Report 2015

Economic and financial developments

National Bank OF BELGIUM

Eurosystem

Global economy and euro area

1. Global economy and euro area

1.1 Headwinds slow down global economy in 2015

Worldwide economic activity, which had had difficulty getting back on a satisfactory growth trajectory following the financial crisis and its subsequent recession, once again faced increased uncertainty and economic headwinds in 2015. It lost steam and was particularly affected by the slowdown in China, which also depressed economic activity in other emerging countries and world trade. By the summer, uncertainty surged over concerns that a less favourable environment and a reversal in the still very beneficial financial conditions would open up major vulnerabilities in some economies. Geopolitical

TABLE 1 GDP OF THE MAIN ECONOMIES

(percentage changes in volume compared with previous year, unless otherwise stated)

				p.m. Contribution to global GDP growth	*p.m. Share of global GDP*[1]	
	2013	2014	2015	*2015*	*2009*	*2014*
Advanced countries	1.1	1.8	1.9	*0.8*	*47.3*	*42.9*
of which:						
United States	1.5	2.4	2.5	*0.4*	*17.4*	*15.9*
Japan	1.6	0.0	0.6	*0.0*	*4.9*	*4.4*
Euro area	–0.3	0.9	1.6	*0.2*	*15.1*	*12.2*
United Kingdom	2.2	2.9	2.5	*0.1*	*2.6*	*2.4*
Emerging countries	5.0	4.6	4.0	*2.3*	*52.7*	*57.1*
of which:						
Emerging Asia	7.0	6.8	6.6	*2.0*	*25.0*	*29.9*
of which:						
China	7.7	7.3	6.9	*1.1*	*13.3*	*16.6*
Central and Eastern Europe	2.9	2.8	3.4	*0.1*	*3.3*	*3.3*
Russia	1.3	0.6	–3.7	*–0.1*	*3.5*	*3.3*
Latin America	2.9	1.3	–0.4	*0.0*	*8.7*	*8.6*
World	3.3	3.4	3.1	*3.1*	*100.0*	*100.0*
p.m. World trade[2]	*3.2*	*3.4*	*2.6*			

Sources: EC, IMF.
(1) According to IMF definitions and on the basis of purchasing power parities.
(2) Average of exports and imports of goods and services.

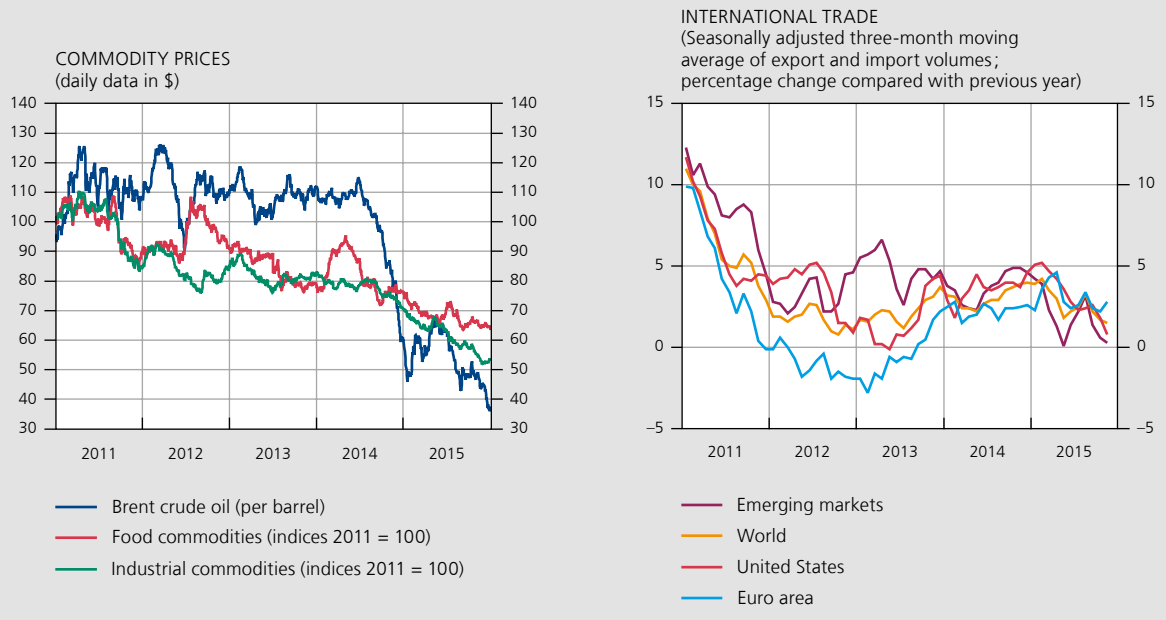
tensions served to heighten the sombre mood and started to eat into the overall economic climate. However, most of the advanced countries were able to shrug this off to a certain extent and staged further growth on the back of low oil prices and accommodating monetary policies. The upturn remained fairly subdued in the euro area and Japan, but the United States and the United Kingdom again recorded robust recoveries during the year under review.

Slowing growth in the emerging economies

The Chinese economy slowed further in 2015, but its growth remains fairly robust: economic activity was up 6.9 %, though well below the 7.3 % increase of the previous year and the peak of 14.2 % in 2007. Based on GDP and expressed in purchasing power parities, China became the world's biggest economy in 2014. To a significant extent, its growth is underpinned by rising consumption on the back of growing real incomes. Investment, by contrast, was severely squeezed, particularly in heavy industry and the property sector.

China's gradual slowdown is largely attributable to the country's transition from an investment- and export-driven economy to a growth model based on consumption and services. The Chinese authorities face a delicate balancing act, as they will need to prevent growth from falling too abruptly while they also have to stop vulnerabilities in a number of industries – e.g. the property and financial sectors – from getting worse. In order to limit the drawbacks of the country's economic rebalancing, the Chinese authorities took a number of fresh fine-tuning measures in 2015, raising infrastructure spending, for instance, and gradually loosening monetary policy. According to OECD calculations, this fiscal stimulus came to about 1.5 % of GDP in 2015. Also, the Chinese government reversed a 2014 move to stop local governments from using off-budget financing vehicles. In the monetary and financial arena, reference rates on one-year loans and deposits have been cut six times since November 2014 and are now at 4.35 % and 1.5 %, compared with 6 % and 3 % prior to this new easing cycle. As the year progressed, credit institutions saw the requirement for reserves to be held with the People's Bank of China lowered in five stages, from 19.5 % to 17 %. However, the potentially expansive effect of this should not be overestimated in view of the recent reduction in foreign currency reserves, which pushed down the Chinese banking industry's excess liquidity. The People's Bank of China changed its exchange rate policy in August and December 2015, sparking a depreciation of the renminbi. Lastly, China took significant further steps in liberalising its interest rates: having abolished the threshold rate on loans in 2013, it now moved to scrap the ceiling on deposit rates.

CHART 1 EMERGING MARKETS SLOWDOWN DEPRESSES COMMODITY PRICES AND INTERNATIONAL TRADE



Sources: CPB, Thomson Reuters Datastream.

Exports contributed negatively to Chinese growth, due to subdued foreign demand combined with the previous appreciation of the renminbi. Import growth also fell sharply. That sizeable slowdown can be attributed to the decline in exports – whose import intensity is very steep – and to the rebalancing of the Chinese economy towards greater consumption and services, which tend to be less trade-intensive than investment and manufacturing. The impact was notable mainly in commodity-exporting countries and other countries in Asia, as Chinese foreign trade is very regionally oriented. India bucked the trend and recorded growth of 7.3 %, chiefly on the back of private consumption and structural measures benefiting investment. All in all, Asia, excluding Japan, remained the most dynamic emerging region with growth at 6.6 %.

Weaker economic activity and the efforts of China – one of the world's biggest consumers of commodities – to cut the energy intensity of its production and consumption have caused a sharp fall in demand for commodities, and commodity prices continued their downward trend in 2015. At the beginning of the year, oil prices temporarily revived from their steep falls since mid-2014, but then gradually came down again to dip below $ 40 a barrel by the end of the year – from some $ 110 a barrel mid-2014. This major terms-of-trade shock severely hit economic activity in commodity-exporting countries. In countries where virtually all oil export revenue accrues to the State – in the Middle East, for instance – budgets have been significantly affected. In Latin America, economic activity contracted by 0.4 % in 2015, following subdued growth at 1.3 % in 2014. Most of this was down to deteriorating conditions in Brazil, which recorded negative growth of 3.8 %. Aside from the effect of steeply lower commodity prices, country-specific factors were also major detractors of economic activity: political uncertainty, precarious budget conditions and the requisite fiscal consolidation. In addition, inflation in Brazil surged to over 10 % by the end of 2015. In Russia, economic activity was similarly depressed by falling commodity prices. This, coupled with persistent geopolitical tensions over the conflict with Ukraine and resultant international sanctions, has pushed the country into a deep recession, as is evident from its negative growth of –3.7 %. Significant spillover effects made a big dent in economic activity in most countries of the Commonwealth of Independent States (CIS). The repercussions of Russia's recession also extended to the Central and Eastern European countries, although they could benefit from lower oil prices and the gradual recovery of the euro area.

The slowdown in the emerging economies had a major impact on world trade growth in 2015. Whereas world trade's fragile recovery post financial crisis primarily reflected subdued demand in the euro area, this recent weakness is mostly down to contracting import volumes in the emerging countries, chiefly in China, Brazil and Russia. In fact, in some months of 2015, import volumes in various emerging regions actually fell. Structural factors also continue to matter: global value chains, for instance, have not expanded any further since the crisis and do not therefore support world trade growth the way they used to. As a result, trade elasticity, expressed as world trade growth relative to global GDP growth, has plunged in the aftermath of the crisis.

Lastly, greater concern over economic conditions in the emerging economies combined with the imminent normalisation of monetary policy in the United States sharply reduced capital inflows into many of these countries, tightening funding conditions. Hardest hit were countries where steep credit growth had caused internal and external imbalances, such as Brazil, Turkey and South Africa. Many emerging countries had taken advantage of the highly accommodating post-crisis monetary policy in most advanced countries and put the ample liquidity to work in propping up their economies. Corporate debt ratios had gone up sharply and a large proportion of these debts are typically denominated in US dollars and other foreign currencies.

Advanced economies have held up well[1]

While emerging countries were seeing their economic growth slide, the US economy kept expanding and continued to serve as a key engine for global economic growth in 2015. Following a weak first quarter due to temporary factors, US domestic demand was up strongly in the rest of the year. Private consumption, which accounts for close to 70 % of US GDP, was driven by robust real income growth, a solid labour market and increased net household wealth. The concomitant recovery in the US housing market boosted investment in residential properties, but other capital spending failed to fully benefit from the still favourable financing conditions. Meanwhile, the appreciation of the US dollar caused a loss in price competitiveness in manufacturing, and this, coupled with stronger domestic demand, negatively impacted the contribution to growth from net exports.

The labour market kept up its recovery of the past few years and the unemployment rate reached levels that are generally considered – by the Federal Open Market Committee (FOMC) too – compatible with full

(1) The main macroeconomic variables for the main economies are shown in tables 1 and 2 of the Statistical Annex.

employment. That said, other labour market indicators continued to point up persistent, if declining, slack in the labour market. Broader unemployment measures – which take into account discouraged workers or involuntary part-timers – and low employment and participation rates still suggest underused labour potential. As a result, compensation for the labour factor continues to merely inch up and combined with lower energy prices and an appreciating currency to ward off any significant upward pressures on consumer prices, causing inflation expectations to be revised downwards.

By the end of 2015, the FOMC was expecting a further increase in inflation in the medium term to 2 % – the level it feels reflects long-term price stability – as temporary falls in energy and import prices should peter out and as the labour market continues to display positive dynamics. And so, at its meeting of 15-16 December, it felt the time was right to raise the corridor for the Fed funds rate by 25 basis points to [0.25 % ; 0.50 %]. In the weeks running up to the FOMC meeting, financial markets had fully anticipated this rate rise, the first since December 2008, and no extra volatility was recorded when it came. The FOMC noted that it expects policy rates to go up only gradually in the calendar year ahead, depending on inflation dynamics. Fiscal policies, by contrast, were rather neutral in 2015 : the structural primary balance improved from –1.1 % to –1.0 % of potential GDP while general government debt stalled at its historic high of 111 % of GDP.

Unlike the United States, Japan faced a stubbornly lacklustre economy in 2015. A GDP fall in the second quarter was followed by only a modest recovery in the third, and GDP ended the year only 0.6 % higher in volume terms. Despite an exceedingly tight labour market – with an unemployment rate at a historic low of 3.4 % – and wage increases (albeit subdued), private consumption lacked lustre, as households quickly built up their savings ratios. Business investment spending also disappointed, despite a cut in corporate taxes, rising corporate earnings and corporations' unprecedentedly high cash positions. In addition, the Japanese yen's depreciation failed to fully offset weaker demand from emerging Asia, particularly China.

The Bank of Japan continued to pursue extremely expansive monetary policies : after it decided to expand its monetary base to 80 trillion yen in October 2014, the Bank of Japan's balance sheet grew to around 65 % of GDP. Inflation expectations were up slightly as a result, but headline and core inflation actually slowed down to around 1 %. In terms of public finances, the reduction of the government deficit to 6.7 % of GDP failed to stem growing general government debt, currently at nearly 230 % of GDP. To keep public finances sustainable, Japan needs to achieve higher potential growth, as envisaged in the third Abenomics pillar. Additional structural reforms were announced, aiming among other things to further raise the female employment rate.

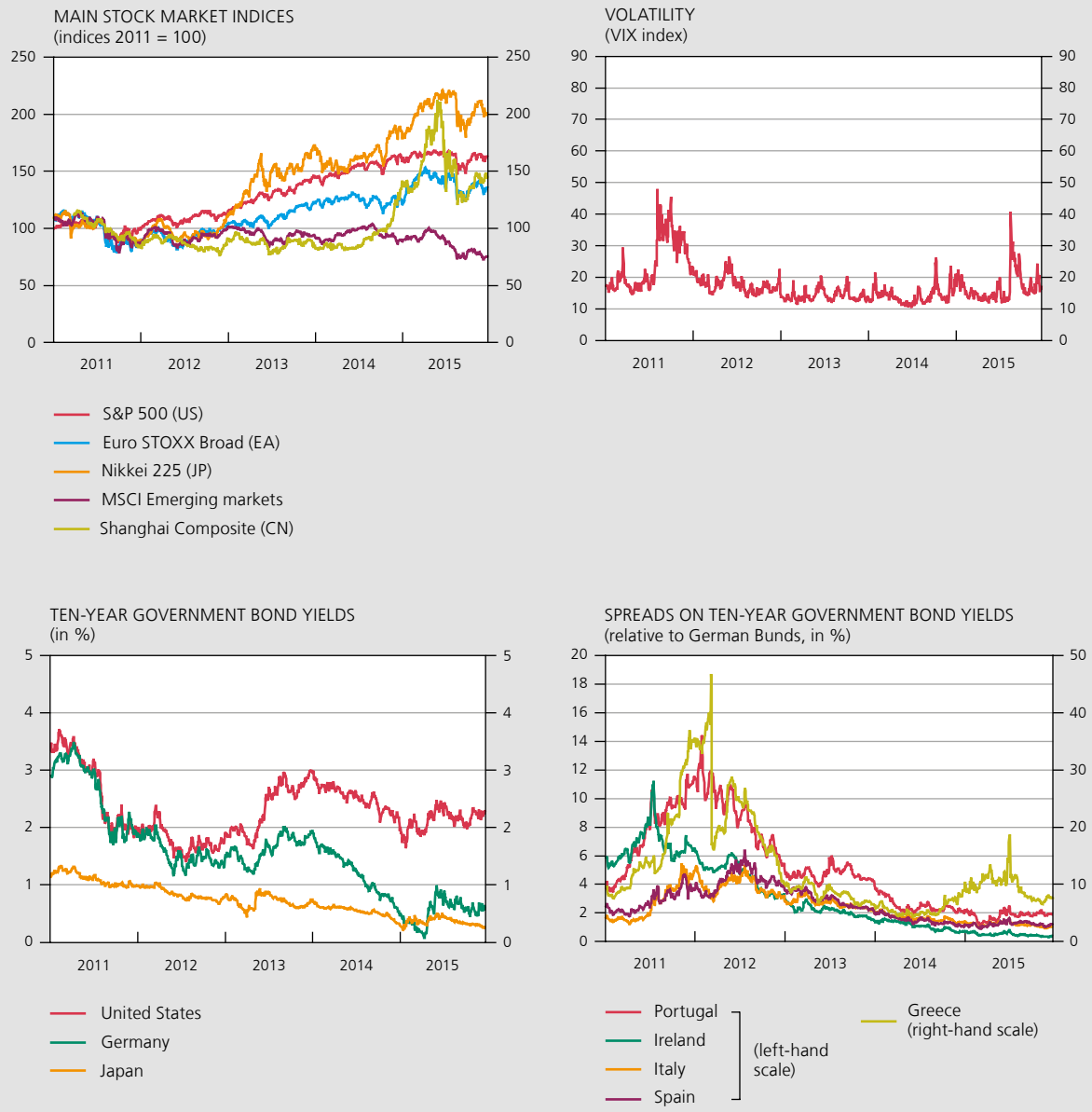
Financial market conditions relatively favourable despite greater uncertainty

On the whole, financial conditions remained relatively favourable, apart from a few pockets of increased volatility and less robust conditions in specific segments of the market. Equity markets largely forged ahead on the upward trajectory they embarked on in 2013, and notched up fresh record highs. Government bond yields stayed low, with any variations chiefly down to differences in monetary policies between the various economic regions and to market perceptions of these regions being in different phases of the economic cycle. In October 2014, the US Federal Reserve ended its asset purchase programme, as the US labour market and economy began to show more general signs of recovery. The ECB, by contrast, announced an expansion of its asset purchase programme on 22 January 2015 against a backdrop of weaker-than-expected inflation trends in the euro area. Whereas government bond yields in the United States were on an uptrend in the first months of the year, those in the euro area narrowed further and even hit a historic low in April. Japan, which also pursued a very accommodating monetary policy, likewise recorded low yields. Even government bond yields in the so-called peripheral countries of the euro area were down at the beginning of the year. In fact, with investors searching for yield, this fall was even more pronounced than for higher-rated government bonds, causing spreads relative to German Bunds to narrow. Greek government bond yields were the only ones to increase in the first half of the year, due to the election of the new Greek government and the subsequent impasse in negotiations over Greece's financial aid programme and economic adjustments, as well as growing doubt as to whether the Greeks would continue to have access to funding.

Volatility in the financial markets intensified over the summer months : after a lengthy period of downward movement, euro area government bond yields were back up in the second quarter. This was due to a confluence of factors, some of them merely technical, reflecting growing investor doubts about the accuracy of government bond valuations after a long period of declining yields. US Treasury yields continued to rise in the first six months, while the upward trend in European government bond yields was accompanied by falling European equity prices, which later rebounded to a certain degree. Growing

CHART 2 INCREASED FINANCIAL MARKET VOLATILITY IN THE SUMMER MONTHS OF 2015

(daily data)



Source: Thomson Reuters Datastream.

concerns over the state of their economies also triggered a fall in share prices of various emerging countries in the second quarter; these did not stabilise somewhat until after the summer.

Spreads between government bond yields in the euro area's peripheral countries and German Bunds were also starting to edge up in this period in the wake of increased uncertainty over the situation in Greece. These concerns came to the boil at the end of June, when the country failed to repay the IMF by the second aid programme's deadline and negotiations about future financing conditions appeared stuck. Risk premiums on Greek government bonds shot up to nearly 20 %, only to come back down again in early July, when agreement on a new aid programme was clearly in the offing. While German government bond yields inched down as investors fled to safe havens, the impact on risk premiums on other high-yield government bonds in the euro area remained limited and temporary. This was also the case with any contagion to other financial assets in the

advanced countries, as was clear from share prices, which barely budged.

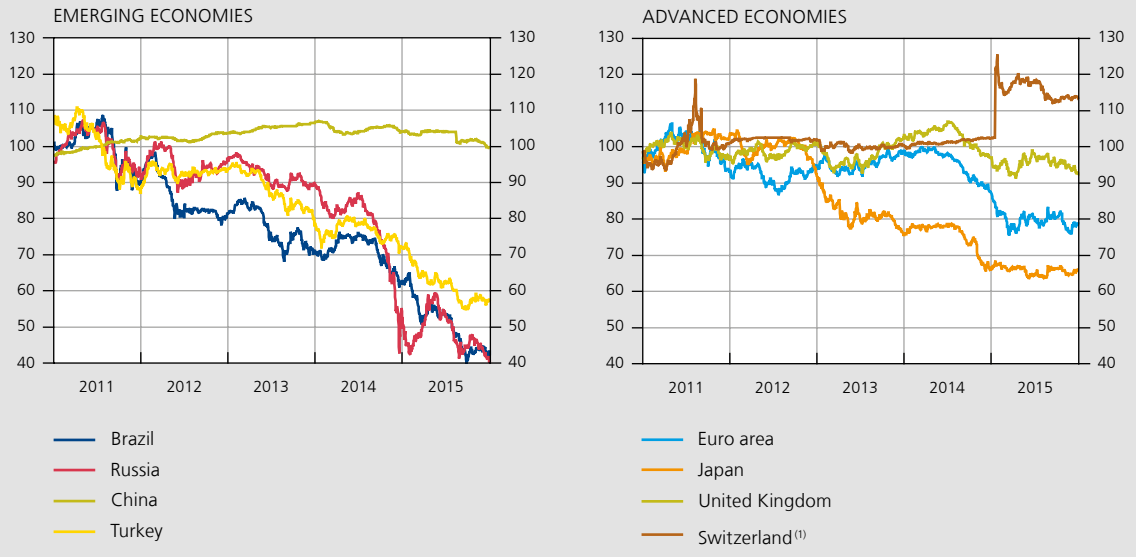
Turmoil in the financial markets did not really reach a peak until later in the summer, when developments in China took centre stage. Between 12 June and 8 July, the Chinese stock market lost over 30 % of its value, tripped up by an announcement by the Chinese supervisory authorities about a series of new measures designed to curb risky investment behaviour by the country's shadow banks, which had contributed to the 150 % surge in Chinese equities since the middle of 2014. The initial impact on global financial markets was subdued, but this changed suddenly when on 11 August the People's Bank of China announced it was to adjust its exchange rate policy. Although this was described as a transition to a renminbi exchange rate more in keeping with its actual value in the markets and although the currency's subsequent depreciation was quite modest, markets considered it a wake-up call signifying that the Chinese economy would slow down further. Panic tore through global financial markets, equity prices plunged, volatility shot up, commodity prices fell and the currencies of a range of emerging countries took a massive hit. Meanwhile, the flight to safe-haven investments pushed down yields on government bonds in the advanced countries. By October, calm was gradually returning, but market volatility spiked again and equity prices took another tumble when the ECB only partially met market expectations regarding additional quantitative easing measures.

The renminbi actually only depreciated by 3 % relative to the US dollar in the first days after the policy change was announced, after which it stabilised at some 2.5 % below its pre-turbulence level following a series of interventions by China's central bank. The turmoil nevertheless also affected the exchange rates of other emerging countries, notably in Asia. In fact, various emerging countries' currencies had been under persistent pressure in the wake of declining capital inflows related to deteriorating growth expectations and the uncertainty over the imminent normalisation of US monetary policy. More specifically, the ongoing fall in commodity prices also depressed the exchange rates of commodity-exporting countries, such as Russia and Brazil. Both the rouble and the real lost about half their value between mid-2014 – when the downturn in commodity prices accelerated – and the end of 2015.

In the advanced countries, currency market developments reflected diverging monetary policies in the different economic regions. The fall in the value of the euro relative to the US dollar – which had started mid-2014 on expectations of a further easing of the ECB's monetary policies – continued into 2015. The euro was not the only currency affected; currencies linked to the euro experienced upward pressure, the

CHART 3 CURRENCY DEPRECIATION IN THE MOST VULNERABLE ECONOMIES

(exchange rates relative to the US dollar, unless otherwise stated; index 2011=100)



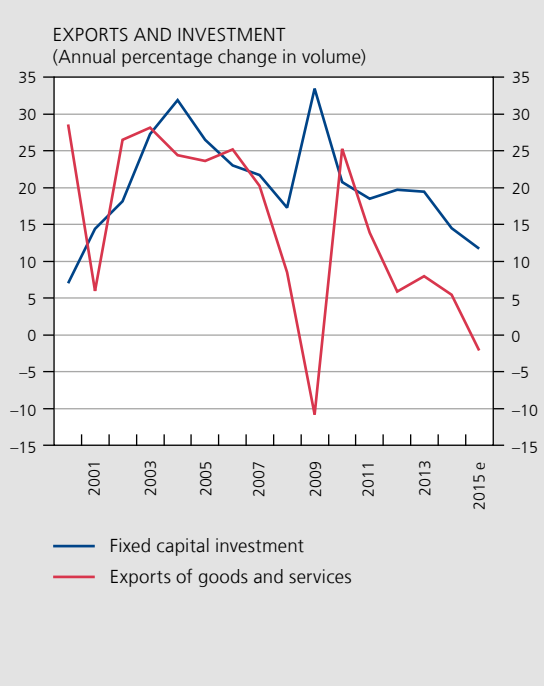
Source: Thomson Reuters Datastream.
(1) Relative to the euro.

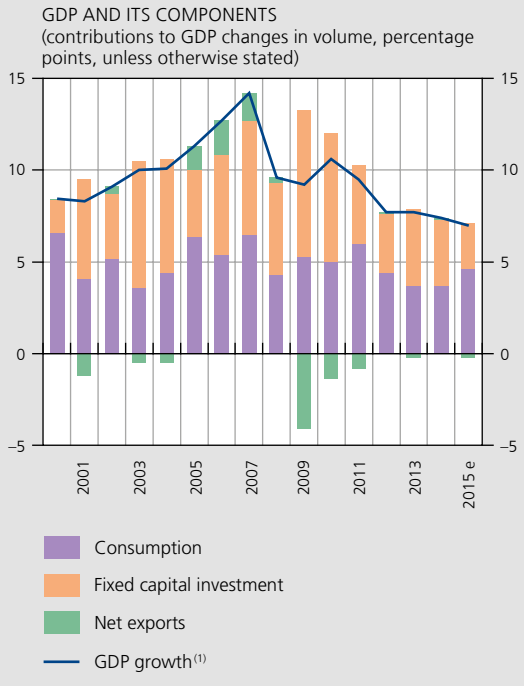
Danish krone and Swiss franc being a case in point. In fact, pressure on the Swiss franc increased to such an extent that the Swiss central bank decided to stop supporting the minimum exchange rate of 1.20 CHF/EUR at the beginning of 2015. The financial markets reacted strongly and the Swiss franc initially surged by over 20 % against the euro, after which it gradually lost ground again. Denmark's central bank kept the krone's fluctuations within the pre-determined range vis-à-vis the euro through repeated interventions. The euro edged back up relative to the dollar during the course of the year, as it increasingly looked as if the United States would hold off normalising monetary policy. By the end of the year, it had edged back down in the wake of an expected further expansion of the ECB's asset purchase programme and the growing conviction that the Federal Reserve would finally start raising the Fed funds rate in December. Sterling and the Japanese yen staged similar movements to the euro: both depreciated vis-à-vis the US dollar in the second half of 2014 and at the start of 2015, then saw their values inch up in the course of the year before moving back down by the end.

Box 1 – Rebalancing of the Chinese economy and its consequences for the global economy

A series of events in China sparked turmoil in the financial markets in the course of 2015: share prices in the Chinese equity markets lost a great deal of ground in June/July and the renminbi depreciated following the adjustment of the country's exchange rate policy in mid-August. Weak import and export figures also raised concerns over the strength of the Chinese growth engine. However, the Chinese economy's slowdown is not new and has in fact been going on for a number of years. In 2007, growth still came in as high as 14.2 % whereas it barely reached 7 % by 2015. This box investigates the factors behind this slowing growth and its repercussions for the global economy.

CHINESE ECONOMIC SLOWDOWN

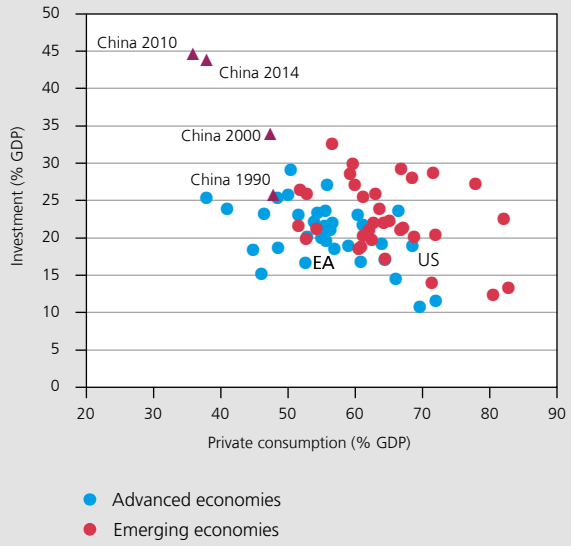




Sources: CEIC, OECD.
(1) Percentage change on the same quarter of the previous year.

Prior to the onset of the global financial crisis, China pursued an export-driven growth model. Admittedly, Chinese export expansion was phenomenal in these years, but net exports were never the biggest contributor to the country's growth, as China initially specialised in assembly operations. What is more, its export growth was underpinned by massive investment in expanding industrial production capacity and its underlying infrastructure, which itself required major imports of capital goods and commodities. Traditionally, capital spending and exports have been the key drivers of China's growth, but over the years this resulted in growing imbalances in the structure of its economy and spending patterns. The constraints of its growth strategy were even more clearly flagged by indicators such as stalling market shares in global trade – albeit at high levels – for specific goods and ever lower returns on investment. In the face of growing doubts, China initially stuck to its investment-based strategy and in fact stepped it up by launching a large-scale fiscal and monetary stimulus programme in the aftermath of the global financial crisis, to avoid too strong a slowdown caused by collapsing export markets. As a result, its high growth continued into 2009 and 2010, running at 10 %. Investment as a percentage of GDP rose from 25 % in 1990 to 45 % in 2010 with the share of private consumption falling to 38 %, making for a pretty exceptional composition of spending compared with other emerging and developed countries. New vulnerabilities emerged, such as a bubble in (some parts of) the residential property market, excess capacity in some heavy industries, a rapid increase in corporate debt ratios and local government financing vehicles, uncontrolled expansion of the country's shadow banks and a growing share of less profitable investment – all adding to doubts about the viability of the existing growth model. The Chinese government and international institutions started to advocate a transition to more moderate but also more balanced growth, with a greater contribution from consumption and services. The stimulus programme was scaled back and economic growth has gradually slowed since 2011.

SPENDING IMBALANCES IN CHINA (1)

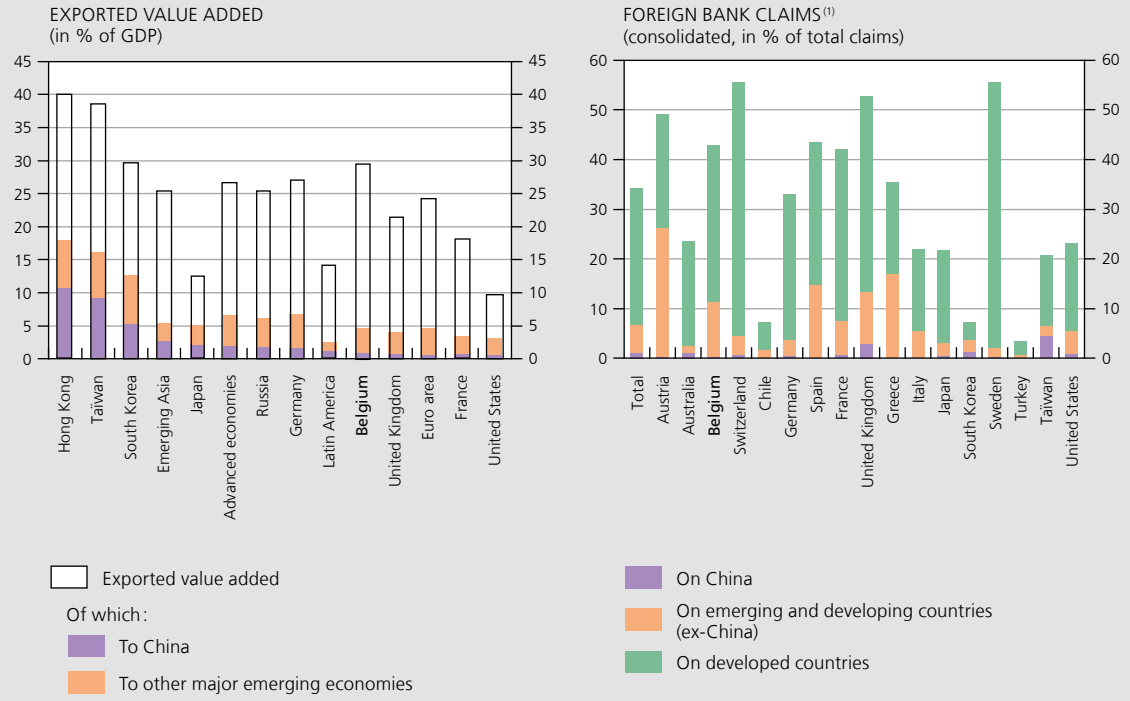


Source : World Bank.
(1) Figures refer to 2014 unless otherwise stated.

Impact on the euro area and Belgium

A complex picture emerges for the potential effects of the Chinese slowdown on the rest of the world, and more specifically on the euro area and Belgium. In addition to the immediate impact through trade and financial relations with China, developments in China have indirect repercussions via other countries, some of which are heavily exposed to China.

TRADE AND FINANCIAL EXPOSURE TO CHINA



Sources : BIS, OECD.
(1) Banks with their head offices in countries featuring in the BIS database.

The above chart captures the degree of openness of a country or region as measured by the exported value added as a percentage of GDP. These are relevant statistics as they factor in re-exports and imported inputs (1) and as they reflect the final destination of the exported value added, including value exported via other countries. This is meaningful information for an impact study given the development of global production chains in recent decades and China's central role in these. The chart only shows the proportion of the value added that ends up in China and the most important other emerging economies. As expected, emerging Asia relies the most heavily on China and other emerging economies. Exports to China, as expressed in value added, account for around 1 % of Belgium's GDP, as for the the euro area as a whole. Around 4 % of Belgian added value ends up in the other major emerging countries, a relatively high exposure – nearly as high as Germany's – that is explained by the Belgian

(1) See, among others, Duprez C. (2014), "Value creation in exports", NBB, *Economic Review*, September.

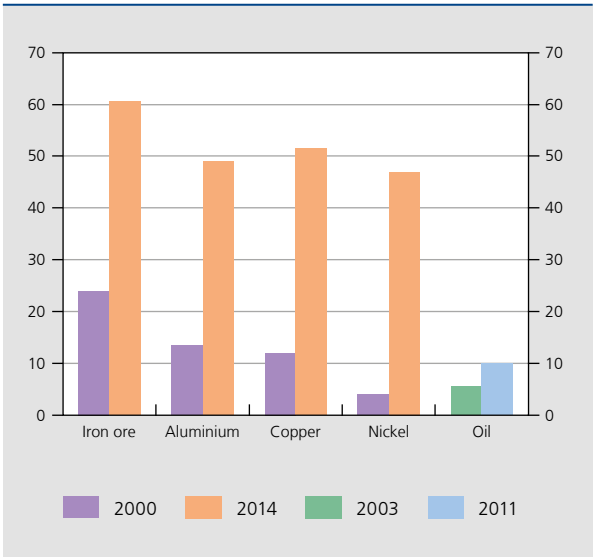
economy's high degree of openness on top of the fact that a key proportion of Belgian exported value added is incorporated in the exports of Belgium's neighbouring countries (mainly Germany) to China and other major emerging economies.

The recent turmoil in the Chinese financial markets and the contagion spreading to global financial markets have sparked concerns over financial exposures, but China's immediate financial linkages with the rest of the world, and with Europe in particular, remain limited. China boasts a major savings surplus and does not really need foreign funding. What is more, it has very strict controls in place governing international financial transactions, investment and banking activities. Direct financial exposure to China can be measured by foreign bank claims on Chinese residents. According to this measure, claims on China are still negligible for all countries, with the exception of the United Kingdom and Taiwan. More generally, the exposures of most developed countries' banks to the group of emerging economies and developing countries not including China is below 10 % of total claims. The transmission of shocks in China to the global financial markets thus occurs mainly through confidence effects.

China's slowdown is also percolating through by means of a third channel : commodity prices. Its enormous appetite for investment has propelled China to the world's number one consumer of commodities such as copper, nickel, aluminium and iron ore. In the immediate aftermath of the global financial crisis, the prices of these commodities stayed at high levels as demand was still shored up by China's massive stimulus programme. With the pace of investment decelerating in China, the metals supercycle came to an end, and producers of these commodities were hit by a combination of falling exports to China and/or lower revenues from commodities and/or depreciating currencies. China's impact on oil prices is less pronounced as its share in final consumption of oil is more modest (11 %) and as abundant supply is a major factor in today's oil market.

CHINESE SHARE OF COMMODITY CONSUMPTION

(in % of global consumption)



Source : UN Comtrade.

Recent OECD[1] calculations suggest that a drop in the growth of Chinese demand by 2 percentage points compared with the baseline scenario for 2016 and 2017 would slow growth in the OECD countries by between 0.1 and 0.2 percentage point in both years, based on the effects of trade only. When its simulations also factor in negative financial shocks, such as a worldwide fall in stock markets and an increase in a range of risk premiums, the OECD puts the growth impact at 0.6 percentage point in 2016 and 0.8 percentage point in 2017 for the euro area, with Germany having a high exposure. The figures for Belgium may be posited to be roughly the same as for Germany. Japan would be hit harder (–0.8 in 2016 and –1 in 2017), as would India (–0.6 in 2016 and –1.2 in 2017) and Russia (–0.7 in 2016 and –1.3 in 2017). If a fall in commodity prices is also taken on board, the impact of the shock would be lessened for both the euro area and particularly for Japan, as these economies are net importers of oil and metals. The reverse would be true for Russia : it would face an even steeper slowdown (–1.8 in 2016 and –1.9 in 2017). As ever, such simulations should be interpreted with due caution as the model structure, its underlying assumptions and the nature of simulated shocks may greatly influence their outcomes.

(1) See OECD (2015), Economic Outlook No. 98, November.

1.2 New monetary easing measures to combat weak inflation in the euro area

Moderate recovery into 2015

The euro area's moderate recovery in economic activity, which had started two years previously, continued into 2015. Average annualised GDP growth even improved slightly to 1.6 % from 0.9 % in 2014.

In the wake of the developments in 2014, the economy's gradual recovery was down to a combination of key factors. At the external end, the euro exchange rate remained relatively low most of the year, benefiting exports chiefly in the first six months of 2015. On top of that, oil prices expressed in euros sank to new lows after having been cut by half between the middle of 2014 and the start of 2015. In the euro area itself, the already highly favourable financing conditions got even slightly better for various economic sectors. Fiscal policies were neutral in 2015, implying an easing on previous years.

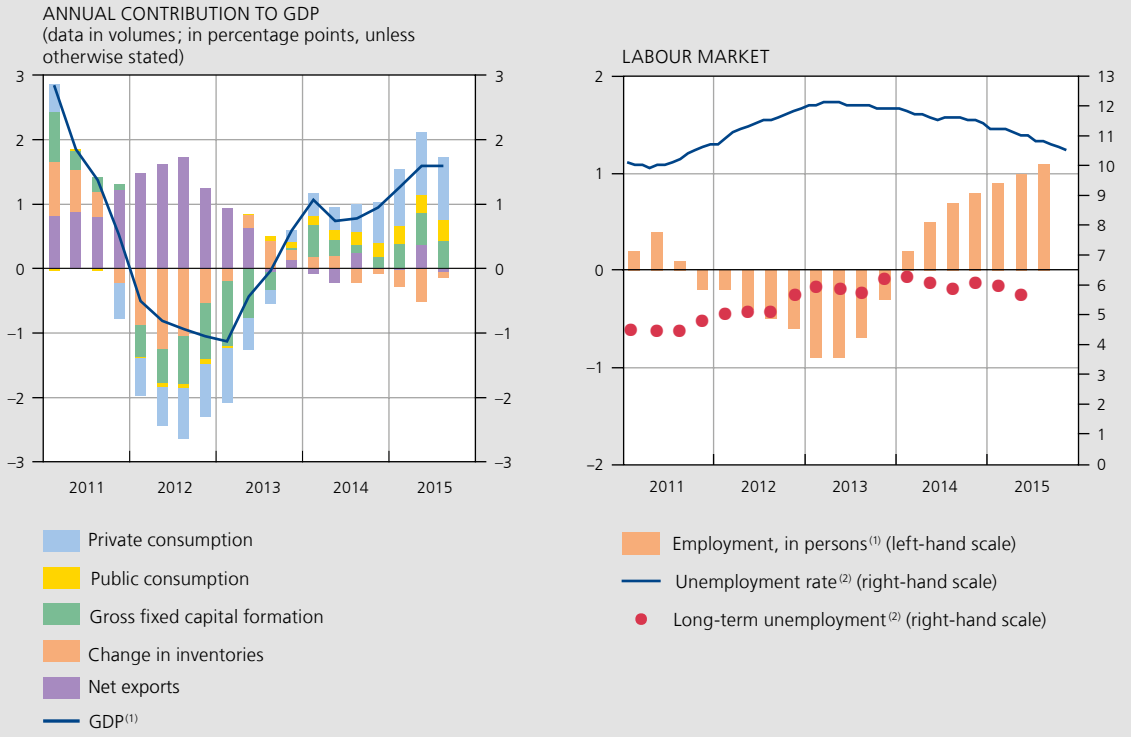
Various signs suggest that the ongoing recovery of economic activity in the euro area has gradually become broader-based. For one thing, it has now expanded to include nearly all Member States. In addition, it is rather more solidly underpinned by domestic demand, chiefly private consumption. Households have not just benefited from low oil prices, but have also seen a significant improvement in the labour market situation. The net job creation seen in 2014 continued into 2015 at a steady pace and supported the ongoing fall in the unemployment rate, which had started in the middle of 2013. Job creation was spurred on even further in a number of countries by efforts to adjust labour costs and reform labour markets. Lastly, bank lending dynamics to non-financial corporations and private individuals was beginning to rebound after a long period of decline, thanks to less weak demand and improved transmission of accommodating monetary policies in the various jurisdictions of the euro area.

On the whole, though, such improvement continued to be rather modest, both in light of the extent of supportive measures and of the achievements in other advanced economies, such as the United States and the United Kingdom. A range of factors continue to get in the way of the euro area economy returning to its production potential.

In 2015, the euro area's rate of unemployment, both long-term and total, remained high despite having come down. European firms have not made full use of their production capacities and corporate investment has likewise been less robust than might have been expected given the improved prospects for domestic demand, increased profitability and better financing conditions. A number of quite substantial adjustments notwithstanding, the great recession of 2008-2009 and the euro crisis of 2011-2012 are still casting a long shadow over the recovery, even if their impact today is more clearly demarcated and specific. In some Member States, investment in residential properties, which had notched up undue gains in the 2000s, is still bumping along the bottom, while in other countries, households or non-financial corporations are still deleveraging their debts.

Having muddled on and failed to take full advantage of supporting factors, and having seen such beneficial factors eroded over time, the euro area saw its economic climate take a turn for the worse over the summer – which

CHART 4 MODERATE GROWTH OF EURO AREA ECONOMIC ACTIVITY AGAINST A BACKDROP OF REVIVING LABOUR MARKET



Source: EC.
(1) Percentage changes on same quarter in the previous year.
(2) Ratio between the number of persons unemployed and the labour force, in %.

is when the effects of weaker foreign demand from China and other emerging economies was beginning to kick in more strongly, if not equally painfully in all countries. Meanwhile, steep declines in the currency values of some emerging economies wiped out the advantages European exporters had enjoyed from the earlier depreciation of the euro. Even ignoring the specific and generally limited impact of the summer's Greek crisis, investor sentiment has turned markedly more cautious and more volatile. Against the backdrop of geopolitical tensions, confidence was shaken on several occasions towards the end of the year by the ever more pressing refugee crisis and later also the terrorist threat in Europe.

Subdued inflation dynamics

As a result of the steep falls in commodity prices – and more specifically oil prices – and an insufficiently robust recovery to make use of production capacity slack, the downward inflation trend that had first beset the euro area in 2012 persisted. Inflation as measured by year-on-year changes in the harmonised index of consumer prices (HICP) declined to an average of 0 % in 2015, compared with 0.4 % in 2014.

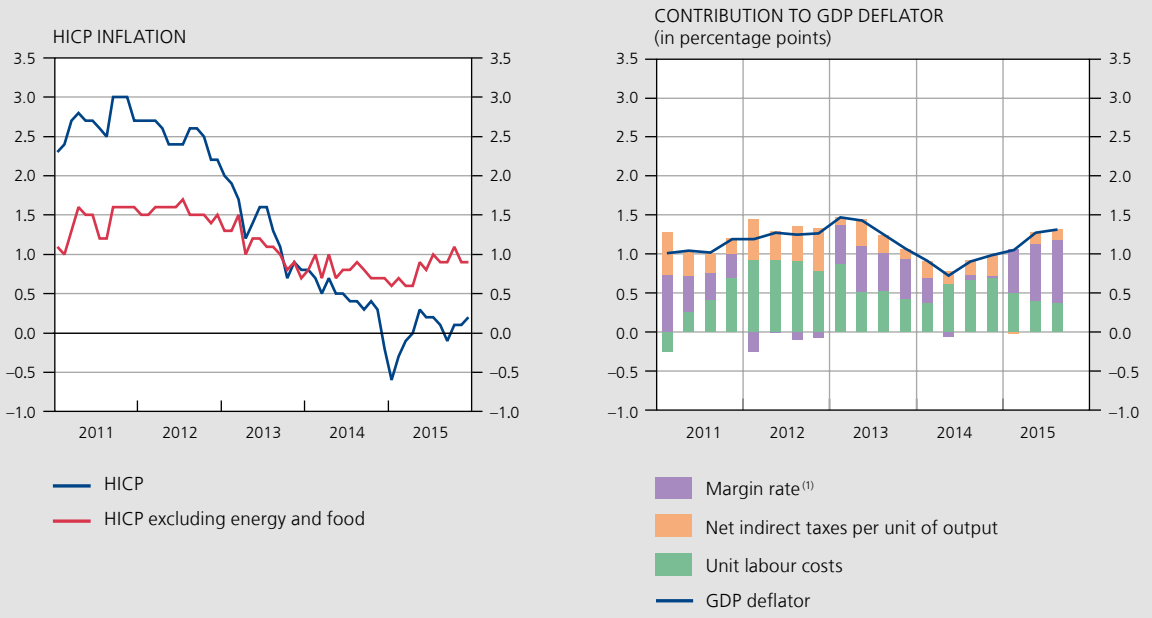
This fall temporarily accelerated towards the end of 2014, when the impact of lower oil prices hit hardest, causing general price levels in January 2015 to dip 0.6 % below the year-earlier figures. A minor upturn in the spring was followed by a steadily slowing inflation rate to barely above 0 % by the end of the year, clearly below the target set by the ECB Governing Council, i.e. an inflation percentage below but close to 2 % over the medium term.

Although the slump in commodity prices was a key contributor to downward price pressures, underlying inflation as measured by changes in the HICP excluding energy and food hovered within a range of 0.6 to 1.1 %. Much like in 2013 and 2014, then, underlying inflation also remained weak.

Domestically driven price pressures edged ahead in tandem with domestic demand, but remained subdued overall. While the rise in unit labour costs reversed from the end of 2014, profit margins contributed to the modest

CHART 5 INFLATION DOWN FURTHER IN EURO AREA AMIDST WEAK DOMESTIC PRICE PRESSURES

(changes on same period in previous year, unless otherwise stated)



Sources: ECB, EC.

(1) The margin rate is defined as the gross operating surplus per unit of output.

rise in domestic price pressures. As a result, the GDP deflator gathered some momentum in keeping with the upward trend from the second half of 2014 – albeit a still fragile recovery.

After a while, the persistent downward inflation trend in the euro area started to depress inflation expectations. Their decline began at the end of 2013, accelerating in mid-2014 and hitting historic lows at the beginning of 2015 over all horizons. That said, monetary action in the course of the year helped to stabilise developments, although by December both the financial markets and professional forecasters were still assuming that inflation would only very gradually return to levels in keeping with the definition of price stability.

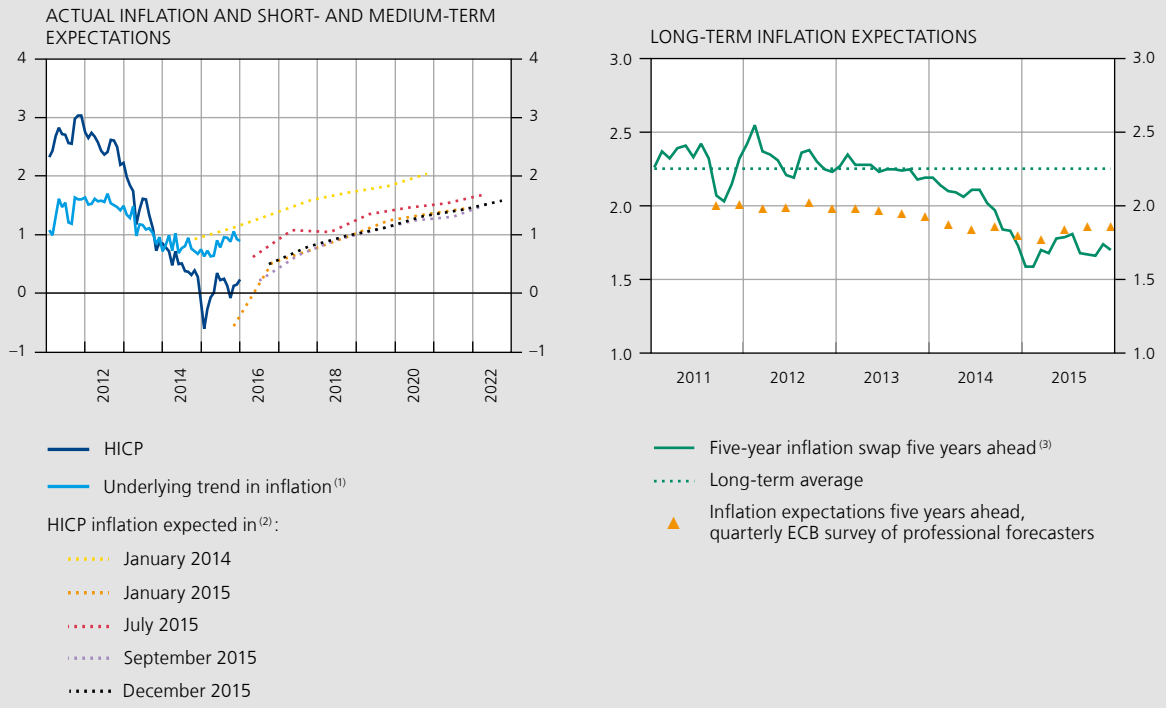
The deterioration in financial-data-based expectations for long-term inflation – i.e. inflation in periods when the impact of shocks currently affecting price trends should have worn off and, with the right policies, should again meet its target – also came to a halt. However, these expectations remained low and the risk of a potential de-anchoring of inflation expectations persisted. To an extent, these concerns were corroborated by survey-data-based inflation expectations for the longer term – these data are stripped of risk premiums and constitute a purer indicator of expectations. After falling back in 2014, the trend turned positive in 2015, but the data did linger below historical averages. Given the modest volatility of this data series, such a deviation – although limited – is cause for some concern. The breakdown of inflation expectations within the next five years (in 2015 these referred to 2020) also pointed to downward risks, as well as a persistently strong asymmetrical interpretation of the price stability definition by private forecasters – a large number of whom continued to predict inflation expectations well below 2 %.

Predominantly downside risks

The ECB's Governing Council takes the view that this fragile economic recovery in the euro area in general, coupled with weak inflation in particular, imply that macroeconomic prospects have not improved, contrary to what might have been expected. Thus, the December projection exercise revised the outlook for inflation in 2016 and 2017 downwards, to 1 % and 1.6 % respectively compared with 1.5 % and 1.8 % in the March projection. What is more, the outlook's downside risks have increased in spite of all the measures taken. These risks include a sharper-than-expected slowdown in the emerging economies due to uncertainty over the Chinese economy's

CHART 6 WEAK INFLATION DYNAMICS IN THE EURO AREA

(year-on-year percentage changes)



Sources: Bloomberg, ECB, Thomson Reuters Datastream.

(1) HICP excluding food and energy.

(2) Measured by the implicit forward rate for an inflation swap. Since consumer price indices are published after some delay, inflation swap contracts reflect the inflation expected in the month three months ahead of their due date. For instance, one-year contracts dated December 2015 reflect inflation rates expected in September in subsequent years.

(3) Implicit inflation rate derived from swaps covering the inflation risk in the euro area, for a period of five years beginning five years after the conclusion of the contract.

transition. In addition, the expected normalisation of US monetary policy could combine with geopolitical tensions to bring new distortions to the emerging markets, as well as to the global financial and commodity markets.

Given that these risks slow down the return of inflation to its mid-term target, they also increase the chances of both a lengthy period of low inflation and a de-anchoring of inflation expectations. Both come at a cost that can be traced back to different forms of downward nominal rigidities, implying that some nominal variables might find it hard – or even impossible – to decline. Nominal interest rates, for one – which equal the sum of expected inflation and real interest rates – stop at a threshold of around nil. As soon as policy rates hit that low, a central bank runs out of options to cut short-term real interest rates. If, for instance, inflation expectations were no longer securely anchored when that happens and were themselves pointing downwards, they would even bring upward pressure to bear on real interest rates, leading to unintended tightening of monetary policy. In addition, a surprise slowdown in inflation would add to the real burden of debt contracted earlier, as most debt contracts are agreed in nominal terms. This would hamper deleveraging and, all other things being equal, typically makes people keener to save, causing (further) reductions in demand. Low inflation figures for the euro area at large imply that Member States needing to bolster their relative competitiveness will also have to slash their wages and prices in absolute terms. For a variety of reasons, neither employers nor employees are keen to go down that route, and this slows down the adjustment process, increases unemployment and further erodes demand. To keep these risks from taking hold and becoming a reality, the Governing Council decided to carry on and step up its accommodating policies as the year progressed, with the continued aim of supporting the economic recovery in the euro area.

Monetary policy measures

End of 2014: instruments deployed prove inadequate

In view of persistently weak inflation prospects, a loss in growth momentum and poor credit developments in the euro area, the Eurosystem implemented a series of accommodating monetary policy measures as early as 2014. Their purpose was to further ease the monetary policy stance and to ensure its effective transmission to both the financial sector and the real economy.

In September 2014, the Governing Council started off by slashing key interest rates to unprecedentedly low levels: the rate on main refinancing operations (MROs) was reduced to 0.05 %, that on the marginal lending facility to 0.30 % and on the deposit facility to –0.20 %. This latter rate means that banks pay interest for holding cash reserves with the Eurosystem. With key rates lower, euro area banks saw their refinancing costs come down. September and December 2014 then saw the first two of eight targeted longer-term refinancing operations (TLTROs), which offer funding to banks at a fixed rate up until the end of September 2018 in return for providing fresh loans to corporations and households (residential mortgages excepted). Lastly, the Governing Council also decided to start buying assets issued by the private sector and on 20 October 2014 launched a third asset purchase programme of euro-denominated covered bonds issued by banks based in the euro area (CBPP3) and on 21 November an asset-backed securities purchase programme (ABSPP), whose underlying assets are receivables from the non-financial sector of the euro area. Both programmes were intended to provide liquidity to the money markets, make markets for these types of securities more dynamic, encourage issuance and support underlying loans.

However, early in 2015, the Governing Council determined that this monetary easing had been insufficient as inflation dynamics had worked out less well than expected. A series of positive supply shocks, i.e. the significant and persistent price falls for oil products, were put forward as the key reason. Although a positive supply shock does not in itself require a monetary policy response, if it proves persistent and if the economy has spare production capacity – which was the case – this may cause economic agents to revise down their inflation expectations, with the latter showing up in prices and wages through second-round effects and so eroding underlying inflation. When this happens, a series of initially positive supply shocks threatens to reverse into negative demand shocks that do require an appropriate policy response. The Governing Council considered the risk of this scenario materialising to be significant and saw its view confirmed in falling inflation expectations. A robust monetary policy response was needed to combat the risks of too long a period of low inflation. With hardly any room left to lower key rates, the Eurosystem's next logical step was to use the size and composition of the central bank balance sheet to establish an appropriate monetary policy stance. So instead of just controlling short-term interest rates, the Eurosystem now attempts to influence the full range of rates by purchasing assets. If these more favourable financing conditions percolate through to households and corporations, they will help to push inflation back up to 2 % through consumption and investment. Since the asset purchases show the central bank's determination to preserve price stability, they also encourage a firm anchoring – or rather, in current conditions, a recovery – of inflation expectations. This is an essential prerequisite for effective monetary policy as it allows the central bank to control real interest rates even when nominal rates have reached their lower bound.

2015: additional balance sheet measures

At its meeting on 22 January 2015, the ECB's Governing Council moved to announce an expanded asset purchase programme (APP), combining ongoing programmes such as the ABSPP and CBPP3 with an extensive public sector purchase programme (PSPP). Under the APP, the ECB aims to purchase a total € 60 billion of assets every month. In January, it envisaged the programme running until the end of September 2016, but in December, the programme was extended to the end of March 2017 in light of the downward revision of the price stability outlook. What is more, the Governing Council has always said that the APP would run at least until it noticed a sustainable change in the path of inflation in keeping with its price stability objective. In other words, assets may still be purchased after March 2017. The Governing Council has thus made it very clear that the APP is meant to help it achieve its mandate.

While the euro area economic recovery continued – albeit subdued – into 2015, inflation dynamics were persistently weak and the Governing Council found the downside risks for the inflation outlook still present by the end of the year. To ensure a swift return of inflation to 2 %, in December it adopted additional measures to make the asset purchase programme more efficient, on top of its extension. One of these was to reinvest principal repayments of securities purchased at maturity under the APP for as long as needed, extending the horizon of both the favourable liquidity conditions and the accommodating monetary policy stance. Another such measure was a cut in the deposit facility rate by 10 basis points to –0.30 % to encourage banks to actually use their surplus liquidity

instead of holding it with the Eurosystem. Other key interest rates were unchanged. Looking ahead, the Council reiterated that it is willing and able to act if necessary, using all instruments available within its mandate, and has pointed out that the asset purchase programme provides sufficient flexibility in terms of adjusting its size, composition and duration.

PSPP features

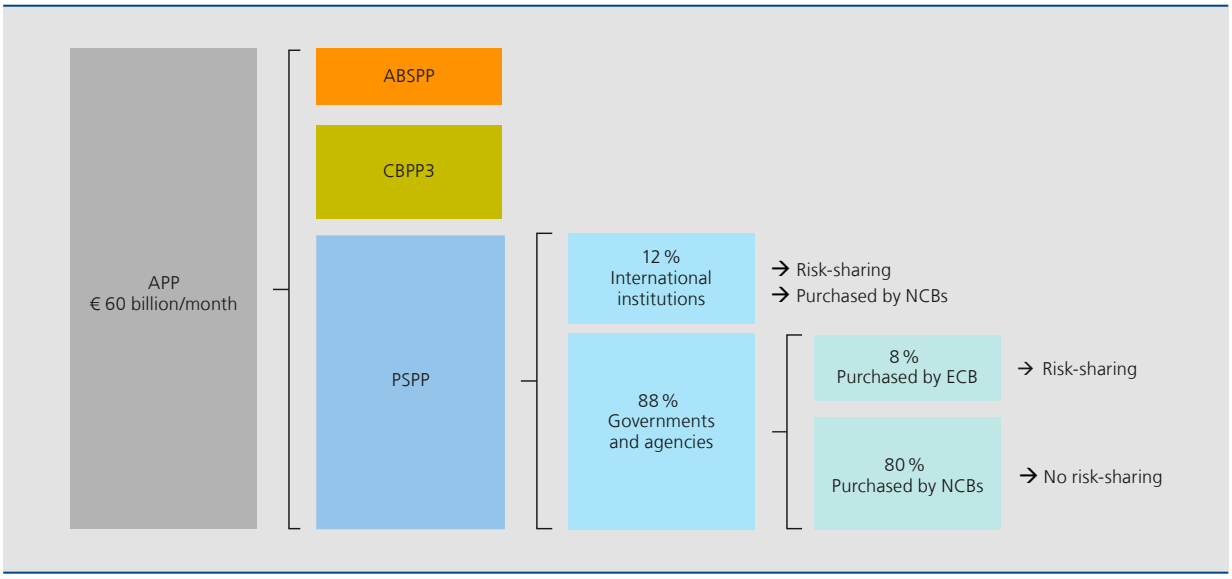
Under the public sector purchase programme (PSPP), the ECB buys euro-denominated securities issued by euro area governments, agencies and European institutions in the secondary market, in return for central bank money or deposits with the central bank. Credit institutions can use these funds to buy other assets and provide loans to the real economy, further easing financial conditions in both cases. (See box 2 for more information on how the APP affects the balance sheets of the central bank and commercial banks.)

These purchases are made across the countries of the euro area in keeping with the ECB's capital key, which reflects their economic and demographic size. Purchases under the PSPP are made both by the national central banks (NCBs) and the ECB (see chart 7 for more details). Although it is implemented at a decentralised level, the PSPP is fully controlled in all its aspects by the Governing Council and the ECB coordinates its purchases, so preserving the unity of Eurosystem monetary policy.

To be eligible for the PSPP, debt securities have to meet a number of conditions: they have to be investment grade and have a minimum remaining term to maturity of two years and a maximum of 30 years. Also, the Eurosystem will not purchase securities with returns below the deposit facility rate. Purchase limits are in place to prevent distortions to market and pricing mechanisms, to keep the Eurosystem from turning into a blocking minority in the event of collective debt arrangements and to curb the risk of the ECB becoming one of the main creditors of euro area governments. Supplementary criteria are in force for countries that are under an EU-IMF adjustment programme.

The Governing Council has decided that any losses incurred on the purchase of securities issued by European institutions by NCBs, and on securities issued by governments and agencies by the ECB, will be shared. This does not apply to any other purchases under the PSPP, implying that only 20 % of PSPP purchases are covered by this arrangement. These constraints on risk-sharing – which contrast with the regime governing other monetary policy operations – reflects the incompleteness of the EMU and the lack of a common fiscal policy at European level. In the current set-up, full risk-sharing would imply that all euro area countries would bear the risks of a default or debt restructuring of one member and would entail fiscal transfers between Member States for which the Eurosystem does not have a mandate. Taking this into account and to ensure that individual Member States are encouraged to devise appropriate fiscal policies, the

CHART 7 SET-UP OF THE EXPANDED ASSET PURCHASE PROGRAMME (APP) (1)



Source: ECB.
(1) The scale of these blocks does not fully reflect the size of the different programmes but does provide an indication.

Governing Council felt compelled to opt for limited risk-sharing. This decision does not detract from the general unity of monetary policy, as the Governing Council makes all the decisions affecting the euro area as a whole.

APP implementation in practice

The expanded asset purchase programme was implemented smoothly in 2015, at volumes matching the announced monthly amount of € 60 billion. The programme purchased an average net € 1 billion in ABSs and € 9 billion in covered bonds every month. Public assets, purchase of which started on 9 March 2015 and which make up the bulk of the APP, added up to a monthly average purchase of € 49 billion.

At the start of the programme, financial market players expressed some doubts as to whether the Governing Council would be able to meet its monthly PSPP purchases targets in quantitative terms. Concerns about a scarcity of government bonds meeting all the requirements were twofold: first, it was assumed that net issuance of debt securities by governments in the euro area would be rather meagre while the programme was running, as fiscal consolidation had been ongoing and Germany was even predicting budget surpluses. And second, it was surmised that banks, pension funds and insurance companies would not be willing to sell government bonds because of regulatory requirements or a lack of attractive investment alternatives. In the event, the feared scarcity never materialised and the proposed purchase amounts were met without difficulty. Besides, the programme has been set up in such a way that it can be adjusted to prevent such risks. As it happens, the Governing Council made use of this flexibility: in September 2015, it decided to raise the purchase limit on an individual security issue from the original 25 % to 33 %, unless such a move gives the Eurosystem a blocking minority, in which case the ceiling would be kept at 25 %. The 33 % ceiling on all of an issuer's outstanding debt was kept unchanged. Meanwhile, the list of agencies whose debt securities are eligible for the programme was extended twice, in April and July, for reasons of monetary policy and risk control. In addition, in December, the Governing Council announced that the APP would from then on also allow purchases of euro-denominated negotiable debt instruments issued by regional and local governments in the euro area. This might help prevent any potential scarcity issues, for example in the German market for government bonds.

As for the implementation of the APP in Belgium, on 9 March, the National Bank of Belgium (NBB) started purchasing OLOs in the secondary market, with net purchases of Belgian government paper under the PSPP amounting to around € 16 billion for full 2015. The scarcity risk for Belgian government bonds was small, as their share in the secondary markets for euro area government bonds (some 5 %) exceeded the NBB's allocation in the ECB's capital key (3.52 %), due to Belgium's rather large gross government debt. What is more, the Federal Debt Agency's funding strategy enables ample liquidity to be generated for the various OLO lines. Lastly, there were no liquidity problems in the secondary markets for OLOs or repos, as shown by the sparse use made of both the NBB's securities lending and the Federal Debt Agency's repo facilities.

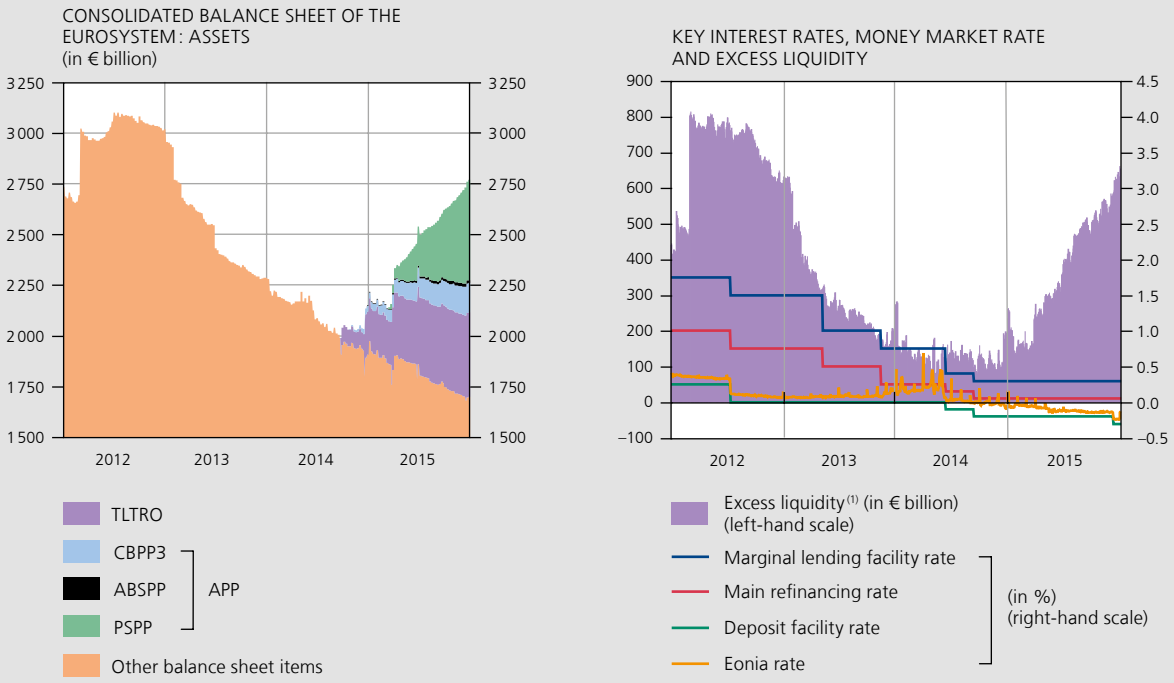
TLTROs face reduced demand but play key role

Long-term funding costs for banks also came down in anticipation of an expanded asset purchase programme run by the Eurosystem and, in January 2015, the Governing Council decided to put the fixed interest rate on future TLTROs on a par with the rate governing main refinancing operations at the relevant time. This put an end to the mark-up of 10 basis points applied on the first two TLTROs in 2014. This particular measure was meant to ensure funding demand from banks via TLTROs as well as a better transmission of monetary easing. It became clear in the second quarter that TLTROs have a key role to play in securing access to cheap funds for banks, particularly when market rates go up. Following two bouts of increased volatility in the euro area bond markets – including bonds issued by banks – demand for the fourth TLTRO in June exceeded expectations. On the whole, the demand for liquidity in 2015's four operations was lower on average than in the first two TLTROs of 2014 (€ 51.4 billion compared with € 106.2 billion). This was in line with expectations in view of the shorter maturities of the new TLTROs as well as the smaller amounts banks were able to borrow compared with the first two operations. Besides, banks were also receiving liquidity under the APP.

Impact on the Eurosystem balance sheet, excess liquidity and Eonia rates

Much as expected, the implementation of the APP and TLTROs significantly increased the Eurosystem's balance sheet total. Under the APP, the Eurosystem takes a more active role in managing its balance sheet compared with previous years, in which the monetary base mainly depended on bank demand for liquidity. And banks typically used to tap the system in times of financial turmoil, turning the size of the balance sheet into an indicator for tensions in the euro area's financial system or for the need for central bank intermediation between financial institutions. Since the launch of the asset purchase programme, however, this interpretation no longer applies.

CHART 8 HIGHER EUROSYSTEM BALANCE SHEET COMES WITH INCREASED EXCESS LIQUIDITY, DEPRESSING THE EONIA RATE



Sources: ECB, Thomson Reuters Datastream.
(1) Excess liquidity equals the sum of the amounts placed in the deposit facility and current account exceeding reserve requirements.

The launch of the TLTROs and the APP – the former offering cheap long-term loans to banks and the latter providing a virtually constant flow of central bank reserves – served to bring down demand for funding by regular monetary policy operations, such as the weekly main refinancing operations and quarterly longer-term refinancing operations.

In line with the expansion of the Eurosystem's consolidated balance sheet, the amount of liquidity that euro area credit institutions kept with the Eurosystem was also up. Excess liquidity, i.e. the central bank reserves that banks hold on top of their required reserves, either in current accounts or in the deposit facility, which command the same return, amounted to € 640 billion by the end of December 2015, compared with € 120 billion in early September 2014, before the start of the various asset purchase programmes and TLTROs.

With banks trying to offload their surpluses onto the markets, the massive excess liquidity has driven the Eonia overnight interest rate tenaciously close to the deposit facility rate – the latter not just serving as the lower limit of the Eonia rate but also as its reference value in the case of excess liquidity. This overnight rate remained negative throughout 2015, implying unprecedentedly low interbank funding rates.

Box 2 – Impact on bank balance sheets of the Eurosystem's expanded asset purchase programme

The Eurosystem's expanded asset purchase programme (APP) does not merely have a lasting impact on the balance sheet of the system itself – which is buying the assets – but also on those of the credit institutions in the euro area, which act as intermediaries when settling the purchases, regardless of who is selling.

On the assets side of the Eurosystem balance sheet, these purchases add to the portfolio held for monetary policy purposes, while on the liabilities side they cause a similar increase in the excess reserves held by credit institutions in the euro area.

APP'S IMPACT ON THE CONSOLIDATED AND SIMPLIFIED BALANCE SHEET OF THE EUROSYSTEM

(in € billion)

Assets	06-03-2015	25-12-2015	Liabilities	06-03-2015	25-12-2015
Refinancing operations	471	542	Banknotes in circulation	1 010	1 083
Securities held for monetary policy purposes ↑	**237**	**805**	Government deposits	56	70
Other assets	1 427	1 421	Reserves held by banks	254	757
			Required reserves	107	113
			Excess reserves ↑	**147**	**644**
			Other liabilities	815	858
Total	**2 135**	**2 768**	**Total**	**2 135**	**2 768**

Source: ECB.

In principle, euro area banks' excess reserves will stay at high levels as long as the assets remain in the Eurosystem's monetary policy portfolio. Use of these generated assets by economic agents – the Eurosystem excepted – can serve to "destroy" this recently issued bank liquidity in three cases: (1) if banks use these new resources to repay open refinancing operations; (2) if this liquidity is converted into banknotes, and (3) if these resources are used to pay euro area governments who subsequently deposit their resources in accounts held by the Eurosystem. These three possible scenarios have materialised relatively infrequently in practice, and excess reserves have typically picked up at the same pace as purchases.

As for the aggregate balance sheet of the euro area's credit institutions, the counterpart of bank liquidity created by APP purchases – an increase in excess reserves on the assets side – will depend on who is the "ultimate" seller of the assets and subsequently on their ultimate use.

If the seller is a euro area bank – a transaction for own account – the purchase on the assets side of the euro area banks' aggregate balance sheet will initially show up as a reduction in the securities portfolio. If the seller is a non-bank resident of the euro area, the Eurosystem will settle the purchase on the liabilities side of the euro area banks' aggregate balance sheet by crediting a deposit account[(1)]. Lastly, if the seller is a non-resident of the euro area, the euro area banks' aggregate balance sheet will – in light of their increasing reserves – be adjusted by a reduction in their net external assets, i.e. the difference between amounts due from and to non-euro area parties. This reduction is the net outcome of either the payment of the amount received for the securities – into an account held by the non-resident seller with a euro area credit institution – or the debiting of an account held by a resident bank with a foreign bank.

(1) If the depositor belongs to the money-holding sector, the purchase of assets by the Eurosystem should initially prompt an increase in M3 money supply.

