REPORT 2018

Economic and financial developments

NationalBank OF BELGIUM
Eurosystem

Economic and financial developments

1. Global economy and euro area

1.1 Divergent picture in the various economic regions owing to higher risks and uncertainties

The global economy maintained its robust growth in 2018. However, mounting risks and uncertainties affected economic activity to varying degrees in several countries, so that the expansion was geographically less uniformly distributed. While growth lost momentum in most of the advanced economies, it gathered strength in the United States, supported by an expansionary fiscal policy. The emerging economies likewise experienced divergent developments. The oil-exporting countries benefited from a further rise in prices on the international markets, while growth was maintained at a steady pace in India and China. Conversely, activity slowed in some oil-importing countries with sizeable internal and external imbalances, which came under pressure from the financial markets. In that context, international

Table 1

GDP of the main economies

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

				p.m. Contribution to global GDP growth	*p.m. Share of global GDP*[1]
	2016	**2017**	**2018**	***2018***	
Advanced economies	1.7	2.4	2.3	*1.0*	*40.8*
of which:					
United States	1.6	2.2	2.9	*0.4*	*15.2*
Japan	1.0	1.9	0.9	*0.0*	*4.2*
Euro area	2.0	2.4	1.9	*0.2*	*11.4*
United Kingdom	1.8	1.8	1.4	*0.0*	*2.2*
Emerging economies	4.4	4.7	4.6	*2.7*	*59.2*
of which:					
China	6.7	6.9	6.6	*1.2*	*18.7*
India	7.1	6.7	7.3	*0.5*	*7.7*
Russia	–0.2	1.5	1.7	*0.1*	*3.1*
Brazil	–3.5	1.1	1.3	*0.0*	*2.5*
World	3.3	3.8	3.7	*3.7*	*100.0*
p.m. World trade[2]	*2.2*	*5.3*	*4.0*		

Sources: Eurostat, ECB, IMF.
1 According to the IMF definitions and calculated on the basis of purchasing power parities.
2 Average of exports and imports of goods and services.

trade, which had been expanding strongly in 2017, slowed down during 2018.

The policy pursued in the United States left its mark on the global economy

While the American economy was running at full speed in 2018, growth was eroded in most other advanced economies. Japan's economic performance was greatly influenced by one-off factors, such as weather conditions and natural disasters. As a result, the Japanese economy displayed a highly erratic profile, with negative and positive growth alternating from one quarter to the next. In the United Kingdom, activity was bolstered by consumption but the uncertainty over the Brexit negotiations (see box 1) continued to have a detrimental impact on investment. Since 2015, GDP growth has weakened significantly so that the country is no longer among the best-performing large economies.

BOX 1

Brexit and its implications for Belgian businesses [1]

In a referendum held on 23 June 2016, a small majority of British citizens voted in favour of leaving the EU ("Brexit"). As a result, on 29 March 2017, the United Kingdom notified the European Council of its intention to leave the EU, thus triggering a procedure which, after two years, should lead to the first departure of a country from the EU.

On 25 November 2018, an agreement was concluded between the British government and the European Council concerning both a withdrawal agreement and a political declaration on the future relationship between the EU and the United Kingdom.

To avoid an abrupt and disorderly departure from the EU, the agreement needs to be ratified both by the House of Commons and by the European Parliament. Owing to the political uncertainty, there is a serious risk that the the UK will not ratify the agreement before 29 March 2019.

The withdrawal agreement is a legally-binding international treaty, setting out the terms of the separation. Key points among its many components concern:

- the rights of European citizens established in the United Kingdom and British citizens established in an EU Member State before the end of a transitional period;
- the financial settlement, the principle being that the financial commitments entered into by the 28 EU countries will be honoured by the 28, including the United Kingdom;
- a dispute settlement procedure;
- a transitional period that will begin when the United Kingdom leaves the EU and its institutions on 29 March 2019, whereby the current situation will be maintained until 31 December 2020 as regards the Single Market, the Customs Union and European policies, with the associated rights and obligations. By mutual agreement, this transition can be extended once by a maximum of two years, i.e. possibly until the end of 2022.

1 Regarding the implications of Brexit for the financial sector, see section G.7 of the "Prudential Regulation and Supervision" part of this Report.

The border between the Republic of Ireland and Northern Ireland is a particularly thorny issue: on the one hand, no-one wants to reinstate the physical frontier between the Irish Republic and Northern Ireland, but on the other hand, it is necessary to arrange for the formalities associated with crossing a border between the EU and a third country, especially as regards trade in goods. A protocol attached to the withdrawal agreement specified a "backstop" solution, namely the creation of a customs territory between the EU and the United Kingdom. This solution is to apply until such time as a final agreement has been concluded on the future relationship between the United Kingdom and the EU, including an alternative solution to avoid a hard border.

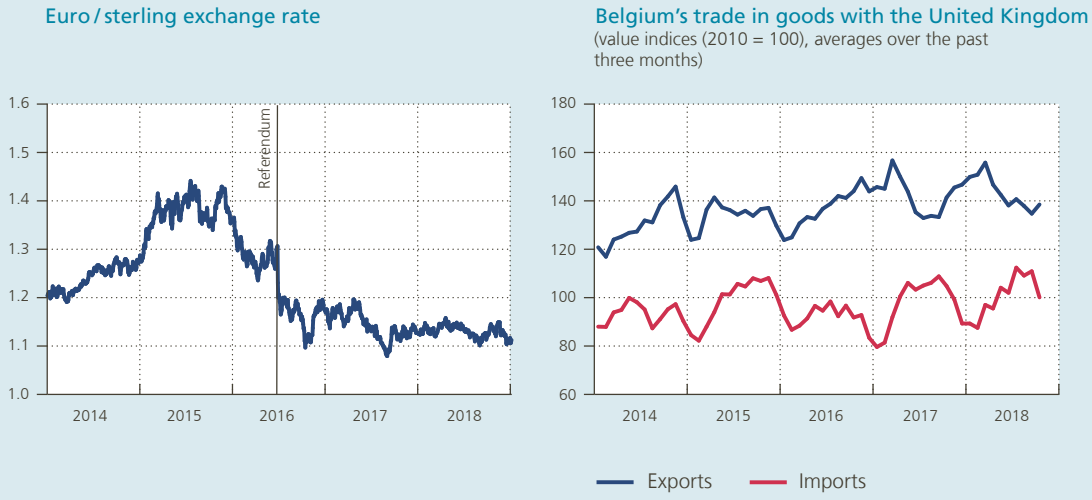
The political declaration establishes the parameters for negotiating "an ambitious, broad, deep and flexible partnership" for cooperation in various spheres. In the economic sphere, there is to be a "free trade area, combining deep regulatory and customs cooperation" for trade in goods between the EU and the United Kingdom. For financial services, the key concept concerns equivalence decisions. The parties are committed to preserving financial stability, market integrity, investor and consumer protection and fair competition. For other services, the aim is to deliver a level of liberalisation well beyond the World Trade Organisation (WTO) commitments, building on recent EU free trade agreements. While the free movement of capital and payments is maintained, that is no longer the case for the free movement of persons, but "mobility arrangements" should be established on the basis of non-discrimination between the EU Member States and full reciprocity.

Considerable potential economic consequences

Since 2016, the uncertainty caused by the Brexit referendum has been reflected primarily in fluctuations in the British currency and the slackening of domestic demand in the UK. Although this has affected

the market conditions of Belgian exporters, the foreign trade figures do not suggest at this stage any interruption in trade in goods between Belgium and the United Kingdom. Belgium's trade surplus with the United Kingdom is still substantial, totalling around € 6.7 billion in 2017 and € 4.5 billion over the first nine months of 2018.

Repercussions of Brexit on the sterling exchange rate and on Belgium's trade



Sources: NAI, Thomson Reuters.

Various studies estimate the long-term economic costs of Brexit. In the absence of any agreement on the future relationship more favourable than the basic WTO rules, those costs could be substantial. Taking just the impact of higher trading costs due to customs duties and non-tariff barriers, the impact in terms of lost GDP would exceed 3 % for the United Kingdom and Ireland. For Belgium, it would amount to 1 %, which is above the average for the EU (0.6 % of GDP). However, that impact would be greatly reduced in the event of agreement on a deeper relationship.

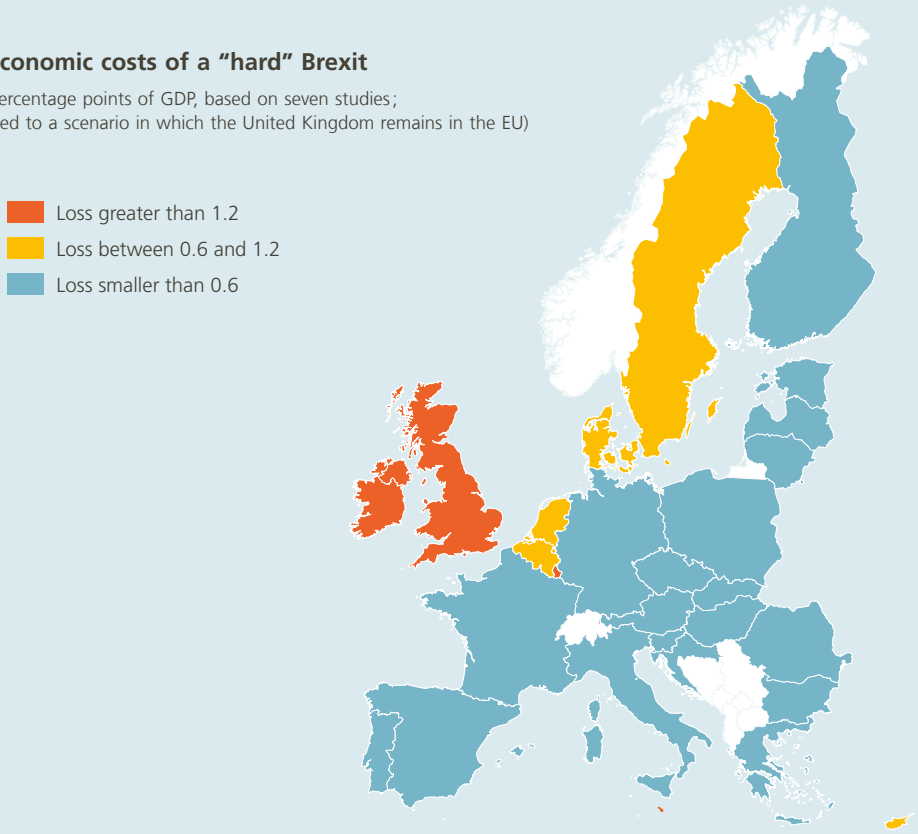
Apart from its impact on trade alone, Brexit could be bad for the entire British and European economy as well if the uncertainties were to persist. It could also make the British economy less attractive for foreign direct investment and the immigration of workers, while the reduced integration into the European economy could curb the United Kingdom's productivity growth for some time to come. Moreover, most studies estimate that the macroeconomic cost of Brexit could be much higher for the United Kingdom, sometimes as high as 10 % of GDP or even more in extreme cases.

Impact on Belgian firms

Many Belgian firms are involved in trade in goods and services with the United Kingdom. According to the 2017 VAT data, more than 41 000 firms are direct exporters and/or importers. If account is also

Long-term economic costs of a "hard" Brexit

(median loss in percentage points of GDP, based on seven studies;
deviation compared to a scenario in which the United Kingdom remains in the EU)



Source: Bisciari P. (2019), *A survey of the long-term impact of Brexit on the UK and on the EU27 economies*, NBB, Working Paper 366.

taken of the suppliers linked to the firms directly involved, almost 67 % of Belgian firms are exposed to demand from the United Kingdom. Similarly, 24 % of Belgian firms obtain supplies on the British market or direct from other importers and are thus at risk of incurring higher production costs as a result of a rise in the cost of inputs from the United Kingdom[1]. Indirect supplier relationships mean a steep rise in the number of firms potentially concerned.

Of the firms exporting to the United Kingdom, almost 8 000 SMEs will be particularly affected. For 20 % of them, the United Kingdom was the destination for more than half their exports within the EU in 2017. The lack of familiarity with the administrative procedures for exports outside the EU, as well as the tariffs that could be imposed directly on those exports, will also be detrimental to many firms, as it is estimated that almost a third of firms exporting to the United Kingdom have no previous experience of the customs formalities associated with exports outside the EU.

1 See Dhyne E. and C. Duprez (2017) "It's a small, small world… A guided tour of the Belgian production network", *International Productivity Monitor,* 32, 84-96.

Number of Belgian firms active in trade in goods and / or services with the United Kingdom

(2017)

	Exports	Imports	of which: Exports and imports
Total	18 510	28 400	5 805
of which:			
Firms employing fewer than 50 FTEs	7 963	11 214	n.
Firms for which the United Kingdom represents at least 50 % of their exports to the EU	6 105	n.	n.
Firms with no previous experience of procedures for exporting outside the EU	6 067	n.	n.

Source: NBB.

Naturally, the imposition of tariff barriers, especially non-tariff barriers (such as special conformity rules for the British market) will have an impact on trade flows. It will therefore have implications for the Belgian logistics and maritime transport sector. For example, the port of Zeebrugge is particularly exposed to cross-Channel trade, especially trade in motor vehicles. In the absence of an agreement, the fisheries sector will also be hard hit because EU fishermen would lose access to British waters.

Stepping up the preparations

In order to limit the adverse effects of Brexit, it is imperative that Belgian firms, and SMEs in particular, take the necessary measures to ensure the continuity of their business. Their exposure to Brexit is not confined just to export and import activities, but also concerns access to services, the whole logistics chain, digital data and services (privacy regulations), intellectual property, the location of production units, etc. In order to be prepared, they would do well to refer to the "Brexit Impact Scan" published on line by FPS Economy. These preparations are necessary regardless of whether the agreement is ratified, since the UK will officially cease to be a member of the EU. The European and Belgian authorities have organised safeguard arrangements to cater for potentially serious disruption if no agreement is reached.

In 2018, the global economy and financial markets were influenced mainly by the policies pursued in the United States, which generated great uncertainty. In particular, the country's protectionist attitude caused much anxiety. In January, a first raft of trade measures was adopted, with the introduction of temporary customs tariffs on solar panels and washing machines, followed in March by additional import duties on aluminium and steel. China was particularly targeted by the American government. The Trump Administration considers that some aspects of Chinese policy concerning intellectual property and technology transfers are unfair and contrary to American interests and believes that these factors explain why China accounts for almost half of the United States' deficit on international trade in goods. At the end of September, higher tariffs were imposed on Chinese products worth $ 250 billion. However, tensions were not confined to trade between the United States and China. For instance,

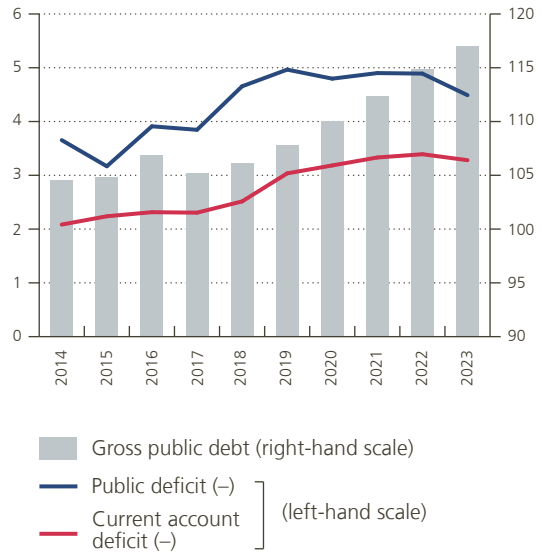
the renegotiation of the NAFTA agreement between the United States, Canada and Mexico also caused regular market disturbances.

The United States' domestic economic policy had implications for the rest of the world as well. Although US economic activity had expanded steadily in 2016 and 2017, and despite growing signs of full capacity utilisation, the Trump Administration approved a massive package of fiscal stimulus measures in late 2017 and early 2018 which provided further support for the US economy in 2018. Tax cuts boosted domestic demand, while consumption also benefited from the further improvement in the labour market situation, with unemployment down to 3.9 % in December, its lowest level for almost 50 years. Furthermore, rising oil prices stimulated investment in the energy sector. However, the expansionary fiscal policy also caused the public deficit to swell significantly, from 3.8 % of GDP in 2017 to 4.7 % in 2018, while the public debt escalated to 106.1 % of GDP. Moreover, the strength of domestic demand encouraged imports, so that the current account deficit also rose to 2.5 % of GDP.

Chart 1

The United States faces a double deficit and the public debt is growing

(in % of GDP)



Source: IMF.

In contrast to most other advanced economies, the growing labour market shortage in the United States led to wage acceleration, which in turn helped to rekindle inflation, which reached the 2 % target set by the US central bank. In those circumstances, the Federal Reserve proceeded to normalise its monetary policy. After five interest rate hikes from the end of 2015, it raised its key interest rate further in four stages in 2018, by 25 basis points at a time, to a range of between 2.25 % and 2.5 %.

Nonetheless, in the course of the year, the pursuit of a procyclical policy in an economy running at full capacity caused investors to fear that the American economy could become overheated and that the Federal Reserve might raise interest rates more rapidly than expected. In that context, the dollar – which had depreciated in 2017 – began rising from February, and this trend was further reinforced from April. The dollar's appreciation against the currencies of the other large advanced economies reflected the divergent growth prospects and the gap in key interest rates in relation to the United States. Nevertheless, the dollar appreciated particularly against the currencies of many emerging economies. The dollar's appreciation triggered a reversal in market sentiment regarding those countries, as some of them had accumulated substantial dollar-denominated debts in the preceding years. In general, the lower dollar-return on assets denominated in the currency of those countries prompted a shift in investors' positions. Although all the emerging economies proved vulnerable, to some extent, to the reversal of investor sentiment – which was reflected in capital outflows and the depreciation of their national currency – the countries most affected were those with substantial current account deficits and heavy borrowing requirements. That applied in particular to Argentina and Turkey. The situation in those countries escalated during the summer, with the sharp depreciation of the peso and the lira causing inflation to take off again. In Turkey, the situation stabilised to some degree after the central bank raised its interest rates and the government announced budget cuts, while the Argentinian government eventually had to turn to the IMF. This period of turbulence had a detrimental impact on economic activity in both

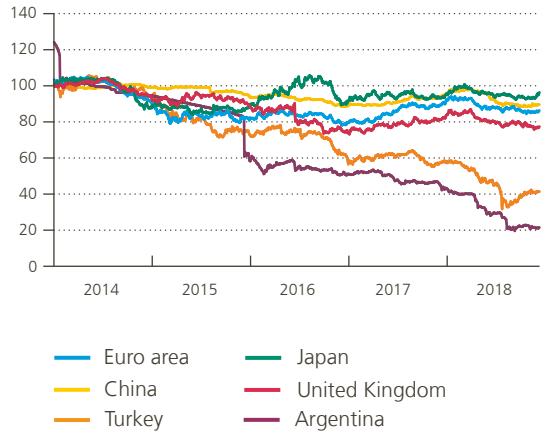
The appreciation of the dollar caused a reversal in market sentiment regarding the emerging economies

countries, resulting in growth in Turkey being halved from the 2017 figure, while in Argentina the economy went into recession.

Chart 2

The United States dollar has appreciated

(daily data, exchange rate vis-à-vis the dollar, indices 2014 = 100)



Source: Thomson Reuters.

Apart from the Argentine and Turkish currencies, the South African rand, the Indian rupee, the Brazilian real and the Russian rouble also weakened considerably. Nevertheless, these currencies stabilised or appreciated again slightly in the autumn. The Chinese renminbi also came under growing pressure from June onwards, but interventions by the Chinese authorities prevented the exchange rate from crossing the threshold of 7 renminbi per dollar.

Activity in China continued expanding steadily. In the first and second quarters, according to the official figures, growth was maintained at almost 7 %, after which it slackened pace somewhat. However, the 6.6 % expansion over the year as a whole remained within the government policy target. In line with the Chinese government's intention of rebalancing the economy, activity was driven mainly by buoyant consumption, while investment lost momentum. Infrastructure investment in particular grew more slowly, following measures to restrict the activities of the shadow banking sector, a key source of funding for such investment. In addition, structural debt reduction in public enterprises and excess capacity in a number of industrial branches also depressed investment. The share of consumption in growth thus increased from an average of 53 % in the period 2005-2017 to 76 % in 2018. Nevertheless, at just under 40 % in 2017, consumption still accounts for a much smaller share of GDP in China than in the advanced countries where the figure averages around 60 %. Despite the mounting trade tensions with the United States, Chinese exports continued expanding in 2018, albeit less strongly than in 2017. Not only did the depreciation of the renminbi bolster exports, American firms probably also brought forward some of their imports from China in anticipation of a further rise in import duties on Chinese products totalling $ 200 billion with effect from 2019. At the end of 2018, the introduction of these new import duties was nonetheless postponed from January to March 2019, depending on progress achieved in the trade talks between the two countries. However, Chinese exports fell sharply at the end of the year.

In 2018, Chinese government policy also tried to strike a balance between the desire to provide enough support for activity in order to prevent an abrupt slowdown in the economy, and the desire to limit the accumulation of financial risks. The close interdependence between the banks and the shadow banking sector, and the growing complexity of the investment instruments that the latter issues, are potential threats to financial stability. Some recent measures aim to strengthen regulation on financial institutions and investment products and to introduce a stronger macroprudential framework and greater transparency. Conversely, the People's Bank of China – which officially maintains a neutral monetary policy stance – gradually relaxed the reserve requirements for banks in order to facilitate access to credit for smaller firms. Fiscal policy remained supportive, though it was increasingly granted by means of tax cuts rather than public spending on infrastructure.

In India, the pace of economic growth quickened further, making India once again the fastest growing large economy in 2018. Investment benefited from the impact of previous structural reforms – such as the harmonisation of the goods and services tax and the new insolvency and bankruptcy code – while exports were shored up by the depreciation of the rupee. Yet the Indian economy was held back to

some extent by rising oil prices, liquidity problems facing the shadow banking sector, and less favourable financing conditions.

The oil-producing countries benefited from the higher oil prices. The recovery thus continued in Russia and Brazil. However, investment in Russia was hit by the uncertainty over the possibility of new American sanctions, while production interruptions caused by strikes in the transport sector in May weakened Brazilian growth.

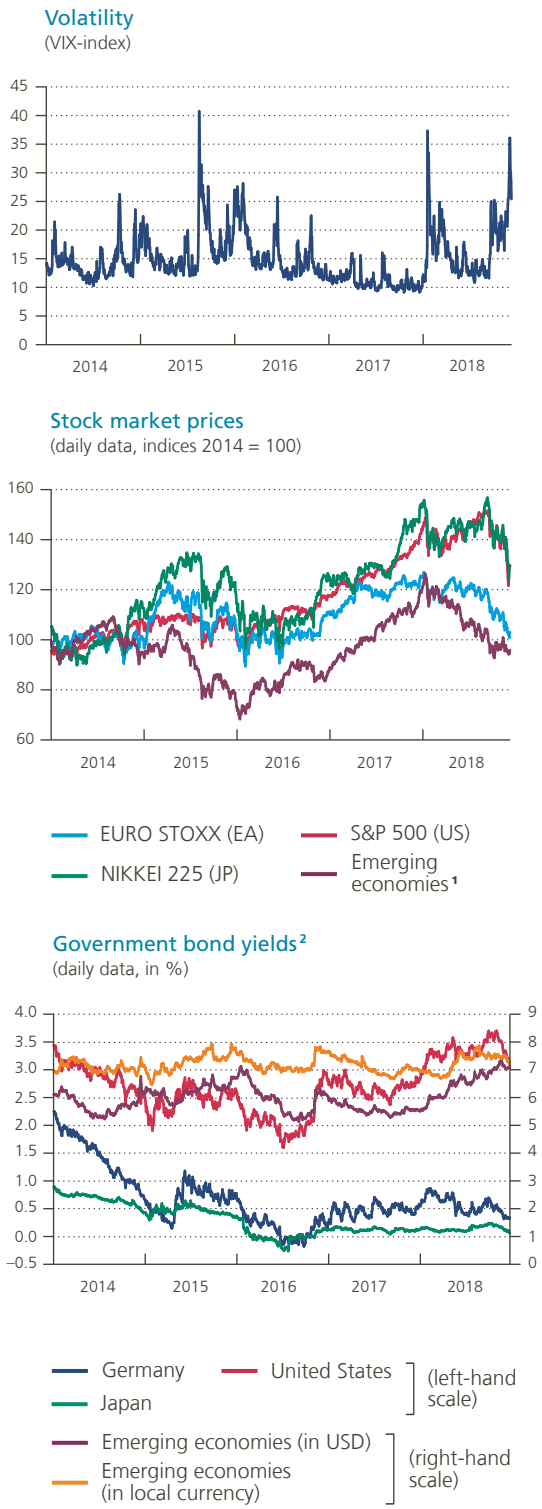
After two years of particularly robust performance, the financial market situation deteriorated considerably

Financial market volatility increased sharply in 2018. The risks and uncertainties weighing on the global economy in 2018 had an increasingly adverse impact on the financial markets as the year progressed. Thus, stock markets fell worldwide at the beginning of February, in the wake of worsening trade tensions and a rise in inflation expectations for the United States, following the publication of bigger-than-expected wage rises. In the emerging economies, stock markets subsequently continued falling, mainly as a result of the dollar's appreciation, combined with the vulnerabilities accumulated by certain countries, as well as the heightened trade tensions and weakening dynamism of the Chinese economy. Conversely, in the advanced economies, stock markets subsequently saw a temporary recovery. In the United States, after February's stock market volatility, markets began rising again strongly during the spring and summer. Thanks to sound corporate results, supported by tax cuts, stock markets actually surpassed the all-time record attained in January. In Japan and the euro area, however, share prices fluctuated without showing any clear trend. European stock markets suffered from the uncertainty over the potential impact of American trade policy on European exports and the deterioration of the situation in the emerging economies, particularly in Turkey. Developments in Italy and those concerning Brexit also played a role, in particular by driving down bank share prices.

Financial market volatility increased sharply

Chart 3

Volatile financial markets



Source: Thomson Reuters.

1 MSCI Emerging Markets index.

2 Advanced economies: ten-year government bonds; emerging economies: JPM EMBI Global index (in USD) and JPM GBI index (in local currency).

However, in the autumn, the persistent trade tensions, together with the gloomier outlook for the global economy, began to exert more widespread downward pressure on stock markets. Investors' mounting concerns over the corporate earnings outlook therefore triggered a worldwide sell-off in stock markets as from October. The impact on the American technology sector in particular – which was still enjoying a highly optimistic earnings outlook – was considerable. The situation worsened further at the end of the year, particularly in the United States, following the publication of lower growth and inflation forecasts by the Federal Reserve and in the context of the imminent shutdown of federal public services.

The bond markets also exhibited divergences between the United States and the other advanced economies in 2018. American government bond yields maintained their upward trend, widening the gap in relation to the still historically low yields on German and Japanese government bonds. This reflected the differing monetary policies and higher inflation expectations in the United States. During the final two months of the year, however, yields declined in all the advanced economies. In the euro area, the spread between Italian and German sovereign bonds widened. Thus, interest rates in Italy rose sharply in May during the negotiations on the coalition agreement between the League and the Five Star Movement. At the end of September, Italian interest rates climbed further, propelled by the fiscal stimulus proposed by the new administration. However, there was little contagion to the other euro area countries, mainly thanks to the greater resilience of the European economy compared to the financial crisis, as well as the establishment of the Banking Union which helped to strengthen the institutional structure of the euro area. In the emerging economies, sovereign bond yields began rising again in 2018, after having fallen throughout the previous year. The spread in relation to American government bonds widened especially in countries with major external imbalances.

World trade faltered while oil prices were highly volatile

Following particularly strong growth during the previous year, international trade lost momentum again in 2018. The sharpest deceleration in trade growth

occurred in the euro area. That slowdown, which affected the various Member States and branches of activity, was due partly to the new European emission tests in the automotive sector and the earlier appreciation of the euro. It is hard to ascertain the extent to which the growing tensions between the United States and China have influenced world trade up to now. On the one hand, American customs duties have mainly affected a number of specific branches of activity which make up only a small proportion of world trade. On the other hand, owing to the global interlinking of production chains, trade barriers may have a greater negative impact than just the direct effect on the countries and products concerned. Moreover, concern over the escalating trade tensions has undeniably had an adverse effect on confidence and on investment projects, as is evident from the more moderate growth in investment, which is highly trade-intensive.

BOX 2

The new American protectionism and its economic impact [1]

In accordance with his campaign speech, President Trump has resolutely opted for a more restrictive and more aggressive trade policy stance, with the aim of "serving American interests first". The unilateral measures are based on an essentially mercantilist view of international trade, whereby the massive American trade deficit ($ 552 billion in 2017) represents a loss of earnings for the country's economy. The measures accord priority to national sovereignty and centre largely on the same objective; promoting activity and employment in the United States.

Trade agreements

Soon after arriving in the White House on 20 January 2017, Donald Trump announced that the United States would withdraw from the Trans-Pacific Partnership negotiated by his predecessor, Barack Obama, with eleven other countries in the Pacific region. In August 2017, the US Administration also launched a revision of the NAFTA agreement with Canada and Mexico. At the end of September 2018, the renegotiation led to the United States-Mexico-Canada Agreement, scheduled to enter into force on 1 January 2020.

Tariffs, threats and retaliation

The Trump Administration also decided to impose new customs duties on a range of products imported into the United States. In January 2018, a safeguard measure thus applied to imports of solar panels worth $ 8.5 billion and imports of washing machines amounting to $ 1.8 billion.

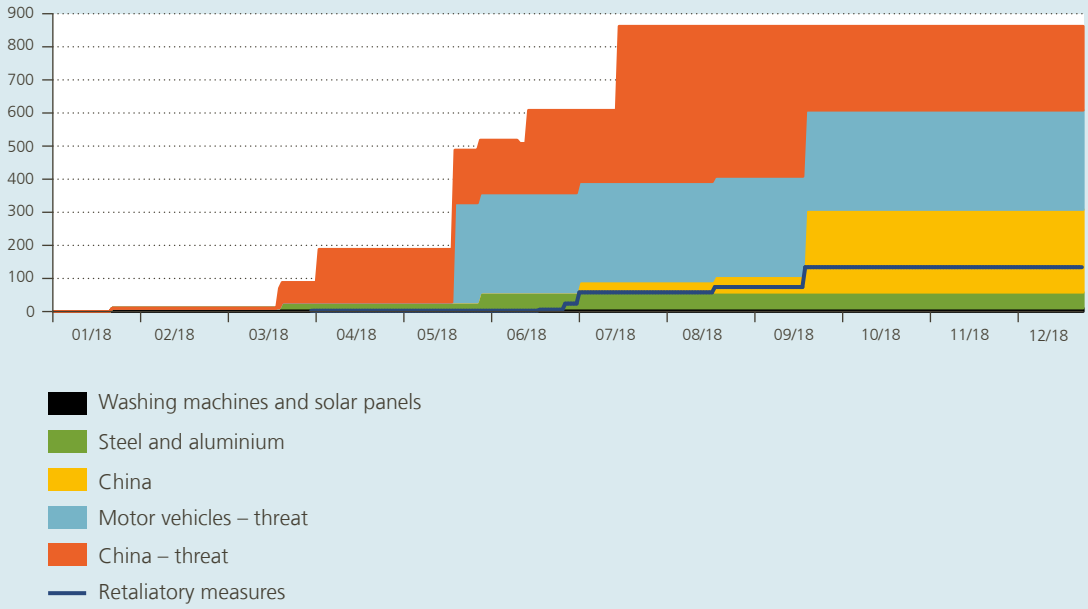
In March 2018, the United States announced that additional customs tariffs of 25 % and 10 % respectively would apply for an indefinite period to American imports of steel and aluminium, representing a total of around $ 48 billion in 2017. The measure took effect on 23 March, but

1 For more details, see Cordemans N, C. Duprez and K. Kikkawa (2018), "America's new trade policy and its impact on the Belgian economy", NBB, *Economic Review*, September, 7-33.

the EU was granted exemption until 1 June. Although the Trump Administration justified the new customs tariffs on national security grounds, they mainly affect historical allies of the United States.

American customs tariffs, threats and retaliatory measures in 2018

($ billion)



Source: Peterson Institute for International Economics.

China, accused of unfair trade practices, notably as regards intellectual property, saw an additional 25 % tariff imposed on exports to the United States worth $ 50 billion, and an additional 10 % tariff on a further $ 200 billion.

As well as imposing new customs duties, the American government threatened to tax all Chinese exports of goods to the United States (around $ 517 billion in 2017) and to raise the existing tariffs to 25 %. It also launched a survey of American imports in the motor vehicle sector. There is the possibility of a 20-25 % tariff on an amount which could be up to $ 300 billion.

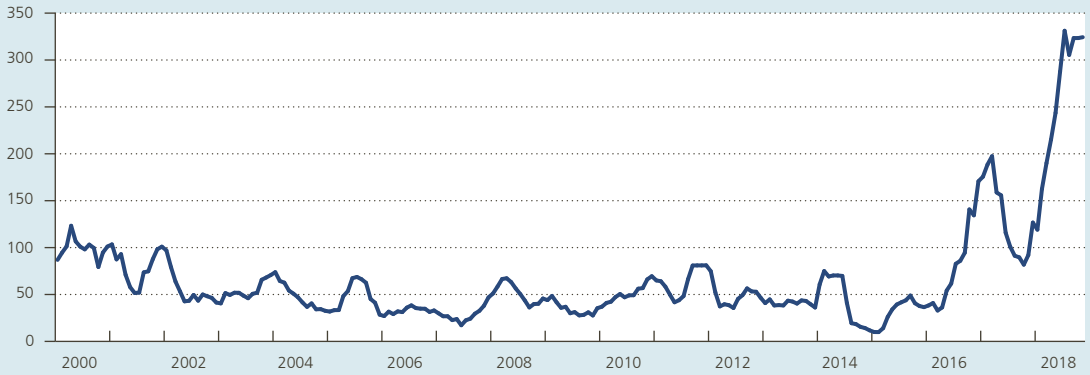
Most of the trading partners affected by the new customs duties on steel and aluminium responded with retaliatory measures against American products, amounting to a total of over $ 24 billion. China responded to the American measures by imposing customs tariffs of 5-25 % on US exports totalling $ 110 billion.

What is the impact on the global economy?

Although they surpass anything seen since the 1930s, the tariff barriers imposed so far by the United States and the reprisals by their trading partners account for only around 3 % of world trade. Their direct macroeconomic impact should therefore be small. According to the OECD[1] and the IMF[2], the tariffs imposed by China and the United States could depress the growth of production in the two countries by 0.2-0.3 of a percentage point between now and 2021. The impact on other economies would be more modest, but generally negative. In principle, the EU would mainly be affected if the threats to the motor vehicle sector are carried out.

Uncertainty of American trade policy

(six-month moving average[1])



Source: Baker S., N. Bloom and S. Davis (2016), "Measuring Economic Policy Uncertainty", *Quarterly Journal of Economics* 131(4): 1593-1636.

1 Number of articles on trade policy uncertainty in American journals.

However, it should be pointed out that the imposition of new customs tariffs inevitably leads to redistribution effects between the countries concerned and those which are exempt and can therefore take advantage of any trade opportunities. It also generates costs in terms of reorganisation of the production chains and may affect productivity in the long term. In the immediate future, the current protectionist climate is undoubtedly a factor in the continuing uncertainty over the economic outlook and financial markets. The uncertainty on the financial markets tends to be particularly detrimental to financing conditions and firms' decisions on investment and recruitment. Implementation of the American threats concerning all Chinese exports and the motor vehicle sector, and the likely escalation of trade tensions that would ensue, could cause more severe erosion of global economic growth.

1 OECD (2018), *Economic Outlook*, October.
2 IMF (2018), *World Economic Outlook,* October.

How exposed is the Belgian economy?

The Belgian value added involved in total American imports amounted to around 4.1 % of Belgian GDP over the period 2009-2011[1]. That percentage is below the figure for the United States' traditional partners, such as Canada (15.6 %) or Mexico (14.2 %), but relatively high in comparison with that of other European countries such as Germany (3.6 %) or France (2.2 %). This figure bears witness to the Belgian economy's exposure to international trade in general and to American imports in particular. It gives an indication of what the Belgian economy could lose in terms of activity if the United States simply closed the door on foreign exports.

If the recent protectionist measures are considered on their own, the macroeconomic effects should be relatively limited. For example, Belgian value added involved in American imports of base metals – including steel and aluminium – comes to 0.07 % of Belgian GDP. However, the branches concerned, including their supply chains, would suffer a quite serious negative impact.

As a supplier of China and the United States, Belgium is indirectly involved in trade between those two countries. Its contribution to Chinese exports to the United States amounted to 0.14 % of its GDP in the period 2009-2011. Conversely, Belgium's contribution to American exports to China was equivalent to 0.03 % of its GDP.

Finally, Belgium's exposure to American motor vehicle imports amounts to 0.14 % of its GDP. That exposure is essentially indirect, i.e. it reflects the Belgian production involved in the manufacture of foreign products for the American market, such as parts made in Belgium forming inputs into the assembly chains of German cars exported to the United States.

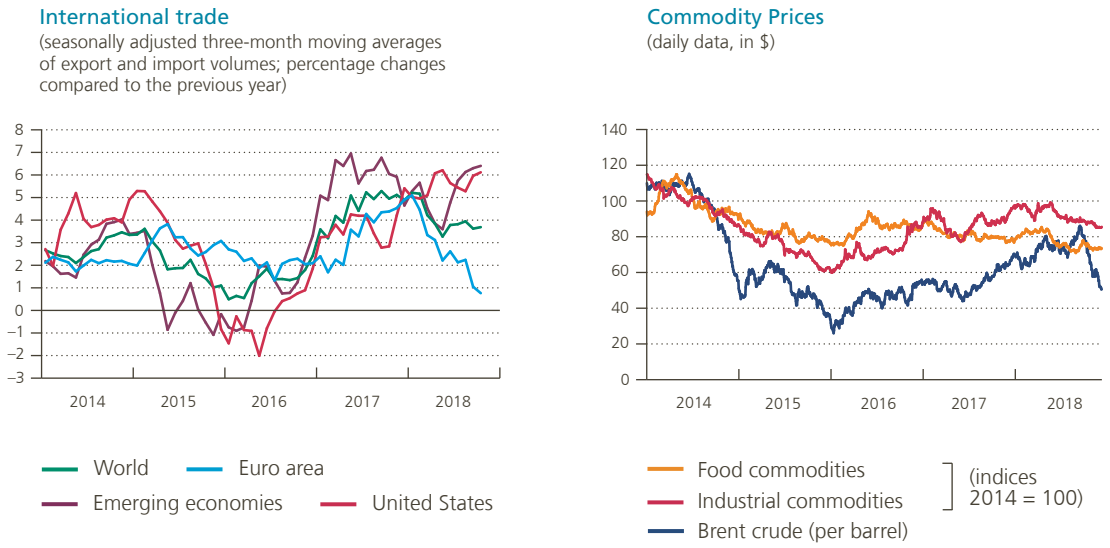
1 The data on international trade in value added are based on input-output matrices published only once every five years with a lag of three years. The estimates are obtained from the average structure of production and trade between countries for the products concerned.

Oil prices fluctuated widely in 2018. In the first half of the year, they maintained the upward trend which had begun in early 2016. The price rise was underpinned by vigorous global demand, while supplies were reduced as the OPEC members and a number of other countries adhered strictly to the agreed production limits, and output was unexpectedly interrupted in countries such as Libya and Venezuela. During the summer, however, oil prices subsided temporarily after OPEC's June decision to step up oil production in consultation with other countries, including Russia. Prices subsequently began rising again, mainly because the market expected exports from Iran – the world's fifth largest oil producer – to decline sharply following American sanctions announced for the autumn. By the beginning of October, the price per barrel of Brent had consequently climbed to around $ 85, its highest level in four years. Oil prices subsequently dropped sharply again to below the level prevailing at the beginning of the year, due to the mounting uncertainty over the outlook for the global economy. The actual implementation, in early November, of the American sanctions against Iran triggered hardly any price rise as a number of countries were still temporarily allowed to import Iranian oil and as it was clear that the decline in Iranian exports would be more than offset by higher production elsewhere.

Industrial commodity prices came under pressure from the start of 2018. They declined following a fall in demand from China, which was due partly to the imposition of stricter environmental measures. Similarly, the mounting trade tensions and uncertainty over the prospects for the global economy began to depress prices of these commodities over the year. That was also the case for food commodities, although other factors also played a role for some of them, such as more abundant than expected supplies.

Chart 4

Subdued international trade and falling commodity prices



Sources: CPB, Thomson Reuters.

1.2 Activity slowed in the euro area, but job creation and inflation continued to rise

Economic activity weakened in the euro area, due to a smaller contribution from net exports

After showing strong dynamism in 2017, with GDP up by 2.4 %, economic growth in the euro area dipped to 1.9 % in 2018. The main reason for that deterioration was a smaller contribution from net exports, as the weaker rise in imports was accompanied by significantly slower export growth, due to the deceleration of world trade and the earlier appreciation of the euro.

However, domestic demand remained vigorous and made a somewhat bigger contribution to GDP growth than in 2017. While the pace of private and public consumption growth diminished slightly, the expansion of investment gained momentum. Growth therefore remained above its potential and the absorption of the repercussions of the 2008 economic and financial crisis continued.

Private consumption remained the main contributor to domestic expenditure, thanks to the improvement in employment and the accelerating wage growth. It was also underpinned by the high level of consumer confidence, although that confidence was eroded during the year.

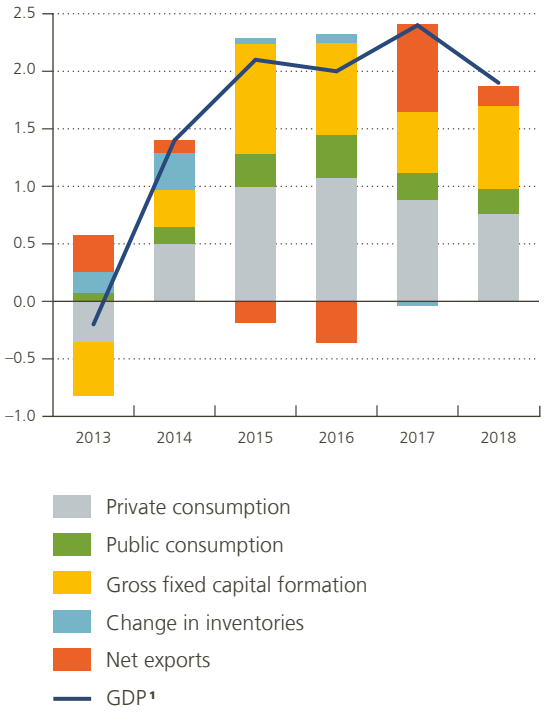
The steady investment growth is due to continuing favourable financing conditions and profitability, business confidence and – in some cases – the need to expand capacity in manufacturing industry. Productive investment in machinery and equipment recorded the strongest growth, while the increase in investment in housing and other buildings and structures slowed slightly. In 2018, the practically continuous recovery since the spring of 2013 propelled investment to its highest level for ten years in real terms.

In 2018, economic activity strengthened in all euro area Member States, so that GDP growth was widespread throughout the euro area, as it had been in the previous year. Once again, Ireland recorded the strongest growth at 7.5 %, but the country's GDP growth is volatile and is heavily influenced by

Chart 5

Domestic demand remains vigorous but the contribution of net exports has diminished

(percentage point contributions to the annual change in real GDP, unless otherwise stated)

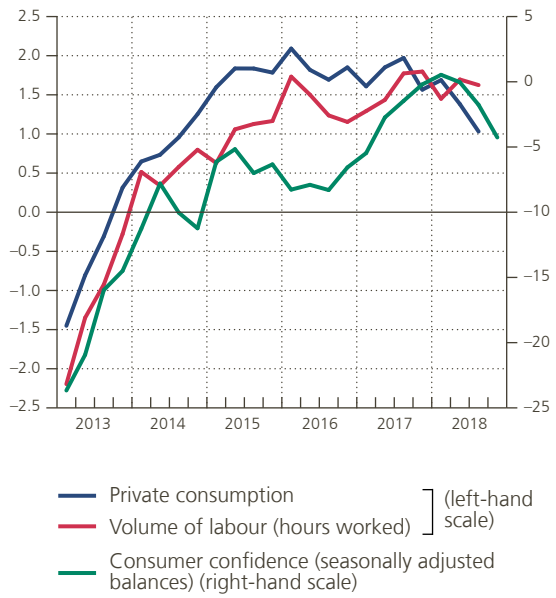


Sources: ECB, Eurostat.
1 Percentage change compared to the previous year.

Chart 6

Private consumption was supported by the favourable labour market conditions and strong consumer confidence

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



Sources: EC, ECB, Eurostat.

multinationals' business. In contrast, growth came to only 1 % in Italy.

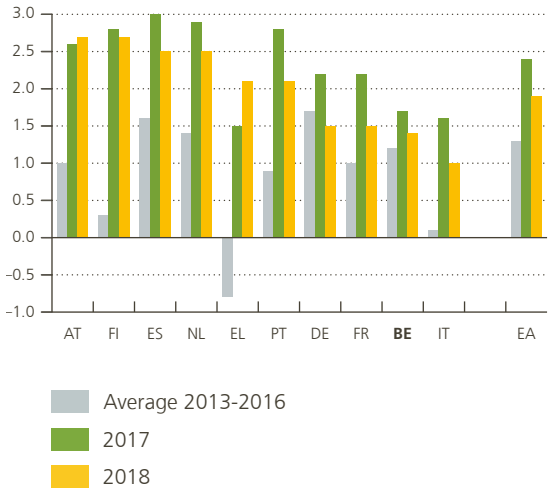
In 2018, growth in most of the euro area countries was slightly weaker than in the previous year, as it was for the euro area as a whole. This was true of the largest euro area countries, among others. The German economy with its strong export focus faced weaker foreign demand. Moreover, the country's car makers had to contend with bottlenecks in the third quarter, owing to new, more stringent emissions tests which considerably restrained vehicle production and exports. Residential investment however remained vigorous in Germany. In France, growth was hit by some one-off factors such as abnormal weather conditions, strikes and protests against fuel price increases. Both investment and exports recorded slower growth. However, imports slackened even more sharply so that the contribution of net exports to GDP growth increased. In Italy, the expansion of domestic demand decelerated, one reason being the modest private consumption. In addition, the rate of export growth slowed significantly.

In contrast, in a number of euro area Member States, including Austria and Finland, growth remained more or less steady. In Greece, the recovery which had begun in 2017 continued, and economic growth bounced back to 2.1 % in 2018. This marked the end of the deep depression, in which GDP had dropped by around a quarter. After several years of reforms which have strengthened the economy, the third adjustment programme ended in August 2018.

Chart 7

Economic activity is expanding in all euro area countries [1]

(real GDP, percentage changes compared to the previous year)



Sources: ECB, Eurostat, NBB.
1 The chart shows only a selection of euro area countries.

Continuing improvement in the labour market

The revival in economic activity was reflected in a further improvement in the labour market. The number of people in work thus rose by 1.4 %, so that the strong job intensity of growth evident in recent years has been maintained. At the end of the third quarter of 2018, the euro area thus had around 158 million people in work, roughly 3.6 % more than in 2007, on the eve of the economic and financial crisis. The repercussions of the crisis have

also been overcome as regards the total number of hours worked: after having dropped by around 7 % during the crisis and in its aftermath, in 2018, the volume of labour regained a level close to the 2007 average.

In 2018, unemployment maintained the downward trend which had begun in mid-2013, dropping to 7.9 % of the labour force in November. In that context, the unemployment rate of young people and that of long-term job-seekers, i.e. those unemployed for a year or more, also declined. In addition, various indicators measuring under-utilisation on the labour market in broader terms pointed to a further improvement in 2018. This concerns for instance the number of under-employed part-time workers and people available for work but not (or no longer) looking for a job (referred to as "discouraged"). Furthermore, the proportion of inactives – people who do not work and do not want a job – in the working age population continued to fall, the main reason being the higher labour market participation of those in the 55-64 age group.

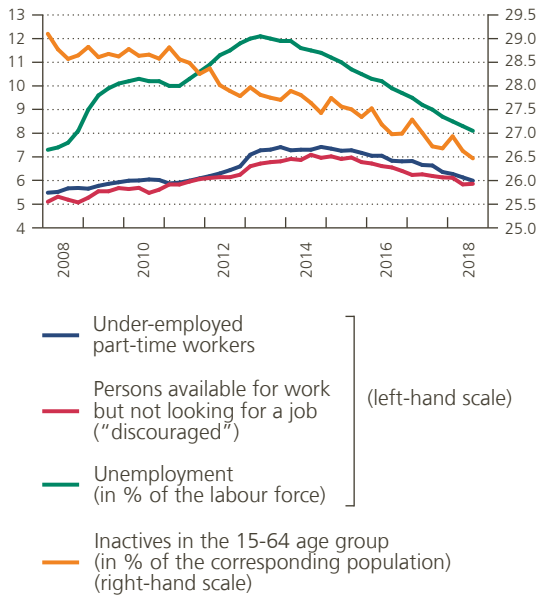
There has been a widespread improvement in the labour market throughout the euro area. In 2018, there was net job creation in almost all countries and unemployment declined everywhere. However, in some countries, including Greece, Spain and Italy, between 10 % and 20 % of the labour force were still looking for work. In contrast, the unemployment rate was below 5 % in other countries, such as Germany, the Netherlands and Austria. Thus, labour market pressures increased in various countries as a result of shortages. The rise in unfilled vacancies in 2018 thus revealed a growing scarcity of labour in some euro area Member States, in specific branches of activity or for particular job profiles. Business leaders in some countries, especially Germany, where construction is the main sector concerned, but also in the Netherlands and Belgium, among others, therefore expressed mounting concern over the availability of labour, considering that this factor could depress the growth outlook. In France, where unemployment remains relatively high, shortages of highly-skilled labour are also reported.

There has been a widespread improvement in the labour market in the euro area

Chart 8

Under-utilisation on the euro area labour market is diminishing

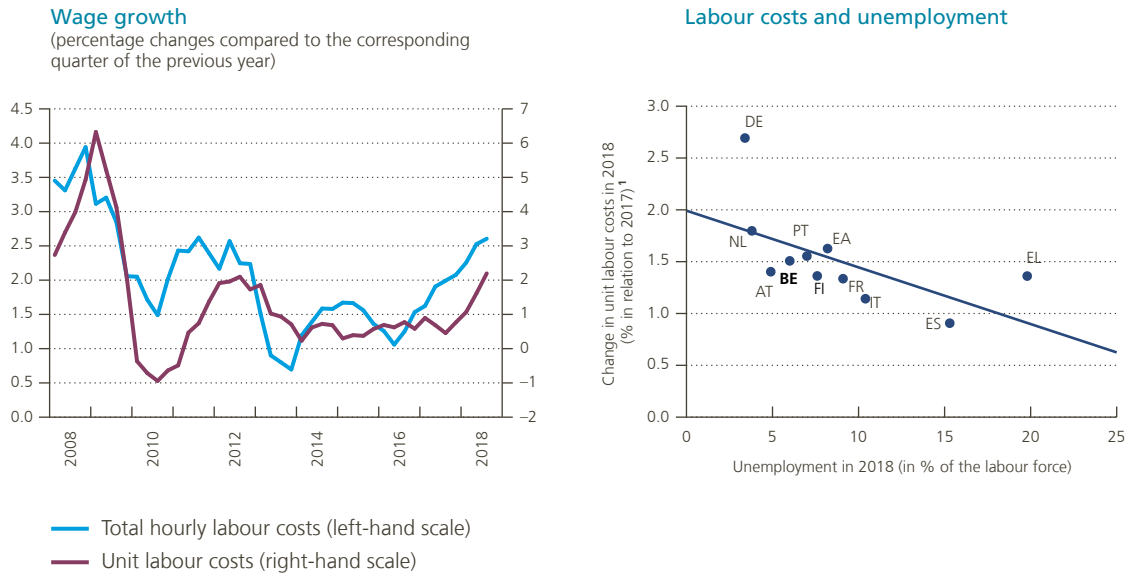
(millions of persons, unless otherwise stated)



Source: Eurostat.

Chart 9

Wage growth is accelerating but remains moderate



Sources: ECB, NBB.
1 Average of the first three quarters of 2018 compared to the corresponding period of the previous year.

Economic growth and the steady improvements in the labour market, causing shortages in certain segments, has led to accelerating labour costs in the euro area in recent years. More particularly, the rise in labour costs has tended to strengthen since employment and unemployment reached a turning point in 2013. Nonetheless, the rate of increase in labour costs per hour worked was limited to around 2.5 % year-on-year in the third quarter of 2018, representing a very small real rise in the context of inflation running at around 2 %. Moreover, the faster rise in hourly labour costs was largely offset by the improvement in productivity up to 2017, so that unit labour costs – which are a key determinant of core inflation – only began rising a little faster at the beginning of 2018. In the third quarter of 2018, those costs were around 2 % higher than a year previously.

The acceleration of the rise in unit labour costs also affected most of the euro area Member States, albeit in varying proportions. For instance, it was no more than around 1 % in some countries with high unemployment, such as Italy and Spain, while it reached 2.7 % in Germany, where unemployment has dropped to a low point and labour market shortages have become more acute.

The ECB Governing Council is more confident that inflation will steadily converge towards the aim

The steeper rise in production costs in the euro area during 2018 was not clearly reflected in the movement in consumer prices. While total inflation climbed from 1.5 % in 2017 to 1.8 % in 2018, the upward pressures originated largely from external sources. They mainly affected the most volatile components of inflation, namely energy and food. Core inflation remained at around 1 % in 2018.

Despite this weak rise in consumer prices, the ECB Governing Council became steadily more convinced that inflation was on a sustained path towards a level which it considers compatible with price stability, namely below, but close to, 2 %. This conviction is based on the fact that, as shown by various recent

studies by the ECB and the Bank [1], rather than being due to a downward revision of the trend inflation as perceived by the economic agents, the low inflation in the euro area is due mainly to real factors.

That is reassuring for two reasons.

First, it suggests that the euro area is not in a situation where a downward revision of inflation expectations would trigger a self-perpetuating low inflation process which would cause a long delay in returning to the central bank's aim. The prevalence of real factors instead implies that the likely situation is one in which increased use of the production factors will ultimately drive inflation towards the ECB's aim, which remains the anchor point for price-setting.

The cyclical upturn in the euro area has led to steady strengthening of wage dynamics

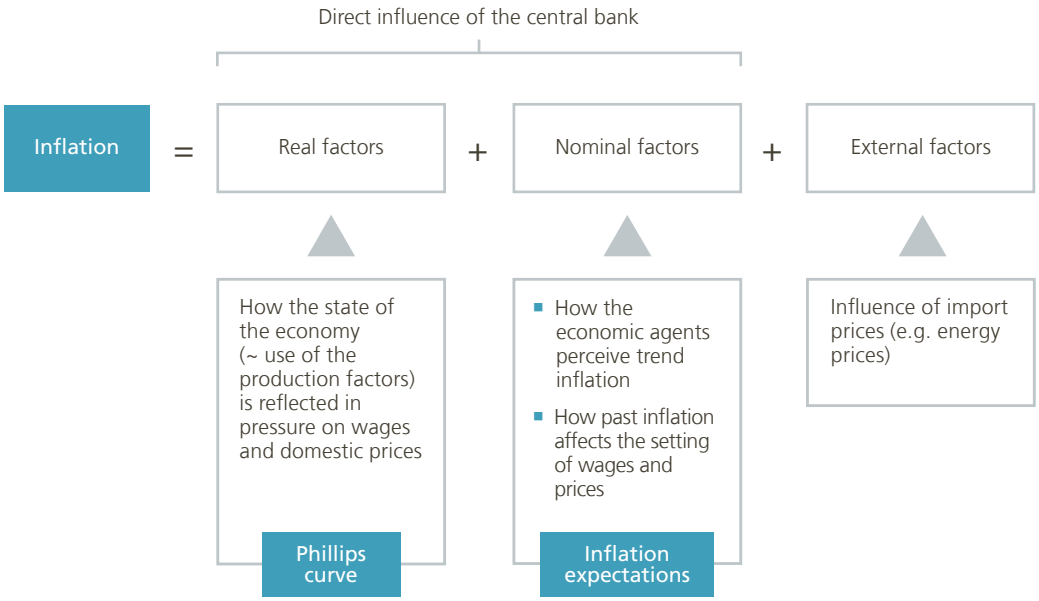
Also, the cyclical upturn in the euro area – although hesitant – has led to a gradual tightening of the labour market and steady strengthening of wage dynamics. This indicates that the ripple effects of activity on inflation – according to the Phillips curve model – are gradually getting going (again). In that context, although firms might initially cut their profit margins temporarily in the face of rising labour cost pressures, they will eventually raise their selling prices to avoid structural impairment of their profitability.

In general, this process takes time to develop. However, it has been unusually slow on this occasion, possibly because of the reforms and structural changes taking place in the euro area in recent years. They may have raised the level of potential supply in the economy, so that there is still scope for a further increase in the use of the production factors, despite the expansion of activity which has already been achieved. In addition, greater flexibility in the way that

1 For more information, see Ciccarelli M. and C. Osbat (2017), *Low inflation in the euro area: Causes and consequences*, ECB, Occasional Paper Series n° 181; Cordemans N. and J. Wauters (2018), "*Are inflation and economic activity out of sync in the euro area?*" NBB, Economic Review, June, 79-95; Stevens A. and J. Wauters (2018), *Is euro area lowflation here to stay? Insights from a time-varying parameter model with survey data*, NBB, Working Paper Research n° 355.

