Financial developments in Belgium

3. Savings and financing the Belgian economy

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

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

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

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

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

Non-financial corporations [1]

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

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

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

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

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

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

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

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

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

Bond financing remained important in 2015

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

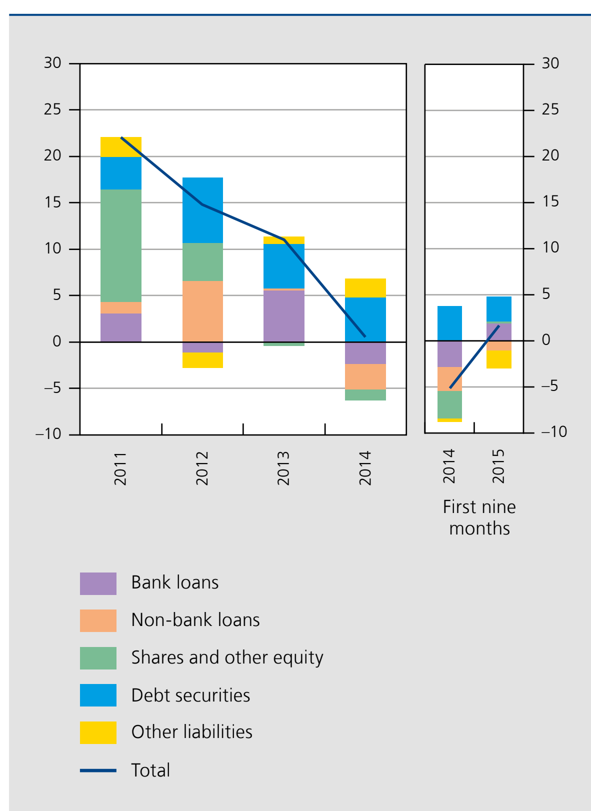
As in 2014, there was a huge difference between the cost of issuing new listed shares and that of debt financing when compared with previous years. This gap may partly explain why investment in the shape of non-financial corporations' authorised capital stalled in the first nine months of 2015. Major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

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

Non-financial corporations' appetite for bonds reflects the fact that issuing these is cheaper than paying the interest charged by banks. In January 2015, returns on investment grade bonds with a maturity of one year or over – i.e. those with upper to maximum (AAA) ratings – were around 1 %. Unlike bank loans, this capability only extends

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

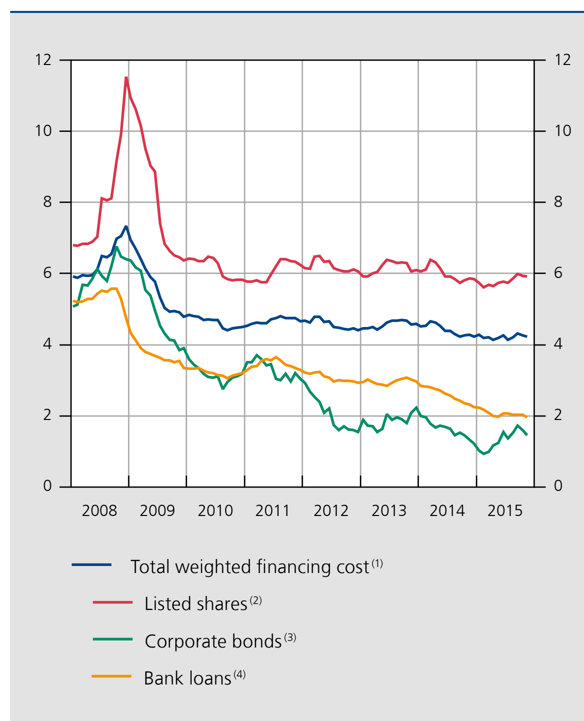
(new financial liabilities of non-financial corporations, in € billion)



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

CHART 52 FUNDING VIA BOND ISSUANCE STILL CHEAPER THAN BANK LOANS

(monthly data, in %)



Source: NBB.
(1) Obtained by weighting the cost of funding by listed share issuance, bond issues and bank loans according to their respective shares in the total outstanding amount of these financial liabilities.
(2) Estimated on the basis of a dividend discount model (see box 19 in the 2005 Annual Report).
(3) Return on an index of euro-denominated bonds issued by Belgian non-financial corporations, with maturities of more than one year and with ratings in excess of Baa; the index is weighted according to the outstanding amounts.
(4) Weighted average rate applied by resident banks to business loans. The weighting is based on the outstanding amount of the various types of credit.

to corporations considered the safest of the bunch. In the wake of a general increase in long-term rates starting from April, returns went up to 1.5 % in November, very close to interest rates on new bank loans, which were averaging 2 % around that time.

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

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

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

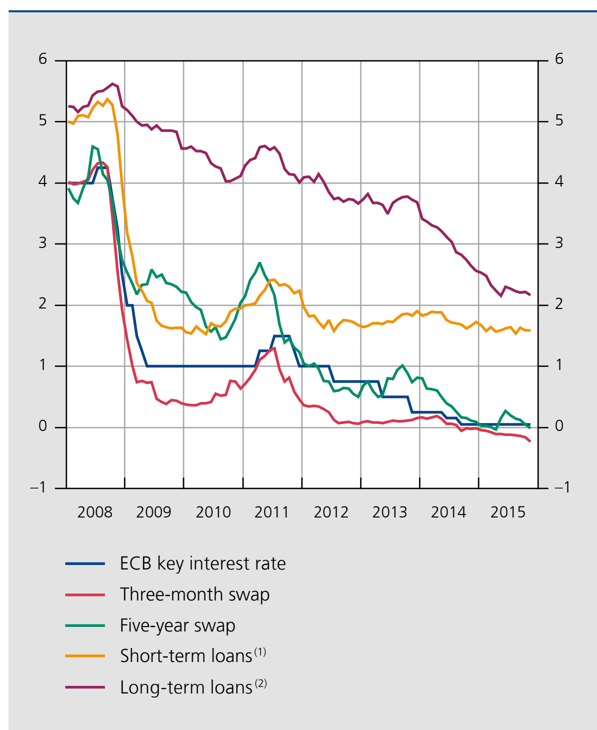
To date, interbank rates have not been fully passed on to borrowing rates charged to corporations. After the financial crisis first broke, resident banks took advantage of easier monetary policies to raise their intermediation margins to higher and more realistic levels than before the crisis. By the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

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

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

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

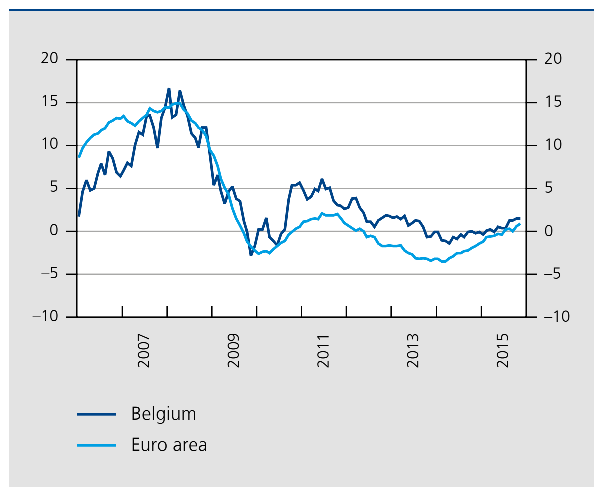
(monthly data, in percentage points)



