

### 3. THE STRENGTH OF FINANCIAL INSTITUTIONS

#### 3.1. BANKS

##### Liquidity and funding

The **stock of liquid assets** of banks operating in Estonia has increased significantly this year and stood at 25% of total assets at the end of August (see Figure 3.1.1). The decision of the European Central Bank in June to make the standing deposit facility rate negative changed the **structure of the liquid assets** of the banks significantly. Since the decision came into force, the banks have held only the amount of assets at the central bank that is necessary for them to meet the minimum reserve requirements. The assets that were earlier held at the central bank were mainly directed into deposits with other banks while the portfolio of liquid securities has also been increased. Securities issued by central governments and banks accounted for almost one fifth of the total liquid assets of the banking sector at the end of August.

The funding of the Estonian banking sector is still mainly based on deposits, and growth in **retail deposits** has continued to be strong this year, reaching 10% at the end of August. Retail deposits make up 80% of the liabilities of banks, and overnight and demand deposits alone account for more than half (see Figure 3.1.2). As low interest rates do not encourage clients to use term deposits for their money, the main growth in retail deposits this year has been in demand deposits, while term deposits have remained about where they were at the end of last year.

**Non-resident deposits** supply one fifth of the retail deposits in the Estonian banking system and they totalled 2.3 billion euros at the end of August, which is about the same as at the end of last year. The growth in non-resident deposits is generally more variable than that in resident

Figure 3.1.1. Banks' liquid assets and their share in total assets

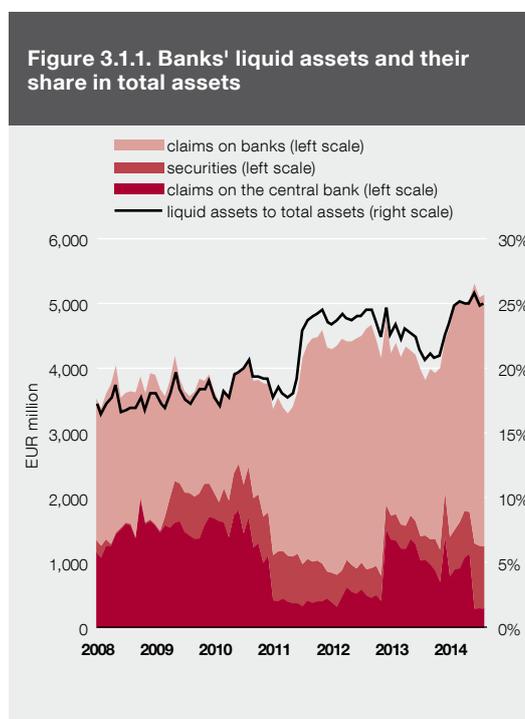
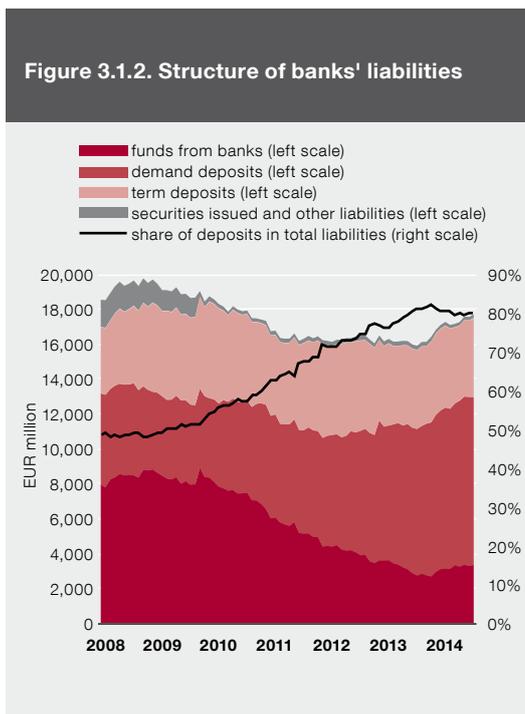


Figure 3.1.2. Structure of banks' liabilities



deposits, and this year it has not been any more volatile than usual. Three quarters of all non-resident deposits are in demand deposits and the risk of an outflow is much higher with them than it is for domestic deposits. The risk is mitigated because the banks with a higher proportion of non-resident deposits generally hold larger liquidity buffers than the average.

Although the funding of the Estonian banking sector has become ever more deposit-based over the past five years, some banks increased their **funding from other banks, including parent banks** again at the end of last year and the start of this. This was mainly done in order to increase liquid assets. As a result the **market funding risk ratio**<sup>17</sup> of the banking sector improved from a year before and stood at -8% at the end of August.

Although deposits increased strongly again, the acceleration in growth in the loan portfolio means the **loan to deposit ratio** of the banking sector improved more slowly. It has remained close to where it was at the end of last year throughout this year and it reached 105% at the end of August (see Figure 3.1.3). The banks fund their loan portfolios from various sources, but the majority finance their loans fully with deposits.

### Profitability

The profitability of the banks remained strong in the first half of 2014. Without one-off dividend payments, net profit was about the same as in the first half of the previous year, and was nearly 4% larger than in the second half of that year (see Figure 3.1.4). The average profitability of bank assets remains stronger than in most of the other European Union countries at 1.6%.

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.