Chart 10

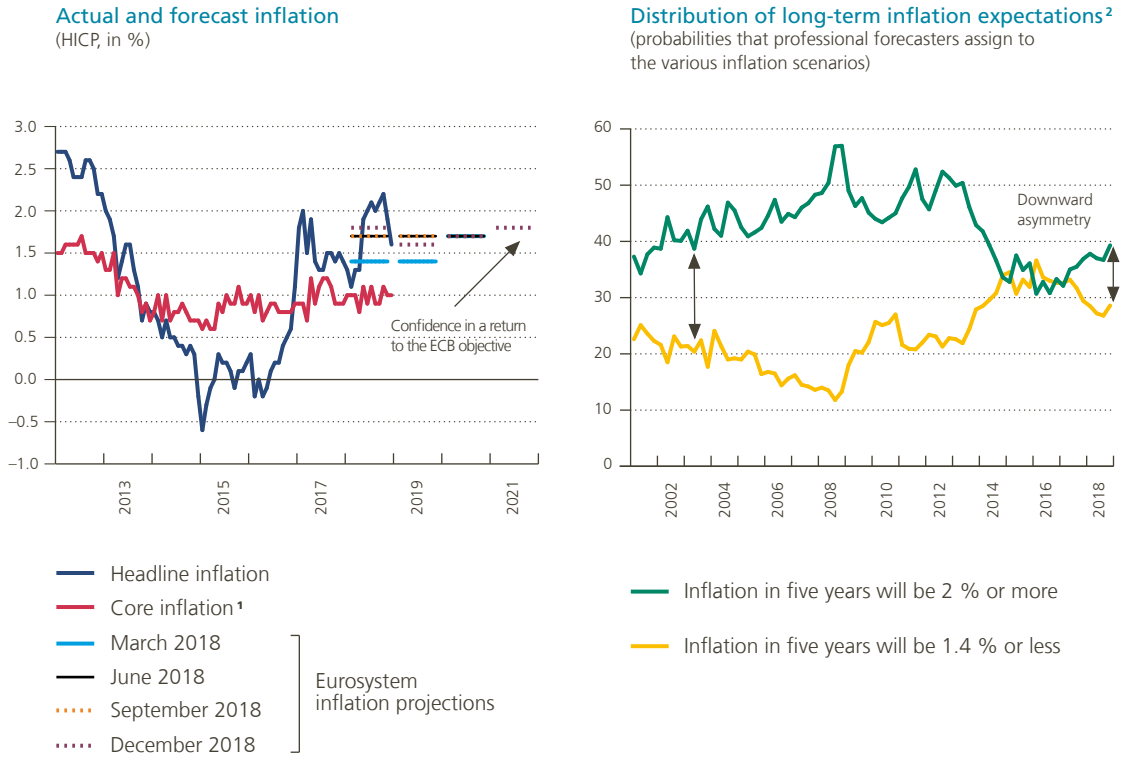
Schematic breakdown of the inflation process



Source: NBB.

Chart 11

Growing confidence in the progressive convergence of inflation towards the aim despite downward asymmetry in long-term inflation expectations



Source: ECB.
1 Headline inflation excluding energy and food.
2 Inflation expectations at five years. Data taken from the ECB's quarterly survey of professional forecasters.

markets function may mean that this residual under-utilisation of production capacity will curb inflation to a greater extent, as the downward pressures on prices and wages are more marked than previously. Finally, the long period of inflation below 2 % may have caused employers and workers to take more account of recent inflation when setting prices and negotiating wages, which could mean that it takes inflation even longer to get back on target.

Although this convergence is taking place more slowly, the conditions therefore exist for the inflation path to return to the ECB's aim in a sustainable manner. For instance, the professional forecasters' average expectations for inflation five years ahead were in the region of 1.9 %, which was comparable to the pre-crisis level. However, the uncertainty surrounding the expectations has not yet entirely returned to normal: according to the forecasters, the likelihood of a low inflation regime (i.e. of 1.4 % or less) is still relatively high in comparison with the pre-crisis period, though it has declined from the 2015-2016 peak as the risk of deflation has faded. At the same time, forecasters are also less inclined than they were before the sovereign debt crisis to bet on long-term inflation of 2 % or more. That downward asymmetry of long-term inflation expectations is unsurprising after several years of low inflation. But vigilance is still required: if that asymmetry were to persist, it could jeopardise the firm anchoring of inflation and hence its sustained approach to the objective.

More generally, the Eurosystem's quarterly projections confirm that inflation is gradually converging on levels closer to 2 %. Since the June 2018 exercise, they see headline inflation stabilising at around 1.7 % in the period from 2018 to 2020. For 2021, the estimates in the December exercise predict that inflation will rise to 1.8 %.

In this context, the previous stimulus measures were adjusted in 2018

The steep fall in inflation since 2009 and the associated deflation risk had prompted the ECB Governing Council to adopt a number of non-standard measures to ease the monetary policy stance in the euro area. The key interest rates were lowered, leading to a negative deposit facility rate. In January 2015, it was decided to embark on large-scale purchases of public and private sector securities under the expanded asset purchase programme (APP). The Council had initially stated that it would carry out monthly purchases until the rise in prices converged sustainably on the aim, thus establishing an explicit link between the execution of the programme and the movement in inflation. It had also said that it would hold the key interest rates at historically low levels until well beyond the period set for the net asset purchases. It thus gave clear indications of future monetary policy. That forward guidance concerned both the horizon of the purchases and that of the key interest rates.

These various measures, including the communication relating to them, were recalibrated on several occasions according to the progress of inflation. Given the growing confidence that the economic recovery would result in sustainable – albeit gradual – convergence of inflation towards the objective, the Council made further adjustments to its main stimulus measures during 2018.

The normalisation of monetary policy will be guided by patience, persistence and prudence

First, it phased out the net asset purchases, indications of their probable termination having been communicated at the beginning of the year and the intentions confirmed when it became apparent that the inflation prospects remained resilient. The net purchases thus declined from € 30 billion a month in January 2018 to € 15 billion a month in the period from October to December, before ceasing at the end of December 2018.

Next, more detailed information was given on the future path of the key interest rates: it is now established that they will remain at their historically low levels at least through the summer of 2019, and in any case for as long as necessary to ensure the continued sustained convergence of inflation towards levels below, but close to, 2 % over the medium term.

Finally, the intention to reinvest the amounts redeemed on the maturing securities acquired under the APP beyond the net purchase phase was confirmed, and the forward guidance on that reinvestment was reinforced. The reinvestment is to continue for an extended period after the date on which the Council begins raising the ECB's key interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and a high degree of monetary support.

These decisions herald a progressive and predictable "normalisation" which guarantees the persistence of a high degree of monetary support

A significant degree of monetary stimulus remains necessary, given that it is taking longer than in the past for economic activity to be reflected in inflation, there are still risks associated with the downward asymmetry of long-term inflation expectations, and widespread uncertainty has resurfaced at international level. Also, monetary policy has to be adjusted gradually and predictably, because the unwinding of the non-standard monetary easing measures which had been adopted since 2014 means venturing into unknown territory, for both policymakers and financial markets. An excessively abrupt normalisation could increase the risk of persistently higher financial volatility, already fuelled by international factors. In these circumstances, an approach guided by patience, persistence and prudence should permit the development of sound inflation dynamics.

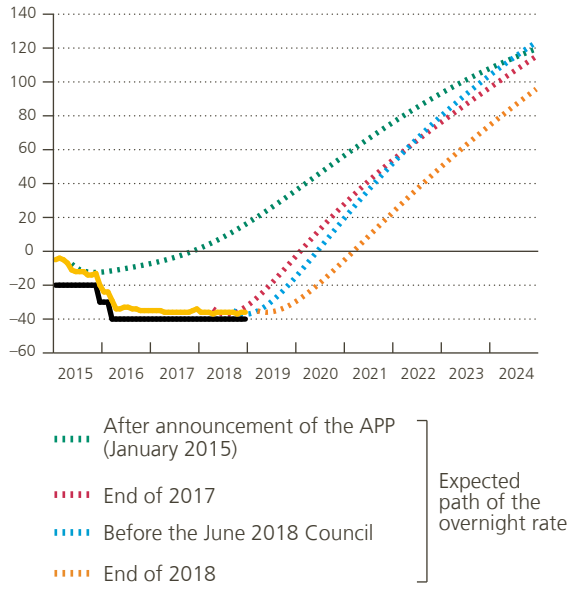
In practice, the normalisation of monetary policy implies assigning a bigger role to the key interest rates among the instruments steering the Eurosystem's monetary policy. In that context, in parallel with the phasing out of the net asset purchases in 2018, the forward guidance on interest rate policy focused directly on the future path of the key interest rates, rather than being linked to the purchase programme schedule as it was previously.

There are two aspects to this guidance. One: the schedule – the key interest rates will remain at their current levels until at least the summer of 2019 – is an anchorage point for the expected

Chart 12

The indications on the future path of the key interest rates and reinvestments guarantee the continuation of monetary support

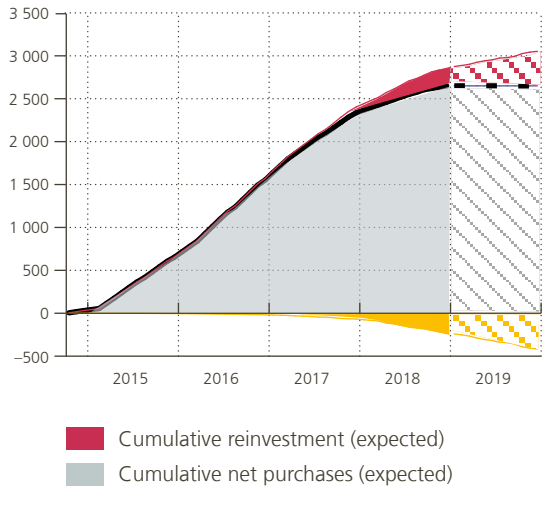
Deposit facility rate, overnight money market rate and projected path of overnight rates[1]
(basis points)



Forward guidance on the key interest rates (since 14 June 2018)

"The key ECB interest rates will remain at their present levels at least through the summer of 2019, and in any case for as long as necessary to ensure the continued sustained convergence of inflation to levels that are below, but close to, 2 % over the medium term."

Size of the portfolio of securities purchased under the APP and projection 12 months ahead[2]
(€ billion)



Forward guidance on reinvestment (since 13 December 2018)

"The reinvesting is set to continue for an extended period of time past the date when we start raising the key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation".

In any event, the Governing Council stands ready to adjust all of its instruments, as appropriate, to ensure that inflation continues to move towards its aim in a sustained manner.

Sources: ECB, own calculations.

1 On the basis of the implicit forward overnight interest rate derived from Eonia swap interest rates at varying maturities.

2 Cumulative net purchases and the outstanding amount of the portfolio are calculated on the basis of the monthly net purchases at their book value; they therefore take no account of the amortisation of securities. The cumulative reinvestments are estimated on the basis of the total redemptions each month. In practice, the Eurosystem can reinvest the maturing principal during the month when redemption takes place or in the following two months.

future path of the key interest rates. The other: the link between the key interest rates and attainment of the inflation aim – the key interest rates will remain at their current levels for as long as necessary to ensure the continued sustained convergence of inflation towards levels below, but close to, 2 % over the medium term – introduces an automatic stabilising factor.

In this way, as economic agents' expectations take account of the fact that the Governing Council adapts the path of the interest rates according to the (expected) progress of inflation in relation to the aim, a downward revision of the inflation outlook will cause them to postpone the expected timing of the rise in the key interest rates. This simple expectation that the period of low interest rates will be extended implies a monetary easing influencing economic agents' decisions on consumption and investment, which helps to neutralise the initial deterioration in the outlook.

In any event, the Governing Council stands ready to adjust all of its instruments, as appropriate, to ensure that inflation continues to move towards its aim in a sustained manner.

The acquisition of new bonds to replace maturing securities in the Eurosystem portfolio is another key element of the gradual normalisation of the monetary policy stance. This reinvestment, which began to be stepped up in 2018, ensures the prolonged presence of the Eurosystem on the markets: the stock of securities on its balance sheet will be held constant at € 2 570 billion. This means that the Eurosystem will remain a significant purchaser of long-term assets, and that will help to continue exerting sustained pressure on yields at these maturities. In other words, the purchase programme is far from over.

In addition, the fact that the duration of the reinvestment policy is linked to the timing of the rise in the key interest rates reinforces the automatic stabilisation mechanism. Any expectation of a delay in raising the key interest rates also implies that the size of the Eurosystem's asset portfolio will be maintained for longer, and thus exerts additional downward pressure on yields. That therefore results in correspondingly greater easing to address any undesirable developments concerning inflation.

Monetary and financial conditions have remained relatively favourable

In 2018, the consolidated balance sheet of the Eurosystem continued to expand as a result of additional net purchases. That growth was only very slightly curbed by the first voluntary repayments, from June onwards, of funds which euro area banks had obtained under the second series of targeted longer-term refinancing operations (TLTRO II)[1] and by the expiry in September of the first series of operations of that type (TLTRO I)[2].

The liquidity that euro area credit institutions held with the Eurosystem stabilised at a high level. In this context of excess liquidity, the overnight money market rate – Eonia – remained a few basis points above the deposit facility rate. It thus remained negative throughout 2018, keeping the cost of interbank financing at an historically low level.

In general, the forward guidance seems to have been effective in steering the markets. Expectations of the future path of the key ECB interest rates were firmly anchored. For example, they were barely affected by the tightening of financial conditions in the United States. However, during the second half of the year, as a result of the mounting uncertainty over the international environment and the situation in some parts of the euro area, economic agents expected the timing of an interest rate hike to be a little later.

Despite the higher long-term yields on American Treasury bills, medium- and long-term rates also remained low overall in the euro area in 2018, though at the end of the year, they were slightly higher than at the end of 2017. That illustrates the growing divergence between monetary policies on either side of the Atlantic.

On the riskier euro area markets, contagion effects were relatively limited despite outbreaks of uncertainty concerning specific situations. For instance, the volatility of yields on Italian sovereign bonds increased sharply, owing to the escalating political tensions in that country. However, those tensions were barely reflected in the sovereign yields of the other euro area countries,

1 For more information, see Report 2016, pp. 57-58 p. 61.
2 For more information, see Report 2014, pp. 67-69.

including those which proved more vulnerable during the euro area debt crisis. The markets thus recognise that the economies of those countries are more soundly based. In that context, investors' flight to safe-haven securities, particularly ten-year German government bonds, was on a much smaller scale than in the past, though it intensified at the end of the year.

Firms also continued to enjoy favourable financing costs on the markets in 2018, despite some widening of their yield spreads in relation to the risk-free interest rate at the end of the year. Interest rates remained low, both on the bonds of non-financial corporations with a very high credit rating and on those of other corporate bond categories. While the sizeable purchases made by the Eurosystem since June 2016 under the programme for purchasing securities of the non-financial corporation sector exerted direct pressure on yields in the case of the former, that effect continued to be transmitted to the latter via the ongoing adjustments to private investors' portfolios.

The euro has fallen steeply against the United States dollar since the spring of 2018, mainly on account of rising yields across the Atlantic. However, against a broader basket of currencies, the euro was under upward pressure, due primarily to the turbulence in some emerging countries.

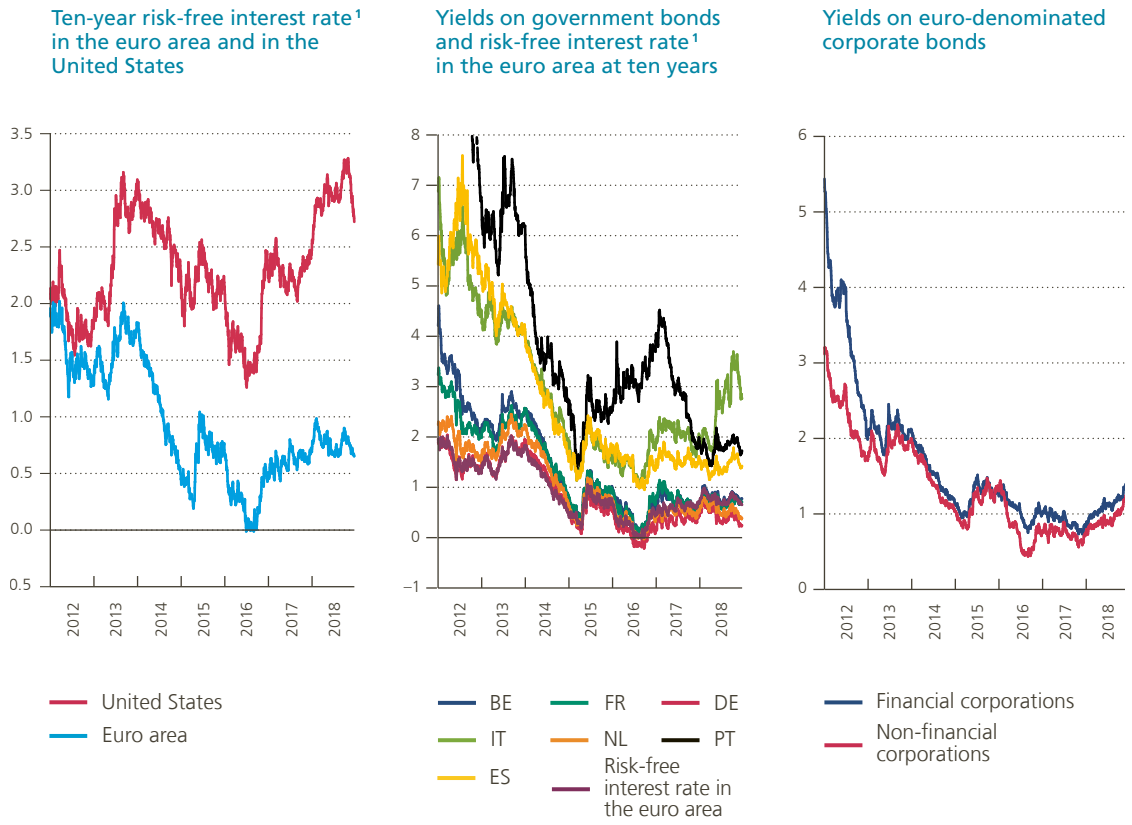
Lending continued to pick up

Although market-based funding is gaining ground, the banking sector still performs a fundamental

Chart 13

Relatively low volatility and contagion effects in nominal yields

(in %)



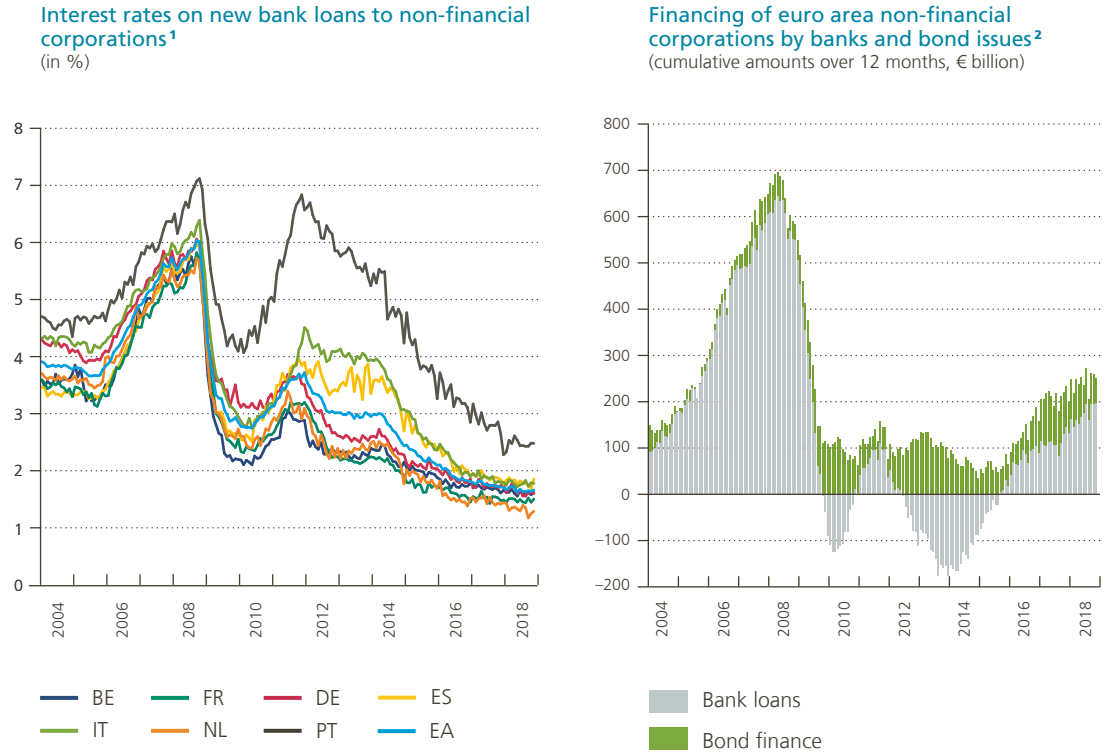
Sources: Bloomberg, Thomson Reuters.

1 For the euro area, Eonia swap interest rates; for the United States, interest rates on federal funds swap rates.

Chart 14

Lending to non-financial corporations continues to pick up

(in %)



Source: ECB.

1 Taking all maturities together.

2 Taking all maturities together. Bank lending volumes are adjusted for securitisation.

role in financing the euro area's economy. It continued to pass on the flexible stance of monetary policy to the real economy. Despite some tension concerning the cost of market-based financing for the banks, the interest rates on bank loans to households and businesses continued to decline, or at least remained very close to their historical low points. The Bank Lending Survey (BLS) also shows that the banks further eased their criteria for lending to firms and households, usually as a result of fiercer competition and attenuation of their risk perception.

This low interest rate environment continued to bolster the growth of demand for loans. Lending by the banks to households and non-financial corporations thus maintained its upward trend, although the dynamics still remain rather weak in some peripheral countries. The strength of bond issues was another source of support for the funding of non-financial corporations.

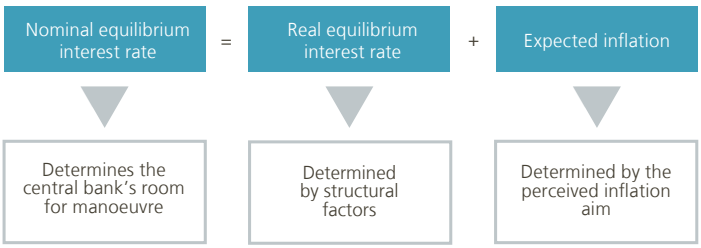
Although lending is rising steadily, it does not currently seem to harbour widespread risks to financial stability. The Eurosystem and the national authorities nevertheless continue to keep a close watch on those risks from a prudential angle. In that connection, some jurisdictions (including Belgium) have, for example, adopted (macro)prudential measures to address specific vulnerabilities detected on local markets, in most cases in the residential property sector.

Future room for manoeuvre in monetary policy

The year 2018 thus marked the start of a gradual and predictable normalisation of the monetary

Chart 15

Monetary policy room for manoeuvre



Source: NBB.

policy stance. In the case of both the key interest rates and the reinvestment of maturing securities, this process is explicitly linked to attainment of the inflation aim. Thus, the Governing Council reaffirmed its commitment to its price stability mandate in a context in which it takes longer than previously for the economic recovery to be reflected in prices, and where downside risks to the macroeconomic outlook exist.

It is also necessary to safeguard price stability in the medium term to ensure that monetary policy has sufficient room for manoeuvre in the future. As the nominal interest rate is the traditional lever that the central bank can use to stabilise the economy in the face of cyclical shocks, an adequate downward margin must be available for that instrument to continue operating in periods of sluggish activity.

Since the nominal equilibrium interest rate is determined jointly by the real equilibrium rate – which aligns the supply of savings with demand for investment – and by expected inflation, firm anchoring of inflation expectations at below, but close to, 2 % helps to keep the nominal interest rate clear of its lower bound of around 0 %, thus reducing the risk

of having to resort to non-standard instruments at times of impending severe economic turbulence.

It is necessary to continue with economic reforms in order to limit the situations in which monetary policy has to be highly accommodative

This contribution to price stability is all the greater as the real component of the nominal equilibrium interest rate is likely to remain small in the future. This downward trend in the real equilibrium interest rate is due to global structural factors supporting the supply of savings and/or depressing demand for investment, such as population ageing. Since the real equilibrium interest rate is determined by structural factors, the role of the other policy areas also becomes essential.

On the one hand, deeper structural reforms – capable of dealing with the gap between the supply of savings and demand for investment – are needed to boost the real equilibrium interest rate. But it is equally essential to pursue policies which can limit the occurrence of scenarios in which monetary policy would have to be highly accommodative if it were the only policy area that could mitigate the consequences of a severe negative shock. In that regard, both microprudential and macroprudential policies – which augment the financial system's resilience to shocks – and initiatives in the direction of deeper Economic and Monetary Union (EMU) – strengthening the fundamentals of the economic system in the broad sense – have a role to play. Moreover, the maintenance of sound public finances will ensure that fiscal policy retains sufficient scope to act alongside the central bank in the event of a future crisis.

BOX 3

The Bank's role in the Eurosystem's monetary policy

The Treaty on the Functioning of the European Union assigned the objective of maintaining price stability to the Eurosystem as a whole. Monetary policy is therefore not a matter for the ECB alone: the Bank also has an eminent role to play, in the same way as the national central banks (NCBs) of the 18 other countries which have adopted the euro. The Bank takes part in the adoption of monetary policy decisions, and in their preparation, as well as in the implementation of the measures approved.

Every six weeks, the Governor of the Bank and his 18 fellow NCB Governors plus the six members of the ECB Executive Board meet in Frankfurt for the ECB Governing Council. These meetings enable them to discuss the risks to price stability in the euro area and to take their monetary policy decisions accordingly. Those decisions are generally adopted by consensus or, if necessary, by a majority vote in accordance with a system of rotating voting rights[1]. NCB Governors each exercise their right to vote in person[2]. They do not formally represent their countries, but act in the interests of the euro area as a whole.

1 For more information on the system of rotating voting rights introduced in 2015, see https://www.ecb.europa.eu/explainers/tell-me-more/html/voting-rotation.en.html

2 See Article 10 of the Statutes of the European System of Central Banks (ESCB) and of the European Central Bank.

These meetings are prepared by various committees comprising staff of the ECB and the NCBs, including the Bank. The committees constitute forums for discussion and an exchange of views on the various aspects of the conduct of monetary policy. For example, this is the framework within which the Bank's staff contribute to the production of the Eurosystem's macroeconomic projections, a key input in the Council's deliberations. In addition, to prepare him to take part in Council debates, the NBB's Governor is able to draw upon both the various analyses and research conducted by the Bank's staff and their more specific strategic recommendations.

All in all, these preparations by the Bank's staff therefore promote the quality of the monetary policy debates in the Eurosystem. They offer an additional point of view, supplementing the views derived from the analyses of the ECB and the other NCBs, providing the committees and the Council with food for thought. In producing reliable statistics, the Bank likewise helps to ensure that the monetary policy decisions are based on good-quality macroeconomic indicators.

The Bank also plays a major role in the implementation of the monetary policy measures adopted by the Council: although the implementation guidelines are decided by the Council, the actual implementation is decentralised and delegated to the NCBs. Thus, the Bank conducts all the open market operations with banking institutions resident in Belgium. This includes inter alia the targeted longer-term refinancing operations (TLTRO). Under the expanded asset purchase programme (APP), the Bank's services purchased Belgian public debt securities amounting to a net cumulative total of almost € 66 billion between March 2015 and December 2018, as well as private debt securities. In particular,

from June 2016, the ECB mandated the Bank, along with five other NCBs[1], to make purchases of corporate sector securities on behalf of the Eurosystem. Altogether, these purchases made by the Bank came to around € 40 billion at the end of 2018.

Finally, and this is not the least important task, the ECB counts on the NCBs – including the Bank – to take charge of communication concerning the conduct of the Eurosystem's monetary policy, in order to explain its objectives and actions to a broader public. This aspect of the conduct of monetary policy has become more important since the crisis and the consequent recourse to non-standard monetary policy measures. With its local roots, the Bank is able to adopt the most appropriate way of communicating with Belgium's economic world and the general public.

1 The other NCBs are Deutsche Bundesbank, Banco de España, Banque de France, Banca d'Italia and Suomen Pankki/Finlands Bank.

Continuing consolidation of public finances

The budget deficit of the euro area as a whole declined a little further, from –1 % of GDP in 2017 to –0.6 % of GDP in 2018. As in 2017, this contraction was due to the maintenance of a favourable economic climate and a further fall in interest charges in the context of persistently low interest rates. The structural primary budget balance of the euro area was stable at 1.1 % of potential GDP, pointing to an all-in-all neutral fiscal policy.

The government budget balance improved in most euro area countries; in countries where that was not the case, the balance remained more or less stable, or only deteriorated slightly. The economic climate in fact had a favourable impact in most countries, and the burden of interest charges on the budget diminished almost everywhere. Portugal recorded a notable reduction in its budget deficit, mainly because one-off factors exerted less pressure on the budget in 2018 than in the previous year. Greece recorded a budget surplus and achieved the target of a primary budget surplus of 3.5 % of GDP, required under the enhanced budgetary surveillance of Greek public finances. For the first time since the introduction of the euro, the budget deficit was below the reference value of 3 % of GDP in all euro area countries.

In many euro area countries, the fiscal policy stance was fairly neutral in 2018, as is evident from the rather limited movements in their structural primary budget balance. However, some Member States, including Finland, the Netherlands and Greece, adopted a slightly expansionary policy, while Germany's policy was a little restrictive.

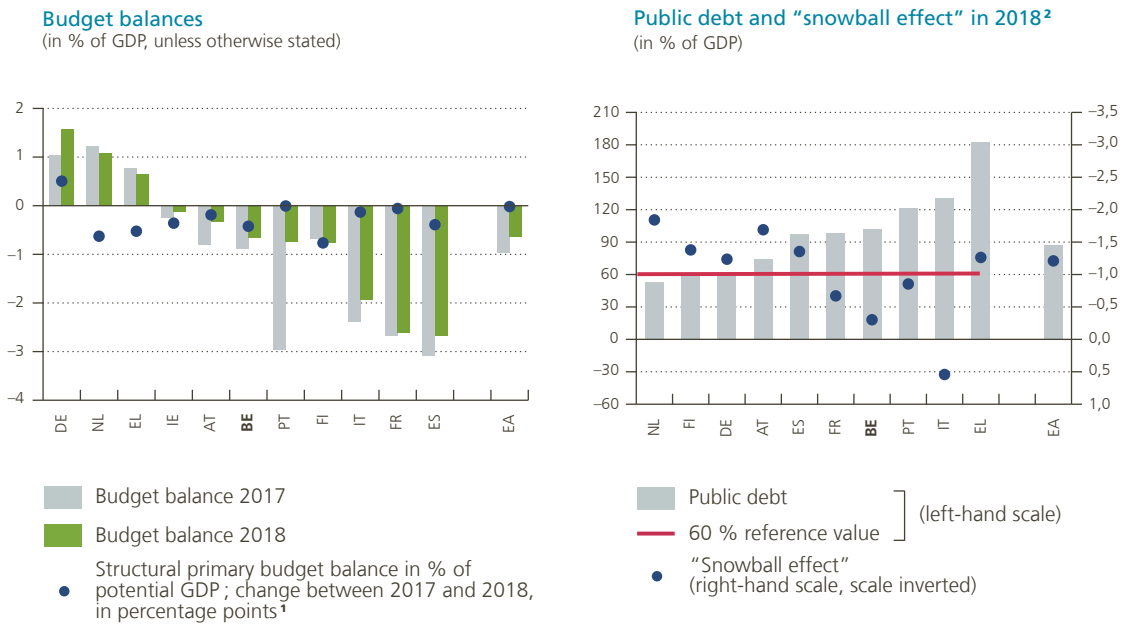
In the euro area as a whole, the public debt expressed as a percentage of GDP declined for the fourth consecutive year, dropping from 88.9 % of GDP in 2017 to 86.9 % in 2018. That improvement is due in equal measure to the primary budget surplus and the "snowball effect", i.e. the impact on the public debt ratio of the gap between nominal GDP growth and the implicit interest rate on the public debt.

In 2018, the public debt ratio declined in most euro area countries. That was due in particular to the "snowball effect", which pushed down the debt ratio everywhere except in Italy, where economic growth remained lower than the implicit interest rate. In seven euro area countries, including the Netherlands, the public debt as a ratio of GDP remained below the 60 % reference value, while in Finland and Germany, it hovered around that value in 2018. At 182.5 % of GDP, the Greek debt ratio remained by far the highest in the euro area.

Among all the euro area countries, only Spain was still subject to an excessive deficit procedure at the end of 2018, under the corrective arm of the Stability

Chart 16

Government budgets continue to improve in the context of a neutral fiscal policy stance and public debt declines



Sources: EC, NBB.

1 A negative sign (deterioration in the structural primary balance) indicates an expansionary fiscal stance.

2 The "snowball effect" measures the effect on the public debt ratio of the gap between nominal GDP growth and the implicit interest rate on the public debt.

and Growth Pact (SGP), as in June 2018 the Ecofin Council decided to end this procedure for France. Consequently, the EU surveillance of public finances is conducted under the preventive arm of the SGP for all Member States except Spain. Greece, which since the end of the third adjustment programme in August has been subject to enhanced budgetary surveillance by the EU, was also reintegrated into the European semester for the coordination of macroeconomic policies.

Under the preventive arm of the SGP, the public finances of the Member States are assessed on the basis of the medium-term objective (MTO). The MTO is a reference value for the structural budget balance specific to each country, which conforms to sound, sustainable public finances. As in 2017, the structural budget balance of various euro area countries, such as Spain, France, Italy, Belgium and Portugal, still failed to achieve the MTO. Those countries therefore need to make an additional effort to attain that objective. Conversely, some other countries, including Germany and the Netherlands, have some fiscal scope since their structural budget balance exceeds the MTO. As already mentioned, the Dutch government used that scope in 2018 to conduct a slightly expansionary policy; in contrast, the structural budget surplus grew larger in Germany.

The consolidation of public finances continued

Following the Italian parliamentary elections in March, the new government questioned the path previously agreed with the EU for consolidating public finances. As a result, there were growing doubts about the sustainability of the Italian public debt, and spreads in relation to the German Bund had widened considerably from May onwards. In November, the European Commission (EC) noted that Italy's draft budgetary plan for 2019 implied a significant deviation from the recommended adjustment path for achieving the

MTO. In November, the EC also launched the first step in the initiation of a new excessive deficit procedure for Italy, due to failure to meet the public debt criterion which stipulates that the 60 %-of-GDP reference value must not be exceeded unless the debt is declining sufficiently and approaching the reference value at a satisfactory rate. However, following intense negotiations with the EC, the Italian government readjusted its draft budget so that the public deficit would amount to around 2 % of GDP in 2019 with no deterioration in the structural budget balance. At the end of December, the Italian parliament approved this amended budget plan which, for the time being, avoided triggering the excessive deficit procedure. The EC also found that the draft budgets submitted by Belgium, France, Portugal, Slovenia and Spain implied a risk that the SGP would not be respected in 2019, as they could lead to a significant deviation from the adjustment path towards the MTO.

Boosting resilience and achieving sustained, stronger growth potential in the euro area

The widespread continuation of the growth in activity, investment and employment in recent years has contributed towards convergence between the euro area countries and has helped to correct the macroeconomic imbalances which had been the fundamental cause of the crisis. Moreover, in contrast to the pre-crisis years, the growth of domestic demand in the euro area countries has not been accompanied – or at least not to the same degree – by a loss of competitiveness or the creation of current account deficits on the balance of payments.

Despite the favourable rebalancing in the euro area, some member countries are still wrestling with the effects of the crisis. For instance, unemployment remains high in some countries such as Greece and Spain, although numerous jobs have been created in recent years in a number of countries, including Spain. Moreover, some euro area countries still have a substantial level of net debt in relation to the rest of the world, even though the significant current account deficits on the balance of payments have been wiped out. What is more, the debts of non-financial corporations or households remain substantial in some Member States, despite declining in recent years. The situation of the euro area banks has improved, but they still need to reduce large amounts of non-performing loans in certain countries. Finally, some euro area countries need to cut their high public debt ratios. These

weaknesses continue to affect the resilience of the countries in question and of the euro area as a whole, and reduce the capacity to absorb future shocks.

In view of the growing uncertainty, notably as regards international trade and Brexit, and the longer-term challenges such as ageing and climate change, the euro area still needs to become more resilient. Hence the need to continue ridding the euro area of the legacy of the crisis and the resulting vulnerability. In all euro area countries, it is also vital to continue building economic structures that function properly and, while strengthening the economic fundamentals, facilitate adjustment processes within the euro area and increase resilience to future crises. That process can also be backed by the EU's initiatives aimed at encouraging structural reforms in the Member States.

The Member States also need to devote efforts to reducing the risks in the financial sector and those facing public finances, so as to create the conditions for further deepening of EMU. In that regard, new steps were taken to strengthen EMU in 2018, but progress was meagre. At the December European Council, it was decided that, for the euro area, the European Stability Mechanism (ESM) would act as a backstop for the banks' Single Resolution Fund, granting it a credit line. Decisions were also taken on other reforms of the ESM, such as the use of the precautionary instruments. In addition, the European Council gave a mandate to devise a budgetary instrument to promote convergence and competitiveness in the euro area. In the future, that instrument is to be included in the EU budget.

The economies need to be made more resilient

2. Economic developments in Belgium

2.1 Subdued economic growth against a backdrop of significant job creation

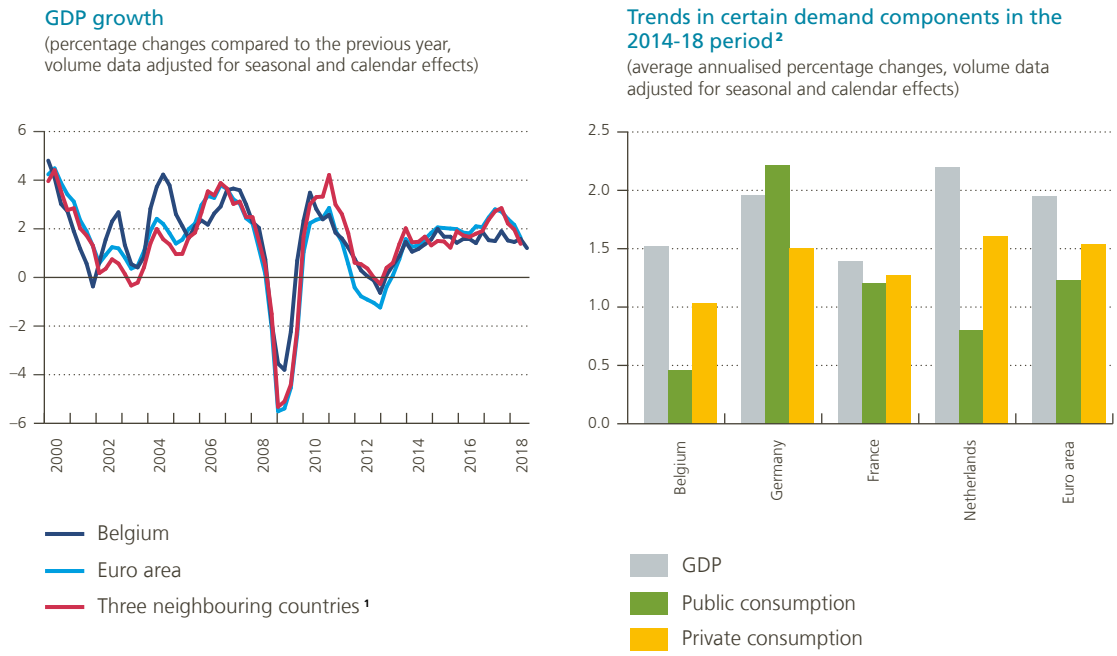
Economic activity continued to climb, but more slowly than in the euro area as a whole

In 2018, Belgium saw no interruption in the expansion of economic activity that had got underway five years ago, with real GDP growth, at 1.4 %, remaining close to the average recorded since 2014.

Nevertheless, growth was less robust than figures posted by the whole euro area or in Belgium's main neighbouring countries. Over the past five years, GDP growth has lagged 0.4 of a percentage point behind average growth recorded by the euro area and Germany. The gap with the Netherlands was even slightly greater, while trends in Belgium were quite similar to those seen in France. However, the rather marked negative gap with the

Chart 17

Stable Belgian growth despite modest private and public consumption



Sources: Eurostat, NAI, NBB.
1 Weighted average for Germany, France and the Netherlands.
2 Eurosystem staff projections for 2018.

euro area recorded in the second half of 2017 did narrow as 2018 progressed, mainly because the euro area slowed while Belgium's growth remained more stable.

Both in 2018 and in the past five years on average, Belgium's slower growth primarily reflected private and public consumption. The modest growth in private consumption, atypical for a time of steep job creation, is in part explained by the impact of wage moderation measures. Dampening down momentum in private and public sector wages and also social security benefits, these measures have eaten into household purchasing power. The lower growth of public consumption reflects Belgium's more restrictive fiscal spending policies in the recent past than those pursued by other countries. By contrast, net exports and investment rose more rapidly.

Going back even further to the 2008 financial crisis, cumulative real GDP growth up to and including the third quarter of 2018 worked out at 10 % in Belgium, compared with 7 % for the euro area. That said, Germany and the Netherlands both enjoyed a more dynamic trend across this period.

Industry and construction supported stronger economic activity, driven by market services

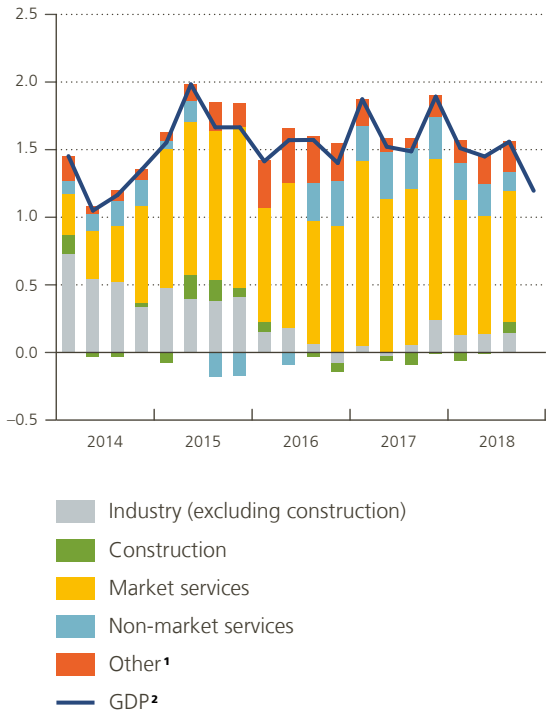
In 2018, market services continued to make the largest contribution to GDP growth. Value added in this branch of activity was up 2 % in the first nine months of the year, compared with the corresponding period in 2017. The rate of growth edged down slightly but remained comparable with its historical average, mainly due to business services. Non-market services continued to make a positive contribution, although recording a minor weakening in the last quarters of the year, which was mostly due to the public administration, defence and education branch.

Industry (excluding construction) saw its value added – which had stalled between mid-2016 and mid-2017 – climb back up by nearly 0.9 % in the first three quarters of 2018, thus contributing an average 0.1 of a percentage point to GDP growth. Meanwhile, economic activity was also up in construction.

Chart 18

Value added growth was chiefly supported by market services

(percentage point contribution to the change in real GDP relative to the previous year, unless otherwise stated; data adjusted for seasonal and calendar effects)



Sources: NAI, NBB.

1 Particularly the agriculture, forestry and fisheries sector and product-related taxes net of subsidies.

2 Percentage changes compared with the previous year.

Job creation remained high

2018 was the fourth successive year to see the net creation of a large number of jobs. Following the upturn in the number of workers by 59 000 in 2016 and by 65 000 in 2017, domestic employment expanded by another 59 000 jobs in 2018. Employment growth – running at an annualised figure of nearly 1.2 % in Belgium since 2015 up to and including 2018 – is similar to the averages reported by Belgium's neighbouring countries and the countries of Northern Europe, which were among the best performers in labour market terms even when economic activity in most of these countries had picked up faster. Recently, Belgium's growth has proved more employment-intensive than in the past. Increasingly, an ever-larger proportion of the working-age population have jobs, with the employment rate adding 2.4 percentage points between 2015 and 2018, to 69.6 %.

These results cannot be separated from measures taken in recent years to relieve both labour costs for employers and fiscal and parafiscal pressure on workers' incomes. The first series of measures boosted companies' demand for labour as this factor became relatively cheaper, while the second raft of measures raised supply through more robust financial incentives to take a job. In addition, incentives encouraging the unemployed back into the workforce also help increase the supply of labour.

Growth remains very employment-intensive

Apart from the ongoing employment growth in health care ("other services" category), it was the sectors that are sensitive to the business cycle that accounted for the biggest share of net job creation, as has been the case since the start of the expansion phase. Only financial and insurance activities continued to see their employee numbers shrink. Employment staged its biggest rise in business services, as well as in the sector comprising trade, transport and the entertainment industry. It was also up in industry, reversing the structural downtrend in this sector.

Self-employment also continued as a major factor underpinning net job creation. The popularity of self-employed status reflects the robust dynamics of the liberal professions, more demand from companies for greater flexibility, the rise of service platform work, successive improvements in the social status of the self-employed and opportunities for the retired to combine their pensions with independent paid work. Moreover, for some people who, despite their skill sets and active search for work, have a hard time finding a job as an employee, self-employed status serves as a gateway into the labour market.

Table 2

Labour supply and demand

(in thousands of persons, unless otherwise stated)

						Level
	2014	2015	2016	2017	2018 e	2018 e
Total population	55	59	57	54	54	11 404
Working-age population [1]	9	16	16	12	9	7 321
Labour force	33	21	33	37	28	5 355
Domestic employment	20	41	59	65	59	4 783
Employees	14	30	46	52	48	3 982
Sectors sensitive to the business cycle [2]	0	18	29	38	36	2 475
Public administration and education	7	3	3	2	1	816
Other services [3]	7	9	14	13	11	691
Self-employed	6	10	13	12	11	801
Unemployed job-seekers	14	–19	–26	–28	–30	495
p.m. Harmonised unemployment rate [4, 5]	*8.6*	*8.6*	*7.9*	*7.1*	*6.0*	
p.m. Harmonised employment rate [4, 6]	*67.3*	*67.2*	*67.7*	*68.5*	*69.6*	

Sources: FPB, NAI, NEO, Statbel, NBB.

1 People aged 15-64.

2 Agriculture, industry, energy and water, construction, trade, transport, catering industry and communication, financial activities, real estate activities and business services.

3 Health care and social work; arts, entertainment and recreation; other services; and households as employer.

4 Based on data from the labour force survey.

5 Job-seekers as a percentage of the labour force aged 15-64.

6 People in work as a percentage of the working-age population between 20 and 64.

More temporary and part-time contracts for new hires

Against the backdrop of robust employment, the question arises as to whether the nature of recruitment has changed since the onset of the financial crisis. To find answers, new hires in 2018 were compared with those in 2008, a year in which the labour market had not yet felt the effects of the great recession.

Growing use of temporary contracts

A new hire is a person who has held a particular position for less than twelve months. In 2017, most of these new hires (57 %) had previously already had a job, albeit under another employment contract, while 19 % were previously students, 16 % job-seekers and 8 % inactive, i.e. drawing a pension, a part-time pension, on disability pay or a housewife/househusband. Together, new hires accounted for 12 % of total employment, a turnover rate well below that of Belgium's neighbouring countries: in 2016 (the latest available year for international comparisons), this rate was 15 % in France, 24 % in the Netherlands and 29 % in Germany.

Temporary jobs as a proportion of new hires have grown significantly since 2008. This includes all temporary employment contracts, temp agency contracts, replacement contracts or agreements to perform certain clearly delineated tasks, plus also student jobs. In 2018, 46 % of new jobs were temporary in nature, 12 percentage points up on 2008, a trend fuelled by the scrapping in 2014 of the legal probationary period when entering into an employment contract. The growing proportion of hires on temporary contracts is particularly notable in the intellectual and academic professions, for people engaged in personal services, and in trade.

Although low-skilled jobs are more often temporary in nature, they have had only a small influence on this trend. Student employment is also increasingly common, and this may well continue as conditions governing this status have eased and this status entails very low social security contributions. This should help boost the employment rate among young people aged between 15 and 24, which has lagged well behind the average in other EU countries (34.7 % compared with Belgium's 22.7 %). Belgian students are much less likely to combine their studies with work, even though such experience would give them (especially the lower-educated ones) an advantage when they come to enter the labour market in the future. Even though it depresses the employment rate, the growing number of young people in higher education is also a positive development, as long as their chosen studies meet the needs of the labour market.

Table 3

New hires [1]: job characteristics

(as a % of the corresponding total)

	New hires			Total employment	
	2018 [2]	2014	2008	2017	2008
Type of employment contract					
Fixed	54	60	66	90	92
Temporary	46	40	34	10	8
Working hours [3]					
Full-time	69	73	76	75	78
Part-time	31	27	24	25	22

Source: Statbel.

1 People in work during the year and who were unemployed, inactive or in a different job in the previous year.

2 Average for the first three quarters.

3 Employees and self-employed.

Although new hires are more frequently for temporary jobs, the share of this particular status in total salaried employment has risen by only 1.4 percentage points over a decade, to 10 % by 2017. Temporary contracts seem to be increasingly used as an obligatory step towards a permanent contract. A study by Federgon[1], the federation of HR services providers in Belgium, found that two-thirds of workers on temporary contracts manage to land a permanent position about a year into their assignment.

Part-time work also accounts for an ever-larger slice of new hires, closely reflecting the increase in the number of male part-time workers in the past ten years. Nevertheless, women are still four times more likely to work part-time than men: 41.2 % of women compared with 10.2 % of men (2017). Compared with other European countries, part-time work in Belgium turns out to be a personal choice much more often, as only 7.8 % of those working part-time in Belgium report doing so involuntarily, as against 26.4 % in the EU as a whole. Moreover, this percentage is falling, which is quite the reverse of the trend across the EU. The rise in voluntary part-time working reflects a variety of schemes – time credit, career breaks and thematic leave – enabling employees to reduce their working time for personal reasons.

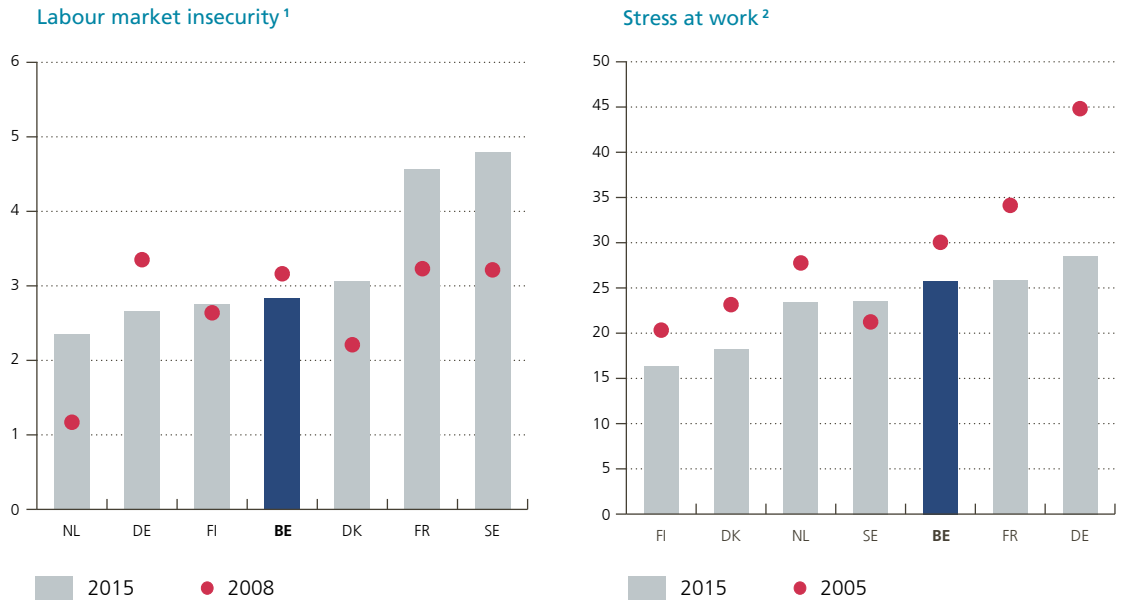
Part-time workers are still predominantly female

While temporary and part-time contracts for new hires have been steadily rising since the great recession, indicators measuring the quality of work – even though they become available only with some time lag – do not point to any deterioration in labour market conditions in Belgium. The country posts a favourable score on labour market insecurity and, like a number of other European countries, has seen work stress fall.

1 See www.uitzendkracht2018.be/www.interimaire2018.be, May 2018.

Chart 19

No fall-off in the quality of work



Source: OECD.

1 Expected loss of income on unemployment, depending on the risk of becoming unemployed, the expected spell of unemployment and unemployment insurance cover, in percentages.

2 Percentage of jobs with a shortage of people to handle the workload. Figures for Germany are for 2013.

Table 4

New hires: workers' characteristics [1]

(in % of the corresponding total)

	New hires			Total employment	
	2018 [2]	2014	2008	2017	2008
Education level					
Low	21	19	24	17	21
Average	38	40	42	39	41
High	42	41	34	45	38
Age					
15-24	30	28	26	6	8
25-54	66	69	71	78	82
55-64	4	3	3	15	10

Source: Statbel.
1 People in work during the year (employees and self-employed), who were unemployed, inactive or in a different job in the previous year.
2 Average for the first three quarters.

It is also possible to analyse the characteristics of newly hired workers for the first nine months of 2018. They show a higher proportion of highly-educated workers than ten years ago, with a lower share for people with a medium or low level of education. In fact, low-educated workers are more highly represented among new hires than in the total employment figure due to a higher turnover rate in the jobs they hold. In terms of age, logically, there are more young people among new hires than in total employment. However, the past ten years have seen their share among new hires come down in favour of older workers, highlighting an ageing working-age population and the positive effects of reforms intended to keep older people in work longer.

Unemployment showed broad-based decline

In line with the significant level of job creation, the number of unemployed job-seekers again fell sharply in 2018, amounting to fewer than 483 000 by the end of the year, which is comparable to numbers before the 2008 recession. In 2017 and 2018, unemployment shrank by around 30 000 people a year, a strikingly high figure, even disregarding a temporary statistical break between mid-2017 and mid-2018 [1].

The fall in unemployment was underway by the end of 2014 and is visible in all three Regions, for all inactivity periods and all age groups. In fact, this fall occurred in spite of the persistent effect of a factor that pushes up the number of unemployed job-seekers, namely the fact that a high proportion of jobless people who used to be exempt from looking for work are now registered as unemployed job-seekers. This change, which primarily concerns the 55-64 age group, reflects a succession of reforms since the early 2000s aimed at making it harder to access the system of unemployment via employer top-up and job-seeking exemptions, followed by the scrapping of the status of "exempt older unemployed person". In 2008, barely 15 % of fully unemployed benefit claimants between the ages of 55 and 64 were registered as job-seekers; this figure rose to 49 % in the first ten months of 2018. Reforms to the unemployment insurance system and end-of-career schemes swelled the labour force, as a proportion of the previously inactive population was now obliged to look for work.

Ever fewer unemployed exempt from seeking work

1 The figures between mid-2017 and mid-2018 do not include unemployed job-seekers in the Walloon Region obliged to register as recipients of subsistence benefit. In July 2018, around 16 000 people were re-included in the statistics.

Between 2014 and 2018, the number of unemployed job-seekers contracted by a total of 101 000. This rises to 174 000 people on a rather broader measure of unemployed job-seekers plus older unemployed exempt from seeking a job, and non-job-seeking unemployed with employer top-up.

Belgium's harmonised unemployment rate has been on a constant downward trend since 2015 and remains below the European average, even though it started falling later. In 2018, it worked out at 6 %, a level not seen since the 1970s. Favourable economic conditions doubtless contributed, but the figure also points to a sustained improvement in the labour market as a result of structural reforms that encourage labour supply and demand.

Labour market tensions have grown but failed to dent employment dynamics

With companies' demand for labour on the rise, vacancies posted by regional public employment services have been increasing since 2014. Replies to the Bank's business surveys confirm prevailing demand dynamics, flagging growing recruitment problems, while manufacturing companies increasingly report shortages of skilled workers, which hampers their production capacity. Nevertheless, the proportion of these companies is similar to pre-crisis levels.