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

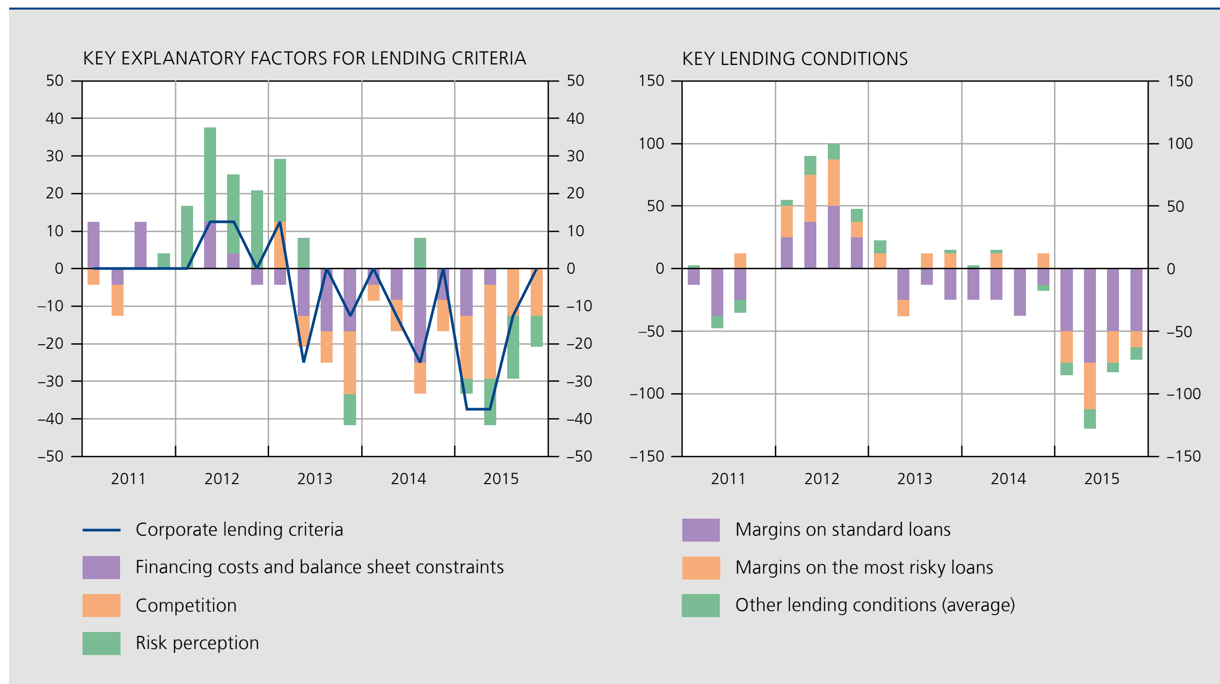
CHART 53 INCREASED LENDING BY RESIDENT BANKS TO RESIDENT NON-FINANCIAL CORPORATIONS, FOLLOWING FALLS IN 2014 (1)

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



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

CHART 55 SIGNIFICANT IMPROVEMENT IN LENDING CONDITIONS TO CORPORATIONS
(weighted net percentages [1])



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

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

Intra-group operations again cause major financial cross-transactions

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

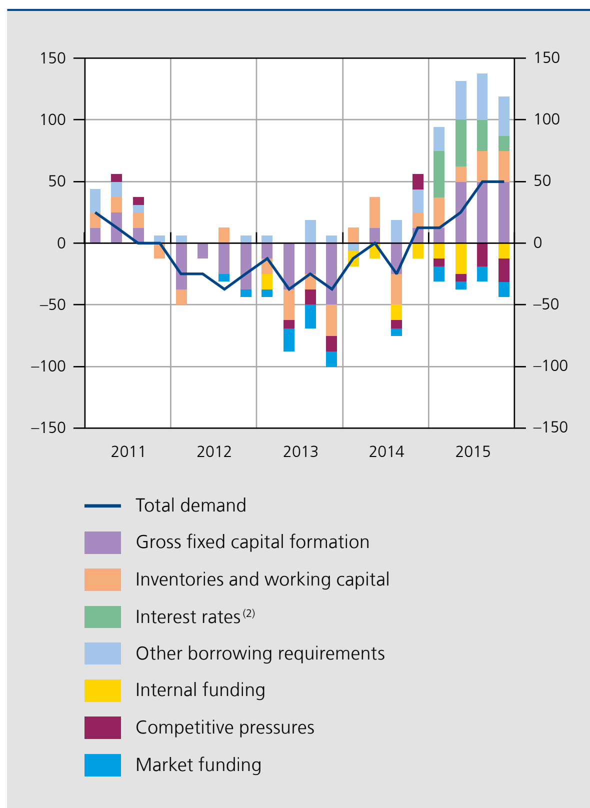
TABLE 11 LENDING BY RESIDENT BANKS TO NON-FINANCIAL CORPORATIONS BY BUSINESS SIZE
(average annualised gowth rates [1], in %)

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

Source: NBB (Central Corporate Credit Register).
(1) Annualised averages of quarterly growth figures. The second quarter of 2012 and the fourth quarter of 2014 have been ignored because of breaks in the statistical series.

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

(weighted net percentages [1])



Source: NBB (bank lending survey).
(1) A positive (negative) net percentage corresponds to a factor contributing to borrowing demand going up (down).
(2) A factor first included in the survey in the first quarter of 2015.

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

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

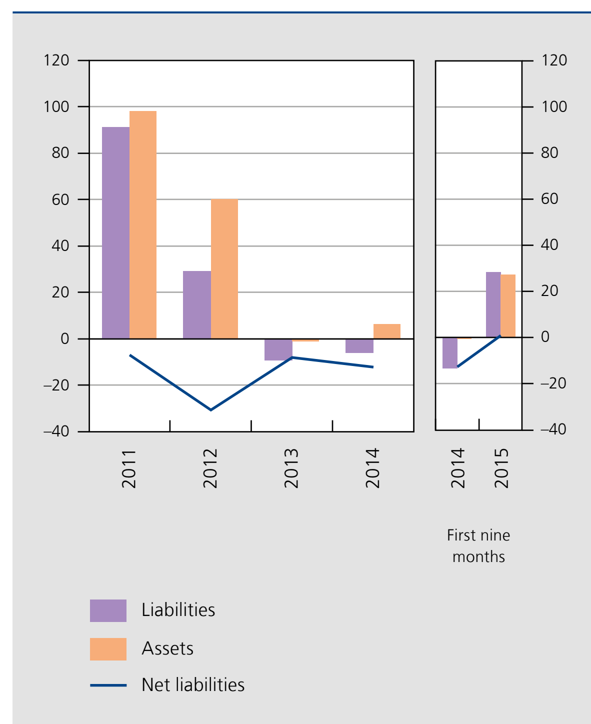
(1) Captive financial institutions and money lenders include financial holding companies and companies in charge of finance for the group of which they are part.

