

# REPORT 2018

Preamble  
Economic and financial developments  
Prudential regulation and supervision

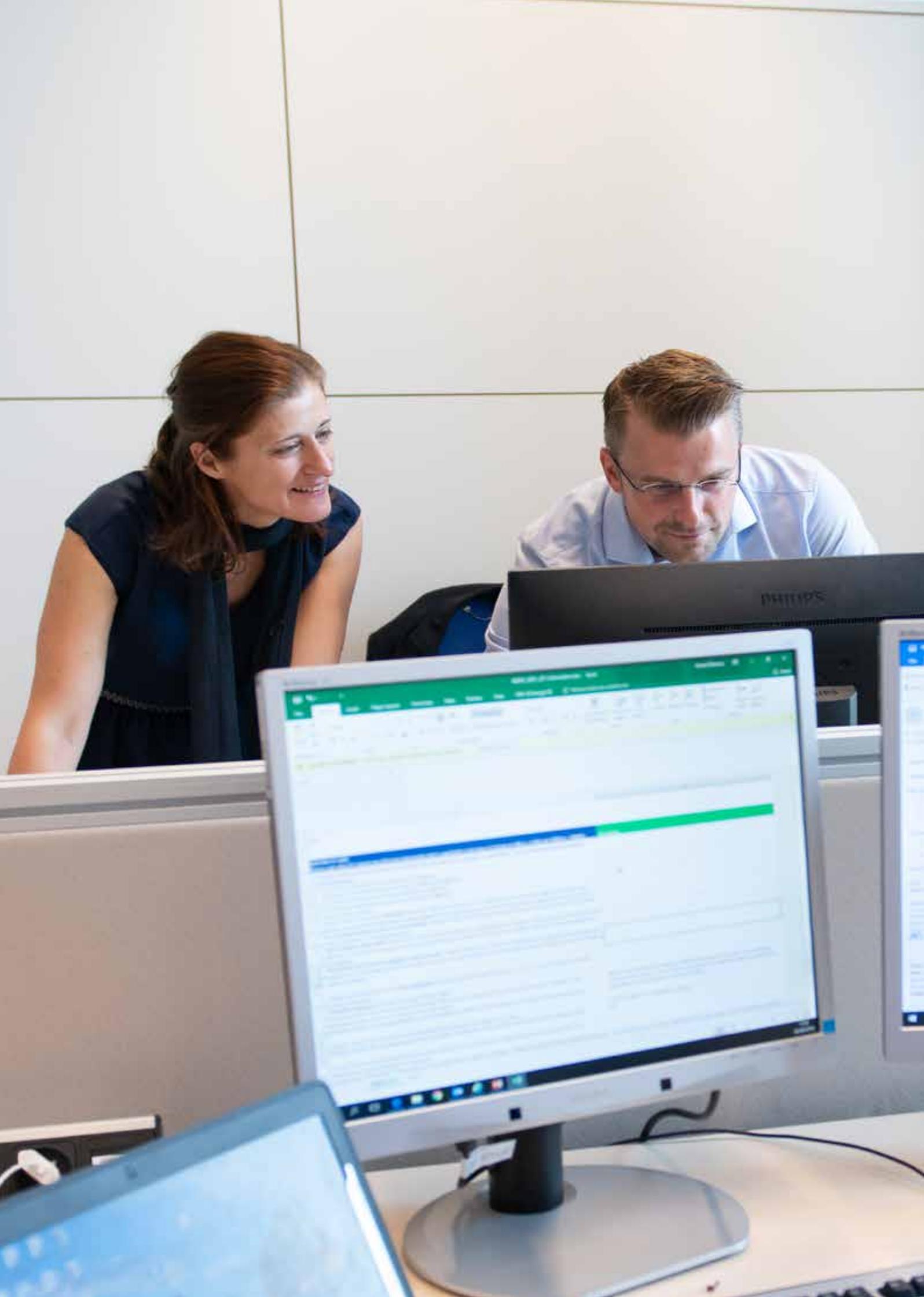


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# Report presented by the Governor on behalf of the Council of Regency\*

In this report, published on behalf of the Council of Regency, the Governor discusses the main economic and financial developments of 2018 and the policy challenges which they revealed. The first chapter deals with the normalisation of monetary policy in the euro area. The process began in 2018 against the backdrop of growing uncertainty in the global economy. The second chapter discusses the situation in the European and Belgian financial sector and explains how prudential policy and regulation can ensure that the sector remains robust. These two chapters therefore focus on the main tasks of the National Bank of Belgium. The Bank performs some of those tasks – such as monetary policy and banking supervision – as a faithful partner in the Economic and Monetary Union (EMU), while other tasks remain entirely or primarily a national responsibility. The third chapter takes a closer look at economic developments in Belgium, and the issues which may hamper stronger and more inclusive growth, before proceeding to examine the consolidation of public finances. Finally, the fourth chapter sets out the conclusions. The rest of the National Bank of Belgium's Annual Report provides more detailed information and analysis on each of these subjects.

## 1. Normalising monetary policy in the euro area while the uncertainty surrounding the global economy increases

### *Main aspects of the normalisation of monetary policy*

1. Ten years after the eruption of the crisis, the ECB Governing Council has begun to normalise the euro area's monetary policy. At its meeting on 13 December, it decided to end the net asset purchases in 2019, so that the quantitative easing launched in 2015 will no longer be reinforced. This decision reflects the Governing Council's confidence in sustained convergence of inflation towards the price stability objective. Such confidence is based on the expectation that the euro area's economic recovery and the resulting stronger pressure on prices will continue even after the net asset purchases have ended.
2. Nonetheless, the Eurosystem will maintain the size of its balance sheet by reinvesting the equivalent amount of the securities redeemed at maturity. That will perpetuate the purchase programme's downward influence on long-term interest rates. The Governing Council intends to maintain that reinvestment policy until well after it begins raising the key interest rates. Those rates will be held at their present level until at least through the summer

\* Two Regents are not able to endorse the Report in its entirety.

of 2019, and in any case for as long as necessary to ensure the sustained convergence of inflation towards levels that are below, but close to, 2 % in the medium term. Safeguarding price stability remains the chosen course of monetary policy to steer the euro area's economy through the crisis.

3. This framework does not only establish the sequence of the various normalisation stages: first, the end of the net asset purchases, then the start of key interest rate rises, and finally the termination of the reinvestment policy. It also indicates that normalisation will be a very gradual process, the pace of which is not fixed in advance. The indications concerning the interest rate path and the accompanying reinvestment policy confirm that ample monetary stimulus is still needed to continue rekindling inflationary pressure. In addition, the pace of normalisation will depend on the strength of the reflation that has begun, which in turn depends largely on the continuation of economic growth in the euro area. The normalisation framework thus provides a buffer against the uncertainties and risks surrounding growth which emerged in 2018.

*Normalisation will be a very gradual process, the pace of which is not fixed in advance*

### *Growth and inflation in the euro area*

4. Compared to 2015, the year when the asset purchases began, not only has the deflation risk faded, but the euro area's growth has exceeded its potential ever since, while the drift in inflation expectations has gone into reverse, thereby fulfilling the aims of quantitative easing. In the meantime, inflation itself increased to 1.8% in 2018. Admittedly, that acceleration mainly reflects the movement in crude oil prices, which maintained a predominantly upward trend until October. At that time, the price of Brent crude oil had reached around \$ 85 per barrel, its highest level in four years, partly owing to fears that the mounting geopolitical tensions would have an adverse impact on supplies. However, towards the end of the year, those fears waned and oil prices also subsided as a result of concern about a global growth slowdown. Inflation thus dipped to 1.6% in December.
5. If the more volatile price components are excluded, then core inflation in the euro area came to barely 1% in 2018. But unemployment continued to decline, dropping to 7.9% at the end of the year. Since the start of the recovery in the euro area, more than 9 million jobs have been created. That therefore supports the belief that domestic price pressures are beginning to build up. There are increasing signs of labour market shortages, particularly in the countries where the recovery is farthest advanced. Wage cost rises therefore gathered pace in 2018. That process could be further intensified as underemployment continues to fall and the legacy of low inflation ceases to hold back wage-setting. The maintenance of strong monetary stimulus even now that net asset purchases have ended will be a contributory factor.
6. Although the economic recovery continued in the euro area in 2018, it lost momentum. Growth declined from 2.4% in 2017 to 1.9%. To some extent, that reflects a number of temporary factors, such as a sharp but probably short-term contraction of activity in the German car industry. More fundamentally, however, following an exceptionally strong 2017, exports produced significantly weaker growth. As a result of less dynamic global trade, European export markets also contracted. International trade ran out of steam, even though the global economy's growth rate was still almost as high as in 2017, at 3.7%. The direct impact of the worsening protectionist pressures on world trade seems to have been limited in 2018. But, owing to the close interlinking of production chains at global level, the effects could extend beyond the products or countries initially concerned. It is also possible that businesses across the world have

*Domestic price pressure is beginning to build up*

already scaled down their investment plans somewhat in view of the mounting uncertainty, whereas capital goods are particularly trade-intensive.

7. While exports from the euro area weakened significantly, domestic demand remained robust up to the third quarter of 2018 – the latest quarter for which data were available when this report went to press. The growth of domestic demand was almost as strong as in 2017, supported by both investment and private consumption. The latter consists mainly of services which are very job-intensive. Consequently, employment in the euro area was up by 1.4%. The deteriorating external environment and growing uncertainty during the year had little impact on this domestic dynamism in the euro area in 2018. Conversely, financial market volatility increased considerably during the fourth quarter. The fall in stock market prices reflected fears of a growth slowdown, which depressed profit expectations and drove up risk premiums. This could result in tighter financing conditions, although – partly thanks to the maintenance of a substantial monetary stimulus – those conditions remained favourable in the euro area in 2018.

### *Numerous uncertainties which could reinforce one another call for caution*

8. The uncertainty originates primarily from the United States' fiscal and trade policies. Among all the advanced economies, the United States alone recorded stronger growth of almost 3% in 2018, thanks to its massive fiscal stimulus package. However, as unemployment had since fallen to less than 4%, there were fears that, sooner or later, the Federal Reserve would have to abandon its policy of gradual interest rate rises in order to prevent the economy from overheating. But that was certainly not the case in 2018, as inflation remained in the region of the 2% target. The Federal Reserve was therefore able to continue raising its key interest rate in a predictable manner in four stages by 25 basis points at a time, to a range of 2.25% to 2.5%. The Federal Reserve also stated that, consequently, the key interest rate was no longer far off its neutral level. Nonetheless, in February 2018, fears of speedier interest rate hikes had triggered a sharp rise in long-term interest rates in the United States and caused the dollar to appreciate. Moreover, the US budget deficit reached 4.7% of GDP and the public debt expanded to 106.1% of GDP, without any clear sustainability plan.
9. The US fiscal stimulus also implies more imports and a deterioration in the current account; but that deficit is specifically one of the main factors behind the policy of raising import duties. Instead of the current account being seen as the result of saving and investment in the economy, a mercantilist vision is gaining ground in the United States, putting excess emphasis on bilateral trade deficits. The focus here is on China and the euro area, particularly Germany. Thus, in 2018, the United States put up the import duty on a range of products representing imports totalling around \$ 300 billion. The biggest share of that figure concerns imports from China, a country which is accused of unfair trade practices and infringements of intellectual property rights, and is increasingly considered a rival which could threaten the United States' position as a world power. The trading partners, especially China, retaliated by raising their customs duties on a range of products representing imports worth over \$ 130 billion. In addition, the United States threatens to impose supplementary duties on car imports and on some still exempt imports from China. That would triple the scale of the tariff increases, inevitably implying the risk of further retaliatory measures by the countries concerned.
10. According to OECD and IMF simulations, the tariff increases already approved – which currently only concern around 3% of world trade – will reduce economic activity in the United States and China by 0.2% to 0.3% of GDP between now and 2020-2021. That estimate takes no account

*The uncertainty originates primarily from the fiscal and trade policies of the United States*

of the impact on confidence, while a further escalation of the trade war could clearly cause growth to slow more sharply. In general, the higher customs tariffs also have an adverse effect on third countries, although the impact is smaller. At this stage, Belgium's direct exposure is still fairly limited, but the situation would be very different in the event of supplementary levies on imports of cars into the United States, as many Belgian firms supply parts for car assembly. Moreover, the European Union as a whole is vulnerable to such levies. Not only does the tendency towards less openness impede access to foreign markets, it also entails reorganisation of production processes and damages confidence. Furthermore, in the longer term, it has an adverse effect on productivity growth, because openness to both trade and direct investment is a powerful driver of innovation and its widespread dissemination.

11. While growth in China only slowed slightly from 6.9% to 6.6%, the country has numerous vulnerabilities. The trade war with the United States is only one of them. China still also faces the difficult challenge of making economic activity less dependent on investment and exports and basing it more on domestic consumption. That transformation implies the risk of a sharp slowdown in growth, while the scope for supporting growth is becoming smaller. Moreover, public enterprises are burdened with heavy debts, and the allocation of resources has not always been ideal in the successive rounds of economic stimulus. In addition, significant risks have built up in the shadow banking sector, while a very substantial proportion of private capital is invested there. These vulnerabilities have already caused a depreciation of the renminbi in 2018.
12. Other emerging economies would also be vulnerable in the event of a further escalation of the trade disputes. Moreover, owing to the key interest rate rises in the US, some of them had already faced capital outflows and tougher financing conditions in 2018. The appreciation of the US dollar also made it harder to repay loans contracted in that currency. The effect was particularly marked in certain countries, such as Argentina and Turkey, but was limited in 2018 in the case of countries with sound fundamentals and a credible economic policy framework.

*The uncertainty over Brexit and turbulence on the sovereign bond market in the euro area are risks closer to home*

13. Following a protracted negotiation process, the British government and the European Commission (EC) reached a withdrawal agreement which the European Council approved on 25 November. However, the British Parliament rejected the agreement on 15 January 2019, thereby considerably increasing the risk of a no-deal Brexit. Even if the agreement were to be approved, many points still remain to be settled. That would mean the start of a transitional period from April 2019 to December 2020, which could perhaps be extended by a maximum of two years. That period was deemed necessary to reach agreement on future relations between the United Kingdom and the EU. The initial positions in that respect were defined in the political declaration accompanying the withdrawal agreement, but it is unclear exactly what direction that might take. This uncertainty has already depressed business investment in the UK. The ultimate economic impact of Brexit will depend on the type of future trading relationship between the UK and the EU. If the least open model is adopted, it could amount to 1% of GDP for Belgium in the long term. A no-deal Brexit will also have supplementary short-term consequences.
14. In addition, the Italian sovereign bond market experienced turbulence in 2018. While monetary policy measures protected the euro area's long-term risk-free interest rates from the upward trend on the American bond market, the spread on Italian government bonds widened significantly from May onwards; the markets were worried about the fiscal expansion announced by the new government when it took office, as Italy's public debt was already hovering around

*The risk of a no-deal Brexit has increased considerably*

130% of GDP. Those fears proved justified in the autumn when an expansionary budget was unveiled, which according to the EC would imply a stimulus of an estimated 1.2% of GDP. The EC considered that the draft budget was contrary to the requirements of the Stability and Growth Pact. In November, it therefore took the first step towards reinstating an excessive deficit procedure, on account of insufficient progress in reducing the public debt. In the end, that caused the Italian government to make some adjustments to its budget. According to the EC, Portugal, Slovenia, Spain, France and Belgium are similarly at risk of failing to comply fully with the requirements of the Stability and Growth Pact in 2019. At the end of the year, France announced a number of measures aimed at supporting purchasing power. Those measures could well cause the deficit to exceed the draft budget figure in 2019.

15. The developments in Italy again highlighted the vicious spiral between sovereign debt and the still predominantly national banking systems. The payment default insurance premiums of Italian banks are still closely correlated with those for the Italian public debt. The sovereign debt portfolio held by the banks began expanding again in 2018 after contracting somewhat in the two preceding years. While the cost of issuing bonds or shares rose sharply for the banks, the effect on the overall funding cost remained small, because Italian banks have a large deposit base and also enjoy low-cost Eurosystem financing in the form of the targeted long-term refinancing operations (TLTRO). But there is still a risk that bank lending rates will go up in Italy, which would be detrimental to the country's already fragile economy. While that calls to mind the 2012 sovereign debt crisis, there were no contagion effects on other euro area countries this time. The developments in Italy had no adverse effect on either the spreads on government bonds or the cost of market financing of the banks. Following the adjustment to the budget, the Italian spread narrowed slightly at the end of the year.

*Unlike what happened during the 2012 sovereign debt crisis, the contagion did not spread to other euro area countries*

***Monetary policy can form a buffer against the risks but cannot eliminate them: other policy areas must come into play***

16. If the aforesaid risks were to materialise, monetary policy could limit their impact on the business cycle in the euro area, and hence on the inflation path. The possibility of delaying a rise in key interest rates can act as an automatic stabiliser, and the effect is further reinforced by the fact that the Governing Council has linked the duration of the reinvestment policy to the timing of that rate rise. However, monetary policy cannot remove the risks in themselves. For example, it cannot avert the detrimental effects on growth potential due to increasing protectionism or Brexit, nor can it offer a solution for the sustainability of public finances in the euro area countries or provide a substitute for deeper EMU. Other policy areas must come into play.
17. Take the example of the rejection of globalisation and the tendency towards protectionism, which have already marked a break with the past for several years now. There are many factors behind this, some of which extend beyond the purely economic sphere. For example, national democracies find it difficult to entrust certain powers to supranational bodies and to strengthen multilateral cooperation. In addition, broad sections of society are plagued by a feeling of loss of control or identity. From an economic point of view, the unequal distribution of the net benefits of globalisation is also a factor. In many advanced economies, income inequality has escalated in recent years, and large sections of the population have seen hardly any real increase in their income. It is true that this trend is less pronounced on the European continent and especially in Belgium, where social adjustments to the market economy are in fact more prevalent than in the Anglo-Saxon countries. This growing inequality is one of the factors weakening the social consensus in favour of free trade. To reverse that trend, the respective national economies

therefore need to implement an economic policy mix conducive to both stronger and more inclusive growth. That requires not only an adequate social safety net, but also and above all a policy which can seize all the growth opportunities, spearheaded by education, training, labour market support and empowerment, so that everyone can enjoy the benefits of economic progress. That is the way to once again generate greater support for a multilateral approach. Such an approach is necessary not only in the trade sphere but also in regard to such matters as financial regulation, the proper allocation of the tax base of multinational companies, intellectual property rights, attenuation of the impact of global warming, migration flows, or cybersecurity and privacy protection. It is beyond question that the need is more pressing than ever in a multipolar world. Developments in the past year are particularly clear evidence of that.

18. In the euro area, the Stability and Growth Pact and the procedure for preventing macroeconomic imbalances must genuinely prompt the Member States to pursue appropriate policies. That should encourage growth potential via structural reforms, make the Member States more resilient and encourage them to form fiscal buffers, particularly in countries with a high level of public debt. Developments in some euro area countries show that full compliance with the Stability and Growth Pact – one of the cornerstones of EMU – is vitally important. It is essential both for the stability of the Member States and for the cohesion of Monetary Union. The formation of fiscal reserves will act as a buffer against future shocks. In addition, compliance with the rules could boost the mutual trust needed for taking new steps towards deeper EMU. Further work on that subject took place in 2018. For instance, the December Euro Summit gave the go-ahead for reform of the European Stability Mechanism (ESM), implementation of the common backstop for the Single Resolution Fund (SRF), and development of a budgetary instrument for strengthening convergence and competitiveness in the euro area. However, the progress achieved fell short of the original ambitions, especially as regards the completion of the Banking Union and the Capital Markets Union. Nonetheless, progress in those areas remains necessary to strengthen EMU.

*Full compliance with the Stability and Growth Pact – one of the cornerstones of EMU – is vitally important*

## 2. A robust European and Belgian financial sector

*Financial stability can never be taken for granted: on the contrary, it requires close monitoring of the risks and refinement of the regulatory and prudential framework*

19. Alongside price stability, financial stability is a precondition for achieving and consolidating sustainable economic growth and welfare. A lack of financial stability – particularly in the banking sector – not only disrupts financial services which are vital for the economy, but also undermines the essential confidence of producers, consumers and investors; in extreme cases, it may even lead the economy on a deflationary path. In that context, the highly accommodative monetary policy pursued by the ECB in recent years has proved appropriate. It not only halted the mutually reinforcing downward feedback loop between macroeconomic and financial instability, but also helped to restore the bank lending channel, thus opening the way to the economic recovery and gradual convergence of inflation towards the target.
20. However, in the current economic situation, there is a danger that the objectives of price stability and financial stability are no longer perfectly aligned. The monetary stimulus provided through the low interest rate policy remains necessary to shore up prices and to anchor inflation and inflationary expectations, in line with the ECB's aim. However, this low interest rate environment also encourages households and businesses to continue accumulating debt and leads to more

risk-taking and a search for yield in the financial sector, where profitability is under pressure. As a result, it could foster systemic risks. Although those risks are only building up gradually, and only in a limited number of European financial markets and euro area countries, we must not forget the lessons of the financial crisis and financial stability should rank high on the prudential policy agenda. The European and national prudential authorities – both the microprudential and the macroprudential authorities and those responsible for crisis management and resolution – play a key role in maintaining financial stability. That is particularly true in the European Monetary Union, where the common monetary policy is geared primarily to price stability and is also less capable of resolving financial stability problems on fragmented markets or in specific countries.

*The gradual build-up of systemic risks requires national and European supervisory authorities to monitor closely macrofinancial developments*

21. Although the European regulatory and supervisory framework within which the supervisory authorities operate has been markedly redesigned and reinforced, it is still incomplete in some important respects, and its effectiveness throughout the system has yet to be tested. That framework still requires further refinement and completion in order to consolidate the now restored financial stability. Inadequate or incomplete regulation could lead to insufficient hedging of the risks incurred or a transfer of the risks to less strictly regulated market segments and compromise the sector's stability owing to inordinate leverage on the balance sheet or excessive maturity or liquidity transformation. In these circumstances, the remaining risk limitation measures under the Basel III agreement, and particularly those restricting the use of banks' internal risk models, need to be promptly and fully transposed into European legislation. In the Belgian context – with the presence of major subsidiaries of international banking groups – the maintenance of sufficient capital and liquidity buffers for all banks operating in Belgium, as specified in the latest revision of the European banking regulations, is also essential to safeguard the resilience of the Belgian banking sector in the as yet incomplete Banking Union.

22. Finally, in a sector that depends on confidence, financial stability requires an efficient crisis management and resolution framework. Such a framework gives the authorities the powers to intervene swiftly if banks or major investment companies are in trouble, in order to restructure them efficiently and strengthen them by using domestic instruments. Swift and effective intervention is actually crucial to prevent any contagion and preserve confidence in the financial sector. As resolution authority, the Bank advocates a sound regulatory framework for the resolution of all banks, combined with a coherent and effective prudential policy. Orderly resolution can only be achieved if the structure of the institutions' liabilities in terms of quantity and quality does not hinder the application of the resolution procedure and access to the Single Resolution Fund, and preserves the option of State intervention in extreme cases. Although the latest revision of the European banking regulations deepened and reinforced the resolution framework in this direction, not all risks are covered – particularly since, as also pointed out by the IMF in its recent FSAP report, the regulations only provide for liquidation according to normal insolvency procedures for non-systemic banks. Although this strategy would probably cause little if any market disruption in the event of an idiosyncratic failure – due to firm-specific non-systemic factors –, the liquidation of a non-systemic bank in a period of systemic financial events or instability could still have a serious adverse impact on the financial system. In such cases, the best way to preserve financial stability is to apply the resolution framework including, if justified, the option of government intervention – albeit as a last resort – to protect depositors and avoid a wave of contagion triggered by a loss of confidence.

*The Bank advocates a sound regulatory framework for bank resolution accompanied by an effective and coherent resolution policy, including for non-systemic banks*

*The financial sector has become more robust overall, but the vicious feedback loop between banks and public debt is still cause for concern, and sustainable profitability remains a point for attention, particularly in a low interest rate environment*

23. Ten years after the crisis, Belgian and European banks are once again in a sound solvency and liquidity position. The excessive dependence on short-term funding has been reduced to some extent. With significant banks currently having a core equity (CET1) ratio of 14.5% of their risk-weighted assets, 4 percentage points higher than in 2010, the European banking sector has become much more resilient. The Belgian banking sector which, as a result of state aid, had to undergo restructuring and has focused more on its core business in its strategic markets, has largely recovered, with a solvency ratio now standing at around 15.5%. That robust starting position – confirmed, moreover, by the microprudential and macroprudential stress tests conducted by the European Banking Authority (EBA) and the IMF – implies that the banks are generally equipped to ensure the continuity of their services to the economy, even in these uncertain times of high macroeconomic and financial risks and (geo)political tensions, both within the EU and elsewhere.

24. Nevertheless, the European banking sector remains vulnerable and the legacy issues have not all been resolved. For instance, the stock of non-performing loans, the persistence of a strong home bias in bond portfolios, and exposures to a number of emerging countries continue to represent risks which, in extreme cases, could also have an impact on the sector as a whole. The severe losses on Italian bank shares, in particular, as a result of tensions on the Italian bond markets not only illustrate these vulnerabilities, but they also give a clear signal that, in extreme situations, the negative feedback loop between banks and sovereign debt remains a concern for the stability of the sector as a whole. Despite the substantial progress in certain areas such as the significant reduction in non-performing loans, the European regulatory and prudential framework in its current form seems inadequately equipped to deal with all these concentration risks – and especially the home bias in government bond holdings – and to limit their systemic impact. The reduction of these vulnerabilities could also act as a powerful catalyst in the completion of the Banking Union, for which it is desirable to lower the risks further before the entry into force of the common deposit guarantee system (EDIS).

*The developments in Italy highlight the vicious spiral between banks and sovereign debts – and the associated risks to financial stability*

25. Persistently low profitability – which, with an average return on equity estimated at 7%, is insufficient in relation to capital costs – remains a considerable challenge for the European banking sector and could ultimately disrupt the smooth functioning of financial intermediation. There is also a risk of a divided European banking landscape in which the more profitable banks seek and secure cost savings and economies of scale by means of substantial investment – e.g. in digitisation and IT – and in the long run threaten the business models of more fragile, often smaller, banks. The profitability of the Belgian banking sector – which is well above the European average with an estimated return on equity of 8.6% – is under mounting pressure. Here, too, high investment costs and ever-increasing charges weigh on profitability, and the low interest rate environment and fiercer competition also pose a growing threat to net interest income, the Belgian banks' primary income source. Yet it remains vital to restore the structural profitability of the European banking sector to a level commensurate with market requirements in order to safeguard the continuity and stability of financial services. However, numerous simulations demonstrate that the current economic recovery might be insufficient for that purpose, and that there is a need for more ambitious structural measures generating substantial efficiency gains. Various strategies might be envisaged, such as securing economies of scale via acquisitions, implementing supplementary cost-cutting rationalisation

*The European financial sector has regained its resilience, but the lack of profitability still needs to be watched*

measures, or applying more flexible and diversified business models. Finally, part of the gap between capital costs and returns achieved could disappear if the financial markets start taking into account the strengthening of bank balance sheets and the stricter regulatory and prudential framework and reduce risk premiums and capital costs.

26. Like the Belgian banking sector, the insurance sector has also embarked on significant structural adjustments, bringing the capital requirements more into line with the inherent risks and aligning the maturities of assets and liabilities. These adjustments have culminated in a reduction in the sector's duration gap and improved the matching of incoming and outgoing cash flows. The stress tests conducted by the IMF, the European Insurance and Occupational Pensions Authority (EIOPA) and the Bank confirm that the sector is resilient and can cope with the impact of a prolonged low interest rate environment.
27. However, in the current low interest rate environment, there is mounting pressure on insurers' profitability and on their business models, especially for those that focus on life insurance. These companies have to redirect their investment towards riskier assets and adapt their products to the new market environment. As regards investment, there is a tendency, on the one hand, to make greater use of riskier assets, or on the other hand, of less liquid instruments such as property. In that context, the recent adjustments to the regulations, bringing the capital requirements for infrastructure investment more closely into line with the inherent risks, do open the way to longer-term investment and further diversification of the investment portfolio. At the same time, the interest rate guarantees on life insurance contracts are being phased out and a shift is taking place in the market segments in which insurers operate, in particular a shift from class 21 to class 23 and/or non-life business.

### *Increasing accumulation of debt in the private sector and accelerating credit cycle in the euro area and Belgium*

28. The acceleration of the financial cycle in numerous EU countries is a warning that an accommodative monetary policy can also have unintended spillover effects harmful to financial stability. In that context, it is important to distinguish between productive and risky lending, and if necessary to take appropriate action. This cycle can in fact go off the rails if, as it did in the run-up to the financial crisis, the banks and the shadow banking sector – driven by fierce competition or an irresponsible search for yield – proceed to fund too many unproductive or insufficiently productive investment projects on over-generous terms.
29. In the light of the accelerating credit cycles, it is all the more important for the banking sector to form additional capital buffers in good times. Now that economic uncertainty and financial market volatility are increasing, and signs of a weakening of the business cycle are emerging, it is especially important to ensure the resilience of the banking sector so that, even in a recession, it can absorb loan losses and preserve stable lending to the real economy. Various EU countries, including France, Ireland and Sweden, have already taken specific measures in that regard, such as activating a countercyclical buffer requirement, while others are considering introducing supplementary measures in the near future. Here, it is very important to strike the right balance between the small but visible short-term costs of additional capital buffers and the substantial – but less obvious – long-term advantages gained by preventing a possible financial recession and the accompanying high social costs.
30. In this context, the Bank, as the macroprudential supervisory authority, keeps a close watch over the Belgian property and credit markets. In contrast to the debt reduction trend in the euro area, the debt ratio of Belgian households is still rising steadily, and at around 60 % of GDP, it

*In view of the further easing of credit conditions and the rising debt ratio, the Bank has reinforced the prudential measure for property risks*

now exceeds the average debt ratio in the euro area. This points to a further increase in the systemic risks in the current credit cycle, especially as the Belgian banks are still expanding their mortgage loan portfolios, sometimes on terms which no longer cover the credit and liquidity risks or no longer ensure an adequate profit margin. In these circumstances, the Bank introduced a new and stricter macroprudential measure in 2018, whereby the Belgian banks using internal models to determine their capital requirements must build up capital buffers in proportion to the risk, sufficient to absorb loan losses on the mortgage portfolio in the event of a property crisis and to limit the potential consequences of such a crisis for the real economy. The Bank is keeping a close eye on this measure's impact on mortgage lending and might consider supplementary measures if the risks continue to build up.

31. However, for the first time since the financial crisis, the credit cycle is also accelerating for Belgian non-financial corporations, as firms are tending to opt for debt financing instead of increasing their equity, and there has recently been a surge in credit expansion. With growth of around 7% – well above the euro area average of 4% – the provision of business loans by Belgian banks is among the most dynamic in the EU. The Bank is therefore monitoring the situation closely and – like some other EU countries – might consider activating the countercyclical capital buffer for the Belgian banks so as to guarantee sufficient absorption capacity and the continuity of lending to the Belgian economy.

#### *The financial sector on the verge of a radical, structural transformation*

32. Having only just recovered from the crisis and adapted to the new, more stringent regulations and supervisory regime, the financial sector faces new structural challenges. Some of those challenges concern more general trends in society, such as digitisation or climate change, and the transition to a low-carbon economy. Others are specific and relate to political decisions such as Brexit or the Capital Markets Union. These challenges undoubtedly create significant new opportunities for the financial sector, but they also imply threats to the sector owing to the far-reaching implications of these trends and the substantial associated investment.
33. The progressive digitisation and digital interlinking of society implies escalating cyber risks and operational IT risks, and the monitoring of those risks in the financial sector – a strategic sector for cyber security – is an absolute priority for the Bank. For example, the Bank devotes particular attention to the cyber security of financial market infrastructures and systemic banks. As it presides over the Financial Sector Cyber Council (FSCC), acting jointly with the financial sector, it endeavours not only to improve the regulatory framework but also to strengthen vigilance and cyber resilience in general. In that connection, the Bank is deploying TIBER-BE, an operational framework for ethical hacking in the financial sector.

*Monitoring cyber risks for financial market infrastructures and systemic banks is a priority for the Bank*

34. This digital transformation is accompanied by risks, but at the same time, it offers the financial sector significant new opportunities. As well as broadening the financial landscape with the advent of new financial service providers – FinTech and BigTech –, the digital transformation offers incumbent institutions – and particularly the banks – new technologies for improving the organisation and supply of services and expanding the product range. In various financial sector segments, new FinTech applications are appearing – such as crowdfunding, peer-to-peer lending, alternative payment services, robot advice or new electronic trading platforms. They enhance customer satisfaction, reduce transaction costs and expand the product range, often in market segments where little or no service was previously available. The second European Payments Directive (PSD2), which notably provides for banks to allow third parties to have access to

information about bank accounts – with the account holder’s consent –, is a major step towards open banking and the further integration of FinTech and BigTech into the European payment services market. For established financial institutions, the digital transformation also offers the opportunity – perhaps in cooperation with FinTech companies – to make structural adjustments to the business processes and infrastructure, thereby cutting costs and achieving economies of scale, or responding better to customers’ needs by means of detailed analysis based on Big Data or artificial intelligence. Finally, the transition to the “new normal” of a digitised financial sector is proceeding apace, and in the short term requires financial institutions to make substantial efforts and invest heavily in order to achieve the necessary transition to the digital age in good time.

35. Brexit will considerably reduce the size of the European internal capital market. The departure from the EU of the largest, most liquid and most sophisticated capital markets could also have a disruptive effect. The need to make rapid and substantial progress on a Capital Markets Union under EU law is therefore all the more pressing. The Capital Markets Union remains a crucial component of the current institutional structure of EMU, offering the prospect of a more balanced and diversified financial sector where, alongside the banks, the capital markets can play their full part in financing the economy – especially innovations – and in spreading the risks more effectively. Despite its many adverse effects, Brexit ultimately also offers some great opportunities for the Capital Markets Union. The relocation of European head offices and the business of a range of major financial institutions from the United Kingdom to the continent could generate the volumes needed to develop strong and sophisticated capital markets in the EU. For the Belgian financial market, that means the arrival of a number of major (re)insurers and payment service providers subject to the Bank’s direct supervision. In this context, it is also important to map out and, if need be, remove the obstacles that are still holding back the development of a diversified financial sector.

*A balanced financial system with sound capital markets is essential for spreading the risks effectively and supporting innovation*

36. Full implementation of the Paris Climate Agreement entails substantial additional investment and major technological innovations providing efficient support for the transition to a low-carbon and more sustainable economy. Funding that transition remains a significant challenge for the financial sector. However, this transition also carries financial risks that the supervisory and prudential regulatory authorities need to duly take into account in their policy. The Bank endorses the EC’s recent Sustainable Finance initiatives, aimed at developing a transparent market for “green finance” on the basis of harmonised definitions (the taxonomy) of “green” assets and a better flow of information on actual climate risks (disclosure). The prudential treatment of climate-related risks – such as transition risks – is currently being examined. In that regard, it is necessary to recognise that specific prudential treatment – be it in the form of lower prudential requirements for green assets such as the green supporting factor, or a stricter regime for assets that negatively impact the climate, such as the brown penalising factor – must always be based on the real risk profile of the underlying assets.

37. Finally, the financial sector must respect the highest standards and best practices in regard to money-laundering and terrorist financing (AML/CFT). That is actually in the sector’s own interests, too. Infringements of the relevant legislation – as observed for a few European banks that have a systemic impact – could have significant prudential implications owing to the possibility of tough sanctions or a loss of confidence in the institution and reputational damage. Since 2016, the Bank has stepped up resources for AML/CFT supervision and devised a new framework for risk-based supervision. Coordination between all the supervisory authorities concerned – both prudential regulators and those

*Maintenance of the highest standards must be the guiding principle for the financial sector in the 21<sup>st</sup> century*

responsible for AML/CFT supervision – also ought to be strengthened at European level to permit better monitoring of such practices, which frequently operate across borders. In that context, the Bank endorses the EC's recent proposals for a new framework for coordination – featuring a key role for the EBA – between the AML/CFT supervision authorities and the prudential regulators, including the single supervisory mechanism (SSM).

### 3. Inclusive growth in Belgium: strengthening growth potential while ensuring the sustainability of public finances

#### *Job creation was very strong again in 2018, even though growth was relatively weak*

38. In Belgium, too, the economic recovery continued in 2018. The Belgian economy grew by 1.4%. Although that was 0.3 percentage point below the 2017 figure, the slowdown was less marked than in the euro area, where economic activity had been propelled by the strong export boost in 2017. That export growth was due mainly to capital goods and transport equipment, destined primarily for China and other emerging economies, a combination of goods and markets that affords less support for Belgian exports. Now that the effect of the surge in exports by the euro area has faded away, growth in Belgium is less divergent. However, Belgium has also seen a slowdown in exports of goods and services against the backdrop of weakening world trade. Export growth was down from 5% in 2017 to 3.5%.

39. Growth was once again particularly job-intensive. With a rise of 1.2% – corresponding to 59 000 new jobs – the expansion of employment in 2018 almost equalled that for economic activity. In a favourable business climate, the policies pursued in recent years have been very successful in creating jobs. They aimed to stimulate demand for labour via wage moderation and reductions in employers' contributions, and to support the labour supply by reductions in taxation, the extension of working life and the activation of job-seekers. The experience of recent years shows that expansion of the labour supply may well be accompanied by a fall in unemployment. Over the past four years, the labour force has expanded by around 120 000 units. More than half of that increase is due to a rise in the participation rate, encouraged by government policy. Nonetheless, over the same period, the numbers of unemployed dropped by around 100 000 units, bringing the unemployment rate down to 6%, the lowest level since the 1970s. In all, no fewer than 220 000 jobs were created in Belgium in the space of four years. And, unlike what has happened in the past, jobs have mainly been created in the business sector rather than in the public sector or in state-aided sectors.

*Expansion of the labour supply may well be accompanied by a fall in unemployment*

40. However, the full impact of the job creation has yet to be felt, as domestic spending growth has not yet caught up with that in the euro area. In 2018, the growth of private consumption in Belgium was again lower than in the euro area and the three main neighbouring countries. In Belgium, consumption grew by 0.8%, or about half a percentage point below the figure for the euro area. Such a gap has been apparent for several years now. Initially, the policies concerning wage moderation and the restoration of competitiveness depressed households' disposable income. That factor has now disappeared so that the gap in relation to the euro area has narrowed, though it has yet to be eliminated altogether.

41. Despite the strong job creation, the growth of disposable income and private consumption has remained modest overall during the past two years. For one thing, pay rises excluding wage indexation tended to be small in 2017 and 2018, according to national accounts available to

date. Also, based on the same data, the wage drift worked out smaller than usual, as job creation largely concerned young people and less-skilled workers whose wages are generally lower. That exerts automatic downward pressure on the movement in average wages. Higher oil prices also eroded purchasing power, as there is a time lapse before their impact is reflected in indexation. Finally, it seems that consumption lagged behind the growth of disposable income. The savings ratio has effectively edged upwards in the past two years. These factors may also explain why there has only been a moderate increase in investment in housing construction and renovation.

42. In the future, various factors could bolster purchasing power and domestic expenditure. The drop in oil prices at the end of 2018 and a further cut in taxes on labour incomes in the context of the tax shift are the most salient points here. The nascent dynamism of the labour market could likewise make a contribution. In the case of new recruitment, fixed-term contracts have been more prevalent than in the past. The move to scrap the trial period for a newly concluded employment contract has only fuelled this tendency. Though fixed-term contracts are initially a source of uncertainty, they often seem to form the gateway to a more permanent job. In addition, now that labour market pressures have increased and growth will be based more on productivity gains, pay rises should support disposable income. However, in order to preserve the favourable labour market dynamics, it is important for the pay rises, agreed within the negotiating framework between the social partners, to take sufficient account of the underlying fundamentals. For example, labour market shortages and productivity gains vary between businesses, sectors and sub-regions, and according to the skills in demand. In taking that into account, wage-setting will better reflect where the best job opportunities are and could also contribute to labour mobility. In addition, it is incumbent upon the social partners to consolidate the progress achieved in terms of cost competitiveness, in accordance with the Law on the Promotion of Employment and the Preventive Safeguarding of Competitiveness.
43. 2018 was also the year in which the constraints on the Belgian economy became more apparent. Four aspects immediately come to mind: the labour market shortages, weak productivity growth, the inadequacy of the infrastructures and the incomplete fiscal consolidation. Eliminating those constraints is the key to stronger growth, more social cohesion and greater sustainability. It would also respond to some of the challenges thrown up by the ageing population. That will also boost the Belgian economy's ability to adapt, enabling it to take full advantage of the growth opportunities that arise while making it more resilient in the face of potential risks and uncertainties.

*It is important for pay rises to take sufficient account of the underlying fundamentals*

*Improving the quantity and quality of the labour supply will boost production capacity and enhance social cohesion*

44. As a result of the strong job creation in recent years, the proportion of Belgians in the 20-64 age group in work is now 70%. That is 2 percentage points higher than at the start of the economic and financial crisis. Nonetheless, the under-used labour potential is still significant. Mobilisation of that potential could create considerable scope for the economy's production capacity and for per capita incomes. It could also have a positive impact on public finances, by increasing revenue while also reducing recourse to replacement incomes. More specifically, it could offset the downward impact of population ageing on the labour supply. Even though the labour reserve is still substantial, the number of vacancies increased in 2018 and businesses had to curtail production because they did not have enough of the right workers. The list of shortage occupations reveals that it is not only highly-skilled personnel who are scarce, but also

*The proportion of Belgians in the 20-64 age group in work has meanwhile risen to 70%. That is 2 percentage points higher than at the start of the crisis*

many operatives such as cleaners, waiters, technicians or maintenance mechanics. Boosting the labour supply while at the same time matching it more closely to the needs of businesses could therefore have a positive impact on growth straightaway.

45. The unemployment rate is usually mentioned in this connection because it measures the size of the labour reserve already present on the labour market. There are wide variations between the Regions here. In Brussels, the unemployment rate is still over 13 %, and it hovers around 9 % in Wallonia. In Flanders, it is 3 %, so that is the Region where firms are most affected by the tight labour market. In any case, there is a need for greater labour mobility and intensive support and guidance for job-seekers. In addition, within the framework of the social dialogue, wage-setting needs to take sufficient account of the geographical variations on the labour market. Furthermore, the Regions must make maximum use of their extensive socio-economic powers to address the specific challenges confronting them.

46. Owing to these variations in unemployment rates between the Regions, there are also considerable divergences in the employment rate, which expresses the numbers in work as a percentage of the population of working age. The participation rate, which measures the number of persons on the labour market, is also relatively low in each Region. Even in Flanders,

*There are too few people on the labour market, while the probability of finding a job quickly has seldom been as high*

where the rate is highest, it is lower than in the EU and even lower in relation to that in the Nordic countries, which perform well in that respect. There are too few people on the labour market, while the probability of finding a job quickly has seldom been as high. It is therefore necessary to make work sufficiently worthwhile. That was also one of the aims of the tax cuts under the tax shift. Those reductions are proportionately larger where they have the greatest impact, namely in the case of the lowest incomes. By allowing the labour market shortage to play a role in determining employment conditions,

the professions facing labour shortages may actually become more attractive. Special attention should also focus on the groups where occupational inactivity is highest. For instance, women are still under-represented on the labour market, although this is less and less the case for younger cohorts. Moreover, the under-utilisation of female potential also takes another form: women generally have fewer opportunities for promotion during their career. That is not only socially unacceptable, it also implies a waste of talent. In the 55-64 age group, the participation rate of both women and men is still low in comparison with rates in other European countries, although it has risen in recent years as a result of the policy on extending working life. A further improvement is in prospect, since the reforms in place take time to exert their full effect. Their impact will be all the greater as the planned reforms are fully implemented, and their success will be scrutinised at every stage of working life. Factors in play here include not only the duties assigned to older workers and their working time regime, but also the fact that remuneration in Belgium is largely determined by seniority without always being matched by a proportional rise in productivity.

47. Moreover, there is still a large group of vulnerable young people who struggle to join the labour market. They include many low-skilled and young people for whom discrimination based on their

*There is still a large group of vulnerable young people who struggle to join the labour market*

origin – or that of their parents – is often an additional handicap. Education and training have a key role to play here. They need to prepare young people properly, develop their talents to the full, and prevent them from dropping out. For some groups, further development in the form of apprenticeships combining work with study may be a solution. Elsewhere in Europe, these systems are successful in easing the transition between school and work.

Early initiation into the latest ICT developments or training in solution-seeking processes is crucial, as are language skills – including competence in the other national languages. Scientific and technical courses that offer good job prospects merit special attention.

That is another area where women are still under-represented. Finally, lifelong learning is the key to successfully extending working life and taking maximum advantage of the rapid changes in technologies, working methods and forms of organisation. Getting more people into the labour market and keeping them there will not only boost the economy's production capacity, it is also the best way to achieve greater social inclusion.

### *Boosting productivity: a question of innovation and resource mobility*

48. Another reason why Belgian growth is relatively weak – and could stay that way, according to the estimates of potential growth – is the meagre rise in productivity. Recent years have brought hardly any productivity gains on a macroeconomic scale. That is partly the corollary to the strong job creation, which has a normal, transient downward effect on productivity growth but in principle ensures that future productivity gains will have a greater impact as more workers will share in them. The bigger the gains, and the more widely they are distributed, the greater that effect will be. However, in practice productivity growth is often concentrated on a small number of efficient firms, because they benefit from strong innovative activity in certain sectors, for instance, and world-renowned research centres in Belgian universities. International companies can also take advantage of innovations in other group entities. That is why openness to trade and direct investment is so important.
49. However, the wider distribution of productivity gains throughout the economic fabric is not sufficiently developed in Belgium. One of the reasons is that resources cannot be sufficiently readily transferred from less productive to more productive activities. Both within firms and on the labour market, inflows and outflows are smaller than elsewhere in Europe. Scope for the appropriate transfer of resources will not only boost productivity, it will also ensure that the economy can achieve transitions more readily, that the growth opportunities can be fully exploited and that the economy is better placed to tackle any setbacks. In view of the implications of increasing protectionism or Brexit, the top priority must be to promote openness to trade on the international stage. That said, a small country like Belgium will above all need to ensure that flexibility, adaptability and innovation ultimately make up for the sales which may be lost on markets under threat.
50. Digitisation provides an excellent opportunity for achieving productivity gains. Existing production processes become more efficient and new products, services and working methods are developed. Making full use of that opportunity does not only imply creative businesses, it also requires an appropriate framework of regulations, particularly for the new production and consumption patterns introduced by e-commerce and the "sharing economy". The concept of competition also needs to be interpreted in the light of these new developments. The objective must be to foster a level playing field. Moreover, competition has only made modest progress on some of the more traditional services markets in Belgium. Yet a lack of competition implies high prices and weak productivity growth. It is also striking to note that e-commerce is still rather under-developed in Belgium. Consequently, a major share of the value added generated by this type of consumption goes abroad and its potential as a distribution channel for exports is not being exploited enough. Digitisation will also make a clear impression on the labour market. Some jobs will disappear completely, while others will be developed because they are able to reinforce the benefits of digitisation. Equipping people with the skills to take part in the far-reaching digital transition is therefore a win-win strategy. It maximises productivity growth while limiting the detrimental effects on the labour market. Investment in training should be a key concern for businesses and workers alike.

*Both within firms and on the labour market, inflows and outflows are smaller than elsewhere in Europe*

*Equipping people with the skills to take part in the far-reaching digital transition is a win-win strategy*

## *Improving the infrastructure: reconciling economic and environmental considerations*

51. To enhance the Belgian economy's performance, it is also necessary to improve the quality of infrastructure. Here, too, the constraints became more obvious in 2018. The growing traffic congestion and uncertainty over electricity supplies are the prime examples. Traffic jams are a considerable cost factor for firms, reducing their productivity and limiting their operating radius. As the Belgian economic fabric acts as a major link between the large North Sea ports and the European hinterland, it is particularly sensitive to the mobility problem. It is becoming ever more difficult for workers to get to work on time, and commuting eats into their free time. The associated costs could thwart the efforts to expand the labour supply. Traffic jams are also a major source of pollution. The energy supply problems, too, are already having a detrimental impact in the short term. Higher electricity prices drive up inflation, although the effect was small in 2018. Initially, that depresses purchasing power, but later, as the higher prices are reflected in indexation, it becomes a cost-increasing factor for businesses, on top of the higher bills for their own electricity consumption. Apart from the measures taken to avert the risk of an interruption in supplies, it is necessary above all to devise a longer-term strategy. That would make it possible to manage the planned diversification out of nuclear power and ease the transition to a low-carbon and more sustainable economy while containing the costs entailed. Tackling these constraints also makes it more attractive to invest in the Belgian economy, and that in turn augments growth potential in the longer term.

52. There are increasing signs of pressure on the housing market, too. Population growth together with the trend towards smaller family units is driving up demand for housing. Although the supply is not very elastic in the short term, housing construction and renovation of existing homes can help to improve the situation. However, that process is hampered by the intrinsic scarcity of building land. It is therefore no coincidence that the price of building plots has soared in recent decades, and that accounts for much of the rise in house prices. This problem does not only create vulnerabilities within the financial system: the affordability of housing is above all a significant economic and social challenge. Moreover, the way that Belgians live takes up a great deal of available space. That is why there are more and more initiatives aimed at concentrating housing units in the centre of towns and villages. That could reduce the urgency of the mobility issue. That approach would also result in homes consuming less energy and would require fewer network infrastructures. Nonetheless, this process could further exacerbate the shortage of building land unless the number of homes per plot is increased at the same time. Boosting the proportion of rented housing and cutting the transaction costs entailed in house purchases could help to reduce the share of commuter traffic in labour mobility. Space is also scarce: more efficient use of it makes it possible to reconcile economic and environmental considerations.

*Space is also scarce: more efficient use of it makes it possible to reconcile economic and environmental considerations*

53. In order to improve the overall quality of the infrastructure and make Belgium more attractive to international investors, a National Investment Pact was launched. An initial report was submitted to the various governments in Belgium in September 2018. It lists six priorities where the need is great: the digital transition, cyber security, education, health care, the energy transition and mobility. Not only must the governments provide scope for such investments in their budget; public-private partnerships must also channel Belgium's abundant supply of savings into these forward-looking investment programmes. Making the necessary changes is a lengthy process. The various public authorities in Belgium therefore have a key role to play in coordinating a process which, by establishing appropriate incentives, steers private initiatives and behaviour patterns in the right direction. Those authorities must also keep watch

*Belgium's abundant supply of savings must be channelled into forward-looking investment programmes*

over the social dimension of these transitions. This process encompasses numerous spheres of action and can only succeed if the various competent authorities endeavour to achieve maximum consistency via mutual coordination.

### *Efficient government and sound public finances*

54. The Belgian authorities' budget deficit came to 0.7 % of GDP, slightly less than the 2017 figure. The public debt declined by 1.5 percentage points to 102 % of GDP. Although the deficit has been reduced considerably in recent years and the debt dynamics were reversed several years ago, the consolidation of public finances has not yet been fully achieved. Further progress towards a structurally balanced budget is needed without delay, in accordance with the rules of the Stability and Growth Pact. The Pact also offers some leeway for structural reforms or for supporting public investment, although fairly limited in practice. Progress towards a balanced budget is necessary to continue reducing the public debt, which is still among the highest in the euro area. That will create a buffer and provide new scope in the budget, e.g. to attenuate the impact of future periods of unfavourable economic conditions. Reducing the deficit in a favourable economic climate is more efficient both economically and socially than if it must be done during a recession with severe pressure from the financial markets. The vicious spiral that such procyclical fiscal tightening can trigger was evident during the debt crisis in a number of euro area countries.

55. As regards the course of public finances in 2018, there are three salient points. First, the good budget outcome is due largely to an increase in corporation tax revenues. In the space of just two years, those revenues rose by one percentage point, from 3.4 % of GDP in 2016 to 4.4 % in 2018. This sharp rise is not so much due to an increase in corporate profits or to a higher effective tax rate. The widening of the tax base – notably through a cut in the notional interest tax deduction for risk capital – effectively largely offsets the reduction in the base rate from 33 to 29 % in 2018. These two factors are part of the multiannual reform of corporation tax. The increase appears to be mainly due to the change in the tax payment behaviour. The tendency to settle a larger proportion of the tax bill in the form of advance payments gave a considerable boost to revenues in the past two years, but in the years ahead that could likely imply lower revenues at the time of the final settlement. The structural starting point is therefore less favourable than it appears from the 2018 balance. In addition, there was no further reduction in primary expenditure, which actually rose again from 49.7 % to 50 % of GDP. That is due partly to the surge in local authority investment, typical of a municipal election year. However, the underlying trend is also upwards, partly as a result of ageing-related expenditure. Finally, interest charges declined to 2.3 % of GDP, primarily because of the fall in interest rates. However, future gains will need to come mainly from reductions in the actual debt, via an improvement in the primary balance.

*Further progress towards a structurally balanced budget is needed without delay*

56. The quest for efficiency is the key guiding principle for the consolidation of public finances, too. First, the government must strive for that efficiency in every aspect of its operations. That applies both to public spending and to the taxes collected. The proper collection of taxes and the battle against tax evasion and social security fraud must remain a focal point of attention. Efficient use of public resources will help to ensure the social safety net needed to accompany the many economic and social transitions. However, efficiency extends beyond the government's own activities. Appropriate economic policies and fiscal incentives encouraging a dynamic economic fabric will help to consolidate public finances. It is therefore desirable, on both the revenue and the expenditure side, to continue seeking adjustments which can support the economy's growth potential, help to achieve the energy transition, and strengthen social cohesion. In a federal

country such as Belgium, that also presupposes that the tailoring of socio-economic policies to the specific needs of the Communities and Regions is accompanied by close coordination and cooperation. That should lead to clear agreements on the allocation of the additional budgetary efforts. It should also avoid imposing an over-burdensome regulatory framework on economic life and encourage policy synergies which will ultimately benefit every Community and Region in the country.

## 4. Conclusion

57. The Belgian economy withstood the crisis relatively well and has produced a particularly strong performance in recent years in terms of job creation. In that regard, the Belgian economy benefited from the recovery in the euro area and the maintenance of a strong monetary stimulus. In addition, the substantial job creation was reinforced by the federal government's economic policy. That policy aimed to stimulate demand for labour via wage moderation and reductions in employers' contributions, and to support the labour supply via reductions in taxation, the extension of working life and the activation of job-seekers. The result was expansion of the labour supply accompanied by a sharp fall in unemployment. Altogether, no fewer than 220 000 jobs were created in Belgium in the space of four years. At the same time, the public deficit has been cut to 0.7 % of GDP and the public debt has resumed a downward trend, declining to 102 % of GDP in 2018. Nevertheless, there was no further improvement in the structural budget balance in 2018 and it did not meet the target set in the Stability Programme put forward in April. So, there is still a large, sustained effort needed to reach a structural budget surplus.
58. In the meantime, the financial sector has undergone radical restructuring and become more robust, though without any erosion of lending to businesses and households. Nevertheless, vigilance is still required in the face of the new risks which are emerging, such as the increasing private sector debt ratio, the low interest rate environment, developments concerning FinTech, cyber security, and the impact on the financial sector of global warming and the energy transition, or the measures to combat money-laundering.
59. The future progress of the Belgian economy will depend primarily on the international situation. In that regard, the uncertainties and risks increased considerably in 2018, not least as regards the continuing escalation of the trade wars, the vulnerability of the emerging economies – especially China – and the impact of a no-deal Brexit. The Eurosystem's monetary policy which, despite the start of normalisation, is set to remain accommodative for a good while, could perform a moderating role to some degree. However, it cannot eliminate the risks in themselves. Moreover, a small country like Belgium has little control over the challenges arising at global level. Continued development of its own growth potential and adaptability is therefore the key to increased growth, prosperity and social cohesion.
60. The fact that the labour market was already particularly tight in 2018 is a clear indication of the need to expand the labour supply still further. Not only must it be easier for job-seekers to gain access to an appropriate job, the number of people available on the labour market also needs to continue rising. Equipping those people with the required skills is the best way to invest in social inclusion, and that will ensure that the opportunities for innovation, particularly in the sphere of digitisation, can be used to the full. It is not only innovation itself that is important here, but also the appropriate transfer of resources from less productive to more productive activities. Productivity can be further augmented by improving the quality of the infrastructure. Dealing with traffic congestion, securing energy supplies, providing affordable housing and achieving the transition to a low-carbon and more sustainable economy represent major challenges here, and

they are also interlinked. In that regard, the government has a role to play not only as an investor in new projects but also and above all as the coordinator of a process which encompasses numerous areas of competence; it must act by providing the appropriate incentives to steer private initiatives and behaviour patterns in the right direction. Finally, the government must make progress towards a structurally balanced budget, which would speed up the reduction in the public debt. By thus creating buffers for the future, the economy will be better able to absorb any shocks and the Belgian social model will be capable of coping with the challenges associated with population ageing.

**Pierre Wunsch**  
Governor

Brussels, 30 January 2019

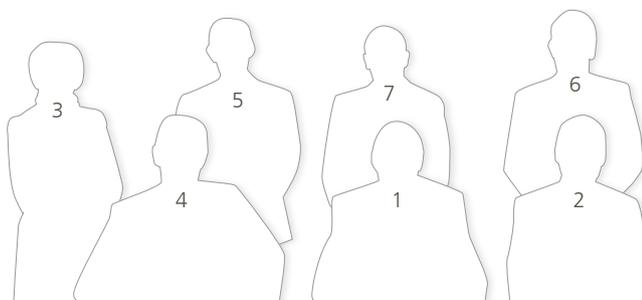




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\* Governor until 1 January 2019. Mr Steven Vanackere was appointed Directeur as of 2 January 2019.

\*\* Governor since 2 January 2019.

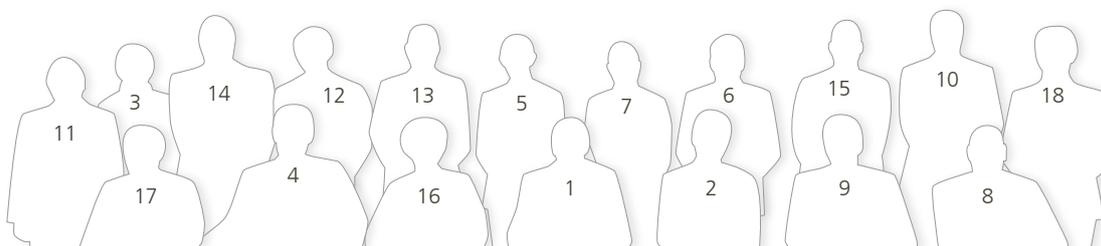
\*\*\* Marcia De Wachter ended her term as Director on 31 October 2018.



# Council of Regency



- |                                      |  |
|--------------------------------------|--|
| 1 Jan Smets, GOVERNOR *              | 10 Pieter Verhelst, REGENT                                 |
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| 6 Tom Dechaene, DIRECTOR             | 15 Danny Van Assche, REGENT                                |
| 7 Tim Hermans, DIRECTOR – SECRETARY  | 16 Fabienne Bister, REGENT                                 |
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\* Governor until 1 January 2019. Mr Steven Vanackere was appointed Directeur as of 2 January 2019.

\*\* Governor since 2 January 2019.

\*\*\* Marcia De Wachter ended her term as Director on 31 October 2018.



# Economic and financial developments



# 1. Global economy and euro area

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## 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)

	2016	2017	2018	<i>p.m.</i> Contribution to global GDP growth	<i>p.m.</i> Share of global GDP <sup>1</sup>
				2018	
<b>Advanced economies</b>	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
<b>Emerging economies</b>	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
<b>World</b>	3.3	3.8	3.7	3.7	100.0
<i>p.m.</i> World trade <sup>2</sup>	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<sup>1</sup>

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.

<sup>1</sup> 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

### Euro/sterling exchange rate



### Belgium's trade in goods with the United Kingdom (value indices (2010 = 100), averages over the past three months)



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

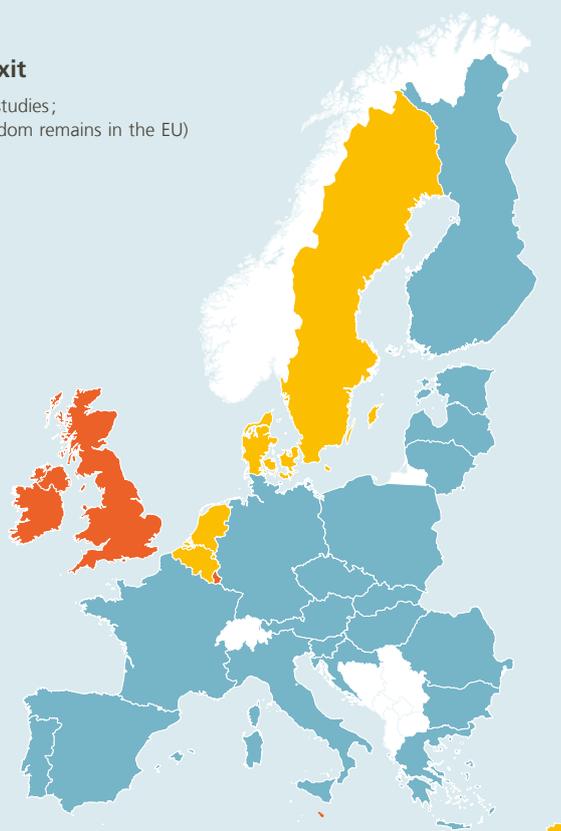
Many Belgian firms are involved in trade in goods and services with the United Kingdom. According to the 2017 VAT data, more than 41 000 firms are direct exporters and/or importers. If account is also



### 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)

- Loss greater than 1.2
- Loss between 0.6 and 1.2
- Loss smaller than 0.6



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<sup>1</sup>. 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.

<sup>1</sup> 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
<b>Total</b>	<b>18 510</b>	<b>28 400</b>	<b>5 805</b>
<b>of which:</b>			
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 online 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,

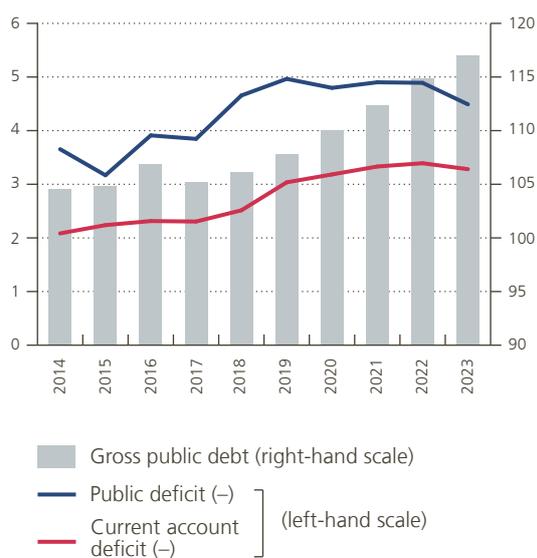
the renegotiation of the NAFTA agreement between the United States, Canada and Mexico also caused regular market disturbances.

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

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

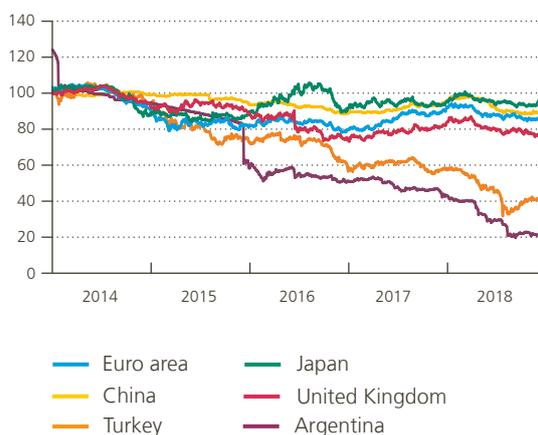
reflected the divergent growth prospects and the gap in key interest rates in relation to the United States. Nevertheless, the dollar appreciated particularly against the currencies of many emerging economies. The dollar's appreciation triggered a reversal in market sentiment regarding those countries, 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

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

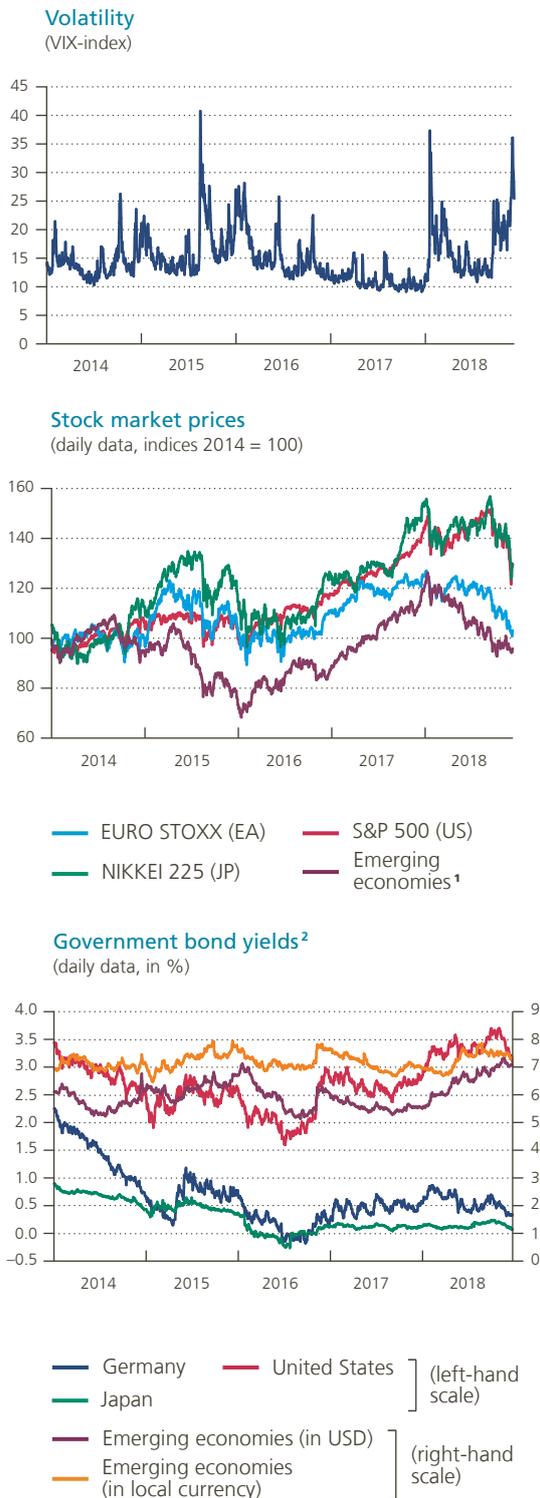
bigger-than-expected wage rises. In the emerging economies, stock markets subsequently continued falling, mainly as a result of the dollar's appreciation, combined with the vulnerabilities accumulated by certain countries, as well as the heightened trade tensions and weakening dynamism of the Chinese 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 shut-down 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<sup>1</sup>

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

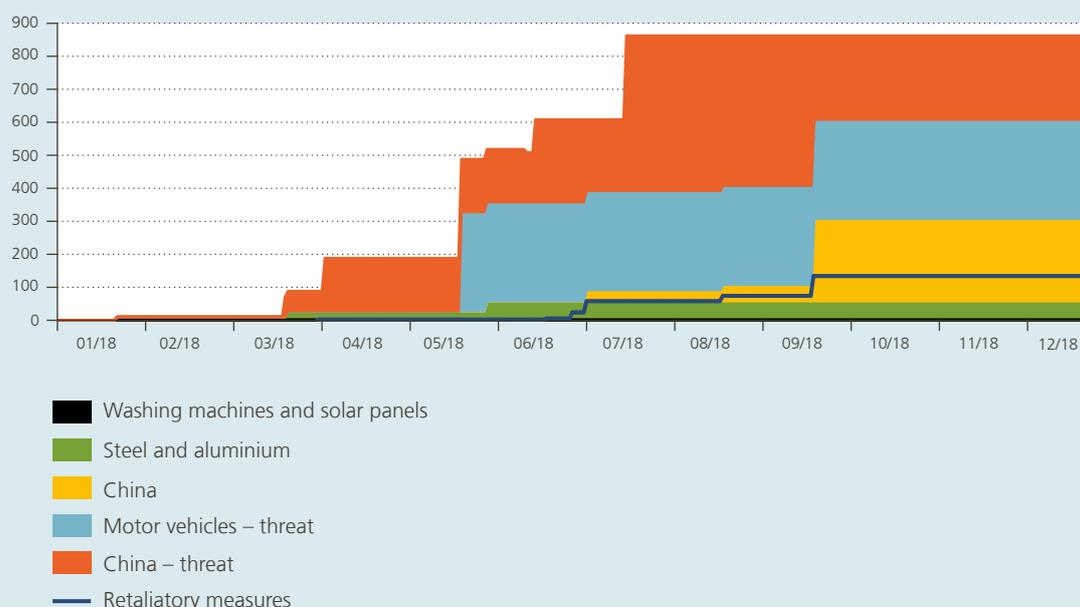
<sup>1</sup> For more details, see Cordemans N, C. Duprez and K. Kikkawa (2018), “America’s new trade policy and its impact on the Belgian economy”, NBB, *Economic Review*, September, 7-33.