No sign whatsoever of the demand for labour decelerating

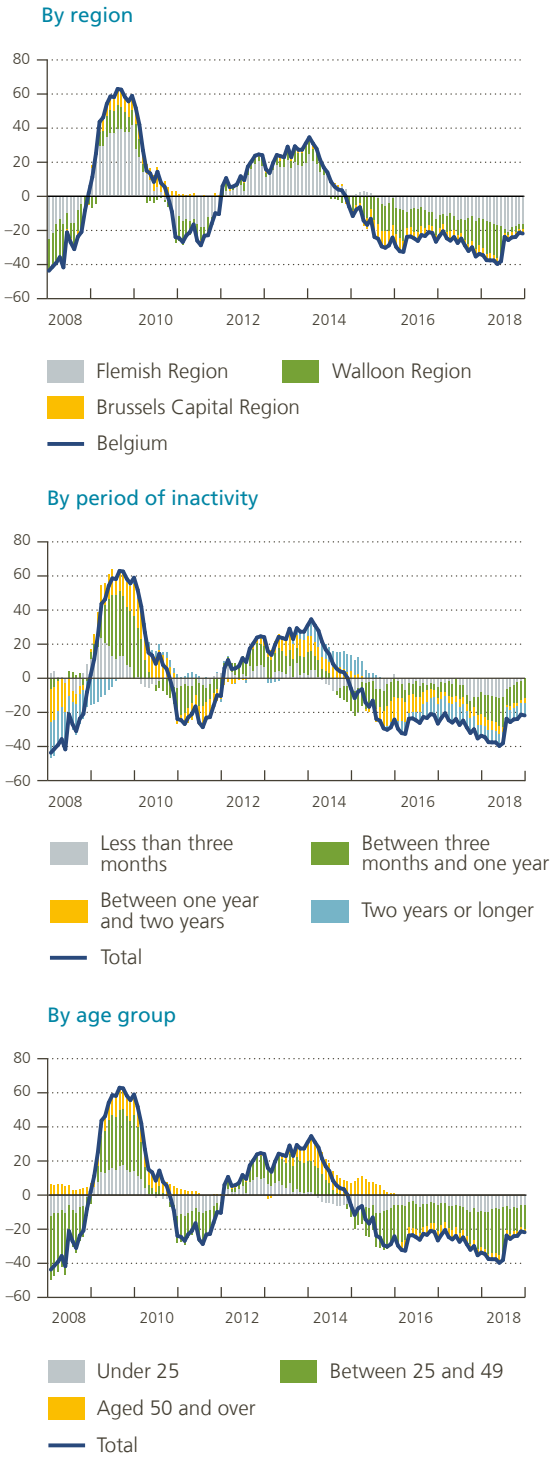
As it takes time for demand and supply in the labour market to align, the increase in vacancies as registered at public employment offices automatically pushes up the number of unfilled positions at the end of each month. The number of vacancies had reached a record high by the end of 2018: 64 000[1] according to statistics from the public employment offices. Yet there is no clear disconnect between end-of-month unfilled vacancies and the number of job offers registered, with the ratio between these two variables rising, though still below 2. Generally speaking, the matching process

1 Data not exhaustive. This figure only includes regular vacancies in the normal economic cycle about which the public employment offices were informed.

Chart 20

Fall in the number of unemployed job-seekers

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

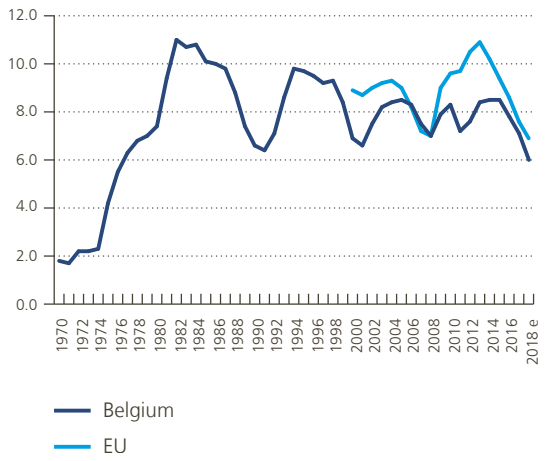


Source: NEO.

Chart 21

Fall in the harmonised unemployment rate

(in % of the labour force aged between 15 and 74)



Sources: EC, NBB.

between demand for and supply of labour continues to work, although tensions are rising in some geographical areas and for some occupations. It is worth noting that these tensions are highly structural in nature and are heightened by the labour market's cyclical dynamics.

On a broader definition than that of the regional employment offices, this translates into a vacancy rate – the number of vacancies as a ratio of total potential jobs, filled and unfilled – averaging 3.5 % in the first nine months of 2018, clearly higher than the EU average (2.2 %), and also than the percentages for Germany (2.9 %) and the Netherlands (3 %).

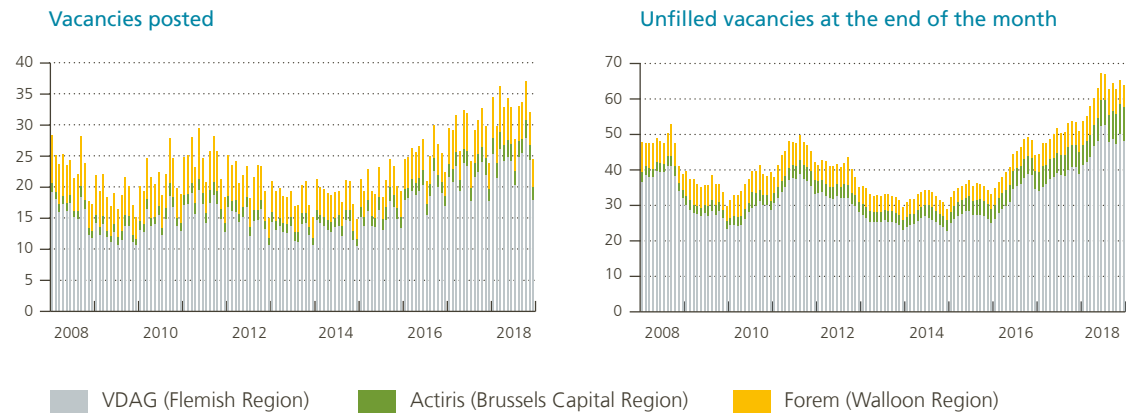
Labour mobility may well be a possible response to the tensions building in specific geographical areas. For one thing, employment in Flanders continued to grow even though the Region was looking at greater tensions. The NSSO's quarterly employment statistics based on where employees live (not on where they work) suggests that the number of Brussels-based employees is growing much more rapidly than those from the other Regions, with a proportion of them taking advantage of the dynamic demand for workers in the outskirts of the country's capital city. The role of the regional employment services – which exchange information on vacancies that go unfilled and which also run language courses – is precisely to alleviate the tensions (arising in Flanders in particular) by offering employment opportunities to unemployed people from the other Regions.

Mobility can reduce shortages

Chart 22

Signs of labour market tensions have become clearer

(vacancies reported[1] and unfilled[2] with public employment services, monthly averages in thousands)



Sources: Actiris, Forem, VDAB.

1 Only vacancies reported via the usual channels, ignoring temporary agency work, government aid and job offers from the other partners.

2 With Forem vacancies only available since 2009, the figures were backward extrapolated using the relationship between vacancies reported and unfilled vacancies in the first twelve months for which data is available.

The proportion of Brussels residents who work outside their Region crept up from 16.7 % in 2010 to 17.5 % in 2017, while Walloons are looking at a contraction of 0.7 of a percentage point (to 16.8 % in 2017) and the Flemish at a fall of 1.2 percentage points (to 10.2 %).

Contrary to popular belief, a very large proportion of vacancies registered and processed by the regional employment offices require only a low level of education or set no formal requirements at all. In 2018, this was true for 43 % of registered vacancies in Brussels, 41 % in Flanders and 60 % in Wallonia. This does not necessarily imply that employers place no importance on the candidates' qualifications, but rather that they are indicating a particular occupation or specific job instead of a diploma.

As discussed in greater depth in chapter 5, "bottleneck jobs" are generally similar for all three Regions, although a few specific features may be noted. In Flanders, for instance, the hardest vacancies to fill are those for cleaners, technical staff, commercial staff, and for people working in health care and social support. Wallonia is facing shortages in the construction sector and in executive, technical and commercial positions, while Brussels is mostly looking for administrative, commercial and information technology personnel.

Tightening recruitment conditions gradually began to translate into upward pressure on wages.

2.2 Moderate wage acceleration and slightly higher inflation

Private sector wages rose faster in 2018

Against a backdrop of robust demand for labour, private sector wages trended up in 2018, though only to a modest extent. Gross hourly wages rose by 2.3 %, compared with 1.7 % in 2017.

Real components primarily accounted for this slight acceleration, by the combined effect of real agreed adjustments and wage drift.

The interprofessional agreement concluded by the social partners in January 2017 set a maximum available margin for real wage increases – i.e. excluding the indexation effect – of 1.1 % over the 2017-18 period. The agreement specified that actual wage agreements should factor in specific economic conditions in the relevant sector and company.

A reading of the index of collectively agreed wages, as collated by FPS Employment, Labour and Social Dialogue based on a sample of the key joint committees, suggests that pay-scale increases agreed by employers remained well below the real margin, i.e. at 0.2 % in 2017 and 0.4 % in 2018. The somewhat faster upturn recorded in 2018 reflects a typical feature of the two-year cycle of wage negotiations

Table 5

Labour costs

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

	2014	2015	2016	2017	2018 e
Hourly labour costs in the private sector	1.1	0.2	–0.2	1.4	1.7
Gross hourly wages	1.3	0.3	1.3	1.7	2.3
Real agreed adjustments [1]	0.0	0.0	0.0	0.2	0.4
Indexation	0.8	0.1	0.5	1.6	1.7
Wage drift [2]	0.5	0.2	0.7	–0.1	0.2
Employers' social contributions [3]	–0.1	–0.1	–1.5	–0.4	–0.6
Hourly labour costs in the public sector	1.2	0.3	2.3	2.9	2.2
of which: Indexation	0.0	0.0	1.0	2.0	1.5
Hourly labour costs in the economy as a whole	1.2	0.2	0.4	1.7	1.7

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, in percentage points.

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

and is attributable to the time required to actually implement the outcomes of sector-specific negotiations. Taken together though, the 0.7 % rise over these two years constitutes a reversal of the trend in the previous six years, when there were hardly any collective wage increases.

During this period of wage moderation, and perhaps more frequently in the last two years, some employers may well have granted financial benefits to their employees which fell outside collectively agreed wages. Social benefits could be expanded, such as an increase in the nominal value of meal vouchers, the allocation of eco-vouchers or hospitalisation cover or, alternatively, a higher employer contribution into a group insurance scheme. Some of these wage components can in fact be seen more as reimbursement of expenses than as an element of pay, such that no employer or employee contributions were applicable.

Employers opting for alternative types of compensation

These factors fall into the category of wage drift, which is also influenced by the employment structure. At times of expansion, when the young and the low-skilled find jobs more easily, the wage drift comes under pressure, whereas an ageing workforce and higher average qualification levels tend to exert upward pressure. On the whole, wage drift in the private sector was up from a slightly negative effect in 2017 to a positive contribution of 0.2 % in 2018. In the public sector, too, changes in the workforce structure were the key factor (apart from indexation) behind higher wages over the past three years; in fact, this factor caused hourly labour costs to climb higher than they did in the private sector in 2016 and 2017.

Indexation the key driving force behind gross wage trends

Whereas gross pay rises in the private sector between 2017 and 2018 were mostly due to real increases, the rise recorded in 2018 is mainly the result of wage indexation. This latter factor made a contribution of 1.7 % to higher private sector hourly pay in 2018, i.e. 0.1 of a percentage point more than in 2017. An indexation is applied to the public sector if the trigger index figure is exceeded by 2 %. The last time this happened was in August 2018 and before that in May 2017, which is why indexation added 1.5 % to public sector pay rises in 2018, compared with 2 % the previous year.

Indexation, which also applies to social security benefits and rent prices, was temporarily suspended in March 2015 until the indexation gauge, i.e. the average of the health index in the previous four months, had risen by 2 %, meaning that automatic indexation mechanisms were shelved until April 2016. Regular indexation has since been gradually applied, based on rules governing adjustment to price trends as implemented by the various joint committees, in settlements or in contracts. The index jump's wage moderation effects showed up in 2015, and especially in 2016 and on into 2017.

Higher wage costs in private sector mitigated by lower employer contributions under the tax shift

Under the 2016-2020 tax shift, reductions in employers' social security contributions were phased in.

The most important of these took effect in 2016. However, a new package of measures came into force in 2018. Arguably, the two most important measures were the reduction of the base rate for employers' social contributions from 22.65 % to 19.88 % and a lower wage restraint levy (down to 5.12 % from 7.35 %). However, these came at a price: employers lost their structural contribution reductions, as flat-rate structural cuts were scrapped (except for disabled employees), as were additional reductions for high wages (except for workers under the Social Maribel scheme). Other changes that had an impact included the full or partial exemptions from social security contributions for first hires at SMEs and the expansion of social contribution reduction for low wages, with the total depressive effect on wage costs working out at 0.6 % in 2018.

Even held back in this way, hourly labour costs in the private sector still rose by 1.7 % in 2018, compared with 1.4 % in the previous year.

Gap in labour costs narrowed in 2018, but Belgium is still at a disadvantage

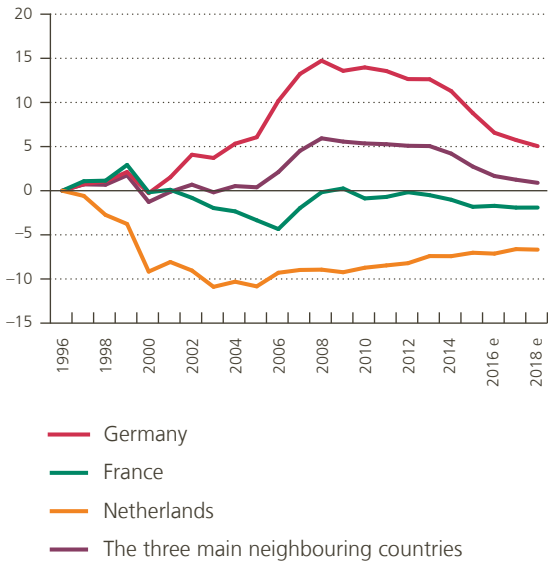
The interprofessional wage negotiation process in Belgium is informed by a comparison of trends in hourly labour costs in Belgium with those for the country's three main trading partners. According to the arrangements laid down in the 19 March 2017 Law amending the 1996 Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness, when calculating the benchmark labour cost gap, wage cost trends in Belgium must be adjusted to disregard the reductions in social security contributions that were decided as part of the tax shift, while only 50 % of any future reductions on top of the tax shift cuts can be taken into account. The measures governing lower contributions thus neutralised, the rise in the benchmark hourly labour costs in the private sector in 2018 was nearly 0.5 of a percentage point higher than national accounts data suggest.

According to the January 2019 technical report released by the Central Economic Council (CEC), hourly labour costs in Belgium measured in this way rose by 2.2 % in 2018, i.e. less than in Germany (2.9 %) and the Netherlands (2.3 %), and the same as in France (2.2 %). This has taken Belgium's wage gap 0.3 of a percentage point down on 2017.

Chart 23

Belgium's hourly labour costs gap narrowed in 2018

(cumulative differences[1] since 1996 in the private sector, in %)



Source: CEC.

1 In keeping with the calculation methodology as set down in the amended Employment and Competitiveness Law. A positive sign indicates a competitiveness gain for the relevant economy compared with Belgium.

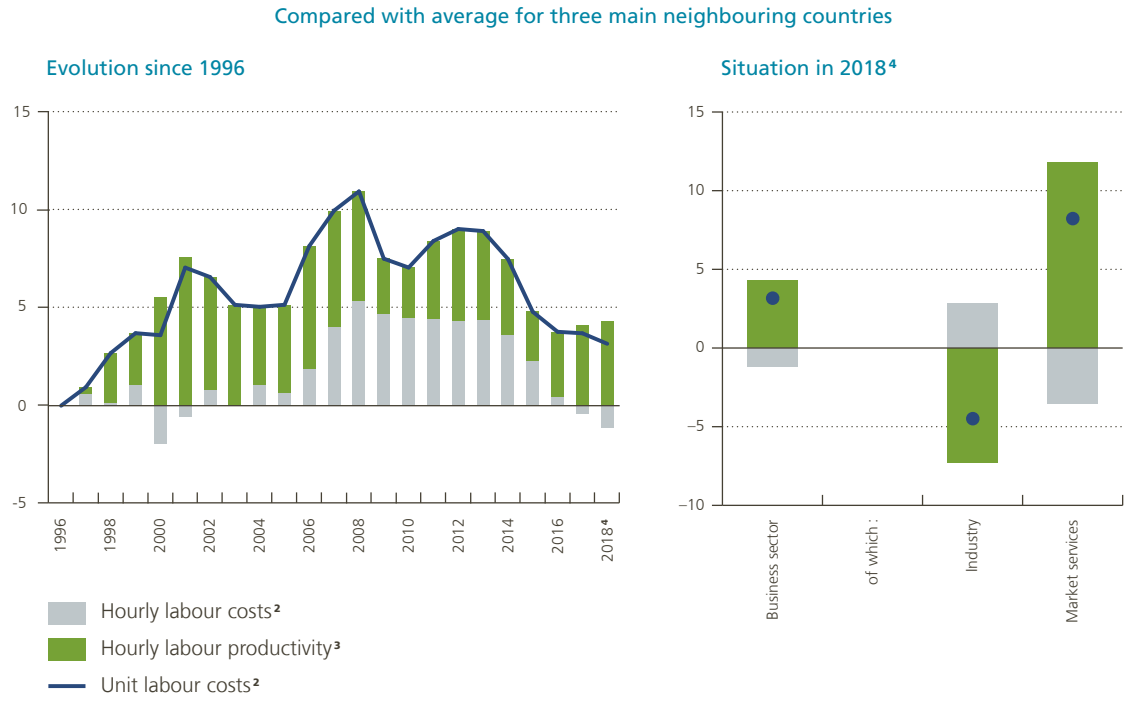
The size of the gap, a cumulative gauge kept since 1996, was also influenced by major overhauls in national accounts data in the four countries. In its January 2018 report, the CEC estimated the gap in labour costs at 0.3 % for 2017, but new data have led it to restate the figure for that year to 1.2 %. Thanks to the reduction recorded in 2018, the gap narrowed to 0.9 % in that year. The CEC is currently setting the maximum available margin at 0.8 % for the 2019-20 period. This margin will serve as a basis for the interprofessional agreement negotiations that will set the wage benchmark for the 2019-20 period.

The amended Law of March 2017 also stipulates that the CEC should calculate an absolute wage gap – comparing wage levels in Belgium with those in its neighbouring countries – in addition to a historical gap, i.e. the wage gap relative to the three neighbouring countries before the 1996 employment and competitiveness law came into force. As long as this historical gap is not run down to zero, any new

Chart 24

Slightly narrower gap for unit labour costs compared with the three main neighbouring countries in 2018

(cumulative differences since 1996 for the business sector[1], in %)



Source: Eurostat.

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

2 A positive sign indicates a faster cumulative increase in Belgian labour costs since 1996 than the average in the three neighbouring countries.

3 A positive sign indicates a slower cumulative Belgian productivity gain since 1996 than the average in the three neighbouring countries.

4 First nine months.

reductions in social security contributions will automatically serve to narrow the gap.

Moreover, the Law says that Belgium's competitiveness should also be assessed in terms of the gap in unit labour costs, a measure that typically shows a neutral trend when a faster uptick in labour costs goes hand in hand with more robust productivity growth. In principle, hourly labour cost trends should not diverge persistently from the trend in labour productivity.

Unit labour cost differences are calculated using the national accounts, and therefore differ from benchmark hourly labour cost calculations – not just because they draw on a different source but also because the tax shift-derived cuts in contributions are not 'neutralised' and because the outcomes for 2018 reflect the average for the first nine months of the year rather than an annualised projection. The developments are comparable with those for hourly labour costs, although productivity in Belgium grew more slowly. The figures for the first nine months of the year suggest that the gap in unit labour costs narrowed in 2018, as a result of a relatively more moderate trend in hourly labour costs in Belgium. A breakdown by sector shows that productivity was particularly weak in market services, a sector that has in fact been gaining in importance in the economy.

Inflation slightly up on trends in food prices

Average annual headline inflation remained relatively high at 2.3 % in 2018, up from 2.2 % in 2017, with food prices accounting for the slight acceleration. By contrast, underlying inflation, which strips out the volatile components from the consumer price index basket, edged down from 1.5 % to 1.3 %.

Food price inflation nearly doubled during the year, working out at 2.7 % compared with 1.4 % a year earlier, reflecting a variety of factors. For one thing, prices

Table 6

Harmonised index of consumer prices (HICP)

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

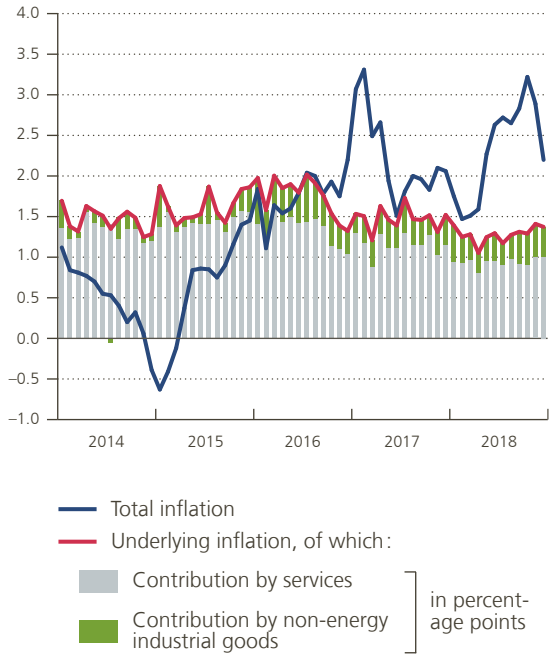
					p.m. Weighting
	2015	2016	2017	2018	*2018*
Total	0.6	1.8	2.2	2.3	*100.0*
Underlying inflation	1.6	1.8	1.5	1.3	*68.7*
Services	2.4	2.2	1.9	1.5	*41.5*
Non-energy industrial goods	0.5	1.0	0.8	0.9	*27.2*
Food	1.8	3.1	1.4	2.7	*21.3*
Energy [1]	–8.0	–0.6	9.9	8.9	*10.0*
Electricity	11.9	28.3	7.9	2.2	*3.2*
Gas	–5.4	–11.8	4.1	9.6	*1.6*
Fuels	–12.8	–5.3	10.6	10.7	*3.3*
Heating oil	–25.7	–17.5	18.7	19.4	*1.6*
Contribution to total inflation [2]					
Regulated prices [3]	0.4	0.3	0.3	0.3	*13.7*
Levies on energy and food	0.4	1.0	0.4	0.1	–
p.m. Health index [4]	*1.0*	*2.1*	*1.8*	*1.8*	–

Sources: Eurostat, Statbel, NBB.
1 Including solid fuels.
2 In percentage points.
3 Eurostat classification.
4 National consumer price index, excluding products seen as damaging to health, i.e. tobacco, alcohol and motor fuels.

Chart 25

Slowdown in underlying inflation

(HICP; percentage changes compared with the previous year, unless otherwise stated)



Source: Eurostat.

of dairy products rose significantly more than in 2017, by a hefty 4.7 % versus 1.2 %. This was related to higher European prices for milk fat and was not peculiar to Belgium: the three main neighbouring countries had seen these prices start to go up six months earlier, at the end of 2016. Feeding into the general rise in processed food prices was the January 2018 increase in excise duties on tobacco and soft drinks containing sugar as well as more expensive alcoholic beverages. As regards unprocessed foods, fruit prices, which had fallen in 2017, were back up in 2018.

Slightly higher inflation due to food prices

The slower underlying inflation was due to services inflation slowing to 1.5 % from 1.9 %, reflecting lower price rises for telecoms services and the "hotels, restaurants and cafés" category, as well as the scrapping of the radio and television licence in the Walloon Region in January 2018. Even without this last measure, which pushed the figure down by 0.2 of a percentage point, services inflation still slowed markedly in 2018, despite the fact that labour costs have been growing sharply since 2017. This was the reverse situation from the preceding years, when the rise in services prices continued to accelerate at a time of rather rigorous wage restraint and measures to alleviate labour costs. This confirms that, in Belgium, labour cost trends are passed on to sales prices only very gradually and after a time lag, with swings in labour costs partly cushioned by the opposite movement in corporate profit margins.

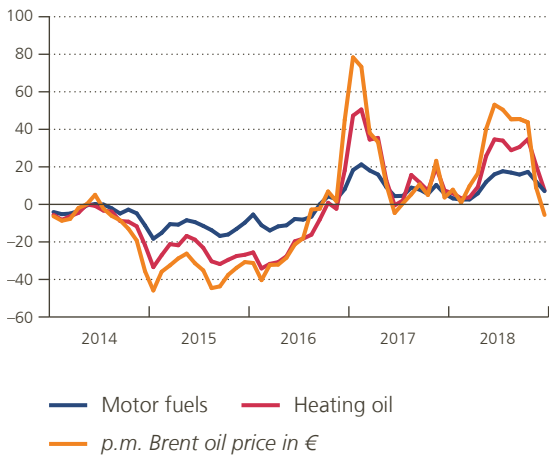
Energy inflation fluctuated significantly in 2018

At an average 8.9 % in 2018, energy inflation remained high but still below the figure for 2017. That said, this average masks major swings in the course of the year. Between May and October 2018, energy prices shot up on sharply higher Brent oil prices, with a year-on-year rise of 17.3 % in prices at the petrol pump and 34.7 % for heating oil in October. November saw oil prices change tack and by the end of the year the same products were recording year-on-year increases of 7.1 % and 7.4 % respectively. Heating oil prices reflect the ups and downs of the international markets much more clearly, as lower excise duties make for a smaller cushion.

Chart 26

Oil product prices reversed towards the end of the year

(HICP; percentage changes compared to the previous year)

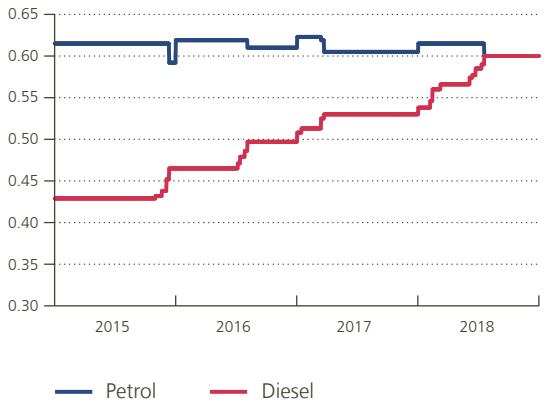


Sources: Eurostat, Thomson Reuters.

Chart 27

Excise duties on petrol and diesel have now converged

(daily data, in € per litre)



Source: Moniteur belge/Belgisch Staatsblad.

The so-called ratchet system clicked into action eight times in 2018. This mechanism was used as part of the tax shift funding; but it is also aimed at discouraging diesel usage because of the health hazard posed by emissions of particulates. The system ensures that any falls in daily maximum prices for diesel – set under the programme contract establishing the retail prices of oil products – are not fully passed on to consumers but are partly offset by higher excise duties. Once diesel excise duties have hit a ceiling, an offsetting cut in excise duties on petrol kicks in. The system was in place until excise duties on diesel reached the levels of duties on unleaded petrol, which has been the case since 19 July 2018, with a duty level of € 0.60 a litre. Regardless of the ratchet system, excise duties on petrol and diesel were indexed to headline inflation in January.

Petroleum products have kept energy inflation high

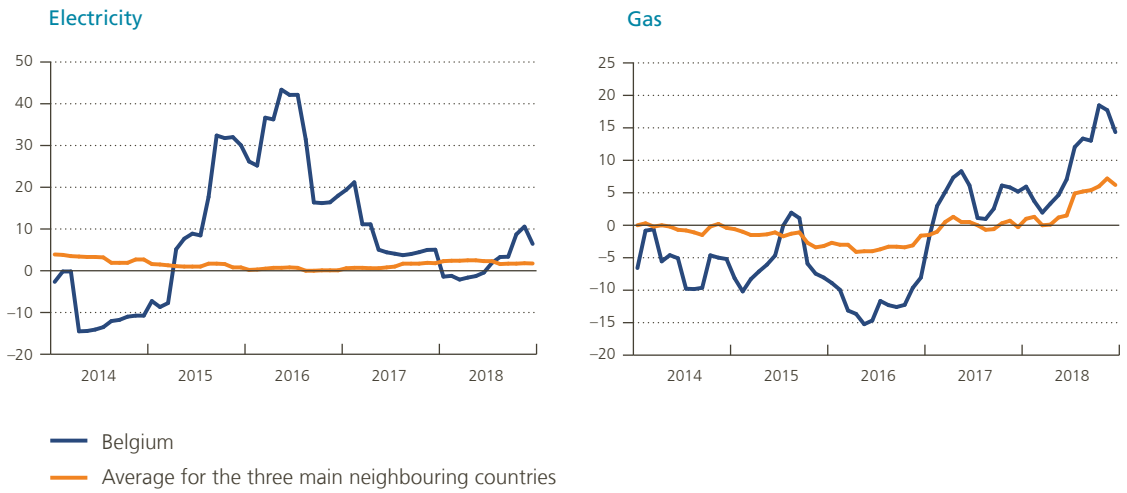
In the summer of 2018, the maximum price for diesel exceeded that of petrol for the first time, while, at € 1.42 a litre, diesel prices at the pump were also marginally higher than those for petrol. Diesel prices rose three times as fast as petrol, having still been below petrol prices in 2017. Excise duties accounted for about 40 % of fuel prices at petrol stations, a proportion that remained relatively stable between 2017 and 2018. Excise duties in Belgium are among the highest in the EU, after the United Kingdom, Italy and France.

Although, on average, electricity prices rose less sharply in 2018, they did record fairly major swings in the

Chart 28

Supply concerns generated upward pressure on electricity prices in 2018

(HICP; percentage changes compared to previous year)



Source: Eurostat.

course of the year. In January 2018, the energy levy in Flanders was scrapped, prompting a fall in electricity prices. Nevertheless, electricity inflation turned positive again from July, reflecting the energy component in electricity bills. Wholesale markets saw electricity prices rise from the second quarter of 2018, chiefly on the back of price developments for other energy-related commodities, such as oil, gas and coal, plus also a significant price increase for carbon credits in the wake of a reform of emissions trading schemes. The unavailability of a large part of Belgium's nuclear power capacity and uncertainty over power supplies in the winter months increased pressures in the electricity market, causing prices of new variable and fixed contracts for individual households to jump in October. Belgium's main neighbouring countries remained free of this additional pressure on consumer prices.

Driven by higher wholesale prices, gas prices for consumers also shot up from July and by October were 18 % higher than they had been a year earlier. Consequently, Belgium faced much steeper price rises in 2018 than the average for its three neighbouring countries, especially as retail prices in Germany were falling throughout the year. These developments caused the headline inflation gap to widen unfavourably for Belgium.

Belgium's inflation gap with its neighbouring countries narrowed sharply compared with previous years, but started widening again during the course of 2018

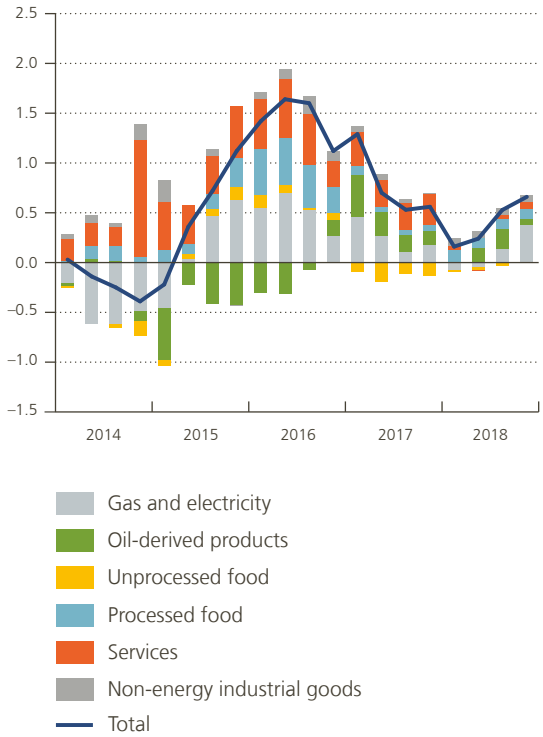
The inflation gap between Belgium and its three main neighbouring countries, which had risen significantly in 2015 and 2016 to reach as much as 1.6 percentage points, has been narrowing continuously since the start of 2017. In fact, it stood as low as 0.2 percentage point in the first six months of 2018. The gap had been mainly due to a faster rise in services prices and the measures taken to finance the tax shift. It started widening again in the second half of the year, this time because of shocks affecting energy-based products, as consumption prices in Belgium more directly reflect global swings in oil prices, while electricity and gas prices also rose more strongly than in the neighbouring countries.

Headline inflation in the three main neighbouring countries rose from an average 1.5 % to 1.9 % in 2018, the gap with Belgium narrowing from 0.8 of a percentage point in 2017 to 0.4 of a percentage point in 2018. Differences in inflation between Belgium and its three main neighbouring countries have been recorded since the creation of EMU in 1999. Although inflation has not been systematically higher in Belgium, the annualised gap has averaged 0.4 of a percentage point during this period.

Chart 29

After previously narrowing, the inflation gap between Belgium and its neighbouring countries widened again, due to energy prices

(quarterly average, in percentage points)



Source: Eurostat.

2.3 Private consumption growth weaker and current account in equilibrium

As in the previous year, GDP growth in 2018 was underpinned by a moderate rise in domestic demand, with net exports making a major contribution. At the same time, the change in inventories put the brakes on GDP growth.

Domestic expenditure (excluding inventories) in Belgium was up by 1 %, an increase almost as large as in 2017 but smaller than previously. Within domestic demand, private consumption and business investment, which together account for two-thirds of GDP, slowed. By contrast, investment in housing rose slightly in 2018, after having come to a standstill in the previous year. A relatively low interest rate environment combined with expanding purchasing power to drive up demand for housing. Government spending, in line with the typical investment cycle in the run-up to local elections, also grew slightly more robustly

Table 7

GDP and main expenditure categories

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

	2014	2015	2016	2017	2018 e
Private consumption	0.6	0.9	1.7	1.1	0.8
General government consumption	0.6	0.6	–0.2	0.6	0.8
Gross fixed capital formation	5.8	2.7	3.8	1.8	1.7
Housing	5.7	1.0	3.7	0.0	0.4
Enterprises	6.5	3.6	4.7	2.3	1.7
p.m. Excluding major specific transactions	*2.5*	*3.6*	*5.4*	*5.5*	*2.3*
General government	1.4	0.7	–2.0	2.1	4.9
p.m. Final domestic expenditure [1]	*1.8*	*1.2*	*1.8*	*1.1*	*1.0*
Change in inventories [2]	0.3	0.3	0.3	0.0	–0.3
Net exports of goods and services [2]	–0.8	0.1	–0.5	0.6	0.7
Exports of goods and services [3]	5.2	3.5	7.6	5.0	3.5
Imports of goods and services [3]	6.2	3.4	8.5	4.3	2.8
GDP	1.3	1.7	1.5	1.7	1.4
p.m. Nominal GDP (in € billion)	*400.1*	*411.0*	*424.7*	*439.1*	*450.5*

Sources: NAI, NBB.

1 In the previous years, significant specific transactions (for instance, certain investment abroad or a multinational's business restructuring), while hardly affecting economic activity in Belgium, increased volatility in certain components of GDP.

2 Excluding the change in inventories.

3 Contributions to the change in GDP compared with the previous year, in percentage points.

than in 2017. Net exports made a larger contribution as gross imports slowed more markedly than gross exports.

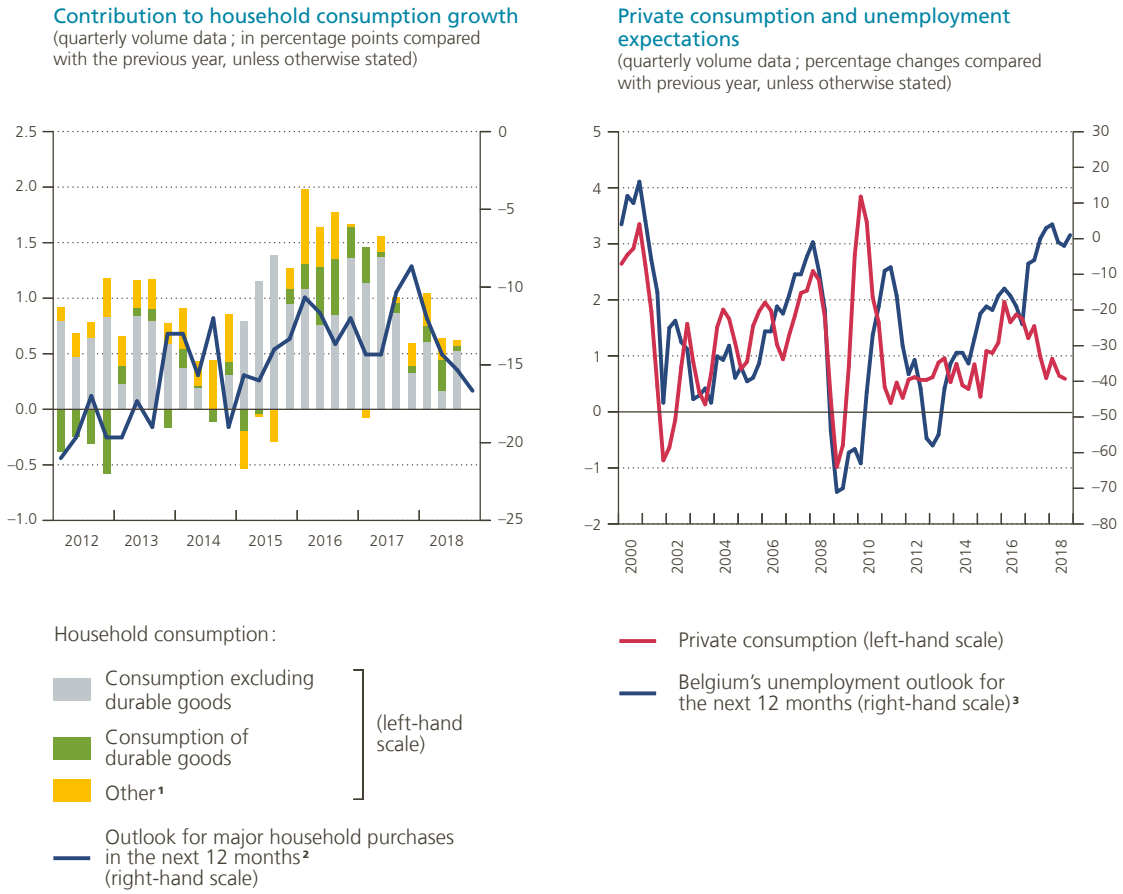
Private consumption growth continues to weaken

Private consumption volume growth slowed for the second consecutive year, coming in at 0.8 %. The slowdown was particularly noticeable in developments in consumption excluding durable goods, which grew at a much slower pace in the first three quarters of the year than on average in the three previous years. Durable goods consumption was up in the first half of 2018. This was not unexpected, in view of the rising indicator in the 2017 household consumption survey for major purchases in the next twelve months.

The slowdown in private consumption recorded in 2018 coincided with a falling consumer confidence indicator. This indicator, having risen since 2001 and peaked in 2017, fell gradually but stayed above its long-term average. The moderate weakening of consumer confidence probably also reflected increased international risks. Consumers nonetheless remained fairly optimistic about the labour market outlook. This sub-indicator usually correlates most closely with trends in private consumption, but this link has weakened sharply in the past three years.

Chart 30

Private consumption slows



Sources : NAI, NBB.

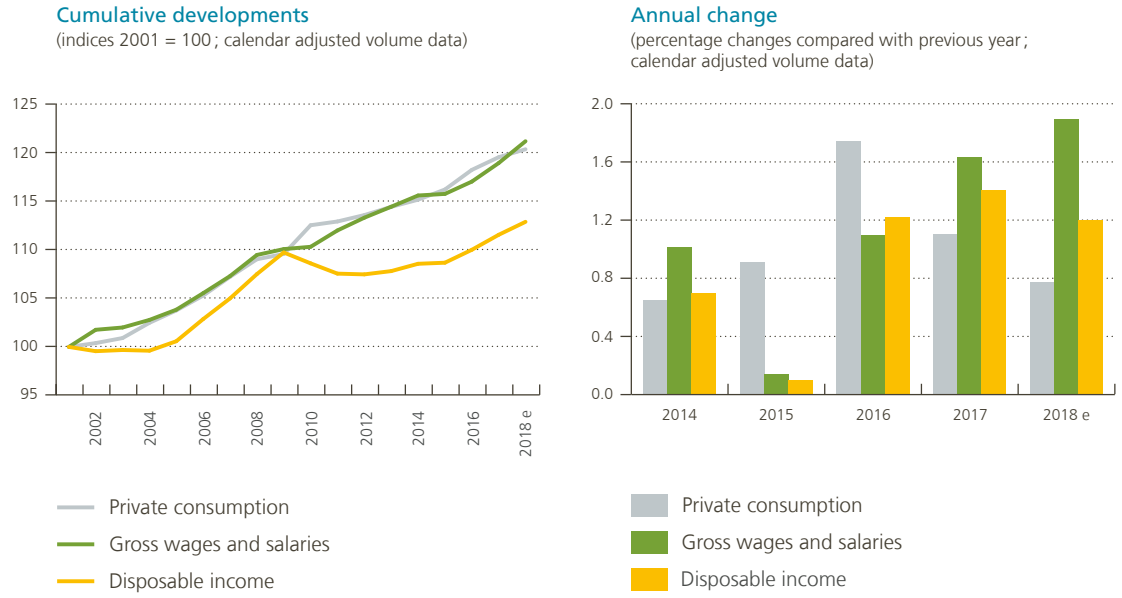
1 The 'Other' category includes Belgian tourists' expenditure abroad minus foreign tourists' expenditure in Belgium.

2 Balance of replies to monthly survey, calendar adjusted data.

3 Balance of replies to monthly survey, aggregate quarterly data. Calendar adjusted data. Reverse of the indicator released by the NBB.

Chart 31

Long-term consumption and household income trends moving in the same direction



Sources : NAI, NBB.

Economic uncertainty may have prompted households to curb their spending to some extent. On the whole, the 0.8 % growth in private consumption in 2018 was somewhat more modest than the 1.2 % rise in purchasing power. As a result, the savings ratio inched up from 11.5 % to 11.8 % of disposable income.

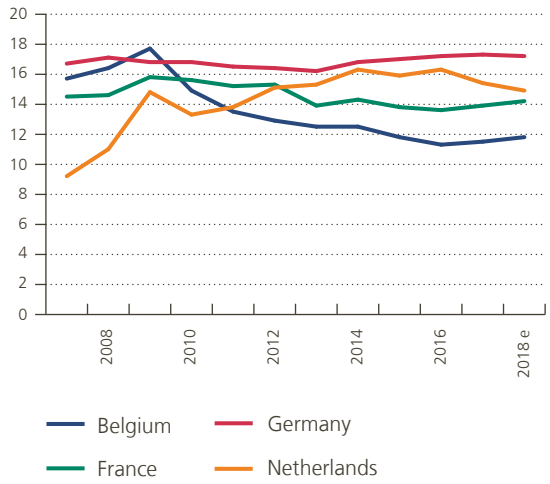
In the long term, consumer spending trends correspond closely to earned income trends. Under normal circumstances, there is also a strong link with disposable income. Between 2010 and 2015, however, this link became less clear due to a fall in capital income, against the backdrop of low returns in the wake of the financial crisis and the sovereign debt crisis in the euro area. This caused the household savings ratio to fall sharply, dropping below the level recorded in neighbouring countries.

That said, the year-on-year changes in these variables may temporarily diverge, among other reasons because households are inclined to smooth out their consumption in response to significant income variability. Their real consumption in 2015 and 2016 grew more strongly than their income, while the index jump curtailed both income growth and the rise in transfers

Chart 32

Gross household savings ratio recovers but is still below neighbouring countries

(in % of disposable income)



Sources : Eurostat, NAI, NBB.

received from the public sector. The reverse was the case in 2017 and 2018, when more rapid income growth did not fuel consumption.

A slight slowdown in disposable income growth

Household purchasing power in 2018 grew at about the same rate as in 2016 and 2017. Just as in previous years, the increase was less marked than in neighbouring countries (1.5 % in Germany and France and 1.9 % in the Netherlands). The purchasing power gap widened in a period of higher inflation in Belgium. Although income indexation mechanisms mitigate the impact of sharper domestic price increases – at the risk, it must be said, of jeopardising Belgium's competitiveness – certain product categories are left out, which potentially further erodes purchasing power. This was the case in 2018 for fuel price rises in particular, as these products are excluded from the reference price index. Wage restraint measures initially also weighed on earned income but, in the medium term, they tend to support corporate competitiveness and employment.

Wages were the main driving force behind household income

Household disposable income grew by 3.1 % in nominal terms in 2018, mainly driven by higher labour income just as in the two previous years. Gross wages rose by 3.8 % in total, on the back of a vigorous new expansion in labour volumes

Table 8

Determinants of household gross disposable income, at current prices

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

						p.m. In € billion
	2014	2015	2016	2017	2018 e	*2018 e*
Gross primary income [1]	1.1	0.6	2.0	3.4	3.3	*252.1*
Gross wages	1.5	0.8	2.9	3.5	3.8	*170.5*
Volume of labour of employees	0.2	0.6	1.4	1.6	1.5	
Gross wages per hour worked [1]	1.4	0.2	1.5	1.9	2.2	
Gross operating surplus and gross mixed income	3.6	1.5	1.2	3.0	2.5	*53.2*
Capital income [2]	–5.0	–1.8	–1.8	3.5	2.2	*28.3*
Interest	–55.1	–43.7	–32.9	–17.6	90.5	*0.9*
Dividends received	3.1	4.3	2.2	5.9	1.0	*17.0*
Other	–0.8	–4.4	–5.1	0.9	0.3	*10.4*
Net current transfers [1]	6.6	9.2	63.1	–1.3	–6.8	*6.0*
Current transfers received	1.6	1.8	3.1	2.3	2.1	*101.0*
Current transfers paid [1]	1.4	1.5	0.4	2.6	2.7	*95.1*
Gross disposable income	1.2	0.8	3.0	3.3	3.1	*258.0*
p.m. In real terms [3]	*0.7*	*0.1*	*1.2*	*1.4*	*1.2*	
Savings ratio [4]	12.5	11.8	11.3	11.5	11.8	

Sources: NAI, NBB.

1 Wages and salaries received, or current transfers paid, not including contributions paid in by employers.

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

3 Data deflated by the household final consumption expenditure deflator.

4 In % of disposable income in the broad sense, i.e. including changes in households' supplementary pension entitlements accruing as a result of an occupational activity.

and a gradual acceleration in hourly wages. Labour income trends, hampered in the first half of the decade by wage moderation efforts, have since shown a more robust dynamic.

Labour income had a more significant impact on disposable income in 2018 thanks to additional personal income tax cuts, following the first stage of the tax shift in 2016. More specifically, the aim was to expand the flat-rate deduction on business expenses, raise the personal income tax allowance, and undertake a further adjustment of the tax brackets. As a result, transfers from households to other sectors, mainly comprising taxes, went up by only 2.7 % – a considerably smaller rise than the total wage bill increase.

Other income categories were much less of a factor in the growth of household disposable income. Total gross operating surplus and gross mixed income went up by a mere 2.5 %, compared with 3 % in 2017. Capital income growth slowed most markedly, decelerating from 3.5 % to 2.2 % in 2018. Corporate dividends saw the smallest increase since 2012.

Transfers received by households from other sectors went up by 2.1 % in 2018. Pension and disability benefits, unlike unemployment benefits, continued to rise at a steady pace.

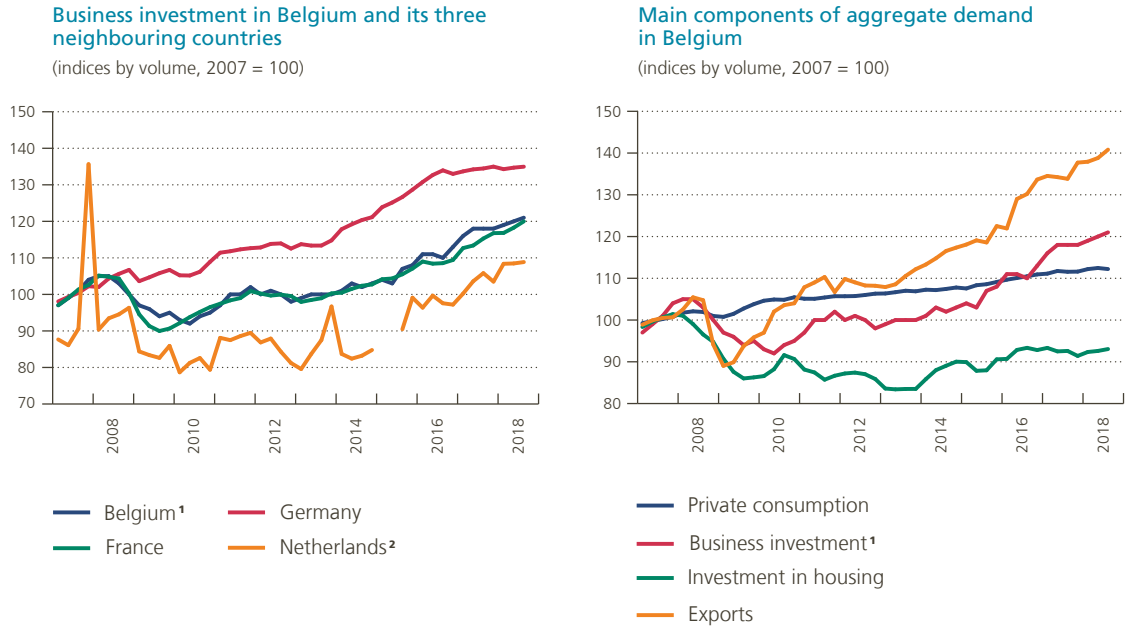
Business investment continued to grow more than GDP

After growing robustly in the four previous years, business investment – excluding certain specific operations – slowed in 2018: its growth by volume came in at 2.3 %, still above GDP growth.

Following the 2008 financial crisis, business investment started to pick up in 2010 and kicked ahead sharply from 2014 onwards, on the back of ample and relatively cheap external funding, wider gross operating margins and robust aggregate demand fundamentals. Business investment was one of the main drivers of economic growth in Belgium. Driven by exports in particular, it increased by a total of well over 20 % between 2007 and 2018, while cumulative

Chart 33

Business investment in Belgium strongly supported growth



Sources: Eurostat, NAI, NBB.

1 Index for Belgium adjusted for specific transactions.

2 A one-off sharp increase was recorded in the Netherlands in 2015, driven by amendments to the tax legislation governing investment. The chart ignores this increase for the sake of readability.

Table 9

Determinants of companies' gross operating surplus[1], at current prices

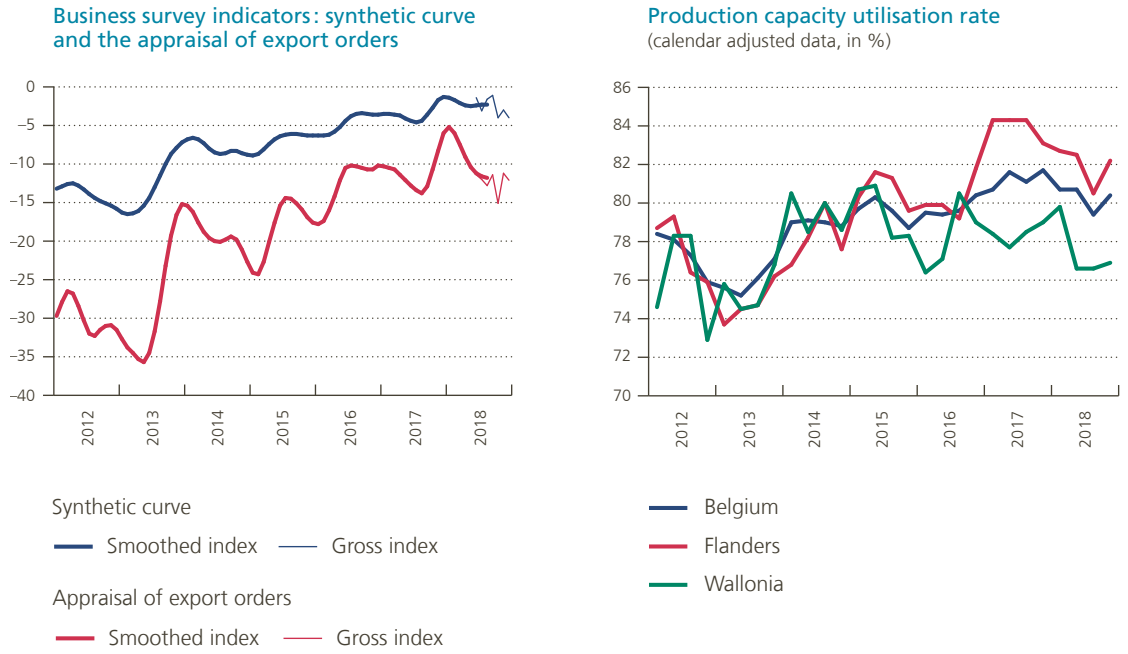
(percentage changes compared with the previous year, unless otherwise stated)

	2014	2015	2016	2017	2018 e
Gross operating margin per unit of sales[2]	–0.8	4.6	1.2	0.5	–1.2
Unit selling price	–0.7	–1.4	–0.3	2.3	2.2
On the domestic market	0.4	0.5	1.3	2.0	2.1
Exports	–1.9	–3.0	–1.7	2.2	1.6
Unit sales costs	–0.7	–2.6	–0.6	2.7	2.9
Imported goods and services	–2.1	–3.8	–2.3	3.1	3.2
Costs of domestic origin per unit of output[2,3]	0.5	–1.3	0.6	1.4	2.0
of which:					
Unit labour costs[4]	0.2	–1.7	–0.2	1.5	2.1
Unit net indirect taxes	0.1	–0.4	4.8	1.9	2.8
Final sales at constant prices	3.7	2.8	5.1	3.1	2.2
Gross operating surplus of companies	2.9	7.6	6.4	3.7	1.0

Sources: NAI, NBB.
1 Private and public companies.
2 Including the change in inventories.
3 In addition to wages, this category includes indirect taxes less 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.

Chart 34

The business cycle weakened in the manufacturing industry



Source: NBB.

private consumption grew by 12 % and investment in housing fell by 7 %. Belgian businesses stepped up their investment more than firms in the Netherlands but less than those in Germany.

Most of this investment was in intangible assets – i.e. intellectual property rights, software and databases – and, to a lesser degree, in real estate. Investment in machinery and equipment only recently returned to the level recorded before the 2007-2008 crisis.

After several years of strong acceleration, the slower growth of business investment in Belgium would appear to be a return to normal. Businesses saw their growth pace slacken in the context of a less favourable environment due to the international cyclical downturn and pressure on operating results.

The gross operating surplus of companies – i.e. revenues from operating activities – grew less robustly in 2018, edging up by a mere 1 %, compared with 5.2 % on average in the four previous years. The slowdown was mainly related to less dynamic developments in sales volumes, both in exports and on the domestic market. Margins also narrowed: unit selling prices rose considerably more slowly than unit sales costs, particularly because imports became more expensive, but also because of the rise in unit labour costs and indirect taxes. Differences of this kind had not been recorded since 2012. As a result, businesses saw their gross operating margins shrink by 1.2 %, reflecting the fact that they have not yet fully passed on the burden of the additional costs in their selling prices.

In addition to the deteriorating international economic situation, the general climate of growing uncertainty also has repercussions for investment. Monthly business surveys point to a gradual slowdown in the appraisal of export orders in the course of the year, prompting the synthetic business confidence indicator to fall relative to its historical high of 2017. More generally, demand prospect indicators also fell between the beginning and the end of the year, both in the manufacturing industry and in business services and trade. Other survey data also point to a slowdown

Slower business investment growth would appear to be a normalisation

Chart 35

Market share remained virtually stable [1, 2]

(annual percentage changes, volume data adjusted for seasonal and calendar effects)

Sources: ECB, NAI.
1 Export markets are determined based on the most recent projections for import demand from trading partners.
2 Excluding the effect of the reorganisation of a pharmaceuticals company's activities in 2016 and 2017.

in business investment. The production capacity utilisation rate in the manufacturing industry fell yet remained above its historical average. This country-wide result nonetheless conceals regional differences, given that the production capacity utilisation rate in Flanders has markedly exceeded the national average since the beginning of 2017.

Exports slowed due to weakening foreign demand

Volume growth of exports of goods and services slowed to 3.5 % in 2018, coming down from around 5 % in 2017. This movement was related directly to falling external demand, which affected markets in the euro area and the rest of the world alike. However, market share remained practically stable in 2017 and 2018, much as it had done on average in the three previous years.

Imports slowed more markedly than exports: the growth in imports dropped from 4.3 % in 2017 to 2.8 % in 2018. Weaker exports played a fundamental role here, as the production process for exports largely depends on imported inputs and components. This effect was exacerbated by the slower pace of private consumption and business investment in Belgium.

All in all, net exports in 2018 contributed 0.7 percentage points to GDP growth by volume, up 0.1 of a percentage point from the – already clearly positive – contribution in 2017. However, the improvement, resulting from volume movements, was not enough to prevent the 2018 trade surplus from weakening. Belgium's terms of trade deteriorated considerably, by nearly 1.6 % in 2018, as import prices rose much faster (by 3.2 %) than export prices (1.6 %), due to rapidly rising energy prices.

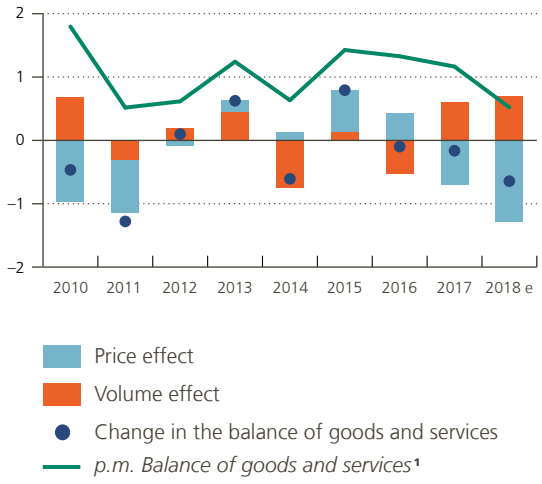
Belgium's trade surplus weakened

According to balance of payments and external trade data, the goods and services surplus is estimated to have shrunk from € 4.4 billion in 2017 to € 0.1 billion in 2018. Available detailed statistics for the first three quarters show that the deterioration was caused by the rising net bill for energy and the falling services trade surplus.

