

4. Financial developments

| 4.1 | challenge to the financial sector | 127 |
|-----|--|-----|
| 4.2 | Low interest rates have boosted bank lending growth | 128 |
| 4.3 | Credit cycle expansion requires vigilance Box 6 – Macroprudential measures by the Bank | 134 |
| 4.4 | Household saving and investment behaviour influenced by low interest rates and uncertainty Box 7 – Investment funds are the main instruments of non-banking financial intermediation in Belgium | 140 |
| 4.5 | More sustainable business models, rather than a search for yield, should underpin bank profitability | 144 |
| 4.6 | The insurance sector stayed robust in 2019 | 155 |
| 4.7 | New fundamental challenges facing the financial sector | 161 |

4.1 An investment-conducive climate that poses a challenge to the financial sector

The low interest rate environment, which stems from fundamental savings and investment developments as much as from accommodative monetary policy, still benefits Belgian households and companies that borrow money. In 2019, they were still able to buy residential property and to finance investment at highly favourable conditions. However, the related rise in the debt ratio comes with attendant risks that, if not managed correctly, may affect the stability of the financial sector. In view of these developments and operating in its capacity as macroprudential authority and authority tasked with the supervision of financial institutions, the Bank has announced two measures, which should at least start to curb the accumulation of new credit risks in Belgian mortgage portfolios and should also make the banking sector more resilient when the financial cycle reverses.

Lower funding costs in the money markets initially conspired with the healthy economy to help banks

bolster their profitability. Lately, however, this has come under pressure as margins have narrowed between average returns on assets and the average cost of sources of funding. Persistently low interest rates have already dented insurers' solvency levels. With time, these might well start to depress returns on portfolios made up of interest-bearing assets and so erode the profitability of companies offering insurance products with a guaranteed return.

The current environment, then, poses a number of challenges to the financial sector. Additional issues include cost structures, how to price in risk factors when setting rates for products and services offered, and diversification of the sector's activities, all of which set against the backdrop of rapid digitalisation. All these concerns should help to trigger some fundamental thinking about the way banks and insurance companies operating in Belgium should adjust their business models.



4.2 Low interest rates have boosted bank lending growth

For a number of years now, the Eurosystem's monetary policy has created a situation in which Belgian households and companies have much easier access to bank finance. Measures taken since 2014 have cut the funding costs for credit institutions, with the interest they are required to pay for tapping the money markets down significantly, especially after the interest rate on the deposit facility had turned negative. Furthermore, these institutions are able to borrow at favourable rates through so-called targeted longer-term refinancing operations (TLTROs) and have found it easier to free up cash for new loans thanks to the ECB's asset purchase programme.

Lower funding costs for banks have – in a fiercely competitive industry – pushed down interest on longer-term loans to households and companies; a trend fuelled by further interest rate cuts in the money markets as 2019 progressed. For example, average rates on Belgian mortgage loans with a term of over ten years fell from 2.0% in December 2018 to 1.6% in November 2019. Interest rates on loans to companies came down by similar percentages.

Eventually, these lower bank lending rates set off a contraction in intermediation margins and banks scrambled to secure their profitability by compensating for narrower margins with higher loan volumes, specifically by easing lending criteria. And so, the past few years have seen credit growth fuelled by riskier loans, particularly in the mortgage market.

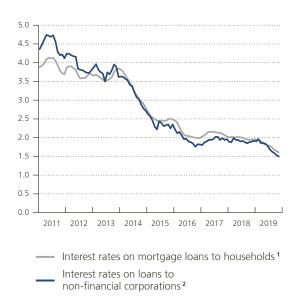
Of the total amount of new loans, the share of mortgage loans with a loan-to-value ratio (LTV) – that is, the ratio of the amount borrowed to the value of the residential property serving as collateral – above 90 % advanced from 28 % in 2014 to 37 % in 2018. Meanwhile, the share of new

loans with a maturity of more than 20 years was also up in the same period, from 31 % to 39 %, while a still significant proportion of loans had a high debt-service-to-income ratio (DSTI), which is to say that the borrowers have high monthly repayments compared with their income. That said, the data for the first six months of 2019 suggest a stabilisation and, in some cases, even a slight tightening of lending criteria.

Chart 44

Abundant savings, monetary policy and competitive pressures in the banking sector have caused interest rates on loans to plunge

(in %)

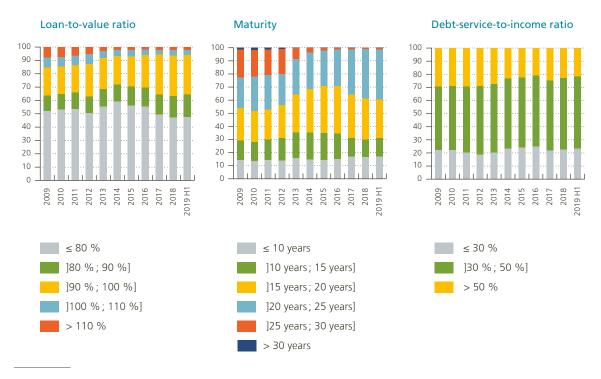


Source: NBB.

- 1 Average rates on new loans initially fixed for over ten years.
- 2 Average rates on loans ranging between € 250 000 and € 1 million, originally fixed for over ten years.

Chart 45
Share of riskier mortgage loans is growing

(breakdown of new mortgage loans by vintage year¹, in % of the total)



Source: NBB.

In the long term, this strategy might jeopardise financial stability, which is why the Bank has introduced a new macroprudential measure aimed at containing such risky loans and at nudging the market in the direction of more sustainable loan criteria (see box 6). Although some banks report having recently reviewed the way they grant loans, sticking to intentions is not always feasible for individual institutions up against competitive pressures in the sector.

With time, lending criteria for companies have also become more favourable. The bank lending survey (BLS) finds that companies have been able to secure higher loans, at longer terms and on less strict terms and conditions. This repeated easing – which also reflected fierce competition in the banking sector – would appear to have ground to a halt in the fourth quarter of 2018, which is exactly when the business cycle turned and risk perception increased.

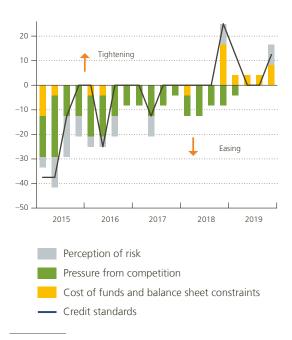
Low interest rates have not just boosted banks' lending supply, they have also fuelled credit demand from households and companies. Despite slowing growth, the economic climate remained expansionary and supportive of investment by households and companies.

¹ Including refinanced loans registered as new contracts. Such refinanced loans can artificially improve the credit standards of new mortgage loans, as a proportion of the loan has already been repaid.

Chart 46

No more easing of lending criteria for companies

(balance of banks' BLS replies, weighted net percentages1)



Sources: ECB, NBB.

Mortgage loans underlie increased household debt

Net new mortgage loans to households amounted to € 9.9 billion in the first nine months of 2019, compared with € 6.3 billion between January and September 2018. The pace of growth remained robust in the year, reaching 5.3 % by the end of November. Those new mortgage loans almost entirely explain households' growing debt, which amounted to 61.1 % of GDP at the end of September 2019 (€ 300 billion, of which € 245 billion was in property loans), compared with an average 57.9 % in the euro area, where household debt ratios fell.

In September 2019, it was announced that mortgage tax relief in Flanders was to be scrapped on 1 January 2020 and the effects partially offset by a reduction in registration fees from 7 % to 6 % – which may well have served as a temporary boost to mortgage agreements at the end of the year. As the measure was implemented at short notice, any effects in anticipation of the move can only have been felt in virtually completed projects for the purchase or construction of properties. Meanwhile, some households may have felt the impact of news from some banks that lending criteria were about to tightened up – one possible sign being the drop in average new mortgage loan amounts in the preceding twelve months, from a peak of \leqslant 132 900 in April 2019 to \leqslant 120 700 in December – as shown by Central Individual Credit Register data.

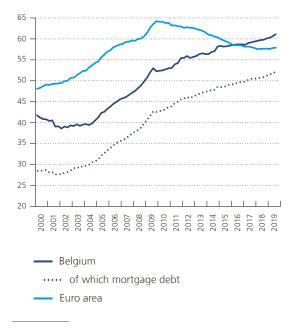
On the information divulged by banks, households' appetite for real estate as an investment (second or third homes and buy-to-let properties) partly explains the surge in the number of new mortgage loans. Activity in the property markets indeed kept rising in 2019: the number of transactions went up by nearly 5 % in the first three quarters, confirming the uptrend recorded since 2016.

Generally speaking, higher real estate demand undoubtedly led to market price rises. Over the first three quarters of 2019, residential property prices

Chart 47

Belgian households' debt ratio keeps rising

(household debt in % of GDP)

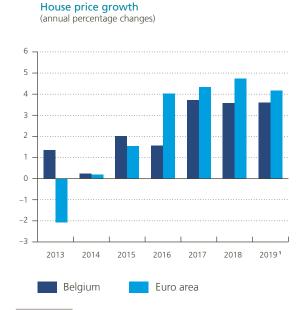


Sources: Eurostat, NBB.