Figure 3.1.3. Loan-to-deposit ratio

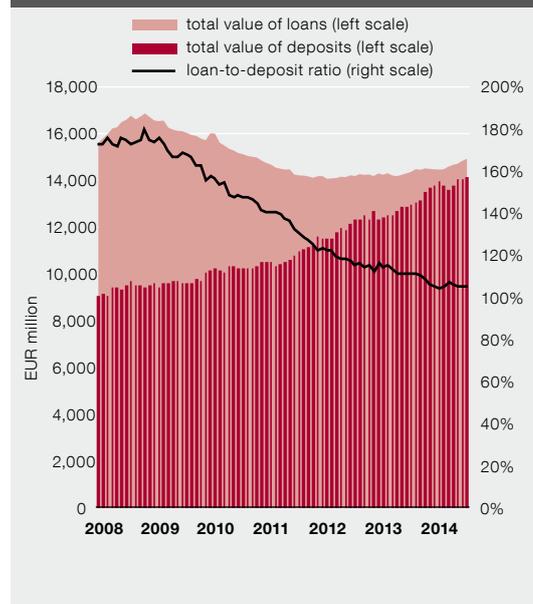
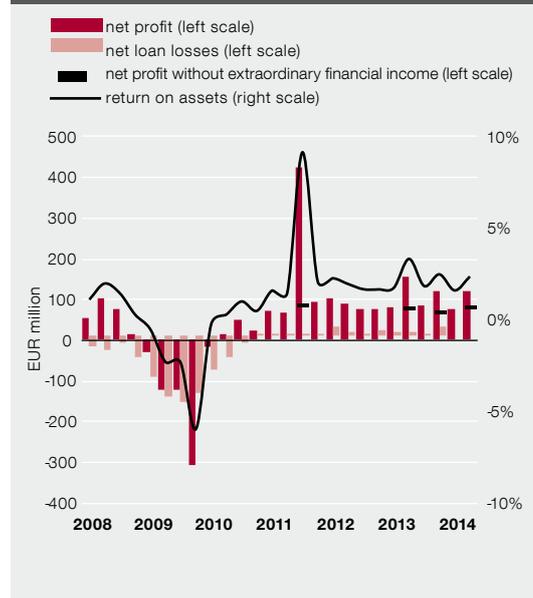


Figure 3.1.4. Banks' net profit and net loan losses



The aggregate **interest income** of the banks has been more or less steady for more than a year now and has increased nominally, though less so as a ratio to total assets (see Figure 3.1.5).

The **cost of funding** for banks has been held down by generally low base interest rates, the large share of deposits in liabilities, and the low cost of deposits. The increase in the share of deposits has this year been offset somewhat by increases in external funds used mainly for liquidity management, although the cost of such funds has not significantly affected the overall funding costs of the banks.

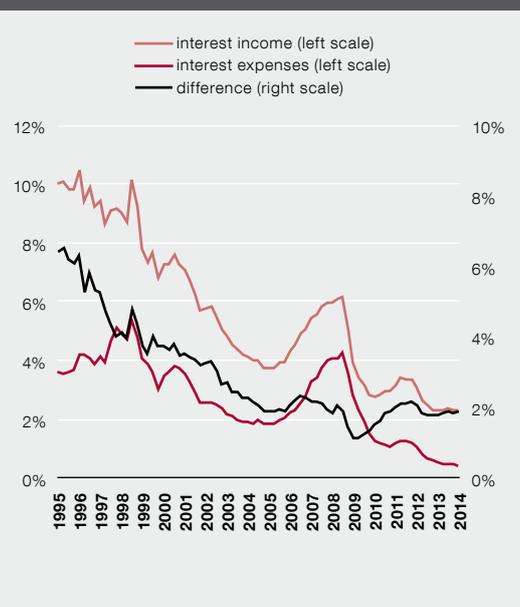
The lack of competition between banks for deposits has also helped keep down the cost of funding but the small amounts paid out on deposits have reduced interest among clients in longer-term depositing and increased the share of demand deposits (see Figure 3.1.6).

The interest income earned by banks should continue to increase to some extent in future as the share of loans with high marginal rates has continued to increase in the loan portfolios of the banks after a period of rapid loan growth (see Figure 3.1.7).

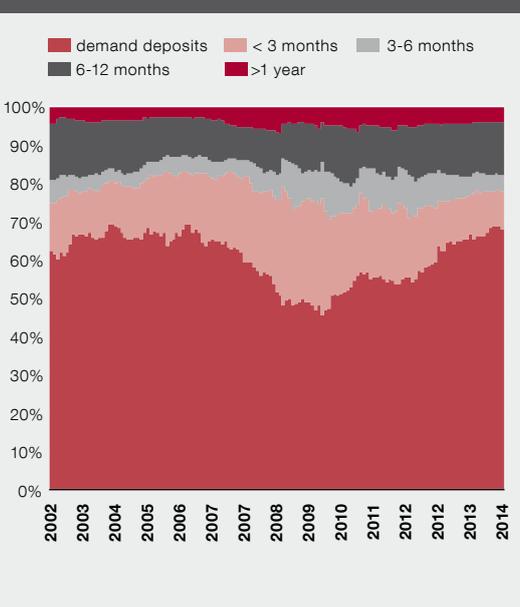
The temporary volatility in the **fee income** of the banks in the last quarter of last year and the first quarter of this was caused mainly by the accounting impact of changes in the structure of one banking group. There was little change in the structure of service fees for the other banks.