Chart 36

Marked deterioration in terms of trade

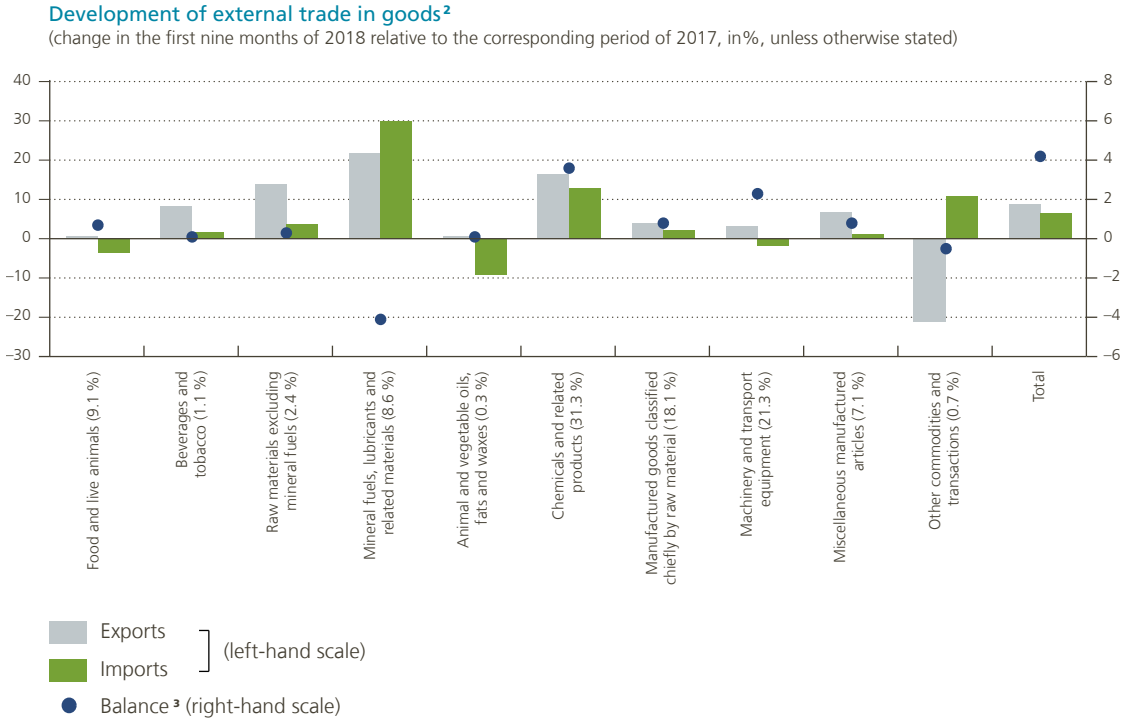
(in percentage points of GDP, unless otherwise stated)

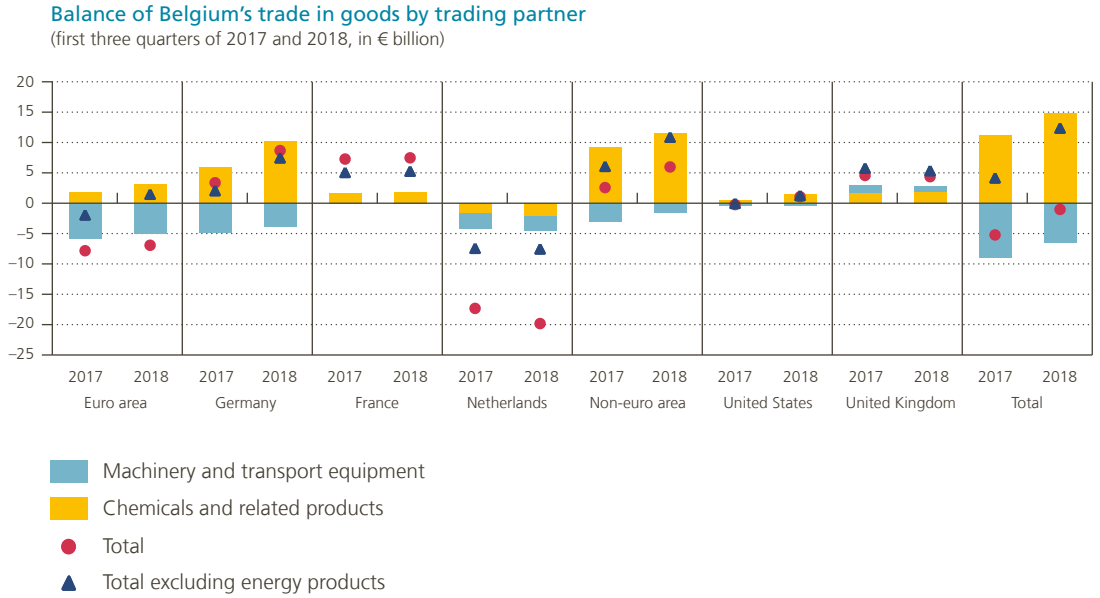


Sources: NAI, NBB.
1 In % of GDP.

Chart 37

Goods trade surplus became larger[1]





Source: NAI.

1 National concept, according to external trade statistics, SITC-1 classification.

2 The proportion of the product category in Belgium's total exports in parentheses.

3 Balance change, in € billion, between the first three quarters of 2017 and 2018.

The balance of goods excluding energy products improved

Belgium's net bill for energy products relative to the rest of the world climbed to nearly € 13.8 billion in the first nine months of 2018, as against € 9.3 billion during the corresponding period of 2017. Higher import prices for oil and natural gas products contributed to the increase. Imports of electricity also grew considerably, mainly in the second and third quarters as a result of the unavailability of a large number of Belgian nuclear power plants and rising wholesale market prices, among other factors.

At the same time, the balance of goods excluding energy products improved by € 7.9 billion to € 12.1 billion, or around 3.7 % of GDP, in the first three quarters of the year. The improvement was reflected particularly strongly in the "chemicals and related products" category, which accounts for more than 30 % of Belgium's total exports. Sales of these commodities on foreign markets grew by more than 16 % in the first nine months of 2018, and their imports by nearly 13 %. The "machinery and transport equipment" category, which has traditionally recorded a negative balance, also contributed to the recovery of the external goods balance, with exports rising by around 3 % and imports falling.

From a geographical perspective, the total goods trade balance improved vis-à-vis both euro area and non-euro area countries. The balance with euro area trading partners nonetheless remained negative due to substantial energy imports from the Netherlands. Excluding energy products, however, the goods trade balance improved significantly, particularly vis-à-vis Germany, Belgium's main trading partner. Exports to Germany in value terms increased by around 14 %, mainly as a result of exports of chemicals and related products, while imports fell by nearly 3 %. The goods surplus with non-euro area countries also grew robustly: excluding energy, it jumped from nearly € 6.1 billion in the first nine months of 2017 to around € 11 billion in the corresponding period of 2018. Regarding trade with the United States, for instance, a € 1.3 billion surplus was recorded, while the goods trade with the US in 2017 was almost in balance.

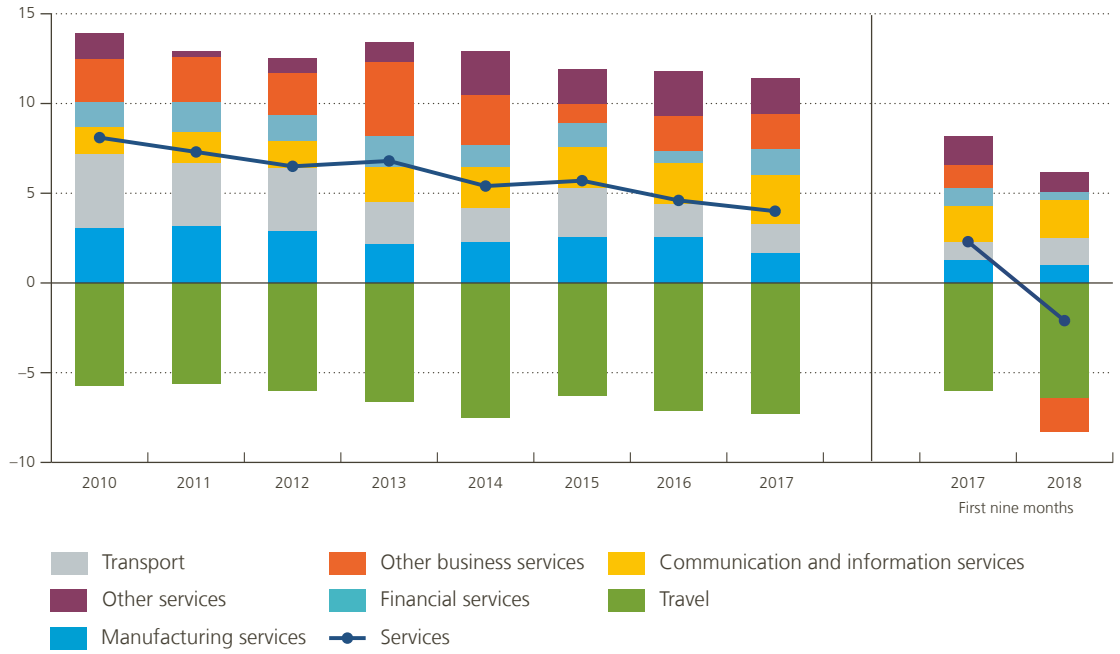
The services surplus was further eroded

In contrast with the expansion of the goods trade surplus, the services balance shrank further in 2018. A deficit of nearly € 2 billion was recorded in the first nine months of the year, whereas 2017 had seen a surplus of almost € 4 billion. Since the beginning of the decade, the services surplus has declined from around 2.2 % of GDP in 2010 to 0.9 % in 2017. This development has been driven mainly by the "transport", "manufacturing services on physical

Chart 38

The services trade surplus was further eroded

(balance, in € billion)



Source: NBB.

inputs owned by others" (comprising the processing, assembly and packaging of goods held by third parties, whereby the services provided do not involve transfer of ownership of the goods in question), "travel" and "other business services" (including inter alia consultancy and R&D services) categories. The surplus or deficit in these categories became smaller or larger respectively, a trend that continued during the first three quarters of 2018.

Belgium's current account balance is close to equilibrium

The decline in Belgium's current account balance with the rest of the world was caused primarily by the shrinking external goods and services trade surplus, which fell from € 4.4 billion in 2017 to € 0.1 billion in 2018. After having turned (slightly) positive in 2017 for the first time since 2010 and amounting to 0.7 % of GDP, the current account was almost back to equilibrium in 2018 (–0.1 % of GDP).

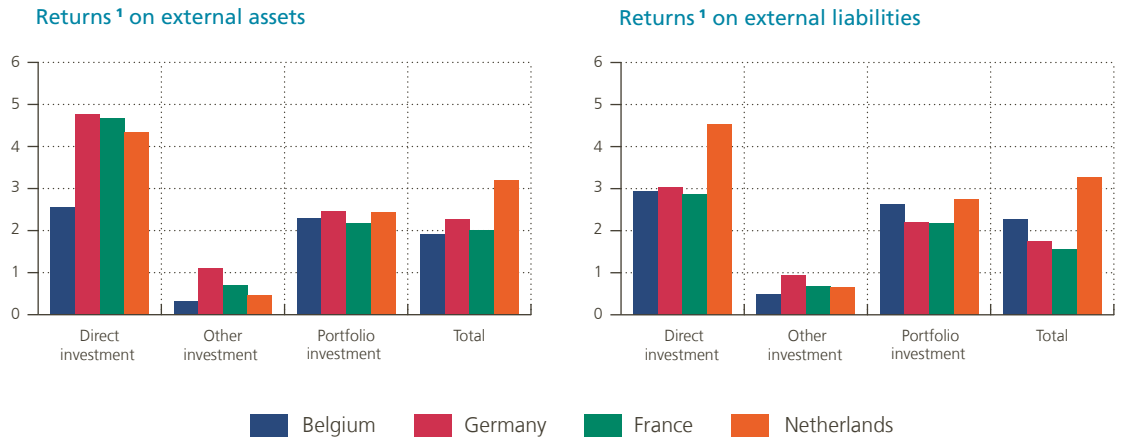
The primary income balance picked up significantly, from around € 5.3 billion in 2017 to nearly € 7.9 billion in 2018. This improvement was largely due to the increase in net investment income in relation to the rest of the world. As the situation on the financial markets returns to normal, particularly in terms of interest rate movements in the medium and long term, net investment income is gradually picking up from previous years. Between 2014 and 2016, net investment income was negative, in line with the general decline in returns on investment products on the financial markets.

Although it improved in 2018, Belgium's net investment income remained relatively small against the backdrop of Belgium's net external position, which remains largely positive at nearly 50 % of GDP. This situation can be explained by both a composition effect and a returns effect. The country's net foreign assets have remained relatively stable in recent years, but their composition by instrument has changed. The proportion of net foreign direct investment rose to nearly 20 % of GDP, primarily as a result of falling foreign shareholdings in Belgian

Chart 39

Belgium's foreign direct investment returns are below those of the neighbouring countries

(in %, average 2014 Q4-2018 Q2)



Sources: ECB, NBB.

1 Implicit annual return, calculated as the ratio of the investment income recorded in the last four quarters to the outstanding assets and liabilities of the net external position during the corresponding quarter of the previous year.

companies. This helped to balance the composition of Belgium's net external position by financial instrument. Although the greater weight of foreign direct investment in the net external position should have a positive effect on net returns, Belgium's returns were lower than those of the neighbouring countries. While the latter recorded average returns of more than 4 % on an annual basis in the 2014-18 period, Belgium's returns came in at just 2.5 %. This situation is reinforced by the still significant weight of intra-group loans in direct investment as opposed to shareholdings. Moreover, Belgium's net foreign assets continue to take the form of substantial positions in portfolio investment and other investment (which includes deposits and loans from various sectors including banking, trade credit, etc.). Against the general backdrop of falling returns on investment products in the financial markets, implicit returns in these investment categories are lower than in others. In fact, returns are somewhat lower on external assets than liabilities, which may reflect a different breakdown of assets and liabilities in terms of maturities.

Net investment income remained relatively small despite a largely positive external position

Lastly, the secondary income deficit grew somewhat in 2018, reflecting, among other factors, the falling secondary income of Belgium's general government relative to other countries. This development is chiefly attributable to a larger Belgian contribution to the EU budget under the "fourth resource", which is based on gross national income. The 2017 contribution was rather small, on account of the gradual and initially limited implementation of new Structural Funds programmes.

Table 10

Current account according to the balance of payments

(balance; in € billion, unless otherwise stated)

	2014	2015	2016	2017	2018 e
Goods and services	0.1	4.8	4.6	4.4	0.1
Goods	–5.3	–0.9	0.0	0.4	n.
Services	5.4	5.7	4.6	4.0	n.
Primary income	2.8	–2.2	0.4	5.3	7.9
Compensation of employees	5.7	5.9	6.1	6.2	6.3
Investment income	–2.3	–7.2	–4.4	0.3	3.0
Other primary income	–0.6	–0.9	–1.2	–1.3	–1.3
Secondary income	–6.4	–6.8	–7.6	–6.5	–7.5
General government	–3.6	–3.8	–4.3	–3.1	–4.1
Other sectors	–2.8	–2.9	–3.3	–3.3	–3.4
Total	–3.5	–4.2	–2.6	3.2	0.5
p.m. Idem, in % of GDP	*–0.9*	*–1.0*	*–0.6*	*0.7*	*0.1*

Sources: NAI, NBB.

3. Savings and financing the Belgian economy

3.1 Non-financial corporations prefer debt financing to equity financing

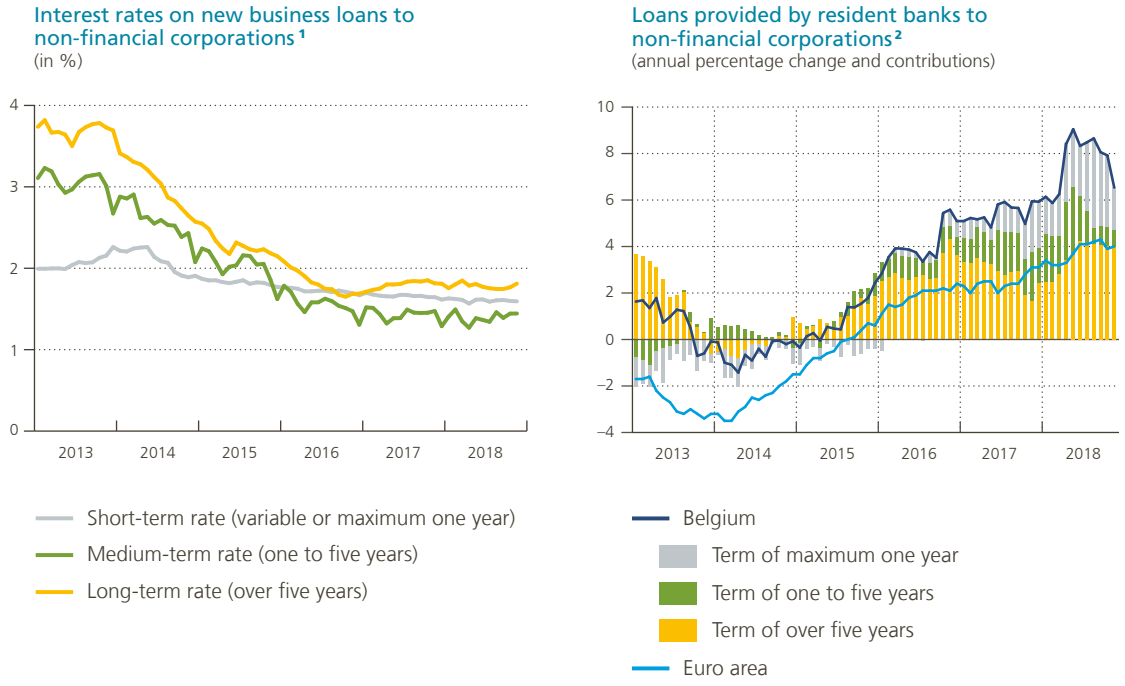
Businesses again stepped up their reliance on bank lending in 2018, with short-term loans gaining in importance. Their debt ratio continued to rise and they reduced their capital, which made them less solvent. Operating profits nonetheless remained robust and once again boosted liquid assets.

Bank credit growth accelerated further...

Businesses continued to make wider use of bank loans in 2018. Annualised growth in bank lending to businesses picked up, peaking at 9 % in May.

Chart 40

Bank lending to businesses still stimulated by low interest rates



Sources: ECB, NBB.
1 Loans up to and including € 1 million.
2 Including securitised or otherwise transferred loans.

Although the upward trend subsequently slowed, lending to businesses continued to expand consistently more robustly than in the euro area, where it accelerated during the course of the year to reach 4 % in November. The bank lending survey (BLS) shows that credit growth was underpinned by persistently low interest rates and greater corporate borrowing requirements.

Businesses made broader use of bank loans

Interest rates on new business loans in 2018 fell or remained close to historical lows. The ECB's monetary policy remained accommodating, which translated into a combination of intense competition between banks and persistently low interest rates. As banks did not fully pass on the slight rise in long-term interest rates in new loans, their already narrow commercial margins on these loans contracted even further. Business leaders also continued to regard funding conditions as highly favourable: the Bank's quarterly survey showed that the percentage of businesses describing borrowing conditions as unfavourable dropped to a record low of 4.5 % in 2018.

Demand for credit was buoyed up by fixed capital formation as well as mergers and acquisitions. Moreover, businesses required additional funding for their inventories and other working capital volumes and used bank loans to refinance and repay debts.

... and showed a broader breakdown by maturity and sector

Whereas long-term bank loans in particular initially recovered from 2014 onwards, shorter maturities gradually contributed more to bank credit growth and its acceleration. The fact that businesses made wider use of loans with a term of less than five years in 2018 can be explained by at least two factors.

First, a few businesses took out bank loans to finance mergers and acquisitions, causing a growth peak in the spring. Following the completion of these operations, the loans were repaid and replaced by long-term bonds, which thus constituted the final funding source for stakes in the new subsidiaries. On the back of these substitutions, bank lending growth slowed and, at the same time, the issue of debt instruments grew in the third quarter.

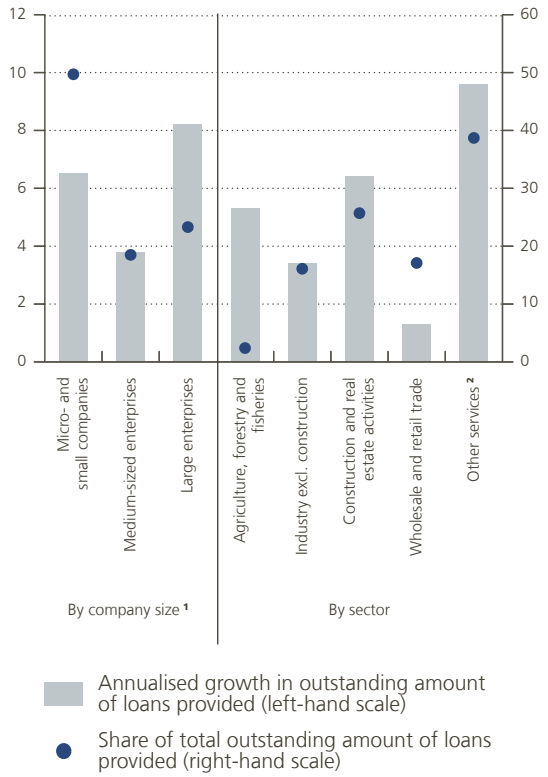
Second, the growing number of such loans also relates to the dynamism of economic activity and potentially concomitant working capital requirements, particularly in sectors with relatively long production cycles such as construction. Corporate cash reserves may at times prove insufficient to pay suppliers' invoices or employees' wages before customer payments have been received. These cash requirements are often met in the shape of overdraft facilities or other types of short-term loans.

Incidentally, it was not just SMEs but also large enterprises that raised the outstanding amount of their bank

Chart 41

Growth in bank lending broadly based across sectors and company sizes

(loans provided by resident banks, monthly data up to 30 September 2018, in %)



Source: NBB (Central Corporate Credit Register).

1 Micro-companies are companies that used the micro format to file their annual accounts, small companies are firms that submitted an abbreviated format. Companies that filed the full format are deemed to be medium-sized or large enterprises depending on whether or not they exceed one or more of the specified thresholds for number of employees (50 FTEs), turnover (€ 9 million) and total assets (€ 4.5 million). Data for companies whose scale has not been determined are not included.

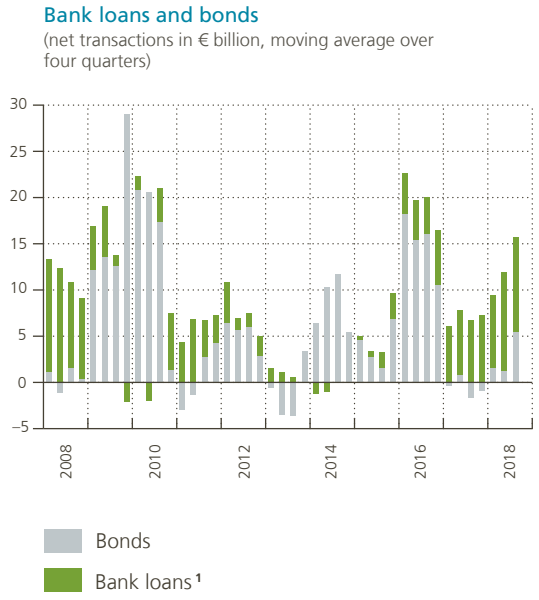
2 Excluding financial activities and insurance.

loans in 2018. This happened in all major sectors, albeit to varying degrees. The increase was particularly strong in construction, with outstanding bank loans climbing 6.4 % between September 2017 and September 2018, and even more substantial in services excluding wholesale and retail trade, where this figure came in at 9.6 %. Conversely, growth in borrowing was very low in the wholesale and retail trade sector, at just 1.3 %, which may be related to the stagnation of economic activity recorded in that sector in 2018.

Overall, Belgian businesses took out new bank loans worth € 12.2 billion net in the first three quarters of 2018. For funding purposes, they thus made broader use of bank lending than of bonds, the issuance of which came to € 6.3 billion net. This suggests that demand for market funding fell somewhat, although it accelerated again in the third quarter. Reduced issuance of debt instruments was accompanied by fewer bond purchases by the Eurosystem under its corporate sector purchase programme (CSPP). In addition, bond market financing costs started to inch up – though this source of funding nonetheless remains the cheapest for large solvent enterprises.

Chart 42

Bank loans were the main funding source



Source : NBB.

1 Provided by resident banks, including securitised or otherwise transferred loans.

Higher debt levels and capital reductions weakened non-financial corporations' balance sheet structure

As a result of the growth in bank lending and, to a lesser extent, in bond issuance, the consolidated debt of non-financial corporations[1] relative to GDP rose by 1.6 percentage points, to 128.8 % in the third quarter of 2018. Consolidated corporate debt thus remained well above the euro area average, which worked out at 78.5 % of GDP at the end of June. This higher debt ratio for Belgian businesses should be qualified, however, given that it came to 66 % of GDP when adjusted for intra-group liabilities. Such liabilities towards captive money lenders and foreign affiliates account for virtually half of Belgian non-financial corporations' debt. Intra-group debt of this scale is typical of Belgium and also of a number of other European countries, including the Netherlands, Ireland and Luxembourg. After having risen for years, these debt levels nonetheless contracted somewhat in Belgium in 2018, by 1.7 percentage points of GDP, which may be related to slowing activity on the part of captive money lenders in response to changes in taxation.

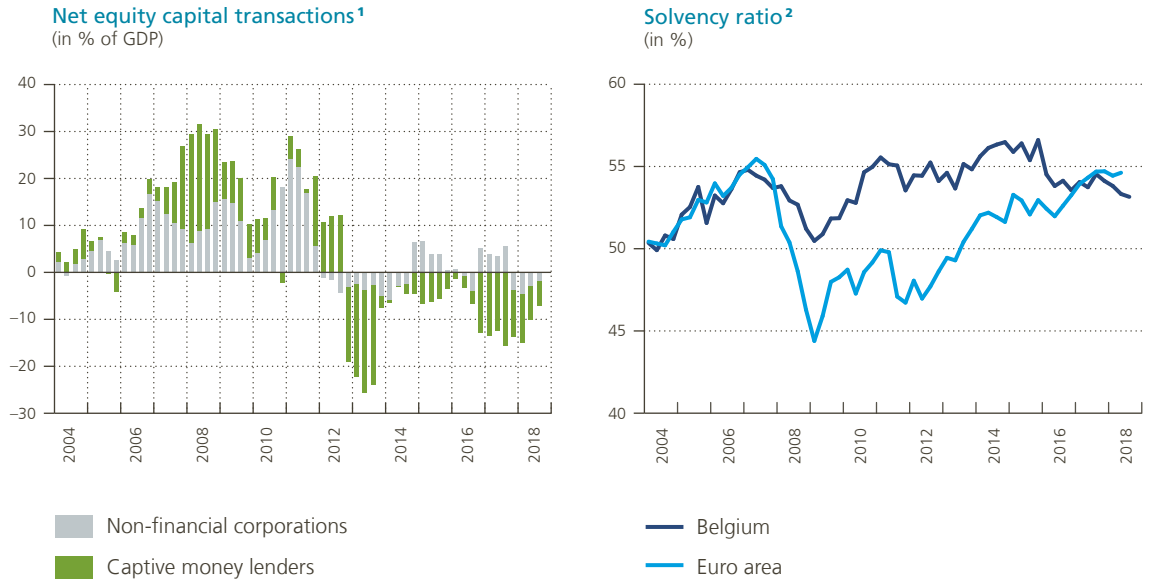
High debt ratio of non-financial corporations is driven by intra-group loans

Businesses not only contracted new loans in 2018, they also reduced their capital. From 2006 onwards, the accumulation and reduction of equity capital by Belgian businesses would appear to have been largely driven by tax changes. After the notional interest deduction scheme for risk capital had initially led to an inflow of capital injections, the abolition of the carry-over provision to subsequent years and the reference rate reduction – implying a smaller tax deduction for equity financing – drove businesses to reduce their capital base from 2012 onwards. This was particularly true for captive money lenders, whose presence in Belgium is largely determined by tax advantages of this kind. Capital reductions would appear to have accelerated since the end of 2017 on

1 Excluding loans provided by resident non-financial corporations to other resident non-financial corporations.

Chart 43

Higher debt and lower equity levels undermine corporate solvency



Sources: ECB, NBB.

1 Moving average over four quarters of net capital increases (+) or decreases (–).

2 Calculated as the ratio of equity capital to total liabilities. Data for the euro area up to and including the second quarter.

the back of further reductions in the rate for notional interest deductions: as a compensatory measure for the 2018 corporation tax rate reduction, tax deductions are no longer calculated on the outstanding capital but rather on the average capital increase over the past five years. In addition, capital reductions among SMEs in 2018 were reinforced by a delayed effect of the 2014 increase in the withholding tax on liquidation premiums. Incorporated reserves, taxed at 10 % at the time, are distributable tax-free after a four-year qualifying period, i.e. from 2018. Lastly, another tax amendment was expected to discourage equity capital reductions in 2018. As from that year, capital reductions are subject to withholding tax, more specifically the portion of the reduction corresponding to the share of taxed reserves in equity capital. The net capital reductions recorded in 2018 would appear to suggest that the first two measures had the largest impact.

The non-financial corporations sector saw its solvency position weaken as a result of falling equity levels and rising debt levels. The sector's solvency ratio, calculated as the ratio of equity capital to total liabilities, fell to 53.2 % in the course of 2018, dropping below the euro area average after having remained above it for around ten consecutive years.

Belgian businesses lose their solvency advantage

The growing proportion of short-term loans, to a share of about 28 % of total debt, added somewhat to refinancing risk. Despite this, it remained much smaller than in the period before the financial crisis, when virtually half of all loans had to be refinanced within twelve months. The less solid funding structure was nonetheless counterbalanced by robust operating profits and favourable funding conditions so that, all in all, debt levels measured by the debt-service ratio – i.e. the ratio of total debt service payments to operating surplus – remained reassuring. Businesses' cash reserves also stayed high, coming to 30.4 % of GDP in the third quarter of 2018.

3.2 Households' mortgage debt levels continued to rise

In an environment of continuing low returns on low-risk assets, and of growing volatility and uncertainty on the financial markets, households continued to focus on real estate in 2018. Driven by a steady rise in prices, real estate accounted for around 60 % of households' wealth. New house purchases, encouraged by favourable funding conditions, were accompanied by an increase in households' mortgage debt levels. At the same time, households accumulated new financial assets only modestly, preferring low-risk and liquid investment options.

Growth in household wealth was underpinned by property holdings

The total net wealth of Belgian households – comprising their real estate and net financial assets – amounted to an estimated € 2 591 billion at the end of September 2018, having grown by € 65.9 billion from the end of 2017 mainly on account of an expansion of their real assets. These assets amounted to an estimated € 1 534 billion[1] on 30 September 2018, against € 1 464 billion nine months earlier.

Thus, property holdings also had a profound impact on the development of households' total net wealth in 2018 – which, incidentally, has been the case since the early 2000s. At that time, households' total assets comprised roughly equal proportions of net financial assets and real estate. The share of property assets started to rise in 2002, reached a peak during the financial crisis and has stabilised at around 60 % since.

More specifically, developments in property wealth were determined mainly by the rise in land prices. The value of land owned by households, coming to an estimated € 296 billion at the end of 2000 – compared with € 302 billion for buildings and structures – had virtually tripled by the end of 2017, to € 879 billion, while the value of buildings had almost doubled, to € 584 billion.

1 It should be noted that, in the absence of available data, the value of households' real assets excludes property located abroad.

BOX 4

Land prices in the development of house prices and households' real estate wealth

Property prices in Belgium have shot up over the past four decades. This trend can be explained by the dynamics of various factors[1]. At macroeconomic level, the pronounced fall in mortgage interest rates, combined with higher household incomes, boosted demand. Population growth and the steady decline in average household size have undoubtedly also played a part. Lastly, against a backdrop of low elasticity of housing supply, the anticipated advantage of the real estate tax reforms, intended to encourage property purchases, was to a large extent passed on in prices.

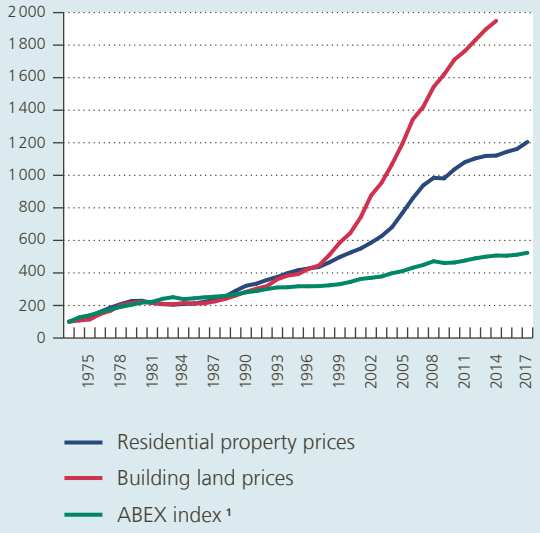
A residential property can be seen as the combination of two separate elements: its structure, i.e. the building as such, and the land it is built on. Property transaction prices can thus be broken down into construction costs and the purchase price of the land on which the property is built. Between 1973 and 2014, land prices in Belgium rose sharply, much faster than house prices[2]. As a result of a robust acceleration at the end of the 1990s in particular, land prices multiplied by a factor of 19 over the period as a whole, compared with a factor of 11 for house prices. By contrast, construction costs developed at a more moderate pace, recording only a fivefold increase in the same period.

1 For a more detailed description of the determinants of real estate prices and their effects, see Warisse Ch. (2017), "Analysis of the developments in residential property prices: is the Belgian market overvalued?", NBB, *Economic Review*, June, pp. 61-78

2 The analysis is restricted to the 1973-2014 period because of data availability. Official statistics on building land prices are no longer available after this date. That said, post-2015 alternative data confirms the outcomes of the analysis.

Rising land prices drove up house prices

(indices 1973 = 100)



Sources: ABEX, NBB.

1 Indicator of construction costs.

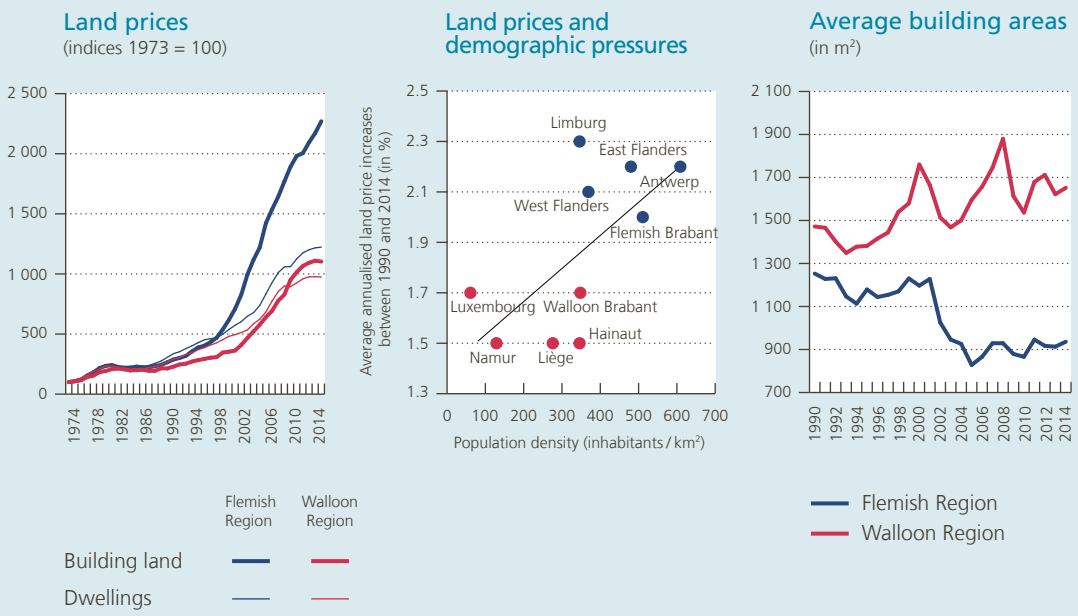
According to the empirical literature, higher land prices are the main driving force behind the expansion of property prices recorded in advanced economies since the second half of the 20th century. This could also be true for Belgium, given that well over 70 % of the increase in property prices since the early 1970s can be attributed to the rise in land prices[1].

However, land price dynamics in Flanders and Wallonia differ considerably[2]. Price rises were stronger in Flanders, where building land prices rose by a factor of 23 between 1973 and 2014, compared with a factor of 11 in Wallonia. The increase in Flanders was more pronounced each year, with the exception of the early 1980s and the period between 2006 and 2011. The more rapid growth in the north of the country was also accompanied by a more marked difference between land price and house price dynamics, whereas overall these two variables developed rather more in parallel in Wallonia. Under the same approach, the share of land price growth in residential property price growth is 74 % for Flanders, as against 54 % for Wallonia.

1 For more detailed information, see Reusens P. and Ch. Warisse (2018), "House prices and economic growth in Belgium", NBB, *Economic Review*, December, pp. 85-111.

2 This analysis ignores the Brussels-Capital Region, as building land is relatively scarce here and transactions are few, making the available data less than representative and price indicators more volatile.

The more rapid rise in land prices in the Flemish Region can partly be explained by a higher relative scarcity of land than in the Walloon Region



Sources: Statbel, NBB.

The much higher rise in land prices in Flanders is partly related to a higher relative scarcity of building land. Most provinces in the north of the country are more densely populated, effectively reducing the available space for building and driving up land prices. With the exception of Hainaut and Walloon Brabant, whose population densities are quite comparable to those in Limburg and West Flanders, all the Walloon provinces are less densely populated than their Flemish counterparts. Moreover, the average area of building land in the Flemish Region is smaller, having shrunk particularly since the early 2000s. It is argued that the significant reduction that has been recorded since then can be partly attributed to the promulgation of a new land use plan in 1999[1].

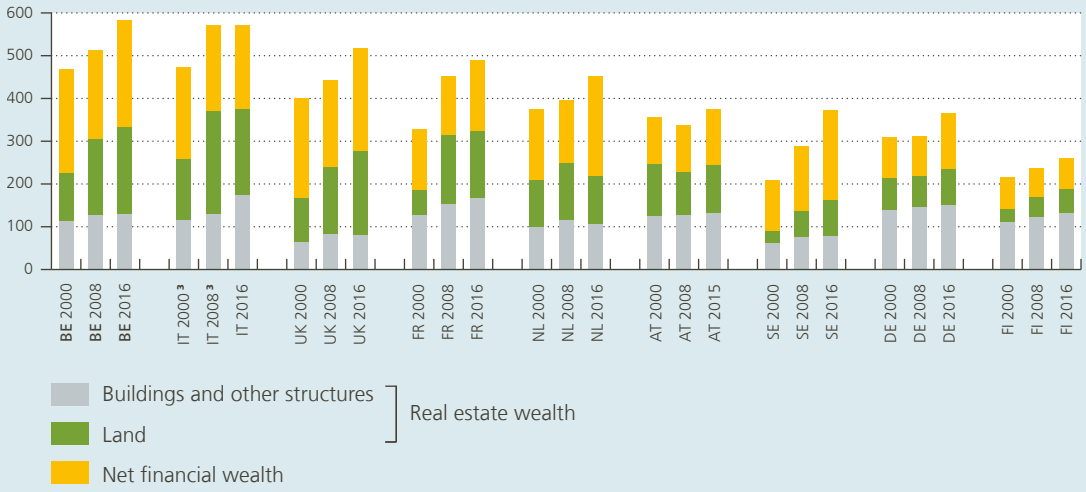
The property price dynamics of recent years, and particularly growing land prices, have had a major impact on households' total assets. Movements in these assets have been strongly affected by property ownership since the early 2000s.

As is true for financial assets, changes in real estate wealth can be explained not only by volume effects (new investment and sales) but also by price effects (valuation). Summary projections prepared by the Bank show that new purchases and new builds account for around one-seventh, and price effects for six-sevenths, of the rise in the value of Belgian households' property wealth (all types of land, buildings and other structures) between 2005 and 2016, the period for which the most detailed data is available.

1 See Manceaux J. (2011), *Bouwgrond: zeldzaam goed in België*, ING, Economic Research Belgium, May.

Belgium saw a significant rise in the value of real estate wealth[1, 2]

(in % of GDP)



Source: Eurostat.

1 Real estate wealth breaks down into three types of asset: dwellings, land, and other buildings and structures. The "Buildings and other structures" series in the chart comprises dwellings and other buildings and structures. There are methodological differences between countries as to the inclusion of land in the possession of households.

2 No data is available for Spain, Portugal and Greece, among other countries.

3 Only data on dwellings and land.

Price effects are more significant when only land is taken into account: it is argued that these would have been eleven times stronger than volume effects, not just because prices for all categories of land (agricultural land, building plots, developed land, etc. held by households) rose, but also because the proportion of land with a higher average value increased.

Belgium is not the only European country where land prices have played a dominant role in the development of household wealth. Along with the United Kingdom, Italy and France, Belgium is one of the countries recording the sharpest increase in the share of real estate in household assets between 2000 and 2016. This can be explained by various factors. First, growing population density drives up the scarcity and price of building plots. This happens even when a sizable part of the population resides in major cities, as is the case in France and Italy. The volume of households' total assets is also related to the percentage of homeownership. This rate is lower in Germany than in Italy or Belgium. In addition, social housing, usually government-owned, in some countries accounts for a larger part of the housing market, which also affects the relative number of homeowners. Lastly, second-home ownership may have an impact on real estate wealth outcomes; the degree to which assets of this kind are owned by private companies rather than by households is determined by national features.

As is the case in numerous European countries, house prices in Belgium have been on an upward trend for some time. Prices have more than doubled since the early 2000s and there have been only two periods of falling prices since reliable statistics became available: one in the first half of the 1980s and a second period – which was shorter and showed a more limited decline – in the wake of the financial crisis of 2008.

Property prices were up by more than 3 % in 2018

House prices in the euro area have been rising again since 2014, after having fallen or stalled for several years against the backdrop of the great recession. Belgium saw house prices rise generally less rapidly than did other key euro area countries, with the notable exceptions of Italy and France.

House prices in Belgium continued their upward trend in 2018, albeit at a somewhat slower pace than in the previous year. Property prices grew by just over 3 % in the first three quarters of 2018 relative to the corresponding period in 2017. Adjusted for inflation, real house price growth came in at around 1.5 %.

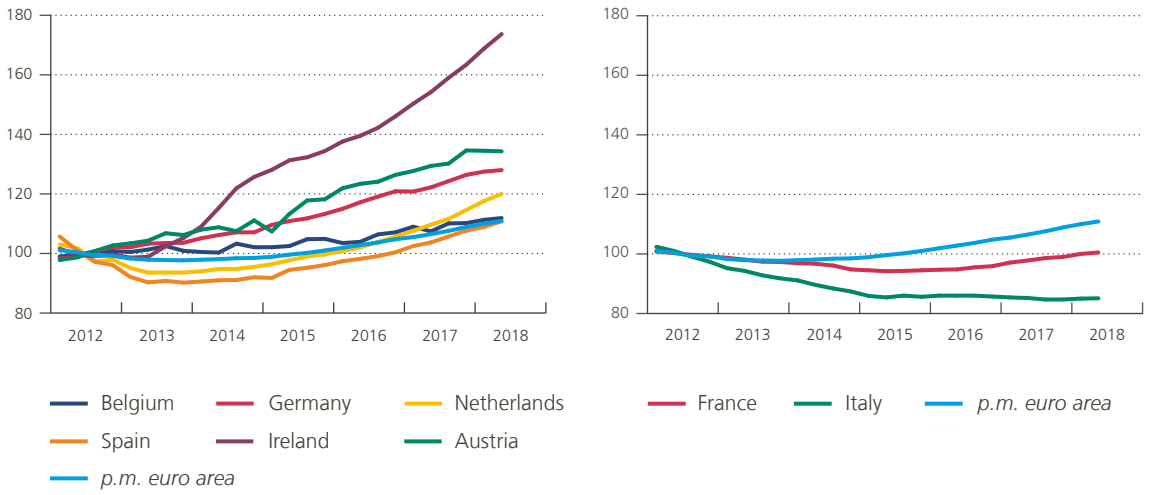
According to the estimates of an econometric model that takes account of various demand factors – household disposable income, mortgage interest rates, demographic trends and key changes in taxes on real estate – house prices in 2018 would have been approximately 6.5 % higher than their estimated equilibrium value. The gap grew just a little from the previous two years, which shows that trends in property prices generally match those in the key determinants of demand for property. The fact that real estate prices are at a level close to the value estimated according to the underlying fundamental determinants does not necessarily imply that the property market is not subject to any risks. Prices could fall substantially should one of the variables deteriorate sharply, for instance due to a sudden increase in mortgage interest rates or a negative shock to household income.

The willingness to use the available space in an economically and ecologically sustainable way, through residential concentration, generally helps to reduce geographical mobility issues and improve energy efficiency. At the same time, the scarcity of building land leads to sharply higher prices, impeding access to housing for large groups of the population. The government has a key role to play in relieving these tensions.

Chart 44

Belgium's growth in property prices lags behind numerous other euro area countries

(indices 2012 = 100)



Sources: OECD, NBB.

The financial environment remained conducive to property loans

Having felt the impact of the mortgage loan tax relief reduction by the Regions, particularly the Flemish Region, the property market strengthened again from 2015 onwards. This trend continued in 2018, as shown by initial projections by the Royal Federation of Belgian Notaries based on the number of new notarial property records.

Low interest rates continued to underpin demand for residential property investment, also via transactions in the secondary market. Interest rates on mortgage loans with a term of over ten years were at around 2 % towards mid-2016, a low nominal level from which they have hardly deviated so far (1.95 % in November 2018) and which is close to zero in real terms.

Despite the more restrictive macroprudential measures the Bank took in May 2018 to counter the rise in household debt, banks taking part in the ECB's bank lending survey (BLS) were not planning to tighten their credit terms in the short term. This stance was driven particularly by competition in the market. Data from the Bank's mortgage lending survey among credit institutions pointed rather to an easing of mortgage lending criteria, notably via the trend increase in the loan-to-value ratio (see chart 54 in section 3.3 on the banking sector).

In addition to the continuing relaxed lending criteria, households may have been encouraged to take out property loans by changes to the tax system. For instance, the Walloon Region abolished the 15 % registration fee for third-home purchases from 1 January 2018, instead charging 12.5 %, i.e. the rate applicable to all purchases. Also effective from that date, the first € 20 000 of the purchase price of first homes serving as main residence is exempt from registration fees. In Flanders, the government decided to reduce the registration fee for first-time buyers from 10 % to 7 %, and even to 6 % in the event of major energy-saving refurbishments. In addition, it granted an exemption from registration fees on the first € 80 000 for purchase prices up to € 200 000 (€ 220 000 in the core cities and the Brussels periphery). These two measures, which came into effect on 1 June 2018, may have contributed to property transaction dynamics in the second half of the year. Lastly, in early 2018, the government of the Brussels-Capital Region took an incentive measure to boost new developments, namely a registration fee exemption on the first € 87 500 bracket of the purchase price of building plots and properties, off-plan or housing starts.

New mortgage loans exceeded repayments by € 6.1 billion in the first three quarters of 2018. Property loans continued to grow robustly year-on-year throughout the year: up by an annualised 5.8 % in November, as opposed to 5.6 % at the end of 2017. This credit growth drove households' mortgage debt to € 231 billion in September 2018, an increase of 2.7 % relative to the end of 2017. Belgian households' debt levels totalled 60.6 % of GDP at the end of June 2018, compared with 57.8 % on average in the euro area.

Households' mortgage debt came to more than €230 billion

The rising debt level explains why, despite the declining average rate of interest on outstanding loans, households saw the interest charges on their loans come down only moderately. Combined with lower interest income from investment, households' net interest income has turned negative since 2012.

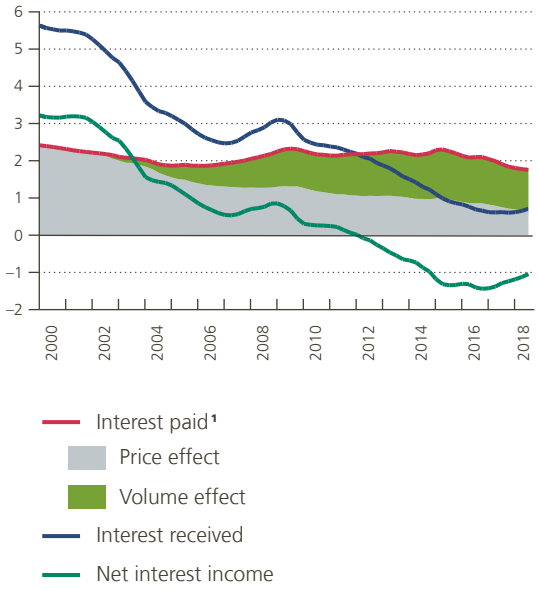
Overall default rates remained stable

The increase in household debt, viewed in aggregate, was not accompanied by higher default rates;

Chart 45

Rising debt levels drove down households' net interest income

(in % of GDP, moving average over four quarters)



Source: NBB.

1 Breakdown of the change in interest paid since the first quarter of 2000.

these remain low in Belgium. The percentage of mortgage loan contracts in arrears was below 1 % in November 2018, the ratio thus having declined somewhat since the beginning of the year. The average amount of overdue payments for contracts in arrears was € 41 000. In consumer credit, the default rate on credit lines came to 5.2 %, roughly the same level recorded at the end of the previous year, while that on loans and instalment purchases stood at 8.7 %, as against 9.3 % at the end of 2017. Although these figures are favourable, it should nonetheless be remembered that the loans-past-due ratio is a retrospective indicator, i.e. one that reflects the economic situation in the past. So, if the environment changes, for instance due to a sharp increase in the unemployment rate and a subsequent drop in household income levels, the default rate may rise. Moreover, there are risk hotspots in certain segments of the population; this is particularly true for young families, low-income families and single-parent families, for whom the burden of loan repayments relative to their income may pose a challenge.

Growing debt and capital losses exerted downward pressure on net financial wealth

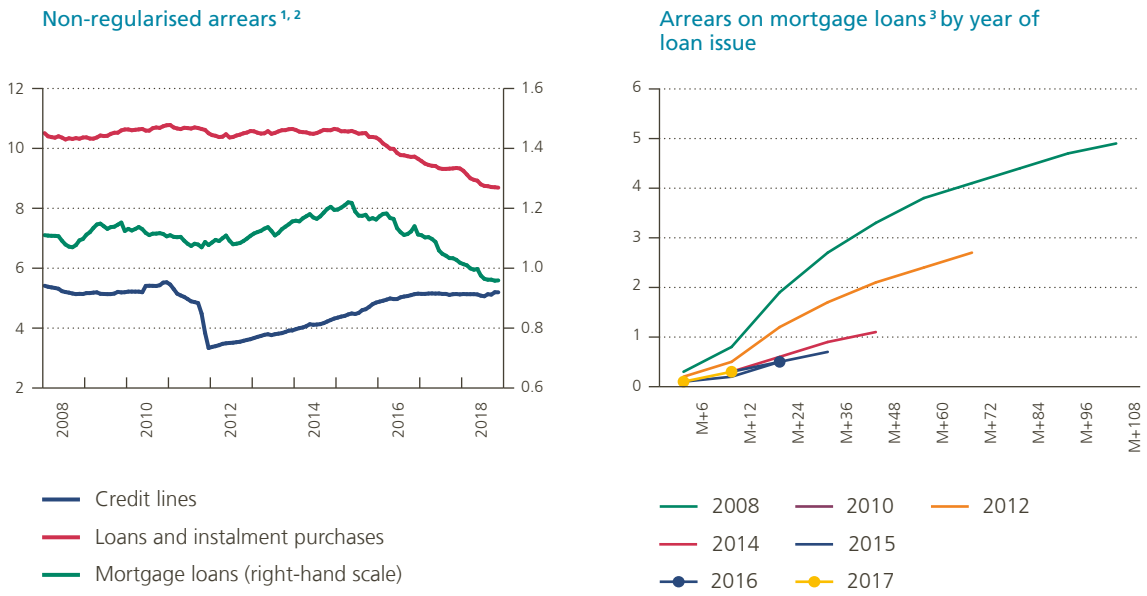
While households saw their financial liabilities, mainly comprising mortgage loans, expand by € 8.3 billion, to € 288 billion in September 2018, the value of their financial assets rose by a mere € 4.2 billion, to € 1 346 billion. Consequently, the net financial wealth of Belgian households in proportion to GDP shrank somewhat, from 241.9 % at the end of 2017 to 236.5 % in September 2018. Nonetheless, households in Belgium are still among the wealthiest in the euro area.

Developments in financial assets were driven by new investment, but also by other factors, primarily revaluations of currently held assets. This latter element, in particular, had a negative impact on the financial portfolios of households, given that a proportion of their assets lost value.

Chart 46

Default rates remain low despite rising debt levels

(in % of the number of outstanding loans)



Source: NBB.

1 Default is deemed to be where a due sum has not been paid either in part or in full within three months following its due date or within one month after formal notice has been served by recorded delivery letter.

2 There is a break in the credit line series at the end of 2011, caused by the expanding scope of the Central Individual Credit Register. Overdraft limits on current accounts must be registered with effect from the end of 2011, whereas until then the registration requirement did not apply to credit lines up to € 1 250 with a maximum repayment period of three months.

3 Loans are grouped by the year they were issued, 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. Any regularisation of loan contracts is not taken into account.

The downward revaluation mostly affected listed shares, investment fund units and insurance products, as a consequence of the financial market downturn. Households' capital losses in the first nine months of the year were estimated at € 5.5 billion, mainly relating to their holdings of listed shares, investment fund units and insurance products without capital guarantee. These developments intensified in the second half of the year, when – particularly in the fourth quarter – stock markets plummeted.

Belgian households' new financial investment focused on low risk and liquidity

Households added € 7.7 billion to their financial assets in the first nine months of 2018, compared with € 3.4 billion in the corresponding period of 2017. In their choice of new investment options, they focused primarily on low risk and liquidity. This therefore chiefly benefited current accounts and savings accounts (banknotes, coins and deposits), which rose by € 6.5 billion and € 5.8 billion respectively. Interest in savings certificates and bonds continued to dwindle, as households scaled back their debt security investment by € 4.2 billion. Shares also became less popular (down by € 3 billion in total). That said, households acquired new investment fund units to the tune of € 2.6 billion, an amount that is nonetheless smaller than in the corresponding period of 2017. Lastly, households invested € 1.9 billion in insurance products without capital guarantee (class 23), while further reducing their holdings of other insurance products by € 0.7 billion.

Stock market uncertainty boosted investment in current and savings accounts

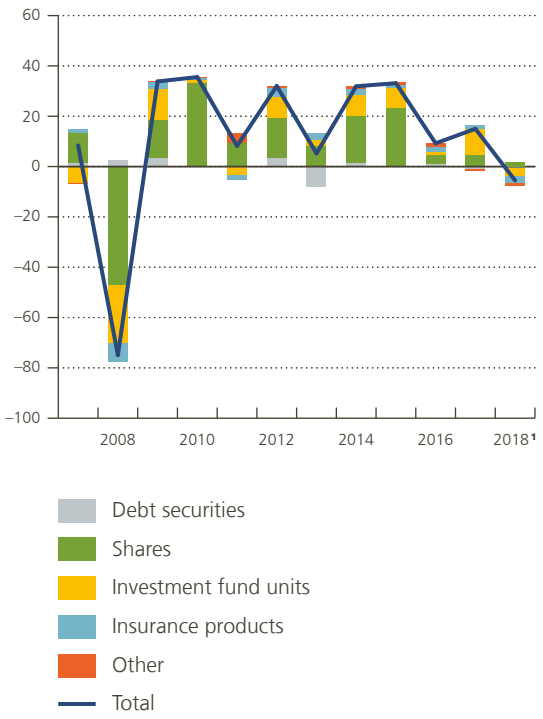
Households' saving behaviour and preference for liquid instruments – despite persistently low returns – was probably driven by a range of factors.

First, they may have responded to the uncertainty surrounding stock market developments from the beginning of the year, an uncertainty that persisted in subsequent months. Moreover, returns on deposits remain positive in nominal terms and deposits in regulated savings accounts are covered by the deposit guarantee scheme system for up to € 100 000 per bank.

Chart 47

Net financial assets declined due to capital losses

(valuation effects in € billion)



Source: NBB.
1 First nine months.