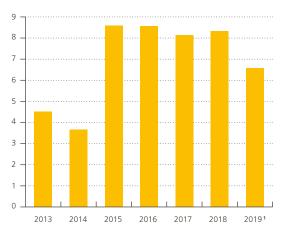
¹ Weighted net percentages comprise the difference between banks' replies that suggest a development in a certain direction and of a certain intensity, and the percentage of replies that point to a development in the opposite direction.

Chart 48

House prices continued to grow in 2019, while property market valuations edged down



Property market valuation (percentage deviation from estimated price according to the Bank's model)



Sources: ECB, NBB.

1 First three quarters of 2019.

continued to grow and recorded a 3.6 % increase. This ties in seamlessly with trends seen in the past couple of years, particularly a more rapid uptick in property prices, even if these still languish below average increases in the euro area.

The valuation of the housing market – defined as the difference between market prices and their fundamental value estimated by the Bank's model – had virtually stabilised between 2015 and 2018. In 2019, it remained positive but did inch down to 6.6% – a decline primarily attributable to sharply higher household disposable income. The fact that property prices are currently close to levels reflecting their value on the basis of the underly-

ing market fundamentals does not necessarily imply that there are no risks to

speak of. Should one of the macroeconomic variables underpinning this equilibrium value suddenly deteriorate substantially, e.g. a sudden rise in mortgage rates or possibly a negative shock to household incomes, prices might well move sharply down.

Companies' bank debts on the rise

Growth of bank lending to non-financial corporations was further boosted by the low interest rate environment as well, keeping lending pretty dynamic in 2019. In November, this growth came in at an annualised rate of 4.3%. Although still higher than the figure for the euro area as a whole (+3.4%), this pace of growth has slowed markedly relative to its May 2018 peak of 9.0%.

This lower figure reflects mergers and acquisitions carried out by a small number of companies in 2017 and 2018, which were initially financed through

medium-term bank lending. However, these loans were repaid within a few months of their transac-

tions and replaced by long-term bonds on the liabilities side of these companies' balance sheets. Through base effects, these repayments put a brake on year-on-year growth of bank lending in 2019, particularly from April onwards.

Property prices rose by

over 3% in 2019



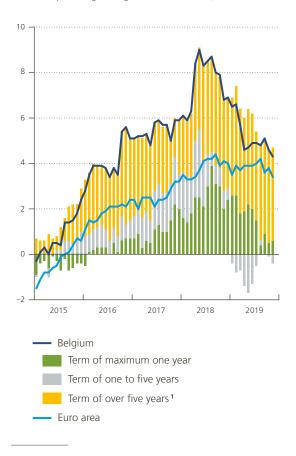
Growth in lending to companies was not merely moderated by the impact of major but infrequent mergers and/or acquisitions, but to some extent also by slowing economic activity. The bank lending survey (BLS) found that the weaker business cycle had a strong influence on credit demand via working capital requirements, as noted since the beginning of 2019, with short-term borrowings (up to one year) making a smaller contribution to total credit growth. Long-term loans, with terms over five years, kept up their high levels of growth and their contribution to total credit growth was similar to that seen in 2018.

Just like last year, bank loans were Belgian companies' main source of external funding in 2019. According to the financial accounts data, companies agreed a net total of € 6.3 billion in loans from Belgian banks in the first nine months of the year and borrowed another € 2.6 billion from foreign banks, taking the total outstanding bank debt to €157.3 billion, i.e. 33.4% of GDP. By contrast, they issued fewer debt securities than in the previous year: € 1.7 billion in the first three guarters of 2019 compared with € 4.1 billion in the corresponding period of 2018. The fact that the outstanding amount in debt securities issued by Belgian companies rose from 13.9 % of GDP at the end of 2018 to 14.6 % in September 2019 primarily reflected positive valuation effects arising from falling yields in the bond markets. However, intra-group liabilities, the amount of which is structurally higher in Belgium than in most other euro

Chart 49

While still supported by long-term lending, loan growth to companies slowed

(growth of lending by resident banks to non-financial corporations, annualised percentage changes and contributions)



Sources: ECB, NBB.

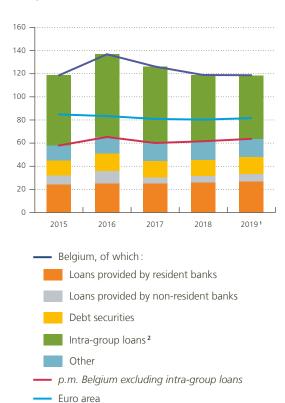
1 Including securitised or otherwise transferred loans.

area countries, recorded a slight fall in 2019 on the back of loan repayments to non-resident corporations. Not including intra-group loans and liabilities between resident corporations, the net outstanding debt of Belgian companies was still up on the end of 2018, rising from 61.6% of GDP to 63.7% in the third guarter of 2019.

Chart 50

Higher company debt

(consolidated debt of non-financial corporations at year-end, in $\,\%\,$ of GDP)



Sources: Eurostat, NBB.

¹ Data on situation as at 30 September.

² Intra-group loans are defined as loans provided by captive money lenders and foreign non-financial corporations; debts incurred by resident non-financial corporations from other resident nonfinancial corporations are not taken into account.

4.3 Credit cycle expansion requires vigilance

The developments as outlined above suggest a clearly upward-moving credit cycle. Total loans granted to companies and households by Belgian banks grew by 4.9% between November 2018 and November 2019 – a percentage not just well ahead of the euro area average (+3.5%) but also not reflective of growth in economic activity. This divergence in developments is illustrated by a rising difference between the credit/percentage of GDP ratio and the trend in this ratio - the widening spread is caused mainly by the surge in lending to companies. The readings on this reference indicator have been among the factors prompting the Bank to activate the countercyclical capital buffer (CCyB). The details of and arguments for this measure are the subject of box 6.

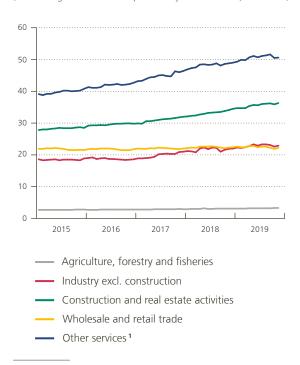
Bank lending growth was not fuelled only by low interest rates and easier lending criteria; to an extent, its deviation from the real economy is also down to a sector effect. Although the slowdown in industrial activity by the end of 2018 – a key cause of the loss of pace in general economic growth - effectively translated into relative stagnation of bank lending to industrial corporations in 2019, its impact on the rise in total outstanding loans was subdued. The reason is that the share of industrial corporations in outstanding loans is fairly small. These enterprises are typically larger than companies in other sectors and some of them are affiliated to Belgian or multinational groups, giving them easier access to alternative sources of funding such as bond issues or intra-group loans. By contrast, services sectors – and especially business services, construction and real estate activities - tend to be made up of smaller, stand-alone companies that rely more on bank finance. And it is in these sectors that bank lending continued to grow steadily in 2019.

Although companies in the real estate sector and construction are less strongly exposed to external

shocks, the volume of the loans taken out in this sector does imply cyclical risks to the financial system. In the event of a reversal in the fortunes of the real estate markets, for instance, such risks might spark a rise in non-performing loans (NPLs). Moreover, the risks in this particular market have risen in the past few years, particularly in the housebuilding sub-sector, where developments are closely linked to mortgage loans entered into by households.

Chart 51 More dynamic bank loan trends in services, real estate and construction

(outstanding amount of loans provided by resident banks, in € billion)



Source: NBB (Central Corporate Credit Register).

1 Excluding financial activities and insurance.

Macroprudential measures by the Bank

The Bank took two new supplementary macroprudential measures as 2019 progressed, both intended to alleviate concerns over the highly dynamic lending that had been going on for several years. The first of these, the countercyclical capital buffer (CCyB), is primarily aimed at guaranteeing the continuity of lending, especially in the event of a cyclical downturn. The second measure, which focuses on supervisory expectations for Belgian mortgage portfolios, aims to keep in check vulnerabilities that may arise when new mortgage loans are granted. Both measures are meant to supplement the Bank's macroprudential toolkit, which already contained two measures that helped build capital buffers and that were covered in great detail in its 2019 Macroprudential Report:





one measure specifically targets mortgage portfolios with capital requirements calculated on the basis of internal models; the other covers the potentially high cost that would attend the failure of systemically important institutions. As is the case with the two measures already in place, CCyB equity criteria do not create fresh capital requirements but aim to dedicate part of any voluntarily held capital buffers in excess of the legal requirements to coverage of specific systemic risks.

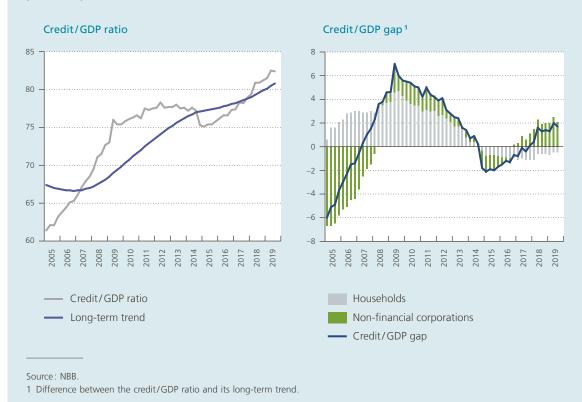
Countercyclical capital buffer (CCyB)

In view of the accelerating credit cycle in the Belgian non-financial private sector, at the end of June 2019, the Bank announced that the country's financial institutions will have to constitute preventive countercyclical capital buffers. In so doing, the Bank is looking to boost the resilience of the Belgian banking sector by enabling it to absorb credit losses in the event, for instance, of a recession and so ensure the continuity of lending to the Belgian economy.