APP'S DIRECT EFFECT ON THE AGGREGATE AND SIMPLIFIED BALANCE SHEET OF EURO AREA BANKS, REPRESENTED BY SELLER

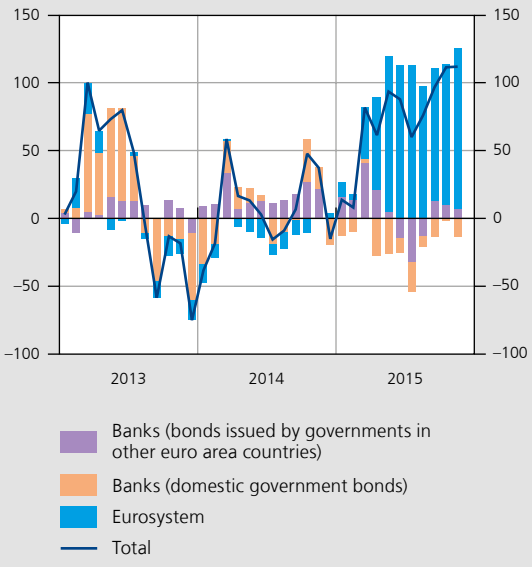
Assets		Liabilities	
Banks' reserves (with the Eurosystem)		Residents' deposits	
Required reserves		APP sellers' deposits	↑
Excess reserves	↑	Other deposits	
Deposits with non-residents	↓	Deposits of non-residents	↑
Securities portfolios		Borrowing from the Eurosystem	
APP-eligible securities	↓	Other borrowing	
Other securities		Equity	
Loans			
Other assets			

Counterpart to the increase in excess reserves:
- Seller is a euro area bank
- Seller is a non-bank resident of the euro area
- Seller is not a resident of the euro area

Source: NBB.

PURCHASES OF EURO AREA PUBLIC SECTOR BONDS BY THE EUROSYSTEM AND BY EURO AREA BANKS

(three-month cumulative net flows, in € billion)



Source: ECB.

Whereas the Eurosystem's portfolio of euro area government paper has kept rising due to the purchases made under the public sector purchase programme (PSPP), euro area banks have seen theirs shrink somewhat since March 2015. This implies that banks have been selling government bonds to the Eurosystem that they had been holding for their own account. Looking at the relevant amounts – and particularly when compared with total PSPP purchase volumes as well as the size of the portfolio of government bonds as held by the euro area banking sector – net sales have remained relatively limited. Obviously, other economic agents – whether resident in the euro area or not – have sold securities to the Eurosystem under the PSPP.

The direct effect of the APP is an increase in liquidity for banks in the euro area, as evidenced both by their ampler reserves with the Eurosystem and an increase in deposit financing. This liquidity can be used in a variety of ways but will invariably impact the balance sheets of the credit institutions. Some banks might tap these resources to grant new loans, causing, on the assets side, an increase in those banks' loan portfolios and, on the liabilities side, higher deposits. If their customers use these deposits to, say, buy goods from customers of other banks in the euro area, the central bank reserves are transferred to another party in the system. At the aggregate level of the banking sector, however, bank reserve volumes should remain unchanged in principle. Liquidity should return to the Eurosystem, in one way or another, as the euro area banking industry as a whole is a closed loop.

Such second-round mechanisms – the above example of which is only one of many possibilities – suggest that the charted direct effect does not neatly capture the APP's eventual impact on euro area credit institutions' balance sheets. It will be difficult to determine in the real world the overall effect of the programme on all balance sheet items of banks in the euro area, because of the different decisions on portfolio rebalancing, at the level of both individual banks and non-bank agents (which, by necessity, will act via banks[1]). Such difficulty will be further compounded by the fact that the trends in the various balance sheet items of resident banks will also be influenced by factors other than the APP.

Since March 2015, growing excess reserves of euro area banks have been moving in tandem with higher deposits by non-bank residents of the euro area, a fall in net external assets and in lending to the public sector in the euro area, and some growth in lending to the euro area's private sector. At the end of the day, the APP's impact on euro area banks' balance sheets may well work out as partially supportive of lending to the real economy. In Belgium too, banks recorded higher reserves coupled with lower net external assets, a decline in net market funding and an increase in deposits by Belgian non-bank residents. Lending to the Belgian non-bank private sector also showed an upward trend, albeit a weaker one.

(1) Portfolio rebalancing decisions refer to decisions on adjusting the composition of their respective balance sheets.

Transmission of the measures to financial conditions and the macroeconomy

The ECB's package of measures would appear to have had a visibly positive effect, even if this is difficult to capture in precise numbers. For one thing, the euro area markets for government bonds experienced increased volatility in the second quarter. Over the summer months, the global economy slowed down and global financial and commodity markets grew increasingly jittery. These external shocks make any correct assessment of these measures a tricky proposition and in fact have sparked a recalibration of the degree of the ECB's monetary accommodation in view of their impact on the inflation outlook. However, it is safe to assume that these shocks would have hit the euro area economy harder if the stimulus package had not been in place.

Signalling on inflation expectations

With its asset purchase programme, the ECB's Governing Council has sent out a strong signal that it is willing to do whatever it takes to meet its price stability objectives. The APP helps the central bank to steer real interest rates appropriately and thus allows it to continue to play its part in stabilising economic activity and inflation. In that sense, its commitment to keeping the APP in place until inflation reaches an expected level of close to 2 % has been crucial.

The ECB's measures have kept the strong fall in headline inflation from being a more persistently downward force driving inflation expectations. Following the announcement of the APP, market-based indicators rebounded, while the renewed drop in inflation over the summer of 2015 proved only a temporary blip to inflation expectations. This effect also reflects markets' anticipation of a further APP expansion in December. Meanwhile, survey-based inflation expectations also revived slightly : compared with the end of 2014, the breakdown of the sample respondents in the professional forecasters' survey showed an upward shift. All that said, multiple resources-derived inflation expectations over all horizons were only a little up on their record lows of the beginning of the year, and remained far removed from the requisite level for price stability. A continued accommodating monetary policy stance is therefore justified.

Lower nominal rates across bond maturities

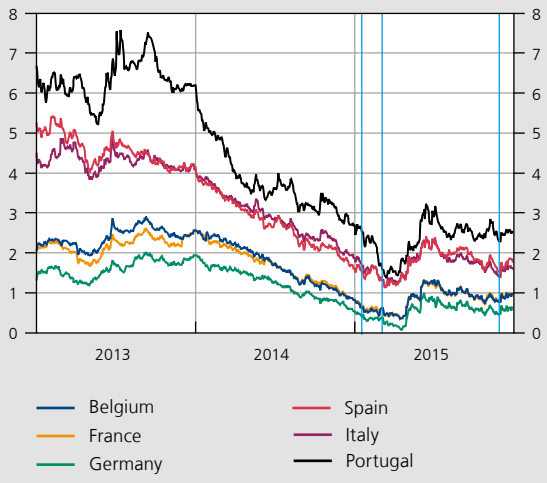
The ECB's quantitative easing programme also had an immediate impact on the returns of purchased assets. Large-scale purchases of government bonds were expected to drive up the prices of such assets and reduce their returns, in line with the law of supply and demand. As rates of government bonds are a reference value – considered as the 'risk-free rate', the stimulus spreads to the rest of the economy in the shape of lower funding costs, encouraging lending and investment.

As the markets had already been anticipating additional easing by the ECB since mid-2014, the new measures had already been priced into a wide range of financial assets and yields on government bonds were historically low by the end of 2014 in a great many euro area countries. Nevertheless, yields went down even further after the ECB announced the PSPP in January, and even when its purchases got underway in March. One explanation was that the size of the asset purchase programme was more substantial than had been expected. Debt securities with longer maturities notched up the steepest falls ; for instance, the yield on ten-year German Bunds, which acts as a reference value for less risky assets in the euro area, plunged from an average 0.64 % in December 2014 to close to 0 % by mid-April 2015. Meanwhile, returns on maturities up to seven years even turned negative. Belgian government paper recorded a drop from 0.90 % to below 0.40 % for ten-year bonds and negative returns for maturities up to six years. Government bond yields of the more fragile euro area countries also came down, most more strongly so.

The second quarter saw two price corrections (one at the end of April and one in early June), sharply pushing up government bond yields. Ten-year German Bund yields added 67 basis points to 0.83 % (monthly average) in the April-June period. A number of explanations have been put forward for these sudden price corrections. First, they may have been a reversal – a logical one to some degree – of the equally unexpected and steep falls after the purchases started in March. At the same time, long-term nominal rates may have experienced some upside effect from some improving macroeconomic data and rising inflation expectations – neither of which can be separated from the APP. In that respect, higher yields are not necessarily a bad thing : although the APP initially depresses long yields, the eventual objective of the programme may be said to achieve higher long-term yields, as this points to improving growth and inflation prospects in as much as it reflects upward revisions vis-à-vis short-term rates. Lastly, a number of technical factors affecting the markets may have intensified the upward trend : seasonally reduced market liquidity, significant bond issuance by a number of governments as a result of very low yields, and mechanical trading strategies which cause a spiral of volatility sparking even greater volatility. Although these factors' actual contribution to volatility cannot be established, one thing has become plain : bouts

CHART 9 TEN-YEAR GOVERNMENT BOND YIELDS HISTORICALLY LOW AFTER PSPP LAUNCH, SUBSEQUENT VOLATILITY (1)

(in %)

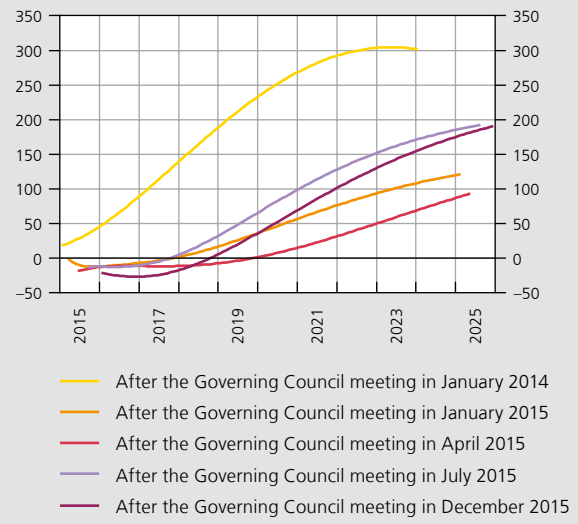


Source : Bloomberg.

(1) Vertical blue lines show the announcement, start of implementation and extension of the APP (22 January, 9 March and 3 December respectively).

CHART 10 MONETARY POLICY MEASURES FURTHER FLATTEN EXPECTED OVERNIGHT RATE TRENDS[1]

(in basis points)

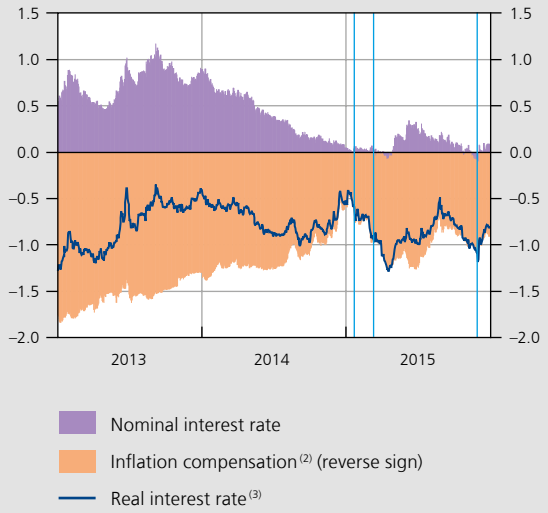


Source: Bloomberg.

(1) Measured on the basis of the implicit overnight interest rate derived from interest rates on Eonia swaps with varying maturities.

CHART 11 REAL INTEREST RATES STAYED AT LOW LEVELS[1]

(in %)



Sources: Bloomberg, Thomson Reuters Datastream.

(1) Vertical blue lines show the announcement, start of implementation and extension of the APP (22 January, 9 March and 3 December respectively).

(2) Measured on the basis of swap contracts covering the inflation risk in the euro area for a 5-year period.

(3) Calculated as the difference between nominal interest rates and inflation compensation.

of increased volatility are integral to a climate of low interest rates. However, the Governing Council intimated it would respond to any unfounded tightening of monetary conditions in such a climate. Yields on government bonds fell again in the second half of the year, as markets discounted expectations of additional monetary policy measures.

Volatility notwithstanding, monetary policy measures have served to further flatten the term structure of interest rates. In keeping with the trend in government bond yields, expectations for money market rates moved up from end-April to early July, and were followed by fresh declines. The steeper slope at the (very) long end of the yield curve compared with early January did stay, which may suggest expectations of more rapid normalisation as soon as key interest rates are raised – positive news in itself. By contrast, the short and middle segments of the yield curve declined further as the year progressed. This shows the impact of forward guidance, of deposit facility rate cuts and of the clear signal about the monetary policy stance sent by the asset purchases – i.e. lower expectations for future risk-free short-term rates. It is assumed that this effect is stronger for short-term rates as the central bank is more reticent about being tied to low interest rates in the far-off future.

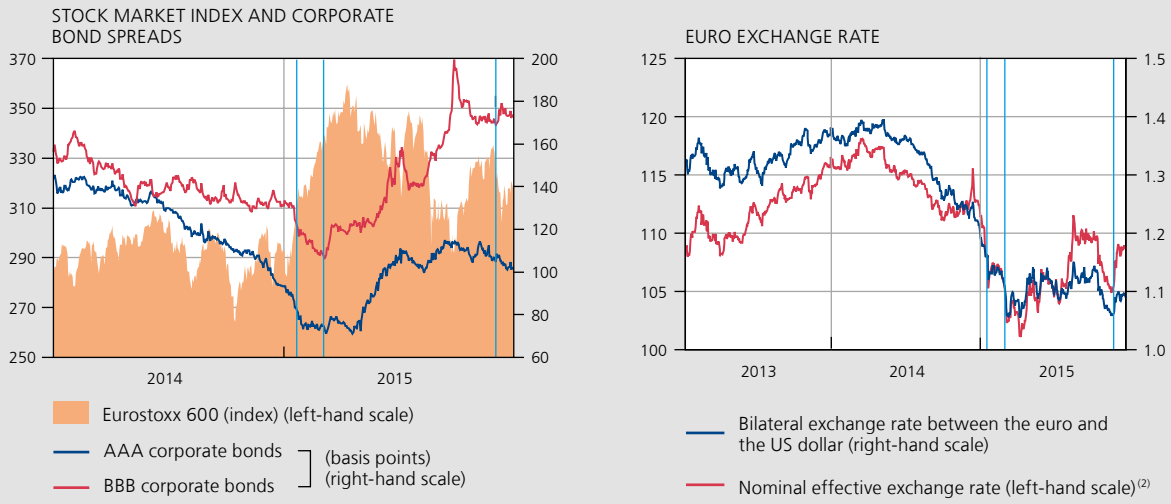
With APP depressing nominal rates but also causing upside pressure to inflation expectations, long-term real interest rates dipped to record lows. The pronounced monetary easing of the first quarter did not last: nominal rates started climbing while inflation expectations fell. October saw an improvement in anticipation of fresh monetary policy measures: real interest rates were low again by the end of the year.

Portfolio rebalancing

In addition to its immediate effect on the nominal rates of the securities it purchases, the asset purchase programme also has an indirect effect on other assets, resulting in lower market funding costs for banks and non-financial corporations.

Initially, the APP did prove a favourable influence on European corporate bonds and equity markets. Corporate bond spreads versus five-year swap rates continued to narrow in the first quarter, a trend that was even more pronounced for lower-rated bonds. Meanwhile, European equity markets notched up gains of around 23 % between the start of the year and their peaks in mid-April. A search for higher-yielding assets outside the euro area ensued

CHART 12 APP CAUSES INVESTORS TO REBALANCE THEIR INVESTMENT PORTFOLIOS[1]



Sources: ECB, Thomson Reuters Datastream.
(1) Vertical blue lines show the announcement, start of implementation and extension of the APP (22 January, 9 March and 3 December respectively).
(2) Nominal effective exchange rate against the 38 main trading partners of the euro area.

and the concomitant adjustment of investment portfolios pushed the euro exchange rate down. Between early January and mid-April, the euro weakened by nearly 10 % in nominal effective terms and by 13 % relative to the US dollar. By the end of April, trends reversed in the wake of, among other factors, renewed volatility in the European markets for government bonds, financial turmoil in the emerging economies in the second half of the year and the delay, in the autumn, of the rate increase by the Federal Reserve, reflecting concerns over the economic recovery in the United States. The disappearance of some of these factors and expectations of intensification of the existing package of stimulus measures again improved broader financial conditions although they were less favourable than in the first half of the year.

Transmission via the banking sector (loan volumes and lending rates)

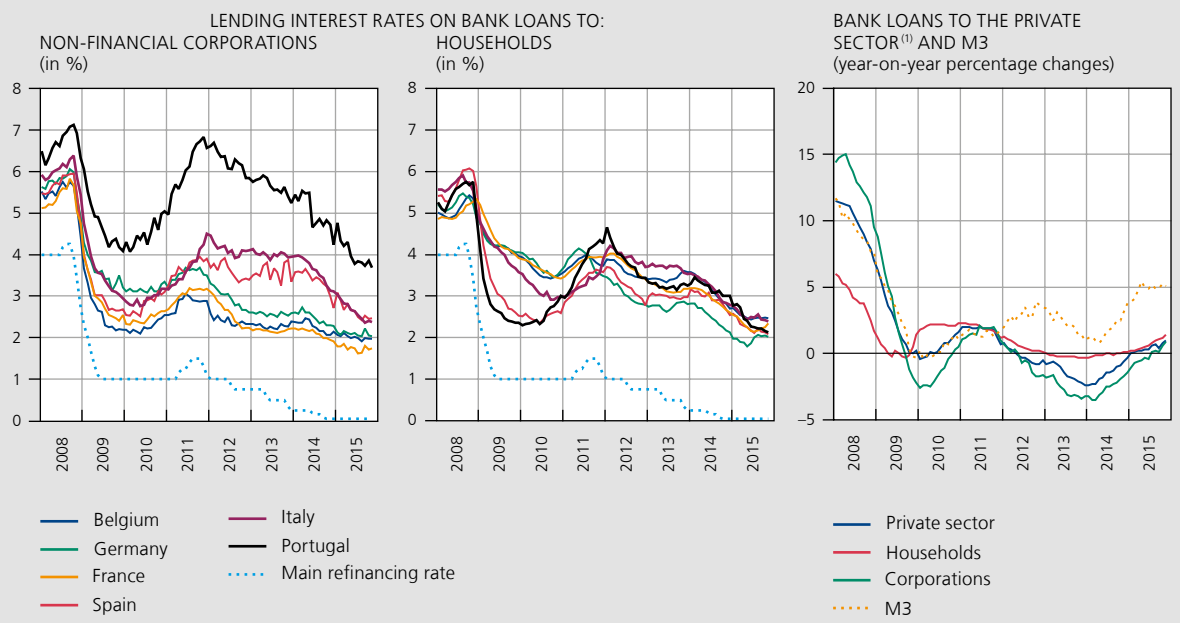
If this quantitative easing is to benefit households and corporations, improved financing conditions also need to be passed on in lending, in terms of both prices and volumes. The ECB's package of monetary policy measures aimed to achieve both and indeed resulted in more attractive financing conditions offered by banks.

Bank lending costs for households and corporations continued to fall in 2015. In addition, lending rates to corporations converged significantly between countries. Corporations in the more fragile economies saw a continuous fall in their bank lending costs, while these remained stable for corporations in the less hard-hit countries from the beginning of 2015 as this group of countries had seen a more rapid and fuller transmission of earlier cuts in key interest rates. The fragmentation of bank financing conditions in the euro area would appear to be clearly reduced. Towards the end of the year, lending rates to the private sector stopped falling, possibly because the cost of financing for banks stabilised or because of banks' attempts to boost their margins.

The bank lending survey (BLS) likewise revealed an ongoing improvement in the lending criteria imposed on the private sector, right across the countries of the euro area. Intensified competition and declining risk perceptions among banks were the main factors contributing to more relaxed lending criteria. Indeed, banks indicated they were primarily using APP-generated additional liquidity as well as TLTRO funding to expand their lending. In terms of the demand from households and corporations for loans, the BLS also noted progress on 2014 thanks to low interest rates, growing financing needs of corporations, firmer consumer confidence and a brighter outlook for housing markets.

With both demand for loans and loan supply improving, lending growth dynamics benefited: bank loans to corporations, for instance, reversed in terms of year-on-year growth and turned slightly positive from July 2015 after

CHART 13 ONGOING IMPROVEMENT IN BANK LOANS TO THE PRIVATE SECTOR IN THE EURO AREA



Sources: ECB, Thomson Reuters Datastream.

(1) All maturities. Data for bank loans to the private sector are adjusted for securitisation over the whole period. Those for bank loans to households and corporations are adjusted from January 2010.

having languished in negative territory since June 2012. Loans to households saw growth accelerate from 0.2 % in January to 1.4 % in November.

Along with the growth in lending, monetary growth picked up even more steeply, with the asset purchase programme obviously being a key contributor. As described in box 2, money supply goes up when residents of the euro area – the banking sector excepted – sell securities to the Eurosystem. Banks acting as financial intermediaries in such transactions between economic agents and the Eurosystem will see increases not only in their reserves with the Eurosystem but also in deposits (included in M3) by economic agents amounting to the value of the securities sold in this way. Also, the asset purchase programme typically triggers portfolio rebalancing, potentially boosting money growth further – if indirectly – as, say, the banking sector decides to use its new-found liquidity to provide new loans or buy assets. Lastly, the opportunity costs of holding assets included in M3 are very small given the flatter risk-free yield curve.

Year-on-year M3 broad money growth continued to accelerate only moderately, from 3.9 % in January to 5.1 % in November. The key driving force was the expansion of the most liquid components of M3, mainly M1 sight deposits.

Interaction with other policy domains

Structural reforms, fiscal policies and financial stability

If monetary policy measures are to achieve the best possible effect, they will have to be backed by other domains of economic policy. On the supply side, the Governing Council has repeatedly pointed out that structural reforms are required to turn today's economic upswing into a structural recovery. More smoothly operating labour and product markets, coupled with a more favourable business climate, encourage investment, promote job creation and enhance productivity. As for the demand side, the Council emphasised the importance of growth-friendly fiscal policies that observe the EU's fiscal rules at the same time. After all, compliance with the EU's Stability and Growth Pact is essential if countries are to meet the budgetary costs of ageing populations and create buffers for the future. Greater confidence in public finances, in turn, tends to encourage consumption and private sector investment.

By supporting nominal incomes, monetary policies also have a significantly positive if not immediately visible effect on financial stability. If a deflationary trend were allowed to run its course, this would have devastating

consequences for the sustainability of nominal debt and land the financial sector with permanently lower interest rates even over longer horizons. Aside from such positive interactions, today's highly accommodating monetary policies can also put financial stability in jeopardy. A lengthy and persistent low interest rate environment may spark an exaggerated search for returns, encourage excessive debt accumulation and depress profitability of both banks and life insurers. This last point was cited as a key risk in the National Bank of Belgium's June 2015 Macroprudential Report, the ECB's Financial Stability Review and the Annual Report of the European Systemic Risk Board (ESRB). In identifying and addressing such financial risks, (macro)prudential policies are the first obvious way to go, leaving monetary policies to focus fully on the primary objective of ensuring price stability.

1.3 Economic activity in euro area countries recovered but languished below potential

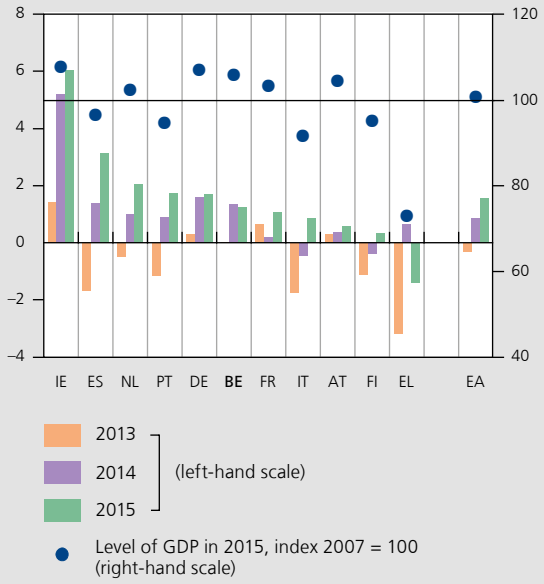
Broader and more robust growth

The euro area's economic revival in 2015 was broader-based than in 2014, with domestic demand in a large number of euro area countries given a substantial boost by – to a lesser or greater degree – lower energy and commodity prices, favourable financial conditions, better access to credit, improved labour markets and less stringent fiscal policies. It was not just consumption that gathered momentum – investment also continued the recovery that first started in 2014. Despite slowing global trade growth, exports rode the wave of a depreciated euro and acted as a key engine for growth.

Germany was again the euro area's economic strongman in terms of growth given the size of its economy. The upturn in the Netherlands also proceeded at a strong pace as investment kicked ahead. Economic revival spread increasingly to those countries that had built up major macroeconomic imbalances in the run-up to the financial crisis but that had since largely remedied these imbalances. Following adjustments to their economies, and bolstered by the growth-supporting factors outlined earlier, most of these countries have been experiencing an economic recovery that gathered momentum in 2015. In Spain, for instance, growth in economic activity more than doubled compared with 2014, while Portugal also reported an upturn. Ireland notched up the highest growth in the euro area for the second year running and its exports shot up, as they had done the previous year. Its robust export expansion is related to the key role that multinational corporations play in Ireland's exports, but its economic revival has now also broadened to include firms that focus more on domestic demand and are relatively more labour-intensive. The Irish recovery, which initially leaned heavily on exports, has thus become more broadly based across sectors and spending categories.

CHART 14 ECONOMIC GROWTH POSITIVE AGAIN IN NEARLY ALL COUNTRIES OF THE EURO AREA

(GDP growth by volume, percentage changes on previous year, unless otherwise stated)



Source: EC.

In other countries, however, including France and Italy, domestic demand was below the average for the euro area. In France, investment continued to diminish, particularly in construction. That said, exports in both countries benefited from the weaker euro and the economic upturn in Europe and other advanced countries. All in all, their economies recorded moderate growth after having been virtually static in the previous year. In Finland, economic activity picked up in 2015 after three years of decline, but the country's actual growth was still meagre. This was down to persistently weak domestic demand and stalling exports in the wake of the clobbering of its exports to Russia.

All in all, in 2015, nearly all euro area countries made significant contributions to euro area growth – in proportion to their economic weight – whereas more than half of the figure for 2014 had been attributable to the increase in Germany's real GDP. In this regard, Spain and Portugal

have caught up smartly in the past two years, and Ireland can even boast a GDP significantly higher than in 2007.

Greece: the only country still struggling to emerge from the crisis

Greece is the only euro area country that recorded a fall in GDP in 2015 (of 1.4%) after having just returned to the black in 2014. This decline should be seen against the backdrop of the troubles that occurred when the second Greek adjustment programme expired and it was negotiating its third.

After the Greek economy appeared to have turned the corner in the course of 2014, negotiations over the fifth review of the second adjustment programme stalled in the autumn of that year. In the financial markets, the spread on Greek government bonds widened and political instability increased. In addition, the end of the year was marred by swelling deposit outflows, which landed Greece's banks into trouble. The situation remained tense in the first half of 2015, especially in the run-up to the Greek referendum at the beginning of July. Surprisingly, and in the teeth of massive uncertainty and falling confidence, economic growth was still positive, although this can be partially explained by a drop in imports and possibly also advance purchases by consumers fearing loss of savings.

Following an extension of the second adjustment programme, it expired on 30 June 2015 without an agreement between the Troika and the Greek government having been reached about the fifth review and the payment of the final tranche of financial assistance. Subsequently, Greece was unable to pay its debt to the IMF when it was due, and the government in Athens felt compelled by eroding confidence in Greek banks and huge outflows of deposits to impose capital controls at the end of June. Against this backdrop, the Greek economy slid downwards again in the second half of 2015.

Despite the victory for the No camp in the Greek referendum which voted against the provisions of the adjustment programme, the Greek authorities agreed to a range of measures after negotiations with the Eurogroup and the Heads of State or Government of the euro area countries. Greece then received a bridge loan to help it meet its immediate financial obligations. In August, the Greek government and the European Stability Mechanism (ESM) agreed the country's third adjustment programme, paving the way for fresh financial assistance to Greece of up to € 86 billion over a period of three years (from August 2015 to August 2018), € 25 billion of which is earmarked for recapitalising its banks. The average term to maturity of the new ESM loan is 32.5 years. With the agreement, the Grexit threat was averted. The IMF was closely involved in the negotiations and will consider its participation in the new financial assistance once Greece has taken the steps it considers necessary for implementation of the programme and once the country's European creditors have made the necessary decisions on debt relief for Greece.

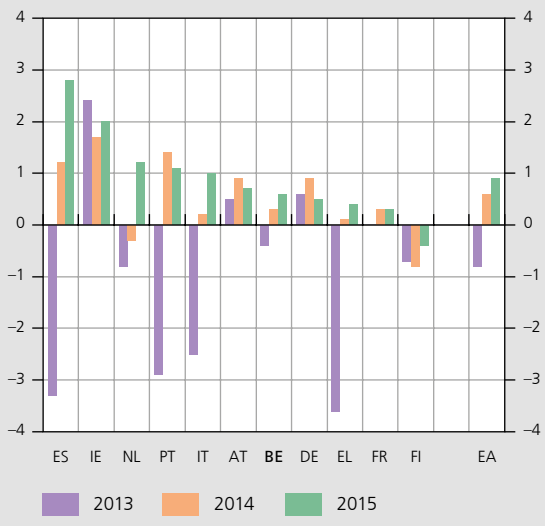
The first tranche of financial assistance amounted to € 26 billion, € 10 billion of which was in the shape of debt issued by the ESM to repair the Greek banking sector. Of the remaining amount, € 13 billion was disbursed in August, € 2 billion in November and € 1 billion in December after Greece had met a number of objectives set down in the adjustment programme's memorandum and had taken measures with regard to the financial sector with the aim of successfully recapitalising the country's banks. The comprehensive assessment of the four main Greek banks that the ECB carried out in the autumn of 2015 initiated their recapitalisation process.

Growth-enhancing factors in the euro area

The economic recovery of the euro area has gone hand in hand with a significant improvement in the labour markets of most euro area countries. Combined with the drivers discussed earlier in this chapter,

CHART 15 EMPLOYMENT GREW FURTHER IN MOST COUNTRIES OF THE EURO AREA

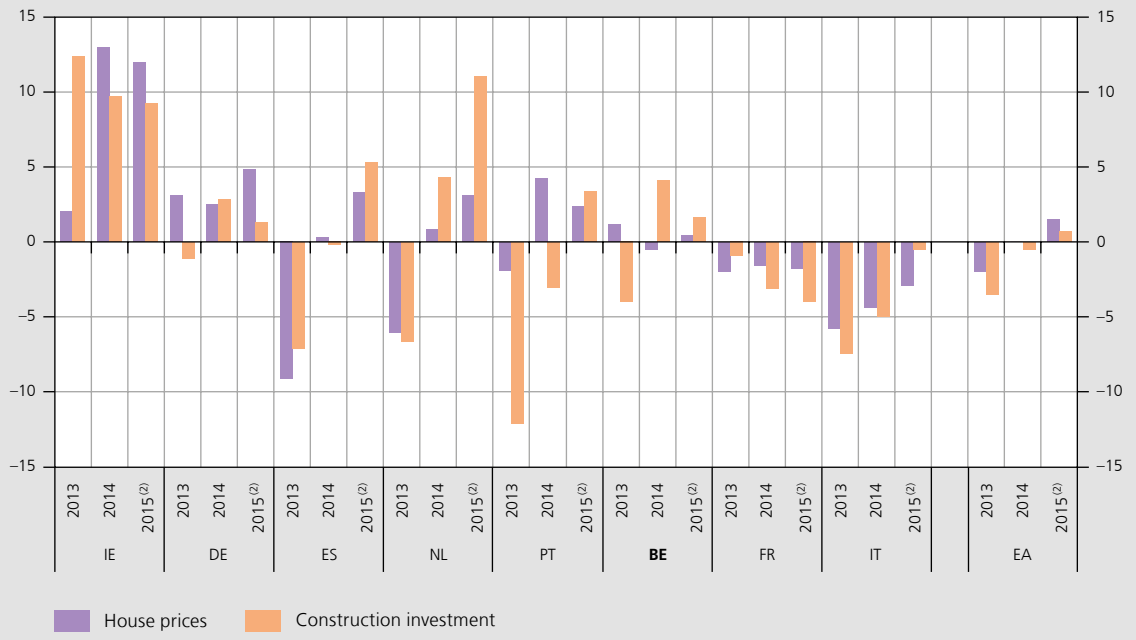
(employment in number of persons, percentage changes on previous year)



Source: EC.

CHART 16 HOUSING MARKET ADJUSTMENTS ENDING IN COUNTRIES HARDEST HIT BY THE FINANCIAL CRISIS[1]

(percentage changes on previous year)



Source: EC.

(1) Countries arranged according to the size of the change in house prices in 2015.

(2) First three quarters for house prices.

this improvement and the related rise in disposable household income have been supportive of domestic demand in the euro area. In the Netherlands and Italy, employment grew significantly after earlier declines; it also picked up sharply in those countries that had seen massive job losses in the aftermath of the crisis. Just like Ireland, both Spain and Portugal – two countries that have reformed their labour markets in the past few years – saw a major amelioration in the jobs situation. In France, by contrast, net job creation was subdued. Incidentally, in most euro area countries unemployment declined, if only slightly in many cases.

Moreover, house prices in the euro area are gradually beginning to revive. After many years of stagnation, the German catch-up in the property sector continued into 2015. Clear recoveries are also noted in certain countries in which residential property markets had been hit hard in previous years: Ireland's house prices have made significant gains, and to a lesser degree so have Portugal's since 2013. Spain's housing market appears to have bottomed out and is making its way back up, as is the market in the Netherlands, which had before also seen house prices slump. The recovery in house prices was often accompanied by a reversal in construction investment; in this regard, Ireland and the Netherlands are reporting strong increases. By contrast, house prices came down further in France and Italy while France in particular suffered further falls in housebuilding investment. Taken as a whole, the euro area recorded a slight recovery in house prices since mid-2014. Construction investment likewise edged up again in 2015 after years of decline.

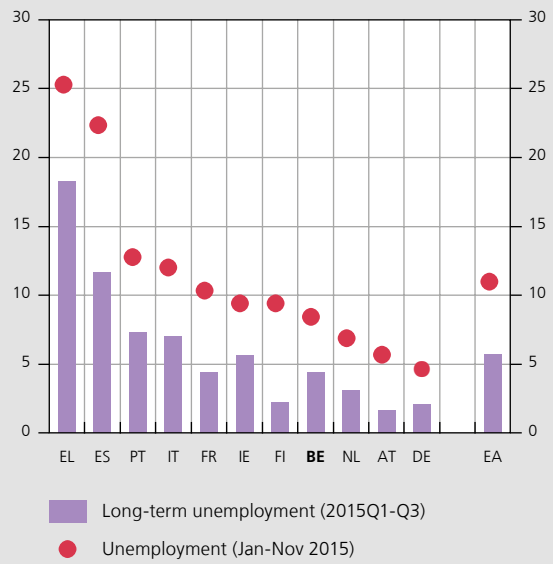
Moreover, it would appear that in a number of euro area countries the legacy of the financial crisis was less of an obstacle to the recovery in economic activity than it had been in previous years. In particular, heavily indebted countries such as Ireland, Spain and Portugal have made considerable progress running down the debt position at the level of both households and non-financial corporations. And this was not only the result of their nominal GDP growth as some countries have also actively deleveraged by reducing the actual size of their debt.

Growth still somewhat squeezed by financial crisis legacy

However, private sector debt ratios remain high in a number of countries, making them vulnerable and hindering spending, particularly investment spending.

CHART 17 UNEMPLOYMENT FELL BUT REMAINED HIGH IN A NUMBER OF EURO AREA COUNTRIES

(in % of the labour force)



Source: EC.

Box 3 explains in some greater detail how the need to deleverage private sector debt has eroded investment dynamics in countries in which debts were steep, obstructing a smooth transmission of monetary policies to lending.

Furthermore, despite recent falls, unemployment has remained high in Greece and Spain, and to a lesser degree also in Portugal and Italy. Labour markets in these countries were all hit deeply by the crisis and the long-term unemployed account for the largest proportion of the joblessness figures. In Ireland too, which has seen its unemployment rate come down to below the average for the euro area, the long-term jobless constitute the largest group. These unemployed people see their skills atrophy over time, something which harms potential growth.

Fiscal policies no longer restrictive

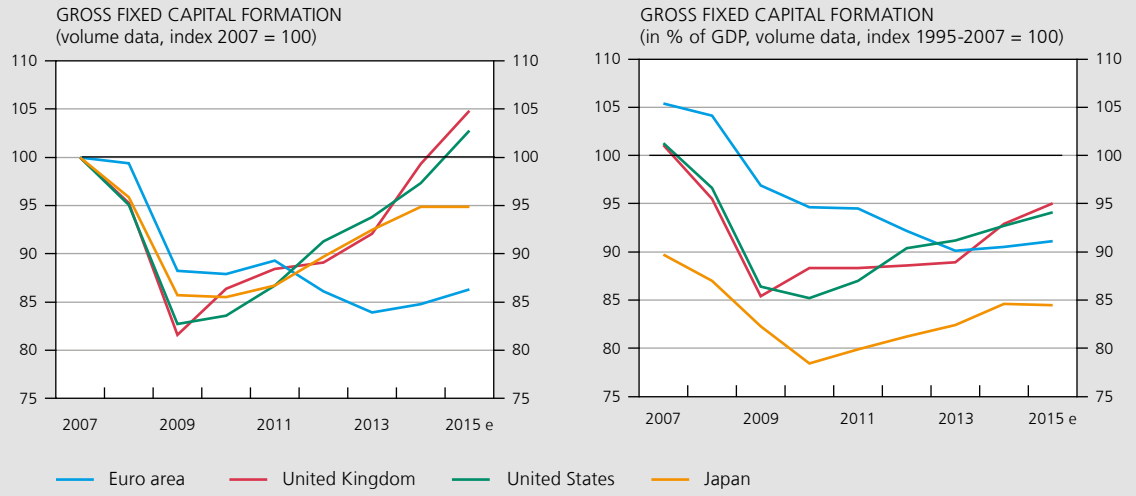
The euro area has made further progress in running down nominal budget deficits and reducing government debt ratios. As in the euro area as a whole, which saw the budget deficit narrow from 2.6 % of GDP in 2014 to 2 % of GDP in 2015, the government budget

Box 3 – Fragile recovery of investment in the euro area

Investment in the euro area took a real beating in the financial crisis and has yet to return to its pre-2008 levels seven years on. Capital spending is an essential and highly cyclical element of demand, and the investment slump and subsequent weak dynamics to a large degree explain the seriousness of the recession and the challenging economic recovery in the euro area. Low capital spending levels do not just depress demand, they undermine the long-term growth potential of the euro area economy, as they impede the expansion of capital stock as well as the spread of innovative technologies. Low investment puts the brakes on the creation of employment and wealth. This box compares recent investment dynamics in the euro area with those in a number of other major advanced economies. It then assesses whether the euro area's subdued capital spending trends are a purely cyclical matter or whether legacy factors persist in bringing a downward influence to bear, particularly on business investment.

The financial crisis initially appeared to have less of an impact in the euro area than in a number of other major advanced economies; in the United States and the United Kingdom, investment volumes collapsed more dramatically in 2009. However, with the latter countries' capital spending bouncing back just as rapidly in the following two years, the differences were minor in this first phase of the crisis. In 2012 and 2013, euro area investment sank deeper as the sovereign debt crisis bit and pushed the euro area back into recession. Recovery has been fragile since. Investment volumes have been on an upward trajectory since the end of 2014 but the EC's latest autumn projections still put them way below their pre-crisis high. In contrast, the United States, the United Kingdom and Japan have seen recovery kick off much more quickly and in the first two countries investment in real terms now exceeds pre-crisis levels.

INVESTMENT SINCE 2007 – AN INTERNATIONAL COMPARISON



Source: EC.

However, this pre-crisis level is only a snapshot of the state of play at that particular time. Taking as our reference the average ratio of investment to GDP, which is measured over a longer period of time, i.e. 1995-2007, this ratio in the euro area happened to be higher than its long-term average in the year before the financial crisis broke, unlike in the United States and the United Kingdom, whose investment as a percentage of GDP was around their average in 2007. Japan's ratio was even below average at the time, a reflection of years of decline after its asset bubble burst in the early 1990s. In view of this, the fall in the euro area's investment ratio may be argued to be persistent in as much as it is a correction on previously excessive capital spending. Besides this, investment-to-GDP still languishes well below its long-term average, while US and UK ratios are drawing closer.

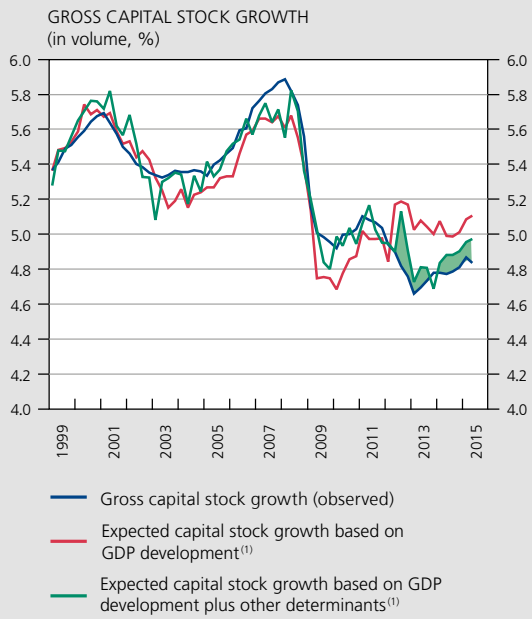
Weak economic growth and the accelerator model

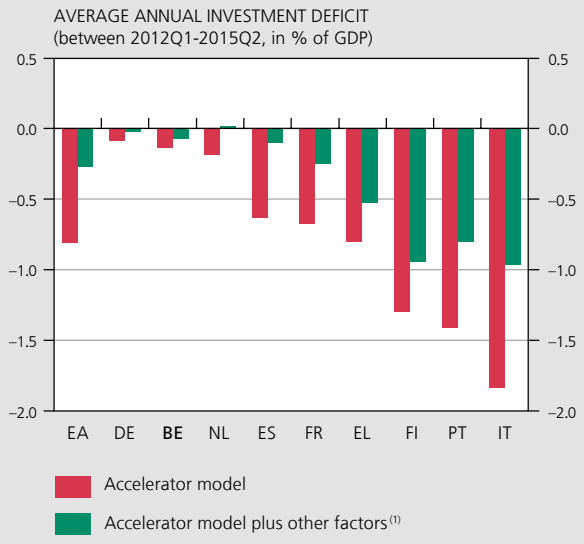
Our analysis now focuses on non-residential investment, the largest element of which is business investment[(1)], using an econometric model – i.e. the accelerator model – to better assess investment dynamics. This simple model assumes that companies are guided chiefly by their expectations as to demand, and in empirical research it typically provides a fairly solid explanation of investment trends. It is predicated on the assumption that changes in desired capital stock are proportional to those in GDP. And it is this desired capital stock – including its depreciation – that determines the dynamics of the gross investment.

The accelerator model broadly explains capital spending dynamics since 1999, confirming the unusual nature of investment growth in the run-up to the financial crisis (2004-2008) as well as the fiscal stimulus – including spending on infrastructure – that supported economic activity in the 2009-2010 period. The model also finds

(1) Only nominal data and no volume data are available for business investment, and various proxies have been proposed in the literature. A number of researchers have deflated nominal business investment using the total investment deflator. Others, such as the EC's European Economic Forecast of November 2013, use real non-residential investment, as this consists primarily of business investment given its small proportion of public investment. This box has adopted the latter approach.

LAGGING INVESTMENT DYNAMICS IN THE EURO AREA – AN EMPIRICAL EXPLANATION





Source: NBB calculations.

(1) Expected capital stock growth is the outcome of an estimate by the so-called accelerator model, with the inclusion of additional factors if relevant. Additional factors in this instance: real bank lending rates, corporate debt ratios, credit restrictions on production and political uncertainty.

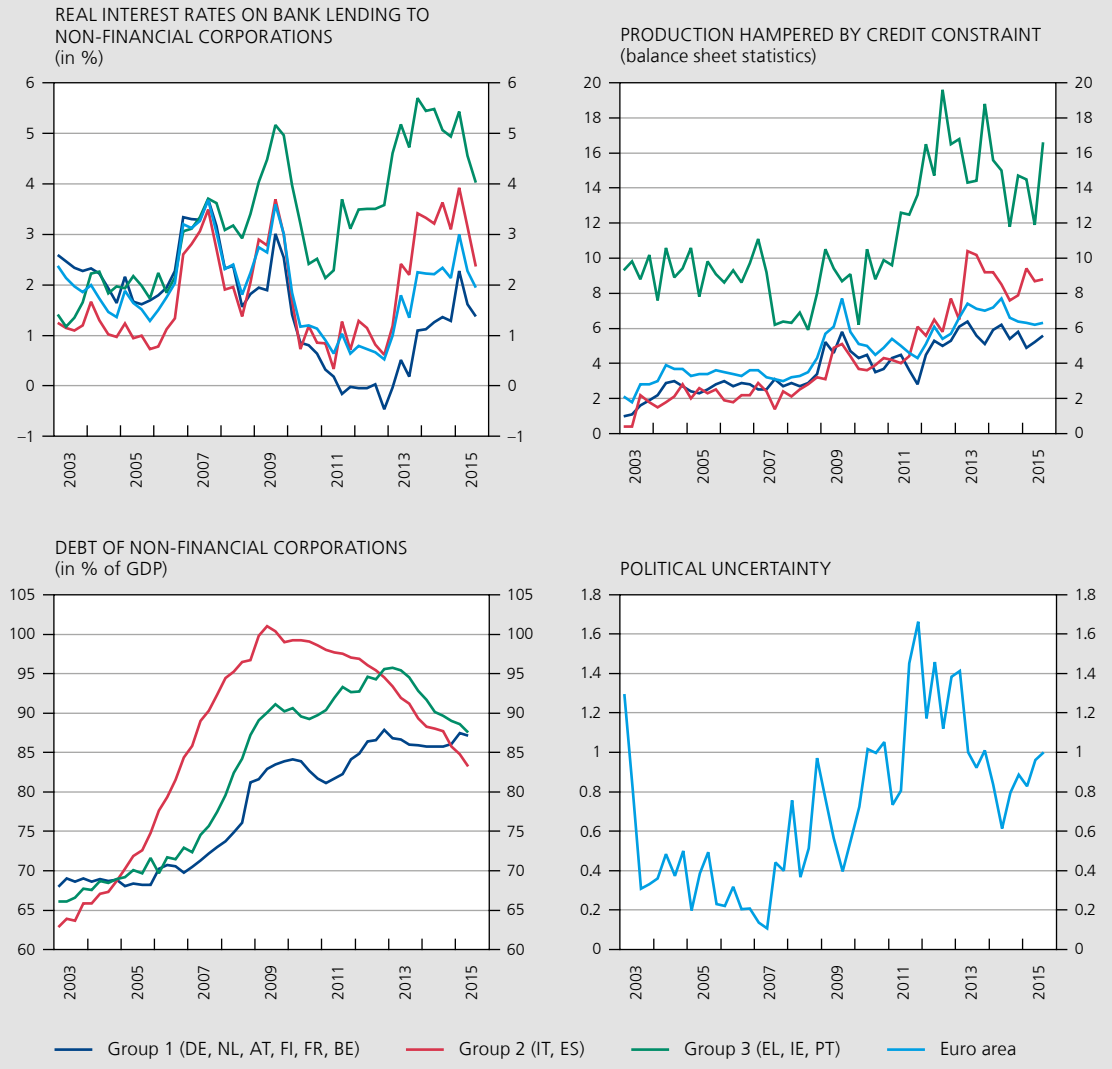
investment to be lower than might be expected based on economic growth since the beginning of 2012. These findings are equally applicable to the euro area at large and to most of its individual Member States. Expressed as a percentage of annualised GDP, this investment deficit is deepest in Greece, Italy, Portugal and Finland, while being very minor in Belgium and Germany.

As it is impossible to explain these weak investment volumes since 2012 using GDP developments only, our analysis requires additional determinants. Factors that may have recently played a part in euro area investment dynamics include the way external funding costs have developed, the need for deleveraging, any credit constraint and increased uncertainty. These factors will be added to the standard specification of the accelerator model.

The model uses real bank lending rates as a proxy for external funding costs. Differences between the euro area countries remained significant in this period, despite historically low key interest rates in the Eurosystem and a wide range of additional measures to remedy financial fragmentation. These differences reflect the diverging credit risks applicable to the various countries and the solvency of their banks. On top of this, real interest rates have been on the rise since 2013, due to lower inflation and inflation expectations.

Another explanatory factor is the way corporations themselves rate their funding options. A key indicator may be derived from the EC's business confidence survey: although there was less mention of credit constraint by corporations across the euro area, clear differences between countries remained, and corporations in the programme countries in particular continued to cite borrowing as a problem. And even for core countries, the situation has not quite returned to pre-crisis levels.

ADDITIONAL DETERMINANTS OF INVESTMENT



(1) Sources: EC, ECB, OECD, Thomson Reuters Datastream, NBB calculations.

Post-crisis, a number of countries embarked on a process of deleveraging, as shows up in the debt ratios of non-financial corporations compared with their peak levels. Corporations may decide to restructure their balance sheets so as to be better prepared when new shocks hit. In fact, they may well have shelved their capital spending plans against the background of economic recession and moderate recovery. All that said, debt ratio reduction has been limited to date and accounts for only a fraction of the pre-crisis increase.

Uncertainty is often cited as an important explanation of the euro area's weak investment dynamics. Economic research has found that corporations typically put off their capital spending decisions until they have more information available to them. Uncertainty is hard to quantify and it is not quite clear what indicator best explains the development of business investment. This analysis includes political uncertainty only and adopts

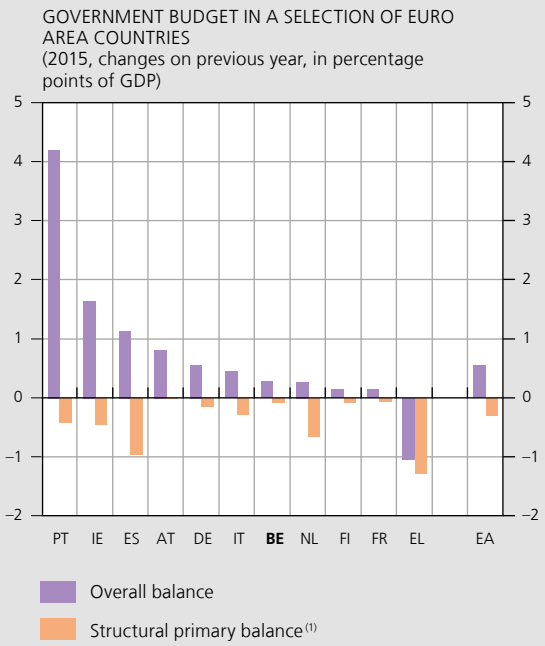
current research practice by using the Economic Policy Uncertainty Index (EPUI), compiled by Baker, Bloom and Davis (2013)[1] and based on news reports.

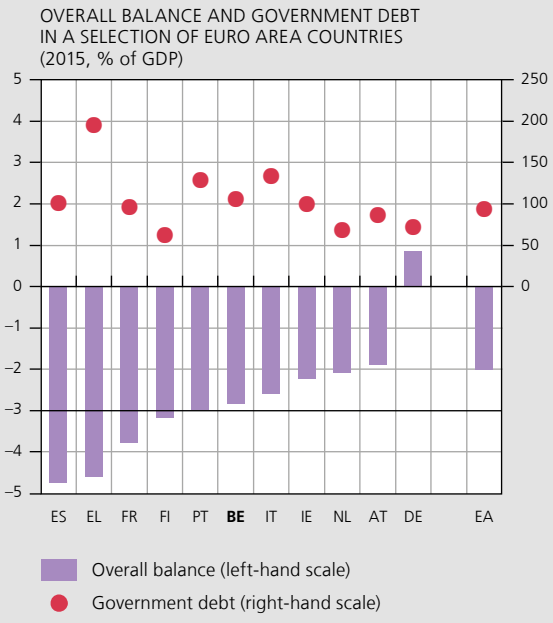
When real bank lending interest rates, corporate debt ratios, the credit constraint indicator and the political uncertainty index are added to the standard specifications, the model sees a major improvement in its ability to explain the situation, particularly in Spain and France. Uncertainty, credit restrictions, deleveraging and real interest rates are shown to have had a major impact on the investment dynamics in these countries. Other studies have produced comparable findings, including IMF (2015)[2]. In so far as these factors still hold back capital spending, there would seem to be a role for policy-makers here.

(1) Baker S., N. Bloom and S. Davies (2013), "Measuring economic policy uncertainty", Chicago Booth Research Paper, 13–02.
(2) Barkbu B., P. Berkmen, P. Lukyantsau, S. Saksonovs and H. Schoelermann (2015), "Investment in the Euro Area: Why Has It Been Weak?", IMF Working Paper 15/32.

balance has improved in most euro area countries. Such improvement reflected lower interest charges, the beneficial effects of the cyclical upturn – a very pronounced feature in Spain and Ireland, among others – and the impact of one-off and other temporary measures, such as in Portugal. However, nearly all euro area countries experienced a reduction in their structural primary balance – which excludes all of these factors – even if this was often minor. This reflects the fact that, after several years of restrictive fiscal policies, a number of euro area countries eased their fiscal policies to some extent. Considered for the euro area as a whole, fiscal policies in 2015 may be described as more or less neutral. Together with the pick-up in economic activity, the improvement in fiscal balances resulted in a slight fall in general government debt as a percentage of GDP in the euro area as a whole, from 94.5 % of GDP to 94 % of GDP – the first such decline, albeit a minor one, since the outbreak of the financial crisis. General government debt came down noticeably in a number of countries

CHART 18 FISCAL POLICIES NO LONGER RESTRICTIVE





Sources: EC, NBB.
(1) Overall balance excluding interest charges and adjusted for cyclical influences and one-off and other temporary factors.

such as Ireland, Germany and Portugal and remained the same or increased in others. Taken together, general government debt in the euro area is still very high, combining with private sector debts to structurally depress the growth capacity of the euro area.

In Greece, public finances charted a different course. Following an unmistakeable improvement in 2014, the country's government deficit widened again in 2015; the structural primary government surplus that it had accrued since 2011 declined in 2015 for the second year running. General government debt shot back up to around 195 % of GDP.

According to the EC's autumn projections, 2015 government deficits in Spain, Greece, France and Finland were still expected to exceed 3 % of GDP, while Portugal's was forecast to come in at exactly 3 %. With the one exception of Finland, all these countries were subject to excessive deficit procedures at the end of 2015, as were, in the euro area, Cyprus, Ireland and Slovenia. In July 2015, the EC investigated whether France had taken effective action to comply with the Council's recommendations under the excessive deficit procedure and decided that the procedure should continue to be held in abeyance.

In accordance with the preventive arm of the Stability and Growth Pact, EU Member States are also required to meet a medium-term budgetary objective. This is a country-specific target value for each Member State, expressed in structural terms. The relevant chart in the chapter on public finances of this Report will demonstrate that several euro area countries still have significant consolidation efforts ahead of them before they achieve that objective. Meanwhile, Germany has exceeded its objective.

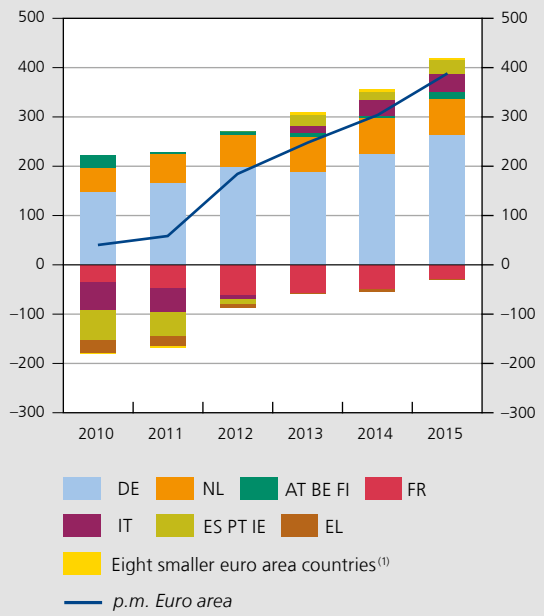
New governance and structural reforms in the euro area continued

The move towards better governance in the EU was continued in 2015, if sometimes haltingly. It had started in 2010 as a response to the challenges that emerged from the financial crisis. On the issue of public finances, the European Commission presented in January 2015 a Communication on making the best use of the flexibility within the existing rules of the Stability and Growth Pact to further growth-friendly fiscal policies. Its aim is to encourage effective implementation of structural reforms, to stimulate investment, specifically in the context of the new European Fund for Strategic Investments, and to take better account of the economic cycle in the individual Member States.

In addition to public finances, surveillance of the risks of macroeconomic imbalances was another arena in

CHART 19 INCREASED CURRENT ACCOUNT SURPLUS IN THE EURO AREA

(annual data in € billion)



Source: EC.

(1) Cyprus, Estonia, Latvia, Lithuania, Luxembourg, Malta, Slovakia and Slovenia.

which the new governance continued, in keeping with the macroeconomic imbalance procedure. As it turns out, significant adjustments have been made in the euro area countries forced to deal with major macroeconomic imbalances after the crisis. They have sharply reduced the current acccount deficits that had often surged in the run-up to the crisis, with most of them even having reversed into surpluses. Ireland, for one, is looking at a current account surplus of nearly 6 % of GDP; Spain's and Portugal's were smaller but still at 1.4 % and 0.5 % of GDP respectively. Although Greece still has a current account deficit of nearly 1 % of GDP, this is a major improvement on its 2008 nadir of 16 % of GDP. Meanwhile, a number of other countries, particularly Germany and the Netherlands, are consistently recording steep current account surpluses, of nearly 9 % and 11 % of GDP respectively. All of this has combined to take the euro area as a whole onto a path of increasing current account surpluses post-crisis, adding up to a total of nearly 4 % of GDP in 2015. Initially, the increase in the current account in financial crisis-torn countries was largely down to contracting domestic demand, but more recently exports have also become a contributor, which in turn is attributable to their improved labour cost competitiveness. Nevertheless, these same countries still tend to have steep

net external debt exposures, which continue to be just as much a source of fragility as the high debt ratios of their domestic sectors.

Incidentally, structural reforms have mostly been implemented more rapidly in the economies that bore the brunt of the financial crisis than they were in the rest of the euro area. Structural reforms are crucially important to a smoothly operating monetary union as these strengthen the adaptability of economies and can bolster their potential growth. Differences between the Member States and the complexities of their institutional environments require reforms to be tailored to the specific needs of individual countries, while not losing sight of potential complementarities between reforms in the various policy domains. In the past couple of years, Spain, Portugal and Ireland have implemented a range of reforms in several domains, including – to a lesser or greater degree – the labour and product markets, public finances and the government sector, and the financial sector. In addition to the countries that have implemented macroeconomic adjustment programmes or bank restructuring programmes, Italy also saw structural reforms gather momentum. To increase productivity and boost its business climate, the country has tabled an ambitious structural reform programme encompassing a range of domains such as its labour and product markets, its institutional framework and its tax system.

Completion of the institutional structure of Economic and Monetary Union

The absence of an agreement between Greece and its European creditors until mid-July 2015 once again fanned fears of a possible Greek exit from the euro area. Repeated doubts as to the irreversibility of euro area membership, which eventually also boil down to a debate about the integrity of the common currency, gave yet another – and impossible to ignore – signal that the construction of the Economic and Monetary Union, unique in its institutional structure, remains incomplete, despite major progress on governance and the banking union.

Observing that, institutionally, the euro area still does not function at its full potential, the five Presidents – of the European Commission, the European Council, the Eurogroup, the European Central Bank and the European Parliament – published their Five Presidents' Report in June 2015. This announced their plans to deepen EMU and complete it by 2025 at the latest. Their aim is to build on the rapid and unprecedented steps that have been taken since 2010 to ensure cohesion in the euro area and use these to create a sustainable basis for the future.

These are ambitious plans focusing on – rightfully – ambitious goals. Given the slow execution of earlier decisions in some domains, such as the banking union and the Capital Markets Union, on which the five Presidents are now tabling new proposals, it is clear that such proposals also need fleshing out and implementing. Their plans are to be put into operation in three stages, the first of which started on 1 July 2015 and is envisaged to be complete by 30 June 2017.

In this first stage, existing instruments and current Treaties should be used to encourage competitiveness and structural convergence, to achieve responsible fiscal policies at national level and at the level of the euro area, to complete financial union and to strengthen democratic accountability. The Five Presidents' Report envisages the completion of EMU in the second stage by launching more far-reaching actions to make the convergence process more binding. In the final stage, by 2025 at the latest, all steps should be fully in place.

The report mentions four domains that require progress. First, the euro area is to develop into a real economic union. In the first stage, this will involve setting up a euro area system of Competitiveness Authorities, a more rigorous implementation of the macroeconomic imbalance procedure, a greater emphasis on employment and social performance, and improved coordination of economic policies within a revamped European Semester. In the medium term, in the second stage, the convergence process should be made more binding through a set of commonly agreed standards defined in the EU legal framework, covering such areas as labour markets, competitiveness, business climate and public administration, including certain aspects of tax policy. Secondly, progress should be made towards financial union, enabling the financial system to diversify risk across countries. More concretely, banking union should be completed. The report envisages agreements on an adequate bridge financing mechanism and on a credible common backstop for the single resolution fund during the transition period to the final creation of this fund. In this context, the launch of a European Deposit Insurance Scheme should also come into its own; concrete steps in this direction should be taken as early as the first stage and within the scope of the current legal framework. The Capital Markets Union should become a priority alongside the banking union. Third, the euro area should develop towards fiscal union. By enhancing the governance framework at the first stage, and more specifically by creating an advisory European Fiscal Board, the euro area should make responsible fiscal policies one of the cornerstones of Economic and Monetary Union. In the longer term,

in the second stage, as the culmination of a process of convergence and of further pooling of decision-making on national budgets, the euro area could develop a common macroeconomic stabilisation function and so become better equipped to handle shocks that cannot be managed at national level alone. Fourth and lastly, the euro area needs to take steps towards strengthening democratic accountability, legitimacy and institutional strengthening. As the euro area develops into a true Economic and Monetary Union, certain decisions will increasingly need to be taken collectively, while ensuring democratic accountability and legitimacy. A euro area treasury could in future be the place for such collective decision-making, which would however not mean that all aspects of budget revenue and spending will need to be centralised.

In October 2015, the European Commission approved a range of measures and released recommendations. This package includes a review of the approach to the European Semester, paying greater attention to employment and social aspects. It also aims to improve the tools for economic governance. The EC recommended setting up National Competitiveness Boards and has established an advisory European Fiscal Board. It is also proposing more unified euro area representation in international financial institutions, in particular the IMF. Its proposed set of measures also envisages steps towards completion of the banking union. To this end, the EC tabled a legislative proposal in November on the first steps towards a European Deposit Insurance Scheme. It has also confirmed its prioritisation of the Capital Markets Union in addition to the banking union.

Economic developments in Belgium

2. Economic developments in Belgium

2.1 Economic recovery remains subdued in Belgium too

In keeping with the ongoing trend noted since the second quarter of 2013, economic expansion in 2015 continued at a moderate pace in Belgium, much as in the rest of the euro area, despite a minor slowdown towards the end of the year. In volume terms, year-on-year GDP grew by 1.4 %, at pretty much the same speed as in 2014 (1.3 %) and slightly below the euro area's 1.6 %.

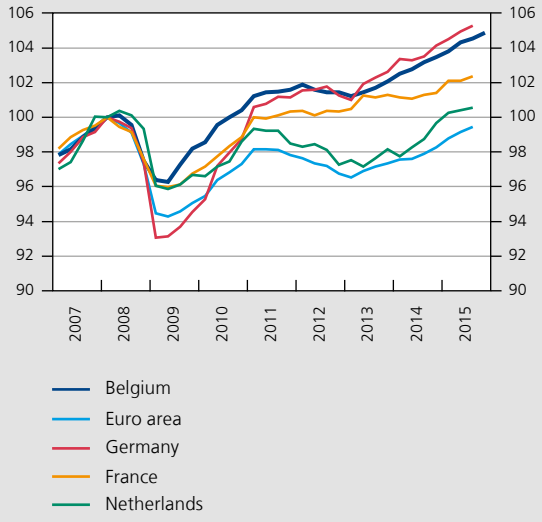
Belgium's economy benefited from the same favourable economic environment enjoyed by its partners in the euro area. First off, monetary policy accommodation made for continued favourable financing conditions for both corporations and private individuals – and the government too, for that matter – as it reduced their financial outgoings. Conditions such as these encourage investment. What is more, companies benefited from improved competitiveness vis-à-vis their rivals outside the euro area because of the weakening of the euro, which was particularly pronounced relative to the US dollar between mid-2014 and early 2015. Lower commodity prices, especially those of crude oil, also helped reduce producer costs and boosted the purchasing power of private individuals.

In addition to these external drivers, Belgian macroeconomic policies were less single-mindedly focused. The fiscal stance, for one, appears to have had a largely neutral effect on economic activity in the past two years. However, wage restraint, which had been ongoing since 2009 and was enhanced by a range of measures in 2015, seems to have supported job creation and so contributed to strengthening the economic fundamentals, even if it did hold back demand and economic activity in the short term. On the whole, and even in the short run, policies supportive of economic potential and the sustainability of public finances should be a force for the good if they give economic agents more confidence in the future.

Economic activity continued to pick up and gradually broadened to include the whole of the Belgian economy. While the cyclical recovery of 2013 initially showed up in higher productivity, employment continued to fall; not until the second quarter of 2014 did the labour market experience net job creation. This improvement

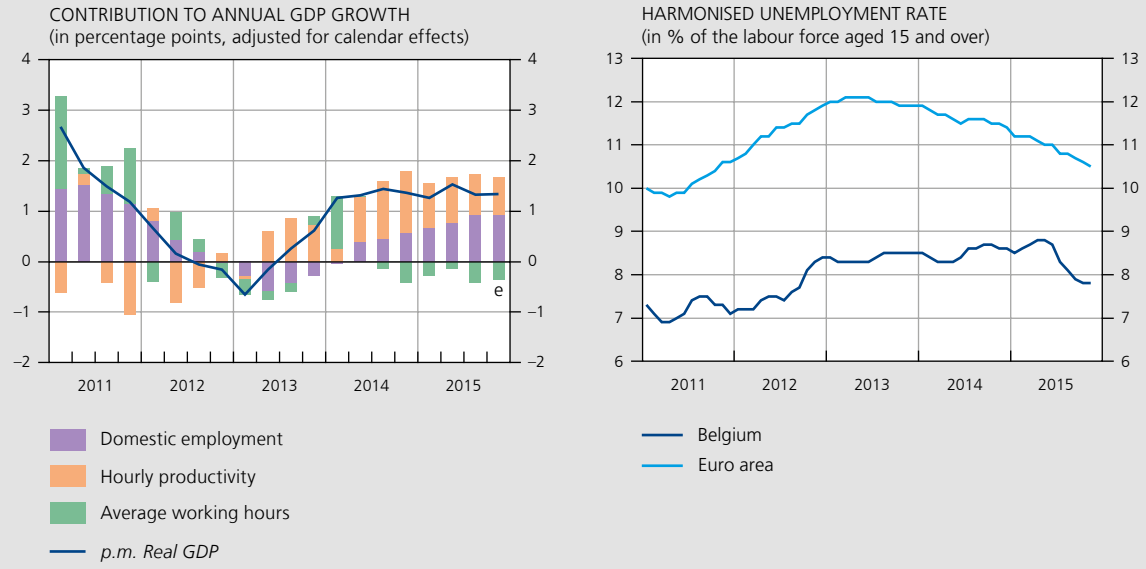
CHART 20 ONGOING BUT MODEST RECOVERY IN BELGIAN ECONOMIC ACTIVITY

(GDP in volume, index 2008Q1 = 100, data adjusted for seasonal and calendar effects)



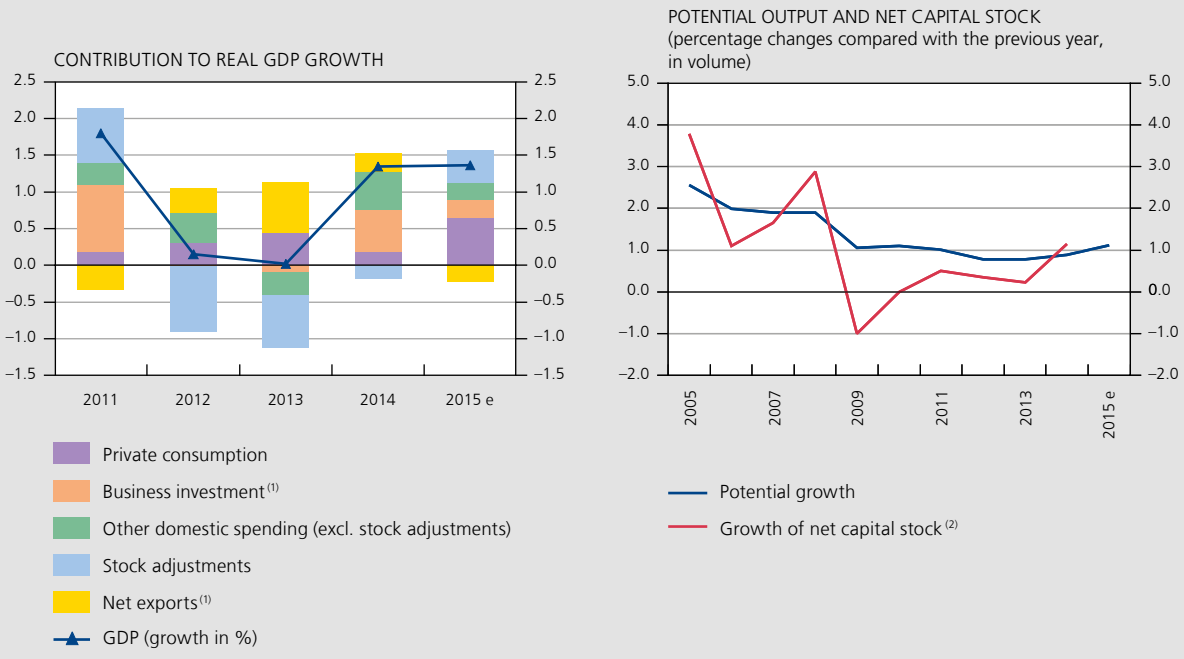
Sources: EC, NAI.

CHART 21 GROWING ECONOMIC ACTIVITY BOOSTS EMPLOYMENT BUT FAILS TO SHOW UP IN UNEMPLOYMENT RATE UNTIL MID-2015



Sources: EC, NAI, NBB.

CHART 22 BROADER-BASED ECONOMIC ACTIVITY, BUT PERSISTENTLY SLOW POTENTIAL GROWTH



Sources: NAI, NBB.
(1) Adjusted for key purchases of capital goods outside Belgium.
(2) Excluding housing and the "public administration and education" branch.

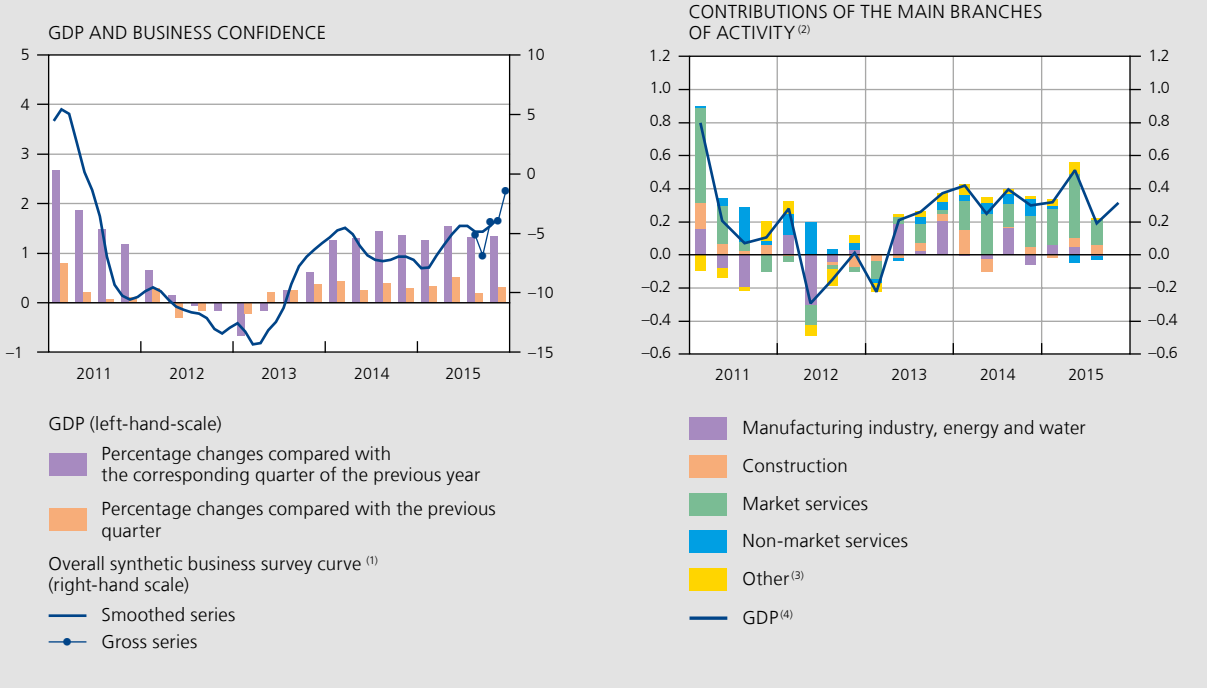
continued throughout 2015 but was fairly modest as the employment rate established on the basis of the labour force survey data did not go up and in fact inched down between 2014 and 2015, from 67.3 % to 67.2 % of the working-age population, while the harmonised unemployment rate rose slightly until May 2015 before moving back down gradually. Meanwhile, the number of corporate bankruptcies has been declining continuously over the past two years.

