III. THE STRENGTH OF FINANCIAL INSTITUTIONS

BANKS

Liquid assets and liquidity risk

The adoption of the euro had a relatively small effect on banks' liquidity management, with a majority of the banks operating in Estonia serving as branches or subsidiary banks. The change-over mainly affected banks with independent liquidity management, that is smaller banks. In the currency board system the minimum reserve requirement was 15% and it had the function of a liquidity buffer. The Eurosystem, on the other hand, uses credit and deposit facilities provided by the central bank for liquidity management (see Figure 1).

As a result of the lowering of the reserve requirement, one third of the Estonian banking sector reduced its **liquid assets**. In the second half of 2010, liquid assets of banks contracted by a total of 600 million euros, that is 3% of the total balance sheet. At the same time, other market participants exchanged their assets with the central bank for claims against commercial banks. Smaller market participants added to their liquid assets by engaging a large volume of deposits against the shrinking of the loan portfolio.

From the viewpoint of financial stability, the **liquidity risks** of the banking sector are rather to the downside, as the growth in the level of deposits does not follow the growth in loan stock. These trends are not expected to change in the next six months. The easing of risks is reflected in the market participants' preference of the deposit facilities provided by the central bank (see Figure 2).

As regards general liquidity management, the operational risks inherent in the adoption of the euro have not jeopardised financial stability. Therefore, any operational failure of the deposit transaction means loss of interest income for

Figure 1. Banks' liquid assets and their share in total balance

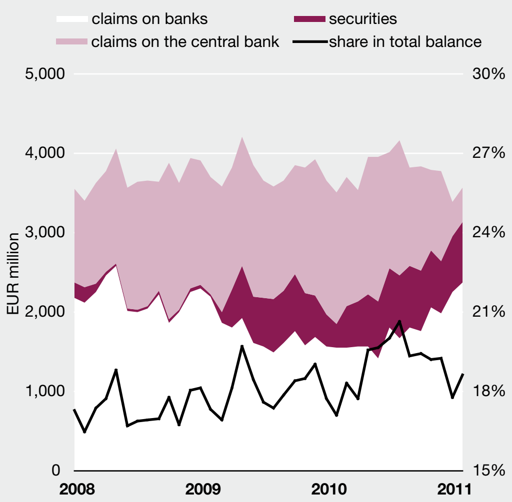
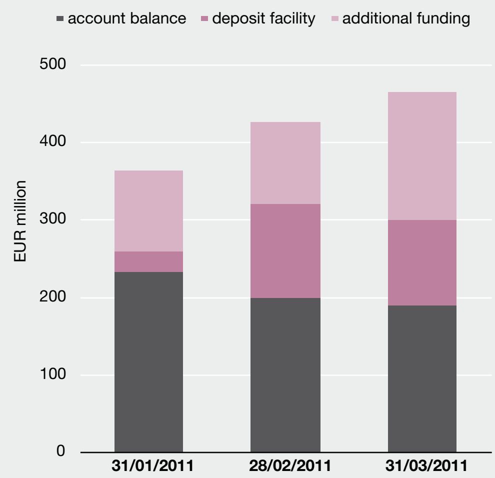


Figure 2. Banks' assets with Eesti Pank



the bank. At the same time, cross-border cooperation must be pursued in liquidity supervision of those market participants whose liquidity is managed centrally by their parent banks. The Financial Supervision Authority has already taken steps in this respect.

Funding

The changeover to the euro had a minor effect on banks' liabilities, with some banks using the released funds in repayment of the loan taken from the parent bank. Repayment was also boosted by the growth in deposits and the contraction of the loan portfolio. By the first quarter of 2011, liabilities to parent banks decreased by 1.5 billion euros from the second quarter of 2010, with the share of non-deposit related liabilities dropping from 42% to 36% (see Figure 3). The direct effect of the lowering of the reserve requirement is estimated to be 40%.