In 2019, lending to Belgian households and non-financial institutions grew apace and faster than GDP percentage growth. The credit/GDP gap, which measures the deviation between the credit/GDP ratio and its long-term trend, and which, under Belgian law, is a key reference indicator for the credit

Lending to Belgium's non-financial private sector

(in % of GDP)



cycle, therefore widened in the first half of 2019 before narrowing slightly to 1.7% in the third quarter. According to the Bank's projections, this gap will once again widen to around 2% over a one-year horizon, justifying the activation of the CCyB according to the guidelines of the European Systemic Risk Board (ESRB), the body tasked with coordinating macroprudential policy in the EU.

The CCyB rate for exposures to the Belgian non-financial private sector has been set at 0.5 %. This should result in the formation of an additional capital buffer of around € 1 billion for the entire Belgian banking sector. Given Belgian banks' current solvency position and this relatively minor CCyB percentage, this is unlikely to disrupt either the pricing of loans or their availability to the Belgian economy. The measure will only ensure that this proportion of own funds is earmarked in banks' balance sheets to absorb any future loan losses in the Belgian market.

To give the relevant institutions ample time to prepare for this additional requirement, the new measure becomes effective a year after the announcement of its activation, i.e. on 1 July 2020.

The Bank takes due account of current economic uncertainties: it is prepared to ease up on or cancel the new measure if, during or after the phase-in period, a particularly negative and persistent shock occurs, in order to prevent it from causing any procyclical effects, i.e. capital requirements accelerating a potential credit contraction.

Supervisory expectations on mortgage loans

The past few years have seen a massive rise in mortgage loan issuance on the back of looser conditions, and the Bank finds that the housing market has, once again, become more vulnerable. In addition to existing vulnerabilities in the outstanding portfolio – e.g. low risk weighting in calculating capital requirements – newly granted mortgage loans are marked by a large and growing proportion of risky loans.

The supervisory expectations came into force on 1 January 2020, putting in place thresholds for a range of indicators which will serve as benchmarks for mortgage loan issuance. More specifically, banks and insurance companies will be urged to tread a lot more cautiously when agreeing loans at very high ratios of the mortgage amount and the value of the underlying property, i.e. the loan-to-value ratio (LTV). The Bank has also set out its expectations on particular risk combinations – also called pockets of risk – such as high LTVs plus a high total debt ratio (debt-to-income – DTI) or monthly burden of loan repayments (debt-service-to-income – DSTI).

This new initiative is meant to supplement the existing macroprudential framework. A previous measure targeting the outstanding stock of mortgage loans, introduced in 2013 and amended in 2018, prescribed an increase in mandatory capital requirements if these are calculated on the basis of internal models. After all, the Bank had established that the capital buffers – the levels of which had been determined based on these models – were inadequate to absorb the potential losses banks stood to incur in the event of worsening market conditions. While this previous measure primarily aimed to bolster banks' resilience, the new initiative aims to improve the quality of newly granted loans, with the Bank making sure that average portfolio quality remains adequate. These actions, then, are both necessary and complementary – a point that was also made by



the ESRB when recommending that the Belgian authorities activate measures with an immediate impact on the profile of new loans. On 23 September 2019, the ESRB had issued warnings or recommendations – the latter being the more binding – to the competent authorities of a number of countries, including Belgium, on medium-term residential real estate vulnerabilities.

To keep the mortgage market open and accessible to solvent borrowers, the Bank provides enough scope for the relevant institutions to factor in a borrower's full profile and any mitigating factors at the point the loan is granted. And so, the Bank has set tolerance margins, allowing a proportion of newly granted loans to breach the reference thresholds. It outlines, for instance, that 35 % of loans granted to first-time buyers, who typically have little in the way of their own resources, can have LTV ratios higher than the 90 % reference level. Furthermore, the Bank will apply the "comply or explain" principle, allowing lenders to deviate from supervisory expectations provided they can prove they observe due care and caution when granting loans. These mechanisms offer some flexibility to lenders and can help prevent unreasonable shocks from hitting the Belgian mortgage market.

The Bank's supervisory expectations for newly granted mortgage loans in Belgium

| | Type of loan | Threshold | Tolerance margin (production allowed above threshold) |
|----------------------------|---------------------|-------------------------------|---|
| LTV limits | Buy-to-let loan | 80 % | 10 % (with 0 % > 90 %) |
| | Owner-occupied loan | 90 % | First-time buyers: 35 % (of which max. 5 % > 100 %) Other: 20 % (with 0 % > 100 %) |
| Limits for pockets of risk | All loans | LTV > 90 % and DSTI > 50 % | 5 % |
| | All loans | LTV > 90 % and DTI > 9 | 5 % |

Source: NBB.

To date, higher household debt levels have not sparked a concomitant rise in the default rate on loans, either mortgages or consumer loans. So, the share of loans in arrears in outstanding mortgage loans has remained below the threshold of 1%, while there was actually a slight decline in the average overdue amount in loan arrangements in arrears, from \leqslant 41 400 at the end of 2018 to \leqslant 38 400 a year later. As for consumer loans, the default rate

on credit lines in 2019 averaged 5.1% (as it had in 2018), while that on loans and instalment purchases averaged 8.5%, compared with 8.9% a year earlier.

However, other indicators would appear to be pointing to a tentative deterioration in portfolio mortgage loans. For instance, the default rate for mortgage loans issued in 2018 would appear to be inching up.

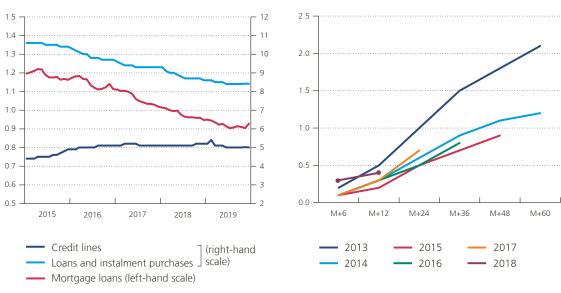
Chart 52

Default rates still contained

(in % of the number of outstanding loans)



Arrears on mortgage loans by year of loan issue²



Source: NBB (Central Individual Credit Register).

¹ Default is deemed to be when a 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 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.

4.4 Household saving and investment behaviour influenced by low interest rates and uncertainty

Most households opted for certainty

and liquidity in their investment

In 2019, against a backdrop of increased uncertainty and losses on their riskier assets in the previous year, households predominantly put their financial savings into accounts and deposits, once

again opting for safety and liquidity. These instruments still offer zero or slightly positive inter-

est rates plus a deposit guarantee, while low or even negative returns on other, riskier and by nature more volatile instruments continued to offer few attractions. The paucity of profitable alternatives consequently also influenced household saving behaviour. Out of a total \leq 14 billion in new financial investment in the first nine months of 2019, savings and sight deposits mopped up \leq 9.4 and \leq 4.4 respectively, while investment fund units – both Belgian and foreign – and

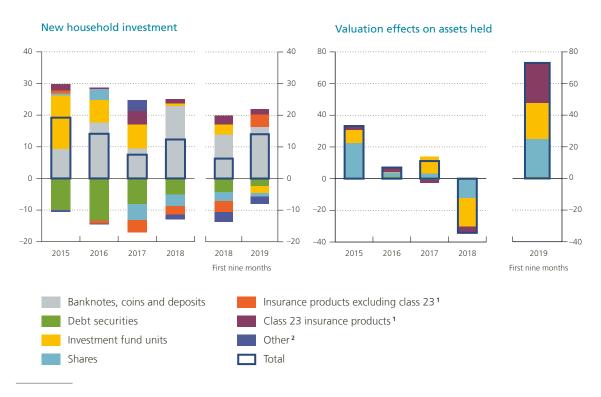
equity portfolios shrank by \in 2.3 and \in 1 billion. Debt instruments (mostly bonds) did not appeal to house-

holds either (-€ 2.3 billion), whereas class 23 insurance products – i.e. products not offering a guaranteed return – attracted a higher but still small proportion of available savings, as in 2018. Like shares and investment fund units owned by households, these products enjoyed positive valuation effects in 2019.



Chart 53

Mostly risk-free new investment against backdrop of growing bearishness (in € billion)



Source: NBB.

Household confidence was affected by a variety of factors in 2019, including concerns over Brexit and a slump in international trade. Consumer confidence surveys suggest that bearishness over the general economic situation eroded consumer sentiment in the first six months of the year, which goes some way towards explaining households' savings behaviour and distinct preference for very liquid instruments. Their perception of the economy was also influenced by their appraisal of their personal financial situation, which remained fairly subdued in the first few months of the year. All these factors generally encouraged precautionary savings, which by their very nature tend to be rather more liquid.

Of course, households' decisions on what to do with their savings impact the money flowing to various institutions established in Belgium. Volumes of cash managed by the banking sector primarily grew in the shape of deposit volumes in 2018 and 2019. This affects the profitability of the sector in as much as negative interest rates in the euro area money markets penalise excess liquidity. In addition, investment funds have been facing a loss in popularity and have recently been forced to sell off a proportion of their assets: net sales amounted to € 1.9 billion in the first three quarters of 2019. Following the turmoil in the financial markets at the end of 2018, rising equity prices made for positive valuation effects in the same nine-month period, pushing up net asset values.

