3. THE STRENGTH OF FINANCIAL INSTITUTIONS

3.1. BANKS

Quality of assets and the loan portfolio

The total **volume of loans and leases** given by banks to the non-financial sector stood at 15.5 billion euros at the end of 2014, an increase of 2.9% over the year. The loan portfolio continued to grow at the same rate at the start of 2015 (see Figure 3.1.1).

The loan portfolio grew mainly because of increased borrowing by **companies** in the first half of 2014. By the end of the year the volume of loans issued to them was 3.5% larger than a year earlier at 8 billion euros. The sectors that contributed most to the growth of the corporate loan stock were principally real estate, trade, and the primary sector (see Figure 3.1.2), while the largest reduction in borrowing last year was the 12.5% fall in the logistics sector. The corporate loan portfolio was noticeably affected by reclassification[15], which caused the loan stock in logistics and manufacturing in particular to decline. The loan portfolio of logistics was 2.5% smaller at the time of the reclassification than it was at the start of the year, and the manufacturing loan portfolio was 12.6% larger.

The household loan portfolio continued to grow steadily, increasing by 2.3% over the year to around 7.5 billion euros. The growth is again being led by the steady take up of mortgages in the relatively active real estate market. Around one fifth more mortgages were granted in 2014 than in 2013, and the total mortgage portfolio grew by 2.6% over the year. The total volume of other household loans was almost the same at

15 The main activities of companies were clarified in December last year and January this year and the results changed how the loan portfolio was distributed by client sectors and by economic sectors. Some companies were moved from the non-financial sector into the financial sector, thus reducing the loan stock of the non-financial sector.

Figure 3.1.1. Annual growth rates of banking sector loans and leases to businesses and households

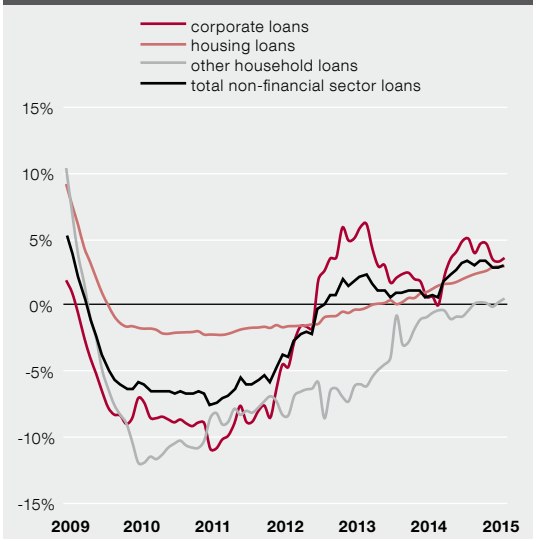
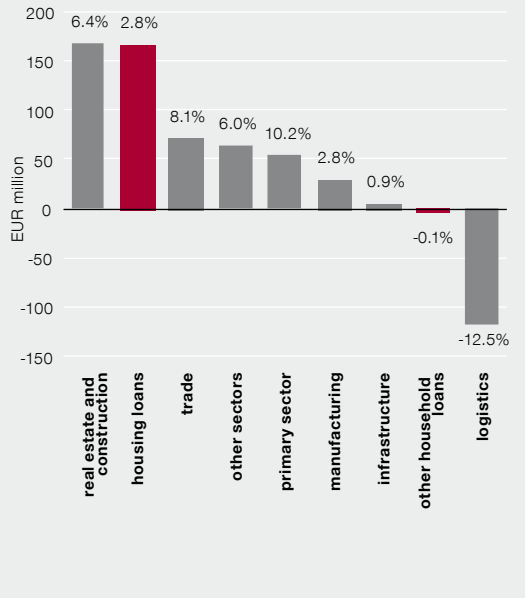


Figure 3.1.2. Annual growth in loans and leases to businesses and households as at 31/12/2014



the end of last year as it was at the start of the year, but the structure of the portfolio changed continuously. The volume of car leases grew by around 8% last year, while consumption loans were down 2.4% and overdrafts and credit cards did not change.

The quality of the loan portfolio continued to improve gradually and at the end of 2014, 225 million euros of loans were overdue by more than 60 days, accounting for 1.7% of the loan portfolio (see Figure 3.1.3). The volume of overdue loans fell by 28 million euros during the year, largely because 62 million euros of loans were written down. Although the volume of overdue loans fell over the whole year, it ticked up slightly in the third quarter, primarily because of companies in trade, real estate and construction that had problems servicing their loans. There were also fewer write downs in 2014.

The reduction in overdue loans should continue in future, though somewhat more slowly and mainly because of write-downs. The stock of overdue loans was down in all client sectors and corporate sectors (see Figure 3.1.4) except trade, which had the most overdue loans at the end of 2014. As the trade sector only accounts for less than 5% of the whole loan portfolio and less than 12% of all overdue loans, some growth in the volume of overdue loans to the sector is not likely to cause problems for financial stability (see Figure 3.1.5).

The banks had made provisions of 170 million euros to cover loan losses at the end of 2014, which was equal to 1.25% of the loan portfolio, or 76% of overdue loans by volume. The volume of provisions was down by 36 million euros over the year, which is generally in line with the improvement in the quality of the loan portfolio and sufficient consideration has been given to possible loan losses.

Figure 3.1.3. Share of overdue loans and provisions in the loan stock

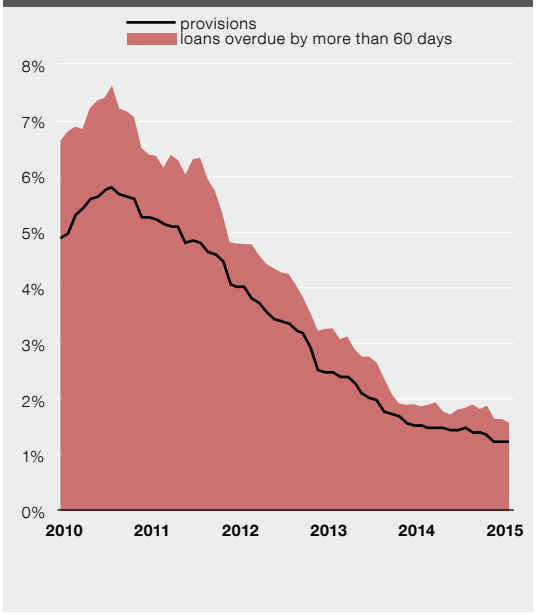
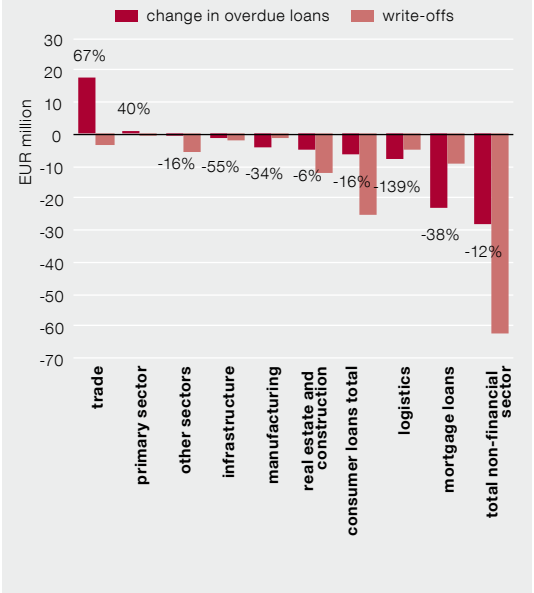


Figure 3.1.4. Change in loans overdue by more than 60 days and write-offs in 2014



The **securities portfolios** of the banks operating in Estonia grew by 14% in 2014 to 1.5 billion euros, and accounted for 7% of assets. One of the largest banks has started to reduce its securities portfolio, and so by the end of February the portfolio of the banks was around 7% smaller than at the beginning of the year. The banks have significantly reduced the share of central government bonds in their holdings (see Figure 3.1.6). Central and local government bonds made up around 37% of the portfolio at the end of 2013, but by the end of February 2015 this had been cut to below 25%. The share of securities of credit and financial institutions has in contrast grown at the same time by about 10 percentage points to 59%. This increase was largely due to investments by one branch in the bonds of its parent. Investments in bonds issued in France and Luxembourg shrank, while those in Denmark, Estonia, Belgium and the USA increased.

