%.

Because of their important role in R&D and innovation, graduates in science and engineering are of great interest. The availability of qualified researchers is often cited as an important driver for companies in the location of their R&D facilities. Failing to educate a sufficient number of researchers could seriously hamper ambitions to reach the R&D target. The number of graduates in mathematics, science, and technology per 1 000 inhabitants aged between 20 and 29 years increased in Belgium from 9.7 in 2000 to 12.2 in 2010 (Graph 14). However, this number is still slightly below the EU27 average of 12.5 and below the number in France, Germany, and the UK.

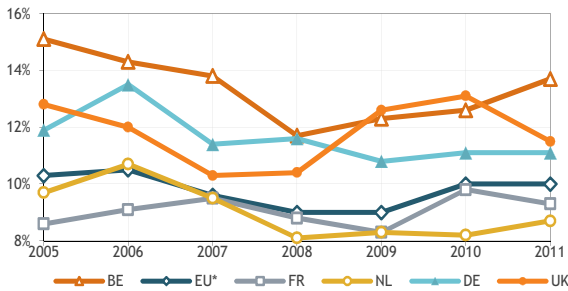
Poverty and exclusion

Graph 15 - Share of the population at risk of poverty and exclusion*



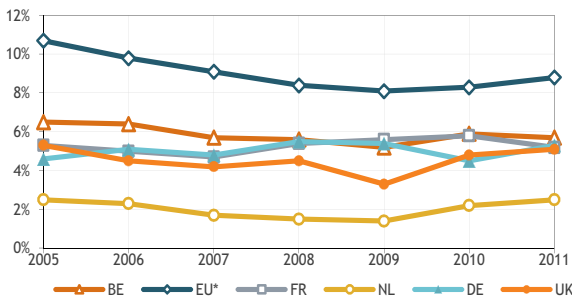
Source: Eurostat (Europe 2020 indicators)
 * For the period 2012-2018, the % is calculated using the population estimates of the Eurostat Europop 2010 convergence scenario
 ** 2005-2006, 2011: estimates

Graph 16 - Share of the population living in a low work intensity household



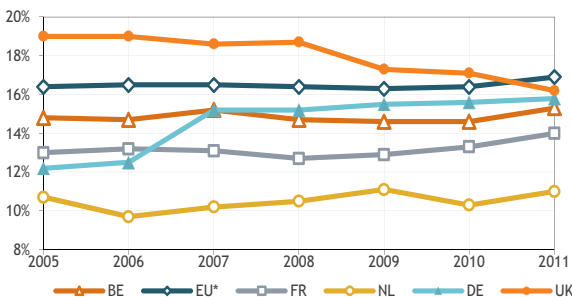
Source: Eurostat (Europe 2020 indicators)
 * 2005-2006, 2011: estimates

Graph 17 - Share of the population suffering from severe material deprivation



Source: Eurostat (Europe 2020 indicators)
 * 2005-2006, 2011: estimates

Graph 18 - At-risk-of-poverty rate



Source: Eurostat (Europe 2020 Indicators)
 * 2005-2006, 2011: estimates

The Europe 2020 strategy aims to reduce the population facing risk of poverty or social exclusion, defined as living in a very low work intensity household, suffering from severe material deprivation or having a disposable income below the poverty threshold (at-risk-of-poverty rate). The Europe 2020 objective is to reduce the targeted population in the EU by at least 20 million compared to the situation in 2008. Member States translated this objective into national targets: Belgium aims at a reduction of 380 000 compared to the situation in 2008. The Belgian National Reform Programme of 2012 announced different measures to guarantee the social protection of the population, to combat inadequate housing and homelessness, and to stimulate the active inclusion of people excluded from the labour market. Finally, in consultation with the federated entities, the federal government will elaborate a realistic plan for combating child poverty.

The EU average of the share of the population facing a risk of poverty or social exclusion dropped from 25.6% to 23.1% between 2005 and 2009 and increased to 24.2% thereafter. In Belgium, it also declined between 2005 and 2009, from 22.6% to 20.2%, and increased to 21% afterwards. As shown in Graph 15, the figures for 2010 and 2011 for the EU and for Belgium diverge from the hypothetical path to the agreed objectives (respectively, an estimated 18.6% and 15.6% in 2018).

Primarily labour market evolutions have influenced this recent development. After a decline from 15.1% in 2005 to 11.7% in 2008, the percentage of persons living in very low work intensity households rose in Belgium to 13.7% by 2011 (Graph 16). The EU average percentage also increased between 2009 and 2011, as was the case in Germany, France, and the Netherlands.

The share of persons suffering from severe material deprivation in Belgium decreased from 2005 to 2009, from 6.5% to 5.2%. In 2010 and 2011, it increased to about 5.8% (Graph 17). In the EU, the decreasing trend stabilised in 2010 around 8.1%, after when it increased to 8.8% in 2011. In 2011, this indicator increased in Germany, the Netherlands, and the UK.

Finally, in the period 2005-2010, the at-risk-of-poverty rate of Belgium, France, and the EU-average stabilised around, respectively, 14.6%, 13%, and 16.4% (Graph 18). In 2011, this indicator increased in Belgium to 15.3%, in France to 14%, and in the EU to 16.9%. In the UK, the at-risk-of-poverty decreased between 2005 and 2011 from 19% to 16.2%. In this period, the indicator fluctuated around 10.5% in the Netherlands. Finally, in Germany it varied around 12.4% in 2005 and 2006. Afterwards, it increased to 15.5% for the period 2007-2011.