Although the outflows from investment funds remained subdued in the face of uncertainty over financial asset prices, there may be concerns about the potential consequences of waves of withdrawals.

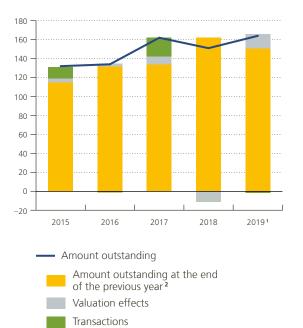
¹ These items comprise the net claims of households on technical insurance reserves, on pension funds and on standardised guarantee schemes.

² The left side of the chart shows this item comprising, in so far as they have been recorded, trade credit as well as miscellaneous assets of general government and financial institutions. On the right side, the item also shows banknotes, coins and deposits, as well as insurance products not ranked under class 23.

Chart 54

Investment funds reduced their assets, but net asset values rose on the back of higher stock market prices

(outstanding financial assets at the end of the year, consolidated data in $\in \mathsf{billion})$



After all, investment funds might not be able to immediately redeem their investors' units in the event of a deep financial crisis, as some of their assets are illiquid. This type of financial intermediation may imply systemic risks, which will need to be monitored and mitigated. For this reason, the NBB and FSMA have joined forces since 2017 to put together an annual overview of activities carried out in Belgium by asset managers and non-banking financial intermediaries, as well as their attendant risks. A summary of this work is given in box 7.

Source: NBB.

- 1 Data for the situation at 30 September.
- 2 Includes other changes in volume since the previous year.

BOX 7

Investment funds are the main instruments of non-banking financial intermediation in Belgium

Non-banking financial intermediation – formerly known as shadow banking – comprises activities similar to credit intermediation, but which are carried out by entities that are not part of the traditional banking system. Using methodology developed by the Financial Stability Board (FSB), the definition also includes most collective investment vehicles, securitised loans no longer on their originator's balance sheet and a range of credit and intermediation activities that rely on short-term sources of funding.



The methodology was first applied in a joint report by NBB and FSMA, published in 2017 for the first time and twice updated since¹. The most recent estimates put non-banking financial intermediation in Belgium – as measured by the assets held by the relevant entities – at a total \leq 142 billion by the end of 2018. The vast majority of these assets (\leq 129 billion, to be more precise) are tied up in investment funds, with a much smaller proportion, estimated at \leq 7 billion, in leasing contracts, factoring and consumer loans. Securitised assets constitute the third component, at \leq 6 billion. By way of comparison, total financial assets on the balance sheets of traditional banking institutions amounted to \leq 964 billion.

Non-banking intermediation is particularly important as a facilitator of market finance, enabling companies to attract more financial resources through equity issues, bond loans or other types of finance. By diversifying assets, investment funds in particular offer their investors an opportunity to widen their range of income opportunities while keeping risks low. Moreover, instruments for market finance can help make capital more internationally mobile by enabling economic actors to launch investment projects through tapping into overseas budget surpluses. This is one of the reasons why the EU is promoting these instruments as part of its Capital Markets Union project.

As in traditional banking, these alternative means of finance can come with systemic risks, which may arise from debt accruals or maturity and liquidity transformation. The NBB/FSMA analysis identifies liquidity risks inherent to investment funds as the key concern for prudential supervision. After all, investment funds, whether held directly or indirectly – through units in other Belgian or foreign funds – comprise equities or debt instruments which cannot always be easily sold on in an organised market, while investment units are typically redeemable at all times.

In Belgium, it is the FSMA that monitors these risks. To limit their scope, the FSMA advises fund managers to manage liquidity risk carefully by using a range of liquidity management instruments should there be any sudden large-scale inflows or redemptions. More specifically, these concern swing pricing, anti-dilution levies – imposing additional charges on investors in the event they buy or sell on large amounts in investment units – or redemption gates, which enable managers to only partially execute investors' redemption orders. These three instruments were made available to public undertakings for collective investment with a variable number of shares/units by way of a Royal Decree published in October 2018.

1 Both the original report and its updates are available on the NBB website (www.nbb.be).

4.5 More sustainable business models, rather than a search for yield, should underpin bank profitability

Trends in households' and companies' investment and savings behaviour were reflected in the Belgian banking sector's balance sheet. In combination with banks' greater preference for granting loans – which often still generate more return than a raft of other asset classes, such as bonds – they have caused a significant increase in the share of loans and deposits in the banks' balance sheets, which are also influenced by banks' activities abroad.

Despite the persistently low interest rates and greater macroeconomic uncertainties, the Belgian banking sector has remained in a fairly strong position to date. Indicators for profitability, asset quality, liquidity and solvency show the sector to be well-placed to take on today's challenges. After all, the traditional earnings model is increasingly under threat from persistently low interest rates, but also from growing digitalisation in the financial sector. Profitability and viability are liable to take a turn for the worse for those banks that are not taking pro-active management action and do not come up with sustainable strategies to face down these challenges.

Major change in balance sheet composition

Although the sector has enjoyed a stable total balance sheet at around € 1 000 billion for a number of years now (end-September 2019: € 1 080 billion, or 226 % of GDP), there has been a significant change in the composition of assets and liabilities. This was due not only to changes in household and company investment and savings behaviour, but also to strategies on the part of banks to adapt to the persistent low interest rate environment.

On the liabilities side, which records the financial resources that banks attract to carry out their activities, the share of household deposits advanced briskly (from 32 % at the end of 2014 to 38 % at the end of September 2019). Meanwhile, interbank funding and funding by other financial institutions came down slightly in the year (from 21% to 18%), as did funding through issuance of debt instruments (from 11% to 9%). The assets side. which shows what use the financial resources are put to, recorded a relatively greater share of loans granted to businesses and households (52 % compared with 45 % five years earlier), had a relatively smaller bond portfolio (12 % compared with 20 %) and saw a greater proportion of cash deposited with central banks (9 % against 2 %).

In the first nine months of 2019, private sector deposits rose by € 29 billion to € 557 billion. These were mostly Belgian deposits (75%) and are not just put towards domestic but also towards foreign lending, mainly through local subsidiaries of Belgian banks. In addition, a number of foreign banks collect rather large amounts of deposits in this country and use them to finance activities in their own home markets outside Belgium. Belgian banks, in their turn, received € 110 billion in deposits from foreign households and businesses.

Interbank funding and funding by other financial institutions (central banks excepted) amounted to € 195 billion by the end of September 2019. Central bank funding, which chiefly comprises amounts borrowed under the Eurosystem's targeted longer-term refinancing operations programme (TLTROs), stood at € 28 billion (3 % of total assets). This (cheap) funding will largely mature in 2020 and 2021 and is then expected to be (partly) rolled over into new

Chart 55

Loans and deposits claim a bigger chunk of balance sheets

(balance sheet structure of Belgian credit institutions on a consolidated basis¹, end-of-period data, 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" 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". "Other liabilities" are primarily short positions, liabilities other than deposits and debt securities, provisions and liabilities for defined benefit obligations. Liabilities linked to transferred assets no longer form part of the "other liabilities", but are included under different items on the liabilities side.

uptakes in the third TLTRO programme announced in 2019, or into other sources of funding such as debt instruments. At the end of September 2019, Belgium's banks had secured € 98 billion of their funding through the issue of debt instruments.

Over the first three quarters of 2019, lending to the private sector was up \in 21 billion to \in 564 billion – here, too, mostly in the Belgian market (65%). The increase reflects both growing loan demand from Belgian households and businesses, and a preference by banks to raise credit volumes. Lending to the foreign private sector – largely furnished by local subsidiaries – amounted to \in 168 billion, an amount that had grown in the course of 2019 as a result of foreign takeovers by Belgian banks.

Banks do not just grant loans, they also invest in bonds. However, the past few years have seen banks sharply cut their investment in (euro area) government paper, in part because of the Eurosystem's asset purchase programmes. They sold off a proportion of their debt instruments to lock in gains, while also not rolling over all the bonds that matured, as these are increasingly trading at negative rates. As a result, the banks' bond portfolio contracted from \leq 195 billion at the end of 2014 (of which \leq 116 billion was in euro area government bonds) to \leq 129 billion in September 2019 (\leq 64 billion of this in euro area government bonds).

Despite more substantial credit volumes, the country's banks are still looking at a liquidity surplus

thanks to plentiful funding – mostly in (savings) deposits and central bank funding. Against this backdrop, the reduction of the bond portfolio came hand in hand with a surge in cash deposited with central banks, \in 70 billion of which was with central banks in the Eurosystem and \in 31 billion – by way of local subsidiaries – with other central banks, e.g. in the Czech Republic, Turkey and the United Kingdom).

The Belgian banking sector has continued to perform well, but challenges are building up

In the first nine months of 2019, the return on equity in the Belgian banking sector averaged 8.7%, compared with 8.6% in the corresponding period a year earlier. Average return on assets was stable at 0.6%. By way of comparison, the weighted average returns

on equity and assets of euro area banks were a lot lower, at 6.4 % and 0.4 % respectively, in June 2019.