Domestic demand as a driving force for economic activity has gradually picked up in the past two years. In 2015, private consumption took the lead as purchasing power grew thanks to oil prices plunging to new lows. The recovery may have gained a firmer toehold, but it remained too subdued for Belgian growth dynamics to really lift off. In fact, both potential growth and the pace of the increase in the capital stock still languished below their pre-crisis values. Moreover, developments in the second half of 2015 have once again proved the Belgian economy to be highly sensitive to external vicissitudes.

2.2 Economic activity and job creation up further despite growing uncertainty

Although economic activity remained positive throughout 2015, it slowed in the third quarter. For a few quarters, the external factors mentioned earlier exerted a greater driving force than did the impact of waning global demand on the euro area. However, this changed as the summer progressed. Growth prospects were revised downwards in several emerging countries, particularly in China, while growth in some developed countries faltered a little and, worse, trade growth significantly trailed expectations. As a result, there was a great deal of uncertainty about the direct or indirect impact of foreign demand for goods and services, and increased volatility in the financial markets. Confidence indicators deteriorated considerably, if temporarily: firms grew less sanguine about their future orders, while consumers no longer took such a rosy view of their financial and employment situation, and applied the brakes to their outgoings. At the same time, the positive contribution to purchasing power of the fall in oil prices diminished. Towards the end of

CHART 23 MODERATE GDP GROWTH DUE TO ROBUST FIRST HALF-YEAR



Sources: NAI, NBB.
(1) Balance of replies to the monthly surveys, non calendar adjusted data.
(2) Contributions to the change in GDP compared with the previous quarter, unless otherwise stated; volume data adjusted for seasonal and calendar effects.
(3) Namely "Agriculture, forestry and fishing" and product-related taxes net of subsidies.
(4) Percentage changes compared with the previous quarter.

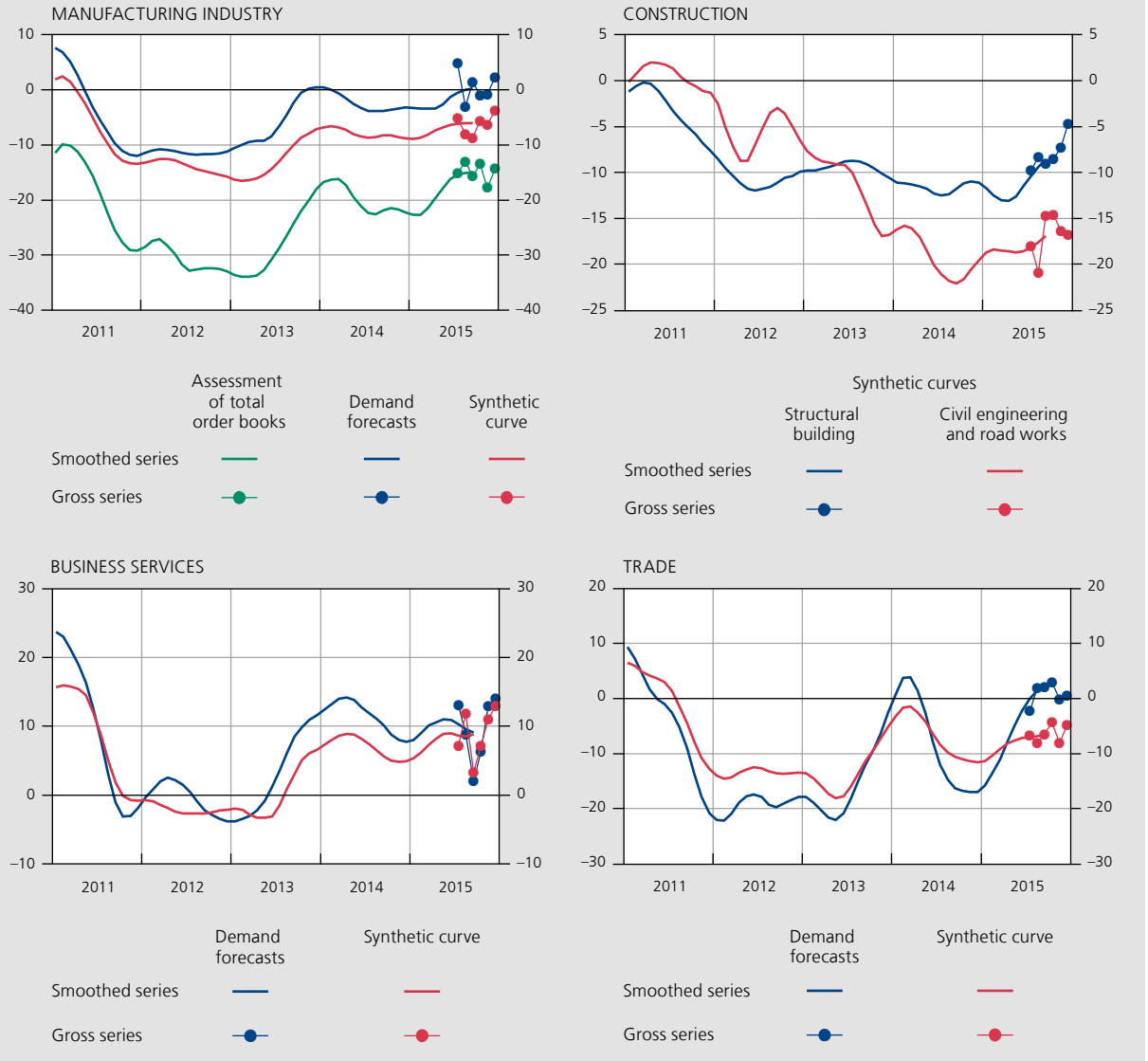
the year, confidence picked up again and the consequences of the terrorist attacks and threats proved altogether muted.

All that said, 2015 got off to an auspicious start: supported by pick-ups in the manufacturing industry and market services sector, GDP was up 0.5 % in the second quarter, its most robust quarterly growth in four years. In the Bank's surveys around that time, businesses in these sectors were reporting an upswing in the economic cycle.

In the third quarter, however, momentum faltered temporarily. Industrial production chains being strongly interlinked globally, the slowing pace of growth in the emerging countries rapidly affected industry, leading to a reversal of the trend in the synthetic curve for manufacturing in the July-September period. A less upbeat outlook was attributable to the order book position – and particularly its foreign component – which suddenly got more negative scores, on top of a notable increase in inventories, which pointed to an imbalance between supply and demand. The reversal in confidence in the market services sector was chiefly reflected in the outlook for economic activity and demand in business services, which typically enjoy close ties with

CHART 24 TEMPORARY UNCERTAINTIES IN SOME SECTORS

(economic indicators, balance of replies, seasonally adjusted data)



Source: NBB.

the manufacturing industry. Company managers in the trade sector, by contrast, benefited from continued domestic consumption growth and stayed fairly optimistic.

Economic activity in the construction industry is largely determined by domestic factors. In 2015, value added did not move ahead as smartly as it had the previous year: the winter months were less mild and held back growth somewhat in the first quarter. Synthetic business survey indicators show confidence in new constructions of buildings to have improved throughout 2015, albeit more in the residential than in the commercial market. Infrastructure was mired in malaise a lot longer and confidence only perked up towards the end of the year, possibly as a result of the recent recovery in public investment.

Value added in non-market services, which include public administration, education, health care and social work, was virtually stable in 2015, after recording a minor upturn in 2014. Taking the longer view, value added creation is currently rather low in the sector and reflects fiscal consolidation efforts.

Tentative economic activity no curb on labour market recovery

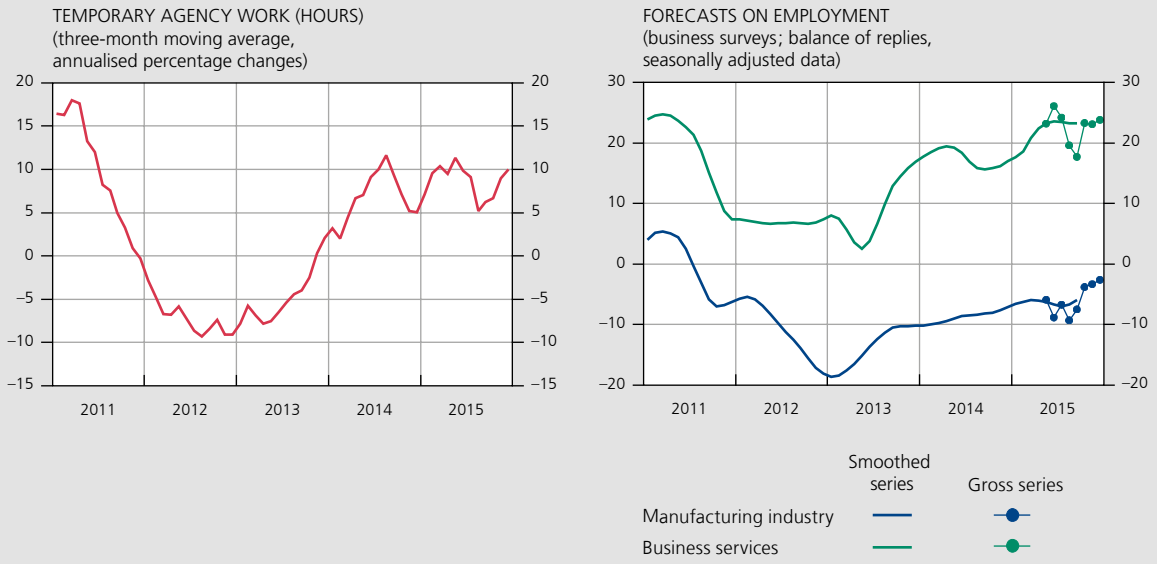
As it was only very short-lived, the deterioration in the economic climate during the course of the year barely had any impact on employment in 2015. Admittedly, during the summer, business leaders in industry and services were slightly more cautious about hiring prospects and there was a brief slowdown in the use of temporary workers, which closely reflects fluctuations in the business cycle. But other than that, labour demand was primarily bolstered by the gradual strengthening of economic activity and years of moderate developments in labour costs.

Companies reported an increase in the number of unfilled vacancies. Employer surveys by FPS Economy, SMEs, Self-employed and Energy recorded nearly 93 000 vacancies on average in the first three quarters of 2015, taking the vacancy rate – the number of vacancies as a ratio of total available jobs, filled or unfilled – to 2.5 % compared with 2.3 % in the same period of 2014. Cyclical sectors recorded a rise, whereas the "public administration and education" branch fell.

To fill these vacancies, employers typically turn to temporary employment agencies – marrying their need for extra workers with a reluctance to hire permanent workers in an uncertain economic climate – and to the regional employment services.

Vacancies reported to the public employment services rose in Flanders and Brussels between 2014 and 2015, whereas they came down further in Wallonia.

CHART 25 BRIEF SLOWDOWN IN TEMPORARY AGENCY ACTIVITY AND HIRING PROSPECTS IN INDUSTRY AND SERVICES



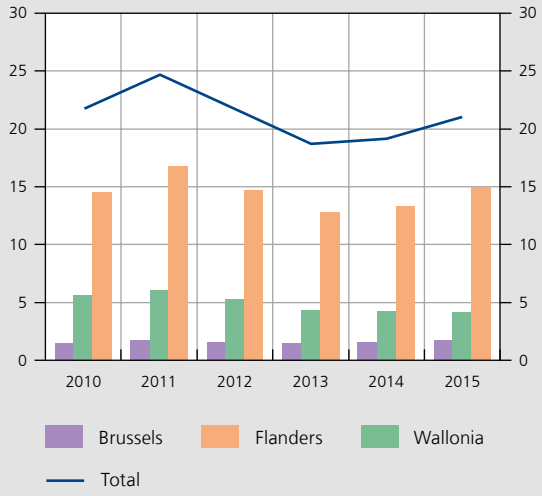
Sources: Federgon, NBB.

Some of these vacancies remain unfilled; at the end of each month, there were around 35 000 job openings across the country. Frictional unemployment accounts for a proportion of this, i.e. the time needed to optimally align labour supply and demand. Another part of the remaining unemployment figure is attributable to – often overlapping – structural factors, such as a mismatch in skills or work experience, mobility aspects or employment conditions, causing so-called critical occupations in all three Regions. In Flanders, commercial and technical positions as well as cleaning jobs are the hardest to fill, in Wallonia technical, commercial and management positions, while Brussels is particularly short of teachers and technical, back-office and commercial staff.

Total employment added 37 500 people in 2015, notably more than the figure for 2014. Salaried employment contributed most, compared with only a minor recovery in 2014. Contrary to recent trends, business-cycle-sensitive branches supported the upturn this time, with market services being one of the key driving forces. Job creation in the market services sector is clearly less based on new service voucher jobs than it has been in

CHART 26 RISING NUMBER OF VACANCIES IN BRUSSELS AND FLANDERS

(vacancies reported by the public employment services[1], in thousands, monthly averages)



Sources: Actiris, Forem, VDAB.
(1) Normal economic cycle excluding temporary workers.

TABLE 2 DOMESTIC EMPLOYMENT AND ITS COMPONENTS

(calendar adjusted data; change in thousands of persons in comparison to previous year, unless otherwise stated)

	2011	2012	2013	2014	2015 e
Labour force	41.2	31.1	6.1	29.0	18.0
National employment	61.1	16.6	–18.5	14.9	37.2
p.m. Employment rate[1][2]	*67.3*	*67.2*	*67.2*	*67.3*	*67.2*
Frontier workers	–0.2	0.5	–0.8	–0.7	–0.3
Domestic employment	61.3	16.1	–17.7	15.6	37.5
Self-employed	8.0	7.8	5.9	7.1	9.9
Employees	53.3	8.3	–23.6	8.6	27.6
Branches sensitive to business cycle	31.9	–7.8	–25.1	–3.8	16.2
Of which:					
Industry	3.0	–7.4	–12.4	–11.6	–8.4[4]
Market services	25.5	–0.8	–7.9	13.3	24.6[4]
Public administration and education	5.0	1.7	2.7	5.1	–2.6
Other services	16.4	14.5	–1.3	7.3	14.0
p.m. Service vouchers	*11.5*	*8.1*	*8.5*	*5.1*	*3.7*
Unemployment	–19.8	14.5	24.6	14.0	–19.2
p.m. Unemployment rate[1][3]	*7.2*	*7.6*	*8.5*	*8.6*	*8.4*

Sources: EC, NAI, NEO, NBB.
(1) Data from labour force surveys.
(2) As a percentage of working-age population (20-64).
(3) As a percentage of labour force (15-64).
(4) Average of first three quarters.

the past, as a result of saturated demand, the increase in the hourly wage cost and hiring issues. Government austerity measures have served to reduce the number of workers in public administration and education in 2015. Employment numbers were also boosted by higher numbers of self-employed workers: 10 000.

Domestic employment solely comprises Belgian or non-Belgian employees in the service of a Belgian employer or registered as self-employed. Foreign service providers and posted workers are excluded even if they work in Belgium and add to value creation. Based on documents drawn up by their countries of origin, the European Commission notes that Belgium is among the key European destinations for workers on secondment: the data suggest that 134 000 – i.e. 3 % of the country's total workforce – worked in Belgium in 2013, compared with 374 000 in Germany (less than 1 %) and 182 000 in France (not even 0.7 %). These posted workers are mostly active in construction.

Box 4 – Seconded workers in construction

Posted workers are contracted to work in Belgium while they are typically employed in other countries. Their contractual relationships with their non-Belgian employers remain in place and they are governed by the social security system of their country of origin. Under European law, employers are required to respect social legislation in force in the host country, e.g. governing working hours, wage conditions and more specifically local minimum wages, etc.

According to NSSO figures based on Limosa returns[1], there were 216 000 workers posted to Belgium in the year 2014 as a whole, compared with 90 000 in 2007. These workers do not show up in Belgium's employment statistics, but in those of their employers' countries of origin. Nearly 60 % of them work in construction. Note that they are not necessarily on annual contracts: the returns record the number of people on secondment contracts, not the length of their service.

EMPLOYMENT AND SECONDMENTS IN CONSTRUCTION

(annual changes in thousands of people)

Sources: NAI, NSSO.

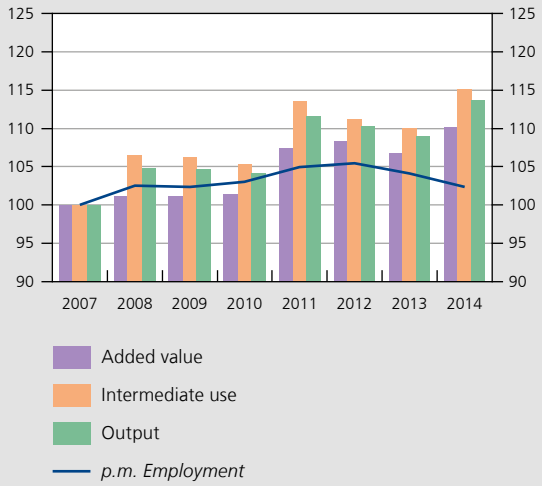
Construction workers on secondment are typically nationals from neighbouring countries, Portugal, Poland and other East European countries. Measured by the foreign company's location, the Netherlands tops the league table,

(1) Compulsory return prior to employment of seconded workers in Belgium.

reflecting the flexibility of Dutch laws on temporary employment agencies, which has led to the establishment of a large number of companies offering such services.

ECONOMIC ACTIVITY AND CONSTRUCTION EMPLOYMENT IN BELGIUM

(index 2007 = 100; by volume for economic activity indicators, by people for employment)



Source: NAI.

Secondments in the construction industry have boosted sector output, and Belgium's national accounts put its rise between 2007 and 2014 at 14 % in volume terms. Construction companies' intermediate use, which includes wages for secondment work, increased a little faster, while the value added generated by the sector advanced 10 %.

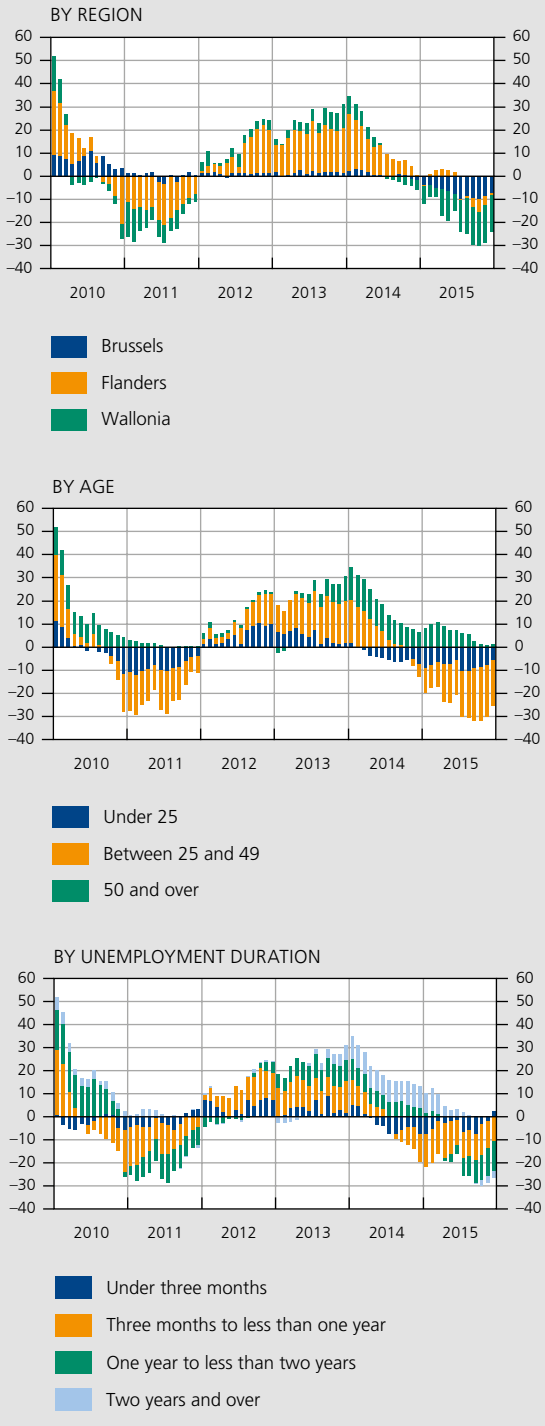
Employment in Belgium did not benefit from it. Between 2012 and 2014, in particular, the period in which the number of seconded workers grew most strongly, the number of construction employees fell by 11 300. Even disregarding seconded workers, the sector also saw a shift from salaried employees to self-employment, which added 4 400 people.

Under EU law, foreign employers are required to comply with the rules on working hours and minimum wages of the host country, but audits by FPS Employment Labour and Social Dialogue find that they do not necessarily do so. In the real world, discouraging audits are very difficult to carry out, enabling foreign companies to offer a service at lower prices than their domestic counterparts thanks to less strict employment conditions and lower wages. European rules are being circumvented at the expense of Belgian employment, which is marked by high wages and heavy direct tax charges on labour.

On the whole, the minimum employment conditions as enshrined European law are not enough to prevent social dumping. More specifically, conventional wages would be more relevant as a criterion than minimum wages. The Commission's proposed Labour Mobility Package to better coordinate social security systems is intended to encourage worker mobility and to help national authorities combat abuse and fraud, but it will take a while before this initiative takes on a more concrete shape. And so to address the shortcomings of the current system, Belgium and a number of other Member States are calling for a review of the conditions that apply to secondments.

CHART 27 FASTER DROP IN NUMBER OF UNEMPLOYED JOB-SEEKERS

(changes in thousands of people compared with the same month of the previous year)



Source: NEO.

While the labour force swelled by around 18 000 people, job creation actually helped to push down unemployment in 2015 by 19 000. This fall in the number of unemployed job-seekers came on top of a cumulative increase of 53 000 people between 2012 and 2014. However, in 2015, unemployed job-seekers still averaged an annualised 579 000, compared with 500 000 in pre-crisis 2008.

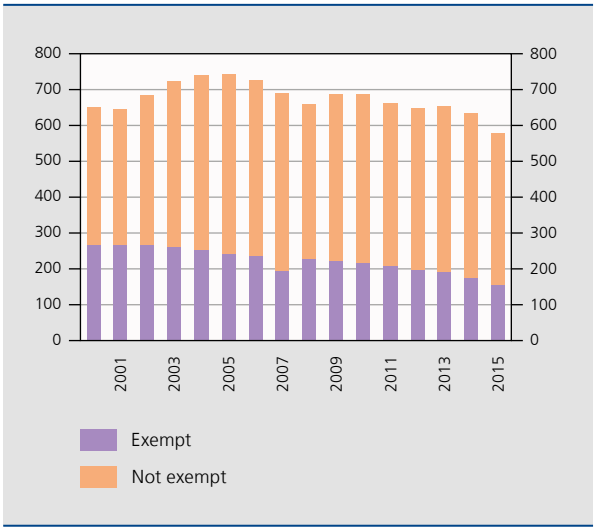
Unemployment has not been coming down at the same speed in all three Belgian Regions. Flanders responded more slowly and did not see unemployment begin to shrink until July 2015, while Wallonia and Brussels recorded falls from July and November 2014 respectively. A note of caution is in order: the unemployment rate in the Flemish Region averaged 5.1 % in the first three quarters of 2015, well below those for Wallonia and Brussels, where 12 % and 17.6 % of the labour force between 15 and 64 years of age are out of work, respectively.

Lower numbers of unemployed job-seekers – a trend that got under way in 2014 – first emerged in the contraction of the pool of those unemployed for less than a year. Short-term unemployment, which typically affects youngsters and the 25 to 49 age bracket the most, has traditionally been more sensitive to cyclical effects and, more specifically, to any upturn in economic activity. Conversely, the number of unemployed people who have been looking for jobs for two years or longer has persistently grown since mid-2013. These situation is primarily due to the job-seekers of 50 and above, notably numerous in this group and difficult to reintegrate on the labour market.

From 2015, though, the rise in long-term unemployment gradually slowed, albeit partly because of an outflow of people claiming insertion allowances who did not bother to re-register as job-seekers when their benefits ceased. In practice, insertion allowance entitlements have been capped at three years since 1 January 2012, with the initial effect of these measures beginning to percolate through in January of the year under review. In fact, in September 2015, the number of long-term unemployed even shrank compared with the previous year. Despite this positive trend, unemployment exceeding one year averaged 51 % in total in the third quarter of 2015 – a worrying phenomenon more prevalent in Belgium than in the EU at large, where it averages 48.2 %. After all, in terms of knowledge, skills and attitudes, the long-term unemployed are the least connected to the labour market and the hardest to re-employ even when economic activity picks up. This is a phenomenon that, if it

CHART 28 ACTIVATING JOB-SEEKERS: CONSTANT REDUCTION IN BENEFIT CLAIMANTS EXEMPT FROM LOOKING FOR WORK

(in thousands of people)



Source: NEO.

persists, causes steeper structural unemployment and erodes the economy's growth potential.

Broken down by age bracket, unemployment shows up major differences between the different age groups. In 2012 and 2013, the crisis had made youth unemployment much more severe, with lacklustre demand reducing the job prospects of young people and forcing them to compete with more experienced job-seekers. As is often the case, in 2014, young people were the first to benefit from the cyclical upturn, and the number of unemployed job-seekers under 25 fell off from the end of the first quarter, a trend that continued throughout 2014 and into 2015. The 25-49 age bracket also started to shrink at the end of 2014, while the number of over- 50s among the unemployed swelled further. That said, a more specific age demarcation within the latter group reveals diverging trends: whereas the 55-60-year-olds accounted for the bulk of the increase in 2014, their share shrank markedly in 2015, when the over-60s were hit hardest. Unlike these two older sub-groups, the 50-55 age bracket has been enjoying a decline in unemployment since mid-2014. The upward trend in the over-50s age group is not a recent phenomenon and has been evident since the early 2000s. The rise reflects successive tightening of the criteria granting older unemployed people exemptions from looking for work. The minimum exemption age has gone up from 50 in 2002 to 60 in 2013, and then to 65 in 2015. All these people are now registered as job-seekers.

Trends in the number of unemployed entitled to benefits based on their status as job-seekers or not do tend to reflect the impact of different measures taken since the 2000s to reduce exemptions from looking for work. The proportion of non-job-seeking unemployed entitled to benefits had fallen to 27 % by 2015, compared with over 40 % in 2000. In January 2015, the government scrapped age-based exemptions altogether and decided that all jobless, including those with an employer top-up and irrespective of their age, should be available for work and actively look for employment. Still, some exemptions, transition measures and adjusted availability were introduced. Beside age reasons, people may be granted an exemption for social and family reasons, albeit that the government has now imposed stricter conditions on access to this system. This set of new measures should accelerate the downward trend in the number of non-job-seeking unemployed entitled to benefits, and re-include them in the supply of labour. In fact, this could contribute to welcome changes in labour market attitudes, as both employees and employers may stop seeing the age of 50 as an "inactivity threshold".

2.3 Subdued inflation only partially reflects moderation in labour costs

Inflation edged up in 2015 but remained low

In 2015, inflation measured by the year-on-year change in the harmonised index of consumer prices (HICP) stayed low at 0.6 %. This was mainly due to crude oil prices, which in fact pushed inflation numbers into negative territory between December 2014 and March 2015.

The downtrend in inflation recorded since mid-2011 nevertheless came to an end, after falling for three years in a row, from 3.4 % in 2011 to 0.5 % in 2014. The situation in Belgium differs from that in the euro area and in its three neighbouring countries, which continued to see average year-on-year inflation decline in 2015. In the final quarter of 2015, Belgium notched up price rises of 1.3 %, compared with 0.2 % in its neighbouring countries and the euro area.

The widening of the inflation gap between Belgium and the three main neighbouring countries in 2015 was caused by multiple factors. For one thing, services inflation, despite lower labour cost growth, is persistently high in Belgium and contrasts with the situation in its three main neighbouring countries. Furthermore,

TABLE 3 HARMONISED INDEX OF CONSUMER PRICES

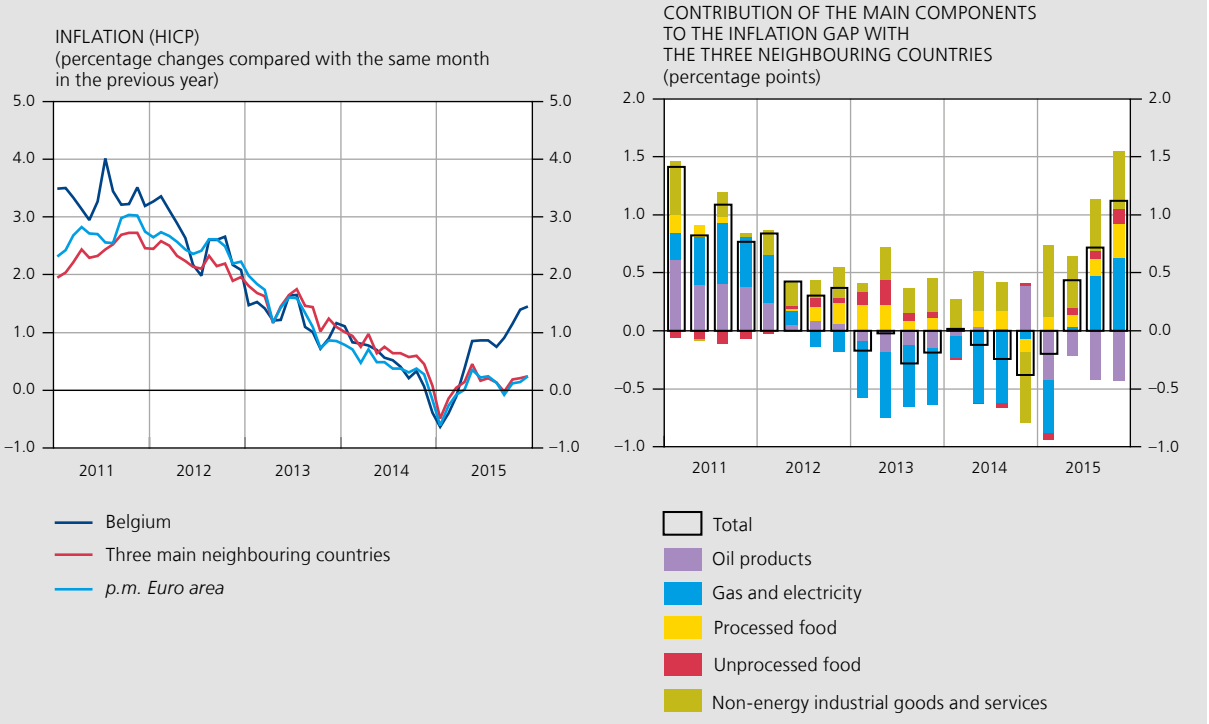
(percentage changes compared with the previous year)

	2011	2012	2013	2014	2015
HICP	3.4	2.6	1.2	0.5	0.6
Energy	17.0	6.0	–4.6	–6.0	–8.0
Unprocessed food	0.2	3.4	4.4	–1.3	2.1
Processed food	3.1	3.1	3.2	2.1	1.6
Underlying inflation	1.5	1.9	1.5	1.5	1.6
Services	1.9	2.5	1.9	2.2	2.4
Non energy industrial goods	1.0	0.9	1.0	0.3	0.5
Health index	3.1	2.7	1.2	0.4	1.0

Source: DGS.

a number of measures introduced by the federal and regional governments are conspiring to push up inflation. Electricity distribution rates have been raised, for instance, while some of the measures taken to finance the tax shift had already exerted a major influence on prices of energy products – chiefly electricity – and alcohol. Regulated prices likewise affected inflation, in particular services prices.

CHART 29 GREATER INFLATION GAP BETWEEN BELGIUM AND ITS NEIGHBOURING COUNTRIES



Sources: EC, DGS.

TABLE 4 CONTRIBUTIONS TO INFLATION FROM PRICE CHANGES FOR LARGELY REGULATED GOODS AND SERVICES
(percentage points)

	2013	2014	2015	*p.m. HICP weight in 2015 (in %)* *2015*
Contribution to total HICP inflation	0.3	0.1	0.5	
Contributions to price changes among the main components:				
Energy	0.6	–2.0	1.2	*11.0*
Excise duties on motor fuels	0.1	0.1	0.1	
VAT on electricity	0.0	–2.4	0.3	
p.m. Annualised impact as of September			*3.1*	
Electricity distribution rates[1]	0.5	0.3	0.9	
Services	0.3	0.5	0.6	*40.8*
Domestic services (including service vouchers)	0.1	0.2	0.2	
Education	0.0	0.0	0.1	
p.m. Annualised impact as of October			*0.4*	
Medical services	0.1	0.1	0.2	
Waste collection	0.0	0.1	0.0	
Sewage	0.0	0.1	0.1	
Processed food	1.0	1.2	0.9	*13.1*
Excise duties on tobacco	0.7	1.1	0.8	
Excise duties on alcohol	0.2	0.1	0.1	
p.m. Annualised impact as of November			*0.6*	

Sources: EC, NBB.
(1) Including a "Prosumer" rate introduced in Flanders in August 2015.

Energy prices stayed below those in 2014, but inched back up during the year

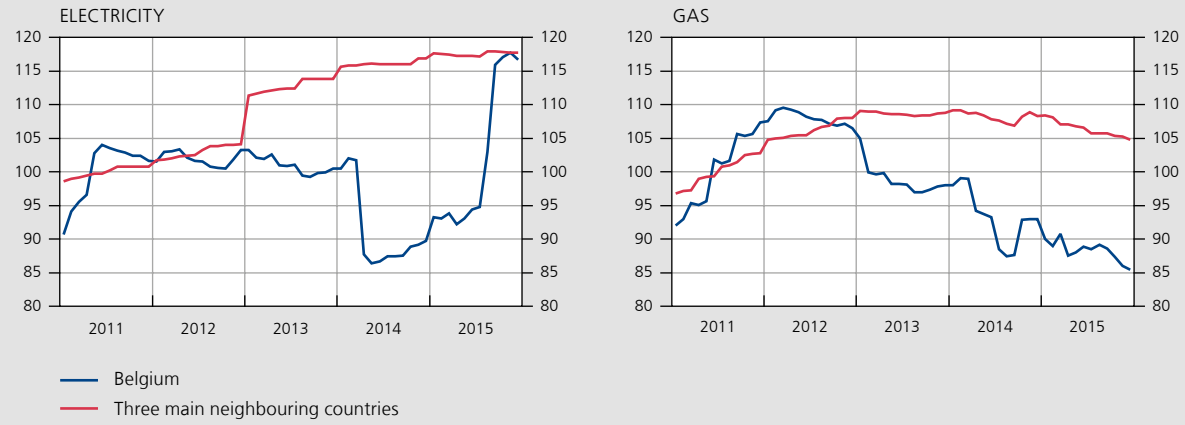
After recording declines of 6 % in 2014, energy prices fell by 8 % in 2015, due to a confluence of factors that brought both upward and downward pressures. The slowdown since 2014 is attributable to sharply lower global oil prices and the downstream drop in prices for refined products. Throughout 2015, Brent crude prices were much lower than in 2014, a year that had already seen sharp falls. In euro terms, Brent slumped by 36 % in 2015, compared with 10 % in 2014.

Higher consumer prices for electricity have wiped out part of the effect on total inflation of oil-derived products. In the first quarter of 2015 energy prices were also pushed down by the previous government's decision to cut the VAT rate on electricity from 21 % to 6 % from April 2014 – a decision that was reversed in September 2015 to help fund the tax shift, taking overall inflation in 2015 up by 0.1 percentage points. Next, distribution rates went up in the country's three Regions: Belgium's utility companies have been subject to corporation tax since mid-2015 and have passed on the extra charges to consumers. In Flanders, August saw the introduction of a so-called "Prosumer rate", imposing a charge for the use of the power grid on consumers generating a proportion of their own (green) electricity. The distribution rate rise caused by both factors combined added an estimated 0.1 percentage point to total inflation in 2015.

As part of the tax shift, in November 2015, the government introduced a ratchet system for diesel and a reverse ratchet system for petrol – linked to diesel prices – with the aim of pushing up diesel prices relative to petrol prices over time. Under this mechanism, any falls in daily maximum prices that are fixed in the "programme contract" for diesel are not fully passed on to consumers but are partly offset by higher excise duties. Once diesel prices have hit an excise duty ceiling, an offsetting cut in excise duties on petrol kicks in, with the mechanism ending as soon as government-targeted amounts have been reached, i.e. € 2 for 50 litres of diesel and € –1.3 for petrol by the end of

CHART 30 DIVERGING ELECTRICITY AND GAS PRICES

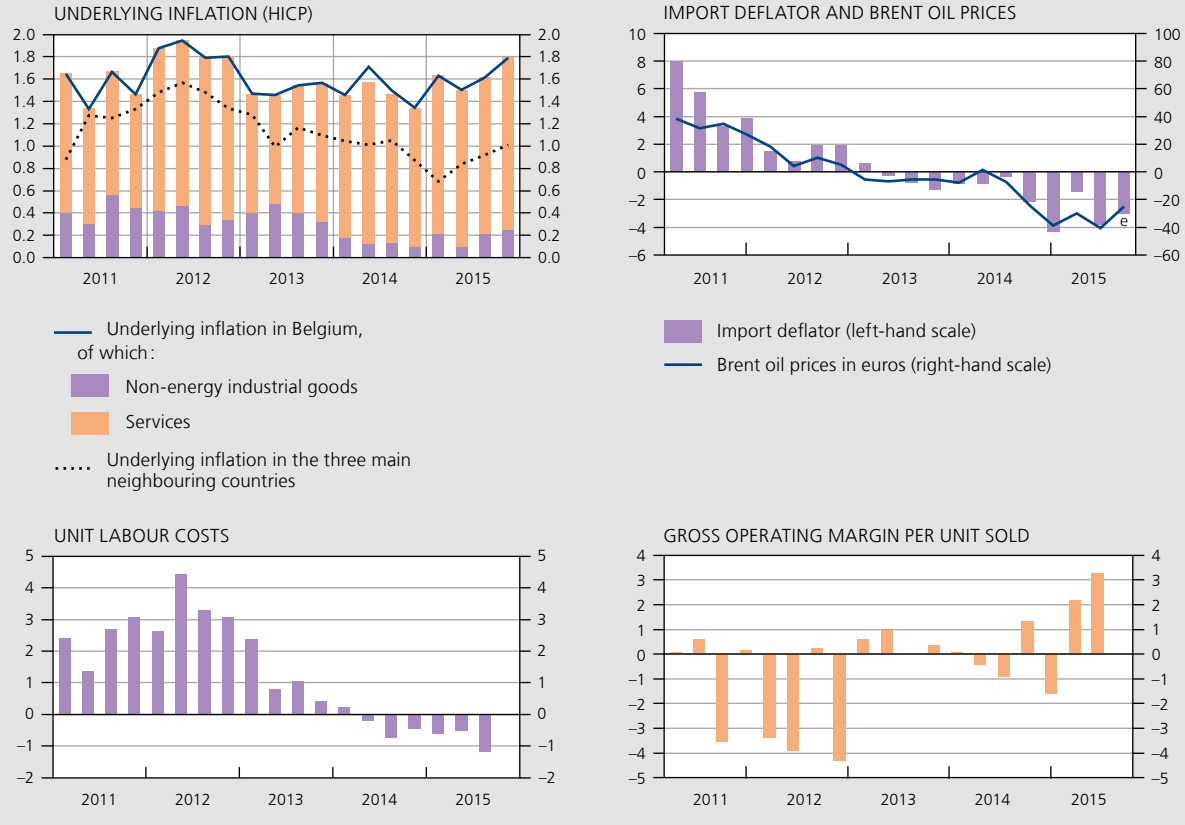
(index 2011 = 100)



Source: EC.

CHART 31 IMPORT PRICES AND PROFIT MARGINS OFFSET MODERATING INFLUENCE OF WAGE GROWTH ON UNDERLYING INFLATION

(percentage changes compared with the previous year)



Sources: EC, NBB.

2016. In 2015, the measure had no significant effect on total inflation.

Gas prices came down slightly in 2015, reflecting Zeebrugge Hub prices and a reduction in distribution network rates.

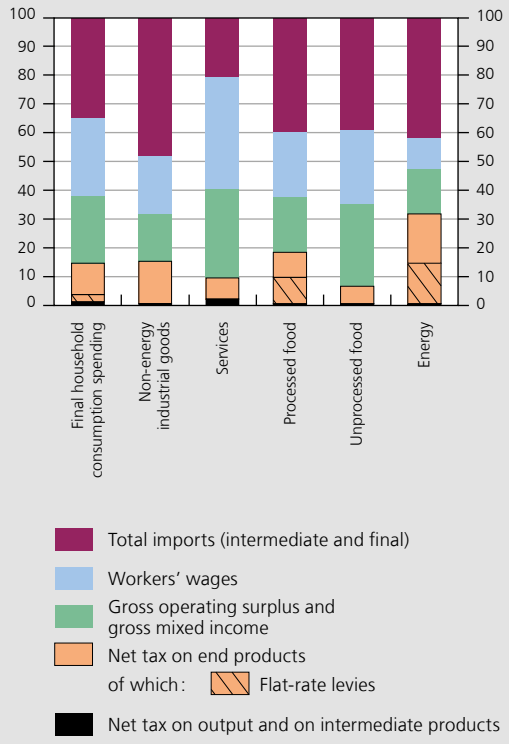
Underlying inflation persistently high due to services prices

Underlying inflation, as measured by the HICP excluding food and energy, averaged 1.6 % in 2015, a minor pick-up relative to 2014's 1.5 %. It has proven to be more persistent in Belgium than in other countries: in Belgium's neighbouring countries, underlying inflation dropped for the third year running, to an average of 0.9 % in 2015, compared with 1 % in 2014 and 1.1 % in 2013. And in the broader euro area as well, it failed to move beyond 0.8 % in 2015.

Services prices are the primary reason for underlying inflation's persistence, growing by 2.4 % in 2015 compared with 2.2 % in 2014 while neighbouring countries posted a mere 1.2 % in 2015 and 1.6 % in 2014. Pricing of services is influenced chiefly by domestic factors such as unit labour costs and corporations' gross operating surpluses. Labour costs account for 27 % of the total household final consumption expenditure but take up over 40 % of total costs in the services sector. In fact, prices for services might have been expected to come down as unit labour costs have grown more slowly in the past couple of years. Although labour costs typically show up in consumer prices gradually, their absence in the pricing figures suggests other factors pulling in the opposite direction.

CHART 32 WORKERS' PAY ACCOUNTS FOR SIGNIFICANTLY HIGHER PROPORTION OF COSTS IN SERVICES COMPARED WITH OTHER SECTORS

(breakdown of cumulative costs of household spending (1), in %, in 2010)



Sources: NAI, NBB.
(1) At purchase prices.

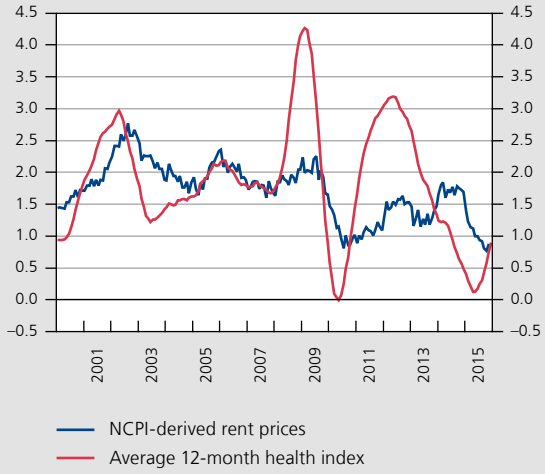
First of all, unit labour costs have been advancing more strongly in services than in the manufacturing industry or even the broader economy. Trends in services prices are also related to firms' profit margins to the extent that they are able to widen these margins, or preserve them in times of low economic activity. In that respect, the OECD's Product Market Regulation (PMR) indicators suggest that some of Belgium's services sectors are more strictly regulated than those in other countries and that, theoretically at least, there is less competition. A survey commissioned by the Eurosystem's Wage Dynamics Network (WDN) indicates companies generally reporting intensified competition in the 2010-2013 period compared with 2008, but less so in business services and financial services. This is not new: as early as 2005, the Eurosystem Inflation Persistence Network reported that euro area prices in services are typically more rigid than in other sectors.

Insufficient competition may explain why communication as a services category made a less negative contribution to inflation in 2015. Normally, this category – which accounts for 8.4 % of the services consumption basket – is best known for falling prices on the back of major quality improvements of the kinds of products that are taken into account in compiling the consumer price index. Yet in 2015, this category scarcely declined at all, mainly because of price rises for packages announced by a major telecoms company at the start of the year.

Pricing of a large proportion of services in Belgium, particularly if regulated, is index-linked – albeit with some time lag – to a range of indicators such as the national consumer price index or the health index, e.g. prices of rent, education, public transport, etc. Theoretically, these types of services might be expected to contribute less to inflation in view of the overall slowdown in inflation in the past few years, but other factors have been known to upset this relationship. Rent prices, for instance, would have gone up less in 2015 if they had been subject to index-linking only. In the event, supply

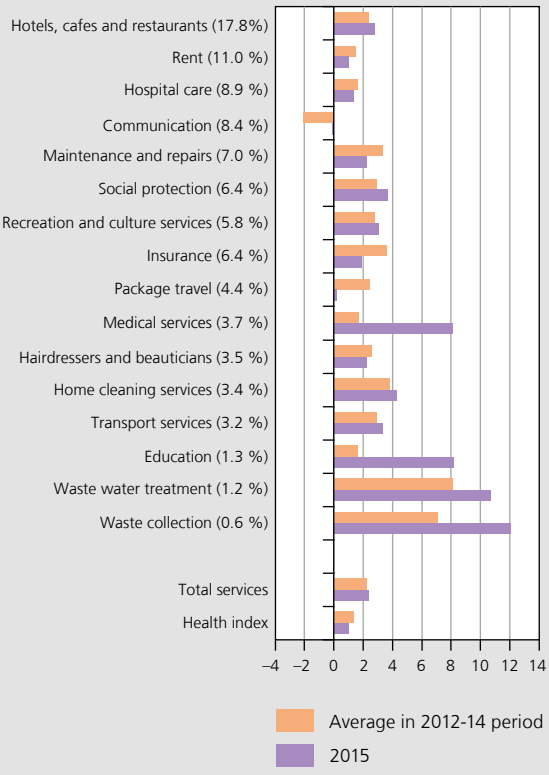
CHART 33 RENT PRICES DO NOT ALWAYS REFLECT INDEXATION MECHANISM

(change in percentages compared with the previous year)



Sources: DGS, NBB.

CHART 34 AVERAGE INFLATION IN THE 2012-14 PERIOD AND IN 2015 ADDS UP TO OVER 2% FOR A WIDE RANGE OF SERVICES COMPONENTS (1)



Source: EC.

(1) In brackets: category weight in the HICP services component.

and demand factors in the property market also came into play.

Services prices are also influenced by administrative decisions, some of which result from fiscal consolidation. The education category, for instance, saw its index surge by 29 % in October even though a negative figure would have been more likely based on typical index-linking. Indeed, the Flemish authorities raised higher education tuition fees sharply and thereby significantly accelerated inflation in this particular category, the effect of which is estimated at +0.4 percentage point on an annual basis in the overall services index. Another example of the influence of regulated prices is the 6 % increase in medical costs in January 2015, which resulted from a harmonisation of patient fees paid to consultants.

Prior to 2015, other regulated services have also become much more expensive, e.g. service vouchers, with prices having gone up from € 8.5 to € 9 in 2014, and the waste collection (with prices rising by 1.4 % in 2013, 18.5 % in 2014 and 12.1 % in 2015) and waste water treatment (from 3.4 % in 2013 to 9.4 % in 2014 and 10.7 % in 2015) categories. The hotels, cafés and restaurants category was a major contributor to the inflation gap between Belgium and its three main neighbouring countries in the 2008-14 period, as revealed in the 2014 annual report of the Price Observatory (NAI).

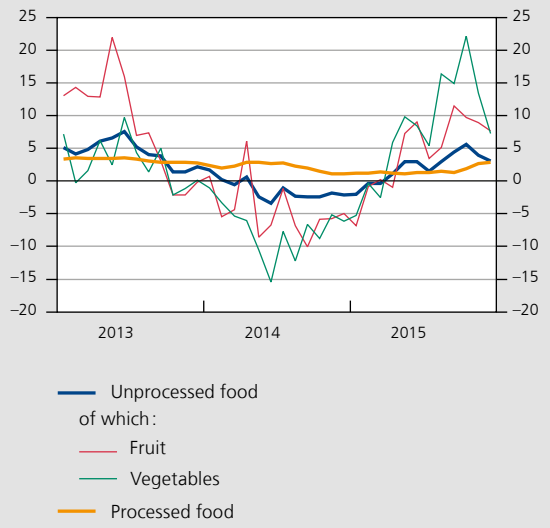
The inflation rate for non-energy industrial goods amounted to 0.5 % in 2015, against 0.3 % in 2014. With industrial goods prices more reliant on global developments than those for services, their still minor price rises would seem to reflect the gloomy economic climate. That said, industrial goods prices picked up slightly in the final months of 2015, mainly because of the influence of euro depreciation on the import deflator – which itself primarily reflects plunging crude oil prices.

Food prices go up

Unprocessed food prices rose by 2.1 % in 2015, compared with a fall of –1.3 % in 2014. Higher prices were chiefly recorded in the vegetables category and to a lesser degree also for fruit. In 2014, good harvests and the Russian trade embargo had caused a collapse in prices, as both had swollen fruit and vegetables supplies. Slightly less favourable weather conditions in 2015 and new markets in Europe and Canada combined to push up the year-on-year inflation figures. Also, drought and poor harvests in the second and third quarters of the year made potatoes a lot more expensive.

CHART 35 FOOD PRICES RISE AND FEEL THE TAX PINCH

(percentage changes compared with the previous year)



Source: EC.

Processed food price increases slowed from 2.1 % in 2014 to 1.6 % in 2015 or – ignoring alcohol and tobacco, whose prices are heavily influenced by excise duty changes – from 0.6 % in 2014 to 0.4 % in 2015. In this segment, lower food price inflation compared with 2014 was mainly down to falling global dairy prices. Later in the year, milk prices were raised by 14 eurocents a litre for a period of nine months, starting in October 2015, a measure taken to pay for a common fund for troubled milk producers facing sales prices that no longer cover their costs. An upside push came from the November rise in alcohol prices as part of the tax shift.

Wage restraint and index jump continue to push down labour cost growth

The growth of labour costs had already clearly slowed down in 2014 but continued to slacken in 2015. Hourly wage costs barely edged ahead by 0.5 % across the Belgian economy, down from 0.9 % in 2014. Main explanations for this slowdown include the freeze, for the third year running, of real collectively agreed wage adjustments in the private sector; a very slight increase in the health index at

TABLE 5 LABOUR COSTS

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

	2011	2012	2013	2014	2015 e
Labour costs in the private sector	2.1	3.1	2.5	0.7	0.4
Gross hourly wages	2.6	3.0	2.3	0.8	0.5
Collectively agreed wages (1)	2.7	3.0	2.0	0.8	0.1
Real agreed adjustments	0.0	0.2	0.1	0.0	0.0
Indexations	2.7	2.8	1.9	0.8	0.1
Wage drift and other factors (2)	–0.1	0.0	0.3	0.0	0.4
Employers' social contributions (3)	–0.5	0.1	0.2	–0.1	–0.2
Social security	0.1	0.0	0.1	–0.2	–0.2
Other contributions (4)	–0.5	0.1	0.1	0.1	0.0
p.m. Unit labour costs in the private sector	*2.3*	*3.5*	*2.1*	*–0.2*	*–0.5*
Hourly labour costs in the public sector	3.7	3.2	3.2	1.5	0.9
of which: indexations	2.7	2.5	2.3	0.0	0.0
Hourly labour costs in the economy as a whole	2.4	3.2	2.7	0.9	0.5

Sources: FPS ELSD, NAI, NSSO, NBB.

(1) Wage increases fixed by joint committees.

(2) Increases and bonuses granted by companies over and above those under interprofessional and sectoral collective agreements; wage drift resulting from changes in the structure of employment, and errors and omissions; contribution to the change in labour costs, percentage points.

(3) Contribution to the change in labour costs resulting from changes in the implicit social security contribution rates, percentage points.

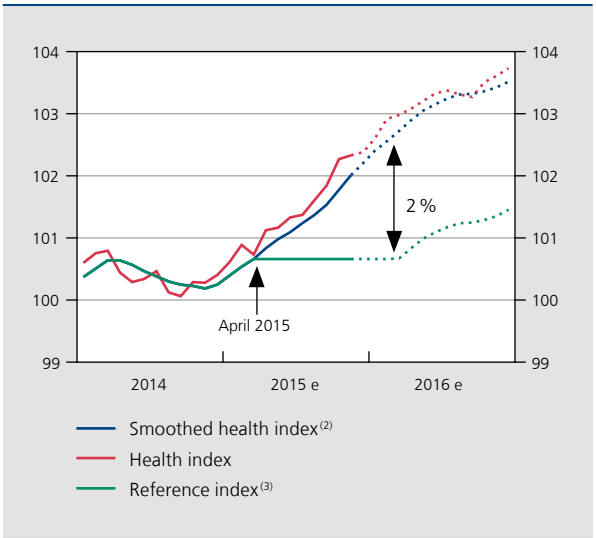
(4) Actual social contributions not paid to the government, including premiums for group insurance, pension funds or occupational pension institutions, and imputed contributions, including redundancy pay.

the start of the year; and the index jump implemented by the government from 1 April 2015. This latter measure effectively boils down to a freeze on automatic wage indexation in both the private and government sectors.

The increase in hourly labour costs in the private sector slowed down to 0.4 % in 2015, compared with 0.7 % in 2014 – far below the average 2.5 % increase of the past decade. Low inflation and the index jump were major factors behind this deceleration: whereas indexation still added 0.8 % to labour cost growth in 2014, this percentage fell to 0.1 % in 2015. In concrete terms, the official indexation parameter, i.e. the smoothed health index calculated as the average of the health index in the past four months, was blocked from 1 April 2015 until it will have grown by 2 %, implying that most automatic indexation mechanisms are temporarily shelved. The fact that indexation still contributed 0.1 % in 2015 was attributable to the fact that the private sector has a wide range of indexation mechanisms in place, depending in particular on joint committee agreements. Some of these had been activated before the index jump was put in place, others after the temporary freeze of the indexation mechanisms – e.g. periodic indexation mechanisms (annual, quarterly or other), which saw indexation occur on the usual dates but based on a reference index that no longer reflected price swings after the freeze. Even without the index jump, indexation would have added only 0.5 % to wage rises in 2015, because of subdued inflation and the time lags between price trends and indexation. The index jump will have the largest impact on labour costs in 2016.

CHART 36 IMPACT OF THE TEMPORARY SUSPENSION OF INDEXATION MECHANISMS ON THE REFERENCE INDEX FOR WAGES

(index(1), 2013 = 100)



Sources: DGS, NBB.

(1) Based on the NBB's 2015 autumn projections.

(2) Four-month average of the health index.

(3) Smoothed health index, taking into account the temporary freeze of the indexation mechanisms.

Real negotiated wage growth had already been frozen in 2013 and 2014, in accordance with the draft interprofessional agreement imposed by the government as some unions withheld their approval, as they had done in the 2011-12 period. This procedure was replicated for the 2015-16 period in the absence of a generally accepted collective agreement. With a view to further reducing the wage gap with Belgium's three main neighbouring countries, no real pay rises in excess of inflation were allowed. For 2016, the law makes provision for the possibility of granting new real negotiated wage increases provided they remain within the total margin of 0.5 % of the gross wage bill, corresponding to the total employer labour cost including all charges, plus 0.3 % of the wage bill in net terms, at no extra cost for the employer.

The effect of the wage drift – which comprises, without distinction, pay scale increases agreed by employers and the effects of changes in the employment structure – climbed to 0.4 % in 2015, compared with 0 % in 2014. In addition to long-term trends such as lengthening careers, this modest increase may be explained by the upturn in economic activity for a second consecutive year and the emergence of tensions in some sectors of the labour market. In part, this upward effect was offset by the slight fall in employers' contributions, which partly reflected a lower rate of employer contributions to the fund for business closures and reductions in social security contributions for the fourth and fifth worker employed by SMEs or the self-employed.

In October 2015, as part of the tax shift (see section 5.2 as well), action was taken to enhance the competitiveness of Belgian corporations and cut their labour costs. Some cost reductions had already featured in the May 2014 Competitiveness and Employment Pact. The measures with regard to labour costs are not expected to have any real effect until 2016 as they are to be put in place only gradually from the beginning of the year. Employers' contributions to social security, which had been between 19 % and 29 % in 2015, including the structural cost reductions, are expected to range from 15 % to 25 % by 2018, depending on employees' pay levels. However, measures to fund the tax shift are likely to put upward pressure on inflation and, via the indexation mechanisms,

on labour costs, partly offsetting the initial drop in labour costs under the tax shift.

Public sector wages showed a similar trend to those in the private sector: they grew by 0.9 % in 2015, compared with the 1.5 % figure for 2014, which itself had been half of 2013's growth rate. The public sector did not enjoy any indexations in 2014, as the threshold index had not been reached since the end of 2012; 2015 saw the introduction of the index jump and with it the further delay of indexation until 2016. No real adjustments were agreed either. The fact that wages budged at all in 2015 in part reflected changes in the employment structure of civil servants: employees staying in service for longer as a result of the reforms to early retirement plans continue to enjoy seniority-related wage increases, while newly hired employees are typically better educated than those they replace, which puts them in a higher salary scale.

Wage gap continued to narrow, primarily due to trends in hourly labour costs

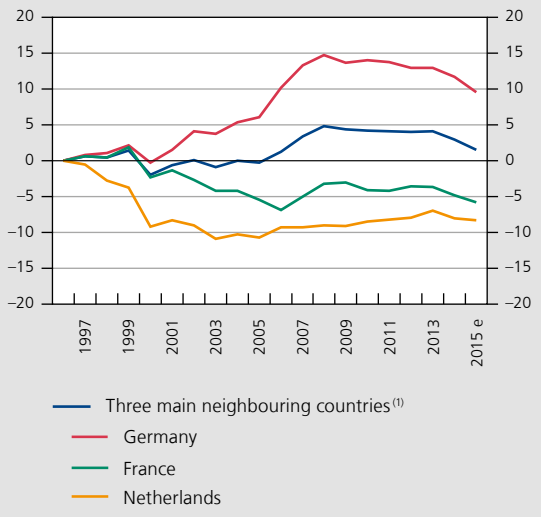
According to the Central Economic Council (CEC) secretariat, the cumulative wage gap since 1996 with Belgium's three main neighbouring countries in terms of hourly labour costs narrowed from 4.1 % in 2013 to 2.9 % in 2014 and then to 1.5 % in 2015. As in previous years, this wage gap is mostly down to the cumulative difference of around 10 % compared with wages in Germany, whereas labour costs have risen more strongly in France and the Netherlands than in Belgium since 1996. The CEC expects the gap to close in 2016, partly on the back of the tax shift. One measure to reduce taxes on labour specifies that the budget derived from employers' exemption from paying 1 % of payroll tax will be earmarked to cut employers' social security contributions. These funds are not in any way to be used to increase wage margins in any future pay negotiations, as this is a measure that is already in place, but recognised in the national accounts as a business subsidy and therefore not deducted from labour costs. The shift of this budget merely has an accounting effect, rather than any real effect on labour costs, and should not therefore have any impact on wage negotiations between the social partners. The government agreement envisages an overhaul of the 1996 Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness which underpins wage bargaining. To date, no concrete steps have been taken.

In addition to hourly wages in Belgium's business sector rising at a slower pace than in its three main neighbouring countries, productivity also worked out a little better in 2015 and, consequently, unit labour costs were down for the second year running, in fact even more so than in 2014. As a result, the cumulative wage gap since 1996 for unit labour costs in the business sector came down from 9.7 % in 2013 to 5.3 % in the first three quarters of 2015. However, despite notable progress in the past couple of years, the difference relative to Germany as recorded since 1996 remains significant.

This gap with Germany is primarily traceable to unit labour cost trends in the market services sector. Although hourly labour costs in the Belgian industry rose faster than the average in the three neighbouring countries, this was more than offset by productivity developments. Meanwhile, the reverse happened in the market services sector: hourly labour costs recorded a slight difference in Belgium's favour, while productivity growth was so poor relative to its neighbouring countries that Belgium ended up with a considerable wage gap. Labour cost trends in the market services sector, like margins, also have an impact in industry though, particulary via outsourcing. When we compare the cumulative difference in unit labour costs with the figures for each of the three neighbouring countries separately, the same pattern emerges: a gap vis-à-vis Germany, more specifically in the market services

CHART 37 BELGIUM'S WAGE GAP NARROWED FURTHER

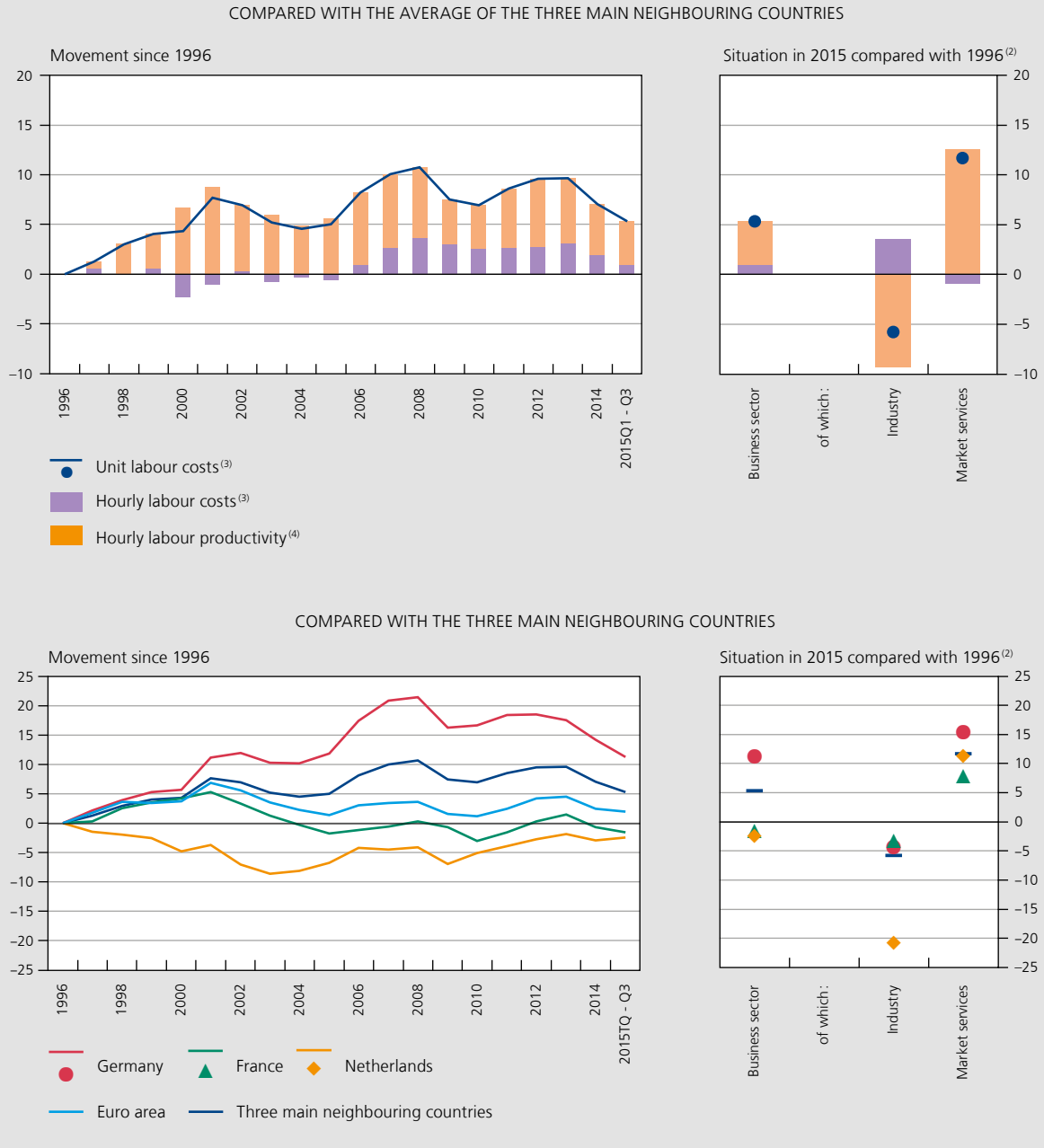
(percentage differences in hourly labour costs in the private sector compared with the three main neighbouring countries, cumulative since 1996)



Source: CEC.
(1) Weighted average based on relative size of GDP.

CHART 38 WAGE GAP IN TERMS OF UNIT LABOUR COSTS NARROWED FURTHER IN 2015, BUT REMAINS SIGNIFICANT COMPARED WITH GERMANY

(business sector[1] in Belgium, percentage differences, cumulative since 1996)



Sources: EC, NAI.

(1) The business sector comprises NACE categories B to N and so includes industry, construction and market services, serving as a proxy for the private sector.

(2) Average of the first three quarters.

(3) A positive sign implies that unit labour costs and hourly labour costs are rising faster in Belgium than the average for the three main neighbouring countries.

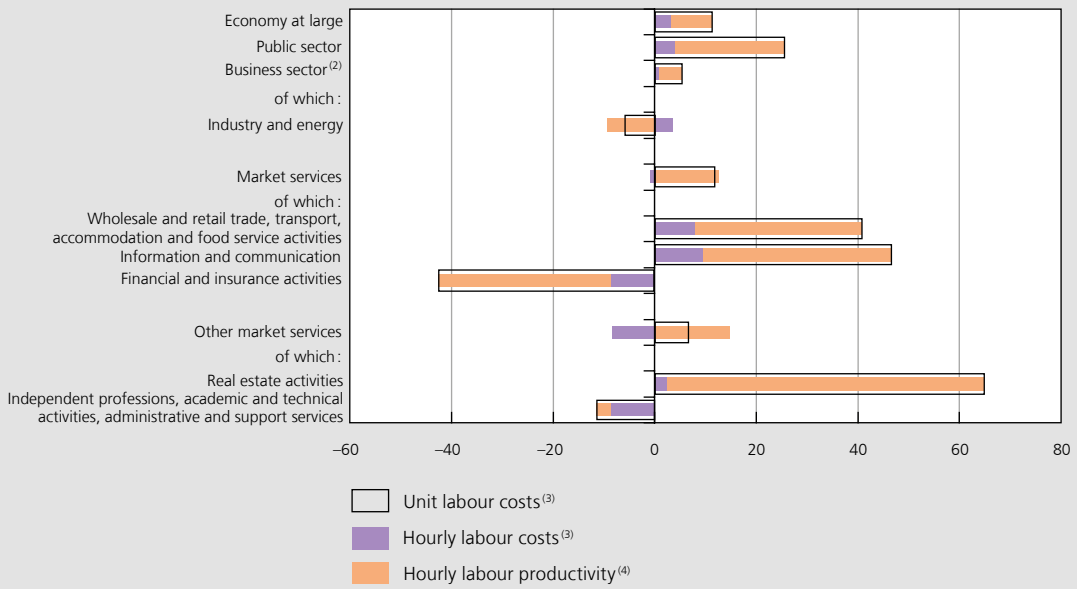
(4) A positive sign implies that labour productivity is rising more slowly in Belgium than the average for the three main neighbouring countries.

sector. Compared with the Netherlands, Belgium recorded a lower increase in cumulative labour costs in industry, but labour costs in the market services sector have gone up so much more that the gains in the manufacturing sector were virtually wiped out.

Probing deeper into the market services sector, a whole range of sub-sectors turn out to have built clear wage gaps relative to the average for the three neighbouring countries, particularly trade, transport, accommodation and food service activities, information

CHART 39 WAGE GAP IN TERMS OF UNIT LABOUR COSTS LARGELY ATTRIBUTABLE TO MARKET SERVICES SECTOR

(2015 (1), percentage differences relative to the three neighbouring countries, cumulative since 1996)



Sources : EC, NAI.

(1) Average of the first three quarters.

(2) The business sector comprises NACE categories B to N and thus includes industry, construction and market services, serving as a proxy for the private sector. The public sector coincides with NACE categories O to Q.

(3) A positive sign implies that unit labour costs and hourly labour costs are rising faster in Belgium than the average for the three main neighbouring countries.

(4) A positive sign implies that labour productivity is rising more slowly in Belgium than the average for the three main neighbouring countries.

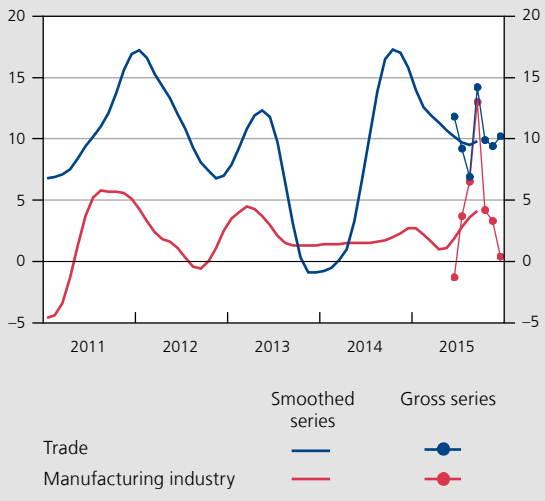
and communication and real estate activities. The gap was mostly attributable to less favourable productivity trends, but the evolution of hourly wages also contributed. Faster wage increases recorded in Belgium in a number of services sub-sectors may partly explain why Belgian prices firmed so much more than those in the neighbouring countries. In financial and insurance activities, by contrast, cumulative labour costs since 1996 have gone up much less strongly in Belgium than in its three neighbouring countries, reflecting more favourable trends in terms of both productivity and hourly labour costs.

2.4 Economic activity growth increasingly driven by consumption

In 2015, economic activity was driven by more robust household spending and the change in inventories – the latter having returned to positive territory after years of negative contributions to growth. That said, this variable is volatile and is frequently revised. Due caution should be observed when interpreting the outcomes.

CHART 40 SPIKE IN INVENTORIES TEMPORARY, ACCORDING TO BUSINESS LEADERS

(balance of replies, seasonally adjusted data)



Source : NBB.

TABLE 6 GDP AND MAIN EXPENDITURE CATEGORIES

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

	2011	2012	2013	2014	2015 e
Private consumption	0.3	0.6	0.9	0.4	1.2
General government consumption	1.3	1.5	–0.1	0.6	0.5
Gross fixed capital formation	4.2	0.2	–1.7	7.0	1.9
Housing	–2.5	–0.1	–4.1	5.7	–0.1
Enterprises	6.5	0.0	–0.5	8.0	2.0
General government	5.9	2.1	–3.7	4.0	5.4
p.m. Final domestic expenditure(1)	*1.4*	*0.7*	*0.0*	*1.9*	*1.2*
Change in inventories(2)	0.7	–0.9	–0.7	–0.2	0.5
Net exports of goods and services(2)	–0.3	0.3	0.7	–0.4	–0.3
Exports of goods and services	6.7	1.8	1.6	5.4	3.5
Imports of goods and services	7.3	1.4	0.8	5.9	3.8
GDP	1.8	0.2	0.0	1.3	1.4
p.m. Final demand	*4.2*	*0.7*	*0.4*	*3.4*	*2.5*

Sources: NAI, NBB.
(1) Excluding the change in inventories; contributions to the change in GDP compared with the previous year, percentage points.
(2) Contributions to the change in GDP compared with the previous year, percentage points.

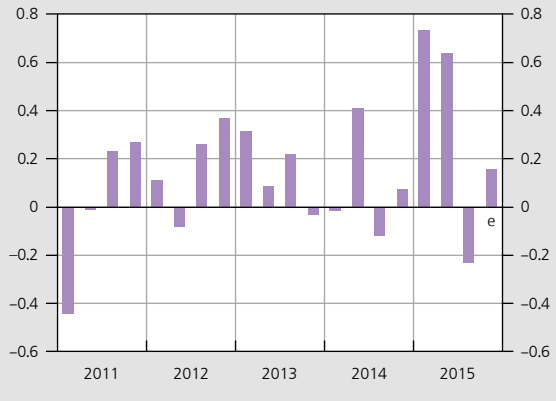
The replies to the Bank's monthly business survey of the manufacturing industry and trade suggest that inventories in the first months of the year were considered to be becoming more 'normal' gradually, reflecting the economic recovery. By the second half of 2015, firms soon began to feel that inventory levels were running too high, particularly in industry, as the outlook for foreign demand turned less certain.

Government consumption expenditure added only 0.5 % in volume terms in 2015. Although similar to the pace of growth in the previous year, this remains historically low compared with an average rise of around 1.5 % since 2000. Government austerity measures have, after all, curbed current expenditure. Public investment, on the other hand, has gone up sharply, as this Report's chapter on public finances will show.

Companies saw their gross fixed capital formation rise further in 2015, albeit a lot more slowly than in 2014. Net exports of goods and services, by contrast, continued to shrink slightly in 2015, as imports were up a little more than exports, despite the country's wage moderation policies aimed at boosting corporate competitiveness. This contraction was down to a few major – though one-off – purchases abroad, the most important of which was a patent in the pharmaceuticals industry. Although causing major spikes in total investment and services imports, these transactions hardly affect economic activity in the short term, even if they do serve to increase the economy's intangible assets.