The procedure on the prevention and correction of macroeconomic imbalances

The Macroeconomic Imbalances Procedure (MIP), based on Article 121.6 of the Treaty which deals with the coordination of EU Member States' economic policies, aims to identify, prevent, and correct unsustainable macro-economic developments. As the first step of the MIP, the Commission releases the Alert Mechanism Report (AMR), the economic reading of the key indicators scoreboard. In this report, the Commission establishes the list of countries that may be affected by or may be at risk of being affected by imbalances and for which an in-depth analysis is needed, which is based on a larger set of indicators and national specific features. At the end of the in-depth analysis, the Commission concludes on the nature of the detected imbalances, designating them from benign to harmful. If the imbalances are considered harmful, the Commission informs the Council. The Council may then, on the recommendation of the Commission, launch the second step of the procedure and recommend that the country take corrective action. The Commission monitors the implementation of the corrective action plan. If a country fails to respond correctly twice, the Council imposes an interest-bearing deposit and an annual fine.

On 14 February 2012, the Commission published its first AMR in which 12 Member States¹ (Belgium, Bulgaria, Cyprus, Denmark, Finland, France, Italy, Hungary, Spain, Slovenia, Sweden, and the United Kingdom) that may be affected by macroeconomic imbalances were selected for an in-depth analysis. These in-depth analyses were published at the end of June 2012. Although imbalances were considered serious and requiring correction for some Member States, the corrective arm of the MIP was not launched.

The 2012 in-depth review concluded that Belgium experienced macroeconomic imbalances which were not excessive but which need to be addressed. In particular, macroeconomic developments in the areas of external competitiveness of goods and indebtedness, especially concerning the high level of public debt, deserved further attention so as to reduce the risk of adverse effects on the functioning of the economy.

On November 2012 and before the second round of MIP, the scoreboard was completed by an eleventh indicator aimed at better capturing the interlinkages between the real economy and the financial sector. This indicator is the annual growth rate of financial sector liabilities based on non-consolidated data and for which a thresh-

old of 16.5% has been identified.

On 28 November 2012, the Commission released its AMR 2013. In this, 14 Member States (the same countries as in the AMR 2012, plus the Netherlands and Malta) were selected for an in-depth analysis.

Based on the Scoreboard (Table 1), three indicators (change in export market shares, gross private sector debt, and general government debt) exceeded their indicative thresholds in the case of Belgium. On the external side, in its economic reading, the Commission underlined the decline in cost-competitiveness due to, inter alia, stronger accumulated unit labour cost increases compared to the euro-area average. Concerning internal imbalances, the Commission recognises that the excessive private sector debt is driven to a large extent by intra-company loans. However, government debt is high and increasing due to the accumulation of large deficits over recent years and the interventions in the financial sector. Moreover, the likelihood of correction in house prices needs to be explored further. Finally, "the Commission finds it useful, also taking into account the identification of an imbalance in May, to examine further the persistence of imbalances or their unwinding"². The in-depth analysis of Belgian imbalances is therefore currently being performed by the Commission.

Table 1 - Scoreboard for Belgium, Germany, France, and the Netherlands with values for 2011

	Thres-holds	Bel-gium	Ger-many	France	Nether-lands
Current account (3-year average, % GDP)	-4/+6%	-0.3	5.9	-1.6	7.5
Net international investment position (% GDP)	-35%	66	33	-16	36
Real effective exchange rate (% , 3-year change)	+/-5%	-0.5	-3.9	-3.2	-1.6
Export market shares (% , 5-year change)	-6%	-10.2	-8.4	-11.2	-8.2
Unit labour cost (% , 3-year change)	+9%	6.3	5.9	6.0	5.8
House prices (% , year-on-year change)	+6%	-0.1	1.4	3.8	-4.0
Private sector credit flow (% GDP)	15%	11.6	4.8	4.0	0.7
Private sector debt (% GDP)	160%	236	128	160	225
Public sector debt (% GDP)	60%	98	81	86	66
Unemployment rate (% , 3-year average)	10%	7.8	6.9	9.6	4.2
Total financial sector liabilities (% , year-on-year change)	16.5%	4.7	2.1	7.3	7.2

Figures in bold: variable outside the thresholds

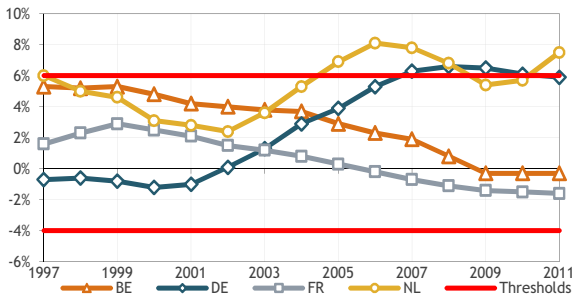
In the next four pages, the indicators for Belgium, Germany, France, and the Netherlands are put into a historical perspective, alongside some indicators giving extra information on the problem areas.

1. The AMR does not include Member States which are subject to surveillance under programmes. At the time of the first AMR (2012 AMR), the countries under programmes were Greece, Ireland, and Portugal. At the time of 2013 AMR, the countries under programmes were Greece, Ireland, Portugal, and Romania.

2. COM(2012) 751 final, page 6

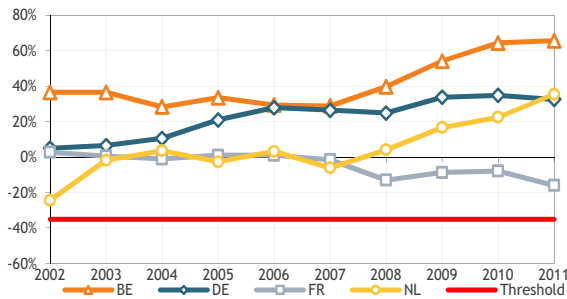
External Imbalances and Competitiveness

Graph 1 - Current account balance - 3-year average (% of GDP)



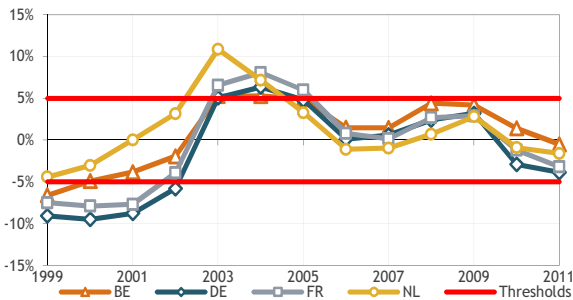
Source: Eurostat (Macroeconomic Imbalance Procedure)