In Estonia the largest banks earn around 60% of their income from fees and services from payment transfers. In future banks can be expected to reduce their costs for payment transfer services somewhat because the system used previously for domestic transfers has been closed

**Figure 3.1.5. Banks' interest income and expenses as a ratio of assets**



**Figure 3.1.6. Structure of deposits by maturities**



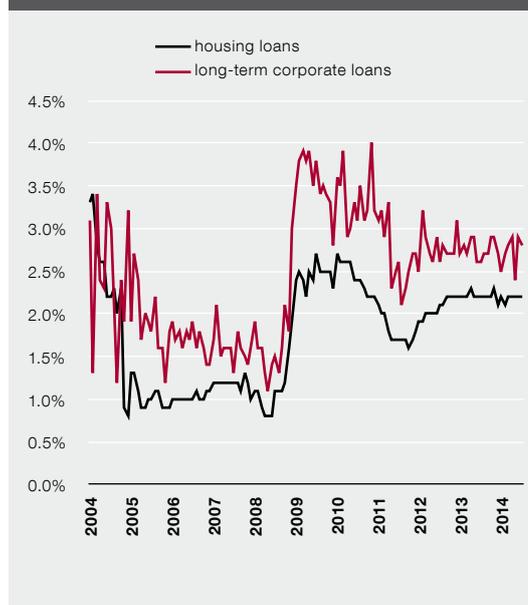
and retail payments are now settled through the same system as cross-border payments. The fee income of the banks depends to a large extent on volumes, and also on how much clients will do to find cheaper service providers.

The effect of earlier **write-offs** returning to performance has been smaller this year. Although a few new problem loans were added to the stock, the value of former write-downs starting to perform again was some 8 million euros more than the value of new write-downs. As a result the impact of the reversal of earlier write-downs contributed only around 5% of the net profit of the banks in the first half of the year, where it had been almost 40 million euros, or more than 10% of net profit, in the previous year.

The **operating costs** of the banks were somewhat lower in the first half of the year than a year earlier, mainly due to reductions in administration costs. Although it can be assumed that banks want to improve their cost efficiency, rising wage costs indicate this can better be achieved by increasing the assets under management rather than by reducing nominal expenditure.

**In future** the large share of loans with floating interest rates will mitigate the interest income risks of the banks, and interest income will be boosted by growth in the share of loans with higher marginals among assets. The cost of funds for the banks depends largely on the decisions of depositors about where to invest their savings. Competition for deposits has been quite quiet recently, with the result that the interest paid on term deposits has shrunk and the share of demand deposits has increased. Tougher competition could lead to something of a rise in the cost of funding for banks, though this assumes they would search more actively for investment opportunities or lower their current loan margins.

**Figure 3.1.7. Interest margins above 6-month EURIBOR on residential loans and long-term corporate loans**



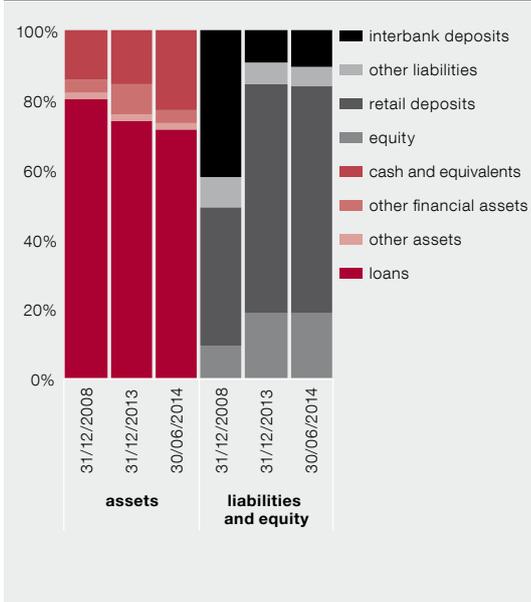
### Capitalisation

The consolidated balance sheet of the banking groups<sup>18</sup> grew by 4% in the first half of 2014. The **structure** of assets in the consolidated balance sheet saw a decrease in cash and equivalents and an increase in other financial assets (see Figure 3.1.8). The total volume of the credit portfolio remained around the same, but it shrank as a share by 2.4 percentage points to 71.4%. There was an increase on the liabilities side in deposits at credit institutions. Retail deposits have increased at the same rate as the total balance sheet and they continue to make up 65% of it. Equity continues to be around 19% of the balance sheet.