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<sup>1</sup> and the IMF<sup>2</sup>, 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<sup>1</sup>)



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<sup>1</sup>. 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.

<sup>1</sup> 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.

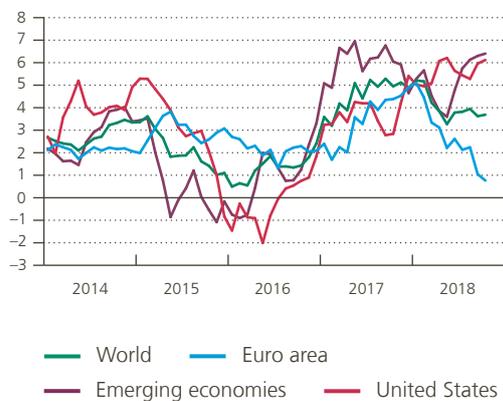
Industrial commodity prices came under pressure from the start of 2018. They declined following a fall in demand from China, which was due partly to the imposition of stricter environmental measures. Similarly, the mounting trade tensions and uncertainty over the prospects for the global economy began 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

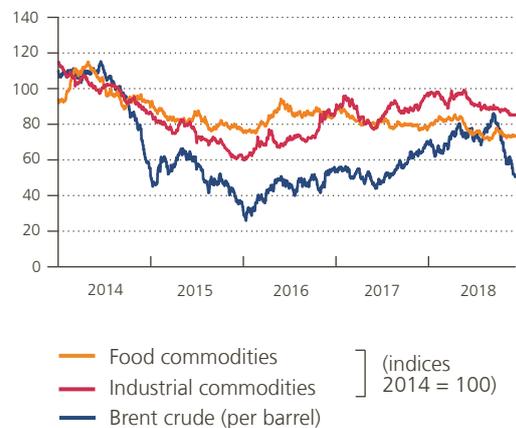
##### International trade

(seasonally adjusted three-month moving averages of export and import volumes; percentage changes compared to the previous year)



##### Commodity Prices

(daily data, in \$)



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.

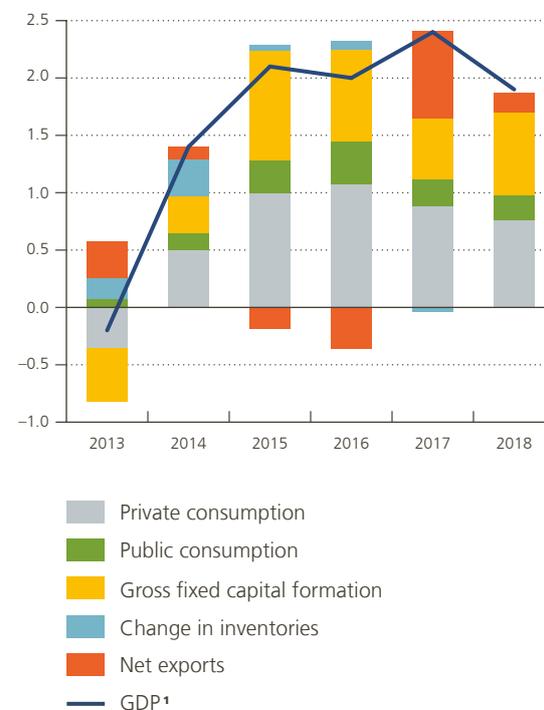
The steady investment growth is due to continuing favourable financing conditions and profitability, business confidence and – in some cases – the need to expand capacity in manufacturing industry. Productive investment in machinery and equipment recorded the strongest growth, while the increase in investment 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

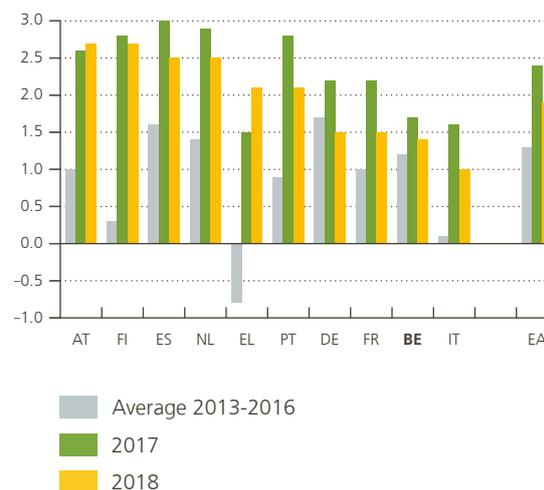
consumption. In addition, the rate of export growth slowed significantly.

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<sup>1</sup>**

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



Sources: ECB, Eurostat, NBB.

<sup>1</sup> 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.

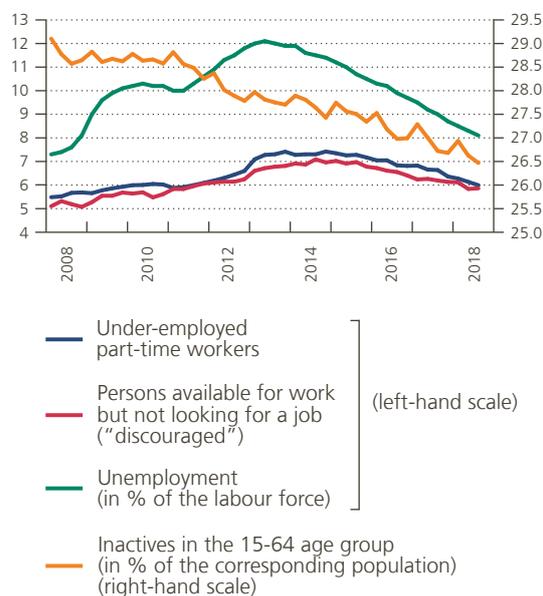
*There has been a widespread improvement in the labour market in the euro area*

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.

Chart 8

**Under-utilisation on the euro area labour market is diminishing**

(millions of persons, unless otherwise stated)



Source: Eurostat.

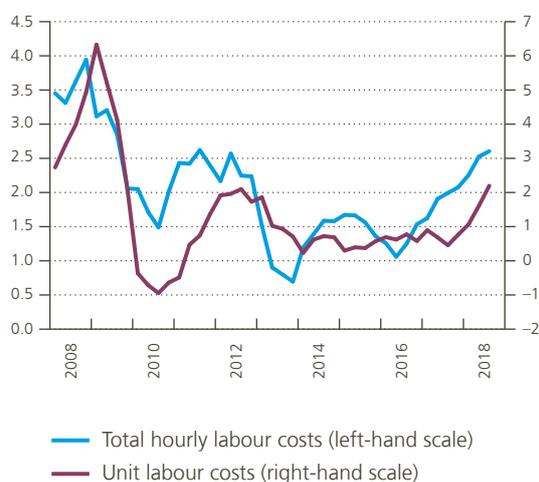


## Chart 9

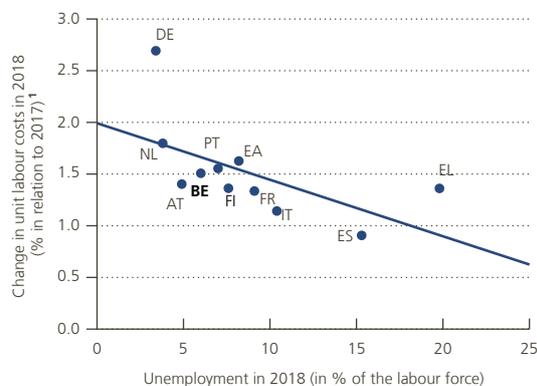
### Wage growth is accelerating but remains moderate

#### Wage growth

(percentage changes compared to the corresponding quarter of the previous year)



#### Labour costs and unemployment



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<sup>1</sup>, 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

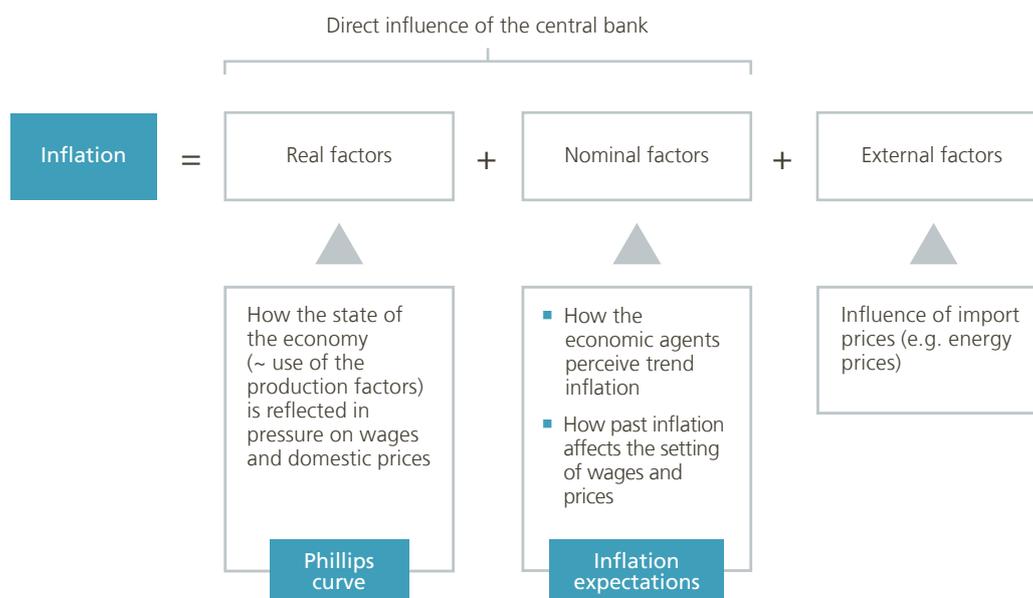
ripple effects of activity on inflation – according to the Phillips curve model – are gradually getting going (again). In that context, although firms might initially cut their profit margins temporarily in the face of rising labour cost pressures, they will eventually raise their selling prices to avoid 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

<sup>1</sup> 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 lowinflation here to stay? Insights from a time-varying parameter model with survey data*, NBB, Working Paper Research n° 355.

Chart 10

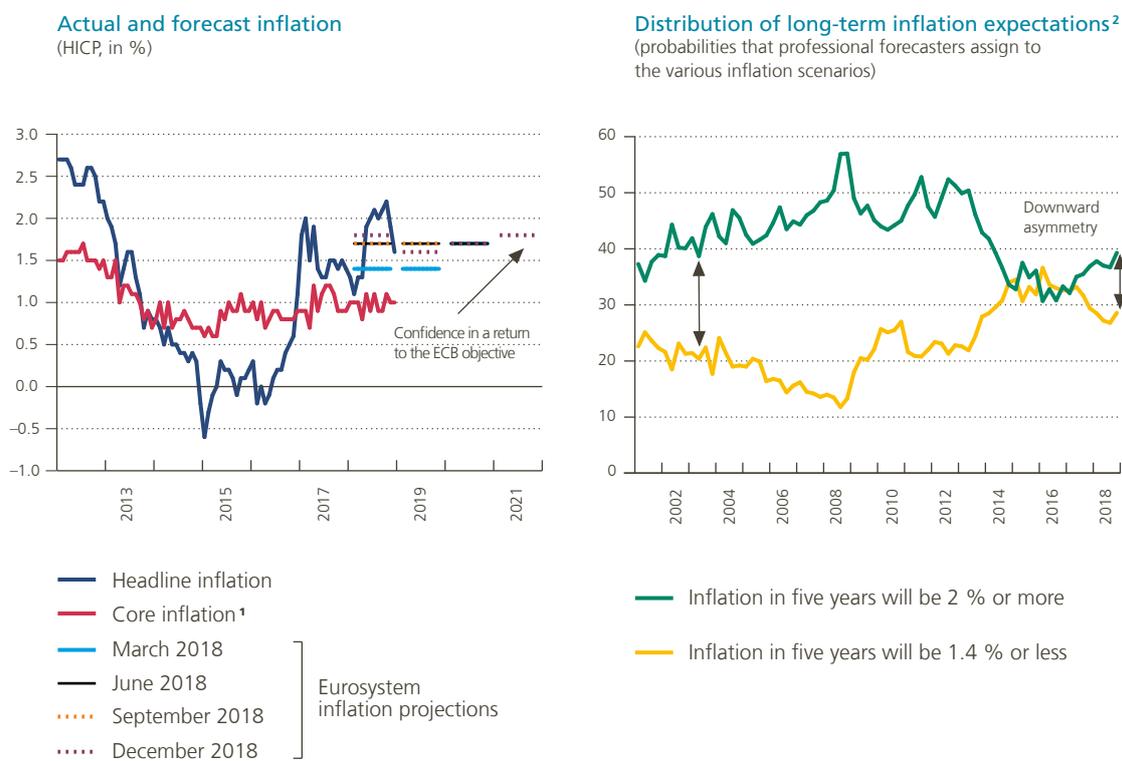
**Schematic breakdown of the inflation process**



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**

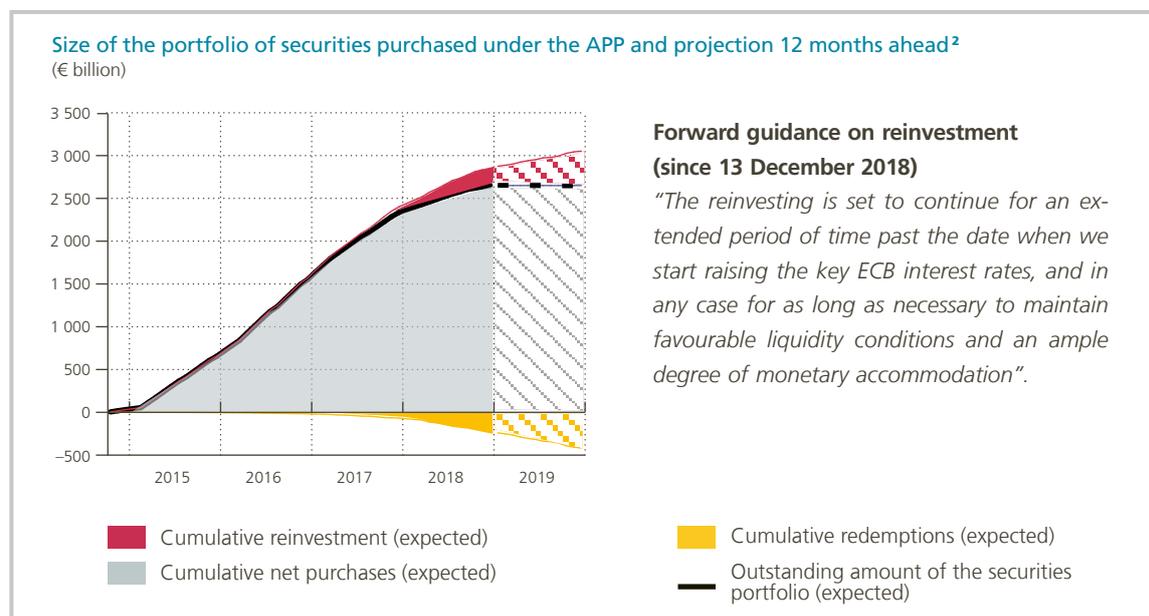
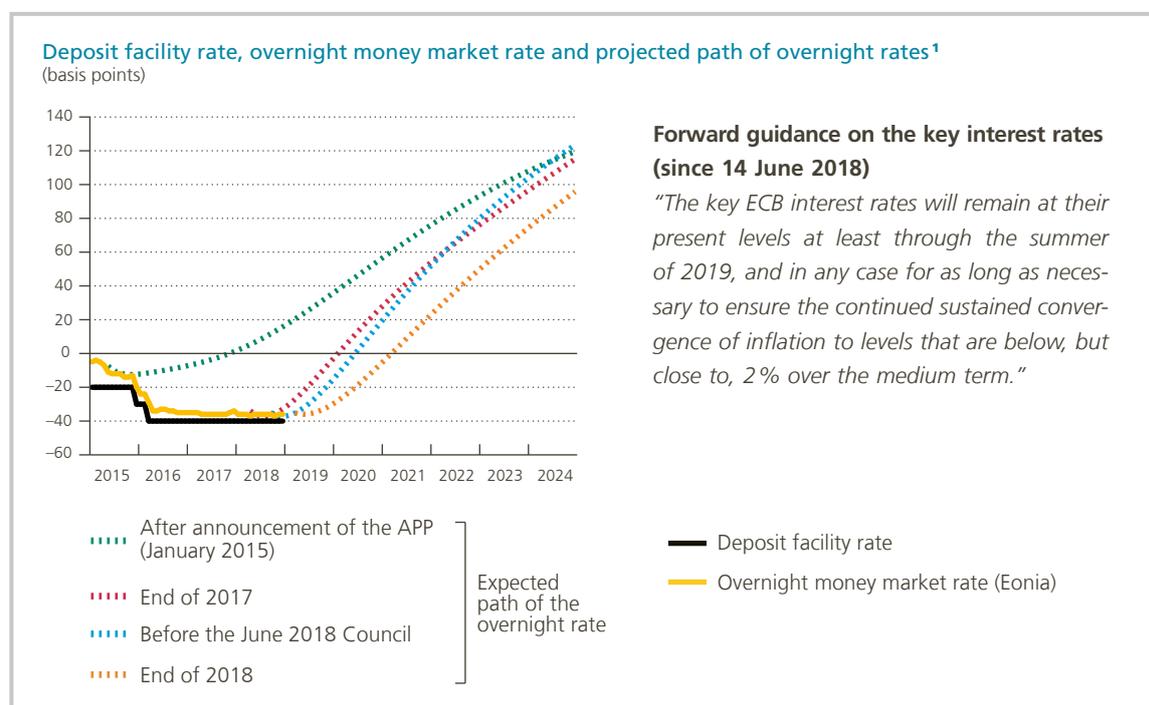
A significant degree of monetary stimulus remains necessary, given that it is taking longer than in the past for economic activity to be reflected in inflation, there are still risks associated with the downward asymmetry of long-term inflation expectations, and widespread uncertainty has resurfaced 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



*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)<sup>1</sup> and by the expiry in September of the first series of operations of that type (TLTRO I)<sup>2</sup>.

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.

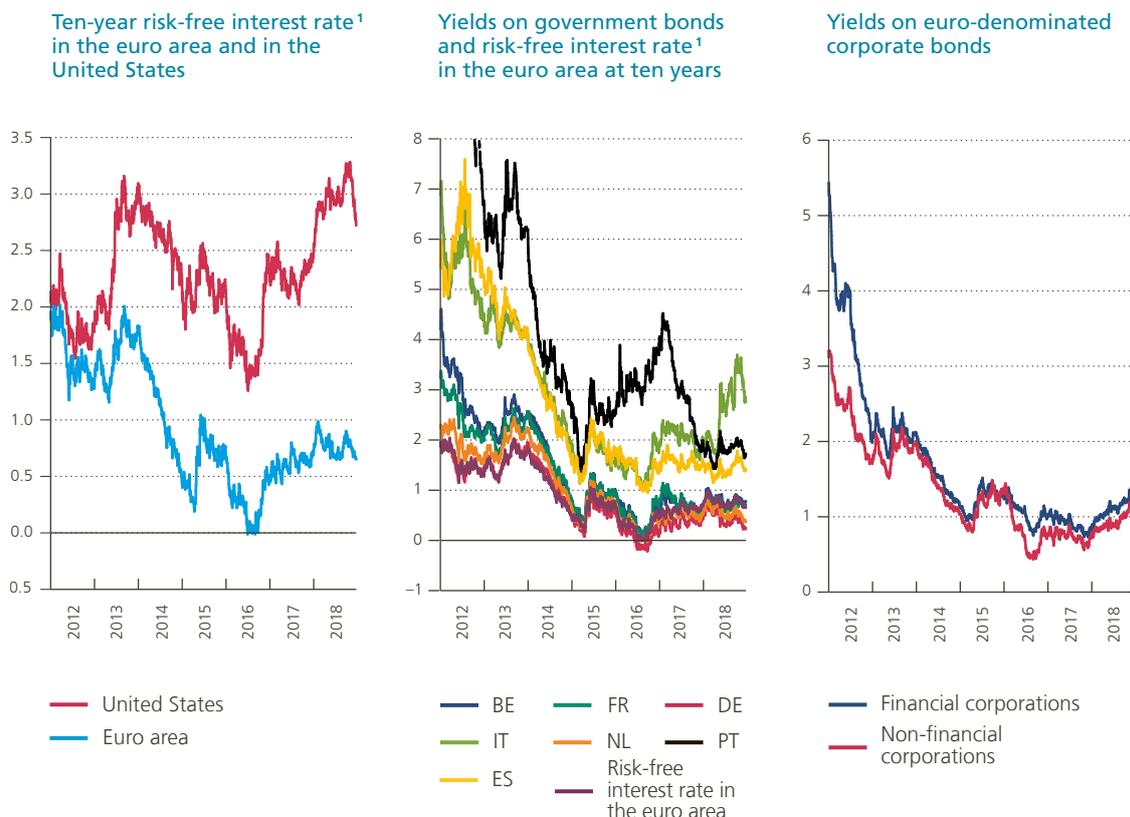
### Lending continued to pick up

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.

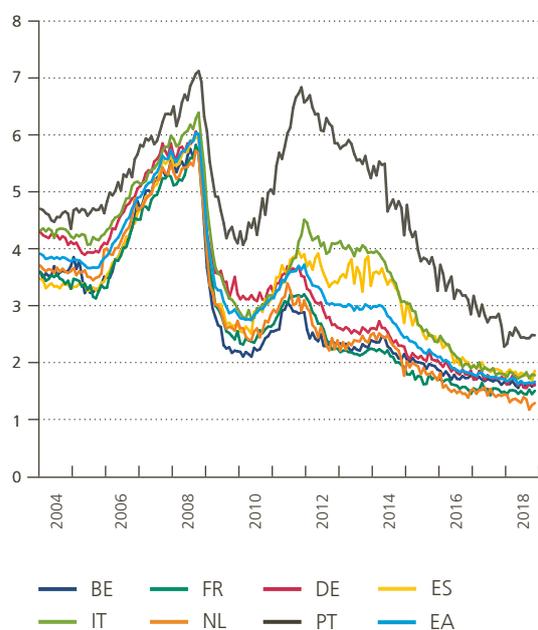
<sup>1</sup> For the euro area, Eonia swap interest rates; for the United States, interest rates on federal funds swap rates.

## Chart 14

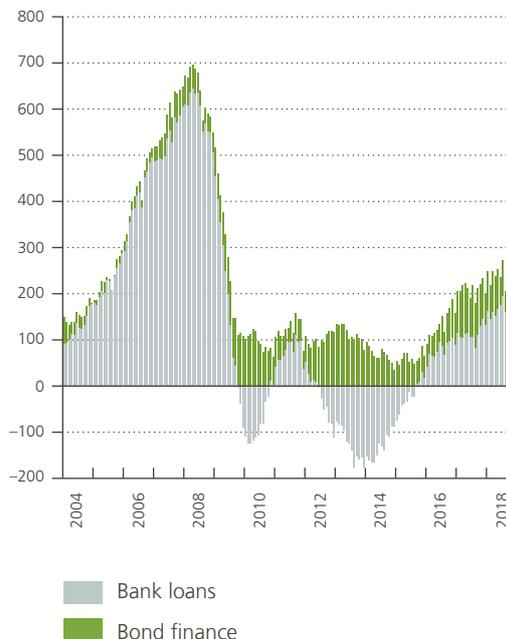
### Lending to non-financial corporations continues to pick up

(in %)

Interest rates on new bank loans to non-financial corporations<sup>1</sup>  
(in %)



Financing of euro area non-financial corporations by banks and bond issues<sup>2</sup>  
(cumulative amounts over 12 months, € billion)



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.

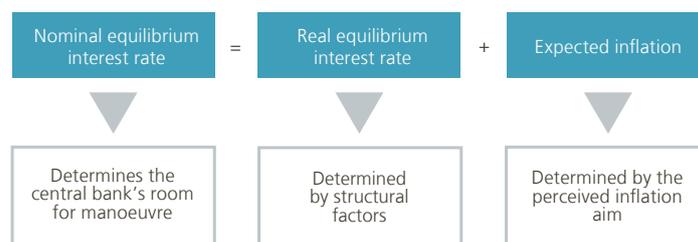
Although lending is rising steadily, it does not currently seem to harbour widespread risks to financial stability. The Eurosystem and the national authorities nevertheless continue to keep a close watch on those risks from a prudential angle. In that connection, some jurisdictions (including Belgium) 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*

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.

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

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<sup>1</sup>. NCB Governors each exercise their right to vote in person<sup>2</sup>. 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<sup>1</sup>, 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.

<sup>1</sup> 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.

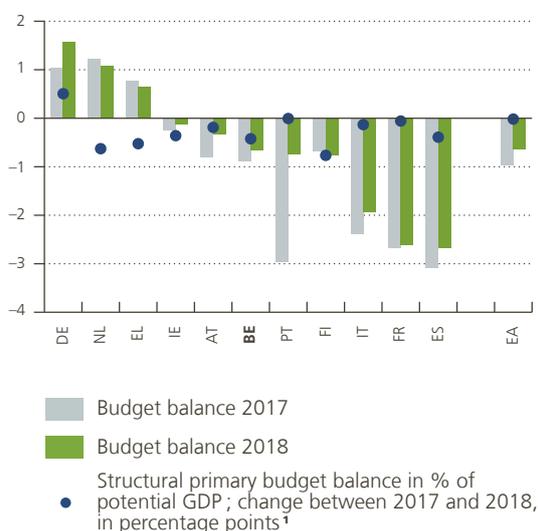
Among all the euro area countries, only Spain was still subject to an excessive deficit procedure at the end of 2018, under the corrective arm of the Stability

## Chart 16

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

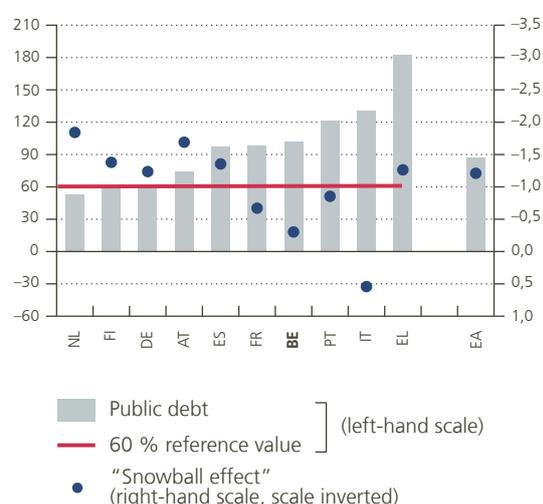
#### Budget balances

(in % of GDP, unless otherwise stated)



#### Public debt and "snowball effect" in 2018<sup>2</sup>

(in % of GDP)



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 | 73 |
| 2.2 | Moderate wage acceleration and slightly higher inflation               | 83 |
| 2.3 | Private consumption growth weaker and current account in equilibrium   | 91 |



## 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.

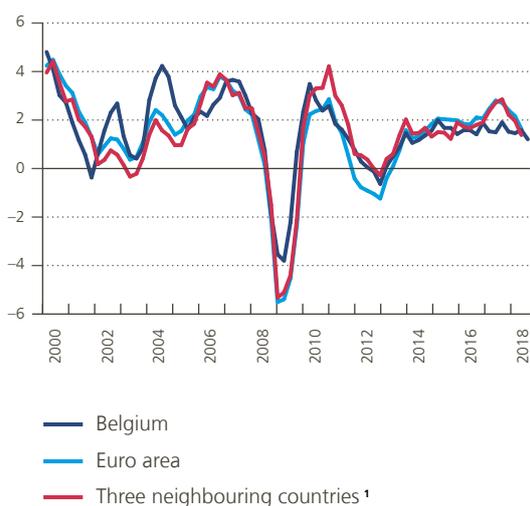
Nevertheless, growth was less robust than figures posted by the whole euro area or in Belgium’s main neighbouring countries. Over the past five years, GDP growth has lagged 0.4 of a percentage point behind average growth recorded by the euro area and Germany. The gap with the Netherlands was even slightly 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

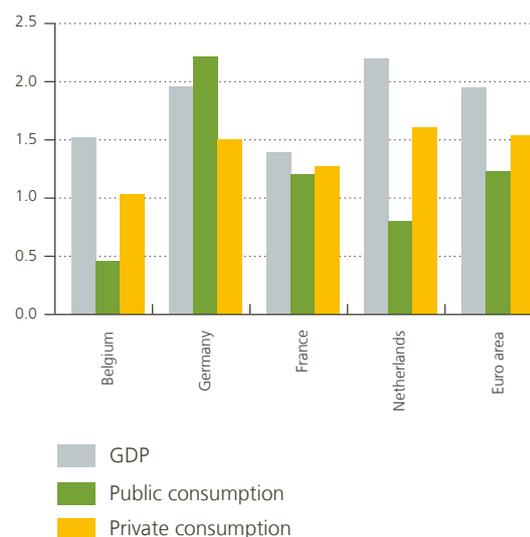
#### GDP growth

(percentage changes compared to the previous year, volume data adjusted for seasonal and calendar effects)



#### Trends in certain demand components in the 2014-18 period<sup>2</sup>

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



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.

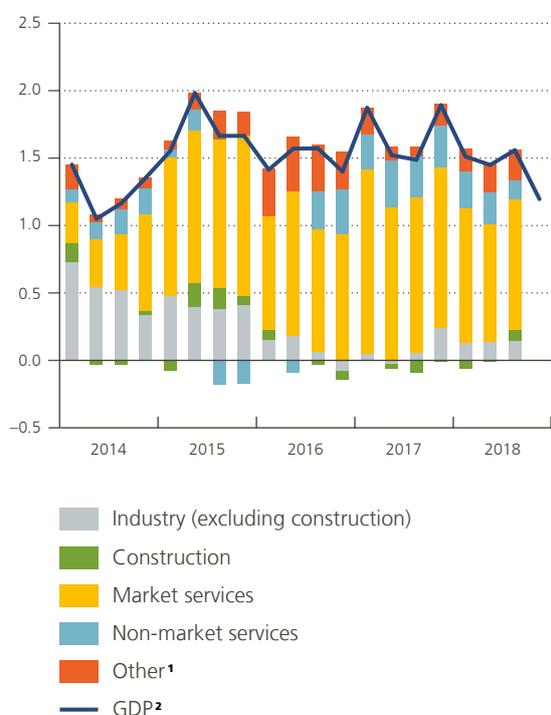
Industry (excluding construction) saw its value added – which had stalled between mid-2016 and mid-2017 – climb back up by nearly 0.9% in the first three quarters of 2018, thus contributing an average 0.1 of a percentage point to GDP growth. Meanwhile, economic activity was also up in construction.



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.

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

<sup>2</sup> 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.

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.

*Growth remains very employment-intensive*

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)

	2014	2015	2016	2017	2018 e	2018 e
						Level
<b>Total population</b>	55	59	57	54	54	11 404
Working-age population <sup>1</sup>	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 <sup>2</sup>	0	18	29	38	36	2 475
Public administration and education	7	3	3	2	1	816
Other services <sup>3</sup>	7	9	14	13	11	691
Self-employed	6	10	13	12	11	801
Unemployed job-seekers	14	-19	-26	-28	-30	495
<i>p.m. Harmonised unemployment rate<sup>4,5</sup></i>	8.6	8.6	7.9	7.1	6.0	
<i>p.m. Harmonised employment rate<sup>4,6</sup></i>	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<sup>1</sup>: job characteristics**

(as a % of the corresponding total)

	New hires			Total employment	
	2018 <sup>2</sup>	2014	2008	2017	2008
<b>Type of employment contract</b>					
Fixed	54	60	66	90	92
Temporary	46	40	34	10	8
<b>Working hours<sup>3</sup></b>					
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<sup>1</sup>, 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

**Part-time workers are still predominantly female**

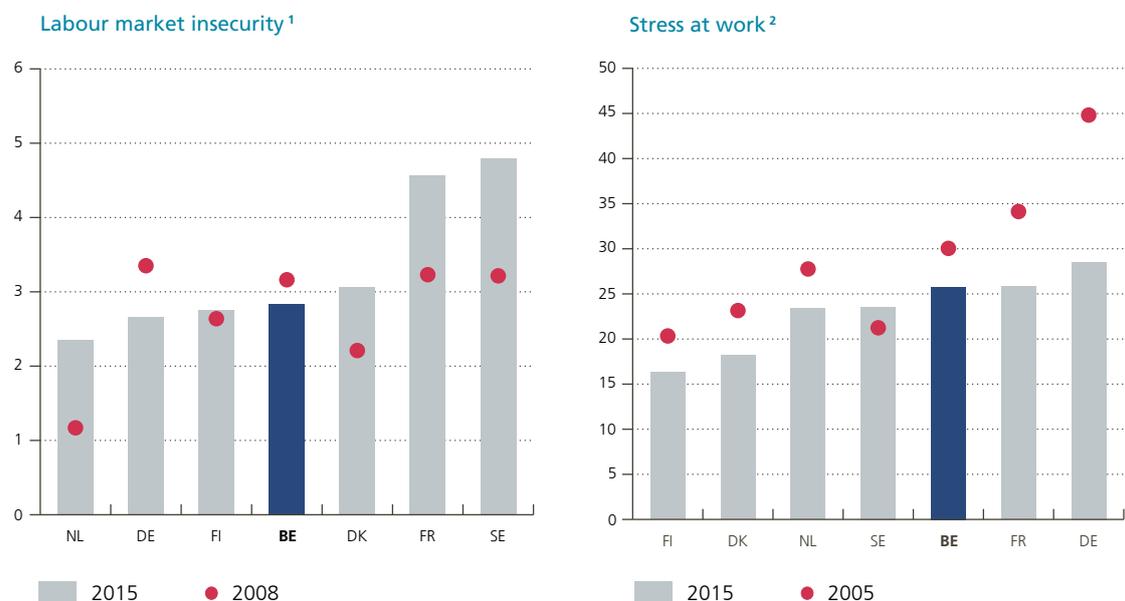
out to be a personal choice much more often, as only 7.8 % of those working part-time in Belgium report doing so involuntarily, as against 26.4 % in the EU as a whole. Moreover, this percentage is falling, which is quite the reverse of the trend across the EU. The rise in voluntary part-time working reflects a variety of schemes – time credit, career breaks and thematic leave – enabling employees to reduce their working time for personal reasons.

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.interimair2018.be](http://www.uitzendkracht2018.be/www.interimair2018.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<sup>1</sup>**

(in % of the corresponding total)

	New hires			Total employment	
	2018 <sup>2</sup>	2014	2008	2017	2008
<b>Education level</b>					
Low	21	19	24	17	21
Average	38	40	42	39	41
High	42	41	34	45	38
<b>Age</b>					
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<sup>1</sup>.

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<sup>1</sup> 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

<sup>1</sup> 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)

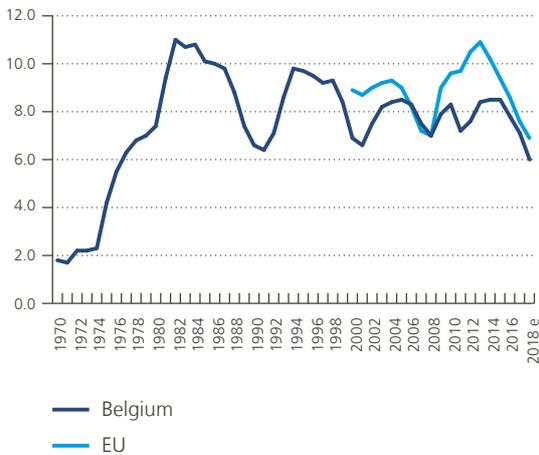


Source: NEO.

**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

*Mobility can reduce shortages*

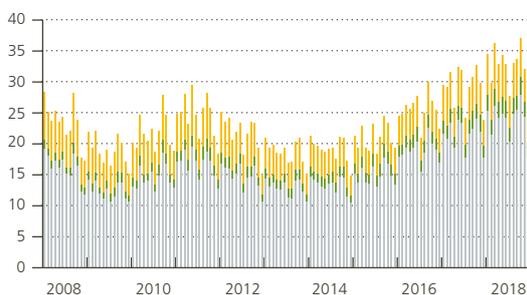
Brussels-based employees is growing much more rapidly than those from the other Regions, with a proportion of them taking advantage of the dynamic demand for workers in the outskirts of the country's capital city. The role of the regional employment services – which exchange information on vacancies 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.

**Chart 22**

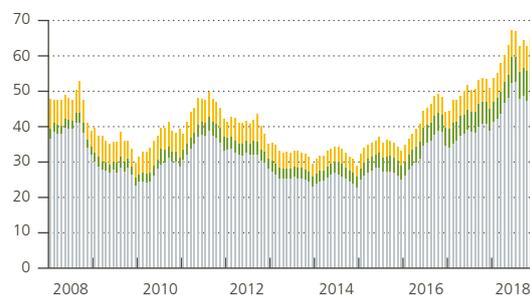
**Signs of labour market tensions have become clearer**

(vacancies reported<sup>1</sup> and unfilled<sup>2</sup> with public employment services, monthly averages in thousands)

**Vacancies posted**



**Unfilled vacancies at the end of the month**



■ VDAG (Flemish Region) ■ Actiris (Brussels Capital Region) ■ Forem (Walloon Region)

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 <sup>1</sup>	0.0	0.0	0.0	0.2	0.4
Indexation	0.8	0.1	0.5	1.6	1.7
Wage drift <sup>2</sup>	0.5	0.2	0.7	-0.1	0.2
Employers' social contributions <sup>3</sup>	-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

### *Employers opting for alternative types of compensation*

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.

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

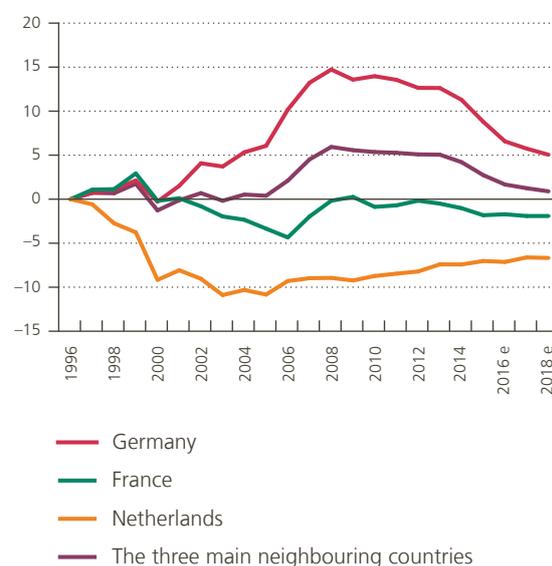
The interprofessional wage negotiation process in Belgium is informed by a comparison of trends in hourly labour costs in Belgium with those for the country's three main trading partners. According to the arrangements laid down in the 19 March 2017 Law amending the 1996 Law on the Promotion of Employment 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<sup>1</sup> since 1996 in the private sector, in %)



Source: CEC.

<sup>1</sup> 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.

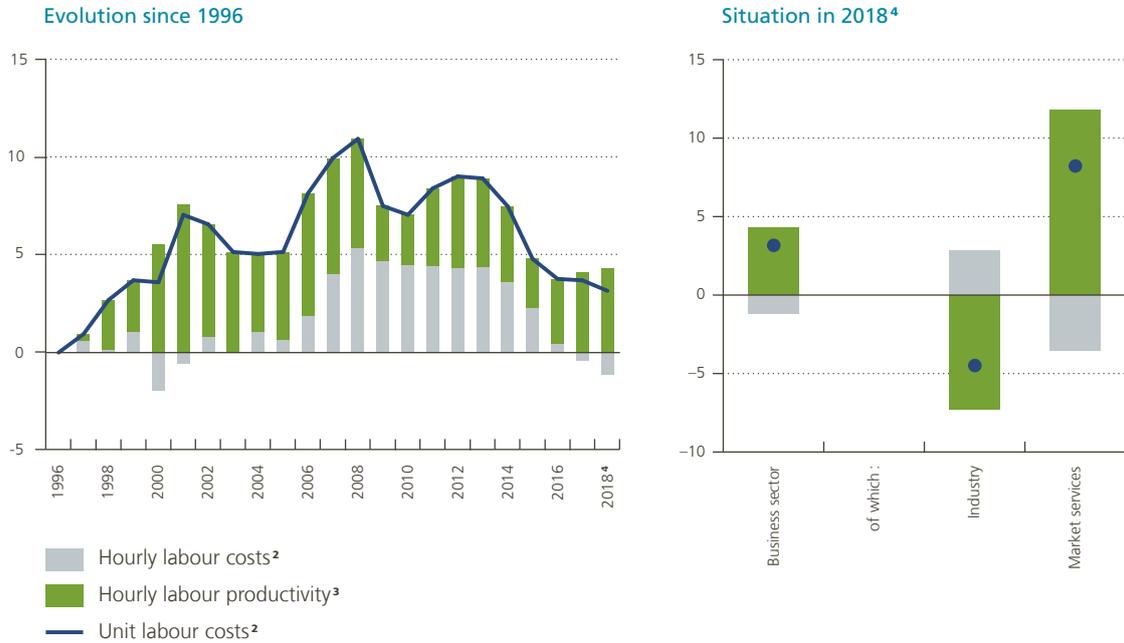
The amended Law of March 2017 also stipulates that the CEC should calculate an absolute wage gap – comparing wage levels in Belgium with those in its neighbouring countries – in addition to a historical gap, i.e. the wage gap relative to the three neighbouring countries before the 1996 employment and 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<sup>1</sup>, in %)

Compared with average for three main neighbouring countries



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)

	2015	2016	2017	2018	<i>p.m.</i> Weighting 2018
<b>Total</b>	0.6	1.8	2.2	2.3	100.0
<b>Underlying inflation</b>	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
<b>Food</b>	1.8	3.1	1.4	2.7	21.3
<b>Energy<sup>1</sup></b>	-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
<b>Contribution to total inflation<sup>2</sup></b>					
Regulated prices <sup>3</sup>	0.4	0.3	0.3	0.3	13.7
Levies on energy and food	0.4	1.0	0.4	0.1	-
<b><i>p.m.</i> Health index<sup>4</sup></b>	1.0	2.1	1.8	1.8	-

Sources: Eurostat, Statbel, NBB.

1 Including solid fuels.

2 In percentage points.

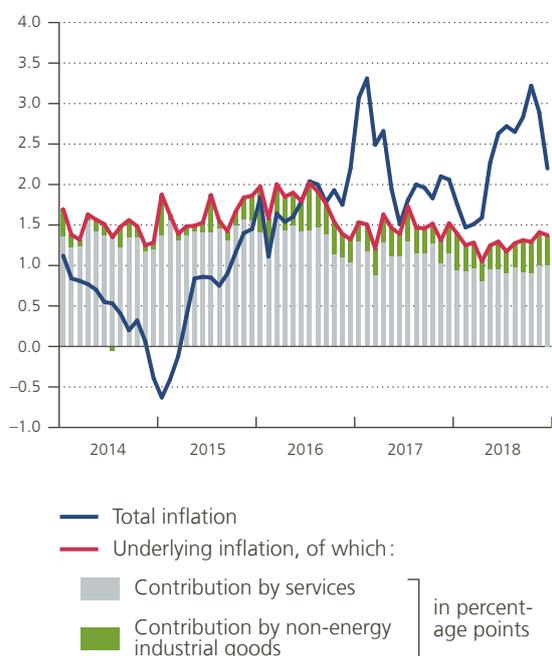
3 Eurostat classification.

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.

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

*Slightly higher inflation due to food prices*

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.

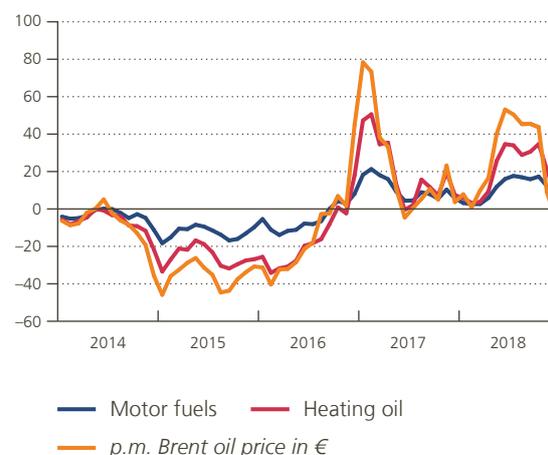
### Energy inflation fluctuated significantly in 2018

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)

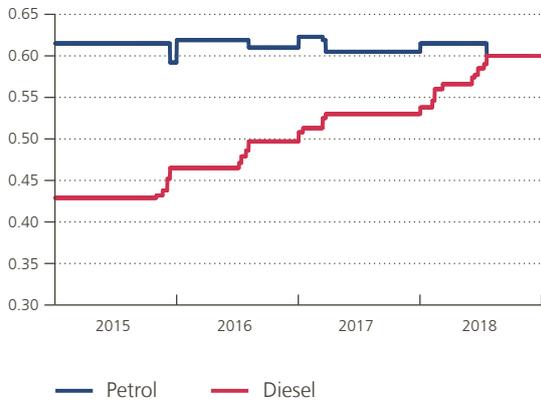


Sources: Eurostat, Thomson Reuters.

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*

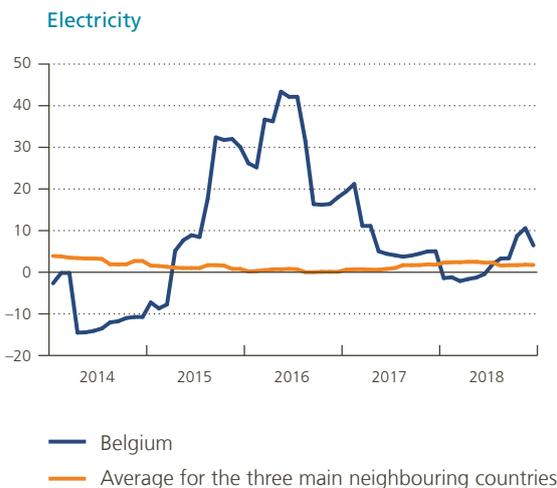
In the summer of 2018, the maximum price for diesel exceeded that of petrol for the first time, while, at € 1.42 a litre, diesel prices at the pump were also marginally higher than those for petrol. Diesel prices rose three times as fast as petrol, having still been below petrol prices in 2017. Excise 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

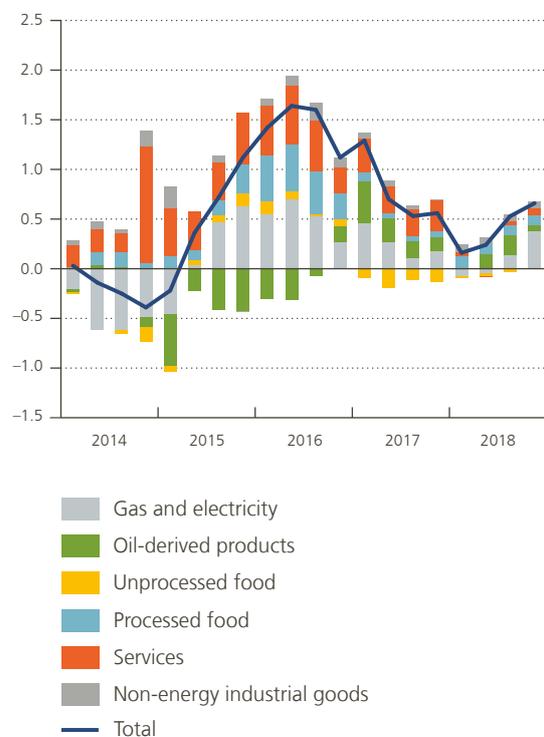
in oil prices, while electricity and gas prices also rose more strongly than in the neighbouring countries.

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
<i>p.m. Excluding major specific transactions</i>	2.5	3.6	5.4	5.5	2.3
General government	1.4	0.7	-2.0	2.1	4.9
<i>p.m. Final domestic expenditure</i> <sup>1</sup>	1.8	1.2	1.8	1.1	1.0
Change in inventories <sup>2</sup>	0.3	0.3	0.3	0.0	-0.3
Net exports of goods and services <sup>2</sup>	-0.8	0.1	-0.5	0.6	0.7
Exports of goods and services <sup>3</sup>	5.2	3.5	7.6	5.0	3.5
Imports of goods and services <sup>3</sup>	6.2	3.4	8.5	4.3	2.8
GDP	1.3	1.7	1.5	1.7	1.4
<i>p.m. Nominal GDP (in € billion)</i>	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

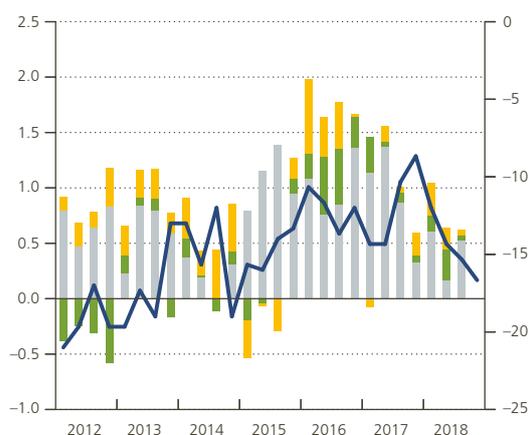
of 2018. This was not unexpected, in view of the rising indicator in the 2017 household consumption survey for major purchases in the next twelve months.

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

**Contribution to household consumption growth**  
(quarterly volume data ; in percentage points compared with the previous year, unless otherwise stated)



Household consumption:

- Consumption excluding durable goods
- Consumption of durable goods
- Other<sup>1</sup>

(left-hand scale)

- Outlook for major household purchases in the next 12 months<sup>2</sup> (right-hand scale)

**Private consumption and unemployment expectations**  
(quarterly volume data ; percentage changes compared with previous year, unless otherwise stated)



- Private consumption (left-hand scale)
- Belgium's unemployment outlook for the next 12 months (right-hand scale)<sup>3</sup>

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.

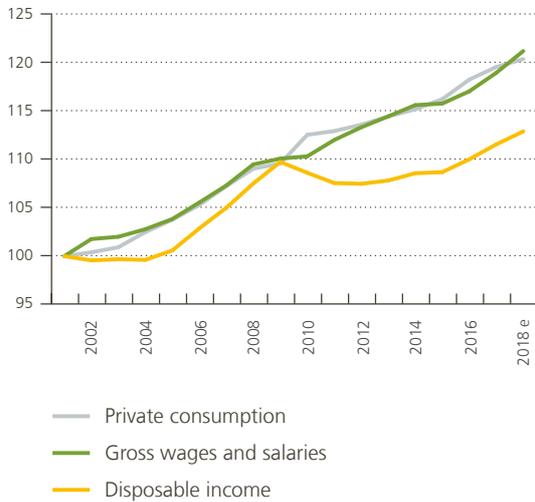
3 Balance of replies to monthly survey, aggregate quarterly data. Calendar adjusted data. Reverse of the indicator released by the NBB.

Chart 31

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

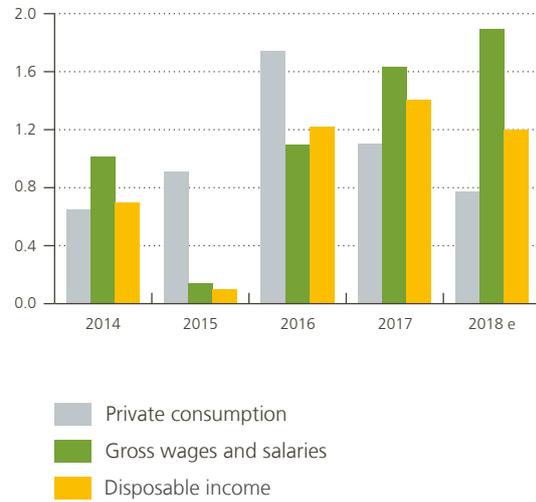
Cumulative developments

(indices 2001 = 100; calendar adjusted volume data)



Annual change

(percentage changes compared with previous year; calendar adjusted volume data)



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.

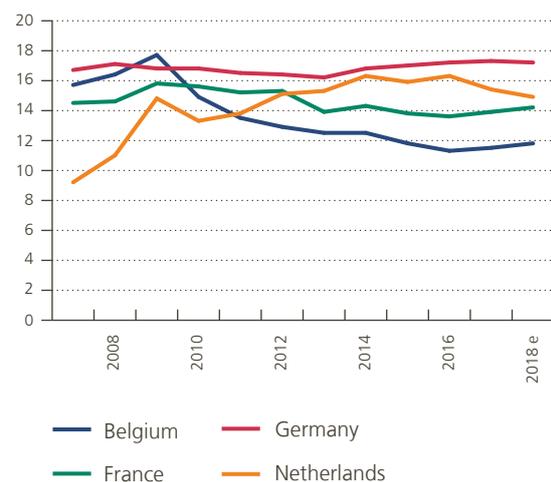
In the long term, consumer spending trends correspond closely to earned income trends. Under normal circumstances, there is also a strong link with disposable income. Between 2010 and 2015, however, this link became less clear due to a fall in capital income, against the backdrop of low returns in the 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)

	2014	2015	2016	2017	2018 e	<i>p.m.</i> In € billion 2018 e
Gross primary income <sup>1</sup>	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 <sup>1</sup>	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 <sup>2</sup>	-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 <sup>1</sup>	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 <sup>1</sup>	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
<i>p.m. In real terms</i> <sup>3</sup>	0.7	0.1	1.2	1.4	1.2	
Savings ratio <sup>4</sup>	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.

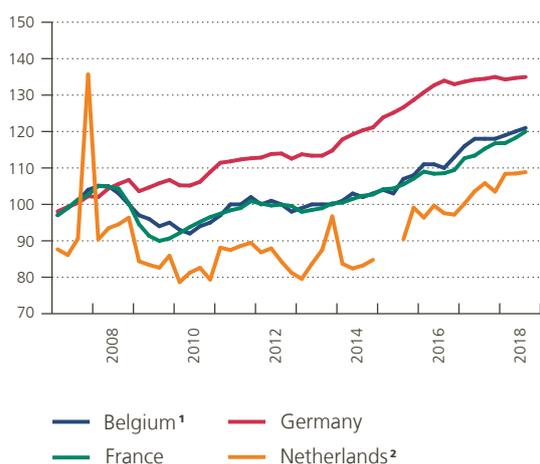
Following the 2008 financial crisis, business investment started to pick up in 2010 and kicked ahead sharply from 2014 onwards, on the back of ample and relatively cheap external funding, wider gross operating margins and robust aggregate demand fundamentals. Business investment was one of the main drivers 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

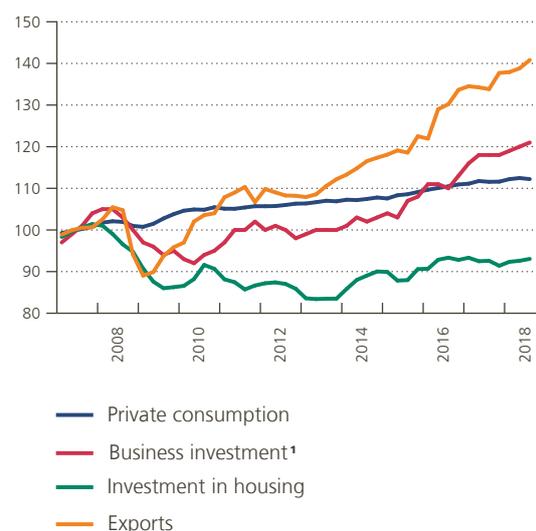
Business investment in Belgium and its three neighbouring countries

(indices by volume, 2007 = 100)



Main components of aggregate demand in Belgium

(indices by volume, 2007 = 100)



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<sup>1</sup>, 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 <sup>2</sup>	-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 <sup>2,3</sup>	0.5	-1.3	0.6	1.4	2.0
of which:					
Unit labour costs <sup>4</sup>	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.

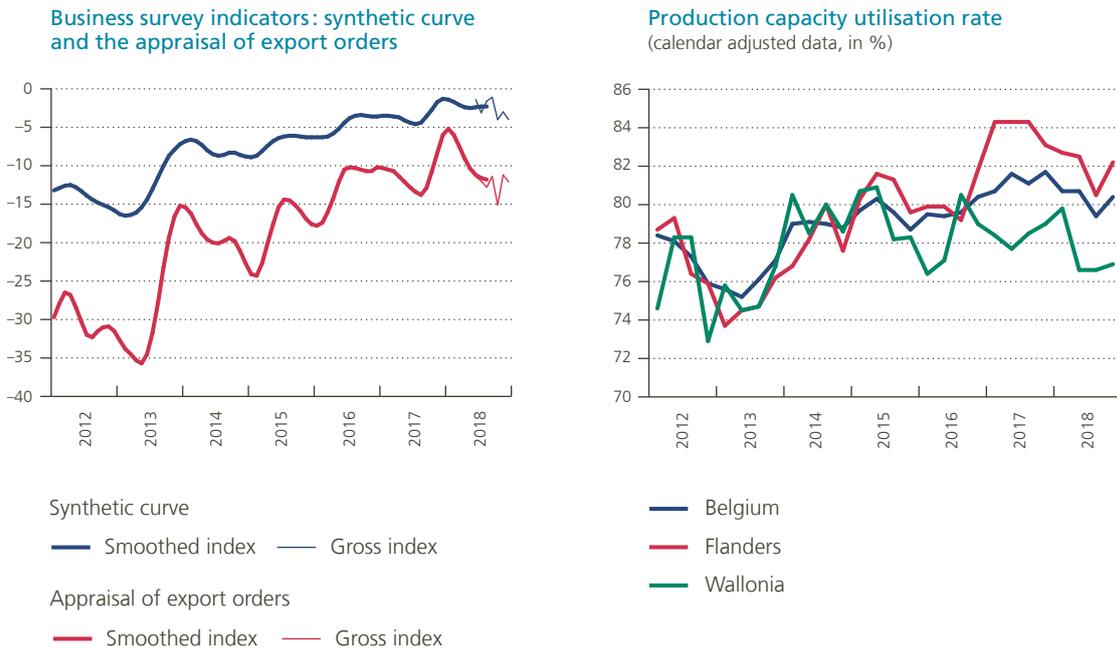
2 Including the change in inventories.

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<sup>1,2</sup>**

(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.

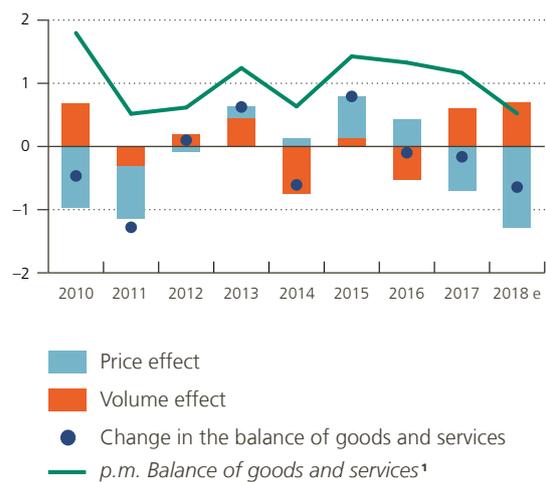
**Belgium's trade surplus weakened**

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.

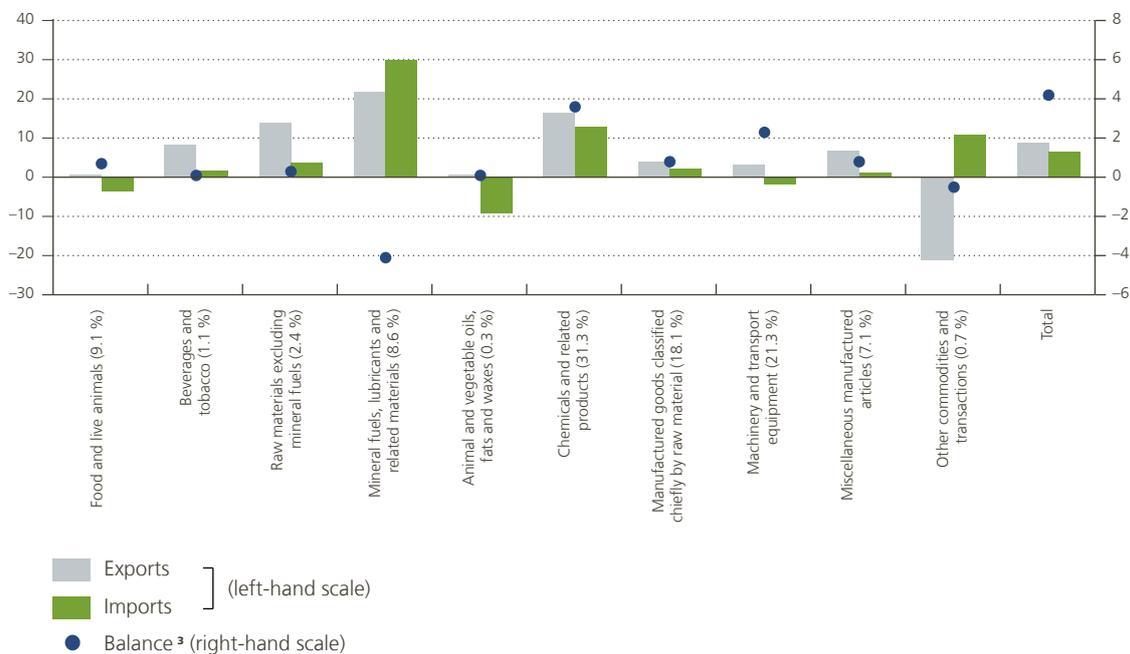
1 In % of GDP.

Chart 37

Goods trade surplus became larger<sup>1</sup>

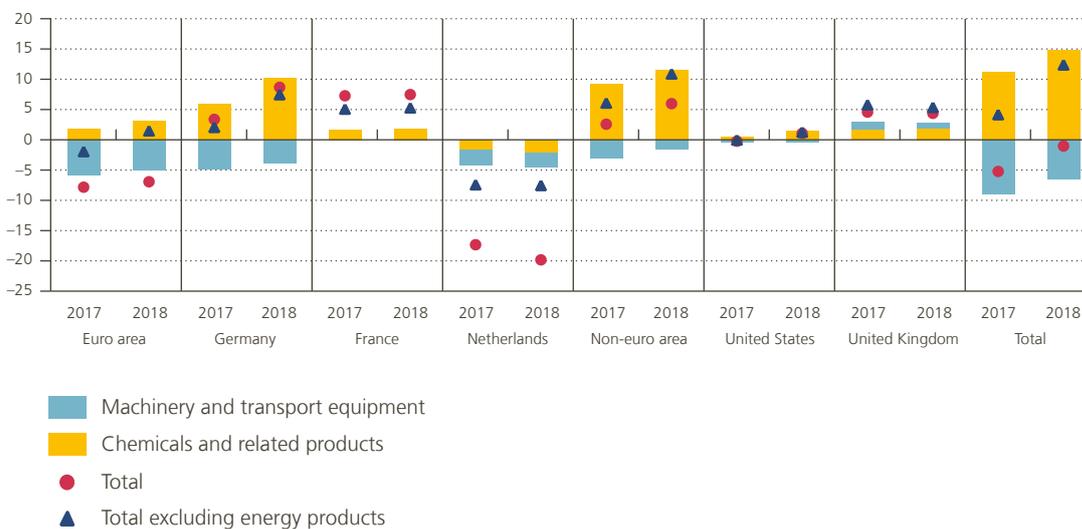
Development of external trade in goods<sup>2</sup>

(change in the first nine months of 2018 relative to the corresponding period of 2017, in%, unless otherwise stated)



Balance of Belgium's trade in goods by trading partner

(first three quarters of 2017 and 2018, in € billion)



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.