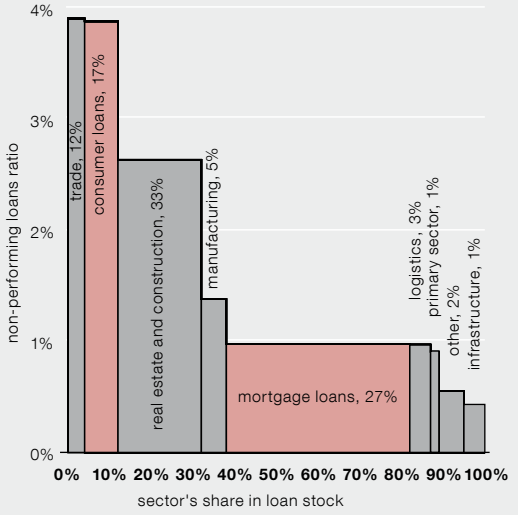
The conflict between Ukraine and Russia has increased the risk of securities from those countries, but this does not have a major impact on banks operating in Estonia as there were no holdings of Ukrainian securities at the end of February and Russian securities accounted for about one thousandth of the total securities portfolio of the banks operating in Estonia.

Assessment of the need for a counter-cyclical buffer

Countercyclical capital buffers are applied to increase the resilience of the banking sector and to reduce the impact of the economic cycle on the lending behaviour of banks. Countercyclical capital buffers need to be imposed if excessively fast credit growth is leading to risks building up and systemic risks increasing.

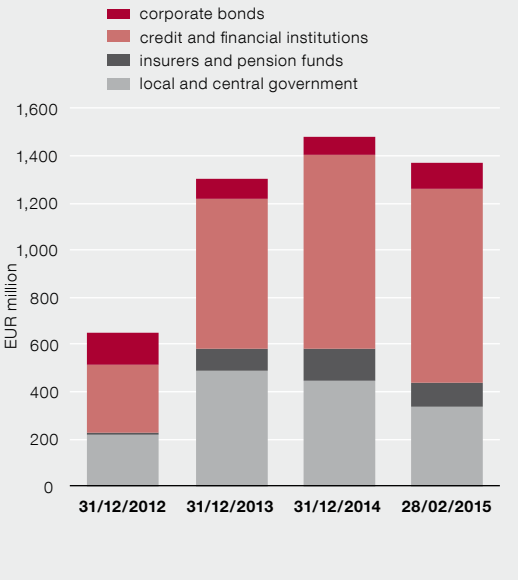
The starting point for assessing the need for a countercyclical capital buffer requirement is the

Figure 3.1.5. Structure of the loans overdue by more than 60 days as at 31/12/2014*



*Area represents sector's share in loans overdue by more than 60 days

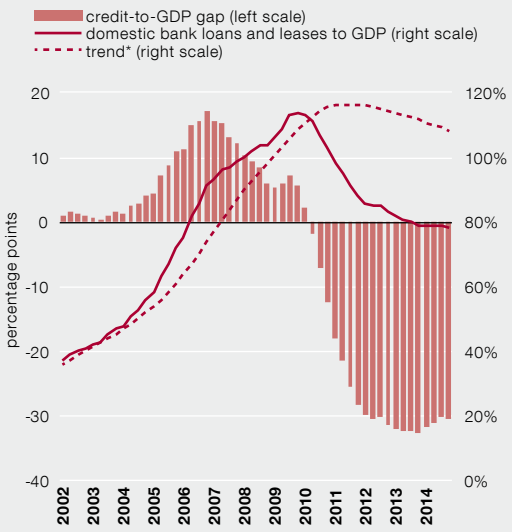
Figure 3.1.6. Securities portfolios of banks by issuer



credit-to-GDP ratio and its deviation from the long-term trend, the **credit-to-GDP gap**. The credit-to-GDP gap in Estonia has remained at about -30 percentage points since 2012, and is calculated to remain negative for several years more (see Figure 3.1.7).

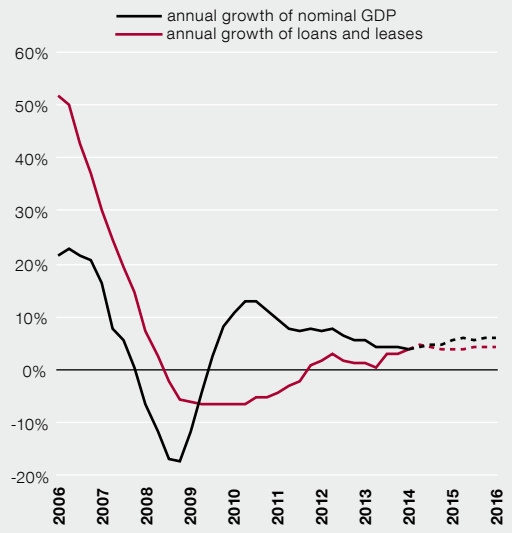
However, a negative credit-to-GDP gap does not make it impossible that increases in debt could start to create systemic risks sooner, and so other indicators also need to be considered in the assessment of the need for buffers. It is most important to observe changes in credit growth and how it differs from economic growth. Growth in the loan and lease portfolio to the non-financial sector has been relatively moderate this year and has remained slower than nominal economic growth (see Figure 3.1.8). The Eesti Pank December forecast expects that credit growth in the non-financial sector will be slower than nominal GDP growth in 2015 and 2016, and so Eesti Pank does not consider it necessary to impose countercyclical capital buffers in the second or third quarters of 2015.

Figure 3.1.7. Ratio of domestic bank loans and leases to GDP and the credit-to-GDP gap



Sources: Statistics Estonia, Eesti Pank
* HP filter (lambda = 400,000)

Figure 3.1.8. Annual growth of the loan and lease portfolio of banks and nominal GDP



Sources: Statistics Estonia, Eesti Pank

Liquidity and funding

Liquid assets increased both in 2014 and in early 2015. The **liquid assets** of the banks operating in Estonia were at their highest ever levels at the end of February at 5.7 billion euros, having increased by 13% over the year (see Figure 3.1.9). As the balance sheet increased by less than liquid assets did over the year, the share of liquid assets in total assets also increased, to around 27% at the end of February. This means the ability of banks to withstand short-term liquidity shocks has increased slightly.

All the banks operating in Estonia met the requirements for the **liquidity coverage ratio (LCR)**, which indicates that the banks here should be able to survive short-term liquidity

stress episodes in the funding markets. Under the LCR requirement, the highly liquid assets of the banks operating in Estonia should be able to cover from 1 January 2015 the net liquidity outflows during a 30 calendar day stress periods (see Box 3 The new liquidity requirements for banks for more details). The individual figures for the banks at the end of January ranged from 113% to 511%.

After the European Central Bank made the interest rate on its standing deposit facility negative in June last year, there has been little change in the structure of liquid assets. To avoid the negative interest rates, the banks are mainly holding only the compulsory minimum reserve at the central bank. This means that the portfolios of liquid securities and claims against other banks have increased at the expense of the assets previously held at the central bank. Claims on the central bank provided an average of 20% of liquid assets in the first five months of 2014, but since June the proportion has generally been 5–7%[16]. At the end of February, claims on the central bank increased as a share of liquid assets by 3 percentage points from their January level to 10%, mainly because of temporary growth in the current accounts of the banks.

The **funding** structure of the Estonian banking sector can generally be seen as favourable from the point of view of financial stability. Over 80% of the funds used come from deposits, which are considered a stable source of funds (see Figure 3.1.10). Client deposits have continued to grow, and they were 8% larger in February 2015 than a year earlier. The amount of funds taken from banks did not particularly change in contrast, and was the same in February as a year earlier

16 The central bank's share of assets increased sharply in December because of a one-off transaction, and it fell back in January to where it had been since negative interest rates were introduced.