Amounting to 9 billion euros before the financial crisis, banks' liabilities to parent banks stood at 6 billion euros at the beginning of 2011 (see Figure 4). The liabilities are expected to drop further, albeit on a smaller scale.

As regards financial stability, the risk of resources obtained by means other than deposits mostly involved the parent banks' ability to raise funds from the market. This does not concern small banks owned by Estonian residents, making up less than 2% of the market. Furthermore, the share of deposits has grown in the last twelve months, with the banks' risks related to market borrowing thus abating.

Profitability

The Estonian banking sector ended the year 2010 with a positive result, posting a **net profit** of 70.5 million euros. Standing at 0.4%, the return on assets (ROA) was still more than three times lower than the average for the last ten years.

Figure 3. Structure of banks' liabilities

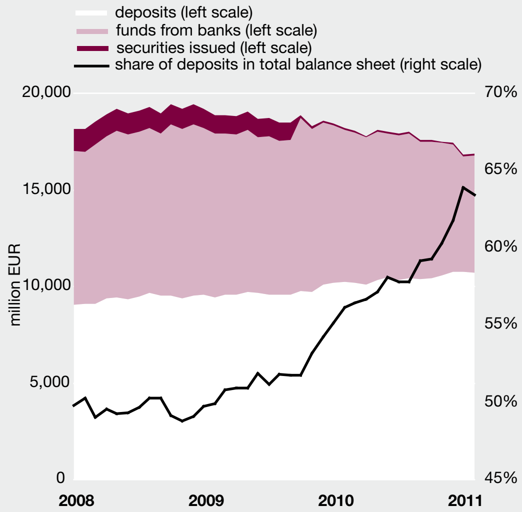
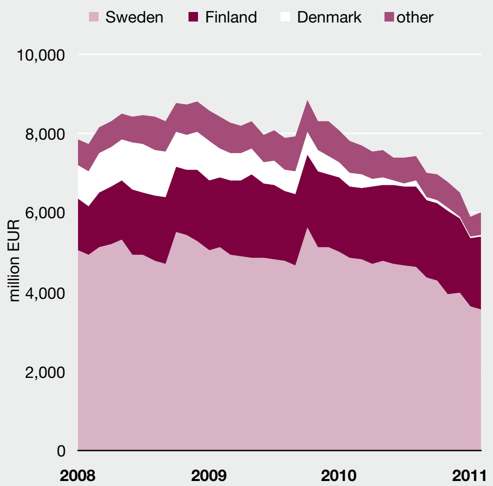


Figure 4. Foreign borrowing by banks



After three quarters of net profit, it is evident that, although the deterioration in the macro-economic conditions significantly affected banks' financial results, especially in 2009, the net profit[1] posted in the years of strong growth was almost twice as high as the negative profit generated in the five subsequent quarters (see Figure 5). With banks not paying dividends in the years of high profitability and capitalising the profit earned, the buffer helped to cover excessive risks taken at the loan market later on.

In 2010, banks' profitability was fuelled primarily by the **decline in loan losses**. On the one hand, this was conditioned by a lower need for loan write-downs against the regained loan repayment ability. On the other hand, the banks started to slim down the provisions made in the previous periods. Considering the size of the provisions, an improvement in loan quality can be expected to further boost profitability.

As in 2009, the net result of the banking sector was significantly affected by the year-end revaluation of equity investments in subsidiaries in 2010. The net profit would have been twice as big without the revaluation.

The **profit before loan losses** of the Estonian banking sector amounted to 285 million euros in 2010. Exceeding the result for 2009 by more than 50%, the profit before loan losses, as a ratio of assets, was still nearly one-third lower than the average for the last ten years.

Due to the widening of the spread between interest rates on loans and funding, **net interest income**, which contributes around 60% of the total income, increased by around 20%. Both interest income and interest expenses dropped, with the decrease in interest expenses being 20% higher (see Figure 6). The funding cost of banks declined, curbed mainly by the use of the

[1] Accumulated total of nearly 1.2 billion euros in 2005–2008.