These profits were generated in a somewhat different way in the first nine months of the year than in 2018. First of all, fee and commission income inched down on the corresponding period in 2018 (from \leqslant 4.3 billion to \leqslant 4.1 billion) – a fall that was entirely due to lower income from asset management. With uncertainties and risks in the macroeconomic environment percolating through to the financial markets, banks are finding it difficult to diversify their income sources by selling funds and investment products. As a percentage of total operating income, then, fee and commission income remained stable at around 25 %.

In addition, just like in 2018, a fresh if limited rise was seen in costs related to loan losses from \leq 0.2 billion in the first nine months of 2018 to \leq 0.7 billion in the corresponding period of 2019. The loan loss



Table 10
Income statement of Belgian credit institutions

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

| | | | | | First nine months | | In % of operating income |
|--|-------|-------|-------|-------|-------------------|-------|--------------------------|
| | 2015 | 2016 | 2017 | 2018 | 2018 | 2019 | 2019 |
| Net interest income | 14.9 | 14.8 | 14.1 | 14.4 | 10.8 | 10.8 | 63.4 |
| Non-interest income | 7.1 | 7.6 | 8.9 | 8.3 | 6.2 | 6.3 | 36.6 |
| Net fee and commission income ¹ | 5.9 | 5.6 | 5.6 | 5.6 | 4.3 | 4.1 | 24.1 |
| Other income ² | 1.2 | 2.0 | 3.3 | 2.6 | 2.0 | 2.1 | |
| Operating income | 22.0 | 22.4 | 23.0 | 22.7 | 17.0 | 17.1 | 100.0 |
| Operating expenses | -12.9 | -13.1 | -13.4 | -13.9 | -10.6 | -10.4 | 60.7 ³ |
| Gross operating result | 9.1 | 9.3 | 9.6 | 8.8 | 6.4 | 6.7 | - |
| Impairments and provisions | -1.3 | -1.8 | -0.7 | -0.8 | -0.2 | -0.7 | - |
| Other components of the income statement | | -1.8 | -3.0 | -2.3 | -1.7 | -1.4 | - |
| Net profit or loss | 6.1 | 5.7 | 5.9 | 5.6 | 4.5 | 4.6 | - |

Source: NBB.

- 1 Including commissions paid to agents.
- 2 This item includes the net realised gains (losses) on financial instruments and other non-interest income.
- 3 Cost/income ratio of the Belgian banking sector.

ratio – i.e. the relationship between the new costs recognised for loan losses and total loan volumes – was up from 6 basis points in 2017 to 12 basis points. This compares with an earlier period in which banks had to recognise fewer and fewer costs for loan losses (from € 3 billion in 2013 to € 0.7 billion in 2017), as favourable economic circumstances kept pushing down the share of non-performing loans in bank balance sheets: between 2013 and 2017, this share fell to 2.7 % from 4.3 %. To a large extent, the decline was due to a fall in foreign households' non-performing loans (including in Ireland). In fact, the effect was even more marked in the euro area countries that were hardest hit by the crisis; for the euro area as a whole, the ratio came down to 4.5 % from around 8% in the same period. In 2019, the Belgian ratio stabilised at around 2.1%, which is still well below the average for the euro area (3.8 % in June 2019).

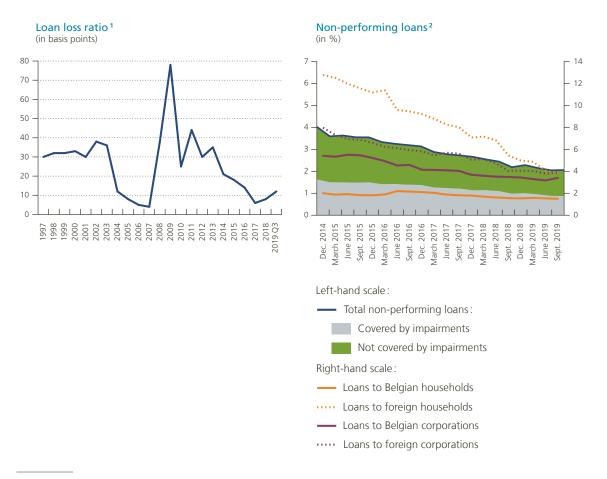
However, higher costs for loan losses and reduced income from the sale of funds and investment products were more than offset by the fall in operating expenses and tax paid. This former item, which includes staff and other general expenses, was down for the first time since 2013, from € 10.6 billion in

the first nine months of 2018 to \leq 10.4 billion in the corresponding period of 2019. This suggests that the past years' various restructuring plans are gradually beginning to bear fruit.

Net interest income – still the main source of income – stabilised in the first nine months of the year at € 10.8 billion. This may seem surprising in the current interest rate climate, but reflects the various strategies banks have been pursuing in the past couple of years to cushion the growing negative impact of the low interest rate environment, for instance by raising credit volumes. It is worth recalling, however, that some of these strategies could have major consequences for financial stability, all the more so if the risks to the macroeconomic situation actually materialise.

All that said, the Belgian banking sector currently has sufficient capital and liquidity buffers to hold out against negative developments for a while. At the end of September 2019, the common equity Tier 1 ratio (CET 1) averaged 15.1%, which is slightly higher than the euro area average (14.8% in June 2019) and well ahead of average capital requirements in the

Chart 56
Loan loss ratio rose slightly, but remained low, while the share of non-performing loans was stable (consolidated data)



Source: NBB

sector. This capital requirement, which is made up of a range of buffers, such as the minimum capital buffer (Pillar 1), the bank-specific capital buffer (Pillar 2) and various systemic buffers – such as the capital conservation buffer and the buffer for other systemically important banks – amounted to an average 11 % for the country's banks by the end of September 2019.

The sector's liquidity indicators also remain favourable. The average liquidity coverage ratio (LCR) came to 136%, well ahead of the requisite 100% indicating that a bank – according to simulations based on certain assumptions – has the wherewithal in terms

of high-quality liquid assets to weather a total net outflow of resources for 30 days at a time of crisis. The net stable funding ratio (NSFR), which indicates whether a bank has sufficient long-term funding to finance its illiquid assets, stood at around 115% according to preliminary (and conservative) calculations, exceeding the 100% that will be required when a binding ratio is imposed. At 95%, the loan-to-deposit ratio remains below 100%, meaning that the sector has ample deposits to fund its loans and does not need any other (more volatile) sources of funding. That said, this ratio did deteriorate somewhat in the last quarters observed.

¹ The loan loss ratio shows the relationship between new impairments – i.e. new costs recognised for loan losses – and total loan volumes.

² The share of non-performing loans is the percentage of loans that may not be repaid due to their borrower getting into financial trouble or which are already in arrears.

Table 11 Belgium's banking sector has adequate capital buffers

(breakdown of Tier 1 capital and risk-weighted assets, end-of-period data, on a consolidated basis; in € hillion unless otherwise stated)

| | 2015 | 2016 | 2017 | 2018 | Sept. 2019 |
|--|-------|-------|-------|-------|------------|
| Tier 1 capital | 55.1 | 60.0 | 63.0 | 63.0 | 63.2 |
| of which: | | | | | |
| Common equity Tier 1 | 53.3 | 58.1 | 60.4 | 59.7 | 58.9 |
| Risk-weighted assets | 345.4 | 369.5 | 373.1 | 382.5 | 390.7 |
| of which: | | | | | |
| Credit risk | 282.8 | 308.1 | 315.3 | 315.9 | 323.3 |
| Market risk | 9.5 | 6.1 | 7.3 | 7.2 | 6.8 |
| Operational risk | 36.0 | 38.7 | 36.7 | 38.6 | 38.5 |
| CVA | 6.9 | 5.5 | 4.3 | 4.5 | 4.6 |
| Other | 10.3 | 11.0 | 9.5 | 16.4 | 17.4 |
| of which: Additional stricter prudential requirements based on Article 458 | 8.5 | 8.8 | 9.2 | 16.1 | 16.7 |
| Tier 1 ratio (in %) | 16.0 | 16.2 | 16.9 | 16.5 | 16.2 |
| Common equity Tier 1 ratio¹ (in %) | 15.4 | 15.7 | 16.2 | 15.6 | 15.1 |
| Leverage ratio (in %) | 4.8 | 5.5 | 5.9 | 5.9 | 5.5 |

Source: NBB.

Strategies to keep up net interest income - are they sustainable?

Initially, the low interest rate environment actually benefited Belgian banks' net interest income, which primarily derives from the interest rate difference between long-term loans and investment on the assets side and short-term deposits on the liabilities side. Interest rate falls in the Eurosystem directly affected interest paid on sight and savings deposits first and

foremost, pushing down Belgian banks' funding costs rapidly. Meanwhile, interest income on loans and investments stayed

higher, as their rates had been locked in for longer terms. The rate differential or net interest margin between the two just grew and grew. Moreover, thanks to the low interest rate environment and supportive economic conditions created by monetary policy, banks were able to up their credit volumes and so built a much wider base from which to garner interest income. In fact, the steeper net interest margin and

increased amount in loans ratcheted up the Belgian banking sector's net interest income by € 1.5 billion to € 14.8 billion between 2013 and 2016.