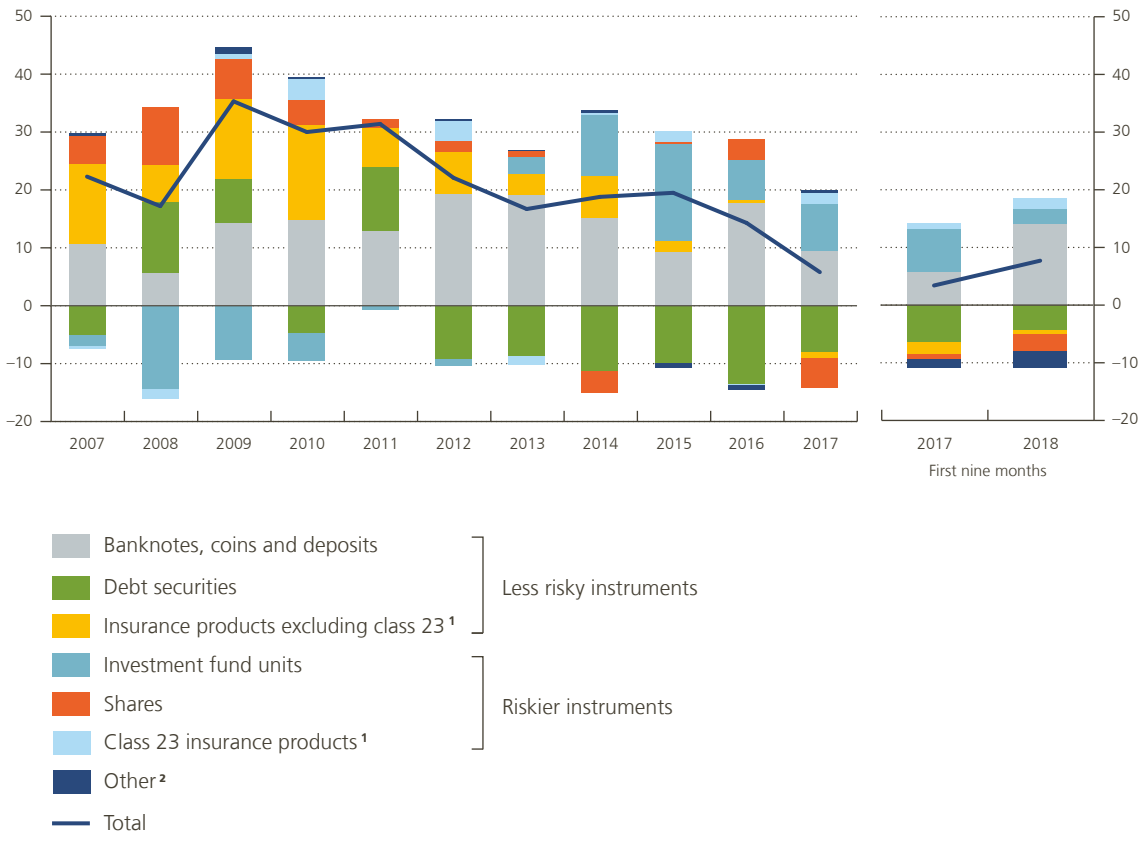
Second, having risen in 2017, the consumer confidence indicator started to fall somewhat in the spring of 2018. Households took an increasingly dim view of the general economic situation as well as of their personal finances. The indicator stayed below its long-term average during the second half of the year, which may have prompted some households to accumulate precautionary savings, which are quickly realisable by nature.

Lastly, households' investment choices may also have been affected by tax-related factors, contributing to a stronger preference for liquidity. From 1 January 2018, households have been subject to a 0.15 % tax on their securities accounts upon hitting a threshold value of € 500 000. The tax applies to holdings of shares, bonds, savings certificates and investment funds, while pension savings funds, life insurance and registered securities are exempt. To avoid the tax, some households may have decided to transfer

Chart 48

Households preferred low-risk and liquid investment options

(in € billion)



Source: NBB.

1 These items comprise the net claims of households on technical insurance reserves, on pension funds and on standardised guarantee schemes.

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

the assets in their securities accounts to liquid instruments in order to stay below the threshold of € 500 000 above which the tax is payable. For the same reason, they may have shifted a part of their investment to class 23 insurance products, which are exempt from the tax.

Households' net wealth remains a cornerstone of the favourable external position

Belgian households have the euro area's largest net financial wealth relative to GDP. This substantial wealth more than offsets the net liabilities of the country's government and businesses, helping to place Belgium's economy as a whole in a net creditor position. According to the financial accounts statistics, net claims on other countries amounted to € 208 billion, or 46.8 % of GDP, at the end of June 2018. Within the euro area, only the Netherlands, Germany and Austria also boast a positive external position along with Belgium.

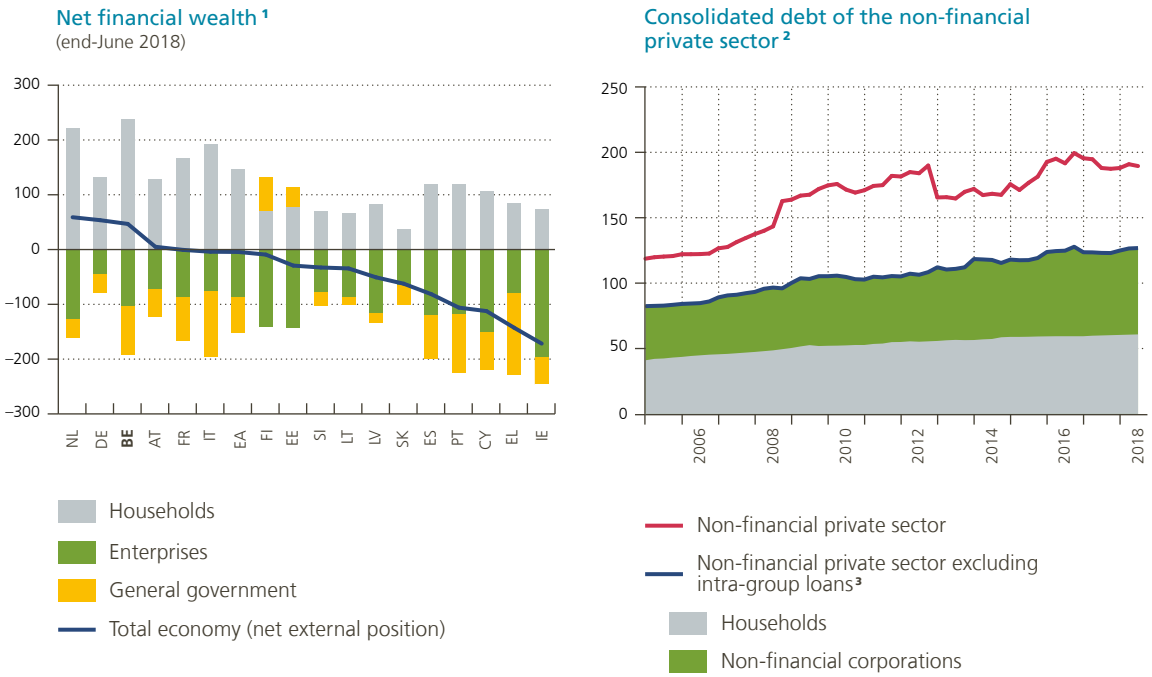
Belgium is a country with high debt levels, but has a broad asset base

Belgium's net creditor position is a favourable factor in the assessment of macroeconomic imbalances, and debt positions in particular. The consolidated debt ratios of the

Chart 49

Net external assets soften risks associated with high debt ratio

(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.

2 Total loans and bonds excluding loans provided by resident non-financial corporations to other resident non-financial corporations.

3 Intra-group loans are defined as loans provided by captive money lenders and foreign non-financial corporations.

general government and the private sector exceed the indicative threshold values the EC applies in the context of its macroeconomic imbalance procedure (MIP). And yet these ratios are not viewed as unsustainable, thanks to the Belgian economy's potentially large domestic financing capacity as reflected in the country's net creditor position. Moreover, Belgium's high level of consolidated private debt includes a substantial amount of cross-border intra-group loans, which should ideally be stripped out of the debt definition. Adjusted for intra-group loans, Belgian private debt would work out at 126.8 % of GDP, which is below the MIP threshold value of 133 %. Lastly, the sustainability of private debt, particularly household debt, when viewed more widely, is underpinned by households' substantial asset holdings and by limited interest rate risks on account of the prevalence of loans at fixed rates or with limited interest rate variability.

3.3 Belgian banks continued to perform well, but there are risks

As in recent years, most Belgian banks were able to present figures for 2018 which were generally better than the euro area average. Yet the growing focus on lending has heightened competition, causing profit margins to fall, and has been associated with a relaxation of lending criteria. Belgium's banks are also vulnerable to unfavourable changes in the market environment, such as a weakening economy or a sudden interest rate rise.

Banks were partially successful in relieving pressure on their profitability

The low interest rate environment in 2018 continued to have an unfavourable effect on Belgian banks' net interest income, which is still by far their most important source of revenue. Interest income from assets declined, owing to lower interest rates on new loans, the fact that in recent years outstanding loans were massively refinanced at lower interest rates, and the gradual scaling back of government bond portfolios. Concomitantly, interest charges on liabilities have for some time now virtually bottomed out, largely as a result of the statutory minimum interest rate on household deposits, which are still the main funding source. In order to relieve pressure on their profitability, the country's banks have notably sought to expand credit volumes. In some market segments, however, this has led to intensified competition, which in turn caused commercial margins – such as those on mortgage loans – to shrink.

Despite these developments, net interest income in the banking sector stabilised during the first three quarters of 2018, compared with the same period in 2017. This is explained in part by higher interest income from the expanding volume of loans to non-financial corporations as well as from derivatives and activities outside Belgium. Note, however, that net interest income trends differed substantially between banks, coming under more pressure among banks that are less diversified in terms of their activities and locations, such as the smaller Belgian retail banks.

Non-interest income dropped during the first three quarters of 2018. This decline may be attributed in part to fee and commission income, which banks use as a means of diversifying their sources of income. But the fees and commissions received are fairly volatile, as sales of funds and investment products depend on market circumstances. At the same time, gains on financial instruments increased. However, higher income from currency derivatives served mainly to hedge exchange rate differences relating to the depreciation of various currencies in 2018. These differences were smaller than in 2017 or even negative and are recognised as other non-interest income. Lastly, financial gains from changes in the fair value of interest rate derivatives were lower than in the previous year.

As a result, operating income in the first three quarters of 2018 – the sum of net interest income and non-interest income – remained below the level posted in the same period of 2017, while operating expenses – which include staff costs, administrative costs and general expenses – continued to climb. Despite restructuring, for example of their branch networks or workforce, Belgian banks are still finding it difficult to enhance efficiency in the short term and to relieve pressure on their profitability by cutting costs. This can be explained by a number of factors, such as the need to invest in order to digitise processes, services and products and to introduce technological innovations. This is certainly true for

Table 11

Income statement of Belgian credit institutions

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

					First three quarters		In % of operating income
	2014	2015	2016	2017	2017	2018	2018 Q1-Q3
Net interest income	14.5	14.9	14.8	14.1	10.7	10.8	63.3
Non-interest income	6.2	7.1	7.6	8.9	7.2	6.2	36.7
Net fee and commission income[1]	5.3	5.9	5.6	5.6	4.6	4.3	25.0
(Un)realised gains or losses on financial instruments[2]	–0.1	1.2	1.5	0.9	0.6	1.3	
Other non-interest income	0.9	0.1	0.5	2.5	2.0	0.7	
Operating income	20.7	22.0	22.4	23.0	17.9	17.0	100.0
Operating expenses	–12.7	–12.9	–13.1	–13.4	–10.5	–10.6	62.4[4]
Gross operating result	8.0	9.1	9.3	9.6	7.4	6.4	
Impairments and provisions	–1.3	–1.3	–1.8	–0.7	–0.5	–0.2	
Impairments on financial assets measured at amortised cost[3]	–1.3	–1.1	–0.9	–0.4	–0.2	–0.4	
Impairments on other financial assets	–0.0	–0.0	0.0	0.1	0.1	0.0	
Other impairments and provisions	–0.0	–0.1	–0.9	–0.3	–0.3	0.2	
Other components of the income statement	–2.2	–1.7	–1.8	–3.0	–2.0	–1.7	
Net profit or loss	4.5	6.1	5.7	5.9	4.9	4.5	

Source: NBB.

1 Including commissions paid to agents.

2 This item 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.

3 Data for the years before 2018 relate to impairments and provisions recognised in the "loans and receivables" portfolio under IAS 39.

4 Cost/income ratio of the Belgian banking sector.

smaller banks as they have less potential for economies of scale. All in all, the cost/income ratio went up from 59 % to 62 %. This is still below the euro area average, which came in at 66 % in first half of 2018.

Net allocations to provisions and impairments declined further during the first three quarters of 2018. This may be attributed in part to the fact that some banks reversed previously recorded provisions and impairments relating to activities both in Belgium and abroad. The planned sale of a portfolio of Irish non-performing loans, for example, led to impairments being reversed. Nevertheless, allocations were still recorded for a number of activities outside Belgium, such as exposures to Turkey. The credit loss ratio, which shows the relationship between new impairments and total credit volume, came to 6.6 basis points in the first three quarters of 2018. This was lower than in many other euro area countries.

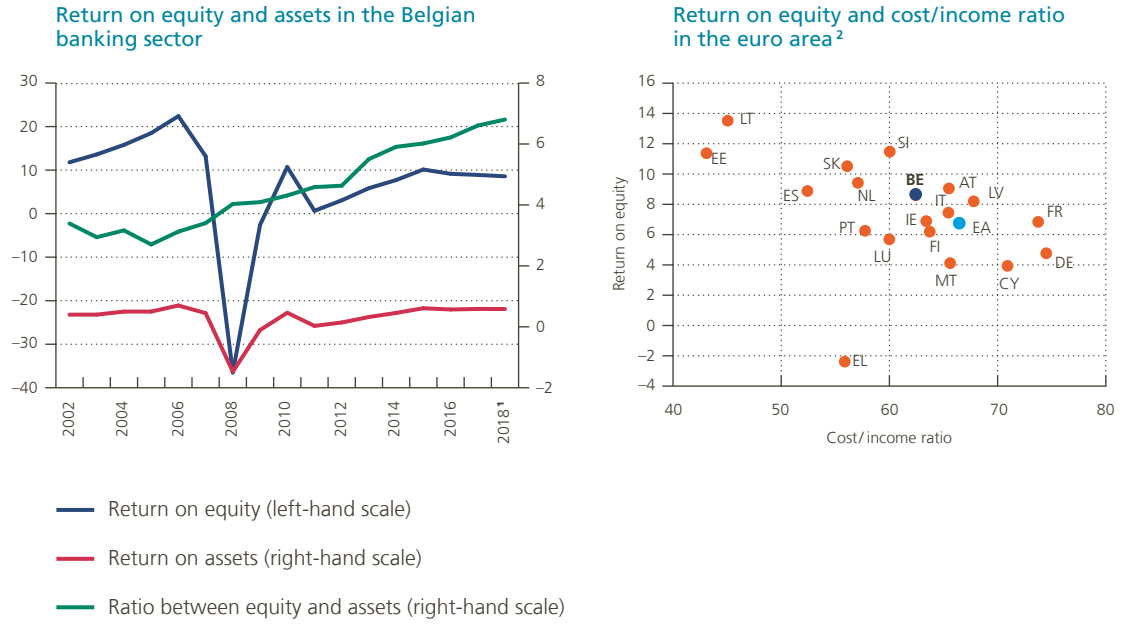
During the first three quarters of 2018, Belgian banks also paid less tax than they did in 2017. The sector as a whole recorded a net profit of € 4.5 billion, compared with € 4.9 billion in the same period of 2017. As a result, the annualised return on equity dropped from 9.9 % to 8.6 % and return on assets from 0.64 % to 0.58 %. Return on equity was thus structurally lower than before the financial crisis. Since then, the tightening prudential requirements for own funds combined

Return on equity was structurally lower than before the crisis, but higher than the euro area average

Chart 50

Profitability of Belgian banks remains strong

(consolidated data; in %)



Sources: ECB, NBB.
1 First three quarters, annualised.
2 Figures for first half of 2018, annualised.

with the restructuring of the Belgian banking sector have resulted in increased financing with own funds and a renewed focus on more traditional banking models, which carry less risk and are therefore less profitable. The growing burden of specific taxes and levies in the wake of the crisis, such as for the deposit guarantee scheme and bank resolution, also contributed to the structurally lower profitability of Belgian banks after the crisis. Yet profitability in general remained relatively strong compared with that of the banking sector in other countries: in the euro area, return on equity and assets averaged 6.8 % and 0.48 % respectively in the first half of 2018.

Future profitability depends on market factors such as interest rate movements

The generally continued good results achieved by Belgian banks in 2018 are no guarantee of future performance. Low net allocations to provisions and impairments, for example, have for some years now contributed to the solid performance of the banking sector in Belgium. This does not, however, rule out the possibility that these factors will have a downward effect on results in the future. This could be the case if less favourable economic conditions were to coincide with growing losses in banks' loan portfolios.

Moreover, profitability is very sensitive to future interest rate movements. If interest rates remain low for a prolonged period, net interest income would shrink further as interest earnings from assets would continue to decline while funding costs cannot be reduced at the same pace. So, all in all, higher interest rates would generally be better for the Belgian banking sector. A steeper interest rate curve would be particularly positive for banks, as their transformation margin – the margin resulting from the transformation of short-term deposits into long-term loans – would then grow.

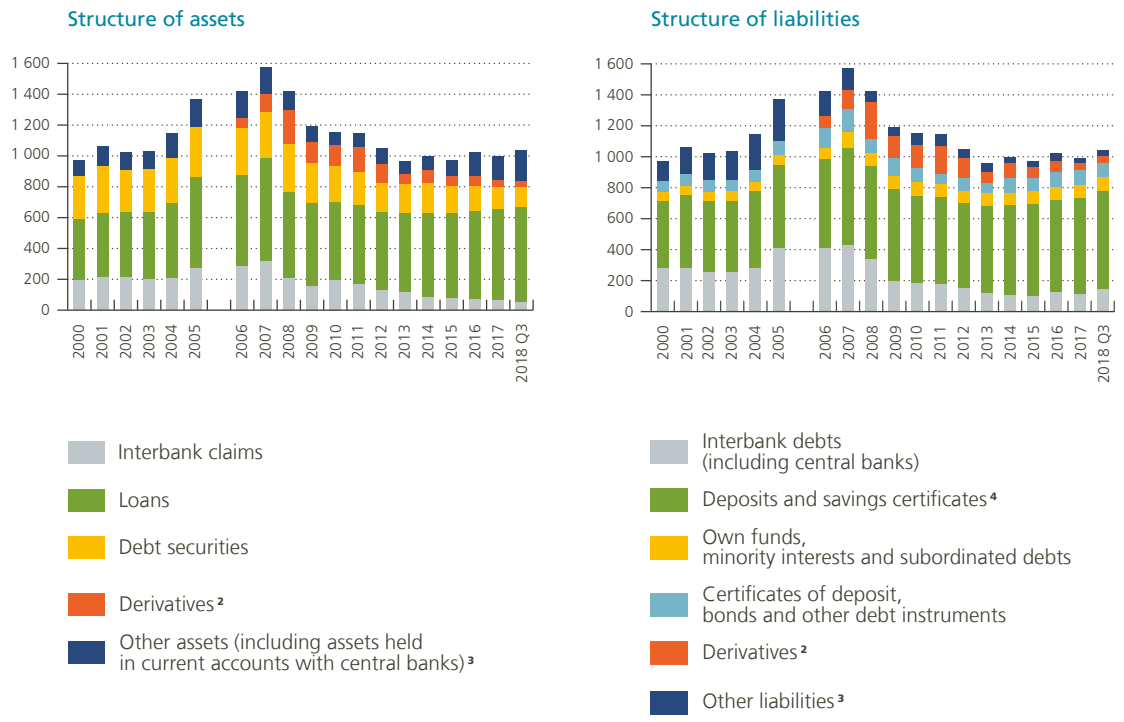
A strong and sudden interest rate hike may also have a (temporary) negative impact on banks' net interest income, as funding costs tend to rise sharply under these circumstances while returns on assets tend to adjust to interest rate movements slowly and gradually. In addition to which, it is quite possible that banks – in their search for yield in the current low interest rate environment – could widen their exposure to sudden interest rate rises, for example by investing more in longer-term assets. In this way, they might seek to broaden the transformation margin and/or to expand the volume of lending on which they earn an interest margin. Banks may also be inclined to take more credit risks in an effort to widen their commercial margins or boost credit volumes in a competitive market. This implies additional risks, of course, which could even increase if interest rates rise, because borrowers' debt servicing capacity may then deteriorate and the value of properties that serve as security for mortgage loans may fall.

Besides, the sharp decline in commercial margins on new mortgage loans – leading to interest rates charged to retail clients falling below 2 % – constitutes a risk for banks. As these low-yielding assets with very long maturities represent a large proportion of bank balance sheets, the future profitability of credit institutions could be negatively impacted, especially if interest rates start to go up.

Chart 51

Bank lending to the private sector has grown further

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

3 "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 instruments, provisions and liabilities for defined benefit obligations.

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 instruments". Liabilities linked to transferred assets no longer form part of the "other liabilities", but are included under different items on the liabilities side.

Private sector lending up further

At the end of 2007, Belgian banks started to restructure their balance sheets and by 2013 they had seen them contract to € 960 billion on a consolidated basis. Since then, total assets in the sector have oscillated around € 1 000 billion, with the figure amounting to € 1 039 billion in September 2018. The 2018 upturn reflected robust lending to the private sector, supported by sustained confidence on the part of economic agents as well as by the low interest rate environment. The country's banks also benefited from favourable financing conditions, attributable to both economic recovery and accommodating monetary policies. Between the end of 2017 and September 2018, loans to households and non-financial corporations rose from € 519 billion to € 535 billion and accounted for over half (51 %) of bank assets by September 2018. Although most of the increased activity concerned the domestic market – accounting for 70 % of these loans – it also included other markets, such as the Czech Republic and the Netherlands.

In 2018, higher lending again coincided with a reduction in debt security holdings. Against the backdrop of the ECB's asset purchase programme, Belgian banks had in the last couple of years sold off a proportion of their bond portfolios in order to lock in gains and/or refrained from rolling over a proportion of maturing positions. By September 2018, the banks' portfolio of government paper stood at € 90 billion, compared with € 136 billion at the end of 2014. The drop was steeper in the portfolio of Belgian government paper (- € 28 billion) than for other euro area countries' government paper (- € 19 billion), and the country's banks are therefore less exposed than before to bonds issued by their own government. In some euro area countries, such as Italy and Portugal, banks still have high exposures to their own governments.

Belgian banks still enjoy a robust liquidity position

Sitting on liquidity surpluses, Belgian banks have no particular difficulties funding their business activities. In fact, a proportion of the liquidity is still being shifted out of interbank market investments to deposits with central banks (in the Eurosystem or in non-euro area countries in which Belgian banks are active), as interbank rates in the euro area are persistently negative. Accordingly, deposits with central banks rose from € 70 billion at the end of 2016 to € 133 billion in September 2018. These liquidity surpluses ensured that the greater focus on (long-term) loans and the simultaneous drop in (liquid) government bonds did not result in any deterioration of Belgian banks' liquidity positions. The liquidity coverage ratio (LCR) actually stood at 140 % in September 2018, comfortably above the 100 % requirement for a bank to maintain sufficient high-quality liquid assets to be able to sustain the total net outflow of funds for 30 days during a period of stress. Nevertheless, the developments outlined above imply that the liquid assets buffer currently comprises a larger proportion of current accounts with central banks and less government paper.

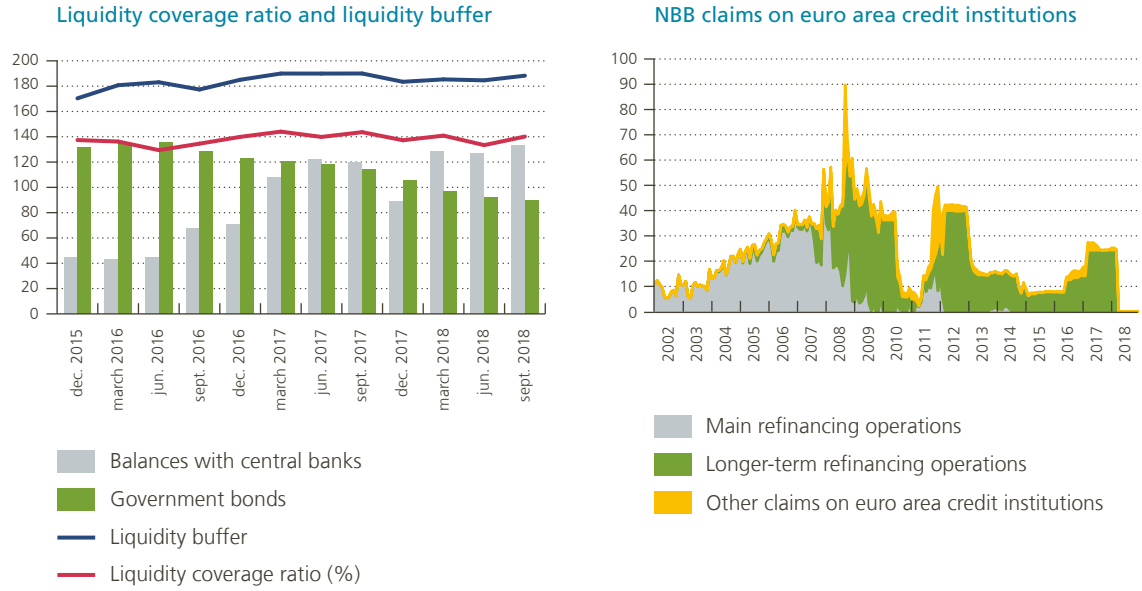
Growing liquidity surpluses at Belgian banks are the result of the continued increase in client deposits, cheap central bank funding and, more recently, rising interbank loans. These new interbank loans are mostly the result of repurchase agreements (repos), whereby banks pledge securities to other credit institutions in exchange for liquidity, which is repaid when the contract matures. The proportion of encumbered assets in the Belgian banking sector has increased, by pledging government bonds for these repos, but also by engaging in other collateralised transactions – more specifically the issuance of covered bank bonds, derivatives transactions and central bank funding. As encumbered assets are neither liquid nor accessible to unsecured debtors (such as depositors), this ratio should preferably not get too high. By September 2018, 14.4 % of assets were encumbered, compared with an average 23 % in the euro area.

In March 2017, the country's banks took advantage of the ECB's last targeted longer-term refinancing operation (TLTRO II) on a massive scale. As many banks had long since met the conditions to be eligible for a -0.4 % rate, through their loans to the real economy, TLTRO II gave them access to cheap funding for the longer term. That said, the bulk of the € 23 billion in outstanding central bank funding will mature in 2020 and 2021, by which time the banks may be faced with higher financing costs. Belgian banks' funding plans suggest they intend to only partially roll over this cheap funding, for instance by issuing covered bonds. With a proportion of this central bank funding not rolled

Chart 52

Belgian banks enjoy liquidity surpluses, thanks in part to cheap central bank funding

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



Source: NBB.

over, the sector might see its liquidity surplus shrink somewhat as a result.

Client deposits have been on an uninterrupted upward path since coming in at € 546 billion in 2012; in September 2018, they amounted to € 636 billion, with Belgian households notching up a very steep rise. Furthermore, today's low interest rate environment has reduced the differences in interest rates on time, savings and sight deposits, which is why households have transferred their cash to a much lesser extent to time and savings deposits. Banks should therefore factor in the likelihood that a proportion of cash has ended up in sight deposits due to a lack of investment opportunities in the current low interest rate environment: once interest rates go back up, there may well be a larger-than-expected outflow of these deposits.

BOX 5

Belgian banks' exposure to risks originating from their foreign positions

The Belgian banking sector's foreign exposures have changed markedly since the financial crisis. To a very large degree, foreign activities and activities not part of the traditional banking model were the

key targets in the deleveraging and balance sheet restructuring that has been taking place since. First, foreign wholesale business has been reduced significantly, such as derivatives transactions and repos with financial counterparties in countries including the United Kingdom and the United States. In addition, some investment in foreign subsidiaries and branches has been wound down, in some cases as a condition of the restructuring programmes the European Commission had imposed on some financial institutions in exchange for the state aid they had received.

Belgium's banks did remain active in some of their strategic foreign markets and have, in fact, often even expanded their activities in these markets. In September 2018, the Belgian banking sector had its biggest outstanding claims – including guarantees and other risk transfers – on the Czech Republic (€ 59 billion), France (€ 52 billion) and Luxembourg (€ 48 billion). In the Czech Republic and Luxembourg, these are mostly exposures to the public sector and the non-financial private sector; in France, a large proportion is also to banks. Some of these exposures to the public sector concern the liquidity surplus deposited with central banks (both inside and outside the Eurosystem) by Belgian banks' foreign subsidiaries.

At times of (geo)political tensions and uncertainties, banks may face unfavourable trends in their foreign exposures or even a (sudden) general repricing of risks in the financial markets. The actual impact on the banking sector strongly depends on their direct exposure to countries with emerging risks. Changes in the (fair) value and in the rating of financial assets – e.g. government bonds – may erode banks' capital or liquidity positions, while reduced repayment capacity in the government, private and/or financial sectors may lead to growing (credit) losses on outstanding positions. If the contagion spreads to other countries or translates into more general changes in market sentiment and repricing of risk in the financial markets, the repercussions might be even more severe, because of the possible additional impact on exposures to other countries and on the banking sector's financing costs, among other things.

In 2018, a number of tensions that might pose a risk to the Belgian banking sector emerged or further increased. One example is the ongoing uncertainty over the Brexit negotiations and the danger of a no-deal departure of the United Kingdom from the EU, which would entail many risks for the other Member States. Political tensions in Italy and uncertainty over the sustainability of Italian government debt also sparked turmoil in the financial markets. Although contagion was limited in 2018, the potential of significant spillover effects in the markets for government bonds in other euro area countries cannot be ruled out. Lastly, financial and macroeconomic conditions in Turkey deteriorated further in 2018, in the wake of political tensions with the United States and sharply reduced investor confidence in Turkish economic and monetary policies. Moreover, these developments also spread to a number of the world's other emerging markets.

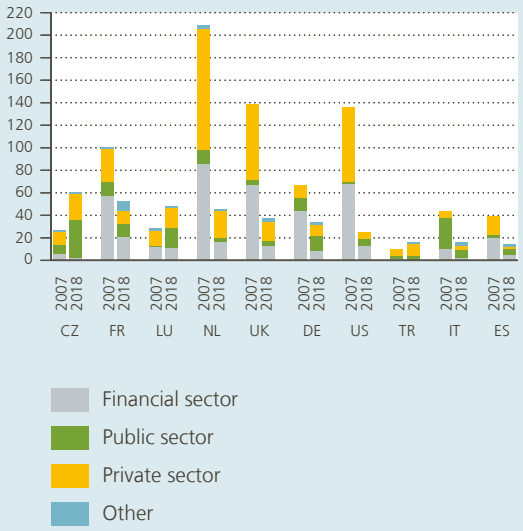
By the end of September 2018, Belgian banks' direct exposure to the United Kingdom, Italy and Turkey totalled € 69 billion. These claims make up 6.6 % of the Belgian banking sector's total assets.

Although they have sharply contracted relative to 2007, exposures to the United Kingdom have remained quite sizeable, totalling € 37 billion at the end of September 2018 (including guarantees and risk transfers), of which € 27 billion related to cross-border exposures. These mostly concerned claims on financial institutions and corporations (each accounting for around € 13 billion), but also partly to derivatives transactions that are cleared via central counterparties and other financial players

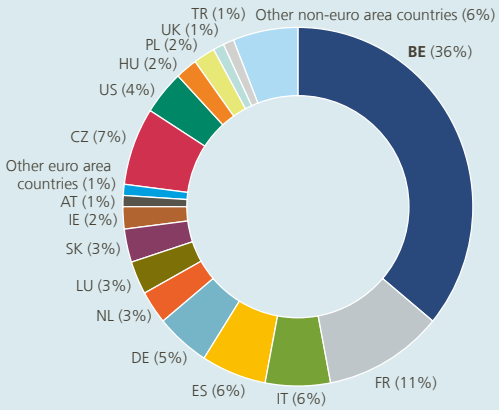
Exposures to the main foreign markets and breakdown of the government bond portfolio

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

Exposures to the main foreign markets in the form of loans and debt securities [1]



Breakdown of Belgian banking sector's portfolio of government bonds [2]



Source: NBB.

1 Data for end-2007 and end-September 2018, ultimate risk basis (after guarantees and other risk transfers).

2 Data for end-September 2018, direct risk basis (before guarantees and other risk transfers).

in the United Kingdom. The figures include cash put in interbank accounts to serve as collateral for derivatives exposures with negative market values. Brexit is creating uncertainty over the continuity of cross-border agreements and mutual recognition of and access to central counterparties in the United Kingdom. In November 2018, the European Commission announced the start of a process of temporary recognition of British central counterparties, ensuring that cross-border derivatives transactions will continue uninterrupted in the event of a hard Brexit.

The Belgian banking sector's exposure to Italy was € 16 billion. Some € 7 billion, nearly half of the total, involved claims on the Italian government, chiefly in the shape of government bonds. In addition, there was € 1.5 billion in outstanding claims on Italian banks, which in turn are heavily exposed to the Italian public sector. That said, Belgian banks have sharply cut the claims on Italy, as these were as much as € 44 billion in 2007. And the exposure continued to fall in 2018, with Italian government bonds being sold off. Aside from the € 16 billion exposure, in June 2018, the residual bank Dexia still held € 23 billion in claims on Italy, virtually exclusively on the Italian state and local authorities.

Via local presence, the Belgian banking sector is also exposed to Turkey to the tune of € 16 billion, compared with € 21 billion at the end of 2017. A proportion of these exposures is to the public

sector, but the bulk of them consist of loans to the private sector – € 8 billion to Turkish companies and € 4 billion to Turkish households. Given current conditions in Turkey, these counterparties might encounter difficulties in repaying their loans. In particular, companies that have taken out loans in dollars or euros and that receive most of their revenues in the local currency might see their repayment capacity jeopardised by the significant depreciation of the Turkish lira. The Turkish banking sector has seen the percentage of non-performing loans go up since the third quarter of 2018. As for the Belgian exposure to Turkey, the share of non-performing loans to non-financial corporations and households amounted to 3.4 % and 3.0 % by September 2018, slightly up on the figures in June 2018 (3.0 % and 2.8 % respectively).

Legacy non-performing loans wound down further...

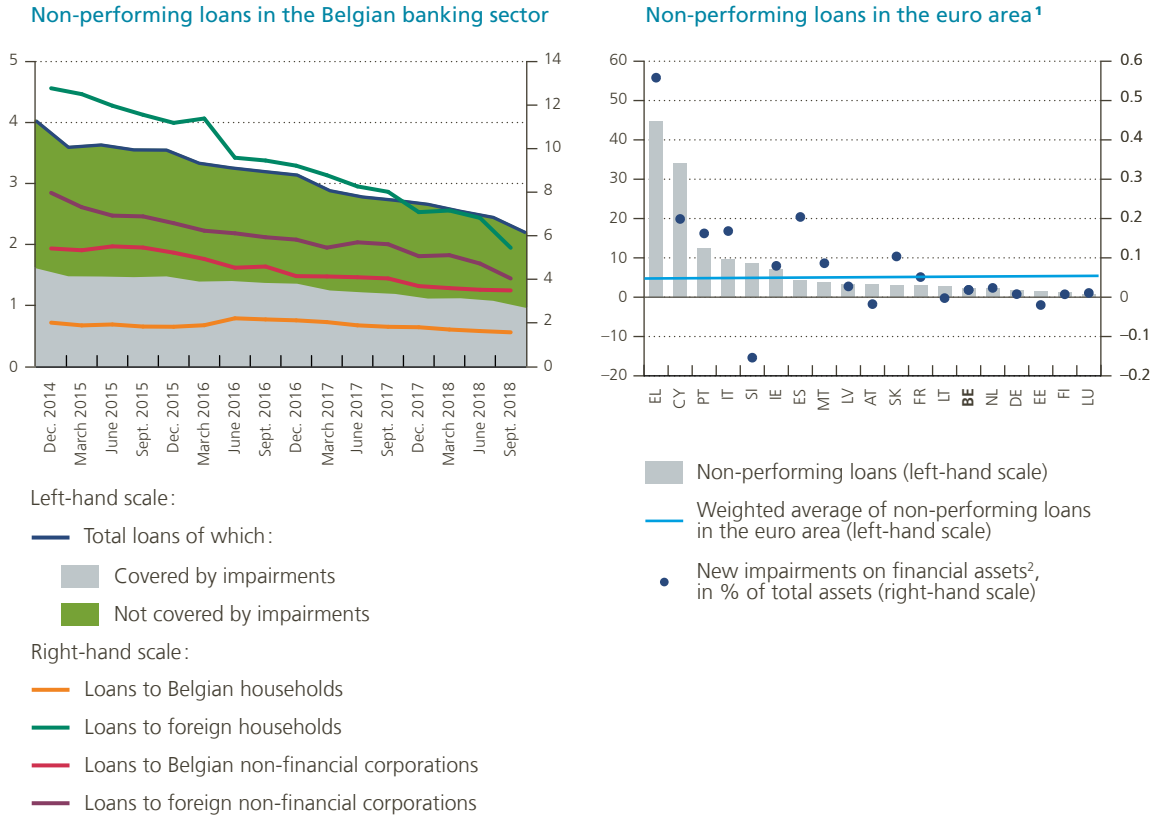
The improved credit quality of loans granted by the Belgian banking sector in the past couple of years reflects the further winding down of legacy non-performing loans, particularly in the foreign portfolios. In Belgium, the ratio of non-performing loans – i.e. the percentage of loans that may not be repaid due to their borrower getting into financial trouble or which are already in arrears – was still at 4 % in 2014 but had come down to 2.2 % by September 2018. By contrast, some euro area countries are still looking at a relatively large proportion of non-performing loans on bank balance sheets, as the process of winding down those non-performing loans which arised in the wake of the financial crisis progresses only very gradually. By June 2018, this ratio averaged 4.4 % in the euro area. In Belgium, the financial crisis had a much smaller impact on loan repayments, as – unlike some other euro area countries – Belgium did not get caught up in a property crisis. The past years' sharp improvement in

Improved credit quality primarily related to foreign portfolios

Chart 53

The credit quality of Belgian bank assets keeps improving year on year and is better than in most other euro area countries

(data on a consolidated basis, in % of total loans, unless otherwise stated)



Sources: ECB, NBB.
1 Figures relate to June 2018.
2 Financial assets not measured at fair value.

the banks' credit quality, then, primarily reflected the foreign portfolios, which have a higher ratio of non-performing loans on average than the Belgian ones. More precisely, the ratio of non-performing loans to the foreign private sector fell from 10 % in 2014 to 4.6 % in September 2018, while non-performing loans to the Belgian private sector saw the ratio inch down to 2.3 % from 3.3 % in the same period.

With credit quality improving, few new impairments and provisions are being taken, and some previous impairments and provisions are being reversed. That said, under IFRS 9, the new accounting standard for financial instruments that came into effect in January 2018, impairments have to be based on expected losses instead of incurred losses as was the case under the IAS 39 standard. The application of IFRS 9 in fact leads to an earlier recognition of (future) credit losses. As a result, the coverage ratio for non-performing loans – i.e. the degree to which non-performing loans are covered by impairments taken – rose slightly, to 45 % in September 2018.

... but are no guarantee of credit quality in the future

All that said, today's credit quality is no guarantee, as it cannot be ruled out that banks see their loan losses go up if the economic situation deteriorates. In fact, robust lending to the private sector and the increasing importance of these loans in total assets are exposing banks to

more credit risk. Meanwhile, higher lending has pushed up counterparties' debt ratios, making it more likely that repayment issues emerge. This risk is somewhat mitigated in Belgium as the ample share of loans at fixed interest rates ensures that there is a curb on the potential decline in of borrowers' repayment capacity if interest rates start to go up. But it is not an insignificant risk, particularly for lending to Belgian households, as these are already looking at a fairly large debt proportion relative to their incomes and as the criteria for mortgage lending – households' main source of debt – have been relaxed even further in the past couple of years.

Mortgage lending criteria relaxed further

For a number of years now, quite a few indicators have been pointing to a loosening of the lending criteria in the portfolio of Belgian mortgage loans, which accounts for a large share of lending to the private sector. For one thing, for new mortgages, the loan-to-value (LTV) ratio, i.e. the value of the loan relative to the value of the home that is its collateral, continues to rise; increasingly, longer-term mortgages are agreed and the monthly repayment burden relative to borrowers' incomes – the debt-service-to-income (DSTI) ratio – remains high. In the first six months of 2018, over half of new mortgage loans had an LTV above 80 %, and over one-third had a maturity of over 20 years. If the economic situation takes a turn for the worse – and ushers in higher unemployment, for instance – or if a sudden interest rate shock pushes down house prices, banks could stand to incur bigger losses than they are currently expecting. This would certainly be the case if contagion spread to the real estate and construction sectors, both of which have also been granted more bank loans in the past couple of years.

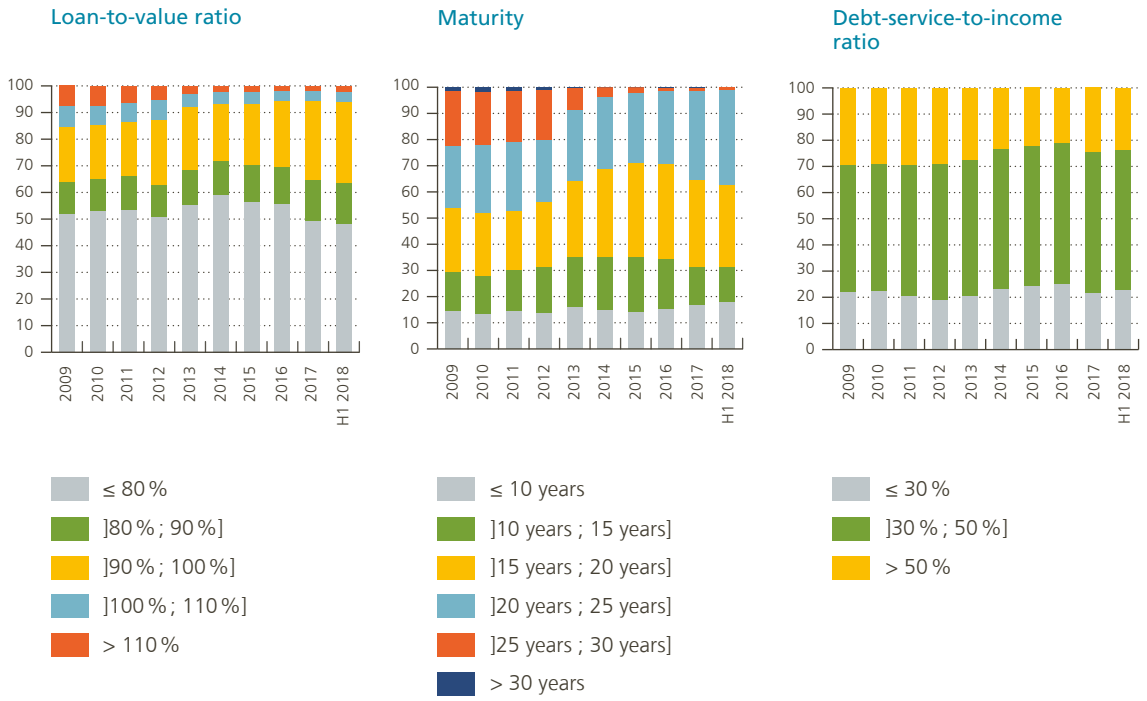
Belgian banks remain pretty solvent

Banks have to retain capital to cushion any unexpected losses in their (lending) portfolios. Required

Chart 54

Higher credit risk on new mortgage loans

(breakdown of new mortgage loans by vintage year[1], in % of the total)



Source: NBB.

1 Including refinanced loans registered as new contracts. Such refinanced loans can artificially improve the credit standards of new mortgage loans, as a proportion of the loan has already been repaid. This was particularly the case in 2014, 2015 and 2016, when a large proportion of outstanding mortgage loans were refinanced.

capital is expressed as a percentage of risk-weighted assets, which are generally calculated using internal models that attempt to estimate unexpected loan losses on the basis of historical data. In Belgium, however, these data do not include a real crisis period so that a possible unfavourable scenario is not sufficiently factored in. At 10 %, the average risk weight of Belgian mortgage loans as calculated by the country's banks is very low when compared with that for other euro area countries: In fact, only two countries show a lower average risk weight. To counteract this, in 2013 the Bank implemented macroprudential measure imposing an increase of five percentage points in the risk weights calculated using internal models, thereby creating higher capital buffers to cushion unexpected losses. In May 2018, this requirmement was replaced with a measure consisting of two components: a linear component (a 5-percentage-point increase), which is an extension of the previous measure, and a more targeted component applied in the form of a multiplier (1.33) that, unlike the first component, depends on the average risk of the portfolio at each bank. The new provision pushed up the risk weight of Belgian mortgage loans to 18 % on average.

The introduction of this new measure combined with increased lending to the private sector pushed up total risk-weighted assets in the Belgian banking sector. In September 2018, these amounted to € 386 billion, of which € 320 billion was for credit risk and € 15.5 billion related to the macroprudential measure discussed. Capital held in the form of shares, retained earnings and other elements (the so-called Tier 1 capital) rose less sharply, to € 64 billion, as its biggest sub-component, common equity Tier 1 (CET 1) capital was subject to a number of changes at the start of 2018. For one thing, a number of transitional provisions for the implementation of Basel III ended, which meant that some elements now have to be fully phased in when capital is calculated; these include minority interests and some unrealised gains and losses on financial instruments. Secondly, CET 1 capital also changed slightly due to the introduction of the new IFRS 9 accounting standard. The new rules on classifying and measuring financial instruments prompted changes to "other comprehensive income" (a sub-component of CET 1 capital), while higher impairments caused a decline in retained earnings (another sub-component of CET 1 capital). The precise impact of the new accounting

Table 12

Solvency ratios and breakdown of capital and risk-weighted assets

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

	2014	2015	2016	2017	2018 M09
Tier 1 capital	53.4	55.1	60.0	63.0	64.0
of which:					
Common equity Tier 1	51.5	53.3	58.1	60.4	59.8
Risk-weighted assets	349.8	345.4	369.5	373.1	386.0
of which:					
Credit risk	290.1	282.8	308.1	315.3	319.6
Market risk	7.1	9.5	6.1	7.3	7.4
Operational risk	34.9	36.0	38.7	36.7	38.6
CVA	8.2	6.9	5.5	4.3	4.2
Other	9.5	10.3	11.0	9.5	16.3
Of which: Additional stricter prudential requirements based on Article 458	8.0	8.5	8.8	9.2	15.5
Tier 1 ratio (in %)	15.3	16.0	16.2	16.9	16.6
Common equity Tier 1 ratio[1] (in %)	14.7	15.4	15.7	16.2	15.5
Leverage ratio	4.7	4.8	5.5	5.9	5.7

Source: NBB.

1 Calculated according to Basel III transitional provisions before 2018 (fully phased in from 2018).

standard on CET 1 capital via both components varied greatly from one bank to the next.

All told, the Tier 1 ratio, i.e. Tier 1 capital relative to risk-weighted assets, shrank a little, from 16.9 % at the end of 2017 to 16.6 % in September 2018. The leverage ratio, which expresses the relationship between Tier 1 capital and non-risk-weighted assets, amounted to 5.7 % at the end of September 2018, compared with 5.9 % at the end of 2017. Lastly, the CET 1 ratio came down to 15.5 %, still well ahead of the minimum requirements and in excess of the average of banks in the euro area (14.7 % in June 2018). The European Banking Authority's stress tests also saw participating Belgian banks do much better in 2018 than the European average.

3.4 A positive balance for the insurance sector in 2018

In 2017 and 2018, Belgium's insurers recorded improved results thanks to the restructuring of their operating model in the life segment of the business. In fact, 2018 even saw a rise in the life insurance premiums collected by insurance companies, something that had not happened in many years. It would appear that the sector is gradually adjusting to the low interest rate environment, even if this sometimes involves a search for higher yield, which has seen insurers more exposed to market risk.

Non-life insurance profits remained stable, while life insurance bounced back

The insurance sector reported total net profits of € 2.1 billion in 2017 and a 16.6 % return on equity, a major improvement on the net result of € 1.3 billion posted for 2016. On the figures available for the first nine months, 2018 results would appear to match or even outpace those for 2017. This conclusion is corroborated by the figures released by Belgium's five insurance groups, which between them reported a result of € 1.9 billion, compared with € 1.6 billion for the same period in 2017.

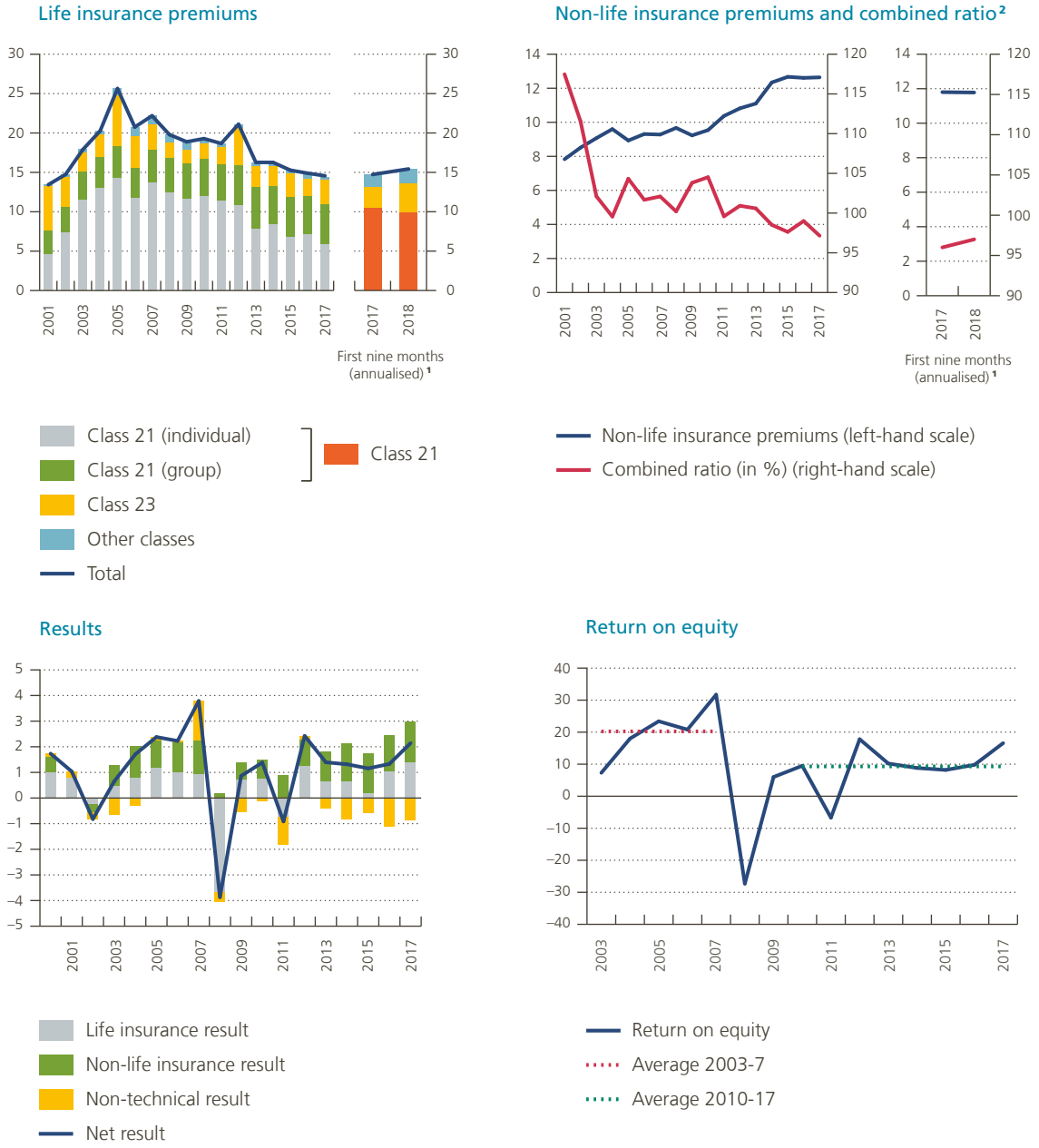
Non-life insurance results in 2017 remained fairly constant for the fourth year running. Premium income was at € 12.6 billion, with the result working out at around € 1.6 billion, thanks in part to mild weather conditions in Belgium that year. Premium income in the first nine months of 2018 was similar to previous years. The trend towards stagnating premiums poses a significant challenge to the non-life insurance sector, which has been facing fierce competition in some traditional segments for a number of years now. Competition may even intensify with the rise of corporations that are leaders in new technologies (the so-called InsurTechs) and that may well grab a chunk of the market. Sector spending in 2018 was slightly up in the wake of events caused by bad weather conditions in the first quarter. The combined ratio, which reflects the relationship between the sector's operating expenses and income, rose in 2017. In the first nine months of 2018, it came in at 97 %, suggesting continued healthy cost management in the non-life business.

The life insurance business found its feet again after a series of challenging years. The segment's result rose in 2017 to € 1.4 billion, mostly because of the drop in the average guaranteed return insurers are offering. This they achieved by encouraging policy-holders to terminate contracts promising returns that they were unable to guarantee in the long term (see below). However, the costs of these schemes depressed sector profitability, particularly in 2016, which also helps to explain the improved results picture for 2017. Furthermore, life insurance premium income for the first nine months of 2018 (€ 15.4 billion annualised) came in ahead of the figures for 2017, bringing to an end the downward trend of the past few years. As box 6 shows, this revival is almost entirely down to the rise in class 23 contracts (life insurance tied to investment funds), with a continuation of the fall in class 21 products (life insurance with guaranteed returns), which has been going on since 2012.

Chart 55

Insurance company profitability improved in 2017 and 2018

(non-consolidated end-of-period figures, premiums and results in € billion, combined ratio and return on equity in %)



Source: NBB.

1 The figures for premium income in the first nine months were collated under Solvency II and may diverge slightly from premiums reported in statutory accounts (see left-hand side of the chart). The amounts have been extrapolated to allow year-on-year comparison.

2 The combined ratio expresses the sum of the cost of claims plus operating expenses relative to net premium income.

BOX 6

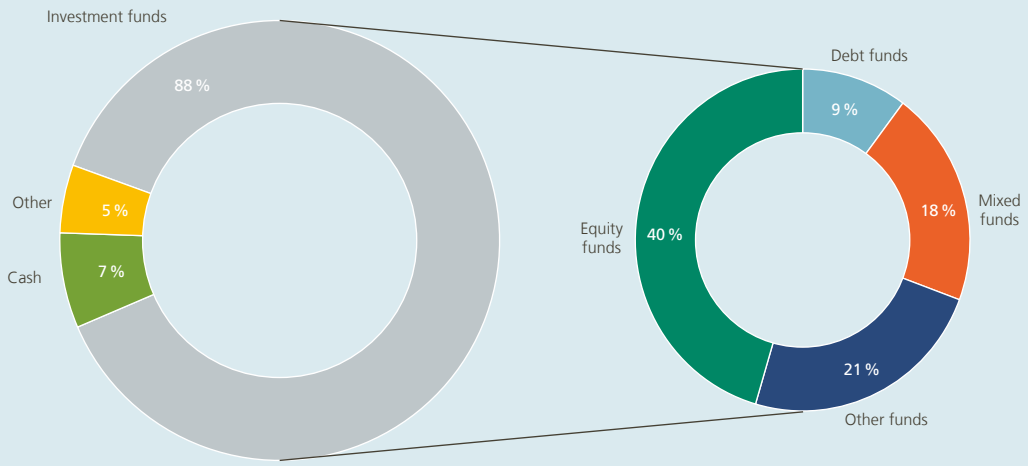
Revived interest in life insurance linked to investment funds (class 23)

In 2018, insurance companies saw life insurance premium income climb back up, after having fallen for five consecutive years. New business was mainly in class 23 contracts that – unlike class 21 contracts – do not offer their holders guaranteed returns. Although they stand to earn potentially higher returns than they do on class 21 products, policy-holders run a much bigger risk, as they alone bear any losses on the investment underlying the contracts. Granted, these come with an insurance component – e.g. death cover – but in practice they bear a striking resemblance to investment fund units and are often also managed by the group company to which the insurer belongs.

The recent success of these products is attributable to two factors. The first is that insurers are no longer willing to run excessive risks, such as those that have come to light in contracts offering policy-holders guaranteed returns that have proven unfeasible in a low interest rate environment. What's more, class 23 contracts, whose risks are squarely taken by policy-holders, do not come with any capital requirements for insurers. Secondly, for policy-holders these contracts offer an alternative to traditional life insurance agreements, which currently offer very low guaranteed returns. Demand for these contracts has been fuelled by the results locked in by these assets in the past few years – thanks, in part, to flourishing equity markets – and by the fact that they are exempt from tax on securities accounts.

Breakdown of insurers' portfolios for class 23 contracts in September 2018

(in % of the total amount in assets underpinning class 23 contracts)



Source: NBB.

Between September 2017 and September 2018, Belgian households invested a net amount of € 2.4 billion in class 23 products, while class 21-related assets fell by € 2.3 billion as contracts matured or assets were transferred to other products. At the end of September 2018, private individuals owned a total € 53.7 billion in class 23 insurance products, of which € 33.7 billion was with Belgian insurance companies.

By September 2018, Belgium's insurance companies held € 37 billion in assets as investments underpinning class 23 contracts. Of these assets, they invested € 33 billion in investment funds, particularly equity funds. This contrasts with traditional class 21 insurance contracts, which have only 6 % in shares (see below). Although class 23 investments do not involve any risks for insurers, they do run a reputation risk should policy-holders suffer heavy losses on these contracts.