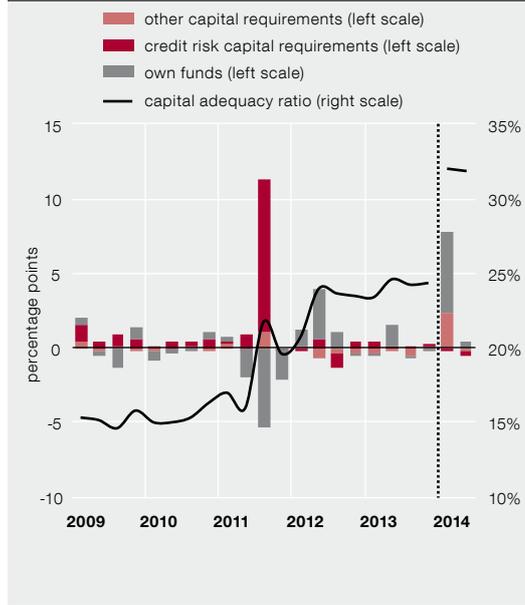
New single capital requirements started to apply to banks in the European Union from the start of 2014 and as a result, the 10% capital adequacy

<sup>18</sup> For this section, the figures for the banks have been consolidated, covering Swedbank, SEB, DNB, Bigbank, Eesti Krediidipank, LHV, Tallinna Äripank and Versobank.

**Figure 3.1.8. Aggregate balance sheet of the banking sector**



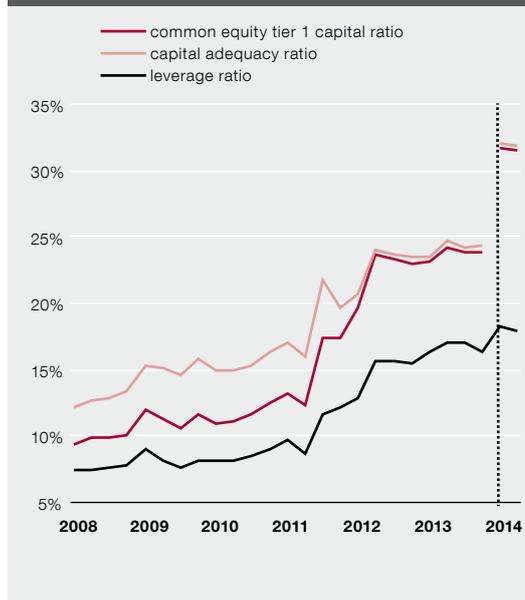
**Figure 3.1.9. Quarterly change in capital adequacy ratio by components**



requirement that had applied in Estonia since 1997 was lowered to 8%. As an additional 2% systemic risk buffer requirement has applied for all banks and banking groups licensed in Estonia since 1 August, the requirement for CET1 rose to 9% of risk-weighted assets.

In international comparison, the Estonian banking sector remains very well capitalised and easily passes the minimum capital requirements. The **Common Equity Tier 1** rate rose by the end of the second quarter of the year to 32% and the capital adequacy ratio was 7.5 percentage points higher than at the end of last year (see Figure 3.1.9). The main driver of the change was good profitability last year, which allowed equity to increase. There was also a rise in the capital adequacy ratio because of a change in the reporting method, which reflects the way minimum equity requirements are recognised in the transition period to the Basel II capital calculation method.

**Figure 3.1.10. Capital and leverage ratios**



Banks prefer to hold equity in Estonia because Estonia has a favourable tax system. The strong capitalisation of Estonian subsidiaries has led one banking group to announce its intention to pay some 60% of the income earned in Estonia to the parent bank in dividends.

The **financial leverage ratio**<sup>19</sup> of the banking groups rose at the start of this year to 18% and

remained about the same throughout the first half of the year (see Figure 3.1.10). The leverage ratio has increased by around 1 percentage point from a year earlier, and as it isn't affected by changes in risk assets, it changed by significantly less than the capital adequacy ratio. Despite this the financial leverage ratio of the Estonian banking sector is high and proves again that the banks here are well capitalised.

19 Tier one own funds as a ratio to assets.

#### Box 4: Forecast and stress test of overdue loans in the banking sector

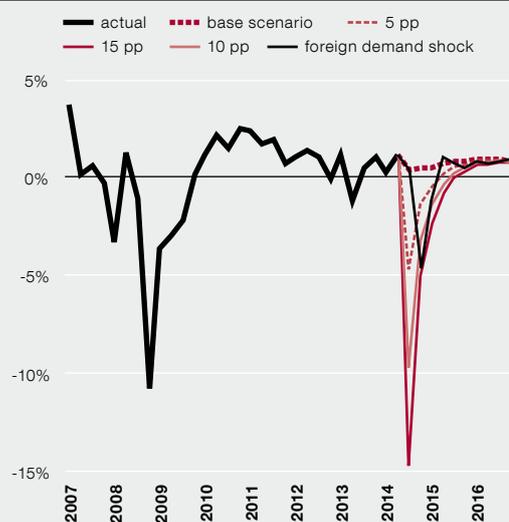
##### Requirements from the macro economy

The forecast and stress test for overdue loans<sup>20</sup> is based on the updated forecast published by Eesti Pank this September, which puts economic growth at 2.1% in 2014, rising to 2.5% in 2015 as unused capacity is deployed and external demand picks up. In the baseline scenario the loan portfolio grows moderately in 2014 and increases over the whole year by around 3.9%. Lending grows faster in 2015 to 4.5%, mainly due to faster growth in other loans to companies and households. As the real estate market continues to stabilise, the growth in housing loans will remain about the same.

Three risk scenarios were modelled alongside the baseline scenario, in which a one-off shock of 15, 10 or 5 percentage points was given to economic growth in comparison to the baseline scenario. An additional macro model was used to link the effect of the shock to other economic indicators so that their impacts on each other could be seen too. From this, three complete risk scenarios of differing severity were produced (see Figure B4.1). The credit risk model is then used for assessing the potential impact of the baseline and risk scenarios on the Estonian banking sector.