With persistently low interest rates, however, the negative effects gain the upper hand. For one thing, it becomes impossible to cut interest rates on a large proportion of the deposits - more specifically regulated savings deposits - as the government imposes a statutory minimum interest rate of 11 basis points

> (of which 1 basis point is the base rate and 10 basis points are fidelity premium). Given the importance of savings deposits as a

source of funding for the Belgian banking sector, it is essential that their remuneration continues to support the stable nature of this type of funding in order to ensure the stability of the financial system. For some other types of deposits, particularly those of other banks or financial institutions, interest rates may nevertheless fall further and, in some cases, banks are already charging negative interest rates.

Margins eroded further by persistent

low interest rate environment

¹ Calculated according to Basel III transitional provisions.

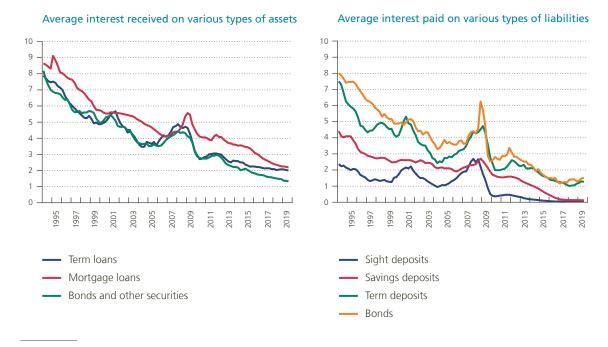
It cannot be ruled out that – although there are precious few real indications of this as yet – banks will tap more funding sources from the wholesale market in order to be able to pass on the ongoing fall in interest rates on the assets side to the liabilities side, and so keep up their margins. Nevertheless, these sources of funding are typically much more volatile than private sector savings, and so also require the banks to keep more liquid assets on their balance sheets for use when such funding needs to be repaid. Retaining liquid assets is becoming ever more expensive, however, as these increasingly bear negative interest rates. Thus, banks' structural liquidity position could come under pressure on both the assets and liabilities side.

Meanwhile, repricing of assets continues apace. Declining interest rates in the financial markets are combining with fiercer competition between banks to push down rates on new loans. Customers in their turn are taking advantage of lower interest rates to refinance mortgages and other loans, which is squeezing

average rates for total loans in the balance sheet even faster (from 3.6% at the end of 2013 to 2.2% in September 2019). In addition, increasing volumes of still relatively high-yielding investments – in bonds, for example – are maturing. Non-consolidated data on the bond portfolios of the six largest Belgian banks show that almost 50% of bonds will mature in the next three years. These bonds, currently with a coupon averaging 3.2%, risk being replaced with investments yielding lower, or even negative, rates. With more and more bond positions not being renewed in the past few years and the freed-up cash - if not rolled over into loans - invested in central bank deposits, an even larger proportion of assets might suddenly be repriced. Banks are currently paying 50 basis points for central bank deposits in the Eurosystem, although a proportion of these liquidity reserves has been exempt from negative rates since the end of October 2019. During the reserve maintenance period from the end of October to mid-December 2019, € 39 billion of the total € 61 billion in liquidity surpluses deposited with the Bank were effectively exempt.

Chart 57
Repricing of assets continues, while interest rates paid on a large proportion of funding sources cannot go any lower

(average interest rates on the various outstanding assets and liabilities of Belgium's credit institutions¹, non-consolidated data, in %)

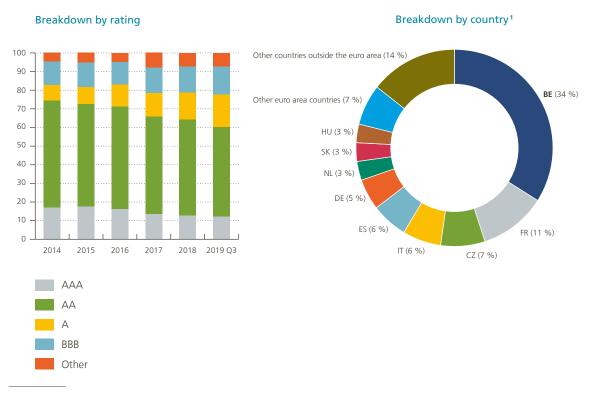


Source: NBB.

¹ These rates are calculated as the ratio of the cumulative flows of interest paid and received over 12 months to the average outstanding volume of the corresponding assets or liabilities during the period under review.

Chart 58

Government bond portfolio contains a larger proportion of lower-rated instruments than previously (composition of Belgian banking sector's government bond portfolio, consolidated data, in % of the total)



displaying search for yield

Source: NBB.

1 Figures for end of September 2019.

To lock in higher returns on their assets, banks might be inclined to invest more in (riskier) lower-quality assets with longer maturities. And indeed, the Belgian banking sector does show signs of such a search for yield. For example, increased numbers of mortgage loans are being agreed with longer maturities and/or higher

LTV ratios, as shown in chart 45 in 4.2. An analysis of movements in the

bond portfolios of this country's six biggest banks finds that newly purchased debt instruments are geographically more diversified than they used to be and that these banks hold relatively larger numbers of bonds from countries with lower ratings. The share of Belgian government bonds in the overall portfolio declined further to 34% (compared with 45% in 2014); the share of high-rated bonds (minimum AA) dropped to 61% (compared with 75% in 2014).

sed numbers whereas interest income from with longer continued to fall – despite big hear Belgian banking sector

In the recent past, Belgian banks once again granted more new loans to create an even broader base for their interest income. For loans to businesses, this effectively caused a rise in net interest income, whereas interest income from loans to households continued to fall – despite bigger volumes – due to

heavy pressures on margins on new loans and refinancing of existing loans. Incidentally, the

share of net interest income from foreign lending has also grown, reflecting Belgian banks' presence in foreign markets – in some cases outside the Eurosystem, where interest margins can be more favourable at times. Besides, any surplus liquidity not ending up in loans can be deposited with the local central bank at positive interest rates. This geographical diversification does imply other risks, though, against which banks must protect themselves adequately.

It is far from certain that the current growth in credit volumes is sustainable, especially in view of the current uncertainties and risks in the macroeconomic environment. In fact, credit growth over the past few years coincided with fiercer competition between banks in the credit markets, putting pressure on lending criteria (see 4.2). Banks' loan losses might well rise again if economic growth fails to pick back up or if some macroeconomic risks actually materialise – although monetary policy is trying to prevent just such a scenario.

Lastly, net interest income was also supported by the clear fall in (net) interest costs for derivatives in the past two years. Although this may be related to developments in the financial markets, it may also point to a change in the degree to which and way in which banks are hedging the interest rate risk they incur by issuing long-term loans that they finance with short-term deposits. The fact that loans and deposits are becoming increasingly important in the balance sheet actually calls for more cover. It is essential that banks looking at a large or widening duration gap continue to adequately hedge against interest rate risks.

A search for yield can help banks to temporarily ward off the pressure on their profitability, but some of these strategies expose them to bigger

credit liquidity and interest rate risks in the longer term, and these risks could materialise in the event of an economic

shock. In the interest of financial stability, it is therefore advisable for banks to develop sustainable strategies to support their profitability.

Pressures on profitability also due to structural factors in banking sector itself

Aside from external cyclical and structural factors – e.g. growing macroeconomic uncertainties, the low interest rate environment and Belgian households' preference for savings deposits, the Belgian banking sector itself also displays a few structural features that could affect profitability. Those features can be both country- and bank-specific.

For a start, there are major differences between national banking sectors in the relative importance of very large, medium-sized and small banks, the presence of certain sub-categories of banks (e.g. banks whose objective is not to maximise profits), how comfortable the general public is with digital distribution channels, and the degree of overcapacity and related competition. These structural, countryspecific factors help to explain the average profitability and cost efficiency of the banking sector in any given country. For instance, in a market with lots of players, banks have much less scope to set their own margins and depend very much on the behaviour of their competitors, influencing their profitability. The degree to which a banking sector uses digital distribution channels rather than a physical network of branch offices, to give another example, will have an impact on cost structures, etc. These factors go some way to explaining the difference between European banking markets in terms of the return on equity and cost/income ratios, with cost-efficient markets turning out to be clearly more profitable.

In this respect, the Belgian banking sector – albeit to a lesser extent than some other big banking sectors in Europe – still has a relatively heavy cost structure squeezing profitability, with cost-income ratios fluctuating around 60% in the past few years. As noted, 2019 saw operating expenses fall ever so slightly for the first time in years. Large-scale restruc-

turing plans typically take time to bear fruit, often requiring major investment, for instance for the overhaul of IT infrastruc-

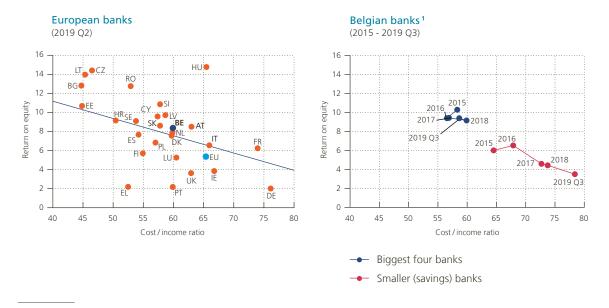
ture. Against the backdrop of wider digitalisation in the financial sector, such investment will inevitably remain necessary. Banks are compelled to develop digital distribution channels and to adapt their internal processes and IT systems to new financial technologies, both because of changing behaviour on the part of their customers and because of the market entry of potential new competitors (BigTech and FinTech). For banks, digitalisation is both a major challenge and an opportunity to work more cost-efficiently.