Freed of its legacy burden, the sector recorded a robust solvency ratio in 2018

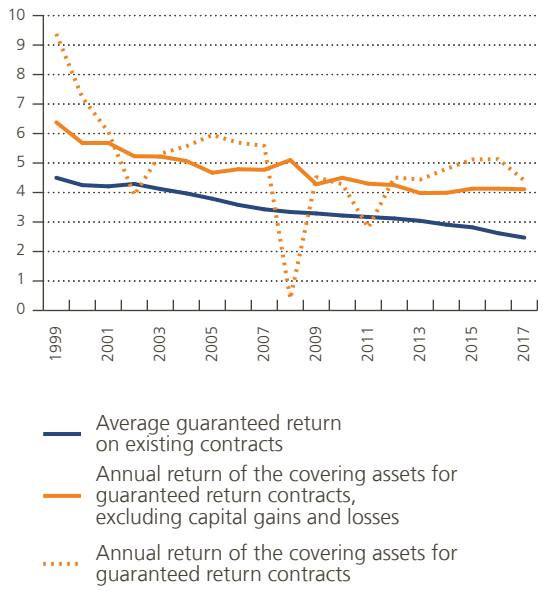
In 2018, various Belgian insurance companies brought to an end their programmes for contract surrenders, some of which they had started many years ago. These programmes offered incentives to persuade policy-holders to surrender contracts that were looking at guaranteed returns – sometimes as high as 4.5 % – that had simply become too high for insurers in a low interest rate environment. In some cases, insurers sold on these contracts to other insurance companies if they had proved unsuccessful in persuading their clients to surrender them. These transactions have largely nursed the Belgian insurance sector back to health. Although by the end of 2017, 14 % of technical provisions were tied to contracts offering guaranteed returns in excess of 4.5 %, the average guaranteed return the sector offered to policy-holders (individual and group insurance) contracted to 2.47 % from 2.63 % between the end of 2016 and the end of 2017. The decline is congruent with the lower returns that insurance companies have been able to secure in the financial markets in the current low interest rate environment, but this is how insurers have made sure they cover their liabilities to policy-holders.

The average guaranteed return paid to policy-holders fell to 2.47 % at the end of 2017, from 2.63 % at the end of 2016

Chart 56

Returns on assets underpinning class 21 contracts remain above average guaranteed return

(in %)



Source: NBB.

Against this backdrop, the average solvency ratio for the Belgian insurance sector stood at 202 % in September 2018, a 10-percentage-point improvement on December 2017. The modest increase in interest rates since the end of 2017 has also played its part in boosting solvency. With insurers's balance sheets calculated at market value under Solvency II rules, any increase in interest rates means that their liabilities fall in value faster than their assets, as liabilities typically have longer durations than do assets. In net terms, this has pushed up equity calculated at market values. Meanwhile, some insurers, whose ratio was close to the 100 % threshold in December 2017, increased their capital in the course of 2018. All that said, major differences remain between insurers, with solvency ratios in September 2018 varying between 120 % and 600 %, with a median value of 190 %.

The low interest rate environment forced insurers to search for higher-yielding assets

Although Belgium's insurance companies have managed to secure sufficient returns on assets to cover their liabilities to policy-holders, they have often done so at the expense of rebalancing in their investment portfolios[1], typically in favour of riskier or less liquid assets. Insurers' portfolios have seen significant changes in the breakdown of assets since September 2016, even if this has been a gradual process in view of the long maturity of assets.

With insurers' balance sheets expressed at market values, all portfolio value changes break down into a price effect – which arises from fluctuations in the value of the asset in the financial markets – and a volume effect (or net flows), which is calculated as the price difference between the purchase and sale of the asset. Between September 2016 and September 2018, the value of investments excluding class 23 declined from € 288 billion to € 267 billion, while the value of government bonds in the balance sheet lost € 16 billion, falling to € 131 billion from € 147 billion. Part of government bonds' decline in value was down to lower market prices in the wake of limited interest rate rises since 2016 (price effect).

1 With class 23 life contracts posing no risk to insurers, the investment portfolio under review only refers to assets held for the purposes of non-life insurance contracts and class 21 life insurance contracts.

At the same time, Belgian insurers cut the volume of government bonds they were holding, for instance by not reinvesting bonds after maturity date, because of low yields on newly acquired bonds, or by selling some of these securities before they matured, as this resulted in significant gains. As a result, the proportion of government bonds in the balance sheet (excluding class 23 assets) fell to 49 % from 51 %.

In their search for more profitable investment, insurers turned to loans

With the search on for alternatives to less profitable traditional investment, Belgium's insurers made a clear shift to assets in the shape of loans – both to companies in their own groups and to non-financial companies – and mortgages. Between September 2016 and September 2018, the share of these assets in insurers' balance sheets went up to 12 % from 9 %, i.e. a net increase of nearly € 6 billion. Although offering attractive returns and being a close fit with the investment horizons of insurance companies, these assets have a less favourable liquidity profile than their traditional investment.

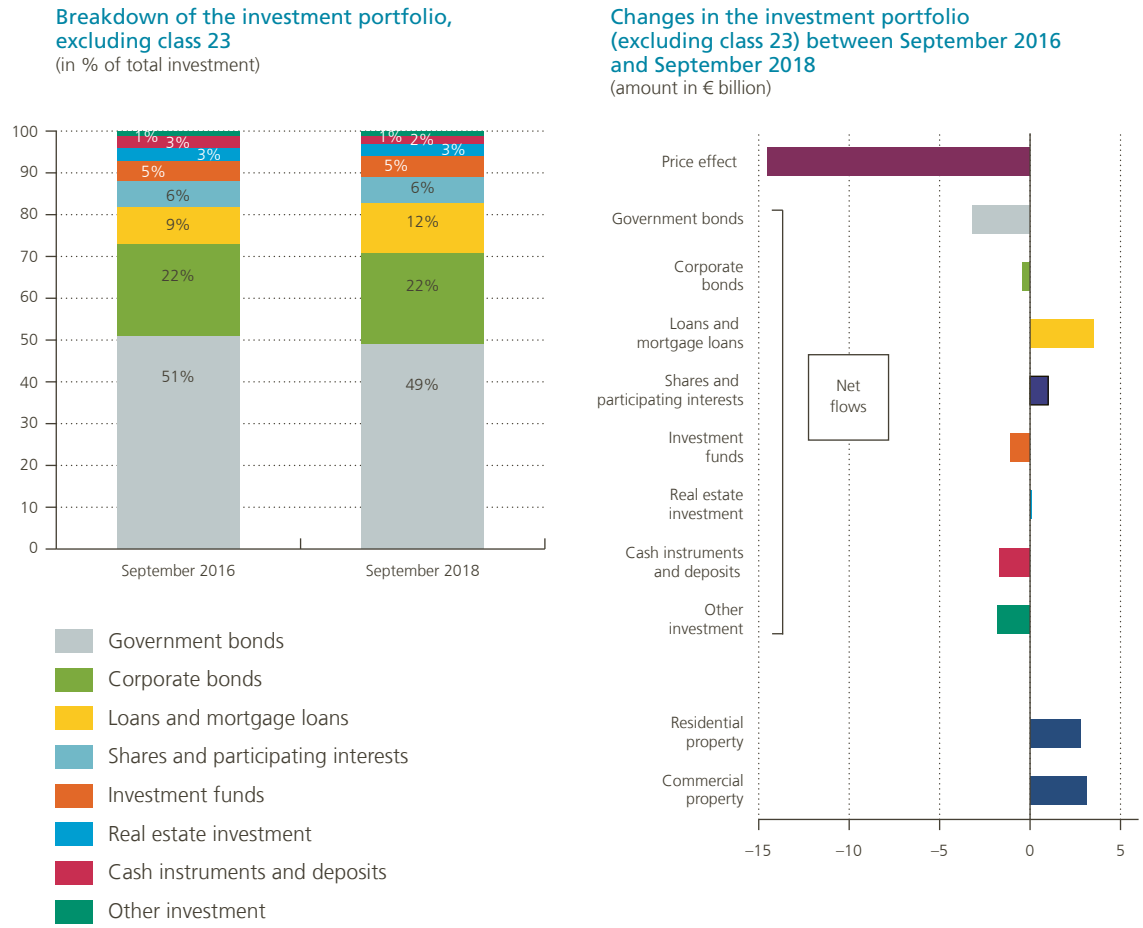
Despite these changes, bonds still accounted for the largest proportion of insurers' investment portfolios in September 2018, with a market value of € 191 billion out of a total € 267 billion (not including class 23 assets). These bonds broke down into government bonds (€ 131 billion, of which € 76 billion issued by the Belgian government) and corporate bonds (€ 60 billion). Nearly 63 % of bonds commanded a high rating, i.e. AAA or AA, a percentage that remained stable in the past year. The portfolio of loans stood at € 31 billion – 12 % of total investment excluding class 23. By way of comparison, exposures to loans and mortgage loans average 5 % in Belgium's neighbouring countries, with the figure as high as 26 % for the Netherlands.

Although investment in infrastructure projects still account for only a tiny proportion of the total, these did grow by € 700 million to € 2.6 billion between September 2016 and September 2018, a third of this invested in Belgium. In part, the uptick was fuelled by the relaxation of capital requirements for these types of investment, to which the sector response was favourable. Insurance companies have repeatedly said they are willing to invest a significant proportion of their assets in these types of projects, but also note that

Chart 57

Investment trends in the insurance sector point to search for yield

(non-consolidated end-of-period data)



Source: NBB.

not enough high-quality projects are to be found in Belgium. Meanwhile, they would also like to see projects and their funding to be standardised somewhat.

Sector remains exposed to market risk, despite robust solvency

Belgium's insurers are currently more exposed to the risk of a correction in the property markets

Although the modest rise in interest rates has so far mostly benefited the sector, higher risk premiums in the financial markets would upset the balance sheets of some insurers by way of a sizeable fall in the value of their assets. A widening of the spreads on bonds, by far the sector's most important investment, would hit assets hard. Under Solvency II, insurance companies are not legally obliged to cushion such movements, as there are no capital requirements in place for holding government bonds of EU member states to offset the risks of default or higher spreads. In the short term, there is little chance of such an increase for most of the bonds held by Belgian insurers, although it cannot be ruled out in the event of contagion in the euro area as a result of tensions in a specific national market.

For much the same reasons, Belgium's insurers are currently more exposed to the risk of a correction in

the property markets. Over the past few years, they have invested more and more in mortgage loans and other assets related to the residential and/or commercial property markets, with the sector's exposure to the property market rising to 12 % of assets by September 2018, compared with 9 % in 2016. The insurance sector in Belgium, for instance, has become one of the key players in the market for commercial property (offices, shops, warehouses), both directly – as it now owns over €8 billion in buildings – and indirectly through loans, shares or bonds[1] to the tune of nearly €29 billion.

1 These securities are issued by real estate investment trusts (REITs) including Cofinimmo, Befimmo or WDP.

4. Public finances

4.1 Belgium still a long way from a structurally balanced budget

Further reduction in nominal government deficit in 2018

Belgium's nominal general government overall balance stood at –0.7 % of GDP in 2018. The upturn compared with 2017 was due to the improving economy and strong job creation, the low interest rate environment as well as a number of temporary factors. The structural overall balance, a key element of fiscal policy, deteriorated by 0.2 percentage point of GDP. General government debt came down further, but at 102 % of GDP is still high compared with most other euro area countries.

Primary expenditure rose on the back of higher social security benefits and public investment, halting the downward trend in expenditure relative to GDP. Government revenues were also up thanks to higher corporation tax revenue, continuing the sharp rise seen in 2017. Interest charges, by contrast, continued their downward movement.

After a marked improvement in 2017, little progress was made in 2018 towards consolidating public finances. Further steps will therefore have to be taken if the envisaged structurally balanced budget is to be achieved and the general government debt reduced at a steady rate. This is all the more pressing given that, with unchanged policy, the budget deficit will rise again in the coming years as the temporary factors that pushed up corporation tax revenues gradually disappear and the measures to reduce tax on employment and the impact of population ageing on such things as pension expenditure take effect.

Little progress in 2018 towards achieving sound public finances

Table 13

General government overall balance and debt

(in % of GDP)

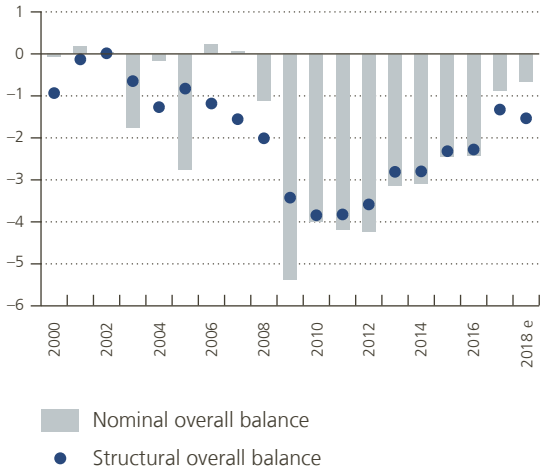
	2014	2015	2016	2017	2018 e
Revenue	52.2	51.3	50.6	51.3	51.6
Primary expenditure	52.0	50.7	50.2	49.7	50.0
Primary balance	0.2	0.6	0.4	1.6	1.6
Interest charges	3.3	3.0	2.8	2.5	2.3
Nominal overall balance	–3.1	–2.5	–2.4	–0.9	–0.7
p.m. Structural overall balance	*–2.8*	*–2.3*	*–2.3*	*–1.3*	*–1.5*
General government debt	107.6	106.5	106.1	103.4	102.0

Sources: NAI, NBB.

Chart 58

Improvement in nominal overall government balance in 2018, but deterioration in structural overall balance

(in % of GDP)



Sources: NAI, NBB.

Varying financial positions in the different government sectors

The general government deficit was attributable to the federal government and to the Communities and Regions. The local government accounts were in balance. Social security also showed a balanced picture, but this was thanks to the contribution this sector receives for that purpose from the federal government.

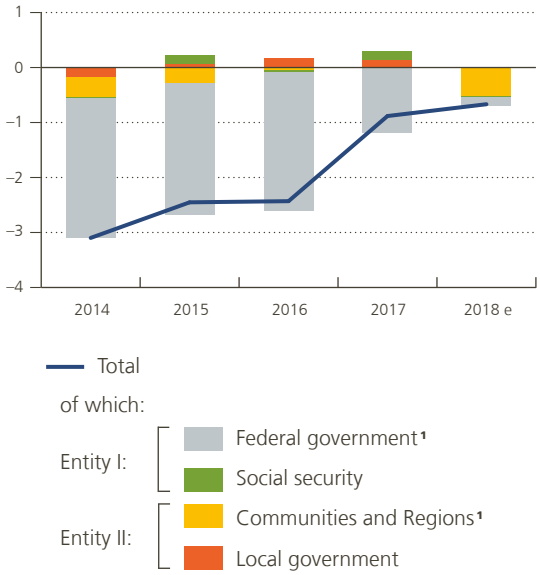
The downward revision of the autonomy factor used for determining the regional additional percentages on personal income tax led to a one-off adjustment in 2018 of the excess taxes paid to the Regions since 2015. This correction had a positive impact on the federal government balance but at the same time negatively impacted the balances of the Flemish Community, the Walloon Region and the Brussels-Capital Region. All three were in deficit, as was the French Community. The other, smaller entities were more or less in balance.

The local government fiscal balance in 2018 was striking, given that local elections were held in October, which usually heralds an increase in spending starting in the year before the elections and typically reaches a peak during the election year, with a concomitant negative impact on the local government overall balance. Although this electoral investment cycle was visible in 2018, too, it did not lead to a deficit. Local government finances have improved systematically since 2012, when the biggest deficit for a long time was recorded, and surpluses – albeit small – were recorded in 2015, 2016 and 2017. The sound financial position of local government was aided by the fiscal oversight which falls within the remit of the Regions.

Chart 59

Federal government, Communities and Regions in deficit, but local government budgets virtually balanced

(nominal overall balance, in % of GDP)



Sources: NAI, NBB.

1 With effect from 2015, these figures include advance payments on the regional additional percentages on personal income tax, although these advance payments are regarded as purely financial transactions according to the ESA 2010 methodology and are only taken into account at the time of collection. This approach is in line with the guidelines for developing fiscal targets in the recommendations from the Public Sector Borrowing Requirement section of Belgium's High Council of Finance, as well as in the stability programmes.

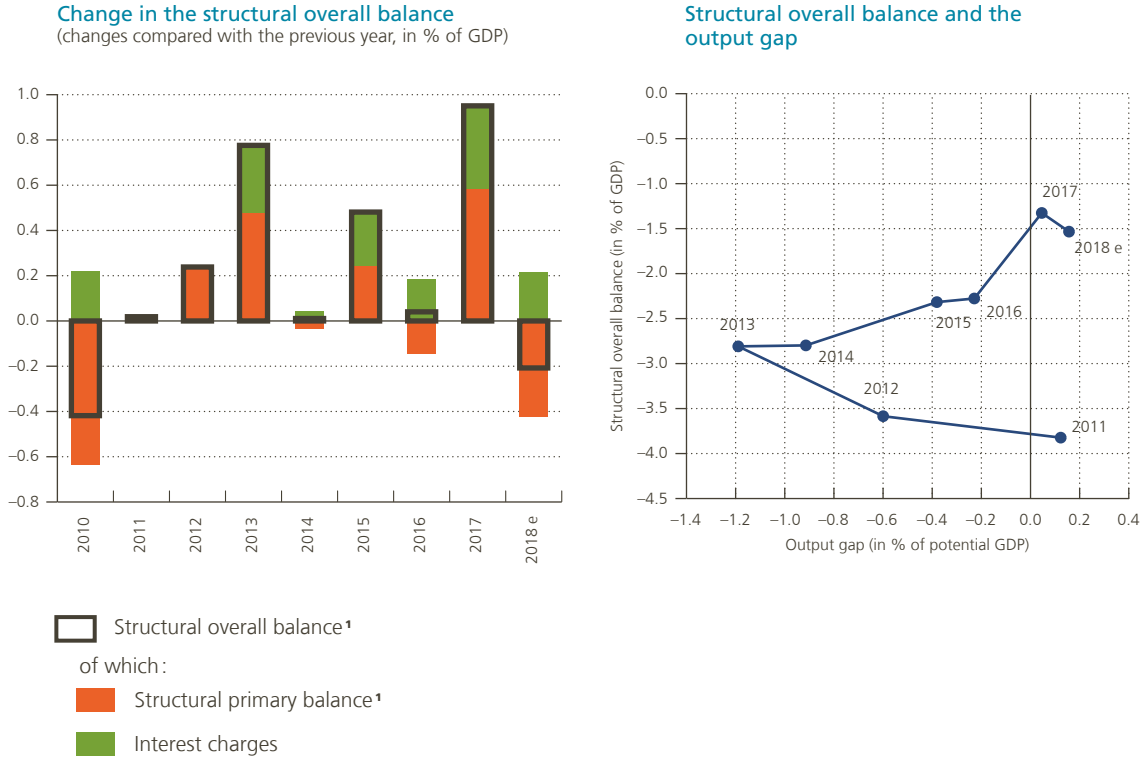
Deterioration in structural overall balance – still a long way from equilibrium

The trend in the nominal overall balance was helped both by the economic situation and by a number of non-recurring factors. The structural overall balance, which is obtained by stripping out those cyclical and temporary factors from the fiscal outcomes, declined by 0.2 percentage point of GDP in 2018 to –1.5 % of GDP, still a long way from the targeted budget balance. The structural primary balance, a better reflection of the discretionary fiscal policy because it is not influenced by movements in interest charges, deteriorated by 0.4 percentage point of GDP.

Belgium's fiscal policy was therefore somewhat expansionary. Against the backdrop of further improvement in the economy in 2018 and the need to guarantee the sustainability of public finances, a more restrictive policy would have been justified.

Chart 60

Deterioration in both the structural primary balance and the structural overall balance in 2018 against the backdrop of continued improvement in the economy



Sources: EC, NAI, NBB.

1 The cyclical component of the structural primary balance and the structural overall balance is determined using EC methodology.

Belgium needs to achieve a structurally balanced budget

Belgium is still quite some way from a structurally balanced budget. However, it is important that this balance is achieved in the medium term, for several reasons. First, sound public finances are essential for securing the trust of economic agents and thus helping to secure sustainable growth conducive to employment creation. Second, a structurally balanced budget makes it possible during periods of normal economic conditions to build up buffers which can be used to support the economy in later weak periods in the economic cycle. Third, the still very high government debt needs to be brought down. This debt makes Belgium vulnerable to a rise in interest rates, which may be expected with time under monetary policy normalisation. The financial markets also appear to be more alert than they were in the period prior to the financial crisis to a lack of fiscal discipline and unsustainable public finances, and this is reflected in interest rates. A structurally balanced budget, and the steady fall in the debt ratio that stems from it, helps avoid upward pressure on spreads between Belgian government bonds and government bonds issued in Germany and other euro area countries that are regarded as low-risk. Finally, a structurally balanced budget enables margins to be created to meet future challenges, with population ageing as a prime example. Although the pension reforms aimed at raising the effective retirement age are making a crucial contribution to the sustainability of Belgian public finances and the affordability of social protection, population ageing will nonetheless drive up the share of social security expenditure over the coming decades.

Sound public finances are essential for securing the trust of economic agents

The European fiscal framework must serve as a guideline

It is also important in the context of the European fiscal framework that Belgium achieves a structurally balanced budget; this is the medium-term objective (MTO) for Belgium in the preventive arm of the Stability and Growth Pact (SGP), which seeks to prevent unsustainable fiscal situations arising. The MTO is set by individual Member States themselves in their stability or convergence programmes, but it must meet the minimum target calculated by the EC every three years. This takes into account the debt ratio, the fiscal costs of population ageing and projected nominal economic growth. The EC will publish new figures in early 2019, and if necessary the MTO will be adjusted accordingly in the next stability programme.

The European fiscal framework also sets out a path for adjustments that need to be made by countries which have not yet met their MTO, with a view to converging towards the objective sufficiently quickly. The adjustment path is determined and assessed using two indicators: the structural overall balance

and primary government expenditure. The minimum required improvement in the structural balance is determined on the basis of the economic situation and the debt ratio of the Member State concerned; for Belgium, the minimum target was 0.6 percentage point of GDP in 2018. The corresponding maximum nominal increase in the other indicator used by the EC, primary government expenditure, was 1.6 %.

The April 2018 Belgian stability programme set a target for that year of reducing the structural government deficit by 0.1 percentage point. Achievement of the medium-term objective of a structurally balanced budget was deferred yet again, from 2019 to 2020.

The budget path was amended once again in the draft budget published in October 2018. For 2019, the 0.2 % targeted improvement in the structural balance was retained, but the starting point was revised downwards. No targets were set for 2020 or 2021, but according to the explanatory memorandum to the revenue and expenditure budgets for the fiscal year 2019, unchanged policy would mean that the structural overall budget deficit would amount to 1.4 % of GDP in 2021.

Together with the draft budget, the federal government also submitted a formal request to the EU authorities to exercise the flexibility provided for in the SGP. The government was seeking permission to deviate temporarily, starting from 2018, from the adjustment path to the MTO in order to make way for the implementation of far-reaching structural reforms which would improve the sustainability of public finances in the long term. However, as this request had to be submitted in the year prior to application of the relevant clause, the EC is investigating whether the criteria have been met from 2019 onwards. A provisional assessment suggests that Belgium will be eligible that year for the requested temporary deviation of 0.5 % of GDP.

Based on the October 2018 draft budget and its own autumn forecasts, the EC concluded that there was a risk that Belgium would deviate significantly from

Table 14

Targets for the Belgian general government overall balance

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

	2015	2016	2017	2018	2019	2020	2021
Nominal balance							
April 2015	**–2.5**	–2.0	–1.0	–0.2			
April 2016		**–2.5**	–1.4	–0.4	–0.2		
April 2017			**–1.6**	–0.7	–0.2	–0.1	
April 2018				**–1.0**	–0.7	0.0	0.1
October 2018 (draft budget)				**–1.0**	–1.0	–1.1 [1]	–1.4 [1]
p.m. Actual/Estimate	*–2.5*	*–2.4*	*–0.9*	*–0.7 e*			
Structural balance [2]							
April 2015	**–2.0**	–1.3	–0.6	0.0			
April 2016		**–1.7**	–0.8	0.0	0.0		
April 2017			**–1.0**	–0.4	0.0	0.0	
April 2018				**–0.8**	–0.6	0.0	0.0
October 2018 (draft budget)				**–0.9**	–0.8	–1.0 [1]	–1.4 [1]
p.m. Actual/Estimate	*–2.3*	*–2.3*	*–1.3*	*–1.5 e*			

Sources: EC, FPS Policy and Support, FPS Finance, NAI, NBB.

1 Estimates if policy remains unchanged as set out in the explanatory memorandum to the federal government revenue and expenditure budgets for fiscal year 2019.

2 The cyclical component of the structural balance was determined for the line item Actual/Estimate based on the EC methodology, while Federal Planning Bureau estimates were used for the stability programmes and other budgetary documents.

the required adjustment path to the MTO in 2018 and 2019. Taking the flexibility on structural reforms into account would not change this assessment. Additionally, government debt would have to come down sufficiently, and Belgium would need to make satisfactory progress towards meeting the reference value of 60 % of GDP, taking as a guide an average annual fall in the debt ratio of one-twentieth of the difference relative to that reference value. The EC analysis showed that Belgium would not meet this criterion in either 2018 or 2019. The next assessment of Belgian public finances by the EC will take place in the spring of 2019, based on the 2019 stability programme and the EC's spring economic forecasts.

How can a structurally balanced budget be achieved?

The government has two levers at its disposal to help achieve a structurally balanced budget, namely revenue and primary expenditure, preferably supported by a policy which promotes growth. Interest charges have already come down substantially due to the general fall in interest rates in recent years, and the scope for reducing them further in the coming years is limited.

Despite increasing in 2018, primary expenditure has moderated in recent years, after rising sharply in the first decade of this century. The main primary expenditure category, social security benefits, should also remain under control in the next few years, despite the upward pressure resulting from population ageing. A shift within the expenditure categories should also enable adjustments to be made which prioritise those categories that can stimulate economic growth in the longer term, for example investment in infrastructure. If such a shift is to be possible, public services will need to be organised as efficiently as possible.

The fiscal effort must come mainly from the federal government, including social security

The margins on the revenue side are very thin given the already substantial tax burden. As with expenditure, the revenue structure needs to boost growth as far as possible. As box 7 in section 4.2 shows, however, the scope for reducing the tax burden on labour further through a shift to other tax bases is limited. Continued efforts will, of course, need to be made to ensure that all tax due is collected.

Achieving a structurally balanced budget and making public finances more conducive to growth will require input from and cooperation between all layers of Belgian government. The Communities and Regions and local government are already well on the way to a structurally balanced budget or have already achieved it. The input will therefore have to come mainly from federal government and the social security system. In April, the Consultative Committee, comprising the Prime Minister and the Minister-Presidents of the Communities and Regions, gave its support to the stability programme budget path, which is banking on a structurally balanced budget for the general government by 2020. However, the Committee was unable to reach agreement on the annual targets for the individual Communities and Regions. For this reason, the Consultative Committee agreement aligns only partially with the fiscal coordination prescribed by the 13 December 2013 cooperation agreement. The fiscal coordination planned in the cooperation agreement was also applied only partially in earlier years, and the Public Sector Borrowing Requirement section of Belgium's High Council of Finance was thus unable to perform its monitoring task fully. The Ecofin Council therefore consistently stresses the importance of effective fiscal coordination between the different Belgian government entities and calls for full implementation of the cooperation agreement. Good cooperation between the different entities is also essential in other areas pertaining to the economy, such as the Investment Pact and the Interfederal Energy Pact.

4.2 Rise in government revenue thanks to higher corporation tax revenue

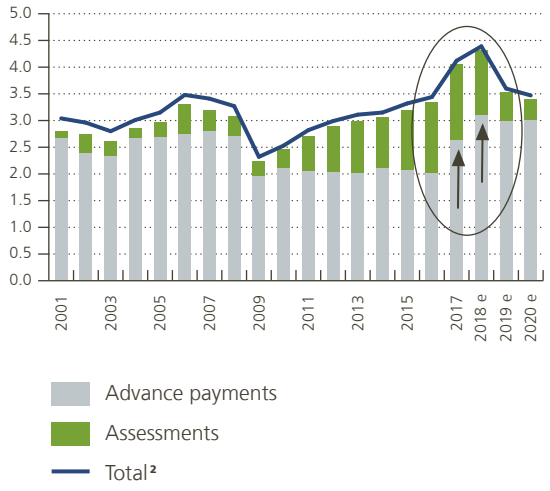
Government revenue rose by 0.3 percentage point of GDP in 2018 thanks to an increase in corporation tax revenues. They reached 4.4 % of GDP, almost one percentage point more than the highest level ever recorded before 2017. Advance payments of corporation tax rose sharply, as they had done in 2017. The reason for this was the further increase in the base rate for the tax surcharge in the event of insufficient advance payments, from 2.25 % to 6.75 % from the 2018 income year. As a result, companies logically stepped up their advance payments. The surplus this produced in 2018 is temporary, because the higher advance payments will reduce the collection via assessments in the ensuing years. The raising of the base rate is part of the corporation tax reform which came into force in Belgium on 1 January 2018, but the temporary fiscal surplus was much larger than anticipated.

The sharp rise in corporation tax revenue is temporary

Chart 61

Sharp but temporary rise in corporation tax revenue [1]

(in % of GDP)



Sources: NAI, NBB.

1 The data for the 2019-20 period are taken from the Bank forecasts published in December 2018.

2 Including other taxes, of which withholding tax is the most important.

The corporation tax reform entails a reduction in the standard rate from 33 % to 29 % starting from the 2018 income year (2019 assessment year); from income year 2020 (assessment year 2021), it will be reduced to 25 %. With effect from 2018, companies which are classified as small under Belgian company law also receive a reduction in the tax rate to 20 % on the first € 100 000 of their taxable profits. The corporation tax reform also contained several other stimulus measures, mainly involving the introduction of a system of fiscal consolidation, a temporary increase in the investment allowance for small businesses and an extension of the exemption for remittance of payroll tax to researchers with bachelor's degrees. A number of compensatory measures were also introduced to ensure that the reform was budget-neutral. They included a significant reform of the system of notional interest deduction, the combination of several tax deduction items in a "basket" with limited deductibility, and the transposition of the EU Directives on combating tax avoidance into Belgian legislation. More information on the reform

of the corporation tax system can be found in the Bank's Economic Review[1].

Revenue from levies on employment declined by 0.1 percentage point of GDP in 2018. Whilst the measures taken under the tax shift to lower these levies reduced the revenue from personal income tax and social security contributions, the high labour intensity of economic growth following the labour market reforms in recent years, including the tax shift, and the concomitant sharp rise in employment, had the effect of pushing up this revenue. Specifically, the revenue from personal income tax was reduced in 2018 by the further increase in the fixed allowance for professional expenses, a further adjustment of the tax bands and an enlargement of the target group eligible for a higher personal tax allowance. Revenue from social security contributions was depressed by the further reduction in employer contributions.

Levies on other income and on assets rose by 0.1 percentage point of GDP in 2018 thanks to an increase in the rate of stock market transaction tax and the coming into effect of the tax on securities accounts – an annual tax of 0.15 % on the average value of financial assets held by natural persons in securities accounts with a value of € 500 000 or more. By the end of the year, this measure had raised € 226 million.

There was also a slight increase in taxes on goods and services. VAT receipts rose by 0.1 percentage point of GDP, while revenue from excise duties and similar levies remained virtually flat. On the one hand, the excise duty on diesel was gradually raised through the ratchet system that was in force

1 See B. Coppens., R. Schoonackers, L. Van Meensel & S. Van Parys (2018), "Recent international trends in corporate taxation: more competition or more convergence?", NBB, *Economic Review*, September, pp. 91-124.

Table 15

General government revenue[1]

(in % of GDP)

	2014	2015	2016	2017	2018 e
Fiscal and parafiscal revenue	45.1	44.6	43.7	44.3	44.5
Levies weighing chiefly on earned income	26.3	26.1	25.0	24.9	24.9
Personal income tax[2]	11.7	11.5	11.0	11.1	11.0
Social security contributions[3]	14.6	14.6	14.0	13.9	13.8
Taxes on company profits[4]	3.1	3.3	3.4	4.1	4.4
Levies on other incomes and on assets[5]	4.5	4.3	4.1	4.1	4.1
Taxes on goods and services	11.1	11.0	11.1	11.1	11.2
of which:					
VAT	6.9	6.7	6.8	6.8	6.8
Excise duties	2.1	2.1	2.2	2.2	2.2
Non-fiscal and non-parafiscal revenue[6]	7.1	6.7	6.9	7.0	7.1
Total revenue	52.2	51.3	50.6	51.3	51.6

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 or 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 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.

between November 2015 and December 2018 as part of the tax shift. Under this system, half of any falls in the maximum price of diesel, as set in the programme contract establishing the retail prices of oil products, is offset by raising the excise duty until the government's target amount is reached. The resultant increase in duty on diesel was linked to a reduction in the rate of duty on petrol. On the other hand, in early 2018, the Flemish Region scrapped the higher energy levy based on electricity consumption – though the monthly levy per offtake point does continue to apply.

Finally, non-fiscal and non-parafiscal revenue rose slightly in 2018, partly due to the higher dividend paid to the federal government by Belfius.

BOX 7

The tax structure in Belgium: is there scope for a shift to promote growth?

The fiscal and parafiscal burden in Belgium is among the highest in Europe, partly due to relatively high government expenditure. Tax on earned income is particularly high. According to the EC, the implicit tax rate on labour, i.e. the total of all levies on income from waged employment, expressed as a percentage of the total wage bill calculated on the basis of the national accounts, was 8.6 percentage points higher in Belgium in 2015 than the average for the euro area. Although the high levies on labour income make it possible to fund social protection, they also discourage the demand for and supply of labour. While the employment rate in Belgium has risen gradually, the labour market participation rate remains low in some sections of the population. To address this, the government has for some time been seeking to reduce the levies on labour and make greater use of different forms of taxation. It is interesting in this light to analyse the composition of the country's tax revenues to gauge how successful Belgium has been in narrowing the gap with other countries as regards levies on labour, and how a further shift towards more growth-friendly taxation principles can be achieved.

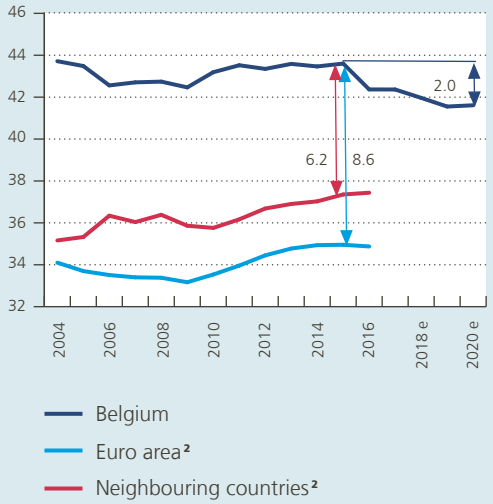
The tax shift approved in 2015 reduced the levies on labour income with effect from 2016 in a bid to improve the competitiveness of Belgian companies and boost household disposable income. Specifically, the tax bands were adjusted to boost the purchasing power of employees, especially those on low and middle incomes; the fixed allowance for professional expenses was also raised and deep cuts were made to employers' social security contributions. It was predicted that when the full effect of these measures was felt in 2020, they would lower tax on labour income by almost 2 percentage points.

Despite the sharp fall in levies on labour income, there is a case for a further shift in the tax burden towards other taxes which have a less disruptive effect on growth. In its country-specific recommendations of 13 July 2018, the Ecofin Council observed that, despite efforts to narrow the gap between wage costs and net pay, some groups are still greatly discouraged from working. As an example, wages earned by single-person households in Belgium on average are among the most

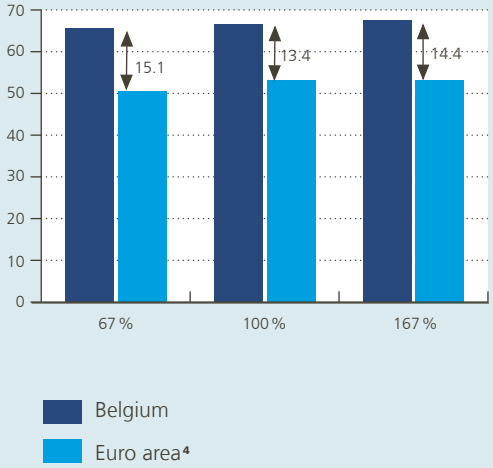
heavily taxed in the EU. Moreover, the unemployment trap for those on low incomes is among the EU's highest. There are also considerable tax disincentives for second earners, especially women. Further – targeted – reforms of personal income tax and social security contributions could therefore encourage labour market participation by these specific groups, and thus boost the labour potential and economic growth over the long term.

Levies on employment remain high despite substantial reduction

Implicit levy on labour[1]
(in % of labour costs)



Marginal fiscal and parafiscal tax rate on labour for a single employee without children, for different levels of income[3]
(in % of labour costs, 2017)



Sources: EC, OECD, NBB.
1 Defined as the total levies on labour income paid to the government, divided by the total wage bill. Calculation based on the national accounts.
2 Unweighted averages.
3 Expressed as a percentage of the average wage.
4 Unweighted averages, with the exception of Cyprus, Malta and Lithuania.

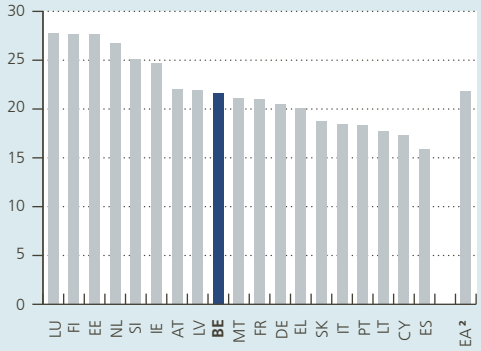
Given the need for fiscal consolidation, compensatory measures will be needed to offset a further reduction in tax on labour income. If the government opts for a shift towards different forms of tax revenue, it could put greater emphasis on taxes on consumption – especially those forms of consumption that are harmful to the environment – and on capital.

The EC has calculated that the implicit tax rate on consumption in Belgium was 21.6 % in 2016, broadly in line with the euro area average. That also applies for the main tax within this category, VAT, where the implicit rate is 13.9 %. This implicit VAT rate is much lower than the standard rate of 21 %, mainly due to the reduced rates and VAT exemptions applying for certain purchases. Consideration could therefore

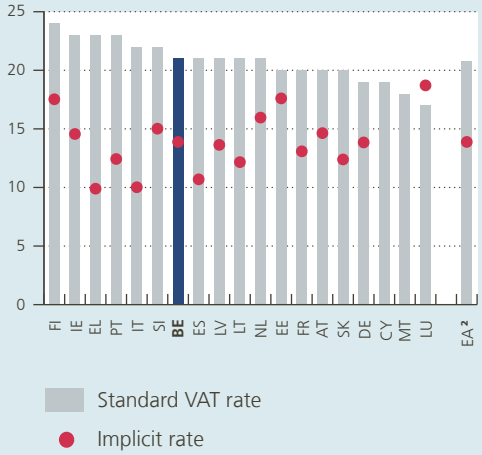
be given to applying reduced rates more selectively in order to shift the tax burden from labour income to less distortive sources of tax revenue.

Taxes on consumption

Implicit tax rate on consumption[1]
(2016, in % of consumer spending by households in Belgium)



Standard and implicit VAT rate[3]
(2016, in %)



Sources: EC, OECD, NBB.
1 Defined as total taxes paid on consumption, divided by household final consumption expenditure in the country's territory.
2 Unweighted averages.
3 The implicit tax rate is defined as government revenue from VAT, divided by household final consumption expenditure in the country's territory.

Belgium also has scope to raise more revenue from environmental levies, which are currently among the lowest in the euro area as a percentage of GDP. Tax revenue from energy levies, in particular, is relatively low. Yet these taxes internalise the negative impact on the environment of production and consumption decisions by economic agents, which should ultimately lead to a lower ecological impact. Seen from this perspective, environmental levies also offer a permanent incentive to continue seeking out new methods to reduce pollution and carbon emissions further and to implement new technologies more rapidly.

In this context, the Ecofin Council's most recent country-specific recommendations alerted Belgium to the considerable potential for an environmentally friendly tax shift, focused among other things on eliminating the favourable tax treatment of company cars, which contribute to air pollution, congestion and greenhouse gas emissions.

Environmental taxes are generally regressive, which means the burden rests more heavily on the shoulders of the more financially precarious segments of the population. This unintended consequence

Relatively low revenue from environmental taxes in Belgium

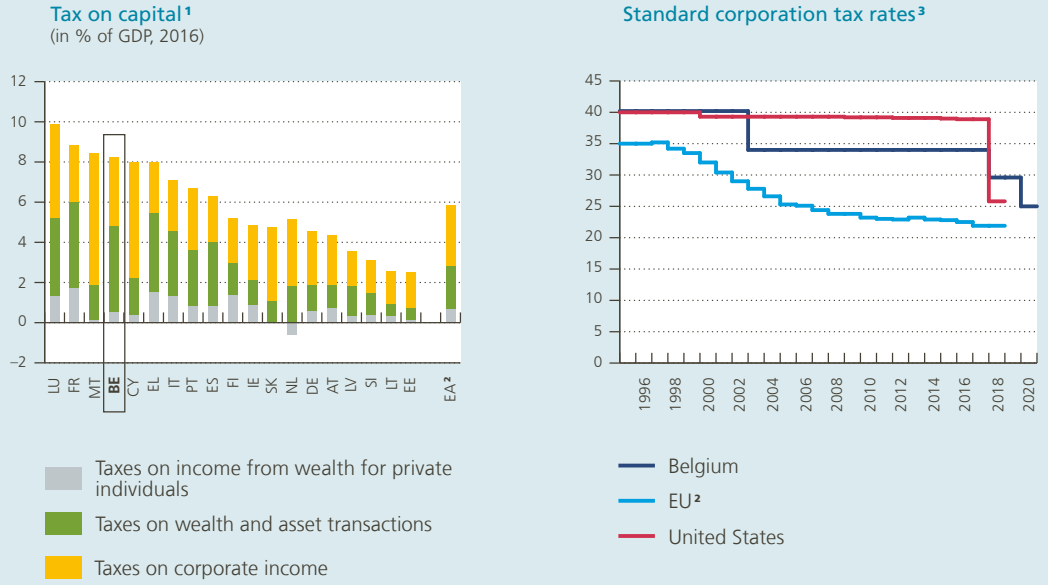
Sources: EC, OECD.
1 Unweighted averages.
2 These taxes comprise fuel duties.
3 Calculated as the ratio of total tax revenue from energy to final consumer spending on energy.

can nevertheless be avoided through compensatory measures, for example the targeted reduction of the levies on labour income referred to above.

Finally, capital is taxed relatively heavily in Belgium. Altogether, the taxes on income from assets of private individuals, the other levies imposed on assets and asset transactions, and the tax on corporate income accounted for a total of 8.2 % of Belgian GDP in 2016, significantly higher than the average of 5.6 % across the euro area.

This can be explained partly by corporation tax revenue, given Belgium's high corporation tax rates in a European perspective. In the light of the changed international environment, and more specifically international initiatives to counter erosion of the tax base, combined with the trend towards lower nominal tax rates, the Belgian corporation tax system was reformed in 2017, with the nominal rate being lowered and the tax base broadened. This was based on a recognition that too great a discrepancy between the tax rate in Belgium and that in the other EU Member States could make Belgium much less attractive as an operating base for multinationals, which would have an adverse knock-on effect on economic activity and employment. Compared with a situation in which the corporation tax system in Belgium was left unchanged, overall the reform might therefore be expected to deliver positive dynamic effects.

Taxes on capital



Sources: EC, NBB.

1 The taxes on capital in Belgium include corporation tax, withholding tax, inheritance taxes, registration fees and gift taxes, taxes on long-term savings, revenue from tax regularisations, withholding tax on income from immovable property, vehicle taxes paid by companies and the nuclear tax.

2 Unweighted averages.

3 These are the highest nominal tax rates, including any local or regional taxes levied on company profits.

The high tax on capital is also due to the levies on asset transactions, resulting from Belgium's relatively high inheritance taxes and property registration fees. By contrast, tax receipts from levies on personal income from assets are much lower in Belgium than in other euro area countries, despite the relatively substantial assets in private hands as a proportion of the country's GDP. However, the base rate for withholding tax has been systematically raised in recent years, from 15 % in 2011 to 30 % on 1 January 2017. A tax on securities accounts was also introduced in 2018, albeit with limited scope and a low rate, and the tax on stock market transactions was raised. On the other hand, there are still virtually no levies on capital gains for private individuals, whereas several European countries do impose such taxes, in a wide variety of ways. In an optimal tax system, the impact of taxes on the various forms of income from financial assets is neutral, unless the intention is to bring about specific changes in behaviour.

Funding a further targeted reduction in tax on labour income requires fair taxation of capital. The international agreements signed in the last few years aimed at avoiding the shifting of tax bases and promoting the sharing of information are important steps in the right direction. The various forms of tax fraud also need to be tackled effectively.

There are also various tax allowances in the personal taxation sphere which are primarily aimed at encouraging home ownership and various forms of long-term saving. These types of tax allowance may be desirable insofar as they help economic agents to build big enough buffers to maintain their consumption pattern after retirement and thus reduce the risk of poverty. However, it is important to ensure that the various allowances are efficient means of achieving these objectives and do not have unintended consequences.

All in all, the margins for funding a further reduction in the tax burden on labour through a shift in the tax base are not infinite. Given the efforts still needed to achieve a structurally balanced budget, greatly reducing taxation on labour would therefore appear to be possible only if margins are created by cutting government expenditure.

4.3 Downward spending trend interrupted

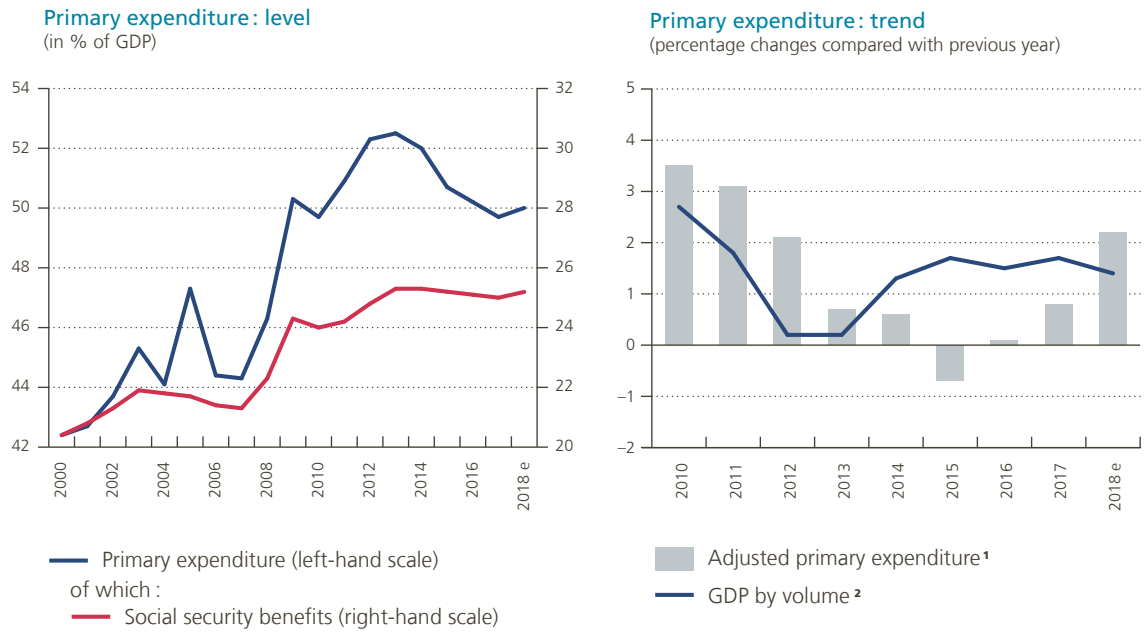
The downward trend in primary expenditure relative to GDP was interrupted in 2018. After declining for four years in a row, the ratio of spending rose compared with 2017, to 50 % of GDP. This figure reflected the underlying trend in primary expenditure: adjusted for the impact of temporary factors, the cyclical effect and the time lag between inflation and indexation, real primary expenditure in 2018 rose by 2.2 %, an advance that – unlike in previous years – outstripped GDP growth by volume.

Accounting for half of GDP, primary expenditure was thus well above 2000 levels. Spending growth has been sharply curbed since 2013 and has helped to bring down the expenditure ratio, but this has not been enough to reverse the rises of the preceding years, particularly during the economic recession that followed the financial crisis.

After coming down for four years, primary expenditure rose

Chart 62

Primary expenditure rose faster than economic growth



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 and 2016 in view of the index jump) of public sector wages and social security benefits and the rise in the GDP deflator.

2 Calendar adjusted data.

Population ageing pushes up spending

Because of their sheer volume, social security benefits have a key part to play in this trend, as they accounted for 25.2 % of GDP in 2018, 0.2 percentage point more than in 2017. In the previous five years, demographic pressures on pensions and other social security benefits were neutralised by a combination of factors including the rigorous control of health care spending, the 2015 index jump and falling unemployment. In 2018, all key social security budget items recorded an increase, with the exception of unemployment benefits.

Spending on unemployment declined for the fifth year running in 2018, by 6.4 % in real terms, to end up at a mere 1.1 % of GDP. The downward trend mostly reflects a favourable economic environment and excellent labour market conditions, which allowed many job-seekers to find jobs. Demographics are also beginning to reduce unemployment spending against a backdrop of gradual outflows of baby boomers from the labour force and the significant numbers of positions thus opened up. The government also implemented measures to tighten up benefits eligibility, which in some cases implied a shift to other categories of social security benefits, as some people who were excluded from unemployment benefit moved onto subsistence benefit.

For public finance, there is also a flipside to the massive labour force outflows, not least because they entail a surge in the number of retired people. Recipients of retirement or survivors' pensions saw their numbers swell by 2.2 % in 2018, and this pace looks set to continue in the years ahead. In 2018, total pension payments amounted to 10.6 % of GDP. In fact, the swelling of the retirement-age population is the key factor behind accelerating pension spending; this rose by 2.4 % in real terms, as it had done in 2017.

Chart 63

Social security benefits, except for unemployment benefits, continue to weigh down the budget

(data deflated by the indexation coefficient of social security benefits[1], percentage changes compared with the previous year, unless otherwise stated)

Sources: Budget documents, NAI, NIHDI, NEO, SCA, NBB.

1 Because of the index jump, the 2015 and 2016 figures assume a theoretical indexation, as the index jump can be considered to be similar to a measure influencing real benefits trends.

2 Double-counting between the general system and the public system (mixed pensions) cannot be stripped out, hence the presentation only of recipients of pensions in the private sector. The upturn between 2010 and 2018 of the number of pension recipients in the public sector is estimated at nearly 50 000.

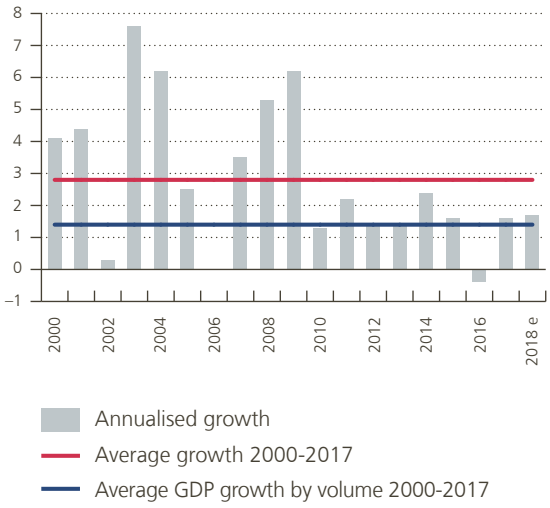
Disability benefits, which had staged only subdued growth in the previous two years, accelerated to 5.6 % in 2018, taking this spending item — i.e. primary incapacity for work and disability together – from 1.3 % to 2 % of GDP over the past decade. Together with pensions, these benefits paid by the National Institute for Health and Disability Insurance (NIHDI) account for a big proportion of the rise in social security spending. As is the case for pensions, higher benefits are down to a major increase in the number of recipients.

Health care spending stayed more or less in line with the government's objective since 2015, i.e. curbing

Chart 64

Health care spending remained moderate

(data deflated by the health index, percentage changes compared with the previous year)



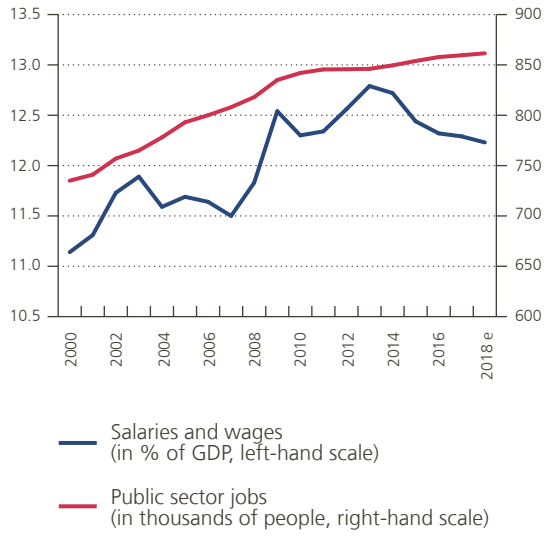
Sources: NAI, NBB.

real spending growth to an annualised maximum of 1.5 %. The more or less natural advance in benefits – fuelled by demographics and the cost of new treatments – had to be offset by new savings, particularly on the reimbursement of proprietary medicines. Through continued effort, spending on health care is being kept under control, as this has clearly been growing less fast since 2010 compared with the previous decade. This expenditure worked out at 6.9 % of GDP in 2018.

Unlike total social security benefits, other current spending categories were kept under tight budget control. At 4 % of GDP, purchases of goods and services remained unchanged compared with 2017. As in previous years, pay in the public sector did not grow as fast as economic activity; it accounted for 12.2 % of GDP. Slower wage trends did not merely reflect the significant effects of the 2015 and 2016 index jump, but also very subdued jobs growth in the public arena since 2010, which has undoubtedly helped to contain wage costs in the public sector. That said, these visible

Chart 65

Public sector employment stabilising



Sources: NAI, NBB.

controls mask diverging trends at different government levels: the fall in the number of civil servants at the federal level is offset by growing employment in the Communities and Regions, with employment at local authorities remaining virtually stable.

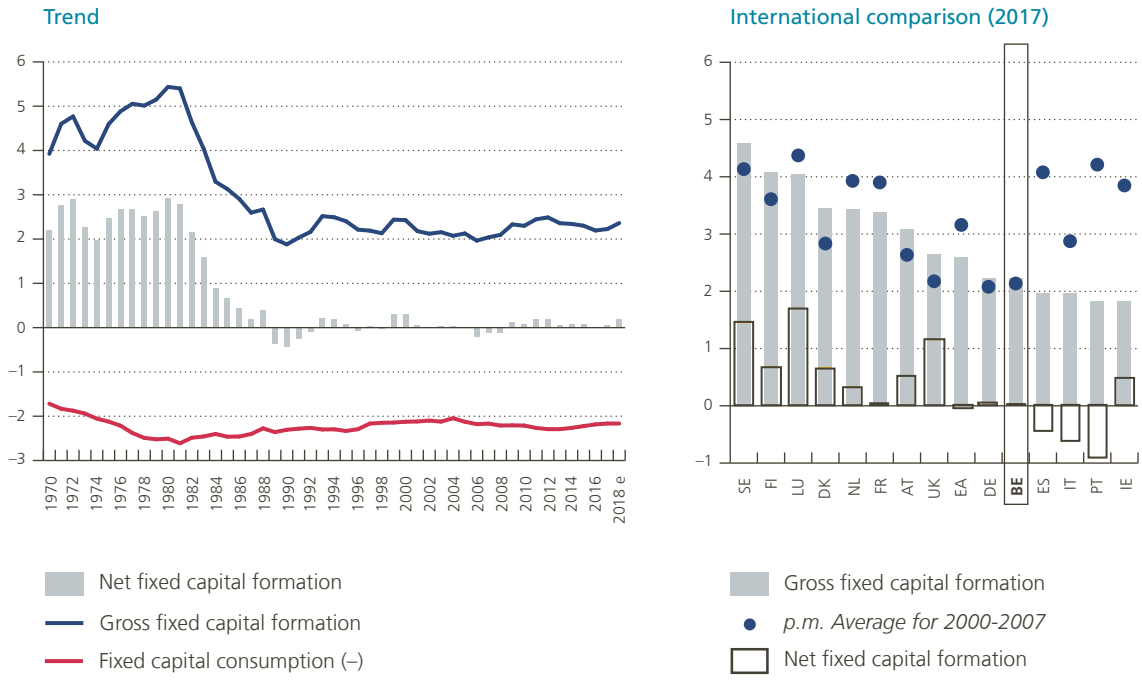
Boosting public investment should be a budget priority

Public investment inched up relative to 2017 to 2.3 % of GDP, but really only because of the electoral cycle that typically sees local authorities spend more in the run-up to municipal and provincial council elections. Ideally, then, any analysis of public investment trends should compare with the previous municipal mandate. Seen from that angle, public investment growth has fallen below its usual rate for a number of years now: the relatively strict budget frameworks imposed by the Regions, now tasked with budget control, would appear to have slowed their capital spending.

Chart 66

Public investment remains weak

(in % of GDP)



Sources: EC, NAI, NBB.

Although limited public investment may help nurse public finances back to health in the short term, such policies have been found to be counter-productive in the longer term, in view of the positive effect of capital spending on growth potential. For over 30 years now, new public investment in Belgium has been barely enough to make up for the attrition of past investment, the upshot being a net investment of virtually zero. In fact, public investment is relatively minor in Belgium compared with other European countries. Recent initiatives to promote investment at European, national and regional level have so far failed to reverse the trend.

Further reduction in interest charges

Interest charges continued to fall in 2018, by 0.2 percentage point of GDP. As in previous years, this reduction was due almost entirely to the fall in the implicit interest rate. This rate, which is the computed interest charge as a proportion of outstanding public sector debt, will continue on a downward trend as long as the market interest rate on new issues remains lower than yields on securities and government loans reaching maturity.