Belgian corporate debt on the whole sustainable

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

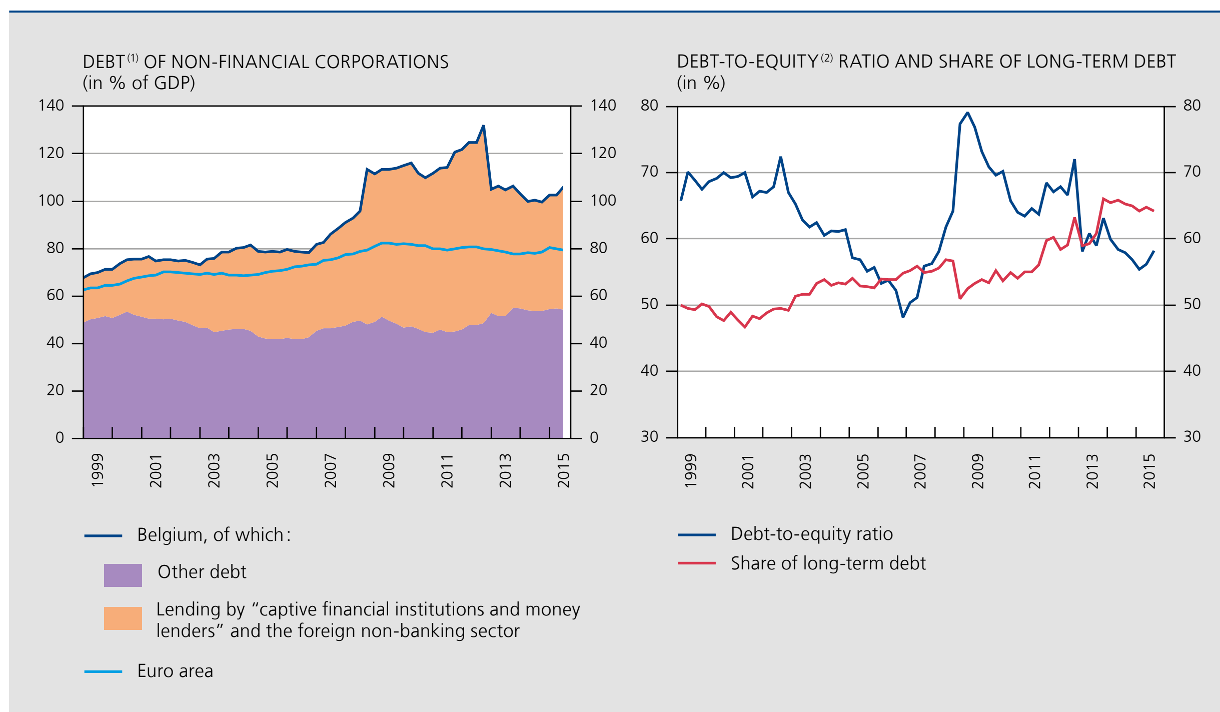
CHART 57 TRANSACTIONS BY RESIDENT NON-FINANCIAL CORPORATIONS WITH THE FOREIGN NON-BANKING SECTOR, CAPTIVE FINANCIAL INSTITUTIONS AND MONEY LENDERS [1]

(in € billion)



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

CHART 58 MODERATE DEBT OF NON-FINANCIAL CORPORATIONS
(consolidated data)



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

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

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

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

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

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

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

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

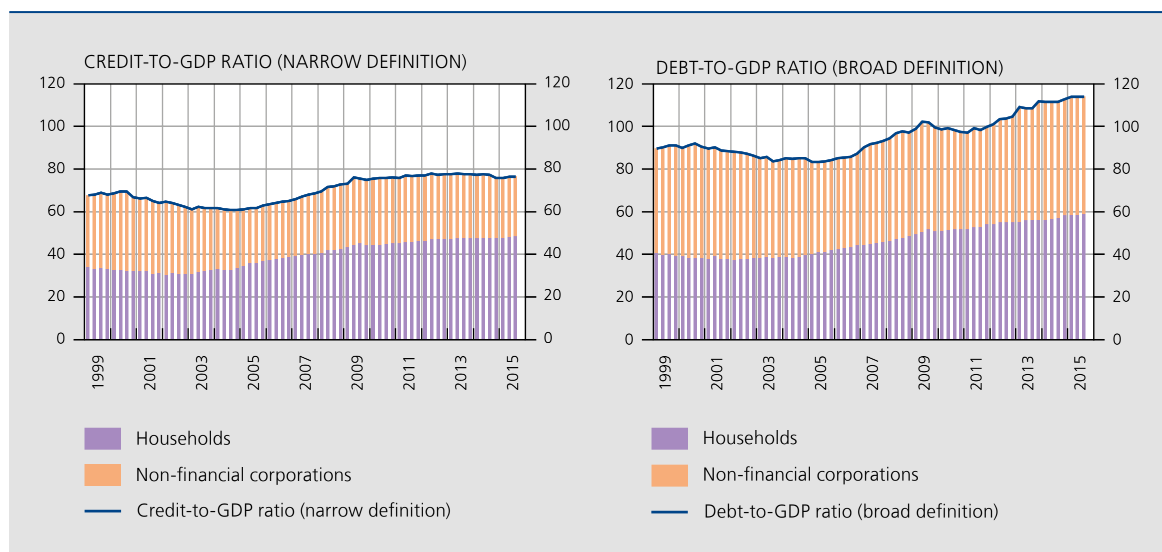
Concepts of credit

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

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

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

CREDIT-TO-GDP AND DEBT-TO-GDP RATIOS
(quarterly data, sector contributions in % of GDP)



Source: NBB.

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

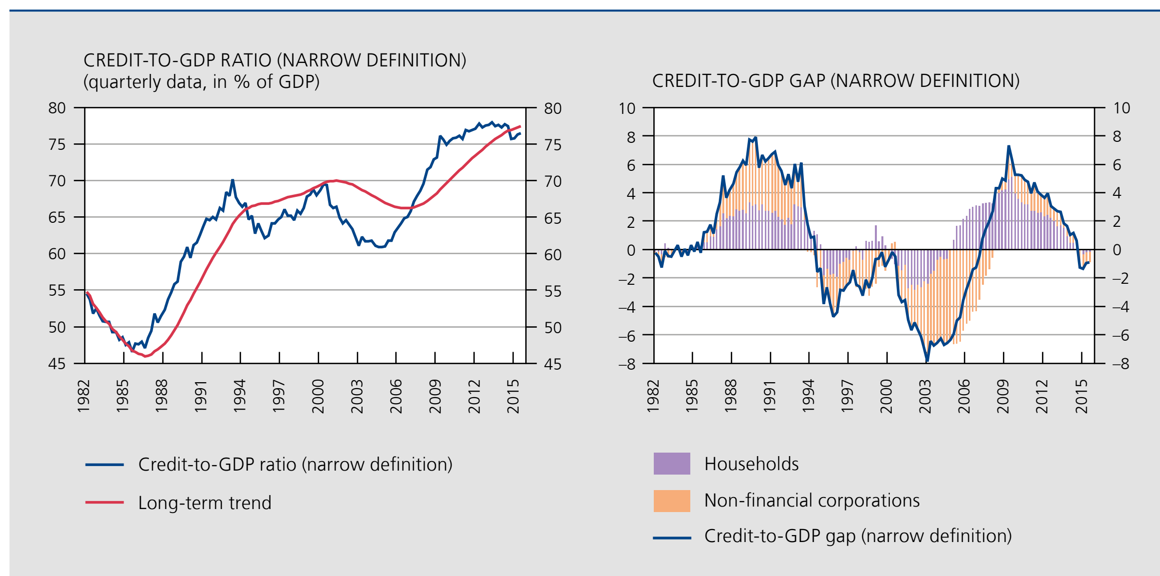
Credit-to-GDP gap and long-term trends

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

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

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

CREDIT-TO-GDP GAP



Source: NBB.

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

Households

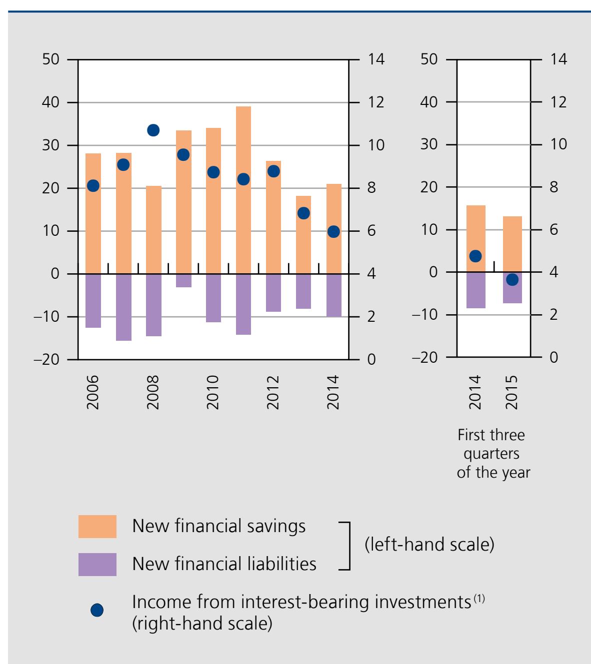
Private individuals invested less and focused more on riskier assets in 2015