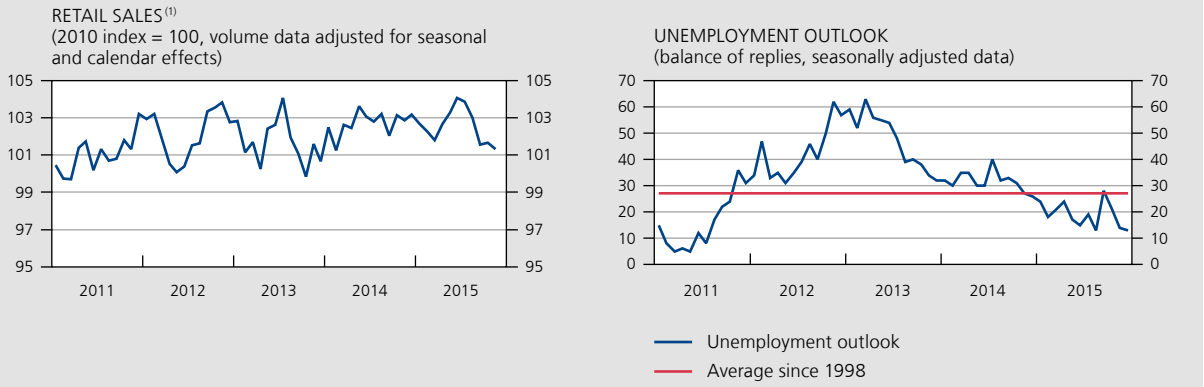
CHART 41 DYNAMIC CONSUMPTION GROWTH IN FIRST HALF-YEAR

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



Sources: NAI, NBB.

CHART 42 PRIVATE CONSUMPTION INCREASES ON THE BACK OF SHARPLY IMPROVED CONFIDENCE



Sources: EC, NBB.
(1) Excluding motor vehicles and motorbikes.

Household consumption up faster than incomes

Staging the fastest increase since 2010 at 1.2 %, private consumption was a key driver of higher economic activity in 2015 and recorded very robust growth indeed at the start of the year.

The rapid decline in commodity prices from the second half of 2014 boosted household purchasing power and was one of the drivers of consumption. At the same time, the labour market perked up while the fear of redundancy waned towards the end of 2014, even taking this sub-indicator of consumer confidence below its normal levels by 2015. As corroborated by its firm correlation with actual consumption, households' more positive take on labour market conditions was the motor behind their willingness to spend.

The favourable climate also showed up in the synthetic consumer confidence indicator, which improved right through to June 2015, when confidence reached its highest levels since mid-2011. Around the same period, the indicator capturing consumers' inclination to buy durable goods also peaked and June retail transaction volumes also reached a new high.

However, the confidence boost of the first half was cut short as the third quarter progressed, with private individuals becoming increasingly worried about the impact of current geopolitical events on the local economic situation, and taking a notably more pessimistic line on the consequences for job security. At the same time, the stimulus of lower oil prices in terms of purchasing power declined and quarterly consumption growth slowed from 0.6 % in the second quarter to –0.2 % in the third. And although the turmoil abated after the summer and confidence perked back up, households kept a tighter rein on their purse-strings throughout the second half.

All that said, and bucking the second-half slowdown, total private consumption rose virtually in line with gross disposable income, which added 1.8 % in nominal terms and 1.2 % in real terms.

Looking at private individuals' primary income, the sum total of the gross operating surplus and gross mixed income staged the strongest growth in 2015 – 3.2 % in nominal terms, its highest pace since the great recession. Both types of income grew at similar rates, with the first comprising both actual collected rental income and imputed rental income from owner-occupied housing. The second type of income is earned by the self-employed and benefited from improved general economic conditions, with the steady increase in the number of self-employed people also weighing in.

Compensation of employees advanced by 1 % in 2015, lagging behind the two previous years despite a more rapid increase in the number of hours worked on the back of the rebounding business cycle. As noted, the upturn was held back by measures to keep labour costs in check, such as the index jump – against a background of low inflation too – and frozen real agreed adjustments.

Lastly, households saw their capital income shrink again in 2015, as they had in the four previous years. In the wake

TABLE 7 DETERMINANTS OF HOUSEHOLD GROSS DISPOSABLE INCOME, AT CURRENT PRICES

(percentage changes compared to the previous year, unless otherwise stated)

	2011	2012	2013	2014	2015 e	*p.m. In € billion* *2015 e*
Gross primary income	2.8	2.5	1.2	1.0	1.2	*291.2*
Compensation of employees	4.5	3.4	2.0	1.2	1.0	*212.4*
Volume of labour of employees	2.1	0.3	–0.8	0.3	0.4	
Labour costs per hour worked	2.4	3.2	2.7	0.9	0.5	
Gross operating surplus and gross mixed income	2.0	1.3	0.9	2.1	3.2	
Capital income[1]	–6.1	–1.2	–3.2	–2.6	–1.2	*28.4*
Interest (net)	–4.3	0.6	–14.4	–39.2	–21.0	*2.5*
Dividends received	–15.4	–1.8	0.0	11.9	0.7	*14.6*
Net current transfers	6.4	2.4	4.5	0.6	–1.5	*–53.7*
Current transfers received	2.8	5.5	3.9	0.8	1.0	*91.1*
Current transfers paid	4.1	4.3	4.2	0.7	0.1	*144.7*
Gross disposable income	2.0	2.6	0.5	1.1	1.8	*237.5*
p.m. In real terms[2]	*–1.0*	*0.6*	*–0.6*	*0.5*	*1.2*	
Savings ratio[3]	13.6	13.5	12.3	12.6	12.5	

Sources: NAI, NBB.

(1) These are net amounts, i.e. the difference between income or transfers received from other sectors and those paid to other sectors.

(2) Data deflated by the household final consumption expenditure deflator.

(3) In % of disposable income in the broad sense, i.e. including changes in households' supplementary pension entitlements accruing in the context of an occupational activity.

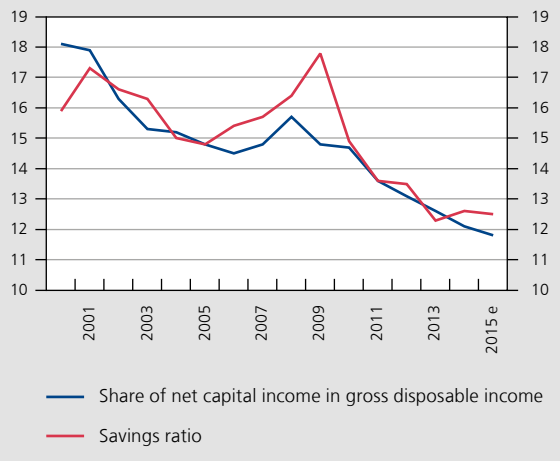
of the great recession, the low interest-rate climate and reduced corporate dividend payments have squeezed capital income and, more generally, household disposable incomes. In 2015, net interest income contracted further, but this was partially offset by a tentative upturn in dividends received.

In addition to higher labour income, private individuals saw their disposable incomes boosted by reduced net transfers to other sectors, which fell for the first time since 2009. As in the previous year, transfers received – mainly social benefits – again rose modestly in 2015 in the wake of limited indexation among other factors. Modest though this was, it exceeded the slim rise in paid transfers, depressed as they were by reduced taxes on income and wealth. The net contraction compared with 2014 was due not only to a higher deductible professional expense allowance, but also to a 2015 decline in amounts paid on liquidation surpluses and tax regularisation compared with the previous year.

Simultaneously to the minor recovery of disposable income in 2015, the proportion saved also edged down

CHART 43 CONTINUOUS EROSION OF SAVINGS RATIO AND CAPITAL INCOME

(in % of gross disposable income[1])



Sources: NAI, NBB.

(1) In % of disposable income in the broad sense, i.e. including changes in households' supplementary pension entitlements accruing in the context of an occupational activity.

further to 12.5 %, taking the savings ratio to within an inch of 2013 all-time lows and way below the levels of around 16 % seen before the onset of the great recession. This persistently low savings ratio – by Belgian standards at least – may be explained by households' propensity to save capital income sooner than labour income, with a drop in the share of the former type of income spelling a lower average savings ratio. Additionally, private individuals may not have tailored their consumer spending patterns to slower income growth and have therefore been limiting their savings accruals to keep raising their consumption expenditure.

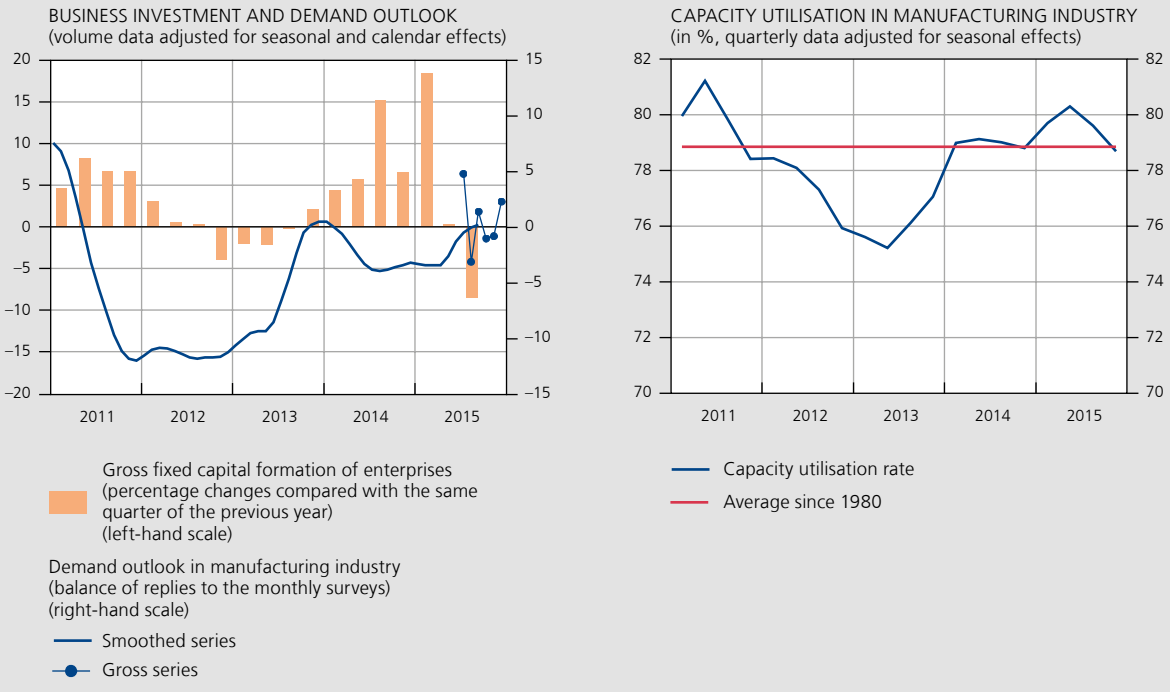
Investment in housing came down by 0.1 % in 2015 even though mortgage rates kept falling and people's fears of losing their jobs diminished on average. This decline stands in contrast to 2014, when households had been very active in the property markets. This rather more subdued picture reflects the changes announced in 2014 concerning the tax treatment of mortgage loans in Flanders, which would appear to have prompted the Region's residents to put in place their investment plans before the year was out. The contraction in the first half of 2015 reflects this backdating shift, specifically in terms of payment of registration fees (stamp duty).

Business investment creeps up; own resources rise steeply

Enterprises account for around two-thirds of the economy's total annual gross fixed capital formation. This particular component of demand is quite volatile as it is prone to occasional exceptionally large individual items that can have a major impact on quarterly figures. A case in point is evident for the first quarter of 2015, when a large amount was paid to acquire a foreign patent. In accordance with ESA 2010 methodology on national accounts in force since 2014, the capitalisation of research and development is recognised as an investment, while the purchase of a patent abroad also constitutes an import transaction. Adjusted for this, business investment would have gone up by an annualised 1.6 %, instead of the 1.9 % actually recognised. This is significantly below the 3.9 % upturn in 2014, ignoring comparable transactions.

It may well be that investment growth is somewhat dampened by structural effects related to changes in the type of assets into which investment is channelled. A possible explanation is that the manufacturing industry with its extensive plant and equipment is losing ground and accounts for a smaller proportion of gross investment, with

CHART 44 BUSINESS INVESTMENT EDGES UP



Sources: NAI, NBB.

TABLE 8 DETERMINANTS OF THE GROSS OPERATING SURPLUS OF COMPANIES[1], AT CURRENT PRICES

(percentage changes compared to the previous year, unless otherwise stated)

	2011	2012	2013	2014	2015 e
Gross operating margin per unit of sales[2]	–0.8	–2.4	0.6	0.0	1.7
Unit selling price	3.5	1.7	0.4	–0.3	–1.1
On the domestic market	3.0	2.2	1.3	0.5	0.0
Exports	3.9	1.3	–0.4	–1.0	–2.1
Unit sales costs	4.3	2.5	0.4	–0.4	–1.6
Imported goods and services	5.1	1.5	–0.4	–1.0	–3.1
Costs of domestic origin per unit of output[3]	1.0	3.8	1.4	–0.4	0.2
of which :					
Unit labour costs[4]	1.9	3.3	1.8	–0.4	–0.5
Unit net indirect taxes	–1.2	7.2	–0.2	0.4	1.9
Final sales at constant prices[2]	4.6	0.7	0.3	3.7	2.7
Gross operating surplus of companies	3.8	–1.7	0.9	3.7	4.5

Sources : NAI, NBB.

(1) Private and public companies.

(2) Including the change in inventories.

(3) In addition to wages, this item comprises indirect taxes minus subsidies, and gross mixed income of self-employed people.

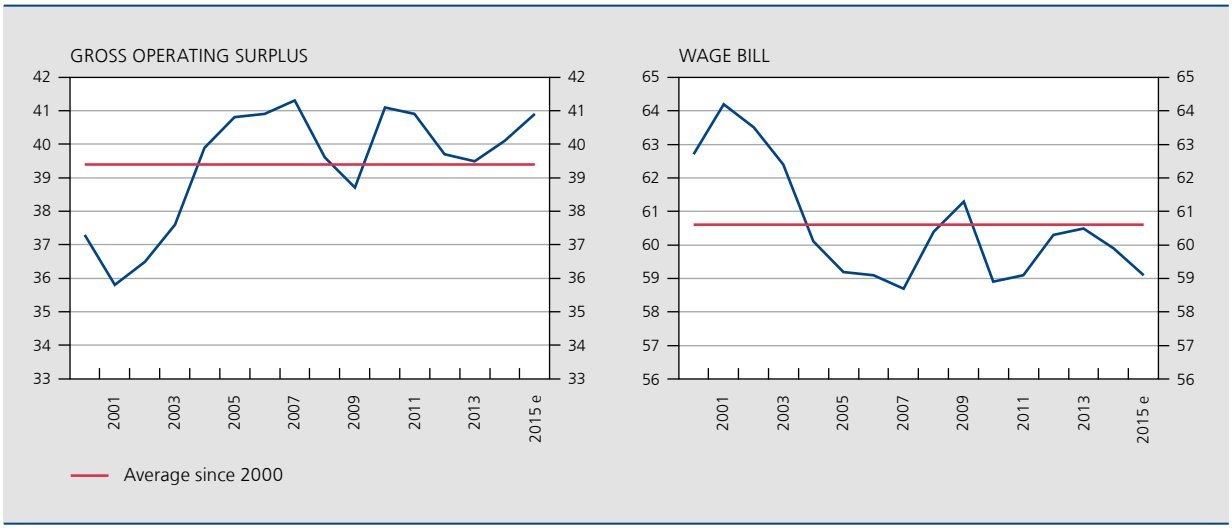
(4) Unit labour costs are expressed in units of value added of the business sector and are not calendar adjusted.

less sizeable investment in, say, research and development mopping up some of the slack.

Business investment in 2015 slumped, despite supportive factors such as a capacity utilisation rate in the manufacturing industry that had been – as early as the end of 2013 – at or over its average as recorded since 1980, and despite the demand outlook for this sector looking brighter. What is more, companies were able to tap funding for their investment plans at very

CHART 45 GROSS OPERATING SURPLUS KEEPS GROWING, WHILE COMPENSATION DIPS BELOW AVERAGE

(in % of the value added of companies)



Sources : NAI, NBB.

favourable conditions indeed, while their internal resources had also grown steadily. The gross operating surplus of companies, i.e. revenues from their activities, shot up by 4.5 % in nominal terms in 2015, once again pushing the operating surplus as a share of value added slightly ahead of the average since 1995. Conversely, the corresponding share of worker compensation declined for the second consecutive year.

Both the 1.7 % advance in the gross operating margin per unit of sales and the 2.7 % volume increase in final sales contributed to a higher gross operating surplus in 2015. Margin improvement reflected sharply lower unit sales costs, while imported goods and services were a lot cheaper in 2015 than in previous years, most of these items of course reflecting lower prices of oil and other commodities. By contrast, costs of a domestic origin inched up despite curbs on labour costs, as unit net indirect taxes rose. Lower costs were not fully passed on to prices and ended up adding 1.7 % to the gross operating margin per unit of sales – a marked change on the weaker margin performance of the previous four years. Final sales fell below the previous year's figures, reflecting less dynamic exports among other factors.

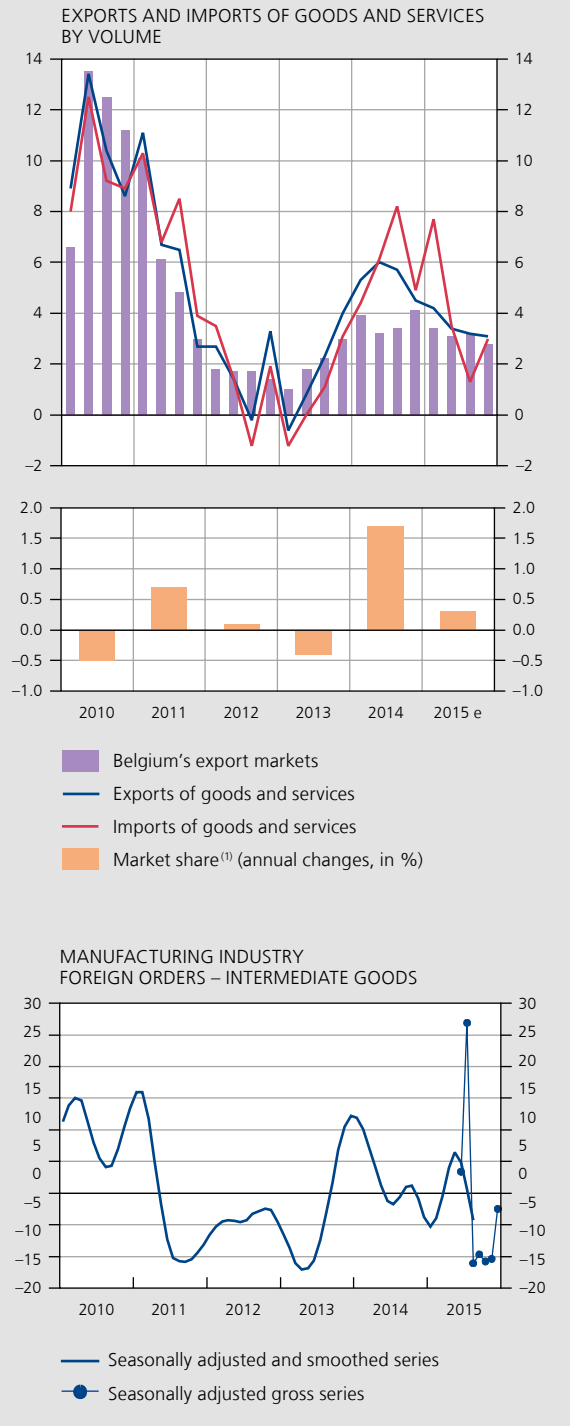
Foreign demand slowing

In 2015, exports of goods and services in volume terms recorded growth lagging the previous year's: 3.5 % compared with 5.4 %. In part, this was down to declining foreign demand – which, incidentally, accelerated as the year progressed.

Despite the fall in the value of the euro vis-à-vis the US dollar from the autumn of 2014 and the first effects of recent labour cost restraints on improved cost competitiveness, it would appear that exports in 2015 were not supported nearly so much as before by new gains of market share in volume terms, as they had been in 2014, even if these were exceptionally large at 1.7 %. According to projections available by the cut-off date of this Report (particularly the statistics for the first three quarters), Belgium's exports only rose slightly faster than the import demand from its main trading partners, weighted by the structure of the exports. However, this new market share gain (around 0.3 %) is close to the average recorded over the post-crisis period.

CHART 46 LESS ROBUST GROWTH OF GOODS AND SERVICES EXPORTS

(volume data adjusted for seasonal and calendar effects; percentage changes compared to the corresponding quarter of the previous year, unless otherwise stated)



Sources: ECB, NAI, NBB.

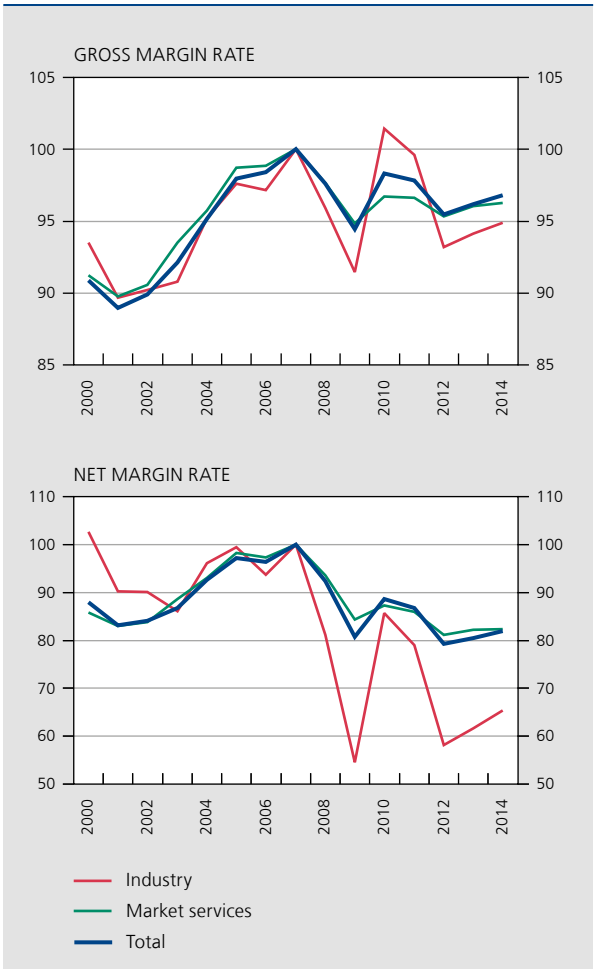
(1) Based on the most recent projections for import demand from trading partners, dating from mid-November 2015.

Box 5 – Trends in corporate operating margins

Corporations' profitability is an essential prerequisite for growth in both investment spending and employment. One way to gauge profitability is to look at the margin rate, defined as the ratio of the operating surplus to the value added. This indicator measures the percentage of the value added available to the company after payment of wages and taxes on production and imports, plus any subsidies. This macroeconomic concept differs sharply from the taxable profits of a company, as it does not include any net payments for debt funding, for instance, in order to neutralise any distortion to results arising from the financial structure. In corporate accounting it would more or less equal EBITDA-to-sales, less current purchases of goods and services.

This margin may be analysed at sector level based on NAI data releases between 1995 and 2014. For all private, non-financial corporations together, the gross margin rate amounted to 44 % in the final year of that period (2014). This is below the 46 % reached before the onset of the great recession, but still ahead of levels recorded at the end of the 1990s and in the early 2000s. In fact, after the boom in the run-up to the crisis we would now seem to be looking at levels normalising.

MARGIN RATE IN INDUSTRY AND THE MARKET SERVICES SECTOR
(index 2007 = 100)



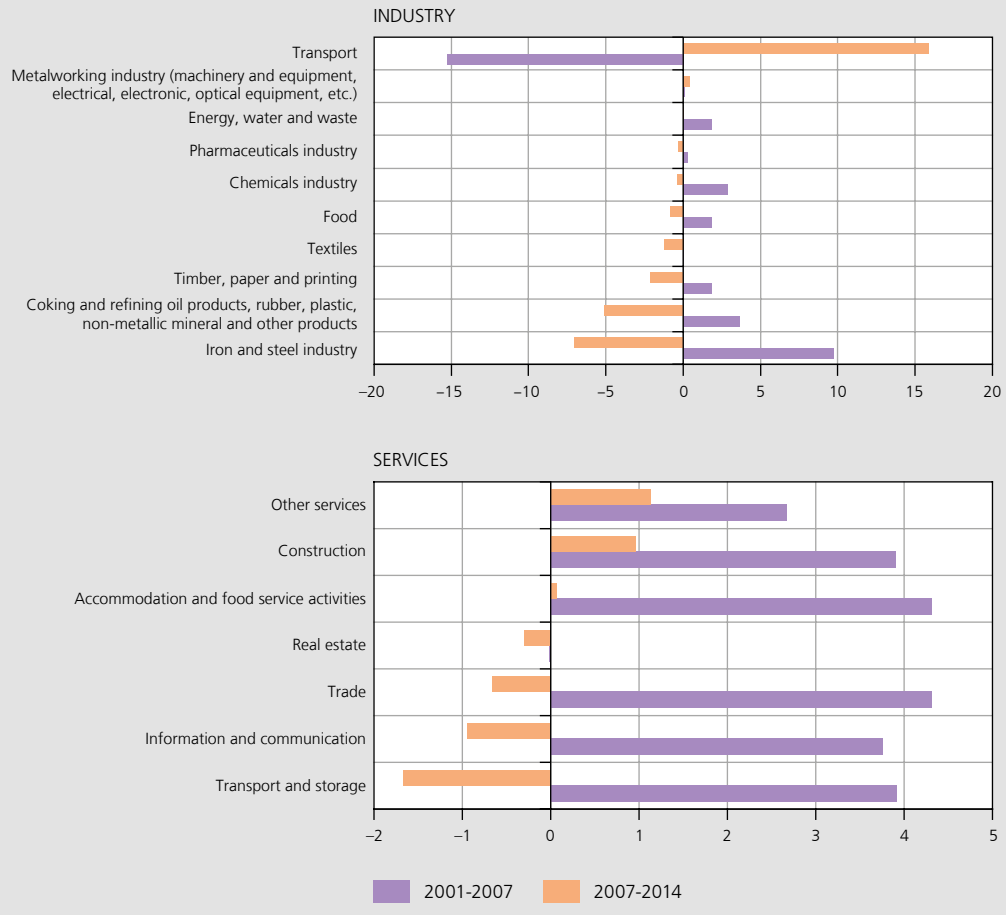
Source : NAI.

However, the picture is influenced by depreciation and amortisation, which are typically less dependent on the business cycle and which therefore tend to eat into margins more when production slows or declines. In addition, a steady increase in capital depreciation has been making itself felt since the mid-1990s, particularly related to the share of IT assets – which depreciate relatively quickly – in the total. Expressing the margin rate in net terms, i.e. after depreciation (or EBIT), the great recession does turn out to have been a turning point. The net margin rate declined from its peak of around 30 % in 2007 to a mere 25 % in 2014, and no recovery has materialised on this gauge.

When margin rates are broken down using the net approach, industrial services are found to have been much harder hit than were market services. In 2014, the net margin rate languished more than 30 % below 2007 levels in industry, compared with around 20 % in market services. Gross margin rates show only minor differences in trends, barring a difference in cyclical sensitivity.

GROSS MARGIN RATE BEFORE AND AFTER THE FINANCIAL CRISIS, BY SECTOR

(average annual growth in the period under review, percentage changes)



Source: NAI.

Broken down by different industrial branches, gross margins paint a widely divergent picture even within industry itself, with more innovative branches typically generating more robust or even improving rates. Also, margin developments in the more traditional industrial branches prove the most sensitive to the vagaries of the economic cycle, strong demand for industrial products from the emerging countries having been a major upward driver of results in these branches before the crisis.

Branches in market services and construction were affected by the crisis in varying degrees, and there would not appear to be any clear correlations between trends before or after. Margin rates fell hardest in information and communication and transport and storage. The latter branch is closely linked to industry and suffered the brunt of collapsing global trade in the aftermath of the recession. Trade has also found it tough to sustain margins since the crisis, while construction and other services – which include specialist services and rapidly growing research and development activities – recorded a further improvement in profitability in the same period.

Apart from cyclical factors, structural factors weigh in on margin rates, and relative price effects emerge due to industry's far greater exposure to global competition than market services: revenues depend on sales prices for goods, while some costs, e.g. wage costs, are index-linked in Belgium. Particularly fierce competition in industry in effect means that companies in this sector have less pricing power than their counterparts in services. That said, productivity gains are much more substantial in industry, with unit labour costs only slightly up and margin rates more or less sustained. Unit labour costs are rising much faster in services considering their lower productivity gains compared with industry, but sales prices also advanced much more briskly.

RELATIVE PRICES BY SECTOR

(Value-added price deflator, average annual growth in the period, in %)

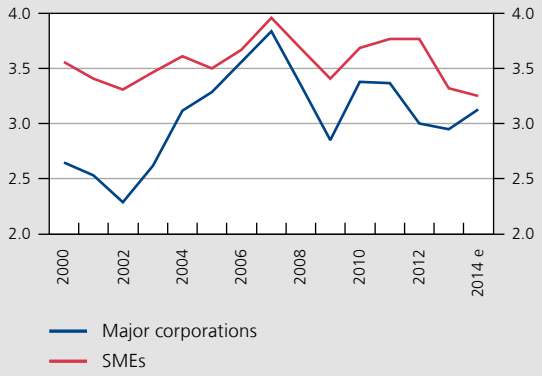
	1995-2014	1995-2001	2001-2007	2007-2014
Total	1.5	1.5	2.0	1.0
Market services	2.2	2.8	2.5	1.4
Industry	–0.2	–1.2	0.9	–0.4

Source: NAI.

Drawing on corporate profit and loss accounts, a similar analysis may be applied from the perspective of company size. The net sales margin, i.e. net operating result as a percentage of turnover, reveals strong correlations between developments before and after the start of the crisis. Pre-tax profitability of larger corporations had improved much more markedly than that of SMEs in the years before the crisis, but plunged just as fast after peaking in 2007. In fact, SMEs prove somewhat more profitable on average. A number of factors might explain the different developments and profitability levels: large corporations, regardless of their sector, tend to be more exposed to the global economy, while SMEs are typically better represented at the rather more profitable services end of the spectrum. Statistical effects may also come into play: bankrupt companies are factored out of the population, leaving only companies with higher average profitability. With bankruptcies affecting the SME population more, plotted series may well overestimate their profitability levels.

PROFITABILITY OF MAJOR CORPORATIONS AND SMES

(Net sales margin [1])

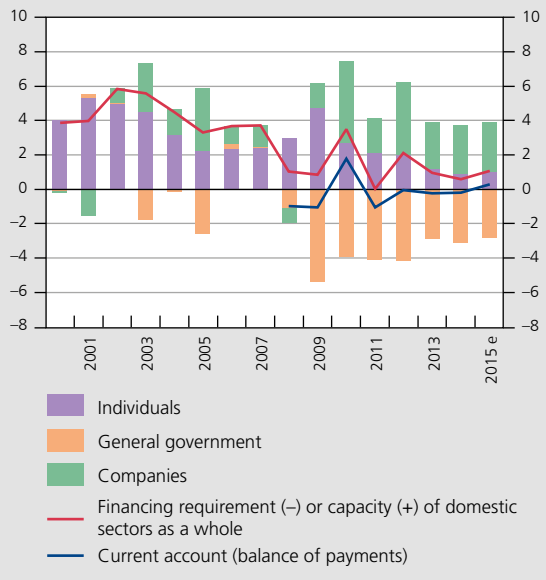


Source : NBB (Central Balance Sheet Office).

(1) Defined as the net operating result as a percentage of turnover.

CHART 47 CORPORATE FINANCING CAPACITY INCREASES

(in % of GDP)



Sources : NAI, NBB.

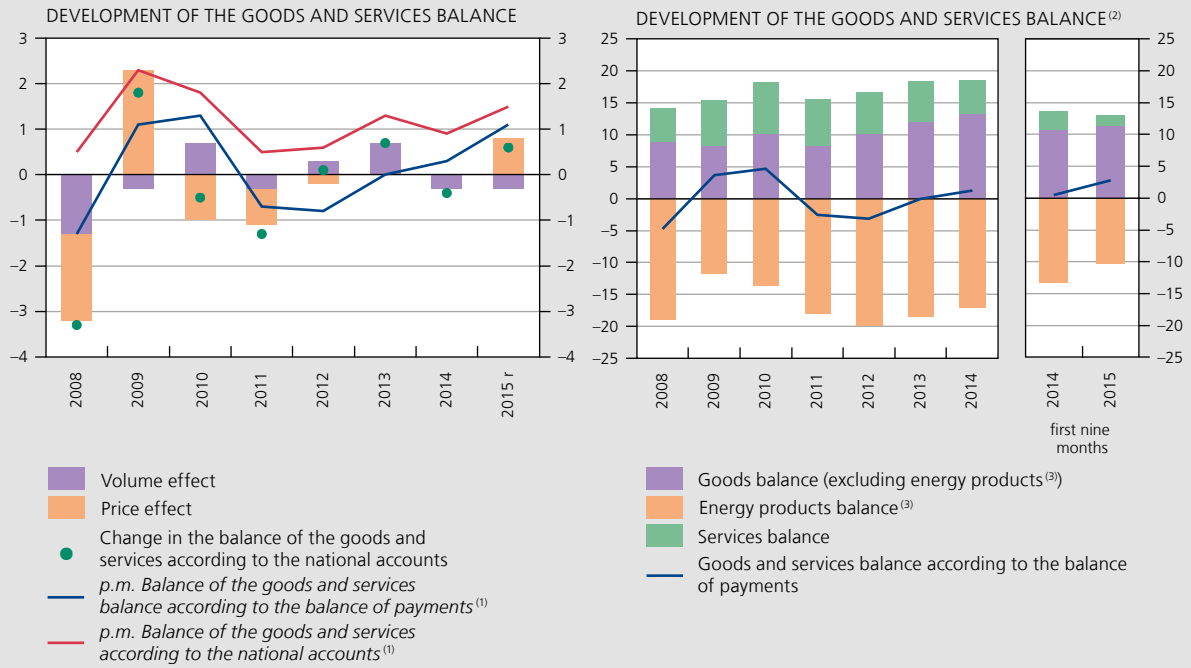
2.5 Improved current account balance

In 2015, given the trend in all income and expenditure across the different sectors, the amount of savings in the Belgian economy has once again outstripped investment. The country's financing capacity, as estimated on the basis of the national accounts, grew from 0.6 % in 2014 to 1.1 % in 2015, particularly on the back of firms seeing their revenues increase while their gross investment in fixed assets lagged behind. As a result, since 2010, companies have recorded, year after year, financial surpluses ranging between 2 % and 5 % of GDP (2.9 % in 2015). In addition, the public sector borrowing requirement came down slightly while household financing capacity increased somewhat to 1 % of GDP.

The economy's improved financing capacity also shows up in similar developments of the current account balance with the rest of the world as recorded in the balance of payments. These statistics show the external balance to have turned positive again in 2015 and to have amounted to 0.3 % of GDP, compared with negative figures since 2011. The breakdown by types of transaction underlines the importance of goods and services in achieving this surplus, although this was partly offset by a deteriorating balance of primary income – which mostly covers income from labour and investment with the rest of the world – and,

CHART 48 IMPROVED GOODS AND SERVICES BALANCE THANKS TO POSITIVE TERMS OF TRADE

(percentage points of GDP, unless otherwise stated)



Sources: NAI, NBB.

(1) In % of GDP.

(2) According to balance of payments statistics, in € billion.

(3) According to foreign trade statistics – mineral fuels, lubricants and related materials (SITC-3).

to a lesser extent, by the worsening of the secondary income balance.

Like other net importers of oil products, Belgium has benefited from steeply lower oil prices, which, because of their greater weighting in the basket of imported goods, have had a bigger impact on import prices than on export prices. Annualised import prices declined by around 3.1 %, compared with a fall of some 2.1 % in exports. This improvement in the terms of trade has reduced the net energy bill from an average of nearly € 17.5 billion per year between 2010 and 2013 to € 17.1 billion in 2014 and around €10 billion for the first nine months of 2015.

This favourable price effect has more than made up for the negative contribution of net foreign trade in real terms, as export volumes rose less rapidly than import volumes. As noted, the purchase of a foreign patent significantly pushed up imports in 2015 and volume effect would have been virtually neutral without this exceptional transaction.

This smaller energy deficit combined with higher imports related to this specific investment explain why the goods trade is responsible for the improved trade balance in 2015, even though the services surplus has fallen.

While the overall balance of goods and services recorded favourable figures, the primary income surplus continued its downward trend first seen in 2012. Although minor in 2015, this deterioration can primarily be traced back to falling investment income balance – mostly portfolio investment in 2015 – whereas the balance of labour income remained relatively stable.

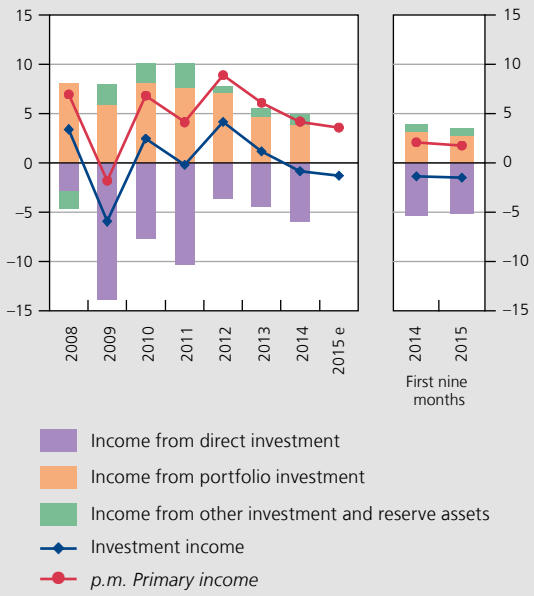
This downward trend in net investment income at work since 2012 is due, to a lesser extent, to the slight decline of the net international investment position vis-à-vis the rest of the world recorded up to 2014. However, this has to be viewed more specifically in the context of the general decline in returns on investment products which exert a negative effect on the income of a net creditor country such as Belgium, whose net international investment position remains exceedingly positive at over 50 % of GDP.

Moreover, the trend in net investment income would also appear to have been influenced by structure effects in the composition of external assets and liabilities.

In this way, the "other investment" category, which includes deposits and loans from various sectors including banking, trade credit, etc., would appear to account for a bigger chunk of Belgium's global investment position, while this investment category records the lowest implied returns. Despite the depreciation of the euro, implicit yields of some categories of financial products seem to have fallen further on the external assets side than on the liabilities side. This is particularly the case for portfolio investments, where implied returns on assets worsened, while those on liabilities remained stable. A similar picture emerges, although to a lesser degree, for direct investment. Despite a limited net position, total direct investment by respectively Belgian residents abroad and foreign residents in Belgium is actually quite high – over twice the size of GDP. The fact that implied returns on these different categories of assets are declining more strongly than those on liabilities might be attributable to a different breakdown, particularly in terms of maturity. Tax considerations may also explain why income flows from direct investment in Belgium

CHART 49 FALL IN NET PRIMARY INCOME

(balances according to the balance of payments; in € billion, unless otherwise stated)



Source: NBB.

TABLE 9 BALANCE OF PAYMENTS AND NET LENDING TO THE REST OF THE WORLD

(balances; in € billion, unless otherwise stated)

	2011	2012	2013	2014	2015 e
1. Current account					
Goods and services	–2.5	–3.1	0.0	1.3	4.5
Goods	–9.7	–9.6	–6.4	–3.9	n.
Services	7.3	6.5	6.4	5.2	n.
Primary income	4.1	8.9	6.1	4.2	3.6
Compensation of employees	5.1	5.4	5.5	5.7	5.8
Investment income	–0.2	4.2	1.1	–0.8	–1.3
Other primary income	–0.7	–0.6	–0.6	–0.7	–0.8
Secondary income	–5.7	–6.0	–6.9	–6.4	–6.9
General government	–3.8	–3.1	–3.8	–3.5	–3.9
Other sectors	–2.0	–3.0	–3.1	–2.8	–3.0
Total	–4.1	–0.2	–0.9	–0.9	1.1
p.m. Idem, in % of GDP	*–1.1*	*–0.1*	*–0.2*	*–0.2*	*0.3*
2. Capital account	–0.4	2.3	–0.4	–1.0	–0.1
3. Net lending to the rest of the world (1 + 2)	–4.5	2.1	–1.3	–1.9	1.0
p.m. Idem, in % of GDP	*–1.2*	*0.5*	*–0.3*	*–0.5*	*0.3*

Sources: NAI, NBB.

CHART 50 DECLINING RETURNS ON ASSETS AND LIABILITIES[1] DESPITE BELGIUM'S CONTINUED VERY POSITIVE NET INTERNATIONAL INVESTMENT POSITION

(in %, unless otherwise stated)

Source: NBB.

(1) Implied returns calculated on the flow data of the balance of payments in year t and of Belgium's average external position in year t-1.

are somewhat at variance with market conditions. Regardless of the country's extremely positive net international investment position, this general slow-down in implied returns, together with changing assets and liabilities composition, helps explain weak net income as well as its downward trend recorded since 2012. The investment income deficit is projected to have widened a little further in 2015.

The secondary income deficit deepened as a result of a higher amount paid by Belgium to European institutions under the fourth own resource, which is linked to gross national income. Balance improvement in 2014 reflected an adjustment of Belgium's national contributions to the EU budget following gross national income revisions for various Member States of the EU. This happened to be favourable for Belgium.

Financial developments in Belgium

3. Savings and financing the Belgian economy

3.1 Financial behaviour of corporations and households influenced by muted economic cycle and low interest rate environment

The more it persists, today's low interest rate environment is likely to have an increasing effect on savings in the economy as well as patterns of financial behaviour displayed by entities in the various sectors. As its impact is felt through multiple channels, so its final effect on each of these entities will differ depending on their own unique features.

Low levels of interest rates should be more encouraging of consumption than of savings, as they tend to eat into returns on financial investment. With households generally saving a larger proportion of income from investment than from other types of income, less investment income increases that substitution effect. By contrast, indebted economic agents typically benefit from low interest rates and see their disposable income rise as their debt burdens are reduced, prompting some income redistribution favouring debtors. Credit institutions' and insurers' revenues are also sensitive to trends in interest rates, particularly given their intermediary role.

To cushion the drop in their financial wealth, investors may be tempted to turn to higher-yielding but riskier financial assets. At the same time, economic agents may use such low financing costs to extend their debt positions, either to increase their leverage and maximise income from their assets, or to acquire real assets or even fund additional consumption. Quite aside from these effects on the dealings of the various sectors of the economy, a low interest rate environment increases the value of both financial assets and liabilities. It therefore has benefits and drawbacks that depend on the wealth position.

These various channels exerted different degrees of influence on the transactions and financial positions of all sectors of the Belgian economy in 2015. Despite some signs of deeper impact, the effects generally remained limited, for private individuals as much as for non-financial corporations and the financial sector at large. A still mixed economic context and continued risk aversion as the legacy of the financial crisis continue to act as moderating influences to this day.

Non-financial corporations [1]

Belgian corporations bolstered capital spending and cash reserves; quite reticent to tap new external financing

In 2015, Belgian non-financial corporations took advantage of the – albeit modest – upswing of the economic cycle and reviving business confidence on the demand outlook to increase investment, also supported by very low interest rate levels. In the first nine months of the year, they raised their gross fixed capital formation

(1) In this and subsequent sections, data discussed refer to transactions by non-financial corporations on a consolidated basis. This implies that transactions between resident non-financial corporations are factored out, which primarily concern cross-holdings and loans between related corporations, as well as trade credit. Also disregarded are transactions with the foreign non-banking sector, captive financial institutions and money lenders. These transactions mainly comprise intra-group flows. Given their specific nature, these transactions are discussed separately at the end of this section.

TABLE 10 TRANSACTIONS BY NON-FINANCIAL CORPORATIONS
(in € billion)

	2011	2012	2013	2014	First nine months 2014	First nine months 2015
Asset creation	65.1	49.7	54.9	52.1	33.9	44.7
Gross fixed capital formation[1]	50.9	52.5	52.8	57.0	41.0	42.3
Change in inventories[1]	4.7	1.9	–0.3	–1.0	0.8	–3.8
Purchases of non-produced non-financial assets[1]	0.8	0.2	0.8	1.1	0.6	0.4
Purchases of financial assets[2]	8.8	–4.9	1.5	–5.0	–8.5	5.7
Funding	71.3	68.7	70.7	59.5	41.7	50.6
Gross savings and capital transfers[1]	49.2	53.9	59.7	58.9	46.8	48.8
New financial liabilities[2]	22.7	14.8	11.0	0.5	–5.1	1.7

Source: NBB.
(1) Data from non-financial accounts.
(2) Data from financial accounts. Not included, with the exception of data on debt securities, are transactions with other non-financial corporations, captive financial institutions and money lenders, or those with the foreign non-banking sector.

to € 42.3 billion, an increase of € 1.3 billion on the year-earlier period, while at the same time scaling back their inventories by € 3.8 billion.

In addition to increasing their gross capital formation, non-financial corporations also used the first nine months of 2015 to acquire financial assets to the tune of € 5.7 billion as well as € 0.4 billion in non-produced non-financial assets. Contrasting markedly with last year's sale of a proportion of their debt securities portfolios, these additions largely took the shape of liquid assets. By the end of the third quarter, their reserves comprised cash and deposits equalling 29.8 % of GDP, up from 26.4 % a year earlier. This build-up of reserves may indicate a desire to be prepared for a rising need for working capital, to cover current expenses such as inputs for production or the payment of wages, or for future investment projects. It may also reflect a wait-and-see attitude in an environment that is still anything but secure.

On the whole, the resources non-financial corporations have managed to save on the back of higher operating results as well as reduced financial costs should be enough to cover purchases of new assets. However, the aggregate data conceal major differences in the financing requirements of individual corporations. Some may indeed save up to bolster their cash positions or to invest, in addition to expanding their capital stock, but others need to tap outside resources to finance their capital spending or strengthen their working capital. These latter firms will have to attract fresh liabilities, from individuals or institutional investors, or from banks. Taken together, non-financial corporations contracted an extra € 1.7 billion worth of new liabilities in the first three quarters of 2015, a rather subdued increase when compared with the volume of new liabilities taken on between 2011 and 2013.

Bond financing remained important in 2015

Corporations' higher, though still moderate, recourse to external financing in 2015 came at a time when their costs were pretty much unchanged on 2014, even in the teeth of greater financial volatility. That said, significant differences remained between the various financial instruments.

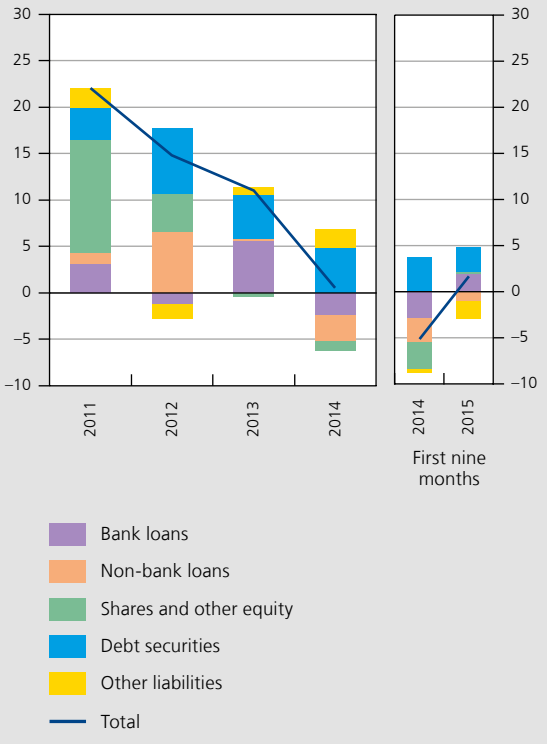
As in 2014, there was a huge difference between the cost of issuing new listed shares and that of debt financing when compared with previous years. This gap may partly explain why investment in the shape of non-financial corporations' authorised capital stalled in the first nine months of 2015. Major reductions in equity had been recorded in the period spanning the second half of 2013 to the third quarter of 2014, that is to say after the announcement in the Programme Law of 28 June 2013 of an increase of between 10 % and 25 % of personal income taxes levied on liquidation bonus payments, and before it came into force on 1 October 2014. However, this was a temporary measure only and should not have affected transactions in 2015.

In net terms, then, new financial liabilities of non-financial corporations primarily took the form of debt in 2015. This higher issuance was still dominated by the largest among the corporations, which typically have easier access to market financing and continued to display a preference for bond loans. While new bank loans added up to € 1.9 billion for the first three quarters of 2015, a total € 2.7 billion of debt securities was issued, less than in the corresponding period of 2014. Non-bank loans declined, with this category including loans provided by other financial institutions, such as insurers, as well as leases and factoring.

Non-financial corporations' appetite for bonds reflects the fact that issuing these is cheaper than paying the interest charged by banks. In January 2015, returns on investment grade bonds with a maturity of one year or over – i.e. those with upper to maximum (AAA) ratings – were around 1 %. Unlike bank loans, this capability only extends to corporations considered the safest of the bunch. In the wake of a general increase in long-term rates starting from April, returns went up to 1.5 % in November, very close to interest rates on new bank loans, which were averaging 2 % around that time.

CHART 51 DEBT SECURITIES STILL LARGEST CATEGORY IN NEW LIABILITIES OF NON-FINANCIAL CORPORATIONS (1)

(new financial liabilities of non-financial corporations, in € billion)

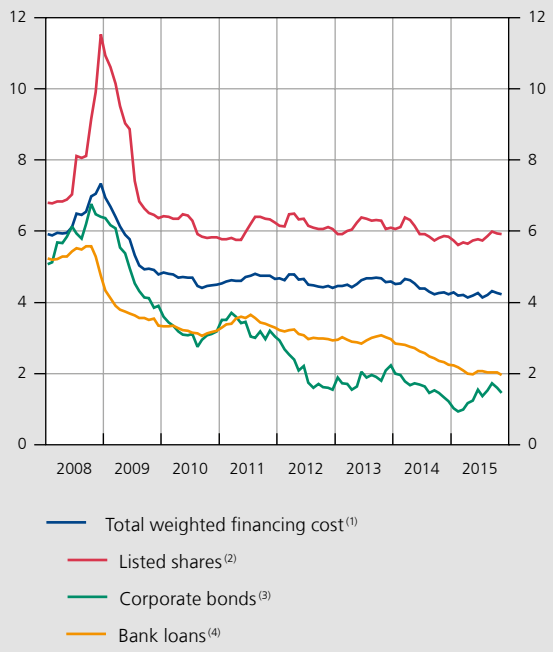


Source: NBB.

(1) Not included are non-debt securities liabilities incurred with other non-financial corporations, captive financial institutions and money lenders, nor those from the foreign non-banking sector.

CHART 52 FUNDING VIA BOND ISSUANCE STILL CHEAPER THAN BANK LOANS

(monthly data, in %)



Source: NBB.

(1) Obtained by weighting the cost of funding by listed share issuance, bond issues and bank loans according to their respective shares in the total outstanding amount of these financial liabilities.

(2) Estimated on the basis of a dividend discount model (see box 19 in the 2005 Annual Report).

(3) Return on an index of euro-denominated bonds issued by Belgian non-financial corporations, with maturities of more than one year and with ratings in excess of Baa; the index is weighted according to the outstanding amounts.

(4) Weighted average rate applied by resident banks to business loans. The weighting is based on the outstanding amount of the various types of credit.

Corporations borrow more from resident banks against a backdrop of easier loan conditions

In year-on-year terms, the outstanding amount in loans provided by resident banks to Belgium-based non-financial corporations, which had dipped into negative territory throughout 2014, turned positive again from February 2015 and bank-reported data put it at 1.5 % by the end of November. The upturn was attributable both to eased loan criteria on the back of low financing costs and balance sheet constraints, and to a higher demand for loans.

The first of these two factors reflected credit institutions continuing to benefit from the highly accommodating policies of the Eurosystem, which through all its facets – including its forward guidance and the expanded programme for the purchase of assets – has managed to keep banks' financing costs exceedingly low. Consequently, banks have continued to gradually lower interest rates, particularly for long-term loans. Average interest on such new loans to corporations of less than € 1 million with terms to maturity over five years came down from 2.6 % at the end of 2014 to 2.2 % in November 2015.

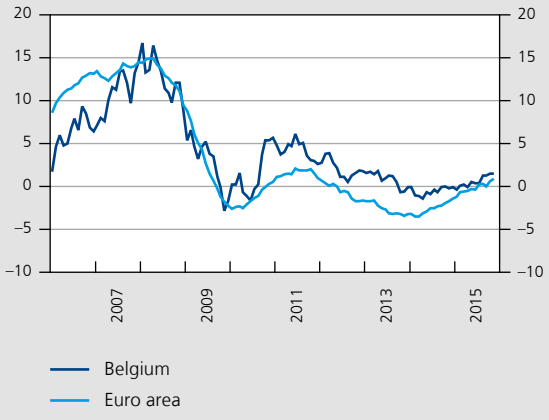
To date, interbank rates have not been fully passed on to borrowing rates charged to corporations. After the financial crisis first broke, resident banks took advantage of easier monetary policies to raise their intermediation margins to higher and more realistic levels than before the crisis. By the end of 2013, these margins started shrinking as competition heated up, and they got even tighter in 2015. By way of illustration, the difference between borrowing rates charged by resident banks on loans with a term to maturity of five years or over and five-year swap rates narrowed by 29 basis points between December 2014 and November 2015.

Money market rates did not fall as sharply as they had in 2014, and this factor probably played a lesser part in Belgian banks' lending policies in 2015. According to the quarterly bank lending survey (BLS), conducted among the country's four main resident credit institutions, other developments nonetheless prompted a further easing of bank loan criteria, aside from financing costs and balance sheet constraints. Competitive pressures were a first key driver, caused as much by other banks as by market funding tapped by large corporations. Also, banks reported downward revisions to their assessment of credit risk, which can be related to economic improvement throughout 2015. In concrete terms, easier loan criteria spread to conditions other than interest rates, such as restraints on volume and term to maturity, as well as a range of clauses typically featuring in loan agreements.

The survey clearly highlighted higher demand and information provided by the banks questioned reveals that corporations' borrowing requirements primarily reflect their need to finance capital spending, expand inventories and increase working capital. On the back of low interest rates, small and medium-sized enterprises (SMEs) account for a sizeable proportion of this demand for bank loans, as

CHART 53 INCREASED LENDING BY RESIDENT BANKS TO RESIDENT NON-FINANCIAL CORPORATIONS, FOLLOWING FALLS IN 2014 (1)

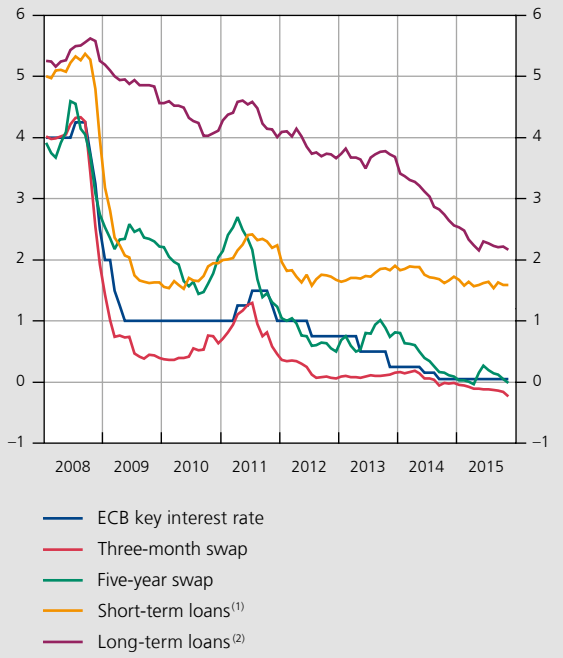
(end-of-month data; annualised percentage changes)



Sources: ECB, NBB.
(1) Including securitised loans.

CHART 54 PERSISTENTLY LOW MONEY MARKET RATES AND FURTHER DECLINES IN INTEREST RATES FOR LONG-TERM BANK LOANS

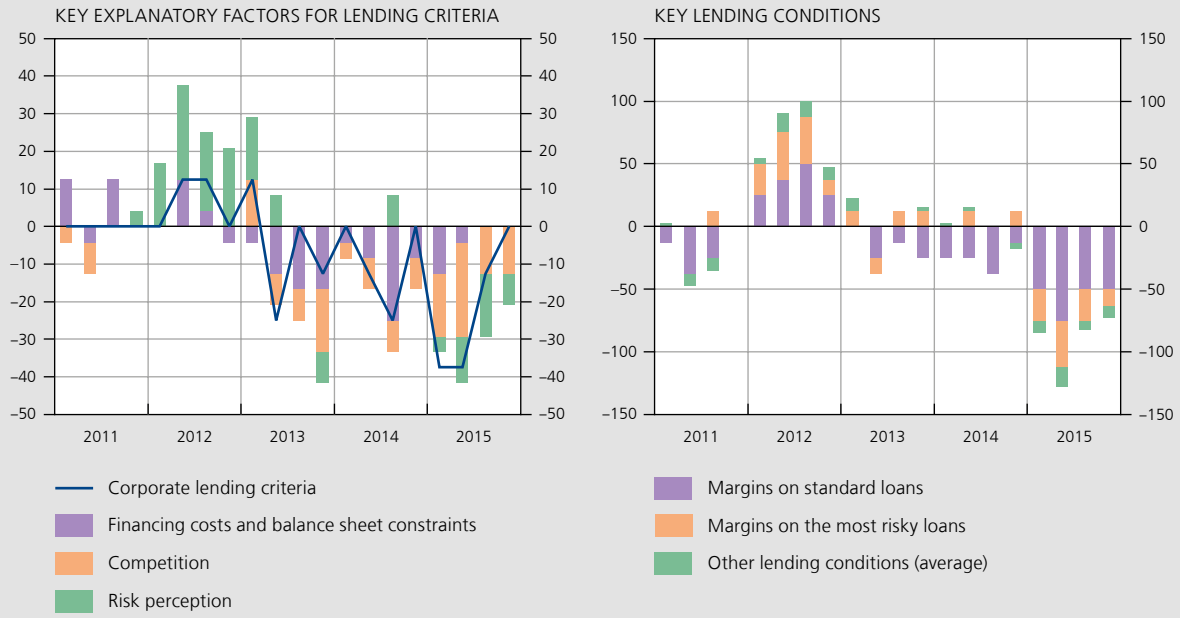
(monthly data, in percentage points)



Sources: Barclays Capital, Thomson Reuters Datastream, NBB.
(1) Interest rate on new bank loans of more than € 1 million at variable rates, initially fixed for up to one year.
(2) Interest rate on loans of € 1 million or less, with a rate initially fixed for more than five years.

CHART 55 SIGNIFICANT IMPROVEMENT IN LENDING CONDITIONS TO CORPORATIONS

(weighted net percentages[1])



Source: NBB (bank lending survey).

(1) A positive (negative) net percentage corresponds to a factor contributing to tightening (easing) of lending criteria or to a condition leading to such tightening (easing).

their more limited access to the financial markets makes this source of finance more of a necessity. In the first three quarters of 2015, bank loans taken out by corporations grew by 0.7 %, with even large corporations a key contributor to the demand despite their preference for bond loans: between December 2014 and September 2015, their bank borrowings rose by 3.3 %, compared with falls in 2013 and 2014.

Intra-group operations again cause major financial cross-transactions

In addition to loans from credit institutions and liabilities contracted with other institutional lenders and private individuals, resident non-financial corporations currently derive a very large proportion of their new liabilities, as recorded in their financial account statistics, from related

TABLE 11 LENDING BY RESIDENT BANKS TO NON-FINANCIAL CORPORATIONS BY BUSINESS SIZE

(average annualised gowth rates[1], in %)

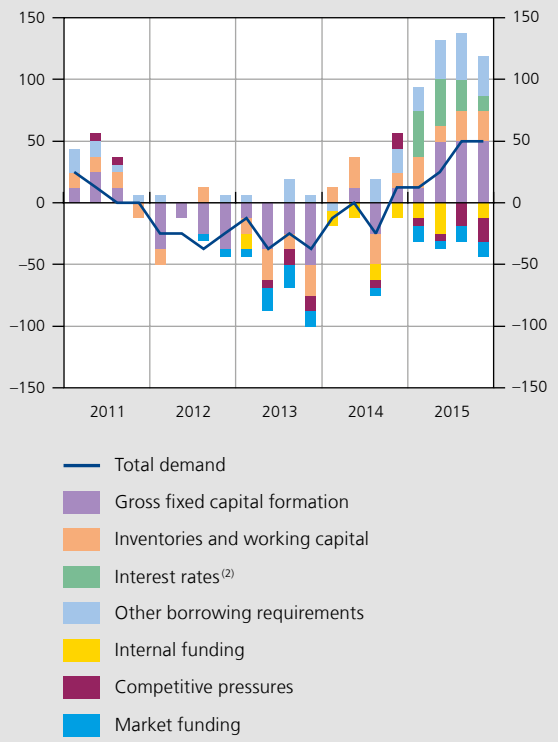
	Average			
	2005-2015Q3	2005-2008	2009-2015Q3	2015Q1-2015Q3
SMEs	5.2	9.1	2.7	0.7
Small businesses	5.0	9.3	2.4	0.7
Medium-sized businesses	5.5	8.8	3.5	0.8
Large corporations	2.1	10.9	–3.3	3.3

Source: NBB (Central Corporate Credit Register).

(1) Annualised averages of quarterly growth figures. The second quarter of 2012 and the fourth quarter of 2014 have been ignored because of breaks in the statistical series.

CHART 56 A RANGE OF FACTORS SUPPORTING CORPORATIONS' DEMAND FOR LOANS

(weighted net percentages[1])



Source: NBB (bank lending survey).

(1) A positive (negative) net percentage corresponds to a factor contributing to borrowing demand going up (down).

(2) A factor first included in the survey in the first quarter of 2015.

party transactions. For non-financial corporations, the importance of these intra-group operations may be gauged using the amounts involved in transactions with non-resident, non-financial corporations and with Belgium-based captive financial institutions and money lenders[1]. In the first nine months of 2015, new liabilities of resident non-financial corporations derived from these entities amounted to € 28.4 billion. These are also related to asset purchases by resident non-financial corporations in the same sectors for virtually the same consideration of € 27.4 billion.

These financial flows are a structural feature of Belgium, whose role as a financial centre has expanded significantly since the approval in 2005 by the federal government of tax deductions for risk capital, the so-called notional interest deduction. This came into force in the 2007 tax year and has proved a stimulus to boosting the equity of Belgium-based corporations, by offering them the possibility to tax deduct the cost of equity in just the same way as the cost of debt. Cash flows in Belgian non-financial corporations are probably largely determined by liquidity requirements and investment projects of related corporations. Lower volumes recorded since 2012 appear to be due in part to successive decreases in yields on Belgian government-issued ten-year linear bonds (OLOs), which act as the reference rate for the notional interest deduction for Belgium-based corporations.

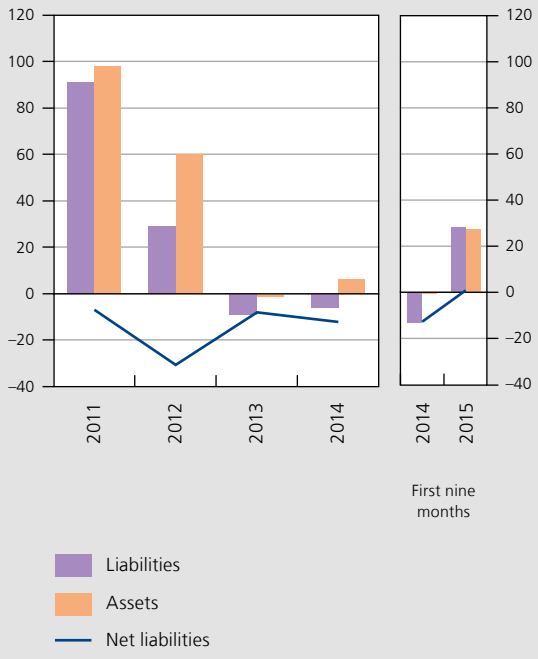
(1) Captive financial institutions and money lenders include financial holding companies and companies in charge of finance for the group of which they are part.

Belgian corporate debt on the whole sustainable

Non-financial corporations have generally seen their total debt rise as a result of transactions as well as an increase in the valuation of their outstanding debt as a result of declining market returns. Consolidated debt, i.e. excluding mutual liabilities between resident non-financial corporations, rose from 99.7 % of GDP at the end of 2014 to 106.2 % by the end of the third quarter of 2015.

CHART 57 TRANSACTIONS BY RESIDENT NON-FINANCIAL CORPORATIONS WITH THE FOREIGN NON-BANKING SECTOR, CAPTIVE FINANCIAL INSTITUTIONS AND MONEY LENDERS[1]

(in € billion)

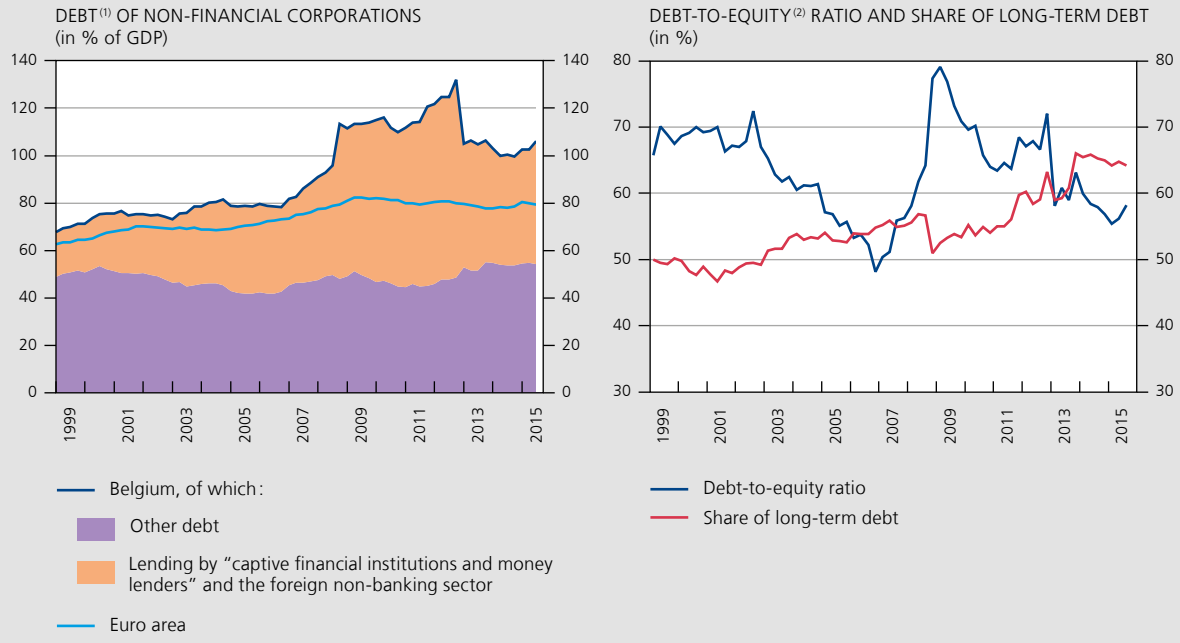


Source: NBB.

(1) With the exception of transactions involving debt securities.

CHART 58 MODERATE DEBT OF NON-FINANCIAL CORPORATIONS

(consolidated data)



Sources : ECB, NBB.

(1) Gross debt defined as the total of outstanding loans and debt securities.

Belgian non-financial corporations' high debt level compared with euro area firms (79.3 % of GDP) requires further explanation. A large proportion is down to the intra-group funding referred to above. Instead of meeting an external financing requirement, these debts often reflect redistribution within a group – possibly for tax reasons, with liabilities offset by corresponding claims on a group entity. While debts between related domestic corporations are not included in consolidated debt calculations, they are when provided by the foreign non-banking sector and the captive financial institutions and money lenders sector, though this is often also intra-group funding. Ignoring this latter type of financing, non-financial corporations' debts only amounted to 54.4 % of GDP.

From a historical perspective, solvency is quite robust when measured by the debt-to-equity ratio. This implies that non-financial corporations' debt ratio and its increase constitute no immediate threat to debt sustainability. Generally speaking, in fact, outstanding debt has risen less than share capital since the crisis, with the latter's relatively large increase mainly due to an increased valuation on the back of reviving share prices. After all, debt issuance (€ 158 billion) has been much more significant than equity issues (€ 98 billion) since 2008, and the latter even slowed to a net € 6.1 billion in the first three quarters of 2015, on a consolidated basis, compared with € 7.1 billion in the corresponding period of 2014. The tax advantage to be gained from equity via the notional interest deduction dropped, as rates are linked to long-term interest rates.

In addition to its level, multiple other factors determine the sustainability of debt, such as its composition – e.g. maturity structure – and the interest charges, all of which have actually been pointing to an improvement in sustainability in the past couple of years. Non-financial corporations improved their financing structure by using more long-term debt – generally considered less risky than having a lot of debt expiring in the short term (refinancing risk). Long-term debt (over one year) as a proportion of consolidated debt amounted to 64 % in the third quarter of 2015, compared with 51 % at the end of 2008. This growing proportion reflects corporations tapping non-bank resources more, particularly by issuing corporate bonds, which tend to have longer maturities. Lastly, despite higher debt levels and extended maturities, interest charges – i.e. interest payments as a percentage of the gross operating surplus – have come down since the financial crisis, thanks both to accommodating monetary policy and higher operating surpluses.

Box 6 – Credit cycles and systemic risk : the credit-to-GDP gap as a monitoring instrument

The recent financial crisis has revealed the key importance for the economy of financial cycles – and more specifically credit cycles – and exposed the procyclical relationship between these cycles and economic activity, particularly in periods of recession. Should lending grow excessively, for instance because of over-optimistic risk assessments, the downward phase of the cycle could spell significant losses for the banking sector, which might exacerbate a recession if banks then move to cut lending and/or restructure their balance sheets. In fact, this procyclical aggravation of financial shocks to the real economy via the banking system and the financial markets proved one of the destabilising factors during the global financial crisis. Belgium managed to avoid a credit crunch but the experience of some other euro area countries has shown it to be imperative to keep regular track of credit developments in the non-financial private sector, to avoid the build-up of excessive imbalances in the upward phase of the cycle and thus curb the impact of economic and financial crises.

In the exercise of its macroprudential mandate, the Bank oversees credit trends in the Belgian economy, and more particularly in the non-financial private sector. A range of indicators may be used to ascertain an economy's position in the credit cycle. Empirical research has shown that such indicators should include measures gauging lending to the non-financial private sector, more specifically the credit-to-GDP ratio and any deviation from its long-term trend : the credit to-GDP-gap. In fact, the credit-to-GDP ratio proves a solid leading indicator of financial crises ; lending is considered excessive when this ratio rises much faster than its long-term trend, i.e. when lending to the non-financial private sector is growing a lot more rapidly than GDP.

Since the beginning of 2016, the Bank has started releasing estimates of the credit-to-GDP gap every quarter. This variable is one of the core indicators for setting the countercyclical capital buffer (CCB), a macroprudential instrument designed to temper cyclical systemic risk and combat procyclical characteristics of lending. When assessing the credit cycle and any potential systemic risk, and when deciding to activate the CCB, the Bank takes into account a wide array of key indicators and, for instance, also publishes the debt-to-GDP ratio, based on a broader definition of debt than the credit-to-GDP gap.

Concepts of credit

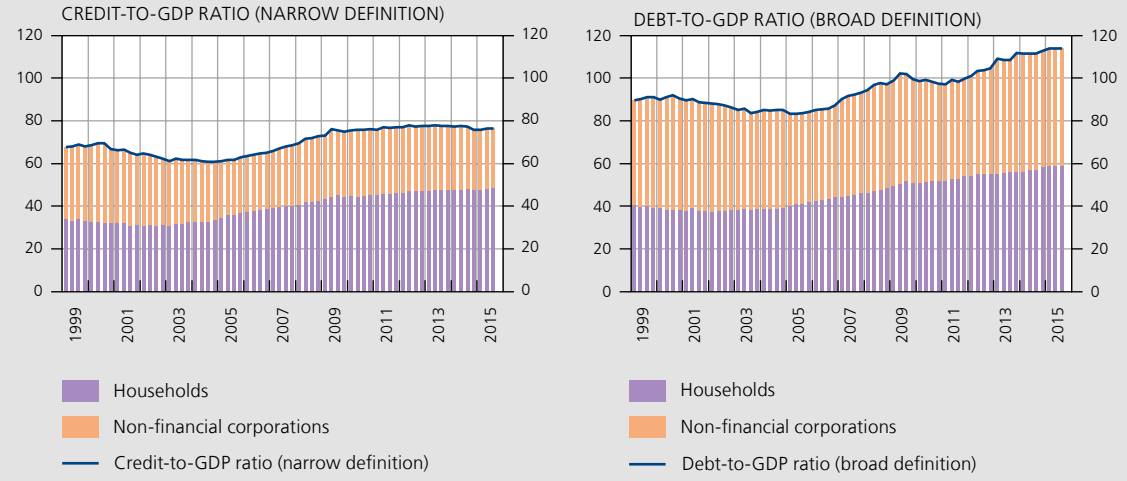
The Bank proposes a narrow and a broader concept of credit. Its narrow definition, i.e. lending by resident banks to the non-financial private sector (including securitised loans), serves to assess the credit-to-GDP gap. The Bank actually prefers this definition as it offers the opportunity to make optimum use of the available data (longer data series), as well as because of the stability (volatility) of the series of estimated credit gaps and the shorter publication lag time. The broader concept of credit, which comprises all – banking and non-banking – loans on a consolidated basis (excluding domestic and foreign intra-group funding) and debt securities, makes it possible to track the levels and trends of the general credit risks facing the non-financial private sector, and thus its resilience [(1)].

The credit-to-GDP ratio (narrow definition) published by the Bank amounted to 76.5 % in the third quarter of 2015, while the debt-to-GDP ratio (broad definition) worked out at 113.9 % in the same period. Parallel trends between the two ratios in the 1999-2009 period were disrupted by the financial crisis, with the credit-to-GDP ratio remaining relatively stable after 2009 while debt-to-GDP rose further. These diverging trends demonstrate the importance of reviewing a range of different credit definitions and may be explained by the higher uptake of non-bank financing after the crisis, and more specifically increased issuance of debt securities by non-financial

(1) For a more precise definition of the broad credit concept, see Annex 2 of the NBB document "Setting the countercyclical buffer rate in Belgium: A policy strategy", available from the Bank's website.