20 Loans overdue for more than 60 days.

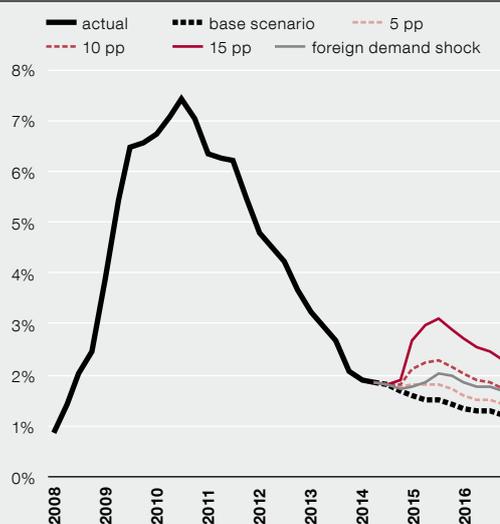
Figure B4.1. Quarterly real GDP growth assumptions for base and risk scenarios



### Forecast for overdue loans

In the baseline scenario the share of overdue loans in the loan portfolio continues to decline, and the quality of corporate loans and housing loans in particular improves in 2014. The share of other loans to households that are overdue did not change significantly over the year, and the faster growth forecast for 2015 sees the quality of the portfolio continue to improve across all types of loan. The reduction in overdue loans is aided by consistently low interest rates and accelerating economic growth, while household loans are also affected by unemployment staying low and wages growing moderately. The reduction in the stock of overdue loans will slow somewhat in 2016, mainly in housing loans to households, where the ratio of overdue loans is already quite low. In the baseline scenario the share of loans overdue by more than 60 days falls to 1.7% by the end of 2014 (see Figure B4.2). The loan portfolio continues to improve at the same rate as was described in the forecast for overdue loans in the previous Financial Stability Review, and the ratio of overdue loans falls to 1.4% by the end of 2015, and to 1.2% by the end of 2016. A large part of the decline in overdue loans will again be a consequence of write-offs, meaning that the actual share of loans that are overdue could be quite different from the forecast.

**Figure B4.2. Loans overdue by more than 60 days as a ratio of the loan portfolio**



The risk scenarios consider highly unfavourable developments for the real economy with a serious impact on the ability of clients to pay and thus on the banking sector. Depending on the risk scenario used, the average share of overdue loans increases to 1.8–3.1%, then starts to fall gradually. The effect is slightly smaller for the largest banks in the risk scenario and the share of overdue loans reaches 1.5–2.5% for them, depending on the size of the shock, and then starts to shrink gradually so that it is about 0.5 percentage point below the peak by the end of the forecast horizon in all the risk scenarios. Smaller banks are more susceptible to the risk scenario and the share of overdue loans reaches 5–8.7% for them, depending on the size of the shock. Although the cumulative effect in the worst risk scenario is similar to the impact of the crisis of 2008, the reaction of overdue loans in both large and small banks is much more modest. The reaction is also smaller than in the risk scenario in the previous Financial Stability Review, as borrowers are less vulnerable

to economic shocks than they were. The financial position of borrowers and their ability to service their loans are stronger than before as the debt-to-income ratio has fallen and both companies and households have managed to increase their financial buffers. The ability of borrowers to repay is also supported by low interest rates in both the baseline and risk scenarios.

### ***Reduced external demand scenario***

The scenario of a fall in external demand describes the hypothetical situation where foreign demand falls in the fourth quarter of 2014 by 10% against the baseline scenario and by a further 5% in the first quarter of 2015. The first fall includes Estonian exports to Russia, which dry up almost completely. The second fall comes from European trading partners, whose exports to Russia fall, leading to a fall in Estonian exports to those countries. The reduction in exports to Russia has a limited impact on the Estonian economy, as a large part of those exports are made up of products imported to Estonia. As some of the exports to Russia are from the intermediary trade permitted by Estonia's geographical location and these can probably not be redirected anywhere else, Estonia's potential GDP will also shrink. As a result of these factors, GDP growth in the fourth quarter of 2014 and the first quarter of 2015 is smaller than in the baseline scenario, and GDP ends up around 7% lower (see Figure B4.1). Unemployment rises by the second quarter of 2015 to 10% and remains there to the end of the forecast horizon.

Lower economic growth and the higher unemployment rate mean that payment difficulties become more common and the share of loans overdue rises to 2% (see Figure B4.2). Overdue loans increase particularly for corporate loans and other household loans, while the quality of the housing loan portfolio is affected somewhat less. The external demand shock scenario affects the quality of the loan portfolio by more than the risk scenario with a shock of 5 percentage points, but by less than the scenario with a shock of 10 percentage points. The effect lasts longer however, and the share of overdue loans declines more slowly than in the other risk scenarios and the unemployment rate remains high for a long time. Large provisions mean that the profits of banks in the external demand scenario are about 8% smaller than in the baseline scenario, although capitalisation still remains high.