Figure 5. Net profit of the banking sector

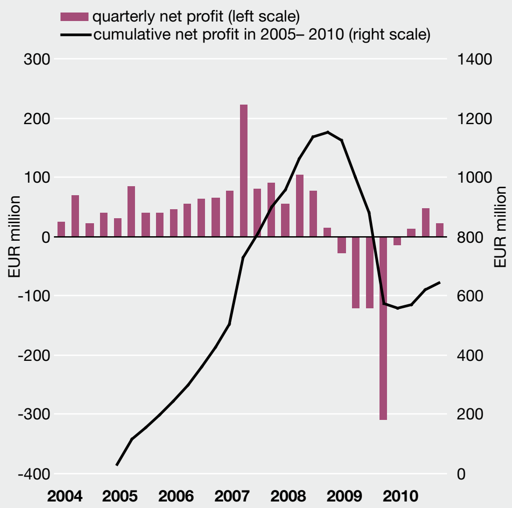
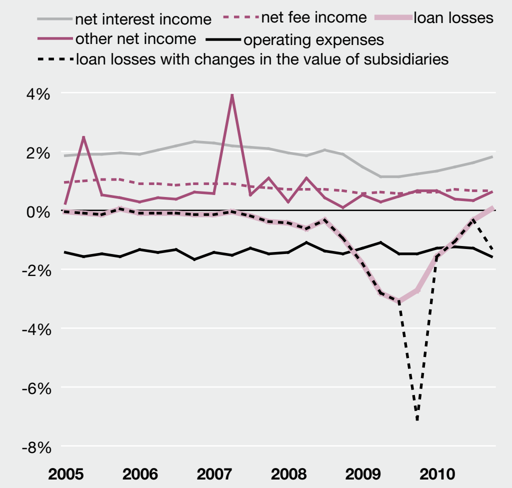


Figure 6. Banks' incomes and expenses by type (% of average assets per quarter x 4)



growing volume of term deposits instead of the relatively more expensive market-based funding mediated by the parent banks (see Figure 7). These trends may be reversed if the competition on the deposit market tightens. As long as the credit demand remains moderate and the new global financing tensions are kept under control, interest expenses are not expected to gain momentum.

The increase in interest income in recent quarters was prompted, above all, by the rise in interest rates (see Figure 8). In addition to the rise in the key interest rate, the value of banks' assets was affected by the rise in new loan interest margins, as represented by the relatively quicker progression of the average interest rate for the banks' total assets, compared to the Euribor. The drop in problem loans also contributed to the increase in interest income in 2010.[2] The interest rates are expected to rise in 2011 alongside regained customer solvency, which will continue to fuel the increase in interest income. Growth will be hampered, however, by a decline in the loan portfolio.

Prompted by the rise in economic activity, **net fee and commission income** grew by 7% in 2010. The biggest increase could be seen in the revenue generated from asset management and payment processing, while the fee and commission income from loan agreements and other services continued to drop. Generating an average of 50–60% of the fee and commission income, payment intermediation will remain a stable source of income for the banks, even though the standardisation of domestic and cross-border euro payments can be expected to curb income to some extent.

As expected, banks' **administrative expenses** increased significantly in connection with the preparation for the adoption of the euro in the

[2] Uncollected interest on loans overdue made up an estimated 6% of the total interest income in 2010.

Figure 7. Interest rate on banks' funds and 6-month Euribor

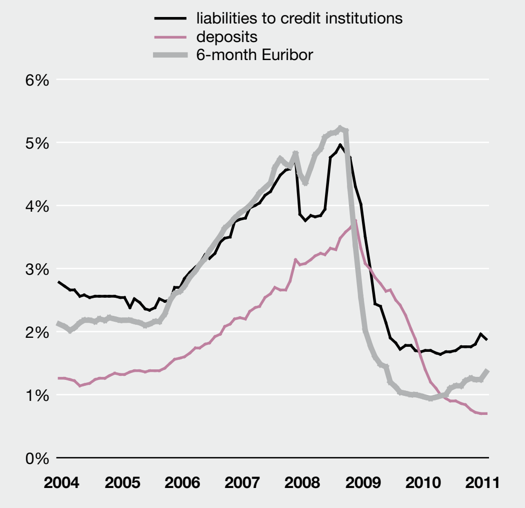


Figure 8. Quarterly growth in interest income since 2005 and the contributions of growth determinants