CREDIT-TO-GDP AND DEBT-TO-GDP RATIOS

(quarterly data, sector contributions in % of GDP)



Source: NBB.

corporations – a category of debt only covered by the broader definition. Both definitions suggest that the period of expansion preceding the crisis (2005 2008) related to an uptrend in bank loans, mostly to households.

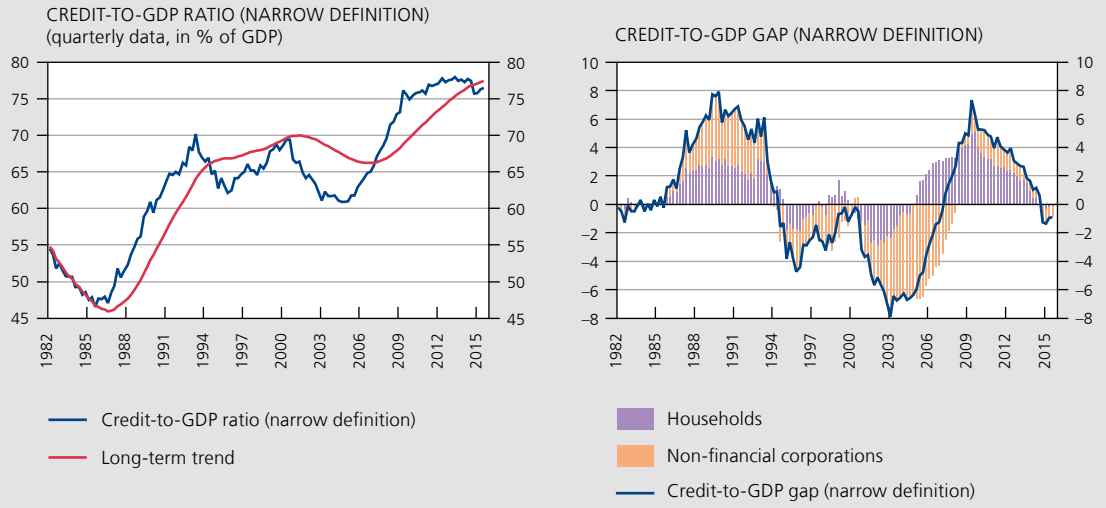
Credit-to-GDP gap and long-term trends

The Bank calculates the credit-to-GDP gap following the procedure recommended by the ESRB, as specified in the Belgian Law of 25 April 2014 on the legal status and supervision of credit institutions. It is measured in percentages of GDP and calculated by subtracting the estimated long-term trend from the recorded credit-to-GDP ratio. In keeping with ESRB recommendations, this trend is computed using a one-sided recursive Hodrick-Prescott filter with a high smoothing parameter (400 000).

The long-term trend typically follows the credit-to-GDP ratio fairly closely, depending on whether it develops in a linear fashion or shows major fluctuations (such as a lengthy downtrend that suddenly reverses). There have been two clearly demarcated periods of steep growth since 1980, the first at the end of the 1980s and early 1990s, when the credit-to-GDP ratio added around 2.5 percentage points a year. The second one was more recent: just before the financial crisis, when the credit-to-GDP ratio grew at a pace fairly close to that in the earlier expansion period. In 2015, by contrast, the ratio's long-term trend rose only very slightly, suggesting relative stabilisation.

According to estimates of the credit-to-GDP gap, the past thirty years have seen two periods of financial expansion, which happen to coincide with the two periods of strong credit growth. The first expansion got underway when the economy staged robust growth at the end of the 1980s and was caused by significantly more bank lending to both households and non-financial corporations. The second period of expansion, which preceded the financial crisis (2005-08), was marked by an acceleration of house prices and was driven more by households than by non-financial corporations. Household contributions to the credit-to-GDP gap turned positive at the end of 2004, while those of non-financial corporations did not become positive until mid-2007. In fact, household contributions

CREDIT-TO-GDP GAP



Source : NBB.

were significantly higher than those of non-financial corporations, accounting for nearly 70 % on average of the credit-to-GDP gap between 2009 and 2013. Despite the recent credit expansion – which mainly concerns households – the credit-to-GDP gap has narrowed since the financial crisis and turned negative in the fourth quarter of 2014. In the third quarter of 2015, the credit-to-GDP gap was slightly negative at 0.9 % of GDP, both for households (0.1 % of GDP) and for non-financial corporations (0.8 % of GDP).

Households

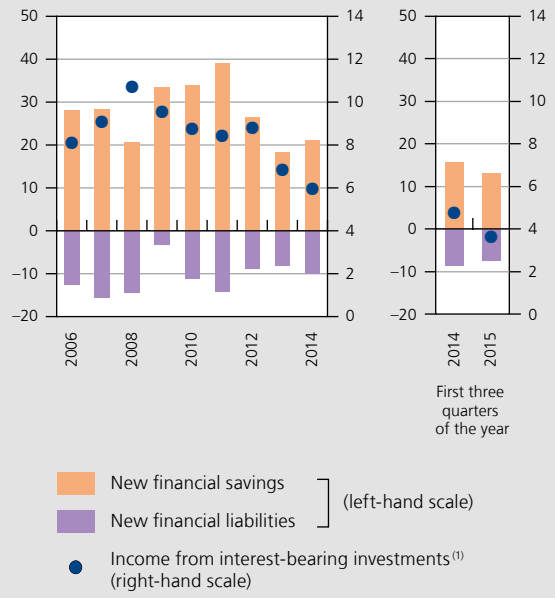
Private individuals invested less and focused more on riskier assets in 2015

The downward trend in Belgian household savings, which had started in 2012, continued into 2015. Whereas in 2011 new savings amounted to € 9.7 billion a quarter, this plunged to € 5.3 billion in 2014 and sank even further in 2015, to € 4.4 billion. These figures are consistent with steeply lower household income from accounts and deposits against a backdrop of low interest rates. The savings slump was somewhat cushioned by steadying income from dividends and other investment, but on the whole private individuals saw their net income from financial investment come down too. This affects any new financial savings, as households tend to consume less of this type of income than labour income. In fact, weak returns on financial investment are encouraging households to spend a greater proportion of their disposable income, at the expense of their savings.

In addition, the dearth of safe and profitable investment opportunities has encouraged households to change the composition of their financial assets : taking savings accumulated in the first three quarters of 2015, private individuals appear to have switched to investment in riskier financial assets in an attempt to cushion the lack of returns on less risky products – a shift that started in 2014 and accelerated in 2015. Nevertheless, ongoing economic fragility caused households to keep investing their savings in highly liquid instruments, possibly as a precaution, but perhaps also to wait for better and more profitable opportunities to open up in financial assets or property.

CHART 59 HOUSEHOLD FINANCIAL SAVINGS DOWN

(annual data, unless otherwise stated; in € billion)



Source: NBB.

(1) Estimates at the end of the first three quarters in right panel.

Factoring in higher liabilities, households saved € 13.1 billion in the first nine months of 2015, compared with € 15.7 billion in the same period of the previous year. Instruments generally considered riskier notched up a net increase of € 15.9 billion, with a mere € 0.8 billion ending up in products with little or no risk – a huge drop on the € 7.3 billion invested in these instruments between January and September 2014.

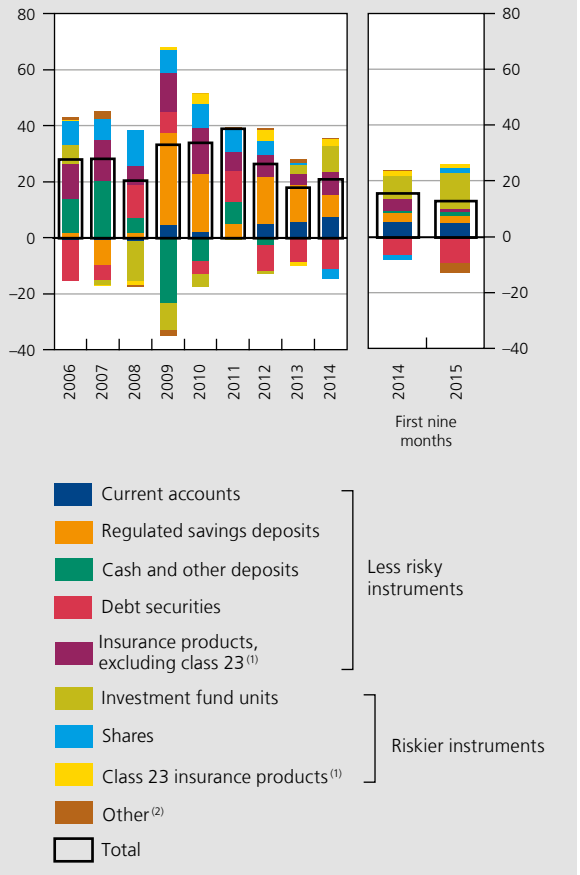
The popularity of riskier assets primarily benefited investment funds, which raked in € 13.1 billion in the first three quarters of 2015, from € 8.3 billion in the corresponding period of 2014. Class 23 insurance products (which offer no guaranteed return) also gained from this trend – albeit to a lesser extent – with inflows of € 1.3 billion, as did equities (€ 1.5 billion). In the less risky arena, sharply lower net amounts on the previous year chiefly reflected private individuals selling off debt securities and/or not reinvesting in these instruments, sparking a negative flow of € 9.3 billion. Private investors were also less enamoured of class 21 insurance products offering a guaranteed return; these attracted merely € 1.3 billion in new resources, compared with € 4.7 billion in 2014. Meanwhile, cash and deposits again exerted a great pull, notching up € 8.8 billion in the first three quarters of 2015, compared with € 9 billion in the previous year.

In fact, households again plumped for sight deposits, which accounted for more than half of investments in liquid assets. This trend, which had begun in 2012, reflected narrowing returns on savings accounts as opposed to current accounts, as well as generally low interest paid on these types of savings. Although regulated savings accounts had benefited from additional savings by private individuals in the first half of 2015, they lost their appeal in the third quarter, when fewer savings came in than were taken out.

Aside from gross returns, savings may also be influenced by the tax treatment of financial assets. The big change in 2015 was the tax treatment of pension savings. The tax rate on savings paid in up to 2014 was lowered from 10 % to 8 % but a proportion of this tax

CHART 60 FORMATION OF FINANCIAL ASSETS: GREATER FOCUS ON RISKIER PRODUCTS

(in € billion)

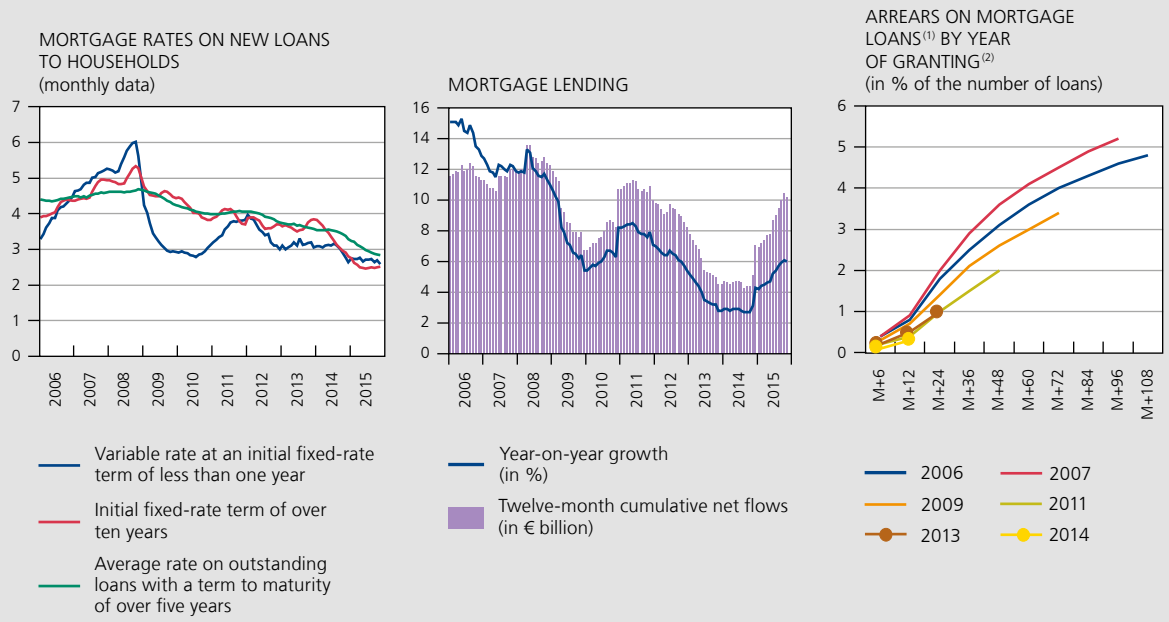


Source: NBB.

(1) These items comprise the net claims of households on technical insurance reserves and on standardised guarantee schemes.

(2) This item comprises, insofar as they have been recorded, trade credit as well as miscellaneous assets of general government and financial institutions.

CHART 61 RESIDENTIAL MORTGAGE RATES DOWN, LOAN VOLUMES UP, ARREARS[1], [2] STABLE



Source: NBB.

(1) A mortgage loan is registered as in default when a due sum has not been paid either in part or in full (i) within three months following its due date or (ii) within one month after formal notice has been served by recorded delivery letter.

(2) Loans are grouped by the year they were granted, with the curves showing the number of loans past due for each year as a percentage of the total number of original loans, after a set number of months following their issue. No account is taken of any regularisation of the loans.

was collected early: between 2015 and 2019, an annual 1 % is deducted from capital saved by the end of 2014, with the remaining 3 % due when the contract expires, i.e. after ten years of savings deposits or when the beneficiary reaches the age of 60. Any pension savings deposits made from 1 January 2015 will be taxed at 8 % when the beneficiary turns 60. In 2015, investment in pension funds remained high at € 1.6 billion over the first three quarters, compared with € 2.1 billion in the same period of 2014.

Other changes in taxation came into force on 1 January 2016, to help finance the tax shift, which aims to reduce tax on labour income and offset this with heavier levies on income from wealth. Inevitably, this will affect household preferences as to how they invest their savings. Two measures deserve special mention in this context. The first is that withholding tax on paid interest and dividends has gone up from 25 % to 27 % (with the exception of some categories of income, such as interest received on regulated savings accounts, whose treatment has not changed, and of some State notes, the so-called Leterme notes). The second is the introduction of a specific tax of 33 % on financial speculation; this affects profit made on the sale of equities or financial derivatives kept for less than six months. Both measures might influence households' willingness to invest in these types of asset.

Mortgage loans booming on favourable conditions and various legal changes

At the same time as building new assets, Belgian households have also been taking on new financial liabilities, mainly mortgages and, to a lesser extent, consumer loans.

2015 saw a wave of mortgage lending against a backdrop of recovering housing markets. In Belgium, nominal prices of residential properties have more than doubled since the year 2000, and declines were quite modest during the great recession when compared with a large number of euro area Member States, in scale as well as duration. That said, growth momentum has slowed significantly since 2011. In 2015, despite property tax reforms, namely in the Flemish Region, nominal prices were up again by 3.2 % over the first three quarters, which ended the downward trend seen in the past four years. In real terms, property prices followed similar trends.

Activity in the housing market had been very brisk towards the end of 2014 in anticipation of impending tax reforms. It returned to more normal levels in 2015, albeit that the Royal Federation of Belgian Notaries recorded a 6.4 % rise in the number of transactions for the year at large.

In the first three quarters of the year under review, the amount in new mortgage loans outpaced repayments by € 5.2 billion. Households saw their total mortgage burden climb to € 194.6 billion by September 2015, up 2.7 % compared with the end of 2014. Mortgage loan volumes were on a continuous growth path throughout the year and posted an annual change of 6 % in November, compared with 4.3 % at the end of 2014.

These robust growth figures ignore key refinancing transactions of existing loans that took place at the end of 2014 and in early 2015 – these have hardly impinged on the size of outstanding mortgage amounts. In fact, two key elements drove the upturn : low interest rates, which have encouraged households to take out new loans to finance their dwelling or to invest ; and tax changes already implemented or soon to come into force, i.e. the new regional rules on mortgage interest relief.

In nominal terms, the actual cost of mortgage loans granted to households remained historically low, as interest rates on medium-term and long-term loans continued to fall as the year wore on. Mortgage rates on loans initially fixed for over ten years were at 2.5 % on average in November, while the percentage had stood at 2.8 % in December 2014. Mortgage rates on loans initially fixed for over five years and less than ten years showed a similar trend over the same period : from 2.7 % to 2.4 %. Belgium's banks noted that they had eased their lending conditions for housing loans in the third quarter of the year after having slightly tightened them in the first half. This easing was reported to have taken the shape of improved non-monetary conditions, particularly the loan-to-value ratio. Conditions were left unchanged in the fourth quarter.

Refinancing aside, new loans were mostly used to buy and renovate residential properties. Changes in the rules also help to explain these trends : in part, the robust dynamics of the end of 2014 reflected households in Flanders anticipating tax treatment changes that were scheduled to come into force on 1 January 2015 (mortgage interest relief). Under the new rules, the maximum amount eligible for relief is reduced and the tax benefit limited to 40 % (instead of the marginal tax rate). Wallonia implemented changes on 1 January 2016 : mortgage interest relief was replaced by a system of *chèque-habitat*, an individual tax credit that becomes less advantageous the more a person earns ; this may also have persuaded some households to act and buy property sooner rather than later. In 2015, households may also have decided to have any renovations done before the year was out, anticipating the imminent change to a measure under which a lower VAT rate was paid for renovations (applicable to properties over ten years old from 2016, compared with five years until the end of 2015). Premium changes to help reduce energy consumption may also have played a part, while a final potential explanatory factor for home loan growth is that property is considered a safe investment in Belgium and may well have been seen as an alternative given the shortage of low-risk opportunities to earn a return.

On the trend in arrears on loans, the Central Individual Credit Register (CICR) recorded no significant increase in terms of home loans, with 2015 default rates stable at low levels (1.2 %). Average home loan arrears amounted to € 40 500 in December 2015, compared with € 38 400 at the end of 2014, an increase of 5.4 %.

Box 7 – Households' capacity to repay mortgage debt from income and financial assets

Households may run into financial difficulties repaying their mortgages when their income is not sufficient to meet their scheduled debt repayments and when they do not have sufficient (liquid) financial assets to meet these payments. This box draws on data provided by the 2010 Eurosystem Household Finance and Consumption Survey (HFCS) to analyse to what extent households are able to repay their mortgages and what obstacles they may face when trying to do so. Survey data at household level have the advantage of separating out households with debt and providing information on the distribution of assets and debts for these households. The downside is that these survey data are neither exhaustive nor exact. After all, survey respondents represent only a sample of the population and their replies may be inaccurate or incomplete. What is more, surveys of this kind are not carried

out very frequently and results are often published after a time lag[1]. However, HFCS findings enable a special review of distribution aspects and more specifically of questions such as who owns assets, who is in debt and what proportion of outstanding mortgage debt is subject to risk.

To assess households' mortgage burdens, two debt ratios relate mortgage debt to income or to financial assets:

- The debt-service-to-income ratio (DSTI) divides the flow of monthly mortgage payments by a household's gross income flow at the time of the survey. This ratio reflects the proportion of its income a household needs to meet its scheduled debt payments.
- The liquid-assets-to-debt-service ratio (LATDS) divides the value of a household's liquid assets (deposits, bonds, listed shares and mutual funds) by the flow of monthly mortgage payments at the time of the survey. This ratio indicates how many months a household could finance its mortgage debt payments from its liquid financial assets, e.g. in the event of a sudden loss of income.

When debt ratios linked to income or liquid assets become too unfavourable, the risk increases that households will be unable to meet their debt commitments. This box therefore focuses on mortgaged households that are looking at excessive debt ratios (high DSTI, low LATDS), and more specifically on their share of the total outstanding mortgage debt. According to HFCS data for 2010, 69.7 % of Belgian households are owner-occupiers compared with 60.1 % in the euro area; 30.5 % of Belgian households have mortgage loans compared with 23.1 % in the euro area.

On the ability to repay the mortgage from current income flows, 18.2 % of total outstanding mortgage debt in Belgium is concentrated with households that spend over 40 % of their income on debt repayments, compared with 14.9 % of households in the euro area. Those with DSTIs in excess of 50 % account for 12.7 % of outstanding mortgage debt in Belgium and 10 % in the euro area. Belgian households typically take out their first mortgages to get onto the property ladder at a relatively young age, when their incomes still have growth potential. In addition, very long-term mortgage loans or loans without capital repayments account for a relatively smaller proportion in Belgium, which implies that debt service payments are typically higher. These intrinsically favourable features of the Belgian mortgage market do imply a higher number of households with high DSTIs.

The analysis of the extent to which a household's outstanding mortgage debt is covered by financial assets will be limited to its liquid assets. Liquid financial assets enable households to make it through periods of lower income, in the event of unemployment for instance. Such periods may at times be quite lengthy, but it is worth investigating more moderate instances of loss of income such as a period of six months. Liquid assets comprise the value of deposits, bonds and savings certificates, listed shares and mutual funds. Not included are unlisted shares and the value of a self-employed person's own company, accrued pension entitlements and other assets. Financial accounts reveal that such liquid financial assets added up to 160 % of GDP in Belgium in the third quarter of 2015, compared with 106 % for the euro area.

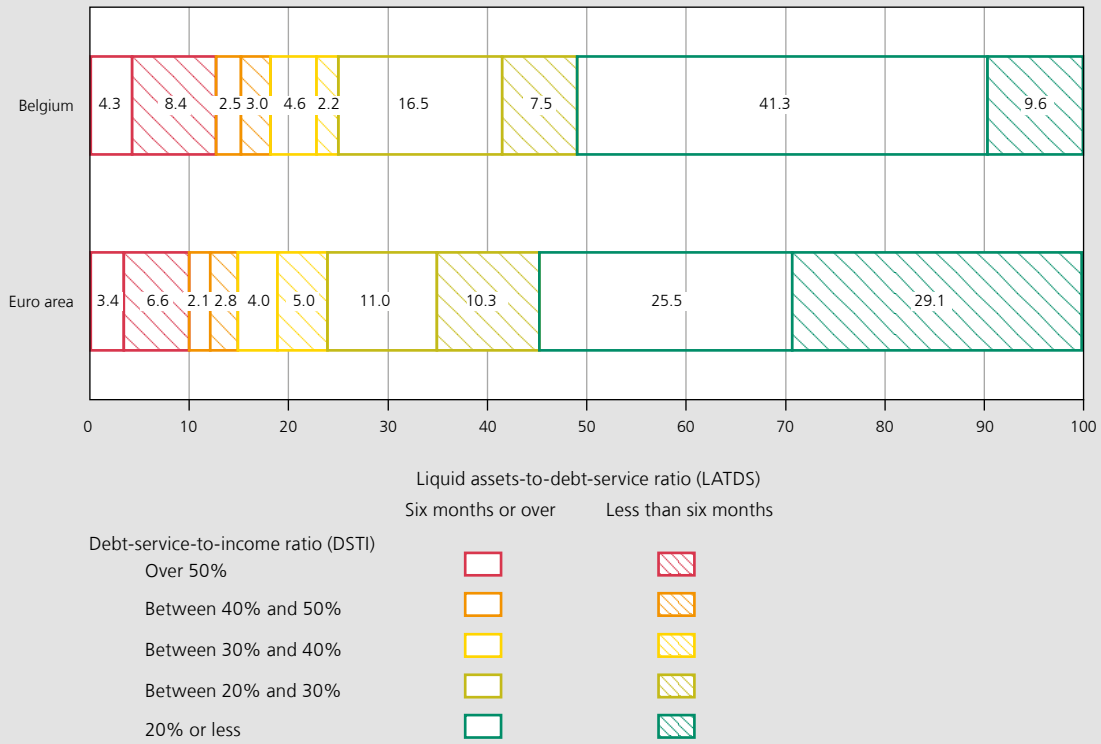
HFCS data show that the high total financial wealth of households is unequally distributed[2]. For one thing, liquid financial assets are not evenly distributed across households with or without mortgage debts. Mortgaged households account for 30.5 % of all Belgian households but they own a mere 21.9 % of all liquid financial assets. Moreover, financial assets are also unevenly divided across this group of households with mortgages. This means in effect that not all of these households have sufficient financial resources to cover their debt.

(1) Fundamental features of the assets and liabilities distribution typically remain fairly stable over time, and an analysis of 2010 data thus has relevance today. The survey was conducted in Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain. The "euro area as a whole" refers to these fifteen countries.

(2) See Du Caju Ph., "Structure and distribution of household wealth: An analysis based on the HFCS", NBB, *Economic Review*, September 2013, pp. 41-62.

DISTRIBUTION OF OUTSTANDING HOUSEHOLD MORTGAGE DEBT BY DEBT-SERVICE-TO-INCOME RATIO (1) (DSTI) AND LIQUID-ASSETS-TO-DEBT-SERVICE RATIO (2) (LATDS)

(in % of total outstanding mortgage debt of households)



Sources: ECB, NBB (HFCS).

(1) Monthly mortgage payments divided by a household's gross income.

(2) The value of a household's liquid financial assets (deposits, bonds and savings certificates, listed shares and mutual funds) divided by monthly mortgage repayments.

In Belgium, HFCS data reveal, 14.9 % of total mortgage debt is owed by households that have sufficient liquid assets to pay off this debt at once and in full. These households hold on to these assets to finance other (unexpected) expenses or simply because of their returns, which may well be higher than the cost of the loan, partly because of the tax treatment of mortgages. In the euro area, only 8.9 % of total outstanding mortgage debt is completely covered by liquid assets.

However, the unequal distribution of assets and debt also implies vulnerable groups of households: 30.8 % of mortgage debt in Belgium is owed by households with insufficient liquid assets to finance six months of debt repayments; this percentage is at 53.8 % in the euro area. The proportion of this debt – covered by financial resources only to a very limited degree – also happens to be higher among groups of households that already find it hard to repay their debts from their household income. While only one-fifth of outstanding mortgage debt with a DSTI of 20 % or less in Belgium is owed by households that have insufficient liquid assets to finance their repayments over a period of six months, this percentage climbs to seven-tenths of mortgage debt with a DSTI of 50 % or over. The figures for the euro area show the proportion of inadequately covered mortgage debt at 50 % in the group with the lowest DSTIs and at 70 % in the group with the highest DSTIs. It would appear that liquid assets in Belgium are mostly held by households without mortgages and by those indebted households that have relatively little trouble repaying their debt from their household income.

All things considered, Belgians' wealth of financial assets contributes to the sustainability of their mortgage debt. However, a significant proportion of mortgaged households spend a large part of their household income on repayments and have few liquid financial reserves to make up for any temporary loss of income. These particular households are vulnerable to unemployment shocks and constitute pockets of risk in the mortgage market. Low-income households with a mortgage are relatively prone to this risk – and particularly the younger ones[1], who may not have had the time to save sufficiently.

(1) See Du Caju Ph., Th. Roelandt, Ch. Van Nieuwenhuyze and M.-D. Zachary, "Household debt: evolution and distribution", NBB, *Economic Review*, September 2014, pp. 61-80.

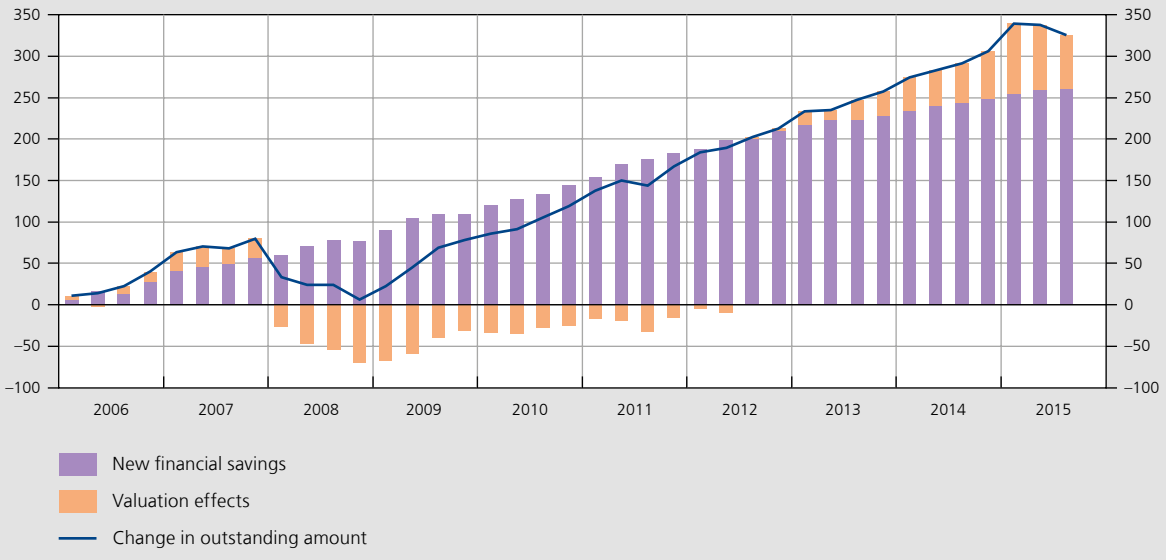
Consumer loans also rose in the first nine months of 2015 compared with the year-earlier period of 2014, albeit their outstanding amount is very much smaller than that of mortgage loans. Subdued increases in disposable income, coupled with low interest rates, probably tempted households to boost volumes borrowed for consumption purposes. Net flows amounted to € 0.3 billion in the first three quarters of 2015, compared with € 1.3 billion in 2014. However, Central Individual Credit Register (CICR) data suggest that new loan volumes rose significantly from August and pertained to transactions involving credit facilities and instalment loans. Arrears on credit facilities amounted to 4.9 % in December 2015, compared with 4.3 % in December 2014. Arrears of sales and instalment loans, by contrast, edged slightly down in 2015 to 10.4 % in December, compared with 10.7 % at the end of the previous year.

Financial wealth climbs further, changes its composition and enjoys fresh positive valuation effects

The financial wealth of a household is the sum total of its financial assets. In addition to changes resulting from the building-up of new assets or entering into new financial liabilities, other effects also come into play, i.e. changes in the prices of its existing assets (valuation effects). Between 2012 and 2014, total financial wealth growth was supported by both volume changes and revaluations of the asset portfolio. Following the heavy losses incurred in 2008 with the onset of the financial crisis, which took households three years to clear, the 2012-14 period saw a significant rise in the valuations of the riskier assets in their portfolios, boosting their financial wealth by € 73.2 billion. 2015 proved a year of contrasts: first-quarter trends in

CHART 62 VALUATION EFFECTS POSITIVE SINCE 2012, BUT DOWNWARD CORRECTION FROM THE SECOND QUARTER OF 2015

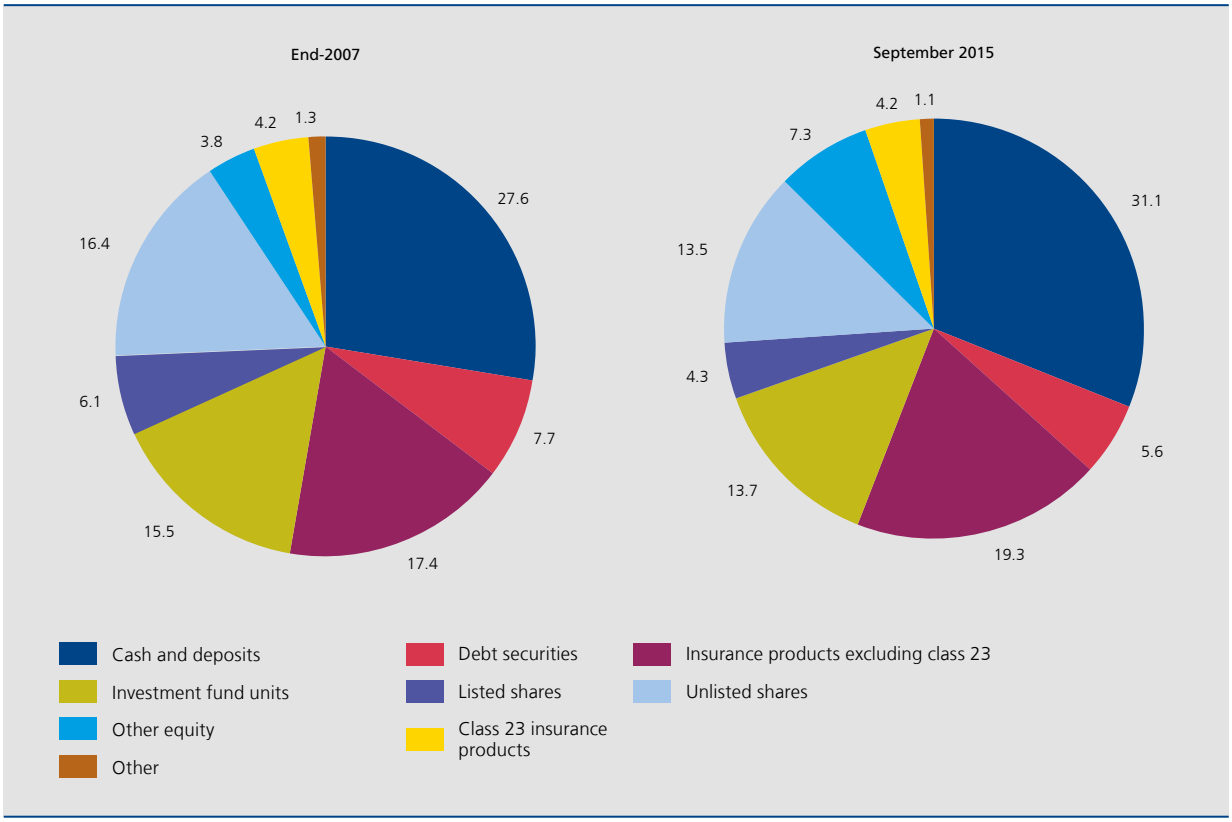
(cumulative flows from 2006Q1, in €billion)



Source: NBB.

CHART 63 HOUSEHOLD FINANCIAL WEALTH BREAKDOWN MORE FOCUSED ON LESS RISKY PRODUCTS THAN BEFORE THE CRISIS

(in % of the total)



Source: NBB.

(1) These items comprise the net claims of households on technical insurance reserves and on standardised guarantee schemes.

(2) This item comprises, insofar as they have been recorded, trade credit as well as miscellaneous assets of general government and financial institutions.

stock market prices added € 27.7 billion to portfolios, but the numbers took a turn for the worse in the second and third quarters, when private individuals incurred losses of nearly € 21 billion on their riskier assets. However, when considered over the full nine-month period, valuation effects remained positive and accounted for almost 35 % of the increase in household financial wealth in the period.

In September 2015, Belgian households boasted financial wealth of € 1 193 billion, working out at 293 % of GDP. This compares with € 947 billion, or 275 % of GDP in December 2007, before the onset of the financial crisis. Over the first three quarters of 2015, it grew by € 20 billion, which breaks down into € 13.1 billion for the formation of new assets and € 6.9 billion for the valuation of the assets portfolio.

Over half of private individuals' portfolios comprise products with little or no risk: cash, deposits, debt securities and insurance products (class 23 excepted). This overall category accounted for € 668 billion in September 2015, with regulated savings accounts still the most popular at € 240 billion, followed by less risky insurance products to the tune of € 230 billion. Highly liquid and low-risk assets, which are usually kept for precautionary saving or while waiting for higher-yielding investment opportunities, make up a substantial chunk of households' portfolios and account for about one-third of their financial assets.

Between 2007 and 2015, capital earmarked for precautionary savings or for savings in anticipation of higher-yielding investment opportunities (cash and deposits) climbed from 27.6 % to 31.1 % of the financial portfolio, reflecting greater household risk aversion due to the financial crisis. Meanwhile, this category's breakdown had also changed: compared with end-2007, the proportion of cash or assets held in current accounts rose, mostly at the expense of money in term deposit accounts. More generally speaking, less risky assets – which in addition to cash and deposits also include debt securities and insurance products excluding class 23 – have seen their share of the total swell over this period; they accounted for 56 % of household financial wealth by September 2015, compared with around 53 % at the

end of 2007. Undoubtedly, the 2008 raise in the deposit guarantee level from € 20 000 to € 1 00 000 also played a part. Conversely, riskier financial instruments, i.e. shares, investment fund units and class 23 insurance products, declined as a proportion of financial wealth from 46 % in 2007 to 42.9 % in September 2015.

Amounting to € 512 billion in September 2015, these riskier instruments broke down into listed and unlisted shares (€ 298 billion, 58 %), investment fund units (€ 163 billion) and class 23 insurance products (€ 51 billion).

In terms of financial liabilities, total household debt, which had come in at € 249 billion at the end of 2014, stood at € 257 billion in September 2015, three-quarters of which was mortgage debt. This works out at an annualised increase of 5.2 % on average in the first three quarters of 2015, a more robust growth rate than the average for 2013 and 2014 (4.2 %).

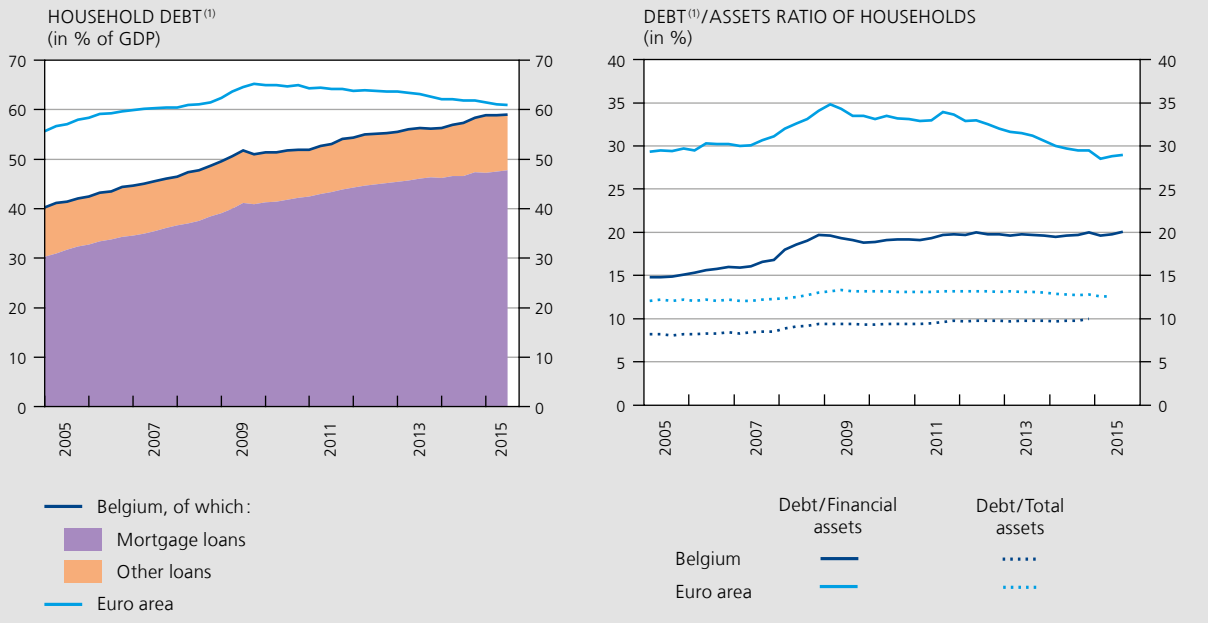
Household debt ratio

The household gross debt ratio continued its upward trend and reached 59.1 % of GDP in the third quarter of 2015, in contrast to a slight deleveraging seen since the beginning of 2010 in the euro area, where the debt ratio gradually declined from 65 % to 60.9 % of GDP in the third quarter of 2015. The persistent increase in the debt ratio in Belgium is mostly attributable to mortgage loans.

Regardless of the further rise in the gross debt ratio, households' financial positions have generally remained robust, as evidenced by the debt-to-asset ratio staying lower in Belgium than in the euro area. In fact, debts have risen quite closely in step with financial wealth growth since the crisis. Microeconomic data also bear out that debt in Belgium is better covered by assets than in the euro area, which is true for both financial assets and for total assets. In view of the uneven distribution of debt, income and wealth across households, these data also point up important vulnerabilities or pockets of risk in the debt structure. More specifically, some households are displaying limited repayment capacity in view of their income and/or liquid assets (see box 7).

Ex-post indicators of credit risk such as non-performing loans (NPLs) and arrears on loans as registered by the Central Individual Credit Register (CICR) illustrate that the debt service burden is still manageable for most households. The NPL ratio for mortgage loans in the Belgian market was relatively low in the third quarter of 2015 and growth in year-on-year total payment arrears for households fell from 4.9 % at the end of 2014 to 1.4 % in December 2015. These trends can be traced

CHART 64 HOUSEHOLD DEBT LEVELS KEEP RISING, BUT WITHOUT ANY INDICATION OF EXCESSIVE RISKS



Sources: ECB, NBB.
(1) Gross debt defined as the total of outstanding loans.

back to an improved macroeconomic environment, and in particular to the fall in joblessness numbers, as well as to the accommodating monetary policy in place since 2008 which has meant that higher debt ratios have not raised total interest charges for households (as a percentage of their disposable income).

Though the overall debt position does not flag up any excessive risks, the Bank has taken a number of precautions within its macroprudential mandate to limit potential future risks. For one thing, it has encouraged banks to observe reticence when setting their mortgage lending conditions and at the end of 2013 it increased the risk weightings on mortgage loans by 5 percentage points for banks using an internal ratings-based approach (IRB). As of 1 January 2016, it can also impose an additional capital buffer (CCB) in the event of too rapid an upswing in the non-financial private sector credit cycle.

3.2 Role and position of the financial sector in the Belgian economy

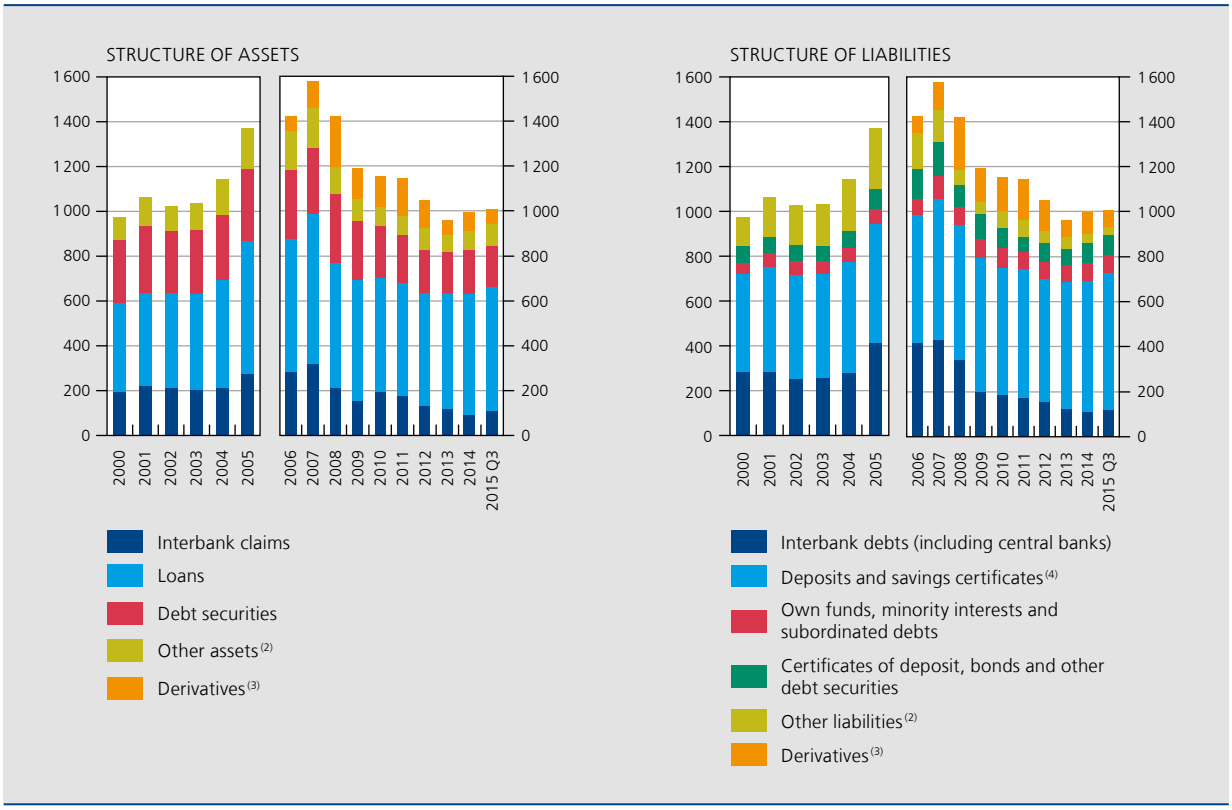
Banks

Belgian banks have sharply scaled back the size of their balance sheets since 2007 and have focused on traditional banking activities in selected strategic markets.

Total assets of Belgium's banks grew from € 996 billion at the end of 2014 to € 1 008 billion at the end of September 2015, i.e. 248 % of GDP. This would appear to confirm that the industry has completed the deleveraging process that got underway at the end of 2007, when Belgian banks still had total assets of € 1 578 billion, or 458 % of GDP, and that has fundamentally changed the composition

CHART 65 BELGIAN BANKS SCALED BACK BALANCE SHEETS FROM THE START OF THE FINANCIAL CRISIS

(balance sheet structure of Belgian credit institutions; end-of-period data, on a consolidated basis[1]; in € billion)



Source : NBB.

(1) Data compiled according to Belgian accounting rules (Belgian GAAP) until 2005 and according to IAS/IFRS standards from 2006.

(2) "Other assets" mainly comprise balances with central banks, shares, tangible and intangible assets, and deferred tax assets. "Other liabilities" are primarily short positions, liabilities excluding deposits and debt securities, provisions and liabilities for defined benefit obligations.

(3) Derivatives are recognised at market values, including – from 2007 – income receivable and charges payable (which are not included in the data relating to 2006).

(4) From the third quarter of 2014, savings certificates are no longer included in "deposits and savings certificates", but rank under "certificates of deposit, bonds and other debt securities". Liabilities linked to transferred assets are no longer recognised under "other liabilities", but are included under different items on the liabilities side.

of their balance sheets. The expansion of activities that defined the years in the run-up to the financial crisis had increasingly focused outside the Belgian market, as it was saturated. After 2008, the focus was firmly back on Belgian soil and cross-border activities were trimmed, although there was still a strong presence in some foreign "home markets", such as East and South-East Europe (KBC and BNP Paribas Fortis), the Netherlands (Argenta), Ireland (KBC), Switzerland (ING Belgium) and Luxembourg.

As well as changing their regional focus, Belgium's banks increasingly resumed their traditional intermediary roles after the financial crisis, attracting deposits from savers and lending to households and companies. Loans provided to private individuals by Belgian banks have risen steadily, chiefly in the Belgian market and in foreign home markets, and amounted to € 263 billion – i.e. 26 % of total assets – by the end of September 2015. A large proportion of this is attributable to the Belgian market for mortgage loans. The outstanding mortgage total grew steadily from € 111 billion at the end of 2007 to € 175 billion, a rise of 58 %. The portfolio of loans to Belgian non-financial corporations also pursued an upward trajectory, albeit a less pronounced one and with occasional periods of negative growth. It advanced from € 97 billion at the end of 2007 to € 114 billion at the end of September 2015, accounting for 11 % of the Belgian banking sector's total assets.

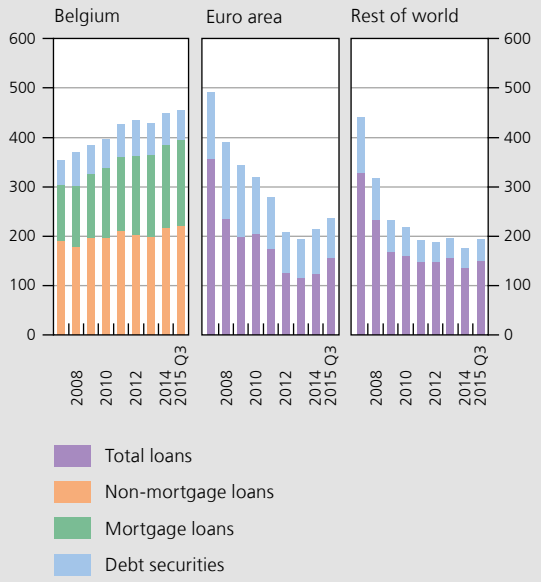
At the same time, outstanding loans to foreign non-financial corporations and to – mainly foreign – banking and non-bank financial corporations have fallen since the end of 2007. This also explains observed falls since 2008 of outstanding loans to counterparties outside Belgium, both in the euro area and elsewhere in the world. By the end of September 2015, loans by Belgian banks to foreign non-financial corporations totalled € 88 billion while € 146 billion had been lent to financial corporations, nearly three-quarters of which to banks and one-quarter to non-bank institutions.

Belgian banks have also steeply reduced their portfolio of debt securities since the financial crisis, from € 297 billion at the end of 2007 to € 182 billion at the end of September 2015, with this being largely attributable to a lower exposure to securities issued by financial and non-financial institutions. Investment in government bonds, by contrast, rose by € 3.5 billion, taking these securities as a proportion of the total balance sheet from 9 % to 13 % by the end of September 2015.

These trends have not been a straight-line affair, and the actual composition of the government bonds portfolio has changed markedly since the onset of the financial crisis. Turmoil in the markets for government bonds

CHART 66 BELGIAN BANKS MAINLY DELEVERAGED EXPOSURES TO FOREIGN COUNTERPARTIES

(geographical breakdown of assets held by Belgian credit institutions in the form of loans and debt securities(1), end-of-period data, in € billion)



Source : NBB.

(1) Data obtained from the consolidated reporting of Belgian credit institutions. Breakdown in accordance with FINREP prudential reporting.

in 2011 and 2012 prompted a rebalancing of exposures to government paper. Belgian banks focused on Belgian government bonds and sharply reduced their exposures to peripheral countries, from € 46 billion at the end of 2007 to € 11 billion at the end of 2013. From 2014, these positions grew again to end up at € 22 billion by the end of September 2015, which was still well below pre-crisis levels. Exposures to non-peripherals, including countries rated AAA such as Germany, have also gone up since 2014. The Belgian public authorities remain the main counterparty, with a 49 % share of the total portfolio of public loans and bonds by the end of September 2015.

The banking sector's balance sheet contraction since the start of the financial crisis reflects movements in loans and securities portfolios, but also significant falls in the market value of the derivatives portfolio, which slumped from € 223 billion at the end of 2008 to € 66 billion by the end of September 2015. Most of this portfolio is made up of interest rate derivatives, whose market values are typically volatile and reliant on market rates. Its decline in the past eight years reflects reduced demand for interest rate risk hedging, as well as a general reduction in banking activities. Banks have done what they could to cut the number

of such contracts, for instance in the event of cross-exposures to the same counterparties. Banks frequently agree new contracts with reverse features to neutralise their existing exposures – so-called back-to-back contracts. As a result, falling market values on the assets side were often linked to comparable reductions on the liabilities side.

The financial crisis also triggered key changes in other items on the liabilities side of Belgian banks' balance sheets, a slump in market funding being one of them. The biggest downturn was recorded in funding by the interbank market, which includes funding by central banks. The total amount borrowed in this market fell from € 432 billion at the end of 2007 to € 121 billion at the end of September 2015. Even though funding from central banks was high at some points – e.g. when market funding temporarily dried up during the global financial crisis and the European sovereign debt crisis –, Belgium's banks have seldom tapped it in the past few years. Neither did the Belgian banks turn to the markets much for other types of funding, which declined overall. That said, they did use the Belgian system for the issue of covered bonds first implemented in 2012: € 21 billion had been borrowed in this way at the end of September 2015.

The general demise of market-based funding for Belgian banks was offset by increased deposit-based funding from households and non-financial corporations, another feature of the transition by the Belgian banks to a more traditional business model. This type of funding recorded an overall increase in the total value of the balance sheet since 2007 to reach 48 % by the end of September 2015, mainly on the back of household deposits. Savings accounts, in particular, gathered momentum and non-consolidated total savings deposits rose from € 149 billion at the end of 2007 to € 258 billion by end-2014 and € 261 billion at the end of September 2015. A significant proportion of this total was paid into branches of foreign banks and then transferred to the parent companies outside Belgium.

2015 balance sheet developments confirm that deleveraging, which started in 2008, is now complete

2015 also saw the first signs of a stabilisation in retail deposits – in the Belgian market at least – as households gradually switched to other types of assets. Increasingly, households choose to invest a proportion of their wealth in funds, as these generate higher

TABLE 12 INCOME STATEMENT OF BELGIAN CREDIT INSTITUTIONS

(consolidated data; in € billion, unless otherwise stated)

	2011	2012	2013	2014	First nine months 2014	First nine months 2015	In % of operating income
Net interest income	14.0	13.6	13.3	14.5	10.8	11.3	66.5
Non-interest income	4.8	4.5	7.0	6.2	5.0	5.7	33.5
Net fee and commission income (incl. commission paid to agents)	4.4	4.5	5.0	5.3	4.1	4.5	26.8
(Un)realised gains or losses on financial instruments[1]	–0.8	0.0	0.8	–0.1	0.3	1.3	
Other non-interest income	1.2	0.0	1.3	0.9	0.5	–0.1	
Operating income	18.7	18.1	20.3	20.7	15.8	16.9	100.0
Operating expenses	–12.3	–13.0	–12.4	–12.7	–9.6	–10.0	58.9[2]
Gross operating result	6.4	5.0	8.0	8.0	6.2	7.0	
Impairments and provisions	–5.0	–2.6	–3.0	–1.3	–0.9	–0.6	
Impairments on loans and receivables	–3.0	–2.0	–2.3	–1.3	–1.0	–0.9	
Impairments on other financial assets	–1.4	0.8	0.0	0.0	0.0	0.0	
Other impairments and provisions	–0.6	–1.5	–0.6	0.1	0.0	0.3	
Other components of the income statement	–1.0	–0.8	–1.8	–2.2	–1.6	–1.9	
Net profit or loss	0.4	1.6	3.3	4.5	3.6	4.4	

Source: NBB.

(1) This item also includes the net realised gains (losses) on financial assets and liabilities not measured at fair value through profit or loss, the net gains (losses) on financial assets and liabilities held for trading and designated at fair value through profit or loss, and the net gains (losses) from hedge accounting.

(2) Cost/income ratio of the Belgian banking sector.

returns than low-yielding savings deposits and life insurance. Belgium's banks also had recourse to other funding resources: wholesale deposits from both non-financial corporations and financial institutions went up from € 204 billion at the end of 2014 to € 223 billion by the end of September 2015, partly because these companies were facing a rather sparse range of investment opportunities.

Two different reasons may be cited for the recent change in the composition of assets. First, in 2015, there was a further increase in the amounts lent to private individuals and non-financial corporations in the home markets of Belgian banks (including Belgium), as befits normal growth of activities. Secondly, exposures to foreign and mainly financial counterparties picked up, a trend that coincided with developments in Belgian banks' wholesale deposits. These may well be of a temporary nature and do not seem to reflect any change in investment policies; to date, Belgian banks have not gone off on any marked search for yield. That said, some banks may be inclined to impose rather more sweeping changes on their assets (and liabilities) in future, in an attempt to support their profitability levels if the current economic climate – of low interest rates and subdued growth – persists in the medium term and erodes their profit generation capacity.

Solid results for Belgian banks in 2015

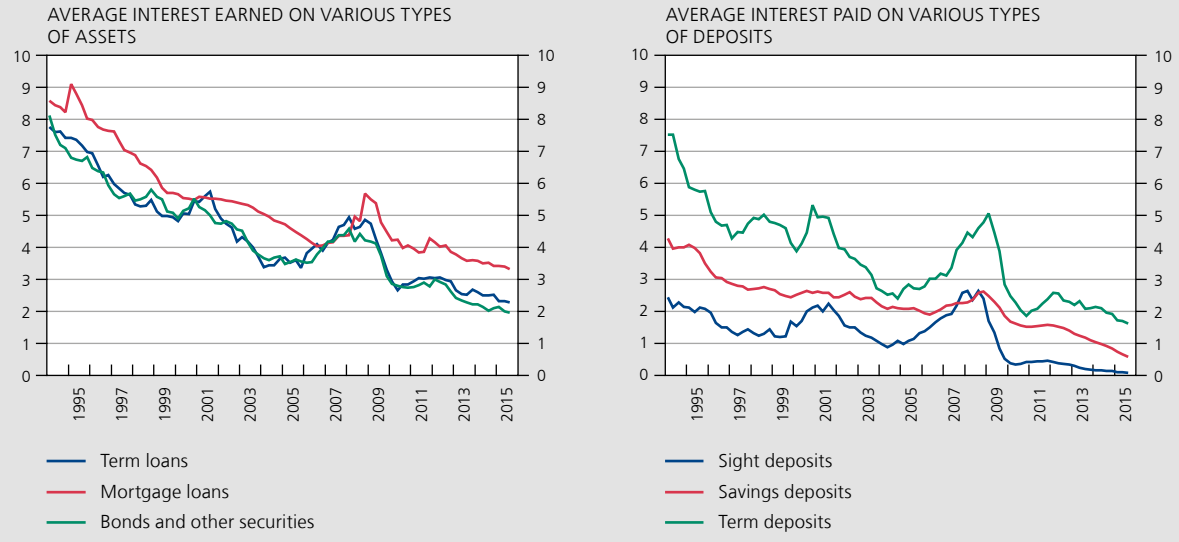
This kind of pressure on profitability did not emerge in 2015. The banking sector as a whole posted profits of € 4.4 billion in the first three quarters of the year, compared with € 3.6 billion in the same period of 2014. Despite the reorientation on the domestic market, non-Belgian "home markets" remain a key source of income for Belgium's banks: a total 38 % of their 2015 net profits derived from foreign activities. The generally solid results of Belgian banks took the shape of an annualised return on equity of 9.6 % and a (relatively) high annualised return on assets of 0.6 %.

Net interest income up despite low interest rate environment

These healthy Belgian bank results are partly underpinned by higher net interest income, rising from € 10.8 billion in the first three quarters of 2014 to € 11.3 billion in the corresponding period of 2015. This increase partly reflected favourable volume trends in interest-bearing assets and liabilities, which moved back up in 2015 after major contractions from the onset of the crisis. Moreover, interest margins picked up as average interest paid on liabilities fell more rapidly than returns on assets, continuing a virtually uninterrupted trend since 2008. In fact, the balance sheet contraction that got underway from the very start of the financial crisis primarily focused on relatively low-yielding activities, such as interbank operations, providing a boost to average returns on assets. What is more, credit institutions managed to keep their commercial margins on selected products high or even raise them – this

CHART 67 INTEREST PAID BY BELGIAN BANKS DECLINED FASTER THAN RETURNS ON ASSETS IN 2015

(interest on outstanding amounts of the various categories of assets and liabilities of Belgian credit institutions, non-consolidated data; in %)



Source: NBB.

margin being the difference between interest rates charged by banks on loans and their corresponding market rates. The intermediation margin, another component of total interest margins, is determined by the yield curve. Total margins rose in 2015, thanks to further declines in bank financing costs, while average returns on assets lost less ground. Interest rates paid on savings deposits, for instance, came down by 27 basis points between the end of 2014 and end-September 2015, while returns on mortgage loans, other term loans and securities slid by a mere 9, 24 and 14 basis points respectively. Lastly, Belgium's banks benefited hugely from early repayment charges on 2015's very large number of mortgage loan refinancing transactions, which contributed to increasing margins and interest revenue.

Non-interest income also on the rise, supported by fee and commission income and gains on financial instruments

Belgian bank results in 2015 were also shored up by higher non-interest income, which amounted to € 5.7 billion in the first nine months of the year, as against € 5 billion in the corresponding period of 2014. One contributing factor was a € 0.4 billion higher net fee and commission income item, mainly on the back of commission earned on the sale of investment funds to households. Gains on financial instruments were also up, mainly thanks to positive (realised or unrealised) changes in financial asset market values.

Higher operating expenses, stable wages

Though benefiting from both interest income and other income, Belgian banks' gross operating result was eroded by a further increase in operating expenses of some € 0.4 billion. A new cost in the equation was their first contribution to the European Single Resolution Fund. An essential feature of the European banking union, this fund will be put in place from 2016, replacing national resolution funds for Member States participating in the banking union set up under Directive 2014/59/EU, and will take on the duties of those funds for credit institutions based in the banking union.

Staff expenses remained stable in 2015, just as in previous years. Between 2007 and 2010, the banking sector had seen payrolls shrink hugely, as Belgian banks massively reduced the reach of their activities and refocused on the domestic market. Payroll costs have since then stabilised despite a permanent reduction in employee numbers in Belgium. In fact, employment in the banking sector contracted by nearly 8 % between 2010 and 2014, while it fell by only 2 % in the broader economy. A lower headcount fits in with rationalisation programmes in place at some of these institutions to align their cost structures with their new business models. However, this process shifted the banks' employment structure towards a greater proportion of managerial staff, so curbing the reduction in compensation.

Impairments and provisions down to very low levels in 2015

In contrast, impairments and provisions, which had already been taken to favourable levels by a downward trend since 2011, shed another € 0.3 billion in the first nine months of 2015 compared with the same period of 2014. Foreign portfolios account for around one-third of the € 0.6 billion recognised for the first nine months of 2015, while these had made up around 80 % of the year-earlier figure – a sure sign that new impairments on some of the Belgian banks' foreign portfolios came down again. Provisions to the tune of € 0.3 billion were reversed. They chiefly related to provisions taken by a number of banks in 2014 to cover unknown impairments that might have arisen from the depreciation of Hungarian portfolios, following measures that the Hungarian government had announced in the first half of 2014. These measures involved the repayment of a proportion of amounts received from borrowers and the conversion of foreign currency loans to Hungarian forint. The impact of these reversals on bank results was limited, as they were partly offset by specific impairments on these portfolios as part of impairments on loans and receivables.

Belgium's banks should sustain profits in future, having continued to benefit from temporary phenomena in 2015

Most of the fairly high profitability of Belgian banks in 2015 can be attributed to temporary factors. For instance, income from capital gains on portfolios at market values does not reflect any structural revenue, and income from refinancing penalties was also of a temporary nature. In addition, banks are unlikely to be able to scale back their financing costs even further as these have reached very low levels. If euro area interest rates stay low for much longer, all interest-bearing assets – whose average maturities are typically longer than those on liabilities – will have to be reinvested at lower rates, depressing margins even more. The question is whether Belgium's banks will be able to sustain their current return levels in the future. To help them do so, they might make further changes to their cost structures. In fact, at the end of 2015, a number of major banks announced that they were extending their restructuring plans and are envisaging additional cost-cutting related to their branch office networks and

workforces. Admittedly, cost-income ratios have improved in the past few years, from 72 % in 2010 to 59 % in the first nine months of 2015, but much of this improvement was underpinned by the temporary factors noted above, including refinancing penalties on mortgage loans.

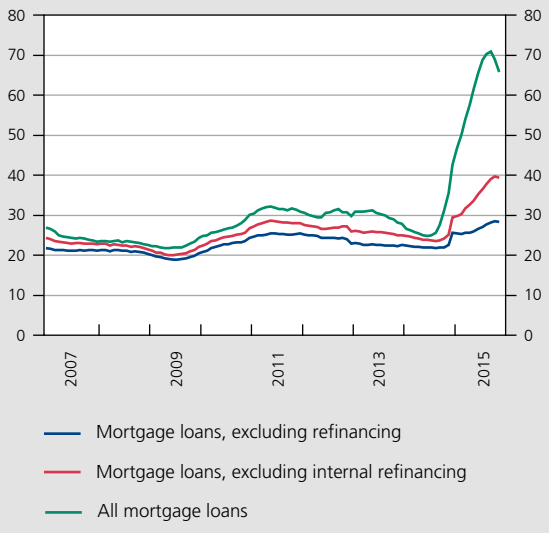
Robust growth in Belgian mortgage loans portfolio, riding a wave of refinancing

In 2015, a great number of Belgian households refinanced their mortgages, much as they had done in the second half of 2014, driven by low mortgage rates. Between end-June 2014 and the end of November 2015, mortgage rates on roughly one-third of outstanding mortgage loans in Belgium were revised downwards, with consumers typically opting for a new fixed rate for the remaining maturity of the loan. Mortgage lending worked out at € 66 billion between end-November 2014 and end-November 2015, some 40 % of this related to internal refinancing. External refinancing, i.e. consumers taking their loans to a different bank, amounted to € 11 billion in the same period.

In 2015, low interest rates served as a direct boost to the mortgage loan portfolio, which had already staged a robust rise in the second half of 2014 in anticipation of measures in Flanders curbing mortgage tax relief from 1 January 2015. Total outstanding mortgage loans to Belgian households grew from € 169.4 billion at the end of 2014 to € 176.4 billion by end-November 2015. Other factors contributed as well: borrowers took advantage of favourable interest rates to take out larger mortgages and used already reimbursed capital without this making any changes to their monthly repayments. And a previous section of this Report has discussed another factor: borrowers anticipating stricter conditions related to low VAT rates on renovations and changes to the Walloon and Brussels housing bonus system, scheduled to come into force in 2016.

CHART 68 NEW LOANS INCLUDE MANY REFINANCED MORTGAGES

(new mortgage loans, twelve months cumulative; in € billion)



Source: NBB.

At this juncture, the surge in home loans does not appear to derive from any significant, across-the-board relaxation of credit standards applied by Belgium's banks. The total portfolio for the sector is still showing declines in the proportion of mortgage loans with contractual maturity of 25 years and over, which had started to come down in 2012. In 2015, this category of loan accounted for a mere 2 % of total new mortgage lending. In 2014 and 2015, low interest rates also pushed down the ratio between monthly debt service and borrower incomes – the so-called debt service-to-income ratio (DSTI) – for newly agreed loans, albeit only very slightly. It is worth nothing, though, that the low interest rates of the past two years have served to push up the average amounts actually borrowed under new contracts. This has led to a shift to higher average loan-to-value (LTV) ratios – which expresses the relationship between the mortgage amount borrowed and the value of the property so financed – but this phenomenon stayed within boundaries set by bank lending policies. The number of loans with LTV ratios in excess of 100 % has stabilised at relatively modest levels since 2013.

As noted, the quality of the mortgage loan portfolios of Belgian banks remained stable in 2015, in spite of a few pockets of risk. The percentage of mortgage loans in arrears was unchanged at around 1.2 %, although actual total payment arrears – i.e. amounts still owed when the loan is denounced – inched up from € 1.3 billion to € 1.35 billion. In addition to the regulatory capital they are obliged to earmark for their portfolios to cushion any unexpected losses, Belgian banks have had to create an additional buffer since the end of 2013 equal to five percentage points of the risk weight applied to their portfolios of Belgian mortgage loans, if computed on the basis of internal models. In October 2015, the Bank, acting on its mandate as macroprudential authority in Belgium, started a procedure to extend this measure in view of persistent vulnerabilities, such as the not insignificant proportion of loans combining high LTVs, high DSTIs and long maturities.

Banking sector solvency improved again in 2015 and number of non-performing loans kept falling

The regulatory capital that is meant to cover the credit risk on the Belgian mortgage loan portfolio as well as

the Belgian banks' other portfolios is based on a calculation of risk-weighted assets. This amount derives from weights that are assigned to the various portfolios of assets and is either calculated by internal models, for banks that have sought and received permission for such models, or from a flat-rate scale applied to banks using the standardised approach. Belgium's banks have also been subject to a new regulatory framework since 1 January 2014, known as Basel III, translated into CRD IV in the European Union. The 2014 transition to the new framework led to an increase in risk-weighted assets. Credit-risk-related assets went up as a result of the higher weighting assigned to exposures to credit institutions and because some banks were no longer able to apply a – more favourable – standard approach to sovereign debt exposures rather than an internal ratings-based approach. In 2015, there was no such increase; in fact, the total amount of risk-weighted assets related to credit risk fell from € 290 billion at the end of 2014 to € 281 billion at the end of September 2015. This reflected a shift in the structure of assets to positions with lower risk weights.

Other risk-weighted assets concern market and operational risk, but also include the regulatory add-on applied to the portfolio of Belgian mortgage loans and the credit valuation adjustment (CVA) which, under CRD IV, aims to improve cover of the counterparty risk arising from derivatives transactions. These risk-weighted assets were relatively stable in the first nine months of 2015.

As a result, total risk-weighted assets, the denominator of regulatory solvency ratios, contracted from € 350 billion at the end of 2014 to € 344 billion at the end of September 2015. As for the numerator: regulatory Tier 1 capital edged up slightly to € 54 billion at the end of September 2015, some € 52 billion of this being common equity Tier 1 capital (CET1). By the end of September 2015, the common equity Tier 1 ratio of the Belgian banking sector averaged 15.0 %, up from 14.7 % at end-2014.

CRD IV prescribes the gradual implementation of a range of add-on buffers from 2016. In addition to the minimum capital requirements, a capital conservation buffer was introduced on 1 January, starting off at 0.625 % in 2016 and rising to 2.5 % by 2019. A countercyclical buffer will need to be activated in the event of excessive lending growth in the economy and will be linked to the location of a bank's operations. For institutions active in several countries, like many Belgian credit institutions, this implies observing the different countercyclical buffers applicable to the relevant countries and applying them in relation to the size of their activities. The Bank has set the countercyclical buffer for the Belgian market at 0 % from 1 January 2016 and will review the appropriateness of the level every quarter. Lastly, at the end of 2015, it announced the levels of the add-on buffers it will impose on eight banks within the framework provided by CRD IV, as these banks have been designated as systemically important in Belgium. The various measures are described in

TABLE 13 BREAKDOWN OF TIER 1 CAPITAL AND RISK-WEIGHTED ASSETS

(end-of-period data, on a consolidated basis, in € billion, unless otherwise stated)

	2009	2010	2011	2012	2013	2014	September 2015
Tier 1 capital	53.9	57.9	56.5	55.9	55.6	53.4	53.5
of which:							
Common equity Tier 1	–	–	–	–	–	51.5	51.6
Risk-weighted assets	407.5	372.5	373.8	352.7	339.4	349.8	343.9
of which:							
Credit risk	352.3	322.8	312.9	301.0	287.7	290.1	280.7
Market risk	16.1	10.7	21.9	16.6	9.9	7.1	10.2
Operational risk	38.8	35.1	35.2	35.0	34.2	34.9	35.3
CVA	–	–	–	–	–	8.2	7.7
Other	0.2	3.9	3.8	0.1	7.6	9.5	10.1
Tier 1 ratio (in %)	13.2	15.5	15.1	15.9	16.4	15.3	15.6
Common Equity Tier 1 ratio (in %)	–	–	–	–	–	14.7	15.0

Source: NBB.

greater depth in section A of the "Prudential regulation and supervision" part of this Report.

Lower risk-weighted assets were accompanied by a reduction in the percentage of impaired loans, with the ratio moving from 3.9 % at the end of 2014 to 3.6 % by the end of September 2015, as the total amount of non-performing loans remained stable while the total portfolio increased in the same period. The ratio fell for all types of counterparties. These consolidated statistics include both the Belgian and the foreign portfolios of the Belgian banks, whose proportion of non-performing loans, generally speaking, remains larger.

Insurance companies

Sector sees profitability decline due to negative life insurance results

As in the banking sector, weak economic conditions in Belgium and the rest of the euro area, as along with the low level of interest rates weighed on Belgian insurance companies' profitability levels in 2015. In the first nine months of the year, the sector's net result came down from € 1 billion in 2014 to € 0.6 billion, and annualised return on equity shrank to 5.1 %, whereas it had reached an average 20 % before the financial crisis (in the 2003-2007 period) and had still been at 8.8 % in 2014.

This contraction was caused by a worsening of both the life insurance technical result and the non-technical result, which recorded losses of € 0.1 billion and € 0.6 billion respectively. These negative figures contrast sharply with the further increase in profitability of the non-life sector, which notched up profits of € 1.3 billion in the first nine months of the year.

Despite capital gains of € 1.1 billion, the life sector's investment income failed to make up for the strong decline in insurance activities, with life premiums shrinking € 1 billion to € 10.8 billion in the first nine months of the year after having slumped to new record lows in 2014. In fact, the 2015 figure constituted the lowest premium income since 2006. The downtrend in premium income from 2008 directly reflects the low interest rate environment: with class 21 investments mostly consisting of bonds, new contracts had to promise guaranteed returns at conditions prevailing in the markets. Unsurprisingly, these were not tempting enough for private individuals to commit to a longer-term investment; they preferred more liquid assets. Against this backdrop, the 2013 increase in tax on premium payments for life insurance products to 2 % may also have reduced savers' demand for life insurance products.

The profitability of the non-life sector, by contrast, has accelerated since 2008 and recorded an increase of 5.8 % of premium income in the first nine months of 2015, taking this to € 9.5 billion. The net combined ratio, which compares the total cost of claims and operating expenses to net premium income, remained below the 100 % mark, showing that insurance companies are maintaining a sound balance between insurance costs and premium income, and have generally raised rates and optimised their cost structures. It is worth noting, though, that these generally solid results were not achieved in all sub-sectors of the non-life sector; in some, costs were higher than premiums.