### **Box 5: THE BAIL-IN MEASURES FOR CREDIT INSTITUTIONS IN THE NEW CRISIS MANAGEMENT FRAMEWORK**

This summer the European Parliament and the Council of the European Union agreed on a single set of rules for the European Union for the recovery and resolution of credit institutions and investment firms<sup>21</sup>. The new framework is to harmonise the options available for intervention by crisis management institutions if problems appear and to reduce the need for state

21 <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32014L0059&from=EN>

aid. Although closure and liquidation under normal insolvency procedures should always be considered first for insolvent credit institutions, there may be cases where this could lead to contagion of other parts of the financial system and could cause systemic disruption. In this case the public interest may be better served by restoring the viability of the credit institution or the part of it providing critical functions.

### ***The principles for application of the crisis resolution measures***

The principles to be followed in the application of crisis resolution measures are further clarified in the directive, including those to be followed for applying the bail-in measure. These principles ensure that there is a common understanding of how the possible costs are to be shared. The directive states that losses are to be borne first by shareholders and then by creditors in accordance with the order of priority of their claims under normal insolvency proceedings. Creditors of the same rank are always to be treated equally. Crisis prevention and crisis resolution should be carried out under the principle that no creditor should bear more of the losses than they would have had to if the credit institution were wound up and liquidated under insolvency procedures.

### ***The bail-in measure***

An important innovation in the directive is the ability to require credit institutions not only to cancel or write down shares or other capital instruments, but also to convert to equity or reduce the principal amount of claims or debt instruments of the creditors of the institution. This means that creditors can be expected to join shareholders in contributing to the recovery of the firm.

The bail-in tool may include:

- a reduction in the principal of the eligible liabilities or in the outstanding amount due;
- the cancellation of debt instruments other than secured liabilities;
- the conversion of eligible liabilities into ordinary shares or other instruments of ownership.

### ***Bail-in measures in the European Union***

Bail-in measures have been applied in the European Union in recent years and in 2013 there was a lot of publicity around the inclusion of creditors and depositors with deposits of over 100,000 euros in the resolution of Laiki Bank (Cyprus Popular Bank) and Bank of Cyprus. Previously, in 2011, the senior bank debt holders of Amagerbanken and Fjordbank in Denmark had had to contribute to the recapitalisation of those banks. Bail-in measures have also been used in the Netherlands and Spain, while the shareholders and subordinated creditors of Banco Espírito Santo in Portugal had to bear losses this year.

### ***The right of early intervention***

A major change in the directive is that the bail-in measure may be applied even when a credit institution is still meeting the prudential requirements but a rapid deterioration of its financial condition means it is likely in the near future to infringe the requirements.

### ***Minimum requirements for own funds and eligible liabilities***

The new framework gives member states the right to require credit institutions to hold at all times a pre-defined level of eligible liabilities in addition to own funds available to absorb losses to restore the viability the credit institution. The application of a minimum requirement of own funds and eligible liabilities shall remain a voluntary option for each member state. The directive still sets the restriction that state aid may be used to restore the viability of a credit institution only after losses totalling not less than 8 % of total liabilities including own funds have already been absorbed.

### ***Scope and application of the measures***

The bail-in tool is not to be applied to claims that are secured, collateralised or otherwise guaranteed. Claims that relate to goods and services which are critical to the daily functioning of the institution and those necessary for the continued operation of the institution are also excluded. This means that depositors covered by deposit guarantee schemes of up to 100,000 euros per depositor should not bear any losses in the resolution process.

To reduce the risks of contagion, the bail-in measure is not to be applied to liabilities arising from a participation in payment systems which have a remaining maturity of less than seven days, or liabilities to institutions, excluding entities that are part of the same group, with an original maturity of less than seven days.

In order to ensure continuity of critical functions, the bail-in tool should not apply to liabilities to employees of the failing institution or to commercial claims that relate to goods and services critical to the daily functioning of the institution.

The new requirements come into force in 2016. As this is a directive, the member states will need to transpose the terms of it into national law. The Ministry of Finance, Eesti Pank and the Financial Supervision Authority have set up a working group to prepare the drafts of these laws.

### 3.2 INSURANCE COMPANIES

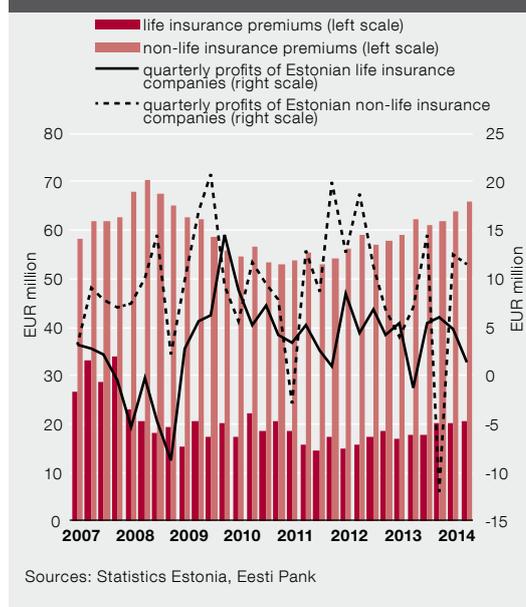
The main risk facing **European insurance companies** in recent years has been low interest rates. Life insurance companies are more exposed to negative effects from the interest rate environment than non-life insurance companies are, because of the long-term nature of their liabilities. The Estonian insurance industry also showed this in the first half of 2014. The operating profit of non-life insurance companies, which is the insurance technical result and the net income from investment, more than doubled from a year earlier, while the profitability of the insurance activities of life insurance companies did not improve. Although insurance companies benefited from the re-pricing of assets due to the fall in interest rates and so investment income increased, lower interest rates also meant that liabilities became more expensive for life insurers. The biggest challenge for life insurers is consequently to retain and increase their earlier profitability.