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

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

CHART 59 HOUSEHOLD FINANCIAL SAVINGS DOWN

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



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

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

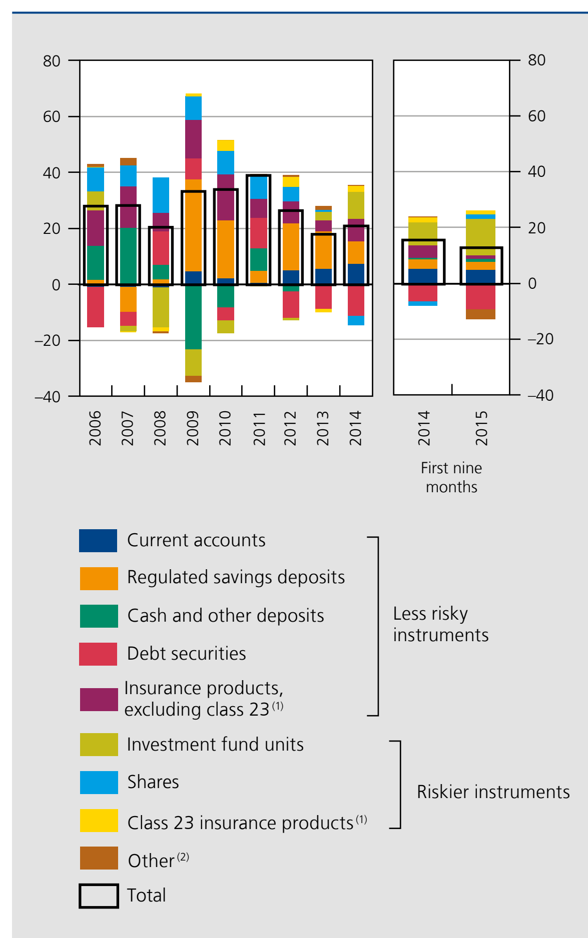
The popularity of riskier assets primarily benefited investment funds, which raked in € 13.1 billion in the first three quarters of 2015, from € 8.3 billion in the corresponding period of 2014. Class 23 insurance products (which offer no guaranteed return) also gained from this trend – albeit to a lesser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

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

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

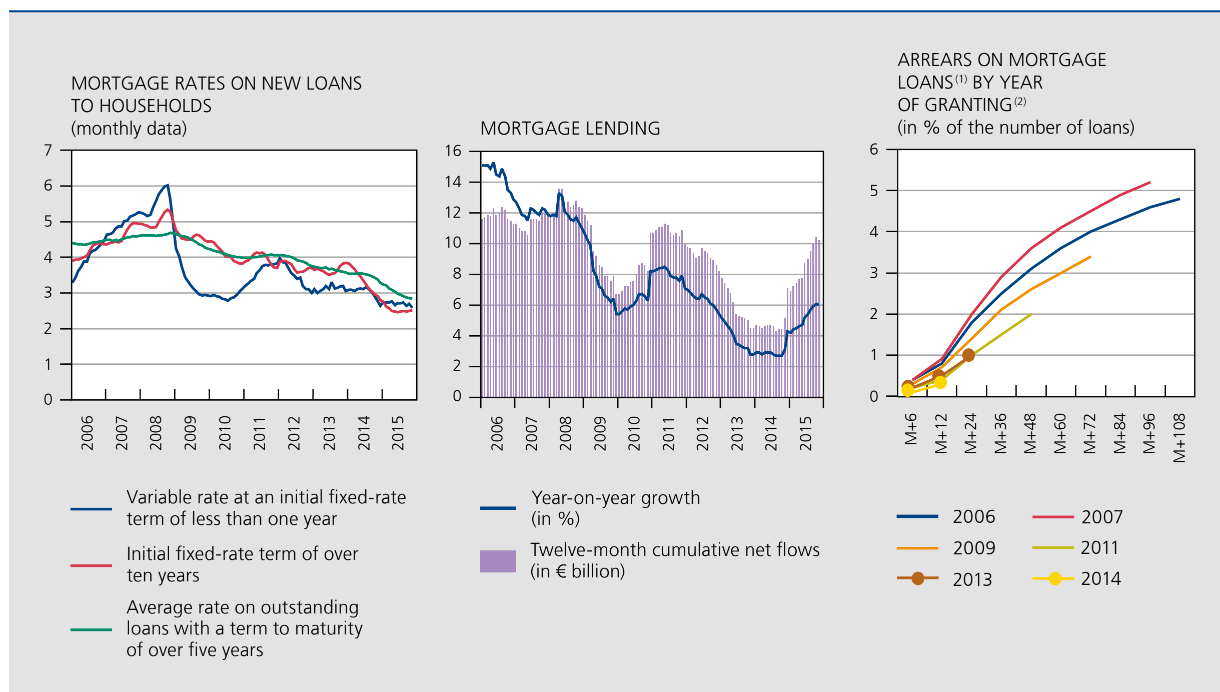
CHART 60 FORMATION OF FINANCIAL ASSETS: GREATER FOCUS ON RISKIER PRODUCTS

(in € billion)



Source: NBB.
(1) These items comprise the net claims of households on technical insurance reserves and on standardised guarantee schemes.
(2) This item comprises, insofar as they have been recorded, trade credit as well as miscellaneous assets of general government and financial institutions.

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



Source: NBB.

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

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

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

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

Mortgage loans booming on favourable conditions and various legal changes

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

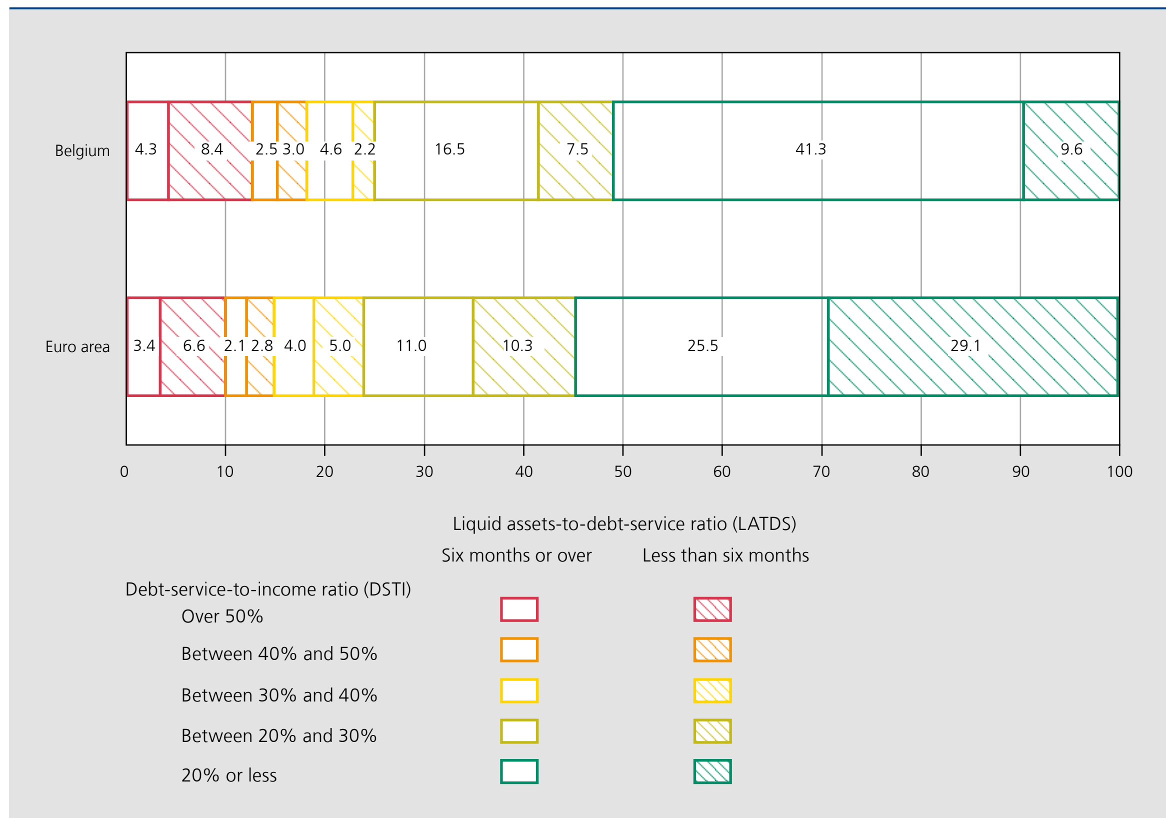
The analysis of the extent to which a household's outstanding mortgage debt is covered by financial assets will be limited to its liquid assets. Liquid financial assets enable households to make it through periods of lower income, in the event of unemployment for instance. Such periods may at times be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