And then there are bank-specific features that play a huge part in a bank's profitability levels and cost efficiency. Cost efficiency is sometimes linked to the size of a bank and to the existence of economies of scale. After all, bigger banks can spread their costs – for staff, digitalisation, investment related to anti-money-laundering and privacy laws,

Chart 59

Differences in profitability and cost efficiency between banks is explained in part by structural country- and bank-specific factors

(annualised consolidated data; in %)



Sources: ECB, NBB.

1 Excluding banks specialising in private banking.

etc. – across a wider base of loan and investment portfolios. Various studies contradict each other on up to what average bank size there are economies of scale to be locked in and on when further upscaling becomes detrimental (because it leads to excessive complexity, for instance). In Belgium, the four biggest banks are looking at significantly lower cost/income ratios than the smaller (savings) banks, which might suggest that economies of scale are mainly to be had at smaller banks and to a much lesser degree – or not at all – at the big banks. In addition, the average cost/income ratio at Belgium's big banks was roughly stable at around 58 % between 2015 and 2019, whereas the percentage was still on the rise at the small (savings) banks in the same period, from 65 % to 79 %.

Of course, the difference also reflects the diversification in sources of income and, more generally, banks' business models. On the whole, profitability tends to be squeezed more at banks that are less diversified in terms of the types of activities generating income, and in terms of the geographical location of those activities. These often also tend

to be smaller (savings) banks, which are highly dependent on interest income from (mortgage) loans. And they have sometimes developed less advanced methods to hedge against interest rate risk related to their activities.

The return on equity of Belgium's four biggest banks and that of smaller savings banks thus clearly differs. Whereas for the country's biggest banks, return on equity exceeds 9 % - which investors deem sufficient to cover the cost of equity, generally estimated at between 8% and 10% - this has slumped for the smaller (savings) banks since 2016, to 3.5 % on average in the first nine months of 2019. That said, investors typically demand lower returns from these types of banks, as they fund themselves differently, for example through a cooperative or private shareholders. Finally, banks that specialise in private banking - and hence largely generate their income from asset management and not from interest income – have also seen their profitability come under pressure in the past couple of years, because of the competitive and volatile markets in which they operate and the necessity to invest.

The Belgian banking sector will have to prop up its profitability more sustainably

Although the Belgian banking sector's profitability has remained on a reasonably even keel up until now,

projections clearly show that the persistent low interest rate environment and macroeconomic un-

Smaller banks in particular will need to restructure

certainties are likely to drag down profitability, largely because of expected downward pressures on net interest income, but also because of a possible increase in loan losses as well as a few structural factors in the banking sector itself. Any fall in profitability may also have repercussions for the sector's solvency position. Below-average-yielding banks are not able to reserve as many profits in their capital buffers and also find it harder to tap investors for capital.

While banks may temporarily resist the pressure on their profitability by engaging in a search for yield, this will at the same time expose them to bigger credit, liquidity and interest rate risks in the longer term, and these might actually materialise in the event of an economic shock. To help safeguard financial stability, banks must avoid such an accumulation of risks arising from an unsustainable search for yield and rather pursue more sustainable strategies to support profitability, and make the structural changes needed to preserve a competitive and healthy banking sector.

First, banks will have to further adapt their cost structures and business models, particularly those that are less diversified in terms of activities and ways of fund-

ing them, or banks that have made little progress as yet in the transition to a more digital society. With interest rates so low, the

clear differences observed between the bigger banks and smaller savings banks in terms of profitability and cost efficiency suggest that the smaller banks in particular will have to restructure to remain sufficiently competitive and profitable. To be able to bear the costs of restructuring – which often involves major changes to IT systems – banks might look to upscale, as this would help to spread the costs over a larger scale of activities. Mergers and acquisitions, such as those seen in the market for private banking, as well as the recently announced take-

over of AXA Bank Belgium by Crelan, can make banks more efficient, provided they are carried out with

due care and with the aim of achieving economies of scale.

Secondly, banks should pay greater attention to correct pricing of the various products and services they offer. Correct pricing implies that they have a firm handle on the internal cost price of their offering, and that whatever price they charge at least covers those costs. In practice, this turns out not always to be the case, either because banks do not have an accurate view on the necessary risk premiums and other costs that should be charged on, or because competition compels them to drop their prices to below the internal cost price.

In recent years, commercial margins have been shrinking in some markets in which banks operate, and sometimes have even turned negative when all expenses are stripped out (including the costs of credit and liquidity risk, for instance). Also, the price difference between less risky and more risky mortgage loans (in terms of loan-to-value, debt-service-to-income and term of the mortgage) has become very slight indeed – perhaps too slight to cover the internal costs related to these heavier risks. Banks have tried to make up for such loose pricing by linking their loan issuance

to the sale of other financial products, such as insurance products. However, they have to make sure that all the products and

services they offer are individually not loss-making, and thus that they charge fees that accurately factor in risks and costs. In light of this, the Bank has taken the initiative to regularly question banks on interest rates and commercial margins on new mortgage loans.

Banks must pay more attention to correct pricing of their products and services



4.6 The insurance sector stayed robust in 2019

Non-life sector collected a higher

amount in premiums in 2019

Although the insurance sector is not having an easy time of it, its results for the first nine months of 2019 were relatively satisfactory. Encouraged by the Bank as their regulator, insurance companies have spent the past few years adjusting gradually to terms with the

low interest rate environment by adapting their management of guaranteed-return life insurance

contracts and investment portfolios. But their relatively solid performance cannot hide the fact that prospects have grown dimmer, as expected interest rate trends will continue to put pressure on their business models.

Better results in 2018 and higher premium income in 2019

The insurance sector reported total net profits of € 3.2 billion in 2018, implying an accounting return on equity of 16.3%. A seemingly clear improvement on 2017 (€ 2.1 billion), this total net profit was strongly influenced by two factors and actually masks a deterioration in the technical result on life insurance. The first of these factors was a sizeable improvement in net profits on the non-technical account, typically a volatile component of total net profits. And secondly, the reporting scope has come to include an insurance company active in the Belgian market since 2018. Using a constant reporting scope (that is to say, excluding this insurance newcomer) total net profits for the sector worked out at € 2.4 billion in 2018 - still an increase on 2017.

Non-life insurance premiums were fairly stable in 2018, for the fifth year in a row. Premium income came in at € 12.7 billion, 1% up on 2017, with the result for 2018 working out at € 1.7 billion - fairly similar to the year-earlier figure (€ 1.5 billion).

In the first nine months of 2019, the non-life insurance sector clocked up net premium income to the tune of €11.1 billion. This surge relative to the year-earlier figure (€ 8.9 billion) mostly reflected the market entry of a few foreign insurers, which

> transferred their activities to Belgium in preparation for Brexit. These compa-

markets outside Belgium and have particular business models, posing no immediate competition for the other players in Belgium's non-life insurance sector. On a constant reporting scope, premium income for the first nine months of 2019 came to around € 10 billion.

nies mostly operate in

In the same period, operating expenses in the nonlife insurance sector jumped by an annualised 32 % to € 6.7 billion, in part because of the market entry by the companies mentioned above, but in part also because of claim payments for two spells of bad weather in March 2019. The combined ratio, which reflects the relationship between the sector's operating expenses and income, inched up to 97.5 % in the first nine months of 2019.

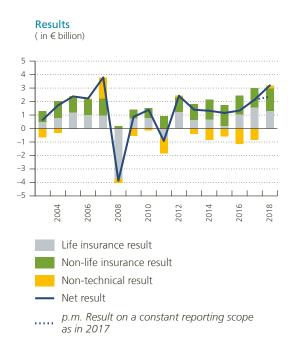
Premium income in the life insurance sector, which had been falling for years, rose to €15.6 billion in 2018, 7% up on 2017.

This renewed appetite for life insurance products reflected brisker demand for class 23 contracts, which mopped up € 3.5 billion in premium income in 2018. Not offering guaranteed returns, these contracts pay returns based on the performance of the investment funds in which their premiums are invested. They hold out higher potential returns than current class 21 guaranteedreturn contracts, but class 23 policy-holders alone

Chart 60

Improved result in 2018

(non-consolidated end-of-period figures)



Return on equity (percentages)



···· Average 2003-2007

..... Average 2010-2018

Source: NBB.

bear any losses on the investment underlying their contracts.

Life insurance sector premium income continued to rise in the first nine months of 2019, clocking up 6 % compared with the corresponding period of the previous year, to € 12.5 billion. This time, it was a modest revival

in interest in class 21 that underpinned the expansion. Class 21 has become much less compelling in the current low interest rate

environment, but this slight recovery may well be explained in part by Belgian households' risk aversion and their preference for low-risk investment. The shortage of more profitable alternative investment no doubt also plays a part. Lastly, a major increase in premiums was reported by an insurance company resuming life insurance activities abroad. This resumption also explains the rise in premium income in other classes of the life insurance sector (classes 21 and 23 excepted) in the first nine months of 2019, compared with the same period in 2018.

Low interest rates affect the sustainability of life insurers' business model ...