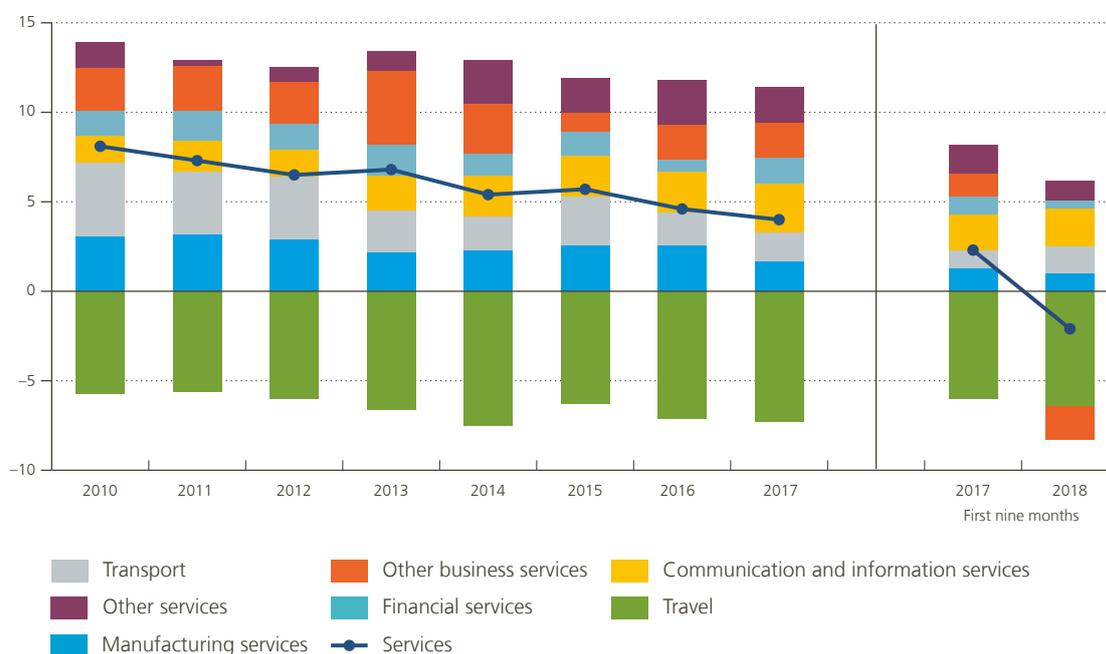
### The services surplus was further eroded

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).

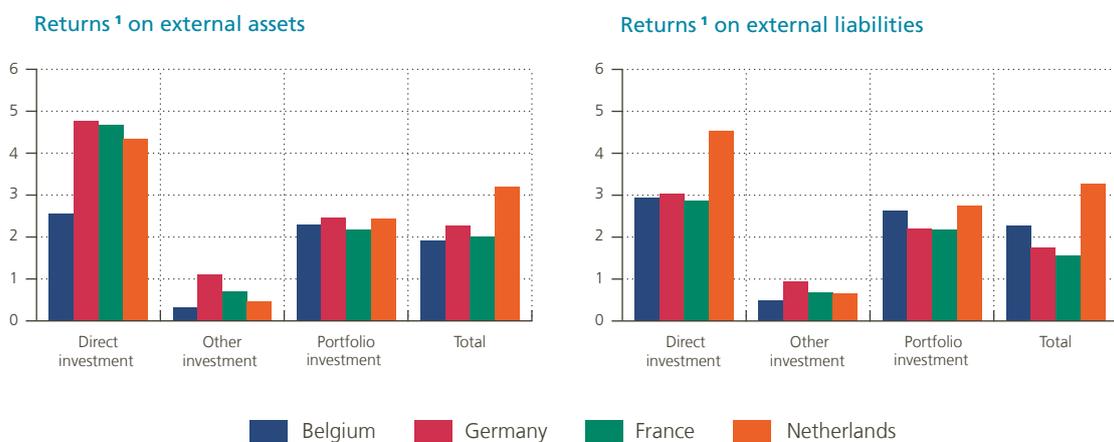
The primary income balance picked up significantly, from around € 5.3 billion in 2017 to nearly € 7.9 billion in 2018. This improvement was largely due to the increase in net investment income in relation to the rest of the world. As the situation on the financial markets returns to normal, particularly 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.

<sup>1</sup> 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

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

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 fall-

ing 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.

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
<b>Goods and services</b>	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.
<b>Primary income</b>	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
<b>Secondary income</b>	-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
<b>Total</b>	-3.5	-4.2	-2.6	3.2	0.5
<i>p.m. Idem, in % of GDP</i>	-0.9	-1.0	-0.6	0.7	0.1

Sources: NAI, NBB.



# 3. Savings and financing the Belgian economy

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### 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

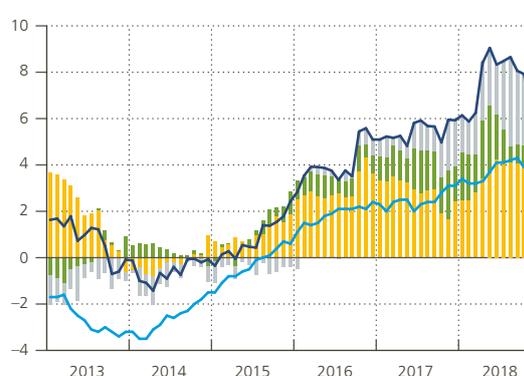
#### Bank lending to businesses still stimulated by low interest rates

Interest rates on new business loans to non-financial corporations<sup>1</sup> (in %)



- Short-term rate (variable or maximum one year)
- Medium-term rate (one to five years)
- Long-term rate (over five years)

Loans provided by resident banks to non-financial corporations<sup>2</sup> (annual percentage change and contributions)



- Belgium
- Term of maximum one year
- Term of one to five years
- Term of over five years
- Euro area

Sources: ECB, NBB.

1 Loans up to and including € 1 million.

2 Including securitised or otherwise transferred loans.

## Businesses made broader use of bank 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.

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.

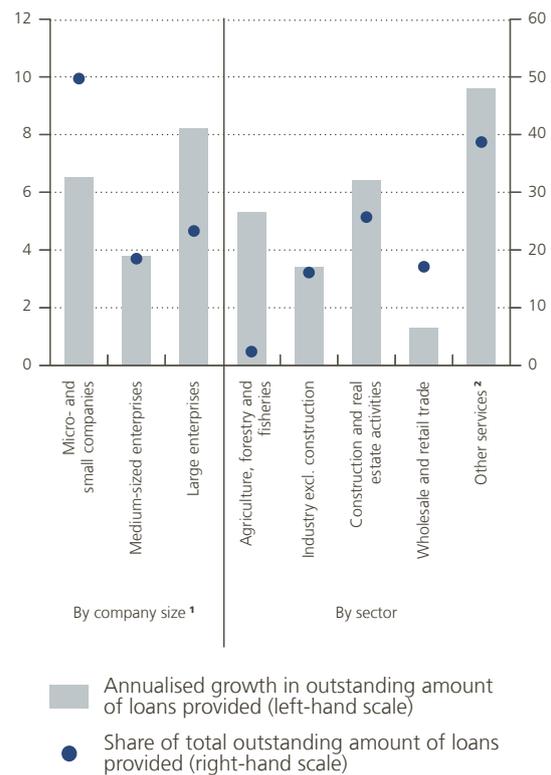
Second, the growing number of such loans also relates to the dynamism of economic activity and potentially concomitant working capital requirements, particularly in sectors with relatively long production cycles such as construction. Corporate cash reserves may at times prove insufficient to pay suppliers' 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.

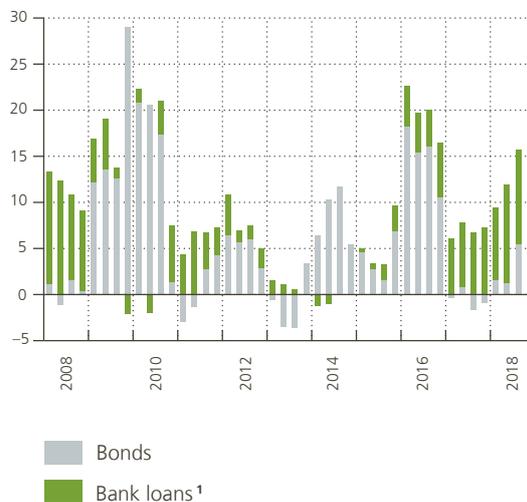
Overall, Belgian businesses took out new bank loans worth € 12.2 billion net in the first three quarters of 2018. For funding purposes, they thus made broader use of bank lending than of bonds, the issuance of which came to € 6.3 billion net. This suggests that demand for market funding fell somewhat, 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**

**Bank loans and bonds**

(net transactions in € billion, moving average over four quarters)



Source: NBB.

<sup>1</sup> Provided by resident banks, including securitised or otherwise transferred loans.



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

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

As a result of the growth in bank lending and, to a lesser extent, in bond issuance, the consolidated debt of non-financial corporations<sup>1</sup> 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

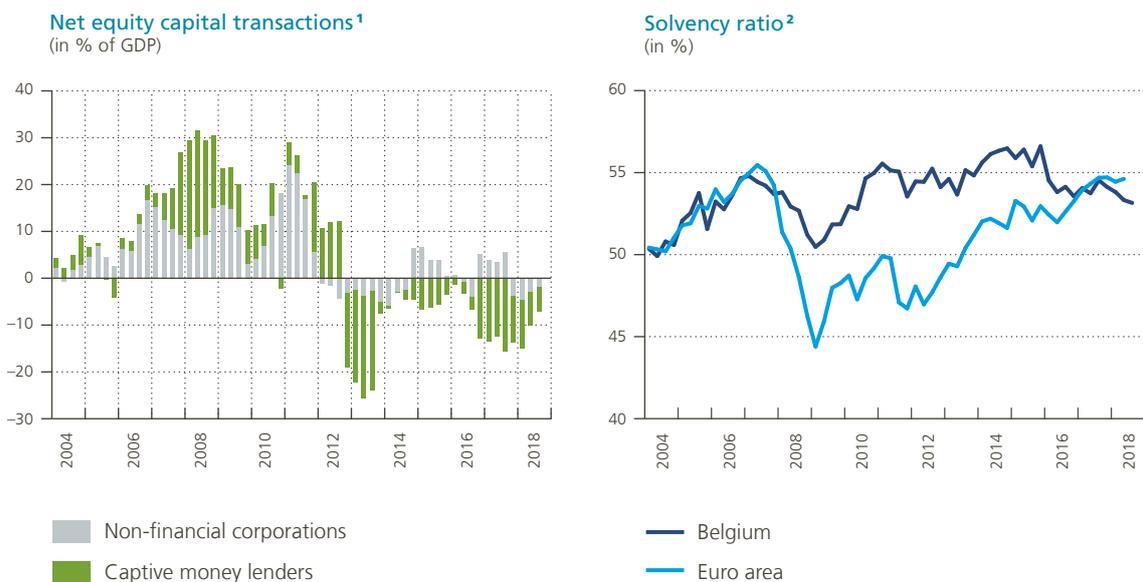
half of Belgian non-financial corporations' debt. Intra-group debt of this scale is typical of Belgium and also of a number of other European countries, including the Netherlands, Ireland and Luxembourg. After having risen for years, these debt levels nonetheless contracted somewhat in Belgium in 2018, 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.

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

<sup>1</sup> 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.

<sup>1</sup> Moving average over four quarters of net capital increases (+) or decreases (-).

<sup>2</sup> 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<sup>1</sup> 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.

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



## 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<sup>1</sup>. 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.

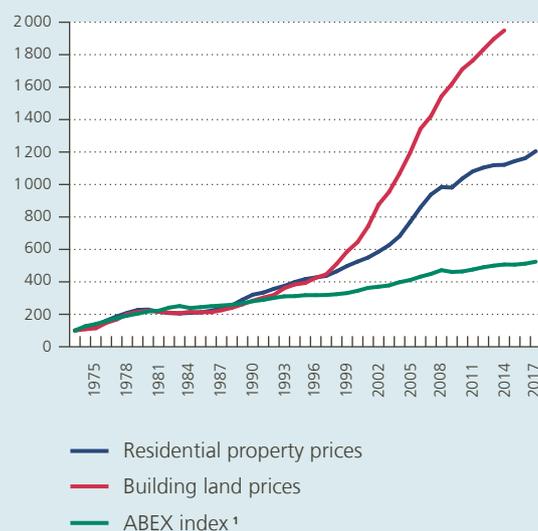
A residential property can be seen as the combination of two separate elements: its structure, i.e. the building as such, and the land it is built on. Property transaction prices can thus be broken down into construction costs and the purchase price of the land on which the property is built. Between 1973 and 2014, land prices in Belgium rose sharply, much faster than house prices<sup>2</sup>. 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.

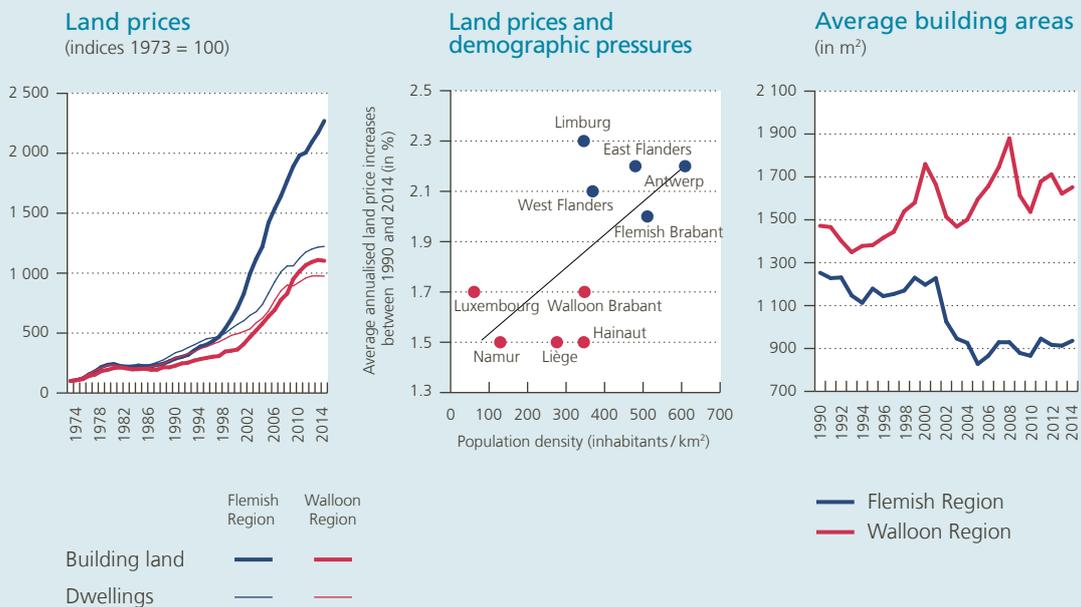
1 Indicator of construction costs.

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<sup>1</sup>.

However, land price dynamics in Flanders and Wallonia differ considerably<sup>2</sup>. 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<sup>1</sup>.

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.

<sup>1</sup> 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<sup>1, 2</sup>

(in % of GDP)



Source: Eurostat.

<sup>1</sup> 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.

<sup>2</sup> No data is available for Spain, Portugal and Greece, among other countries.

<sup>3</sup> 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%.

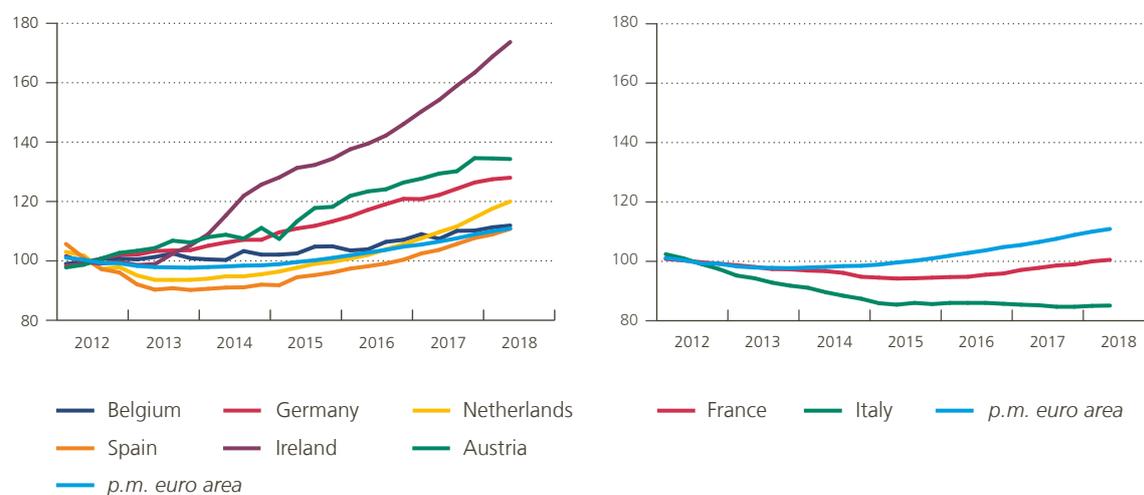
According to the estimates of an econometric model that takes account of various demand factors – household disposable income, mortgage interest rates, demographic trends and key changes in taxes on real estate – house prices in 2018 would have been approximately 6.5% higher than their estimated equilibrium 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

### Households' mortgage debt came to more than €230 billion

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.

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.

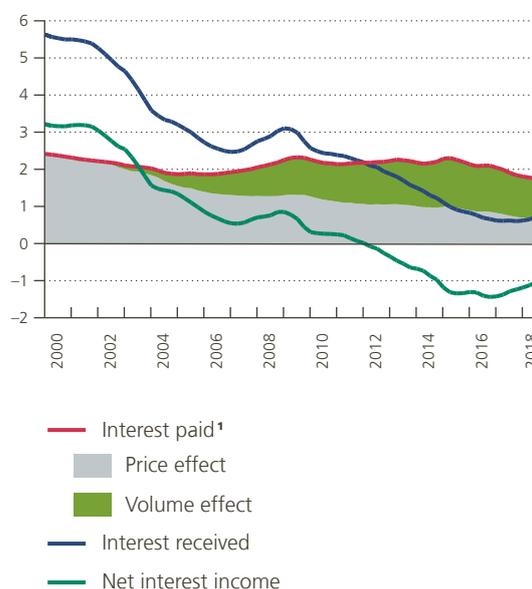
### Overall default rates remained stable

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.

<sup>1</sup> 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

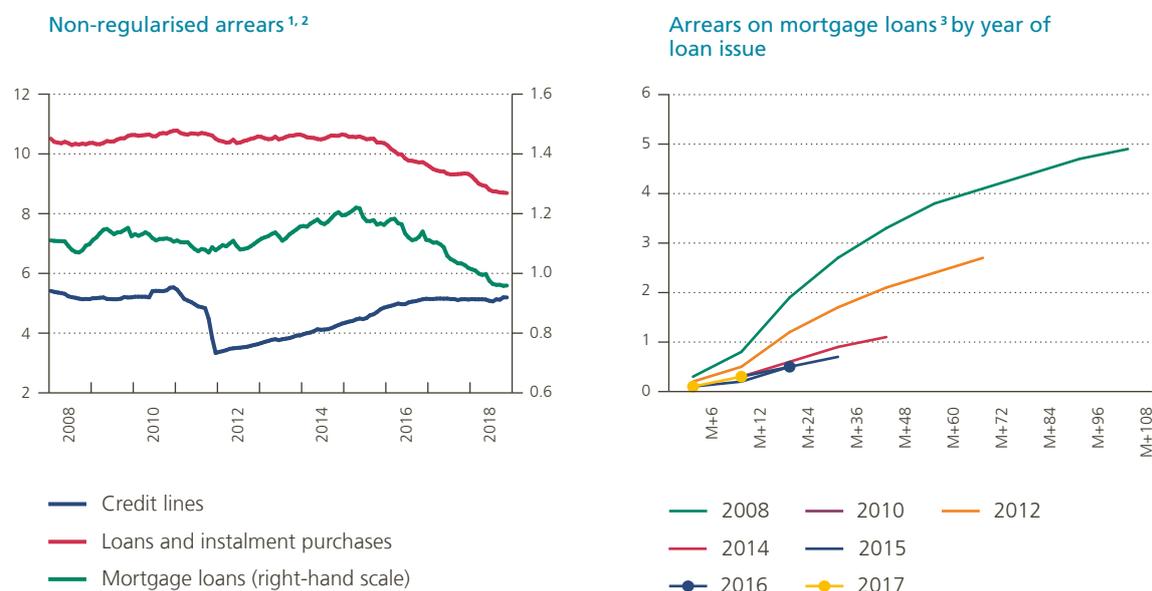
While households saw their financial liabilities, mainly comprising mortgage loans, expand by €8.3 billion, to €288 billion in September 2018, the value of their financial assets rose by a mere €4.2 billion, to €1 346 billion. Consequently, the net financial wealth of Belgian households in proportion 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

### Stock market uncertainty boosted investment in current and savings accounts

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.

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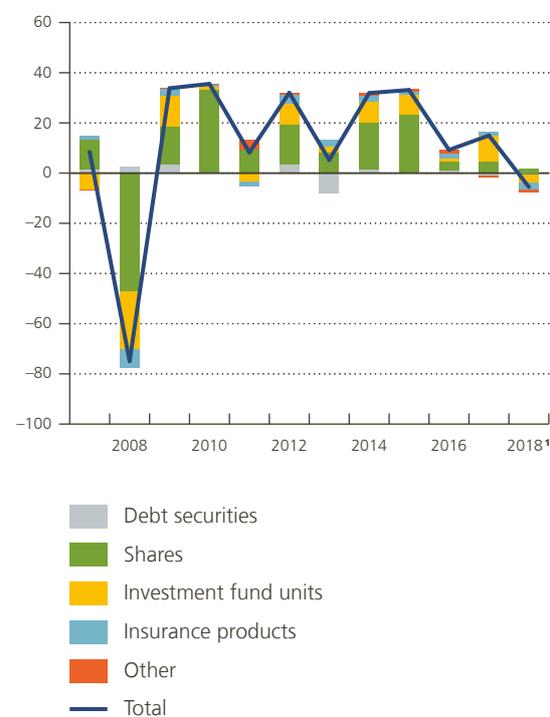
Households' saving behaviour and preference for liquid instruments – despite persistently low returns – was probably driven by a range of factors.

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.

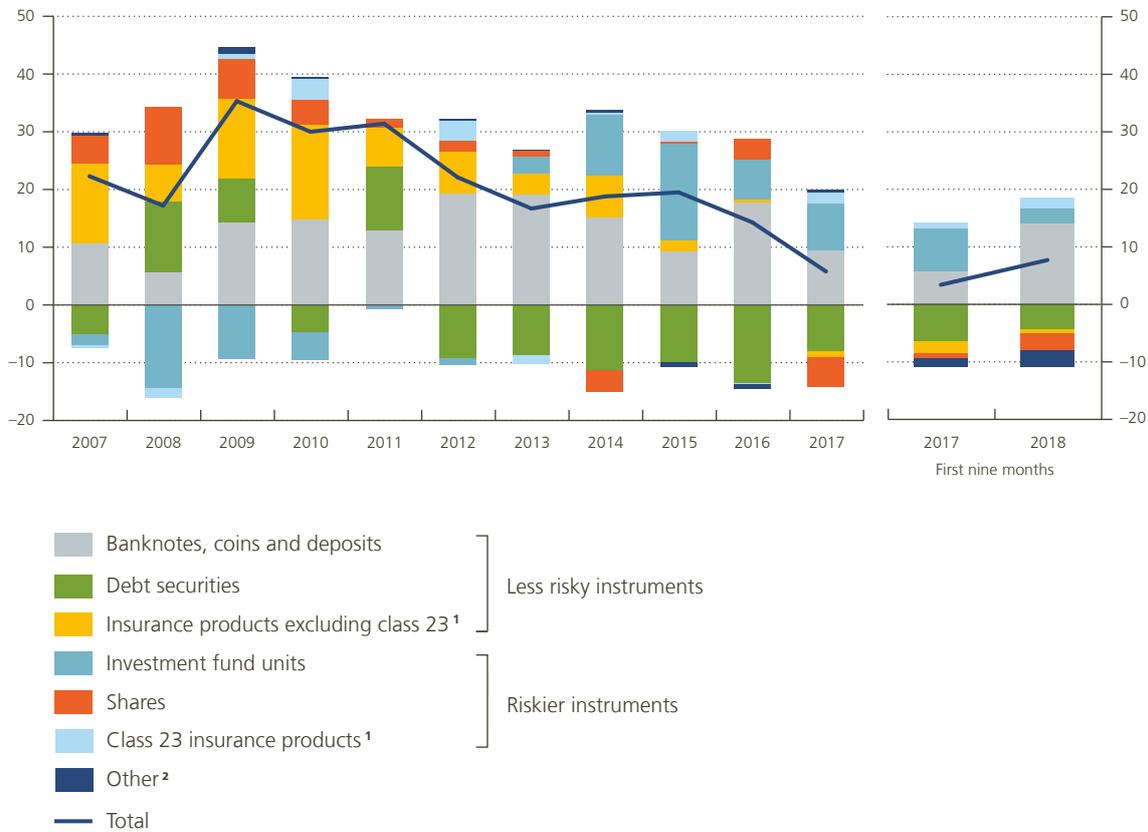
Second, having risen in 2017, the consumer confidence indicator started to fall somewhat in the spring of 2018. Households took an increasingly dim view of the general economic situation as well as of their personal finances. The indicator stayed below its long-term average during the second half of 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.

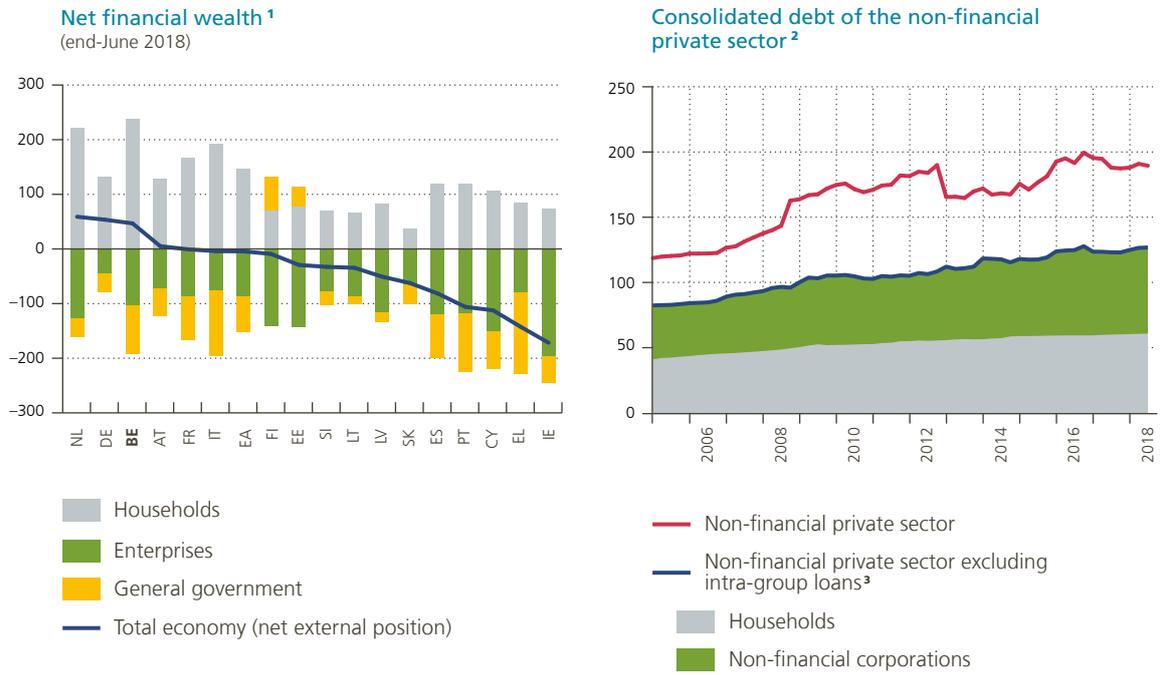
Belgium's net creditor position is a favourable factor in the assessment of macroeconomic imbalances, and debt positions in particular. The consolidated debt ratios of the

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

### 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)

	2014	2015	2016	2017	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 <sup>1</sup>	5.3	5.9	5.6	5.6	4.6	4.3	25.0
(Un)realised gains or losses on financial instruments <sup>2</sup>	-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 <sup>4</sup>
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 <sup>3</sup>	-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 %.

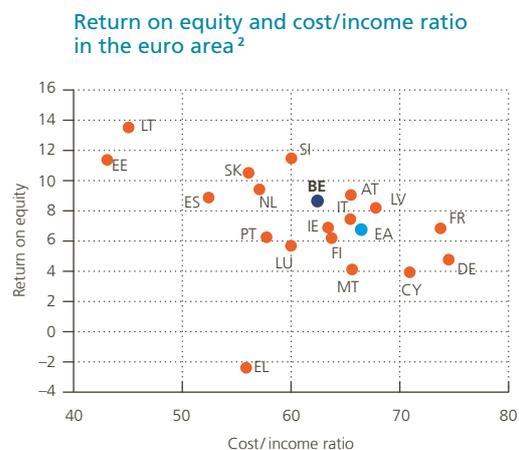
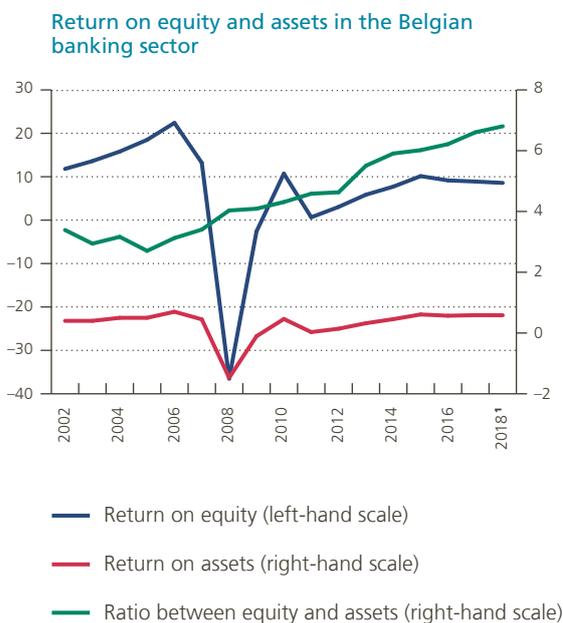
Return on equity was thus structurally lower than before the financial crisis. Since then, the tightening prudential requirements for own funds combined

*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

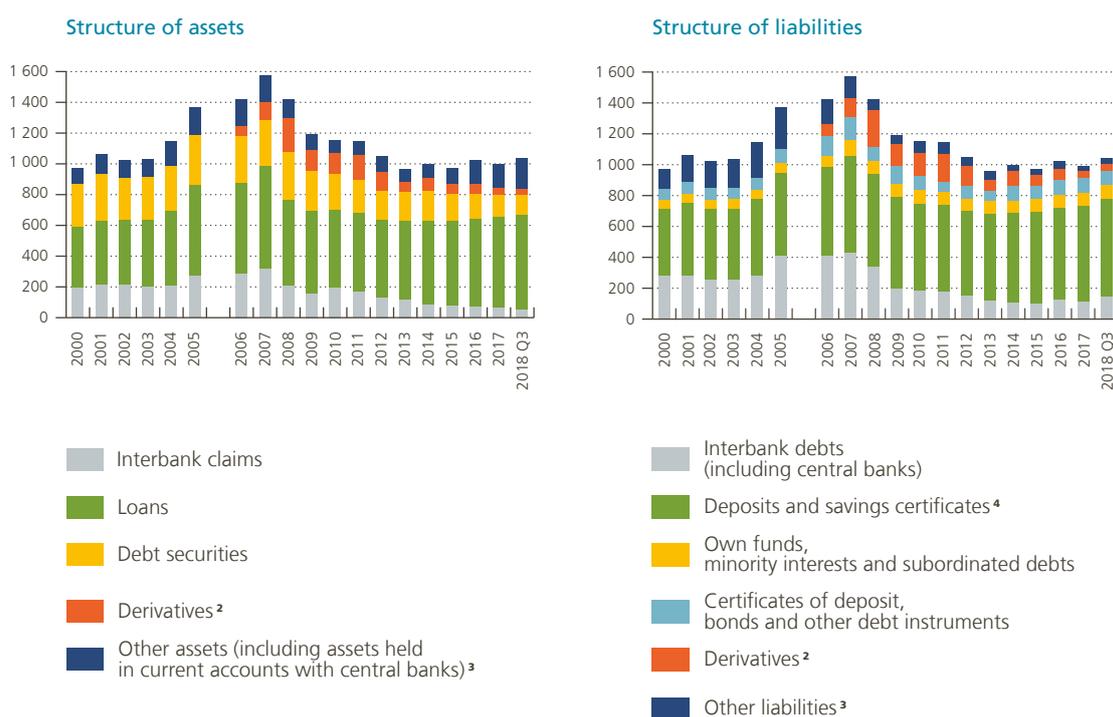
margins or boost credit volumes in a competitive market. This implies additional risks, of course, which could even increase if interest rates rise, because borrowers' debt servicing capacity may then deteriorate and the value of properties that serve as security for mortgage loans may fall.

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<sup>1</sup>, 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.

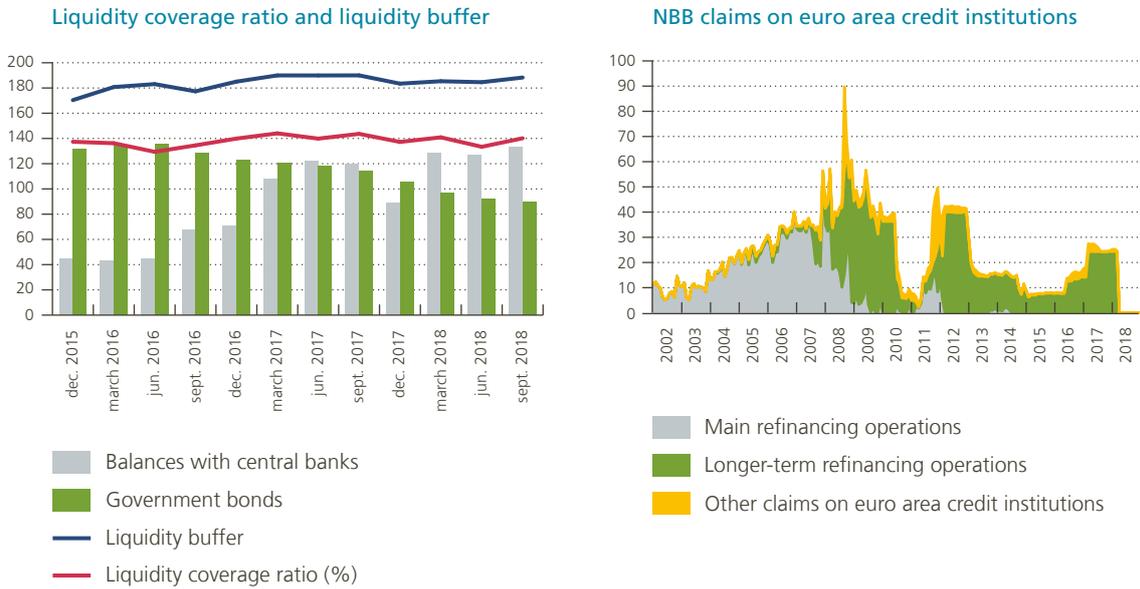
Growing liquidity surpluses at Belgian banks are the result of the continued increase in client deposits, cheap central bank funding and, more recently, rising interbank loans. These new interbank loans are mostly the result of repurchase agreements (repos), whereby banks pledge securities to other credit 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.

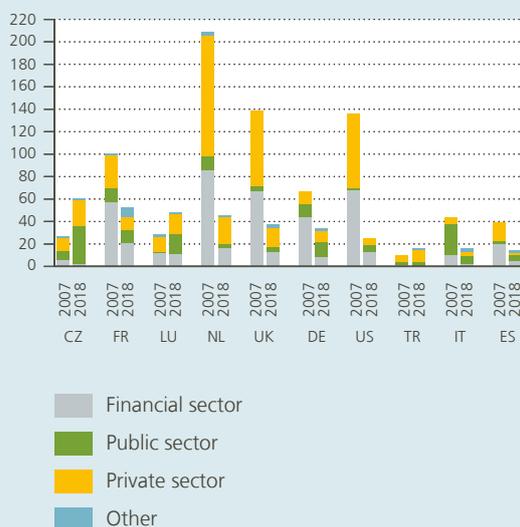
Although they have sharply contracted relative to 2007, exposures to the United Kingdom have remained quite sizeable, totalling € 37 billion at the end of September 2018 (including guarantees and risk transfers), of which € 27 billion related to cross-border exposures. These mostly concerned claims on 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



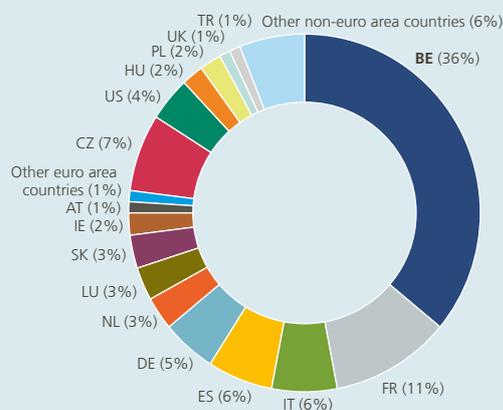
## Exposures to the main foreign markets and breakdown of the government bond portfolio

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

### Exposures to the main foreign markets in the form of loans and debt securities<sup>1</sup>



### Breakdown of Belgian banking sector's portfolio of government bonds<sup>2</sup>



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

*Improved credit quality primarily related to foreign portfolios*

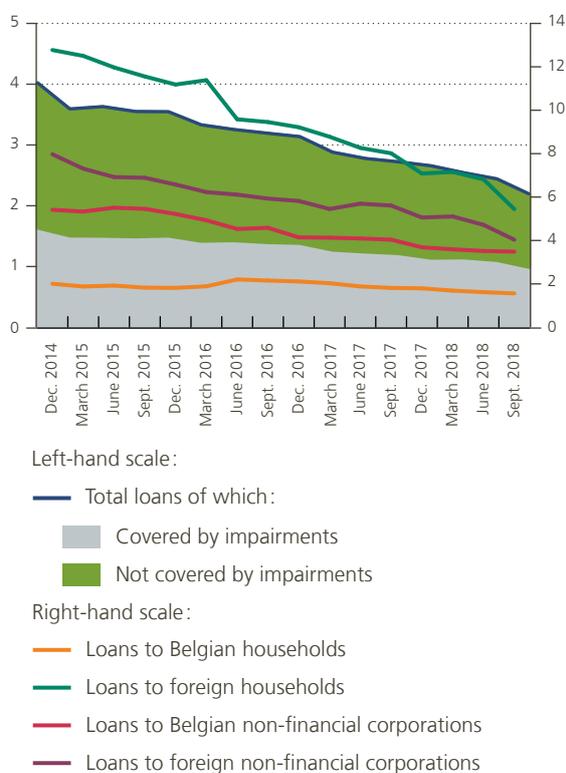
getting into financial trouble or which are already in arrears – was still at 4 % in 2014 but had come down to 2.2 % by September 2018. By contrast, some euro area countries are still looking at a relatively large proportion of non-performing loans on bank balance sheets, as the process of winding down 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

## Chart 53

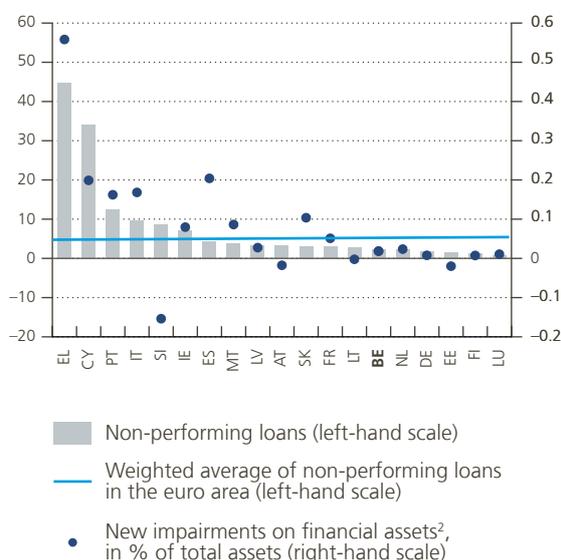
### The credit quality of Belgian bank assets keeps improving year on year and is better than in most other euro area countries

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

#### Non-performing loans in the Belgian banking sector



#### Non-performing loans in the euro area<sup>1</sup>



Sources: ECB, NBB.

<sup>1</sup> Figures relate to June 2018.

<sup>2</sup> 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.

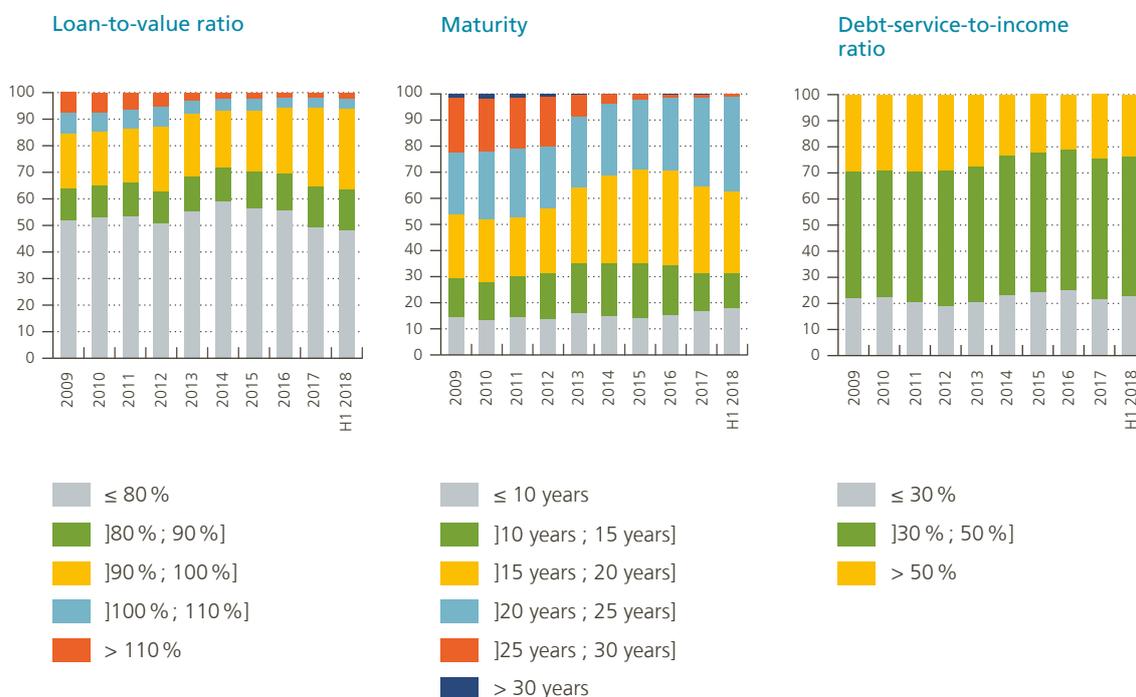
### Belgian banks remain pretty solvent

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<sup>1</sup>, in % of the total)



Source: NBB.

<sup>1</sup> 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 requirement 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
<b>Tier 1 capital</b>	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
<b>Risk-weighted assets</b>	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
<b>Tier 1 ratio (in %)</b>	15.3	16.0	16.2	16.9	16.6
<b>Common equity Tier 1 ratio<sup>1</sup> (in %)</b>	14.7	15.4	15.7	16.2	15.5
<b>Leverage ratio</b>	4.7	4.8	5.5	5.9	5.7

Source: NBB.

<sup>1</sup> 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

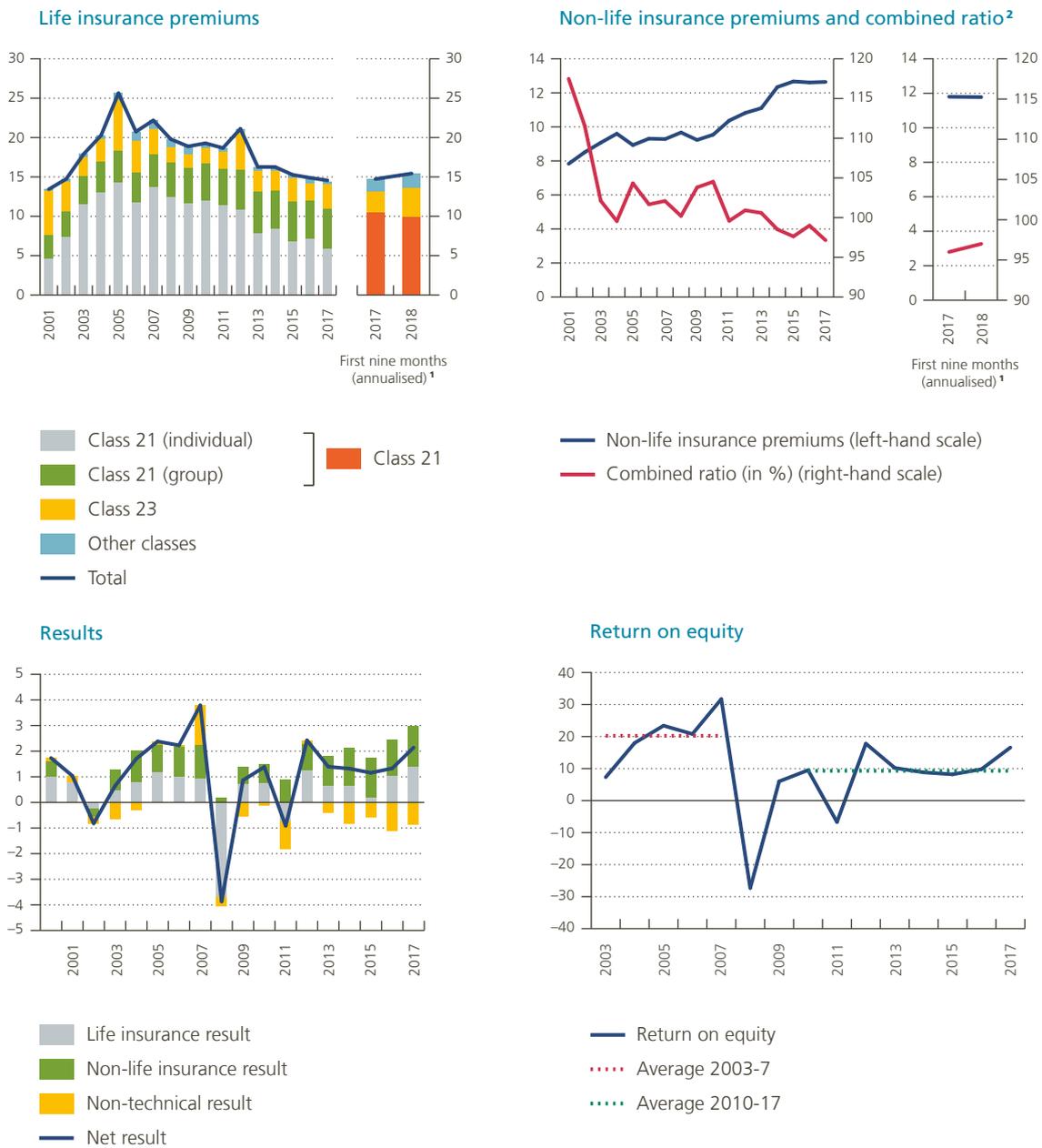
premiums poses a significant challenge to the non-life insurance sector, which has been facing fierce competition in some traditional segments for a number of years now. Competition may even intensify with the rise of corporations that are leaders in new technologies (the so-called InsurTechs) and that 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.

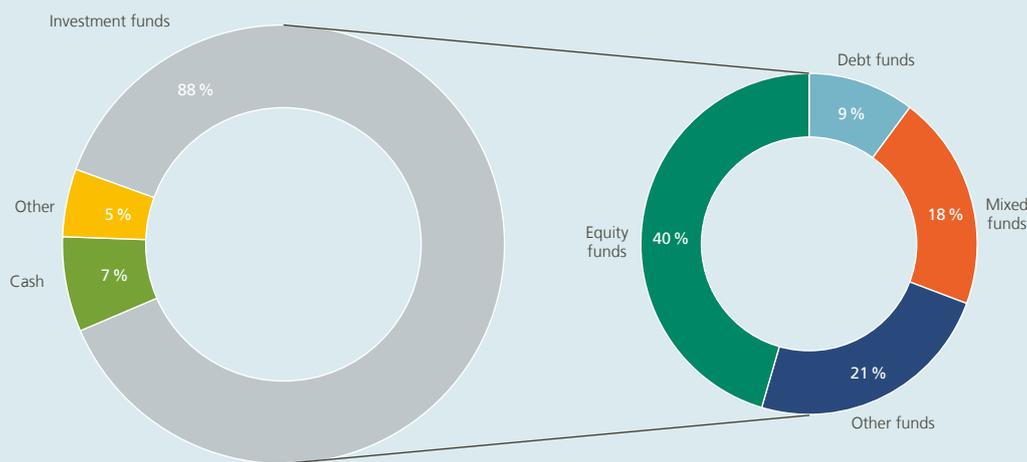
## Revived interest in life insurance linked to investment funds (class 23)

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

*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*

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

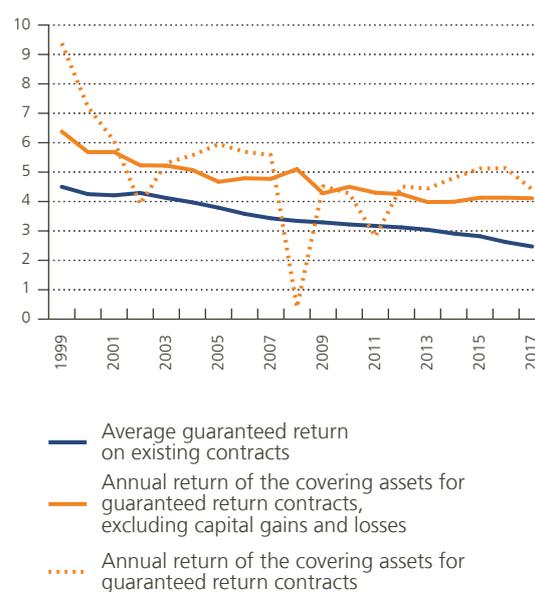
insurance sector back to health. Although by the end of 2017, 14% of technical provisions were tied to contracts offering guaranteed returns in excess of 4.5%, the average guaranteed return the sector offered to policy-holders (individual and group insurance) contracted to 2.47% from 2.63% between the 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.

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' 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<sup>1</sup>, 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).

<sup>1</sup> 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.

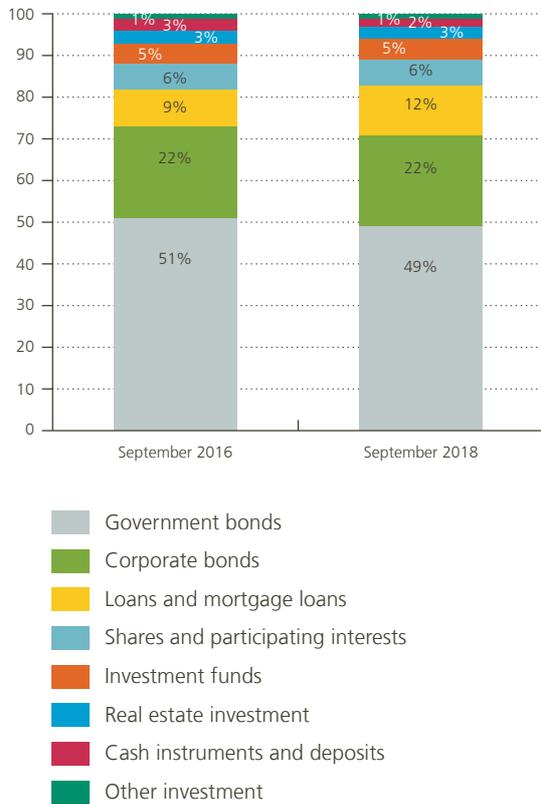
Although investment in infrastructure projects still account for only a tiny proportion of the total, these did grow by € 700 million to € 2.6 billion between September 2016 and September 2018, a third of this invested in Belgium. In part, the uptick was fuelled by the relaxation of capital requirements 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

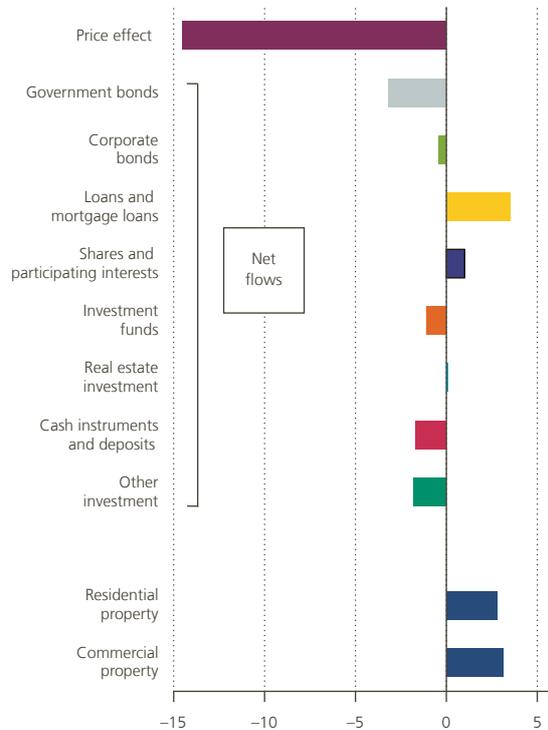
**Investment trends in the insurance sector point to search for yield**

(non-consolidated end-of-period data)

**Breakdown of the investment portfolio, excluding class 23**  
(in % of total investment)



**Changes in the investment portfolio (excluding class 23) between September 2016 and September 2018**  
(amount in € billion)



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<sup>1</sup> to the tune of nearly €29 billion.

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



## 4. Public finances

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## 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)

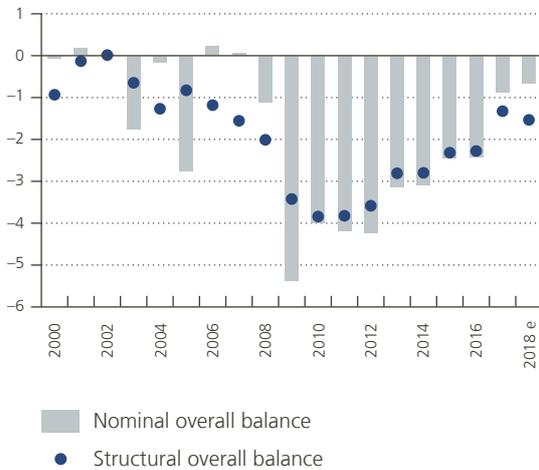
	2014	2015	2016	2017	2018 e
Revenue	52.2	51.3	50.6	51.3	51.6
Primary expenditure	52.0	50.7	50.2	49.7	50.0
Primary balance	0.2	0.6	0.4	1.6	1.6
Interest charges	3.3	3.0	2.8	2.5	2.3
Nominal overall balance	-3.1	-2.5	-2.4	-0.9	-0.7
<i>p.m. Structural overall balance</i>	-2.8	-2.3	-2.3	-1.3	-1.5
General government 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.

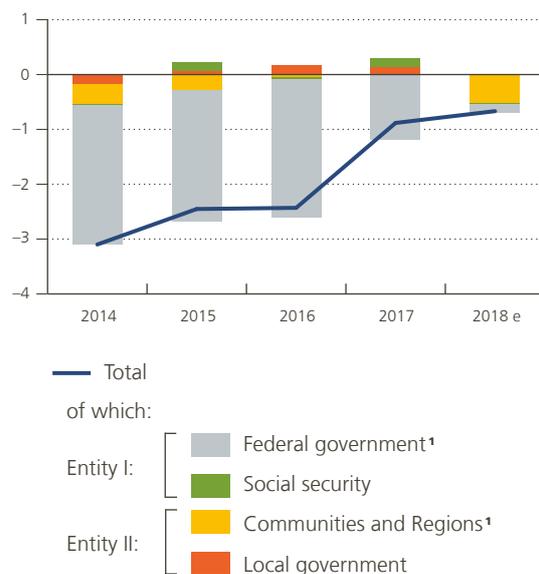
The downward revision of the autonomy factor used for determining the regional additional percentages on personal income tax led to a one-off adjustment in 2018 of the excess taxes paid to the Regions since 2015. This correction had a positive impact on the federal government balance but at the same 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.

<sup>1</sup> 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

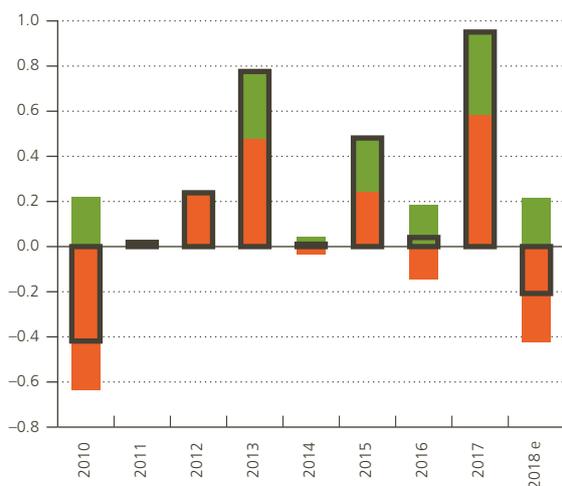
by movements in interest charges, deteriorated by 0.4 percentage point of GDP.

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.

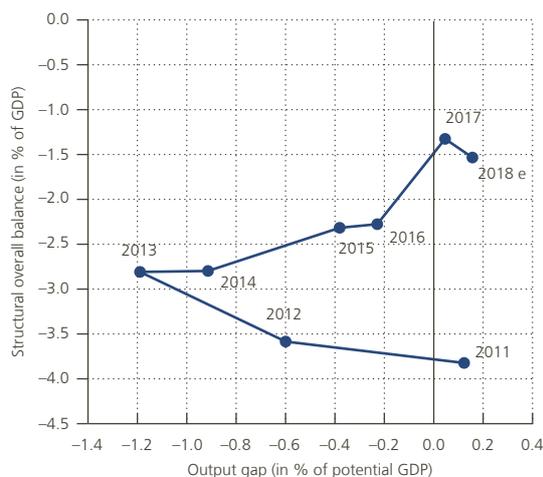
Chart 60

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

Change in the structural overall balance  
(changes compared with the previous year, in % of GDP)



Structural overall balance and the output gap



- Structural overall balance<sup>1</sup>
- of which:
- Structural primary balance<sup>1</sup>
- Interest charges

Sources: EC, NAI, NBB.

<sup>1</sup> 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

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

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.

### **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
<b>Nominal balance</b>							
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 <sup>1</sup>	-1.4 <sup>1</sup>
<i>p.m. Actual/Estimate</i>	-2.5	-2.4	-0.9	-0.7 e			
<b>Structural balance<sup>2</sup></b>							
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 <sup>1</sup>	-1.4 <sup>1</sup>
<i>p.m. Actual/Estimate</i>	-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

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

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 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

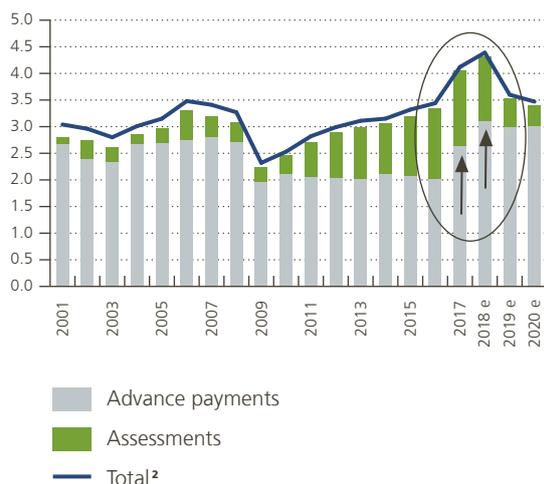
2.25 % to 6.75 % from the 2018 income year. As a result, companies logically stepped up their advance payments. The surplus this produced in 2018 is temporary, because the higher advance payments will reduce the collection via assessments in the ensuing years. The raising of the base rate is part of 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<sup>1</sup>

(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<sup>1</sup>.

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<sup>1</sup>**

(in % of GDP)

	2014	2015	2016	2017	2018 e
<b>Fiscal and parafiscal revenue</b>	<b>45.1</b>	<b>44.6</b>	<b>43.7</b>	<b>44.3</b>	<b>44.5</b>
Levies weighing chiefly on earned income	26.3	26.1	25.0	24.9	24.9
Personal income tax <sup>2</sup>	11.7	11.5	11.0	11.1	11.0
Social security contributions <sup>3</sup>	14.6	14.6	14.0	13.9	13.8
Taxes on company profits <sup>4</sup>	3.1	3.3	3.4	4.1	4.4
Levies on other incomes and on assets <sup>5</sup>	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
<b>Non-fiscal and non-parafiscal revenue<sup>6</sup></b>	<b>7.1</b>	<b>6.7</b>	<b>6.9</b>	<b>7.0</b>	<b>7.1</b>
<b>Total revenue</b>	<b>52.2</b>	<b>51.3</b>	<b>50.6</b>	<b>51.3</b>	<b>51.6</b>

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.

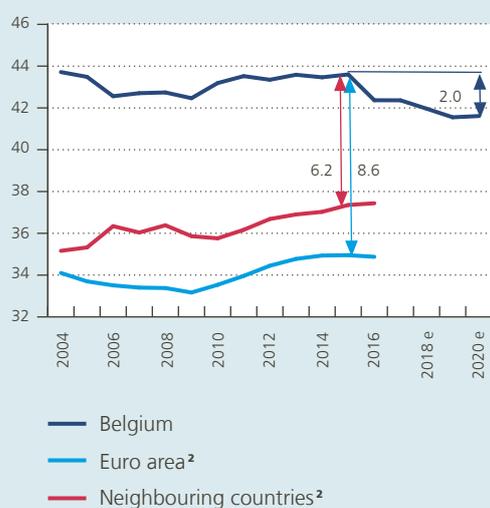
Despite the sharp fall in levies on labour income, there is a case for a further shift in the tax burden towards other taxes which have a less disruptive effect on growth. In its country-specific recommendations of 13 July 2018, the Ecofin Council observed that, despite efforts to narrow the gap between 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



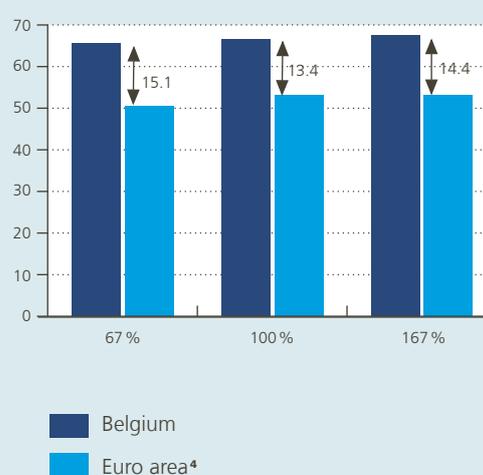
heavily taxed in the EU. Moreover, the unemployment trap for those on low incomes is among the EU's highest. There are also considerable tax disincentives for second earners, especially women. Further – targeted – reforms of personal income tax and social security contributions could therefore encourage 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<sup>1</sup>**  
(in % of labour costs)



**Marginal fiscal and parafiscal tax rate on labour for a single employee without children, for different levels of income<sup>3</sup>**  
(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

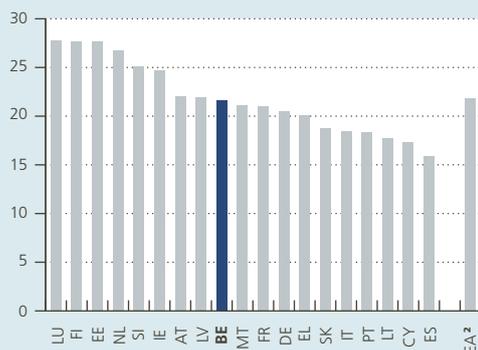


be given to applying reduced rates more selectively in order to shift the tax burden from labour income to less distortive sources of tax revenue.

## Taxes on consumption

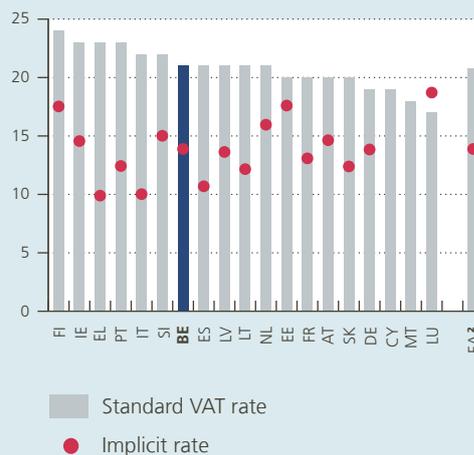
### Implicit tax rate on consumption<sup>1</sup>

(2016, in % of consumer spending by households in Belgium)



### Standard and implicit VAT rate<sup>3</sup>

(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

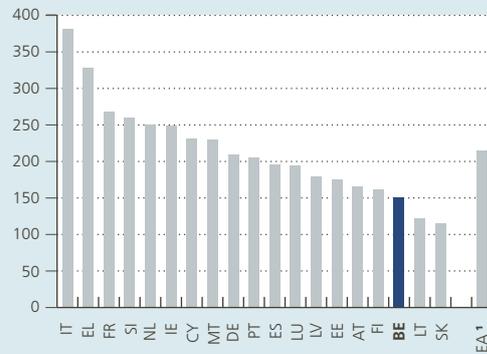


## Relatively low revenue from environmental taxes in Belgium

**Environmental tax**  
(in % GDP, 2016)



**Real implicit tax on energy<sup>3</sup>**  
(euro per tonne of oil equivalent, 2016)



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.