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

(1) Fundamental features of the assets and liabilities distribution typically remain fairly stable over time, and an analysis of 2010 data thus has relevance today. The survey was conducted in Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Italy, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain. The "euro area as a whole" refers to these fifteen countries.
(2) See Du Caju Ph., "Structure and distribution of household wealth: An analysis based on the HFCS", NBB, *Economic Review*, September 2013, pp. 41-62.

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

(in % of total outstanding mortgage debt of households)



Sources: ECB, NBB (HFCS).

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

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

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

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

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

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

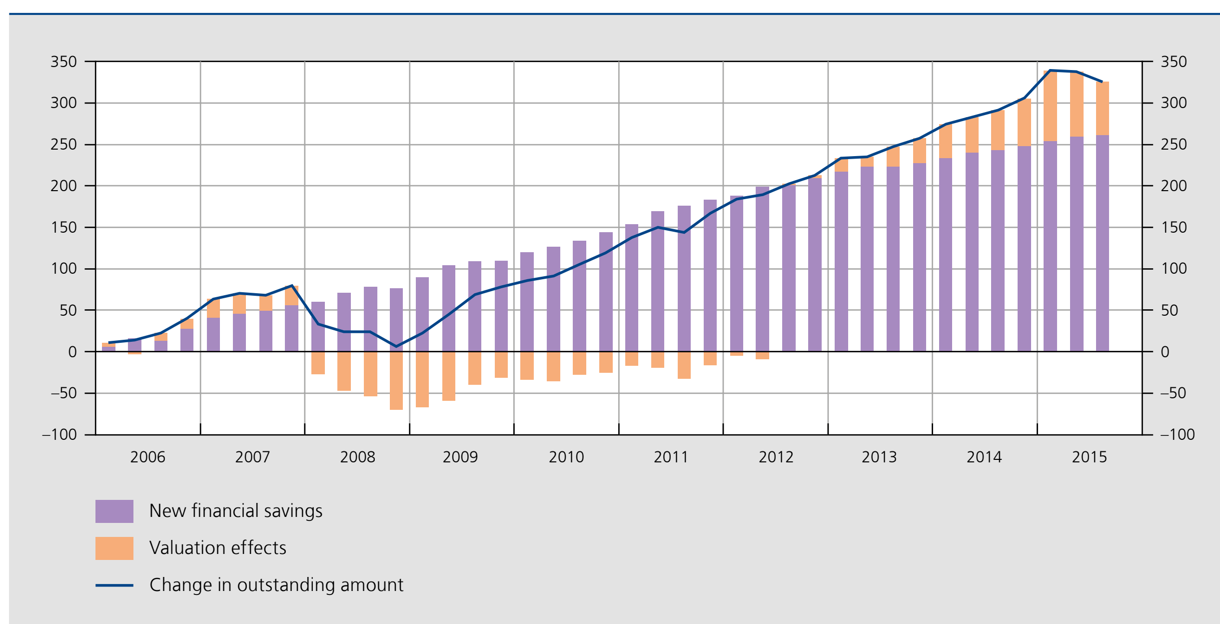
Consumer loans also rose in the first nine months of 2015 compared with the year-earlier period of 2014, albeit their outstanding amount is very much smaller than that of mortgage loans. Subdued increases in disposable income, coupled with low interest rates, probably tempted households to boost volumes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

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

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

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

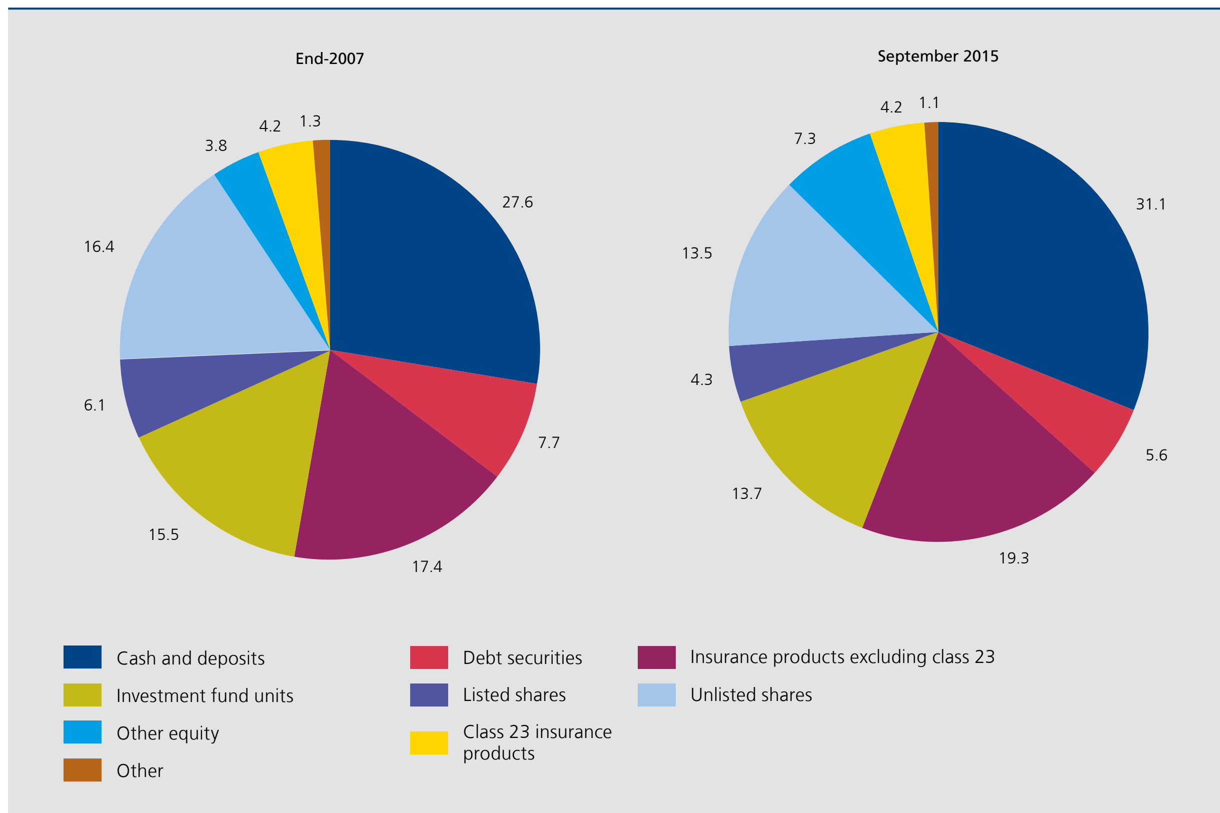
(cumulative flows from 2006Q1, in €billion)



Source: NBB.

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

(in % of the total)



Source: NBB.