Graph 2 - Net international investment position (% of GDP)



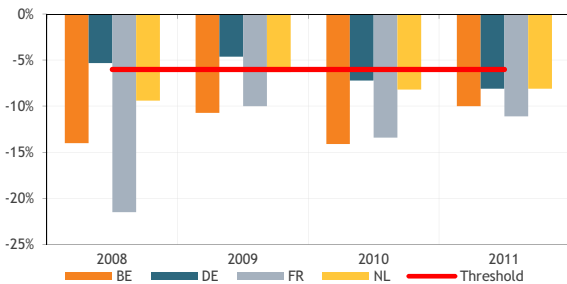
Source: Eurostat, Macroeconomic Imbalance Procedure

Graph 3 - Real effective exchange rate, HICP deflators relative to 35 industrial countries (3-year change in %)



Source: Eurostat (Macroeconomic Imbalance Procedure)

Graph 4 - Goods and services export market shares (5-year change in %)



Source: Eurostat (Macroeconomic Imbalance Procedure)

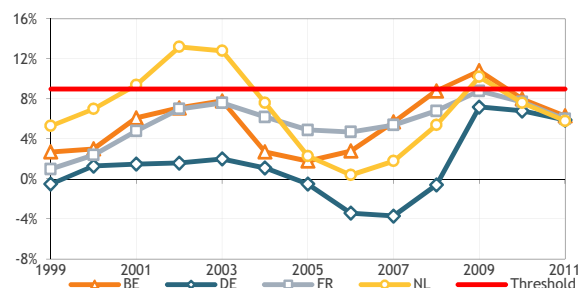
The current account balance as a percentage of GDP is the first external imbalances indicator. As it concerns a 3-year backward moving average transformation, the information for the most recent year's data is diluted. According to this indicator (Graph 1), the Belgian current account has been on a declining trend since the beginning of the 2000s. This trend accelerated between 2005 and 2009 before the stabilisation of the indicator at a slightly negative level (-0.3% of GDP). This evolution is similar to that observed in France. However, the French indicator has been negative since 2005 and reached -1.6% of GDP in 2011, indicating a worse external position than that of Belgium.

The Commission also includes the net international investment position (NIIP) as a percentage of GDP (Graph 2). The NIIP is the value of financial assets held by residents abroad less the domestic assets owned by non-residents. The change in the NIIP from one period to another depends mainly on the current account balance and on the revaluation effect due to assets/liabilities prices and exchange rate movements. Over the whole period, the Belgian NIIP was one of the highest in the EU. Among the neighbouring countries, divergences have appeared since 2008 between France, where the NIIP turned negative, and the Netherlands, which has rapidly improved its NIIP.

As a measure of persistent changes in prices' competitiveness relative to the major trading partners of the respective country, an indicator on the real effective exchange rate (REER) based on the harmonised index of consumer prices deflators (3-year change in %) is included. As shown in Graph 3, in the four euro area countries, the REER has followed a very similar evolution since 2005, remaining in the narrow band defined by the Commission for EA members (+/-5%). However, Belgium exhibits the least favourable evolution. This is mainly explained by Belgian inflation.

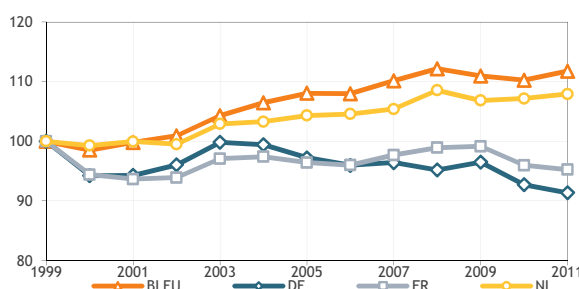
In order to identify slow and persistent losses in competitiveness, the Commission also considers an indicator on export market shares (5-year change in %), capturing components of competitiveness or the ability to exploit new sales opportunities due to rapid demand growth in emerging economies (Graph 4). According to this indicator, all four countries have recorded losses in their export market shares since 2010 that are larger than the threshold (-6%). Part of this deterioration is structural and is linked to the increasing role played by the emerging countries in world trade.

Graph 5 - Nominal unit labour cost (3-year change in %)



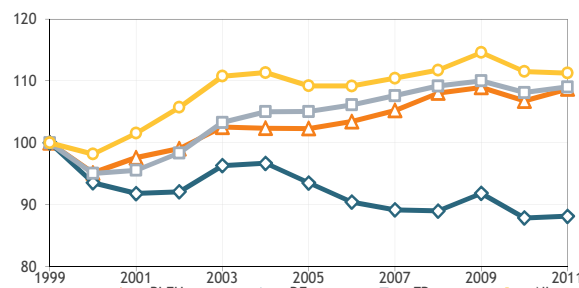
Source: Eurostat (Macroeconomic Imbalance Procedure)

Graph 6 - Real effective exchange rate, export prices deflators relative to 35 industrial countries 1999=100



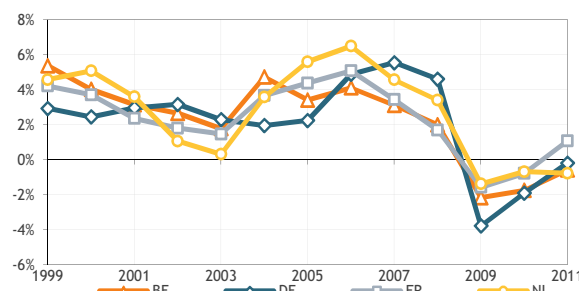
Source: European Commission (Competitiveness Report)

Graph 7 - Real effective exchange rate, ULC deflators relative to 35 industrial countries (1999=100)



Source: Eurostat (Macroeconomic Imbalance Procedure)

Graph 8 - Real labour productivity per person employed (3-year change in %)



Source: Eurostat (Macroeconomic Imbalance Procedure)

The last external imbalance indicator (Graph 5) is the 3-year percentage change in the ratio of nominal compensation per employee to real GDP per person employed (or unit labour costs). According to this indicator, Belgian nominal ULC have increased faster than ULC in neighbouring countries since 2007. Since 2005, the profile of the evolution has been similar in Belgium and the Netherlands as these two countries crossed the threshold (9%) in 2009 before returning below it from 2010. This is an indication of losses in the cost competitiveness of the Belgian economy.