Figure 3.1.9. Liquid assets of banks and their share in total assets

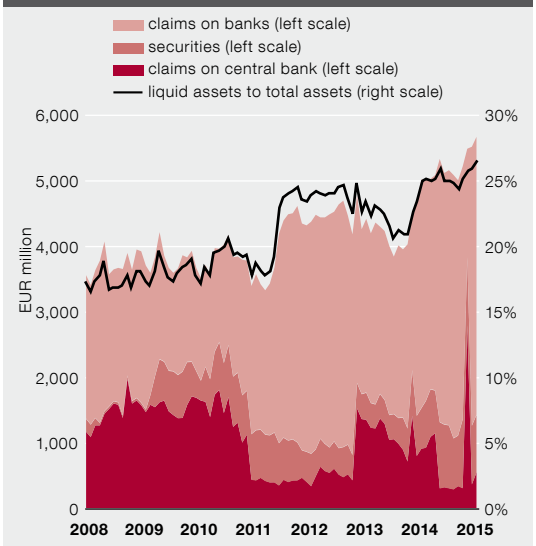
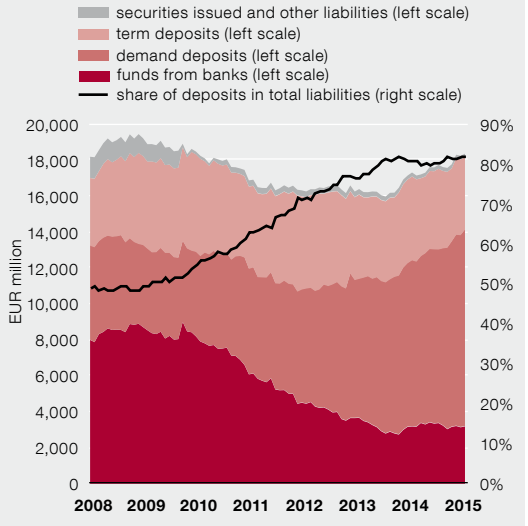


Figure 3.1.10. Structure of banks' liabilities



at 3.2 billion euros. Primarily because of the increase in liquid assets, the market-based funding ratio improved at the end of February[17], moving from –9% to –12%.

The rapid growth in **client deposits** has mainly been in demand deposits, as low deposit interest rates do not encourage money to be put in time deposits. The growth in demand deposits has led to a change in the maturities structure of the liabilities of the banks (see Figure 3.1.11). The share of demand deposits in total resources was 7 percentage points higher in February than a year earlier at 60% and it has mainly increased at the expense of term deposits of up to one year. The share of long-term funds with a maturity of over one year increased slightly and was 1.8 percentage points higher at the end of February than a year earlier at 8.7%.

Non-resident deposits grew at the end of last year, mainly through an increase in demand deposits. The annual growth in non-resident deposits stood at 16% at the end of February. The growth in non-resident deposits is generally more volatile than that in resident deposits, and so the risk of outflows of such deposits is larger. The majority of non-resident deposits come from tax-free or low-tax regions, and these accounted for 45% of all non-resident deposits in February 2015. The share of deposits from these areas was around 5 percentage points higher than at the same time last year (see Figure 3.1.12). Deposits from the United Kingdom provided 16% of all non-resident deposits at the end of February, while 9% came from Russia and 8% from Cyprus.

Figure 3.1.11. Structure of funding by maturity

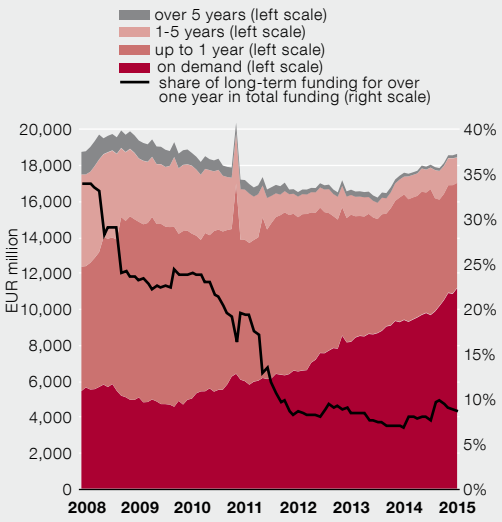
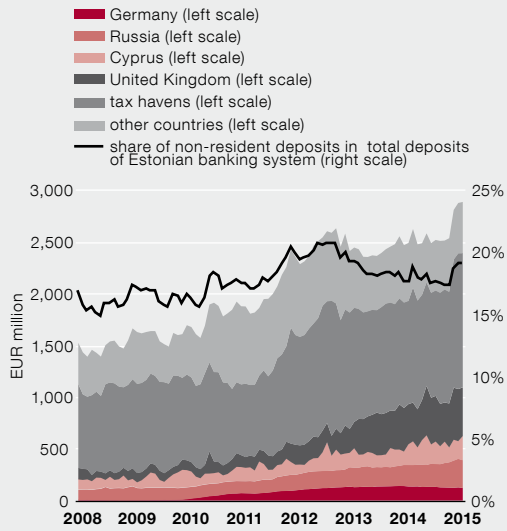


Figure 3.1.12. Non-resident deposits

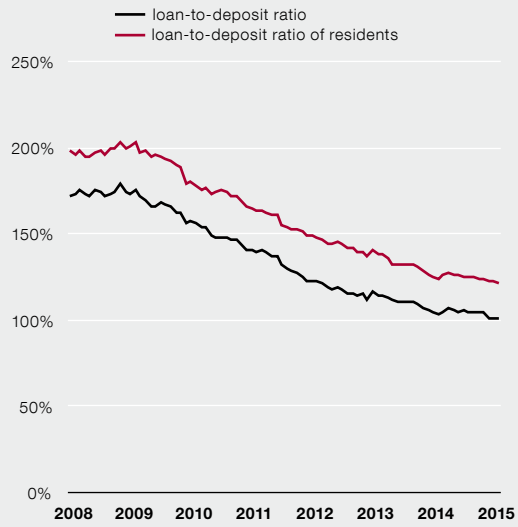


17 Market funding risk ratio = (market-based funding - liquid assets) / total assets. Market-based funding means funds from other banks, including parent banks, and bonds that have been issued.

Around one fifth of the deposits in the Estonian banking sector are non-resident deposits and that share has changed little for years now. Banks that have a higher share of non-resident deposits hold more in liquid assets than the average, which alleviates the liquidity risks that arise from non-resident deposits.

The loan-to-deposit ratio has improved consistently since 2009 and at the end of February it was down to 100% (see Figure 3.1.13). Without non-resident loans and deposits, the loan-to-deposit ratio is higher at 120%. Although this is around 2 percentage points better than a year ago, it still shows that resident deposits alone are not sufficient to fund loans to residents.

Figure 3.1.13. Loan-to-deposit ratio



Box 3: New liquidity requirements for banks

The main priority for banking supervision until the recent financial crisis was capitalisation. The Basel Committee on Banking Supervision did not have a standard for liquidity risk and there was no harmonised method in the European Union for assessing it either. However, a lot of the problems that financial institutions faced during the crisis arose from the liquidity risks they had taken on and not from shortages of capital at first. Harsh lessons were learned from the tendency to finance long-term assets with short-term funds, and it illustrated the clear need to improve the liquidity and funding management of the banks. To strengthen the resilience of the banks to liquidity risk, two liquidity standards have been introduced, the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR). The LCR is intended to improve the short-term liquidity of the banks, while the NSFR should restrict the risks from an excessive mismatch in maturities over the longer term.