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

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

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

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

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

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

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

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

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

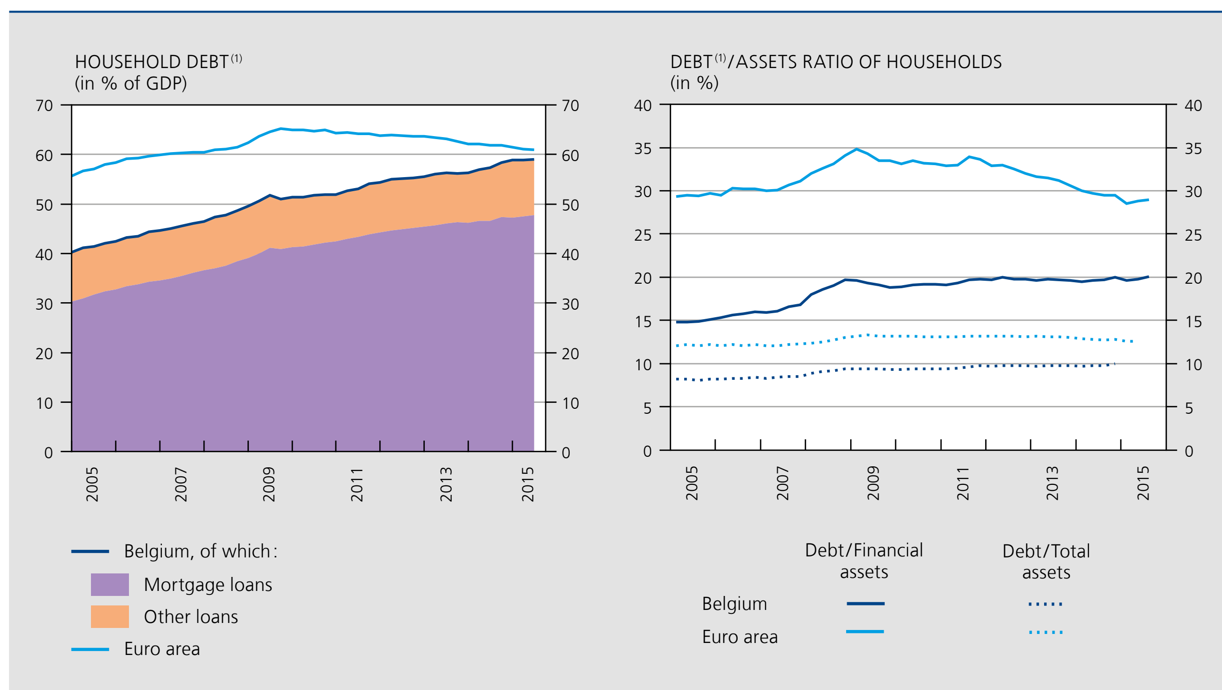
Household debt ratio

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

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

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

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



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

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

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

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

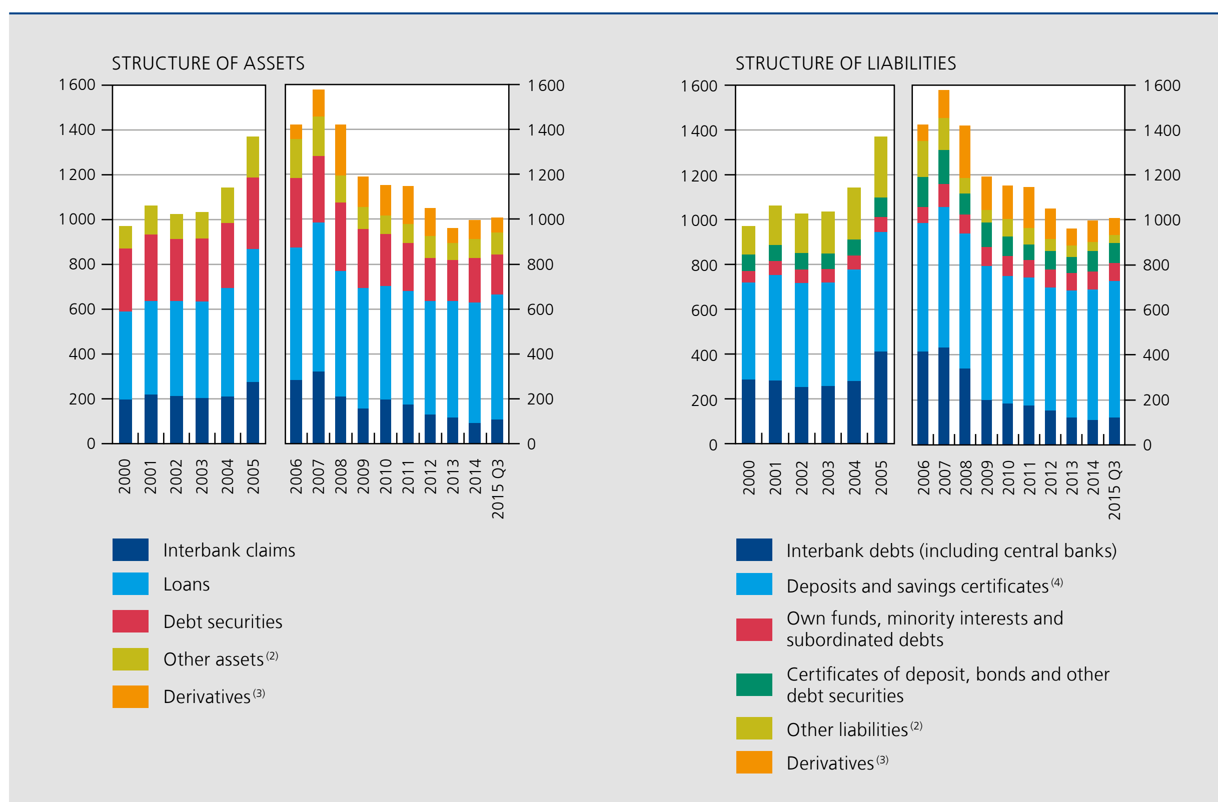
Banks

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

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

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

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



Source: NBB.

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

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

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

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

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

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

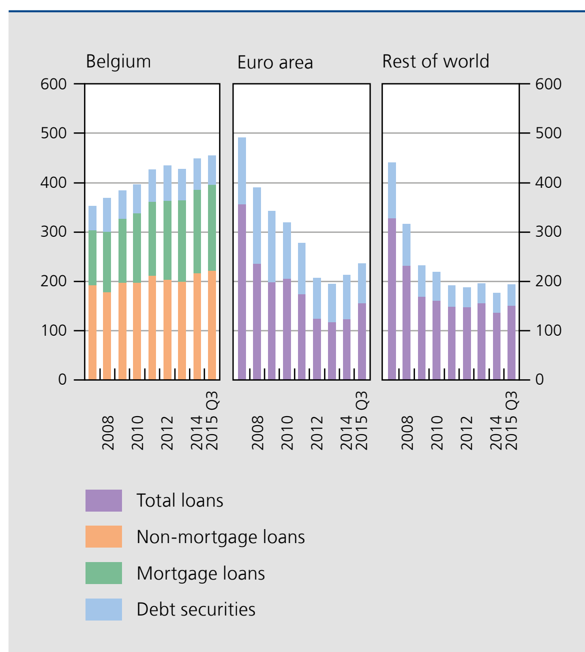
At the same time, outstanding loans to foreign non-financial corporations and to – mainly foreign – banking and non-bank financial corporations have fallen since the end of 2007. This also explains observed falls since 2008 of outstanding loans to counterparties outside Belgium, both in the euro area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

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

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

CHART 66 BELGIAN BANKS MAINLY DELEVERAGED EXPOSURES TO FOREIGN COUNTERPARTIES

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



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

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

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

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

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

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

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

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

TABLE 12 INCOME STATEMENT OF BELGIAN CREDIT INSTITUTIONS

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

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

Source: NBB.