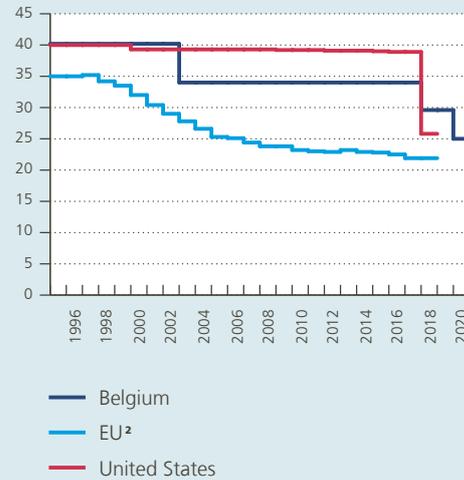


## Taxes on capital

**Tax on capital<sup>1</sup>**  
(in % of GDP, 2016)



**Standard corporation tax rates<sup>3</sup>**



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.

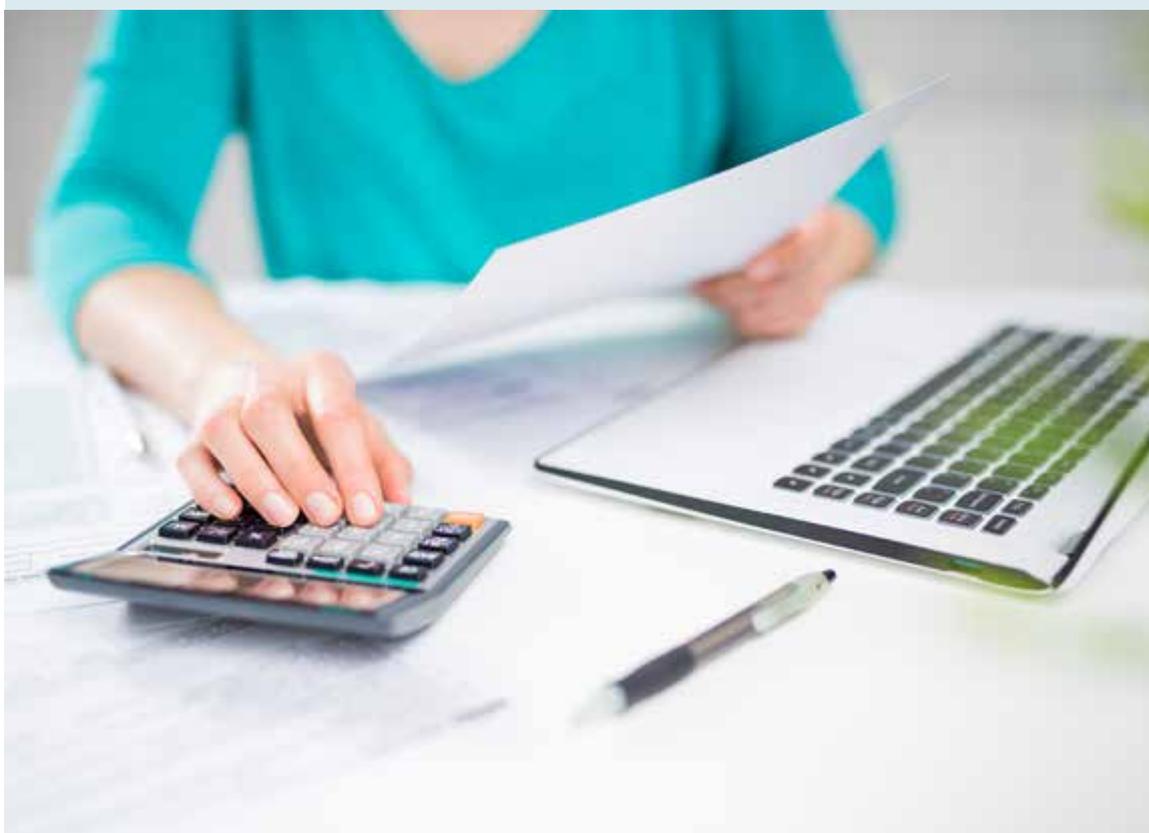
The high tax on capital is also due to the levies on asset transactions, resulting from Belgium's relatively high inheritance taxes and property registration fees. By contrast, tax receipts from levies on personal income from assets are much lower in Belgium than in other euro area countries, despite 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

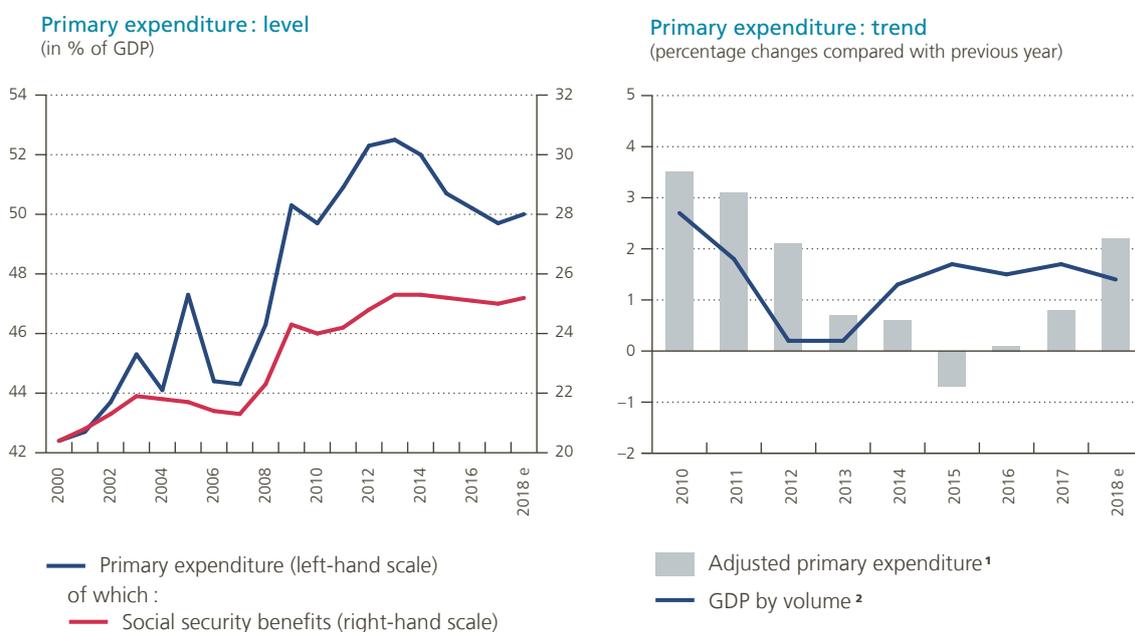
The downward trend in primary expenditure relative to GDP was interrupted in 2018. After declining for four years in a row, the ratio of spending rose compared with 2017, to 50% of GDP. This figure reflected the underlying trend in primary expenditure: adjusted for the impact of temporary factors, the 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.

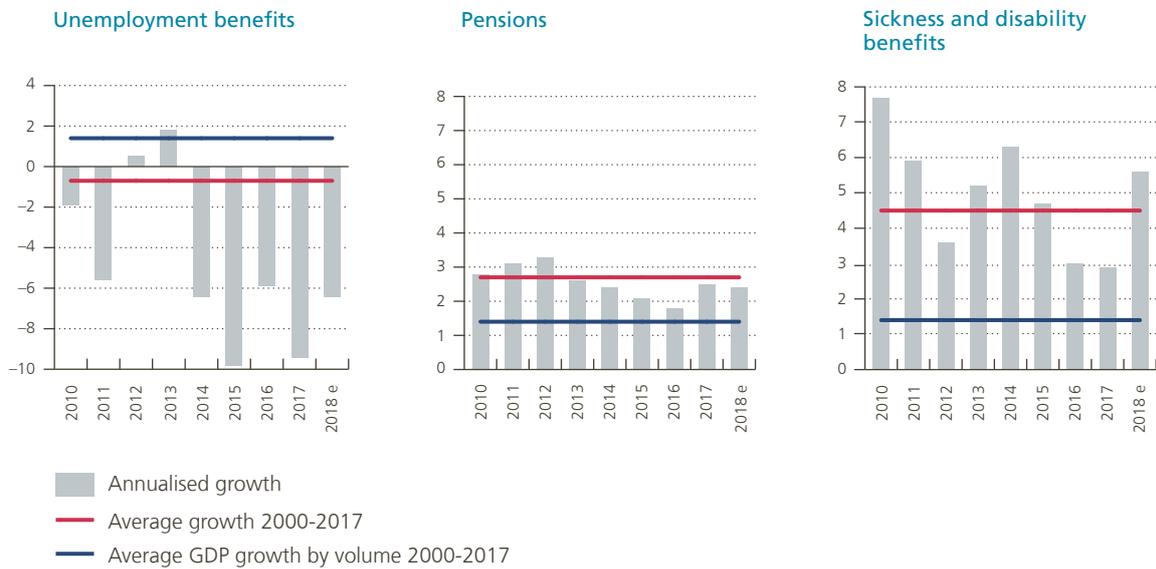
For public finance, there is also a flipside to the massive labour force outflows, not least because they entail a surge in the number of retired people. Recipients of retirement or survivors' pensions saw their numbers swell by 2.2% in 2018, and this pace looks set to continue in the years ahead. In 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.



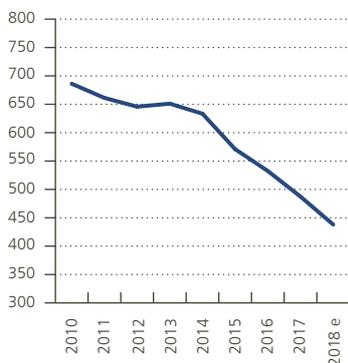
Chart 63

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

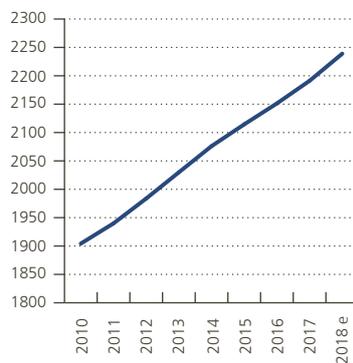
(data deflated by the indexation coefficient of social security benefits<sup>1</sup>, percentage changes compared with the previous year, unless otherwise stated)



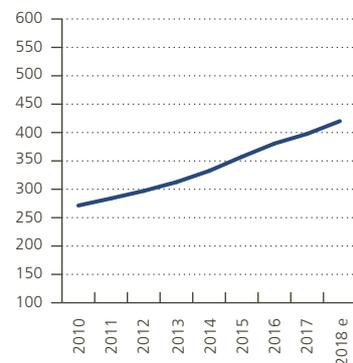
**Fully unemployed entitled to benefits**  
(annual averages, in thousands of people)



**Private sector retired<sup>2</sup>**  
(annual averages, in thousands of people)



**Disabled**  
(annual averages, in thousands of people)



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

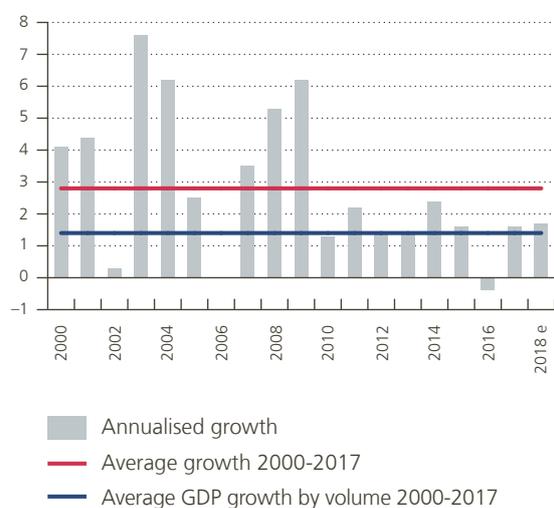
(NIHDI) account for a big proportion of the rise in social security spending. As is the case for pensions, higher benefits are down to a major increase in the number of recipients.

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.

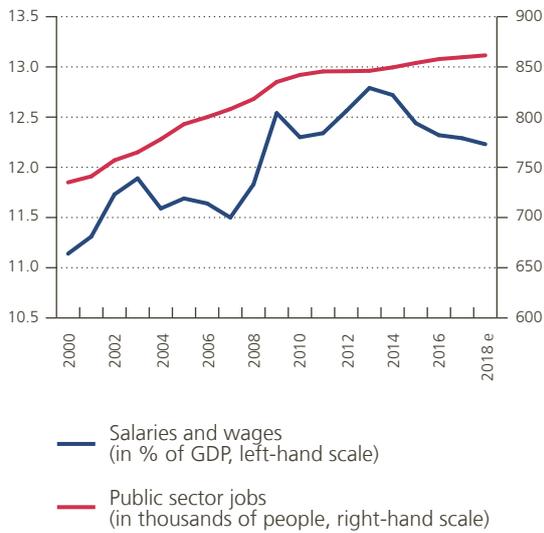
real spending growth to an annualised maximum of 1.5%. The more or less natural advance in benefits – fuelled by demographics and the cost of new treatments – had to be offset by new savings, particularly on the reimbursement of proprietary medicines. Through continued effort, spending on health care 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.

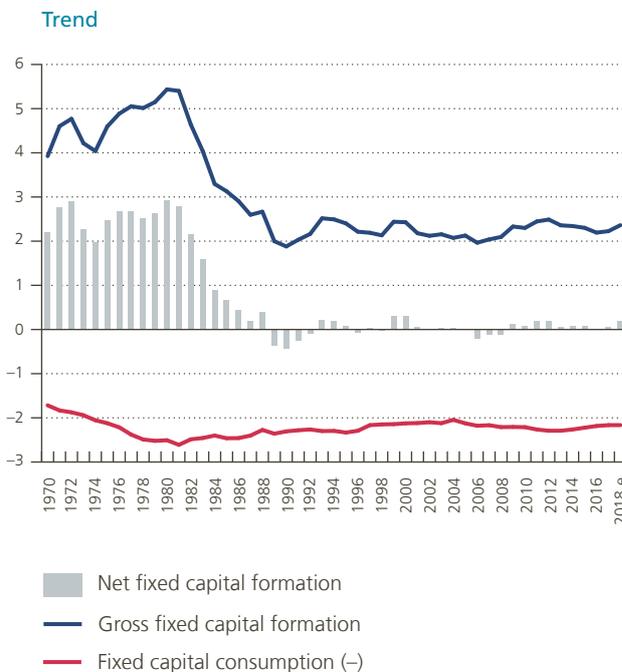
Boosting public investment should be a budget priority

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

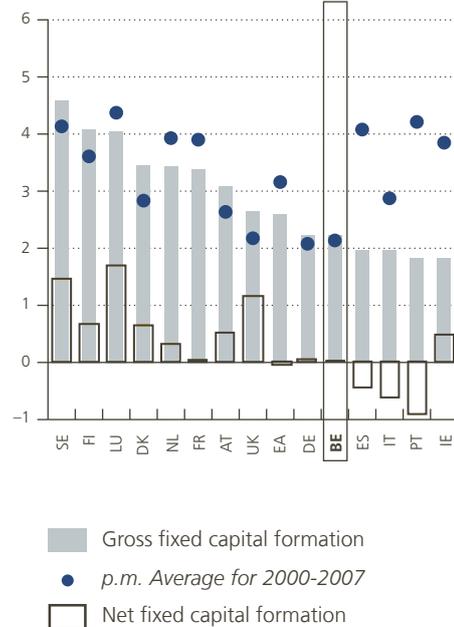
Public investment remains weak

(in % of GDP)



Sources: EC, NAI, NBB.

International comparison (2017)



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.

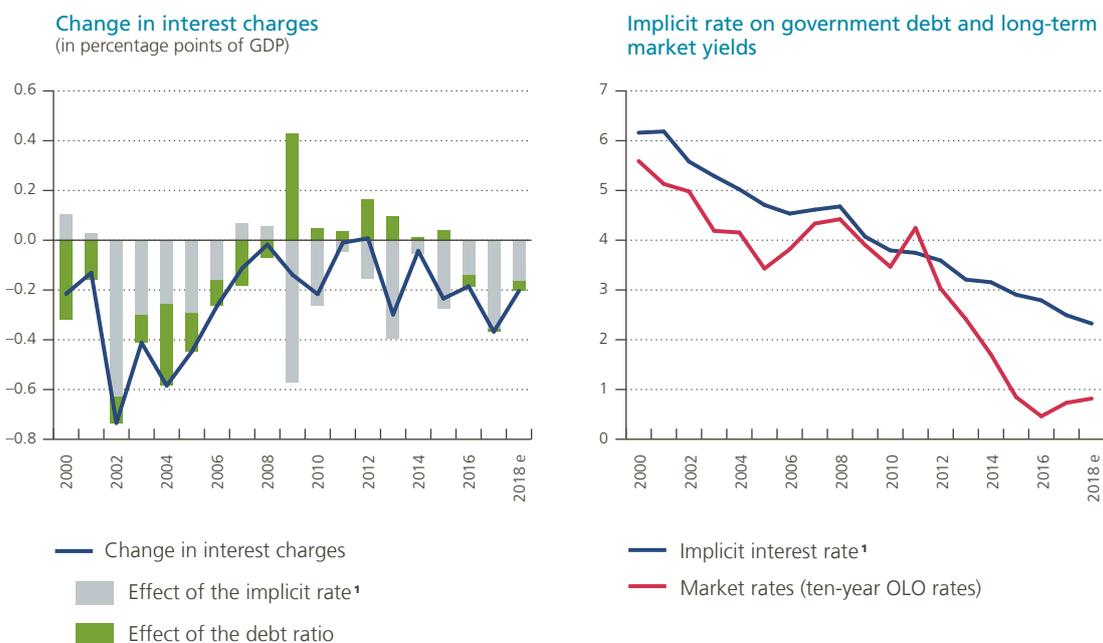
In the short term, the government was able to generate funds through the issuance of Treasury bills with maturities between three and twelve months (with yields varying between  $-0.99\%$  and  $-0.3\%$ ), as interest rates remained negative throughout the year. Yields on ten-year reference bonds fluctuated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

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

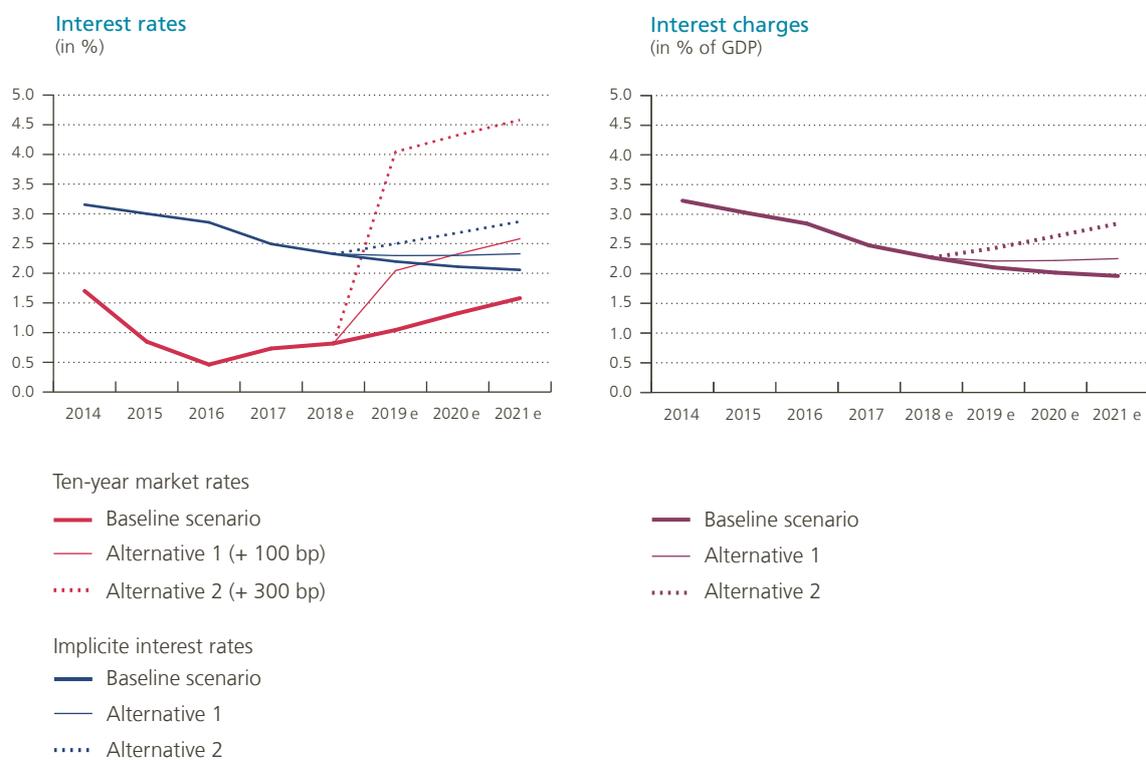
However, the baseline scenario in the Bank's projections does not factor in any significant and rapid yield rises, such as recently seen in Italy. A simulation exercise shows that a hypothetical shock of an average 100 basis points on securities yields in 2019 would push up interest charges by around € 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

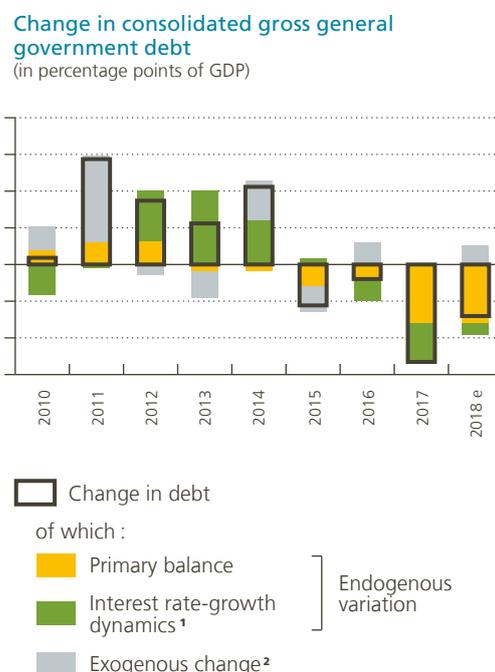
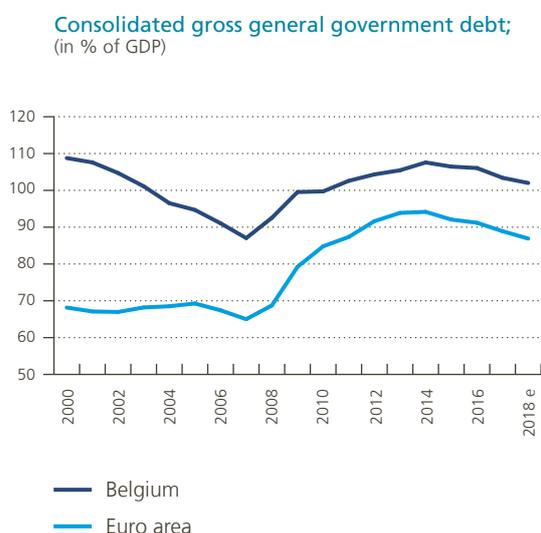
The Belgian government's debt ratio stood at 102 % of GDP by the end of 2018, implying only a slight drop vis-à-vis 2017, by 1.4 percentage points. This is still high, though. And the gap with the euro area average has widened as Belgium is slower to reduce its debt.

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.

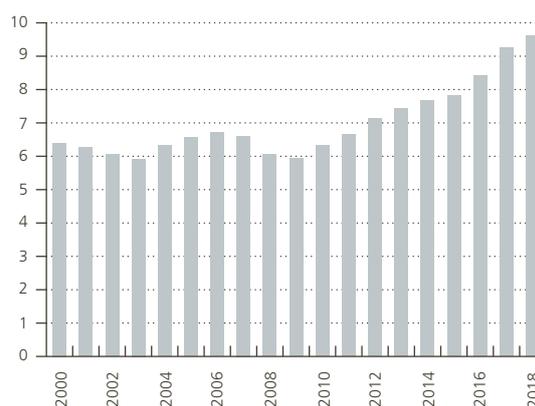
The federal government's gross borrowing requirement covers, on the one hand, the current year's deficit and, on the other hand, early debt repayments and refinancing of debt reaching maturity. With the exception of the renewal of Treasury bills in the short term – whose outstanding amount remained unchanged 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



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## 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.

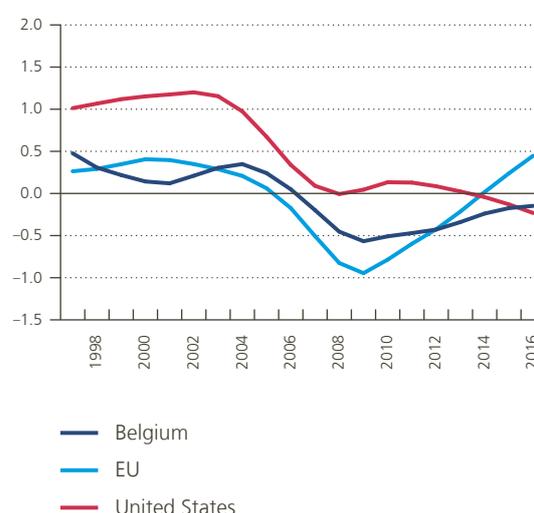
TFP – which reflects how efficiently the production factors (human capital, knowledge and physical assets) are mobilised – is not a concept that can be directly measured. The change in TFP, which was slightly negative at the end of the period although it is recovering, seems to be at odds with the recent 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<sup>1</sup> 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<sup>2</sup>. The analysis of detailed data reveals a marked polarisation of individual performance in terms of the level

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.

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

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<sup>1</sup>.

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.

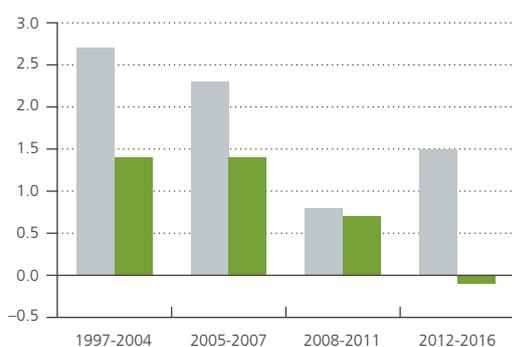
<sup>1</sup> See De Mulder J. and H. Godefroid (2018), “Productivity slowdown: findings and tentative explanations”, NBB, *Economic Review*, December, pp. 51-66.

## Chart 72

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

#### Aggregate productivity growth

(annual averages per sub-period, percentage change)



■ Frontier firms<sup>1</sup>  
■ Other firms

#### Contribution to aggregate productivity growth<sup>2</sup>

(annual averages per sub-period, percentage points)



■ Internal growth of frontier firms  
■ Reallocation: frontier firms  
■ Internal growth of other firms  
■ Reallocation: other firms

Source: NBB.

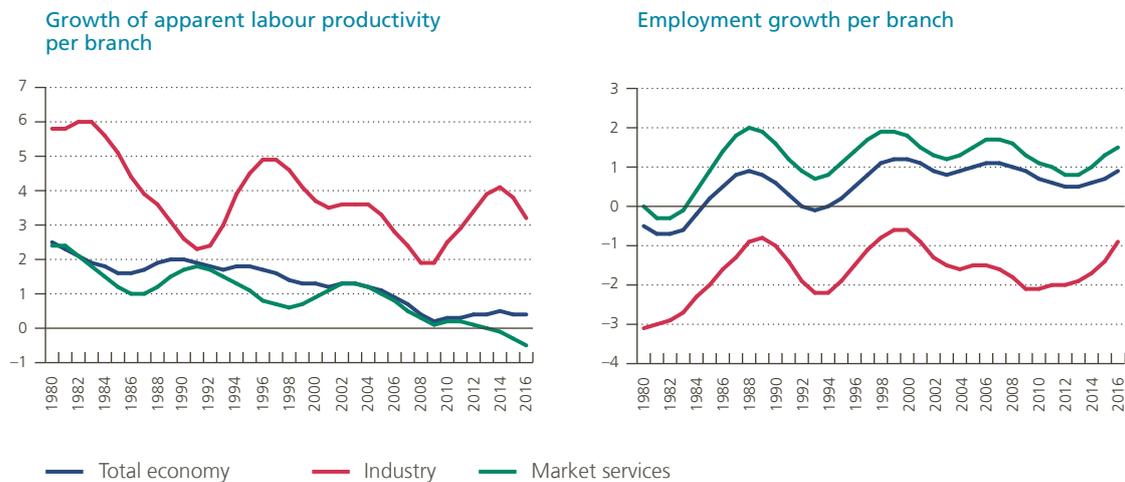
<sup>1</sup> The category comprising frontier firms covers all firms with a productivity level in the top decile of the TFP distribution for their sector for at least two consecutive years.

<sup>2</sup> 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")

**Innovation reinforces firms' organic growth**

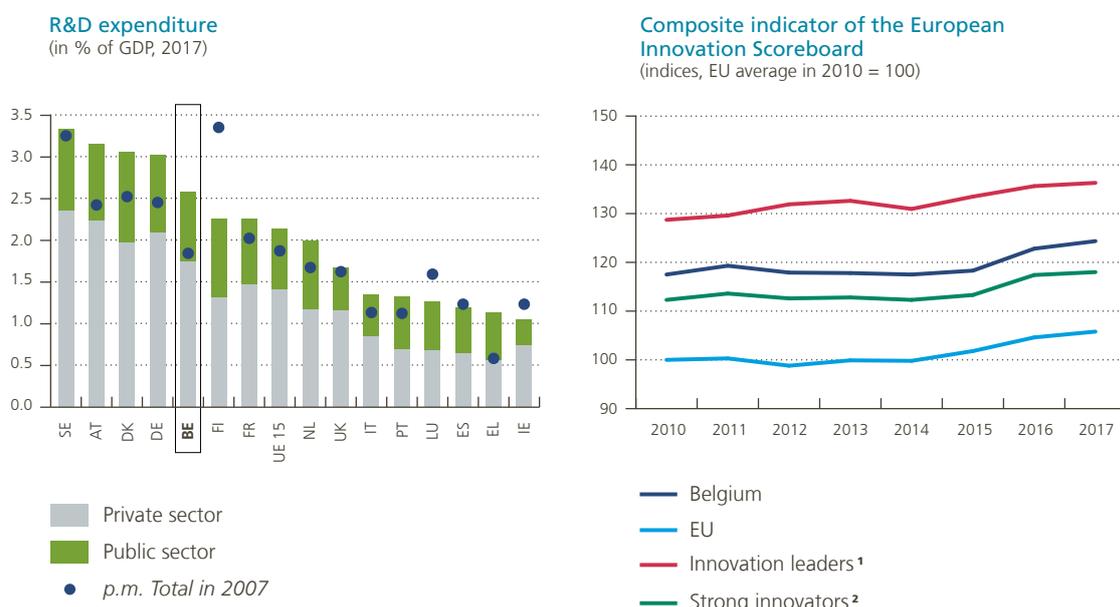
were thus replaced by a new system reserved strictly for research activities conducted on Belgian territory, in accordance with the OECD code of conduct. The deduction increased from 80 % to 85 % of net income and was also extended to new copyright-protected software.

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-negligible 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

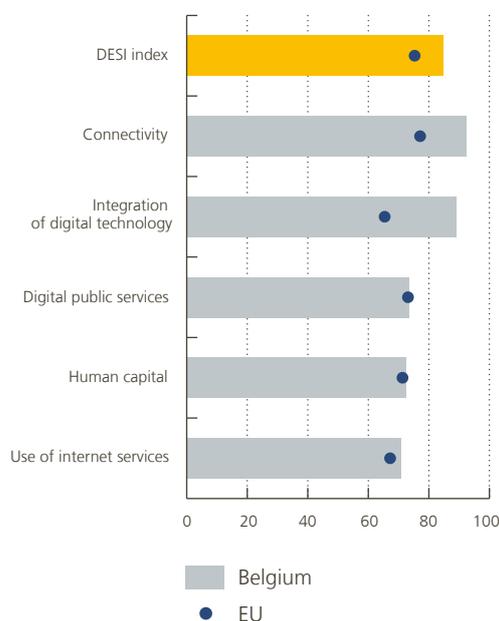
Belgium is in a fairly good position in the European digital landscape according to the EC's Digital Economy and Society Index (DESI), which assesses five separate criteria (connectivity, human capital, use of internet services, integration of technology by firms, and digital public services). In 2018, 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

Chart 75

**Belgium outperforms the European average in the digital sphere, except in the case of public services and human capital<sup>1</sup>**



Source: EC.

<sup>1</sup> Indicators rescheduled between 0 (country with the worst score) and 100 (country with the best score).

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 %).

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)<sup>1</sup>. By applying their methodology to Belgian data, the HCE (2016)<sup>2</sup> estimated that 39% of jobs could be fully digitalised. More recently, in a 2017 report<sup>3</sup>, the OECD noted a high risk of digitisation for just 7% of jobs in Belgium. In contrast, an analysis by McKinsey (2017)<sup>4</sup> 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.

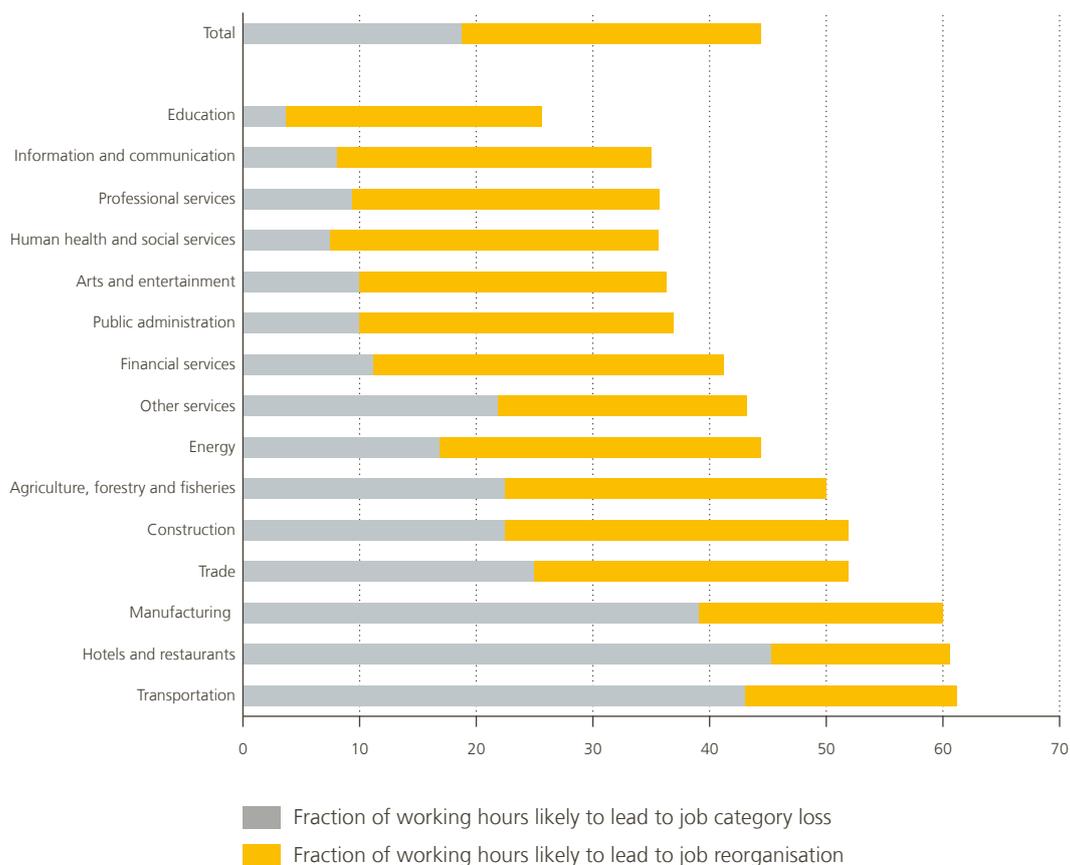
In terms of skill levels, it is currently only highly-skilled tasks that have a low risk of digitisation. According to the HCE's 2016 analysis, barely 13 % of highly-skilled jobs could be almost totally automated, with that figure rising to 30 % for low-skilled jobs and 69 % for medium-skilled jobs.

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<sup>1</sup>**

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



Source: McKinsey.

<sup>1</sup> 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 %) <sup>1</sup>.

### 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<sup>2</sup>, 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*

<sup>1</sup> See EC, *Survey of schools ICT in education*.

<sup>2</sup> 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,

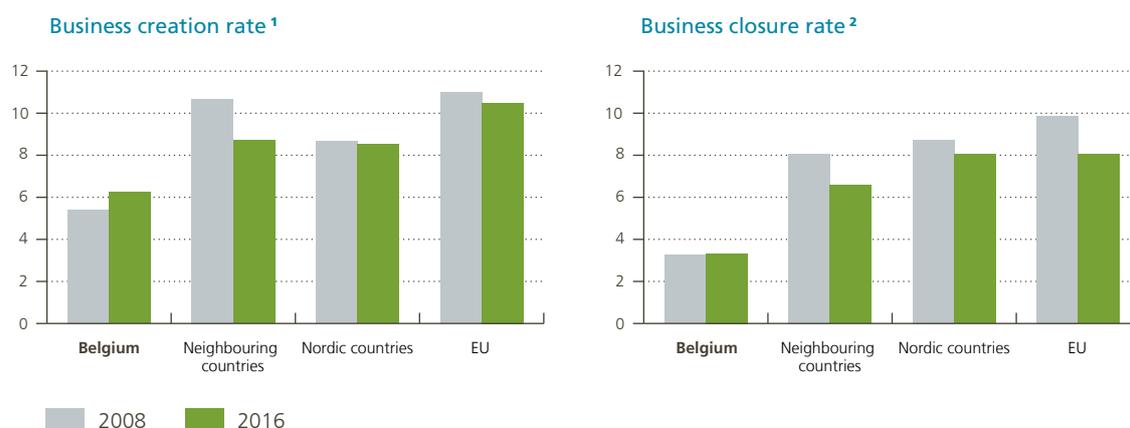
neither should their demise, so as to ensure that the continuation in business of inefficient entities does not take up a substantial share of the resources, whether workers or capital, which could be put to better use elsewhere. If such firms remain in business, that will also depress growth potential 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 enterprises have also been subject to a lower rate of corporation tax at 20 % on the first € 100 000 of profits.

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

*Encouraging business creation does not only mean simplifying the administrative procedures*



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

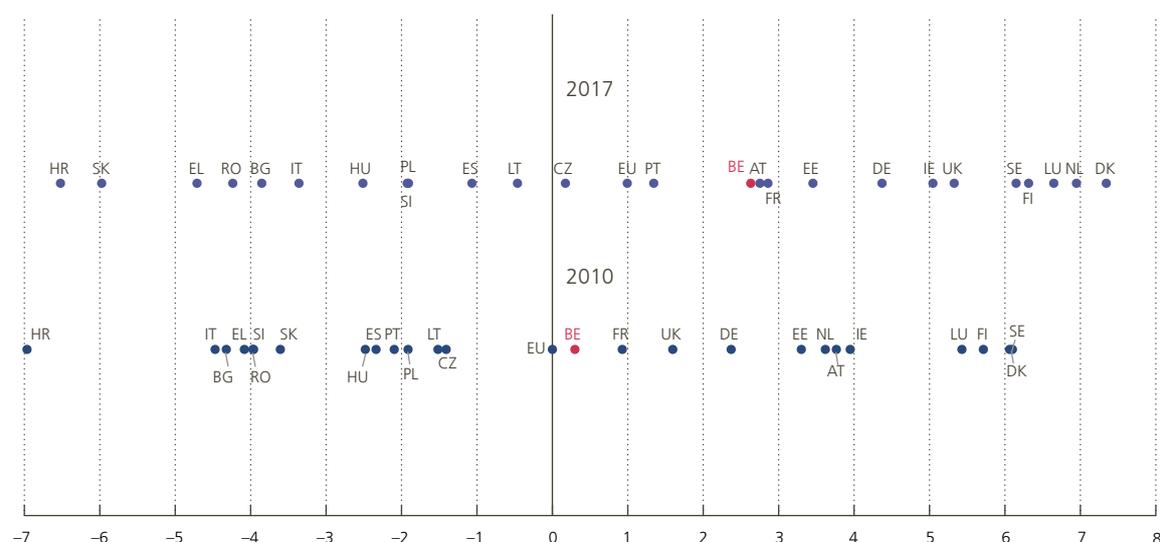
more general aims such as protecting the environment or certain fundamental rights. However, the regulatory framework must not place too many restraints on the development of activities that respond to new needs.

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<sup>1</sup> in 2010 = 0)



Sources: IMD, WEF, NBB.

<sup>1</sup> 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

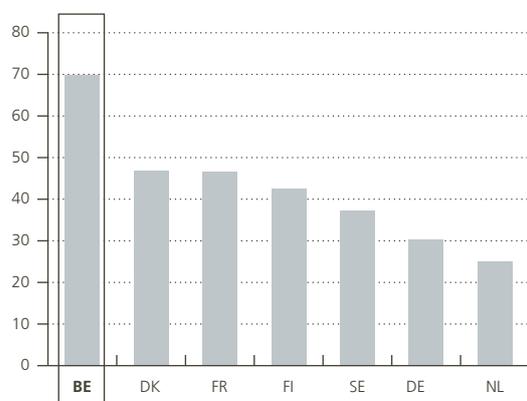
have, on average, a replacement income equivalent to 70 % of their last net wages. Alongside appropriate financial incentives, there is also a need to step up the efforts to provide guidance and training for job-seekers in order to limit the number of long-term unemployed.

### Chart 79

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

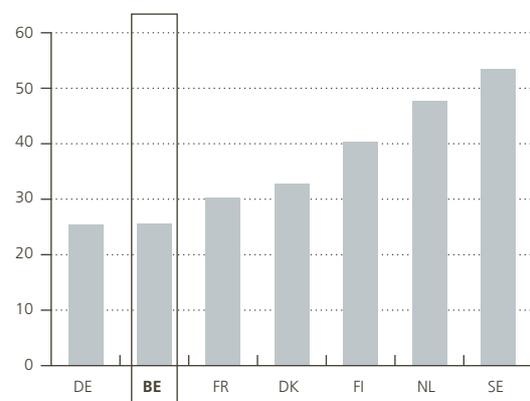
##### Unemployment trap

(net replacement rate, in %, average over five years of unemployment, for a single person with no children receiving 67 % of the average wage, 2016)



##### Transition from unemployment into work

(in % of unemployed persons in 2016 who are in work in 2017, 15-64 age group)



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

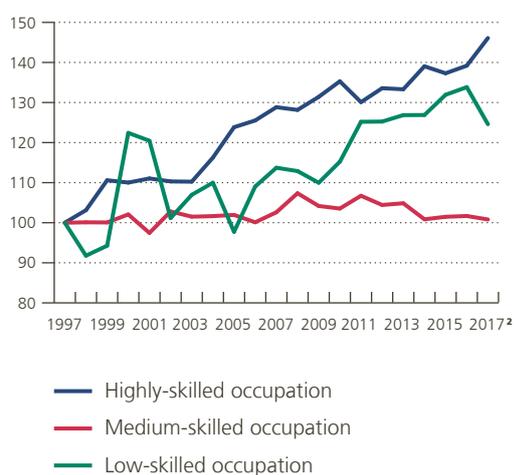
many of them offer services relating to people or physical locations, including services connected with new activities of digital platforms or e-commerce. Belgium's policy of subsidising low-skilled jobs over the past fifteen years through the development of a service voucher system and also taking action in the non-market sector has also helped to expand

Chart 80

### Polarisation of employment but not wages

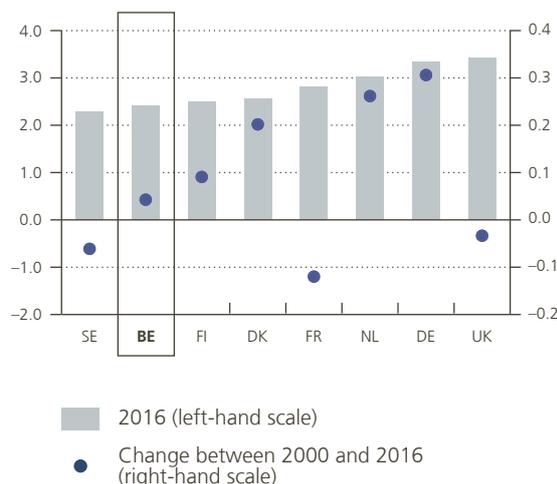
#### Employment by occupation<sup>1</sup>

(indices 1997 = 100, persons in work, 15-64 age group)



#### Dispersion between high and low wages<sup>3</sup>

(ratio between the ninth and first wage deciles, gross wages for full-time employees)



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<sup>1</sup>. 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

### Demand for labour is increasingly focused on highly-skilled jobs

financial incentives for investing in the required knowledge and skills to fill 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.

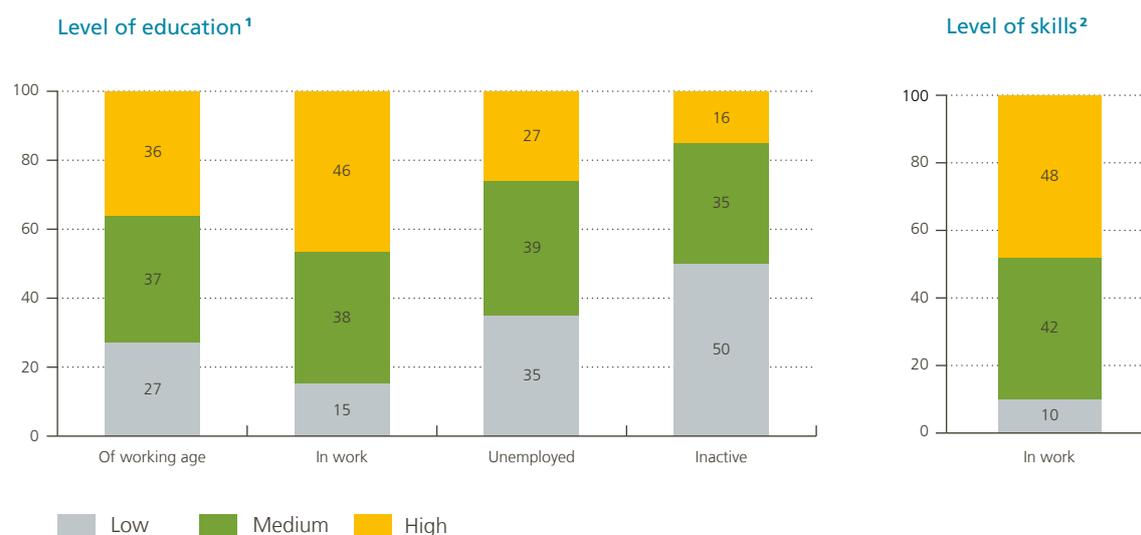
This mismatch between supply and demand for labour influences the extent to which workers are over- or under-qualified. For instance, holders of a higher education diploma usually have a job that matches their level of education (80% in 2017, compared to 78% in 1997). Conversely, it is harder for a person

<sup>1</sup> 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.

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

<sup>2</sup> 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 <sup>1</sup>	7.1	14.9	4.4	9.7
Vacancy rate <sup>2</sup>	3.4	3.2	3.6	2.8
Characteristics of the unemployed <sup>3</sup>				
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.

**Labour market pressures are greater in Flanders**

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.

**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.

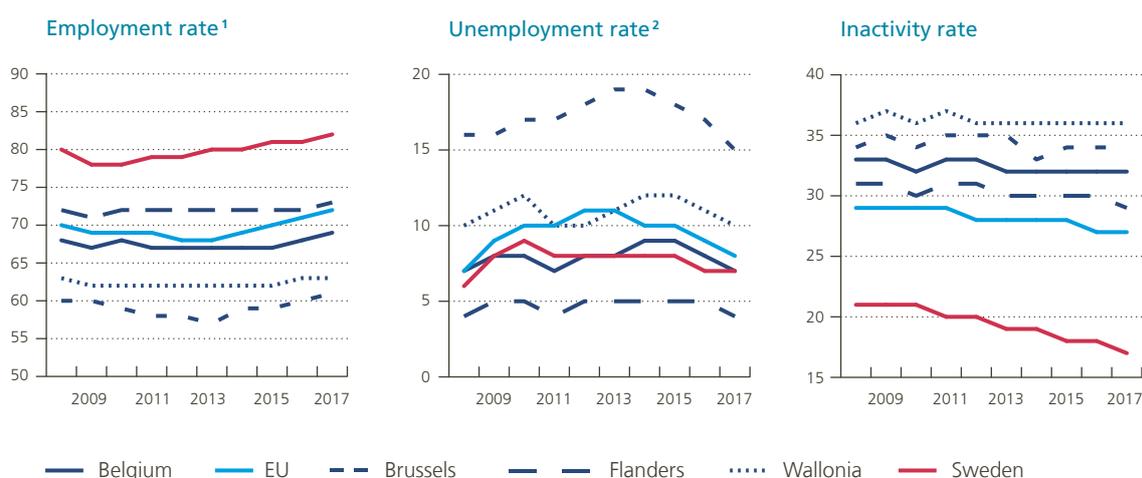
Although in principle a section of the inactive population could easily be mobilised and form part of the potential labour force, the majority of inactives do not wish to participate in the labour market and are not looking for a job. In 2017, that group was estimated at almost 1.6 million people, i.e. 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	<i>p.m. Sweden</i>
<b>Total</b>	<b>68.0</b>	<b>66.1</b>	<b>70.6</b>	<b>63.9</b>	<b>73.3</b>	<b>82.5</b>
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<sup>1</sup> 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

<sup>1</sup> 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

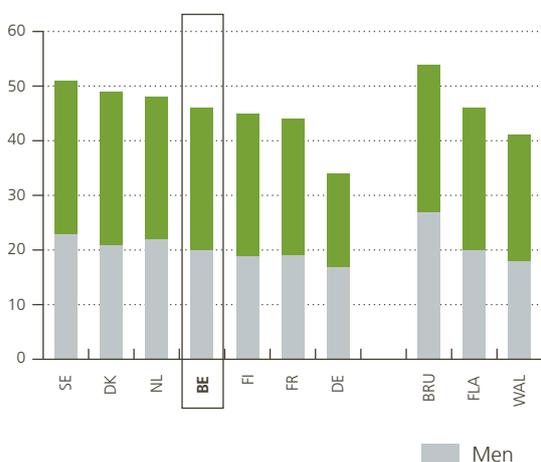
and communication technologies, together with engineering, industry and construction, which will remain most in demand in the future. Although a high proportion of the population holds higher education diplomas, barely 21 % of new graduates in the 30-34 age group chose one of those areas of study. That 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**

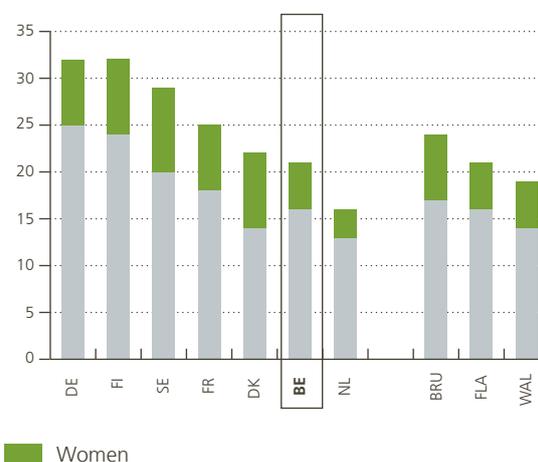
**Graduates, all fields**

(in % of the population aged between 30 and 34 years, 2017)



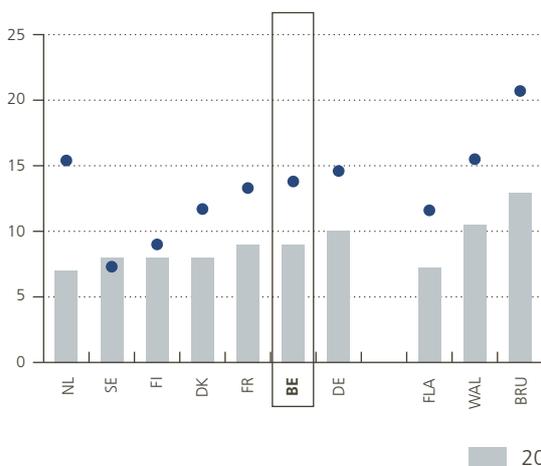
**Graduates in fields with good job prospects<sup>1</sup>**

(in % of graduates aged between 30 and 34 years, 2017)



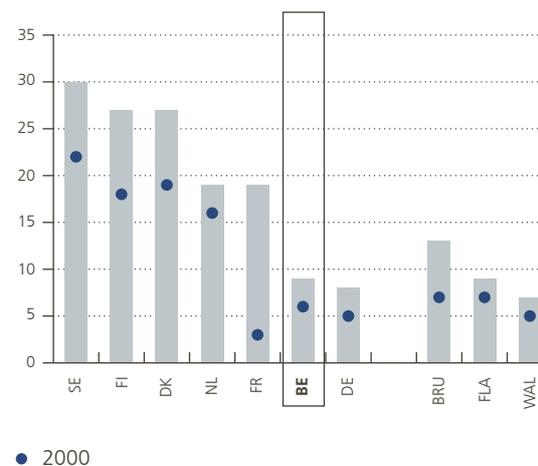
**School drop-out rate**

(in % of persons aged between 18 and 24 years)



**Participation in education and training**

(in % of persons aged between 25 and 64 years, during the past four weeks)



Source: Eurostat (LFS, microdata).

<sup>1</sup> 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 coun-

tries, 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.

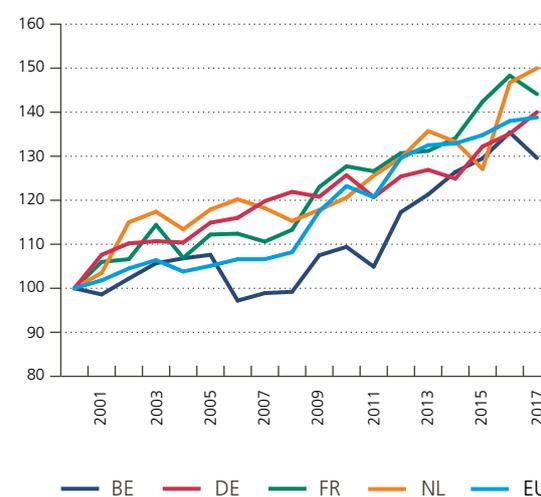
The efforts in this regard should not be seen as hampering economic development but instead should be viewed in relation to the constant need to improve the productive efficiency of firms. The ratio between an economy's GDP and its domestic material consumption (DMC) quantifies that economy's efficiency 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<sup>1</sup>; indices 2000 = 100)



Source: Eurostat.

<sup>1</sup> 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<sup>1</sup>, 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

<sup>1</sup> 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.

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*

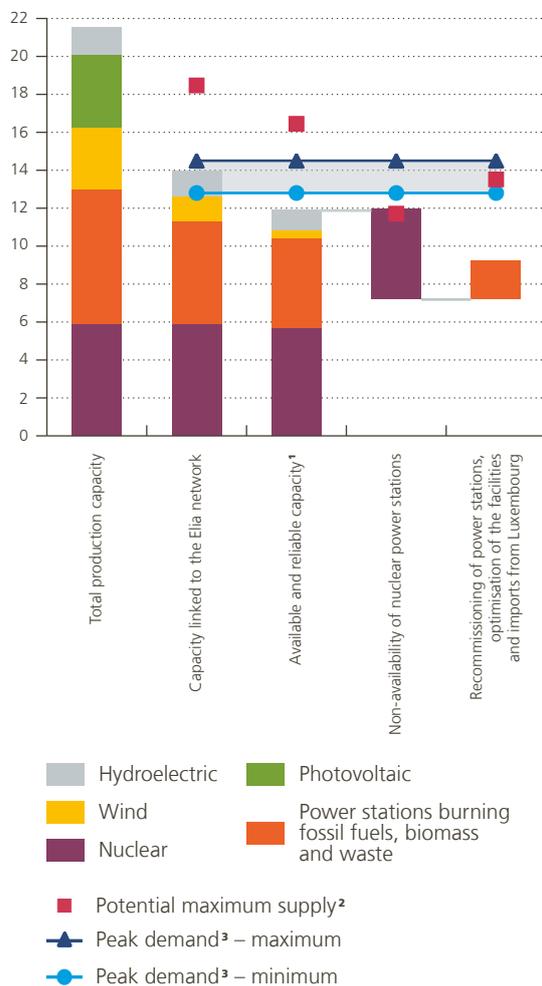
To alleviate this uncertainty, various measures were taken such as the recommissioning of gas power plants which had been mothballed, and optimisation of both power-generating facilities and interconnection to the Luxembourg network. Net imports totalled around 17.4 TWh in 2018, more than



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.

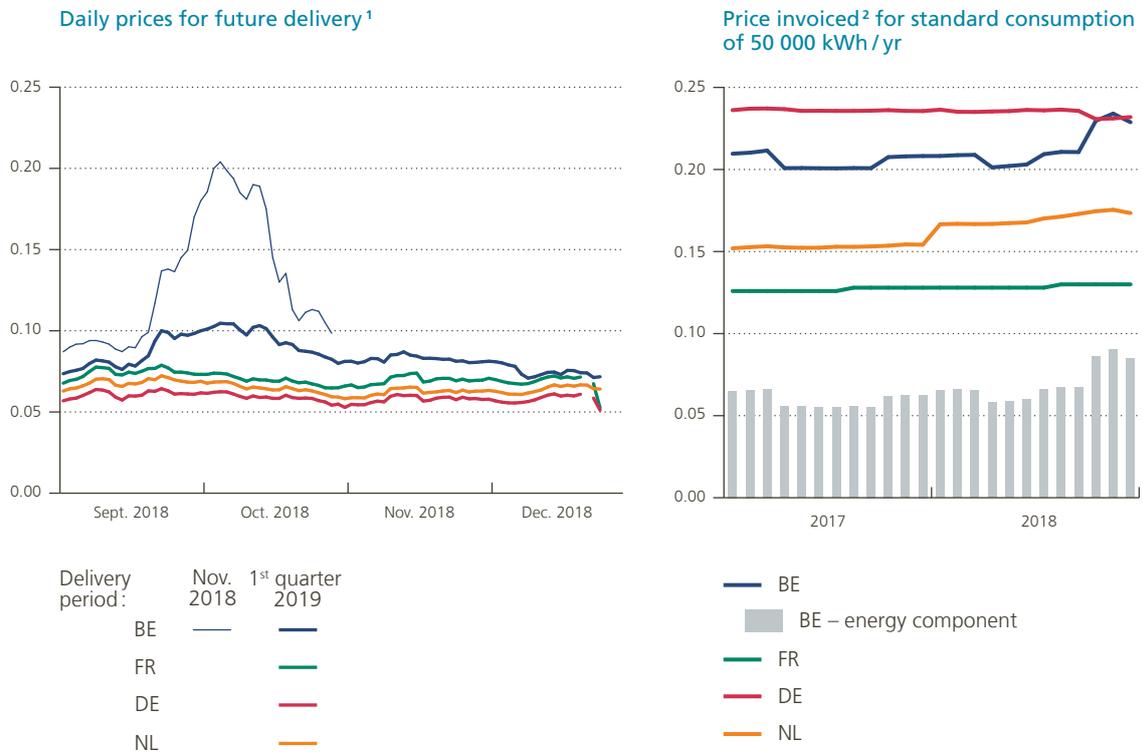
Where electricity supplies are concerned, the authorities' scope for intervention varies according to whether the activities concerned are regulated (transmission and distribution) or subject to competition (production and supply of electricity). In the former case, the regulators determine the conditions 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 Index.

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*

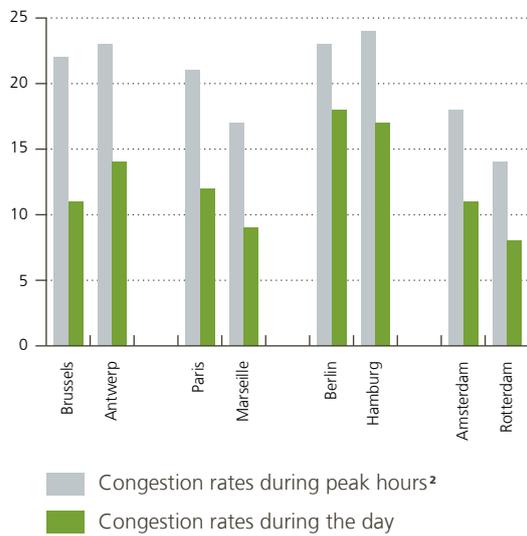
The increase in road transport flows creates congestion primarily around the large urban centres and in areas of economic activity. According to the INRIX indicator of congestion rates at peak hours, which mainly affect commuter travel, the cities of Brussels and Antwerp are ranked 7<sup>th</sup> and 9<sup>th</sup> among the most congested major European cities, well ahead of Lyon or Stockholm, although those cities are similar

Chart 87

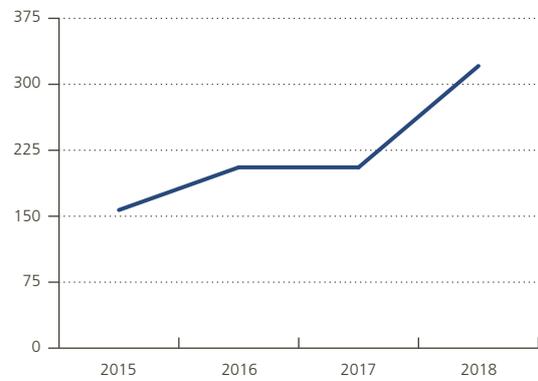
### An increasingly saturated road network

#### Congestion rates

(in % of hours affected by congestion<sup>1</sup>)



#### Incidence of queues



— Number of hours per year in which the total length of motorway queues<sup>3</sup> exceeds 100 km in Belgium between 10.00 and 15.00

Sources: INRIX, Touring.

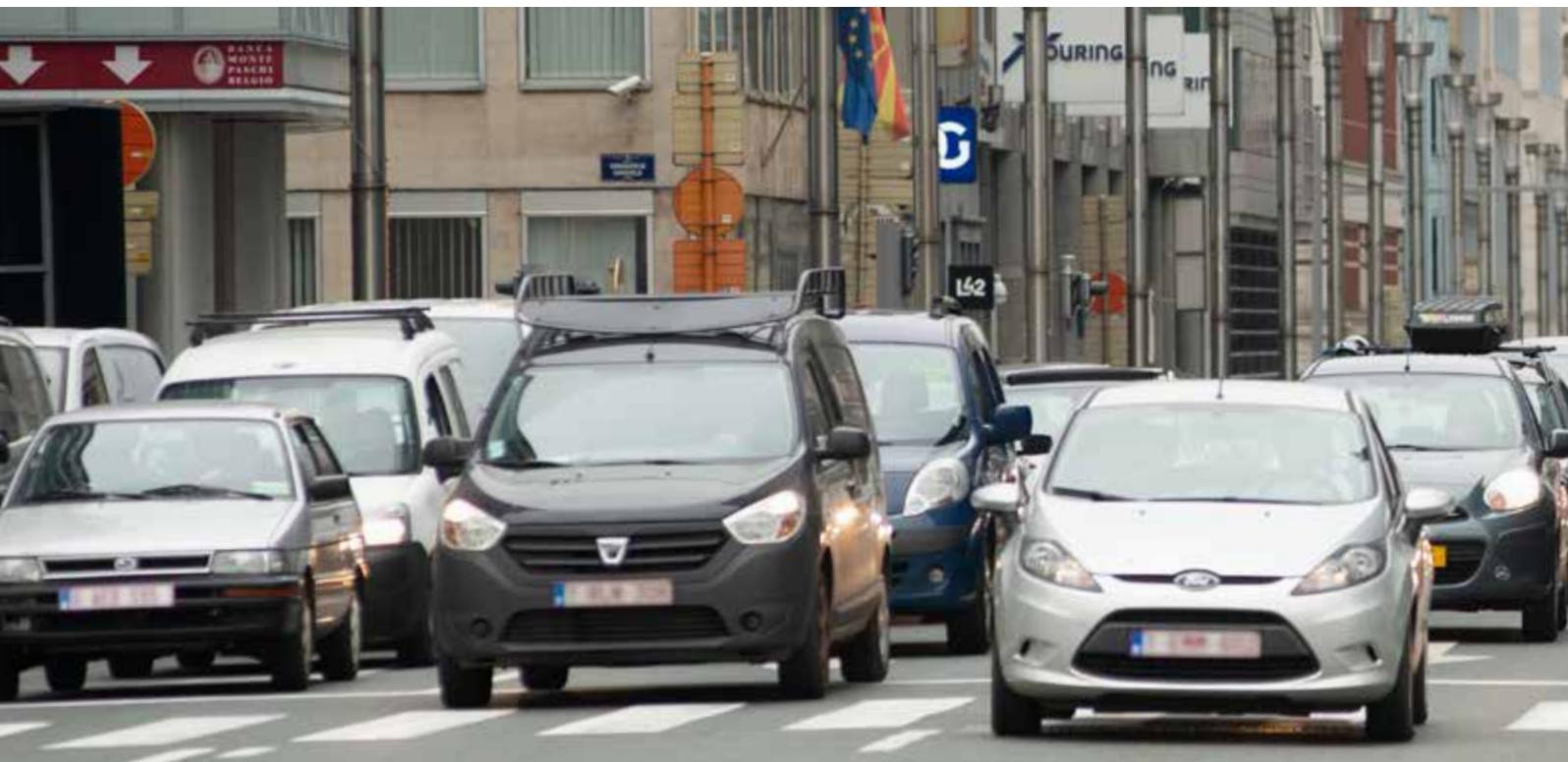
1 INRIX considers that there is congestion if the speed is less than 65% of the free-flow speed.

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<sub>2</sub> 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*



## 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 <sup>1</sup>	Infrastructure adequate and efficient <sup>1</sup>	Infrastructure meets business requirements <sup>1</sup>	Ports, railways, roads and ICT <sup>2</sup> 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	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<sup>1</sup>. 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 %)<sup>2</sup>.