Lacklustre economic growth, low inflation and low interest rates may be here to stay, and insurers may be forced

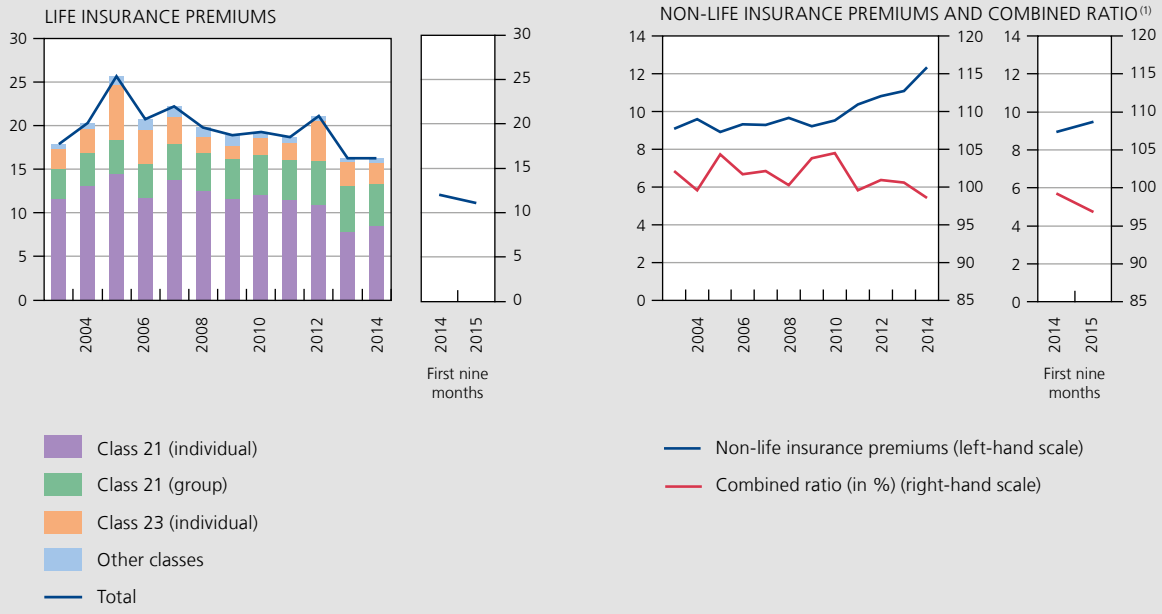
TABLE 14 MAIN COMPONENTS OF THE PROFIT AND LOSS ACCOUNTS OF BELGIAN INSURANCE COMPANIES
(non-consolidated data, in € billion)

					First nine months[1]	
	2011	2012	2013	2014	2014	2015
Life insurance technical result	–0.7	1.2	0.6	0.7	0.3	–0.1
Non-life insurance technical result	0.9	1.1	1.2	1.5	1.0	1.3
Non-technical result[2]	–1.1	0.1	–0.4	–0.8	–0.3	–0.6
Net result for the financial year	–0.9	2.4	1.4	1.3	1.0	0.6
Return on equity	–6.7	17.8	10.2	8.8	8.9	5.1

Bron: NBB.
(1) Figures based on quarterly prudential reports, except for the annualised return on equity.
(2) The non-technical result includes investment income not imputed to life and non-life insurance activities, and exceptional items and taxes.

CHART 69 LIFE INSURANCE PREMIUMS FALL, NON-LIFE INSURANCE GROWS

(non-consolidated data; in € billion, unless otherwise stated)



Source: NBB.

(1) The combined ratio is the ratio relating the sum of the cost of claims plus operating expenses to net premium income.

to adjust their operations and cost structures even further, on top of all the measures they have already taken. After all, business models guaranteeing lasting profitability for insurers, even in less favourable economic circumstances, are a prerequisite for the stability of the broader financial sector. Using the results of transversal analyses of the insurance sector, the Bank decided to take microprudential action to bolster, in a sustainable way, the profitability of selected number of institutions. In addition, it may prove necessary for insurers to slash operating expenses further, possibly through consolidations, in order to align cost structures with the shrinkage in activity volumes. Assuralia statistics put FTE numbers at nearly 23 000 in 2013, less than in previous years. Labour costs, which had steadily increased since 2001, stabilised in 2014.

Solvency II in place from 1 January 2016

The impact of the financial crisis was less immediate and strong for insurance companies than for banks, so that the restructuring of their regulatory framework was initially less far-reaching. Seven years on, though, persistently low interest rates are posing a major challenge to the sector. And on 1 January 2016, it also saw fundamental reforms to its regulatory framework with the implementation of Solvency II. A radical change for insurers, the new framework is largely based on assets and liabilities being recognised at market values, with a company's equity defined as the difference between the market values of its assets and liabilities.

Assets will be valued on the basis of quoted market prices where available, while the fair values of other assets are calculated on the basis of assumptions reflecting market conditions, interest rates, the probability of events etc. Insurance companies' liabilities are mainly technical reserves whose market values are impossible to determine, and the value of these reserves is arrived at by calculating the present value of the incoming and outgoing financial flows on the basis of the discount rate. This will be a risk-free rate set by the European Insurance and Occupational Pensions Authority (EIOPA) on the basis of market swap rates with maturities of up to 20 years, extrapolated to the ultimate forward rate of 4.2 %.

Portfolios being valued at market values should facilitate assessments of the financial risks facing insurers and enable them to better anticipate the impact of low interest rates on their solvency in future. Whereas under the current system the present value of life insurance technical reserves is calculated on the basis of the commercial interest rates as specified in the contract, Solvency II will

see the estimated values of technical reserves increase when market rates fall, putting pressure on the value of a company's equity.

However, the Solvency II regulatory framework has put in place transitional measures, some of which will apply until 2032, by which time the balance sheet position of insurance companies will be fully estimated at market values.

According to a first set of data collated by the Bank in 2015 as part of a preliminary analysis, the Belgian market should, on average, be sufficiently resilient to handle a lengthy period of low interest rates. However, this general observation obscures heterogeneities: although many insurers are indeed well capitalised, an analysis of solvency margins under Solvency II reveals that some of them, typically smaller companies, are a lot more vulnerable. The Bank has requested that these institutions take specific measures to meet the new requirements. This current period of low interest rates coinciding with the changes in the prudential regulatory framework might prompt a restructuring of the weakest entities in the sector or their takeover by other, more robust companies.

Insurers adjust investment strategies in search of returns

In view of the low returns on their traditional portfolios, insurers are trying to shift their investments to higher-yielding assets in order to meet the liabilities stemming from life insurance contracts. For several years now, government bonds have been losing ground to other assets in their investment portfolios. The category continued to shrink steadily in 2015, falling to 41 % (€ 102.5 billion) from 46 % in 2011. The decline is partly the result of bonds being sold out of the portfolio to tap capital gains and partly due to a reorientation towards alternative investments. That said, the extent of this shift to riskier assets remained fairly muted in 2015. An evergrowing loan portfolio, which rose to € 16.6 billion in the third quarter of 2015, is a case in point as its share in the assets of insurance companies has more than doubled in the space of four years, even if it does not account for more than 6.7 %. Investment in units for collective investment (UCIs) is also still on the rise and added nearly € 30 billion, largely attributable to class 23 insurance products. Posing less of a risk to insurers, this class has flourished in the run-up to Solvency II, a system that imposes less stringent capital requirements on this class than it does for products offering guaranteed returns. Lastly, a small number of insurers are shifting their government bond portfolios towards bonds commanding lower ratings than before, in order to realise higher returns than those offered by the safest issuers.

The transition to Solvency II also prompts changes to the capital requirements governing the different types of assets. Investments in equities, for instance, will require more capital than they did under Solvency I and a number of insurers are bound to review their strategic asset allocations.

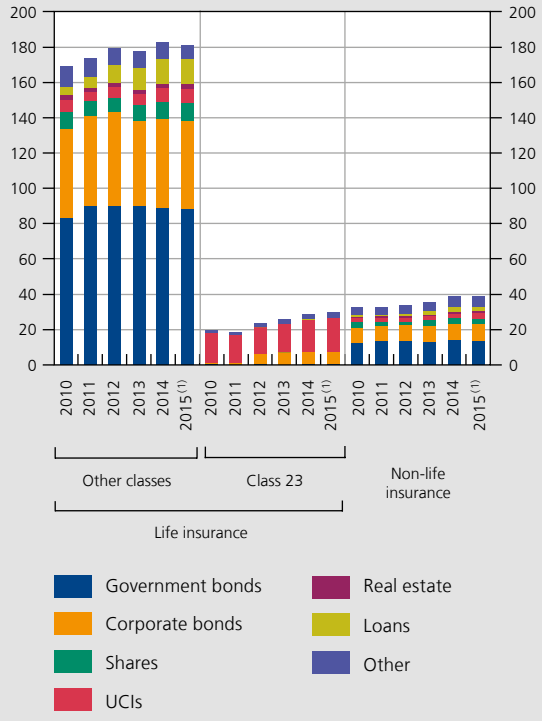
Solvency II will likely also influence insurers' management of assets and liabilities (ALM). This framework will require additional capital to cover the interest rate risk arising from mismatches in the cash flows between liabilities and assets, a common occurrence for insurers. Insurers looking to reduce the gap in maturities on both sides of their balance sheets will be unable to shorten the duration of their liabilities and will therefore be much more likely to extend the duration of their assets. Analyses of asset flows bear this out as maturities of recently acquired bonds are typically longer than those that have gone from the portfolios.

Low interest rates pose threat to the sector

A lengthy period of low interest rates is bad news for the insurance industry, and particularly for life insurers, which

CHART 70 BONDS STILL PREDOMINANT IN LIFE INSURANCE INVENTORY RESERVES

(breakdown of insurers' covering assets; non-consolidated end-of-period data, in € billion)



Source: NBB.
(1) Data at 30 September.

tend to have higher average durations of liabilities than of assets and which still guarantee high rates of return to policy-holders.

Total inventory reserves for guaranteed-return contracts grew from € 165.8 billion to € 168.4 billion between the end of 2013 and end-2014, the latest period for which detailed annual data are available. These higher outstanding reserves are attributable to group insurance, which recorded an increase of nearly 5 %. Reserves for individual insurance were stable; contracts with guaranteed returns of over 2 % declined and those with lower returns were up. The biggest risk facing the Belgian insurance sector is the legacy of contracts with high guaranteed returns, which can no longer be funded profitably due to low market rates. In 2014, contracts for which the guaranteed return on accrued and/or yet to be accrued reserves (based on future premiums) exceeded 4.5 % amounted to € 26.6 billion or 16 % of inventory reserves. The comparable figure for 2013 was € 27.6 billion.

Persistently low interest rates are forcing insurance companies to offer contracts more in line with market conditions, taking the average guaranteed return of class 21 agreements down from 3.04 % in 2013 to 2.91 % in 2014 – or, more specifically, from 2.88 % to 2.72 % for individual insurance and from 3.41 % to 3.27 % for group insurance. This has also encouraged insurers to market class 23 contracts that are linked to investment funds and offer no guaranteed return. What is more, some class 21 contracts impose time limits on guarantees and specify that the reserve built up will technically be considered a new premium after the agreed period, with guaranteed returns in line with market conditions that apply by that time. Meanwhile, insurance companies have also developed hybrid products to help reduce their risks, consisting of a guaranteed-return life insurance product (class 21) coupled with another life product in class 23, whose returns reflect the performance of an investment fund. But, options to pass on lower returns to policy-holders are limited by intense competition between insurance companies and from other savings products.

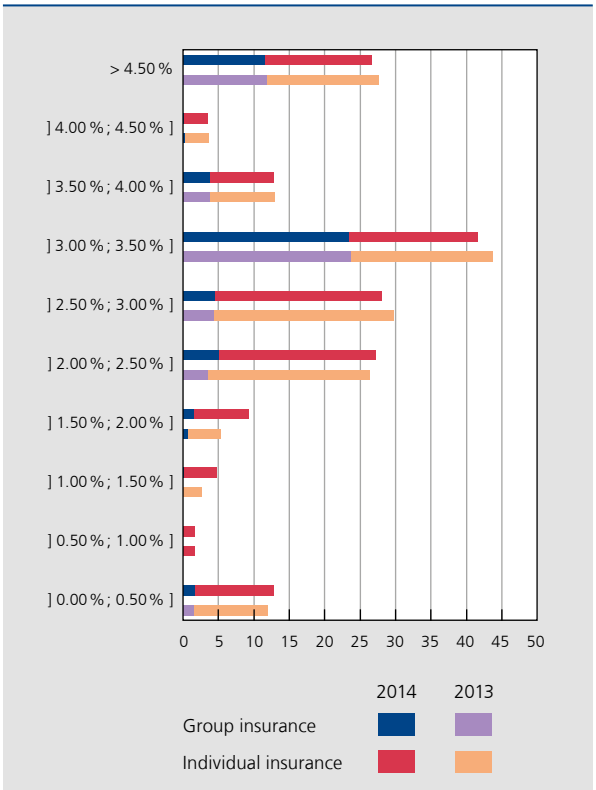
If current low interest rates are here to stay, significant amounts of high-rated securities (AAA or AA) coming to maturity will have to be reinvested in lower-yielding investments. There is a real risk, then, that the effective return on assets will not be enough to cover the guaranteed interest rates on contracts entered into earlier. The outstanding total of life insurance contracts with guaranteed returns and the actual rates paid on them are therefore very important risk parameters for insurance companies in times of falling interest rates on risk-free investments. In addition, offering too low a return would expose insurers to a greater risk of policy surrender. In support of their net profit, insurers unlocked capital gains to the tune of € 1.3 billion in the first nine months of 2015.

At times of low interest rates, prudential rules oblige insurance companies to book additional annual provisions in their accounts. These provisions, for which no exemptions have been granted since 2013, stood at a cumulative total of € 5.4 billion at the end of 2014 and made the sector less profitable.

In its press releases, the Bank has repeatedly expressed its concerns over the impact of low nominal growth coupled with consistently low interest rates on the situation of insurance companies. This is why it encourages them, as it does Belgium's banks, to proceed with their restructuring process and rationalisation programmes in order to bolster their solvency position, without taking on any new operational risks. The Bank has also recommended that insurers curb any dividend payments to shareholders and policy-holders in order to safeguard their fundamental resilience in the longer term, while also suggesting

CHART 71 CONTINUED HIGH GUARANTEED RETURNS IN GROUP INSURANCE

(breakdown of life insurance inventory reserves by guaranteed return per individual contract; end-of-period data, in € billion)



Source: NBB.

that they consider their interest margin levels. Improving the solvency of financial institutions by retaining earnings and/or raising capital will be the key if insurers are to meet the new challenges of the economic cycle and ever more rigorous regulatory requirements. Given these constraints, the Bank has cautioned reticence on the part of insurers when realising capital gains, as this should fit into a preventive strategy primarily focused on meeting contractual obligations.

As the insurance industry's supervisor, the Bank is authorised to set and – if called for by circumstances – review the maximum reference rate for long-term insurance contracts (in excess of eight years). In view of current market developments, it has recommended reducing this maximum reference rate from 3.75 % to 1.5 %. In January 2016, Belgium's Minister of the Economy exercised his right of evocation; he set the maximum reference rate at 2 %.

Belgium's new Solvency II law will include a mechanism for the annual setting, from 1 January 2017, of the maximum reference rate. Retaining the Minister's right of evocation, this new mechanism should better reflect current market conditions and prevent competitive distortions that could jeopardise consumer interests. The Bank supports the proposed downward revision of the system of minimum guaranteed interest rates on group insurance, as provided for in the Law of 28 April 2003 governing supplementary pensions. The Law currently imposes an annual minimum return on supplementary pensions of 3.75 % for member contributions and of 3.25 % for the contributions paid in by employers. These minimum interest rates are no longer in step with current market rates. However, employers have been pressuring insurers to guarantee these rates – including through profit-sharing – in an attempt to cover their own legal obligation to make up the difference with the minimum returns for these group insurance contracts for supplementary pensions. These fixed minimum interest rates will be replaced with a system where these rates are left to float, so they are better aligned with conditions in the market.

3.3 Significant net financial assets, transferred abroad via the financial sector

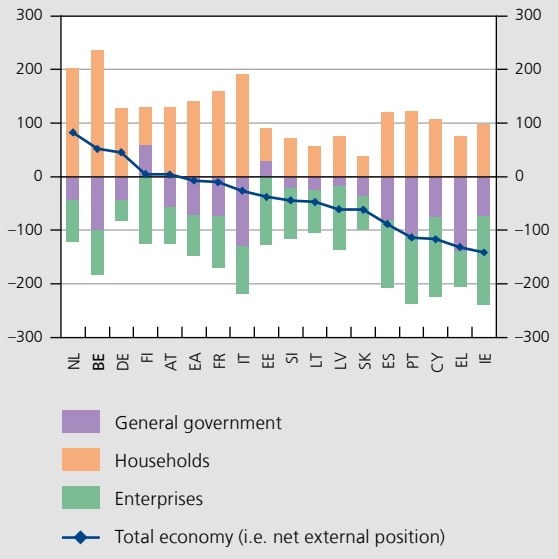
On aggregate, domestic sectors have more financial claims than liabilities, and the Belgian economy had built up a net asset position vis-à-vis the rest of the world of 52 % of GDP by the end of June 2015. Households accounted for the greater proportion of this: as a percentage of GDP, they boasted the largest net financial wealth (235 %) of any euro area country. By contrast, other sectors, such as non-financial corporations (–86.3 %) and the general government (–97.8 %), face significant net liabilities.

Belgium's net external claims are a key structural feature of its economy. Their development is not merely driven by the broader economy's net savings – which more or less coincide with the current account balance – but also by price swings in sectors' assets and liabilities. It is important to focus on the nature of these funds and on the way in which financial resources in sectors enjoying surpluses flow to deficit sectors, i.e. financial intermediation.

The economies of Europe, including Belgium's, are traditionally said to have bank-driven financial intermediation, in contrast to the US economy, whose financial markets mainly provide intermediation. Indeed, Belgium's financial intermediaries have a key part to play in absorbing funds, as is immediately apparent when breaking down how the net wealth from the various sectors end up with sectors that face net financial liabilities. The financial sector (comprising banks, other financial institutions, insurers and pension funds) is the key user of net household wealth, to the tune of 139 % of GDP in the third quarter of 2015, with other sectors accounting for 92 % of GDP. Supported by this ample funding base, Belgium's financial sector

CHART 72 BELGIAN ECONOMY CHARACTERISED BY POSITIVE NET FINANCIAL ASSETS (1)

(data at end-June 2015, in % of GDP)



Sources: ECB, NBB.

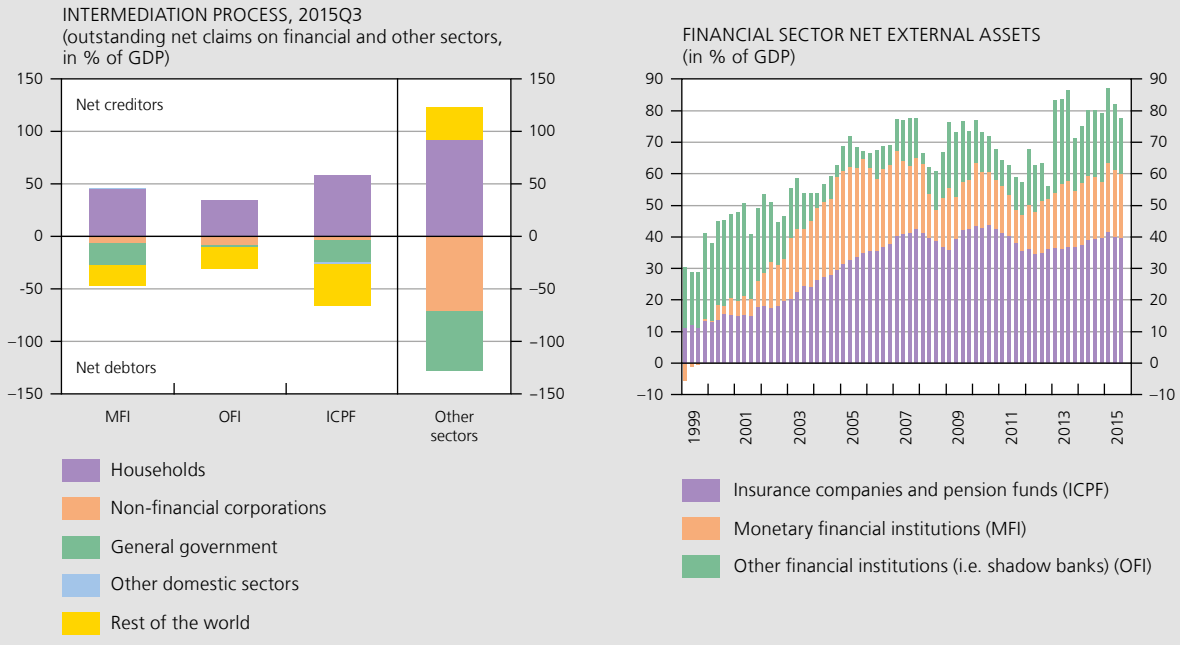
(1) Difference between the outstanding amounts of financial assets and liabilities. Luxembourg and Malta are not included in view of the high volatility of their data.

does not require recourse to other sectors for its net funding. In fact, these net financial assets are more than adequate to meet the net requirements of the country's domestic sectors, allowing its financial sector to build up net surpluses vis-à-vis the rest of the world.

Intermediation outside the financial sector works differently. Here, too, Belgian households are the main net creditors, but the foreign sector also provides net funding, with the resources used both by non-financial corporations and by the general government. Whereas the Belgian financial sector and other sectors enjoy roughly equal weight in general government funding, Belgium's non-financial corporations are chiefly funded from outside the financial sector. One source of finance is by way of issuing listed or unlisted shares, whose owners are either Belgian households or foreigners. Their debt funding, by contrast, is mostly supplied by the Belgian financial sector, even if bank credit is are below that in other euro area countries (32 % of GDP compared with 42 % of GDP in the euro area at the end of September 2015) and funding via the financial sector partly also derives from holding companies, typically intra-group funding. In addition, bank loans have increasingly been replaced by capital markets-based funding since the financial crisis – albeit mainly in the case of large corporations – with outstanding bonds trending up from 4.3 % of GDP at the end of 2007 to a peak of 11.5 % of GDP by the third quarter of 2015. The fact that non-financial corporations do not tap the financial sector a lot also reflects the cyclical nature of their net financial liabilities, which tend not to be very high when there is no major fixed capital formation or if they have access to significant internal resources.

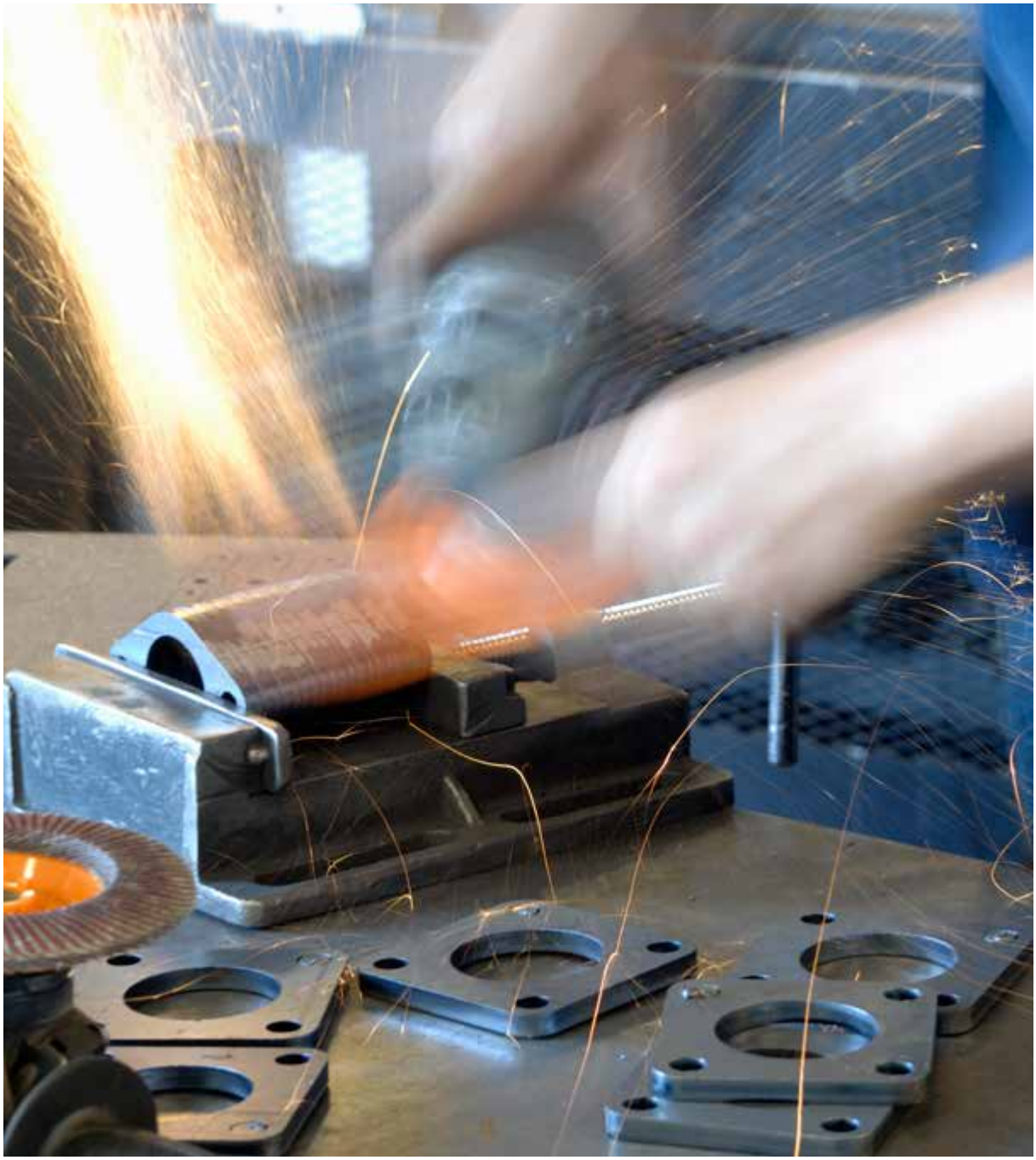
Net funding provided to the financial sector by households is relatively evenly distributed across its three sub-sectors: banks, other financial institutions (e.g. shadow banks) and insurers and pension funds, at 46 %, 35 % and 58 % of GDP respectively. It is worth noting that in terms of gross funding banks receive a lot more from households (95 % of GDP) as the banking sector, unlike the other two financial sub-sectors, also provides lending to households (worth 49 % of GDP, primarily mortgage loans). Banks' sector-specific breakdown of investments is similar to those of insurers and pension funds in that they primarily finance the general government and parties outside Belgium. A key point is that all of Belgium's financial sub-sectors run net external surpluses, which implies that the net funding derived from households amply meets the financing needs of domestic sectors. If built up via the financial sector, these exposures tend to take the shape of portfolio and other investments (mainly interbank deposits and loans).

CHART 73 FINANCIAL INTERMEDIATION AND NET EXTERNAL ASSETS OF THE BELGIAN FINANCIAL SECTOR



Source: NBB.

The size of these exposures via the financial sector is closely linked to net household wealth. External assets accrue most at insurers and pension funds, as Belgium's demographics imply a rising pension entitlement accrual trend. The pivotal role played by the financial sector in financial intermediation demonstrates the importance of effective prudential policies, particularly in Belgium where net household wealth is largely converted through the financial sector into portfolio investment and other investment transferred abroad. The question is whether this is an optimal allocation and whether households should not be providing funding to other sectors in a more direct way, so that external exposures are built up outside the financial sector and potentially also changing the form that they take – issues that may be addressed by initiatives such as the Capital Markets Union, as well as by the tax framework if this is predicated on a neutral treatment of financial instruments.



Public finances

4. Public finances

4.1 Overview of fiscal policy[1]

Deficit dips just below the threshold of 3 % of GDP

Belgium ended 2015 on a general government deficit of 2.8 % of GDP. Only slightly better than the figure for 2014, this is the third consecutive year of a deficit very close to the threshold of 3 % of GDP that the European fiscal framework uses as its reference value for determining excessive deficits. General government debt edged down slightly to 106.5 % of GDP, thanks to specific factors.

Belgium's lower deficit matches the drop in interest charges on its public debt, while both primary expenditure and revenue, expressed as percentages of GDP, plunged in 2015, confirming the trend reversal first observed in 2014. The similar trend in 2015 partly reflected the index jump slowing down a number of expenditures and revenues, while spending was curbed by austerity measures and tax revenue fell below expectations.

Declines were almost of the same magnitude on the revenue and expenditure side, leaving the primary balance – i.e. the overall balance excluding interest charges – virtually unchanged and back in equilibrium. The latter contrasts with the state of play in the period before the onset of the financial and economic crisis: in 2007, Belgium's general government still recorded a primary surplus of 4 % of GDP, even if this was already undershooting levels notched up around the turn of the century.

Belgium's structural overall balance – which adjusts the budget for the effects of cyclical and temporary factors – improved by 0.3 percentage point of GDP in 2015 compared with the previous year, matching the improvement in the nominal balance. The business cycle may have

(1) As for all the macroeconomic estimates for Belgium, the 2015 estimates for public finances have been established on the basis of information available on 29 January 2016.

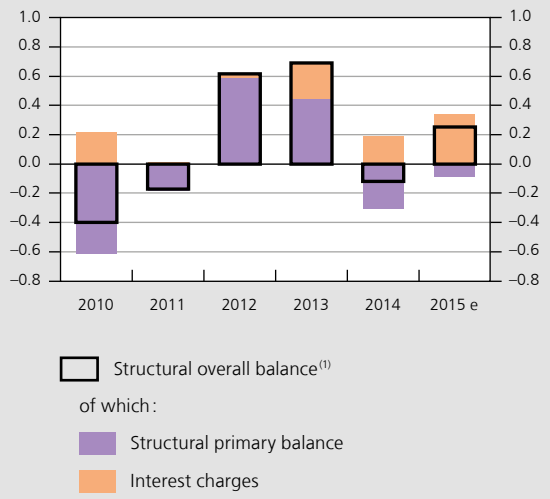
TABLE 15 GENERAL GOVERNMENT OVERALL BALANCE AND DEBT
(in % of GDP)

	2000	2007	2012	2013	2014	2015 e
Revenue	49.0	48.3	51.6	52.7	52.0	51.2
Primary expenditure	42.4	44.3	52.2	52.3	52.0	51.2
Interest charges	6.7	4.0	3.6	3.3	3.1	2.8
Primary balance	6.6	4.0	–0.6	0.4	0.0	0.0
Overall balance	–0.1	0.1	–4.1	–2.9	–3.1	–2.8
General government debt	108.8	86.9	104.1	105.1	106.7	106.5

Sources: NAI, NBB.

CHART 74 SLIGHTLY BETTER STRUCTURAL OVERALL BALANCE IN 2015 ON LOWER INTEREST CHARGES

(changes compared with the previous year, in percentage points of GDP)



Sources: EC, NAI, NBB.

(1) The cyclical component of the structural overall balance is determined based on EC methodology.

exerted a bit of an upward push on public finances, but the effect was cancelled out by the downward pull of non-recurrent factors that were less favourable than in 2014. The structural balance stalled on the same kind of figures as in 2013, while the general government had still enjoyed a structural improvement in 2012 and 2013 of 1.3 percentage points of GDP. Obviously, then, the much-needed further consolidation of public finances has virtually ground to a halt: capturing the fundamental trend in fiscal policies, the structural primary balance even deteriorated in 2014 and 2015 by a total of 0.4 percentage point of GDP.

Fiscal targets missed again

These outcomes imply that, once again, Belgium failed to meet its agreed fiscal targets after pushing them back several times in previous years.

In its April 2015 stability programme, which presents its budgetary plans for the current and subsequent three years to the EC, the Belgian government envisaged a reduction in its 2015 structural budget deficit by 0.7 percentage point of GDP. Subsequent years were to see a further improvement of the structural balance and equilibrium reached by 2018. These targets are in line with the European budgetary framework, which requires an annual improvement in the structural balance of 0.6 percentage point of GDP.

Belgium improved the structural balance by 0.3 percentage point of GDP in 2015, way below the target. The same had happened in 2014, when the aim was a rise of 0.5 percentage point of GDP but the reality brought an increase in the structural deficit of 0.1 percentage point

TABLE 16 TARGETS FOR THE OVERALL BALANCE OF BELGIAN GENERAL GOVERNMENT

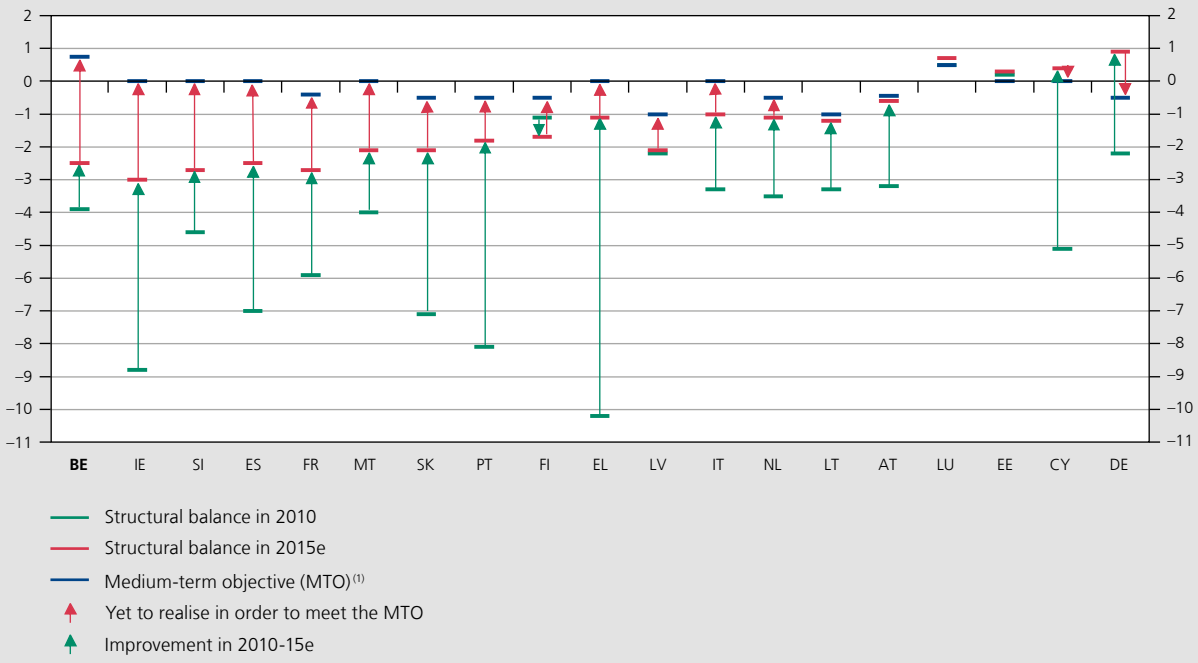
(stability programme targets; unless otherwise stated; in % of GDP)

	2012	2013	2014	2015	2016	2017	2018
Nominal balance							
April 2012	**–2.8**	–2.15	–1.1	0.0			
April 2013		**–2.5**	–2.0	–0.5	0.4		
April 2014			**–2.1**	–1.4	–0.4	0.6	
April 2015				**–2.5**	–2.0	–1.0	–0.2
October 2015 (draft budget)				–2.6	**–2.1**	–1.0	–0.3
p.m. actual	*–4.1*	*–2.9*	*–3.1*	*–2.8 e*			
Structural balance							
April 2013		**–1.8**	–1.2	0.0	0.75		
April 2014			**–1.4**	–0.7	0.0	0.75	
April 2015				**–2.0**	–1.3	–0.6	0.0
October 2015 (draft budget)				–2.0	**–1.2**	–0.5	0.0
p.m. actual	*–3.4*	*–2.7*	*–2.8*	*–2.5 e*			

Sources: EC, NAI, FPS Budget and Management Control, FPS Finance, NBB.

CHART 75 BELGIUM TO MAKE BIGGEST STRUCTURAL BALANCE IMPROVEMENT TO ACHIEVE MEDIUM-TERM OBJECTIVE

(in % of GDP)



Sources: EC, NBB.

(1) Minimum medium-term objective as defined by the EC in 2012. These targets will be reviewed at the beginning of 2016.

of GDP. Taking both years together, the deviation adds up to 1 percentage point of GDP.

The EC classified the breach of the reference value of 3 % of GDP for the budget deficit in 2014 as modest, temporary and exceptional, and ascribed it in particular to statistical adjustment as part of the transition to ESA 2010. It also said that the required improvement in the structural balance in order to comply with the debt rule in 2016 – prescribing an incremental decline of one-twentieth a year in the gap between the debt ratio and 60 % of GDP – was not achievable and not desirable in view of the exceptional economic conditions of low inflation coupled with slow economic growth; in fact it effectively ignored the debt rule laid down in 2011. Although defensible in the current climate, the EC turning a blind eye to its own debt criterion should remain a temporary matter and compliance with the debt criterion should once again be a central plank of fiscal policies as soon as inflation picks back up and economic activity rebounds. In addition, the EC took a similarly flexible line on the rules of the preventive arm, noting some, but no significant deviation from the desired path towards medium-term targets. It its autumn projections, which put the 2015 budget deficit at 2.7 % of GDP, the EC considered that similar risks prevailed in 2015.

The target date for a balanced budget has been systematically postponed in the past few years, but to ensure the sustainability of Belgium's public finances, rapid strides will need to be taken towards that goal, and subsequently also towards achieving the medium-term objective set in the European fiscal framework. At this point, the target is pegged at a structural surplus of 0.75 % of GDP, but the calculations that underlie it date back to 2012 and are still based on the debt ratio as well as on the projected budgetary costs of an ageing population at the time. However, the debt ratio has deteriorated and therefore worsened the starting point, although the Belgian government has taken a range of measures to help curb the cost of ageing in the longer term. All things considered, the new minimum medium-term objective – which the EC will propose in the spring of 2016 and which should factor in the impact of structural measures – may be assumed to be less steep.

To achieve current medium-term objective, Belgium will require a bigger improvement in its structural balance than other euro area countries. One reason for this is that Belgium achieved a relatively minor improvement in its balance in the 2010-15 period when compared with the other countries. In fact, only a very few countries – Germany, for one – took restructuring further than

strictly required, which is why the Germans now enjoy some budgetary wiggle room.

Contributions from the different entities to consolidation influenced by sixth State reform

Sound management of public finances is the essential duty of every government and every government subsector. Under the sixth State reform, the Communities and Regions gained in importance following the major transfer of authorities and resources from Entity I, which comprises the federal government and social security. The budget section, which came into force on 1 January 2015, features in the Special Finance Act of 6 January 2014 to reform funding of the Communities and Regions, enhance the fiscal autonomy of the Regions and fund new powers and authorities; the same was done for the German-speaking Community in the Law of 19 April 2014.

The Communities now enjoy full authority over all family allowances and various aspects of health care and social support, while the Regions acquired additional powers, most notably relating to employment – such as reductions in social security contributions – and tax expenditure – in particular mortgage interest relief (housing bonus). The French Community transferred most of its new responsibilities and associated resources to the Walloon Region and the French Community Commission, thus implementing the Sainte-Émilie agreements.

Most of the expenditure affected by the sixth State reform falls within the social security remit, and by transferring relevant resources to the Communities and Regions through earmarking tax revenues, grants or fiscal autonomy, the federal government gave up financial resources that it had previously used to keep social security in balance, regardless of whether it did so via alternative financial resources or by way of an equilibrium grant.

As it was, the year in which the budget section of the sixth State reform was put into place saw a reduction in transfers by Entity I to the Communities and the Regions. The Special Finance Act of 6 January 2014 had envisaged a larger contribution by the federated entities to the consolidation of Belgian public finances; this was to take the shape of a structural levy of € 1.25 billion on the personal income tax resources that are transferred to the Communities and Regions by the federal government, whereas they ended up contributing € 250 million in 2014. In fact, this levy will be raised to € 2.5 billion in 2016. Also, the so-called "responsibilisation contribution" (shortfall contribution) by the federated entities for the payment of their civil servants' pensions significantly increased for the first time in 2015. State reform also included a refinancing of various Brussels-based institutions, e.g. the Brussels-Capital Region, the French Community Commission, the Flemish Community Commission and the municipalities in that Region.

Against this institutional backdrop and given economic developments as described in this Report's other chapters, the slight reduction in the overall nominal deficit of the Belgian government was down to an improvement in the accounts of Entity I and to a lesser degree of Entity II, which is made up of the Communities and Regions as well as local government. Entity II's borrowing requirement still remains well below that for Entity I.

TABLE 17 OVERALL BALANCE OF GENERAL GOVERNMENT AND BY SUB-SECTOR
(in % of GDP)

	2012	2013	2014	2015 e[1]
Entity I	–3.6	–2.5	–2.6	–2.4
Federal government	–3.5	–2.4	–2.5	–2.4
Social security	–0.1	0.0	0.0	0.0
Entity II	–0.6	–0.4	–0.5	–0.4
Communities and Regions	–0.1	–0.2	–0.4	–0.3
Local government	–0.5	–0.2	–0.2	–0.1
Total	–4.1	–2.9	–3.1	–2.8

Sources: NAI, NBB.
(1) These figures include the advances on the regional additional percentages on personal income tax although, according to the methodology of ESA 2010, those advances are regarded as purely financial transactions and the regional additional percentages are only taken into account at the time of collection. This approach deviates from NAI practices but is in line with those observed in developing fiscal targets in the recommendations of the Public Sector Borrowing Requirement section of Belgium's High Council of Finance, as well as in stability programmes.

In 2015, the federal government deficit shrank by 0.1 % to 2.4 % of GDP. Besides the bigger consolidation contribution by the federated entities, federal finances also benefited from a further easing of interest charges, from the austerity measures taken by the government in its initial 2015 budget and the two adjustments of March and October, as well as from the full effect of earlier measures. That said, all these favourable factors were partly offset by various unfavourable ones on the revenue side.

In 2015, too, social security accounts were balanced. Measures taken on health care and unemployment meant that social benefit payments were under control, whereas the index jump proved a downward force for both benefits and social security contribution receipts.

Despite their contributions to the consolidation of public finances, the Communities and Regions still managed to cut their deficits from 0.4 % to 0.3 % of GDP, taking advantage of the downward effect of the index jump on public employees' wages and transferred social benefits, particularly child allowances, as well as the measures taken by the newly elected governments after the May 2014 general election. The Walloon Region, the Flemish Community and the French Community ended 2015 on a deficit, whereas the Brussels-Capital Region still ran a surplus.

Local government, a sub-sector not immediately affected by the State reforms, reported a virtually unchanged deficit of 0.1 % of GDP. Like the other sub-sectors, it was also able to reduce the wage bill on the back of the index jump.

Solid fiscal coordination essential

In the fiscal arena, there are countless interactions between a state's various federated entities; these require efficient and operational coordination, and even more so if this state has a strongly federal dimension.

The 13 December 2013 cooperation agreement between the federal government, the Communities, the Regions and the Community Commissions implements the key aspects of the Fiscal Compact of the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union. The agreement stipulates that when the stability programme is updated, annual budget targets will be allocated in nominal and structural terms between the various levels of government on the basis of a recommendation by the Public Sector Borrowing Requirement section of the High Council of Finance. This allocation will have to be approved by a decision of the Consultative Committee, a body comprising the Prime Minister and the Minister-Presidents of the Communities and Regions. The Public Sector Borrowing Requirement section is also designated as the independent body which, among other things, monitors compliance with these decisions and, more generally, checks that the governments fulfil their commitments.

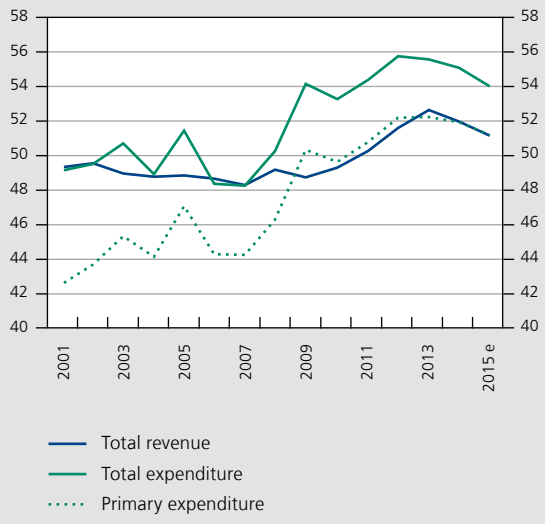
In 2015, the Consultative Committee confined itself to taking note of the division of the fiscal targets across government sub-sectors as proposed by the federal government. The April 2015 stability programme determined that both the individual federated entities and the sub-sectors should put in place budgetary trajectories that lead to a structurally balanced budget by 2018 at the latest. Regarding individual entities, the programme did not specify any step-by-step process or targets for 2015.

4.2 Government revenues and expenditure both down

The fall in total general government expenditures by 1.1 percentage points of GDP can be traced back to a drop in interest charges of 0.3 percentage point and primary expenditure ending up 0.7 percentage point lower – the latter a continuation of a downtrend that started in 2014 and a clear reversal of the recent past, which had seen primary expenditure surge since the turn of the

CHART 76 GOVERNMENT INFLUENCE HAS WEAKENED IN RECENT YEARS

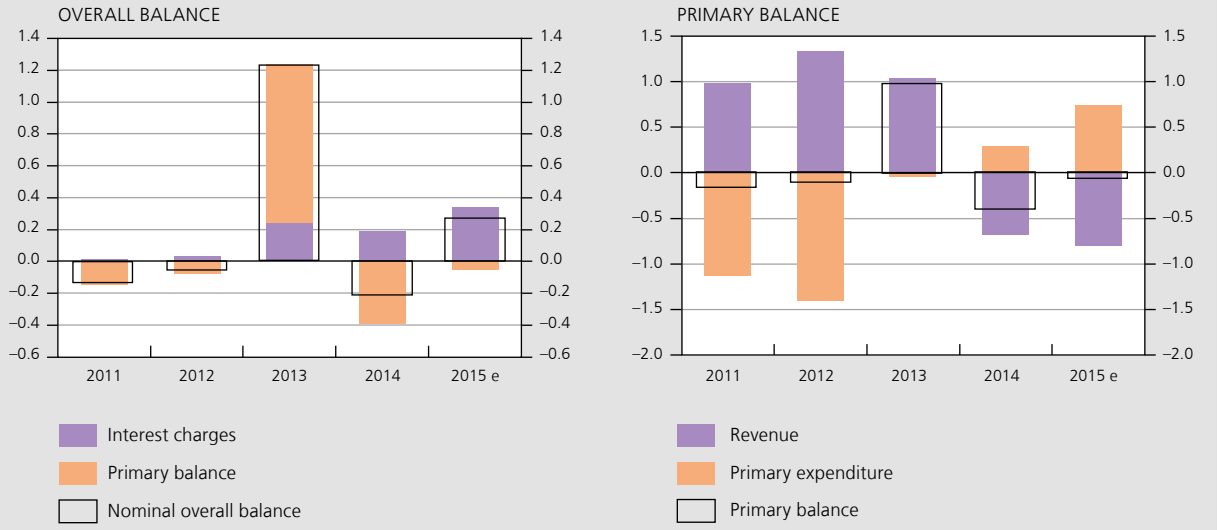
(in % of GDP)



Sources: NAI, NBB.

CHART 77 DETERMINANTS OF THE CHANGE IN THE GENERAL GOVERNMENT'S NOMINAL OVERALL BALANCE AND PRIMARY BALANCE [1]

(changes, in percentage points of GDP)



Sources: NAI, NBB.

(1) The government-paid capital increase for Dexia in 2012 is recognised as a capital transfer and had a negative effect of 0.8 % of GDP on that year's overall balance and primary balance.

century. Also persisting in its 2014 showings, government revenue fell by 0.8 percentage point of GDP in 2015. All that said, Belgium's expenditure and revenue ratios remained stubbornly high, both from historical perspective and in comparison with other European countries.

As for the contribution of primary expenditure and total revenue to the consolidation of public finances after the financial crisis and the subsequent recession, two clear periods emerge: first, a recovery largely driven by income-boosting measures in the 2011-13 period, and second, a shift in focus towards scaling back primary expenditure from 2014. However, consolidation was rather limited in size as government revenues also fell hard in this period.

Steep falls in revenue from payroll taxes and government revenues from financial institutions

The downturn in total government revenue reflects across-the-board falls in fiscal, parafiscal and other revenues.

In regard to fiscal and parafiscal revenue, it was levies on earned income that went down hardest, by 0.3 percentage point of GDP, virtually entirely because of reduced revenue from personal income tax. The share of wages in GDP contracted in the wake of the index jump and the freezing of real negotiated wages, the impact of which was compounded by the increase in tax-deductible professional expense allowances taken into account in payroll tax calculations. Meanwhile, a lower pay ratio adversely affected social security contributions, although this was offset by a shift from allocated to real social contributions for child benefit granted to public employees, the authority for which has been transferred to the Communities under the sixth State reform.

Revenue from taxes on company profits nudged 3.3 % of GDP, up 0.1 percentage point of GDP on 2014, chiefly because of 2015 assessments making up for delays in 2014.

In financial 2015, a range of fiscal measures conspired to push up the tax base for corporation tax, such as the subjection to corporation tax of some intermunicipal utility companies and restrictions on the use of the notional interest system by banks. A similar effect derived from new legislation on the liquidation levy imposed on small and medium-sized enterprises. If SMEs keep their profits as a reserve in their companies and pay 10 %, no additional withholding tax will be due upon liquidation on condition that these retained earnings stay in the company until its liquidation. Lastly, lower reference rates for notional interest deductions – linked to yields on ten-year Belgian government bonds – had an upward effect on corporation tax due.

TABLE 18 GENERAL GOVERNMENT REVENUE[1]

(in % of GDP)

	2011	2012	2013	2014	2015 e
Fiscal and parafiscal revenue	43.2	44.3	45.2	44.8	44.4
Levies weighing chiefly on earned income	25.7	26.0	26.4	26.2	25.9
Personal income tax[2]	11.4	11.5	11.8	11.6	11.3
Social contributions[3]	14.3	14.5	14.7	14.5	14.5
Taxes on company profits[4]	2.8	3.0	3.1	3.2	3.3
Levies on other incomes and on assets[5]	3.7	4.0	4.4	4.4	4.3
Taxes on goods and services	10.9	11.3	11.2	11.1	10.9
of which:					
VAT	6.9	6.9	6.9	6.9	6.7
Excise duties	2.1	2.1	2.0	2.1	2.1
Non-fiscal and non-parafiscal revenue[6]	7.1	7.3	7.5	7.2	6.8
Total revenue	50.3	51.6	52.7	52.0	51.2

Sources: NAI, NBB.

(1) In line with ESA 2010, total revenue of general government does not include the proceeds of customs duties transferred to the EU nor the revenues levied directly by the EU.

(2) Mainly payroll tax, advance payments, assessments and additional percentages on personal income tax.

(3) Including the special social security contribution and the contributions of people not in work.

(4) Mainly advance payments, assessments and withholding tax.

(5) Mainly withholding tax on income of individuals, withholding tax on income from immovable property (including the proceeds of additional percentages), inheritance taxes and registration fees.

(6) Income from assets, imputed social contributions, current transfers and capital transfers from other sectors, plus sales of goods and services produced, including revenues on guarantees granted by the State on interbank loans.

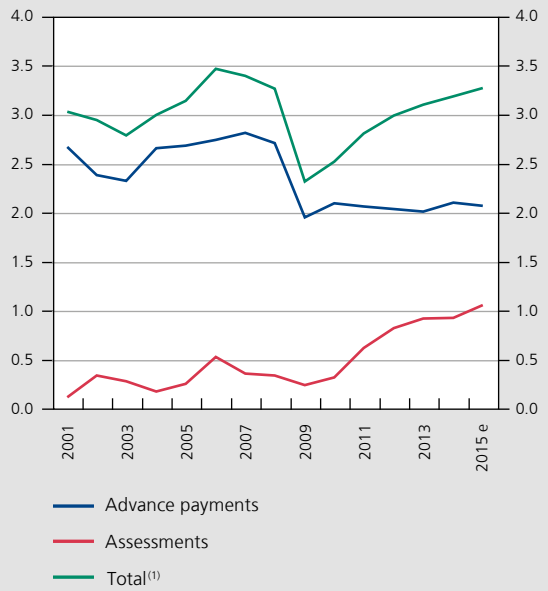
Contrary to expectations at the time of the initial budget, the effect of these factors only partially showed through in advance tax payments by companies, which remained virtually unchanged. Consequently, revenue from tax assessments may be expected to rise further in future, continuing the post-crisis shift to tax assessments from tax collection via advance payments. Supporting this trend is the low tax surcharge due in the event of insufficient advance payments, i.e. 1.125 % in the 2016 tax year.

Levies on other income and on assets decreased by 0.1 percentage point of GDP to 4.3 % of GDP – a clear break with the recent past and a result of lower revenue from withholding tax. This revenue had seen a temporary uptick in 2014 due to a change in the law on liquidation gains, for which withholding tax was raised from 10 % to 25 % in October 2014. Income from the third tax regularisation operation, announced as the final window for tax forgiveness, also slumped.

Taxes on goods and services, expressed as a percentage of GDP, declined slightly in the wake of lower VAT revenues, which itself was down to a hefty increase in refunds in the first half of 2015, while gross VAT revenue was in line with tax base expectations. The first half's unexpected surge in refunds may be partly due to the strong rise in capital

CHART 78 CORPORATION TAX SHIFTS TO COLLECTION VIA TAX ASSESSMENTS

(in % of GDP)



Sources: NAI, NBB.

(1) Including other taxes, the most important of which is the withholding tax.

spending in the first quarter, while significant growth in inventories in the first two quarters of the financial year may also be part of the explanation. The second half of 2015, by contrast, saw average refunds slide and somewhat offset the steep rise of the first six months. VAT revenue returned to its upward trajectory when VAT rates on households' electricity consumption were raised to 21 % from the beginning of September. In a separate development, income from excise duties was stable at 2.1 % of GDP, as it will not be until 2016 that the full extent of higher excise duties on diesel and alcohol will feed through to revenue, these having come into effect on 1 November of the year under review.

The slowdown in non-fiscal and non-parafiscal revenue by 0.3 percentage point of GDP was caused, among other factors, by the State receiving less income from various financial institutions. The Bank's payments to the State, for one, declined, as did fees paid by Dexia for government guarantees. Banks' payments into Belgium's resolution fund ceased as this was replaced by a European version from 2015, and as the Belgian State merely serves as a conduit to funnel the banks' payments to this European fund. Lastly, the shift from imputed to actual social contributions pushed down other revenue.

TABLE 19 MAIN FISCAL AND PARAFISCAL MEASURES[1]

(in € million, differences compared with the previous year)

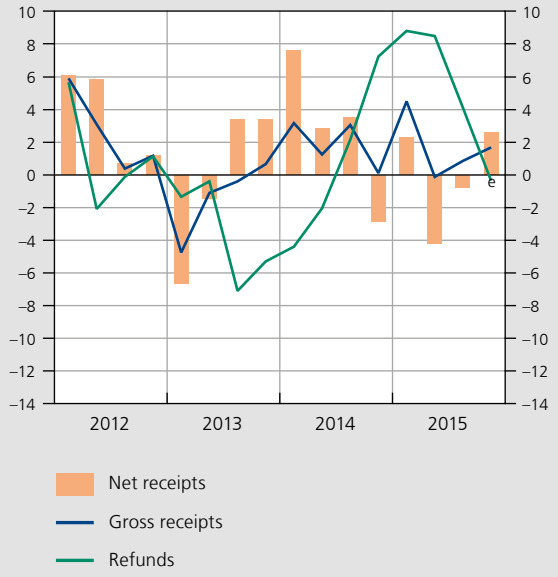
	2013	2014	2015
Total fiscal measures	2 795	221	684
Structural fiscal measures	1 747	545	1 244
Federal government and social security	1 720	525	1 161
Personal income tax	461	–56	–492
Corporation tax	552	327	1 022
Levies on other incomes and on assets	71	131	358
Taxes on goods and services	636	123	273
Communities and Regions and local authorities	27	20	82
Non-recurrent measures	1 048	–324	–560
of which:			
Liquidation gains	600	65	–665
Tax regularisation	625	293	–642
Tax agreements and court decisions	–52	–248	323
Delayed collection of inheritance taxes	0	–150	225
Delayed personal income tax assessments	250	–150	100
Structural parafiscal measures	–60	–285	–174
Total	**2 735**	**–64**	**510**
p.m. In % of GDP	*0.7*	*0.0*	*0.1*

Sources: Budget documents, NBB.

(1) This generally concerns the presumed influence of the measures according to the budget documents. The final impact may be different.

CHART 79 VAT REFUNDS SMARTLY UP IN FIRST HALF OF 2015

(VAT revenue, percentage changes compared with the previous year)



Sources: NAI, NBB.

Restrictive primary expenditure management

Primary expenditure as a percentage of GDP was down considerably in 2015. This ratio, which measures government spending excluding interest charges, dropped back from 52 % of GDP in 2014 to 51.2 %. This downward trend reflected a stabilisation of primary expenditure in volume terms, coupled with economic activity growth in real terms.

To obtain a true picture of the fundamental trend in fiscal policy, the growth of expenditure should be adjusted for temporary factors as well as for cyclical factors and indexation effects. For one thing, non-recurrent factors slowed spending growth by 0.1 percentage point in 2015, e.g. the extension of UMTS licences, whose allocation is recognised as a negative expense in the national accounts. Second, unemployment benefits showed the effects of the business cycle on primary expenditure and recorded

TABLE 20 GENERAL GOVERNMENT PRIMARY EXPENDITURE

(deflated by the GDP deflator, percentage changes compared with the previous year, unless otherwise stated)

	2011	2012	2013	2014	2015 e	Average 2000-2014
Level recorded [1]	50.8	52.2	52.3	52.0	51.2	47.2
1. Real recorded growth	4.1	2.9	0.1	0.8	–0.1	2.8
2. Influence of non-recurrent or fiscally neutral factors [2]	0.4	1.1	–1.4	0.2	–0.1	0.0
3. Influence of cyclical factors [2]	–0.3	0.1	0.1	–0.1	–0.2	0.0
4. Indexation effect [2], [3]	0.4	0.3	0.5	–0.4	0.0	0.0
5. Adjusted real growth (1 – 2 – 3 – 4)	3.6	1.3	0.9	1.0	0.3	2.7

Sources: DGS, NAI, NBB.

(1) In % of GDP.

(2) Contribution to real recorded growth of primary expenditure.

(3) Effect caused by the difference between the actual indexation (or the theoretical indexation for 2015 in view of the agreed index jump) of public sector wages and social security benefits and the rise in the GDP deflator. The other effects due to differences between inflation measured by the GDP deflator and the movement in price factors influencing other expenditure categories – whether these are attributable to the indexation mechanisms or to divergent patterns in the prices of certain expenditure categories – are not adjusted, owing to the absence of sufficient information.

a growth rate below their typical average in 2015, which means that, all in all, the cyclical component shaved 0.2 percentage point off the change in primary expenditure. And lastly, indexation-related factors – excluding the index jump – had a negligible impact on expenditures.

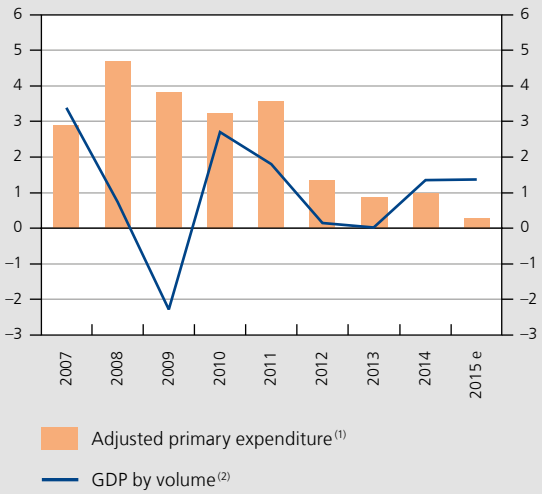
At the end of the day, primary expenditure recorded adjusted growth of 0.3 % in 2015, and so has managed to stay below real GDP growth for the second year running. The gap with economic activity growth nevertheless widened to 1 percentage point in 2015. This slowdown suggests that the current fiscal policy stance, geared towards consolidation of public finances by way of spending cuts, remained on course.

Numerous austerity measures at various levels of government have combined to slow down primary expenditure, and the index jump was a key driver: for one thing, it helped all government sub-sectors to keep their wage bills in check, including in the Communities and Regions, as well as in local government, which accounted for 45 % and 37 % of government employment respectively. And for another, the implementation of an index jump put the brakes on higher social benefits – which were set for a 2 % increase in July if automatic indexation had been in force. This single measure therefore has significant effects on total primary expenditure even if it has failed to improve the overall balance, as government revenue has also fallen in the wake of constrained employee compensation.

On balance, civil servants' remuneration inched down on lower employee numbers in addition to the index jump, as not all vacancies left by employee departures were filled. Lower government employment has a significant impact as compensation accounts for one-quarter of public sector expenditures – 12.5 % of GDP in 2015. Compensation

CHART 80 PRIMARY EXPENDITURE LAGS BEHIND ECONOMIC GROWTH

(percentage volume changes compared with the previous year)



Sources: NAI, NBB.

(1) Primary expenditure deflated by the GDP deflator and adjusted for cyclical and non-recurrent or budget-neutral factors, and for the indexation effect. The latter is caused by the difference between the actual indexation (or the theoretical indexation for 2015 in view of the agreed index jump) of public sector wages and social security benefits and the rise in the GDP deflator.

(2) Calendar adjusted data.

TABLE 21 PRIMARY EXPENDITURE IN 2015

(year-on-year percentage changes by volume. unless otherwise stated)

	Year-on-year change	*p.m. Average change 2000-2014*	In % of GDP	*p.m. In % of GDP in 2000*
Wages	–0.3	*2.3*	12.5	*11.1*
Intermediate consumption	0.5	*2.7*	4.3	*3.7*
Pensions	1.3	*3.0*	10.2	*8.1*
Health care	1.5	*3.3*	6.9	*5.3*
Unemployment	–6.6	*1.3*	1.5	*1.7*
Sickness and disability benefits	4.7	*4.8*	1.8	*1.1*
Other social benefits	0.1	*2.4*	4.7	*4.1*
Business subsidies	–1.5	*6.7*	3.3	*1.7*
Current transfers	1.2	*2.2*	2.1	*1.8*
Gross investment	5.1	*1.3*	2.5	*2.4*
Other capital expenditure	–18.5	*3.5*	1.4	*1.3*
Total	–0.1	*2.9*	51.2	*42.4*

Sources: NAI. NBB.

controls were in place at federal government level, which had committed to cutting payrolls by 4 % in 2015, both for the public administration and social security bodies. Local authorities, Communities and Regions also attempted to restrain this expenditure.

Savings were made on purchases of goods and services across all government sub-sectors. On balance, intermediate consumption still grew in real terms, but at a clearly slower rate than the average since 2000. This is particularly true for the federal government and social security bodies, which had agreed to slash their operating budgets.

Subsidies were likewise revised downwards. This category includes reductions in payroll tax, targeted cuts in social security contributions and service vouchers, as well as federal government subsidies to Belgium's national rail company SNCB, which were scaled back in 2015.

Current transfers, including external transfers, were slightly up in real terms. This was the outcome of two factors pulling in opposite directions: cost-cutting measures related to the development aid budget partly offset Belgium's higher fourth-resource contribution to the EU's budget.

Public investment was significantly up in the year under review; gross fixed capital formation was the only expenditure rising faster than its average trend in the past 15 years. Major school construction projects, particularly in the Flemish Community, were a key driving force, as was the pick-up in investment by local government in keeping with its typical electoral cycle. The federal government, by contrast, cut down on its capital spending in the past year.

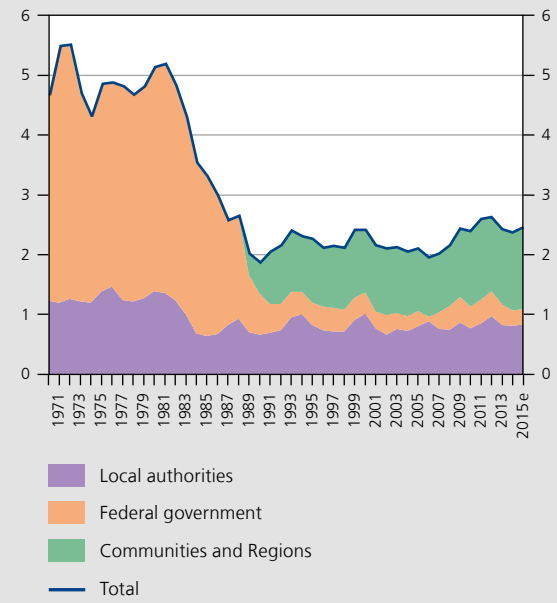
Box 8 – Public investment trends

Public investment can take many different forms, from buildings and other construction projects, to transport, to intangible assets including R&D, etc. In Belgium, this expenditure amounted to close to € 10 billion in 2015.

Belgium's Communities and Regions accounted for over half of public investment, which quite logically extended to their remits in education, road infrastructure, public transport, etc. Local authorities take up over one-third of public investment, although this typically varies in line with municipalities' six-year electoral cycle. This type of capital spending tends to focus on provincial and municipal roads and schools, as well as waste management. The federal government, which includes social security that calls for little or no capital spending, today only represents one-tenth of total public investment in Belgium, for instance on defence.

COMMUNITIES AND REGIONS ACCOUNT FOR THE BULK OF PUBLIC INVESTMENT

(public investment by sub-sector[1], in % of GDP)



Sources: NAI, NBB.

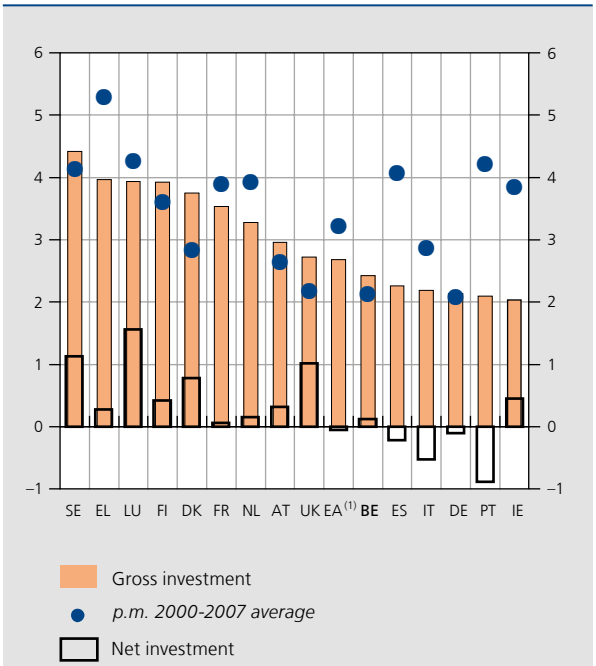
(1) The national accounts did not include the Communities and Regions as fully-fledged sub-sectors until 1989. For the period before 1995, for which the NAI does not provide statistics in keeping with the ESA 2010 methodology, a retropolation was carried out on the basis of the growth rates included in the national accounts according to ESA1995.

Between 1970 and 2015, public investment as a percentage of GDP halved and it now accounts for a mere 2.5 % of GDP, as against 5.5 % in its heyday in the early 1970s. Compared with total expenditure, public investment fell even harder and now only takes up one-third. Forty-five years ago, Belgium spent 13 % of its budget on investment, but it saw this percentage nosedive over the subsequent two decades to 5 % in 1990. The ratio has since fluctuated around 5 % of primary expenditure.

The biggest cuts were recorded in the fiscal consolidation drive of the 1980s – after all, capital spending is easy to scrap or postpone at times of austerity. However, by the end of the 1980s, investment stabilised and it currently varies between 2 % and 2.5 % of GDP – very different from other spending categories, most of which have risen sharply since 2000.

PUBLIC INVESTMENT DOWN IN EUROPE AND REMAINS LOW IN BELGIUM

(fixed capital formation, estimates for 2015, in % of GDP)



Source: EC.

(1) The average value given for the euro area is in fact the figure for 2007.

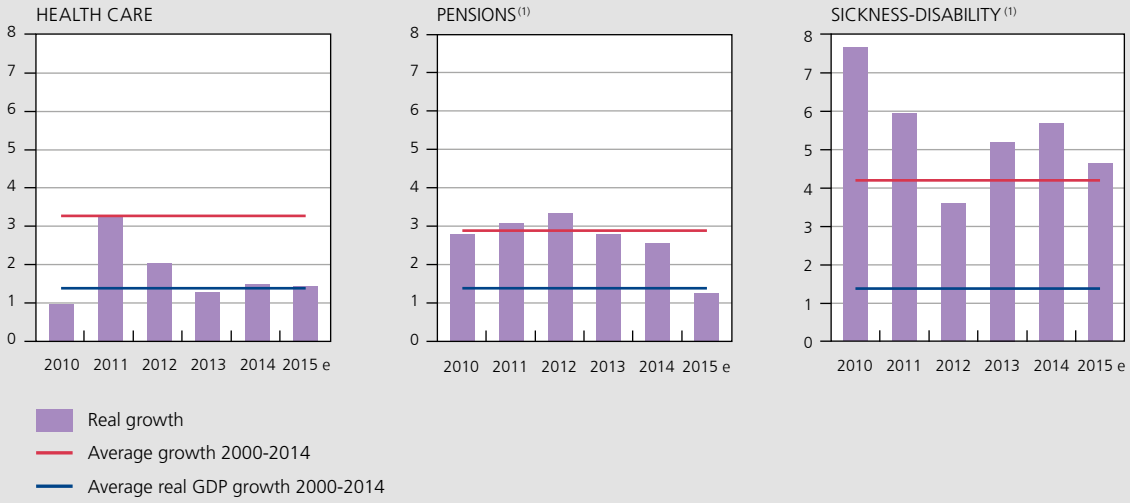
For many embattled countries, Europe's economic and financial crisis brought deep cuts in public investment, e.g. in Ireland, Portugal and the Mediterranean countries. Like Belgium, these countries – Greece excepted – are now among the group of countries with the lowest levels of public investment. Germany is one of them: just like in Belgium, public investment in Germany was low even before the crisis and has since hardly budged. The Scandinavian countries, by contrast, have investment ratios that are twice as high, at close to 4 % of GDP. In 2015, public investment as a percentage of GDP averaged 2.7 % in the euro area.

In terms of net fixed capital formation, Belgium is in the middle of the rankings at a ratio of nearly nil in 2015. Net fixed capital formation is defined as the difference between gross fixed capital formation and the use of investment, i.e. investment less depreciation of fixed assets due to normal wear and tear. Post-crisis, net fixed capital formation has also fallen sharply across Europe, by an average 0.8 percentage points of GDP between 2007 and 2015 in the euro area.

Like some other government expenditure – e.g. on education and R&D – capital spending clearly benefits a country's long-term growth potential. In a situation like the current one, with public investment low in Belgium and in other European countries, the government had best leave investment spending untouched or even step it up as much as feasible, as this facilitates higher capital stock and benefits an economy's production capacity. Enhancing a country's capital stock also has less obviously immediate benefits: public investment may encourage private spending and raise productivity. But how public investment influences potential growth depends on the type of investment, and government should single out spending considered sufficiently productive, such as on infrastructure – both maintenance and new construction –, investment in training and education, and 'green' investment. Lastly, the decision-making process should be as efficient as possible and allow for the government to achieve the best possible projects at the lowest possible cost.

CHART 81 RELATIVELY LIMITED INCREASE IN PUBLIC EXPENDITURE ON HEALTH CARE AND PENSIONS IN CONTRAST TO SICKNESS AND DISABILITY BENEFITS

(deflated by GDP deflator; percentage changes compared with the previous year, unless otherwise stated)



Sources: Budget documents, NAI, NBB.

(1) Expenditure adjusted for the indexation effect, caused by the difference between the actual indexation (or the theoretical indexation for 2015 in view of the agreed index jump) of public sector wages and social security benefits and the rise in the GDP deflator.

Other capital expenditure has fallen sharply as limits on tax credits for energy-efficiency investment, as approved by the previous federal government, took hold. From now on, these tax reductions are recognised in the national accounts as investment grants and no longer as lower revenue.

The budget for social benefits has grown once more, despite the index jump. Full-2015 expenditure was up by 2.3 % on volume factors and a benefits review allocating a 'welfare' budget that links benefits to general living standards. However, the actual growth percentage is still below the average of the past 15 years.

Health care spending added 1.5 % in real terms, similar to the previous year's increase but still a lot below past trends. The year 2015 saw the implementation of a range of health care measures such as an increase in patient fees for selected consultants, price cuts for subsidised medicines and the promotion of generic drugs, as well as shorter hospital stays after giving birth.

Pension expenditure increased by 1.3 % in real terms, taking down growth even further, to half of the average increase since 2000. Key drivers were the index jump and a slowdown in the growth of the number of pensioners. In 2015, the age threshold for early retirement was raised to 61.5 and the career length condition to 40 years from 39. However, it will be some time before the reforms approved by the current federal government have any visible effects.

Meanwhile, benefits paid under the sickness and disability scheme continued to rise to well above the long-term average in real terms. This is being driven by a steep upturn in the number of disability benefit claimants, as the baby boom generation grows older and with it the number of women in the older age brackets who are increasingly active in the labour market. Other factors include stricter eligibility conditions for other social benefits, such as unemployment benefits and more recently also early retirement.

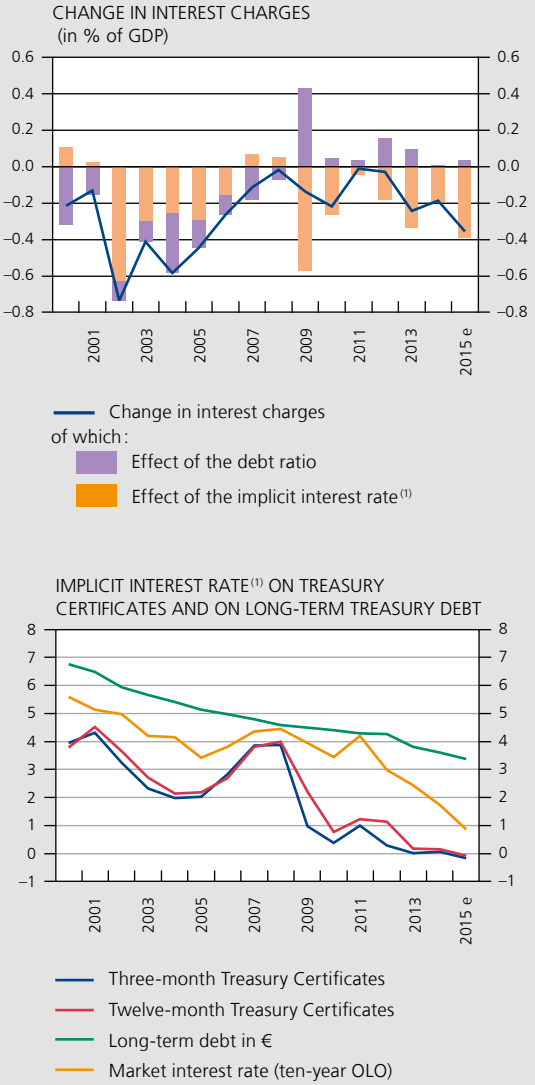
Lastly, cyclically adjusted unemployment benefits fell in real terms on the back of the labour market reforms agreed by the federal government as described in chapter 2.