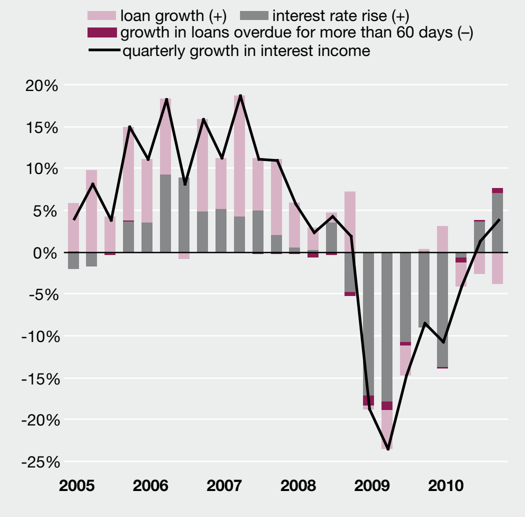


Figure 9. Contributions of wage costs and other expenses in the growth of operating expenses and operating expenses as a ratio to total assets

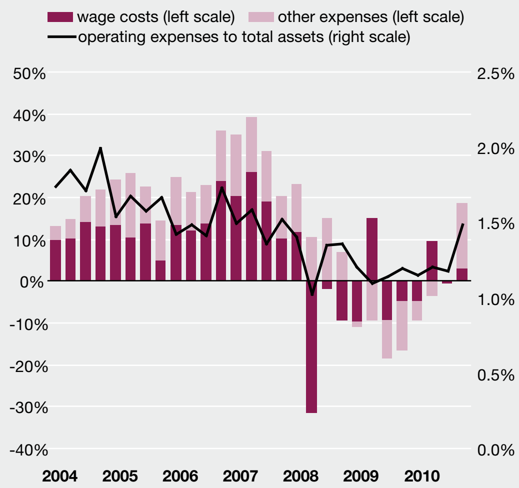
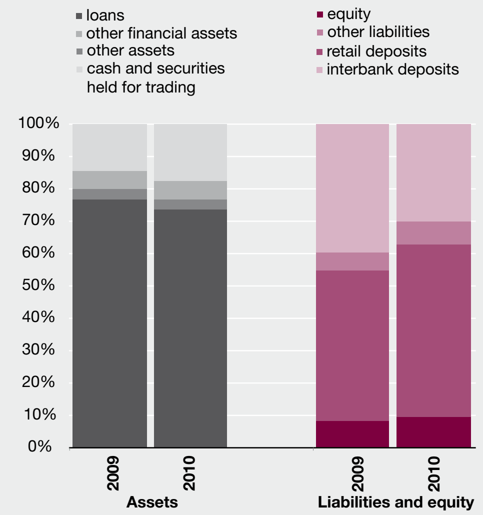


Figure 10. Aggregate consolidated balance sheet of the banking sector



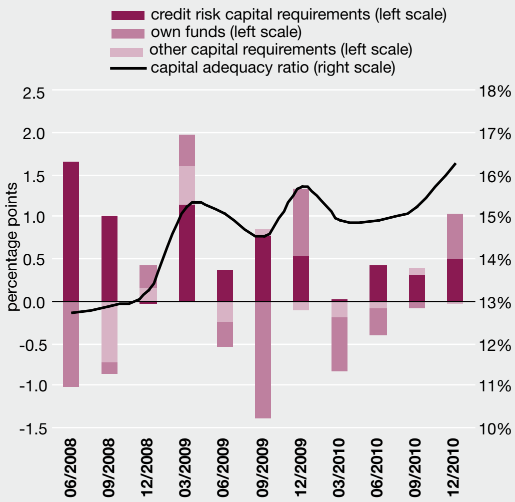
fourth quarter of 2010. Administrative expenses grew by as much as 19%, with the costs, as a ratio of assets, being at the highest level for the last three years (see Figure 9). Even though this cost increase is not expected to reoccur, the pursuit of profitability by banks may urge them to restore the bonus pay reserve. This, in turn, may exacerbate the banking sector's economic efficiency which has been the highest in the last decades after the recent crisis.