The liquidity coverage ratio

The LCR requirement obliges banks to hold sufficient liquid assets that they would be able to cover the net liquidity outflows over a 30 calendar day stress period. This requirement does not prevent them taking on liquidity risk, but it says that in doing so, banks must have sufficient buffers to insure themselves against a short-term liquidity crisis. The LCR was introduced to increase the

resilience of the banks to liquidity shocks and to strengthen their short-term liquidity by creating an additional incentive for them to fund their activities from more stable sources of funds.

The liquidity coverage ratio is calculated from two components:

1. the value of liquid assets with a high credit rating after deductions for the likely drop in price in a liquidity stress period;

2. the net outflow of cash, which is calculated as the difference between the forecast outflow of funds and the estimated inflow during a 30 day period of stress when a part of deposits flows out and it is difficult to roll wholesale financing over. The more stable the funds used are, the smaller the outflow of funds is estimated to be. Several indicators are used in the assessment of stability, among them the length of each depositor's relationship with the bank and the presence of a state guarantee for deposits.

Banks can adapt their activities to meet the requirements of the liquidity coverage ratio in several ways. One way is to increase their stock of liquid assets or use deposits more as a source of funds. Highly liquid assets include all assets that will not lose their value even at times of stress, or will lose only very little of it. In October 2014 the European Commission published a delegated act[18] on the application of the LCR in the European Union. This regulation divides all high-quality liquid assets into three groups and it sets conditions defining the maximum share that assets with different levels of liquidity may provide in the liquidity buffer, and the typical deductions in value that different types of assets should be subject to. Liquid assets, the deductions and the limits within the liquidity buffer are shown in more detail in Table B3.1. The structural features of the European Union financial sector were taken into account when the regulation for the LCR was being drafted for the European Union, which has led the European

Table B3.1. Haircuts, caps and floors for different liquid assets

	Examples of liquid assets	Haircut	Percentage of liquidity buffer	
Level 1 liquid assets	cash, deposits at central bank, Member State government bonds, third country government bonds with at least AA- rating, covered bonds that meet certain specific conditions*	0% (covered bonds: 7%)	60-100%	
Level 2A liquid assets	Third country government bonds and bonds issued by public entities with a 20% risk weight, corporate debt securities (issue size of min. EUR 250m, at least AA- rating), covered bonds that meet certain conditions*	15%		Maximum 40%
Level 2B liquid assets	Asset-backed securities (underlying assets: mortgages, auto loans, SME loans, consumer loans), equities that form part of a major stock index, covered bonds that meet certain conditions*, restricted committed liquidity facilities, corporate debt securties (issue size of min. EUR 250m, at least BBB- rating)	25%-50%	Maximum 15%	

* Covered bonds are subject to a 70% cap in the liquidity buffer
Source: Commission Delegated Act (EU) 2015/61

18 Commission Delegated Act (EU) 2015/61 of 10 October 2014 supplementing the European Parliament and Council Regulation (EU) No 575/2013 with regard to the liquidity coverage requirement applicable to credit institutions.

Union standards to differ somewhat from the Basel standards. An example of this is that a wider range of asset-backed securities are accepted as liquid assets and certain covered bonds are given more extensive recognition in the LCR than under the Basel standard.

The net stable funding ratio

The net stable funding ratio requirement supplements the LCR requirement and requires banks to maintain a stable funding structure that matches the structure of their assets and off-balance-sheet activities. This standard limits dependence on short-term sources of funds and helps in assessing the risks of financing. The net stable funding ratio is calculated as the ratio of the available amount of stable funding to the required amount of stable funding and it must be at least 100% to meet the requirement.

The net stable funding ratio is calculated from two components:

1. the available amount of stable funding, such as deposits, bonds with long maturities and equity, which is found by applying different weights of between 100% and 0% to sources of funds of different types. The more stable a source of funds is considered to be, the more weight it is given. Long-term sources of funds are assumed to be more stable than short-term sources. The deposits of households and small and medium-sized enterprises are also considered more stable than sources like wholesale funding;

2. the required amount of stable funding, to cover loans for example, which is weighted for factors that reflect the market liquidity and maturity of the required stable funding. The more liquid an asset is considered to be, the less weight it is given. This means that short-term high-quality assets need less in stable funds than assets with long maturities such as housing loans.

Implementation of the liquidity requirements

The LCR requirement is being introduced gradually in the European Union, and will apply fully by 2018, though member states are able to shorten this transition period. The requirement applies 100% in Estonia from 1 January this year. Implementation of the net stable funding ratio has not yet been programmed in Estonia, but it should come into force in the European Union in 2018.

Box 4: The relations between Estonia's biggest banks and their parents

A majority of the banks operating in Estonia are subsidiaries or branches of large Nordic bank groups and so their operations are directly connected to their parent groups and to the

developments in the parent bank's home markets. Risks from rapidly rising real estate prices and high debt levels have increased in recent years in Sweden in particular, though also in Norway and Finland. Any loss of confidence by international financial markets in the parent banks or in the economies in the home markets could in consequence pose a major risk to financial stability in Estonia. This makes it important to assess how far the operations of the biggest banks operating in Estonia are affected by their parents and whether the relationships have changed over time.

The large Nordic bank groups mainly entered the Estonian banking market in the late 1990s and early 2000s after the Russian crisis. There was not enough in domestic savings to fund the economy and being part of the Nordic bank groups enabled banks to access international financial markets. Funds from parent banks allowed market share to be increased rapidly, and the funding of the banks relied ever more on obligations to the parent companies. The debt liabilities originating from the parent banks of the four biggest banks peaked in May 2008, just before the global financial crisis hit, at 7.8 billion euros, or 43% of the total liabilities of the banks (see Figure B4.1).

During the crisis the bank groups changed their lending policies and the price of funds rose, risk assessments tightened and the credit supply shrank. In the years that followed, the banks preferred to pay back the funds they had taken from their parents and the stock of assets of the banks diminished. During the recovery of the economy and as incomes rose, the growth in deposits from the non-financial sector accelerated and this

Figure B4.1. Aggregate liabilities owed by the four largest banks to parent banks by maturity

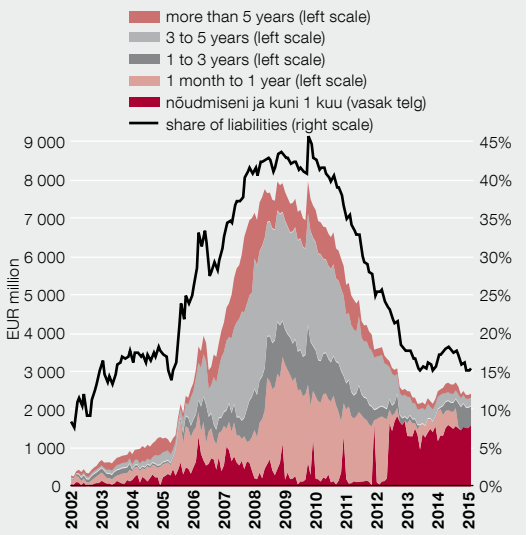
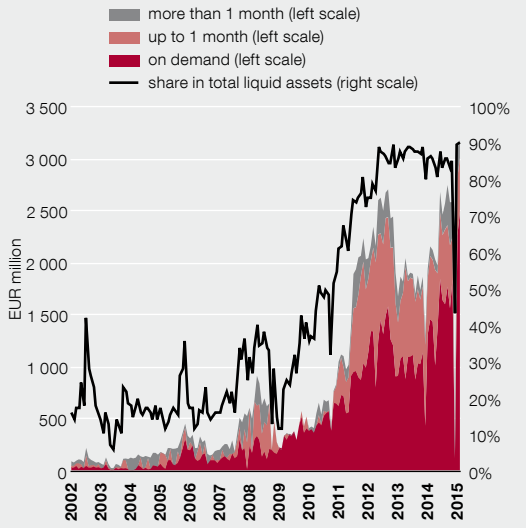


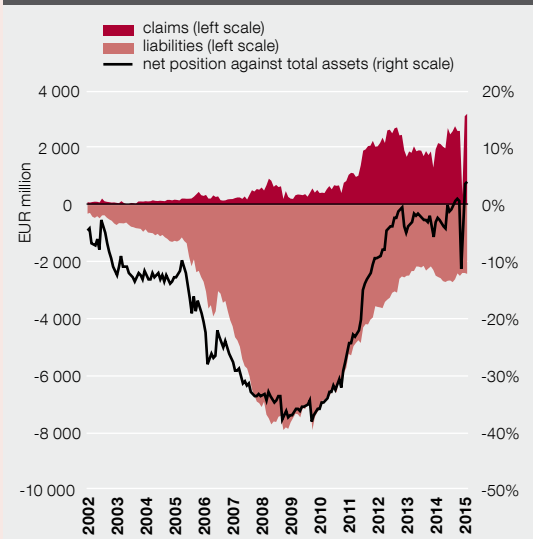
Figure B4.2. Aggregate claims of four largest banks on parent banks and their share in banks' total liquid assets



allowed the banks to finance their lending more from domestic deposits. The bank groups have not wanted to increase their loan supply substantially in Estonia, even under current economic conditions, and so the role of parent banks in funding the local banks has declined since the crisis.