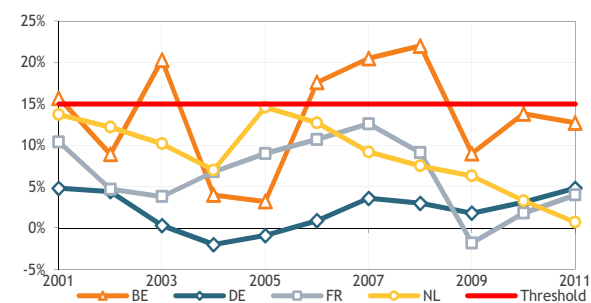
As price competitiveness is important for a small open economy such as Belgium, three other indicators have been taken into account to refine the analysis. Moreover, as current evolutions could depend on previous losses or gains in competitiveness, the three additional indicators are presented as an index rather than as a percentage of change in order to keep track of historical developments.

Graph 6 shows the evolution of the real effective exchange rate index (1996 = 100), using export prices of goods and services as deflator, vis-à-vis 35 other industrialised countries. The most striking element is the divergent evolutions of Germany and France, which succeeded in improving their REER, and Belgium and the Netherlands, which recorded deterioration in their REER mainly over 2003-2008. This confirms a problem of external price competitiveness for Belgium.

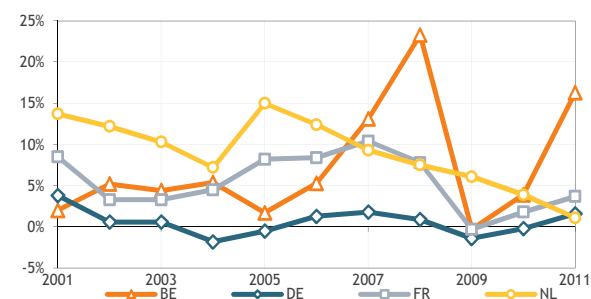
As labour costs are usually one of the main determinants of prices, Graph 7 shows the evolution of the real effective exchange rate index (1996 = 100), using ULC as the deflator, vis-à-vis 35 other industrialised countries. In this case, divergences appear between Germany on the one hand and France, the Netherlands and Belgium on the other hand. The three latter experienced a deterioration in their REER. These deteriorations were of a comparable size in France and Belgium but more pronounced in the Netherlands, while Germany registered an improvement. However, over the most recent years, 2005-2011, the deterioration of this indicator has been larger in Belgium (growth rate of 6.2%) than in France (3.8%) and the Netherlands (1.9%).

It is also interesting to compare the evolution of productivity to see if the roots of the divergences are in productivity or wage developments. Graph 8 shows real labour productivity per person employed (index, 1996 = 100). The evolutions of productivity in the four countries appear to be much closer to each other than that observed in terms of ULC-based REER. The divergences in cost competitiveness therefore seem to be mainly due to divergences in nominal wage increases and non-labour costs evolution. However, labour productivity growth has been particularly slow in Belgium in the most recent years.

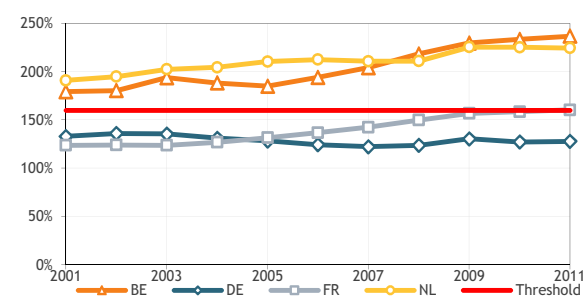
Internal imbalances indicators

Graph 9 - Private sector credit flow non-consolidated (% of GDP)

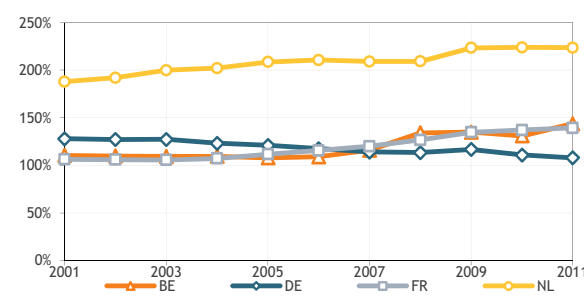
Source: Eurostat (Macroeconomic Imbalance Procedure)

Graph 10 - Private sector credit flow consolidated (% of GDP)

Source: Eurostat (Macroeconomic Imbalance Procedure)

Graph 11 - Private sector debt non-consolidated (% of GDP)

Source: Eurostat (Macroeconomic Imbalance Procedure)

Graph 12 - Private sector debt consolidated (% of GDP)

Source: Eurostat (Macroeconomic Imbalance Procedure)

Graph 9 presents an indicator on credit flows to the private sector, defined as securities other than shares, and loans to non-financial corporations, households and non-profit institutions serving households on a non-consolidated basis and expressed as a percentage of GDP. According to the Commission, high credit flows appear to be one of the best early indicators of crises. Contrary to the three neighbouring countries, the flow of credit to the private Belgian sector has recently been large, passing the threshold in 2006, 2007 and 2008. However, because of its non-consolidated nature, this indicator has to be interpreted with caution for Belgium. The presence of many centres of multinational firms usually entails large flows of intra-group loans that are linked to the optimisation of firms' treasury management rather than the emergence of an asset bubble.