Capital adequacy

The **aggregated balance sheet** of banks[3] strengthened significantly in 2010. The financial leverage of the non-financial sector decreased, scaling down the banks' balance sheet and significantly changing the balance structure (see Figure 10). The risks related to the balance sheet abated due to contraction of the loan portfolio and a growth in the share of liquid assets, indicating a drop in risk-weighted assets. With

[3] For this chapter, the figures for the banks have been consolidated.

Figure 11. Change in capital adequacy ratio from previous quarter by components



a growth in retail deposits and a 9.7% increase in the share of equity, the structure of liabilities became much more conventional.

Due to a decrease in the credit risk, the **capital requirements** of the banking sector were further reduced in the fourth quarter of 2010. The credit risk requirements decreased by a total of around 153 million euros in 2010, while other capital requirements increased by 28 million euro, fuelled mainly by the currency risk requirements.

The **own funds** kept by the banks to cover their risks dropped by about 103 million euros in 2010. This was conditioned, above all, by repayment of subordinated liabilities to parent banks in the total amount of nearly 120 million euros. The drop was compensated, to some extent, by a 16-million-euro growth in Tier 1 own funds as a result of the share capital increase. The quality of own funds was enhanced, with the share of Tier 1 own funds rising to 78% within the year.

Even though own funds decreased in 2010, the **capital adequacy ratio** rose. The decrease in credit risk capital requirements exceeded the decrease in own funds, with the capital adequacy ratio consequently climbing by 0.5 percentage points to 16.2%, significantly exceeding the minimum requirement of 10% (see Figure 11). In the fourth quarter of 2010, both the decrease in capital requirements and the increase in own funds contributed to the capitalisation of the banking sector.

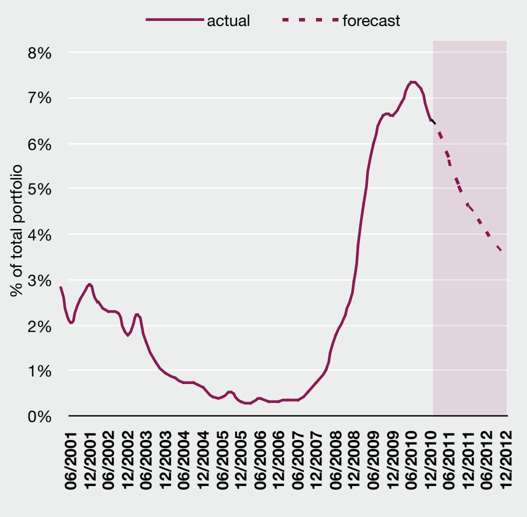
Forecast for and stress test of the banking sector

Forecast

The drop in loans overdue for more than 60 days is expected to continue in the near future, for two reasons. Firstly, prompted by the improvement in the economic environment, loan customers who have had payment difficulties will become solvent again. Secondly, the banks are writing off uncollectible receivables from the balance sheet. The latter has a greater effect on the drop in overdue loans. **The proportion of overdue loans in the loan portfolio may drop below 5% by the end of 2011 and to 3.5% by the end of 2012** (see Figure 12). The forecast for overdue loans has seen a downward adjustment, compared to the autumn of 2010, with one bank currently under liquidation excluded from the aggregated portfolio.[4]

[4] This lowered the volume of overdue loans by 0.3 percentage points in December 2010.

Figure 12. Loans overdue for more than 60 days



The decrease in problem loans will condition a drop in the established provisions. The provisions are expected to show a similar decline with the loans overdue for more than

60 days. At the same time, the coverage of loans overdue for more than 60 days is expected to remain at the high level of 80% (see Figure 13).