Funds from parent banks have been running at less than 20% of the liabilities of the banks since the end of 2012 and the maturities of these funds have dropped significantly in recent years together with their share. Around 70% of the liabilities to the parent banks were held on demand or with a contractual maturity of less than one month.

Figure B4.3. Aggregate claims, liabilities and net position of four largest banks to parent banks



The banks operating in Estonia are also related to their parent banks through liquidity management. The liquidity of the banks in the Nordic bank groups is managed at group level and a large part of their liquid assets are in the form of short-term claims on the parent banks. Before Estonia adopted the euro in 2011, the share of assets related to the parent banks was small, but after that the presence of the liquid assets of those banks increased notably (see Figure B4.2). Claims on the parent banks increased again after the European Union decided in June 2014 to introduce negative interest rates on the standing deposit facility at the central bank. The claims of the four largest banks on their parent banks accounted for 90% of the most liquid assets at the end of February 2015, while the value of other liquid assets was quite small at below 2% of all assets.

Comparing the claims and liabilities to parent banks reveals that during the time of rapid growth in the economy and during the crisis, all banks had a net position with their parent bank that was deeply negative (see Figure B4.3). This indicator has improved since the financial crisis and has been close to zero since the second half of 2014. The net positions towards the parent banks have varied quite a lot between banks since the crisis, as they have used funds from their parents in different ways.

The dependency of the Estonian banking sector as a whole on funding from parent banks has been reduced a long way since the time of rapid economic growth. A larger share of the funds taken from the parents is in short-term funds than was earlier the case. The reduction in funding dependency has been accompanied by closer connections with the parent banks through liquidity management and liquid assets.

Profitability

The profitability of banks remained strong in 2014 despite low base interest rates and moderate loan growth (see Figure 3.1.14).

The **operating profit** of the banks was a combined 306 million euros without one-off dividend income. This was around 8% less than in the previous year, but it was still high by the standards of other European countries (see Figure 3.1.15). Low base interest rates have reduced the income of the banks in other European Union countries too, but the accommodative atmosphere for growth has improved the quality of the loan portfolio. The drop in interest income has also been offset in some cases by income earned from service fees and trading portfolios (see Figure 3.1.16). The profit of the banks in Estonia has also been boosted in recent years by the return to perfor-

Figure 3.1.14. Net profit and net loan losses of banks

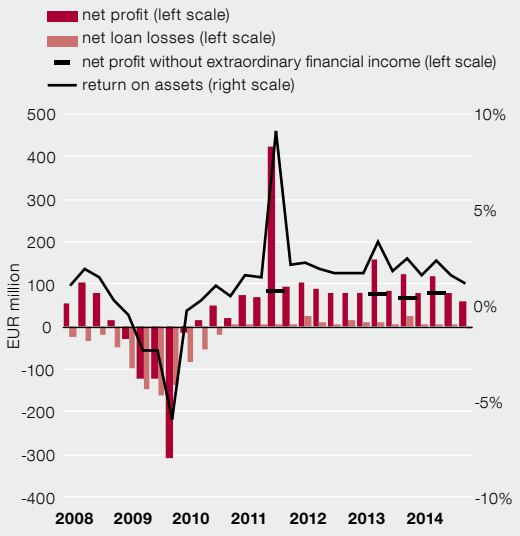
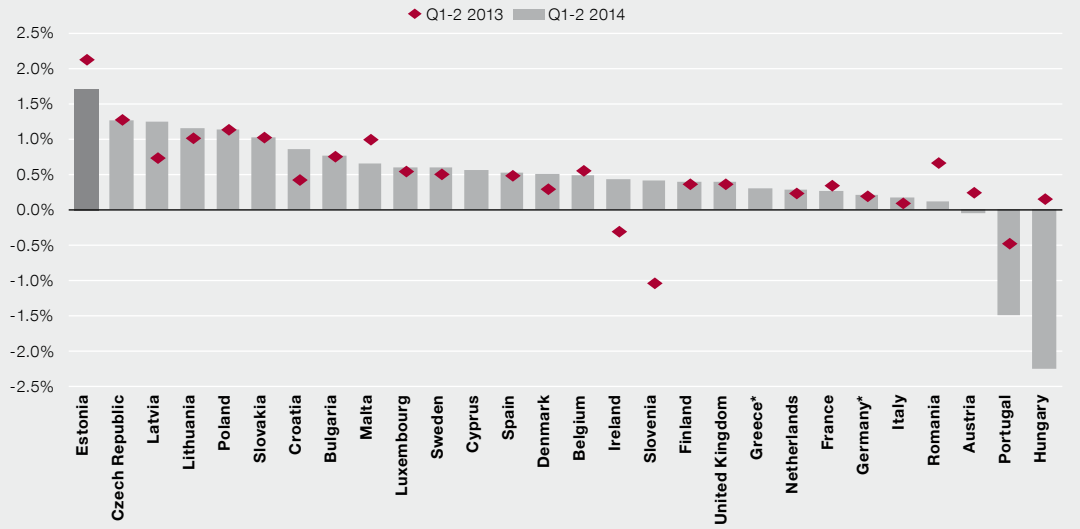


Figure 3.1.15. Banking sector profitability



*major banks
Source: European Central Bank

mance of loans that had previously been written down, though in 2014 this swelled the consolidated income of the banks by only 2%.

The loan portfolio represents a large part of the funding sources for the banks operating in Estonia. The ability to lower the price of funds has become quite limited and a majority of loans are issued with floating interest rates, which means that client interest payments depend largely on changes in base interest rates. The local banks saw their **interest income** increase by around 0.8% last year, while **interest expenses** fell by around three times that amount.

The growth in interest income has mainly been driven by income from bonds, while the income from the loan portfolio has changed little. Interest income was boosted in the first half of the year as new loans were granted with higher margins, but in the second half of the year the continuing decline in EURIBOR came to dominate (see Figure 3.1.17).

While banks are able to increase their interest income by investing in riskier activities or assets, the options for reducing **interest expenses** are rather more limited because the share of very cheap funds is already large. This means that falling prices for funds will have little effect on the profitability of banks in the short term, as a large part of their funds already comes from deposits that they pay little for.

The challenging environment has led banks to increase their **securities portfolios**, which could make the profitability of riskier positions more volatile. Even so, the securities portfolios and riskier positions have so far grown only moderately. The strong capitalisation of the banks also means they have sufficient resources to allow them to take on additional risk.