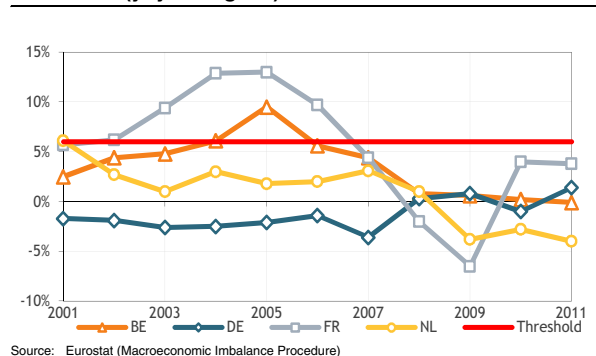
For this reason, Graph 10 presents this indicator of credit flow to the private sector but on a consolidated basis. The passage from a non-consolidated to a consolidated indicator substantially reduces the relative size of the credit flow for Belgium. However, in 2011, even on a consolidated basis, the loans to non-financial corporations reached a particularly high level.

The Commission also includes in the scoreboard a stock indicator in the form of the private sector debt level as a percentage of GDP. According to this indicator (Graph 11), Belgium is above the threshold over the whole period covered. However, as underlined for the credit flow indicator and for the same reason, the debt indicator has to be interpreted with caution.

The exclusion of intra-sector liabilities such as intra-group loans gives rise to the same indicator but on a consolidated basis. As shown by Graph 12, the relative size of private sector debt has fallen, except for the Netherlands. This reduction is particularly large for Belgium (almost 100% of GDP). On a consolidated basis, Belgium had a level of private sector debt as a percentage of GDP close to the French level in 2011, slightly above that of Germany but largely below that of the Netherlands.

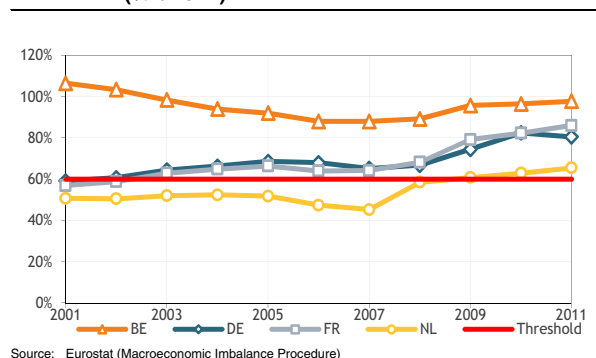
Finally, these indicators also have to be interpreted with caution because they are established on a gross and not a net basis. Private sector debt is generally used to accumulate assets (houses, financial assets, etc.). The amount and the nature of the accumulated assets are also important in judging the potential disequilibrium nature of the level of private sector debt.

Graph 13 - Real house price (yoy change %)



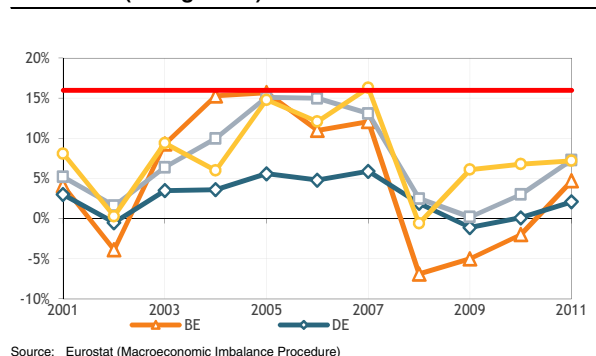
As housing market developments have figured prominently in many of the previous financial crises, the Commission has decided to include the year-on-year change in real house prices, defined as the house price indicator deflated by the national accounts deflator for private final consumption expenditure (households and NPIS). According to this indicator (Graph 13), the Belgian real house price index increased relatively rapidly between 2003 and 2007. However, a correction occurred in the subsequent years with, first, a reduction in the rate of growth and, in 2011, even a decrease in real house prices.

Graph 14 - Public sector debt (% of GDP)



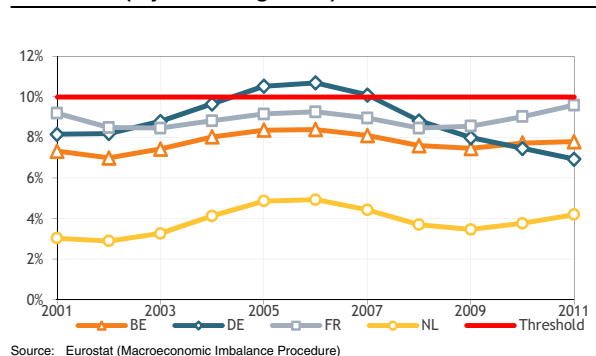
To consider the potential contribution of public debt to macroeconomic imbalances, the Commission has also included in the scoreboard a complementary indicator: the general government consolidated gross debt, as defined in the Excessive Deficit Procedure as a percentage of GDP (Graph 14). As is well-known, Belgium has a large public sector debt, which exceeded the threshold of 60% of GDP. However, this ratio has been on a clear downward trend since 1994. Since 2008 and the resurgence of public deficits as a consequence of the financial and economic crisis and the public financial intervention to save the banking systems, the public debt ratio has again increased. As a result of these developments, the four countries have presented a public debt since 2009 that exceeded the threshold percentage of GDP.

Graph 15 - Financial sector liabilities (change in %)



A newly introduced indicator, the annual growth rate of total financial sector liabilities, measures the evolution of the sum of all liabilities (which includes currency and deposits, securities other than shares, loans, shares and other equity, insurance technical reserves and other accounts payable) of the total financial sector. This indicator is aimed at better capturing the interlinkages between the real economy and the financial sector. The growth rate of financial sector liabilities in Belgium, as in the three neighbouring countries, remains largely below the thresholds (Graph 15).