Interest charges down significantly

In 2015, interest charges fell by 0.3 percentage point to 2.8 % of GDP, in line with the ongoing downward movement in the interest-charges-to-GDP ratio since the early 1990s. The contraction was due mainly to the steady reduction in the implicit interest rate on the public debt, down from 10.1 % of GDP in 1990 to 2.7 % in 2014.

CHART 82 LOWER INTEREST CHARGES ON FURTHER IMPLICIT INTEREST RATE FALLS

(in %, unless otherwise stated)



Sources : FPS Finance, NAI, NBB.

(1) Ratio between interest charges in the current year and debt at the end of the previous year.

Up to 2007, the fall in interest charges was also caused by the significant decline in the debt ratio, but the rise in the debt ratio has slowed this reduction since the end of 2008.

2015 was no different and the further decline in interest charges mirrored the exceedingly low interest rates on new securities and government loans, both short-dated and longer-dated bonds. Owing to negative interest rates throughout the year, the government generated some funds through the issuance of Treasury bills with maturities of less than one year. In April 2015, yields on ten-year reference bonds plumbed intra-year lows of around 0.3 % to rise again to 1.3 % in June and to 1 % by the end of the year. The spread on ten-year linear Belgian bonds relative to Bunds stabilised at around 30 basis points by the end of 2015.

4.3 Public debt still high, but pension reforms boost long-term sustainability of public finances

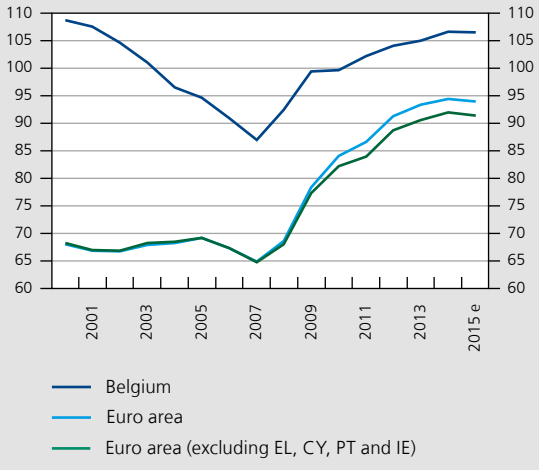
Debt ratio slightly down

Public debt, which had been steadily rising after the onset of the financial and economic crisis in 2008, came down only slightly in 2015, to 106.5 % of GDP. Belgium's debt ratio nevertheless remains high compared with the euro area (down to 94 % of GDP). The gap between the two again increased somewhat. Between 2010 and 2013, Belgian public debt did not rise as fast as that of the euro area, which shot up because of rapidly rising debts in a number of peripheral countries.

The slight fall in the debt ratio is exclusively attributable to exogenous factors, so named because they have an impact on the public debt but not on the overall balance. Endogenous factors as in interest-rate-to-growth dynamics, which capture the impact of implicit interest rates and

CHART 83 DEBT RATIO DOWN IN BELGIUM AND IN EURO AREA

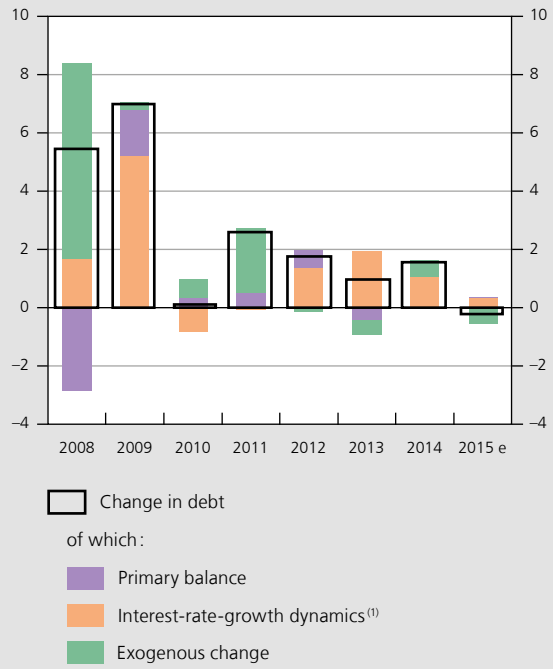
(consolidated gross government debt, in % of GDP)



Sources : EC, NAI, NBB.

CHART 84 DETERMINANTS OF THE CHANGE IN THE CONSOLIDATED GROSS DEBT OF GENERAL GOVERNMENT

(in percentage points of GDP)



Sources: NAI, NBB.

(1) The difference between the debt's implicit interest rate and nominal GDP growth, multiplied by the debt at the end of the previous year and GDP in the period under review.

nominal GDP growth on debt ratios, pushed it slightly upward. Indeed, debt ratios automatically increase when implicit interest rates exceed nominal growth, unless the primary balance is positive enough to cushion this. These dynamics have added 10.7 percentage points of GDP to debt growth since 2008, mainly triggered by the recession in 2009 and because of relatively low nominal growth in GDP in the past four years. In 2015, implicit interest rates on the public debt, although steadily moving down, still exceeded nominal GDP growth; to prevent an endogenous increase in the debt ratio in 2015, a small primary surplus was required. As it happened, the primary balance remained at 0 %.

In 2015, exogenous factors proved a downward influence on the debt ratio: KBC repaid the last remaining debt it had received from the Flemish Community in 2010 in the aftermath of the financial crisis, while Greece paid off part of the loans it had received since 2012 under the European Financial Stability Facility (EFSR). Sound debt management helped to reduce the debt ratio, more specifically because of the favourable effects of issue premiums – with nominal coupons exceeding market rates, their issue values were higher than their nominal values. Issue premiums have also been a feature of previous years as yields on government bonds have fallen. However, the downward effects on debt are only temporary and typically evaporate as and when higher coupons are paid. Once again, in 2015, interest payments on a cash basis for securities issued above face value in the past few years exceeded those on a transaction basis, which serve as the reference value for interest charges in the general government accounts. A similar upward effect derived from the costs of interest-rate swaps and other derivative contracts entered into in the autumn of 2014 in order to issue government bonds at then applicable rates in 2015. In a separate development, debt was swollen by state pension liabilities related to pension funds that were taken over from corporations in the past. With the implementation of ESA 2010, government acquisitions of pension funds – such as Belgacom's in 2003 – are recognised as purely financial transactions and have no impact on the overall balance. Funds thus taken over initially depress debt, but future pension liabilities will push it up year after year. Lastly, higher loans granted under social housing policy caused upward pressure on the debt ratio.

General government debt management benefits from lower interest rates

Federal government debt is by far the most important component of total general government debt in Belgium.

In 2015, the federal government's gross balance to be financed amounted to € 41 billion, i.e. € 2.8 billion more than in the previous year, as medium-term and long-term debt expiring in 2015 was significantly higher than in 2014. Conversely, fewer outstanding loans were bought back and the budget deficit shrank in cash terms.

Belgium's higher financing requirements were mostly met through the issuance of OLOs, while funding by means of non-standardised debt securities was also up, by € 1.2 billion. Unlike highly liquid standardised OLOs, these latter securities are tailored to the needs of investors: in 2015, for instance, the government issued securities – for the first time and on a limited scale – with a maturity of 100 years, as well as inflation-linked securities for which investors will receive an annual interest coupon on a nominal amount linked to an inflation index and the index-linked nominal amount at maturity. Unlike in 2014, in 2015, the government actually reduced the volume of Treasury bills, by € 1.1 billion.

TABLE 22 FINANCING REQUIREMENTS AND RESOURCES OF THE FEDERAL GOVERNMENT

(in € billion)

	2013	2014	2015
Gross balance to be financed	40.4	38.2	41.0
Gross financing requirements	33.0	32.9	37.0
Budget deficit (+) or surplus (–)[1]	5.7	10.5	9.0
Medium- and long-term debt maturing during the year	27.3	22.4	28.0
In euro	27.3	22.4	28.0
In foreign currencies	0.0	0.0	0.0
Buybacks (securities maturing the next year or beyond)	7.4	5.3	4.0
Funding resources	46.7	35.7	40.7
Linear bonds (OLOs)	42.3	31.8	35.6
State notes and others	4.4	3.8	5.1
Net change in the short-term debt in foreign currencies	0.6	0.0	0.0
Change in the outstanding amount of Treasury Certificates	–7.1	1.8	–1.1
Net change in other short-term debts in € and in financial assets	0.1	1.4	1.4

Source: FPS Finance.

(1) The overall balance is calculated on a cash basis and takes account of financial transactions which are not included in the overall balance of general government which, in accordance with ESA 2010, is calculated on a transaction basis.

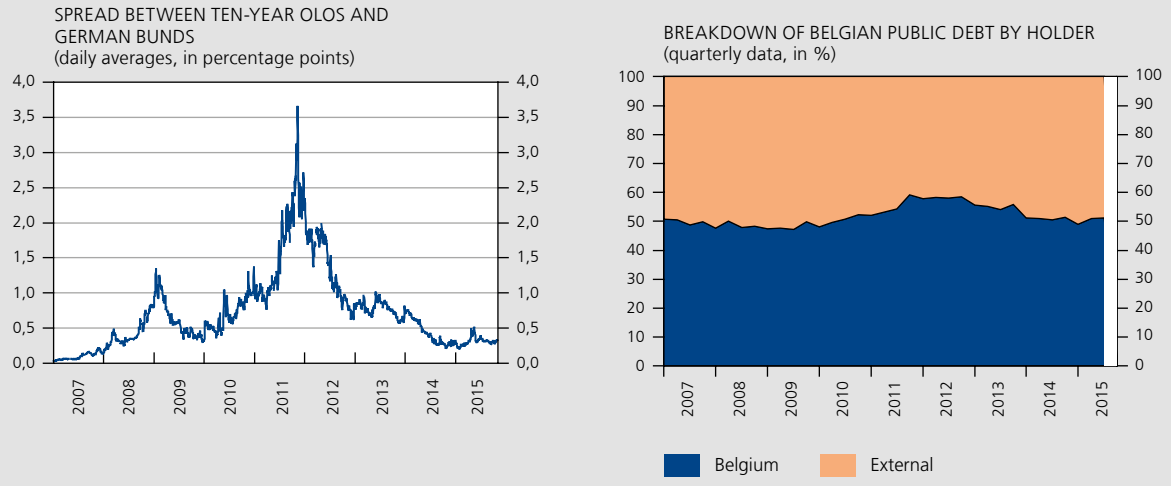
This selection of funding resources resulted in a minor upturn in the average maturity of the debt portfolio, to eight years – still quite a hefty change on 2010, when it was still at six years. A longer average maturity typically reduces refinancing risks.

Debt ownership also remained virtually stable on 2014, with domestic and foreign investors holding around half of general government debt. By the end of 2011, the proportion of foreign investors in the total had shrunk to 41 % in the wake of reduced confidence in Belgian government paper, but in 2014 this returned to more or less normal pre-sovereign debt crisis levels. This renewed confidence in Belgium is also clear from the low spread between ten-year OLOs and German Bunds, which fluctuated around 30 basis points throughout the year, its lowest average since 2007.

Guarantees granted to financial institutions decline further

Against the backdrop of the financial crisis, the Belgian government, principally the federal State, granted guarantees to financial institutions, which do not affect the budget balance or the debt unless they are called on. Since the end of 2014, the only remaining guarantee relates to the Dexia interbank funding that had been agreed in December 2011. This was replaced by a final agreement in January 2013, with the ceiling for the Belgian State put at € 43.7 billion. The guarantee declined from € 37.6 billion in 2014 to € 31.5 billion in 2015.

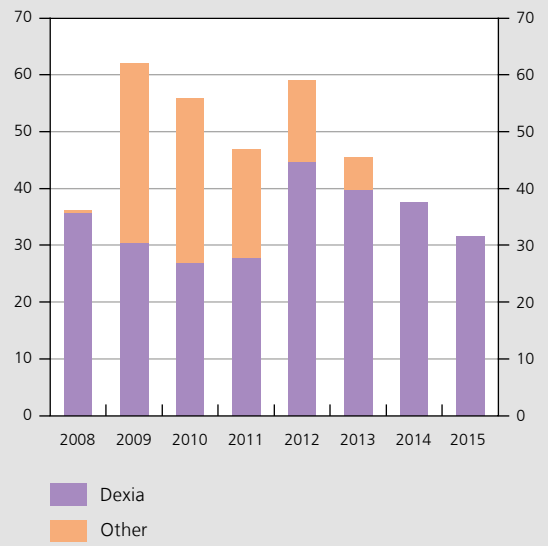
CHART 85 DEBT SPREADS AND OWNERSHIP RETURN TO NORMAL AFTER FINANCIAL AND ECONOMIC CRISIS



Sources: Thomson Reuters Datastream, NAI, NBB.

CHART 86 FURTHER REDUCTION IN GUARANTEES GRANTED TO FINANCIAL INSTITUTIONS

(guarantees granted to financial institutions, in € billion)



Sources: FPS Finance, NAI, NBB.

Fresh steps in pension reforms

Keeping public finances sustainable in the longer term is an essential prerequisite for fiscal policy, with the spend on pensions, health care and care for the elderly key determinants that need to be kept in check. On taking office in October 2014, the federal government tabled a number of proposals for further reform of the pension systems, based on the underlying principle of keeping people in work longer. This would boost employment, support economic activity and slow down the increasing budgetary cost of an ageing population.

The new government's most notable proposals were to raise the statutory retirement age, to further tighten up early retirement conditions and to abolish the pension bonus – a financial stimulus to keep people approaching the end of their careers in work longer. The government also announced its intention to harmonise the various pension systems governing civil servants and private sector employees. In addition to these reforms, the government announced the creation of an advisory National Pension Committee to help pave the way for fundamental reform and to oversee the financial and social sustainability of Belgium's pension systems. The committee is supported by the pensions Knowledge Centre and an Academic Council. These bodies were created in the spring of 2015.

Today, a number of these pension reform measures have already been put into place: the statutory retirement age will be raised from 65 to 66 in 2025 and to 67 in 2030, when any and all career length requirements will cease. In addition, early retirement conditions were tightened up further. At the end of 2011, the previous federal government had agreed to raise the required minimum age from 60 to 62 years and to raise the minimum career length from 35 to 40 years. Going one step further, the incumbent federal government raised this minimum age to 62.5 in 2017 and to 63 in 2018, with the compulsory career length increasing to 41 years in 2017 and to 42 years from 2019 – with some exceptions still applying to people who have had very long careers. Meanwhile, the government will limit the number of people eligible for survivor pensions by gradually raising the minimum age from 45 to 50 in 2025, and to 55 in 2030. Lastly, the system of pension bonuses was abolished with effect from 1 January 2015, and no bonus entitlements will accrue after that date unless they were built up before the announcement that the system would be axed. All reforms pertain to the three most important pension systems: of the civil service, private sector employees and the self-employed.

Meanwhile, a number of adjustments were also agreed specifically for public sector pensions. One key change is the abolition of the so-called 'diploma bonus', with academic study years counting towards calculations of career length gradually phased out between 2016 and 2030. People will now also be allowed to combine, without limitation, a public sector retirement pension with income from the exercise of a professional activity, from 65 years of age or after a career of 45 years.

Taking a leaf from the previous coalition's book, the government also tightened up the conditions governing unemployment benefit with employer top-up, i.e. pre-pension arrangements. Two key changes were introduced: it raised the minimum eligibility age and it stipulated that this group of unemployed people should be registered as job-seekers and be available for work. Some exceptions apply for people in heavy and arduous jobs, people who have had unusually long careers and people with serious medical conditions. In future, it will also be impossible for people to collect their supplementary occupational pensions before they effectively retire, and any new schemes will not be allowed to end before members turn 65.

In the years ahead, further reforms may be expected in the various pension systems, as the National Pension Committee was set up precisely to prepare such reforms. It has been tasked with defining objective criteria for heavy and arduous work, investigating the possibility

of part-time pensions, reviewing the harmonisation of the diploma bonus system in pension calculations in the three main pension systems and studying the implementation of a points-based pension scheme. The federal government hopes to have secured agreement on such a scheme by the end of its term in office and is looking to its implementation by 2030. Other reforms announced include harmonisation of some aspects of the public sector scheme with that in the private sector, an overhaul of pension institutions and enhancement of the link between labour input and pension amounts. Measures were also tabled that should strengthen the second pension pillar.

Pension reforms reduce the budgetary cost of an ageing population

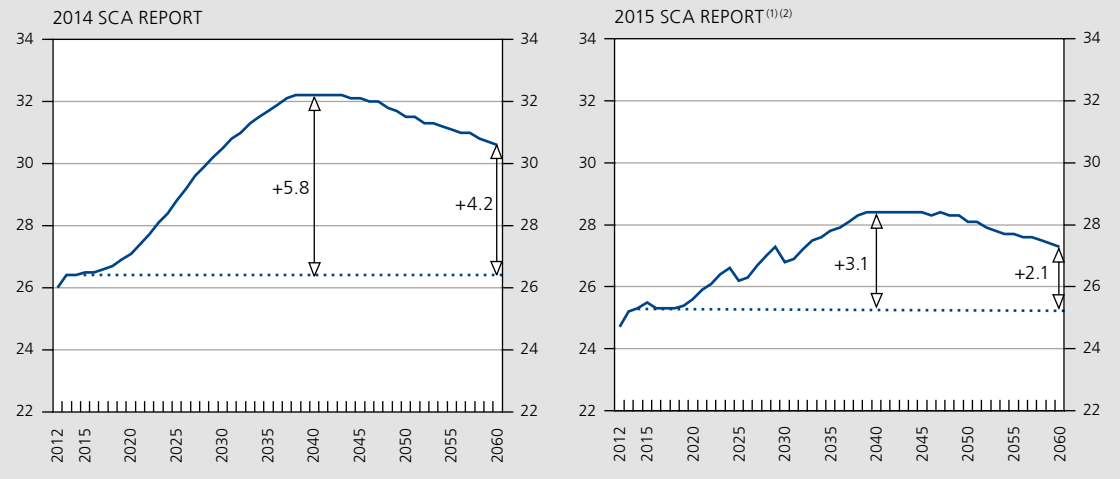
The Study Committee on Ageing (SCA) analyses the social and budgetary consequences of an ageing population in the longer term and calculates the budgetary cost of ageing as the change in percentages of GDP in social benefits as a whole.

In its 2015 report, the Study Committee presents a baseline scenario capturing the main measures taken by the federal government in the past year in terms of social expenditure, and particularly pensions, unemployment benefit with employer top-up, unemployment, health care and disability. The scenario also allows for a possible shift in retirement behaviour patterns whereby the increase in the statutory pension age prompts people to postpone retirement by an average of two years. Social expenditure under the baseline scenario will climb from 25.3 % of GDP in 2014 to 27.3 % of GDP in 2060, having peaked at 28.4 % of GDP in 2040. Between 2014 and 2060, the budgetary cost of ageing thus works out at 2.1 percentage points of GDP, down by half of the figure in the SCA's 2014 report.

Invariably, such long-term projections are fraught with considerable uncertainty, as they rely completely on their underpinning assumptions – and the scenario outcomes are particularly influenced by the assumptions pertaining to productivity growth and the labour market, which underpin calculations of potential economic growth. The scenario sees productivity growth increasing gradually by an average 0.8 % per annum in the 2014-20 period, to 1.5 % a year from 2035. If actual productivity undershoots this assumption by 0.25 percentage points from 2035, the budgetary cost of ageing would be 1.2 percentage point of GDP higher by 2060. In the baseline scenario, the administrative unemployment ratio will drop steeply, from 12.3 % of the labour force in 2014 to 8 % by 2036. To make these projections come true, the country needs active policies to support productivity growth and boost labour market participation.

CHART 87 PENSION REFORMS SLOW DOWN RISE IN SOCIAL BENEFITS

(social benefits, in % of GDP)



Source: Study Committee on Ageing (SCA).

(1) In terms of pension reforms, the Study Committee factored in the increase in the legal retirement age, stricter eligibility conditions for early retirement, tightening of unemployment benefit with employer top-up, increase in the minimum age for survivor pensions, the abolition of the pension bonus in the three pension systems and the abolition of the diploma bonus for the career condition in the civil service scheme.

(2) Social expenditure, in percentages of GDP, was subject to a downward effect due to the upward revision of GDP after the transition to ESA 2010 in the national accounts.

TABLE 23 LONG-TERM IMPACT OF PENSION REFORMS IN THE LABOUR MARKET

(impact by 2060; changes in thousands, unless otherwise stated; difference between baseline scenario and no reforms scenario)

Number of retired	–315
Number of non-job-seeking unemployed with employer top-up	–80
Total	**–395**
Labour force	318
Employment	292
Job-seeking unemployed	25
Inactive	77
Employment (change, in %)	*5.6*

Source: Study Committee on Ageing (SCA).

To study the specific impacts of the main pension reform measures on the labour market, economic activity, the cost of an ageing population and the social sustainability of pensions, the SCA took its 2015 report's baseline scenario and compared it with a scenario that does not include these measures. Its findings show that the reforms combine to reduce by 395 000 the number of people eligible for retirement pensions and the number of non-job-seeking unemployed with employer top-up in the rather longer term (by 2060). This is offset by a comparable rise in the non-retired population, made up of the labour force and the economically inactive. The reforms should take the total employment ratio 3.9 percentage points higher, with the ratio of the 55-66 age bracket even climbing by 16.4 percentage points. An increase in the labour force would translate into a 5.6 % expansion in employment, while GDP is expected to rise by the same percentage on the assumption of unchanged productivity growth.

The reforms, then, would push down the cost of an ageing population by 2.1 percentage points of GDP, of which 1.5 percentage points is attributable to lower pension expenditure and 0.6 percentage point to other social expenditure. Lower spending on pensions reflects three factors: a fall in the number of retired people and non-job-seeking unemployed enjoying an employer top-up, the abolition of the pension bonus and the upward revision of economic growth.

Lengthier careers will also add up to higher average pension amounts than in a scenario of no reforms. This, coupled with higher labour market participation by women should help to reduce the risk of poverty for the retired, while also narrowing inequality within this group. Pension reform measures already in place should therefore help cut the budgetary cost of ageing while at the same time enhancing the social sustainability of pensions.

Absorbing structural budget deficit is essential to guarantee sustainable public finances

While structural measures have helped the government to significantly cut the expected future costs of an ageing population, these remain quite significant and the sustainability of Belgian public finances therefore remains a concern, especially against a backdrop of high and rising general government debt – way over the Maastricht Treaty criterion of 60 % of GDP – and a budget deficit that came within an inch of the target of 3 % of GDP in 2015.

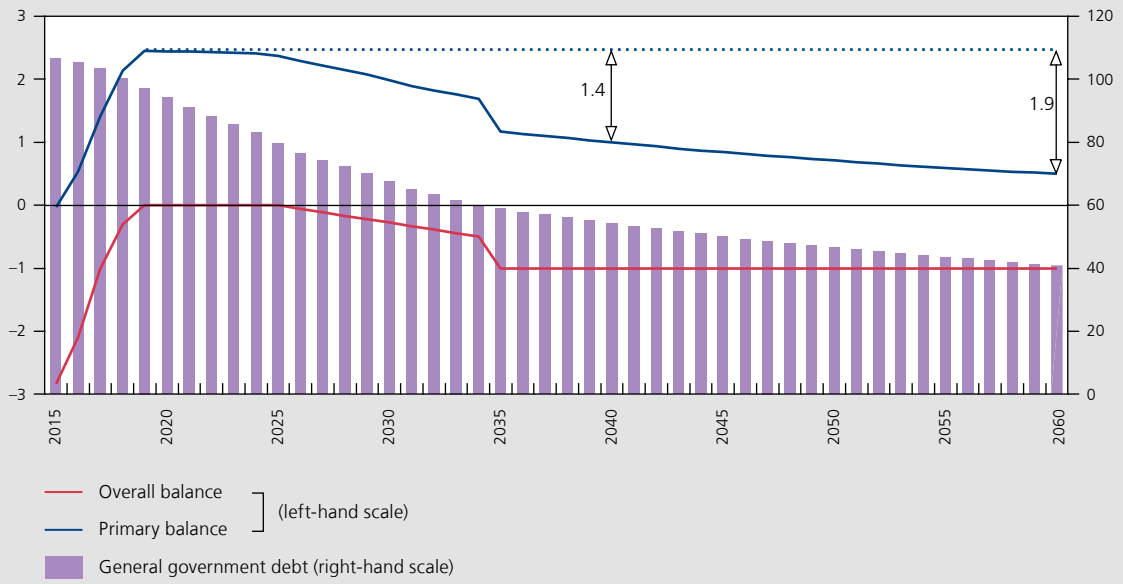
By complying with the European fiscal framework and by meeting the targets as set out in its stability programme, Belgium should be able to ensure the sustainability of its public finances. If Belgium does actually meet both these conditions, it will create a budgetary margin to help cushion the cost of an ageing population, because more rapid deleveraging should push down interest charges and as the budget balance may then be used for this purpose.

This is corroborated by a simulation exercise plotting the development of public finances in the longer term. The exercise assumes that Belgium will achieve a structurally balanced budget by 2018, in line with the stability programme target, while this balanced budget is assumed to stay in place until 2025. The government's overall balance would then incline towards a deficit of 0.5 % of GDP after 2025. The deficit is then assumed to revert back to 1 % of GDP once government debt has dipped below 60 % of GDP. This scenario is fully compliant with the European fiscal framework, which specifies that the budget deficit may rise to a maximum of 0.5 % of GDP in the medium term and to 1 % of GDP in countries with debt ratios below 60 % of GDP and with low risks to the sustainability of public finances in the long term. The exercise next factors in the growth assumptions underpinning the baseline scenario of the Study Committee on Ageing, which sees labour productivity increase by an average 1.3 % per annum in the 2016-60 period, while employment should add 0.4 %, taking economic activity growth to an average of 1.7 % per annum.

The simulation exercise throws up a primary balance at 2.4 % of GDP in 2019, gradually declining to 1 % in 2040 and to 0.5 % by 2060. The permitted deterioration of the primary surplus by 1.4 % of GDP between 2019 and 2040 is less than half of the expected impact on

CHART 88 EUROPEAN FISCAL FRAMEWORK TARGETS SHOULD BE MET TO ENSURE SUSTAINABILITY OF PUBLIC FINANCES

(public finances based on fiscal targets[1], in % of GDP)



Sources: EC, FPB, NAI, SCA, NBB.

(1) Simulation based on the macroeconomic assumptions underpinning the SCA baseline scenario as well as on the assumption that implicit interest rates on general government debt will rise to 3.75 % in 2035 and then stabilise at that level. Inflation is assumed to be at 1.9 % from 2018.

the balance of the cost of ageing in that period. By 2060, the decline in the primary surplus should produce a margin nearly equal to the expected ageing costs. Belgium's debt is expected to dip below 60 % of GDP around 2035.

To be able to fund future social benefits and other expenditure without having to raise taxes in a major way, Belgium would be well advised to achieve its stability programme targets and comply with the rules of the European fiscal framework, while also keeping government expenditure on pensions and health care strictly under control. Lastly, policies should be put in place that focus on increasing potential growth by promoting productivity and encouraging employment, all the more so because the estimates of the budgetary cost of ageing are hedged with uncertainties, particularly when it comes to assumptions about economic growth.

Placing the economy on a broader footing

5. Raising the growth potential and resilience of the economy

5.1 Integrating in a constantly changing world

The repercussions of the successive crises experienced in the 2008-12 period continued to be felt in 2015, and the economic recovery remained fragile. On top of this, Belgium – together with Europe's other economies – had to contend with fundamental structural changes that presented both opportunities and threats.

Against the backdrop of a globalising economy, the past two decades have been marked by the accelerated development of new economic powers in the world, most notably China. The emerging economies are both a manufacturing base and – as the income level of their population rises – a source of demand. At the same time, production chains have been organised on an increasingly international basis, resulting in a large-scale worldwide reallocation of value creation and employment. This has been made possible by factors such as the use of more efficient and less expensive technologies in the transport of goods and exchange of data.

Viewed more broadly, new technologies are bringing about extremely rapid change to the environment in which companies, workers, consumers and governments operate. This relates on the one hand to innovation in specific fields of activity, such as the biosciences and biotechnology, and nano materials, and on the other to transversal technological progress based on digitisation. This is having a far-reaching impact on production practices, market operation and the organisation of society more generally. It is no longer simply the kind of business that has traditionally been exposed to international competition that is having to deal with these forces : every company, regardless of sector, is having to reconsider its business model in response to the rise of digital businesses operating all over the world in fields such as e-commerce, tourism, media, culture and financial services. Economic agents are also being confronted at local level by competitors based far away. Even locally based firms are now able to forge relationships with partners and customers all over the world.

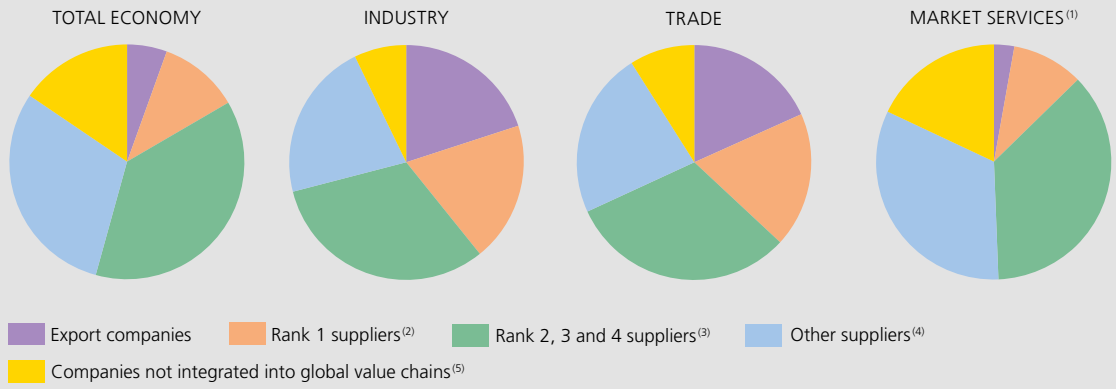
The international fragmentation of value chains and technological developments are accompanied by a transformation of the form and content of labour. The necessary skills are constantly evolving. It is difficult to align the organisation of the economy as a network with an approach to labour that has traditionally been heavily centralised and vertical.

These fundamental changes are occurring at a time in which it is also necessary to address the consequences of an ageing population and when the environmental sustainability of economic activity has become a primary concern. They pose significant challenges to the continued existence of the current social model and the well-being of the population through the danger of exclusion from the labour market or the drying up of the finances needed for the State to operate and for the viability of social protection to be maintained.

These various developments have already had an impact on the organisation not only of industrial sectors, but also that of a considerable proportion of market services in the advanced economies. As a small, open economy traditionally specialising in semi-finished goods, Belgium has naturally had to contend with these fundamental changes. Recent studies show that a substantial proportion of Belgian businesses have been able to integrate themselves into these global value chains. Just over 5 % of them are export

CHART 89 ALL MAJOR SECTORS PARTICIPATE IN GLOBAL VALUE CHAINS

(breakdown of Belgian businesses, in 2012



Source: NBB.
(1) Sectors H to N as classified by NACE Rev. 2, excluding banks and insurance companies.
(2) A rank 1 supplier is a non-export company that supplies inputs or services to at least one export company.
(3) A rank i supplier is a non-export company that supplies intermediate inputs or services to at least one rank i-1 supplier.
(4) Other non-export companies located in earlier stages of the production chain than the export companies.
(5) Non-export companies that are not located in earlier stages of the production chain than the export companies.

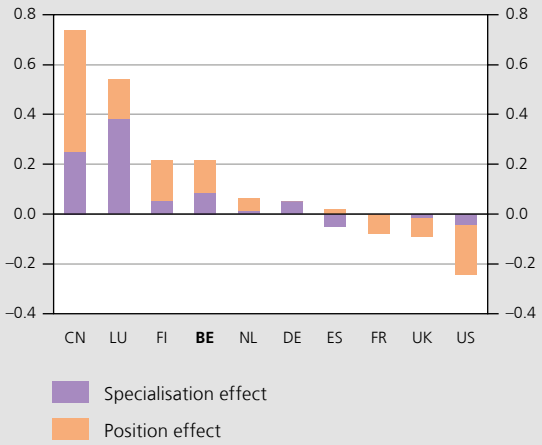
companies, 11 % are suppliers to export companies, and 54 % may be viewed as having a significant involvement – direct or indirect – with export-related activities.

Merely participating in global value chains is not sufficient to gain optimum benefit; a good position within the chain is also important, as a company's position within the production process has a decisive influence on its results. Businesses at the end of the chain tend to record better economic results than those at an earlier stage, in terms of both productivity growth and the expansion of the workforce. Viewed in this light, the Belgian economy might suffer from its traditional role of turning intermediate products into semi-finished goods, which means that Belgian companies are positioned at a relatively earlier stage of these chains compared with the EU average. For one thing, they are more concentrated than their counterparts in neighbouring countries in sectors active at the beginning of chains (specialisation effect). Moreover, even though they are active in the same industries as their counterparts in other countries, they generally tend to be positioned at an earlier stage (position effect). This is the case, for instance, for basic chemicals in the chemicals industry and basic metal-working in the metal-working industry, both of which are highly developed in Belgium due to ready access to raw materials via the ports.

In a more fragmented economic environment of this kind, economic policy to safeguard a country's competitiveness

CHART 90 AVERAGE DISTANCE BETWEEN BUSINESSES AND END USERS (1) (2)

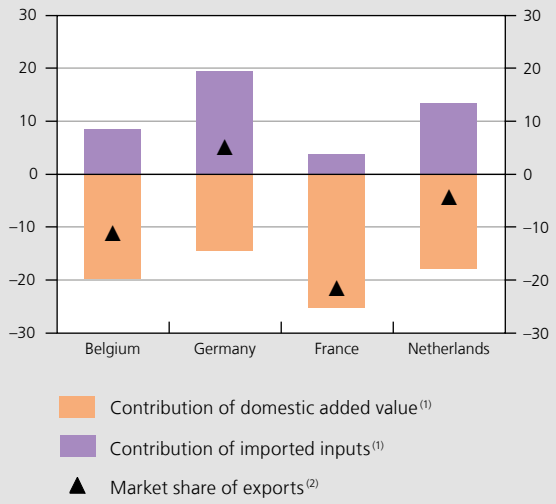
(differences compared with the average of the EU15, 2011)



Source: NBB, based on WIOD data.
(1) The average distance to the end user measures the average number of processes undergone during production before a product reaches its end users. The greater the distance, the more specialised a country is in production phases situated in early stages of the chains.
(2) A positive contribution from the specialisation effect indicates that a country's businesses are represented more strongly – compared with the EU15 as a whole – in industries situated in the initial processing stages of global value chains (e.g. iron and steel industries and the chemicals industry).
A positive contribution from the position effect means that a country's businesses in the same industry are generally concentrated more strongly in the earliest processing stages (e.g. basic chemicals and basic metal-working) than is the case for the EU15 average.

CHART 91 REDUCTION IN DOMESTIC VALUE ADDED TO EXPORTS

(export market shares[1]; percentage changes for the 1995-2011 period, unless otherwise stated)



Source: NBB calculations based on OECD data (TiVA).

(1) In percentage points.

(2) Share of the export of goods and services by value in the total exports of OECD countries.

may not be limited solely to the results of export companies. The domestic contribution to the added value and labour components of those exports ought equally to be consolidated and developed.

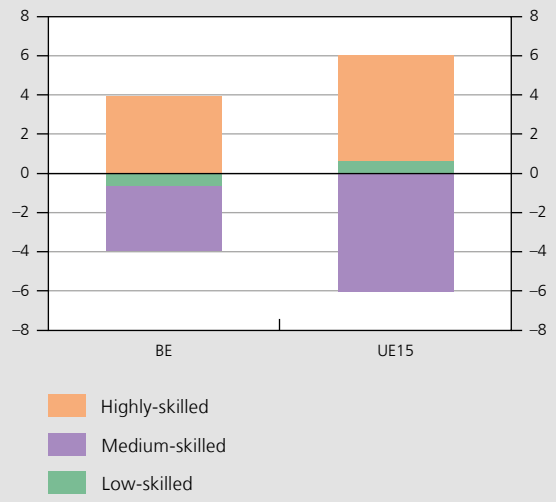
After all, the international reorganisation of production systems did not have a neutral impact on the pattern of Belgium's market share and those of its three neighbouring countries within total OECD exports. Between 1995 and 2011 – the most recent year for which it is possible to estimate the value added domestically to exports – Germany, Belgium, France and the Netherlands all registered a fall in the content of domestic added value. The decline partly reflects the transfer of certain production segments to countries where production costs are less steep (Eastern Europe or emerging economies). The fall of about 20 % in Belgium was similar to that for the Netherlands, greater than in Germany (–15 %) but less than in France (–25 %). The decline in the content of domestic added value to exports in Belgium, France and the Netherlands was partially offset by the rise in the import content of exports, due to the re-export of imported products, whether or not after further processing. In Germany, the contribution of the import content of exports compensated for the reduction in the domestic content, thereby raising the market share for exports.

Fundamental organisational changes also had an impact on demand for labour. By changing production techniques and intensifying international competition, these phenomena had a highly polarising effect. Highly-skilled professions, such as IT specialists, engineers, architects, accountants and financial experts, are more sought after, as their skills offer a fairly good fit with technological progress. Certain more conceptual phases of the production chain have also developed in Belgium, thanks in particular to the quality of the human capital.

These developments have, by contrast, put pressure on professions with an intermediate skills level, especially those whose tasks are of a more routine nature, and which can therefore be more readily relocated. Administrative jobs, such as typists, and certain skilled professions in industry (such as textiles, metal-working and printing) have suffered from computerisation, the automation of production chains and greater outsourcing and relocation opportunities. Fiercer international competition means that businesses can select the production location for certain segments based on comparative advantages in respect of production costs, availability of labour, or even flexibility in terms of prevailing tax, social and environmental laws.

CHART 92 DECLINING SHARE OF MEDIUM-SKILLED PROFESSIONS[1]

(share of total employment, change in percentage points between 2000 and 2013)



Source: EC.

(1) According to the International Standard Classification of Occupations (ISCO), low-skilled jobs include basic occupations such as domestic helpers. Medium-skilled occupations include administrative personnel, providers of personal services, tradespeople, artisans and machine and systems operators. Highly-skilled jobs include managers and the intellectual, scientific and artistic professions.

Low-skilled jobs have been less affected by these major changes, although supportive economic policy measures, including those to benefit domestic services, contributed to this. Demand for certain occupations has not diminished, however, especially where these are not routine and, as in the case of domestic help, involve interaction between providers of the service and customers.

Despite the fundamental changes they have brought about in production practices as well as in the content and organisation of work, the changes in the economic and technological environment have not prevented Belgium from maintaining its level of prosperity. The Belgian economy, like those of its neighbours, continues to display a high degree of economic development. GDP per capita stood at about € 35 750 in 2014, which means the average per-capita income generated in the economy was within the same margin as in the neighbouring countries – 12 % higher than the average of the 15 countries belonging to the EU at the beginning of 2003, prior to the expansion that took in primarily the Baltic states and certain Central and Eastern European countries.

The result reflects higher productivity per hour worked and a longer average working time per worker. The first of these advantages is declining, however, as average productivity growth was less than that in neighbouring countries in the 2000-2014 period. The second is chiefly attributable to Belgium's small number of part-time workers and to the fact that they work longer hours than in the other countries. By contrast, the workforce participation rate was significantly lower in Belgium than in the other countries. This gap has widened in recent years, as the employment rate has risen less strongly in Belgium. The difference is measured based on administrative data, to ensure consistency with other elements of the breakdown of GDP per resident. Belgium's position relative to the other countries considered does not change if the measurement of the employment rate is based on the labour force survey although the results are higher than those based on administrative sources.

TABLE 24 BREAKDOWN IN THE PATTERN OF GDP PER CAPITA

(average annual percentage changes, by volume, unless otherwise stated)

	GDP per capita	Share of the working-age population (1)	Employment rate (2)	Average working time per year (3)	Productivity per hour (4)
2000-2014					
BE	0.9	–0.1	0.2	–0.1	0.8
FR	0.7	–0.2	0.2	–0.4	1.1
DE	1.3	–0.2	0.9	–0.5	1.1
NL	0.8	–0.2	0.3	–0.3	0.9
EU15	0.8	–0.2	0.3	–0.3	1.0
2009-2014					
BE	–0.2	–0.2	–0.2	–0.1	0.4
FR	–0.1	–0.4	0.0	–0.4	0.7
DE	1.0	0.0	1.1	–0.6	0.6
NL	–0.6	–0.4	–0.3	–0.1	0.2
EU15	–0.4	–0.3	–0.3	–0.4	0.6
Level, 2014	(in € (5))	(in %)	(in %)	(in hours)	(in € (5))
BE	35 759	65.2	62.3	1 560	56.5
FR	32 391	63.4	65.3	1 473	53.1
DE	36 099	66.0	80.1	1 366	50.0
NL	39 382	65.7	79.0	1 420	53.4
EU15	31 892	65.1	69.3	1 574	44.9

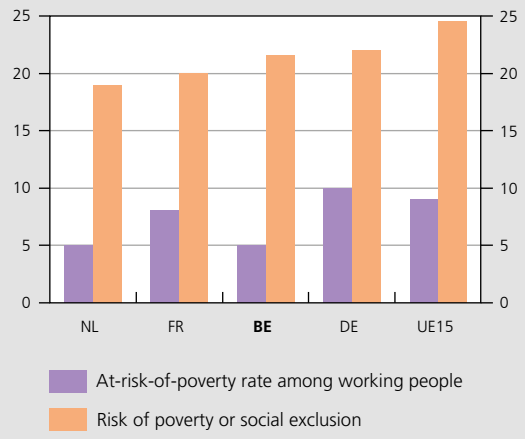
Source : EC.
(1) Ratio of population aged 15 to 64 to the total population.
(2) Based on employment in the national accounts.
(3) Based on employment and labour volume in the national accounts.
(4) Real GDP per hour worked.
(5) At current prices.

While trends in contributions to growth have not changed fundamentally since the great recession, growth in income per capita has been abruptly curtailed. Germany has distinguished itself in this respect from Belgium and its other partners by maintaining a positive, albeit slightly slower, dynamic.

At individual level, employment participation is also a factor in mitigating the risk of poverty. In 2014, one Belgian aged 18 to 64 in five was confronted with the threat of poverty or social exclusion. Although this percentage is well below the European average, it remains higher than in France and the Netherlands, and has seen very little change in the past ten years. There are certain groups in Belgium that only participate in employment to a limited degree. This is particularly the case for young people, the over-55s, non-EU citizens and, transversally, low-skilled people. Within these groups, it is the low-skilled as well as non-EU citizens who are at greatest risk of poverty, with a third and more than a half of them affected, respectively. This indicator highlights the importance of achieving better labour market integration for everyone, especially these target groups, by offering them quality jobs with decent pay.

CHART 93 WORK REDUCES THE RISK OF POVERTY OR SOCIAL EXCLUSION

(in % of the population aged 18 to 64, 2014)



Source: EC.

Generally speaking, sustainable consolidation of the economy's development potential, alongside measures to mitigate the budget impact of demographic ageing, should not just help safeguard the long-term viability of public finances but also increase resilience to external shocks. This must be based on the creation of additional jobs as well as on efficiency gains and on an economy that functions so as to allow smooth adjustment to the constant changes occurring within the economic environment. Belgium's various governments have introduced fundamental reforms in this regard in recent years, the consequences of which must be tracked continuously and precisely. Where necessary, they should also be consolidated through other measures.

A variety of measures have already been taken since 2011 in order to mitigate the crisis and tackle the structural weaknesses of the Belgian economy, primarily in the shape of labour market reforms, extended working life, restored competitiveness and reduced labour costs. Significant new steps were taken in 2015. The intention is to lay a solid foundation not only for employment and economic activity, but also for healthy public finances and to ensure that the Belgian social model remains affordable.

This final chapter will look in greater detail at the measures that have been taken with respect to the labour market and the general functioning of the economy. A number of remaining points will also be considered, without claiming to offer an exhaustive summary or comprehensive analysis. The most recently available data will be drawn on. They relate to earlier periods in some cases, chiefly where the availability of data usable for international comparison is limited, or where there is a need for granular information that reflects the heterogeneous nature of Belgium's businesses. Such data are only considered if they continue to offer relevant information on current fundamental features of the economy.

Box 9 – Supplementary indicators for Belgium in addition to GDP: summary of the first publication

In accordance with the Law of 14 March 2014, the Federal Planning Bureau (FPB), under the auspices of the National Accounts Institute (NAI), has developed a series of indicators in order to measure quality of life, human

development, social progress and the sustainability of the economy. A first report was published at the beginning of February 2016, in which these supplementary indicators in addition to GDP are discussed.

The FPB has selected twelve themes, following careful analysis of the various initiatives that have been taken for almost ten years now by international institutions (EC and Eurostat, OECD, and the UN Economic Commission for Europe) and by countries such as the Netherlands, France and the United Kingdom. Sixty-four indicators were selected from existing statistics. These must be calculated using robust methodology, must be relevant to the themes being considered, and must allow comparisons over time or with other countries.

THEMES AND NATURE OF THE SUPPLEMENTARY INDICATORS IN ADDITION TO GDP

Themes	Nature of the selected indicators
Subjective well-being	Two indicators that show satisfaction with life, based on data from the European Social Survey.
Standard of living and poverty	Ten indicators relating to household consumption, official development aid, the risk of poverty or social exclusion, income inequality, the number of subsistence benefit recipients and over-indebtedness.
Work and leisure	Six indicators relating to socio-economic position in the employment market and to stress at work and leisure.
Health	Six indicators on life expectancy and health risk factors.
Education and training	Three indicators concerning education and training.
Society	Seven indicators of general confidence and interpersonal contacts, participation in civil life, and safety and insecurity.
Environment	Five indicators on pollutants.
Climate and energy	Five indicators relating to greenhouse gas emissions and energy consumption, including renewable energy.
Natural resources	Seven indicators for the consumption of raw materials (including fuel and water) and for waste.
Land and ecosystems	Five indicators on diversity of fauna and land use.
Economic capital	Six indicators relating to investment, fixed capital stock and intellectual capital stock, and also to financial variables – the net financial position compared with other countries, and public debt.
Mobility and transport	Three indicators on the share of cars in passenger transport and on the transport of goods by road, as well as the number of traffic deaths.

Source: FPB (2016), *Supplementary indicators in addition to GDP.*

Summary of results

The law requires the publication of a summary of the results in the Bank's Report. This task is rendered more difficult by the diversity of the studied themes and the heterogeneous nature and characteristics of the indicators

taken into account – in terms of availability, for instance. The supplementary indicators in addition to GDP serve, in fact, to reflect the multidimensional nature of the factors influencing well-being and development, so that emphasising certain specific indicators or deriving a synthetic indicator would be contrary to this approach. The analyses described in the Bank's Report also match this approach, incidentally, as they draw on the supplementary indicators where these offer relevant information on the themes covered. This is the case, for instance, for the indicators relating to the employment market and the risk of poverty, but also to those for the net financial position of the public debt relative to other countries.

The summary presented here, which was prepared according to the approach described in the FPB publication, nevertheless relies on a transversal breakdown of the indicators according to three dimensions: "Here and now", "Later" and "Elsewhere". For the purposes of evaluation, it examines whether the indicators have developed positively in terms of the political objectives set at Belgian and European level.

The "Here and now" dimension comprises the indicators that might offer answers to questions about the situation and development of the well-being of the Belgians and of Belgian society. It consists of 36 indicators, from which no clear trend can be inferred:

- Subjective well-being remained stable between 2002 and 2012, the most recent year for which this survey data is available.
- Most of the indicators relating to the "Health" and "Education and training" themes developed positively, as did emissions of particulates ($PM_{2.5}$) and nitrogen oxides (NO_x), and those relating to the number of road traffic accidents.
- Energy dependence has increased since 1990, but there has been a positive turn in the past five years.
- Developments for the themes "Standard of living and poverty", "Work and leisure" and "Society", by contrast, have mostly been negative over the past five years.

The "Later" dimension relates to the question of whether Belgians and Belgian society will be able to maintain their level of well-being in the future or even to increase it. It comprises 34 indicators, mostly related to environmental factors ("Environment", "Climate and energy", "Natural resources", "Land and ecosystems") and economic themes ("Economic capital", "Mobility and transport"), and to the "Health" and "Education and training" themes. General confidence and contacts with friends and family are likewise included, as is the proportion of young people not in employment, education or training. For the most part, these indicators moved steadily closer to the adopted targets. The most noteworthy exceptions are:

- An initial deviation from the targets set for indicators regarding use of natural resources and primary energy consumption, followed once again by a turn for the better in the past five years.
- The indicator for the meadow bird population ("Land and ecosystems" theme) – one of the rare indicators for biological diversity that have been available for a prolonged period – deviated increasingly widely from the target.
- As stated in the chapter on public finances, the level of public debt rose from 2007 onwards, moving away from the target of 60 % of GDP.
- Within the "Mobility and transport" theme, the share of the car in passenger transport moved steadily closer to the target from 1990 onwards, but has begun to move away from it again in the past five years. The opposite occurred in freight transport.

The "Elsewhere" dimension incorporates indicators that help answer the question: "How does the development of society in Belgium influence the capacity of other countries to develop and the well-being of their people?". It comprises seven indicators relating to the "Natural resources" and "Climate and energy" themes, together with the indicator for official development aid.

- The indicators for the "Natural resources" and "Climate and energy" themes relate to global environmental capital, such as the climate system and raw materials resources. All these indicators have been converging with their targets in the past five years.
- Official development aid showed a very slight improvement over the period as a whole.

Breakdown of results by population group

A large number of indicators (25 of the 64) have been broken down according to relevant population categories – primarily gender, education and/or age, although other breakdowns are also presented.

The situation for women is better than or equal to that of men in terms of health and its determinants, with the exception of depression, which affects women more frequently. Men are also more likely to be the victims of fatal road traffic accidents. The differences are narrowing in this regard, probably reflecting increasingly similar lifestyles. Men's pay, by contrast, remains higher than that of women, although the gap is narrowing. Women are more likely than men to receive higher education, the female employment rate is converging with that of males, and men still have significantly more leisure time than women. What is more, women rate a number of themes differently to men, as seen primarily in their lower general confidence and greater sense of insecurity. They also have less confidence than men in institutions, although the difference is shrinking.

The level of education is a determinant not just of labour market status but also of health. The two dimensions are, incidentally, linked through employment and working conditions, as well as the generally higher income levels of highly-skilled professions. The employment rate, unlike the unemployment rate, rises with the level of education, while people whose qualifications are not so high have more leisure time. Health, as measured in terms of life expectancy and healthy life expectancy, is better for the highly-skilled. Moreover, education levels correlate positively with other determinants of health : there are fewer regular smokers and fewer cases of obesity among highly-skilled workers, while the lowest-skilled are more likely to experience depression.

When broken down by age, the figures show that the situation of people nearing the end of their careers and of retirees has improved relative to that of people at the beginning of their careers. This reflects the fact that the risk of poverty or social exclusion has fallen over the past ten years for people aged 65 and over, thanks primarily to the reduction in the proportion of pensioners on incomes below the poverty level. This reduction was structurally influenced by the raising of the employment rate among 55-64-year-olds and among women, which had the effect of consolidating the accrual of pension entitlements, particularly for women. The unemployment rate among 15-24-year-olds has, by contrast, remained roughly four times higher than that of 55-64-year-olds over the past two decades. It is also apparent from indicators broken down according to socio-economic status that the unemployed are more likely than other socio-economic categories to experience poverty or social exclusion. The proportion of unemployed people with incomes below the poverty level, for instance, has remained higher than that of retired people throughout the past decade. The gap has actually widened.

The indicators broken down by household type showed that one-parent families – almost exclusively adults in the first half of their professional career and their dependent children – are more likely than other types of household to experience problems in entering the employment market and to suffer serious material deprivation. Families of this sort also have to get by more often on an income below the poverty threshold.

Future developments in the supplementary indicators in addition to GDP

All the supplementary indicators in addition to GDP will be updated annually. The series can be adjusted in line with new thinking and social debates, but also in response to other international and Belgian initiatives, the latter at both federal and regional level. The FPB's next report will include international comparisons, primarily at European level.

5.2 Raising the employment rate by strengthening both labour supply and demand

Increasing the number of people in work is key in terms of safeguarding the long-term funding of the social security system and improving social integration. At the same time, the need to raise the employment rate is part of a range of specific challenges for the labour market. The ageing of the Belgian workforce – like that of the population as a whole – is already clearly visible. Moreover, the economy can only adapt to globalisation and new technologies if it – and more specifically the labour market too – functions in such a way as to allow smooth shifts in production factors towards promising new activities. These same forces not only lead to a change in the nature of the required tasks, but also alter the expectations of (potential) employees as to how these tasks should be performed.

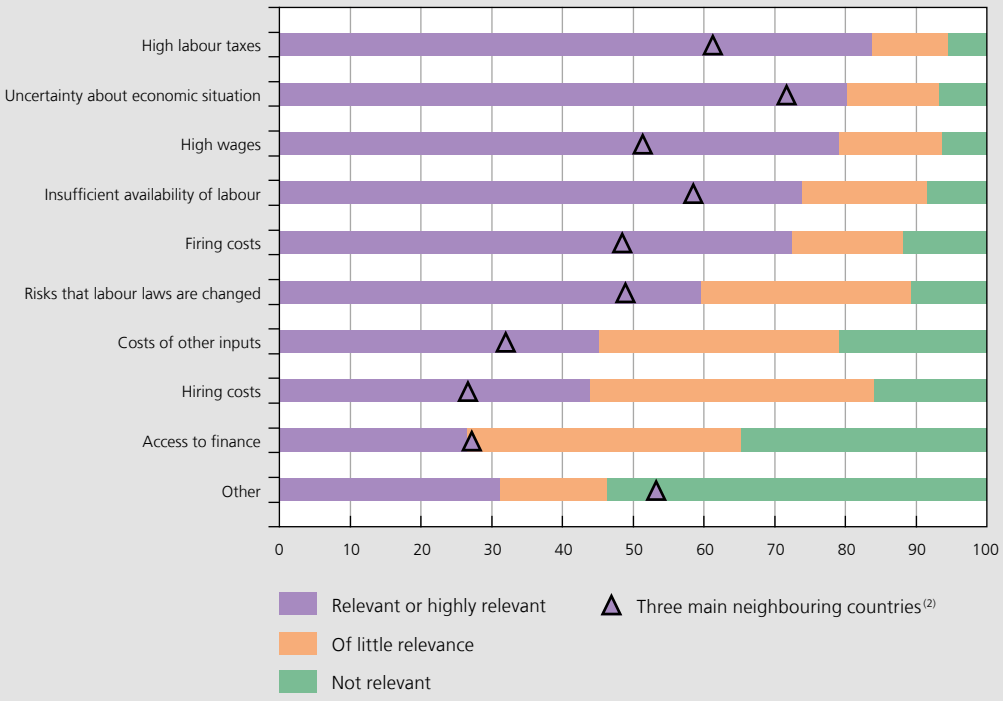
Growth in employment should be aided by the recovery in competitiveness and by the tax shift, as well as by the pension reform. It will also be stimulated by a comprehensive approach supported by all stakeholders in the labour market. The equilibrium point between labour supply and demand needs to be raised in order to create more jobs.

Raising demand for labour by scaling back obstacles to hiring

The results of the Wage Dynamics Network (WDN) survey of wage-setting carried out in 2014 by the ESCB showed that companies considered "uncertainty about economic conditions", "high payroll taxes" and "high wages" to be the biggest obstacles to hiring new employees with permanent, open-ended contracts in the 2010-13 period. Other key factors were insufficient availability of labour with the required skills and high firing costs. Wage levels and high payroll taxes are particularly relevant for Belgian companies – even more so than for businesses in the main neighbouring countries. A reduction in payroll taxes, as the tax shift entails, could therefore help break down obstacles to job creation. Strategies to mitigate uncertainty and to increase the availability of labour would also seem

CHART 94 SUBSTANTIAL UNCERTAINTY, HIGH TAXES AND HIGH WAGES ARE SEEN BY BELGIAN COMPANIES AS THE BIGGEST OBSTACLES TO HIRING WORKERS WITH PERMANENT, OPEN-ENDED CONTRACTS

(2010-13 period, in % (1))



Source: ESCB (WDN survey).

(1) Weighted results based on employment and sector, according to the structure of the overall business population. Unweighted results for Germany.

(2) Unweighted average results for France, Germany and the Netherlands.

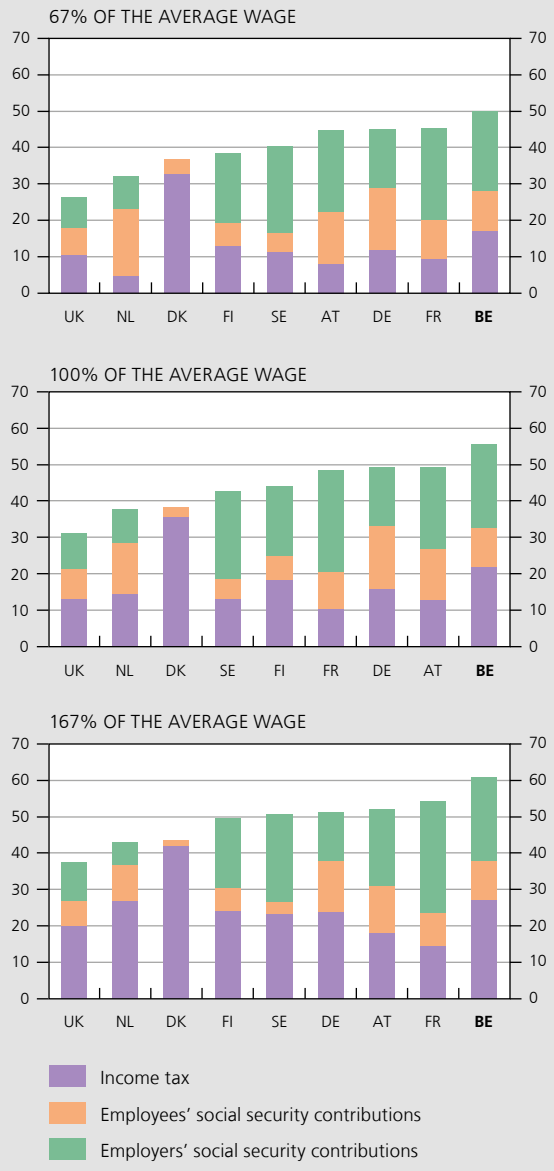
appropriate, as a large percentage of companies take the view that the labour market has become less flexible.

Fiscal and parafiscal wedge higher in Belgium than in the euro area and neighbouring countries

Fiscal and parafiscal pressure on employment – most frequently cited by employers as a relevant or highly relevant hindrance to hiring workers in Belgium – does indeed remain particularly heavy when viewed internationally. The tax wedge, equal to the difference between the labour costs paid by an employer and the net earnings received by the employee, is the largest of any EU country for which data is available, regardless of wage levels. A high tax wedge has a negative influence on the labour supply as it makes working less rewarding, and it undermines demand for labour as hiring and retaining workers is more expensive. Social security contributions are the largest part of labour taxes in Belgium and it is the employers' contributions that provide most of them. They therefore account for a considerable proportion of total labour costs.

CHART 95 BELGIUM HAS LARGEST TAX WEDGE[1] IN EU

(levies on income from labour in % of labour costs for employers, 2014, by wage levels)



Source: EC.

(1) Businesses with at least ten employees. Tax wedge for a single person with no children. This comparison does not take account of wage subsidies.

One of the aims of the tax shift is to reduce employers' social security contributions significantly in the years ahead: employers' actual contributions to social security, including extra reductions for low and average wages, should be brought down from a percentage varying between 19 % and 29 % in 2015 to between 15 % and 25 % by 2018. To that end, additional resources have been added on top of those already set out in the 2014 Pact for Competitiveness, Employment and Recovery and to the amount that was already being used for the 1 % exemption from passing on payroll tax for businesses in the market sector. The planned budget for measures relating to the tax shift that have an impact on wage costs in the business sector totals € 1 389 million (or approximately 1 % of the wage bill) in 2016; by 2020, it will amount to a total reduction of € 3 293 million.

In addition to this, the first hire by SMEs is wholly exempt from social security contributions as from 1 January 2016, and reduced social security contributions apply to the second to sixth employee. Moreover, the partial exemption from passing on payroll tax for night and shift work has been raised with effect from 1 January 2016 from 15.6 % to 22.8 %, with an additional specific exemption for companies producing high-technology products.

However, the tax shift does not only consist of measures designed to enhance businesses' competitiveness by reducing wage costs; it is also intended to widen the labour supply through measures to stimulate purchasing power. Action has been taken to fund this shift. The following box describes a simulation of the macroeconomic impact of these measures.

TABLE 25 TAX SHIFT: OVERVIEW OF MEASURES WITH AN IMPACT ON WAGE COSTS

Instrument	Target group	Year	Mesure
Generic employers' social security contributions	All employers	2016	Rate: 30 % Extra reduction for low and medium wages Lower flat-rate reduction
		2017	–
		2018	Rate: 25 % Extra reduction for low wages Scrapping flat-rate reduction and reduction for high wages
Social security contributions first hire	SMEs	2016	Hiring first worker: no employer's contributions Hiring second to sixth worker: reduced social security contributions, also applies retroactively to employees hired in 2015
		2017	Extra reduction third to sixth worker
		2018	–
Payroll tax exemption	All employers	2016	Structural 1 % payroll tax exemption converted into budget to reduce generic employers' social security contributions
Payroll tax exemption for night and shift work	Companies where night and shift work is carried out	2016	Exemption: 22.8 % of payroll tax instead of 15.6 % in 2015 2.2 percentage points extra for high-tech products

Sources: FPB, NBB.

Box 10 – Macroeconomic impact of the tax shift on the Belgian economy

The federal government decided in 2015 to implement a major tax shift. Phased in over a period from 2015 to the end of 2020, this should primarily reduce fiscal and parafiscal pressure on employment. The tax shift will be funded by raising a number of taxes on consumption, levying additional taxes on income from capital, and increasing several specific company taxes.

The object of the exercise is to create higher growth and additional jobs in the Belgian economy. The chief goal on the demand side of the labour market is a substantial reduction in wage costs by reducing employers' contributions and hence improving the competitiveness of businesses. The more favourable relative price of labour compared with capital, together with increased export demand due to the improvement in Belgian companies' prices compared with those of foreign competitors, should create additional jobs. On the supply side, working will be made more attractive by raising net pay. The boost to household purchasing power will be further intensified by a work bonus for low-paid workers, by an increased funding for the adjustment of social insurance benefits to the standard of living and by adding a number of social corrections, designed to help mitigate the negative consequences of funding the tax shift for weaker members of society. A total of € 11.4 billion in new structural

measures aimed at boosting purchasing power and competitiveness will be taken within the framework of the tax shift, representing 2.2 % of forecast GDP in 2020.

The funding measures required if an excessive burden on the public sector budget is to be avoided tend to curb positive impacts on growth and employment. Taxes on consumption reduce household disposable income and partly cancel out the competitive advantage gained by businesses, as higher prices feed through into higher wages due to automatic index-linking. Taxes on income from capital and a wide range of specific increases in business taxes included in the package of measures will exert upward pressure on bank interest rates and businesses' capital costs, causing them to scale back investment. The total impact of the measures to fund the tax shift is estimated at € 4.8 billion – 0.9 % of forecast GDP in 2020.

Taken together, the purchasing power and competitiveness measures should deliver an initial boost that is € 6.6 billion greater than the initial financing costs. The positive payback effects of the tax shift for the economy will, however, temper the ultimate impact of the tax shift on the government's financing balance.

INITIAL IMPACT OF THE TAX SHIFT ON GOVERNMENT ACCOUNTS

(in € million)

	2015	2016	2017	2018	2019	2020	Cumulative
New measures	1 024	4 407	691	2 237	2 147	1 303	11 449
Purchasing power	883	2 293	331	1 675	1 834	311	7 328
Competitiveness	141	1 754	360	562	313	992	4 121
Funding	915	2 136	885	565	204	127	4 832
VAT and excise duties	368	1 130	400	525	157	67	2 647
Non-labour-related	537	1 011	410	40	47	60	2 105
Other net funding measures	10	–5	75	0	0	0	80
Balance not funded in advance	110	1 911	–194	1 672	1 943	1 176	6 617

Source: NBB.

The table shows the scale and phasing for each year of the amounts relating to the newly introduced measures. The final column indicates the total *ex-ante* estimated costs or gains of all the measures set out under that heading, leaving aside effects arising from changes in behaviour on the part of the economic agents in response to the new measures.

The macroeconomic impact of the complete package of measures on the Belgian economy in the 2015-21 period[(1)] has been estimated using the Bank's econometric quarterly model. This is based on the hypothesis that the real component of hourly labour costs in the private sector will not be renegotiated, compared with the assumed wage trajectory in a baseline scenario without a tax shift. This implies that neither employees nor employers will use the extra scope opened up by the tax shift in terms of competitiveness and purchasing power as an argument for bringing new wage conditions to the negotiating table. Price movements resulting from the package of measures may, by contrast, influence the nominal component of hourly labour costs through the operation of automatic

(1) The NBB paper "Incidence macroéconomique sur l'économie belge du scénario de tax shift élaboré par le Gouvernement" contains further details of the measures incorporated in these calculations. It also describes at greater length the macroeconomic influence exerted both by the overall package of measures and by that of the grouped measures on competitiveness and purchasing power measurement and funding side of the tax shift.

index-linking. The Bank's model does not contain a behavioural equation for the labour supply, which means that reduced taxes on pay in particular do not affect the participation rate.

Only part of the calculated macroeconomic effects can be attributed to the tax shift itself. The remainder is the result of the positive impact of the implicit budgetary stimulus on the Belgian economy, due to the initial deterioration in the primary government budget balance. However, the total effect cannot be split unambiguously between these two elements.

These calculations show that, over a seven-year period, the Belgian economy would receive an additional boost to growth of 1.5 %, and that approximately 64 500 new jobs would be created, although the positive impact would remain fairly modest until 2017.

IMPACT OF THE TAX SHIFT ON THE BELGIAN ECONOMY AFTER SEVEN YEARS, BROKEN DOWN BY SIGNIFICANT TRANSMISSION CHANNELS

(deviation in % from a baseline scenario; cumulative growth differentials, unless otherwise stated)

	New measures			Funding				Balance
	Purchasing power	Competi-tiveness	Total	Indirect taxes	Non-labour-related	Other	Total	
GDP	1.4	1.1	2.4	–0.7	–0.2	0.0	–0.9	1.5
Private consumption	3.7	0.6	4.3	–0.8	–0.2	0.0	–1.1	3.2
Gross fixed capital formation	2.1	1.0	3.1	–0.8	–1.1	0.0	–1.9	1.2
Exports of goods and services	–0.1	1.3	1.3	–0.6	–0.1	0.0	–0.7	0.6
Employment in thousands of persons	44.2	53.2	97.4	–23.5	–9.4	0.0	–32.9	64.5
Nominal labour costs per hour	0.1	–3.9	–3.8	1.2	0.1	0.0	1.3	–2.5
Consumer prices	0.1	–1.8	–1.6	1.8	0.2	0.0	1.9	0.3
Primary balance (in % of GDP)	–0.7	–0.3	–0.9	0.3	0.3	0.0	0.6	–0.3
Public debt (in % of GDP)	3.2	4.0	7.2	–3.5	–2.5	–0.1	–6.1	1.1

Source: BNB.

The competition element of the tax shift in particular is supposed to create a relatively large number of jobs in the long term. This is not only because of the combined effect of the substitution of capital for labour and increased demand for exports, but also because about 20-25 % of the new reductions in employers' contributions are aimed at low wages, which should create more jobs than an identical amount would if spent on linear measures. At the same time, however, when calculating the impact of the tax shift on the Belgian economy, it ought not to be forgotten that jobs created via the competition element are also subject to greater uncertainty. It is obviously important that businesses actually take advantage of reduced labour costs to lower prices. What is more, competitive advantages will diminish and the effects calculated will be partly neutralised if – contrary to the hypothesis used in the calculations – domestic real wages nevertheless experience upward pressure compared with the wage levels used in the baseline scenario, or if foreign competitors themselves lowered their prices.

Lastly, the positive payback effects for the public finances, generated primarily by additional receipts related to extra jobs and reduced spending on unemployment benefits, will reduce the initial budget deficit. The impact on the primary balance, however, will remain negative for the whole of the period considered in these calculations: it

would hit a trough in 2019 and after that the effect would reduce. Still, further funding measures will be needed to achieve the budgetary targets set out in the stability programme. Guaranteeing sustainable public sector finances remains crucial if the budgetary costs of demographic ageing are to be met and buffers built up for the future.

IMPACT OF TAX SHIFT ON BELGIUM'S ECONOMY AND PRIMARY BALANCE

(deviation in % from a baseline scenario; cumulative growth differentials, unless otherwise stated)

	2015	2016	2017	2018	2019	2020	2021
GDP	0.0	0.2	0.5	0.7	1.0	1.3	1.5
Private consumption	0.1	0.5	1.2	1.6	2.2	2.9	3.2
Nominal labour costs per hour	0.0	–0.8	–0.8	–1.2	–1.5	–2.2	–2.5
Consumer prices	0.2	0.5	0.6	0.8	0.7	0.5	0.3
Employment (in thousands of persons)	0.4	6.1	16.3	26.7	38.6	52.5	64.5
Primary balance (in % of GDP)	–0.1	–0.4	–0.1	–0.3	–0.6	–0.4	–0.3
p.m. Balance not funded in advance (in % of GDP)	*0.0*	*–0.5*	*–0.4*	*–0.8*	*–1.1*	*–1.3*	*–1.3*

Source: NBB.

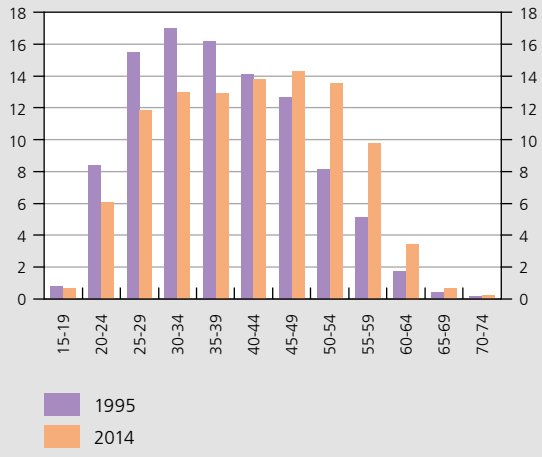
The substantial moderation of real conventional adjustments, the index jump and the tax shift should help reduce growth in labour costs considerably for companies in the private sector and hence diminish the wage gap relative to the neighbouring countries. Moreover, the coalition agreement provides for an adjustment to the Employment and Competitiveness Law to introduce provisions that will prevent the growth of labour costs in the reference countries from being exceeded again, after the existing situation has been rectified. This revision will occur in consultation with the social partners prior to the beginning of the next round of negotiations on collective labour agreements.

Wages heavily influenced by structure of employment

In addition to the heavy tax burden, employers cited high wage levels as an obstacle to hiring. The high level of wages is partly attributable to the high productivity of employees and to the structure of employment. Wage patterns for white-collar workers in Belgium are heavily influenced by an employee's seniority within a company and by their level of education. Most collective labour agreements in which job categories and the corresponding minimum pay for white-collar staff are determined include a pay scale based on seniority; this kind of differentiation is very rare, however, for blue-collar workers.

CHART 96 COMPOSITION OF EMPLOYMENT REVEALS AGEING OF WORKING POPULATION

(by age, in % of total employment)



Source: EC.

For employees aged over 50 in particular, growth in pay related to seniority is stronger in Belgium than in other countries. In the case of blue-collar workers, by contrast, growth in experience-related pay generally accompanies changes in function and hence in pay scale.

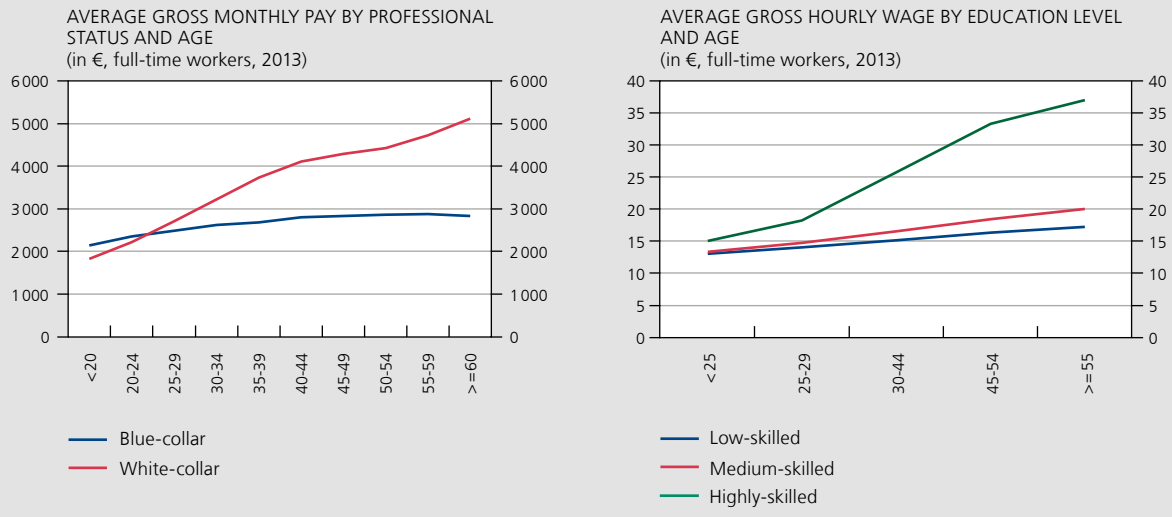
Owing to the ageing of the Belgian workforce, seniority-based pay scales will have a growing impact on wage patterns. Whereas the 30–34-year-old age bracket still accounted for the largest proportion of people in work in 1995, in 2014 it was the 45–49-year-olds. More than a quarter of workers were aged over 50 in the latter year, compared with 15 % in 1995. The ageing of the workforce not only reflects demographic trends in Belgium, but also measures such as stricter early retirement rules that the government has introduced with a view to lengthening working careers. Raising the retirement age further in the years ahead will likely only intensify this phenomenon.