Figure 3.1.16. Aggregate components of the profitability of banks

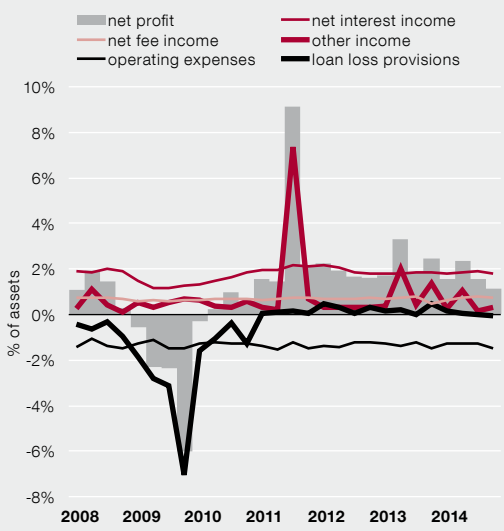
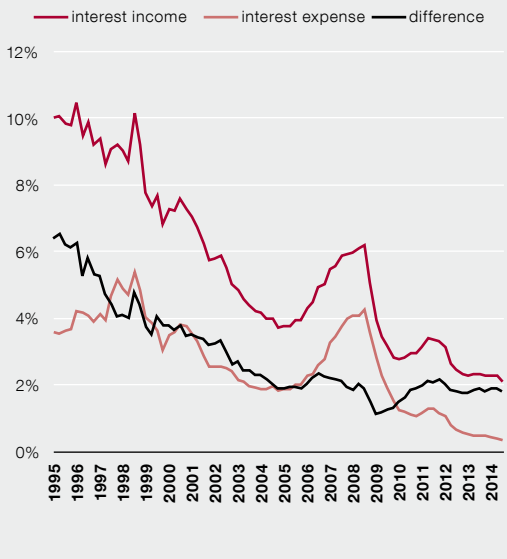


Figure 3.1.17. Interest income and expenses of banks as a ratio to assets



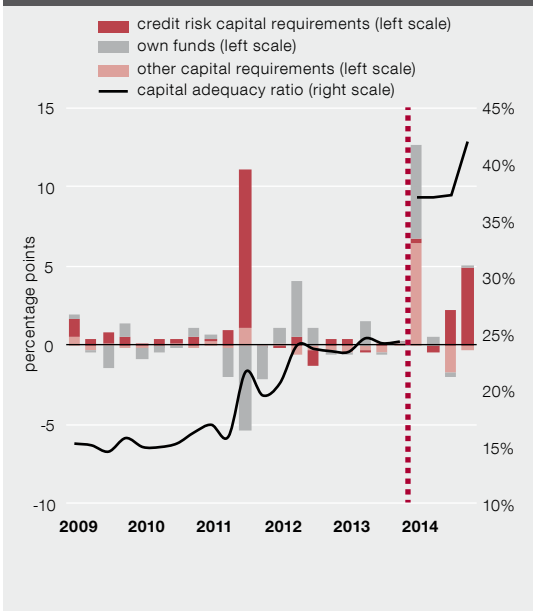
Fee income increased slightly for the banks in 2014, though mainly through transaction charges and contract fees. The local banks are not as involved in asset management as the Nordic banks and the overall share of fee income has not changed significantly recently.

As profits have recovered, the wages and bonuses of staff have also risen. The one-off costs of branch closures and staff reductions have also raised costs. The Danske Bank group announced that it is planning to close six of its twelve branch offices[19] and guide clients to using electronic channels and payment machines more. This change is however at least partially offset by the increased cost of information technology development and management.

The trend of shrinking branch office networks and leaving clients to manage their cash and everyday payment orders for themselves is in evidence not only in Estonia, as the banks have acted similarly in other countries in the region, including the Nordic countries. To save costs, cash handling in branch offices is usually stopped first, and clients are directed to use machines for paying in or withdrawing cash as branch offices focus more on providing consultation services.

In future the profitability of the banks will come under pressure from the continuing low level of key interest rates. The book profitability of the banks will also be affected less in future by one-off income from the return to performance of previously written-down loans. As the local banks are very profitable and very strongly capitalised by international standards, a slight drop in profitability will not pose any threat to financial stability. The biggest risks still mainly stem from potential slow economic growth or unexpected developments in the main export markets of bank clients.

Figure 3.1.18. Quarterly change in capital adequacy ratio by components



Capitalisation

New capital requirements apply for banks in the European Union from 2014, under which their capital must equal at least 8% of risk-weighted assets, and their high-quality core equity tier 1 (CET1) capital must equal at least 4.5% of risk-weighted assets. Additional buffers were subsequently introduced in Estonia with a 2.5% capital conservation buffer from 19 May 2014 and a 2% systemic risk buffer from 1 August 2014. This means that all of the banks licensed in Estonia now need to hold total own funds equal to 12.5% of risk-weighted assets and CET1 equal to 9%.

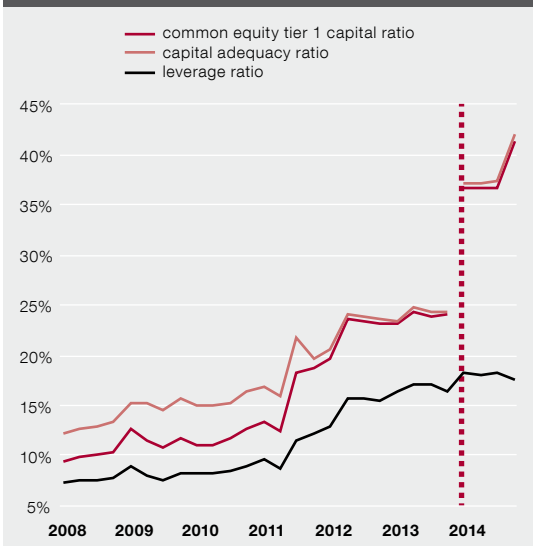
The ratio of total own funds in the banking sector rose to 42% by the end of 2014. Around 99%

19 The Danske Bank group announced at the start of this year that it was planning to terminate its active participation in the retail markets of the Baltic states and to close many of its client service offices. It is intending instead to focus mainly on business clients in the markets of the region. The Danske Bank group previously exited the Irish retail market in the same way and it is now selling a lot of its positions in other local markets.

of total capital was **core equity tier 1 capital**, which increased to 41% of risk-weighted assets (see Figure 3.1.18). The ratio of total own funds climbed by 17 percentage points last year and it leapt up at the start of the year as own funds increased and the reporting methodology was changed. The changes affected how minimum reserves of own funds are presented during the transition period of the Basel I method of calculating capital. The ratio of total own funds rose by around 5 percentage points in the fourth quarter of the year, mainly because one large bank reduced the credit risk requirement in its internal rating methodology[20].

The **financial leverage ratio** of the bank groups rose last year by around 1 percentage point to 18% (see Figure 3.1.19). Although the capital ratios rose substantially, the leverage ratio has not changed much since its rise in the first quarter in response to the increase in own funds. In consequence, the capital ratio has risen largely because of the change in methodology and the calculation of risk-weighted assets. Despite this, the capital indicators and the leverage ratio show that the Estonian banking sector is well capitalised. Bank groups prefer to hold as much equity as possible in Estonia because Estonia has the most favourable tax system. The strong capitalisation has led banking groups to start paying dividends to their parent banks out of the income earned in Estonia.

Figure 3.1.19. Capital and leverage ratios



20 The credit risk requirement was lowered because the bank started using the new expanded internal rating method (A-IRB).

Box 5: Forecast and stress test of overdue loans in the banking sector

Requirements from the macro economy

The forecast and stress test for overdue loans[21] is based on the forecast published by Eesti Pank in December 2014, which expects economic growth to pick up gradually to 2.1% in 2015 and 3.3% in 2016. The revival of growth will draw on returning external demand alongside demand from households. In the baseline scenario the loan portfolio will increase by 3.8% in 2015 and by 4.4% in 2016, mainly through increased lending to companies and moderate growth in housing loans following the stabilisation of the real estate market.

21 Loans overdue for more than 60 days.

Three risk scenarios were modelled alongside the baseline scenario as usual, assuming sharply slower growth than in the baseline scenario by 15, 10 and 5 percentage points over one quarter. An additional macro model is then used to connect these shocks to other economic indicators so that their impacts on each other can be considered. From this, three complete risk scenarios of differing severity are produced (see Figure B5.1). The credit risk model is then finally used for assessing the possible impact of the baseline and risk scenarios on the Estonian banking sector.