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

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

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

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

Solid results for Belgian banks in 2015

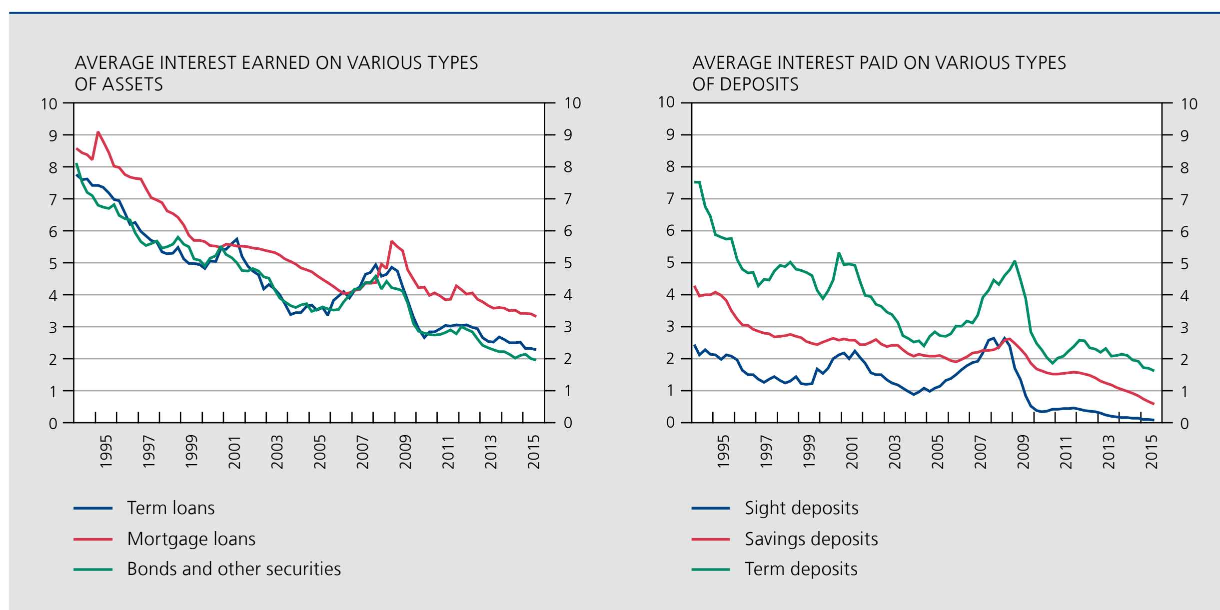
This kind of pressure on profitability did not emerge in 2015. The banking sector as a whole posted profits of € 4.4 billion in the first three quarters of the year, compared with € 3.6 billion in the same period of 2014. Despite the reorientation on the domestic market, non-Belgian "home markets" remain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

Net interest income up despite low interest rate environment

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

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

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



Source: NBB.

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

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

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

Higher operating expenses, stable wages

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

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

Impairments and provisions down to very low levels in 2015

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

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

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

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

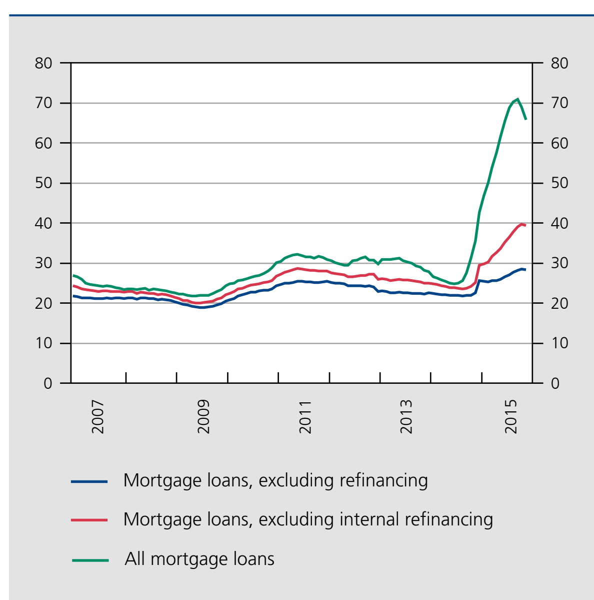
Robust growth in Belgian mortgage loans portfolio, riding a wave of refinancing

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

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

CHART 68 NEW LOANS INCLUDE MANY REFINANCED MORTGAGES

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



Source: NBB.

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

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

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

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

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

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

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

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

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

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

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

Source: NBB.

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

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

Insurance companies

Sector sees profitability decline due to negative life insurance results

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

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

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

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

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

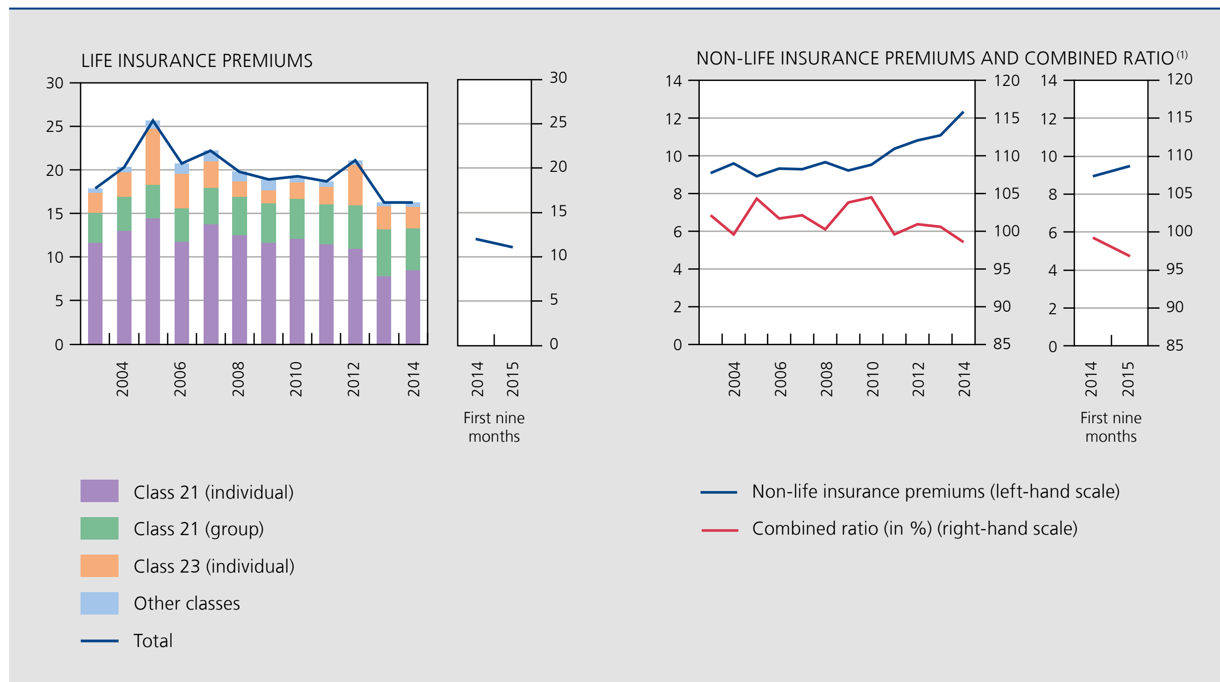
TABLE 14 MAIN COMPONENTS OF THE PROFIT AND LOSS ACCOUNTS OF BELGIAN INSURANCE COMPANIES
(non-consolidated data, in € billion)

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

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

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

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



Source : NBB.