The composite indicator had been rising since 2005, but deteriorated significantly with the outbreak of

*The Belgians' well-being indicator has returned to a level comparable to that before the crisis*

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

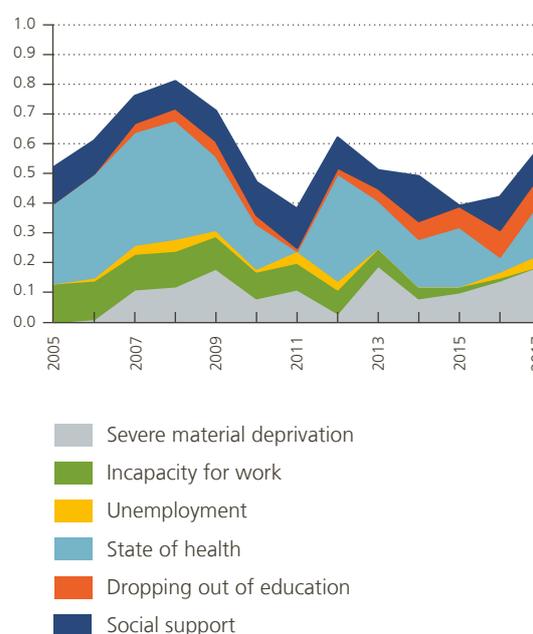
<sup>1</sup> Well-being as expressed in the answers to the question: “Overall, how satisfied are you with your life nowadays?” taken from the 2013 EU-SILC survey (see box 9 for a brief account of the beyond-GDP indicators).

<sup>2</sup> 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 88

**Well-being<sup>1</sup> is rising, but has yet to regain its pre-crisis level**

(scale of 0 to 1)



Source: FPB.

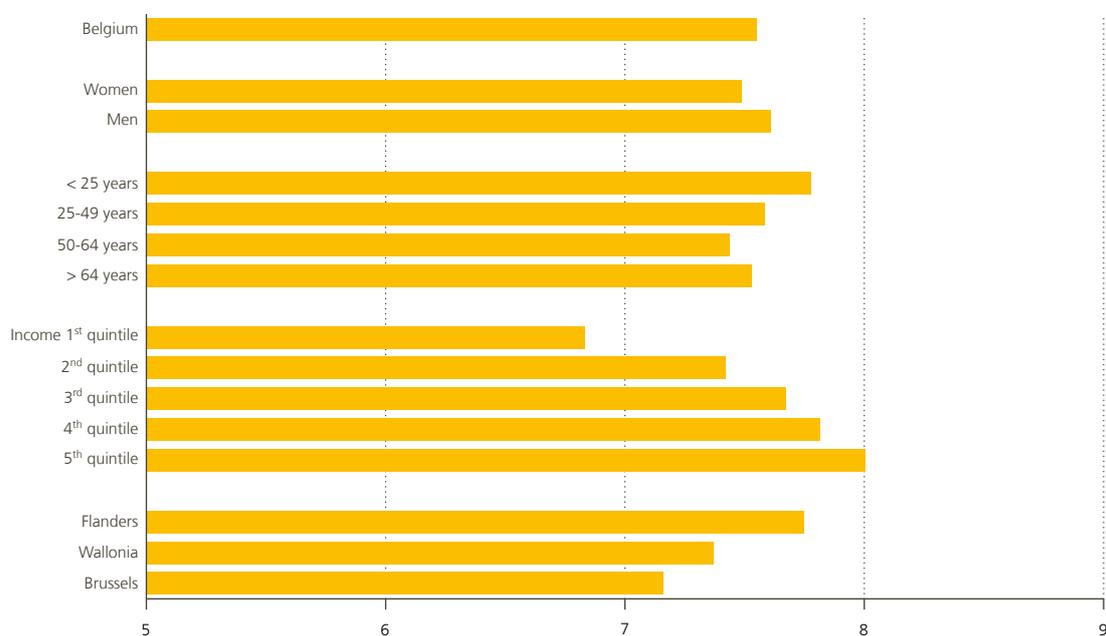
<sup>1</sup> 0 corresponds to a situation in which the six indicators were simultaneously at their minimum level over the period 2005-2017, while 1 corresponds to a situation in which they were all simultaneously at their maximum level over that same period.

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.)

## Chart 89

### Unequal satisfaction with life according to population group

(scale of 0 to 10; 2013)<sup>1</sup>



Source: FPB.

<sup>1</sup> 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.



# Prudential regulation and supervision



## A. Implementation of the FSAP recommendations

On 8 March 2018, the International Monetary Fund (IMF) published the report<sup>1</sup> on the Financial Sector Assessment Programme (FSAP) for Belgium after having conducted an analysis of the Belgian financial sector and Belgian financial legislation in 2017. This exercise is carried out every five years for countries such as Belgium which have a systemically important financial sector. An FSAP is a financial sector analysis by the IMF and deals with three main subjects: the resilience of the local financial sector, the quality of the financial regulation and supervision framework, and the crisis management toolkit. On completing its FSAP missions, the IMF publishes its analysis and recommendations to the authorities concerned; in Belgium's case, that means the Bank and the federal authorities, plus the single supervisory mechanism (SSM) and the single resolution mechanism (SRM) in their respective capacity as the supervisory authority and the resolution authority for Belgian significant institutions (SIs). These recommendations are not binding but they carry considerable weight.

In its report, the IMF emphasises that the Belgian financial sector has become considerably stronger since the previous FSAP analysis in 2012-2013. The stress tests conducted by the IMF jointly with the NBB and the European Central Bank show that, in Belgium, both the banking sector and the insurance sector are capable of coping with the materialisation of credit risks and market risks resulting from a severe deterioration in the macrofinancial situation. According to the IMF, the banks' resilience shows that the loan portfolios are relatively sound and that exposure to market and liquidity risks is limited. Insurance companies have sound levels of equity capital, and the share of guaranteed-yield products is declining. Nonetheless, the IMF highlights the need for close monitoring of the banks' ability to absorb

interest rate shocks and credit risk in certain specific portfolios, and the growing liquidity risks for insurance companies.

Despite the favourable assessment of the health of the Belgian financial sector, the IMF report also mentions a number of challenges. Examples include the potential vulnerabilities in the Belgian housing sector associated with the current low interest rate environment and the increase in Belgian household debt ratios. The FSAP report therefore endorses the additional macroprudential capital requirements proposed by the Bank in 2017 which have since been adopted (see section B.1). The IMF also recommends simplifying the procedure for decisions on macroprudential matters in order to permit a prompt and effective response to macrofinancial developments.

*The IMF emphasises that the Belgian financial sector has become considerably stronger since its previous analysis in 2012-2013*

The IMF is likewise interested in the development of a European Banking Union. In the IMF's opinion, prudential supervision at the level of European banking groups should be accompanied by sufficiently close attention to the systemically important subsidiaries of those groups during the transition to a full European Banking Union. In Belgium's case, this is important because a number of foreign banking group subsidiaries hold key positions in the financial sector. The IMF also points out here that, during the transitional period preceding full Banking Union, it is vital to maintain sufficient capital and liquidity buffers at the level of these subsidiaries.

<sup>1</sup> IMF, *Belgium: Financial System Stability Assessment*, March 2018.

The IMF mentions the significant improvement in the supervision of the Belgian financial sector and financial crisis management in Belgium by the authorities concerned, but encourages new measures in that area. As regards prudential supervision, there should

*The IMF mentions the significant improvement in the supervision of the Belgian financial sector and financial crisis management in Belgium*

be continued efforts to ensure prudent provisioning practices and to improve the quality of the internal models used to calculate the capital requirements. In that connection, the IMF also asks for special attention to the challenges posed by complex financial

conglomerates, changes in the insurance sector's risk profile, and the potential challenges arising from the low quality of some insurers' capital components. As for financial crisis management, the authorities are advised to enhance their ability to manage a crisis by according priority to the resolution plans of systemically important banks and the reinforcement of the deposit guarantee system.

Lastly, the IMF states in its report that the oversight arrangements for the Society for Worldwide Interbank Financial Telecommunication (SWIFT), which is based in Belgium, have proved effective but that this company faces new risks, notably cyber security incidents in its global user network. In this connection, the Bank is recommended to strengthen further its role as overseer.

More details on the analysis and the various recommendations may be found in the FSAP report and in the three technical annexes published at the same time by the IMF. These IMF recommendations will have an impact on the authorities' programme in the years ahead. In 2018, in consultation with the other Belgian authorities, the Bank has already taken steps to implement these recommendations.

In parallel with the Belgian FSAP, the IMF also conducted an analysis of the financial sector in the euro area as a whole, and the financial regulation and supervision exercised over that sector. That analysis was likewise very important for assessing the Banking Union and financial regulation in the European Union. Box 10 offers a brief summary of the main conclusions and recommendations of that exercise.

**BOX 10**

## **FSAP analysis of the euro area**

The FSAP exercise concerning the euro area aimed to analyse the resilience of the European banking sector, the joint supervision of the banks by the SSM and the SRM, and the policy of the ECB and the Eurosystem on the provision of emergency liquidity for credit institutions. This was the first exercise in which the IMF assessed the functioning of the first two components of the Banking Union: the SSM and the SRM.





The IMF concluded that the resilience of large euro area banks has generally improved, but significant vulnerabilities persist. In aggregate, the capital buffers are considered large in relation to the immediate threats, but some individual banks remain particularly vulnerable to credit risks and/or market risks. The banking system as a whole also has sufficient liquidity, notably thanks to the provision of liquidity by the ECB. Nonetheless, the IMF highlights the structurally weak profitability of numerous banks with varying business models. It considers that the risks to financial stability relate mainly to economic and geopolitical uncertainty.

In the IMF's opinion, banking supervision in the euro area has improved markedly with the creation of the SSM. It notes that the SSM has reinforced its independence and its operating efficiency and has succeeded in harmonising prudential supervision at a high level. Yet, banking supervision still faces some major challenges, particularly concerning the resources available to the SSM, the monitoring of the banks' liquidity risks and credit risks, and the fragmentation of the still partly national legislation in the euro area. The Fund likewise stresses the need for better cooperation between prudential supervision and the control of money-laundering. The IMF considers that supervision of the non-bank financial sector has also been strengthened, notably by the proposed transfer to the SSM of responsibility for the supervision of systemically important investment firms in the euro area, and by more centralised supervision of financial market infrastructures (FMIs) by the European Securities and Markets Authority (ESMA) and the ECB. Finally, the IMF considers that macroprudential policy should similarly improve the identification and management of the risks associated with non-bank and cross-border financial flows.



The conclusions of the FSAP analysis also state that banking crisis management has been strengthened considerably, but that here, too, the arrangements remain fragmented. In the IMF's opinion, adoption of the Bank Resolution and Recovery Directive (BRRD) and establishment of the SSM and the SRM provide a sounder basis for dealing with banks in difficulty. Recent instances of intervention in the case of banks in difficulty have demonstrated a number of strengths but also revealed that there are still circumstances which encourage circumvention of the BRRD and lead to more government intervention. Consequently, in the view of the IMF, the banking crisis management framework in the euro area still faces significant transitional and structural challenges. In that connection, the Fund referred to one crucial challenge: the accumulation of internal reinforcement instruments (minimum requirement for own funds and eligible liabilities or MREL), which needs to speed up, particularly for the large banks. In addition, the SSM, the SRM and the Single Resolution Fund (SRF) must continue to strengthen their respective operational capability and financial soundness. In that context, the IMF also calls for the establishment of a European deposit guarantee scheme and greater harmonisation, with – ultimately – centralisation of the emergency liquidity to be made available to credit institutions by central banks.

## B. Macroprudential policy

*The purpose of the Bank's activities in performing its macroprudential mandate is to safeguard overall financial stability. The Bank fulfils part of that responsibility jointly with the ECB, which was given a number of powers concerning macroprudential policy under the SSM.*

*During the year under review the Bank monitored the risks in the financial system and took steps to address the vulnerabilities found. The Bank's macroprudential risk assessments cover a wide range of potential current and future threats to financial stability. Those analyses are therefore not confined to the banking sector but focus on any vulnerabilities in the Belgian financial system as a whole.*

*For instance, the Bank conducts periodic analyses of the use of derivatives in the Belgian financial sector and the associated risks. In May 2018, the Bank published its first extensive study of the use of derivatives by Belgian financial institutions. The report first describes the changes to the regulatory framework for banks and insurance companies since the crisis in regard to derivatives, and then analyses the trends in Belgian banks' and insurers' derivatives business. Finally, it sets out a series of points for attention concerning the policies to be adopted. Assessment of the risks relating to derivatives operations is challenging and requires detailed data on the transactions and positions of the various market players. The reporting obligations imposed by the European Regulation on over-the-counter derivatives, central counterparties and trade repositories (European Market Infrastructure Regulation or EMIR) provide for such granular data<sup>1</sup>, but analysing the data is difficult because of the large volume and the hitherto poor quality of the data reported. During the year under review, the Bank invested significant resources in developing an IT platform for the analysis and quality control of these EMIR data. That platform will become operational during 2019.*

*In October, as part of the periodic monitoring of asset management activities and the shadow banking sector in Belgium, the Bank and the FSMA published the first update of their original 2017 report. As things stand at present, no significant threat to financial stability was identified in regard to asset management and non-bank financial intermediation. However, developments concerning these two activities and their links with other sectors of the economy need to be kept under close watch. In that connection, the FSMA and the Bank will continue their efforts to improve the availability of data on these activities.*

*As every year, the Bank also reviewed the classification of Belgian banks as domestic systemically important banks. The list of eight institutions previously designated as domestic systemically important banks was confirmed, and the capital surcharges imposed on those institutions were maintained. The level of common equity Tier 1 (CET1) surcharge stands at 1.5% for BNP Paribas Fortis, KBC Group, Belfius Bank and ING Belgium, and 0.75% for Euroclear, The Bank of New York Mellon, Argenta and Axa Bank Belgium.*

*The Bank's other core macroprudential policy activities are discussed in more detail below. They include the analysis and monitoring of vulnerabilities relating to the real estate sector, in which the focus is not only on analysis of the macroprudential risks in housing but also on any risks arising from activities and exposures in*

<sup>1</sup> Counterparties concluding a derivatives contract must report the details of each transaction to a trade repository of their choice. Apart from data on the identity of the counterparties and the type of contract, its underlying value, maturity and reference amount, the reporting obligation also includes, for example, the value of the contract and the guarantee requirements applicable to the counterparties.

the commercial property sector. In addition, each quarter, the Bank determines the rate of the countercyclical capital buffer for credit risk exposures in Belgium. Finally, during the year under review, the Bank continued to extend its analytical framework for monitoring the risks relating to climate change and the transition to a low-carbon economy.

## 1. Residential and commercial real estate markets

### Residential real estate

In recent years, the Bank has kept a close eye on the risks associated with developments on the Belgian housing market and those relating to the banks' mortgage loan portfolios, more especially in the riskier sub-segments. The IMF, the ECB and the European Systemic Risk Board (ESRB) have also drawn attention to developments on the Belgian housing market. At the end of 2016, the ESRB had issued a warning to eight Member States, including Belgium, on the basis of an analysis of the medium-term risks.

Recent developments on the Belgian mortgage market have confirmed that the vulnerabilities seen in the past had not been resolved (see chapter 3.3. of the "Economic and financial developments" part of the Report). Mortgage lending has continued to grow by more than 5% per annum since July 2015, and consequently the household debt ratio topped 60% of GDP in 2018, a level which now exceeds the euro area average. Furthermore, the strong growth of mortgage debt was accompanied by a further easing of borrowing conditions, as the previous favourable trend towards tightening of credit conditions has come to an end. The already significant share of recent mortgage lending represented by loans with a high loan-to-value ratio, i.e. the amount borrowed in relation to the value of the property to be financed, has

*The Bank considered that a new, stricter and more targeted macroprudential measure was necessary*

gone up. The proportion of loans with maturities of over 20 years has risen whereas, at the same time, the interest rates charged to customers have remained low, which could in future limit the adjustment of demand to a higher interest rate environment. Moreover, the share of loans with a debt-service-to-income ratio, i.e. a monthly debt payment in relation to the borrower's

income, of more than 50% has stabilised at a high level. Also, the banks' commercial margins are continuing to shrink, particularly as a result of market competition, dropping to a level which often takes insufficient account of the aforesaid risks. Finally, there has been no break in the house price growth evident in recent decades, and various indicators suggest that these prices are somewhat overvalued (see chapter 3.2. of the "Economic and financial developments" part of this Report).

In view of these developments, the Bank considered that a new macroprudential measure – stricter and more targeted than a previous measure which had expired in 2017 – was definitely necessary, both to maintain the banks' resilience and to promote the continuation of prudent lending criteria and encourage the banks to reduce the share of the riskiest loans in new business.

This measure was notified to the ECB under Article 5 of the Single Supervisory Mechanism Regulation, and subsequently to the various competent European institutions, as specified in Article 458 of the Capital Requirements Regulation. On 20 March 2018, on the basis of the opinions from the ESRB and the European Banking Authority (EBA), the European Commission announced its decision not to raise any objections to the proposed measure with the Council. The measure was then forwarded to the government and approved by the King on 4 May 2018, by means of a new Royal Decree.

The new measure first comprises a linear component, i.e. one targeting all loans in the same way, thus ensuring continuity with the previous measure. This linear component corresponds to a 5 percentage point increase in the risk weighting calculated in accordance with internal models. A second, more targeted, component is applied according to the average risk of each bank's portfolio, using a multiplier. In this case, the initial (microprudential) risk weighting is multiplied by a factor of 1.33. This means that banks holding a riskier mortgage loan portfolio and therefore contributing more to systemic risk are subject to a proportionately higher capital requirement.



Taken together, the two components resulted, at the end of September 2018, in the creation of a buffer amounting to around € 1 700 million consisting of CET 1 capital. The Bank considers that this capital buffer is necessary to enable the banking sector to absorb any major shocks on the Belgian housing market. Although this capital buffer is still relatively modest in absolute terms, it considerably reinforces the resilience of the banks concerned, as it implies an increase in the average risk weighting of Belgian mortgage loans from 10 % to over 18 % (5 percentage point increase due to the first component and 3 percentage point increase due to the second component), which exceeds the European average.

This macroprudential measure was accompanied by a set of measures targeting loan criteria. Back in 2012, the Bank in fact established a framework for monitoring risks in the Belgian mortgage market and has

repeatedly reminded the sector of the importance of maintaining sound lending criteria.

The Bank considers that the combination of the two types of measures is an appropriate response to developments on the Belgian housing market and achieves the two aims of its policy concerning that market. First, the banks' resilience is strengthened sufficiently by the application of the capital measure implemented since 30 April 2018. Next, the combination of the second – targeted – component of the capital measure and the measures concerning loan criteria creates significant incentives to maintain a prudent lending policy and reduce the share of the riskiest loans in the banks' portfolios. The Bank expects that the incentives provided by these measures will be enough to achieve that second aim. However, during the course of 2019, an *ex-post* assessment will need to be conducted on the measures taken. If necessary, the Bank will

propose new initiatives to limit the accumulation of systemic risks in this sector.

### Commercial real estate

As pointed out in chapter 3 of the “Economic and financial developments” part of this Report, the Belgian financial sector’s exposures to the real estate market are not confined to the residential segment alone. Thus, the exposures of Belgian banks and insurers to the commercial segment, be it in the form of loans or other financial instruments issued by companies active in construction or real estate, have grown significantly in recent years. The Belgian non-financial private sector is also exposed to this market, as Belgian households, for example, hold a large proportion of the shares issued by regulated property companies, which are listed firms investing in real estate with the aim of earning rental income. Yet, movements in Belgian commercial property prices have been relatively moderate up to now, and do not suggest any over-valuation, in contrast to what is happening in some European cities.

The size of the exposures of both the financial and non-financial sectors and the significant interaction between the residential and commercial markets make these developments particularly relevant for financial stability. That is why the Bank maintains a close watch on the real estate business sector. One of the main challenges of this analysis concerns rectifying serious gaps in the data, owing to the market’s heterogeneity.

## 2. Countercyclical capital buffer

Once a quarter, the Bank has to set the countercyclical capital buffer (CCyB) rate applicable to credit exposures on counterparties located in Belgian territory. The aim of the CCyB is to support sustained lending throughout the cycle by strengthening the banks’ resilience in the event of an increase in cyclical systemic risks (e.g. in the case of excessive credit growth). It uses a wide range of information, including a vast array of indicators considered relevant for signalling the rise in cyclical systemic risks. Each decision on the countercyclical buffer rate is submitted to the ECB and published every quarter on the Bank’s website together with a selection of key indicators.

The credit/GDP gap, which compares the level of the credit/GDP ratio to its long-term trend, is one of the key indicators taken into account. In the third quarter of 2018, following the acceleration of the credit cycle which was reflected in stronger growth of lending, notably to Belgian non-financial corporations, this indicator rose to 2 % of GDP, reaching the threshold suggested by the ESRB for activating the buffer.

Overall, the growth of lending to businesses accelerated while the expansion of credit to households stabilised. In November 2018, the annual growth of lending stood at 6.5 % for businesses compared to 5.2 % for households.

The Bank keeps a close eye on these developments. But at the time of the decision concerning the first quarter of 2019, it remained of the opinion that the developments observed did not provide sufficient grounds for raising the countercyclical buffer rate. It is first necessary to analyse the persistence of the lending dynamics, notably in the case of non-financial corporations. As the rise in the countercyclical buffer rate generally becomes effective a year after the date of the decision, activation in the context of a temporary (i.e. non-persistent) increase in lending could lead to the imposition of additional capital buffers at a time when the credit cycle has reverted to a non-excessive profile. However, if the credit cycle in Belgium continues to accelerate, the Bank could consider activating the countercyclical buffer, as has been done in some other EU countries.

In addition to the CCyB applied to exposures in Belgium, Belgian banks also have to apply the buffer rates imposed by foreign authorities on their credit exposures in those countries. The table below gives an overview of the current and future countercyclical buffer rates. The countries listed include a growing number of euro area countries where an acceleration of the credit cycle has been apparent. Variations in response between countries are due mainly to the specific characteristics of national markets, the heterogeneity of the dynamics – i.e. their nature and their persistence – and the desire of some national macroprudential authorities to take action early in the credit cycle recovery phase.

During the year under review, in response to the ESRB’s recommendation on recognising and setting

Table 19

**Countercyclical buffer rates imposed by foreign authorities**

(in %)

Country	Current buffer rate		Future buffer rate	
	Percentage	Entry into force	Percentage	Entry into force
Bulgaria			0.50	01-10-2019
Czech Republic	1.25	01-01-2019	1.50	01-07-2019
			1.75	01-01-2020
Denmark			0.50	31-03-2019
			1.00	30-09-2019
France			0.25	01-07-2019
Hong Kong	2.50	01-01-2019	unchanged	
Iceland	1.25	01-11-2017	1.75	15-05-2019
Ireland			1.00	05-07-2019
Lithuania	0.50	31-12-2018	1.00	30-06-2019
Luxembourg			0.25	01-01-2020
Norway	2.00	31-12-2017	2.50	31-12-2019
Slovakia	1.25	01-08-2018	1.50	01-08-2019
Sweden	2.00	19-03-2017	2.50	19-09-2019
United Kingdom	1.00	28-11-2018	unchanged	

Sources: BIS, ESRB.

countercyclical buffer rates for European banks' exposures to third countries, the Bank identified three non-EU countries in which Belgian banks had significant exposures (the United States, Switzerland and Turkey) and monitored the cyclical systemic risks in those countries. That monitoring forms part of the more general framework of analyses by the ESRB and the ECB for significant exposures at European Union and euro area level respectively.

### 3. Climate change and transition to a low-carbon economy

The challenges relating to climate change and the transition to a low-carbon economy are attracting ever-increasing attention, and there are growing numbers of initiatives aimed at achieving the goals of the Paris Climate Change Agreement (COP21). Since the financial sector plays a crucial role in funding the transition to a low-carbon economy, the European Commission launched a sustainable finance action plan in March 2018 to ensure that the financial system supports the EU's objectives concerning climate and sustainable development. The transition offers

many new funding opportunities for banks, insurers and other investors. Conversely, climate change itself and a potentially abrupt transition due to sudden, unexpected changes in policy, market sentiment or available technologies may pose risks for financial institutions and financial stability. Central banks and prudential authorities, too, are therefore focusing more and more attention on this subject.

Like other European supervisory authorities, the Bank recently added the risks associated with climate change and the transition to a low-carbon economy as points for attention on the list of potential financial risks (see the Bank's Annual Report 2017, Macroprudential Report 2018 and Financial Stability Report 2018). The thematic article on the risks to financial stability associated with climate change and the transition to a low-carbon economy – included in the Financial Stability Report 2018 – describes how climate change and the transition to a low-carbon economy may present risks for financial institutions and financial stability and explains the role that the prudential regulators can play in that regard. The article also contains an initial analysis of those risks for the Belgian financial sector. However, the information

currently available on the exposure of Belgian financial institutions to those risks is not detailed enough to permit an in-depth analysis.

At the end of 2018, in order to gain a better understanding in the short term of the size of those exposures for the Belgian financial sector, the Bank – acting within the framework of its macroprudential mandate – questioned the financial sector on

*While the transition offers financial institutions many new opportunities, climate change itself and a potentially abrupt transition may pose risks*

the various climate-related risks and the degree to which institutions had already taken account of them in their risk strategy and policy. In addition, the Bank's sectoral survey aims to make the financial sector more aware of the importance of those risks, thus en-

couraging financial institutions to monitor, assess and manage them. At present, the lack of common definitions ("taxonomy") and any standardised framework for disclosure of the climate-related risks is a serious impediment to the proper monitoring and assessment of those risks.

In this connection, the Bank, like the Finance Minister and the FSMA, has endorsed the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD<sup>1</sup>). In addition, the Bank takes part in working groups responsible for implementing the EU Sustainable Finance Action Plan and the related legislation, notably as regards a taxonomy and disclosure requirements. The Bank also takes part in other working groups, for instance via the Network for Greening the Financial System (NGFS) and the Sustainable Insurance Forum (SIF), in which the supervisory authorities of various countries exchange information and discuss the prudential approach to climate-related risks and encouragement for sustainable finance. They also debate and analyse the scope for using stress tests and scenario analyses to assess those risks.

<sup>1</sup> In 2017, the Task Force on Climate-related Financial Disclosures (TCFD) published a series of recommendations on voluntary disclosure in the annual reports of both financial and non-financial corporations of consistent, comparable data on governance, strategy, risk management and indicators concerning the climate-related risks and opportunities.

Owing to the long-term prospective nature of climate-related risks, the uncertainty regarding the materialisation, and especially the lack of data of the required quality and granularity, these analyses are still at an early stage.

Nonetheless, the current lack of information and data of adequate quality does not mean that no action can be taken yet. The Bank favours a progressive prudential approach. First, the quality of the information on climate-related risks and green investments must be improved and institutions must be made more aware of the risks relating to climate change and the transition to a low-carbon economy. Even in the absence of a harmonised taxonomy at European level, institutions can already make an effort to improve their understanding of these risks.

Next, the sector could be notified of a range of expectations concerning both the inclusion of these risks in the risk management of financial institutions, and the requirements for reporting and publication (Pillar 3) of information relating to these risks. Climate-related risks need not necessarily be regarded as separate risk categories. Both the physical risk resulting from the actual materialisation of climate change and the risks arising from the transition to a low-carbon economy could considerably amplify the traditional risks, such as credit risk, market risk, operational risk, liquidity risk and insurance risk. For example, large-scale droughts or flooding could increase the risk of failure in the agricultural sector, or the value of buildings taken as collateral could decline as a result of stricter energy performance standards, as in the Netherlands, where commercial buildings must meet a minimum energy standard from 2023 onwards.

Furthermore, climate-related risks should be taken into account in risk assessments by the supervisory authority and, where necessary, capital requirements could ultimately be imposed under the second pillar. Pillar 1 capital requirements could also be adjusted in the future. However, the Bank – like most European supervisory authorities – is convinced that the regulations concerning capital must be based solely on the prudential risks, and that any changes to the capital requirements must therefore be adequately backed by proof of higher or lower risks concerning the exposures to which those changes relate. For instance, the Pillar 1 capital requirements for certain exposures very vulnerable to climate-related risks



(the brown penalising factor) could potentially increase over time if it can be demonstrated that those specific exposures present a greater risk. At the same time, the capital requirements for certain “green” exposures may be reduced (green supporting factor) if it becomes clear that these assets present lower risks than other exposures. But it is important to bear in mind the potential risks which may arise if certain investment projects regarded as “green” are less green than initially expected (greenwashing), if certain technologies prove less promising than predicted, or if market sentiment suddenly changes direction.

Nevertheless, that does not negate the importance of encouraging green investment, on the contrary. Since financial stability has everything to gain from

a timely but gradual transition, rather than a belated but abrupt transition, it is vital to encourage green finance. The supervisory authority can help to make the financial sector more sustainable by collaborating on the definition of a common taxonomy and common disclosure requirements, which will promote transparency and stimulate the green investment market. Finally, central banks and prudential authorities can also set a good example. In this respect, the Bank decided to apply the ESG (environmental, social and governance) criteria to the management of part of its asset portfolio (dollar-denominated corporate bonds).

*Climate-related risks should be taken into account in risk assessments*



## C. Resolution

*The Bank's actions as the resolution authority for credit institutions take place within the broader framework of the single resolution mechanism (SRM), in which it participates as the national resolution authority. The SRM was established in 2014 with the Single Resolution Board (SRB) at its centre. Since its creation, progress has been steady thanks to the close cooperation between the SRB and the national resolution authorities. In the past few years, the SRM has permitted the implementation of a completely new resolution framework. Whilst important progress has been made, the challenges remain significant and many questions still need to be resolved.*

*Within this context, and in accordance with the Royal Decree determining the rules on its organisation and operation<sup>1</sup>, the Bank's Resolution College has set up an action plan for 2018. The plan is intended to support the work under the SRM. It is structured around four main objectives, namely (i) ensuring that a robust legislative and regulatory framework for dealing with default scenarios is developed; (ii) improving the resolvability of Belgian credit institutions and stockbroking firms; (iii) establishing crisis management capacity and operationalising the resolution tools; and (iv) supporting resolution funding arrangements.*

### 1. Legislative and regulatory framework

During the year under review, the legal framework for resolution was significantly modified following the adoption by the European co-legislators of a proposal for a Directive amending the Bank Resolution and Recovery Directive (BRRD)<sup>2</sup>, and a draft Regulation amending the Single Resolution Mechanism Regulation (SRMR)<sup>3</sup>. Adoption of these proposals brings substantial additions to the rules on the minimum requirement for own funds and eligible liabilities (MREL) introduced by the BRRD in 2014, by transposing into European law such things as the total loss-absorbing capacity (TLAC) standard defined by the Financial Stability Board (FSB). They also clarify certain rules on implementation of the MREL for all European Union credit institutions.

The above-mentioned Directive and Regulation form part of a set of provisions known as the risk reduction measures. These measures are described in more detail in box 14.

In addition, during 2018, the Bank took part in the work of the SRB aimed at clarifying the practical

arrangements governing the implementation of the existing regulatory framework, by developing horizontal technical notes supporting the preparation of resolution plans and ensuring their overall consistency. In 2018, these horizontal technical notes mainly concerned the topics identified in the SRB Work Programme for 2018-2020, in particular the choice of resolution tools in the resolution plans and the specific requirements relating to the planning of each of these tools, the public interest test which determines which credit institutions are likely

1 Royal Decree of 22 February 2015 determining the rules on the organisation and operation of the Resolution College, the conditions relating to the exchange of information by the Resolution College with third parties, and the measures to prevent conflicts of interest.

2 Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, as well as Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU and Regulations (EU) No. 1093/2010 and (EU) No. 648/2012 of the European Parliament and of the Council.

3 Regulation (EU) No. 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No. 1093/2010.

to satisfy the conditions for resolution, the simplified obligations regime, the MREL, identification of critical functions, and operational continuity in the event of a crisis, including access to market infrastructures.

All these developments and actions contribute to the establishment of a new harmonised working framework within the Banking Union. The SRB, in close cooperation with the national resolution authorities, has played a key role enabling substantial progress to be made. Nevertheless, there are still many challenges to address in order to attain the resolvability objectives defined by the Directive for all credit

*Despite the substantial progress made there are still many challenges to address in order to attain the BRRD's resolvability objectives for all credit institutions and investment firms in the EU*

institutions and investment firms in the European Union. Two questions in particular are of singular importance for Belgium, given the characteristics of its financial system.

The first question concerns the reinforcement of the MREL policy. The availability of sufficient financial resources to absorb losses and recapitalise is essential to ensure the feasibility and credibility of effective resolution by application of the resolution tools and, in particular the bail-in instrument. To that end, the BRRD specifies that institutions must satisfy an MREL requirement on an individual basis, and that the European Union parent undertakings must also meet an MREL requirement on a consolidated basis. As the national resolution authority, the Bank constantly advocates the implementation of a sound resolution model based on the application of appropriate liability buffers. That entails the determination of MREL requirements of a sufficient level and quality, i.e. requirements that must be met with tools which do not compromise the implementation of the resolution strategy in the event of a bail-in. In this context, the Bank is encouraging the SRB to reinforce its MREL policy and go beyond what it currently envisages.

The second question concerns the resolution strategy for less significant credit institutions. Under certain favourable market conditions, a liquidation

under normal insolvency proceedings could be considered feasible for these institutions but it could prove more problematic in the event of a systemic crisis. The Bank has initiated an exchange of views with the European Commission and the SRB to clarify the requirements that apply to this type of institution under the current framework, both those applicable at the time of drawing up the resolution plan and those applicable once the institution is actually failing. In this context, account was taken of the precedents set by crisis management of the Venetian banks in 2017 (see box 10 in the Report 2017) and what implications these may have for the requirements set by the BRRD. This second question also demonstrates the need to strike the right balance between resolvability on the one hand and proportionality on the other.

## **2. Resolvability of credit institutions and stockbroking firms**

The BRRD specifies that resolution authorities prepare a resolution plan for each banking group established in the European Union and for each credit institution or investment firm established in the European Union and not already belonging to a banking group. In Belgium, this obligation rests partly with the SRB and partly with the Bank, in accordance with the allocation of powers defined in the SRMR.

The development of a resolution plan is the outcome of a multi-annual process. Its objective is to make every banking group resolvable. It defines the presumed sequence of actions that the resolution authority could take to resolve a crisis and ensures that the institution or banking group is ready to implement these measures or any alternative to them. The resolution plan establishes a presumption taking into account that, in the event of an actual or likely failure, the resolution authorities can deviate from the measures specified in the resolution plan if that helps achieve the resolution objectives more effectively.

Once the resolution plan has been developed, the resolution authority assesses the resolvability and determines the MREL requirement. If an institution cannot be resolved, the resolution authority gives it a period of time after which it must have proposed measures to remedy the problems identified.



If the proposed measures are not satisfactory, the resolution authority has a range of powers enabling it to remove the substantive impediments to the resolvability of that institution.

For banking groups falling under its competence, the SRB has adopted a multi-annual approach. Each annual resolution plan cycle represents significant progress as additional elements are examined during each cycle with the aim of completing, by 2020, resolution plans that respect all the requirements laid down by the BRRD. The annual resolution cycle which began in 2018 will be an important step towards preparation of plans under the competence of the SRB in that those plans will incorporate not only a consolidated MREL requirement but also an individual MREL requirement, and the SRB will carry out a first assessment of the impediments to resolvability.

During the year under review, the SRB adopted the first binding MREL decisions for EU parent companies at a consolidated level. Three decisions concern EU parent companies governed by Belgian law, including one for which a resolution college has been established.

The consolidated MREL requirement is defined on the basis of the methodology adopted by the SRB in 2017. The requirement includes a loss absorption amount and an amount intended to ensure recapitalisation and market confidence. The first amount is based on the own funds requirements, namely the Pillar 1 capital requirements, the Pillar 2 capital requirements and the sum of the combined buffer requirements. The second amount consists of two components. The recapitalisation amount corresponds to the Pillar 1 and 2 capital requirements applied to the risk-weighted assets as it would be determined after resolution. Within certain limits, that amount can therefore take account of a reduction in the risk-weighted assets due to the materialisation of certain risks. It is supplemented by an amount intended to ensure market confidence, which corresponds to the combined buffer requirements minus 125 basis points. While this method determines the level of the MREL requirement, it should be noted that, in 2018, the SRB had not yet set any binding requirement for the composition of the MREL, and in particular the part of the MREL requirement which must be met with instruments absorbing losses before unsecured creditors in the event of liquidation.

The decision-making procedure for determining the MREL requirement on a consolidated basis varies between the banks for which a resolution college has been set up and those for which that is not the case. For the former, the MREL requirement is determined by a joint decision of the resolution college, after which the decision is ratified by the SRB in executive session. For banks without a resolution college, the MREL requirement is set by the SRB in executive session. Once the MREL requirement has been determined, the SRB – in accordance with the SRMR – refers the decision to the national resolution authorities which are responsible for its implementation.

In its capacity as the Belgian national resolution authority, the Bank takes part in the SRB's decision-making process in its executive session for institutions or groups established solely in Belgium and for cross-border groups whose parent company or subsidiary is established in Belgium. The executive session of the SRB

*It is crucial for MREL decisions to permit the credible implementation of the chosen resolution strategies without any adverse effect on deposits*

adopts its decisions, including those concerning draft resolution plans and draft MREL decisions, by unanimity among its members. In the absence of consensus, decisions may be adopted by a simple majority of the permanent members

of the SRB alone. This decision-making process, laid down in the SRMR, differs for example from the decision-making mechanisms in the ECB's Supervisory Board where the principle is that each representative has one vote. Such a decision-making process, where the representatives of the national resolution authorities are not required to vote in the absence of consensus, does not offer sufficient guarantees regarding consideration for national sensitivities or the effective handling of problems identified at that level. In this context, it is crucial that MREL decisions enable the credible implementation of the chosen resolution strategies, and in particular implementation of the bail-in tool, without any adverse effect on deposits. That is all the more important as any shortcomings in this regard could have implications for the risk of government intervention in the event of a financial crisis.

In 2018, the Bank's Resolution College adopted draft resolution plans for 13 less significant institutions (LSIs) as well as draft MREL decisions at individual

or consolidated level for each of these banks or banking groups. These drafts were submitted to the SRB, which has the right to express its opinion on them, and in particular to indicate any elements of the draft decision that do not comply with the Regulation or the SRB's general instructions. The SRB's opinion is expected during the first quarter of 2019. The draft resolution plan and the draft MREL decisions will then be formally adopted by the Resolution College.

Although every LSI draft resolution plan is specific and is drawn up according to the particular characteristics of the institution or banking group, three categories can nevertheless be distinguished. In the first category of plans, if the supervisory or resolution authority finds that an institution is failing or likely to fail, it is wound up under normal insolvency proceedings. In other words, the resolution authority does not foresee the use of resolution tools if the institution is failing. In most cases, this concerns institutions whose failure would have a very minor impact on the Belgian economy and on the stability of the Belgian financial system, and which are therefore unlikely to meet the public interest criterion in the event of failure.

In contrast to the first category, plans in the second category explicitly envisage the use of the resolution tools if an institution is failing or likely to fail. In particular, the resolution authority considers that, in view of the size of the institution, its deposits, or its interconnectedness with other Belgian credit institutions, it is less likely that liquidation under normal insolvency proceedings would achieve the objectives of resolution as effectively as a resolution procedure. The resolution objectives are to ensure the continuity of the institution's critical functions, to avoid any significant adverse effect on the stability of the financial system, in particular by preventing contagion, and to protect public funds, the covered deposits and investors, as well as customers' funds and assets.

The third category of plans concerns institutions for which liquidation under normal insolvency proceedings is considered credible if the institution is found to be failing or likely to fail under normal circumstances, i.e. in the event of an idiosyncratic crisis. In the event of a systemic crisis, it is presumed that such a procedure would have a contagion effect, which could be contained by initiating a resolution procedure. These plans provide therefore the implementation of these two options.

### 3. Development of crisis management capacity and operationalisation of resolution tools

When a resolution procedure is initiated, the responsibility for implementing the resolution tools rests with the national resolution authorities, regardless of whether the crisis to be resolved concerns an institution under the SRB's competence or one which comes under the competence of the national authorities.

In this connection, the Bank has drafted a national manual detailing each step to be followed and each measure to be implemented when applying the bail-in tool. This general manual supplements the specific analyses conducted by the groups concerned when drawing up their resolution plan (bail-in playbook). This manual and these analyses are intended to facilitate implementation of the bail-in tool and also illustrate the potential problems entailed when applying this resolution tool. In order to cover the whole resolution spectrum, this manual will need to be supplemented for each of the other three resolution tools, namely the sale of business tool, the asset separation tool, and the bridge institution tool. The drafting of these national manuals by the national resolution authorities forms part of a broader project piloted by the SRB.

### 4. Constitution of resolution funding schemes

In 2018, the SRB collected €285 million from 34 Belgian institutions liable for contributions, compared to €250 million in 2017. This increase can be explained by the further mutualisation of the Single Resolution Fund during the transition period,

the application of an additional risk indicator, and the application of a higher growth factor, which incorporates the growth of the covered deposits. The institutions were authorised to pay 15% of their contribution in the form of an irrevocable payment commitment guaranteed by cash collateral. The total contribution of Belgian institutions in the form of irrevocable payment commitments came to €30 million in 2018. Altogether, €7.5 billion was collected in 2018 from institutions subject to the SRMR. Consequently, the SRF now has €24.9 billion at its disposal. The target level to be reached by the end of the initial 8-year period, that is 31 December 2023, is 1% of the total deposits covered of all authorised credit institutions within the Banking Union, and can be estimated at €56.3 billion on the basis of the current amount of covered deposits.

*The Bank has drafted a manual detailing each step to be followed and each measure to be implemented when applying the bail-in tool*

For institutions which are not covered by the SRF, namely Belgian branches of third-country credit institutions or investment firms, and stockbroking firms governed by Belgian law which do not fall under the ECB's consolidated supervision of the parent company, the Law of 27 June 2016 provides for the establishment of a national resolution fund, also financed by the collection of annual contributions. The contributing institutions paid just over €405 000 into the national resolution fund in 2018, compared to €452 000 in 2017, which means that the fund now contains €1.2 million. In 2023, the fund should contain €3.3 million.



## D. Banks and stockbroking firms

*Under the SSM, new initiatives were taken in parallel with those of the European Commission to address the persistently high level of non-performing loans in certain countries, and the banks underwent a new SREP assessment. New stress tests were coordinated at European level by the EBA, and in Belgium by the Bank.*

*At national level, horizontal analyses focused particularly on the risks associated with interest rates, financing, liquidity and the business models of Belgian banks. On-site inspection missions examined the governance, business models and main risks present in credit institutions. In particular, the missions concerning internal models formed part of the TRIM project set up at SSM level, and among other things focused on credit risk and market risk.*

*Developments concerning banking regulation took place mainly at the European Union level, where work continued at a steady pace to strengthen the Banking Union and the Capital Markets Union. At global level, following the conclusion of the Basel III agreement at the end of 2017, the work of the Basel Committee on Banking Supervision focused more on the implementation and assessment of the Basel III reforms and on the scope for regulatory arbitrage. At Belgian level, the Bank published a new Circular and updated its governance manual.*

### 1. Mapping of the sector, supervision priorities and operational aspects

#### 1.1 Population and classification of Belgian banks according to the SSM criteria

While the bank population remained stable overall at 105 institutions in 2018, the number of credit institutions governed by Belgian law was down by two units at 32. This decline concerns two banking subsidiaries which merged with their Belgian parent bank. Conversely, the population of branches of European credit institutions increased in net terms by one unit (four new approvals and three licence withdrawals).

These movements seem to bear out a number of underlying trends. First, consolidation has been steadily taking place for several years in the segment comprising Belgian banks which apply a relatively traditional business model (private customers and SMEs served by a hybrid distribution network with both physical outlets and internet access). This

consolidation often stems from the need to achieve economies of scale and rationalise costs in order to bring the existing distribution channels more into line with the digital future. It should be noted that a series of licence applications are currently being examined for new banks which intend to offer a range of almost exclusively digital services, aimed at specific niches such as private banking, or a broader public for ordinary banking transactions.

In regard to branches, some banks are reconsidering their location in the European Union and in the euro area, not only in the context of the United Kingdom's departure from the EU, but also as part of a more

*The ongoing consolidation stems from the need to rationalise costs, and the desire to bring the existing distribution channels more into line with the digital future*

general effort by the banks to adapt their geographical position to commercial needs.

In most cases, the branches have a small target group of professional counterparties, and their market share is modest. However, completion of the Banking Union is likely to bring a more fundamental reorganisation of the banking landscape in the euro area and in Belgium, which will probably be accompanied by an increase in the number of branches targeting the banking needs of individuals and other non-professional counterparties as regards payments, savings and investment.

In the euro area, banking supervision is exercised by the SSM, which is based on cooperation between the ECB and the national banking supervision authorities of the euro area. The ECB exercises direct supervision over all significant institutions (SIs) with the assistance of the national supervisory authorities. The latter continue to maintain direct supervision over less significant institutions (LSIs), although the ECB may take on the direct supervision of those institutions if that is justified for the consistent application of its supervision standards.

In the case of the SIs, under the direction of the ECB, the Bank takes part in 15 Joint Supervisory Teams (JSTs) which supervise significant Belgian institutions, be they Belgian banks owned by a Belgian parent company, Belgium-based subsidiaries of a non-Belgian parent company subject to the SSM, or banks established in Belgium and owned by a non-Belgian parent company not subject to either the SSM or the law of an EEA member country. The group of Belgian LSIs comprises 15 banks; that number goes up to 19 if financial holding companies and financial services groups of less significant institutions are included.

**Table 20**

**Number of institutions subject to supervision**

(end-of-period data)

	2017	2018
<b>Credit institutions</b>	<b>104</b>	<b>105</b>
Under Belgian law	34	32
Branches governed by the law of an EEA member country	46	47
Branches governed by the law of a non-EEA member country	8	8
Financial holding companies	5	6
Financial services groups	5	5
Other financial institutions <sup>1</sup>	6	7
<b>Investment firms</b>	<b>32</b>	<b>32</b>
Under Belgian law	19	17
Branches governed by the law of an EEA member country	11	14
Financial holding companies	2	1

Source: NBB.

<sup>1</sup> Specialist subsidiaries of credit institutions and credit institutions associated with a central institution with which they form a federation.



Table 21

**Belgian banks grouped according to the SSM classification criteria**

Significant institutions (SIs)	Less significant institutions (LSIs)
<b>Belgian parent</b>	Groupe Anbang – Banque Nagelmackers
Argenta	Byblos Bank Europe
AXA Bank Belgium	CPH
Belfius	Crelan Group (Crelan, Europabank)
Degroof Petercam	Datex Group – CKV group
Dexia (financial holding company)	Dierickx-Leys
KBC Group KBC Banque, CBC	ENI
<b>Non-Belgian SSM-member parent</b>	Euroclear
BNP Paribas Fortis, bpost bank	Finaxis Group –
Groupe CMNE – Beobank, Banque Transatlantique Belgium	Delen Private Bank, Bank J. Van Breda & C°
ING Belgium	Shizuoka Bank
Banca Monte Paschi Belgio	United Taiwan Bank
MeDirect Bank	Van de Put & C°
Puilaetco Dewaay Private Bankers	vdk bank
Santander Consumer Bank	
Société Générale Private Banking	
<b>Non-SSM member parent not governed by the law of an EEA member country</b>	
Bank of New York Mellon	

Source: NBB.

**BOX 11****The Bank's role in the single supervisory mechanism**

Since 2014, banking supervision in Europe has been organised via the single supervisory mechanism (SSM). The SSM comprises the ECB and the national supervisory authorities of the euro area countries, including the Bank.

The SSM's main aims are to safeguard the safety and soundness of the European banking system, to increase financial integration and stability, and to ensure consistent banking supervision.

With the SSM, the decision-making process has become longer and more complex, in that prudential decisions concerning Belgian banks are no longer taken by the National Bank in Brussels but by the ECB in Frankfurt. On the other hand, the Bank is now involved in decisions taken in Frankfurt, not only for Belgian banks but for all banks in the euro area. Those decisions are prepared under a cooperative effort





between the ECB and the national supervisory authorities concerned, including the Bank. This mechanism also avoids any national bias in the decision-making process.

The Bank's role in the SSM is therefore performed at various levels. Within the SSM, decisions are taken by the ECB Governing Council (on which the NBB's Governor has a seat) on the proposal of the SSM Supervisory Board (in which the NBB's Director in charge of banking supervision represents the Bank). Depending on their nature, the decisions are prepared by Joint Supervisory Teams (JSTs), inspection teams or SSM horizontal functions.

The JSTs conduct the day-to-day supervision of significant banks. Under the SSM, each significant bank or banking group (significant institution or SI), has its own JST composed of staff of the ECB and the national supervisory authorities. The Bank takes part not only in the JSTs of banking groups which have their (European) head office in Belgium, but also in the JSTs of Belgian banks which have their principal place of business elsewhere in the euro area. There are thus 15 JSTs in which the Bank plays an active part: seven for groups which have their (European) head office in Belgium (Argenta, AXA Bank, Belfius, Degroof Petercam, Dexia, KBC, The Bank of New York Mellon) and eight for institutions headed by a parent company established elsewhere in the euro area (BNPP Fortis and bpost banque, groupe Crédit Mutuel, ING Belgium, MeDirect, Monte Paschi Belgio, Puilaetco, Santander Consumer Bank, Société Générale Private Banking).

The allocation of tasks in a JST depends on the size and structure of the banking group subject to its supervision. The Bank's staff who are members of a JST analyse the risks incurred by the banking group concerned in Belgium but also help to monitor the risks to which the group is exposed elsewhere. In larger



JSTs, which supervise the largest and most complex banking groups, there is scope for specialisation, with the JST's Belgian members concentrating, for example, on one specific risk (such as operational risk) for the banking group as a whole.

In the SSM, the ECB exercises direct supervision over the 119 SIs in the participating Member States. Together, these banks account for almost 82 % of the total banking assets of the euro area. Banks which are not considered "significant" are classed as "less significant" institutions. This mainly concerns local and specialist banks. They remain subject to the supervision of the national supervisory authorities, in close cooperation with the ECB. The Bank is thus the supervisory authority for fifteen local banks or specialist institutions (such as Euroclear).

On-site inspections of institutions subject to SSM supervision are conducted by teams comprising inspectors from the ECB and the national supervisory authorities such as the Bank. In principle, these inspection teams are led by staff of the national supervisory authority, but an inspection team may also be led by the ECB.

The SSM is supported by the horizontal functions of the ECB and the national supervisory authorities. The methodology for risk monitoring and analysis and other aspects of supervision is drawn up by committees and networks comprising experts from the ECB and national supervisory authorities such as the Bank.

The national supervisory authorities of the SSM continue to supply the great majority of the staff responsible for prudential supervision tasks. The reason lies partly in the design and organisation of the SSM, which supplemented the existing supervisory capability of the national supervisory authorities when the SSM was launched with a well-defined central supervisory capacity at the ECB. Also, the national supervisory authorities often have to cover an area of supervision broader than that specifically entrusted to the SSM. For instance, the SSM does not cover certain categories of institutions (branches of third country banks, representative agencies, stockbroking firms), measures to tackle money-laundering and tax mechanisms, structural reform of the financial market, etc.

The Bank currently allocates around 125 staff to the microprudential supervision of credit institutions and investment firms. The allocation of these resources is broken down as follows:

- a) 50 % to ongoing (off-site) supervision over each institution. This concerns analysis of the financial situation, compliance with the regulatory ratios (solvency, liquidity, balance sheet ratios, etc.), assessment of the risks to which each institution is exposed and how they are covered, and assessment of the institution's corporate governance;
- b) 30 % to on-site supervision. This concerns the inspection function, which carries out on-site inspections at institutions according to a specified audit methodology and on the basis of a predefined mission and includes checks on the models that the banks use to calculate their capital requirements;
- c) 20 % to transversal activities, such as the collection and validation of the data that institutions must submit to the supervisory authority, and support for the teams in charge of examining new licence applications and assessing the suitability of the institutions' directors and shareholders. This also concerns monitoring the way in which individual institutions incorporate new financial sector trends



in their business model (for example, as regards FinTech or the PSD2), trends which, while offering new opportunities, may also entail risks.

As mentioned earlier, the Bank also has the task of watching over financial institutions' compliance with the legislation aimed at preventing the use of the financial system for the purpose of money-laundering and terrorist financing, and the financing of the proliferation of weapons of mass destruction. That task has not been transferred to the ECB, including as regards the SIs. Finally, the ECB has certain macroprudential powers under the SSM, but that is without prejudice to the responsibility of the national macroprudential supervisory authority.

## 1.2 The deliverables of microprudential supervision

Microprudential supervision is conducted by various teams of staff. Some staff analyse and assess a given institution's financial situation and the risks to which it is exposed (ongoing or off-site supervision). Others conduct on-site inspections at institutions on the basis of a specific mission, using the audit methodology (on-site supervision).

*Microprudential supervision is conducted by various multidisciplinary teams of staff covering ongoing supervision (off-site role), on-site inspections (on-site supervision) and checks on internal models*

Finally, there are teams responsible for checking and validating the quantitative "internal" models used by certain institutions to calculate their capital requirements.

This supervision cannot achieve its intended targets and results unless all the analyses, examination and monitoring lead to deliverables resulting in operational supervision decisions and actions in regard to the institution. The activities of the various functions involved are spelt out below.

### **Ongoing (off-site) supervision – Decision on capital**

In principle, the analyses and examinations concerning a bank's financial situation and risks lead each

year to a SREP (Supervisory Review and Evaluation Process) decision. The SREP follows a common methodology and decision-making process permitting horizontal comparisons and analyses. The harmonised SREP ensures that institutions in similar situations are treated in the same way and assessed according to the same criteria.

Periodically, each institution therefore receives an individual SREP decision aimed at making continuous improvements to its position (financial situation, organisation and governance). Thus, the supervisory authorities' decisions comprise not only additional capital requirements on top of the minimum requirements, but also supplementary measures addressing weaknesses specific to the institution concerned.

Decisions are based on a combination of quantitative and qualitative elements derived from an overall assessment of the institution's sustainability, capital and liquidity. Apart from supplementary capital and liquidity requirements, SREP decisions may include quality control measures, such as the imposition of conditions or restrictions on activities, reinforcement of the internal control environment, the obligation to reduce risks, limitation or prior approval of the payment of dividends, or the imposition of supplementary or more frequent reporting obligations.

The results of the SREP decisions applicable to Belgian banks and taken during the year under review are presented in section D.2.2 below.

## On-site inspections – Inspection report

The inspections supplement the ongoing supervision of institutions and aim to provide a detailed analysis of the various risks, internal control systems, business models and governance of the supervised legal entities.

They are conducted on the premises of the supervised legal entities according to a predefined scope and timetable. The inspections must be risk-based, proportionate, intrusive, prospective and pragmatic.

Under the responsibility of a head of mission, the inspection teams act independently of the teams in charge of ongoing supervision, but in coordination with them.

Unless there are special reasons for doing otherwise, the inspection process follows various defined steps detailed in the manuals used by the inspectors:

- the preparatory phase, which comprises confirmation of the availability of the parties concerned, notification of the start of the inspection to the supervised entity, and production of a preparatory memorandum for the inspection, describing the reasons justifying it and its scope and objectives. Before the meeting at the start of the inspection, the head of mission also sends an initial request for information;
- the inspection itself takes place on the premises of the supervised legal entity. The investigation phase comprises interviews and examination of procedures, reports and files. Evidence is collected in order to ensure that an “audit trail” is in place for all the weaknesses identified by the inspection team. Various inspection techniques are used: observation, verification and analysis of information, targeted interviews, process analysis, sampling/case-by-case examination, confirmation of data, etc.;
- in the report phase, the inspection’s findings are formalised in an inspection report which contains conclusions, a schedule of findings or recommendations, and a main part. Annexes may be added. It should be noted that:
  - the findings or recommendations are ranked according to their actual or potential impact on

the financial situation of the supervised legal entity, its level of capital, internal governance, and risk control and management. The reputational risk incurred by the supervised legal entity is also taken into account;

- in addition, the report gives an overall score which reflects the general assessment on completion of the inspection<sup>1</sup>;
- the draft report is sent to the supervised legal entity a few days before an end-of-mission meeting is held, at which the inspection team presents the inspection results;
- taking account of comments received at the end-of-mission meeting<sup>2</sup>, the head of mission will then finalise the draft report, which will be sent to the supervised legal entity.

The inspection reports give rise to recommendations which will be monitored by the teams in charge of the ongoing supervision of the legal entities concerned. Those teams will be responsible for monitoring the implementation of the corrective measures under an action plan defined with the supervised legal entity.

On the date set in the action plan, the monitoring phase may be ended if the measures taken by the supervised legal entity conform entirely to the monitoring request, or additional information may be requested for the purpose of adjusting the action plan.

The inspections may also result in the application of prudential measures under the disciplinary powers assigned to the regulator.

In 2018, the inspections concerned the governance, business models and main risks in the institutions subject to supervision: credit risk, market risk, liquidity risk, interest rate risk, operational risk (including IT risk), reputational risk, etc.

The inspections covered significant and less significant credit institutions (SIs and LSIs), but also

1 Inspection reports produced under the SSM do not give an overall score.

2 In the case of inspections conducted under the SSM, the supervised legal entity has two weeks to respond in writing.

investment firms and payment institutions subject to the Bank's supervision.

The prevention of money-laundering was another subject covered in 2018 by inspections of all categories of institutions subject to supervision.

### ***Inspections on internal models***

Inspections of internal models aim to assess the quality of the models that banks use to calculate their regulatory capital requirements, in the light of the regulations in force. These models should lead to better risk management.

Since the regulations governing internal models are principles-based, their assessment relies to a large extent on judgment and benchmarking in relation to other banks and current good practice. This assessment is facilitated by use of the ECB guide to internal models, which describes the SSM's interpretation of the laws relating to models.

The scope of the models reviewed covers all Pillar 1 risks (credit risk, market risk, operational risk and counterparty risk), and the economic capital models used by the banks under Pillar 2.

The inspections concerning internal models take place mainly on site and are facilitated by files supplied by the banks; the files contain all the relevant information enabling the inspectors to understand and assess the models used by the banks.

Apart from the usual inspection techniques, inspectors often use modelling of their own to quantify errors and simplifications on the part of the banks. This quantification is important to determine the severity of the weaknesses detected.

The inspection culminates in a report containing a description of the models reviewed and the weaknesses identified.

Recommendations aimed at remedying these weaknesses and a proposal for a decision (approval or rejection) are set out in a note by the inspection team and submitted to the management of the SSM. This proposal for a decision may be accompanied by a capital penalty. Decisions are followed up by the JSTs (see box 11), possibly with the assistance of the inspectors who carried out the mission.

The on-site missions conducted in 2018 continued to form part of the TRIM (Targeted Review of Internal Models) project, set up at SSM level and intended to strengthen credibility and confirm the suitability and relevance of the internal models used by SIs to calculate their capital requirements. The missions focused mainly on models for calculating the credit risk for retail customers and SMEs, and models for calculating market risk.

A last wave of missions will take place in 2019 under the TRIM. It will cover the models that SIs use to calculate the credit risk on portfolios with a historically low default rate (large firms, financial institutions, specialised lending).

Apart from these missions forming part of the TRIM, work focused on analysing credit risk models, including the pre-application work for one bank wishing to apply the internal models approach in the near future. One operational risk model was also monitored.

### ***Horizontal analyses***

In parallel with producing these deliverables, the Bank conducted various specific horizontal analyses of the Belgian banking sector (see box 12).



## Horizontal analyses of the banking sector

### *Interest rate risk*

In a low interest rate environment and owing to the possible impact of either persistently low interest rates or a sudden, rapid rise, interest rate risk has for a number of years been among the priorities in the supervision of Belgian credit institutions. The trend in the interest income of Belgian banks and the prudential parameters concerning interest rate risk are therefore analysed in detail.

Belgian banks generally have a relatively large proportion of assets on which the interest rates are fixed for a prolonged period. These assets consist predominantly of mortgage loans, financed mainly by sight deposits and savings deposits with no contractual maturity or repricing date. Consequently, Belgian banks have a relatively large average duration gap between the assets and liabilities and have to make extensive use of derivatives to hedge the resulting interest rate risk. However, the use of derivatives entails other risks, as explained in detail in the thematic article on “Derivatives and systemic risk” in the Bank’s 2018 Financial Stability Report. In addition, the banks depend heavily on behaviour models to estimate the repricing behaviour of non-maturity deposits and prepayments of mortgage loans. That implies a significant model risk, as observed behaviour may differ from estimated behaviour. Owing to the size of the duration gap, the considerable use of derivatives, and the high model risk, the Belgian banks’ exposure to interest rate risk on non-trading activities exceeds the average for the euro area banking sector, and that is also reflected in the stress tests conducted by the SSM in 2017, which aimed to obtain additional information on interest rate sensitivity of the economic value of banks’ capital<sup>1</sup> and their net interest income.

As also shown by the business model analysis (see below), the low interest rate environment puts pressure on Belgian banks’ interest income, as interest rates on deposits have fallen to their lowest level while interest rates received on the assets are steadily revised downwards, further exacerbated by the prepayment of mortgage loans. That is also reflected in the periodic reports that Belgian banks submit to the Bank, in which they are asked to indicate the economic value of equity and their interest income over the next three years for their banking book on the basis of various scenarios. In these calculations, banks have to take account of various set principles, including a maximum interest rate revision period for sight deposits and savings deposits, and the assumption of a constant balance sheet, so that the figures submitted can be more readily compared between the various institutions.

The chart below shows the net interest income of the Belgian banking sector from June 2012 and the estimated future interest income for the three years from June 2018 onwards according to three scenarios: constant interest rates, a 200-basis-point increase and a 200-basis-point reduction in interest rates. The chart below shows that, while a persistently low interest rate environment would depress the banks’ profitability in the years ahead, the same could apply if interest rates were to go up. Although higher interest rates, and especially a steeper slope in the yield curve, are generally

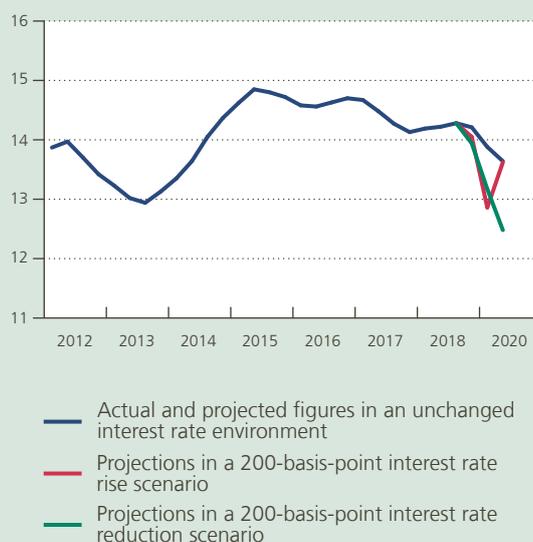
<sup>1</sup> The economic value of equity is the discounted value of a bank’s net assets, all cash flows being taken into account at the time of the next interest rate adjustment and discounted at a risk-free interest rate.



more favourable to the Belgian banking sector, given that their transformation margin resulting from the financing of long-term loans by short-term deposits would increase, a sudden, steep rise in interest rates could equally be disadvantageous – at least temporarily – for the banks’ interest income since the financing cost could rise sharply while interest rates on the invested assets would still remain low for some time.

### Actual and projected annual net interest income of Belgian banks

(data on a consolidated basis, in € billion)



Source: NBB.

Note: The projections are derived from the Belgian banks’ periodic reporting to the Bank in which they estimate the income projected according to various scenarios defined on the basis of their internal models, taking account of certain assumptions supplied by the Bank.

In a low interest rate environment, the banks may tend to increase the duration gap, as this would widen their transformation margin and hence their net interest income if interest rates remain low. However, a bigger duration gap makes the banks more exposed to a sudden rise in interest rates.

The reporting suggests that the weighted average sensitivity of the economic value to a 200-basis-point interest rate rise<sup>1</sup> has increased slightly since 2014, which could indicate a slight widening of the duration gap owing to the low interest rates. However, the figures need to be interpreted with due caution.

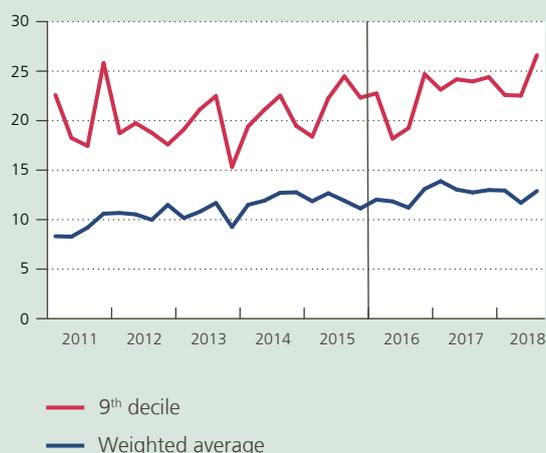
<sup>1</sup> In accordance with Article 98 (5) of European Directive 2013/36/EU (CRD), transposed into Belgian law by Article 143, § 1, 12°, of the Banking Law, measures must in any case be taken if a parallel change in interest rates were to reduce the institution’s economic value by more than 20% of its regulatory capital.



The banks may adopt different strategies regarding future changes in interest rates. Interest rate risk analyses aim partly to capture sectoral movements in positioning in relation to the various possible movements of the yield curve, and partly to identify banks which have excessive open positions and are therefore vulnerable to a rise in interest rates or to persistently low interest rates.

### Effect of a parallel 200-basis-point increase in the yield curve on the economic value of equity

(data on a consolidated basis, in % of the regulatory capital)



Source: NBB.

Note: The projections are obtained from the Belgian banks' periodic reporting to the Bank in which they estimate the economic value of equity according to various scenarios defined on the basis of their internal models, taking account of certain assumptions supplied by the Bank. Pursuant to the Bank's circular on the interest rate risk associated with activities other than trading, adopted at the end of 2015, certain changes were made to the calculation assumptions in reporting from March 2016 onwards.