Forecast for overdue loans

The baseline scenario foresees that the share of overdue loans in the loan portfolio will continue to decline (see Figure B5.2), and the quality of corporate loans and consumption loans in particular will improve over the forecast horizon. Although the share of housing loans overdue is already very small, it will fall further during the period covered by the forecast, by around one fifth in total. Overdue loans will diminish most during the first part of the forecast horizon and they will account for less than 1.5% by the end of 2015 and be close to the natural level that may be considered unavoidable in normal lending activity. It is forecast that the share of overdue loans in the loan portfolio will decline by 0.35 percentage point this year and 0.13 percentage point in 2016. This will be helped by low interest rates and accelerating economic growth, and for households also by low unemployment and steady wage growth. As overdue loans are mostly reduced by write-offs, the actual share of overdue loans may not be as forecast.

Figure B5.1. Quarterly real GDP growth assumptions in the base and risk scenarios

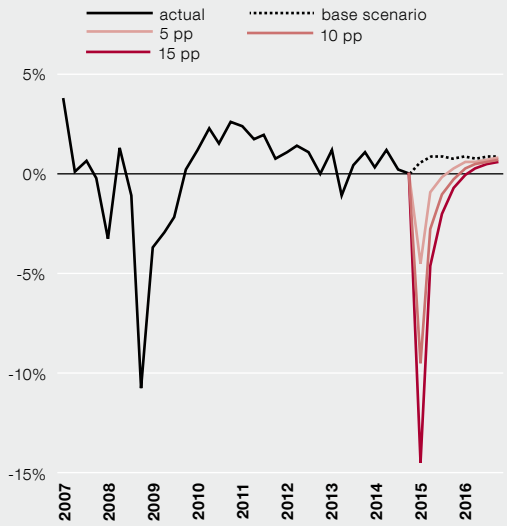
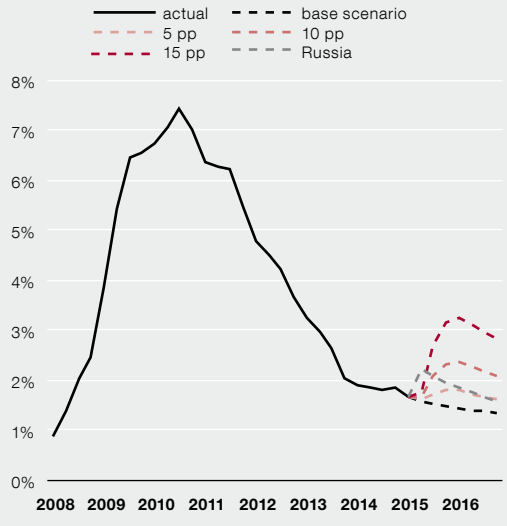
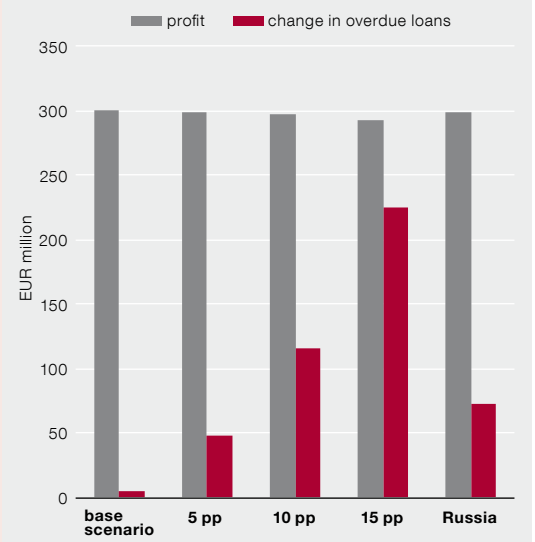


Figure B5.2. Loans overdue by more than 60 days as a ratio of the loan portfolio



In the risk scenarios reflecting very unfavourable changes in the real economy, the economic circumstances of borrowers and their ability to repay loans deteriorate sharply, which in turn has a negative impact on the banking sector. Depending on the risk scenario used, the share of overdue loans increases to 1.8–3.3%, and it is consumption loans and corporate loans that see the worst deterioration in quality. The retreat of the shock and the recovery of the real economy then start to reduce the volume of overdue corporate and housing loans, but the quality of the portfolio of consumption loans does not improve during the forecast horizon. Larger banks are less vulnerable to the risk scenario and the share of overdue loans reaches 1.6–2.8% for them, depending on the size of the shock. Smaller banks are more susceptible to the risk scenario and the share of overdue loans reaches 4.4–8.3% for them, depending on the size of the shock. The smaller banks are more susceptible because corporate and consumption loans make up a larger share of their loan portfolios. The vulnerabilities to overdue loans in the risk scenarios have not changed significantly from the last Financial Stability Review and they remain notably less than during the recession of 2008, when the cumulative decline in the economy was close to that in the most negative risk scenario.

Figure B5.3. Profit before loan loss and change in overdue loans



The ability of the banks operating in Estonia to earn profits is good. Even when interest income and service fee income fall in the negative scenarios, profit before loan losses is little lower than in the baseline scenario. Profit exceeds the growth in overdue loans even in the most negative scenario (see Figure B5.3). This means that current profits are sufficient to cover loan losses even in the negative scenarios, and the equity of banks would not decrease.

***Risks related to Russia*[22]**

The banks operating in Estonia are indirectly exposed to risks related to Russia through loan clients whose activity depends partly on trade with Russia. However, the share of such clients in the loan portfolios of the banks is very small, and they account for around 1% of the loan

22 The impact of this scenario is similar to that in the scenario with a fall in foreign demand that was published in the Financial Stability Review in autumn 2014.

stock of the banking sector. Only a few small banks have granted a significant share of loans to such clients.

There are however more sectors in Estonia that are indirectly dependent on Russia or affected by risks coming from there, and these include transport and agriculture, which are among the most vulnerable in this context. These sectors account for around 14% of the loans issued to companies in the non-financial sector. The banks consider that the turnover of around one tenth of the companies in the vulnerable sectors largely depends directly or indirectly on the Russian market. If those companies were to have problems repaying loans, it could increase the share of overdue loans in the corporate loan portfolio by around 1 percentage point to 3.1%, and the share in the total loan portfolio to 2.2%. Assuming that all other developments remain the same as in the baseline scenario, the share of overdue loans would then fall to the same level by the end of the period covered by the forecast as it was at the start of it.

3.2. INSURANCE COMPANIES

Steady economic growth and higher household incomes aided **growth in the Estonian insurance market**, as 8% more was taken in insurance contributions than in the previous year. The low interest rates however had a dampening effect on the operating results of life insurers. The net profits of insurance companies registered in Estonia were substantially larger than in 2013, rising by around 13 million euros or 43%. The rise in net profits was driven to a large extent by the results of non-life insurers, as their profit had been low in 2013, and the net profit earned in 2014 was still below the average of the past five years.

The accommodative monetary policy is likely to leave interest rates at their current low levels for a long time yet and so it remains important for life insurers to adapt their business models to the changed circumstances. In regard to the legal framework, insurance companies are making preparations for the transition to the Solvency II capital requirements. The results of the Europe-wide stress tests run by European Insurance and Occupational Pensions Authority (EIOPA) in 2014 showed that the readiness of Estonian insurers for the transition to the Solvency II requirements is assessed to be average. The factor most affecting the Estonian life insurers that did the tests was interest rates remaining low for a long time[23].