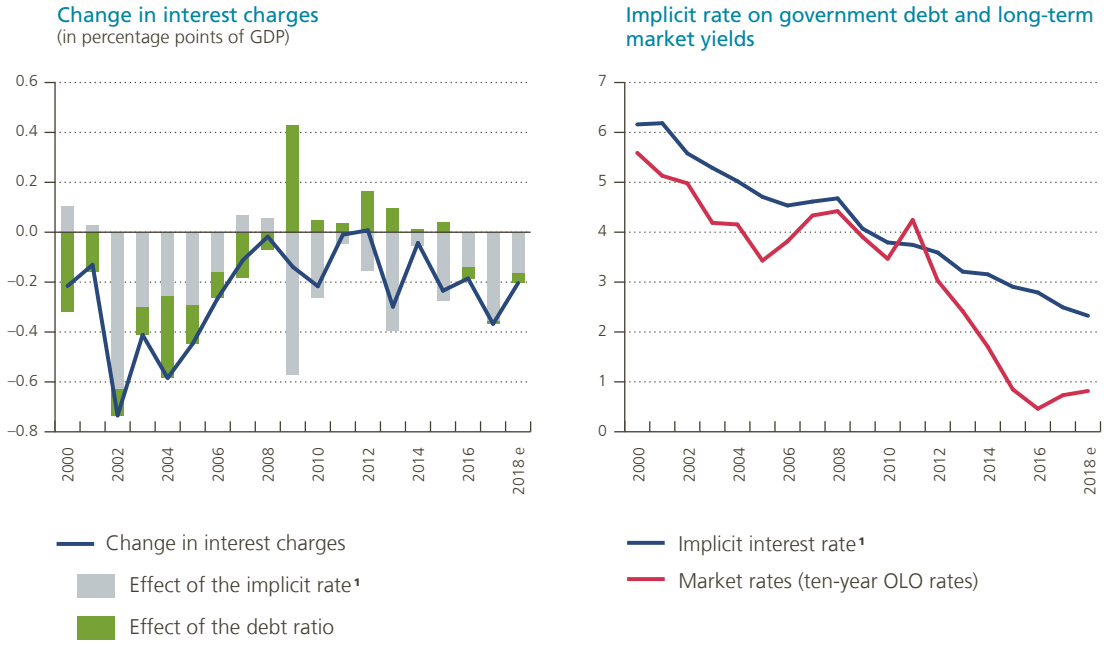
In the short term, the government was able to generate funds through the issuance of Treasury bills with maturities between three and twelve months (with yields varying between –0.99 % and –0.3 %), as interest rates remained negative throughout the year. Yields on ten-year reference bonds fluctuated between 0.6 % and 1 % in 2018.

The difference between market rates and the implicit interest rate might well narrow soon, or even reverse, in an environment where financial markets anticipate higher interest rates under more normalised monetary policies. As a result, interest charges are likely to decline less rapidly in the years ahead, as the Bank's December 2018 projections suggest. Any further easing in the medium term should mainly be realised through debt reduction.

Chart 67

2018's lower interest charges again largely due to reduced implicit interest rate

(in %, unless otherwise stated)



Sources: FPS Finance, NAI, NBB.

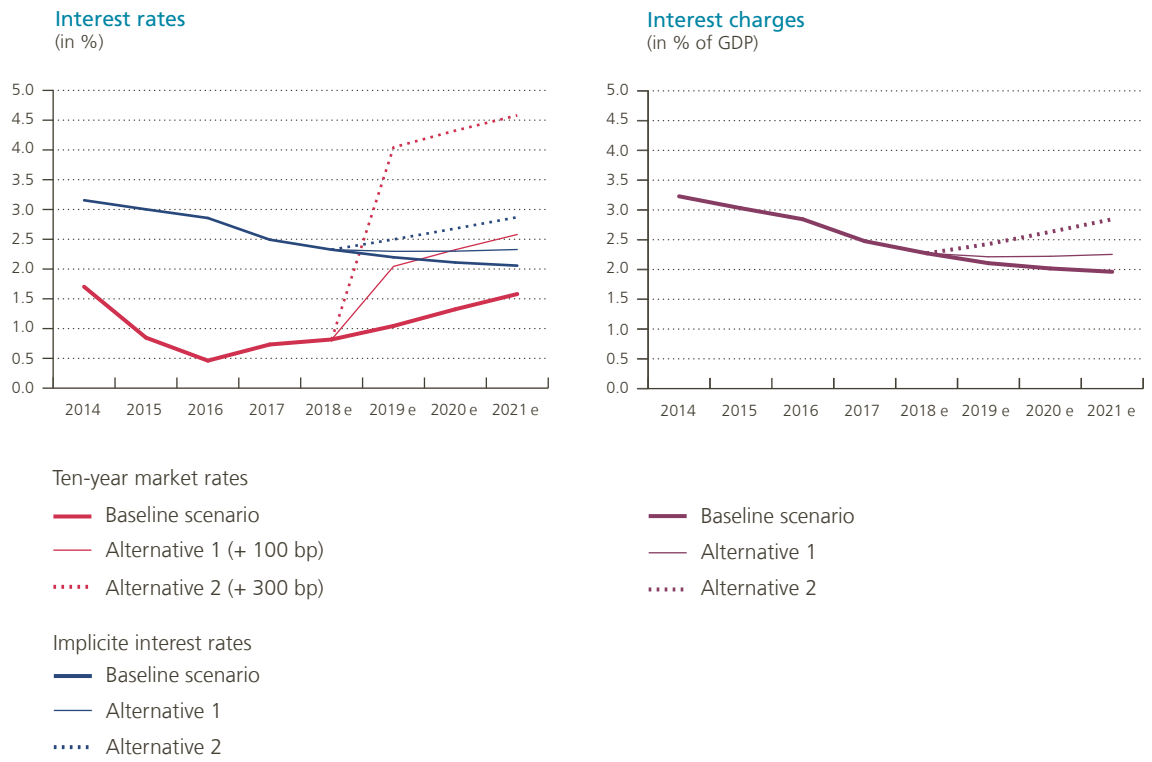
1 Interest charges in the current year as a proportion of the outstanding debt at the end of the preceding year.

However, the baseline scenario in the Bank's projections does not factor in any significant and rapid yield rises, such as recently seen in Italy. A simulation exercise shows that a hypothetical shock of an average 100 basis points on securities yields in 2019 would push up interest charges by around € 500 million in the same year, a little over 0.1 % of GDP. A 300 basis-point shock would push up interest charges by over 0.3 % of GDP. Consistently higher interest rates would cause cumulative effects over time: if average yields add 100 basis points, this could push up interest charges by around 0.3 % of GDP by 2021; an increase by 300 basis points would constitute nearly 1 % of GDP. With the average duration of government debt having risen in the past couple of years, the refinancing risk for the Treasury is limited, but hefty rate rises would eventually hit the Belgian general government overall balance.

Chart 68

A rapid rise in interest rates would hit public budget

(simulations based on the Bank's December 2018 macroeconomic projections)



Source: NBB.

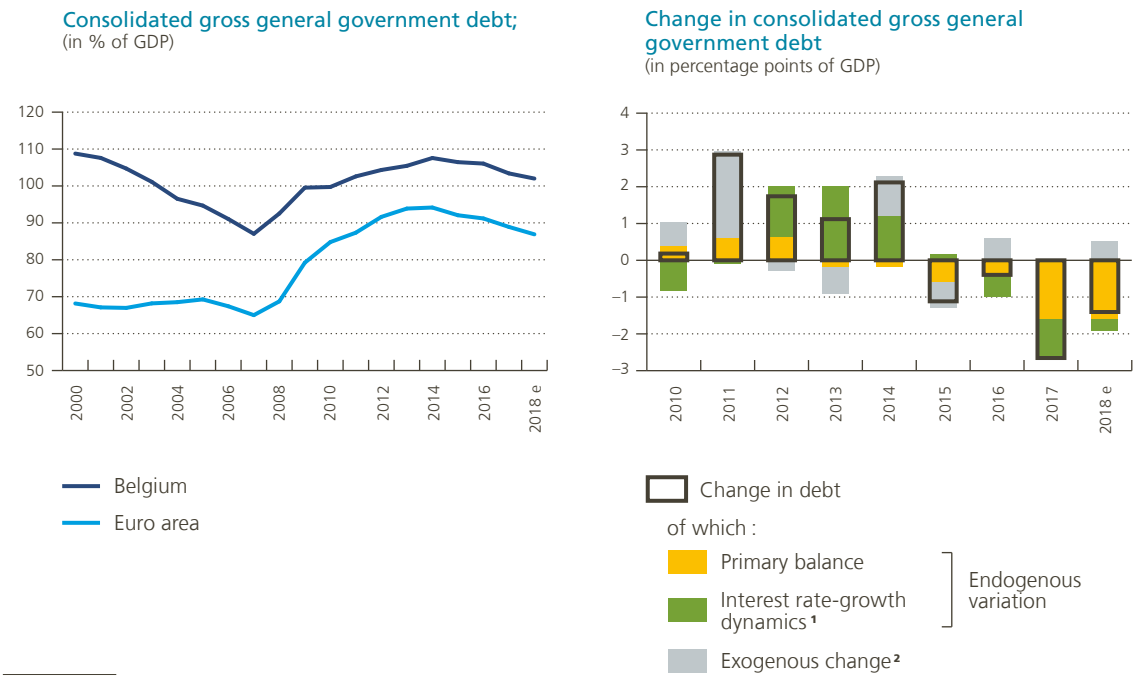
4.4 Government debt declining only slowly, while still at a high level

The Belgian government's debt ratio stood at 102 % of GDP by the end of 2018, implying only a slight drop vis-à-vis 2017, by 1.4 percentage points. This is still high, though. And the gap with the euro area average has widened as Belgium is slower to reduce its debt.

The reduction in the debt ratio in 2018 was due to endogenous factors, specifically the primary surplus. This impact was intensified by a nominal GDP growth that was higher than the implicit interest rate on government debt. Exogenous factors, which affect debt but not the overall balance, accounted for only a slightly upward effect. These reflect, in particular, social housing loans provided by the Flemish Region and accounting factors related to the fact that interest payments recorded on a cash basis were higher than on a transaction

Chart 69

Debt ratio continued to fall in 2018



Sources: EC, NBB.

1 The difference between the implicit interest on debt and nominal GDP growth, multiplied by the ratio of the debt at the end of the preceding year to the GDP over the period under review.

2 The exogenous factors also include the effect of statistical reclassifications. In October 2018, NAI reclassified Infrabel, the country's rail infrastructure manager, and put it into the public sector. This change, which takes effect from 2014, pushes up the debt ratio by around 0.5 percentage point.

basis, with the latter serving as the reference for interest charges in the government accounts.

To strengthen debt reduction and make it more sustainable, the country should pursue a budget path that quickly leads to a balanced budget. Any delay slows down debt ratio reduction and makes Belgian public finances vulnerable to a degree.

The average maturity of government debt has gone up in the low interest rate environment

The trend towards a higher average maturity of federal government debt started in 2010 and continued into 2018. By the end of the year, this was nine years and seven months, four months more than in 2017, while the figure was slightly below six years in 2009. This strategy reduces the amount of debt that needs rolling over every year and provides a level of protection against the refinancing risk in the event of higher interest rates. Compared with 2009, the gross borrowing requirement has come down by nearly 40 %.

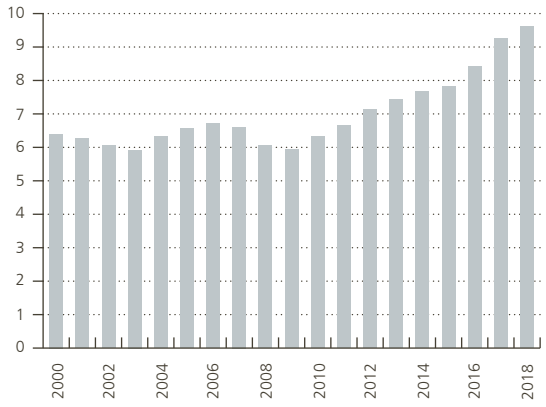
That said, this strategy does come at a cost in the short term as it prevents the benefits from the lowest rates for shorter-dated maturities from being fully reaped. Debt issued in 2018 averaged an initial maturity of 14.8 years and yields of 0.95 %. In addition to ten-year paper – which accounts for over 40 % of total gross funding – at average yields of 0.80 %, the Belgian State also issued bonds with much longer maturities of 30, 40 and even 50 years, systematically at rates below 2 %. Five- and six-year dated bonds were looking at average yields of 0.15 %, with a floor of just under 0 % in the June operation.

The federal government's gross borrowing requirement covers, on the one hand, the current year's deficit and, on the other hand, early debt repayments and refinancing of debt reaching maturity. With the exception of the renewal of Treasury bills in the short term – whose outstanding amount remained unchanged on 2017 – the requirement was nearly fully met by the issuance of OLOs (linear bonds) intended for institutional investors. Just as in 2017, issuance of State notes targeting private individuals was insignificant, as there was no demand for these products at current particularly low rates. In March 2018, the government issued its first "green OLO" to the tune of €4.5 billion. Higher investor appetite for these kinds of assets helped Belgium to secure a slightly better deal than for traditional OLO lines.

Chart 70

Average maturity of federal government debt has risen further

(average maturity of federal government debt, in years)



Source: FPS Finance.

5. Towards a dynamic and inclusive economy

5.1 Addressing the challenges of a changing world

In 2018, the Belgian economy saw a continuation of the expansion phase which had begun five years earlier. Over time, certain constraints on production seem to have become increasingly pressing, as is evident from the proliferating signs of labour market tensions. These cyclical developments are taking place in a context of multi-faceted changes which have been in progress for a number of years now.

The reduction of international trade barriers combined with the technological progress made during the past 20 years has accentuated the fragmentation and the international reorganisation of value chains. Like other advanced countries, Belgium has pursued its transformation into a service and knowledge economy, to the detriment of the traditional production structures.

Other factors, such as the digital revolution, population ageing and the need to take account of environmental constraints, likewise bring about profound changes in the structure of the economy and demand for labour.

Both businesses and individuals are exposed to profound changes

Both businesses and individuals are directly exposed to these changes. Some firms, and with them their workers, benefit greatly while others do not succeed in taking advantage of the changes. This tends to foster a degree of polarisation in the distribution of the benefits of growth, although this is less the case in Belgium than in other advanced economies due to the Belgian system of social protection and dialogue. In Belgium, wage inequality and the risk of in-work poverty are low in comparison with other European countries. However, signs of tension are becoming apparent and need to be addressed.

In view of these developments, it is vital to improve the conditions necessary to ensure the economy's resilience and sustainable growth. Those conditions include matching the available labour resources to firms' demand for labour, creating a framework that gives them sufficient incentives to develop via innovation or to permit the emergence of new economic projects while meeting Belgium's international commitments, including those concerning the environment, access to public services and efficient, reliable infrastructure, and fair distribution of the gains associated with these changes and innovations.

5.2 Revitalising and broadening productivity growth

In order to produce sustainable growth, an economy has to make optimum use of the resources at its disposal. Productivity growth is in this respect the main driving force behind the sustainable generation of income. For several decades, the Belgian economy has been among the most productive in the world, but that advantage is gradually diminishing. It is true that the growth of total factor productivity (TFP) has slowed in all the advanced economies since the beginning of the 2000s, well before the economic and financial crisis erupted. Nonetheless, while TFP growth in the EU picked up at the time of the economic recovery, reaching a steady pace of almost 0.5 % in 2016, it has remained slightly negative in Belgium.

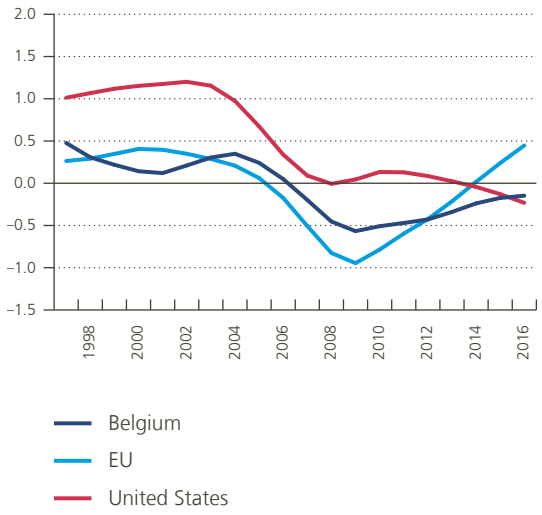
TFP – which reflects how efficiently the production factors (human capital, knowledge and physical assets) are mobilised – is not a concept that can be directly measured. The change in TFP, which was slightly negative at the end of the period although it is recovering, seems to be at odds with the recent significant technological progress. Besides the fact that this progress may take time and may entail fundamental changes in the organisation of businesses and the functioning of the economy before its effects become fully evident, this apparent contradiction may be due in part to the methodological limits of estimation[1] or composition effects. However, alternative ways of measuring productivity, such as apparent labour productivity, also show that the revival in Belgium is less vigorous than for the EU as a whole and in other advanced economies.

However, this issue is difficult to address, especially as the weak aggregate performance masks very wide variations between firms[2]. The analysis of detailed data reveals a marked polarisation of individual performance in terms of the level of productivity between front-runner or "frontier" firms at the cutting edge of their branch of activity (top decile of the distribution), which succeed in

Chart 71

Total factor productivity growth strengthened recently in Belgium, but to a much lesser degree than for the EU as a whole

(percentage annual change, smoothed data)



Source: Conference Board.

1 Traditional methods of assessing productivity face numerous difficulties, notably in a context where the concepts of quality and dematerialisation of production are increasingly important components of wealth creation. Such phenomena are particularly hard to capture in the prevailing statistical system.

2 In aggregate, the firm data display TFP trends similar to those in the macroeconomic statistics, although the growth rates are higher. This discrepancy is due to constraints concerning microeconomic analysis, which excludes certain sectors (non-market and primary sectors) and does not cover self-employed workers.

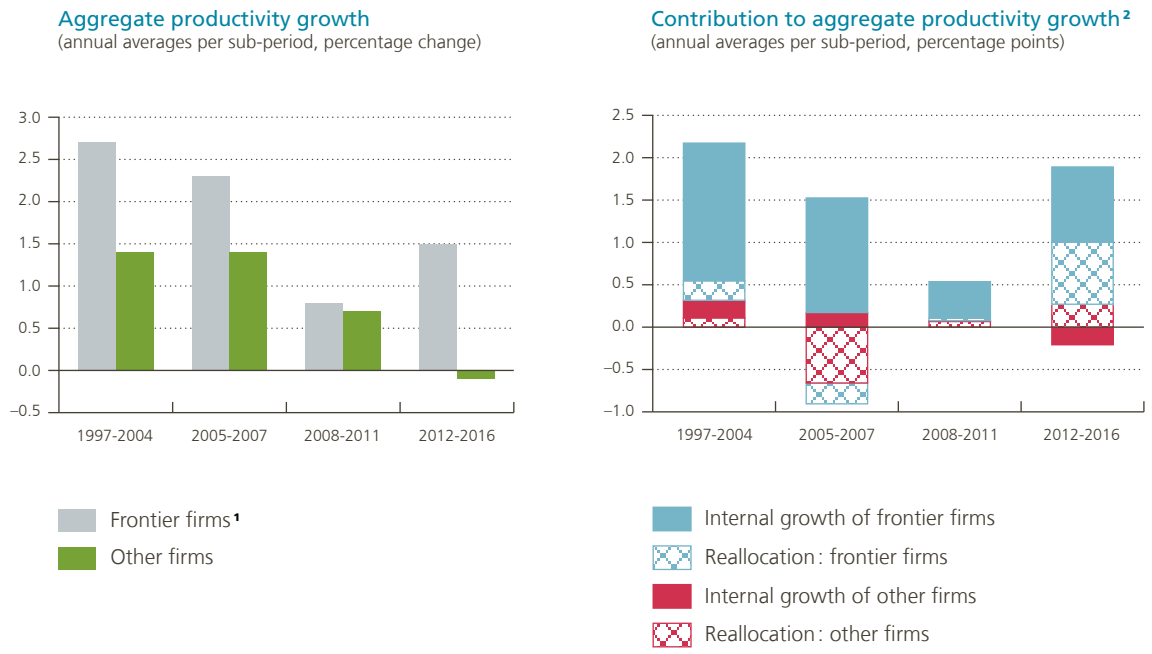
maintaining or even increasing their advantage, and a large number of other firms which perform well below the average for their sector and are unable to catch up. This growing disparity between frontier firms and the others is symptomatic of a problem in the diffusion of technology[1].

The breakdown of productivity gains by sector of activity likewise reveals a contrasting pattern. For firms in the manufacturing industry, where the volume of employment has fallen steadily over the past two decades, productivity gains have remained substantial. Nevertheless, apart from the jump that followed the economic recovery, they were smaller in the 2000s than in the past (3 % between 2000 and 2016, as opposed to almost 4.5 % between 1980 and 2000). For firms in the market services branch – the main source of job creation – productivity gains have tended to be much smaller. From the year 2000, growth only averaged 1 % per annum, and has been virtually zero since 2013. In the context of an increasingly service-based economy, that fact combined with industry's weaker performance than in the past helps to account for the low growth of aggregate productivity. It is puzzling that, despite the recent acceleration, it seems harder for technological progress to be converted into measurable productivity gains. This is particularly true for the services sector, which has been steadily growing in importance with the tertiarisation of the Belgian economy.

1 See De Mulder J. and H. Godefroid (2018), "Productivity slowdown: findings and tentative explanations", NBB, *Economic Review*, December, pp. 51-66.

Chart 72

Productivity gains are still achieved mainly by the top-performing firms



Source: NBB.

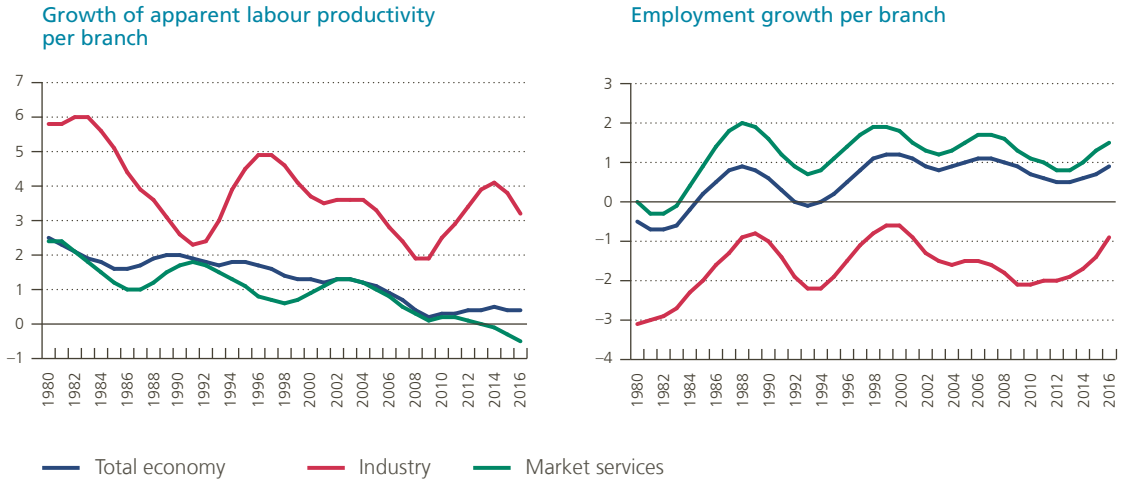
1 The category comprising frontier firms covers all firms with a productivity level in the top decile of the TFP distribution for their sector for at least two consecutive years.

2 The contribution of the reallocation of resources was negative between 2005 and 2007, owing to the departure of several frontier firms and the resulting redistribution of market shares in favour of other firms.

Chart 73

Services create jobs, but productivity gains are smaller than in industry

(percentage annual change, smoothed data)



Source: OECD.

Boosting firms' performance via innovation and research

Up to the end of the last century, internal growth – due to improved intrinsic efficiency of the production processes within the firm or the development of new products – was the main source of productivity gains, but that contribution gradually diminished from the start of the 2000s up to the outbreak of the crisis, contributing to a decline in aggregate productivity. It has only recovered to a small degree in recent years.

To maximise firms' organic growth potential, it is necessary to have substantial innovative capacity. Before the economic and financial crisis, Belgian expenditure on R&D as a percentage of GDP was in line with the European average, but it has risen more strongly since 2010, stimulated by an attractive tax framework in which the tax allowances were expanded and adapted to ensure that R&D activities are anchored in the local economy. In 2017, in order to limit the scope for tax optimisation, the rules on the tax deduction for income derived from patented products or technologies ("patent box") were thus replaced by a new system reserved strictly for research activities conducted on Belgian territory, in accordance with the OECD code of conduct. The deduction increased from 80 % to 85 % of net income and was also extended to new copyright-protected software.

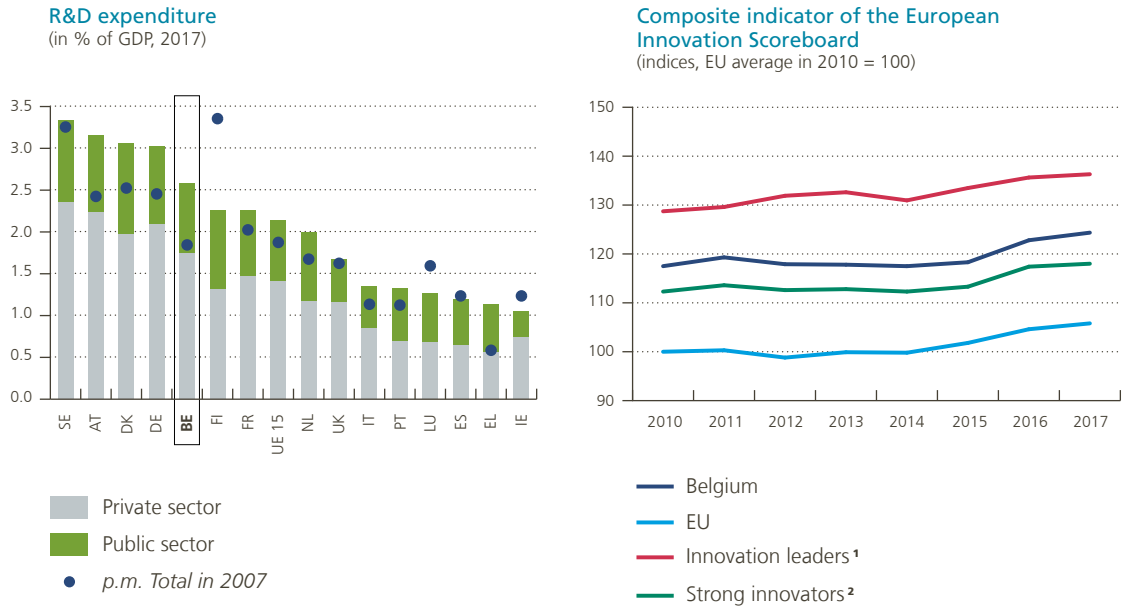
Innovation reinforces firms' organic growth

In 2017, R&D expenditure thus represented 2.6 % of GDP, versus an EU average of 2.1 %. Nonetheless, it was still lower than in the Nordic countries and Germany, and also below the national target of 3 % of GDP under the Europe 2020 strategy. Two-thirds of that expenditure comes from the private sector and tends to be concentrated within a few large firms, including subsidiaries of multinationals, and in certain branches of activity, such as chemicals and pharmaceuticals. The highly specific nature of these R&D efforts may explain the limited spillover effects and meagre spread of technology to other firms or sectors. There is thus a need to encourage a much wider range of firms, including SMEs, to step up their investment in intangible assets, extend their innovation activity and adapt their organisational and production models.

Apart from the findings concerning R&D expenditure, the EC's European Innovation Scoreboard offers a composite view of the innovation systems in each

Chart 74

R&D and innovation performance is better than the EU average but not as good as in the top-performing countries



Sources: EC, Eurostat.

1 Countries performing at least 20 % better than the EU average. In 2017, these were Denmark, Finland, Luxembourg, the Netherlands, Sweden and the United Kingdom.

2 Countries with performance ranging between 90 % and 120 % of the EU average. In 2017, that was Austria, Belgium, France, Germany, Ireland and Slovenia.

country. Belgium is ranked as a "strong innovator", and its performance has been on an upward trend since 2015, to reach a level similar to Germany's in 2017. Nonetheless, Belgium's performance still falls short of the leading group.

Innovation in Belgium benefits from the attractiveness of a number of research centres with a considerable international reputation, e.g. in terms of international scientific publications or patents filed. According to the Reuters 2018 ranking of the most innovative universities, almost all the Belgian universities – KU Leuven, Ghent University, ULB, VUB, UCLouvain, ULiège and Antwerp University – are among the top 100 in Europe, with KU Leuven holding first place for several years now. In addition, some inter-university research centres are also prolific and two of them – IMEC and VIB, specialising in micro-, nano- and biotechnologies – ranked among the ten leading patent filers in Belgium in 2017. Public-private partnerships and close collaboration between innovative SMEs and university research centres likewise generate results which are well above the European average. Nevertheless, there are weaknesses in the case of some intangible assets: in 2017, according to the results of the index compiled on that subject by the EC, Belgium lagged almost 15 % behind the European average as regards both international patent applications, using the procedure laid down by the Patent Cooperation Treaty, and designs and models. Performances related to the spillover effects of innovation, e.g. on local suppliers or in the marketing of new products, are also relatively less favourable.

Supporting the digital revolution on product markets...

The digitisation of activities is a key factor in improving the productive efficiency of firms. In that regard, the pace of innovation is accelerating. However, apart from firms in the information and communication technology (ICT) sector, the productivity gains

associated with the digital revolution are still marginal for the great majority of businesses. The benefits of digital technologies accrue to a small number of firms, and only materialise if the adoption of these new technologies brings a step change in consumption or production methods.

While the new forms of business associated with the digital economy still only represent a small fraction of total activity, they offer non-negligeable growth potential. Yet this progress exacerbates the problem of the inadequate spread of technology. Firms which have access to this technological progress see their dominant position reinforced, and that reduces the development scope of their competitors.

The digital economy offers considerable growth potential

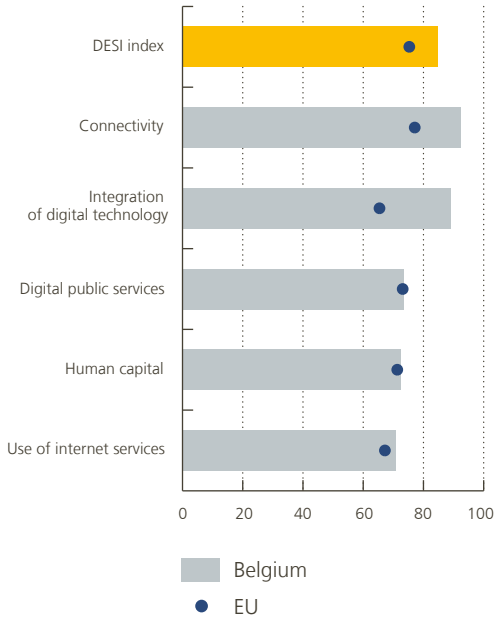
Belgium is in a fairly good position in the European digital landscape according to the EC's Digital Economy and Society Index (DESI), which assesses five separate criteria (connectivity, human capital, use of internet services, integration of technology by firms, and digital public services). In 2018, Belgium was still among the leading group which includes the Nordic countries (Denmark, Finland and Sweden) and the United Kingdom, although the gap in relation to those countries has widened.

Belgium is a European leader in terms of high-speed broadband coverage and use, and there has been significant progress in deploying new-generation networks. However, the penetration of mobile connectivity could still be improved by increasing competition on the market. Full implementation of European Directive 2014/61/EU, whose aim is to reduce the cost of deploying high-speed electronic communications networks, will further encourage investment in these networks. Digital technology is also well integrated in firms in Belgium, except for the relatively disappointing turnover figures in e-commerce, despite recent adjustments to the regulatory framework governing night work, and the number of SMEs selling on-line cross-border.

In addition, most Belgian citizens use a large number of on-line services, particularly as regards social networks, banking, entertainment and shopping. Moreover, almost 61 % of Belgians in the 16-74 age group have general basic or more advanced digital skills, a figure slightly above the European average (57 %), but below that of the leading countries in this field, namely Luxembourg (85 %), the Netherlands (79 %) and Sweden (77 %).

Chart 75

Belgium outperforms the European average in the digital sphere, except in the case of public services and human capital [1]



Source: EC.
1 Indicators rescheduled between 0 (country with the worst score) and 100 (country with the best score).

In the case of digital public services, the picture is more mixed. While the results are good regarding the provision of pre-completed forms and online health services, the complex structure of the allocation of responsibilities between the various levels of government tends to hamper compatibility between the systems. It also seems that in some spheres such as the judicial system, the potential of digital technologies has yet to be fully exploited.

... and on the labour market

The impact of these new technologies is not confined to the performance of businesses. Leaving aside the jobs directly created by the associated new activities, digitisation of the production processes has

other implications for the labour market. On the one hand, it generates a substitution effect, i.e. the performance of a range of tasks can now be left entirely to machines. On the other hand, it has complementarity effects. The robot or machine helps people to perform their tasks, thereby improving working conditions and boosting the productivity and efficiency of the workers. These productivity gains in turn generate more income and indirectly strengthen demand, activity and employment.

One of the first studies to quantify the effect of digitisation was the one by Frey and Osborne (2013)[1]. By applying their methodology to Belgian data, the HCE (2016)[2] estimated that 39 % of jobs could be fully digitalised. More recently, in a 2017 report[3], the OECD noted a high risk of digitisation for just 7 % of jobs in Belgium. In contrast, an analysis by McKinsey (2017)[4] estimates that 21 % of employees are working in occupations capable of being automated to more than 70 %, which means that they are liable to lose their job. The McKinsey study predicts that automation and artificial intelligence could create 200 000 new jobs in Belgium by 2030. While they will be partly offset by job losses, the expected net outcome is positive, with 40 000 additional jobs.

These conclusions are based on analyses of scenarios in which automation will lead in the future to higher productivity in the countries at the forefront of digitisation (including Belgium), with few major unemployment risks and steady wage growth. However, that will not happen unless the leading countries widen the spread of technology, in a context where workers adapt their skills and firms create new products and innovative services. The spectre of technological progress destroying hundreds of thousands of jobs should therefore not be exaggerated. First of all, the long-term picture does not suggest that technical progress will destroy net employment. Secondly, the pace of job creation has been particularly strong in recent years. And lastly, measured technical progress is actually very low at the moment. Such progress therefore transforms jobs rather than destroying them on a massive scale.

1 Frey C.B. and M.A. Osborne (2013), *The future of employment: how susceptible are jobs to computerisation?*, Oxford Martin School.
2 HCE (2016), *Digital economy and labour market.*
3 OECD (2017), "How technology and globalisation are transforming the labour market", *Employment Outlook*, Chapter 3, OECD Publishing, Paris.
4 McKinsey & Company (2017), *Digitally-enabled automation and artificial intelligence: shaping the future of work in Europe's digital front-runners.*

Identifying the types of job which will disappear and those that will survive or be created implies reasoning in terms of tasks rather than occupations. In fact, it is a job's content in terms of routine tasks or those suitable for automation that will determine whether or not the job is destined to disappear. Thus, the jobs most likely to be replaced by machines are the most repetitive ones which do not involve interaction with other people, do not require problem-solving skills or creativity. According to this study, this means that the sectors offering the highest potential for automation are transportation, hotels and accommodation, manufacturing and trade. Conversely, the sectors least affected will be education, information and communication, professional services and health.

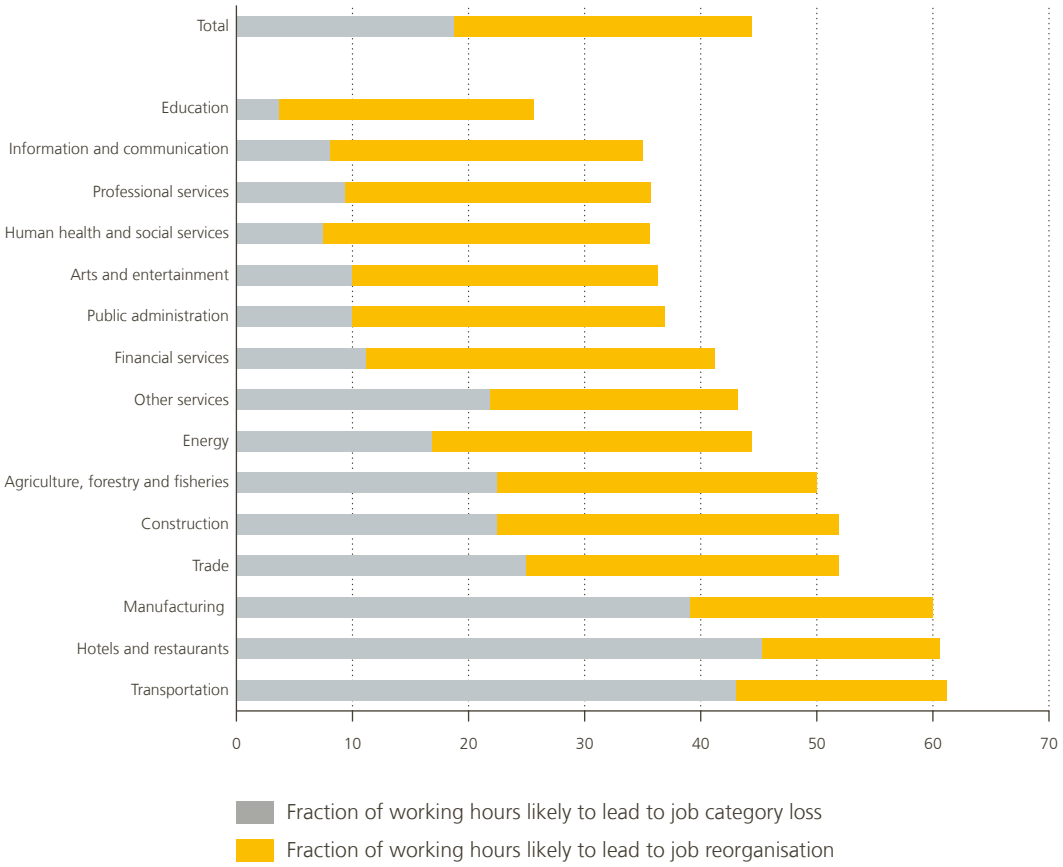
In terms of skill levels, it is currently only highly-skilled tasks that have a low risk of digitisation. According to the HCE's 2016 analysis, barely 13 % of highly-skilled jobs could be almost totally automated, with that figure rising to 30 % for low-skilled jobs and 69 % for medium-skilled jobs.

The education system must likewise adapt to these developments and offer the broadest possible training in digital-related skills. To that end, schools need to have modern technological tools and teachers trained in their use; yet in Belgium, that training includes little specifically ICT-related content. Only 19 % of primary school pupils have teachers who have completed compulsory training in these subjects, a figure close to that for Finland (19 %) and

Chart 76

Almost half the hours worked will be subject to total or partial automation [1]

(technical automation possible on the basis of currently available technologies, by branch of activity, in %)



Source: McKinsey.

1 On the basis of analysis of nine European countries including Belgium, considered to be front-runners in digitisation.

France (25 %), but well below the European average (30 %) and the scores for Sweden (40 %) and Denmark (60 %)[1].

Enjoying the support of efficient public services

The government has a role to play in reinforcing the actions of firms. In parallel or in synergy with the European initiatives, the Belgian government has devised and implemented plans for supporting the spread of innovation and the adoption of digital technology, and boosting their economic impact. At federal level, apart from tax-related measures, this includes boosting the deployment of ultra-fast digital networks and developing "e-government" services. In particular, the Digital Act introduced in 2016 comprises a series of legal proposals permitting the use of digital media instead of paper, and concerning for example electronic signatures or archiving.

With the support of their universities and research centres, the Regions have set up strategies for supporting high-tech innovation in the areas in which they specialise. In the digital sphere, the Industry 4.0 plan in Flanders supports businesses by developing efficient infrastructure, and also by helping them in their digitisation process and ensuring that the workforce acquires adequate digital skills. In Wallonia, where the Marshall Plan/Digital Wallonia programme led to the launch of around twenty sizeable projects, that strategy will be maintained. In the Brussels-Capital Region, digital.brussels led to the selection of 19 projects while the NexTech plan is intended to assist Brussels-based firms in the use and deployment of ICT.

An efficient and resilient economy is not confined to good performance by the private sector. Stable and efficient public institutions are also a catalyst for long-term growth, as differences between countries in terms of institutional quality can influence decisions on the allocation of physical, human and technological capital. Though the expectations of economic agents depend on the burden of regulatory obligations in their country, they are also affected by the level of confidence in their public institutions, particularly in their ability to act effectively.

According to the Bank's 2016 analysis of government efficiency in regard to health, education, security and mobility[2], Belgium's performance was average in comparison with that of the other European countries. The government therefore undoubtedly has scope for efficiency gains in each of the areas mentioned, even if the nature of those respective gains may vary. This finding is in line with the more recent results of surveys by the World Bank and the WEF, which also conclude that there is room for improving the efficiency of the Belgian public sector, particularly as regards the legal framework and government response to technological and societal changes. In addition, the use of online services to facilitate the provision of information and interaction with government ("e-participation") could be further advanced and better coordinated between the various levels of power.

There is scope for improving efficiency in the public sector by means of the opportunities offered by digitisation

1 See EC, *Survey of schools ICT in education.*
2 See box 6 in the Annual Report 2016, pp. 141-144.

5.3 Facilitating regeneration of the economic fabric

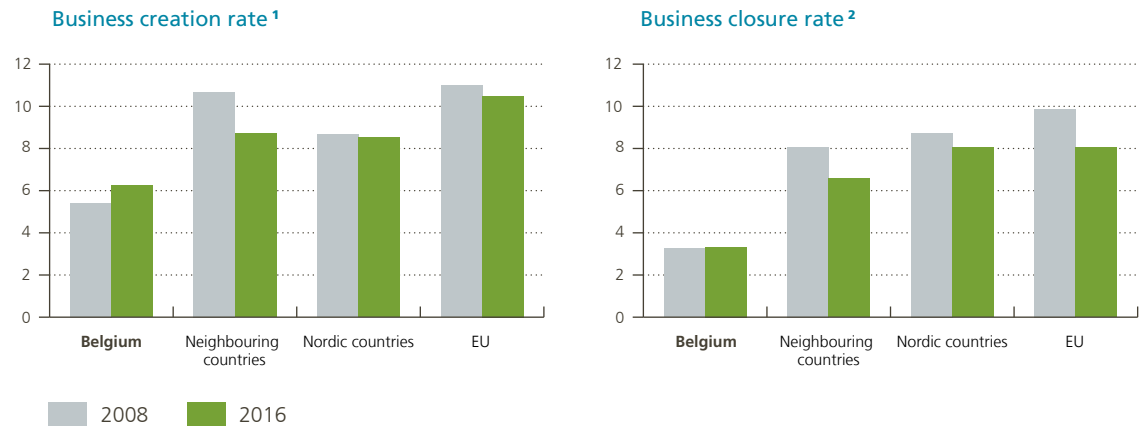
Apart from internal productivity gains within each firm, the reallocation of resources via the transfer of workers or capital from technologically backward firms to those at the forefront as regards efficiency is another source of aggregate productivity growth. In a flexible economy, barriers to the entry of new players should be low in order to boost competition and permit the emergence of new champions or the establishment of new sectors. At the same time, firms that are increasingly lagging behind in technological terms should either develop innovations enabling them to overcome their handicap or be forced out of the market. Just as the creation of new businesses should not be unduly hindered, neither should their demise, so as to ensure that the continuation in business of inefficient entities does not take up a substantial share of the resources, whether workers or capital, which could be put to better use elsewhere. If such firms remain in business, that will also depress growth potential due to the gradual de-skilling of workers.

Since the crisis, this reallocation process has played a part in TFP recovery in Belgium, but its contribution has been modest. At the same time, the low rates of business entries and exits bear witness to a structural lack of dynamism in Belgium in that respect.

Chart 77

The dynamics of business creations and closures exhibit greater inertia in Belgium than for the EU as a whole

(in %)



Source: Eurostat.

1 Number of business creations in *t* divided by the number of businesses active in *t*.

2 Number of business closures in *t* divided by the number of businesses active in *t*.

Stimulating entrepreneurial dynamism

According to the OECD, Belgium has a significantly stricter business liquidation framework compared to other EU countries, both in terms of the scale of the personal costs for the failing entrepreneur and the lack of preventive mechanisms or systems. Moreover, although the level of employment protection in Belgium is comparable overall to that of the reference countries, the specific rules on collective redundancies are more stringent. If these exit barriers are excessive in relation to appropriate protection for creditors and debtors on the one hand and for workers on the other, they may impede the process of closing less efficient firms and hamper restructuring to create sounder entities. They entail costs for the failing entrepreneur and tend to increase the stigma associated with failure. These same aspects may also discourage the development of new risky projects among a population which is sociologically more risk-averse than in other European countries. The 11 August 2017 reform of the bankruptcy and judicial reorganisation laws which took effect on 1 May 2018, extending the scope of the bankruptcy regime to all businesses, is an initial response to this problem and is meant, in particular, to facilitate the launch of new activities by the failing party.

However, encouraging business creation does not only mean simplifying the associated administrative procedures. Initiatives that improve access to funding appropriate to the needs of new businesses and their risk profile are equally necessary, e.g. by developing the venture capital market. Since 2015, a tax shelter – or tax credit – mechanism granting a 30 % to 45 % exemption under certain conditions to individuals wishing to invest in a new business (start-up) was thus introduced. In 2017, this mechanism was extended to the financing of young, expanding businesses (scale-ups). These measures form part of the federal Start-up Plan, which introduces additional measures aimed at young entrepreneurs (new tax framework for crowdfunding and reduction in labour costs at recruitment). Since 2018, with a view to supporting SME growth following the corporation tax reform, small entreprises have also been subject to a lower rate of corporation tax at 20 % on the first € 100 000 of profits.

Encouraging business creation does not only mean simplifying the administrative procedures

Lastly, promoting a positive culture and attitude towards entrepreneurship among young people is also a way of raising the business creation rate in the long term. That naturally involves education. Measures have already been introduced at federal level, such as student-entrepreneur status since 2017, and also at regional level : in Wallonia, with the Enterprising Generations 2015-2020

programme, which includes an entrepreneurial schools programme and further training in entrepreneurship for teaching staff; in Flanders with the Education Plan 2015-2019, which aims in particular to mobilise the entrepreneurial potential of students and job-seekers; and in Brussels with the Young Entrepreneurship Strategy, established in 2016, which aims to make 100 % of young Brussels residents aware of the entrepreneurial approach by 2025. Moves to encourage women entrepreneurs have also been initiated (Female Entrepreneurship Plan) with the support of the federal and regional governments.

Adopting product market regulation more favourable to new activities

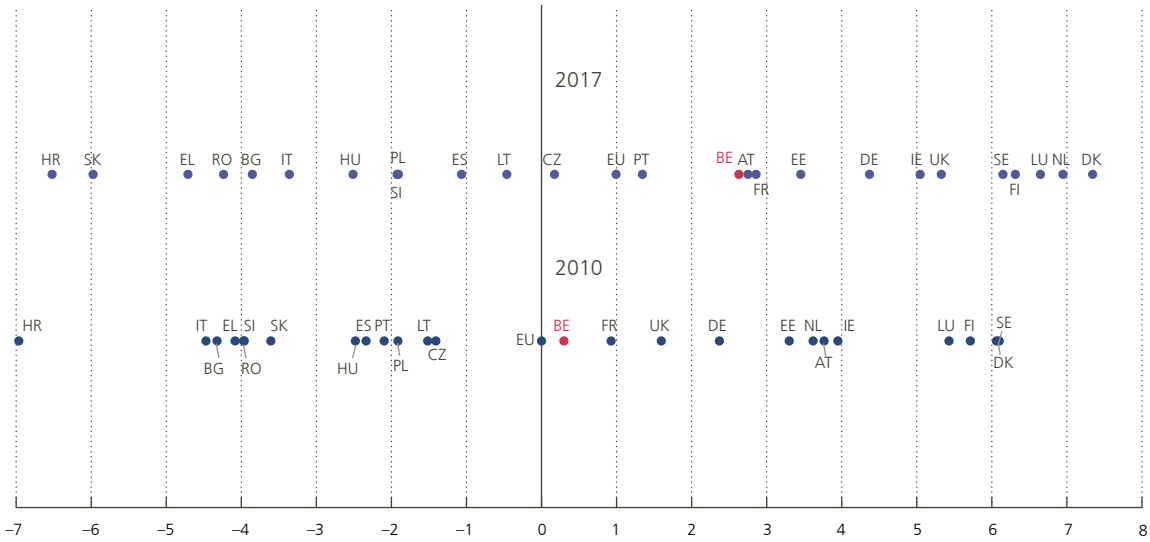
In view of the many changes facing our economy, the regulatory framework requires continuous adaptation in regard to both the labour market and the product markets. The regulatory framework should not be assessed solely in the light of firms' performance. Its primary purpose is to meet the needs of consumer and worker protection, plus also more general aims such as protecting the environment or certain fundamental rights. However, the regulatory framework must not place too many restraints on the development of activities that respond to new needs.

The regulatory environment is one of the factors influencing investors' decisions on developing new projects or setting up an establishment in Belgium. Both national and international economic agents are less inclined to invest if they have to devote too many resources to compliance with unnecessarily stringent contractual or regulatory obligations. The regulatory framework in Belgium has become less strict since 2010, but some weaknesses remain. They include various administrative requirements, such as authorisations, labour market regulations or tax rules, and the obligation to publish reports at regular intervals. According to the business leaders polled by the WEF, such requirements are considered stricter in Belgium than on average in the EU, particularly compared to neighbouring and Nordic countries. In the services sector, while the regulations in Belgium are similar to the EU average, they are still more restrictive than in the three

Chart 78

The Belgian regulatory framework has generally become more flexible

(synthetic index of regulation, a higher value indicates a situation more favourable to the development of economic activity; EU average[1] in 2010 = 0)



Sources: IMD, WEF, NBB.

1 Excluding Cyprus, Malta and Latvia.

neighbouring countries, despite some improvement since 2010. That may be part of the reason for slower productivity growth in that sector. Although a series of reforms has been implemented, including the Easy Switch procedures in 2017 and Bankswitching in 2018, which make it easier to transfer from one telephone company or bank to another, there is still scope for action, notably as regards openness to competition in the retail trade or in certain professional services.

As the sixth State reform transferred numerous regulatory powers to the Regions, adjustment of the regulatory framework requires adequate coordination in the adoption of new measures, and it is vital to avoid excessive discrepancies which would limit one Region's access to the markets of the country's other Regions and impede the optimum allocation of resources.

Ensuring that the labour market functions in a way that supports transitions

Various indicators, such as the low rate of occupational mobility, the level of taxation and parafiscal charges on labour income, the link between pay and seniority, the unemployment traps and the strict rules on collective redundancies, reflect the rather rigid functioning of the labour market in Belgium. One fact connected with the low rate of business creation and closures is that more than 40 % of employees stay with the same employer for over ten years. That is comparable to the figure in neighbouring countries but is much higher than in the Nordic countries. It can also be linked to the predominance of permanent contracts: nearly nine out of ten employees work on the basis of a permanent contract, while temporary contracts – which are common for young people entering the labour market – become very unusual in the older age groups, from age 25 onwards. The Securex annual staff rotation barometer indicates that in 2017 barely 5.8 % of workers changed their job on their own initiative, while 4 % did so involuntarily. In the case of workers aged over 50, the cumulative total of these rates is no more than 2 %.

A stable job may be a guarantee of career quality, but that stability must be based on economic criteria, i.e. it must reflect the fact that the employee and employer are well matched. The significant influence of seniority in determining wages could also be a contributory factor in the lower mobility of employees. Workers may fear losing certain pay advantages if they change employer because not all their experience can be put to use with their new employer. It also costs employers more to dismiss a senior employee since redundancy costs increase in direct proportion to length of service at the firm.

More than 40 % of employees stay with the same employer for over ten years

In the agreement concluded in the summer of 2018 (Jobs Deal), the federal government had asked the social partners to reconsider the wage progression criteria, so as to link them to skills and productivity rather than seniority, also leaving room for greater flexibility to take better account of specific regional and/or local characteristics.

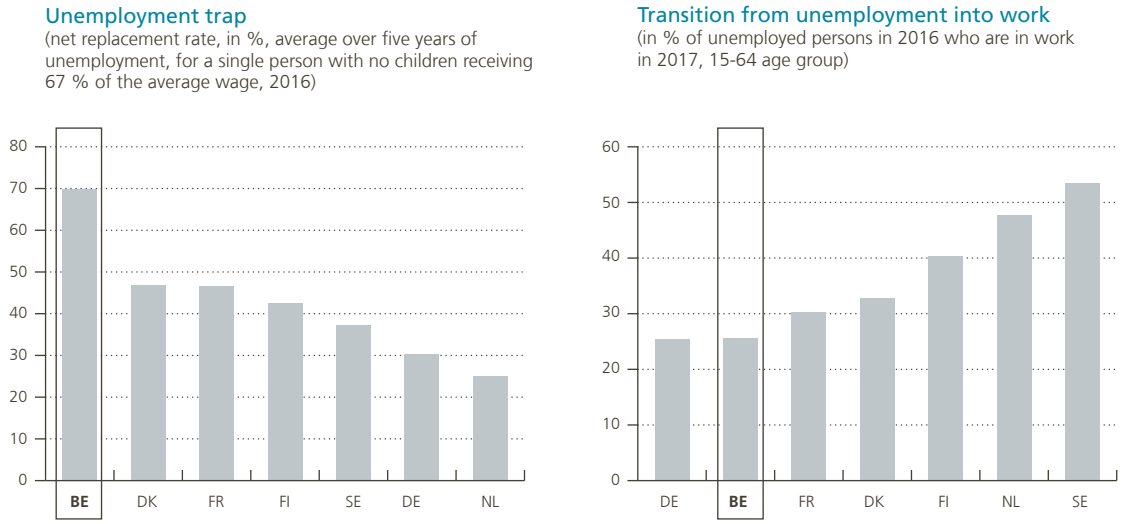
The heavy burden of taxes and parafiscal levies on wages could also be restricting the use of potential labour. In 2017, Belgium still had the second highest hourly labour cost in the EU after Denmark, at an average of € 39.6 per hour worked for the economy as a whole, with social security charges accounting for € 10.7 of that figure. On the basis of these Eurostat statistics, Belgium's position has improved considerably as a result of the wage moderation measures and the tax shift. While labour costs per hour worked in the economy as a whole increased by 1.5 % in Belgium between 2014 and 2017, the corresponding rise was 8.3 % in Germany, 3.7 % in France and 3.3 % in the Netherlands.

Although the likelihood of losing one's job is lower in Belgium, the lack of occupational mobility is also reflected in long periods of unemployment and a weak transition into work, entailing the risk of de-skilling or discouragement for this population group. More than half of all job-seekers have been unemployed for over a year, and for a third of them that period exceeds two years. This low incidence of return to work is due in part to the relatively high net replacement rates in Belgium. Despite the 2012 unemployment insurance reform, which made unemployment benefits more degressive, Belgium still has a significant unemployment trap (i.e. little difference between unemployment

benefits and net labour incomes). Moreover, in contrast to practice in other countries such as Denmark, Sweden and the Netherlands, the unemployed continue to receive benefits even after a prolonged period. Thus, according to the OECD indicator, people who have been unemployed for up to five years have, on average, a replacement income equivalent to 70 % of their last net wages. Alongside appropriate financial incentives, there is also a need to step up the efforts to provide guidance and training for job-seekers in order to limit the number of long-term unemployed.

Chart 79

A more marked unemployment trap in Belgium associated with a weak transition into work



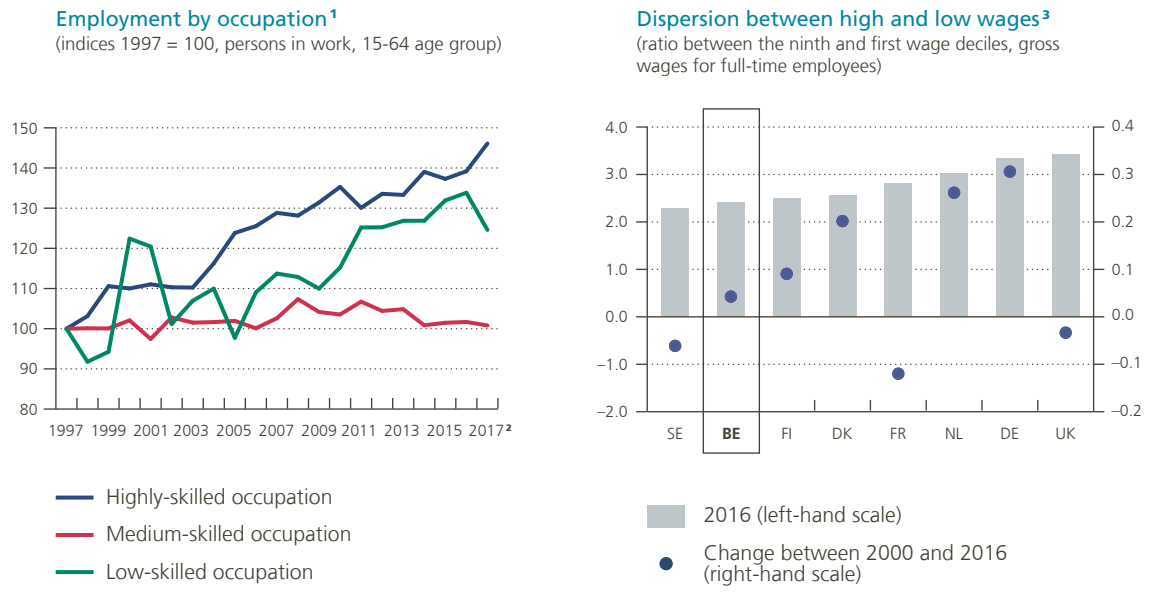
Sources: Eurostat (LFS, microdata), OECD.