The continual rise in the Euribor will fuel further growth in net interest income. The growth in operating profit could be hampered in 2011 by the potential decrease in fee and commission income, and the decline in currency exchange and conversion revenue, conditioned by the adoption of the euro. In total, the banks operating in Estonia are expected to post a **pre-provisions profit** of an estimated 320 billion kroons, that is almost 12% more than in 2010.

A continual improvement in the capitalisation of the banking sector is expected for 2011. The main contributors to the increase in capitalisation include the posted pre-provisions profit, along with other factors, such as decline in loan loss provisions and a continual regression of risk-weighted assets. A two-percentage-point rise is expected in the consolidated capital adequacy ratio of the banking sector by the end of 2011, to 18%[5] (see Figure 14). The Tier 1 capital adequacy ratio is expected to surpass 14%.

Stress test

The stress test is used for ascertaining the banking sector's ability to withstand poorer-than-expected developments. The hypothetical macro-scenario used in the analysis is based on the external environment assumptions of the pan-European stress test of the European Banking Authority. Should the negative assumptions of the scenario be materialised, the GDP growth will be 1.4 percentage points lower and unemploy-

[5] Provided that the Tier 2 own funds (including subordinated loans) will not change in 2011.

Figure 13. Loans overdue, loan-loss provisions and provisions as a ratio to loans overdue

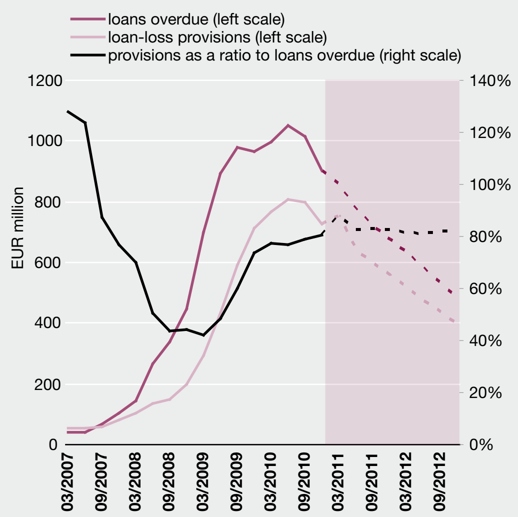
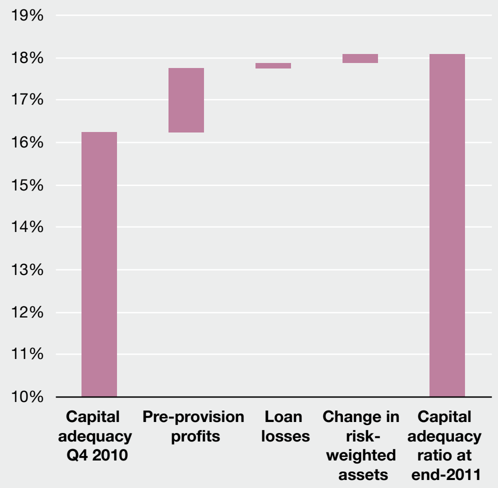


Figure 14. Change in capital adequacy ratio by components



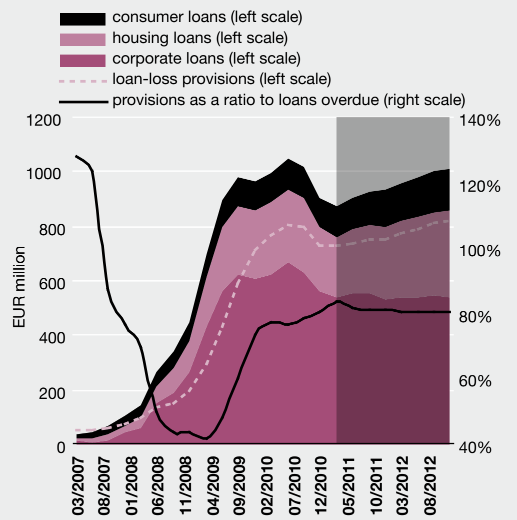
ment 2 percentage points higher in 2011. The three-month Euribor will rise to 2.8% by the end of the year, introducing a significant change from the viewpoint of loan repayment ability.