Graph 16 - Unemployment rate (3-year average in %)



Finally, the Commission also takes into consideration the real economy potential imbalances through an indicator for the unemployment rate that is designed to monitor high and persistent rates of unemployment pointing towards a potential misallocation of resources and general lack of further adjustment capacity in the economy. As illustrated by Graph 16, this indicator is not considered problematic for Belgium. In 2010 and 2011, the effect of the economic downturn on the labour market was already visible in France, the Netherlands and Belgium, but not yet in Germany, where the indicator continued to improve.

Long-term Sustainable Development Visions: Concepts, Applications, and Elaboration

This Planning Paper explores the usefulness and the need for long-term visions of society's development to guide the achievement of a sustainable society. Such a future society is able to combine material wealth improvements with social equity and justice and to limit its environmental impact to a level within the Earth's self-recovery capabilities. Government initiatives already taken in several industrialized countries to help respond to this need are reviewed. This review covers different levels of governance, from the sub-national to the global level, with a particular focus on the Belgian Federal Sustainable Development (SD) strategy adopted in a Parliamentary Act of 1997. It analyses in particular the content and the follow-up of the 2010 revision of this Act, which has introduced a long-term vision for Sustainable Development in this strategy.

The first part of the Planning Paper gives an overview of various long-term vision applications from the last decade. It defines this concept in the context of foresight exercises as well as of long-term strategies. It reviews the case of Belgium at the federal and regional levels. Belgian Federal SD Plans from now on will be based on this vision and contain the concrete measures that are deemed necessary to achieve the long-term objectives included in the vision. The Paper also reviews the objectives of the Europe 2020 and EU SD strategies and their interrelations. While the Europe 2020 strategy is presented as the cornerstone of EU policy, a new EU SD strategy announced by the European Council for 2014 will have to integrate both the objectives of Europe 2020 as well as the follow-up of the Rio+20 commitments. It also describes efforts made to elaborate long-term visions of an ideal society in a series of industrialised countries. Finally, it stresses the important outcome of the Rio+20 Conference in launching the adoption of SD goals at the global level and the need for a coherent overarching framework of goals shared by all countries, including common strategic goals at the EU level.

The second part of the Planning Paper describes the elaboration process of the 2050 long-term vision endorsed by the Federal Government in the Royal Decree to be voted late March 2013. This process was organized according to the above-mentioned Act of 1997, coordinating the Federal SD policy and stipulating that the long-term vision has to comprise 2050 objectives, intermediary goals by decennia, and indicators for monitor-

ing implementation progress. Developing such an ambitious long-term vision has required the use of expertise from public authorities and civil society, but also the participation of members of parliament. In cooperation with the special parliamentary Commission on Climate and Sustainable Development, the official process was launched in June 2011, on the basis of an evaluation of twenty years of Federal political action for SD (see: Twenty Years of Political Commitment to Sustainable Development? Federal Report on Sustainable Development 2011. November 2011, FPB, D/2011/7433/33). After this launch, each actor in the Federal strategy played its part in defining specific goals up to 2050 in view of Belgium's international commitments on SD.

The Planning Paper describes the specific contributions of the Federal Planning Bureau at the outset of the vision elaboration process as well as the work of the federal administration, coordinated by the Interdepartmental Commission on SD, and the various inputs of civil society, coordinated by the Federal Council for SD. It also focusses on elements of parliamentary commission debates based on these inputs. The conclusion of this second part underlines the existence of important common points shared by all these contributions but also areas of divergence, indicating the necessity to gain even more public support for SD. Based on the review of various initiatives to draw up a sustainable society and the in-depth analysis of the creation of a "sustainable development vision" at the Belgian federal level, the final conclusion of the Paper comes back to the usefulness of and need for such a process. It reiterates that instruments guiding the transition towards sustainable lifestyles in the coming decades demand as much attention as efforts to live more sustainably now and that these instruments and efforts can be mutually supportive.

"Visions à long terme de développement durable. Concepts, applications et élaboration / Langetermijnvisies inzake duurzame ontwikkeling. Begrippen, toepassingen en uitwerking", Task Force on Sustainable Development, Planning Paper 113, March 2013.

Specification and estimation of a dynamic consumption allocation model

An allocation model of Belgian household consumption has been formulated and estimated. The classic Almost Ideal Demand System has been modified by introducing a dynamic adjustment mechanism and by the inclusion of demographic variables. Implied long-run overall income and uncompensated price elasticities are calculated for the whole allocation structure.

This paper presents an allocation model of Belgian household consumption over 23 categories of goods and services. An extension of the classic Almost Ideal Demand System (the name refers to the fact that the model can be considered an approximation to any demand system, has several properties consistent with consumer theory, and is easy to estimate) has been formulated and estimated. The original model has been modified by introducing a dynamic adjustment mechanism (allowing for a gradual correction between actual and 'optimal' consumption patterns) and by the inclusion of demographic variables. These capture shifts in consumption patterns related to the changing age composition of the population. Implied long-run overall income and uncompensated price elasticities are calculated for the whole allocation structure. They are computed as the effects of permanent income and price shocks in long-run (steady-state) equilibrium on the various consumption item quantities.

The implied long-run income elasticities are relatively high for recreation, other goods and services, clothing, personal transport equipment, and energy consumption categories. Communication, consumption abroad, domestic services, medical care, food, non-alcoholic and alcoholic beverages, tobacco, rent, and purchased transport have rather low long-run income elasticities.

The long-run uncompensated own price elasticities, which take into account the income effect of a price change, are relatively low for communication, consumption abroad, domestic services, medical care, food, non-alcoholic beverages, rent (positive sign for but non-significantly different from zero), furniture, purchased transport, and energy consumption categories. Alcoholic beverages, tobacco, clothing, and personal transport equipment show rather high price elasticities.

The model has been integrated into the medium-term macroeconomic and sectoral projection model HERMES.