### Funding and liquidity

The Bank regularly reviews the funding and liquidity of Belgian credit institutions. That review takes place annually, but the timetable and frequency may be modified during a liquidity crisis. The review of funding and liquidity is structured so as to provide information on the banks' solvency indicators (such as credit risk spreads or ratings), information on the composition of the banks' funding, and information on the banks' short-term resilience to liquidity shocks. However, the review is conducted flexibly in order to address topical subjects, too, which could potentially affect the banks' liquidity.

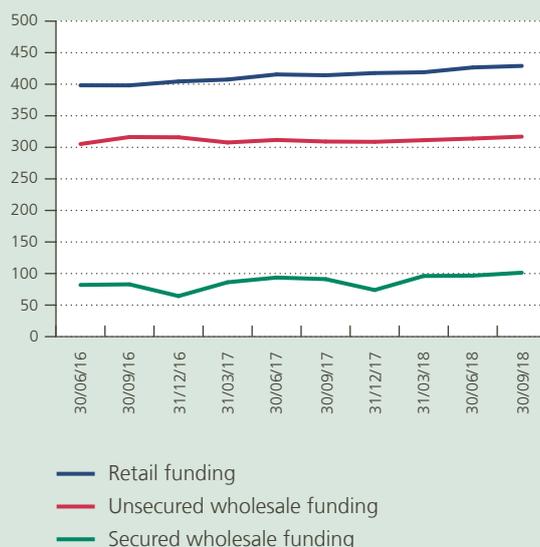
As shown by the funding and liquidity review conducted at the end of 2018, the aggregate data on all Belgian credit institutions reveal that the composition of their funding has remained relatively stable over the past two years. Retail deposits have risen by almost 8 %, constituting a stable funding source.



Unsecured wholesale funding of financial and non-financial counterparties has remained unchanged, while secured wholesale funding has risen by 22 %, starting from a lower base. This increase is due mainly to funds obtained under the targeted longer-term refinancing operations (TLTROs) and covered bonds.

### Belgian banks' funding sources

(in € billion)



Source: NBB.

The stability of the composition of the assets and funding of Belgian credit institutions is also reflected in the regulatory liquidity ratios. While the short-term liquidity coverage ratio (LCR) requires a bank to hold sufficient liquid assets to withstand a liquidity stress scenario for one month, the net stable funding ratio (NSFR) requires a bank to have sufficient long-term funding to finance illiquid assets.

The NSFR is not yet a minimum regulatory requirement, but it is reported to the supervisory authorities by the SIs. The whole sample of Belgian credit institutions already has an NSFR of over 100 %, and the situation has been generally stable over the past two years.

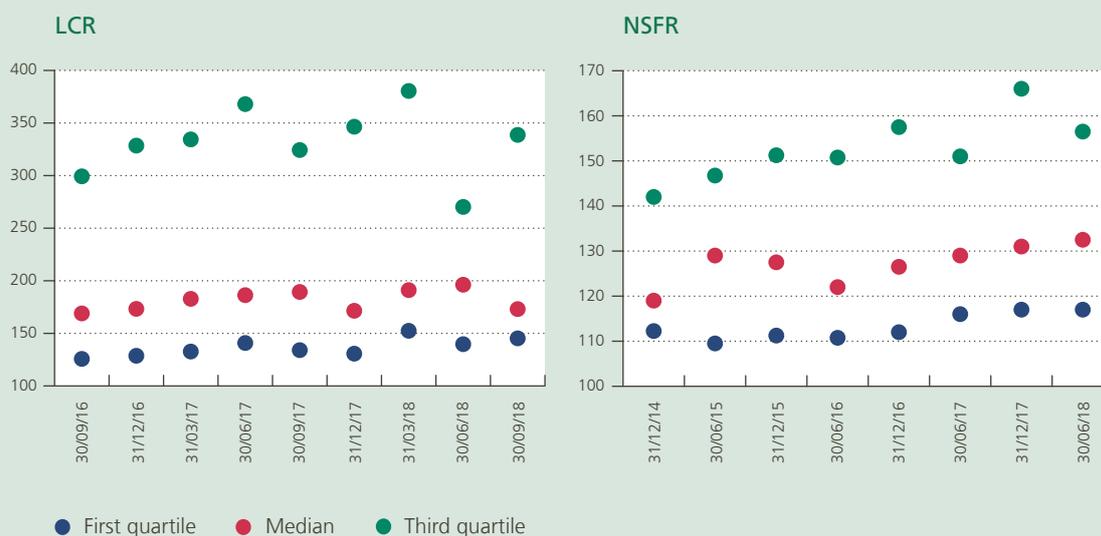
The LCR has been a minimum regulatory requirement since October 2015 and has been fully in force (minimum requirement of 100 %) since January 2018. Belgian credit institutions' LCR has also remained above 100 %. This ratio is more volatile than the NSFR owing to its short-term nature.

The 2018 review of funding and liquidity also included a liquidity crisis simulation for all Belgian credit institutions, identifying sources of pressure on liquidity which are not reflected in the LCR or the NSFR. Liquidity stress tests are becoming a standard tool in the supervisory toolbox. The SSM will also subject all SIs to a detailed liquidity stress test in 2019.



Points for attention in forthcoming reviews of funding and liquidity are the impact of the expected normalisation of central bank policy on the holding of liquid assets and funding choices, and the replacement of financing via the TLTROs expiring in June 2020.

### Trend in the LCRs and NSFRs of Belgian banks



Source: NBB.

### Horizontal analysis of the Belgian banks' financial plans

In 2018, the Bank continued the horizontal analysis of the leading Belgian credit institutions' strategic and financial plans. The aim of the analysis is to proactively identify significant trends in profitability, the underlying activities and potential systemic risks in the Belgian banking sector.

Previous analyses have revealed substantial and growing pressure on Belgian banks' profitability, owing to a range of factors, including low interest rates and keen competition. Analysis of the 2018 financial plans shows that this pressure is not diminishing. On the main credit markets, the banks foresee relatively strong average volume growth over the term of the financial plans, against the backdrop of declining margins. The plans show that interest income should pick up a little compared to previous forecasts, partly as a result of the upward trend in yield curves at the start of the period under review.

This raises the question whether the strong average credit expansion over the planning period – at a pace slightly exceeding that of previous years – is a realistic starting point, taking account of developments in the monetary and economic context (see box 11 in the Report 2017).

Another striking characteristic is the constant reduction in the average new loan loss provisions. This reduction in new provisions year after year is generally justified by the historically low level of the



loan provisions realised. However, this tendency, whereby credit institutions adjust their expected loss provisions according to current observations, does imply risks. In these circumstances, a change in the economic environment could rapidly exert pressure on profitability.

In a competitive environment with profitability under stress, sound and well-reasoned forward planning of the institutions' activities (including pricing) and *ex-ante* identification and close monitoring of the resulting risks within their overall balance sheet are essential to ensure their sustainability. Specific, good quality strategic, financial and corporate management plans are crucial for this prospective steering. The assumptions must be realistic, so that potential problems concerning the business model, profitability and the emergence of risks are identified, recognised and addressed as quickly as possible.

## 2. Prudential policy aspects

### 2.1 SSM and EU measures concerning non-performing loans

The year 2018 brought new European initiatives aimed at addressing the persistently high level of non-performing loans in certain European countries and avoiding a further accumulation of such loans. This work was conducted partly by the ECB, under the SSM, and by the European Commission. The measures taken should enable institutions to concentrate once again on their

core business of lending to the real economy and strengthen the resilience of the banking system as a whole.

In March 2018, the SSM published an addendum to the 2017 guidance to banks on

non-performing loans, spelling out the prudential expectations relating to the prudential provisioning of those loans. The 2017 guidance asks credit institutions to define credible strategies for dealing with their portfolio of defaulting loans, specifying quantitative targets for each portfolio and measures which need to be implemented from both an organisational and a financial point of view. The addendum adopted by the SSM aims to prevent the accumulation of new non-performing loans in the banking system, by pre-defining a target for gradually increasing coverage over time (calendar

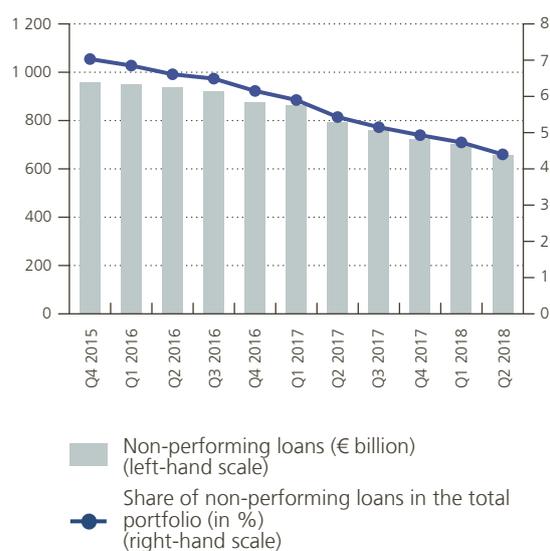
approach), which should lead to full prudential provisioning after a certain number of years. Under its SREP approach, the SSM may decide on specific prudential measures if an institution deviates from that target without justification.

In July 2018, this addendum was supplemented by the SSM's announcement of further steps in its prudential

*The SSM and the European Commission took new initiatives to address the persistently high level of non-performing loans in certain countries*

Chart 101

Ratio of non-performing loans of significant credit institutions in the euro area



Source: ECB.

treatment of the stock of existing non-performing loans. The SSM intends to achieve a credible reduction in the stock of such loans by defining prudential expectations specific to each institution regarding prudential provisioning. The aim is to achieve the same coverage of the stock and flow of non-performing loans over the medium term. These specific expectations are stated for each institution and are determined according to the share of non-performing loans in its total loan portfolio and its own financial characteristics, while ensuring consistency between comparable institutions.

The European Commission likewise proposed a gradual coverage approach for non-performing loans, pursuant to its mandate derived from the conclusions of the July 2017 European Council. In contrast to the SSM's approach, which advocates a target for coverage by provisions, this measure envisages a minimum compulsory level of coverage for non-performing loans by capital or provisions, applied uniformly to all credit institutions. This obligation will apply only to new loans granted by credit institutions. At the end of 2018, this proposal was still being discussed.

In 2018, the SSM continued its measures to reduce the level of non-performing loans. In particular, it made sure

that credit institutions with a high level of non-performing loans actually implement ambitious strategies to reduce those loans. Among other things, that took the form of sales of non-performing loan portfolios, renegotiation or the establishment of more efficient recovery procedures. Thus, under pressure from the prudential authorities and given the improvement in the economic environment, there was a marked acceleration in the reduction of the ratio of non-performing loans in the euro area, as the share of these loans in the loan portfolios of SIs, subject to direct SSM supervision, dropped from 7% at the end of 2015 to 4.4% at the end of June 2018. The average rate of provisioning for these loans stood at 46% at the end of June 2018.

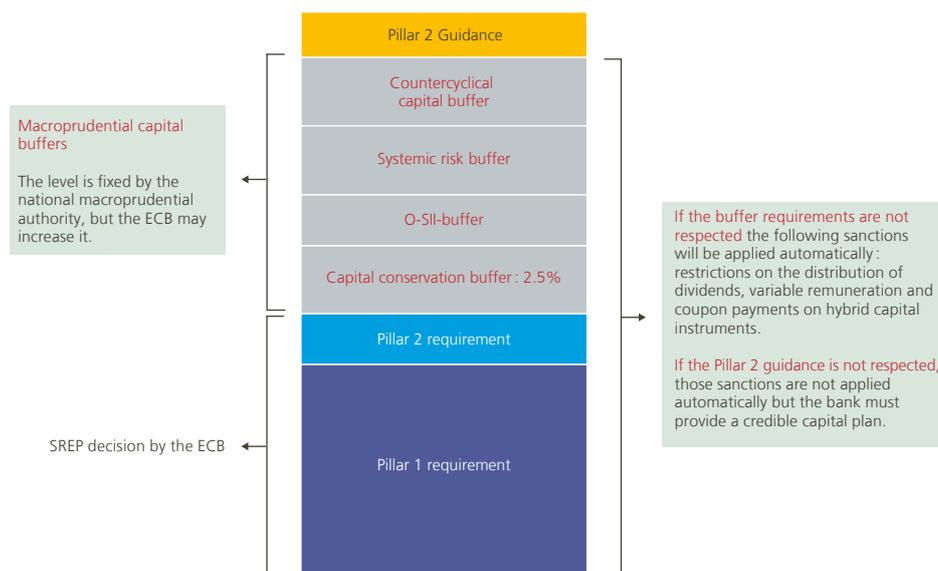
## 2.2 SREP methodology and results

In 2018, the banks subject to direct SSM supervision (SIs) underwent a new SREP<sup>1</sup> on the basis of the methodology drawn up in 2015 and the adjustments made in 2016. A complete harmonised stress test exercise was also carried out in 2018 (see box 13)

<sup>1</sup> Annual exercise to assess the risks and quantify the capital and liquidity needed (Supervisory Review and Evaluation Process – SREP).

### Chart 102

Structure of the capital requirements in terms of CET 1



Source: NBB.

taking account of the situation of credit institutions at the end of 2017. The SSM incorporated the results of that exercise in its SREP decisions when fixing an additional target, known as Pillar 2 guidance<sup>1</sup>, for CET1 capital. The Pillar 2 guidance was determined in order to ensure that in a severe crisis the CET1 ratio remains above 5.5% of the risk-weighted assets and the amount of the systemic capital buffer for banks classed as global systemically important groups as defined by the FSB.

Although there was no change in 2018 to the SSM methodology for quantifying the requirements under Pillar 2 or the Pillar 2 guidance, in July 2018 the EBA published a revision of its guidelines on the common procedures and methodologies for the SREP, particularly as regards taking account of the stress test results when determining the Pillar 2 guidance. That revision will imply two methodological changes which the ECB should incorporate in the 2019 SREP, whose decisions will apply in 2020. First, when determining the Pillar 2 guidance, the reduction in CET1 capital resulting from the adverse scenario in the stress test can no longer be offset by capital buffers for systemic risk. The latter are intended to cover macroeconomic risks, and not bank-specific microeconomic risks which come under the Pillar 2 requirements and the Pillar 2 guidance. Second, the Pillar 2 guidance will no longer apply only to the CET1 requirement but also to the total capital requirement. These two changes should imply, *ceteris paribus*, an increase in demand for both CET1 capital and total capital from 2020: the banks need to be prepared for that.

On 9 November 2018, the ECB also published a new version of the guides on expectations regarding the quality of the internal capital and liquidity adequacy assessment processes (ICAAPs and ILAAPs). These guides, which have been used to assess ICAAPs and ILAAPs since 1 January 2019, are meant to help credit institutions to improve their practices in this regard. The SSM expects institutions to ensure that the risks which they face are accurately assessed in accordance with a prospective approach, so that all significant risks are identified, properly managed, and covered by an adequate level of capital and liquidity.

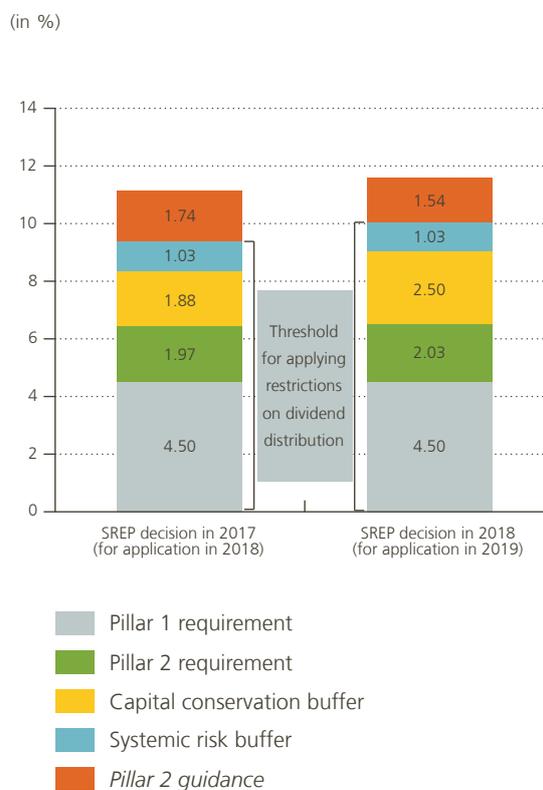
These guides should also help to reduce differences in the approaches adopted by institutions and thus ultimately strengthen the role of the ICAAPs and ILAAPs in the SREP. In this context, the SSM is continuing to draw up a methodology for determining the capital

requirements under Pillar 2 on the basis of a more granular assessment of the various risks. That work should enrich the holistic approach currently used and improve transparency concerning the nature of the factors taken into account by the SSM – notably the level of the risks, the business models, and the quality of the organisation and governance – in determining the capital requirements under Pillar 2.

In 2018, the average level of Pillar 2 requirements for the SIs came to 2.1% of the risk-weighted assets, compared to 2.0% in 2017. However, the CET1 ratio threshold

1 Unlike the Pillar 2 requirement, the Pillar 2 guidance is fixed in addition to the amount of CET1 necessary to cover the capital buffer requirements. Failure to meet that target does not trigger automatic prudential measures such as restrictions on payment of dividends, variable remuneration or coupons on AT1 instruments, applicable in the event of failure to comply with the capital buffer requirements. If a bank does not respect the Pillar 2 guidance, it must inform the supervisory authority, and the SSM may take prudential measures, with due regard for the specific circumstances.

**Chart 103**  
Level and structure of the CET1 capital requirements for Belgian banks



Sources: ECB, NBB.

(maximum distributable amount trigger, MDA trigger) automatically triggering prudential measures was increased further as a result of the continued phasing-in of capital conservation and systemic risk buffers.

Thus, for Belgian banks subject to SSM supervision, the average MDA trigger increased from 9.38 % to 10.06 %, while the Pillar 2 requirements remained more or less stable, at 2.03 % in 2018 compared to 1.97 % in 2017. The total CET1 capital requirement of Belgian banks increased from 11.11 % to 11.61 %, up by slightly less than the MDA trigger, reflecting the small reduction in the Pillar 2 guidance, from 1.74 % to 1.54 %, to offset the increase in the capital conservation and systemic risk buffers.

For LSIs, the Bank conducted a similar SREP exercise in accordance with a methodology aligned with the harmonised methodology developed for the SSM in 2018.

For LSIs, the method of calculating the second pillar requirement therefore changed slightly, but is still

based on the scores attributed under the SREP exercise to the various risk categories, such as interest rate risk and operational risk.

A new aspect of the methodology is the possibility of formulating Pillar 2 guidance on the basis of the stress test for LSIs (see box 13). The level of this guidance is calculated in the same way as for SIs, but the stress test in this case is conducted by the Bank. In addition, for LSIs no minimum is used for the guidance, which means that if the Pillar 2 requirement is high enough to meet the stress test requirements, no additional Pillar 2 guidance is requested.

During the year under review, a complete prudential supervision and assessment process was only conducted for top priority LSIs; in their case, it always gave rise to a new second pillar requirement. A stress test was likewise conducted for these same institutions but did not lead to Pillar 2 guidance being drawn up for any of the institutions concerned. In general, the new methodology has not led to any significant change in the capital requirements.

## BOX 13

### 2018 stress tests by the EBA and the Bank

#### *EBA's 2018 stress test for significant institutions*

In 2018, as in 2014 and 2016, the EBA coordinated a stress test in which 48 large European banks took part, 33 of them being established in SSM Member States and subject to the direct supervision of the ECB. Two of these institutions are located in Belgium: Belfius Bank and KBC Group<sup>1</sup>.

Like the previous ones, the 2018 exercise aimed to provide the supervisory authorities, banks and market players with a common analytical framework enabling them to compare and assess the ability of the large banks and the EU banking system to withstand adverse economic shocks. The stress test comprised a baseline scenario and an adverse scenario, both with a three-year horizon (2018-2020). The assumptions for the macroeconomic variables in the baseline scenario conformed to the December 2017 forecasts published by the ECB. The adverse scenario, designed by the ECB and the ESRB, was a hypothetical scenario reflecting the systemic risks considered to represent the most serious threats to the stability of the European Union banking sector at the start of the exercise,

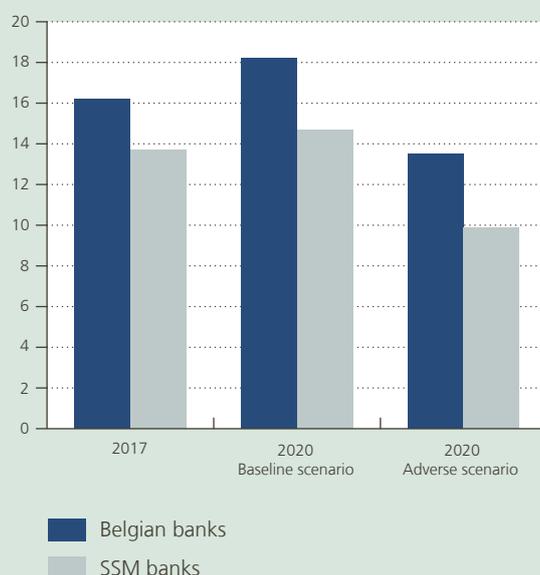
<sup>1</sup> ING Belgium and BNP Paribas Fortis, subsidiaries of foreign banking groups, took part in the stress test through their parent company. Their results are therefore not consolidated in the Belgian average presented in the chart in this box.



in January 2018. As the adverse stress test scenario was hypothetical, its estimated impact should not be regarded as a forecast of the banks' profitability. Moreover, the results take no account of any response to the shocks by the banks, as the test is based on the assumption of a static balance sheet. Nonetheless, the stress test results can serve as a useful analysis tool for assessing the resilience of the banks' balance sheets to the specific shocks considered.

Like the EU-wide stress test conducted in 2016, the 2018 stress test did not comprise any pass or fail threshold for the projected tier 1 capital ratio (CET1 ratio) in the adverse scenario. Instead, it was designed as a key contribution to the Supervisory Review and Evaluation Process (SREP), where mitigating management measures and the potential balance sheet dynamics may also be taken into account, primarily in order to establish Pillar 2 guidance (see section D.2.2).

Average CET 1 ratio



Sources: ECB, NBB.

The above chart compares the average CET1 ratio of the Belgian banks (Belfius and KBC) and the SSM banks at the beginning and end of the stress test horizon in the baseline scenario and in the adverse scenario.

The Belgian banks were in a better starting position compared to the sample of large SSM banks which took part in the stress test. At the beginning of the period considered, their CET 1 ratio averaged 16.2 %, contrasting favourably with the average starting value of 13.7 % for the CET 1 ratio of the sample of SSM banks.



Belgian banks also performed well in the 2018 stress test compared to other euro area banks. In the baseline scenario, the CET1 ratio for Belgian banks was up by an average of 2 percentage points between 2017 and 2020, while that of the SSM banks went up by 1 percentage point, on average, over the same period. These two increases are largely due to the favourable macroeconomic and financial forecasts published by the ECB for Belgium and the euro area, and a number of EBA methodological assumptions.

In the adverse scenario, the Belgian banks also did better than the SSM banks, as the reduction in the CET1 ratio between 2017 and 2020 averaged 2.7 percentage points for the Belgian banks and 3.9 percentage points for the SSM banks. In both cases, the sharp fall in the CET1 ratios was due to the very severe recession simulated by the ECB and the ESRB, which – for Belgium and the euro area – led among other things to a substantial contraction in GDP, a steep rise in unemployment, a marked fall in property prices and a rise in interest rates accompanied by widening spreads.

Taking account of their higher initial CET1 ratio and the smaller decline in that ratio in the adverse scenario, the CET1 ratio projected at the end of 2020 for the Belgian banks in the adverse scenario therefore averaged 13.5%, well above the average CET1 ratio of 9.9% for SSM banks.

The better starting position of the Belgian banks and their performance in the 2018 stress test are at least partly a reflection of the continuous adjustment efforts that those banks have been making since the crisis, including the strengthening of their capital, their debt reduction and the decline in the volume of legacy assets.

Overall, the results of the two largest Belgian banks which participated directly in the 2018 stress test show the steady improvement in their resilience. That is a welcome development in an environment which nonetheless remains challenging for the profitability of European banks.

### ***The Bank's 2018 stress test for less significant institutions***

In 2018, the Bank also conducted a stress test on the three main LSIs which are subject to its supervision. Since this exercise took place at the same time as the EBA stress test for SIs, both the baseline scenario and the adverse scenario were tuned to those of the EBA test. The methodology used is likewise based on that for the EBA stress test, although a number of simplifications were introduced.

The desired proportionality for this stress test was similarly ensured by asking the LSIs to supply only additional information on their starting position in December 2017. The projections for 2018-2020 were produced by the Bank, in contrast to the EBA stress test in which the SIs themselves take responsibility for the projections.

The stress test results were not published but were discussed with the LSIs and helped to determine the Pillar 2 guidance under the SREP.

### 3. Regulatory aspects

During the year under review, the main developments concerning banking regulation took place in the European Union, where work on strengthening the Banking Union and the Capital Markets Union continued at a steady pace. At global level, following the conclusion of the Basel III agreement finalised at the end of 2017, the Basel Committee on Banking Supervision's work focused more on the implementation and assessment of the Basel III reforms and on scope for regulatory arbitrage. At Belgian level, the Bank published a new Circular and updated its manual on governance.

#### 3.1 International regulations

##### 3.1.1 Strengthening of the banking union and the capital markets union

Completion of the Banking Union and further work on the Capital Markets Union in the EU continued to determine the supervisory authorities' programme in 2018. As regards completion of the Banking Union, new steps were taken to reduce the banking risks by the progress of the negotiations on a package of changes to the European banking legislation (CRR

2/CRD V/BRRD 2) and by the measures described above aimed at reducing the banks' non-performing loans, notably by the compulsory formation of provisions for those loans. This banking risk reduction is a pre-condition for concluding other European agreements on sharing the burden between Member States in the

event of materialisation of these risks (risk-sharing). That sharing would require the establishment of the third pillar of the Banking Union, namely a European Deposit Insurance scheme (EDIS) and adequate funding for the Single Resolution Fund. Apart from the completion of the Banking Union, other measures were taken in 2018 to establish the Capital Markets Union, intended to create deeper and better integrated capital markets in the European Union. Work on the adoption of specific prudential rules for European investment

firms and for various types of securitisation instruments are the principal elements.

The sections below deal with these topics in more detail. In this context, box 14 describes the progress achieved in the negotiations on adjustments to the banking regulations (CRR, CRD and BRRD).

#### *European Deposit Insurance Scheme (EDIS)*

One of the principal elements of the completion of the banking union concerns the switch to a European Deposit Insurance Scheme (EDIS). EDIS would be a key step towards strengthening financial stability in the euro area, by further boosting confidence in the stability of bank deposits, wherever they are located in the euro area, and severing the link between banking problems and the financial situation of the Member States concerned.

Under the initial 2015 proposal for creating EDIS, risk-sharing between the Member States would be phased in, and EDIS would be established in three automatic stages (reinsurance, coinsurance, full insurance) by 2024. Discussions in the European Parliament and the EU Council of Ministers revealed differences of opinion on that proposal. Some Member States want banks to become stronger before being ready to share the potential burden of bankruptcies in the Banking Union. Consequently, three years after the initial EDIS proposal was presented by the Commission, hardly any progress has been made.

To resolve the deadlock and facilitate political debate on EDIS, a European working group studied the continuing development of the scheme in 2018 and produced alternative proposals. Each option offers a different degree of mutual loss sharing, but first puts the emphasis on providing the essential liquidity for repaying (within 7 working days) the guaranteed deposits of a bank in difficulty. Moving on from the first stage – providing the necessary liquidity – to the second which concerns sharing the losses could be made subject to a range of conditions, such as targeted asset quality reviews and the level of the problem loans of banks whose deposits are protected by the system.

#### *Backstop for the Single Resolution Fund*

The European Resolution Fund provides adequate finance for the SRM, the second pillar of the Banking Union. From 2023 onwards, the Single Resolution

*Banking risk reduction is a pre-condition for concluding European agreements on sharing the burden between Member States in the event of materialisation of these risks (risk-sharing)*

Fund (SRF) will have an intervention reserve amounting to 1% of the deposits covered by guarantee systems of credit institutions in the Banking Union, equivalent to around €55 billion. In certain crisis cases, and especially in the event of a crisis affecting a significant banking group or a systemic crisis, the SRF's resources are likely to be insufficient to enable it to fulfil its mission. That is why – back in 2013, even before the SRF was created – Ministers from the Eurogroup and the Ecofin Council indicated the need to develop a public safety net, called the “backstop”. The use of that safety net is a last resort.

In its roadmap for deeper European Economic and Monetary Union, the European Commission proposed that the future European Monetary Fund should serve as a safety net for the SRF, either by providing it with guarantees or by granting it a liquidity line.

On that basis, on 4 December 2018, Finance Ministers meeting in the Ecofin Council agreed terms of reference governing the activation of a common safety net for the SRF. That common safety net is provided by intervention on the part of the European Stability Mechanism, which offers the SRF a renewable credit line the size of which is determined, during the transitional period, by the level of the SRF. This safety net covers all possible uses of the SRF, including liquidity support. The European Stability Mechanism enjoys preferential creditor status. This common safety net will be introduced by no later than the end of the transitional period, or earlier depending on the progress achieved in reducing risks.

#### ***Prudential regime for investment firms***

Investment firms like Belgian stockbroking firms are now subject to European prudential regulation which had been intended more for credit institutions and is therefore less suited to the activities and risks specific to that sector. The European Commission therefore proposed a revision of the prudential framework for investment firms, in the context of the capital markets union. Under that proposal, the banking regulation (and SSM supervision) only applies to large investment firms of systemic importance, and there is a new, tailor-made regime for smaller investment firms, addressing the problems of the current regulatory framework (complexity, lack of risk sensitivity, and fragmentation). More specifically, the Commission proposes a prudential framework which is both simpler and more proportionate, as well as being more

sensitive to the specific risks of investment firms and better suited to their business models.

The capital requirements for investment firms would be fixed according to a new approach, specifically designed for the commercial services and practices most likely to generate risks for investment firms, their customers and their counterparties. This approach establishes the capital requirements according to the scale, nature and complexity of the investment services offered and/or activities pursued. The minimum starting capital required for granting a licence, namely a quarter of the firm's fixed costs for the previous year, would be the minimum amount of capital required. Very small, non-complex investment firms would be subject to an even simpler regime for capital, corporate governance and reporting obligations.

The proposal makes provision for a five-year transitional period for investment firms before they have to apply the new requirements in full. Both the European Parliament and the EU Council of Ministers negotiated intensively on this proposal during 2018 with a view to speedy production of a final version.

#### ***Prudential regulation for various types of securitisation instruments***

The creation of a European Capital Markets Union also anticipates the adjustment and harmonisation of the European regulations on various types of securitisation instruments. The new Regulation on securitisation, comprising a general framework plus a specific framework for simple, transparent and standardised securitisation (STS), was adopted in December 2017 and came into force on 1 January 2019<sup>1</sup>. In 2018, the EBA worked on various technical mandates and guidelines to render the regulations and the STS framework operational.

In March 2018, the European Commission published a proposal on a framework for covered bonds, comprising a Directive and a Regulation amending the CRR as regards exposures in the form of covered bonds. Negotiations are in progress at European level and a final agreement should be reached in 2019. The Directive's main aim is to introduce minimum standards and encourage the development of covered bond markets in the Member States where markets are

<sup>1</sup> Regulation (EU) No. 2017/2402 of 12 December 2017.

under-developed or lack a legal framework. The minimum standards are linked to structural characteristics (such as eligibility of the assets as collateral and requirements concerning collateral) and public supervision.

Finally, during 2018, the European Commission also presented a proposal concerning sovereign bond-backed securities (SBBS). This is a specific legal framework for securitisation operations made by private or public entities and backed by a diversified set of euro area sovereign bonds. Thanks to the principle of priority/subordinate tranches of debt instruments and appropriate calibration, the top tranche could represent a low-risk European debt instrument.

Banks make a significant contribution to the direct financing of central governments by granting loans or buying government debt instruments for their own account. Liquid sovereign bonds also play a crucial role in the liquidity and balance sheet management of financial institutions. Thus, when there are higher financial risks for a national government, reflected in lower solvency and higher risk premiums, these exposures can damage banks' solvency and liquidity. In addition, banks tend to retain a larger share of the debt of their own national government, and that concentration heightens the risk of contagion, with the national government's problems affecting the local financial sector (sovereign-bank nexus). The SBBS proposal aims to alleviate that problem.

## BOX 14

### Reform of the European regulations (Risk reduction package)

The NBB's Report 2017 had already examined the proposals published by the European Commission with a view to amending the European banking legislation, namely the Capital Requirements Regulation (CRR), which is directly applicable, and the Capital Requirements Directive (CRD) and the Bank Recovery and Resolution Directive (BRRD), to be transposed into national law by the Member States. These proposals aim to introduce a number of key components of the Basel III package of additional regulatory requirements such as the leverage ratio, the net stable funding ratio (NSFR), new methods of calculating the capital requirements for counterparty risk and market risk, and the arrangements for introducing the TLAC requirement in the EU (see chapter C) for global systemically important institutions. This set of measures is therefore known as the risk reduction package.

In 2018, the European Parliament and the EU Council both determined their position on these proposals, and the negotiations between those two bodies and the European Commission, known as the "trilogue", began with a view to finalising the legislation. In the context of this debate, Belgium's key points for attention concerned the proposals for replacing the capital requirements, the liquidity requirements and the MREL requirements of local subsidiaries of foreign banks with parent company guarantees, the need to make European banks subject to adequate requirements concerning subordinated debt which could facilitate the resolution of a struggling bank, and maintenance of the effectiveness of the package of measures in reducing risks. Other points for attention in the debate included the need to adjust the Basel rules to specific European characteristics and the importance of proportionality in the application of the banking regulations to smaller and less complex institutions.

At the end of 2018, the European institutions reached agreement on the broad outline of the "Risk reduction package" which will undergo technical development with the aim of publishing final texts in the first half of 2019.

However, this proposal has been criticised by many EU Member States and by the financial sector, partly because the SBBs are expected to have a negative impact on the liquidity and funding costs of the various national governments, and it is feared that – in the event of a crisis – buyers may not be found for the subordinate tranches. The Bank is prepared to continue the debate on the proposed instrument in the context of deepening the Capital Markets Union.

### 3.1.2 Work of the Basel Committee

After having concluded the Basel III agreement, the Basel Committee on Banking Supervision focused on the implementation and assessment of the Basel III reforms and on the measures to be taken concerning the scope for regulatory arbitrage. The implementation work concerns such matters as the organisation of regular quantitative studies of the impact of the introduction of the new standards. Box 15 briefly describes the results of the first impact study which took account of the finalised Basel III agreement. Regarding the scope for regulatory arbitrage, work is in progress for the adoption of measures aimed at curbing window dressing, i.e. temporary reductions in transaction volumes on the main financial markets around the reference dates, which have the effect of temporarily increasing on those dates the leverage ratios which the entities in question are required to report. The concerns raised by the heightened volatility on various segments of the money markets and derivatives markets



around the key reference dates were among the reasons prompting the Basel Committee to consider these measures. Finally, in 2018, the Committee agreed to step up the harmonisation of certain aspects of the minimum capital requirements for market risk. These market risk standards were published by the Basel Committee on Banking Supervision in January 2016, as part of the Basel III package, but recent adjustments are intended to address the problems identified by the Basel Committee in monitoring the implementation and impact of the new regulations. The adjustments include recalibration of certain parameters and a simplified approach for banks with lower market risks. All the components of the Basel III framework have thus been completed.

#### BOX 15

### Impact of the Basel III reforms adopted in the wake of the crisis

The NBB's Report 2017 had already dealt with the finalisation of the Basel III reforms for the banking sector, adopted in the wake of the crisis. A final agreement on that subject had been concluded by the Basel Committee on Banking Supervision in December 2017.

That agreement provides for a significant change in the calculation of the risk-weighted assets, the denominator of the risk-based capital ratio. In particular, in the case of credit risk, this means a revision of the standardised approach and a reduction in the use of internal models for certain types



## Overview of the results

(data at the end of 2017)

	Number of banks	Change in the Tier 1 MRC (in %) <sup>1</sup>	Combined capital shortfall (in € billion)		
			CET1	Tier 1	Total
Group 1 banks <sup>2</sup>	111	3.6	5.2	7.3	13.3
of which: G-SIBs	30	3.0	5.2	6.3	12.2
Group 2 banks <sup>2</sup>	95	5.9	1.0	0.8	0.7

Source: Basel Committee on Banking Supervision.

1 In % of the total basic MRC established according to the target level requirement, i.e. the combination of risk-based capital requirements and capital requirements based on the leverage ratio, plus the capital conservation buffer and, where applicable, the G-SIB buffer.

2 Group 1 = Banks operating internationally with Tier 1 capital > €3 billion;  
G-SIBs = Global Systemically Important Banks, as determined by the Financial Stability Board.  
Group 2 = Other banks.

of assets. For other types of assets, internal models are subject to additional restrictions. For operational risk, internal models are abolished altogether. The last part of the finalised Basel III package is the so-called "output floor". It specifies that the total risk-weighted assets calculated by using internal models must not be less than 72.5% of the risk-weighted assets calculated according to the standardised approach. The agreement provides for the introduction of these standards by 1 January 2022, the output floor being initially fixed at 50% and gradually rising to 72.5% by 2027.

Publication of the finalised "Basel III" package was accompanied by publication of the results of Quantitative Impact Studies (QIS). These studies show the change in the Minimum Required Capital (MRC) and any capital shortfalls caused by application of the finalised package.

The first QIS to be conducted on the basis of the published final text took place on the basis of data as at end of December 2017. The QIS revealed considerable regional variations. For instance, while the average increase in the minimum required capital is 3.6%, it is 20.2% for European banks in Group 1 <sup>1</sup> and, on average, minimum required capital is actually lower for banks in America and in the rest of the world. The result for Europe tallies with the parallel impact study by the EBA. For a sample of 38 Group 1 banks in the EU, that study reported an impact of 18.7%.

The significant discrepancy between regions is not due to differences in business models, as the analysis shows, for example, that there is no correlation between the relative size of a bank's mortgage portfolio and the impact of Basel III, but instead is due more to the prudential framework currently applicable in those regions. While the Basel standard sets minimum required capital for the first Pillar, members are still free to impose stricter rules themselves (what is known as "super equivalence"). There are also variations between regions in the level of Pillar 2 capital requirements which are additional to the Pillar 1 capital requirements and are not taken into account in this QIS.

<sup>1</sup> The Basel Committee divides its members into three regions: Europe (EU Member States, Russia, Turkey, Switzerland), America (North, Central and South American members) and the rest of the world (Asia, Oceania and South Africa).



The impact also varies within the European Union and in Belgium. At EU level, the relatively high impact is distorted to some degree by the results for a few large banks. It should also be noted that the calculation of that impact does not take into account certain EU prudential specificities, even where the EU now already deviates from the Basel standards currently in force. In addition, the finalised Basel III package offers certain options for the supervisory authorities which are not currently taken into account in calculating the impact.

For Belgian banks, the average impact is less than the average for the EU. The Belgian banking sector would not experience any capital shortfall following the introduction of Basel III; consequently, the impact seems to be manageable for the Belgian banks, especially taking account of the sufficiently long transitional period.

The EBA is currently working jointly with the SSM and the national supervisory authorities on a new impact study in connection with the Call for Advice addressed to it by the European Commission on the implementation of the Basel III package in the EU. That study will provide a still more detailed picture of the impact of Basel III, taking account of the specific context of the EU.

### 3.2 Reporting, accounting and governance

On 26 September 2017, the EBA published new guidelines on internal governance<sup>1</sup>. The new guidelines put more emphasis on the tasks and responsibilities of the statutory management body, notably as regards its supervisory function. They also provide details on the composition and role of advisory committees formed within the statutory management body. In the aftermath of the Panama Papers, it also reinforced the guidelines on the use of complex structures and the relationship to be maintained with those structures. In addition, issues such as the risk culture, rules of conduct, and the management of conflicts of interest were developed and the guidelines now fully reflect the “three lines of defence” model. The new EBA guidelines were transposed into the Belgian prudential framework by a Circular on internal governance<sup>2</sup> and – specifically for the credit institutions sector – by updating of the banking sector governance manual.

For instance, the manual takes account of the principle of proportionality and the proportionality criteria proposed in the EBA guidelines. The new guidelines on operations with offshore centres and complex structures were also explicitly included in the manual: the EBA guidelines now stipulate that the use of these structures and centres should be avoided in the first place. If an institution were nevertheless to set up complex structures or activities, the statutory management body must

understand them and their purpose, and the specific risks associated with them, and ensure that the internal control functions are appropriately involved.

As regards the policy on conflicts of interest, the EBA guidelines stress in particular that institutions must establish adequate procedures for transactions between related parties, and that members of the statutory management body are also required to abstain from voting on matters where they have, or could have, a potential conflict of interest, or if their objectivity would be compromised.

On the subject of the composition of the board’s main advisory committees, the EBA guidelines require these committees to comprise a majority of independent directors and to be chaired by an independent member. Where these requirements go further than the requirements of the Banking Law or any other applicable legislation, the manual and the Circular specify that these guidelines should be regarded as recommended good practice which, as stipulated by Article 21, § 1, 1°, of the Banking Law, may be taken into account in the overall assessment of the organisation and functioning of the institution’s governance arrangements.

1 EBA/GL/2017/11 Guidelines of 26 September 2017 on internal governance. These guidelines came into force on 30 June 2018 and replace the EBA GL 44 Guidelines of 27 September 2011.

2 Circular NBB\_2018\_28 of 23 October 2018 – EBA Guidelines of 26 September 2017 on internal governance (EBA/GL/2017/11).



## E. Insurance undertakings

*During the year under review, the Bank continued to exercise closer supervision over insurance undertakings with the highest risk profile, within the framework of its ongoing (off-site) supervision. In some cases, the Bank imposed measures which occasionally led to cessation of all or part of an undertaking's business. The Bank's operational supervision over insurance undertakings also focused in particular on the adequacy of the "best estimate" of technical provisions in the life insurance portfolios. The quarterly reports which undertakings submitted to the Bank also formed the subject of a transversal analysis. Finally, particular attention focused on applications made to the Bank in connection with Brexit, the supplementary individual health insurance market, ORSA assessments and the accredited auditor's duty of cooperation.*

*Inspection missions (on-site) concerned such matters as pricing in the "industrial accidents" branch and the independent audit functions. Various applications concerning internal models were approved and monitored, and benchmarking work continued.*

*Furthermore, the legal framework for insurance and reinsurance undertakings was supplemented. Work focused in particular on revision of the standard Solvency II formula and the long-term guarantee measures, and on preparations for the entry into force of IFRS 17. Also, a new Bank Communication clarified the regulatory framework concerning governance. New field tests were also conducted with a view to devising a common prudential framework for international insurance groups, and stress tests were conducted jointly with EIOPA. Finally, work on prudential reporting concerned the introduction of new validation tests and simplification of some types of report.*

### 1. Mapping of the sector and supervision priorities

#### 1.1 Insurance undertakings

At the end of 2018, the Bank exercised supervision over 82 insurers, reinsurers, surety companies and regional public transport companies which insure their fleet of vehicles themselves. On the one hand, the steady decline in the number of supervised undertakings evident in previous years continued, owing to a degree of consolidation in the sector. On the other hand, a new trend emerged in the year

under review, with new players coming under the Bank's supervision because of Brexit. Of all the un-

dertakings subject to the Bank's supervision, only two are reinsurance undertakings in the strict sense<sup>1</sup>.

***New players came under the Bank's supervision because of Brexit***

<sup>1</sup> The number of reinsurers subject to supervision increased considerably in 2017 owing to a technical adjustment to the regulatory framework. As a result of the entry into force of the new prudential supervision regime, direct insurers which also engaged in reinsurance activities before 2016 were recorded as reinsurers.

Table 22

**Number of institutions subject to supervision<sup>1</sup>**

(end-of-period data)

	2014	2015	2016	2017	2018
Active insurance undertakings	80	75	72	67	67
Insurance undertakings in run-off	4	3	2	2	1
Reinsurance undertakings	1	1	1	29	31
of which: undertakings also operating as insurers	–	–	–	28	29
Other <sup>2</sup>	12	12	12	12	12
<b>Total<sup>3</sup></b>	<b>97</b>	<b>91</b>	<b>87</b>	<b>82</b>	<b>82</b>

Source: NBB.

1 At the end of 2018, the Bank also exercised prudential supervision over nine branches of undertakings governed by the law of another EEA member country, but that prudential supervision was confined to verifying compliance with the money-laundering legislation.

2 Surety companies and regional public transport companies.

3 For 2017 and 2018, the total only takes account once of undertakings active as both insurers and reinsurers.

## 1.2 Insurance groups

At the end of 2018, 11 Belgian insurance groups were subject to the Bank's supervision, the same number as in 2017. Seven of those groups only have holdings in Belgian insurance undertakings (national groups), while four groups have holdings in at least one foreign insurance undertaking (international groups). In that respect, too, the situation is the same as at the end of 2017. Under Solvency II, the Bank is the group supervisory authority for each of those groups, and in that capacity, it receives specific reports which form the basis of prudential supervision at group level.

Table 23

**Belgian insurance groups subject to the Bank's supervision**

Belgian national groups	Belgian international groups
Belfius Assurances	Ageas SA/NV
Cigna Elmwood Holdings	Navigators Holdings (Europe)
Credimo Holding	KBC Assurances
Fédérale Assurance	PSH
Groupe Patronale	
Securex	
Vitrufin	

Source: NBB (situation at the end of 2018).

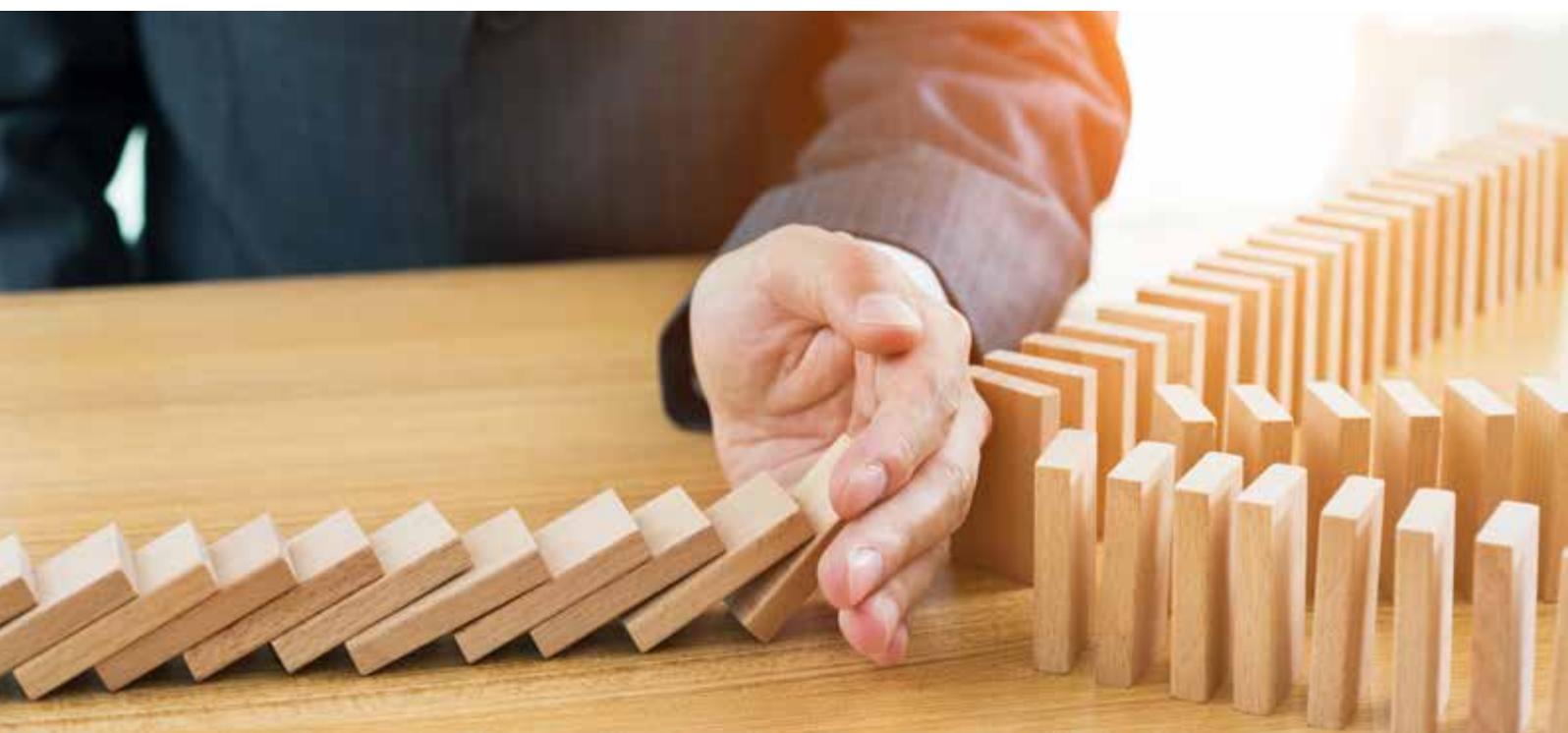


Table 24

**Colleges for insurance undertakings subject to the Bank's supervision**

The Bank is the group supervisory authority	The Bank is one of the supervisory authorities involved	
Ageas SA/NV	Allianz	Allianz Benelux
KBC Assurances		Euler Hermes
Navigators Holdings (Europe)	AXA	AXA Belgium
PSH		Inter Partner Assistance
		Touring Assurances
	Assurances du Crédit Mutuel	Partners Assurances
	Generali	Generali Belgium
		Europ Assistance Belgium
	Munich Re	D.A.S.
		DKV Belgium
		Ergo Insurance
	NN	NN Insurance Belgium
	Baloise Group	Baloise Belgium
		Euromex

Source: NBB (situation at the end of 2018).

The supervisory authorities of cross-border groups facilitate group supervision by working together in colleges of supervisors. These colleges ensure that the collaboration, exchange of information, and mutual consultation between the supervisory authorities of the EEA member countries actually takes place in order to promote decision-making and the convergence of supervisory activities. The establishment and operation of the colleges are based on coordination arrangements between the supervisory authorities concerned, for which the principles are laid down in the legislation.

### 1.3 Supervision priorities and operational aspects

#### 1.3.1 Ongoing supervision (off-site)

During the period under review, the Bank continued to step up its supervision of undertakings with the highest risk profile. In parallel with the initiatives taken by the undertakings themselves, the Bank imposed measures which, in some cases, led to cessation of some or all of the undertaking's activities.

The new prudential rules (Solvency II framework) continued to make their mark on the supervision of insurance undertakings. Insurers made substantial progress in the correct application of the new rules. Reporting quality remains a point for attention, although further improvements were apparent during the period under review.

The transversal analyses conducted in 2017 were followed up in 2018 and new analyses were initiated.

#### *Brexit*

For insurers and reinsurers with their registered office in the United Kingdom, Brexit may have significant implications.

With that in mind, a number of British insurers and reinsurers have set up companies, including some under Belgian law, from which to manage and develop their

*Prudential supervision over the new undertakings formed in the context of Brexit will present a major challenge for the Bank*

European activities. The Bank dealt with four cases of this type during the year under review. It involved close consultation with the undertakings concerned in order to gain an understanding of the activities and plans of their Belgian companies. These cases have now been dealt with, but the prudential supervision of these new Belgian insurers and reinsurers will present a major challenge for the Bank in the future. At the time this Report went to press, some companies were still considering setting up a subsidiary in Belgium on account of Brexit.

### ***Best estimate of the technical provisions for the life insurance portfolio***

The analysis of the impact of profit-sharing on the best estimate of the technical provisions for life insurance continued during the year under review. Particular attention focused on how a sudden interest rate rise would affect profit sharing. The insurers surveyed had to state the estimated likelihood of their products being surrendered in the event of such an interest rate rise. In some cases, policy-holders may in fact secure a financial gain from surrendering their contract, despite the associated costs, but in other cases, insurers are well protected against such behaviour, in particular by the tax penalty associated with the surrender of certain contracts. The Bank also gained a better understanding of the link between a possible interest rate rise, the profit shares that insurers may pay, and the expectations of the policy-holders in that respect.

### ***Cost projections in the best estimate***

During the year under review, the Bank completed the horizontal analysis of the cost modelling in the technical provisions (for seven insurers). The analysis resulted in a Communication<sup>1</sup> which, alongside the analysis conclusions, also clarifies the existing regulations; this should lead to uniform application of the regulatory provisions.

The horizontal analysis showed that the ways in which insurers allocate and project the costs when calculating the best estimate differ in twelve significant respects, and that they often do not comply with all the regulatory provisions. The main

<sup>1</sup> Communication NBB\_2017\_32 on the results of the horizontal analysis of the costs used in valuing the technical provisions.

quantifiable finding is that there are gaps and differences in practice on the following five aspects: the overhead expenses attributed to acquisition costs; the adjustments for non-recurring costs; the adjustments concerning contract boundaries established according to Solvency II; the need to coordinate cost-related cash flows with those of the underlying claims in the projections, and the explicit modelling of fixed costs. The Bank analysed the firms' action plans and informed them of its observations in cases where the plans did not entirely conform to its recommendations.

### ***Horizontal analysis of non-occupational health insurance***

In order to analyse the fair competition conditions in regard to supplementary individual health insurance, the Bank conducted a horizontal analysis of the Belgian market. The study showed that the profitability of the products depends on their characteristics. On the basis of the product characteristics, it is possible to estimate the risk that the future profitability of the portfolio will deteriorate if the medical index does not adequately reflect the trend in claims paid out.

The best estimate seems extremely sensitive to the assumptions concerning future claims inflation and future premium indexation. In order to ensure fair competition conditions, firms were asked, when calculating the best estimate and setting its parameters, to conduct a number of sensitivity analyses which will permit identification of the points mentioned above.

The sensitivity analyses will make it possible to assess the best estimates notified by the firms and, if necessary, to impose corrective measures.

### ***Analysis of periodic reporting***

During the year under review, the Bank received, for the second time, annual reports produced in accordance with the new prudential regime, and conducted transversal plausibility checks on them, covering key elements of the firms' financial situation.

The Bank is totally committed to establishing a set of instruments enabling more detailed analysis of the data. The emphasis here will be on key factors in the financial health of firms. The Bank will

accord priority to monitoring the technical provisions, the quality of the capital requirement calculations and the nature of the firms' asset portfolios.

Insurers with a low solvency ratio were a priority for analysis in 2018. The solvency calculations are based on a multitude of technical specifications and require proper interpretation of the regulations in order to guarantee correct application. In addition, correct calculation of the parameters used is essential in order to ensure the quality of solvency reporting. The analysis includes a detailed examination of the valuations in the balance sheet, and calculation of the required and available capital. This exercise is conducted by applying the principle of proportionality.

In 2017, firms had, for the first time, submitted a Regular Supervisory Report (RSR) to the Bank. This document is intended for the Bank for supervisory purposes, and its content is not made public. The descriptive report, supplemented by predefined quantitative reporting templates, contains both qualitative and quantitative information. It forms part of the information which is mandatory for supervision purposes. The information obtained from the RSR is used to establish the firm's overall risk profile. This information is examined alongside the information obtained from the Own Risk and Solvency Assessment (ORSA)<sup>1</sup>, the Solvency and Financial Condition Report (SFCR), and the governance memorandum. The RSR could be a useful instrument for the supervisory authority in that it enables accurate interpretation of the large volume of figures submitted in the regular reports. Meetings have been held with large firms on the consistency of the various documents mentioned above, and on points which the Bank wished to examine more closely during the year under review. The discussions continued in 2018 for large firms on the basis of the information available on the prudent person principle, the EPIFP<sup>2</sup> (expected profit in future premiums), and the effects of the risk attenuation concerning reinsurance and derivatives. The intention is to give the firms feedback on the Bank's expectations concerning these points.

## ORSA

In addition, detailed appraisals of the 20 guidelines relating to the ORSA and 17 good practices concerning stress tests, sensitivity analysis and scenario analysis,

included in a Bank Circular<sup>3</sup>, were conducted for the main insurance groups in 2018. Their appraisal and the main findings of the risk assessment were discussed with the firms.

## Accredited auditor's duty of cooperation

In accordance with their duty of cooperation, accredited auditors explained their approach to the best estimate at a workshop. In connection with the expectations concerning their duty to cooperate in prudential supervision, the auditors drew up a detailed report for the first time and discussed its findings with the Bank. This work will continue on a structured basis in 2019.

### 1.3.2 Inspections (on-site)

Since the introduction of the Solvency II prudential rules in January 2016, insurance company inspections have centred mainly on the aspects most affected by the new regulations. The calculation of the best estimate of the technical provisions and mortgage loan valuations formed the subject of several specific missions which were completed in 2018. They produced significant findings. In 2018, other subjects more closely linked to economic business models and operating processes were also addressed.

## Pricing

Owing to the persistently low interest rate environment, mixed insurance undertakings have stepped up their marketing of non-life insurance products on which profitability is less sensitive to movements in the yield curve. That triggered fiercer competition in some branches of activity. In that context, inspections were conducted in order to analyse the pricing and profitability of the "industrial accident"

1 The ORSA enables the insurer to assess its risks and solvency itself. In that connection, there is particular attention to the overall solvency need, continuous conformity with the set capital requirements and technical provision requirements, and assessment of the degree to which the insurer's risk profile deviates from the assumptions underlying the calculation of the solvency capital requirement ("adequacy of the standard formula").

2 The EPIFP is the expected profit included in future premiums on existing contracts. That expected profit reduces the best estimate and therefore increases the net assets. Correct assessment of this element is therefore important.

3 Circular NBB\_2017\_13 of 19 April 2017 on the Own Risk and Solvency Assessment (ORSA).

branch for which the statistics reveal downward pressure on prices. These analyses show that a significant proportion of insurers operating in these business segments are defending their market share or aiming to expand it, often at the expense of their profitability. The inspections highlighted the importance of robust pricing and the formalism necessary in the pricing process. In the current market circumstances, shortcomings in those respects may lead to inappropriate continued activity and a discrepancy between the profitability targets and the actual results.

In view of the market competition, some firms slash their margins, damaging the profitability of the “industrial accident” branch as a whole. The Bank seeks to ensure healthy competition on this market segment, but that also entails robust and transparent pricing processes for all the insurers concerned.

#### ***Independent audit functions***

Further qualitative inspection missions were carried out in 2018, permitting detailed examination

of three independent audit functions: the actuarial function, the internal audit function and the risk management function.

It emerged that some firms do not yet provide sufficient resources for their independent audit functions. These functions need to be allocated the necessary time and resources so that they can fulfil their missions properly. In order to ensure their independence and objectivity, those responsible for the said audit functions obviously cannot (continue to) receive variable remuneration related to the performance of the operating entities and spheres over which they exercise supervision.

It was also apparent that the status of the independent audit functions within the organisation – and that does not only mean the organisation chart – did not always reflect the independence requirement. Even if the people performing these functions have the necessary skills, in practice they still do not have the required experience and often do not have the time for further development in their role, since they have to combine it with operational activities.



### Internal models

During the year under review, an undertaking which had previously used the standard method was granted approval for its full internal model, following a two-year pre-application period. Pre-application work also began for two other undertakings wishing to set up an establishment in Belgium on account of Brexit.

The monitoring of the previously approved internal models of four companies continued in 2018. Various aspects were covered, such as monitoring of the firm's remedial plan, the "terms and conditions"

imposed by the supervisors and general checks on the models' performance. A number of significant changes to these models were also examined during the year under review. Measures were taken where the Bank considered that the quality of the internal models was inadequate.

Apart from the work relating to the solvency capital requirement (SCR), the Bank continued its benchmarking of the economic scenario generators developed by insurers, and the monitoring of aspects relating to the asset-liability management of the models used to value the life insurance liabilities. The internal development of challenger models also continued.

## BOX 16

### Flashing-light reserve

The Royal Decree<sup>1</sup> on the annual accounts of insurance and reinsurance undertakings states that the additional reserves formed under Solvency I should be retained in the statutory annual accounts when switching to Solvency II and must then be topped up for as long as interest rate risks persist.

Since the new Solvency II framework imposes specific regulatory capital requirements to cover the interest rate risk, the said Royal Decree contains simplified provisions on exemption from the obligation to form additional reserves. The mechanism for granting such exemptions has been aligned more closely with Solvency II.

All the regulatory capital requirements must be covered in order to qualify for exemption from the obligation to form additional reserves. To claim exemption, firms must also conduct stress tests on their exposure to interest rate risk, and the test results must be satisfactory.

Cases are assessed as follows. Exemption is granted if the following two conditions are met and there are no other factors precluding exemption: the firm must first have a solvency ratio of over 100 % in the baseline scenario and must then maintain that ratio above 100 % after application of an adverse scenario.

For 2018, the Bank received exemption applications from 24 firms. Nine firms did not claim exemption and will therefore form additional reserves to cover the interest rate risk in their balance sheets.

<sup>1</sup> Royal Decree of 1 June 2016 amending the Royal Decree of 17 November 1994 on the annual accounts of insurance and reinsurance undertakings.

## 2. Legal framework and prudential supervision

### 2.1 Revision of the Solvency II legal framework

#### *Revision of the Solvency II standard formula*

During the period under review, the European Commission revised some aspects of the standard formula for calculating the solvency capital requirement<sup>1</sup>. Between September 2015 and January 2016, the European Commission had held a public consultation on the advantages, undesirable effects, consistency and cohesion of the financial regulations, including the Solvency II legislation. Over 50 respondents had taken part in this public survey, including players in the insurance sector, public authorities and non-governmental organisations. On the basis of the feedback received by the Commission, three areas were identified in which the Solvency II framework could be improved.

The first area concerns the proportionate, simplified application of the Solvency II requirements. The Solvency II legislation replaced 28 national regimes with a harmonised, risk-based legal framework. The Solvency II Directive<sup>2</sup> specifies that the rules and implementing technical standards drawn up by the Commission should take account of the principle of proportionality, ensuring the proportionate application of the Directive, particularly in the case of small insurance undertakings. Although the legislation contains numerous provisions on proportionality, the public consultation showed room for improvements to ensure that the legal requirements are proportionate to the risks. Specific points where more simplifications are possible include the provisions on calculation of the capital requirements for counterparty default risk and catastrophe risk.

The second area concerns removing unintended technical inconsistencies. The public consultation showed that the Solvency II framework could be made more consistent with the legislation on other financial sectors, such as on the prudential treatment of derivatives and local authority guarantees. In this connection, differences in the business models of financial institutions ought to be taken into account. The legislation should also enable European insurers to use the latest financial products. Finally, it is necessary to avoid undesirable

effects such as excessive dependence on credit rating agencies.

The third and final area for revising Solvency II concerns the removal of unjustified barriers to insurers' investments. In the public consultation, respondents pointed out that the Solvency II framework could create undesirable restrictions on long-term investment. The Solvency II Delegated Regulation was already amended in 2015<sup>3</sup> to support investment in infrastructure projects and European long-term investment funds (ELTIFs). The 2018 revision of the legislation provides for further refinement of the standard formula for calculating the capital requirements, in order to improve risk sensitivity for certain types of investment. For instance, in the case of investment in firms which do not currently have a credit rating issued by a rating agency, it would be possible to envisage a refined risk weighting based on these firms' financial figures.

On the subject of these three areas for revision, the European Commission sent two letters to the European Insurance and Occupational Pensions Authority (EIOPA) in July 2016 and February 2017, requesting a technical opinion on the specific components of the standard formula. EIOPA conveyed its technical opinions to the Commission in October 2017 and February 2018. They concern a number of questions of particular interest to the Belgian insurance sector, such as the treatment of local authority guarantees, the look-through approach for investment in related undertakings, and the provisions on the loss-absorbing capacity of deferred taxes.

#### *Revision of the long-term guarantee measures*

In order to ensure the efficient operation and stability of Europe's insurance markets, a number of long-term guarantee measures were introduced under the Solvency II regulatory framework. This concerns

1 As specified by recital 150 in Commission Delegated Regulation (EU) 2015/35 of 10 October 2014 supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of insurance and reinsurance (Solvency II).

2 In accordance with Article 29(4) of Directive 2009/138/EC of the European Parliament and of the Council of 25 November 2009 on the taking-up and pursuit of the business of insurance and reinsurance (Solvency II).

3 See the Bank's Report 2017.

more particularly a technique for extrapolating the risk-free yield curve, thus establishing rates which are stable enough to attenuate the artificial volatility of the capital and technical provisions, various adjustments aimed at discouraging procyclical behaviour, and a number of transitional measures permitting a phased switch from the previous prudential regime (Solvency I) to the new regime.

Introduction of these measures is accompanied by close scrutiny of their effectiveness. To that end, EIOPA was instructed to report annually to the European Parliament, the Council and the Commission up to 1 January 2021 on the impact of the application of these measures. The national supervisory authorities are working closely with EIOPA to enable it to bring this project to a successful conclusion.

Since 2016, EIOPA has published three reports on the application of the long-term guarantee measures and their influence on the financial position of the undertakings concerned, as well as, more generally, on their economic impact in the European Union.

For example, EIOPA's 2018 Report shows that the solvency ratio of the Belgian sector as a whole is 192 % if all the long-term guarantee measures are taken into account, but drops to 174 % if those measures are disregarded. This 18-percentage-point impact is smaller than the European average, which is around 38 percentage points, with the solvency ratio dropping from 239 % to 201 %. It should also be noted that in Belgium, 39 firms use the volatility adjustment for risk-free yield curves, and only one applies the transitional measure for the technical provisions. At European level, 737 insurers and reinsurers out of a total of 2912 use at least one measure.

EIOPA is expected to give the European Commission its opinion on the long-term guarantee measures, if appropriate after consulting the ESRB and arranging public consultations. The Commission will then present a report on the revision of those measures by no later than 1 January 2021.

## 2.2 The IFRS 17 accounting standard

Since 1 January 2012, all insurers and reinsurers governed by Belgian law have had to draw up consolidated accounts and a management report on their consolidated accounts if, alone or jointly, they control one or more subsidiaries governed by

Belgian or foreign law. That consolidation is carried out in accordance with the set of international accounting standards defined by the International Accounting Standards Board (IASB) which had been adopted by the European Commission by the balance sheet date.