In the above scenario, the stock of overdue loans will start growing again. Compared to the previous cycle of overdue loans, this growth will still remain relatively modest. The stock of loans overdue for more than 60 days will grow by nearly 30 million euros in 2011 (see Figure 15), while the loan quality will be exacerbated by household loans that are more sensitive to changes in the key interest rate.

However, this scenario will have no major negative effect on the banks' profitability. Even though the income base will be lowered to some extent, the banks' interest income will increase, fuelled by the rise in key interest rates. Income will be curbed by the drop in fee and commission income stemming from low economic activity, and the loss of interest income from overdue loans.

Presuming that the banks' wish to keep the provisions in relation to overdue loans on the current level of 80%, they must make additional write-downs of nearly 27 million euros in 2011. This will only constitute 10% of the estimated pre-provisions profit of banks. The materialisation of the scenario used for the stress test will thus have no major effect on the capitalisation of the banking sector.

Figure 15. Loans overdue, loan-loss provisions and provisions as a ratio to loans overdue (stress-test scenario)

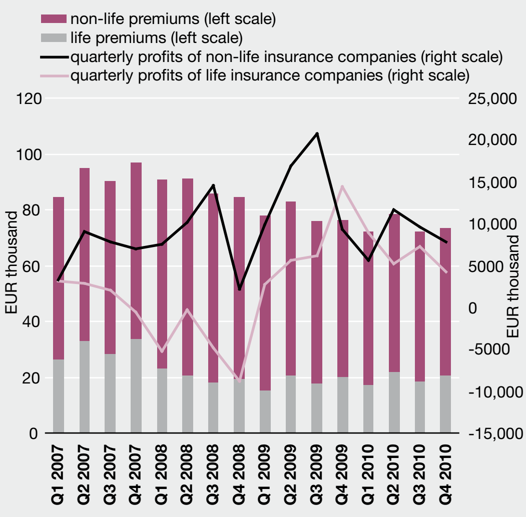


INSURANCE COMPANIES

The insurance market constitutes 1.3% of the total assets of the Estonian financial system. The size of the insurance market poses no danger to the stability of the financial system. Still, the relative concentration of the market and the ownership relations may transfer problems faced by insurance companies to the banking sector, thus stoking tensions in the entire financial sector. Even though the insurance market has been contracting for three straight years, and investment income decreased somewhat in 2010, insurance companies have remained risk-sensitive and have steadfastly fulfilled all capital requirements. Moreover, the sector has remained profitable (see Figure 16).

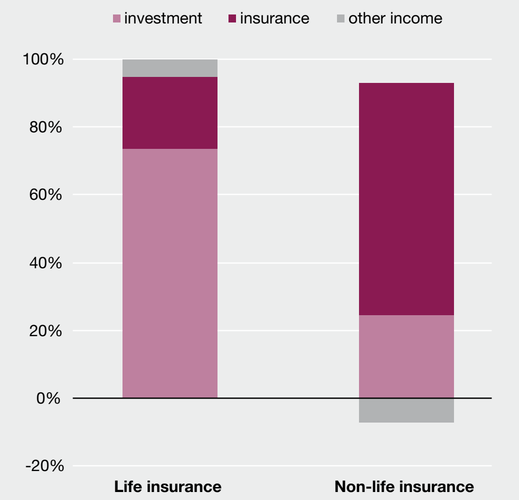
The risks to the insurance sector can be divided into two: insurance risks and financial risks related to investing activities. In non-life insurance, adequate assessment of the risks of the insurance portfolio and generation of sufficient cash flows from main activities is most important. In life insurance, the main source of income is the generation of sufficient revenue from the investment portfolio (see Figure 17).