The total profitability of **Estonian insurers** increased in the first half of 2014. Insurance companies earned 30 million euros in net profit in the first two quarters of the year, which is more than one million euros more than in the whole previous year. The capitalisation of the Estonian insurance market has remained good, and the own funds of insurance companies were many times larger than the capital requirements in 2013.

#### Life insurance

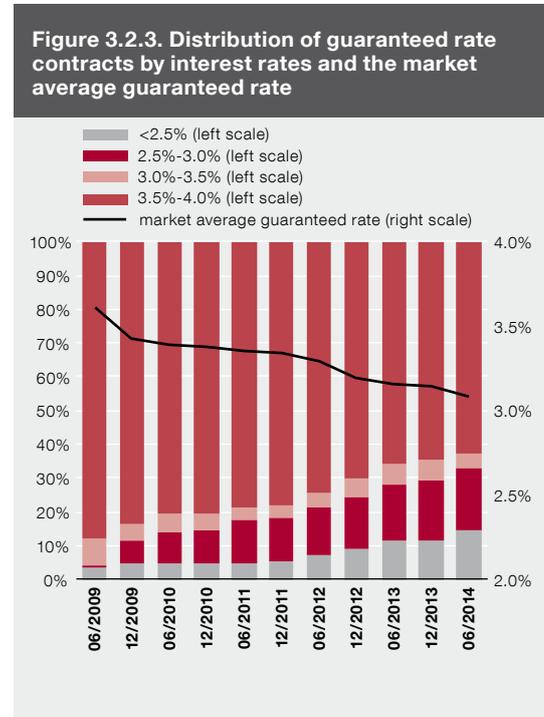
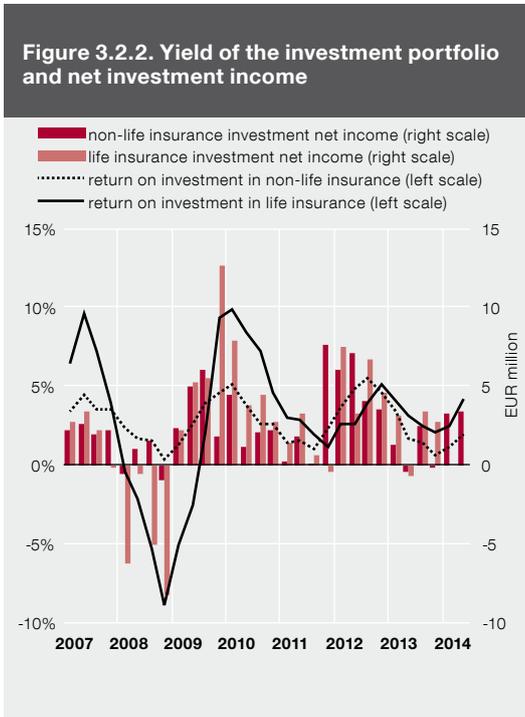
The growth of the Estonian life insurance market accelerated in the first half of 2014 and life insurers took in 16% more in **premiums** than in the first half of the previous year (see Figure 3.2.1). Despite the good conditions for sales of insurance, life insurance companies did not see the

Figure 3.2.1. Profit of insurance companies and premiums collected



insurance technical result improve. Although financial markets favoured higher investment income, the gain from the revaluation of financial assets was offset by an increase in life insurance provisions. As a result the insurance technical result remained about the same as a year earlier at over 7.5 million euros.

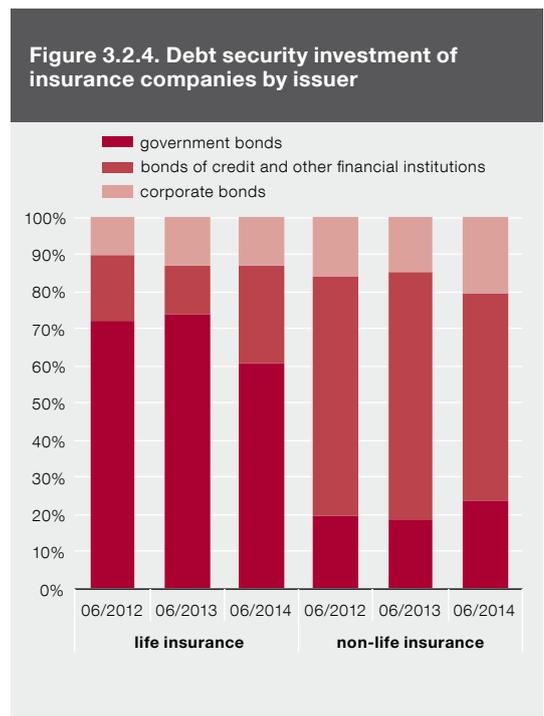
The investment strategies of Estonian insurance companies are relatively conservative. Investment portfolios are dominated by bonds, a little over 60% of which are issued by governments, and financial investments are fairly well distributed within this. **Net investment income** was more than four times higher in the first half of 2014 than a year earlier (see Figure 3.2.2). The sharp growth in net investment income came mainly from the revaluation of assets, as a large part of the bonds are carried at fair value. This meant the falls in yields on sovereign bonds led to an improvement in investment returns due to the reassessment of asset values. Net income



from interest was generally speaking at about the same level as last year.