5.4 Reducing the persistent mismatch between supply and demand on the labour market

The growing use of digital technologies and the greater fragmentation of production chains have contributed to a polarisation of employment in the advanced economies. That means a rise in highly-skilled jobs and, to a lesser degree, low-skilled jobs, while the share of medium-skilled jobs is declining. The reason for the continuing presence of low-skilled jobs is that many of them offer services relating to people or physical locations, including services connected with new activities of digital platforms or e-commerce. Belgium's policy of subsidising low-skilled jobs over the past fifteen years through the development of a service voucher system and also taking action in the non-market sector has also helped to expand

Chart 80

Polarisation of employment but not wages



Sources: Eurostat, OECD.

1 Based on the International Standard Classification of Occupations (ISCO). A highly-skilled occupation corresponds to the jobs of directors and management, intellectual and scientific occupations, and intermediate occupations (ISCO 1-3). Medium-skilled occupations comprise administrative staff, persons providing services for individuals, traders and sales staff, skilled trades in agriculture, industry and crafts, and operators of machinery and equipment and assembly workers (ISCO 4-8). Finally, a low-skilled occupation is an elementary occupation (ISCO 9).

2 Break in the series due to the change in the method of collecting data from the labour force surveys.

3 The latest available years are 2014 for France and the Netherlands and 2013 for Sweden. The earliest available year is 2002 for Denmark, France and the Netherlands.

less-skilled employment, as have the various measures targeting low wages and alleviating charges for lower-paid workers.

In Belgium, the polarisation of employment is not accompanied by wage polarisation[1]. The dispersion between high and low wages has remained more or less stable at a low level, whereas it has widened in most European countries, except Sweden, France and the United Kingdom. This more compressed wage scale helps to reduce income inequality. On the other hand, it may reduce the financial incentives for investing in the required knowledge and skills to fill highly-skilled jobs.

Demand for labour is increasingly focused on highly-skilled jobs

While demand for labour is tending to focus increasingly on highly-skilled jobs, the proportion of higher education graduates in the population is still insufficient even though it has risen steeply in the past 20 years. That is particularly true if we consider the labour force potential in the economy. Only 27 % of the unemployed and barely 16 % of inactives are highly-educated, whereas almost half the personnel recruited on the labour market must have a higher education diploma. Conversely, 10 % of jobs only require a low skill level whereas 27 % of the population have only lower secondary education qualifications. Substantial though it is, this gap was bigger in the past since almost 43 % of the population of working age had no more than lower secondary education qualifications in 1997, at a time when the proportion of low-skilled jobs was virtually the same. Apart from the generalised prolongation of education, the gradual retirement of generations who had a lower level of basic education is a factor in this trend.

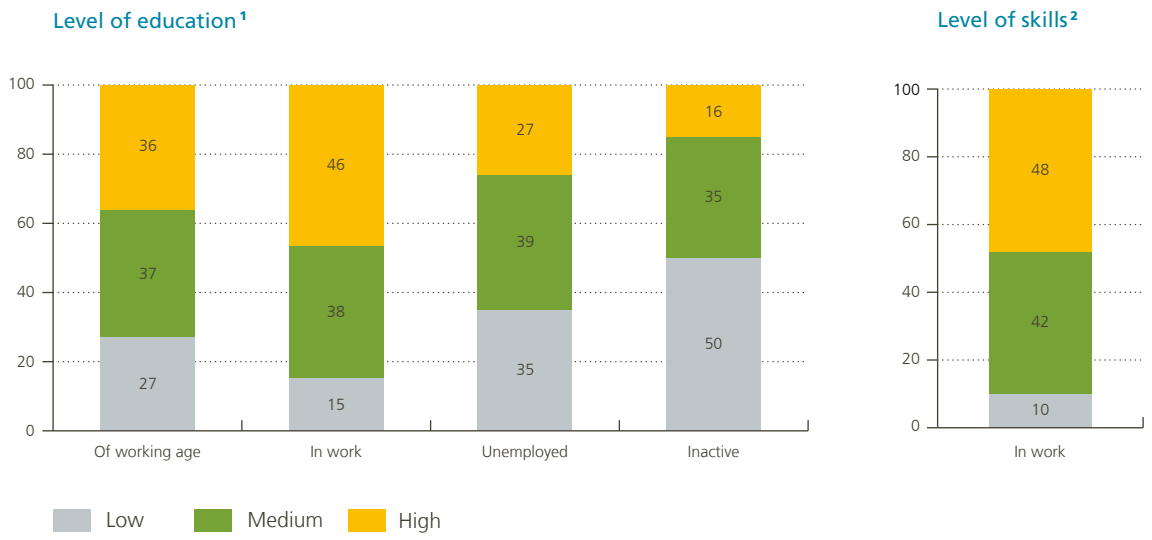
This mismatch between supply and demand for labour influences the extent to which workers are over- or under-qualified. For instance, holders of a higher education diploma usually have a job that matches their level of education (80 % in 2017, compared to 78 % in 1997). Conversely, it is harder for a person

1 See De Sloover F. and Y. Saks (2018), "Is job polarisation accompanied by wage polarisation" ? NBB, *Economic Review*, September, pp. 79-90.

Chart 81

Too few higher education graduates compared to demand from firms

(in %, 2017)



Source: Eurostat.

1 Level of education based on the International Standard Classification for Education (ISCED) for the 15-64 age group, by socioeconomic status.

2 Skill level of the job for the total population in work based on the ISCO classification.

with a low or medium level of education to secure a more highly-skilled job. Two decades ago, eight out of ten workers with no more than lower secondary education qualifications had a job requiring medium or high skill levels. Today, that proportion is seven out of ten. The same applies to workers with upper secondary education qualifications. While 26 % used to gain access to highly-skilled jobs, that figure is now down to 24 %. More symptomatic of the downgrading of workers with secondary education diplomas is the fact that 12 % of them nowadays are in a low-skilled job, compared to 8 % in 1997, and that is having a ripple-through effect, driving out the least-skilled. People completing no more than lower secondary education therefore still have a high unemployment rate (14 % in 2017, compared to 7 % for the medium-educated and 4 % for the highly-educated), despite the continued growth of low-skilled jobs.

Mismatches are holding back economic development in all three Regions

Owing to these mismatches, in a business climate favourable to job creation, growing numbers of firms are reporting difficulties in recruitment. The vacancy rate, which measures the proportion of vacancies in the total number of potential jobs (filled and vacant), has risen in all European countries since the economic recovery. However, that increase, with a rate of 3.4 % in 2017, is much bigger in Belgium, than the EU average of 2 %, while those rates stood at 1.5 % and 1.2 % respectively in 2010. Although the majority of vacancies concern permanent jobs (109 200, against 23 600 temporary posts in 2017), vacancies in temporary employment have risen almost twice as fast as those in permanent jobs over the past four years. Small firms with fewer than ten employees account for the majority of vacancies to a greater extent than in the past.

At 3.4 %, the vacancy rate in Belgium is well above the EU average

In order to gain an idea of the shortages prevailing on the labour market, the public employment services examine job vacancies where recruitment problems are greater than the median, i.e. so-called "bottleneck jobs". Apart from the time naturally entailed in matching supply to demand for labour (selection of candidates, recruitment procedure, etc.), other structural factors may affect the process. These include an

Table 16

Pressures expressed in different ways depending on the Region

(2017)

	Belgium	Brussels	Flanders	Wallonia
Unemployment rate [1]	7.1	14.9	4.4	9.7
Vacancy rate [2]	3.4	3.2	3.6	2.8
Characteristics of the unemployed [3]				
Medium to high level of education	64	59	70	61
25-49 age group	59	70	53	60
Unemployed for less than one year	51	48	62	42
Presenting those three characteristics	20	21	25	17

Source: Eurostat (LFS, microdata).
1 In % of the labour force aged between 15 and 64 years.
2 In % of the total potential jobs.
3 In % of the total number of unemployed aged between 15 and 64 years according to the ILO definition.

inadequate labour supply in terms of both quantity and quality (a mismatch between the skills required and those offered by the available spare labour), mobility, and the employment conditions offered (wages too low, non-standard hours, arduous work, etc.). While the bottleneck jobs are often the same in all three Regions, there are some specific characteristics. In Flanders, the jobs which are hardest to fill are for cleaners, technical occupations, commercial posts and jobs in the health or personal care sector. In Wallonia, the bottleneck jobs are in the construction sector, and also managerial, technical and commercial positions. In Brussels, the main shortages are in administrative and commercial jobs and IT occupations.

These vacancies and bottlenecks exist despite the large number of job-seekers, although that number has fallen sharply in recent years. Nonetheless, a considerable proportion of these job-seekers have characteristics which favour a return to work. For instance, in 2017, in Belgium as a whole, 64 % of them had a medium or high level of education, 59 % were in the 25-49 age group, and 51 % had been unemployed for less than one year. At regional level, the pressures are greater in Flanders than in the other two Regions, on account of both a lower proportion of job-seekers and stronger demand for labour. This suggests that Flanders is moving ever closer towards the frictional unemployment rate – i.e. the unemployment rate arising from the time required for people to find a job commensurate with their skills – while the proportion of unemployed people who are more difficult to get into work is falling. In Brussels and Wallonia, job-seekers' level of education is lower, on average, and the percentage of long-term unemployed is higher; which represents an additional handicap for the employability of this labour reserve.

Labour market pressures are greater in Flanders

The labour reserve is not confined to the unemployed

The tightness on the labour market could be alleviated by having greater recourse to the inactive population, some of whom wish to work but are not directly available and are therefore not included among official job-seekers. Although Belgium has created a large number of jobs since 2015, its employment rate is still below the European average, and deviates widely from the rates in the neighbouring countries (except France) and the Nordic countries. Compared to Sweden, regarded as one of the top performers in matters concerning the labour market, the difference does not lie in higher unemployment but in much greater inactivity. In Belgium, one-third of the population of working age is inactive, compared to 17.5 % in Sweden. Thus, while the unemployment rate has

fallen significantly in the past three years, there has been only a slight reduction in the proportion of people not participating in the labour market.

The reasons for the disparate performance in terms of the employment rate vary from one Region to another. The higher employment rate in Flanders is accompanied by a lower unemployment rate and slightly lower inactivity. Conversely, employment rates in Wallonia and Brussels are below the national average. While the situation in Brussels is due mainly to a higher unemployment rate, in Wallonia it is more the reflection of greater inactivity. However, even though Flanders has an employment rate above the European average – an advantage which is nevertheless dwindling as time goes by – none of the three Regions outperforms Sweden in terms of employment and inactivity, so that there is still activation potential in Flanders as well as in Wallonia and Brussels.

If it is accompanied by decent employment conditions, getting a greater number of people into work means a lower risk of poverty, greater social inclusion and an additional income source for our social security system. The benefits of stronger attachment to the labour market, especially for the categories most at risk, are therefore manifold.

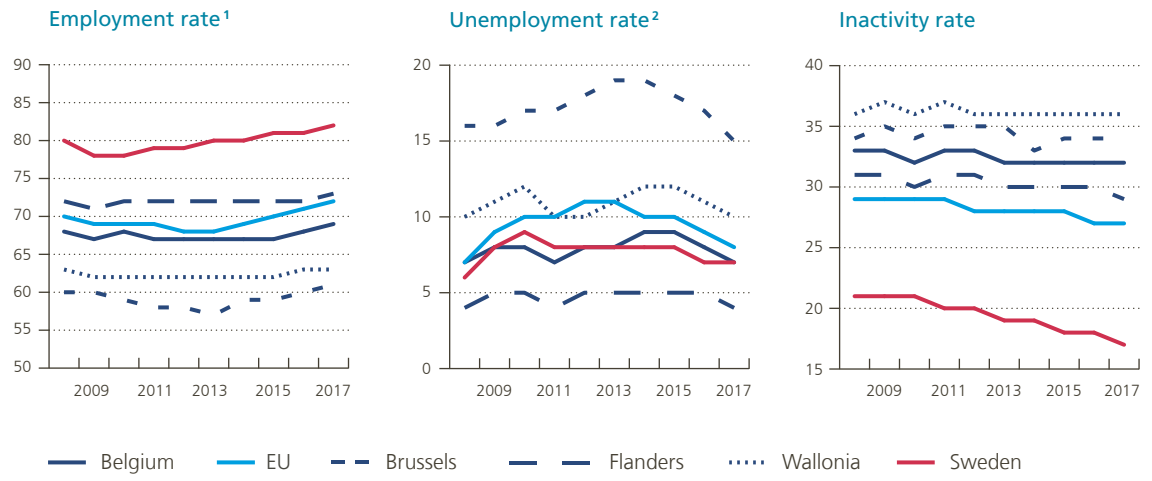
Although in principle a section of the inactive population could easily be mobilised and form part of the potential labour force, the majority of inactives do not wish to participate in the labour market and are not looking for a job. In 2017, that group was estimated at almost 1.6 million people, i.e. 22 % of the working age population. This figure is half as big again as in Sweden (14 %), Denmark (14 %) and the Netherlands (15 %). Among the comparison countries, only France has a higher proportion, at 25 %. The main reasons cited for non-participation are education (41 %), sickness (19 %) and, particularly for women, family responsibilities (20 % of total inactives, but 30 % of all inactive women).

Women are also among the groups with participation rates below the national average, such as people aged 55 and over, young people, non-European nationals, and – across the board – people with a low level of education. The gap in participation rates between men and women was still large in 2017 (9.6 percentage points), although it was slightly below the EU average (11.1 percentage points). Brussels records the

Chart 82

The lower employment rate in Belgium is due to a too high rate of inactivity, rather than a high unemployment rate

(in % of the 15-64 age group, unless otherwise stated)



Source: Eurostat.

1 In % of the population aged between 20 and 64 years.

2 In % of the labour force.

biggest gap (13.6 percentage points); together with Wallonia these are the two Regions where women are less active on the labour market, at 59 %, compared to 66 % in Flanders. For all Regions of the country, the difference is very marked compared to Sweden, where the female activity rate is 80.7 %, the highest figure among the comparison countries, compared to 84.3 % for men, i.e. a difference of 3.6 percentage points. This smaller gap also applies to Finland (3.6 percentage points) and Denmark (5.4 percentage points). In contrast, the situation in the neighbouring countries is closer to that of Belgium, although the difference in participation between men and women is also smaller there than in our country. Women likewise account for almost 70 % of part-time workers in Belgium who would like to work more. This under-employed population constitutes a considerable potential supply of labour.

The breakdown by age group shows a low participation rate of around 28 % for young people between the ages of 15 and 24 years. This rate is tending to fall, mainly on account of longer periods spent in education, with only a minority so far combining a job with their studies. In Flanders, just under one young person in three participates in the labour market, whereas in the other two Regions the figures are barely 24 % in Wallonia and 23 % in Brussels. Nonetheless, we could see an upward trend in the future since it is becoming increasingly common for students to have a job, and the conditions allowing student worker status have been eased. This initial job experience could subsequently favour entry to the labour market for young graduates. In this regard, apprenticeships are very important too, although they are still underused in Belgium.

The above findings, particularly the labour market pressures, are also fuelled by the ageing of the population. Not only is there a steady decline in the proportion of the working age population comprising young people to replace the older ones leaving the labour market, but the proportion of people over the age of 55 years is rising: it was up from 16 % in 1997 to 20 % in 2017. However, their labour market participation rate is still much lower than that of workers aged between 25 and 54 years. This exerts downward pressure on the overall activity rate and the number of active persons. The measures adopted since 2000 to restrict the scope for early departure from the labour market have gradually limited the mass exodus which used to occur from the age of 50 years. In fact, the participation rate of persons in the 55-64 age group has risen by 28 percentage points over 20 years, but at

Table 17

All population groups have a participation rate below the European average

(in % of the corresponding population aged between 15 and 64 years, 2017)

	Belgium	Brussels	Flanders	Wallonia	EU	*p.m. Sweden*
Total	68.0	66.1	70.6	63.9	73.3	*82.5*
Men	72.8	72.9	74.9	68.9	78.9	*84.3*
Women	63.2	59.3	66.3	59.0	67.8	*80.7*
15-24 years	28.1	22.6	31.5	24.1	41.7	*54.7*
25-54 years	84.8	79.5	88.0	81.0	85.7	*91.3*
55-64 years	51.3	55.7	51.9	49.0	60.6	*80.5*
Low-educated	41.7	44.8	43.2	38.4	53.6	*57.7*
Medium-educated	70.1	63.3	72.4	67.6	76.2	*87.1*
Highly-educated	85.9	84.5	86.9	84.3	88.0	*91.9*
Nationals	68.3	64.2	71.1	64.2	73.5	*83.2*
EU nationals	72.2	76.9	72.9	66.3	79.3	*84.6*
Non-EU nationals	52.7	54.8	52.4	50.5	65.5	*71.2*

Source: Eurostat.

51 % it remains very low compared to the European average, not to mention Sweden where the figure is 80.5 %. For this age group, Brussels has the highest participation rate (56 %), followed by Flanders (52 %) and Wallonia (49 %).

Among the groups most at risk of unemployment are non-EU nationals, who are in a much worse position on the labour market than their European peers in all three Regions of the country. The High Council for Employment[1] has shown that only a small part of the labour market participation gap between Belgians and non-EU nationals is due to the personal characteristics of the individuals, such as age, gender, level of education or Region of residence.

Initial education and lifelong learning are more than ever the passports to a job

As pointed out earlier, people with a low level of education still have more difficulty in joining the labour market. While 86 % of higher education graduates participate in the labour market, that proportion falls to 42 % for people with no more than lower secondary education qualifications. The new requirements regarding digital skills and the fact that workers with a low education are being driven out by those with a medium level of education are likely to exacerbate this problem in the future.

Owing to the scarcity of job opportunities for them, the number of people with a low level of education needs to be reduced by cutting the school drop-out rate. Although the situation has recently improved, that rate remains high at 9 % in 2017. This phenomenon is particularly marked in the Brussels Region, where 13 % of young people in the 18-24 age group leave the education system without obtaining a higher secondary education diploma or the equivalent. In contrast, the rate in Flanders is 7 %, equalling that in the Netherlands, which achieves the best performance among the comparison countries.

The education system needs to encourage more people to pursue higher education, whether or not at university. Belgium does relatively well in

1 HCE (2018), *Immigrants born outside the European Union on the labour market in Belgium*.

that respect, since 46 % of the 30-34 age group had a higher education diploma in 2017, a figure similar to that in the comparison countries and almost equal to the target for 2020 (47 %). At regional level, Brussels has the largest proportion of graduates (53 %), followed by Flanders (45 %) and Wallonia (42 %). However, among the highly-skilled jobs, it is those requiring training in science, mathematics, statistics and information and communication technologies, together with engineering, industry and construction, which will remain most in demand in the future. Although a high proportion of the population holds higher education diplomas, barely 21 % of new graduates in the 30-34 age group chose one of those areas of study. That is particularly true in the case of women, since only 9 % of them obtained degrees in those subjects, even though more women than

Chart 83

Too few women in fields with good job prospects, a continuing high rate of school drop-outs, and low participation in lifelong learning

Source: Eurostat (LFS, microdata).

1 Studies in science, mathematics, statistics, ICT, engineering, industry and construction.

men pursue higher education, They thus represent 55 % of total graduates but barely 48 % of highly-skilled jobs. In the case of managerial posts, the proportion of women actually drops to below 33 %.

Not only technical knowledge but also social and inter-personal skills, plus adaptability, enhance the likelihood of finding a job. In general, tasks based on sensory experience and fine motor skills, those concerning ethics, social interaction and emotional intelligence, or interdisciplinary tasks and those requiring creativity, inventiveness and intuition, are still difficult to convert into algorithms.

However, the learning of new skills is not confined to initial education. After leaving the education system, further training is vital to ensure the employability of potential workers. Yet in Belgium in 2017, barely 8.5 % of people in the 25-64 age group had attended training in the past four weeks. That is a long way from the best practice seen in the comparison countries, especially the Nordic countries. Moreover, some population groups are under-represented. Low-skilled workers and those aged 55 and over are among workers with a low training rate, yet these are workers who could derive great benefit from training: the former, in order to match the level of their skills to the labour market requirements, and the latter to maintain their employability.

Lifelong learning is key for employability throughout a career

5.5 Reconciling economic growth and environmental constraints

In order to be sustainable, economic development must be efficient, socially fair and environmentally sound. These goals, which form the basis of the approach adopted in 2016 by the members of the United Nations (UN), are explicitly reiterated in various European policies, and in the long-term federal strategic vision for sustainable development.

More specifically, the environmental transition mainly features in the policies for combating climate change, which originate from the UN Framework Convention on Climate Change. By ratifying it in 1996, Belgium opted to transform itself into an economy generating low greenhouse gas emissions. That decision was taken in the broader European context of reducing greenhouse gas emissions, improving energy efficiency and developing renewable energy sources.

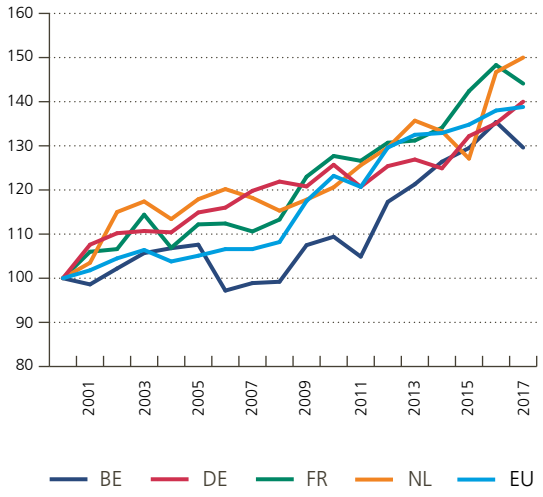
The efforts in this regard should not be seen as hampering economic development but instead should be viewed in relation to the constant need to improve the productive efficiency of firms. The ratio between an economy's GDP and its domestic material consumption (DMC) quantifies that economy's efficiency in its use of natural resources. Since the turn of the millennium, resource productivity has generally improved in the EU, particularly from 2008, following a marked decline in DMC against the backdrop of weak growth. In Belgium, the increase in resource productivity took longer to gather pace. In general, these developments also reflect a composition effect due to the growing importance of service activities, which consume a smaller quantity of raw materials than industry.

Accounting for 78 % of the EU's greenhouse gas emissions, both energy production and energy consumption methods are central to this transition.

Chart 84

An economy that makes more efficient use of natural resources

(resource productivity[1]; indices 2000 = 100)



Source: Eurostat.

1 Real GDP divided by domestic material consumption (DMC). The latter is defined as the annual quantity of raw materials extracted from domestic territory plus physical imports minus physical exports. The raw materials concerned are: biomass, metallic minerals, non-metallic minerals and fossil fuels.

This is not just a matter for energy policy but requires the coordination of provisions which come under various subjects – energy, transport, town planning, industry, innovation, digital technology, and the legal system – which traditionally have few, if any, mutual links and in which the powers are shared among the federated entities whose way of dealing with the issues sometimes varies. Nevertheless, a consistent approach and effective coordination are vital for a transition entailing the

least cost to the community while still being socially acceptable : we must avoid any lack of coordination and stability in the regulatory framework causing either businesses or individuals to make ill-advised investment resulting in losses.

Achieving an energy transition that guarantees security of supply

The commitments made in connection with the energy and environmental transition, be it at Belgian [1], European or global level, imply considerable adjustments to the energy mix and are therefore bound to affect the functioning of the economy and security of energy supplies. To guarantee the maintenance and deployment of economic activities, it is crucial to ensure everyday energy supplies while adapting the infrastructure and equipment so as to put the transition strategy into effect. That applies in particular to electricity.

In the final quarter of 2018, there were serious doubts about the ability of the Belgian electricity generating facilities to meet demand during the winter period, owing to the temporary closure of a number of nuclear power stations. Planned and unplanned non-availability amounted to between 3 900 and 4 900 megawatts (MW), i.e. 30-37 % of non-intermittent generating capacity (nuclear, fossil fuel power plants, cogeneration, biomass) over which the transmission system operator can in principle exercise some discretionary control in order to safeguard the stability of the system, and hence the continuity of electricity supplies. At the same time, while the installed renewable energy capacity (excluding pumped storage) represented around 36 % of the total installed capacity in 2017, it accounted for barely 19.2 % of net production.

Consistent and coordinated policies are necessary for a successful ecological transition

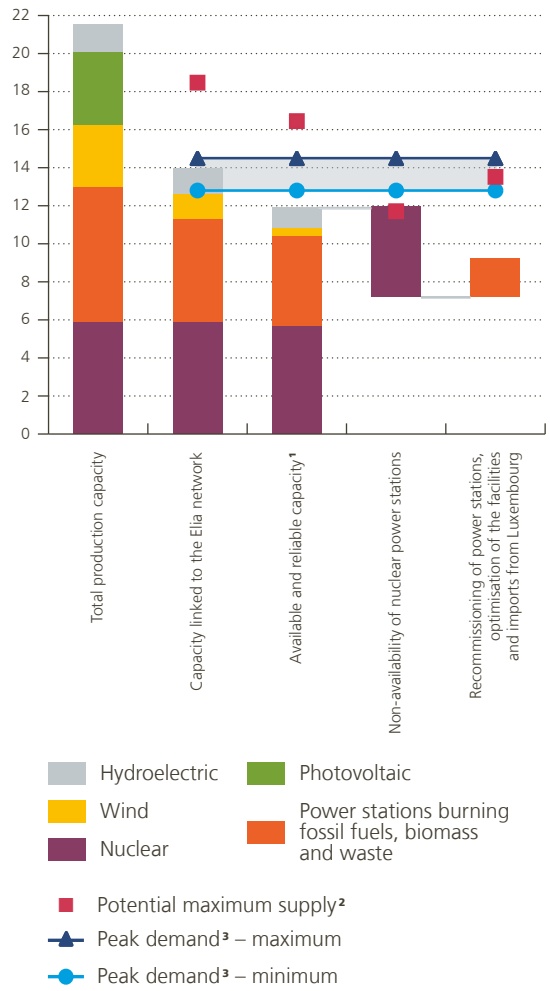
To alleviate this uncertainty, various measures were taken such as the recommissioning of gas power plants which had been mothballed, and optimisation of both power-generating facilities and interconnection to the Luxembourg network. Net imports totalled around 17.4 TWh in 2018, more than

1 Notably the commitment on closing down nuclear power stations between 2022 and 2025, confirmed by the Regions and by the federal government in the Interfederal Energy Pact.

Chart 85

Potential electricity supply on the basis of the non-availability of generating units in Belgium

(2018, capacity in GW)



Sources: DG Energy, Elia.

1 Taking account of availability and load factors, excluding producers connected to the distribution networks.

2 Remaining domestic production capacity after the successive non-availabilities considered plus maximum import capacity.

3 Elia estimates for the winter of 2018-2019.

2.5 times higher than in the two preceding years but similar to the figure recorded at the time of the previous supply crisis in 2014-2015. However, the option of using the 4 500 MW maximum import capacity depends on the available scope in neighbouring countries in terms of production and transport, as well as their own domestic demand, which varies according to the weather.

Temporary interruptions in the electricity supply would be detrimental both to citizens' comfort and to economic activity. Apart from the costs incurred in lost production and the restarting of installations, the perception of a deterioration in security of electricity supply is harmful in the long term to the reputation and attractiveness of Belgium in the eyes of foreign investors. Even if this risk of interruption does not materialise, its mere presence affects the competitiveness of some firms owing to the pressures that this situation creates on the wholesale electricity markets. Thus, prices for electricity delivery scheduled at various maturities during the 2018-2019 winter period in Belgium diverged from those in the neighbouring countries during the last four months of 2018, in a general context of rising prices in Europe. If these price discrepancies persist, firms will face a higher cost for this essential input, particularly in certain industrial branches. Ultimately, these price rises will also have an indirect impact on wages via wage indexation to consumer prices, and on the health index.

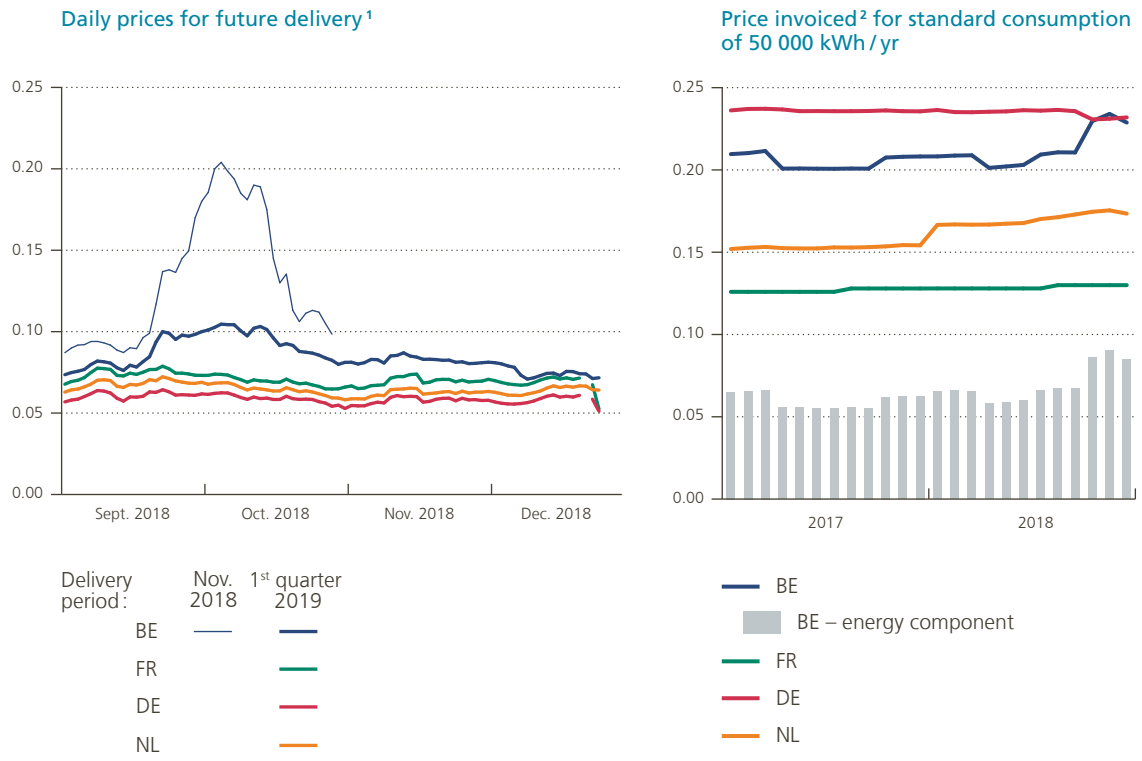
Where electricity supplies are concerned, the authorities' scope for intervention varies according to whether the activities concerned are regulated (transmission and distribution) or subject to competition (production and supply of electricity). In the former case, the regulators determine the conditions and prices for access to the networks while ensuring a balance between the costs and efficiency of the infrastructure. For activities subject to competition, it is necessary to adopt a regulatory framework that offers sufficient incentives to attract flexible means of production into the market at the right time and in accordance with future needs, including during the transitional period. For that, suppliers and producers must be able to rely on a stable and predictable regulatory framework, with a coordinated approach by the various levels of government in drawing up and implementing the legislative framework.

The emergency solutions described previously to address the risk of an interruption in supplies are not the answer to the need to establish sufficient supplies in line with the long-term goals, namely the phasing out of nuclear power in 2022-2025 and the transition to a lower carbon economy. There must be no further significant delays in adapting and modernising the production facilities as necessary, in view of the time taken to decide on investment and to install

Chart 86

Contrasting trends compared to the neighbouring countries as regards electricity prices on wholesale markets and the prices invoiced to business customers

(in €/kWh)



Sources: CREG, European Energy Exchange, ICE Endex.

1 Daily prices for delivery of baseload electricity in November 2018 and in the first quarter of 2019.

2 Weighted average of the prices for the standard supplier's standard package in a given supply zone, the best bid in the same zone and a competing bid from the second supplier on the market.

the facilities and put them into operation. This also applies to the transmission and distribution infrastructure, which must be strengthened in order to permit the integration of new uses and new, more decentralised electricity production configurations.

Pursuing an ambitious mobility policy

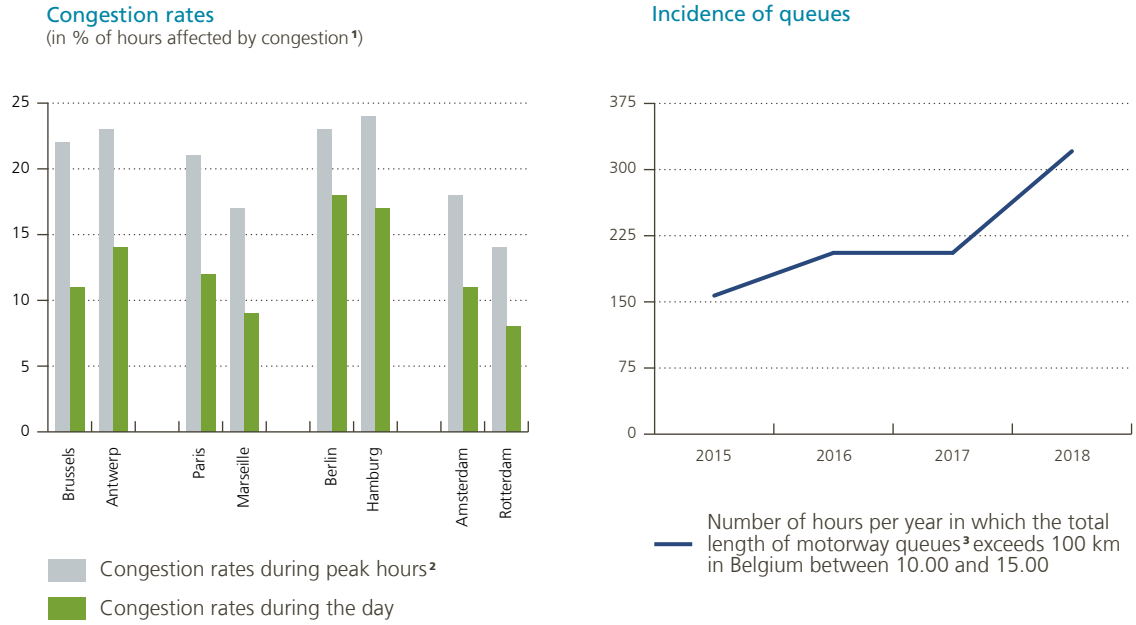
While the question of mobility is also central to the transition to a lower carbon economy, the difficulties that Belgium faces are currently damaging economic activity. Workers struggle to get to work owing to the saturation of public transport and/or congestion on the road network. This congestion problem is shared with users in the freight transport sector and therefore affects Belgium's attractiveness as a logistical hub, though Belgium occupies a central position in Europe and has major development advantages thanks to its port and airport infrastructure.

Congestion affects Belgium's attractiveness and is a source of negative externalities

The increase in road transport flows creates congestion primarily around the large urban centres and in areas of economic activity. According to the INRIX indicator of congestion rates at peak hours, which mainly affect commuter travel, the cities of Brussels and Antwerp are ranked 7th and 9th among the most congested major European cities, well ahead of Lyon or Stockholm, although those cities are similar

Chart 87

An increasingly saturated road network



Sources: INRIX, Touring.

1 INRIX considers that there is congestion if the speed is less than 65 % of the free-flow speed.

2 Peak times defined locally.

3 Touring takes account of the length of motorway traffic queues at places where recorded speeds are less than 50 km/h.

in terms of population size. With regard to congestion during the day, which concerns logistics activities to a greater degree, Antwerp and its region suffer more frequent traffic jams than Brussels or Paris. In the neighbouring countries, only the major German cities have bigger problems in that respect. But the effects of traffic jams also extend beyond urban areas. Thus, the cumulative number

of hours in the year when the Belgian motorway network records traffic queues of more than 100 km (with speeds of less than 50 km/h) is rising with each passing year, including during off-peak hours: in addition to the growing road freight traffic, an increasing number of drivers and commuters prefer to travel outside the peak congestion periods.

Apart from its direct economic impact, saturation of the road transport networks gives rise to negative externalities for the well-being of citizens (noise, stress relating to travel difficulties) and the level of the air quality, with implications for public health and the environment. In 2016, the emissions generated by road travel accounted for 28 % of CO_2 emissions in Belgium (i.e. 20 % of total greenhouse gas emissions), 48 % of NOx emissions and 15 % of emissions of particulate matter with a diameter smaller than 2.5 microns and 10 microns respectively.

The growing density in vehicle numbers is due partly to favourable tax treatment of individual car travel, via company car schemes (including cars provided for workers as part of their wages but available for private use), which concerns 8 % of the stock of vehicles. Harmonisation of the tax treatment of the various modes of transport could curb the growth of road traffic. In 2017-2018, the federal government initiated the implementation of various tax measures relating to motor vehicle use, such as the harmonisation of excise duties on diesel with those on petrol, reduction of the tax allowance for use of a fuel card, and a radical revision of the tax framework for company cars. On the one hand, the introduction of the travel allowance or "cash for cars" on 1 January 2018 offers workers with a company car (and the associated benefits) the option of giving it up and receiving in return a sum of money to fund their various private and/or business journeys. On the other hand, providing workers with a "mobility" budget corresponding to the total annual cost to the employer of financing a company car and the associated expenses (fuel, insurance, maintenance, taxes, etc.) enables workers to spend that sum on an environment-friendly car and/or alternative, sustainable modes of transport, with the right to receive cash payment of the unspent balance of the budget.

Harmonise the tax treatment of modes of transport to curb congestion

BOX 8

The National Strategic Investment Pact

In the face of the challenges confronting the Belgian economy, investment in general and the government-funded part of that investment are among the levers for reinforcing economic potential. Over the past 20 years, public investment has declined. By 2017, it accounted for only 2.2 % of GDP, well below the public investment rates in Scandinavia (4.4 %), France or the Netherlands (both at 3.4 %). Consequently, Belgium is trailing behind, which has visible repercussions on the state of various types of infrastructure, particularly public infrastructure.

In general, the availability of efficient infrastructure promotes citizens' well-being and business competitiveness. Conversely, infrastructure defects or congestion affect the smooth operation of business and the country's economic attractiveness. Contrary to what is seen in France and the Netherlands, but in common with what is happening in Germany, user ratings on these subjects in Belgium are tending to deteriorate. This is particularly true of network infrastructure such as energy and telecommunications. While the ratings on infrastructure for commercial logistic services is stable in Belgium, mainly thanks to the quality of its port and airport infrastructure, it is not improving

Infrastructure quality indicators

(scores between 0 and 10, 10 corresponding to the top score, average per sub-period)

	Basic infrastructure	Energy	ICT	Infrastructure relating to transport and trade
	Maintenance and development are adequately planned and financed [1]	Infrastructure adequate and efficient [1]	Infrastructure meets business requirements [1]	Ports, railways, roads and ICT [2] 2007-2010
	2005-2008			2007-2010
Belgium	6.1	7.3	8.3	8.0
France	7.9	8.5	8.2	7.8
Netherlands	6.6	8.0	8.7	8.5
Germany	7.4	8.1	8.8	8.5
EU	5.5	6.5	7.7	6.6
	2015-2018			2016-2018
Belgium	5.4	6.2	7.9	8.0
France	7.7	8.5	8.2	8.0
Netherlands	8.8	9.0	9.2	8.5
Germany	6.4	7.1	7.1	8.8
EU	6.1	7.1	8.0	7.0

Sources: World Bank, IMD.
1 Rating based on IMD survey of senior executives.
2 Rating based on World Bank survey of logistics professionals.

as is the case in the neighbouring countries which, overall, are seen as having strengthened their infrastructure networks.

In view of this, the Prime Minister formed a strategic committee with six members from the economic world, in order to establish the basis of a National Strategic Investment Pact. This committee was given the task of setting the – public or private – investment priorities intended to strengthen the foundations of the economy, innovation and employment, thus leading to sustainable and inclusive growth by 2030. This move is in line with the Investment Plan for Europe.

On that basis, the committee reported to the Prime Minister and the Minister-Presidents of the Communities and Regions in September 2018. Six investment areas were identified: the digital transition, cyber security, education, the health system, the energy transition and transport. Practical plans were put forward for each of them, based on the experience of numerous players in the field. Investment and operating expenditure amounting to € 144 to 155 billion, directly supporting efficiency (such as infrastructure maintenance or the strengthening of human capital in the digital sphere) were set for the period up to 2030, with the government bearing around 45 % of the cost.

The committee also identified four transversal factors which would favour implementation of the plans and are partly a matter for the government. These factors are: a) a more effective and predictable legal and regulatory framework for permits and appeals; b) improved ability to mobilise the capital available from the government and also from private investors and EU institutions; c) wise use of public-private partnerships based on stronger governance of investment projects; and d) a budget strategy and European rules that encourage public investment. Practical recommendations were also made on these

issues. In particular, with regard to both the areas for investment and the transversal conditions, the strategic committee's report highlights the need for discussion and coordination between the various levels of power.

At this stage, the report on the National Strategic Investment Pact does not, in itself, represent any commitments for either the federal government or the federated entities. However, it does form an appropriate benchmark for the practical implementation of a coordinated public investment strategy in Belgium.

Other financial incentives may also help to stagger demand for road transport over time, such as the use of tolls, including in cities, varying according to the level of congestion. As well as reducing the actual costs resulting from congestion, such demand management can be a source of funding for transport infrastructures and services. With regard to users, demand for commuter travel can be smoothed out by flexible working arrangements and tele-working, or the length of commuter journeys can be reduced by the use of satellite offices or shared ("co-working") premises. In 2017, no fewer than 23 % of workers made use of teleworking arrangements, an increase of around a third in four years. The use of real-time travel data could improve the efficiency of transport systems. Apart from the positive impact on all users, centralisation of that information would permit the grouping of freight flows to common destinations and the development of intermodality.

More generally, demand for travel should be steered towards alternative, additional modes of transport, thus easing the pressure on the existing infrastructure, especially at peak periods, by promoting public transport or "softer" modes of mobility. Consequently, there needs to be sufficient suitable and efficient infrastructure for that purpose. In the case of freight transport, that means improving rail access to the ports and economic activity zones, and modifying waterways to take larger vessels. In the case of passenger transport, this includes, for example, the provision of parking facilities close to railway stations, or the creation of cycle paths. Between 2000 and 2013, the total number of passengers travelling on the three regional public transport networks doubled, but has since remained steady. The authorities need to avoid transferring the congestion problems from one mode of transport to another, but should instead, where appropriate, plan ahead for investment in public transport to cater for this growth and perpetuate it by maintaining or improving the attractiveness, reliability and punctuality of public transport. More generally, town planning policy and decisions on where to live or where to locate new activity zones are likewise closely linked to this transport issue.

The problem of transport infrastructure congestion exacerbates the low geographical mobility of workers. Except for the residents of Flemish and Walloon Brabant, who are more likely to travel to Brussels, very few commuters travel from their home to another province, and hardly any travel between Flanders and Wallonia.

This low geographical mobility is reflected in sizeable disparities in unemployment rates between the provinces, including neighbouring ones. Despite successive adjustments to the unemployment regulations to help the jobless get back into work (definition of suitable work, degressive benefits, greater support and guidance for the young and for those aged 50 and over) and the cooperation agreements between the regional public employment services, the geographical mobility of job-seekers is still insufficient.

The constraint of the distance between home and place of work is compounded by the language

Table 18

Few workers are employed outside their province of residence

(in % of workers in the province of residence, 2017)

		Province of residence										
		WEST FL	ANTW'P	LIMB'G	EAST FL	FL BRAB	**BRUSS**	WALL'N BRAB	HAIN'T	NAM	LIEG	LUX
Place of work	WEST FL	**89**	0	0	4	0	**0**	0	1	0	0	0
	ANTW'P	0	**87**	5	6	7	**1**	0	0	0	0	0
	LIMB'G	0	2	**80**	0	2	**0**	1	0	0	1	0
	EAST FL	6	3	1	**77**	2	**1**	0	1	0	0	0
	FL BRAB	1	3	5	4	**61**	**8**	6	1	1	0	0
	BRUSS	**2**	**3**	**2**	**7**	**25**	**82**	**28**	**8**	**8**	**3**	**1**
	WALL'N BRAB	0	0	0	0	1	**4**	**54**	5	8	1	0
	HAIN'T	1	0	0	0	0	**2**	5	**75**	8	0	0
	NAM	0	0	0	0	0	**0**	3	4	**67**	4	6
	LIEG	0	0	1	0	0	**0**	1	1	2	**84**	3
	LUX	0	0	0	0	0	**0**	0	0	4	1	**62**
	Abroad	1	2	7	1	1	1	1	3	1	4	27

Source: Eurostat (LFS, microdata).

barrier, which in practice limits mobility between the Regions. The distance problem is also exacerbated by the lack of financial incentives to work, particularly for low wage earners and those with a low level of education. Taking account of the relatively high replacement rate for the unemployed, the wage levels offered do not seem sufficiently attractive to compensate for the travel costs.

5.6 Enhancing the general well-being of the population

The polarisation of society caused by the changes mentioned above highlights the need for economic growth to be inclusive, in order to promote not just wealth creation but also the well-being of the population as a whole.

The composite indicator of average well-being – "Here and now" – devised by the Federal Planning Bureau (FPB) provides the best picture of changes observed in the well-being of Belgians[1]. It combines the changes in six indicators, namely state of health (40 % weighting in the composite indicator), material deprivation (19 %), social support (15 %), incapacity for work (13 %), dropping out of education (9 %) and unemployment (4 %)[2].

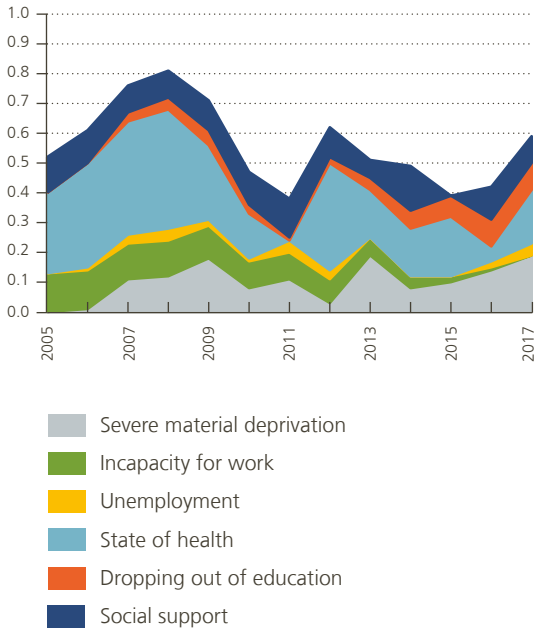
The composite indicator had been rising since 2005, but deteriorated significantly with the outbreak of the economic and financial crisis, and fell to its lowest level in 2011. Since 2015, however, the well-being of Belgian people has recovered, and in 2017 was comparable to its 2005 level. The trend between 2008 and 2011 was closely linked to the deterioration in the general state of health of the population during that period, as the indicator dropped to its minimum value in that last year. This deterioration in the health indicator during the economic crisis bears out the results of the latest national health survey in Belgium, which revealed mental health problems in particular. This issue, regarded as important in Belgium, has proven economic consequences beyond the effect on people's well-being: the OECD estimates the associated direct costs (health care) and indirect costs (unemployment, absences from work, loss of productivity, etc.)

The Belgians' well-being indicator has returned to a level comparable to that before the crisis

Chart 88

Well-being[1] is rising, but has yet to regain its pre-crisis level

(scale of 0 to 1)



Source: FPB.

1 0 corresponds to a situation in which the six indicators were simultaneously at their minimum level over the period 2005-2017, while 1 corresponds to a situation in which they were all simultaneously at their maximum level over that same period.

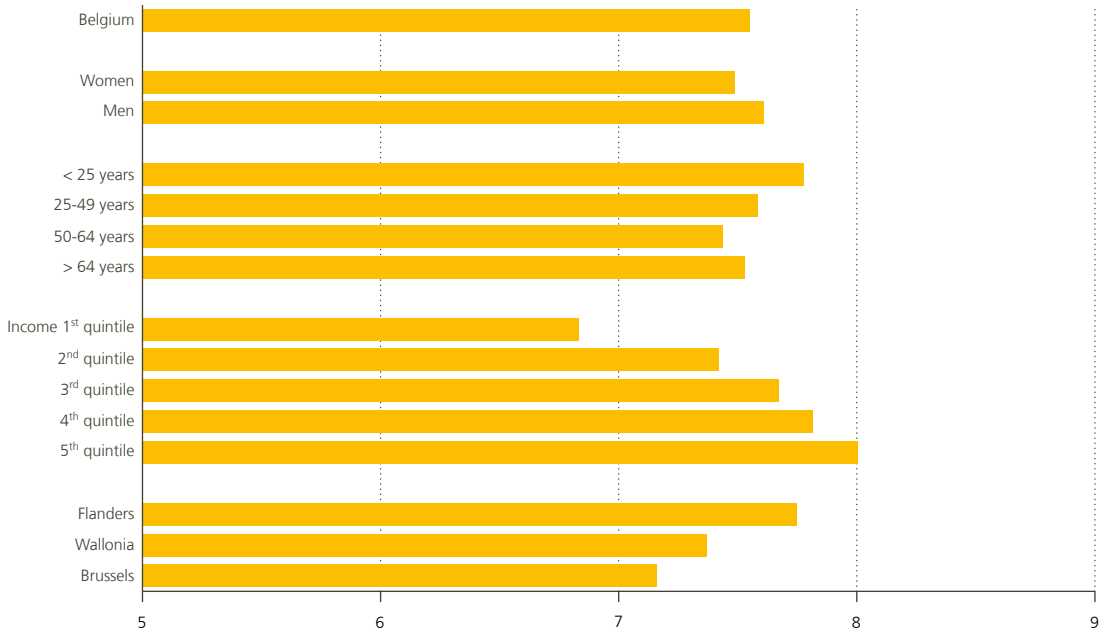
1 Well-being as expressed in the answers to the question: "Overall, how satisfied are you with your life nowadays?" taken from the 2013 EU-SILC survey (see box 9 for a brief account of the beyond-GDP indicators).

2 These six indicators are included in the composite well-being index so that an increase in one of these indicators improves general well-being.

Chart 89

Unequal satisfaction with life according to population group

(scale of 0 to10; 2013)[1]



Source: FPB.

1 Satisfaction with life is measured by the question: "Overall, how satisfied are you with your life nowadays?". The answer to that question is given on a scale ranging from 0 (not at all satisfied) to 10 (totally satisfied).

at around 5.1 % of GDP in Belgium in 2015, compared to 4.1 % for the EU. Investing in preventive health care therefore achieves the two-fold aim of well-being and economic growth.

Apart from the state of health, the improvement in the well-being indicator in recent years also concerns all the other dimensions except for incapacity for work. However, this general trend in well-being masks wide variations between different sub-populations. While there are few differences in the assessment of well-being by gender in terms of satisfaction with life, that is not so in the case of other sub-groups. For instance, younger people (16-24 years) are on average more satisfied with their lives than older people, and especially those in the 50-64 age group. Also, although income is not a key determinant of well-being, satisfaction increases with the level of income. This also differs between the Regions, with people in Flanders being the most satisfied and Brussels residents the least.

On the basis of this finding, the FPB identified the well-being determinants specific to the various population categories: for women and men; for four age groups (16-24 years, 25-49 years, 50-64 years and over 64 years); for five income categories (quintiles); and according to the Region of residence.

Whichever sub-population is considered, health is always the main determinant of well-being. However, men's well-being is more affected by their labour market status, especially if they are job-seekers. Conversely, lack of qualifications affects the well-being of women but not that of men. The well-being of young people (16-24 years) depends more particularly on the level of social support that they receive, their inclusion in the labour market (unemployment or incapacity for work) and their level of education. In contrast, in the 25-64 age group, it is the variables relating to standard of living (income, material deprivation) that influence well-being. Lack of qualifications also affects well-being in the first two income quintiles. When it comes to measuring

the standard of living, the degree of material deprivation and hence access – or otherwise – to a normal living standard matters more than income level. Some regional disparities are also apparent: health is more important for the well-being of the Flemish and Walloon populations than for Brussels residents, who are more sensitive to the variables relating to standard of living. Labour market status and level of education are also key factors for well-being in Wallonia.

BOX 9

Trend in the beyond-GDP indicators

Under the Law of 14 March 2014 supplementing the Law of 21 December 1994 containing social and miscellaneous provisions, the National Accounts Institute (NAI) and the Federal Planning Bureau (FPB) publish a report each year on beyond-GDP indicators, relating to various topics in relation to well-being. A summary is given here in accordance with the Law.

In this edition, the FPB reviews 67 indicators selected in order to measure "quality of life, human development, social progress and the sustainability of our economy", grouped around three dimensions based on the definition of sustainable development: "Here and now", "Later", and "Elsewhere".

Where appropriate, the indicators are broken down according to relevant population categories. A detailed description of the methods of selecting the topics and indicators is given in the report published by the NAI and the FPB in February 2016.

In the 2019 report, as well as taking account of comments by users and Parliament, some adjustments were made to the list of indicators for methodological reasons, the aim being to find more relevant measures for constructing the composite indicator on the basis of indicators available annually. The presentation of the indicators is now arranged around the 17 Sustainable Development Goals (SDGs) set by the UN for the period up to 2030. According to the Agenda for Sustainable Development designed to achieve these goals, it is essential to reconcile economic growth, social inclusion and environmental protection on the basis of integrated and sustainable management of the planet's resources. In fact, these SDGs are consistent with the FPB's approach.

Trend in the indicators

The "Here and now" dimension concerns changes in people's well-being and the development of society in Belgium since 1990. Some 41 indicators concerning poverty, decent work, inequality, health, education, cities and justice cover this dimension, for which there is no apparent systematic trend in relation to the respective SDGs:

- with regard to education (SDG 4), gender equality (SDG 5) and peace and justice (SDG 16), the trend is favourable, i.e. heading towards their goals;
- in contrast, trends relating to poverty (SDG 1) are unfavourable;
- in regard to health (SDG 3), the three indicators relating to life expectancy, death due to chronic illness and road accidents, the trend is favourable; conversely, the subjective indicators concerning people's perception of their state of health point to a deterioration;
- the indicators relating to decent work (SDG 8), inequality (SDG 10) and cities (SDG 11) do not display any clear tendencies.

Comparison of these indicators with those at EU level or, failing that, in the three neighbouring countries favours Belgium in the case of 17 of the 28 indicators which can be compared.

There are 32 indicators covering the "Later" dimension, which concerns the ability of future generations to maintain and improve that well-being. These indicators are taken mainly from the environmental SDGs concerning hunger (SDG 2), health (SDG 3), education (SDG 4), water (SDG 6), energy (SDG 7), infrastructure (SDG 9), consumption and production (SDG 12), climate (SDG 13), life on land and life below water (SDG 14 and 15), and ways of implementing global sustainable development partnerships (SDG 17). Most of these are moving towards their goals, with the following notable exceptions:

- life expectancy and good health (SDG 3), which is no longer improving (in contrast to life expectancy at birth);
- the wild bird population (one of the few indicators of biological diversity available over a long period), which continues to deviate further from its goal.

An international comparison shows that 12 of the 23 indicators which can be compared record a more favourable situation in Belgium; this primarily concerns social indicators. The environmental indicators are less favourable in Belgium than in the rest of Europe.

The "Elsewhere" indicators reflecting Belgium's impact on the rest of the world – namely the ability of other countries to develop and the well-being of their population – display a favourable trend as regards the consumption of natural resources (energy (SDG 7) and commodities (SDG 12)) and greenhouse gas emissions (SDG 13). Conversely, the trend in the public development aid indicator (SDG 17) is unfavourable.

The international comparison of these indicators is favourable to Belgium with regard to domestic material consumption and public development aid, but not as regards the primary energy consumption indicators and those concerning greenhouse gas emissions.

Breakdown of the indicators

Of the 67 indicators adopted, 31 can be broken down by population sub-categories, defined according to gender, income level, level of education or age. It emerges that:

- according to gender (28 indicators), many differences are smaller though there are still some substantial discrepancies unfavourable to women. This concerns the risk of poverty or social exclusion, including a very low work intensity, perceived health, depression, leisure time and feeling safe in public places;
- according to income level (15 indicators), the situations are more favourable for the highest income groups, which is hardly surprising;
- according to level of education (12 indicators), the conditions are more favourable for persons with a better level of education, and the differences are tending to increase. People with no more than

a lower secondary education certificate are at a particular disadvantage, and the gap in relation to others (with at least an upper secondary education certificate) is generally very marked;

- according to age (12 indicators), various divergent trends are apparent which could ultimately have implications for the well-being of certain groups and the development of society. Thus, long-term incapacity for work among the 25-64 age group may affect economic activity. Similarly, while the improvement in living conditions for the over-65 age group is positive, it contrasts with the tougher conditions experienced by younger people, which may harm solidarity between the generations. While there are differences of level relating to age (e.g. in terms of health, incapacity for work, employment or unemployment), it is evident that the trends are almost always more favourable to the older age groups. Apart from the – predominant – health indicator, it is the trend in indicators relating to work and poverty that needs to be monitored.

In accordance with its mission, the FPB will continue to update these indicators, taking account of changes in the state of knowledge and social debates. Future work will focus in particular on the development of a composite indicator for the "Later" and "Elsewhere" dimensions of well-being and an indicator on the carbon footprint as presented in the 2018 report on the beyond-GDP indicators. That work will also ensure consistency between this set of beyond-GDP indicators and the sustainable development indicators, particularly in the context of the monitoring of the UN SDGs.