Figure 16. Profit of insurance companies and premiums from residents



Sources: Statistics Estonia, Eesti Pank

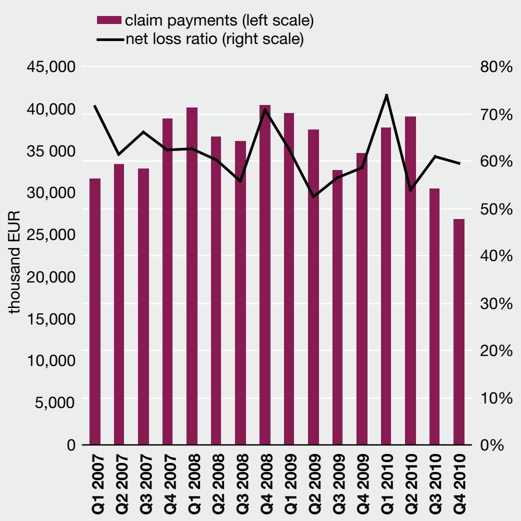
Figure 17. Structure of profits of insurance companies as at 31/12/2010



Estonian insurance companies have been quite successful in hedging their insurance risks. In life insurance, the risks of the insurance portfolio are largely borne by the policy holder, with unit-linked life insurance contributing 50% of the operating volume. In the conditions of a stabilising economy, life insurance premiums have shown positive annual growth throughout the year 2010. As domestic demand needs more time to recover, non-life **insurance premiums** dropped by 9% in the year. The drop ceased by the end of the year. In the fourth quarter of 2010, the total volume of life and non-life insurance premiums collected was still two times bigger than the total disbursement of indemnities. In non-life insurance, the risk management ability and efficiency is reflected in the **net loss ratio** which fell below 60% at the end of the year (see Figure 18). This ratio should be less than 60–70% in standard conditions.

Interest risk is the biggest financial risk for both life and non-life insurance companies. Low interest rates curbed investment income by 6% in 2010. The volume of **financial investments**

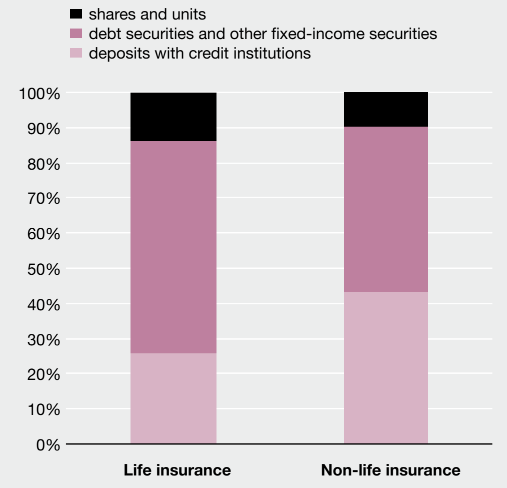
Figure 18. Claims and net loss ratio in non-life insurance



of life and non-life insurance companies grew by 10% and 20%, respectively. Still, the annual yield of investments was lower than in the previous four quarters. In both sectors, a majority of the investments have been made in bonds, shares of bond funds and other fixed-income securities (see Figure 19). The proportion of the shares of equity funds and the instruments of credit institutions and other financial institutions[6] in the investment portfolio of insurance companies has grown. The investment portfolio of Estonian insurance companies is not affected by the credit risk of the issuers of securities and its impact on the quality of assets.

The decrease in investment income and lower non-life insurance sales volumes reduced the **profitability** of insurance companies in 2010. The insurance market still remained profitable in 2010. A 25.6-million-euro profit was posted by the life insurance sector, and a 34.7-million-euro profit by the non-life insurance sector. Due to stable profitability, the liquidity reserve of both life and non-life insurance companies has reached 154 and 211 million euros respectively (year-on-year growth of 20%), ensuring persistent stability.

Figure 19. Structure of financial investments of insurance companies as at 31/12/2010



[6] Except for insurers and pension funds.