*"Specification and estimation of a dynamic consumption allocation model",
I. Bracke, P. Willemé,
Working Paper 15-12, December 2012.*

Machines that go 'ping': medical technology and health expenditure in OECD countries

It is widely believed that medical technology has been a major driver of rising health care expenditure in developed economies. This paper uses data on approved medical devices and drugs as a new proxy for medical technological progress. The effects of these variables on total real per capita health spending were estimated using a panel model for 18 OECD countries covering the period 1981-2009. The results confirm the substantial cost-increasing effect of medical technology, which may account for at least 50% of the explained historical growth of spending.

While rising health care expenditure as a percentage of national income is a well-known and widely documented feature across the industrialized world, it has proved difficult to quantify the effects of the underlying cost drivers. The main difficulty is to find suitable proxies to measure medical technological innovation, which is believed to be a major determinant of steadily increasing health spending. This paper's main contribution is the

use of data on approved medical devices and drugs to proxy for medical technological progress. Four variables were defined, based on the US Food and Drug Administration statistics on the annual number of approved products (it should be noted that approval does not necessarily imply reimbursement by public or private health insurance funds). The variables were used as proxies for the introduction of new medical technology in the countries studied, as long time series at the level of individual countries are not publicly available. Their effects on total real per capita health spending were estimated using a panel model for 18 OECD countries covering the period 1981-2009. The variables were introduced in the model either with explicit lags of up to five years or as technology 'stocks', and together with conventional explanatory variables such as real per capita income, the age composition of the population, and the share of public expenditure in total expenditure. The dependent variable was converted to real per capita terms using US dollar purchasing power price indices. The age compo-

sition of the population was defined as the share of the elderly population in the total population, using the age brackets 65-74, 75-84, and 85+ years of age. All data, except the FDA approval data, were taken from OECD databases. Panel cointegration tests did not reject the possibility of a cointegrating relationship between the logarithms of the model variables.

The results confirm the substantial cost-increasing effect of medical technology, which may account for at least 50% of the explained historical growth in spending. Excluding the approval variables causes a significant upward bias in the estimated income elasticity of health spending and negatively affects some model specification tests. Despite the overall net positive effect of technology, the effect of two subgroups of approvals on ex-

penditure is significantly negative. These subgroups can be thought of as representing 'incremental medical innovation', while the positive effects are related to radically innovative pharmaceutical products and devices. The results are consistent with those reported in other studies, which suggest that some new products, despite their high price when they are introduced, can ultimately save money by reducing spending on other medical interventions.

*"Machines that go 'ping': medical technology and health expenditures in OECD countries",
P. Willemé, M. Dumont,
Working Paper 2-13, January 2013*

Gender-specific effects of certain unemployment and pensions measures taken in 2012

In the course of 2012, the Belgian federal government took a number of measures in the pension and unemployment schemes. This publication aims to analyse the impact by gender of a selection of those measures from a macro-fiscal perspective and from a microeconomic perspective.

In 2012, the Belgian federal government took a number of socioeconomic measures. In the pension scheme, both the eligibility age and the career condition for early retirement were raised. In addition, certain pension calculation modalities were reviewed, in particular the valuation of certain assimilated periods in the wage-earners' scheme. For unemployment, the system of increased degression of benefits was stepped up.

As a first step, a macro-fiscal analysis of the pension reform was carried out by gender using the macro-fiscal model MALTESE. With the exception of the self-employed scheme, women, having shorter careers, should be more obliged to postpone retirement than men. In the self-employed scheme, many women were already compelled to retire from the age of 65 before the reform, having less than 35 career years. These postponements result in a reduction in the number of beneficiaries and in an increase in average pensions. In the wage-earners' scheme, average pensions should rise more strongly for women than for men in the long term, as women are to extend their professional careers more. In the self-employed scheme and the public sector, on the other hand, average pensions should increase more for men than for women, but for different reasons. In the self-employed scheme, men are more obliged to postpone retirement; in the public sector, a higher proportion of women re-

ceives a physical disability pension, for which neither the conditions of allocation nor the amount are affected by the reform.

Secondly, using the micro-simulation model MIDAS, a microeconomic analysis was conducted by gender of two specific measures: increased degression of unemployment benefits and changes in the valuation of certain assimilated periods for pension calculation. The first measure increases the poverty risk for the unemployed. This increase is more pronounced for men as they are more numerous in the two family categories most affected by the reform: cohabitants with dependants and singles. The valuation of third period unemployment, which is characterized by minimal or lump-sum benefits for the long-term unemployed, would bring about a slight reduction in the average pension amount (the more so as this valuation is extended to cohabitants with dependants and to singles), as would the valuation of certain pre-pension periods before the age of 60 at the minimum claim per working year, which are no longer based on final salary. This reduction is more pronounced among men, who form the majority within the population affected by the measure.

*"Mesures prises en 2012 dans les branches chômage et pension : évaluation des effets selon le genre / Maatregelen genomen in 2012 in de takken werkloosheid en pensioenen: evaluatie van de effecten volgens geslacht",
G. Dekkers, R. Desmet, N. Fasquelle, M.-J. Festjens,
Ch. Joyeux, B. Scholtus, S. Weemaes,
Working Paper 3-13, February 2013*

Other Recent Publications

Working Paper 1-13, January 2013

"The impact of subsidies and fiscal incentives on corporate R&D expenditures in Belgium (2001-2009)",
M. Dumont

Report, December 2012

"Towards 100% renewable energy in Belgium by 2050",
D. Devogelaer, D. Gusbin, collective publication
with VITO and ICEDD

Research in progress

The long-term budgetary and social challenges of ageing

Different aspects of the long-term dynamics of acute health care, long-term care and pension expenditure are being scrutinized. A long-term model is being used to project the budgetary consequences of ageing, notably taking the new pension reform into account; the social dimension of pension benefits is being investigated using a microsimulation model.

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Employment in the civil service

The question of whether the level and the structure of employment in government bodies in Belgium is appropriate has been raised frequently. A research project at FPB addresses this question, including the implications of public employment dynamics on public pensions.