The renewed appetite for life

insurance products seen in

2018 continued into 2019

In the life insurance sector, the investment return is still a whole lot higher than the average garanteed rate of returns on outstanding class 21 contracts

> with guaranteed returns. Besides, the duration gap between assets and liabilities has shrunk in the past few years in the wake of

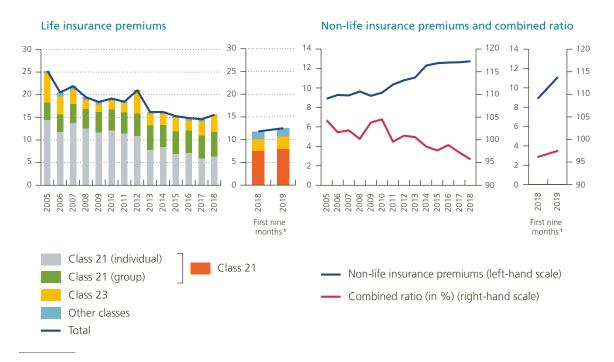
a range of measures (described below) that insurers have taken to reduce a burden of liabilities that had become too heavy. With average maturities for assets below those for liabilities, the reinvestment risk is still there.

Falling interest rates have also had a fairly significant effect on life insurer solvency: the sector's average coverage ratio, which reflects the relationship between eligible own funds and the solvency capital requirement, came down from 219% in

Chart 61

Life and non-life insurance premiums were up in 2019

(premiums in € billion, combined ratio in %)



Source: NBB

December 2018 to 196 % in June 2019 and to 187 % in September 2019. Under Solvency II rules, insurers' balance sheets are calculated at market value, and declining interest rates typically cause liabilities to rise in value more rapidly than assets – provided, of course, that liabilities have longer durations than the assets. The net outcome is a fall in the equity calculated at market value. Despite its deteriorating solvency, the sector is still correctly capitalised to meet Solvency II requirements. This is corroborated by the Bank's 2018 stress test simulations.

Another clearly visible consequence of the low interest rate environment is the investment strategy that insurers have adapted to aim for higher returns.

At the end of September 2019, the sector's investment portfolios (excluding class 23) amounted to € 303.3 billion. Government bonds accounted for 48 %, a significantly higher proportion than the European average of somewhat over 30 %. This type

of investment has been becoming less important to insurers over time.

Corporate bonds, which accounted for 21% of the investment portfolios, were mainly issued by banks, manufacturers and energy companies.

The remainder of the insurance sector's investment portfolios – i.e. 31% of the total – comprises a whole series of other assets, fixed-rate or otherwise, that are riskier and/or less liquid but that may generate greater returns. A number of these asset classes – e.g. investment in the real estate sector and loans – have gradually become more important in insurance companies' portfolios, exposing them more to market risk.

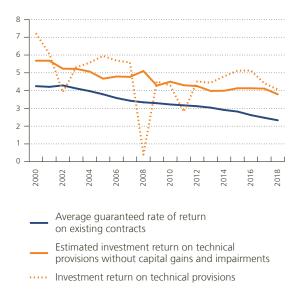
In terms of real estate assets (residential and commercial), insurance companies are exposed by way of ownership of buildings, but also by holding loans (particularly towards infrastructure projects) and

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).

Chart 62

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

(in %



Source: NBB.

mortgage loans, as well as securities issued by real estate corporations. This direct and indirect exposure to the real estate markets has been on the up in past years, rising from 10.5 % to 14.7 % of total investment between early 2016 and September 2019. The exposure amounted to € 44.6 billion by the end of September 2019.

Mortgage loans accounted for around € 16.3 billion of this total, either issued by Belgium's insurance companies themselves or bought in the secondary markets. By the end of September 2019, these loans amounted to 5.4% of total sector investment, compared with 3.9% in September 2016. In addition to their higher returns and mortgage terms that match their investment horizons, insurers' interest in mortgage lending may also result from the fact that financial conglomerates – i.e. entities offering both banking and insurance services – may benefit (in terms of regulatory capital requirements) from including loans with LTVs below 80 % in their group's insurance segment balance sheet. The Bank is keeping a very close eye on any such scope for regulatory arbitrage, for instance in its new annual survey of the sector that specifically focuses on mortgage loans. The data for April 2019 reveal that, at the end of 2018, portfolios

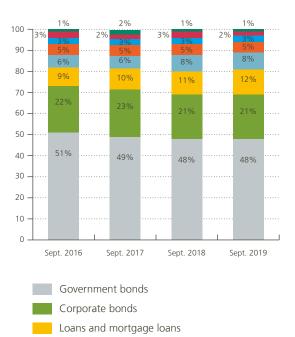
of insurer-held mortgage loans accounted for around 6% of total portfolios of mortgage loans the financial sector had issued to residents and non-residents. These portfolios' features and risk profiles are fairly comparable to the banking sector's mortgage loan portfolios. To ensure fair competition, the Bank has therefore decided to include insurance companies in the scope of its explicit supervisory expectations on mortgage loans (see box 6).

The low interest rate environment has not merely propelled Belgium's life insurers to change their investment strategies; they have also addressed their liabilities. To free themselves of the massive burden of class 21 contracts – whose guaranteed returns were pegged at relatively high and hard-to-meet levels – many insurers have offered incentives to their

Chart 63

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

(breakdown of the investment portfolios excluding class 23, non-consolidated data, in % of total investment)



Shares and participating interests

Cash instruments and deposits

Investment funds

Buildinas

Other investment

Source: NBB.

clients to surrender existing contracts on very favourable conditions and switch to class 23 products without any guaranteed return. Although class 23 products are a better bet for insurers, as the investment risk is transferred to the policy-holder and as they require less regulatory capital requirements, they do run a reputation risk in the event of clients incurring heavy losses on such contracts. New class 21 contracts are offering significantly lower guaranteed returns to bring them in line with those that can currently be earned in the financial markets. All these measures have conspired to bring down the average guaranteed return on life insurance contracts (individual and group insurance) from 2.63 % to 2.31 % between end-2016 and end-2018.

... and reflection on the future of their business model must continue

Although life insurance companies have managed to keep the return differences on their investment and payments on guaranteed-return contracts positive, they must undeniably continue to reflect on the future of their business model. In a way, the wider diversification of products that insurers now offer may prove a very interesting arena indeed. Some stakeholders in the sector are even considering expanding their offering to prevention, assistance and service products, so as to tap into other sources of income beyond their traditional insurance activities.

4.7 New fundamental challenges facing the financial sector

The entire financial sector, banks as well as insurance companies, is facing transversal structural risks in addition to the low interest rate environment. Financial institutions must take due, proper and timely account of increased climate-related risks, either as a result of direct exposure to climate change, or as part of the transition to a low-carbon economy. At the same time, IT and cyber risks are also growing stronger in the wake of ongoing digitalisation and the wider digital interconnectedness of the financial sector.

Climate-related risk

As the balance sheets of banks and insurers may be influenced by climate-related risks as well as the risk of a sudden transition to a more sustainable and low-carbon economy, the Bank feels it is essential to review the potential impact of these risks on the financial sector. Insurers are exposed to physical and transition risks, both on the liabilities side of their balance sheets – when climate disasters (floods, storms, hailstorms, drought, etc.) spark

higher insurance pay-outs – and on the assets side in the event of depreciating investment in industries that may themselves be vulnerable to such risks. The banking sector is facing these same risks by way of its investment – in the shape of loans, for instance – in sectors and regions that are physically exposed to climate risks or must factor in transition risks. In response, in 2018, the Bank conducted a survey of eight insurance companies and seven credit institutions representative of their sectors. Its aim for the survey was to gather quantitative and qualitative information about exposures to climate-related risks, while it also intended to raise awareness among companies of the concomitant financial risks.

The survey found that, although aware of potential risks, financial institutions have made relatively little headway quantifying them or systematically integrating them in their risk management. Also, the proportion of green investment in their portfolios was found to be very small. Detailed outcomes of the survey can be found in the Financial Stability Report 2019, published by the Bank in June 2019.



Digitalisation and cyber security

Growing digitalisation of financial transactions and society's increased digital interconnectedness have led to higher IT and cyber security risks in the industry (for more information on this subject, see the sections on operational supervision and digitalisation in the Prudential regulation and supervision part of this Report). For financial institutions, the challenge is to adapt their often obsolete legacy IT systems under pressure from new and innovative players, new technologies and customer expectations. Banks have to adapt their business models to a digital world, further developing their digital distribution channels for customers that increasingly expect to carry out their banking transactions in a different way. And they risk being crowded out by competing FinTech and BigTech businesses if they fail to keep up. Furthermore, banks have to adapt their internal processes as well, which can be guite a challenge – their current IT set-ups are sometimes quite complex – but which also holds out opportunities, in the shape of new technologies such as artificial intelligence and blockchain.

Meanwhile, banks need to ensure appropriate protection for their IT systems and services against cyber attacks, which are becoming ever more sophisticated, powerful and targeted and look set only to increase in the future. As cyber threats are evolving rapidly, institutions must – now more than ever – make sure their defence capabilities are up to the task of flexibly responding to changing patterns of attack.

Insurers have a key role to play in covering cyber and IT risks, and their offering in this field is developing apace. To gain more insight into the current state of play, the Bank sent out a survey to the entire insurance sector in the autumn of 2019. The two-part questionnaire covers the various dimensions of the cyber threat facing insurers. The first part gathers information on the way insurance companies incorporate cyber risk in their internal operational risk management (identification, reporting, incident management, etc.), while the second part investigates insurance agreements to find out how insurers take account of direct or indirect cyber risks in their policies. Survey responses will be shared with the Bank early in 2020.