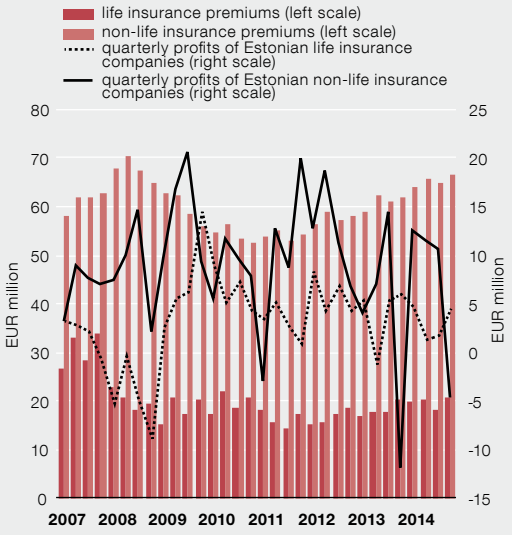
Life insurance

Like in 2013, the operating results of Estonian life insurance companies were largely dictated in 2014 by low interest rates. Nevertheless, this did not harm the popularity of life insurance products, as the Estonian life insurance market grew by 9% over the year (see Figure 3.2.1). The low interest rates did make the liabilities of the life insurers more expensive though. Above all, an increase in technical provisions has left the **insurance technical result** smaller in the past couple of years and it was 26% down on 2013.

Despite the low interest rates the net income from investments in 2014 was almost triple what it was a year earlier (see Figure 3.2.2). **The average return on the investment portfolio** increased from 2.1% in the previous year to 5.9%, which is

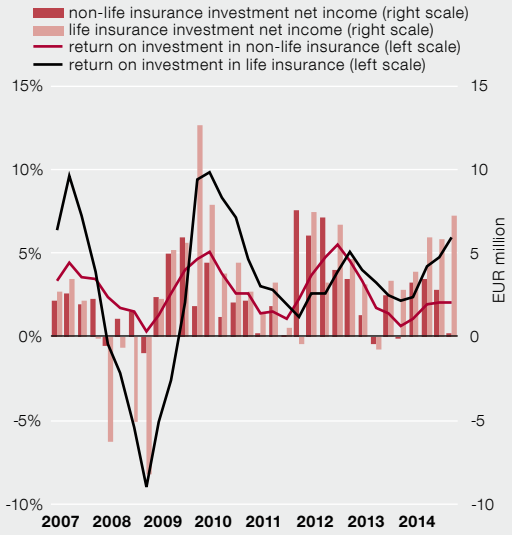
23 Press release from the Financial Supervision Authority, 1 December 2014 The Estonian insurance market is at an average level in the EIOPA stress tests (in Estonian only)

Figure 3.2.1. Profit of insurance companies and premiums from residents



Source: Statistics Estonia, Eesti Pank

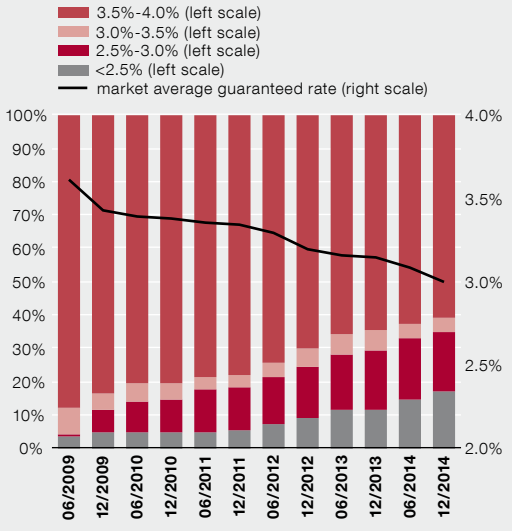
Figure 3.2.2. Yield of the investment portfolio and net investment income



almost double the average rate of return guaranteed to insurance clients of 3% (see Figure 3.2.3). As the return on investment was mainly driven by the rise in asset prices in financial markets, such a rise was probably temporary in nature. Looking only at the return on the investment portfolio may give an excessively positive impression of the profitability and prospects of life insurers. If interest rates stay low, insurance companies will probably not be able to increase their profitability over the medium term by repricing the value of their assets. If the average annual return on investment is adjusted for the extraordinary one-off income from repricing assets, the return on the investment portfolio comes out at 4%.

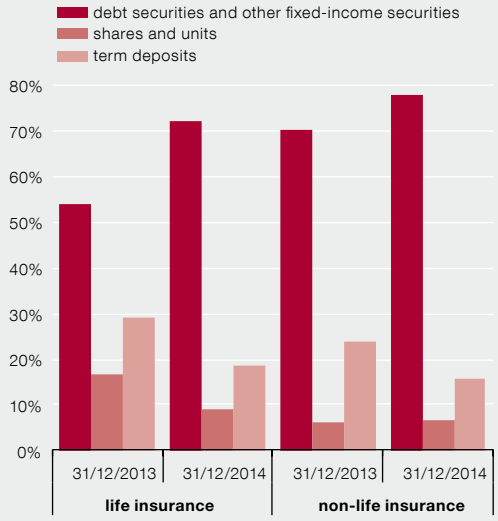
In macroprudential terms it is important to observe whether the search for higher returns has led to increased risks in investments. Although the structure of investments by life insurers has changed to some extent, the **investment strategy of Estonian life insurance companies**

Figure 3.2.3. Distribution of guaranteed rate contracts by interest rate and the market average guaranteed rate



can still be considered conservative. The financial investment portfolio is mainly made up of bonds, and their share increased to 72% in 2014 (see Figure 3.2.4). As it was in the first half of 2014, the share of central government bonds in the bond portfolio was again reduced in the second half of the year, and it fell from 74% to 55% over the year as a whole. The share of bonds from financial institutions increased by 18 percentage points at the same time, and that of corporate bonds increased by 1 percentage point (see Figure 3.2.5). The risk level of the bond portfolio has improved slightly though, as the share of high-quality bonds rated AA- or higher increased from 35% in 2013 to 41% in 2014[24]. The quality of the bond portfolio was also raised by a reduction in the share of non-investment grade bonds.

Figure 3.2.4. Investments of insurance companies

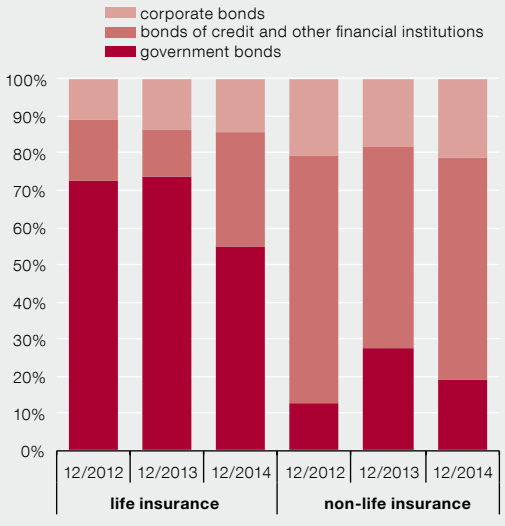


Non-life insurance

The Estonian non-life insurance market continued to grow in 2014 as **contributions to the non-life insurance sector** increased by 7% over the year to 261 million euros. Branches of foreign non-life insurers operating in Estonia had 24% of the market.

Unlike life insurers, the non-life insurers registered in Estonia managed to improve their operating results in 2014. They are less exposed to the risks from low interest rates than life insurers are and their profitability depends principally on the successful management of insurance risks. The technical result from the insurance operations of non-life insurers increased by 7 million euros last year, or 26%. **The net loss ratio** fell from 65% in 2013 to 58%. Estonian non-life insurance companies collect enough insurance payments at that level to cover the claim payments and operation costs, and also to earn profits.

Figure 3.2.5. Debt security investment of insurance companies by issuer



24 Bonds without a rating are not taken into account when the shares of ratings are calculated.

Developments in the financial markets in 2014 aided the growth in the profitability of the investments of the non-life insurance companies. Although net interest income was down 12% on the previous year, **net investment income** tripled to 9.7 million euros due to the repricing of assets. The structure of risk assets has not changed a great deal. The shares of bonds and shares in the financial investment portfolio increased in the first half of 2014 and the share of deposits fell, but the structure hardly changed in the second half of the year.