On 18 May 2017, the IASB published a new standard relating to insurance contracts, IFRS 17, replacing the previous standard, IFRS 4. This standard lays down a set of principles governing the valuation of insurance contracts. It is essentially based on a current value method and harmonisation of the presentation of the accounts. The general valuation principles under the new standard are fairly similar to those of the Solvency II prudential regime. For example, in both cases, the expected value of the contractual cash flows has to be projected for each maturity, discounted via a risk-free yield curve, and adjusted for a risk margin.

At global level, the standard is expected to enter into force on 1 January 2022. Before it can apply in the EU, it must first be ratified by the European Commission. Initially, the standard was scheduled to enter into force on 1 January 2021, but in November 2018, the IASB provisionally decided to postpone the implementation date by one year, so that the uncertainty associated with a possible reopening of the standard – which the IASB is examining following requests from a number of sectoral associations – does not make it difficult for firms to be properly prepared.

In connection with this adoption process, the European Financial Reporting Advisory Group (EFRAG), a European panel of advisers on financial reporting, was asked by the European Commission to give an opinion on ratification of the new standard. That opinion is to be accompanied by a detailed impact analysis, including a cost-benefit analysis and a more general analysis of the economic impact of introducing the standard in the European Union. For that purpose, the EFRAG is working with the supervisors and firms concerned, who take part in field studies enabling it to complete its analyses. At the same time, EIOPA has conducted and published an analysis setting out the merits of the standard from a European angle and comparing the common features of the Solvency II regime and the new accounting standard, thus also highlighting the potential efficiency gains that could result. However, it should be noted that the new standard

is considerably more complex than the previous one, and its implementation is currently proving a challenge for the undertakings concerned.

### 2.3 Modernisation of the regulatory framework concerning governance

The Law on the supervision of insurance undertakings<sup>1</sup> introduced stricter governance quality rules applicable to insurers and reinsurers. Since this new regime came into force, the Bank has handled a large number of cases relating to governance and conducted an initial review of the implementation of the new quality requirements. It thus proved necessary to modernise the regulatory framework in various respects, and that led to the publication, on 13 September 2018, of a Communication<sup>2</sup> updating the Circular on the overarching governance system for the insurance and reinsurance sector<sup>3</sup> in various spheres.

That Communication first clarified the concept of proportionality by using quantitative and qualitative criteria to classify Belgian insurance and reinsurance institutions and groups into two categories: significant institutions/groups and less significant institutions/groups. The practical implications of that classification in regard to governance were spelt out. For example, the frequency of the complete revision of the Regular Supervisory Report (see section E.1.) is three years for less significant institutions/groups (with annual reporting of changes) and one year for significant institutions/groups. Another example is that less significant institutions are authorised to place one person in charge of a combination of independent audit functions or to outsource an independent audit function. Similarly, the rules governing the allocation of tasks among the members of the management board of a less significant institution are less stringent than those applicable in significant institutions.

Next, a number of aspects concerning the concept of the governance system were specified in detail. The missions of management bodies were clarified as regards the validation of prudential reporting and integrity policy. The organisational rules to be respected as regards the preservation of documents relating to insurance and reinsurance business in accordance with Article 76 of the Law, and the Bank's expectations on reporting of the independent audit functions and the combination of functions, were also spelt out.

Finally, taking account of the fact that growing numbers of undertakings outsource certain critical activities or functions, the Bank reinforced its outsourcing requirements, notably by defining the content of the information file to be submitted to the Bank and the arrangements for reporting by the service provider to the management bodies of the undertaking concerned.

### 2.4 International Capital Standard

In the context of the global convergence of prudential standards for insurance and the promotion of financial stability, the International Association of Insurance Supervisors (IAIS) is working on a common prudential framework for internationally active insurance groups (IAIG<sup>4</sup>). One feature of this framework is the development of an International Capital Standard (ICS) comprising several sections: the provision concerning the consolidation scope, the valuation of assets and liabilities, the capital elements and the capital requirements.

Over the past four years, field tests have been conducted on this subject. Field testing serves to refine the capital standards mentioned above and to continue developing the qualitative aspects of the regulatory framework. It also offers the benefit of contributions by experts from both the insurance sector and the supervisory authorities. During the period under review, a field test was conducted to specify the capital requirements in more detail according to a standard approach. In addition, data were collected on the internal models used to determine the capital requirements. The International Capital Standard is expected to be finalised by the end of 2019 with a view to its application to all internationally active insurance groups on a consolidated basis after a

1 Law of 13 March 2016 on the legal status and supervision of insurance and reinsurance undertakings.

2 Communication 2018\_23 dated 13 September 2018 updating the Overarching Governance System Circular.

3 Circular 2016\_31 on the Bank's prudential expectations regarding the governance system for the insurance and reinsurance sector ("Overarching Governance System Circular")

4 IAIGs are insurance groups which meet two criteria, the first relating to the weight of non-domestic activity and the second to the group's size. An IAIG should thus issue premiums in at least three countries, and the share of its non-domestic gross premiums issued should exceed 10%. In addition, taking an average over three years, it should have assets in excess of \$ 50 billion or premiums in excess of \$ 10 billion. The supervisory authority has some discretion over the application of these measures when determining whether a particular group should be regarded as an IAIG.

five-year monitoring period. The ongoing discussions aim to ensure, among other things, that the European Solvency II standard is recognised as the practical implementation of the International Capital Standard.

## 2.5 Stress tests

The Bank's policy on stress testing for insurers specifies that the insurance sector must undergo a stress test at least once a year, and that the tests will be aligned with any European stress test. In 2018, EIOPA conducted one of these European stress tests in which two Belgian insurance groups took part. The Bank also decided to arrange a similar exercise for a number of insurers who together account for a significant share of the Belgian insurance sector. This Belgian stress test specified the same scenarios as those developed for the EIOPA exercise.

In 2018, the European stress test comprised three scenarios. Two scenarios presented a combination of market risks and underwriting risks. These two scenarios had been developed by EIOPA and the ESRB and reflect the ESRB's assessment of the main risks for the European financial system.

The primary aim of the Yield Curve Down (YCD) scenario is to assess the potential vulnerabilities of the insurance sector resulting from a persistently low interest rate environment combined with a small rise in risk premiums and a decline in mortality due to medical progress. The scenario affects both the assets and the liabilities of undertakings owing to an environment featuring declining risk-free yield curves combined with stresses affecting major asset categories in the investment portfolio and a bigger than expected increase in average life expectancy. This scenario not only forms part of the Bank's macroprudential risk assessment framework, it also makes it possible to identify any potential weaknesses at microprudential level. In practice, this means that the results of the YCD scenario are taken into account in assessing applications for exemption from forming the flashing light provision for interest rate risk (see box 16, section E.1.).

The Yield Curve Up (YCU) scenario tests the sector's resilience in the case of a sudden, sharp rise in risk aversion supplemented by upward revision of the claims burden and an impact on the surrender of insurance contracts. This scenario leads to rising risk-free yield curves, a steep increase in risk premiums for the

main asset categories, higher inflation with an impact on non-life technical provisions, and significant cash outflows owing to the increase in surrendered policies.

The third scenario, devised by EIOPA, simulates the impact of various natural catastrophes on the insurers' financial situation. This scenario was not used in the Belgian stress test.

The reference date for this exercise had been set as 31 December 2017. For each scenario, firms were asked to calculate the impact on the balance sheet, their own resources and the capital requirement. The stress test results were published on the EIOPA website<sup>1</sup>.

## 2.6 Developments in reporting

During 2018, in regard to prudential reporting in the insurance sector, the emphasis was on data quality and on simplification of certain narrative and quantitative reports.

The data quality in the quantitative reports remains a matter for concern both for the sector and for the supervisors. As well as contributing to the introduction of new validation tests at European level, the Bank conducted its own validation tests at the Belgian level. Systematic tests on the list of assets were introduced to verify consistency between the Solvency II reporting information and that contained in the annual accounts. The Bank also continued to involve the auditors in the process of checking the quality of the prudential reporting and will pursue its dialogue with them in order to share its experience and specify its expectations.

A new Communication<sup>2</sup> modifies the narrative reports that insurers and reinsurers have to submit to the Bank from 2019 onwards. These changes mainly concern: (i) integration of the governance memorandum in the Regular Supervisory Report (RSR), (ii) revision of the frequency of collecting the RSR, with differentiation according to whether an institution is classed as significant or less significant, (iii) structured authorisation to refer to internal documents in the RSR, and (iv) adjustment of the arrangements for submitting certain reports. Apart from these fundamental

<sup>1</sup> <https://eiopa.europa.eu/Publications/Surveys/EIOPA%202018%20Insurance%20Stress%20Test%20Report.pdf>

<sup>2</sup> Communication NBB\_2018\_24/Insurance and reinsurance sector – regular reports to be submitted via the eCorporate platform from 2019 onwards.

revisions, the Communication also specified the report collection dates for 2019 and listed on the Bank's website the reporting templates to be used.

In its risk analysis, the Bank conducts a series of horizontal analyses each year of the risks to which the insurance sector is exposed. Belgian insurers' interest rate risk, liquidity risk and spread risk are examined in more detail. For the analysis of interest rate and liquidity risks, specific reports had been devised before the introduction of Solvency II. In 2018, on the basis of the new data supplied by Solvency II reporting, the Bank examined whether reporting on interest rate and liquidity risks could be streamlined.

In 2014, to obtain a more complete and detailed picture of the insurance sector's exposure to interest rate risk, the Bank decided to devise a specific standard annual report for monitoring that risk. The data were generally requested for both the undertakings' portfolio as a whole and for the main product segments. Thanks to the information in the Solvency II reporting, it has now been possible to simplify the interest rate risk reports. For instance, the cash flow projections for the technical provisions and yields are no longer requested. In addition, the duration of the technical provisions and of their covering assets and the asset cash flow projection now only have to be stated at the portfolio level. The section concerning the composition of the guaranteed interest rates on the insurance portfolio is retained in full. The date for supplying this report is being brought forward by two months from 2019.

In view of the downward trend in the volumes of traditional life insurance premiums and the increasing share of illiquid assets on the Belgian insurance market, the Bank specifies separate quarterly reporting on liquidity risk for all insurers providing life insurance. That reporting focuses on monitoring inward and outward cash flows, the trend in the liquid assets and liabilities, and finally, the trend in exposures to instruments and derivatives with a potential liquidity risk. That enables more systematic analysis of an insurer's liquidity risk, at both individual and sectoral level. The Solvency II reporting now offers the opportunity to derive a series of similar indicators, either directly or indirectly. In order to foster the efficiency of the two reporting systems, the liquidity reporting was therefore brought more into line with the Solvency II reporting requirements. For example, the data on the liquidity of the investment portfolio are no longer requested but are derived from the Solvency II reports on the list of assets. The date for delivering these reports is unchanged.

At European level, EIOPA has also announced its plan to initiate discussions on reporting from 2019 onwards. Revision of the reporting will aim to review the relevance of the content, structure and standardised formats of the Quantitative Reporting Templates (QRTs). However, the objective is not to reduce or increase the number of data items to be submitted, but to improve the reports and publications as a whole in relation to the aim in view.

## F. Financial market infrastructures

*During the year under review, in the sphere of market infrastructures, particular attention focused on IT risks and cyber risks, the impact of FinTech on the business models of financial market infrastructures, and developments concerning Brexit. These subjects are examined separately in chapter G. The rest of this chapter deals with the other activities concerning the supervision and oversight of market infrastructures, payments and critical service providers.*

### 1. Mapping the sector

The Bank is responsible for both the oversight and the prudential supervision of financial market infrastructures (FMIs), custodians, payment service providers and critical service providers. Oversight concerns the security of the financial system, whereas prudential supervision examines the security of the FMI operators.

FMIs are critical components of the national and international financial markets, owing to the services which they provide, such as facilitating the exchange of money for goods, services and financial assets, or offering a secure and efficient way for the authorities to manage systemic risks and for central banks to conduct their monetary policy<sup>1</sup>. FMIs were designed to concentrate payment, clearing and settlement activities in order to improve risk management and reduce costs and delays in these areas. If they work well, FMIs can considerably enhance the efficiency, transparency and security of financial systems. However, their activities often lead FMIs to concentrate the risks, and badly designed and managed FMIs may even constitute a source of systemic risk in themselves. That is why it is necessary to have an adequate framework for regulation, supervision and oversight.

Central banks have traditionally taken on that oversight role because they are very concerned to maintain the security and efficiency of payment, clearing and settlement systems. One of the main tasks of central banks is in fact to maintain the public's

confidence in the currency, and that confidence depends very much on the ability of the economic agents to transfer capital and financial instruments smoothly and securely via these FMIs. These systems therefore need to be robust and reliable and must remain available when the markets are in crisis; moreover, they must never be the source of a crisis themselves. Oversight pursues these aims by supervising, assessing and, where necessary, modifying the systems.

*Central banks are very concerned to maintain the security and efficiency of payment, clearing and settlement systems*

The Bank is also a microprudential supervision authority for individual financial institutions, placing the emphasis on the operator's financial soundness (by assessing compliance with the prudential requirements).

In cases where the Bank exercises both oversight and prudential supervision, these two activities may be considered complementary.

The table below presents the systems and institutions subject to the Bank's supervision and/or oversight.

<sup>1</sup> The role played by FMIs for financial markets and the real economy is described in section 1.1 of the Financial Market Infrastructures and Payment Services Report 2018 (<https://www.nbb.be/doc/ts/publications/IMF-and-payment-services/2018/IMF-report2018.pdf>).

Table 25

Mapping of the financial market infrastructures and payment services sector

	International cooperation		The Bank acts as the sole authority
	The Bank acts as lead authority	The Bank participates under the direction of another authority	
Prudential supervision		<u>Custodian</u> Bank of New York Mellon SA/NV	<u>Custodian</u> BNYM Brussels branch
			Payment service providers (PSP) Payment institutions (PI) Electronic money institutions (ELMI)
Prudential supervision and oversight	<u>Central securities depository (CSD)</u> Euroclear Belgium <u>International central securities depository (ICSD)</u> Euroclear Bank SA/NV <u>Equivalent settlement institution</u> Euroclear SA/NV	<u>Central counterparties (CCP)</u> LCH Ltd (UK), ICE Clear Europe (UK) LCH SA (FR), Eurex Clearing AG (DE), EuroCCP (NL), Keler CCP (HU), CC&G (IT)	<u>Payment processors</u> Worldline SA/NV
	<u>Critical service provider</u> SWIFT	<u>Service provider</u> TARGET2-Securities (T2S) <sup>1</sup>	<u>Central securities depository</u> NBB-SSS
Oversight		<u>Payment system</u> TARGET2 (T2) <sup>1</sup> CLS Bank	<u>Card payment schemes</u> Bancontact <sup>1</sup> MasterCard Europe
			<u>Payment system</u> Centre for Exchange and Clearing (CEC) <sup>1</sup>

Post-trade infrastructure	Securities clearing	Payments	Payment systems
	Securities settlement		Payment institutions and electronic money institutions
	Custody of securities		Payment processors
Service providers	T2S		Card payment schemes
Critical service providers	SWIFT		

Source: NBB.

<sup>1</sup> Peer review in Eurosystem/ESCB.

As well as being classified according to the type of services provided, these institutions are also grouped according to: (i) the Bank's role (namely prudential supervision authority, overseer, or both) and (ii) the international dimension of the system or institution (the Bank as the sole authority, international cooperation agreement with the Bank as the main player, or other role for the Bank).

## 2. Priorities for oversight and supervision

A number of subjects such as IT risks and cyber risks and the impact of FinTech and Brexit are examined on a transversal basis in chapter G. During the year under review, the priorities specific to the various institutions were also determined on the basis of

risk analyses. Liquidity risks and operational risks were common themes here. Particular attention was also paid to the new authorisation requirements under the stricter European regulatory standards. Institutions already approved in Belgium had to show that they satisfied these new requirements in order to be able to pursue their activities. The next section gives more details on the applications for authorisation from the Belgian central securities depositories under the CSD Regulation, central counterparties, the supervision of payment institutions – including the grandfathering procedure under the second European Payment Services Directive (PSD2) – and the oversight of payment activities.

### **Central securities depositories**

In the year under review, the Bank, as the competent national authority, concentrated on assessing the central securities depositories' compliance with the CSD Regulation<sup>1</sup>.

Although, from a strictly legal angle, NBB-SSS<sup>2</sup> does not come under the competent authority for CSDs, the Bank decided to implement internally an independent check on compliance by NBB-SSS with the CSD Regulation, just as it has the task of checking compliance with this Regulation by the private CSDs (namely Euroclear Belgium and Euroclear Bank), thus encouraging fair competition conditions.

In September 2017, Euroclear Belgium had applied for authorisation under the CSD Regulation. The Bank had considered this application incomplete in that it needed additional information to assess whether all the CSD Regulation's requirements were met. In September 2018, Euroclear Belgium provided all the additional information requested, whereupon the Bank considered its application to be complete. Following consultation with the "relevant authorities"<sup>3</sup> (during a statutory maximum period of three months after the application was deemed complete), the Bank will decide during 2019 whether Euroclear Belgium fulfils all the conditions for authorisation as a CSD.

Throughout the Euroclear Belgium authorisation process, the Bank maintained close contact with the competent authorities in France and the Netherlands on the grounds that Euroclear Belgium uses the same technical platform (ESES) as Euroclear France and Euroclear Nederland, and their authorisation

applications therefore contain many identical components. Although the assessment process is organised bilaterally by each competent authority with its CSD, the authorities concerned coordinate the process with one another on account of these identical components.

The Bank also resorted to international cooperation for the international central securities depository, Euroclear Bank. The overseers of the central banks issuing the main currencies – with which a multilateral cooperation agreement has been concluded – can exchange their views on the Bank's assessment of the management of Euroclear Bank's credit risk, liquidity risk and operational risk. As in the case of Euroclear Belgium, the application from Euroclear Bank seeking authorisation under the CSD Regulation had similarly been judged incomplete, and during the year under review the Bank paid particular attention to the areas on which additional information had been requested. In preparation for the authorisation of Euroclear Bank as a CSD, close cooperation was also established with the Luxembourg authorities, responsible for the other international securities depository, Clearstream Banking Luxembourg, in order to achieve a harmonised approach.

### **Central counterparties**

Although no central counterparty (CCP) has its registered office in Belgium, the Bank takes part in various colleges supervising CCPs, either because these institutions settle transactions in the books of a Belgian central securities depository or because of the importance of a Belgian financial institution as a participant in a CCP. Since the euro-denominated activities of CCPs currently operating from the United Kingdom may be significant, the impact of Brexit is being closely monitored. Otherwise, the priorities for the supervision of the various CCPs are determined by the competent national authorities, in consultation with the supervisory colleges.

1 Regulation (EU) No. 909/2014 on improving securities settlement in the European Union and on central securities depositories.

2 NBB-SSS is the securities clearing and settlement system managed by the Bank, which is used to issue the bonds of the Belgian government, regional entities and certain private issuers. Belgian equities are issued in Euroclear Belgium.

3 These include ESMA, the Eurosystem as the central bank issuing the euro, and the authorities of the Member States for which the CSD is important.

## Prudential supervision of payments

The Bank bears wide responsibility for payments and – depending on the system or the institution – acts as the overseer or the prudential supervision authority, while – as the prudential supervisory authority – it supervises payment service providers.

At the end of 2018, 19 payment institutions and five electronic money institutions were subject to the Bank's supervision. The Bank also exercised supervision over five institutions with limited status<sup>1</sup> and five branches of foreign institutions. During the year under review, no new authorisation was issued for any Belgian payment institution or electronic money institution. Also, during the year under review, three authorisations were withdrawn, two foreign branches were authorised, and one institution progressed from limited status to full status.

A key element of the authorisations granted by the Bank in connection with Brexit is the effective relocation of payment services and/or electronic money services in a Belgian entity. This means that commercial decisions concerning the Belgian market – and, by extension, the EEA market if the services are provided there on the basis of authorisation in Belgium – must be taken by the Belgian entity, and that real activities must take place in the Belgian entity or be organised

from there. Applicants can use the content of their original foreign application, but it must be adapted from the point of view of the Belgian entity and must take account of specific features of the Belgian legislation applicable, e.g. as regards the regulations on money-laundering.

In 2017, the Bank had already granted authorisation to two Belgian payment institutions established by British payment institutions with a view to continuing to provide their services on the continent after Brexit.

During the second half of the year under review, a number of applications were received from British payment institutions for authorisation of a Belgian payment institution which could operate in parallel with the British one and provide services in the EEA from the Belgian entity.

During the period under review, one of the priorities for the prudential supervision of payment institutions and electronic money institutions was the

<sup>1</sup> Limited status implies that a number of administrative requirements concerning authorisation have not been met (for example, presentation of an *ex-ante* plan for supplying the Bank with statistical data, or a plan for notifying the Bank of major incidents). Conversely, the requirements concerning IT security or combating money laundering are applicable in full to limited status institutions.

Table 26

### Number of payment and electronic money institutions subject to supervision

(end-of-period data)

	2014	2015	2016	2017	2018
<b>Payment institutions</b>	<b>18</b>	<b>20</b>	<b>24</b>	<b>26</b>	<b>25</b>
Under Belgian law	11	12	16	19	19
Limited status institutions <sup>1</sup>	4	5	5	5	3
Foreign branches governed by the law of an EEA member country	3	3	3	2	3
<b>Electronic money institutions</b>	<b>11</b>	<b>11</b>	<b>9</b>	<b>9</b>	<b>9</b>
Under Belgian law	5	5	5	5	5
Limited status institutions <sup>2</sup>	5	5	3	3	2
Foreign branches governed by the law of an EEA member country	1	1	1	1	2

Source: NBB.

<sup>1</sup> Institutions registered as having limited status in accordance with Article 82 of the Law of 11 March 2018 and subject to a limited regime.

<sup>2</sup> Institutions registered as having limited status in accordance with Article 200 of the Law of 11 March 2018 and subject to a limited regime.



implementation of the second European Payment Services Directive (PSD2)<sup>1</sup>, which was transposed into Belgian law by the Law of 11 March 2018<sup>2</sup>. Among other things, that Law requires the Bank to verify, on the basis of a file submitted by the institution, whether the institution satisfies the additional authorisation requirements introduced by the PSD2. The transitional procedure, which took place during the year under review, is also known as “grandfathering”. Institutions which have not submitted a complete file by the stipulated deadline may be obliged by the Bank to cease their payment activities.

The authorisation requirements under the PSD2 which are added to those which applied under the PSD1 concern the following eight topics:

1. protection of sensitive payment data;
2. compliance with the EBA guidelines on strong customer authentication and common and secure open standards of communication<sup>3</sup>;
3. application of an adequate IT security policy;
4. notification of security incidents and operational incidents to the Bank;

5. collection of statistical data on transactions, fraud and performance;
6. establishment of the provisions necessary for business continuity;
7. compliance with the rules on the issuance of card payment instruments; and
8. compliance with the rules on payment account management.

It should be noted that the requirements do not apply to all institutions, some being specific to a particular business model.

1 Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No. 1093/2010, and repealing Directive 2007/64/EC

2 Law of 11 March 2018 on the legal status and supervision of payment institutions and electronic money institutions, access to the activity of payment services provider and the activity of electronic money issuance, and access to payment systems, M.B./B.S. 26 March 2018 (“Law of 11 March 2018”).

3 Commission Delegated Regulation (EU) 2018/389 of 27 November 2017 supplementing Directive (EU) 2015/2366 of the European Parliament and of the Council with regard to regulatory technical standards for strong customer authentication and common and secure open standards of communication.

During the year under review, the Bank also published Circulars and additional information obligations necessary for the sector so that compliance with these new requirements can be monitored continuously. The Bank likewise took the necessary steps to transpose into Belgian law the technical standards and guidelines established by the EBA, and to notify them to the Belgian payments sector.

### ***Oversight of payment activities***

As the overseer, the Bank covers payment systems, payment instrument processors, and card payment schemes. The proper, secure processing of card payments in Belgium is a key objective of the Bank's oversight, in view of their role in the real economy. Although payment processors are not necessarily payment systems, the Belgian economy is heavily dependent on their smooth operation, and hence on the stability and continuity of book-entry payments. The Law of 24 March 2017<sup>1</sup> makes systemically important payment processors subject to the Bank's direct legal supervision and lays down certain conditions on the pursuit of the activity.

In regard to payment systems, in 2018, the ECB published the results of the Eurosystem's assessment exercise covering all payment systems located in the

euro area. For systemically important payment systems (SIPS)<sup>2</sup>, the criteria used for that assessment are set out in the ECB's SIPS Regulation<sup>3</sup>, while for other systems the criteria are included in the *ad-hoc* oversight framework<sup>4</sup> developed by the ECB. In this exercise, the Bank took charge of the assessment of the CEC (Centre for Exchange and Clearing), the Belgian domestic system which handles most of the interbank retail payments in Belgium.

For the CEC, 2018 was dominated by the preparation of the instantaneous payments platform which will enable customers of participating banks to transfer sums of money in just a few seconds to the recipient's account. This platform is scheduled to come into operation early in 2019. In the course of its oversight of the CEC, the Bank monitored this preparatory phase.

1 Law of 24 March 2017 on the supervision of payment transaction processors.

2 The systemically important payment systems (SIPSs) are: TARGET2, EBA Euro 1, EBA/STEP2 and STET (the French retail payments system).

3 Regulation (EU) No. 795/2014 of the European Central Bank of 3 July 2014 on oversight requirements for systemically important payment systems (ECB/2014/28).

4 "Revised oversight framework for retail payment systems", ECB, February 2016.



During the year under review, still within the framework of the Eurosystem, the Bank also took part in the assessment of card payment schemes in regard to the EBA guidelines on the security of internet payments. In this connection, it examined the Bancontact scheme and acted as lead overseer – a coordinating role – of an international group in charge of the assessment of Mastercard Europe. As in the case of the payment systems mentioned above, the ECB published the summary report on the overall level of the sector's conformity with these guidelines.

The Law of 24 March 2017 on the supervision of payment transaction processors imposes obligations on systemically important processors concerning risk management, operational continuity and the notification of incidents. As prescribed by that Law, in November 2018, the Bank adopted a Regulation which specifies the various details of those obligations: that Regulation should be published shortly in the form of a Royal Decree.

<sup>1</sup> Two processors currently hold that status: Worldline and equensWorldline.



## G. Cross-sectoral aspects of prudential regulation and supervision

*As a prudential supervisory authority, the Bank has jurisdiction over a range of spheres which cover multiple sectors and are therefore not discussed in the sections of this Annual Report on banking, insurance and financial market infrastructures.*

*The year 2018 brought notable developments in the European legal framework concerning the prevention of money-laundering and terrorist financing plus, at national level, the entry into force of the new anti-money-laundering Law.*

*The quality assurance unit, which aims to ensure that the Bank's prudential supervision and resolution activities satisfy a number of quality requirements, continued that work.*

*On the subject of FinTech and digitisation, the Bank sent a questionnaire to a representative sample of institutions in the sectors comprising credit institutions, market infrastructures, payment institutions, electronic money institutions and insurance undertakings, in order to obtain a sectoral overview of the key trends and developments. One specific point for attention concerned the transposition of the second European Payment Services Directive (PSD2).*

*In view of the still growing cyber threats, the Bank actively contributed to the further development, at European level, of a regulatory framework for the management of cyber risks and recommendations on the subject. During the year under review, it also carried out several inspection assignments concerning cyber risk and set up a framework for ethical piracy. Finally, in collaboration with Febelfin, the Bank continued its work of mapping e-banking fraud.*

*As regards governance and the collaboration of auditors in prudential supervision, the year under review brought the preparation of a common approach by the Bank and the FSMA concerning the expertise of those responsible for the compliance function, publication of a communication on the renewal of auditors' accreditation, and a new "fit and proper" Circular. The Bank also took part in monitoring the recommendations of the Optima and Panama Papers commissions.*

*Finally, in 2018, the Bank made financial institutions aware of the risks that would result from a "hard Brexit", notably via contracts with British counterparties.*

### **1. Prevention of money-laundering and terrorist financing**

In regard to combating money-laundering and terrorist financing (AML/CFT) at European level, 2018 brought some notable changes in the legal framework and the emergence of new projects resulting from significant incidents which can be deemed to have revealed weaknesses in the existing legal framework or its implementation.

In Belgium, these developments are accompanied by the implications of the entry into force of the new anti-money-laundering Law of 18 September 2017<sup>1</sup>. During the past year, the Bank therefore paid particularly close attention to the effective implementation of that new Law.

<sup>1</sup> Law of 18 September 2017 on the prevention of money-laundering and terrorist financing and limits on the use of cash.

## 1.1 Development and implementation of the European legal framework and new projects for the future

The 5th European Directive on AML/CFT<sup>1</sup> came into force on 9 July 2018. Instituted in response to the 2015 terrorist attacks in Europe, this Directive aims mainly to strengthen the European legal framework and that of the Member States in such matters as the vigilance measures applicable in regard to electronic money or high-risk countries, and the transparency of companies and legal structures, in particular by clarifying the scope of the concept of “actual beneficial owners” of trusts and similar legal arrangements. It introduces an obligation on the Member States to compile a list of prominent public functions, as the people entrusted with those functions become “politically exposed persons” requiring the exercise of greater vigilance<sup>2</sup>. It also requires Member States to make operators in virtual currencies subject to obligations preventing money-laundering and terrorist financing (AML/CFT) and

to supervision on compliance with those obligations. In addition, the new directive aims to improve the functioning of national financial intelligence units and their mutual cooperation, and the functioning and interconnection of national registers of the actual beneficial owners of companies and legal structures. It likewise introduces a new obligation on Member States to set up a central register or mechanism permitting identification of the holders of bank accounts, payment accounts and

1 Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money-laundering or terrorist financing and amending Directives 2009/138/EC and 2013/36/EU (OJEU of 19 June 2018).

2 While some categories of politically exposed persons, such as heads of State, heads of government, ministers and so on are unequivocal, other categories, such as senior officers in the armed forces, members of the administrative, management or supervisory bodies of public enterprises, etc., may give rise to differing interpretations and be clarified by compiling such a list.



safe-deposit boxes. Finally, the 5th directive also includes various provisions to facilitate and intensify cooperation between the competent national supervisory authorities concerning AML/CFT, and with the prudential supervisory authorities, including the ECB acting under the SSM.

As this 5<sup>th</sup> Anti-Money-Laundering Directive has to be transposed into the national laws of the Member States by 10 January 2020, the Bank is taking part in the working group coordinated by FPS Finance – Treasury – which is in charge of drawing up the technical aspects of a preliminary draft transposition Law. The Bank will also put forward, in this connection, legislative provisions which properly clarify and reinforce the cooperation obligations of the national supervisory authorities in regard to AML/CFT, with a view to making that supervision more effective.

In factual terms, there have been a number of incidents in Europe recently which appear to reveal weaknesses in the implementation of the European legal framework on AML/CFT and its supervision in certain EU Member States. In view of these events, the European Commission published a communication<sup>1</sup> on 12 September 2018 listing the legislative and non-legislative measures which it recommends reinforcing in the short term both prudential supervision of banks and their supervision in regard to AML/CFT, as well as its ideas for the longer term.

As a short-term legislative measure, the Commission says that it wishes to remove all the legal obstacles to the exchange of information between prudential supervision authorities and the authorities supervising the AML/CFT of banks by amending the Capital Requirements Directive<sup>2</sup>. It also states that it wishes to supplement the current review of the founding regulations of the three European supervisory authorities<sup>3</sup> with additional amending provisions on their roles in regard to AML/CFT. These additional changes aim primarily to centralise powers relating to AML/CFT in the EBA, including in sectors of activity which come under EIOPA or ESMA. They are then meant to clarify the content of EBA's tasks in this area and strengthen the legal tools provided for that purpose. Among other things, the Commission envisages obliging the EBA to inform the European Parliament, the Council and the Commission of any serious unresolved shortcomings which it identifies, for instance in its peer reviews, and enabling the EBA to issue injunctions to both national supervisory authorities and financial

institutions. Finally, in the short term the Commission wishes to give the EBA a central role in cooperation with the authorities of third countries.

On the subject of short-term non-legislative measures, the Commission encourages the European supervisory authorities, and especially the EBA, to make use of their existing powers. That includes drawing up “common guidelines” and the implementation of peer reviews and procedures for breaches of European law, both in order to ensure that the authorities in charge of the prudential supervision of banks take due account of the AML/CFT risks, even if those authorities do not simultaneously hold specific responsibilities for supervising AML/CFT, and to reinforce the Europe-wide effectiveness and convergence of the AML/CFT supervision exercised by the national authorities. The Commission likewise encourages the ECB to meet the deadline for concluding the agreement with the AML/CFT supervisory authorities required by the 5<sup>th</sup> Directive for organising their cooperation, and to clarify the arrangements for taking account of AML/CFT risks in the exercise of its supervisory powers.

*Following a number of recent incidents in Europe, the European Commission published a series of measures aimed at strengthening supervision in order to combat money-laundering and terrorist financing*

1 Communication from the Commission to the European Parliament, the European Council, the European Central Bank, the Economic and Social Committee and the Committee of the Regions strengthening the Union framework for prudential and anti-money-laundering supervision for financial institutions, 12 September 2018, COM (2018) 645 final.

2 Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

3 Regulation (EU) No. 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), amending Decision No. 716/2009/EC and repealing Commission Decision 2009/78/EC; Regulation (EU) No. 1094/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Insurance and Occupational Pensions Authority), amending Decision No. 716/2009/EC and repealing Commission Decision 2009/79/EC; and Regulation (EU) No. 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No. 716/2009/EC and repealing Commission Decision 2009/77/EC.

In the longer term, the Commission announces that it will explore the potential for further reforms which could include replacement of the current Directive specifying the minimum degree of harmonisation in regard to AML/CFT with an EU Regulation directly applicable in the legal systems of the Member States, which would achieve full harmonisation of the national laws on the subject, and the creation or designation of a European authority centralising the responsibility for exercising supervision over AML/CFT.

Since the publication of this particularly important Communication by the European Commission, the Bank has played an active and constructive part in the technical discussions on the short-term legislative measures referred to above. Convinced of the need to produce a strong and effective European response to the recent incidents, the Bank is particularly careful in this context to ensure the high technical quality of the intended amendments to European legislation, and to maintain a proper balance between provisions specifically relating to AML/CFT supervision and those relating to prudential supervision.

It should be noted that, once these new provisions have been adopted and are in force, they could have a significant direct impact on the responsibilities of the Bank as both a national supervisory authority for AML/CFT and a prudential supervisory authority.

On 4 December 2018, responding to the same events as the European Commission, the European Council also published its Conclusions<sup>1</sup> on an Anti-Money-Laundering Action Plan, which sets out the measures which it intends to see implemented without delay both by the European Commission and the European authorities, and by the Member States and their competent national authorities, in order to rectify the shortcomings found.

## **1.2 Implementation of the Law on the prevention of money-laundering of 18 September 2017**

### ***Communication to financial institutions of their AML/CFT obligations***

Following entry into force of the Anti-Money-Laundering Law of 18 September 2017, the Bank

considered that, in order to ensure effective application of the Law, it needed an efficient communication instrument enabling it to provide financial institutions with complete, easy and regularly updated information, so that they would know and understand in detail all the legal and regulatory obligations to which they are subject in that respect. For that purpose, the Bank created a new section on its website, gathering together all the relevant texts on AML/CFT (Law, Regulations, preparatory work, European and international guidelines, etc.), and arranging them by subject in order to facilitate searches. This section can also be used to address to the financial institutions the recommendations and comments that the Bank deems necessary for the correct and effective application of the provisions of the law and regulation on the prevention of money-laundering.

After having placed the structure of the new website section and all the reference documents on line at the beginning of 2018, the Bank steadily enhanced it by adding its comments and recommendations in stages, subject by subject, after having first submitted its plans to the financial sector's professional associations for consultation. At the end of 2018, this website section thus contained all the recommendations which the Bank considered useful for all relevant aspects of the subject. There are alert mechanisms for informing financial institutions whenever significant changes are made to the website. It is also possible to consult earlier versions of the website. At a future stage, the Bank will also publish this website section in English.

In the future, the Bank will update this website regularly whenever it considers that necessary, notably to take account of changes in the standards and recommendations of the competent international bodies concerning AML/CFT, the European and national legal and regulatory framework and the interpretation of the applicable rules, etc.

### ***Risk-based supervision methodology***

Since the Bank is legally required to apply a risk-based approach in exercising its supervisory powers, it has to implement a supervision methodology in accordance with the common guidelines on

<sup>1</sup> Anti-Money-Laundering Action Plan – Council Conclusions, 4 December 2018.

risk-based supervision, adopted on 7 April 2017 by the European supervisory authorities<sup>1</sup> and which the Bank stated that it would respect.

For that purpose, and on the basis of the experience gained in previous years, the Bank collects the summarised initial data that it needs concerning the inherent AML/CFT risks confronting each financial institution, the apparent degree to which its AML/CFT mechanisms conform to the legal and regulatory obligations, and the apparent effectiveness of those mechanisms by means of the periodic questionnaire, the 2018 version of which was produced on a sectoral basis<sup>2</sup>. In addition, in 2018, the Bank acquired supplementary IT tools giving it the benefit of an automated preliminary analysis of the responses to the periodic questionnaire submitted online by each financial institution, and also enabling it to take account of all the available information, including the result of the earlier off-site supervision and on-site inspections, the prudential information and the information obtained from accredited auditors or reliable external sources, in order to allocate an appropriate risk profile to each financial institution.

That risk profile determines the level of priority, frequency and intensity of the off-site supervision. Depending on the case, the checks may include detailed examination of the organisation charts, policies and internal procedures of the financial institution concerned, the collection and analysis of more detailed information from the institution, examination of internal audit reports and the way that they have been followed up, meetings with the AML/CFT officer and the senior director responsible, etc. Where appropriate, visits to the premises may be arranged in order to enable the supervision team to examine the situation in more detail, though these on-site visits do not follow the audit methodology applied to on-site inspections. Off-site supervision also includes monitoring the action plans produced by financial institutions following previous on-site inspections. These off-site supervisory actions are intended to determine the measures that the financial institution concerned must adopt and implement within a reasonable period in order to rectify the weaknesses identified. It may, if necessary, result in recourse to the constraint powers granted to the Bank by the Anti-Money-Laundering Law of 18 September 2017, such as setting deadlines for rectification, the imposition of penalties,

ordering the replacement of directors, suspension of activities, etc.

The risk profile assigned to financial institutions taking account of the results of previous checks also serves as a basis for determining the priorities for on-site inspections concerning AML/CFT, and the subjects which those inspections will cover.

*The Bank is continuing to strengthen its risk-based supervision tools*

#### **Checks on the effective implementation of the new legal and regulatory provisions**

Since the entry into force of the Anti-Money-Laundering Law of 18 September 2017, the Bank has had to ensure that financial institutions subject to its statutory supervisory powers take the necessary action, within a reasonable time, to comply fully and effectively with their new legal and regulatory obligations. The most crucial of those is the obligation to conduct an overall assessment of the AML/CFT risks as the basis for their internal AML/CFT procedures and policies. The Bank therefore instituted checks whereby it requested all financial institutions under its jurisdiction to conduct such an overall risk assessment without delay, together with a systematic analysis of the weaknesses of their internal AML/CFT mechanisms in regard to both their new legal and regulatory obligations and the risks which they identified, and to produce an action plan for remedying those weaknesses within a reasonable period of time<sup>3</sup>.

The Bank asked them to submit an interim report on this work by the end of March 2018, in order to ensure that the work had actually been started, followed in mid-July 2018 by a final report summarising the conclusions of their risk analysis, their analysis of the weaknesses, and their action plan for remedying them.

1 "Joint Guidelines on the characteristics of a risk-based approach to anti-money-laundering and terrorist financing supervision, and the steps to be taken when conducting supervision on a risk-sensitive basis – The Risk-Based Supervision Guidelines", ESAs 2016 72, 7 April 2017.

2 Circular NBB\_2018\_01 of 15 January 2018 / Periodic questionnaire on the prevention of money laundering and terrorist financing.

3 Circular NBB\_2018\_02 of 24 January 2018 / Global risk assessment concerning anti-money-laundering and terrorist financing.

The Bank incorporates this information in its risk-based supervision process as described above, giving priority to the examination of information supplied by financial institutions to which it has assigned a high risk profile. As well as continuing these checks in 2019, the Bank drew the financial institutions' attention to the fact that this work must be repeated when necessary to adjust their internal AML/CFT mechanisms in line with changes in the risks to which they are exposed.

### **Specific checks on funds transmission**

In 2018, in view of the high risks specifically linked to the transmission of funds involving the substantial use of cash, the Bank completed the horizontal checks launched in 2017 and comprising the examination of a sample of transactions effected by agents of the main Belgian or foreign payment institutions (money remitters) operating in Belgian territory. For the purpose of these checks, the Bank first sent each of the payment institutions concerned individual recommendations on rectifying the weaknesses identified.

However, on the basis of all the analyses conducted and the additional information received, the Bank also found that certain shortcomings are common in these institutions' control procedures and systems. The points for attention identified essentially concern the supervision of agents, coding errors, vigilance over transactions between Belgian counterparties, situations which may reveal fragmentation of transactions, and finally, the need for exclusive management by the compliance function of requests for information and alerts.

The Bank therefore considered it necessary to publish a Communication<sup>1</sup> notifying the entire sector of the general lessons derived from these horizontal checks, while explicitly stressing the importance of rigorous compliance with the obligations under the legal and regulatory AML/CFT framework, and adherence to the internal policies and procedures established within payment institutions.

<sup>1</sup> Communication NBB\_2018\_21 of 20 June 2018 / Horizontal supervisory analysis comprising examination of a sample of transactions concluded by agents linked to various payment institutions.

### **AML/CFT checks on the occasion of new applications for authorisation or registration of entities subject to the Anti-Money-Laundering Law of 18 September 2017**

In processing applications for the authorisation of new financial institutions and the registration of new branches or other forms of establishment on Belgian territory which are subject to the Anti-Money-Laundering Law of 18 September 2017 and the Bank's supervisory jurisdiction, the Bank ensures that these entities will comply fully with their obligations on this matter, notably as regards their governance and organisational arrangements, and their policies, procedures and internal controls, on the basis of an appropriate overall risk analysis.

A particularly large number of applications of this type were submitted in 2018, notably in view of the United Kingdom's imminent departure from the European Union and the decision of many financial institutions based there to relocate to EU territory. This particularly concerns the electronic money and payment institutions sector, but also the credit institutions sector. In regard to these applications, the Bank pays special attention to obtaining the assurance that the decision-making centre for performance of the AML/CFT function is actually located in the Belgian entity and that the organisational measures implemented permit effective performance of that function.

The processing of these applications had a very significant impact on the allocation of the human resources which the Bank assigns to the performance of its supervisory powers relating to AML/CFT.

## **2. Quality assurance**

The quality assurance unit continued the work initiated in 2016, which aims to ensure that the Bank's prudential supervision and resolution activities (in both the national and the international context) meet the specified quality requirements.

More than half of the work done concerned banking supervision, and was centred on three main aspects: finalisation of a quality assurance mission which aimed to assess whether the governance, organisation and functioning set up by the Bank in the context of the SSM enable it to perform

adequately its role as a national competent authority in relation to the ECB; the Bank's role as the NBB single point of contact for ECB in terms of quality and as contributor to its quality assurance work under the SSM; and continuation of the work on improving the quality of the processes, procedures and checks applied within the operational services responsible for the supervision of less significant institutions (LSIs).

The quality assurance unit also had to intervene occasionally, as a facilitator, coordinator or adviser, in a whole range of cross-sectoral issues, i.e. dealing with subjects which concern more than one prudential supervision service at a time. These actions were initiated by the quality assurance unit or in response to a request from the Bank's management. For example, the quality assurance unit played a key role in 2018 in ensuring that the cross-sectoral recommendations of the Internal Audit addressed to the prudential supervision services are properly implemented.

The network of quality assurance correspondents from the Bank's operational supervision and resolution services continued its work. That relates both to the regular, structured exchange of information on quality, and to consultation on the definition of initiatives to improve the quality of their activities. This led to the continuing implementation within those services of the quality targets defined to ensure that supervision would be effective, efficient and rigorous.

### 3. FinTech

In recent years, driven by technological innovations and changing consumer preferences, the financial sector has become increasingly digitalised, with the introduction of numerous new applications, processes and products. Digital transformation and FinTech<sup>1</sup> are closely linked concepts and are characterised by both the arrival on the market of new, innovative service providers and initiatives of existing institutions aiming to improve their organisation, their provision of services and their product range with the support of technological innovations.

The Bank recognises the importance of these developments and has therefore taken various measures to establish a dialogue on these issues with

both new and established market players. In that context, the Bank set up a central contact point (FinTech single point of contact), in close coordination with the FSMA, to address FinTech-related questions<sup>2</sup>.

In view of the potential influence of new technologies on the financial market, the Bank also aimed to develop a sectoral overview of significant trends and developments concerning Fintech and digitisation in the Belgian financial landscape. Therefore the Bank sent a structured survey in the second half of 2017 to a representative selection of institutions in the sector comprising credit institutions, market infrastructures, payment institutions, electronic money institutions and insurance undertakings.

The survey aimed to assess the outlook and general observations of the industry on FinTech, the prospects for certain business models and specific technologies, the practical strategy pursued by institutions with regard to Fintech, and observations or comments related to regulation and supervisory practices. The horizontal survey also aimed to obtain an idea of the stance of the various players with regard to FinTech, the potential impact of these developments on their current business model, and the measures they expect to take to deal with this trend.

#### 3.1 Survey for credit institutions

The responses by credit institutions showed, *inter alia*, that they first of all intend to modernise in order to remain relevant in the future. Banks also consider it relatively plausible that financial services will become increasingly modular and that banks can retain sufficient business, while a large number of new, specialist companies take over certain specific activities, notably

*The Bank made the financial sector aware of the challenges concerning FinTech and digitisation*

1 The Financial Stability Board (FSB) defines the FinTech concept as technology-enabled innovation in financial services that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provision of financial services. Circular NBB\_2018\_02 of 24 January 2018 /Global risk assessment concerning anti-money-laundering and terrorist financing.

2 The central FinTech contact point may be found at <https://www.nbb.be/fr/supervision-financiere/generalites/point-de-contact-fintech>.



by offering them directly on the platforms of banks and technology companies.

The banks are of the opinion that their main strength lies in their established client portfolio, their customer knowledge, and the confidence that the customers have in them. Furthermore, they believe they also have an advantage over the new financial institutions in terms of knowledge and experience, both on the level of the often complex regulations and on the level of risk management.

On the other hand, the Belgian banking sector expressed its concerns about its often aged IT infrastructure, which may lead to higher operating costs, inefficient processes, or an increase in the associated risks, and problems in implementing innovative business models. In addition, the survey responses highlighted that a number of banks have no clear strategy on FinTech and digitisation, which means that they have no clear view on the situation and often demonstrate reticent behaviour. In each market segment there were clear examples of these banks with no innovation-strategy, while some of their direct competitors were clearly gaining a competitive advantage through their continued efforts in this matter. The survey also demonstrated that banks of a more modest size rather position themselves as “follower”, and

refer to the fact that, in terms of operational and financial capacity, they are less able to experiment, and that big banks are more attractive to FinTech entities for developing partnerships.

With regard to the impact of FinTech, the banks highlighted cyber risks in particular, alongside the risks related to their profitability and strategy, and the risk that their role will may decline if customers conclude transactions directly with investors, thereby by-passing their function as intermediary.

At the end of 2018, the Bank published the results of this analysis on its website<sup>1</sup> and drawing attention to a number of good practices in this context. An essential part of these recommendations refers to the necessity for designing, implementing and managing a clear strategy, in which the role and participation of the board of directors proves to be a key success factor. The banks must also be sufficiently aware that, in certain cases, FinTech and digitisation projects are necessary to maintain their current market position and business model, and to continue to meet the customers’ changing needs.

<sup>1</sup> Analysis of the impact of fintech and digitalisation on the Belgian banking sector and supervision, NBB, 22 November 2018 (<https://www.nbb.be/fr/articles/analyse-de-limpact-de-fintech-et-de-la-numerisation-sur-le-secteur-et-le-controle-bancaires>)

### 3.2 Survey for payment institutions, electronic money institutions and financial market infrastructures

The survey responses from payment institutions, electronic money institutions and financial market infrastructures highlighted that, despite the introduction of new technologies and innovation in the sector, most of the clearing and settlement activities still take place on the existing payments and market infrastructures. The market infrastructures and payment institutions that took part in the survey noted that new developments in the field are aimed mainly at optimising customer relationships (front-end). Furthermore, the survey showed that the respondents observe a higher level of competition in the payments market, that puts more pressure on the margins of existing players. The sector is of the opinion that this trend is driven on the one hand by the need to improve the customer experience, and on the other hand by the arrival of the “Open Banking” concept (see section G. 4) in the market, which enables new third parties to enter the market. Finally, most of the respondents also indicated that they were closely monitoring the developments with regards to the digitisation of the financial sector.

### 3.3 Survey for insurance undertakings

The questionnaire the Bank sent out to insurance undertakings aimed to provide some idea of what the various existing players are thinking and to ascertain their views on the impact of InsurTech on the European and Belgian insurance markets and the main legal obstacles that could prevent Belgian insurers from implementing their strategy in that regard.

The responses that, in the short term, InsurTech<sup>1</sup> is seen more as an opportunity for improving the services of insurers than as an immediate threat. Insurers are preparing for the arrival of these new technologies, and the potential impact on their business model or internal organisation is generally being discussed at the level of the board of directors or the executive board. The independent audit functions are also consulted during the decision-making process, and special internal groups are being set up. The sector’s primary concerns relate more to the changes needed for their business model than to the entry in the market of new

market players. Insurers are also of the opinion that, in some cases, the current legislation limits the application of new technologies on consumer protection grounds.

In the medium term, the internal processes of insurers can be improved, for instance by enhancing their IT organisation, by creating new departments (e.g. data management), or by stepping up the use of robots for recurrent tasks. The claims assessment process and fraud prevention will also be improved, which in turn will have an impact on the contract premiums. Insurers expect more personalised risk coverage and hence a decline in risk mutualisation.

In the longer term, insurers generally consider that, over the next ten years, digitisation and InsurTech will play a vital role on the market in terms of product distribution, customer service, and even product design, and in risk assessment and pricing. In some cases, the changes to the way in which products are developed, priced or marketed will limit the insurers’ role to that of a “risk bearer”.

## 4. Open Banking

The strong development of the digitisation in the financial sector is driven in part by the transposition of the second European Payment Services Directive (PSD2)<sup>2</sup>. This Directive, which was transposed into Belgian law by the Law of 11 March 2018, is related to recent innovations in the payments sector and requires payment service providers to open up their payment account infrastructure (Open Banking). This should enable new players to enter the payment services market and offer payment initiation and account information services. The opening up of the payment accounts infrastructure is accompanied by strong security requirements with which payment service providers (banks, payment institutions and electronic money institutions) must comply.

1 InsurTech refers to the use of technological innovations to achieve savings and increase the efficiency of the current insurance sector model. InsurTech explores the opportunities, such as the supply of ultra-personalised policies and the use of new data flows from internet devices, for dynamic assessment of premiums according to observed behaviour.

2 Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015. on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No. 1093/2010, and repealing Directive 2007/64/EC.

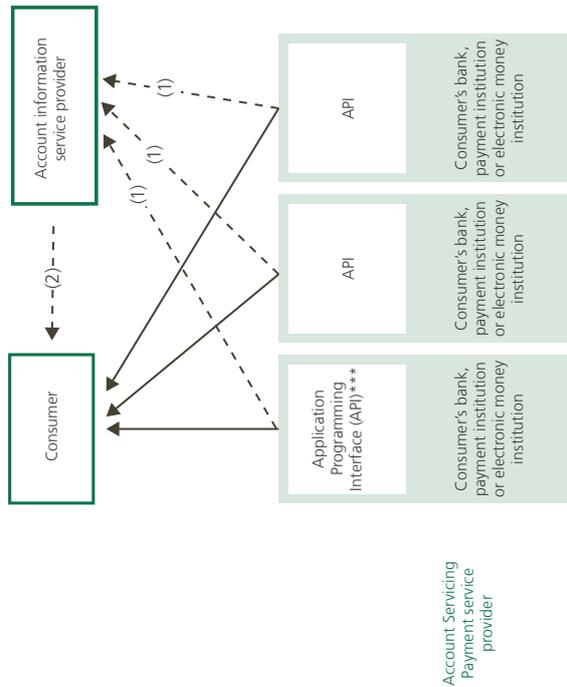
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Chart 104

Diagram of the operational processes relating to the new payment services

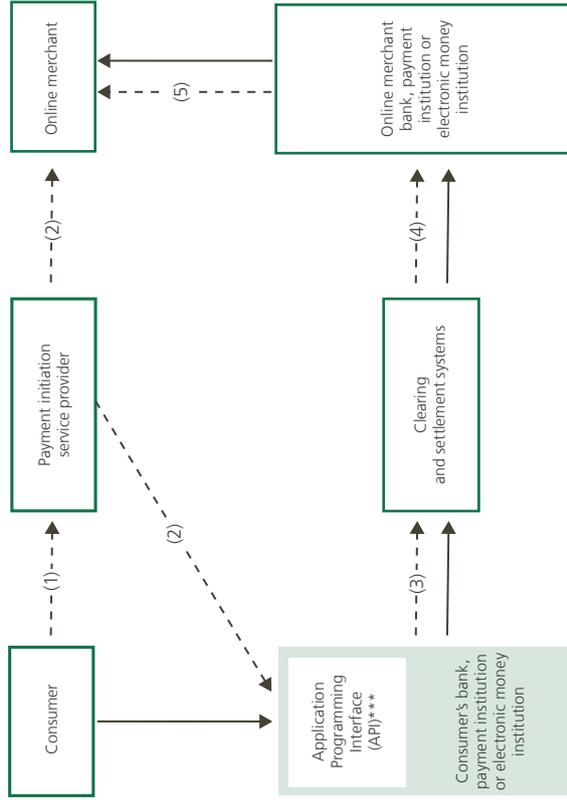
Account information service provider

Entry into force of the PSD2 enables consumers to aggregate the information from their various payment accounts (1) via a single account information service provider (2)



Payment initiation service provider

Entry into force of the PSD2 enables consumers to make payments to online merchants (2) via a payment initiation service provider (1). The account servicing payment service provider sends the instruction to the clearing and settlement systems (3). The other steps (4 & 5) remain unaltered.



Source: NBB.

(\*) Third party provider: a third party may be (1) a payment initiation service provider, authorized by the Bank and subject to more limited regulatory requirements (given they do not come into possession of customers' funds), or an account information service provider, registered by the Bank (which also does not come into possession of customers' funds). Third party providers may also be banks, payment institutions or electronic money institutions.

(\*\*) Account Servicing Payment service providers: banks, payment institutions or electronic money institutions authorised by the Bank and subject to its prudential supervision.

(\*\*\*): API: Application Programming Interface.

To that end, the PSD2 introduces two new categories of payment service providers in the regulatory framework, payment initiation service providers and account information service providers. Like other institutions approved for that purpose, these two types of service provider will be able to access the payment accounts of a payment service user subject to the user's explicit consent. One of the possible applications of this change in the legal framework is the opportunity for an account information service provider to consolidate the account balance of multiple payment accounts held by an individual with multiple financial institutions, in one single application. For payment initiation service providers, the new regulatory framework enables them to initiate payments directly from the payment account of a user to the beneficiary. The diagram below illustrates the new business models that are made possible on the basis of the new legislative framework.

Existing credit institutions, payment institutions and electronic money institutions will also be able to offer these new services. Thanks to this new legislative framework, all these players will be able, at the request of their customers, to consult their payment accounts or initiate payments from accounts held by that customer with another financial institution. For payment service users, be they individuals or legal entities, it will thus become possible to manage all their payment accounts via a single application of just one service provider. This development should further intensify competition between financial service providers to retain their customers and acquire new ones.

Given that new types actors can obtain access to payment accounts, an important pillar of this new Open Banking landscape consists of additional IT and security provisions that need be respected by the industry. More specifically, this concerns the application of strong customer authentication for the secure initiation and execution of payments, and the implementation of common, secure and open communication standards for the interaction between account servicing payment service providers (i.e. banks, payment institutions and electronic money institutions), account information service providers and payment initiation service providers. In order to ensure uniform application of these new regulations across the EEA, the EBA is in charge of developing the technical standards on the subject.

Strong customer authentication requires the use of at least the following three elements which must be

independent and confidential: an element that only the user knows (e.g. a PIN code), an element that only the user possesses (e.g. a payment card), and an element inherent to the user (e.g. biometric data such as a fingerprint). Given that the regulatory technical standards are both technology and business-model neutral, market players are able to develop new products that take into account these requirements. For instance, there are already payment cards that use a fingerprint instead of a PIN code for the purpose of applying strong customer authentication.

In regard to communication requirements, the PSD2 introduces the obligation for account servicing payment service providers to offer at least one interface to account information service providers and payment initiation service providers for accessing information on the payment accounts that they manage. The existing practice of third-party access without identification, referred

to in market jargon as 'screen scraping' or, mistakenly, as 'direct access', will no longer be allowed once

the regulatory technical standards apply, as of 14 September 2019. It is important to note that these technical standards only apply to payment accounts, in accordance with the scope of the PSD2. The standards therefore do not apply to access to accounts which are not to be qualified as payment accounts.

The development within the payments market and the Open Banking landscape will demonstrate whether the various objectives of the PSD2, such as the promotion of competition and innovation, fostering the integration of payments within the EU, and enhancing customer convenience, will be achieved.

*Entry into force of the PSD2 Directive gives new actors access to the payment services market*

## 5. Cyber risks and IT risks

### 5.1 Continuing rise in cyber threats and IT-related threats

The digitisation of the operational processes of the financial sector, which is already highly computerised, progressed further during the year under review. The degree of interconnectivity between

the operational processes of the various financial players also remained very high. Moreover, financial institutions are increasingly opting for business models in which IT services are outsourced according to operational or functional specialisation. The increased and more diversified digitisation of access channels for customers of financial institutions and FMIs is another factor adding to the complexity of the financial landscape and the rise in operational risk.

Throughout the world, cyber attacks are becoming ever more sophisticated and powerful, and the financial sector is one of the potential targets (see box 17). The number of targeted, long-term cyber attacks is likely to grow further in the future. Cyber attacks may come from inside or outside the institution, and the attackers may have various motives, ranging from financial theft to geostrategic espionage and sabotage, and including terrorism and activism. Cyber criminals' ability to conceal the attack in certain cases permits misappropriation over long periods, intentional disclosure, and the modification or destruction of sensitive or critical financial data.

In these circumstances, it is hard for financial institutions and FMIs to provide adequate protection against the various attacks for their IT systems and

services and their electronic data. As cyber threats are evolving very rapidly, it is more important than ever to ensure that the defence capabilities of institutions and FMIs enable them to respond flexibly to the changing attack

methods. In this context, solutions for gathering information on the potential threats, attackers and types of attack are vital. In addition, it is useful for financial institutions to know the customer's and/or counterparty's risk profile in order to determine the risk of fraud associated with certain transactions. In retail banking, for example, that is achieved by means of security mechanisms integrated in the internet or mobile banking application. In the case of correspondent banking

activities, one example is the Customer Security Programme (CSP), set up by SWIFT to facilitate assessment of the counterparty risk.

Apart from cyber risk, the financial sector's heavy dependence on IT solutions also presents other challenges. Under pressure from innovative players, new technologies, customer expectations or growing security risks, traditional institutions are encouraged to renew their sometimes very obsolescent IT architecture, but the complexity of their IT environment makes it very hard to achieve that aim quickly and responsibly, i.e. without taking disproportionate risks. There is likewise a high risk of growing dependence on third parties for IT services and standardised IT system components. In particular, cloud solutions are increasingly being used, and for ever more important processes. The need for sufficiently representative testing of recovery solutions – which must guarantee continuity following incidents – remains another key point for attention.

It is therefore essential for the management bodies of the financial players to have the necessary expertise and information to enable them to keep a proper watch on the risks and contain them within acceptable limits. In addition, all the staff of these businesses must be aware of cyber risks and IT risks in order to understand how those risks may arise and how they are expected to respond to them.

Assessing cyber risks and IT risks and promoting their control are similarly absolute priorities for the prudential supervision and oversight of financial institutions and FMIs, with European and international cooperation becoming ever more important. Individual institutions are strongly recommended to continue stepping up their protective measures and efforts against IT risks and cybernetic risks. Due attention is also being paid to the intersectoral control strategies being devised in Belgium and abroad. These two aspects are discussed in more detail in the sections below.

*It is more important than ever to ensure that the defence capabilities of institutions and financial market infrastructures enable them to respond flexibly to the changing cyber threats*

## Some examples of cyber security incidents and threats in 2018

**Meltdown/Spectre:** In January, vulnerabilities specific to the speculative execution technique were exposed, this technique consisting in processor optimisation which is invariably applied in (all) modern processors. Although chip manufacturers have meanwhile updated the microcode as far as possible, in order to limit the scope for exploiting these vulnerabilities, it is likely that ultimately only an adjustment to the hardware of the future processors will provide full protection. For now, the financial sector has not experienced any specific incident based on exploitation of these vulnerabilities.

**Coincheck Inc:** In January, it was reported that fraudsters had stolen over 500 million in XEM cryptocurrency, the currency specific to the NEM (New Economy Movement) blockchain platform. At the time of the incident, the stolen XEM cryptocurrencies represented around \$ 400 million. A trading platform for these cryptocurrencies, Coincheck, was hacked.

**Mexico:** In May, it transpired that a number of Mexican banks had fallen victim to a cyber attack. The fraudsters had credited false accounts and then withdrawn large sums in cash. Customers' accounts were unaffected by the attack. According to the reports, the fraudsters succeeded in abusing software modules developed by the banks or third parties enabling transactions via a local Mexican interbank payment system. The local interbank payment system itself was not compromised; it was only the access points to this network in individual institutions that were affected.

**Supermicro:** In October, there were widespread media reports of the potential manipulation of Supermicro motherboards during the production process, which would make these hardware components vulnerable to espionage. Since these motherboards are used throughout the world in server infrastructures, the potential impact was massive. But, following an investigation, Supermicro stated that no evidence had been found to support the allegations previously publicised by the media. Nonetheless, these disclosures drew attention to the danger of cyber attacks via the suppliers of hardware, software and IT services. Earlier in 2018, the American and British authorities had explicitly warned against the danger of this type of attack.

### 5.2 Guidelines on cyber risk resilience

In recent years, the Bank has made a substantial contribution to the preparation of a regulatory framework aimed at improving the control of cyber risks and IT risks. On 1 January 2016, the prudential Circular<sup>1</sup> on the Bank's expectations concerning the operational continuity and security of systemically important institutions came into force. The Bank also made an active contribution to establishing a European regulatory framework for

the management of IT risks and cyber risks under the aegis of the EBA. That work culminated in the publication by the EBA of guidance for supervisory authorities on the assessment of the ICT risk in the SREP (Supervisory Review and Evaluation Process) of credit institutions and investment firms<sup>2</sup>, which

<sup>1</sup> Circular NBB\_2015\_32 of 18 December 2015 on additional prudential expectations concerning the operational continuity and security of systemic financial institutions.

<sup>2</sup> EBA Guidelines on ICT Risk Assessment under the Supervisory Review and Evaluation Process (SREP), May 2017.

came into force on 1 January 2018. It also led to EBA recommendations on outsourcing by financial institutions to cloud service providers. In addition, the EBA published various technical recommendations, guidelines and standards in connection with the second European Payment Services Directive (PSD2), covering cyber and IT aspects. Furthermore, the EBA is preparing guidelines on outsourcing in general and on management of ICT-related risks and security risks.

Various initiatives were also taken for FMIs in this respect. In June 2016, the Committee on Payments and Market Infrastructures (CPMI) and the International Organisation of Securities Commissions (IOSCO) published guidelines on cyber resilience<sup>2</sup>,

which are applicable immediately to FMIs. During the year under review, on the basis of these guidelines, the Eurosystem drew up the Cyber Resilience Oversight Expectations (CROE), which were finalised in December 2018 after a public consultation cycle. In May 2018, the CPMI published a strategy<sup>3</sup> for reducing the risk of wholesale payments fraud. This strategy proposes measures for preventing,

1 EBA recommendations on outsourcing to cloud service providers, December 2017.

2 CPMI-IOSCO, Guidance on cyber resilience for financial market infrastructures, June 2016.

3 Reducing the risk of wholesale payments fraud related to endpoint security (<https://www.bis.org/cpmi/publ/d178.htm>).



detecting and remedying fraud, and highlights the need for proper communication on the subject by all the public and private sector players concerned. As co-chair of the CPMI working group, the Bank made a significant contribution to that strategy. Like the other member central banks, the Bank is also working on the implementation of this strategy.

### 5.3 Operational activities

Cyber and IT risks are a major point of attention for the Bank in the course of its prudential supervision and oversight. In that sphere, it focuses attention on the security of individual financial institutions and FMIs and the confidence that they inspire, as well as on the sector as a whole. The approach concerning individual institutions is two-pronged. On the one hand, institutions are required to hold capital to cover their operational risks, including cyber risks and IT risks. Also, the operational security and robustness of the critical processes of financial institutions and FMIs are subject to close monitoring. The availability, integrity and confidentiality of the IT systems and data play a central role here. In 2018, the Bank conducted a number of inspections (for banks under the SSM) to check on compliance with the regulatory framework and the proper management of IT systems in relation to cyber risks and IT risks. In addition, the Bank monitors these risks in financial institutions and FMIs in the course of its ongoing and recurrent supervisory activities.

The Bank also devotes increasing attention to sector-wide initiatives. For instance, the SSM regularly conducts cross-sectoral analyses on subjects relating to IT and cybernetic aspects. In 2018, for example, it asked all the significant banks and the largest less significant banks to answer a questionnaire which should supply important information on IT aspects for the annual SREP, and will also permit cross-sectoral analyses.

In its role as the sectoral authority for application of the law on the security and protection of critical infrastructures (principally banks and FMIs), the Bank also assesses the effectiveness of the control systems of these infrastructures, organises sectoral exercises and coordinates operational incidents of a systemic nature for the Belgian financial sector.