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Macroeconomic, budgetary and ghg emissions prospects

Using a consistent modelling approach, medium-term macroeconomic and budgetary prospects as well as the evolution of greenhouse gas (GHG) emissions are investigated. A consistent regional-national version of the model developed in collaboration with experts from the regional governments of Brussels, Flanders and Wallonia generates regional results.

contact: hermes@plan.be

Input-Output tables 2010

The FPB is preparing the Belgian Input-Output tables for 2010. These are compiled using the European System of National and Regional Accounts ESA95, and will incorporate the new NACE Rev. 2 - CPA 2008 nomenclature. The National Accounts Institute will transmit the data to Eurostat. The tables will be available in a 60-industry disaggregation by the end of 2013.

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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.

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Innovation

Innovation is a key determinant of productivity growth. A comprehensive publication on this subject is planned for Summer 2013. Particular attention will be given to public policy that will facilitate innovation leading to the creation of economic activity and jobs.

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Progress in economic modelling at the FPB

On-going projects aimed at incorporating new approaches in economic modelling are supported by different institutions. Partners from the three Regions (IBSA-BISA, SVR and IWEPS) support the development of a "bottom-up" approach in the regional/national medium-term model. The federal sickness and disability fund (RIZIV-INAMI) collaborates on modelling health care expenditure. The EC supports the development of a sectoral international model. A federal research fund (BELSPO) and the Federal Public Service Social Security support modelling migrations in the dynamic microsimulation model, which is managed using the LIAM2 software developed at the FPB with the support of Luxembourg partners (IGSS - the Ministry of Social Security - and CEPS/INSTEAD).

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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 with a new version of the model. As regional governments have the competence on major issues affecting transport demand, a correct modelling of transport demand requires a development of the regional dimension.

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Recent history of major economic policy measures

March 2013

The federal Parliament approved two bills on product market competition. The one reforms competition policy, the other strengthens price monitoring. The institutional structure of the competition authority will be simplified. The three presently separate bodies (for investigation, prosecution, and decision, respectively) will be unified into the Belgian Competition Authority, while securing the independence of the three functions. The reform will improve transparency, and shorten and simplify the procedures, while maintaining the current rights of defence. The Price Observatory - established in 2009 - receives the power to notify the new competition authority when it has detected extraordinary price and/or margin changes or other structural market malfunctioning. The competition authority may then take measures to correct the situation. Both institutions will receive more funding. The approved bills will be inserted into the Code of Economic Law as Books IV and V.

In the domain of pensions, two measures were taken. The pension bonus is reformed to take into account the stricter conditions of access to early retirement that came into effect with the 2011 pension reform. The reform will also aim to make the system more incentivising (progressive bonus). Furthermore, the pension bonus will no longer be transferred to the surviving partner. From 1 April 2013, the minimum pension (household rate) will increase for the self-employed scheme (under the government agreement which provides for the gradual alignment of the minimum pensions of self-employed workers to those of wage earners).

February 2013

The government endorsed proposals from the social partners concerning wages. The EUR 400 million budget made available annually (EUR 300 million in 2013) for increasing social security contributions (SSC) cuts will be used mainly to increase the across-the-board EUR 400 employers' SSC cut per full-time equivalent employee in the for-profit sector (to about EUR 440) and to increase employees' SSC cuts marginally. The present 6% discount on the minimum gross wage for employees aged less than 21 relative to the minimum gross wage for 21-year olds will be phased out to 4% in 2013, 2% in 2014, and 0% in 2015. One-off performance-related wage bonuses, linked to performance targets set by firms, will be made largely exempt from personal income taxes and SSCs.

The European authorities have adopted a new set of rules (the so-called "Two-Pack" legislation), in order to further strengthen the surveillance mechanisms in the euro area. These rules add to the "Six-Pack" adopted in September 2011 and the Fiscal Compact of January 2012. The "Two-Pack" consists, first, of a Regulation on the monitoring of draft budgetary plans that complements the preventive arm of the Stability and Growth Package (SGP). Under this regulation, inter alia, euro-area Member States shall submit their draft budgetary plan for the following year to the Commission and the Eurogroup before 15 October. If the Commission assesses that the draft budgetary plan shows serious non-compliance with the SGP, the Commission can require a revised draft budgetary plan. The second Regulation enhances the surveillance of euro-area Member States experiencing or threatened with serious difficulties with respect to their financial stability.

For the calculation of pensions after 1 January 2013, some assimilated (inactivity) periods will no longer be counted as based on the fictional salary but will instead be based on the minimum annual allowance.

January 2013

From 1 January 2013, for pensioners aged 65 or more years old who have had a career of 42 years or more, the professional income ceiling is removed. In other cases (less than 65 years, less than 42 years of career), the professional income ceiling is indexed and the anti-cumulation rules are softened.

New criteria for price indexation of gas and electricity were developed. From now on, prices may only change in function of quotations on the Central West-European markets. They should be based on transparent, objective, and verifiable information. The Federal levy on electricity was reduced by 23% and that on gas by 26%. Meanwhile, consumers of sustainable energy lose their discounts on the Federal levy.

The federal government decided to reorganise the railway incumbent, NMBS/SNCB Group. The holding will be dismantled. The operation of all stations and the information services to passengers will be assigned to the train operating company, NMBS/SNCB. The task of the grid operator, Infrabel, will be limited to network maintenance. All staff will be assigned to a new company, named HR-Rail, in which NMBS/SNCB, Infrabel, and the Belgian State are shareholders.

December 2012

The Belgian air transport industry will benefit from a reduction in fiscal pressure of EUR 20 million per year. The larger part of this amount will come from reducing employers' social contributions. This should create a more level playing field when competing against foreign budget carriers. The reductions should come to an end in 2020, when a level playing field will be imposed by the EU. A further step in creating a more level playing field is the removal of fiscal support for Brussels-South Charleroi Airport. It may lose (part of) the Walloon regional subsidies and its exemption from paying for Belgocontrol.

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