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

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

Solvency II in place from 1 January 2016

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

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

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

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

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

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

Insurers adjust investment strategies in search of returns

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

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

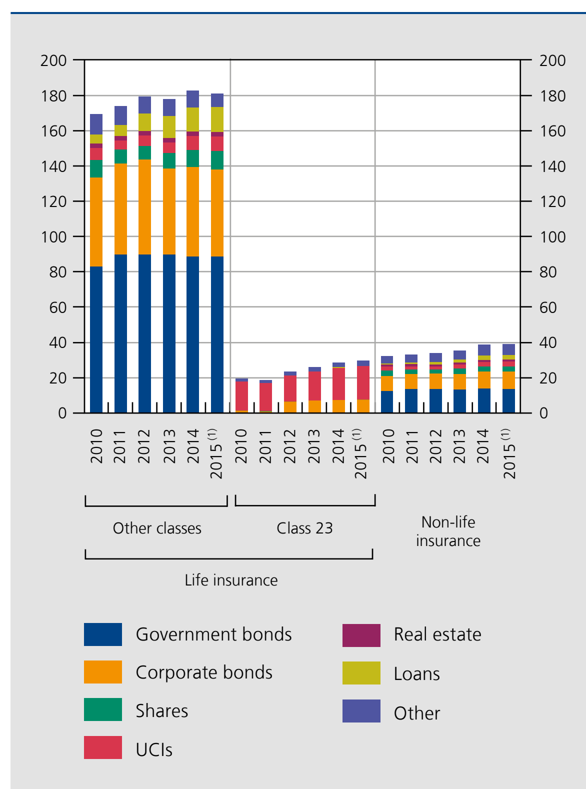
Solvency II will likely also influence insurers' management of assets and liabilities (ALM). This framework will require additional capital to cover the interest rate risk arising from mismatches in the cash flows between liabilities and assets, a common occurrence for insurers. Insurers looking to reduce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

Low interest rates pose threat to the sector

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

CHART 70 BONDS STILL PREDOMINANT IN LIFE INSURANCE INVENTORY RESERVES

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



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

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

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

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

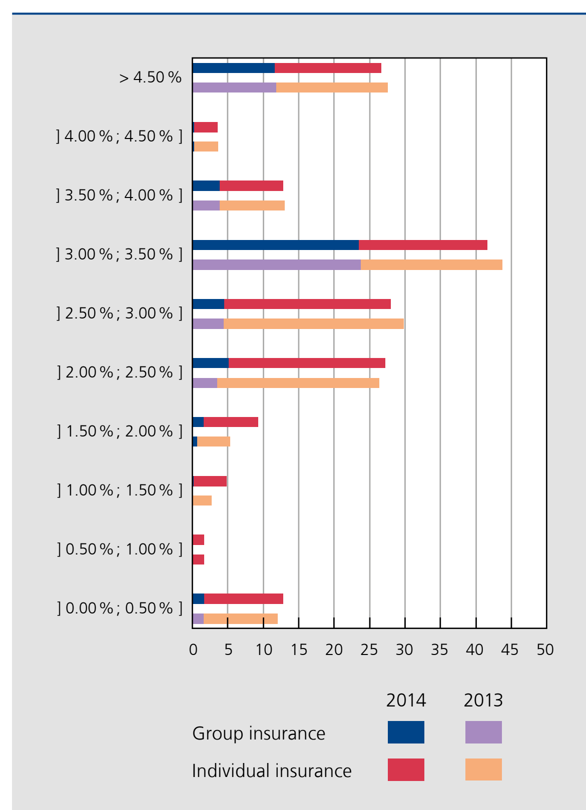
If current low interest rates are here to stay, significant amounts of high-rated securities (AAA or AA) coming to maturity will have to be reinvested in lower-yielding investments. There is a real risk, then, that the effective return on assets will not be enough to cover the guaranteed interest rates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

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

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

CHART 71 CONTINUED HIGH GUARANTEED RETURNS IN GROUP INSURANCE

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



Source : NBB.

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

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

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

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

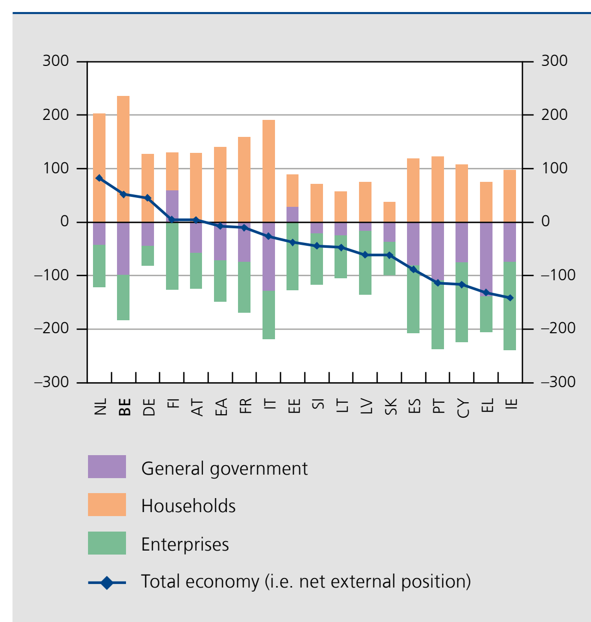
On aggregate, domestic sectors have more financial claims than liabilities, and the Belgian economy had built up a net asset position vis-à-vis the rest of the world of 52 % of GDP by the end of June 2015. Households accounted for the greater proportion of this: as a percentage of GDP, they boasted the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

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

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

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

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



Sources: ECB, NBB.

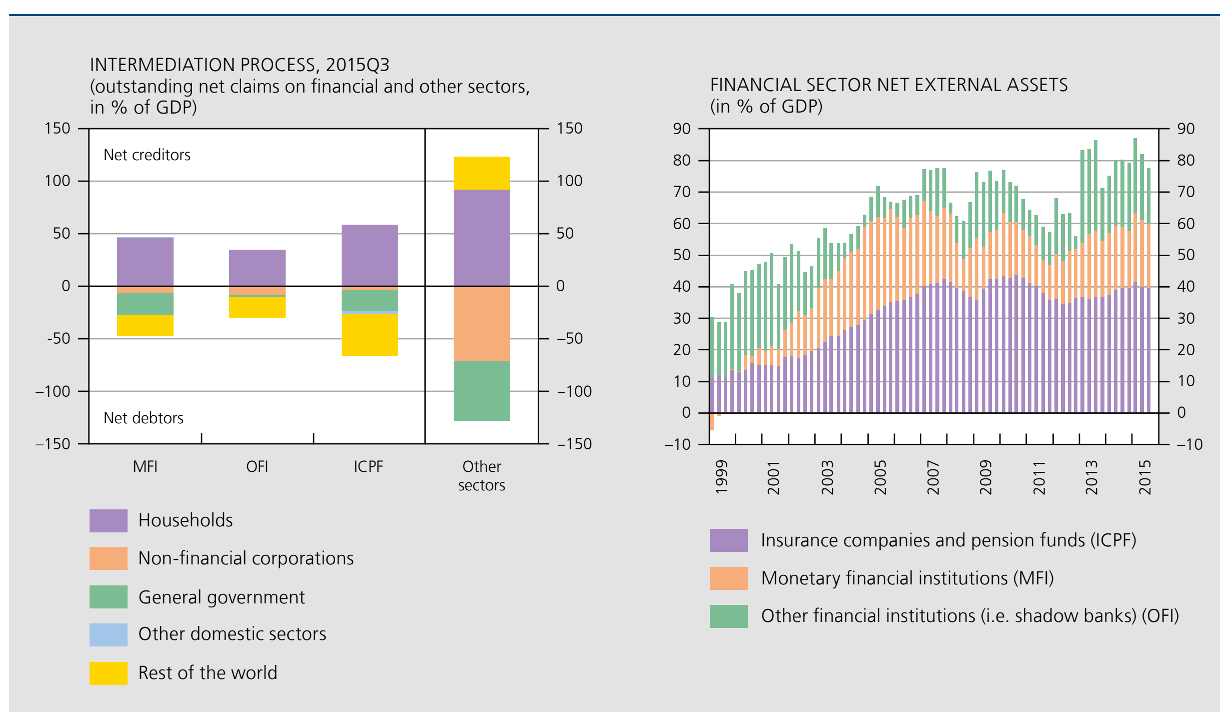
(1) Difference between the outstanding amounts of financial assets and liabilities. Luxembourg and Malta are not included in view of the high volatility of their data.

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

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

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

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



Source : NBB.

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