In order to implement the recommendation of the High Level Expert Group (HLEG) on the future of

the Belgian financial sector, namely to pay sufficient attention to cyber security, the Financial Sector Cyber Advisory Council (FSCC) was set up under the chairmanship of the Bank. It comprises representatives of the Centre for Cyber Security Belgium, Febelfin, Assuralia and the financial sector. The FSCC endeavours to boost the cyber resilience of the Belgian financial sector via a range of initiatives.

One practical achievement here is the establishment of an ethical hacking framework by the Bank, namely TIBER-BE (Threat Intelligence-Based Ethical Red Teaming Belgium). This programme forms the Belgian part of a methodology devised by the Eurosystem and aiming to increase the cyber resilience of individual financial institutions and FMIs by means of sophisticated tests, and to supply important observations on the cyber security of the Belgian financial sector as a whole. The Bank encourages these exercises in its capacity as the guardian of financial stability, and these tests are therefore conducted independently of its prudential supervision and oversight responsibilities.

*The Bank has set up an ethical hacking framework which aims to increase the cyber resilience of financial institutions and financial market infrastructures*

### 5.4 Internet banking fraud

The close cooperation with Febelfin and other parties continued in 2018 for the purpose of mapping e-banking fraud and raising consumers' awareness. The clear upward trend in the number of e-banking fraud cases apparent in 2017, and the associated financial losses, was confirmed in the first half of 2018.

As in previous years, reported cases of e-banking fraud among consumers in 2018 were due almost exclusively to fraud techniques whereby cyber criminals deceive users of e-banking into disclosing their personal security codes (usually after a telephone call or via a rogue website). The rise in fraud cases in 2017 and 2018 is therefore attributable to an increase in the number of attacks rather than the use of innovative fraud techniques.

## Chart 105

### E-banking fraud



Source: Febelfin.

Here, too, the Bank keeps a very close watch on the changing risks associated with the entry into force of the PSD2.

## 6. Developments in governance, reporting and auditors' cooperation in prudential supervision

### Expertise of compliance officers

The 2016 report of the High Level Expert Group (HLEG) on the future of the Belgian financial sector contained a series of recommendations on strengthening governance in financial institutions. In 2017, it had already led to changes to the various sectoral laws, notably to enable the Bank to impose the same expertise requirements on compliance officers as those already applied by the FSMA. Consequently, in 2018, the Bank and the FSMA developed a common approach in order to harmonise more closely the requirements of the two supervisory authorities in regard to assessment of the expertise of compliance officers. These requirements were laid down in a Bank Regulation<sup>1</sup>.

The main new point concerns candidate compliance officers having to pass an examination at a training centre accredited by the Bank and the FSMA. On 18 May 2018, the two authorities published a joint Communication<sup>2</sup> on this subject, setting out

the procedure which institutions wishing to hold examinations must follow in submitting their application for accreditation to the two supervisory authorities. The application for accreditation must include the information permitting verification that the tests meet all the accreditation conditions (content of the questions, composition and working method of the board of examiners, practical organisation, etc.).

From now on, compliance officers and other persons responsible for the compliance function must also take part in an ongoing training programme in a training institution recognised by the FSMA on the Bank's recommendation. In that connection, on 8 May 2018 the FSMA published a Communication<sup>3</sup> specifying the scope of that ongoing training obligation, notably as regards the course frequency and content.

### Renewal of auditors' accreditation

In view of the societal importance of financial institutions and insurance companies, auditing duties can

<sup>1</sup> Bank Regulation of 6 February 2018 on the expertise of persons responsible for the compliance function, approved by Royal Decree of 15 April 2018 and entered into force on 1 June 2018.

<sup>2</sup> Communication NBB\_2018\_19 of 18 May 2018 on applications for accreditation of examinations with a view to performance of the compliance function.

<sup>3</sup> FSMA\_2018\_05 Communication of 8 May 2018 on ongoing training for officers.



only be entrusted to auditors approved for that purpose by the Bank. The Bank grants auditors accreditation for a six-year period on the basis of the Bank's accreditation Regulation of 21 December 2012<sup>1</sup>. No earlier than six months and no later than three months before that accreditation expires, the accredited auditor must on his own initiative apply for renewal of the accreditation for a further six-year period. The first renewal applications should arrive at the Bank during the first quarter of 2019.

In this connection, on 21 September 2018, the Bank published a Communication<sup>2</sup> explaining the form and content of the application for renewal of the accreditation. That Communication lists the information which the application must contain,

including as regards the experience gained in the course of mandates for institutions subject to supervision (description of the mandates, assessment of the cooperation with the Bank, plan of approach for the future). The aim is to obtain specific information supplementing the accreditation application, to enable the Bank to check whether the information tallies with the records which it has created over the years in the course of a system of annual assessment of the quality of the auditor's work per mandate exercised in a supervised institution. In accordance with the accreditation regulation, the Bank has to justify any decision to refuse renewal of accreditation in regard to the expectations concerning the competence requirements and the efforts made in carrying out the assignment.

1 Bank Regulation of 21 December 2012 on the accreditation of auditors and firms of auditors.

2 Communication NBB\_2018\_26 of 21 September 2018 on the renewal of auditors' accreditation.

## Follow-up to parliamentary recommendations

After publication of the recommendations of the parliamentary commissions concerning Optima<sup>1</sup> and Panama Papers<sup>2</sup>, the Bank cooperated fully in various regulatory initiatives, notably in regard to transactions between related parties and special mechanisms.

Modification of the legal framework governing transactions between related parties was also recommended by the IMF in the 2017 FSAP (see chapter A of the “Prudential regulation and supervision” part), in order to comply with the Basel Committee’s fundamental principles for effective banking supervision (principle 20 - transactions with related parties). The sectoral laws already specify that loans, credits or guarantees must be concluded on the conditions applicable to their customers and must be notified to the statutory management body and to the supervisory authority<sup>3</sup>. In order to implement the recommendations, an amendment to these rules was prepared, which extends both the material scope (all transactions between related parties) and personal scope (all intra-group transactions, including transactions with subsidiaries and sister companies).

In order to implement the recommendations of the two parliamentary commissions on tax evasion (special mechanisms), a working group was set up comprising representatives of the Ministry of Finance, the Treasury, the Special Tax Inspectorate, the FSMA and the Bank.

This working group tackled three subjects:

- adjustment of the legal framework concerning special mechanisms, in order to make it easier to report them to the justice system;
- updating of the list of special mechanisms, with examination of mechanisms which may be deleted from existing Circulars<sup>4</sup>, those which may be reformulated, and those which should be added; and
- conclusion of a cooperation agreement with the Special Tax Inspectorate so that information useful for the supervision of a financial institution can be passed on to the Bank and the FSMA.

## Suitability of directors and other key function holders

The prudential legislation stipulates that directors, members of the management board, those responsible for independent control functions and those effectively managing financial institutions must have the expertise and professional integrity required for their job. The assessment of the suitability of these persons is often described as the assessment of their “fit & proper” character.

In the wake of the financial crisis, the question of “suitability” has been a priority for some years and has given rise to the publication of a series of new rules, guidelines and recommendations at international, European and national level.

For instance, on 26 September 2017 the EBA and ESMA published joint guidelines on the assessment of the suitability of members of the management body and key function holders<sup>5</sup>. The ECB also recently published its SSM Guide to fit and proper assessments<sup>6</sup>. In the insurance sector, the EIOPA Guidelines on the system of governance<sup>7</sup> provide a reference framework for the assessment of both the individual and collective suitability of directors and those responsible for independent control functions in insurance undertakings.

In view of the proliferation of rules and guidelines on the subject, some updating and some form of codification were necessary in order to maintain

1 On 7 July 2016, a parliamentary commission of inquiry was set up, and on 28 June 2017 it published a report on the failure of Optima Bank: in this connection, see “Parliamentary inquiry into the causes of the failure of Optima Bank and the possible conflict of interests between the Optima Group and its components on the one hand, and the government on the other”, Parliamentary papers, 2016-2017, Doc. 54 1938/007.

2 On 21 April 2016, a special commission on “International tax evasion/Panama Papers” was set up which published its report on 31 October 2017: see: “The Panama Papers and international tax evasion”, Parliamentary papers, 2016-2017, Doc. 54 2749/001.

3 See Article 72 of the Banking Law and Article 93 of the Solvency II Law.

4 This concerns more particularly two Circulars dated 18 December 1997, namely Circular D1 97/9 to credit institutions and Circular 97/4 to investment firms, and Communication D 207 of 30 November 2001 to insurance undertakings.

5 EBA/GL/2017/12 Guidelines of 26 September 2017 on the assessment of the suitability of members of the management body and key function holders. With effect from 30 June 2018, these guidelines replace the EBA GL 2012/06 guidelines of 22 November 2012.

6 SSM Guide to fit and proper assessments, May 2018.

7 EIOPA Guidelines on system of governance of 14 September 2015, in particular guidelines 11 to 14.

a good overview of the framework applicable. On 18 September 2018 the Bank therefore published a new “fit & proper” circular<sup>1</sup>, aimed at creating a “fit & proper” manual and transposing the aforesaid EBA and EIOPA guidelines into the Belgian prudential framework.

The aim of the “fit & proper” manual is to list all the regulatory and policy documents applicable on the subject and provide the necessary clarification. In addition, the manual contains explanations on topics not covered in themselves by specific policy documents. The manual combines an intersectoral approach with the text and references specific to the various sectors: where the manual and its basic principles are applicable to all financial institutions subject to the Bank’s supervision, the relevant legal and policy texts applicable to the various types of financial institution are specified.

In terms of content, the manual is based on the guidelines listed in the 2013 “fit & proper” Circular, which was repealed when the manual was introduced. In addition, the manual develops or highlights a range of subjects. For instance, further emphasis was placed on the primary responsibility of the institutions in the assessment of suitability, and there was development of the chapters on collective suitability, continuous suitability assessment (and therefore, if necessary, reassessment of the person concerned), and the time which must be devoted to performing the duties of a director. The manual also sheds light on a range of new points concerning expertise, such as the Bank’s regulation on the persons responsible for the compliance function<sup>2</sup> (see above). As regards propriety, the manual now explicitly states that the lack of transparency in relation to the supervisory authority and breaches of the anti-money laundering legislation, consumer protection legislation and tax legislation, are points to be taken into account in assessing the suitability of the person concerned.

Specifically for the banking sector, the manual deals with some particular points concerning the EBA guidelines and the SSM supervision. Thus, in the manual the requirements on the number of years of relevant professional experience for directors of significant institutions subject to ECB supervision are aligned with the thresholds defined in the SSM Guide. Decisions on suitability which are the responsibility of the ECB are subject to slightly

longer timescales, in line with current practice. Finally, the chapter on directors’ independence and the management of conflicts of interest clarifies the way in which the provisions on these subjects under the Banking Law are to be read in connection to the guidance on these topics in the EBA guidelines.

In the insurance and reinsurance sector, the 2013 rules on expertise and integrity were generally kept on in the new manual. Nonetheless, a number of points were added, notably in connection with the Solvency II rules: (i) obligation to develop a “fit & proper” policy, (ii) explicit mention of the basic theoretical knowledge expected in the field of insurance and reinsurance, (iii) listing of specific rules on the expected expertise of persons responsible for independent control functions, (iv) definition of expertise rules to be respected for “reference persons” to be appointed within the undertaking if an independent controlfunction is outsourced, and (v) the recommendation whereby, in the case of financial conglomerates in which there are significant business relationships between the bank and the insurer, the insurer’s board of directors should include one independent director within the meaning of Article 526ter of the Company Code who does not have a seat on the board of directors of the bank and the parent company. In addition, the rules followed by the Bank in its suitability assessment were also reviewed (“fit & proper” interview, modelling of the Bank’s decisions, etc.).

*The question of suitability (fit & proper character) has been a national and international priority for some years*

Since this manual is, in principle, an evolving document which is published on line, it will be modified regularly in accordance with new developments on the subject so that, in the future, institutions will continue to have an updated overview of the prudential framework in this area.

1 Circular NBB\_2018\_25 of 18 September 2018 on the suitability of directors, members of the management committee, responsible persons of independent control functions and senior managers of financial institutions.

2 Royal Decree of 15 April 2018 approving the National Bank of Belgium Regulation of 6 February 2018 on the expertise of persons responsible for the compliance function.

## 7. Brexit

On 29 March 2017, following the referendum on departure from the EU, the United Kingdom had initiated a procedure provided for in Article 50 of the EU Treaty with a view to leaving the EU and thus becoming a “third country”. Unless a different date is specifically agreed, the whole legal framework of the EU will cease to apply to the United Kingdom from 30 March 2019. In particular, financial institutions might lose their European passport which previously conferred freedom to provide their services in every EU country.

Since May 2017, the EU and the United Kingdom have been negotiating their separation agreement in order to avoid the serious consequences of a disorderly (“hard”) Brexit. Such a scenario means great legal uncertainty for current business relationships, and risks causing a sudden interruption in services which will have a serious impact on economic activity. Both parties are committed to reaching agreement, but material differences between the two camps could prevent an agreement from being concluded. If the agreement is ratified, it could include a transitional period up to 31 December 2020.

In view of the said uncertainty, the European Commission has reminded all parties concerned of the importance of preparing for a “hard Brexit” which could materialise as early as March 2019. In that context, the European supervisory authorities and the ECB have issued opinions and clarified their expectations for the financial sector. The

*The Bank has made financial institutions aware of the risks that would result from a hard Brexit*

Bank has repeatedly drawn the attention of Belgian financial institutions to the risks that would result from a “hard Brexit” by referring to the opinions published

by the EBA, surveys of the sector and prudential measures in relation to the institutions concerned.

In order to guarantee the continuity of their activities, financial institutions may need to apply to the national competent authorities for a new licence, amend certain clauses in their contracts or transfer certain activities.

The Bank notes that, overall, the level of exposure of the Belgian financial sector to British counterparties is

relatively low. At the end of June 2018, those exposures totalled € 39 billion for Belgian banks, or 4 % of their total assets, and € 6 billion for Belgian insurers, corresponding to 2 % of their investments.

However, the potential impact of a hard Brexit is not confined to direct exposures, and depends both on the nature of the undertaking’s activities and the level of preparation required, which varies from one institution to another.

Although they do not provide services for customers directly in Britain, many institutions could be affected via contracts concluded with British counterparties. For example, there is legal uncertainty over the possibility of making changes or exercising certain options under existing over-the-counter derivative contracts which are not handled by a clearing house (central counterparty, CCP). To reduce that risk, institutions should check the cases in which authorisation has to be obtained from the competent national authorities (the FSMA in Belgium and the Financial Conduct Authority in the United Kingdom). Moreover, bonds issued by Belgian banking institutions but governed by British law might not be eligible for a bail-in, so that certain changes would need to be made to the issuance contract clauses.

British CCPs perform a critical role for the European financial market, as they clear more than 90 % of the transactions in interest rate derivatives in Europe. At present, British CCPs are subject to the European Regulation on over-the-counter derivatives (European Market Infrastructure Regulation, EMIR). They risk losing their licence to effect clearing of these products in Europe. The massive and sudden interruption of the clearing services of British CCPs could cause serious instability on the financial markets. In order to reduce the dependence of European financial institutions on British CCPs, the European authorities are encouraging them to establish access to CCPs based in the European Union, outside the United Kingdom. However, to avoid serious disruption to current activities, the Commission will grant a temporary licence extension to British CCPs. With a view to improving the regulation of the activities of systemically important CCPs based in third countries, including – after Brexit – the United Kingdom, the European Commission envisages modifying the EMIR Regulation to give greater power of supervision of those entities to the European Financial Markets Authority.



A number of Belgian banks provide banking services in the United Kingdom. The Bank has asked them to contact the British authorities in order to ensure the continuity of those activities. They must also inform their customers in time, notably if the services are modified or terminated.

Similarly, in order to ensure the continuity of their commitments to British customers, some Belgian insurers need to establish a British branch or subsidiary. Establishment of such an entity is subject to the approval of the British authorities and the Bank's non-objection.

In the wake of Brexit, British insurers are liable to lose their right to offer protection to customers in the European Economic Area (EEA). In that context, some British insurance companies have already begun setting up subsidiaries in Belgium. Having an

establishment in Belgium will also enable them to pursue their activities in other countries of the European Economic Area, either under freedom to provide services, or via branches. In addition, insurers must ascertain that they can still settle claims under existing insurance contracts held by EU customers. Many of them have already taken steps to transfer their contracts to an EU-based entity. That takes time, because it requires not only the approval of the national prudential supervision authorities in the EU and the United Kingdom, but also the approval of the British Court of Justice.

The same applies to British payment institutions, electronic money institutions and investment firms, which will lose their passport, essential for continuing to do business with their customers in the EU. To guarantee the continuity of their services in Belgium and the EU, a number of institutions have

applied to the Bank for approval or are considering doing so.

The Bank's prudential supervision teams have conducted numerous dialogues with Belgian financial institutions, which have evidently made good progress

in identifying the risks and preparing for the potential consequences of a hard Brexit. The Bank is likewise in discussions with institutions which are considering modifying their structure or wish to establish a branch or subsidiary in Belgium to offer services to EU customers.

Annexes



### Annex 1

#### Main macroeconomic indicators in the euro area and other major economies (1-2)

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

	GDP <sup>1</sup>			Unemployment rate <sup>2</sup>			Inflation		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
<b>Euro area</b>	2.0	2.4	1.9	10.0	9.1	8.2	0.2	1.5	1.8
Germany	2.2	2.2	1.5	4.1	3.8	3.4	0.4	1.7	1.9
France	1.2	2.2	1.5	10.1	9.4	9.1	0.3	1.2	2.1
Italy	1.1	1.6	1.0	11.7	11.2	10.4	-0.1	1.3	1.3
Spain	3.2	3.0	2.5	19.6	17.2	15.3	-0.3	2.0	1.8
Netherlands	2.2	2.9	2.5	6.0	4.9	3.8	0.1	1.3	1.6
Belgium	1.5	1.7	1.4	7.9	7.1	6.0	1.8	2.2	2.3
Austria	2.0	2.6	2.7	6.0	5.5	4.9	1.0	2.2	2.1
Greece	-0.2	1.5	2.1	23.6	21.5	19.8	0.0	1.1	0.9
Finland	2.5	2.8	2.7	8.8	8.6	7.6	0.4	0.8	1.2
Portugal	1.9	2.8	2.1	11.2	9.0	7.0	0.6	1.6	1.4
Ireland	5.0	7.2	7.5	8.4	6.7	5.7	-0.2	0.3	0.7
Slovakia	3.1	3.2	4.3	9.7	8.1	6.6	-0.5	1.4	2.6
Luxembourg	2.4	1.5	3.6	6.3	5.6	5.5	0.0	2.1	2.0
Slovenia	3.1	4.9	4.2	8.0	6.6	5.3	-0.2	1.6	2.0
Cyprus	4.8	4.2	3.8	13.0	11.1	8.2	-1.2	0.7	0.8
Estonia	3.5	4.9	3.5	6.8	5.8	5.7	0.8	3.7	3.5
Malta	5.7	6.6	5.4	4.7	4.0	3.8	0.9	1.3	1.9
Latvia	2.1	4.6	4.9	9.6	8.7	7.4	0.1	2.9	2.6
Lithuania	2.4	4.1	3.2	7.9	7.1	6.3	0.7	3.7	2.6
<b>United Kingdom</b>	1.8	1.8	1.4	4.9	4.4	4.1	0.7	2.7	2.5
<b>United States</b>	1.6	2.2	2.9	4.9	4.4	3.8	1.3	2.1	2.4
<b>Japan</b>	1.0	1.9	0.9	3.1	2.9	2.9	-0.1	0.5	1.2
<b>China</b>	6.7	6.9	6.6	4.0	3.9	4.0	2.0	1.6	2.2

Sources: ECB, Eurostat, IMF, NBB.

1 Calendar adjusted volume data.

2 Ratio between the number of unemployed and the labour force, in %.

## Annex 2

### Main macroeconomic indicators in the euro area and other major economies (2-2)

(in % of GDP)

	Balance of payments current account			Overall balance of general government			Public debt		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
<b>Euro area</b>	3.5	4.0	3.8	-1.6	-1.0	-0.6	91.2	88.9	86.9
Germany	8.7	8.2	7.8	0.9	1.0	1.6	67.9	63.9	60.1
France	-0.8	-0.6	-0.6	-3.5	-2.7	-2.6	98.2	98.5	98.7
Italy	2.5	2.7	2.6	-2.5	-2.4	-1.9	131.4	131.2	131.1
Spain	2.2	1.9	1.2	-4.5	-3.1	-2.7	99.0	98.1	96.9
Netherlands	8.1	10.5	10.1	0.0	1.2	1.1	61.9	57.0	53.2
Belgium	-0.4	0.9	-0.1	-2.4	-0.9	-0.7	106.1	103.4	102.0
Austria	2.6	2.1	2.0	-1.6	-0.8	-0.3	83.0	78.3	74.5
Greece	-0.6	-1.0	-0.2	0.5	0.8	0.6	178.5	176.1	182.5
Finland	-0.6	0.6	0.7	-1.7	-0.7	-0.8	63.0	61.3	59.8
Portugal	0.1	0.2	0.0	-2.0	-3.0	-0.7	129.2	124.8	121.5
Ireland	-4.2	8.5	11.7	-0.5	-0.2	-0.1	73.4	68.4	63.9
Slovakia	-1.2	-0.2	0.0	-2.2	-0.8	-0.6	51.8	50.9	48.8
Luxembourg	2.0	4.4	4.2	1.6	1.4	1.3	20.7	23.0	21.4
Slovenia	5.4	7.1	7.5	-1.9	0.1	0.5	78.7	74.1	70.2
Cyprus	-5.1	-8.4	-8.2	0.3	1.8	2.8	105.5	96.1	105.0
Estonia	1.8	3.3	3.5	-0.3	-0.4	0.5	9.2	8.7	8.0
Malta	7.0	13.8	12.3	0.9	3.5	1.3	56.3	50.9	47.9
Latvia	1.4	0.7	0.0	0.1	-0.6	-0.8	40.3	40.0	37.1
Lithuania	-0.7	0.9	-0.8	0.3	0.5	0.6	39.9	39.4	34.8
<b>United Kingdom</b>	-5.2	-3.8	-3.5	-2.9	-1.8	-2.0	87.9	87.5	87.4
<b>United States</b>	-2.3	-2.3	-2.5	-3.9	-3.8	-4.7	106.8	105.2	106.1
<b>Japan</b>	3.9	4.0	3.6	-3.7	-4.3	-3.7	235.6	237.6	238.2
<b>China</b>	1.8	1.4	0.7	-3.7	-3.9	-4.1	44.2	47.0	50.1

Sources: EC, IMF, NBB.

### Annex 3

#### GDP and main categories of expenditure, by volume

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

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 e
Household final consumption expenditure	0.5	2.7	0.3	0.6	0.7	0.6	0.9	1.7	1.1	0.8
General government final consumption expenditure	1.1	1.0	1.2	1.4	0.3	0.6	0.6	-0.2	0.6	0.8
Gross fixed capital formation	-6.7	-0.8	4.2	0.2	-1.5	5.8	2.7	3.8	1.8	1.7
Housing	-10.4	1.8	-2.5	-0.1	-3.9	5.7	1.0	3.7	0.0	0.4
Enterprises	-7.5	-2.1	6.5	0.0	-0.2	6.5	3.6	4.7	2.3	1.7
General government	11.0	0.7	6.0	2.2	-4.3	1.4	0.7	-2.0	2.1	4.9
<i>p.m. Final domestic expenditure</i> <sup>1,2</sup>	-1.1	1.5	1.4	0.7	0.1	1.8	1.2	1.7	1.1	1.0
Change in inventories and acquisitions less disposals of valuables <sup>1</sup>	-0.8	0.6	0.7	-0.6	-0.4	0.3	0.3	0.3	0.0	-0.3
Net exports of goods and services <sup>1</sup>	-0.4	0.7	-0.3	0.2	0.5	-0.8	0.1	-0.5	0.6	0.7
Exports of goods and services	-9.4	10.3	6.7	0.3	0.9	5.2	3.5	7.6	5.0	3.5
Imports of goods and services	-9.0	9.6	7.3	0.1	0.3	6.2	3.4	8.5	4.3	2.8
GDP	-2.3	2.7	1.8	0.2	0.2	1.3	1.7	1.5	1.7	1.4
Trade surplus (+) or deficit (-) due to the change in the terms of trade <sup>3</sup>	2.0	-1.1	-0.9	-0.1	0.2	0.2	0.7	0.5	-0.8	-1.4
Net primary incomes received from the rest of the world <sup>3</sup>	-2.2	3.1	-2.1	1.4	-0.8	-0.9	-1.2	0.6	1.1	-0.2
GNI	-2.4	4.7	-1.3	1.6	-0.4	0.5	1.1	2.6	2.0	-0.1
<i>p.m. Total domestic expenditure</i> <sup>4</sup>	-1.9	2.1	2.2	0.0	-0.3	2.0	1.6	2.1	1.1	0.7
<i>Final expenditure</i> <sup>5</sup>	-5.2	5.5	4.2	0.2	0.3	3.5	2.5	4.6	2.9	2.0
<i>General government expenditure</i> <sup>6</sup>	2.0	0.9	1.7	1.5	-0.1	0.6	0.6	-0.4	0.7	1.2

Sources: NAI, NBB.

- 1 Contribution to the change in GDP.
- 2 Household and general government final consumption expenditure and gross fixed capital formation and acquisitions less disposals of valuables.
- 3 Contribution to the change in GNI.
- 4 Final domestic expenditure and change in inventories.
- 5 Total domestic expenditure and exports of goods and services.
- 6 Final consumption expenditure and gross fixed capital formation of general government.

## Annex 4

### GDP and the main categories of expenditure, at current prices

(data not adjusted for calendar effects, in € million)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 e
Household final consumption expenditure	181 546	189 693	196 069	201 182	204 385	206 748	210 022	217 405	223 858	229 709
General government final consumption expenditure	83 782	85 999	90 128	94 011	96 087	97 348	98 051	99 376	102 201	105 046
Gross fixed capital formation	78 780	79 661	85 609	87 672	86 944	92 161	94 980	99 132	103 156	107 029
Housing	19 186	19 852	19 630	20 205	19 732	20 927	21 210	22 121	22 727	23 369
Enterprises	51 463	51 415	56 705	57 823	57 962	61 868	64 311	67 699	70 657	73 123
General government	8 131	8 394	9 275	9 644	9 250	9 367	9 459	9 313	9 771	10 537
<i>p.m. Final domestic expenditure</i> <sup>1</sup>	344 200	355 454	371 913	382 929	387 514	396 295	403 077	415 928	429 233	441 784
Change in inventories and acquisitions less disposals of valuables	-3 219	3 188	5 339	2 246	52	1 292	2 094	3 106	4 724	6 398
Net exports of goods and services	7 892	6 560	1 962	2 390	4 873	2 537	5 864	5 640	5 114	2 349
Exports of goods and services	241 739	279 114	309 486	318 935	320 661	330 737	332 094	351 287	376 628	396 268
Imports of goods and services	233 847	272 554	307 524	316 546	315 788	328 200	326 230	345 647	371 514	393 919
GDP	348 781	365 101	379 106	387 500	392 340	400 087	411 010	424 660	439 052	450 531
Net primary incomes received from the rest of the world	430	11 508	3 823	9 482	6 468	2 761	-2 234	423	5 297	4 726
GNI	349 211	376 608	382 929	396 983	398 808	402 848	408 777	425 083	444 349	455 257
<i>p.m. Total domestic expenditure</i> <sup>2</sup>	340 889	358 541	377 145	385 110	387 467	397 550	405 147	419 020	433 938	448 181
<i>Final expenditure</i> <sup>3</sup>	582 628	637 654	686 630	704 046	708 128	728 286	737 240	770 307	810 566	844 449
<i>General government expenditure</i> <sup>4</sup>	91 912	94 393	99 402	103 654	105 337	106 715	107 510	108 689	111 972	115 583

Sources: NAI, NBB.

1 Household and general government final consumption expenditure and gross fixed capital formation and acquisitions less disposals of valuables.

2 Final domestic expenditure and change in inventories.

3 Total domestic expenditure and exports of goods and services.

4 Final consumption expenditure and gross fixed capital formation of general government.

## Annex 5

### Labour market

(annual averages, thousands of persons)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 e
Population of working age <sup>1</sup>	7 124	7 180	7 225	7 247	7 259	7 268	7 284	7 300	7 312	7 321
Labour force	5 075	5 118	5 159	5 194	5 203	5 236	5 256	5 290	5 327	5 355
<b>National employment</b>	<b>4 524</b>	<b>4 553</b>	<b>4 614</b>	<b>4 635</b>	<b>4 619</b>	<b>4 638</b>	<b>4 678</b>	<b>4 737</b>	<b>4 802</b>	<b>4 860</b>
Frontier workers (balance)	78	79	79	80	79	78	77	77	78	78
Domestic employment	4 446	4 474	4 535	4 555	4 540	4 560	4 601	4 660	4 724	4 783
Self-employed	722	727	735	743	749	755	765	778	790	801
Employees	3 724	3 747	3 800	3 812	3 791	3 805	3 836	3 882	3 934	3 982
Branches sensitive to the business cycle <sup>2</sup>	2 348	2 352	2 384	2 380	2 354	2 354	2 372	2 401	2 439	2 475
Public administration and education	783	790	795	797	800	807	810	813	815	816
Other services <sup>3</sup>	593	605	621	636	637	644	653	667	680	691
<b>Unemployment<sup>4</sup></b>	<b>551</b>	<b>565</b>	<b>545</b>	<b>559</b>	<b>584</b>	<b>598</b>	<b>579</b>	<b>553</b>	<b>525</b>	<b>495</b>

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

1 Persons aged 15 to 64.

2 The branches agriculture; industry; construction; production and supply of electricity, gas, steam and air conditioning; water supply; sewerage, waste management and remediation activities; trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities; information and communication; financial and insurance activities; real estate activities; specialist, scientific and technical activities and administrative and support service activities.

3 The branches human health and social work, culture, entertainment and recreational activities; other service activities and activities of households as employers.

4 Unemployed job-seekers.

## Annex 6

### Employment rate

(in % of the corresponding population aged 20 to 64<sup>1</sup>, annual averages)

	2009	2010	2011	2012	2013	2014	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>
Total	67.1	67.6	67.3	67.2	67.2	67.3	67.2	67.7	68.5	69.5
<i>p.m. Total (from 15 to 64 years)</i>	<i>61.6</i>	<i>62.0</i>	<i>61.9</i>	<i>61.8</i>	<i>61.8</i>	<i>61.9</i>	<i>61.8</i>	<i>62.3</i>	<i>63.1</i>	<i>64.2</i>
<b>According to sex</b>										
Women	61.0	61.6	61.5	61.7	62.1	62.9	63.0	63.0	63.6	65.2
Men	73.2	73.5	73.0	72.7	72.3	71.6	71.3	72.3	73.4	73.7
<b>According to age</b>										
20 to 29	61.8	61.0	60.5	59.4	57.9	57.8	57.6	57.6	57.5	58.1
30 to 54	79.9	80.5	79.8	79.9	79.8	79.7	79.3	79.9	80.4	81.3
55 to 64	35.3	37.3	38.7	39.5	41.7	42.7	44.0	45.4	48.3	49.9
<b>According to Region</b>										
Brussels	59.5	59.2	58.2	58.2	56.8	58.7	58.7	59.8	60.8	60.9
Flanders	71.5	72.1	71.8	71.5	71.9	71.9	71.9	72.0	73.0	74.6
Wallonia	61.7	62.2	62.2	62.5	62.3	61.8	61.5	62.6	63.2	63.1
<b>According to educational level</b>										
Lower secondary education or less	47.7	48.4	47.3	47.1	46.8	46.6	45.6	45.6	45.9	45.2
Upper secondary education	68.8	69.1	68.9	68.5	68.6	67.2	67.2	67.7	67.8	68.8
Higher education	81.9	81.9	82.0	81.8	81.0	82.0	81.8	82.2	82.2	83.4
<b>According to nationality</b>										
Belgian	68.4	68.8	68.7	68.6	68.7	68.6	68.5	69.0	69.8	70.8
Other EU nationals	62.4	65.1	65.1	65.1	63.6	65.7	66.4	67.8	68.2	68.5
Other	40.9	40.3	39.6	38.9	39.9	40.5	42.7	41.6	41.6	42.2

Source: Statbel.

1 These employment rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 As a result of the reform of the labor force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years.  
For more information, see: <https://statbel.fgov.be/en>.

3 Average of the first three quarters.

## Annex 7

### Unemployment rate

(in % of the corresponding labour force aged 15 to 64<sup>1</sup>, annual averages)

	2009	2010	2011	2012	2013	2014	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>
<b>Total</b>	8.0	8.4	7.2	7.6	8.5	8.6	8.6	7.9	7.1	6.1
<b>According to sex</b>										
Women	8.1	8.6	7.2	7.4	8.2	8.0	7.8	7.6	7.1	5.7
Men	7.8	8.2	7.2	7.7	8.7	9.1	9.2	8.1	7.2	6.4
<b>According to age</b>										
15 to 24	21.9	22.4	18.7	19.8	23.7	23.2	22.1	20.1	19.2	17.0
25 to 54	6.8	7.3	6.4	6.7	7.4	7.6	7.7	7.1	6.2	5.3
55 to 64	5.1	4.6	4.0	4.5	5.4	5.4	5.6	5.7	5.9	4.4
<b>According to Region</b>										
Brussels	15.9	17.4	17.1	17.5	19.3	18.5	17.5	16.9	15.0	13.4
Flanders	5.0	5.2	4.3	4.6	5.1	5.1	5.2	4.9	4.4	3.5
Wallonia	11.2	11.5	9.5	10.1	11.4	12.0	12.0	10.6	9.8	8.8
<b>According to educational level</b>										
Lower secondary education or less	13.7	15.4	14.1	14.2	16.0	16.4	17.0	16.2	14.8	13.5
Upper secondary education	8.1	8.2	6.8	7.8	8.3	8.8	8.7	8.0	7.2	6.0
Higher education	4.5	4.5	3.8	4.0	4.9	4.7	4.6	4.2	4.3	3.5
<b>According to nationality</b>										
Belgian	7.1	7.5	6.3	6.5	7.4	7.5	7.6	7.0	6.2	5.3
Other EU nationals	11.1	11.0	10.3	11.3	12.5	11.4	11.0	9.9	9.9	8.3
Other	29.5	30.7	27.8	30.6	29.9	30.9	26.6	27.3	25.0	24.0

Source: Statbel.

1 These unemployment rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 As a result of the reform of the labor force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years. For more information, see: <https://statbel.fgov.be/en>.

3 Average of the first three quarters.

## Annex 8

### Inactivity rate

(in % of the corresponding population aged 15 to 64<sup>1</sup>, annual averages)

	2009	2010	2011	2012	2013	2014	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>
<b>Total</b>	33.1	32.3	33.3	33.1	32.5	32.3	32.4	32.4	32.0	31.6
<b>According to sex</b>										
Women	39.1	38.2	38.9	38.7	37.7	37.0	37.0	37.1	36.8	35.9
Men	27.2	26.6	27.7	27.5	27.3	27.6	27.8	27.7	27.2	27.3
<b>According to age</b>										
15 to 24	67.6	67.5	68.0	68.5	69.0	69.8	70.0	71.5	71.9	70.6
25 to 54	14.4	13.7	15.3	15.0	14.7	14.4	14.9	14.9	15.2	15.2
55 to 64	62.8	60.8	59.7	58.6	55.9	54.9	53.4	51.9	48.7	47.8
<b>According to Region</b>										
Brussels	34.5	33.7	35.1	34.6	34.9	33.4	34.3	33.5	33.9	35.0
Flanders	30.8	30.1	30.8	31.0	30.2	30.1	30.0	30.1	29.4	28.2
Wallonia	36.7	35.9	37.0	36.3	35.6	35.8	36.1	36.1	36.1	36.6
<b>According to educational level</b>										
Lower secondary education or less	55.2	53.7	55.3	55.6	55.3	55.4	56.6	57.0	58.3	59.1
Upper secondary education	28.8	28.5	29.6	29.3	28.9	30.0	29.9	30.0	29.9	29.1
Higher education	14.2	14.3	14.7	14.9	14.8	14.0	14.2	14.2	14.1	13.6
<b>According to nationality</b>										
Belgian	32.7	32.1	32.8	32.6	32.0	31.9	32.0	32.0	31.7	31.1
Other EU nationals	33.0	29.9	30.7	30.1	30.7	29.4	29.1	28.6	27.8	29.1
Other	45.1	45.1	48.2	47.9	46.4	45.0	45.6	46.0	47.3	47.2

Source: Statbel.

1 These inactivity rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 As a result of the reform of the labor force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years.  
For more information, see: <https://statbel.fgov.be/en>.

3 Average of the first three quarters.

## Annex 9

### Employment rate : regional details

(in % of the corresponding population aged 20 to 64<sup>1</sup>, annual averages)

	Brussels			Flanders			Wallonia					
	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>
Total	58.7	59.8	60.8	60.9	71.9	72.0	73.0	74.6	61.5	62.6	63.2	63.1
<i>p.m. Total (from 15 to 64 years)</i>	54.2	55.3	56.2	56.3	66.4	66.5	67.5	69.3	56.2	57.1	57.7	57.8
According to sex												
Women	53.2	54.3	54.6	56.2	68.2	67.7	68.2	70.7	57.2	57.9	58.7	58.3
Men	64.3	65.3	67.0	65.7	75.6	76.3	77.7	78.4	65.9	67.3	67.7	68.0
According to age												
20 to 29	46.1	46.2	47.2	45.6	65.0	64.6	64.6	65.8	49.6	50.2	49.4	49.6
30 to 54	67.3	68.6	69.5	70.3	84.6	84.8	85.4	87.0	74.1	75.1	75.3	75.2
55 to 64	45.6	47.0	48.5	48.9	45.6	46.7	49.5	52.2	40.8	42.8	45.8	45.8
According to educational level												
Lower secondary education or less	41.2	39.8	40.9	40.6	50.6	50.4	51.5	51.9	40.2	40.7	40.0	38.1
Upper secondary education	51.8	53.8	53.6	52.8	72.3	72.3	72.4	73.7	61.3	62.6	62.8	63.4
Higher education	76.4	77.9	77.6	77.9	84.1	84.1	84.1	86.0	79.7	80.1	80.4	80.7
According to nationality												
Belgian	58.9	59.6	60.1	60.7	72.7	73.1	74.1	75.5	62.8	63.7	64.2	64.4
Other EU nationals	69.0	71.4	72.8	71.6	71.9	70.4	69.8	72.5	57.8	61.0	61.5	60.1
Other	40.6	40.1	41.0	39.6	48.7	46.0	44.1	48.9	35.2	36.7	38.3	34.8

Source : Statbel.

1 These employment rates are calculated on the basis of the harmonised data taken from the labour force survey.

2 As a result of the reform of the labor force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years.  
For more information, see : <https://statbel.fgov.be/en>.

3 Average of the first three quarters.

## Annex 10

### Unemployment rate : regional details

(in % of the corresponding labour force aged 15 to 64<sup>1</sup>, annual averages)

	Brussels			Flanders			Wallonia					
	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>
<b>Total</b>	17.5	16.9	15.0	13.4	5.2	4.9	4.4	3.5	12.0	10.6	9.8	8.8
<b>According to sex</b>												
Women	15.9	16.1	14.9	12.0	4.6	4.7	4.8	3.4	11.4	10.3	9.0	8.4
Men	18.7	17.6	15.1	14.6	5.7	5.0	4.0	3.6	12.5	10.8	10.5	9.1
<b>According to age</b>												
15 to 24	36.2	35.9	33.2	30.9	15.2	14.1	12.8	12.2	32.2	27.9	29.0	23.9
25 to 54	16.9	15.9	14.0	12.6	4.3	4.2	3.5	2.7	10.8	9.5	8.7	8.0
55 to 64	11.4	14.1	12.9	10.4	4.2	3.3	4.5	3.0	6.8	7.6	6.5	5.8
<b>According to educational level</b>												
Lower secondary education or less	29.3	30.7	27.4	26.2	10.3	9.7	8.6	7.1	22.3	20.1	19.4	18.6
Upper secondary education	21.6	20.1	18.1	16.0	5.3	5.0	4.0	3.3	12.8	11.3	10.8	9.5
Higher education	9.1	8.5	8.3	7.2	3.2	2.9	3.3	2.5	5.7	5.2	4.7	3.9
<b>According to nationality</b>												
Belgian	16.9	16.6	14.8	12.6	4.7	4.2	3.7	3.1	11.3	10.0	9.2	8.1
Other EU nationals	12.6	11.8	10.4	9.6	8.8	7.9	8.8	5.5	11.9	9.8	10.9	10.3
Other	31.6	30.9	29.2	29.9	18.2	22.0	20.3	16.9	35.1	31.8	27.5	29.0

Source: Statbel.

<sup>1</sup> These unemployment rates are calculated on the basis of the harmonised data taken from the labour force survey.

<sup>2</sup> As a result of the reform of the labor force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years. For more information, see: <https://statbel.fgov.be/en>.

<sup>3</sup> Average of the first three quarters.

## Annex 11

### Inactivity rate: regional details

(in % of the corresponding population aged 15 to 64<sup>1</sup>, annual averages)

	Brussels			Flanders			Wallonia			
	2015	2016	2017 <sup>2</sup>	2015	2016	2017 <sup>2</sup>	2015	2016	2017 <sup>2</sup>	2018 <sup>3</sup>
<b>Total</b>	34.3	33.5	33.9	35.0	30.0	29.4	36.1	36.1	36.1	36.6
<b>According to sex</b>										
Women	41.4	40.1	40.7	40.9	34.0	33.7	40.9	41.0	41.0	41.6
Men	27.1	26.9	27.1	29.0	26.0	25.1	31.4	31.2	31.1	31.6
<b>According to age</b>										
15 to 24	76.6	76.6	77.4	78.6	67.1	68.5	72.7	74.8	75.9	75.3
25 to 54	20.3	19.9	20.5	21.5	12.0	12.0	18.2	18.3	18.9	19.8
55 to 64	48.5	45.3	44.3	45.4	52.5	48.1	56.2	53.7	51.0	51.4
<b>According to educational level</b>										
Lower secondary education or less	52.4	53.3	55.2	56.5	55.8	56.8	59.3	60.0	61.6	63.3
Upper secondary education	37.1	35.5	36.7	39.1	27.4	27.6	32.7	32.6	32.4	32.0
Higher education	16.0	14.9	15.5	16.1	13.2	13.1	15.5	15.6	15.7	16.1
<b>According to nationality</b>										
Belgian	35.5	34.9	35.8	36.7	29.7	28.9	35.6	35.6	35.8	36.0
Other EU nationals	25.5	23.1	23.1	24.5	25.2	27.1	37.1	35.6	33.7	35.9
Other	43.7	44.6	45.2	46.5	45.0	47.6	49.5	49.5	49.5	53.6

Source: Statbel.

<sup>1</sup> These inactivity rates are calculated on the basis of the harmonised data taken from the labour force survey.

<sup>2</sup> As a result of the reform of the labor force survey, in which a rotary panel was introduced in particular, the results from 2017 are not fully comparable with those of the previous years. For more information, see: <https://statbel.fgov.be/en>.

<sup>3</sup> Average of the first three quarters.

## Annex 12

## Revenue, expenditure and overall balance of general government

(in € million)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 e
<b>Revenue<sup>1</sup></b>	170 090	180 141	190 781	200 070	206 752	208 747	210 838	214 928	225 112	232 354
<b>Fiscal and para-fiscal revenue</b>	147 274	155 439	163 769	171 708	177 343	180 272	183 289	185 509	194 307	200 599
Levies weighing chiefly on earned income	89 295	92 644	97 451	100 765	103 677	105 164	107 071	106 106	109 524	111 949
Personal income tax <sup>2</sup>	38 870	41 104	43 344	44 483	46 131	46 885	47 211	46 849	48 694	49 611
Social security contributions <sup>3</sup>	50 425	51 541	54 106	56 282	57 545	58 279	59 859	59 256	60 830	62 338
Taxes on profits of companies <sup>4</sup>	8 108	9 249	10 673	11 599	12 218	12 586	13 643	14 621	18 110	19 761
Taxes on other income and in respect of property <sup>5</sup>	12 119	13 211	14 144	15 433	17 320	17 912	17 509	17 537	17 902	18 595
Taxes on goods and services	37 753	40 335	41 502	43 912	44 129	44 610	45 066	47 246	48 770	50 295
<b>Non-fiscal and non-para-fiscal revenue<sup>6</sup></b>	22 817	24 702	27 012	28 362	29 409	28 475	27 549	29 420	30 805	31 754
<b>Expenditure excluding interest charges</b>	175 528	181 579	193 042	202 510	206 062	208 087	208 465	213 173	218 115	225 182
<b>Social insurance benefits</b>	84 887	87 447	91 583	96 121	99 370	101 301	103 538	106 584	109 941	113 454
Replacement incomes	48 353	49 989	52 350	55 208	57 787	58 705	59 879	61 760	63 623	65 525
Pensions	32 737	33 873	35 852	38 035	39 807	40 743	42 022	43 714	45 699	47 510
Private sector pensions	20 900	21 507	22 724	24 128	25 241	25 956	26 747	27 902	29 230	30 642
General government pensions	11 837	12 367	13 128	13 908	14 566	14 788	15 276	15 812	16 469	16 868
Old people's guaranteed income	390	436	450	456	500	541	545	536	572	598
Unemployment benefits with employer top-up <sup>7</sup>	1 502	1 592	1 637	1 626	1 611	1 548	1 477	1 405	1 270	1 101
Unemployment benefits	6 903	6 817	6 605	6 816	7 080	6 627	6 035	5 799	5 357	5 091
Career breaks and time credit	750	783	814	832	833	831	851	817	806	647
Sickness and disability insurance benefits	4 922	5 335	5 802	6 172	6 622	7 042	7 449	7 843	8 229	8 821
Industrial accidents and occupational diseases	518	520	481	487	505	499	490	487	487	493
Integration allowance	631	634	709	783	830	874	1 010	1 160	1 204	1 264
Other social insurance benefits <sup>8</sup>	36 535	37 458	39 232	40 913	41 582	42 596	43 660	44 824	46 318	47 930
of which:										
Health care										
Family allowances	23 333	24 020	25 295	26 336	27 033	27 791	28 544	29 030	30 042	31 097
<b>Other primary expenditure</b>	5 458	5 549	5 805	5 995	6 192	6 282	6 309	6 373	6 498	6 665
Compensation of employees	90 641	94 132	101 460	106 389	106 692	106 786	104 926	106 589	108 175	111 727
Current purchases of goods and services	43 748	44 909	46 771	48 655	50 194	50 890	51 120	52 337	53 971	55 070
Subsidies to enterprises	15 029	15 187	15 888	16 515	17 131	17 042	16 722	16 896	17 582	18 137
Current transfers to the rest of the world	10 695	12 372	13 375	13 308	13 591	13 996	14 061	14 266	14 690	14 819
Other current transfers	4 342	4 456	4 501	4 711	5 128	4 782	5 071	5 511	4 266	5 161
Gross fixed capital formation	3 361	3 235	3 496	3 577	3 355	3 546	3 334	3 657	3 635	3 729
Other capital expenditure	8 131	8 394	9 275	9 644	9 250	9 367	9 459	9 313	9 771	10 545
<b>Balance excluding interest charges</b>	-5 437	-1 438	-2 261	-2 440	690	659	2 373	1 755	6 997	7 172
<b>Interest charges</b>	13 338	13 171	13 638	13 969	12 972	13 057	12 449	12 076	10 870	10 179
<b>Overall balance</b>	-18 775	-14 609	-15 899	-16 409	-12 281	-12 397	-10 076	-10 321	-3 874	-3 007

Sources: NAI, NBB.

1 In accordance with the ESA 2010, general government revenues do not include the tax revenues transferred to the EU, nor revenues collected directly by the EU.

2 Mainly withholding tax on earned income, advance payments, assessments and proceeds of additional percentages on personal income tax.

3 Total social contributions, including the special social security contribution and the contributions of non-active persons.

4 Mainly advance payments, assessments and the withholding tax on income from movable property payable by companies.

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

6 Property incomes, imputed social security contributions, current and capital transfers from other sectors and sales of produced goods and services, including activation of capital expenditure for own account.

7 New name for pre-pensions (early retirement).

8 Apart from the two main sub-categories mentioned in the table, this item also includes mainly allowances to handicapped persons and transfers to the institutions accommodating them, payments by subsistence funds and pensions to war victims.

## Annex 13

### Overall balance of general government, by sub-sector

(in € million)

	Entity I		Total	Entity II			Total	General government
	Federal government <sup>1</sup>	Social security		Communities and Regions <sup>1</sup>	Local authorities			
2009	-13 322	-2 580	-15 901	-2 759	-115	-2 874	-18 775	
2010	-10 949	-639	-11 588	-2 694	-327	-3 021	-14 609	
2011	-13 929	192	-13 737	-1 455	-707	-2 161	-15 899	
2012	-13 743	-383	-14 127	-337	-1 946	-2 283	-16 409	
2013	-10 106	-286	-10 392	-899	-990	-1 889	-12 281	
2014	-10 209	-91	-10 299	-1 431	-667	-2 098	-12 397	
2015	-9 869	665	-9 204	-1 140	268	-872	-10 076	
2016	-10 705	-154	-10 859	-177	716	539	-10 321	
2017	-5 155	694	-4 461	-23	610	587	-3 874	
2018 e	-673	-119	-792	-2 295	80	-2 215	-3 007	

Sources : NAI, NBB.

<sup>1</sup> With effect from 2015, these figures take account of advance payments of the regional surcharges on personal income tax, even though – according to the ESA 2010 methodology – these advance payments should be regarded as purely financial transactions, and the regional surcharges should not be taken into account until the time of the tax assessment. The approach adopted here corresponds to that used for formulating the budget targets set out in the recommendations of the “Public Sector Borrowing Requirement” section of the High Council of Finance and in the stability programmes.

## Annex 14

### Determinants of the change in the consolidated gross debt of general government<sup>1</sup>

(in % of GDP, unless otherwise stated)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 e
Debt level (at end of period)	99.5	99.7	102.6	104.3	105.5	107.6	106.5	106.1	103.4	102.0
<i>p.m.</i> Level of debt at end of period (€ million)	347 168	364 081	388 937	404 292	413 733	430 373	437 541	450 390	453 994	459 321
Change in the debt	7.0	0.2	2.9	1.7	1.1	2.1	-1.1	-0.4	-2.7	-1.4
Endogenous change <sup>2</sup>	6.8	-0.4	0.5	2.0	1.8	1.1	-0.4	-1.0	-2.6	-1.9
Primary balance required to stabilise the debt	5.2	-0.8	-0.1	1.4	2.0	1.2	0.2	-0.6	-1.0	-0.3
Implicit interest rate on the debt	4.1	3.8	3.7	3.6	3.2	3.2	2.9	2.8	2.4	2.2
Nominal GDP growth <sup>3</sup>	-1.5	4.7	3.8	2.2	1.2	2.0	2.7	3.3	3.4	2.6
Actual primary balance	-1.6	-0.4	-0.6	-0.6	0.2	0.2	0.6	0.4	1.6	1.6
Change resulting from other factors <sup>4</sup>	0.2	0.6	2.4	-0.3	-0.7	1.1	-0.7	0.6	-0.1	0.5
Net acquisition of financial assets										
Cash and deposits	-0.9	0.5	0.3	-0.2	-0.1	0.1	0.1	0.4	-0.2	0.0
Shares and other equity	1.1	0.1	0.9	-0.7	-1.1	0.3	-0.7	0.3	-0.5	0.0
Securities other than shares <sup>5</sup>	0.0	-0.2	0.0	0.0	-0.1	-0.1	0.0	0.0	0.1	-0.1
Loans	0.6	0.4	0.8	1.5	0.7	0.4	0.1	0.1	0.2	0.3
Valuation effects										
Impact of exchange rate differences	0.0	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.0
Impact of issue and redemption premiums	-0.2	-0.3	0.1	-0.8	-0.4	-0.8	-1.0	-0.7	-0.2	-0.1
Difference between interest on accrual basis and cash interest	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4
Volume effects										
Changes in sectoral classification and other volume changes	0.2	0.0	0.3	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Other effects										
Net change in other accounts payable and receivable	-0.3	0.3	0.1	0.1	0.2	0.4	0.1	0.5	-0.2	0.1
Financial derivatives	-0.1	-0.7	-0.1	0.0	-0.2	0.0	0.3	0.4	0.0	0.0
Net change in other financial liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Statistical adjustment	-0.2	0.2	0.0	-0.2	0.0	-0.3	0.0	-0.8	0.4	n.

Sources : NAI, NBB.

1 Concept of debt as defined in Council Regulation (EC) No. 479/2009 of 25 May 2009 on the application of the Protocol on the excessive deficit procedure annexed to the Treaty establishing the European Community.

2 The endogenous change in the public debt is indicated by the difference between the primary balance required to stabilise the debt in % on GDP – i.e. the balance equal to the difference between the implicit interest rate and the nominal GDP growth rate, multiplied by the ratio between the debt at the end of the previous year and the GDP in the period considered – and the actual primary balance.

3 Percentage changes compared to the previous year.

4 A positive (negative) value means a factor increasing (reducing) the debt.

5 Excluding financial derivatives.

## Annex 15

### Overview of institutions subject to National Bank of Belgium supervision<sup>1</sup>

(end-of-period data)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Financial holding companies										
<i>Total</i>	6	6	7	7	7	6	7	6	5	6
Credit institutions										
Credit institutions governed by Belgian law	48	48	47	42	39	37	37	34	34	32
Belgian branches of credit institutions governed by the law of a non-EEA country	9	9	9	9	10	10	10	8	8	8
Belgian branches of credit institutions governed by the law of another EEA country	47	50	52	53	55	56	52	50	46	47
<i>Total credit institutions</i>	104	107	108	104	104	103	99	92	88	87
Payment institutions governed by Belgian law	0	1	9	9	11	15	17	21	24	22
Electronic payment institutions governed by Belgian law	4	6	6	6	10	10	10	8	8	7
<i>Total</i>	4	7	15	15	21	25	27	29	32	29
Settlement institutions governed by Belgian law <sup>2</sup>										
<i>Total</i>	2	2	1	2	2	2	2	2	2	2
Card scheme										
<i>Total</i>	2	2	2	2	2	2	2	2	2	2
Retail payment systems										
<i>Total</i>	1	1	1	1	1	1	1	1	1	1
Financial message service provider										
<i>Total</i>	1	1	1	1	1	1	1	1	1	1
Insurance and reinsurance companies										
Insurance companies governed by Belgian law	97	97	95	88	84	81	76	73	68	69
Belgian branches of insurance companies governed by the law of another EEA country	50	48	47	46	46	47	43	45	46	46
Belgian branches of insurance companies governed by the law of a non-EEA country	0	0	0	0	0	0	0	0	0	0
According to specialisation										
Life insurance companies	29	28	26	24	23	23	21	22	20	16
Non-life insurance companies	94	91	89	83	81	79	72	70	67	72
Mixed insurance companies	23	24	25	25	24	24	24	24	25	24
Reinsurance companies	1	2	2	2	2	2	2	2	2	3
<i>Total insurance companies</i>	147	145	142	134	130	128	119	118	114	115
Freedom to provide services										
Credit institutions	571	587	641	667	673	683	709	640	672	672
Insurance companies	873	893	915	942	933	950	970	999	917	1 095
<i>Total freedom to provide services</i>	1 444	1 480	1 556	1 609	1 606	1 631	1 679	1 639	1 589	1 767
Stockbroking firms with Belgian licence <sup>3</sup>										
<i>Total</i>	23	23	23	21	20	20	20	20	19	17

Source: NBB.

<sup>1</sup> The list of names of the institutions subject to the Bank's supervision can be consulted on the website: [www.nbb.be](http://www.nbb.be).

<sup>2</sup> Excluding organisations similar to settlement institutions.

<sup>3</sup> In accordance with the allocation of tasks agreed with the FSMA, the Bank also supervises 14 branches of stockbroking firms governed by the law of another EEA country.



## Methodological note

Unless otherwise indicated, when data are compared from year to year, they all relate to the same period of the years in question. In the tables, the totals shown may differ from the sum of the items owing to rounding.

In order to provide an update on various key economic data relating to Belgium in the year 2018 as a whole, it has been necessary to make estimates, as the statistical material for that year is sometimes still fragmentary. In the tables and charts, these estimates, which were based on information available on 25 January 2019, are marked "e". They represent mere orders of magnitude intended to demonstrate the trends which already seem to be emerging. The Belgian sources used are mainly the NAI, Statbel and the Bank. The comments on the international environment and the comparisons between economies are usually based on the latest data or estimates originating from institutions such as the EC, the IMF, the OECD and the ECB.

The monetary unit used in the Report for the data concerning the euro area member countries is the euro. Amounts relating to periods before the introduction of the euro, on 1 January 1999 in Belgium and in most of the Member States, are converted at the irrevocable euro conversion rates. Except in the chapters on monetary policy and prices, where the definition coincides with the historical reality, the euro area is defined wherever possible in this Report as consisting of all the EU countries which adopted the single currency during the period 1999-2015. Apart from Belgium, the area therefore consists of Austria, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain. For convenience, the term "euro area" is also used to designate this group of countries for periods prior to the start of Stage 3 of EMU. For some analyses, the preferred source was the OECD which includes in the euro area only the countries which are members of that international institution, i.e. excluding Cyprus and Malta. In view of the small size of those economies, the OECD data are perfectly representative of the euro area as a whole.

For the sake of simplicity, the sectoral breakdown groups together, under the heading "individuals", households and non-profit institutions serving households, which constitute separate sectors according to the ESA 2010 methodology. Nevertheless, the terms "individuals" and "households" are used as synonyms. The terms "corporations", "firms" and "enterprises" are also frequently used as synonyms, whereas in the commentary from the GDP expenditure angle, "enterprises" also covers self-employed people, who are included under households in the real and financial sectoral accounts.



## Conventional signs

–	the datum does not exist or is meaningless
e	estimate by the Bank
<i>etc.</i>	<i>et cetera</i>
n.	not available
<i>p.m.</i>	<i>pro memoria</i>
Q	quarter



### Abbreviations

#### Euro area countries in 2018

EA	Euro area
BE	Belgium
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LU	Luxembourg
LV	Latvia
LT	Lithuania
MT	Malta
NL	Netherlands
AT	Austria
PT	Portugal
SI	Slovenia
SK	Slovakia
FI	Finland

#### Other European Union countries

EU	European Union
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
HR	Croatia
HU	Hungary
PL	Poland
RO	Romania
SE	Sweden
UK	United Kingdom

## Other countries

JP	Japan
TR	Turkey
US	United States

## Belgian Regions or provinces

BRUSS	Brussels
FL	Flanders
WAL	Wallonia
ANTW'P	Antwerp
FL BRAB	Flemish Brabant
WAL'N BRAB	Walloon Brabant
HAIN'T	Hainaut
WEST FL	West Flanders
EAST FL	East Flanders
LIEG	Liège
LIMB'G	Limburg
LUX	Luxembourg
NAM	Namur

## Other abbreviations

ABEX	Association of Belgian Experts
Actiris	Brussels regional employment office
AML/CFT	Anti-money-laundering and combating the financing of terrorism
API	Application programming interface
APP	Expanded asset purchase programme
BIS	Bank for International Settlements
BLS	Bank lending survey
BRRD	Bank Recovery and Resolution Directive
CBFA	Banking, Finance and Insurance Commission
CCP	Central counterparty
CCT	Collective labour agreement
CCyB	Countercyclical capital buffer
CEC	Central Economic Council
CEC	Centre for Exchange and Clearing
CET 1	Common equity Tier 1
CICR	Central Individual Credit Register
CMU	Capital Markets Union
CNT/NAR	National Labour Board
CO <sub>2</sub>	Carbon dioxide
COFOG	Classification of the Functions of Government
COICOP	Classification of Individual Consumption by Purpose
COP	Conference of the Parties
CPAS	Public social assistance centre
CPB	Central Planning Bureau (the Netherlands)

CPMI	Committee on Payments and Market Infrastructures
CSD	Central securities depository
CRD	Capital Requirements Directive
CREG	Commission for Electricity and Gas Regulation
CROE	Cyber Resilience Oversight Expectations
CRR	Capital Requirements Regulation
CSPP	Corporate sector purchase programme
CPSS	Committee on Payments and Settlement Systems
CVA	Credit valuation adjustment
DESI	Digital Economy and Society Index
DGS	Deposit guarantee system
DG	Directorate General
DMC	Domestic material consumption
DSTI	Debt-service-to-income ratio
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
Ecofin	Economic and Financial Affairs Council
EDIS	European Deposit Insurance Scheme
EDP	Excessive deficit procedure
EEA	European Economic Area
EFRAG	European Financial Reporting Advisory Group
EFSD	European Fund for Strategic Investments
EIF	European Investment Fund
EIOPA	European Insurance and Occupational Pensions Authority
Elia	Belgium's electricity transmission system operator
EMIR	European Market Infrastructure Regulation
EMU	Economic and Monetary Union
Eonia	Euro Overnight Index Average
ESA 2010	European System of Accounts 2010
ESCB	European System of Central Banks
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
Eurostat	Statistical Office of the European Union
EU-SILC	EU Statistics on Income and Living Conditions
FDI	Foreign direct investment
Febelfin	Belgian Financial Sector Federation
Federgon	Federation of HR service providers
FINREP	Financial reporting framework
FinTech	Financial technology
FMI	Financial market infrastructure
Forem	Walloon public service for vocational training and employment
FPB	Federal Planning Bureau (Belgium)
FPS	Federal Public Service
FPS ELSD	Federal Public Service Employment, Labour and Social Dialogue
FSAP	Financial Sector Assessment Programme
FSB	Financial Stability Board
FSCC	Financial Sector Cyber advisory Council
FSMA	Financial Services and Markets Authority

G7	Group of Seven
GAAP	Generally Accepted Accounting Principles
GDP	Gross domestic product
GEM	Global Entrepreneurship Monitor
GSE	Government-sponsored enterprise
GNI	Gross national income
G-SIB	Global systemically important bank
GW	Gigawatt
HCE	High Council for Employment
HICP	Harmonised index of consumer prices
HLEG	High Level Expert Group
HR	Human resources
IAIG	Internationally active insurance group
IAIS	International Association of Insurance Supervisors
IAS	International Accounting Standard
IASB	International Accounting Standards Board
ICAAP	Internal Capital Adequacy Assessment Process
ICE Endex	European Energy Derivatives Exchange
ICS	International Capital Standard
ICSD	International central securities depository
ICT	Information and communication technology
IFRS	International Financial Reporting Standard
ILAAP	Internal Liquidity Adequacy Assessment Process
IMEC	Interuniversitair Micro-Electronica Centrum
ILO	International Labour Office
IMD	Institute for Management Development
IMF	International Monetary Fund
Infrabel	Belgian railway infrastructure manager
IOSCO	International Organisation of Securities Commissions
InsurTech	Insurance technology
IRAIF	Belgian institute of accredited auditors for financial institutions
IRB	Internal ratings-based approach
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
JPM EMBI	JP Morgan Emerging Market Bond Index
JPM GBI	JP Morgan Government Bond Index
JST	Joint Supervisory Team
km	kilometer
KU Leuven	Katholieke Universiteit Leuven
LCR	Liquidity coverage ratio
LEA	Local employment agency
LFS	Labour force survey
LSI	Less significant institution
LTG	Long-term guarantee
LTV	Loan-to-value ratio

MCR	Minimum capital requirement
MDA	Maximum distributable amount
MIP	Macroeconomic imbalance procedure
MREL	Minimum requirement for own funds and eligible liabilities
MSCI	Morgan Stanley Capital International
MTO	Medium-term objective
MW	Megawatt
NACE	Nomenclature of economic activities of the European Community
NAFTA	North American Free Trade Agreement
NAI	National Accounts Institute
NBB	National Bank of Belgium
NCA	National competent authority
NCB	National central bank
NCPI	National consumer price index
NEO	National Employment Office
NIHDI	National Institute for Health and Disability Insurance
NPL	Non-performing loan
NSFR	Net stable funding ratio
NSSO	National Social Security Office
OECD	Organisation for Economic Cooperation and Development
OIS	Overnight Indexed Swap
OLO	Linear bond
OMT	Outright monetary transactions
OPEC	Organisation of Petroleum Exporting Countries
ORSA	Own Risk and Solvency Assessment
PIT	Personal income tax
PSD	Payment Services Directive
PSPP	Public sector purchase programme
QA	Quality assurance
QIS	Quantitative Impact Study
R&D	Research and development
RES	Renewable energy source
RSR	Regular Supervisory Report(ing)
RWA	Risk-weighted asset
S&P	Standard & Poor's
SBBS	Sovereign bond-backed securities
SCA	Study Committee on Ageing (formerly SGA)
SCR	Solvency capital requirement
SDG	Sustainable development goal
SGP	Stability and Growth Pact
SI	Significant institution
SITC	Standard International Trade Classification
SME	Small and medium-sized enterprise
SRB	Single Resolution Board
SRF	Single Resolution Fund
SREP	Supervisory Review and Evaluation Process

SRM	Single resolution mechanism
SSM	Single supervisory mechanism
Statbel	Belgian Statistical Office
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TIBER	Threat Intelligence-Based Ethical Red Teaming
TFP	Total factor productivity
TLAC	Total loss-absorbing capacity
TLTRO	Targeted longer-term refinancing operation
TRIM	Targeted Review of Internal Models
TWh	Terawattuur
UAntwerpen	Universiteit Antwerpen
UCLouvain	Université Catholique de Louvain
UGent	Universiteit Gent
UJS	Unemployed job-seeker
ULB	Université Libre de Bruxelles
ULiège	Université de Liège
UN	United Nations
VAT	Value added tax
VIX	Volatility Index
VDAB	Flemish public employment service
VIB	Vlaams Instituut voor Biotechnologie (Flemish biotech institute)
WDP	Warehouses De Pauw
WEF	World Economic Forum
WTO	World Trade Organisation
YCD	Yield Curve Down
YCU	Yield Curve Up

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