**The average yield of the investment portfolio** rose from 2% last year to 4% by the end of the second quarter of 2014, making it higher than the average return of 3.1% guaranteed to insurance clients (see Figure 3.2.3). Although the gap between the average yield of the investment portfolio and the guaranteed rate for insurance clients is no longer negative, it is still only small. A prolonged period of low interest rates has made it notably harder to earn a profit on products with a guaranteed return, and has prompted companies to look for more profitable investments. The structure of investment of life insurers has already changed somewhat.

While the bond portfolio is again mainly filled with sovereign bonds, their share fell from 74% in the first half of last year to 61% in the first half of this (see Figure 3.2.4). More has been invested



in bonds of credit institutions and other financial institutions so that somewhat greater income could be earned. As a result of low interest rates for deposits, term deposits declined markedly in the investment portfolio of Estonian life insurers. Their share of less than 20% of the portfolio in the first half of 2014 was nine percentage points smaller than a year earlier (see Figure 3.2.5). However, the share of term deposits in the **investment portfolio of Estonian insurance companies** still remains significantly larger than the European average of 5%<sup>22</sup>.

### Non-life insurance

Like the life insurance market, the non-life market continued to grow this year. **Premiums** of 130 million euros were collected from Estonian residents, which was 7% more than a year earlier. Insurance activities became more profitable and slightly less was paid out in claims in the first half of the year than a year ago. The combined effect of the decline in pay-outs for claims and the rise in non-life premiums meant that the net loss ratio fell in the second quarter from 60% to 57% (see Figure 3.2.6).

Net investment income increased sharply, and while **net interest income** fell by 25%, net investment income was around nine times higher than in the first half of the previous year. It mainly increased because of the revaluation of assets.

The higher income from sales of insurance and lower pay-outs for claims net of reinsurance together helped lift the insurance technical result. These factors and the strong growth in net investment income helped improve the operating profit of non-life insurance significantly. **Operating profit** reached 28 million euros in the first half

Figure 3.2.5. Investments of insurance companies

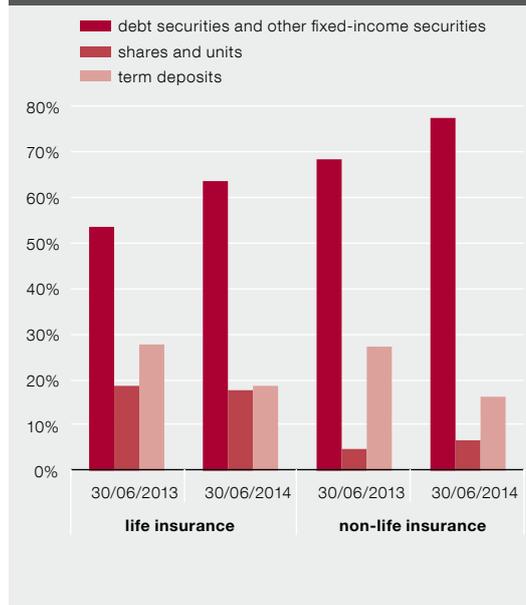
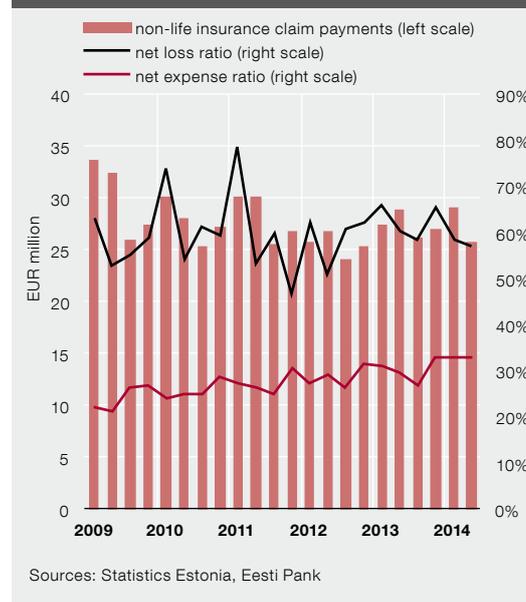


Figure 3.2.6. Estonian non-life insurers' claims, net loss and net expense ratios



<sup>22</sup> EU/EAA (re)insurance statistics – statistical annex to EIOPA Financial Stability reports (2013).

of the year, which is more or less the same as the operating profit earned in the whole of 2013.

As was the case for life insurers, the share of term deposits in non-life insurers' **financial investment portfolio** declined by 11 percentage points from a year earlier to 16% at the end of the second quarter. The financial investments of non-life insurance companies remain focused on bonds and other fixed-income securities, which make up around 80% of the portfolio. The credit risk of the investment portfolio may be considered relatively small as the issuers of the bonds have high credit ratings, and over 75% have a rating of at least A.