In theory, an employee's productivity initially rises sharply, following which it continues to grow slightly, before levelling off or even falling towards the end of their career. More rapid increases in pay after the age of 55 – probably only rarely matched by the pattern of productivity – undermine the position of these workers in the labour market and make them more expensive for employers. This illustrates yet again that it is crucially important to invest in lifelong learning throughout people's careers to maintain or even increase their employability. It is worth noting, however, that higher pay levels in the statistics above the age of 55 are partially attributable to composition effects, since the composition of employment in terms of education level changes for the oldest age cohorts. The proportion of highly-skilled workers, who earn more than average, increases, while that of the low-skilled shrinks, as the latter often leave the labour market earlier than their highly-skilled counterparts. This is because low-skilled workers tend to start work at a younger age, which means they are entitled to a full pension sooner and likewise qualify at an earlier age for early retirement schemes. The opportunity costs associated with retirement are also lowest for low-skilled staff, as they suffer the smallest loss of income in terms of their pension compared with their previous wage level.

Employment structure and demographic ageing also play an important role in pay patterns in the public sector. This is because civil servants' pay rises with seniority in a similar way as in the private sector, albeit with a few differences. The federal government, for instance, pays a basic salary for more senior positions that is almost always higher than in the private sector. The ratio is reversed at lower levels, basic salaries are, with a few exceptions, lower than in the private sector. Although seniority-related differentials are similar for higher positions to those in the private sector, they are larger in the case of lower-status staff.

It is also the case that pay patterns in Belgium correlate strongly with educational levels. Pay has been rising much more steeply for the highly-skilled than for low- and medium-skilled staff. Demand for medium-skilled jobs has fallen in the last few years – due in particular to technological developments and to the emergence of global value chains – while demand for highly-skilled staff has

CHART 97 SHARP INCREASE IN PAY ACCORDING TO AGE, PARTICULARLY FOR HIGHLY-SKILLED WHITE-COLLAR STAFF (1)



Source : DGS.

(1) Only for companies with more than ten employees. Certain sectors, such as agriculture, fisheries, public administration, education, health care and other personal services were not taken into account.

increased. These social trends are changing the structure of employment in Belgium, which is affecting average wage levels.

Influence of redundancy costs on hiring

According to the employers surveyed for the WDN, obstacles to hiring – in terms of costs – are not just related to labour costs, but are also influenced by redundancy expenses. OECD data show that employment protection rules for temporary contracts and for the individual dismissal of permanent employees were not much stricter in 2013 than on average in the euro area. The specific requirements for collective redundancies, by contrast, were more restrictive in Belgium. Since the harmonisation of blue-collar and white-collar status in 2014, blue-collar staff have enjoyed greater protection, and the trial period has been scrapped. In other words, legislation governing individual redundancies has been tightened up for blue-collar workers in Belgium since 2013. The rules for white-collar staff – particularly those with low high seniority – have, by contrast, been loosened. Over time, this harmonisation ought to reduce the obstacles to mobility between blue-collar and white-collar jobs during an employee's career and, possibly, make technical education more attractive. Moreover, the government's intention, as expressed in the coalition agreement, to simplify company closure and collective redundancies procedures (the Renault Law), in order to obtain shorter procedures that offer greater clarity sooner to the affected company and its employees, could make redundancy rules more flexible.

Supporting the labour supply

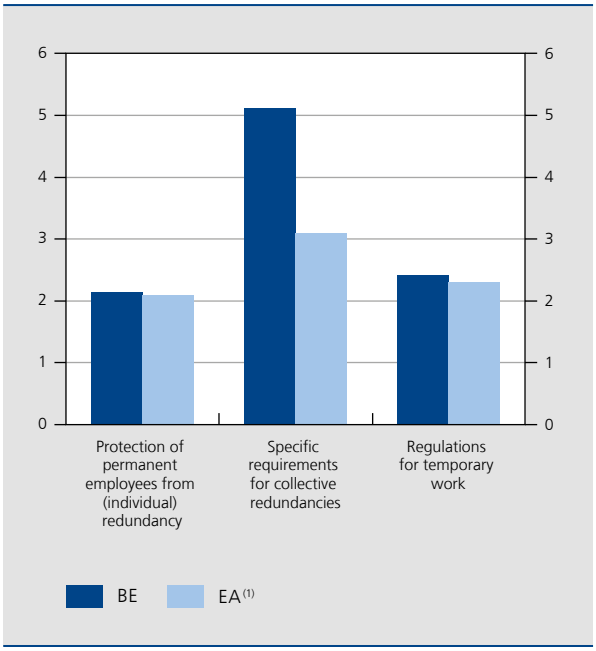
Measures designed to boost demand for labour will not be enough in themselves to raise the employment rate in any lasting way. If they are not accompanied by an increase in supply, the shortage of workers that is already affecting certain functions and regions will grow rapidly. This means not only facilitating access to work in general, through policies such as offering an appropriate financial stimulus, but also concentrating particularly on those groups that are currently the least active in the labour market. The paradigm of the modern labour market relies much more on the development of talent than on selection. Above all, the focus must be on education, guidance and a smoother transition between the different forms of education and the labour market.

Insufficient transition into work

Compared internationally, the transition from unemployment to work is low in Belgium : on average, barely 20 % of unemployed people found a job after one year,

CHART 98 EMPLOYMENT PROTECTION IS MORE STRICTLY REGULATED IN BELGIUM FOR COLLECTIVE REDUNDANCIES

(index figures, scale of 0 to 6, from less to more restrictive, in 2013)

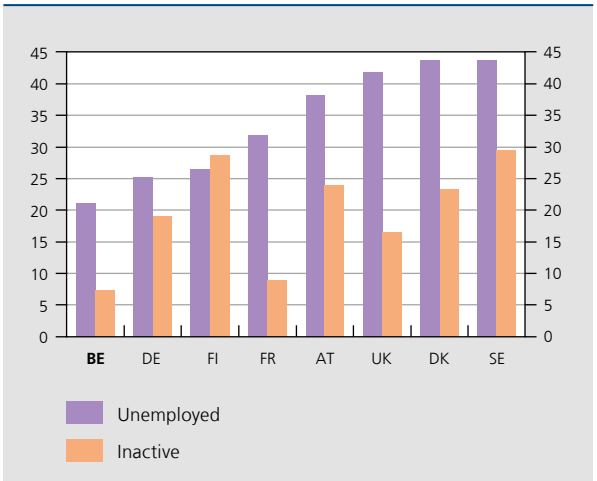


Source : OECD.

(1) Unweighted average. No figures available for Cyprus, Malta, Lithuania and Latvia.

CHART 99 LESS TRANSITION INTO WORK IN BELGIUM

(transition from unemployed or inactive status in 2012 to employed in 2013, in % of initial socio-economic status)



Source : EC.

while this rate is as high as 25 % in Germany, 31 % in France and more than 40 % in Denmark and Sweden – all countries with similar economic situations to that of Belgium.

The federal and regional governments in Belgium have bolstered their activation and guidance measures with a view to shortening the duration of unemployment. Alongside the measures taken by the public employment services to help unemployed people seek work, they have for instance broadened the definition of what constitutes a "suitable position" in terms of the vacancies that unemployed people must consider. There are now also more frequent checks on whether unemployed people are genuinely seeking work. In addition, the degressive nature of unemployment benefits, which was tightened up from the end of 2012, has now come into full force.

Harmonised data suggest that there is far less transition in Belgium from inactivity into employment, especially compared with Germany, Austria and the Nordic countries. There is more part-time work in those countries, and it is more common to have shorter-term employment contracts (temporary work, etc.). Countries where apprenticeships are common, such as Germany, achieve better results in terms of the transition from study to work. Other factors also influence the transition into employment, such as an activation policy offering specific guidance and training. These are discussed at more length later in this chapter.

Stimulating labour market participation by reducing unemployment traps

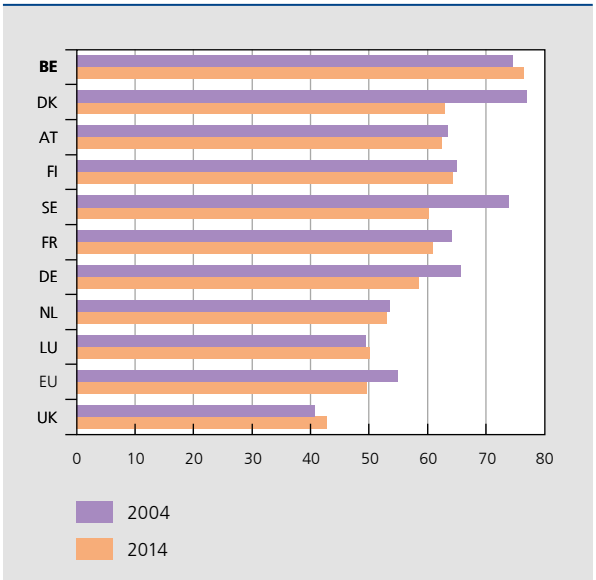
Financial stimuli ought not to be disregarded. The income of those in work must be sufficiently higher than their replacement income, since taking up a job entails certain costs (commuting, child care, etc.) and may lead to the loss of certain advantages enjoyed by benefit recipients, such as higher health care subsidies or access to particular public services.

This dilemma is swiftly solved for most unemployed people, as the individuals concerned have qualifications and skills that command a professional income that is clearly higher than the benefits they receive when they are unemployed or inactive. The financial unemployment trap is a reality, however, for several population groups facing greater difficulties in the labour market. It can be a factor for the low-skilled, for instance, who generally only qualify for low-paid work, above all in the case of a part-time job. In Belgium in 2014, unemployment benefits for people who had a relatively low-paid job (earning 67 % of the average wage) amounted to 76.4 % of the wage earned prior to unemployment, the highest level in the whole of the EU. Although unemployment benefits have been reformed in recent years, Belgium's position has not altered structurally, as the relevant benefits were raised at the beginning of the period of unemployment and made more degressive at the same time.

As part of the tax shift, measures have also been taken with a view to raising the net wages of people in work, particularly for low and mid-level incomes. These have taken the form, for example, of a staged increase in the flat-rate allowance for professional expenses in 2015, 2016 and 2018. The calculation of the tax-free amount has also been adjusted and – with effect from 2020 – only a single tax-free amount will be applied, regardless of income. In addition, the government is proposing the phased integration of the 30 % tax band with the 25 % band (in income year 2016 and income year 2018), and the widening of the 40 % tax band by raising the lower threshold for the 45 % band from € 13 530 to € 13 940 (income year 2018) and then to € 14 330 (income year 2019). Both the social and the fiscal parts of the work bonus were raised on 1 August 2015. Moreover, further increases in the fiscal work bonus (a refundable tax credit) are planned for 2016 and 2019. Net income from work will also rise for the self-employed: as from 2018, they will enjoy reduced social security contributions, equal

CHART 100 RISK OF FINANCIAL UNEMPLOYMENT TRAP[1]

(ratio of net benefits to last net wage, in %)



Source: EC.

(1) Before becoming unemployed, the person in question had a job earning 67 % of the average employee wage. Average situation for six types of household and for five different durations of employment (2, 7, 13, 25 and 60 months), unweighted averages, only taking account of unemployment benefits.

TABLE 26 EMPLOYMENT RATE FOR AT-RISK GROUPS AND 2020 TARGETS COMPARED WITH EUROPEAN AVERAGE

(in % of the corresponding population aged 20 to 64, unless otherwise stated)

	Belgium			EU[1]	
	2015[2]	*p.m. Change since 2000*[3]	2020 target	2015[2]	*p.m. Change since 2000*[3]
Total	67.2	*1.2*	73.2	69.9	*3.4*
Women	62.9	*6.9*	69.1	64.2	*6.9*
Aged up to 30	57.8	*–8.6*		61.3	*–2.3*
Aged 55 and over	43.8	*17.6*	50.0	53.2	*16.3*
Low-skilled	45.6	*–5.2*		52.5	*–2.5*
Difference between Belgian and non-EU citizens[4]	23.1	*n.*	16.5	14.0	*n.*

Source: EC.
(1) EU27 (excluding Croatia); second-quarter data were used for 2000.
(2) Average of the first three quarters.
(3) In percentage points.
(4) The employment rate for non-EU citizens is 45.5 % in Belgium, compared with an average of 56.5 % for the EU.

to the reduced contributions for starters which already apply to them.

Selected target groups require specific measures

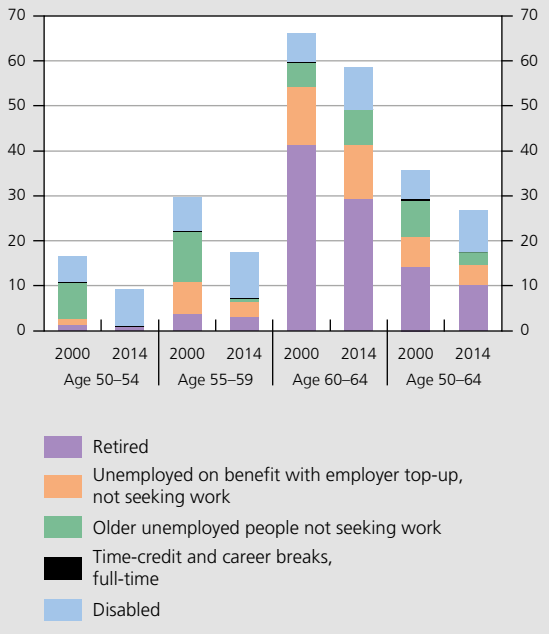
With just over two-thirds of 20-64-year-olds in work, Belgium remains well below the 73.2 % target set for 2020. This situation is attributable to various risk groups, so-called because their employment rate is considerably below the average. Despite an improvement compared with the figures in 2000, the employment rate for women is 1.3 percentage points lower than the European average and that for over-55s 9.4 points lower. The same applies to young people and the low-skilled, for whom the situation has deteriorated faster in Belgium over the past 15 years than in the EU as a whole. The fall in employment among young people is partly due to the larger percentage of students and longer study periods. Among European countries, Belgium has the lowest employment rate for non-EU citizens and the difference in the employment rate between this population group and the country's own citizens is much bigger than the European average. Each of these groups thus requires special attention, particularly in terms of training and tackling discrimination.

Increased labour-market participation by over-50s

While the total population in Belgium continues to grow relatively robustly, the rate at which the working age (15-64) population is growing has been coming down steadily. In 2014, it grew by just 9 000 people, the outflow being offset

CHART 101 DECLINE IN EARLY RETIREMENT FROM THE LABOUR MARKET AMONG 50-64-YEAR-OLDS

(in % of the corresponding population[1])



Sources: DGS-FPB, NIHDI-INAMI-RIZIV, NEO, NPO, PSPS.
(1) Estimated totals, obtained by combining data that do not necessarily relate to the same period. Possible double-counting for mixed careers cannot be ruled out in the data for pensions from 2000. The chart assumes that that proportion of mixed careers in the total number of pensions was equal to that in 2014. For this reason, the total figures are only indicative.

less and less by an inflow of young people from the age of 15. Demographic forecasts suggest that the working age population will actually begin to fall in 2018.

The labour force has grown more strongly than the working age population, due in part to more workers aged 50 and above participating in the job market. Although the number of older people in work is growing, the total number of unemployed job-seekers aged 50 and above also continues to rise. These increases are the result of policy measures intended to exempt fewer unemployed people from seeking work and of increased career length.

In 2014, a total of 27 % of 50–64-year-olds use one or other early retirement scheme prior to the statutory retirement age. Although this percentage remains high, it nevertheless shows a sharp reduction compared with the year 2000, when almost 36 % of 50–64-year-olds opted for one of the different schemes. This decline is noticeable in each age category for this population group, as it is for each of the relevant schemes, with the exception of disability.

The proportion of retired people in the 50-64-year-old category fell from 14.2 % to 10.2 % between 2000 and 2014, due primarily to the raising of the statutory retirement age for women. What is more, the successive reforms carried out since 2011, which include tightening the conditions for access to early retirement, have yet to take full effect.

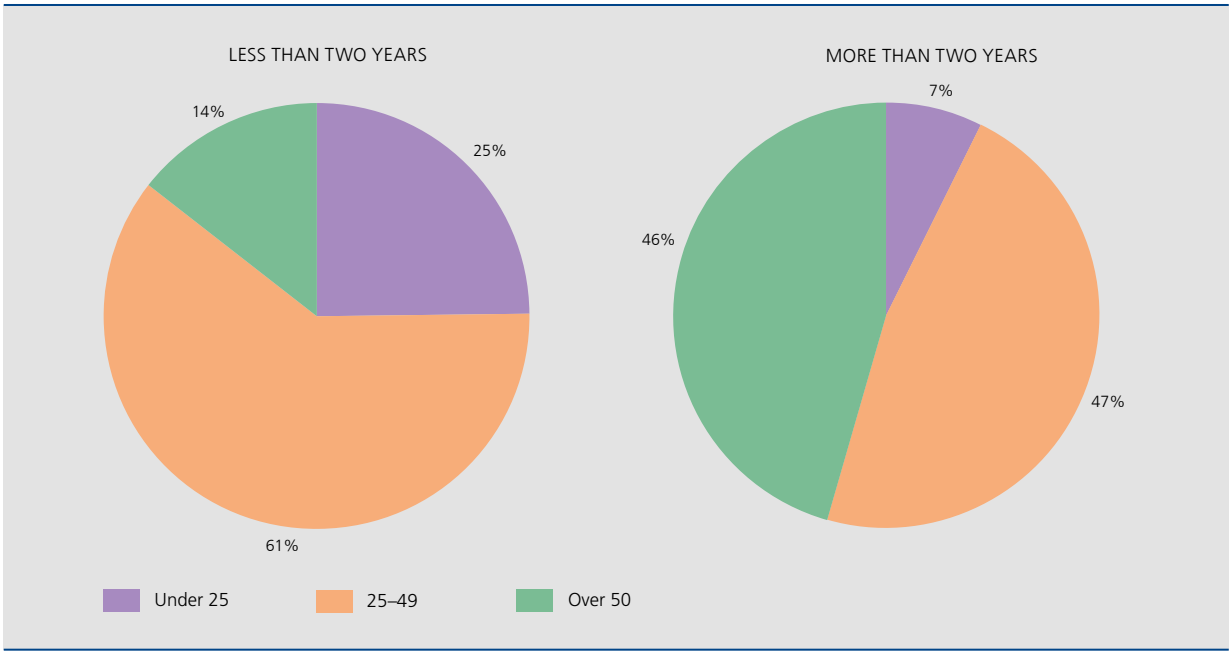
The system of unemployment benefits with employer top-up and exemption from job-seeking – the former pre-pension scheme – has undergone numerous rule changes since 2000, with the age criteria raised and career length conditions tightened. In principle, these benefits can no longer be accessed before the age of 62, although numerous exceptions continue to apply. The age requirement to qualify for the job-seeking exemption linked to the rule has meanwhile been gradually raised to 65. In 2014, this system applied to 3.2 % of 55-59-year-olds and to roughly 12 % of 60-64-year-olds.

The status of older unemployed people not seeking work – which was introduced in 1985 to reduce differences in treatment between redundant older employees qualifying for an early retirement scheme and other employees – had already been frequently modified. While in 2000 this status was still accessible from the age of 50, the minimum age has been raised several times since 2002. From 2015, newly unemployed people remain obliged to seek work until the age of 65: only unemployed people who previously held this status are able to retain it. The proportion of people belonging to this category in 2014 was 0.9 % for 55-59-year-olds and approximately 8 % for 60-64-year-olds.

The increase of over 2.5 percentage points recorded between 2000 and 2014 in the proportion of disabled people in the 50-60-year-old bracket illustrates the need

CHART 102 PEOPLE AGED 50 AND OVER ARE MORE FREQUENTLY AFFECTED BY LONG-TERM UNEMPLOYMENT

(unemployed job-seekers by age and duration, share of the corresponding total, 2015)



Source: NEO.

to closely monitor working conditions, given that people are having longer careers.

Long-term unemployment common among over-50s

The number of job-seekers and the average duration of unemployment are determined in part by the socioeconomic, demographic, regulatory and institutional context. The relative scale of long-term unemployment is an indicator of structural unemployment, which does not fall when there is an upturn in activity. The duration of unemployment can exert a negative influence in itself, as it can reduce the employability of the long-term jobless; their skills gradually atrophy, and they can feel discouraged. The level of structural unemployment in Belgium is partly explained by the rise in the average age of the unemployed, due both to demographic ageing and to the measures taken to encourage unemployed people aged 55 and over to actively seek work.

Lifelong learning increases employability

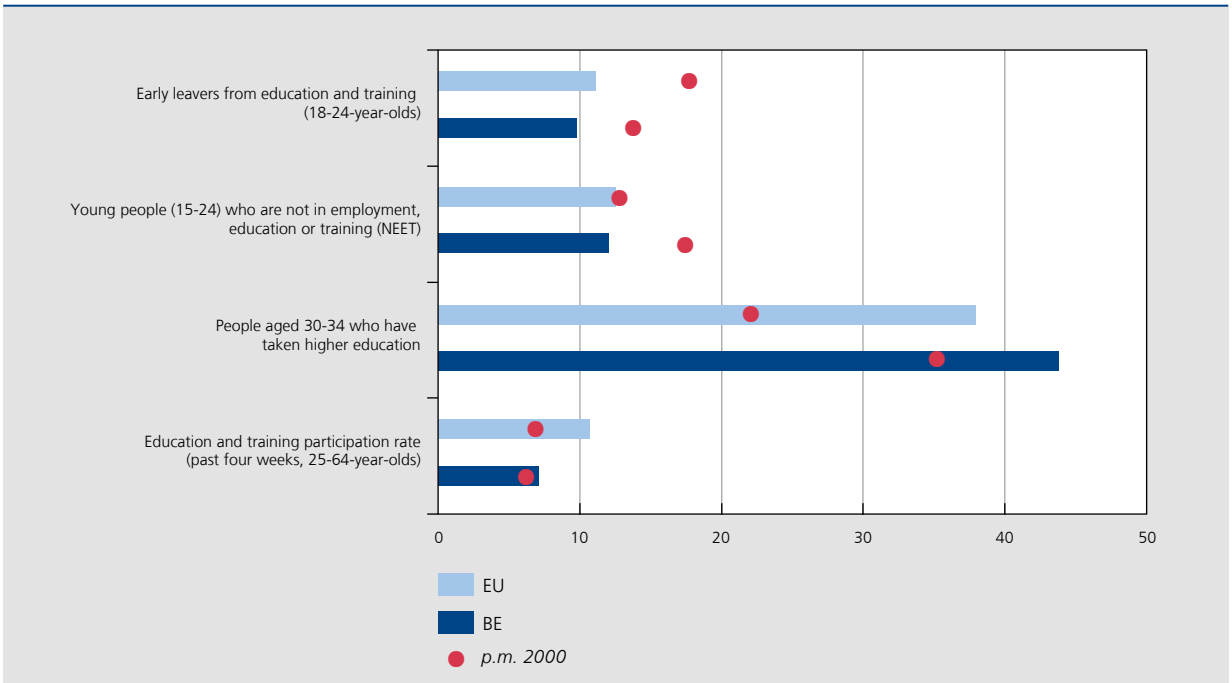
The creation of new activities and jobs is what drives economic dynamism in an increasingly competitive international environment. This dynamism relies in turn on skilled workers who are capable of adapting to a constantly changing society. Lifelong learning is vital in this context, and even more so given the relative ageing of the working-age population – but it is not sufficiently accessible to all groups in society. According to the labour force survey, barely 7 % of workers in 2014 had undertaken any training in the four weeks prior to the survey. The amount of training was especially meagre for low-skilled workers and for employees aged 55 and over, even though these groups would benefit considerably from training: it would enable the former to bring their skills levels into line with the demands of the labour market and the latter to maintain their skills throughout the course of their careers.

Efficient education system enhances entry into the labour market

The speed and quality of young people's entry into the labour market depends primarily on their level of education. In 2014, however, almost one pupil in ten left school without a certificate of higher secondary education or the equivalent. In other words, these youngsters lack the minimum skills required by employers, and which are necessary for lasting integration in the labour market. The percentage of early school leavers has fallen steadily since the year 2000, bringing it close to the 9.5 % target set for 2020, but considerable differences remain between the three Regions. The rate

CHART 103 IMPROVEMENT IN EDUCATION AND TRAINING INDICATORS

(in % of the corresponding population, 2014)



Source: EC.

in Flanders is 7 % and this Region targets a 5.2 % rate for 2020. It is therefore successfully stemming the flow of insufficiently skilled young people into the labour market. This is not the case for Wallonia and Brussels, where the percentage of early school leavers is twice as high.

This indicator does not provide any *de facto* information about socioeconomic status. The percentage of young people neither in employment nor in education and training offers a better illustration of the difficulties youngsters experience in entering the labour market. Belgium's results have improved sharply since 2000, bringing them into line with the EU average. The differences mentioned earlier are visible again at regional level. The unemployment rate among the low-skilled is much higher in Brussels and Wallonia than it is in Flanders. This incurs considerable human and economic costs, both for the community and for the individuals themselves, in terms of budget, activity and income.

To address these difficulties, it is necessary to strengthen the connection between education and employment, to re-evaluate vocational and technical education, and to develop apprenticeships and internships. In 2014, almost 44 % of the Belgian population aged 30-34 held a higher education diploma, with the proportion rising to 50 % for women. However, women were less likely to hold a qualification in the STEM subjects (Science, Technology, Engineering and Mathematics). Yet, STEM graduates are highly sought after by employers and thus able to integrate themselves in the labour market more readily and sustainably. In fact, a lot of 'critical occupations' are in these subject areas, but the proportion of STEM graduates (male and female together) in Belgium was only 16.9 %, compared with 22.9 % in the EU based on the most recently available figures, which date from 2012.

Non-EU citizens still under-represented in the labour market

Labour market policy also needs to pay particular attention to people of non-European origin, mainly because of their low employment rate. It is essential, given the current inflow of asylum-seekers, to ensure that these people are integrated into the labour market. This population group offers a number of advantages; it could, for instance, help alleviate population ageing. After all, while 21 % of the Belgian population is aged between 18 and 34, some 51 % of asylum-seekers fall into this category. Moreover, they appear to be better educated than previous waves of refugees. OECD data for Germany show that 20 % of Syrian asylum-seekers hold a tertiary education diploma, compared with 15 % of all other nationalities together. The large proportion of high-skilled people among Syrian refugees is confirmed by survey data from the Office of the United Nations High Commissioner for Refugees.

TABLE 27 EDUCATION AND TRAINING INDICATORS BY REGION
(in % of the corresponding population, 2014)

	Brussels	Flanders		Wallonia
			2020 target	
Early school leavers (18-24 years)	14.4	7.0	5.2	12.9
NEET (15-24 years)	15.8	9.8		14.7
Higher education graduates (30-34 years)	47.5	44.8	47.8	40.1
Continuous training (25-64 years)	10.0	7.5		5.4

Source: EC.

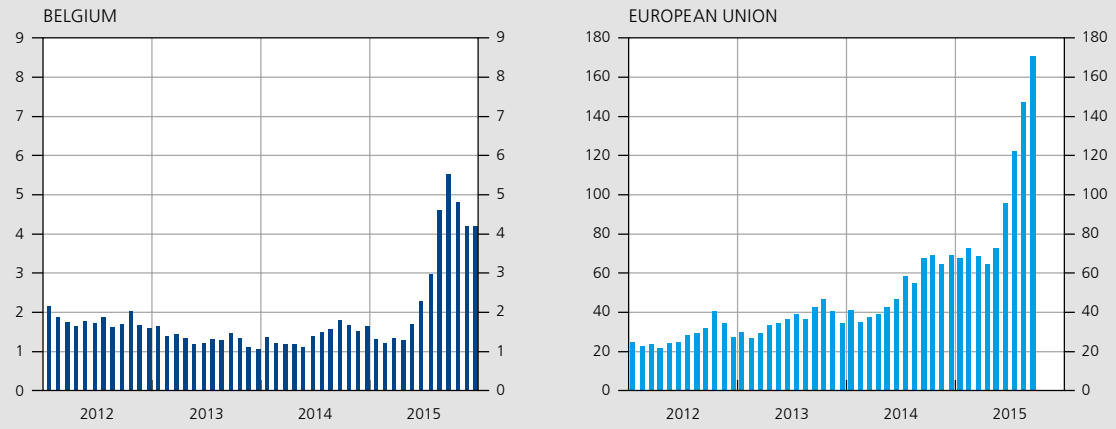
Box 11 – Some statistics on the wave of asylum applications in 2015

A total of 35 476 applications for asylum were registered in Belgium between 1 January and 31 December 2015 – twice the number in 2014. The Office of the Commissioner General for Refugees and Stateless Persons (CGRS) recorded a peak of 5 512 applications in September 2015, which was three times as high as in the same month in 2014.

This sharp increase did not only occur in Belgium. Severe geopolitical tensions and the deterioration in living conditions and security in the countries of origin have caused the number of asylum applications in the EU to rise inexorably since May 2015, reaching 171 000 in September and a total of 883 000 since the beginning of 2015. The number for the EU, too, is twice that for the same period of 2014, with Belgium accounting for 3.1 % of the total number of asylum applications in the EU during the first nine months of 2015, putting it in seventh place for the number of registered asylum-seekers. The first two places were occupied by Germany and Hungary (35 % and 20 % of applicants respectively). In terms of asylum-seekers per capita, Hungary has received the largest number, with 18 per 1 000 residents, followed by Sweden (8), Austria (7) and Germany (4). Belgium occupied seventh place with 2 asylum-seekers per 1 000 residents.

TOTAL NUMBER OF ASYLUM APPLICATIONS IN THE EU

(in thousands)



Source: EC.

To ease pressure on a number of countries, the EU Council approved plans in September 2015 to disperse refugees. A total of 160 000 asylum-seekers from Italy, Greece and Hungary were allocated to other Member States, based on a formula taking account of the characteristics of the receiving country: total population (40 %), GDP (40 %), number of asylum applications in the past (10 %) and unemployment rate (10 %). These criteria would require Belgium to receive 5 928 additional asylum-seekers over the next two years.

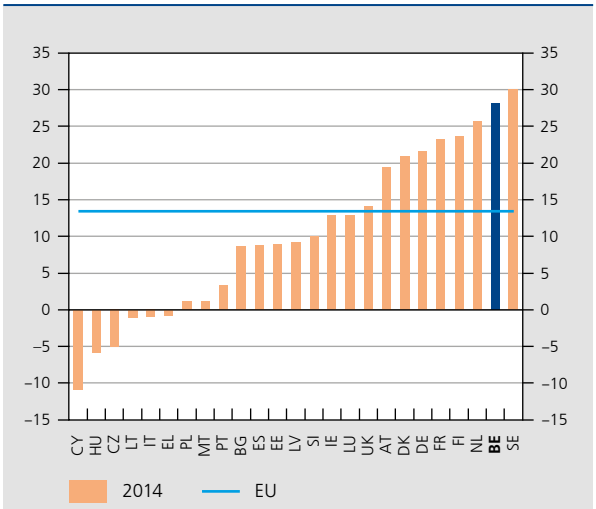
In 2015, the main countries of origin of people seeking asylum in Belgium were Iraq (21.8 % of applications), Syria (21.3 %), Afghanistan (20 %) and Somalia (5.4 %). A worrying element in the recent wave of asylum-seekers is the growing proportion of unaccompanied minors representing 10 % of total applications, with the CGRS registering 3 520 applications in 2015 compared with 531 in 2014.

Despite the higher number of minors, 18–34-year-olds make up the largest age group (51.4 %) among migrants. This age structure contrasts with that of the Belgian population, in which the same category only represents 21.3 %. The relatively young refugee population could therefore be a positive factor, given the relative ageing of the Belgian population. In quantitative terms, however, the scale of this group currently remains limited: the roughly 29 000 asylum-seekers aged 14 to 64 who were received in 2015 account for just 0.4 % of the working-age population and 0.5 % of the working population. Their contribution will depend on factors such as the degree to which they integrate into

society and enter into the labour market. Nevertheless, in Belgium, the participation of people of foreign origin in the labour market is much lower than that of natives – more so than anywhere else in Europe. Combating obstacles to employment for non-EU citizens will therefore be crucial if full use is to be made of the potential of this wave of refugees in terms of employment and economic growth.

INTERNATIONAL COMPARISON OF EMPLOYMENT RATE GAPS BETWEEN NON-IMMIGRANTS AND NON-EU CITIZENS

(in percentage points, working population aged 20 to 64)



Source: EC.

Regional employment and unemployment differentials

At regional level, Flanders differed from Belgium's other two Regions in its higher average employment rate in the first three quarters of 2015: 72 % compared with 61.4 % in Wallonia and 58.5 % in Brussels. It was also the first of the three Regions to set a target for employment in 2020 (76 %).

This is also reflected in the marked differences in unemployment levels between the Regions. Differences were detected within individual Regions as well, with wider gaps between the respective Walloon provinces than between the Flemish ones. The unemployment rate in Flanders was 5.1 %, compared with 12 % in Wallonia and 17.6 % in Brussels. Antwerp was the Flemish province with the highest rate of unemployment, at 6.1 %, which is still considerably less than the lowest unemployment figure in Wallonia, 8.2 % in Walloon Brabant.

TABLE 28 EMPLOYMENT RATE OF RISK GROUPS BY REGION

(in % of the corresponding population aged 20 to 64, unless otherwise stated, averages for the first three quarters of 2015)

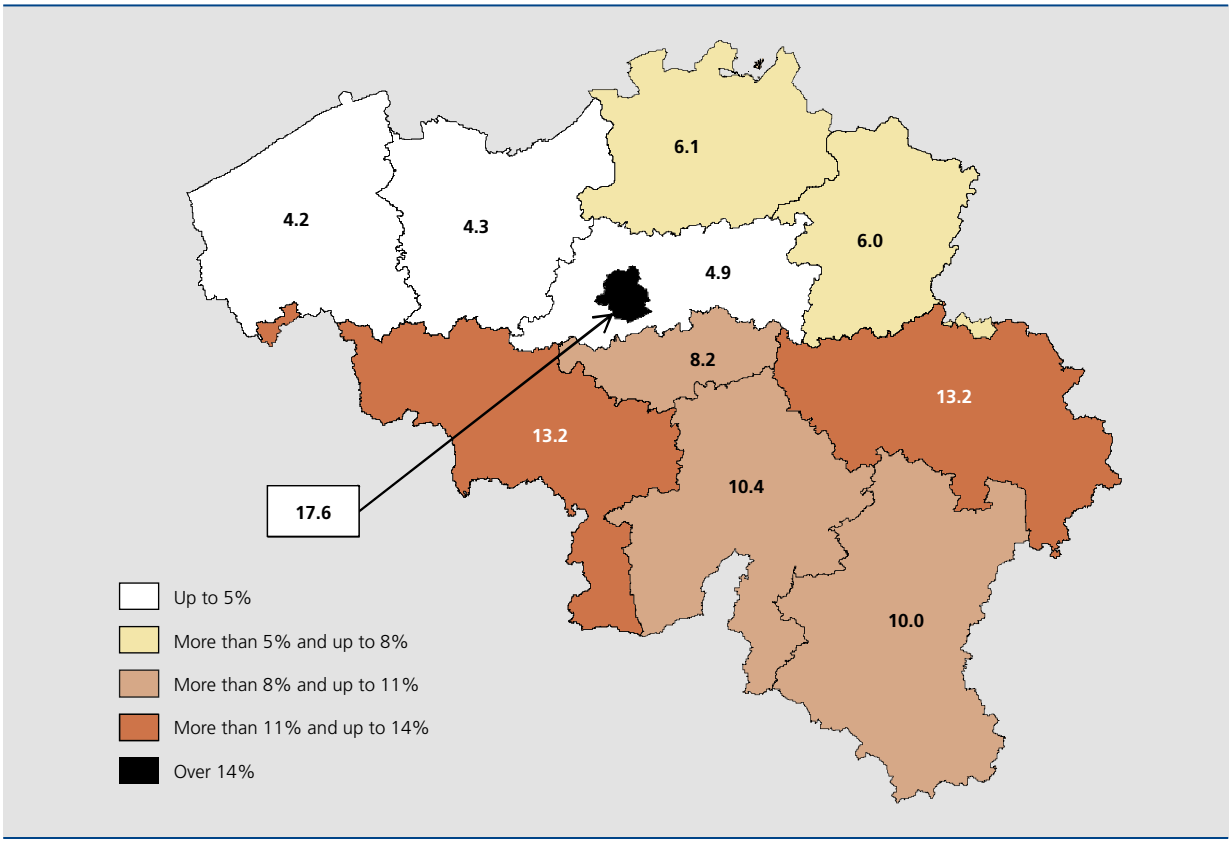
	Brussels	Flanders	Wallonia
Total	58.5	72.0	61.4
Women	52.9	68.3	56.9
Aged up to 30	45.8	65.5	49.4
Aged 55 and over	44.8	45.3	40.8
Low-skilled	41.1	50.4	40.4
Difference between Belgians and non-EU citizens (1)	18.9	20.3	24.5

Source: EC.

(1) The employment rate for non-EU citizens is 40.2 % in Brussels, 52.3 % in Flanders and 38.3 % in Wallonia.

CHART 104 CONSIDERABLE DIFFERENCES IN UNEMPLOYMENT RATES BETWEEN NEIGHBOURING AREAS

(in % of the corresponding labour force aged 15 to 64, averages for the first three quarters of 2015)



Source: DGS.

These regional differences highlight possible hindrances to geographical mobility in Belgium. Large numbers of Walloon and Flemish commuters travel into Brussels every day and an increasing number of Brussels residents work outside their Region; but mobility between the two other Regions is much lower, even between neighbouring provinces. The first factor that might explain this phenomenon is the language barrier and a second possible explanation is that the lowest-skilled unemployed generally gain less financial benefit from accepting a job far from home than more highly skilled job-seekers do. The regional public employment services have been increasing their efforts to exchange vacancies for some years now, and they are collaborating more intensively to organise language courses.

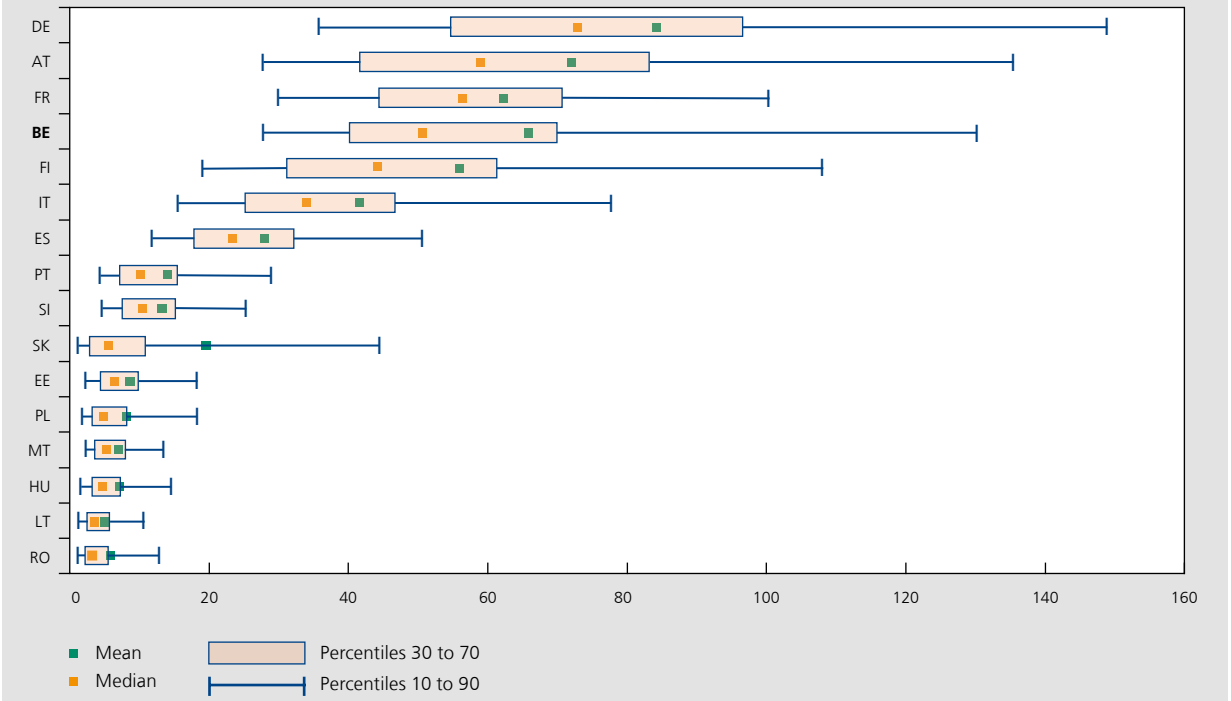
5.3 Imbuing the Belgian economy with greater vitality and resilience

To bolster growth potential and enhance productivity, Belgium needs to encourage an entrepreneurial mind-set and innovation, and remove factors that stand in the way of creating companies and access to the markets. After all, the economy is a dynamic process. In the rather longer term, the key drivers of income creation are both the development of existing companies – particularly as part of global added value chains – and churning, with new companies, new products and/or new production processes taking the place of others. These dynamics will be able to keep ticking over smoothly if administrative, legal and tax barriers are broken down, an effective and transparent regulatory framework is in place, and financial intermediation operates efficiently.

International productivity comparisons generally put Belgium at the top of the league table. In fact, some Belgian companies actually push the technological frontier and rank among the most efficient in their industries. However, such first-class companies' superior performances mask highly diverging results, as business productivity shows a strongly asymmetrical distribution in most countries. For example, Belgium's 10% of companies

CHART 105 BELGIAN COMPANIES AMONG THE MOST EFFICIENT IN EUROPE

(apparent labour productivity[1], in € thousands)



Source: CompNet.

(1) Results based on individual data for companies with 20 or more employees, in manufacturing industry and market services (NACE 2008 branches C to N, with the exception of branches D and E). Averages of the various moments of the distribution of apparent labour productivity assessed at the level of NACE 2-digit sectors of activity over the 2003-07 period. Data on the 2011-13 period for Belgium confirm the very asymmetrical and highly heterogeneous nature of the productivity distribution of its companies. Data not available for the other countries.

with productivity levels among the highest in Europe have a counterpoint in huge numbers of companies – nearly 70 % – with results below, and sometimes far below, the average in their sectors.

The most efficient companies – i.e. the ones in the top 30 percentiles of productivity distribution – typically also prove the most strongly integrated in global value chains. These exporters/importers of goods or services and/or subsidiaries of multinational corporations are key players in the market because of the international trade they generate and as drivers of technology diffusion. In 2013, they accounted for only 10 % of the companies registered with the Bank's Central Balance Sheet Office, but contributed 71 % of the added value and 65 % of employment.

Productivity levels influence both participation in value chains and the degree to which companies are integrated in their domestic components. The more productive a company exclusively focused on the domestic markets, the better it will fit into the domestic processing phases at an earlier stage than – but close to – export companies. As a result, it should benefit from global demand as much as from technological transfers holding out opportunities to push at the frontiers of efficiency.

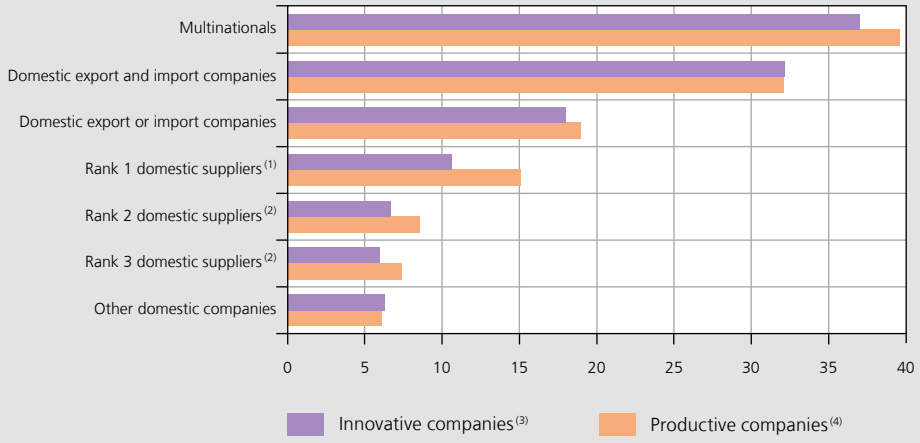
Belgian companies' generally high productivity levels cannot disguise the fact that productivity has hardly budged in the past couple of years. Achieving higher levels of productivity growth is possible both by enhancing productivity gains in existing companies and by encouraging the creation of new and promising companies.

Raising productivity by encouraging research and innovation ...

Although many aspects – improving the quality of production factors, say, or making management more efficient – can boost internal productivity growth, it is investment in intangibles, and R&D spending in particular, that makes the difference. At this juncture, however, such investment

CHART 106 COMPANIES INTEGRATED INTO GLOBAL VALUE CHAINS ARE MORE PRODUCTIVE AND INNOVATIVE

(in % of population, 2013)



Source: NBB, based on individual data provided by the Central Balance Sheet Office, foreign trade and the balance of payments.

(1) A rank 1 supplier is a domestic company that supplies intermediate inputs or provides services to at least one export company or multinational.

(2) A rank i supplier is a domestic company that supplies intermediate inputs or provides services to at least one rank i-1 supplier.

(3) A company is considered innovative if it invested in intangible assets in 2012 and/or 2013, e.g. R&D, concessions, patents, licences, know-how, trademarks and related rights, or in goodwill.

(4) A company is considered very productive if its apparent labour productivity is in the top 30 percentile of productivity distribution.

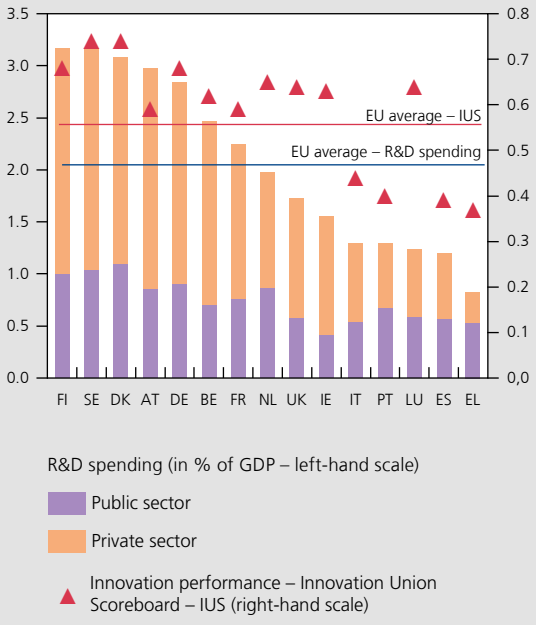
is typically concentrated in companies that are already highly productive and that want to stay at the top of their technological game. The challenge is to get more companies to make these types of investment and to get them more focused on innovation.

In Belgium, a lot is already happening in this arena. A great many fiscal or parafiscal benefits are in place, such as an 80 % tax deduction on income from patents and partial exemption from payroll tax for researchers, making Belgium relatively competitive. The country's three Regions have each developed their own innovation policies, for instance by reducing administrative burdens and simplifying government aid procedures, but also by designing investment programmes to favour innovative economic clusters. Belgium's R&D spending as a percentage of GDP may be above the EU average, but it still lags the 3 % target agreed in the country's Europe 2020 strategy. Over two-thirds of research and development is carried out by the private sector, while the government's financial resources earmarked for R&D remain below those in the three neighbouring countries.

In the private sector, it tends to be the bigger enterprises that give priority to R&D. In 2012, 7.9 % of innovative companies in Belgium – regardless of whether they launched new products, developed new production processes or introduced innovations in marketing or organisation – belonged to companies with head offices

CHART 107 R&D INVESTMENT AND INNOVATION PERFORMANCE ABOVE EUROPEAN AVERAGE

(2014)



Sources: EC (IUS) and Eurostat.

outside Belgium, compared with an average 3.7 % in the EU and 3.6 % in Belgium's three neighbouring countries. In addition, R&D spending is typically focused in selected sectors, such as pharmaceuticals and chemicals. The pharmaceuticals sector, for one, has greatly increased its share of R&D in the private sector in recent years, to 31 % in 2011 (from 25 % in 2005). Services, particularly in information and communication technology, also saw their share go up, to 21 % in 2011 (compared with 17 % in 2005), pushing down the relative shares of research and development in other sectors of industry, such as the manufacture of electronic and computer equipment.

The European Innovation Union Scoreboard (IUS) continues to rank Belgium among the so-called innovation followers, performing above the average in the EU, but below the leading innovators. The chart captures a broader perspective of innovation than just R&D and presents an overview of the innovation ecosystem, a nexus of complex links between, among other factors, human capital, access to finance, investment, intellectual property and regulatory frameworks.

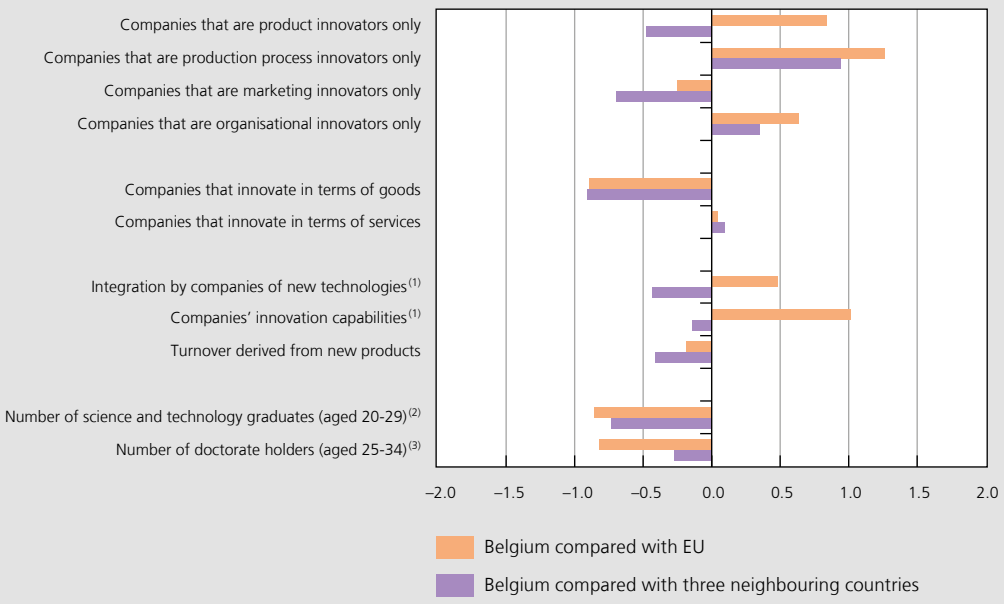
Belgium does well on the numbers of people who have completed higher education, but despite this European recognition for the country's education system, the number of science and technology graduates is lagging behind. As they are often crucial players in the innovation process, this could put a brake on the development of ideas and new technologies. Belgium's research system may have expanded strongly, but there is still scope for improvement in terms of access to funding and the diffusion of innovation effects across the broader economy. In fact, the innovation process often gets stuck at the design stage and fails to be taken to the next level in terms of developing new products.

Business productivity growth is not merely a product of spending in R&D or other intangible assets; it implies optimum diffusion of technology trends. Companies integrated in global value chains, and more particularly multinationals, are key to the spread of innovations, as R&D and innovations developed in international groups will typically be dispersed to all of their entities irrespective of their locations.

On top of this direct impact in multinational group companies, spillover effects may reach domestic companies earlier in the chain. Belgian companies enjoying direct relationships with multinationals show a smaller productivity

CHART 108 INNOVATION IN BELGIUM: PROCESS IMPROVEMENT BEFORE NEW PRODUCTS

(normalised standard deviations between Belgium and its reference group; 2012, unless stated otherwise)



Sources: Eurostat (CIS) and World Economic Forum (WEF).
(1) 2015 results.
(2) 2011-12 averages.
(3) 2011 results.

TABLE 29 PRODUCTIVITY GAPS BY CLOSENESS TO MULTINATIONAL COMPANIES[1]

(in %, average in 2006-2013 period)

	Difference in productivity levels compared with multinationals	Difference in productivity growth relative to multinationals
Rank 1[2] suppliers	–27.6	1.5
Rank 2[3] suppliers	–35.9	–1.7
Rank 3[3] suppliers	–45.3	–4.1
Other domestic companies	–44.4	–4.6

Source: NBB.

(1) Any company at least 10 %-owned by foreign investors.

(2) A rank 1 domestic supplier is a company that supplies intermediate inputs or services to at least one multinational.

(3) A rank i domestic supplier is a company that supplies intermediate inputs or services to at least one Rank i – 1 supplier.

gap (–28 %) than those that are further removed from these multinationals (–45 %). Their closeness also helps improve their total factor productivity (TFP) faster than multinationals and enables them to catch up with these.

... by better integrating information and communication technology ...

Yet another source of internal productivity growth is increased integration of new information and communication technology (ICT) in production and distribution processes. Like most of its European peers, Belgium has yet to fully leverage new possibilities and opportunities; and this is especially the case with its SMEs.

Belgium now faces the twin challenge of encouraging and keeping up to date its digital infrastructure, and better leveraging elements already in place. ICT's share of the added value remains lower in Belgium than in its three neighbouring countries, the OECD average and the United States. And ICT needs to be integrated into other sectors of the economy, as there are more profits to be earned by using technology than by developing it.

In the most recent 2014-15 period, the percentage of Belgian companies selling their products and/or services online (24 %) exceeded the EU average (16 %) as well as the average in the three neighbouring countries (17.6 %). By contrast, the number of companies buying online (18.5 %) fell below the EU average (22.5 %) and that for the neighbouring countries (25.7 %). These commercial online activities have pushed e-commerce's proportion of overall turnover to 15 %, close to the European average. However, e-commerce in Belgium is constrained by a range of regulatory conditions that do not affect its neighbours, and the end-2015 agreement on the legal framework for night and shift work in e-commerce should benefit trade and distribution, and help Belgium catch up.

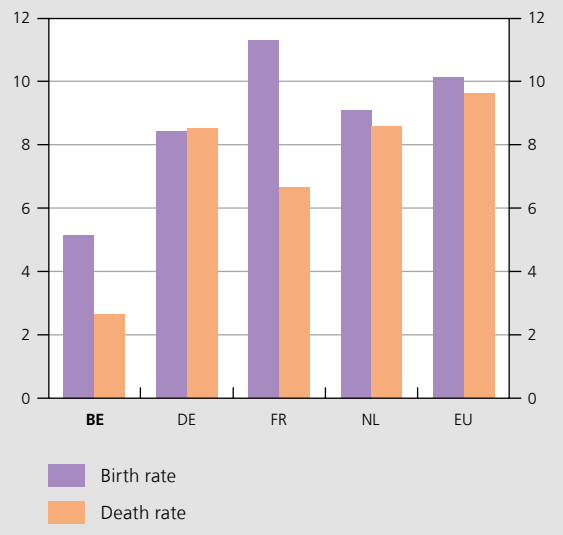
... and by efficiently allocating resources

Enhancing companies' internal performance is one way of boosting a country's average productivity levels; the other is business creation and closure dynamics. An economy running at its full potential will see the least productive companies go under and so free up resources (physical capital, labour and/or financial resources), boosting the expansion of existing players and creating fertile ground for new companies with better growth prospects to emerge.

The recent crisis caused the collapse of many a company in Belgium, and to re-energise the country's productive network new companies will need to be created, preferably players with high growth potential. This is a challenge, as Belgium has been known for years for its low number of new businesses; in this arena it lags behind its three neighbouring countries and even the broader EU. Statistics on company demographics reveal that the new business creation ratio in Belgium – an average 5.2 % in the 2010-12 period – is well below these two reference areas, i.e. 9.6 % in the neighbouring countries and an average 10.1 % in the EU. At the same time, company closure rates are also significantly lower in Belgium and make

CHART 109 BUSINESS CREATION AND CLOSURE RELATIVELY LOW IN BELGIUM

(in % of the number of active companies, 2010-12 averages)



Source: EC.

for very weak rotation in its population of companies. All that said, Belgium did see the net number of companies grow by 2.1 % in the period and so beat the EU average (1.5 %). More recent data for Belgium only would seem to suggest that business creation dynamics have somewhat improved in the past two years.

However, these negative observations on gross business creation numbers require some qualification: though relatively low in numbers in Belgium, these would appear to be of a higher quality than in the main neighbouring countries.

New companies can be broken down into two main categories depending on their long-term growth potential. The first category – necessity- or opportunity-driven entrepreneurship – comprises people creating their own jobs (retail, self-employed, the liberal professions, etc.) or seeing the creation of their company as a way to earn a living or generate an income. The second category – entrepreneurship focused on growth – comprises people aiming to develop an economic project generating wealth and employment beyond their primary need to secure their livelihoods. A sample of Belgian companies created in the past two decades shows examples of both profiles, as not even 27 % of these new players saw their turnover make significant strides in the first five years of their existence – 29 % if only SMEs are considered – while 32 % sustained or reduced their activity levels. Belgium's potential high-growth players are slightly more strongly represented in manufacturing and construction.

Contributions made by necessity- or opportunity-driven entrepreneurs should not be dismissed, of course, but ultimately it is growth-driven entrepreneurs that are likely to spark buoyant TFP and employment growth, provided they are not greatly discouraged either at the start or at a later stage of their development. Compared with the situation in Belgium's three neighbouring countries and in the EU, this latter category accounts for a bigger proportion of the population of Belgian entrepreneurs. Surveys conducted by Global Entrepreneurship Monitor (GEM) revealed a higher number of growth-driven entrepreneurs in Belgium, except at the peak of the recent economic crisis when reduced employment opportunities in both private and public sectors may have encouraged more people to start their own business. What is more, Belgium's growth-driven entrepreneurs are much more focused on developing and exporting new products than their counterparts in its neighbouring countries.

Both types of entrepreneurship can run into a range of obstacles. Whereas regulatory barriers may hinder market entry for entrepreneurs driven by necessity or opportunity (rules about starting a retail business, say, or entry barriers to selected professions), growth-focused entrepreneurs undoubtedly face greater funding issues. Banks may have recently loosened their bank lending conditions for companies, but venture capital remains very hard to come by.

TABLE 30 GROWTH PROFILE, AFTER FIVE YEARS, OF COMPANIES CREATED BETWEEN 1996 AND 2010

(in % of number of companies created)

	p.m. Share of total at time of creation	Five years after creation			
		Closed	Zombie [1]	Stable [2]	Significant growth [3]
Total		41.5	3.5	28.2	26.9
Breakdown by initial size [4]					
Small	*58*	48.3	0.7	22.8	28.1
Medium-sized	*31*	33.3	6.9	28.5	31.4
Large	*10*	27.9	8.4	57.6	6.1
Breakdown by sector					
Industry	*6*	34.6	2.1	34.5	28.7
Construction	*16*	36.9	2.7	27.0	33.4
Market services	*78*	43.3	3.7	28.1	24.8

Source: NBB, based on VAT returns and data from the Crossroads Bank for Enterprises.

(1) A zombie company is one with turnover in its fifth year of business at least two deciles lower than at the outset of operations.

(2) A company is rated as stable if its turnover in its fifth year of business is in the same decile – or one notch up or down – as at the outset of operations.

(3) A company is considered to stage significant growth if its turnover in its fifth year of business is at least two deciles higher than at the outset of operations. In construction, a company cannot be classified as staging significant growth if it ranked in the top two deciles at the outset.

(4) A company is considered small if its turnover in its first year of business is in the lowest three deciles of that year; it is considered large if its initial turnover is in the top three deciles.

TABLE 31 ENTREPRENEURSHIP POTENTIALLY GENERATING MORE GROWTH

(in % of total new entrepreneurs[1])

	Necessity or opportunity	Growth
2008		
Belgium	55.4	44.7
Neighbouring countries	76.0	24.0
EU average	79.6	40.4
2011		
Belgium	82.9	17.2
Neighbouring countries	76.8	23.2
EU average	71.8	28.3
2014		
Belgium	73.8	26.2
Neighbouring countries	83.0	17.0
EU average	70.7	29.3

Source: Global Entrepreneurship Monitor.

(1) Entrepreneurs starting a business or running a business that is no more than three-and-a-half years old.

According to OECD figures, Belgium invested 0.028 % of GDP in venture capital in 2014, just above the EU15 average, but the amount of funding that goes into early-stage projects – e.g. start-ups – is below the EU15 average and invested amounts have stalled at below pre-crisis levels. To improve access to this type of funding, the federal government launched a tax shelter mechanism for start-ups in the year under review, particularly aimed at innovative SMEs.

Cultural factors also influence the dynamics of both types of entrepreneurship. Belgium's cultural conditions are less conducive to business creation than the average in Europe, with a greater fear of failure and risk aversion often cited as impediments when establishing companies in Belgium. By contrast, Belgium puts few objective obstacles or red tape in the way of the budding entrepreneur. From a rather longer-term perspective, the country would do well to pursue education policies that encourage student creativity and reward an entrepreneurial mind-set, for the benefit of both individuals and society at large. Policy measures to help bankrupt entrepreneurs' transition to a new occupational activity might tempt greater numbers of aspiring entrepreneurs to flesh out their projects.

A growth-promoting framework requires high-quality infrastructure ...

In addition to intangible capital, physical transport and communications infrastructure is of course also crucially important for any country to foster its economic potential, to earn and keep its place in the globalised economy and to make it more attractive for foreign direct investment (FDI). It also helps to ensure an efficient economy by facilitating labour mobility and physical and information flows.

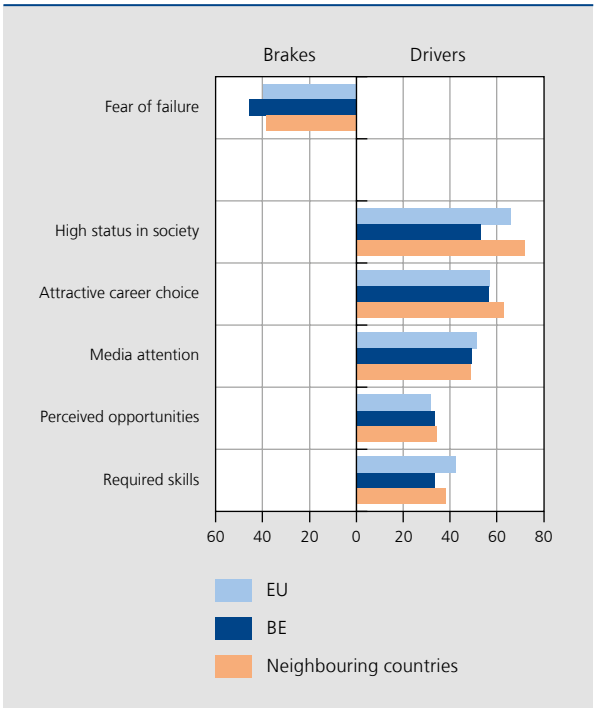
A key contributor to the Belgian economy, logistics is supported by a port infrastructure – which is among the best performing in the EU – and by the country's geographical position in the middle of a hinterland of various key centres. Belgium ranked third in the World Bank's 2014 Logistics Performance Index, after Germany and the Netherlands, and it is also among the European leaders in terms of transport infrastructure density (road, rail and waterways).

But this superior infrastructure is deteriorating, particularly the country's roads, which are facing serious congestion, especially in and around the large conurbations and not least because taxation favours car use.

INRIX's report, which is based on observations of real-time average speeds and traffic volumes in major conurbations in particular, notes that Belgium is the most congested country in Europe; three of its cities – Brussels, Antwerp

CHART 110 CULTURAL FACTORS IN THE WAY OF BUSINESS CREATION

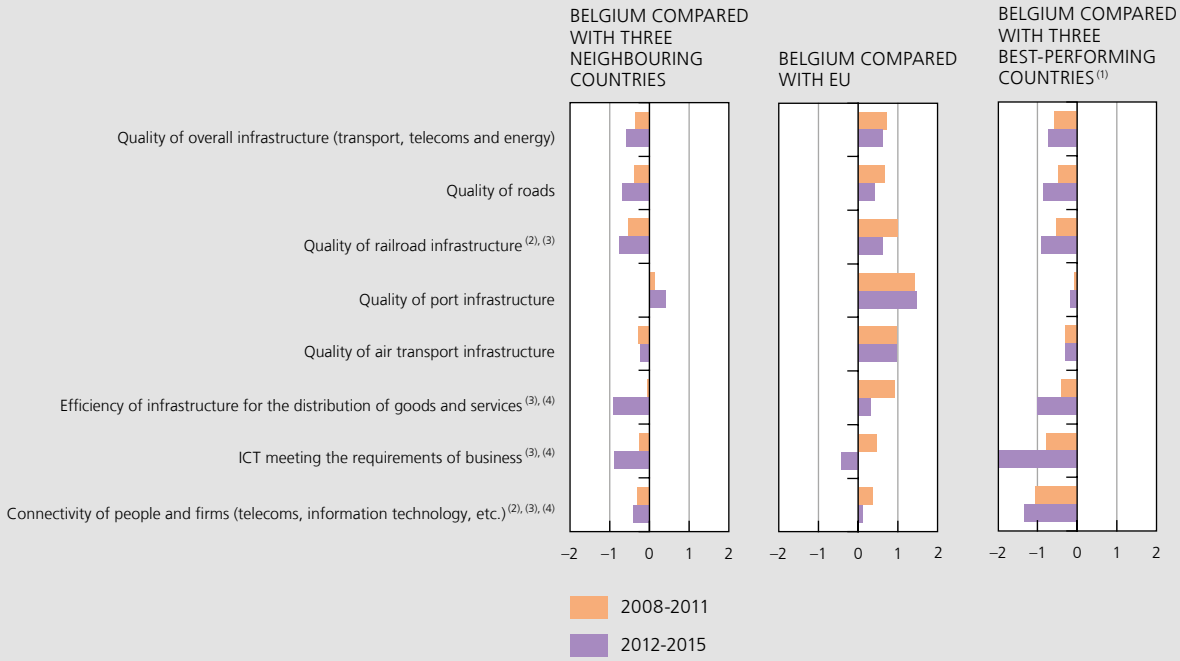
(in % of 18-64 age bracket, average in the 2012-14 period)



Source: Global Entrepreneurship Monitor.

CHART 111 BELGIAN TRANSPORT INFRASTRUCTURE GETTING WORSE

(normalised standard deviations between Belgium and its reference group)



Sources: IMD, Global Competitiveness Report (WEF).

(1) Selection of the three best performing countries based on the average in the years under review, by indicator.

(2) Data for 2010 and 2011, and not for the 2008-11 period.

(3) EU excluding Cyprus and Malta.

(4) Data for Latvia only pertain to the 2013-15 period.

and Ghent – made it to the Top 10 of most traffic-jam-prone European cities in 2014. Investment in transport infrastructure should not merely emphasise closer integration of the various transport resources (roads, rail and inland waterways) and more complementarity between them, but should also find solutions to bottlenecks in the system. Such spending should also take account of global ecological considerations and promote modes of transport that impact less on the environment. In fact, environmental considerations should be extended beyond transport to encourage environmentally friendly production practices and responsible behaviour across the board. This will require efficient coordination between the various entities of the State.

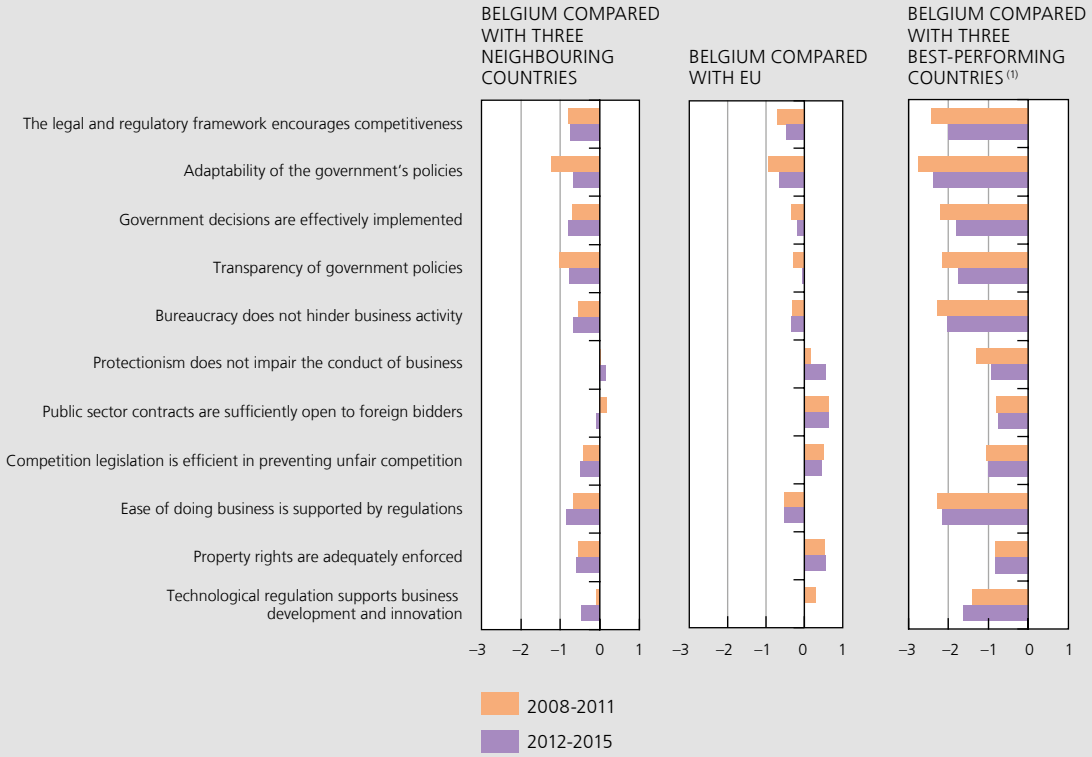
... a suitable regulatory framework ...

Appropriate regulation is equally important to an efficiently-run economy. If excessive, it nips in the bud the rise of new players, promotes the continued existence of poorly performing companies and slows TFP growth. However, improving economic efficiency should never be the only criterion by which to judge a regulatory framework, and specifically not at the expense of failing to protect consumers and/or the environment. Similarly, market imperfections may call for a rigorous regulatory framework, as the absence of rules and regulations could cause companies to undermine the public interest by not taking account of the negative externalities caused by their operations. OECD indicators on regulation suggest that the rules governing product markets – which might depress economic efficiency – are generally agreed to be less heavy-handed in Belgium, as well as in its neighbouring countries and in the other countries of the EU.

Nonetheless, there are some notable differences between Belgium's performance and that of its three neighbouring countries. The legal and regulatory framework, the adaptability of government policy, bureaucracy and the efficiency of doing business all leave room for improvement in Belgium. It is worth noting that the sixth State reform transferred some of these powers – e.g. access to selected professions – to the Regions, and that diverging regulatory developments might hinder the growth of economic activity, especially for companies active in more than one of Belgium's three Regions.

CHART 112 GOVERNMENT POLICIES AND LEGAL AND REGULATORY FRAMEWORK NEED TO BE BETTER ALIGNED TO COMPETITIVE CHALLENGES

(indicators for regulation and market functioning, normalised standard deviation between Belgium and its reference group)



Source : IMD.

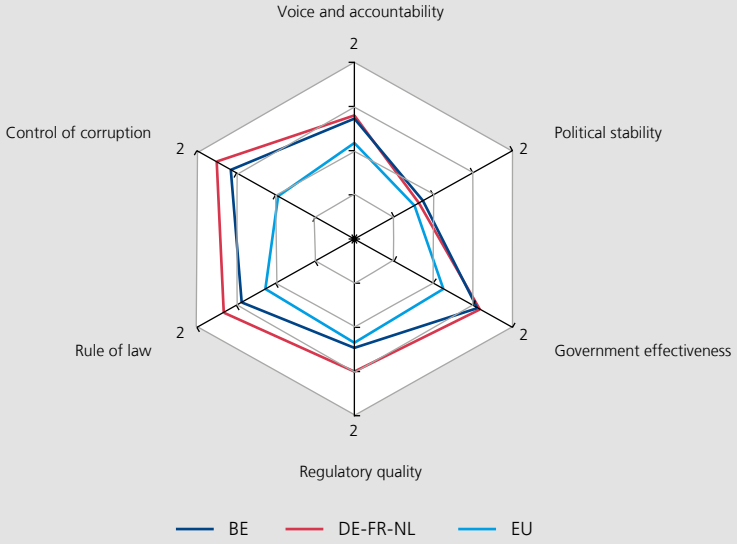
(1) Selection of the three best performing countries based on the average in the years under review, by indicator.

... and robust governance on the part of the government

In addition to appropriate regulation, a sound economy also benefits from the confidence business and private individuals have in their government and the country's institutions. The World Bank's Worldwide Governance Indicators have shown such confidence to have been higher for Belgium than the EU average for many years. Some indicators nevertheless point to less favourable conditions in Belgium than in its three neighbouring countries, particularly in the government's ability to enforce rules and policy measures that foster the development of the private sector as well as the rule of law – e.g. intractably slow legal procedures.

CHART 113 SOME ASPECTS OF GOVERNMENT GOVERNANCE SCORED AS LESS FAVOURABLE IN BELGIUM THAN IN NEIGHBOURING COUNTRIES[1]

(averages in 2011-14)



Source: World Bank.

(1) High values reflect good governance scores.

(2) "Voice and accountability" captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

(3) "Government effectiveness" captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

(4) "Regulatory quality" captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.