

### III. THE STRENGTH OF FINANCIAL INSTITUTIONS

#### BANKS

##### Liquid assets and liquidity risk

The minimum reserve requirement for banks was lowered from 15% to 11% in September 2010 and to 7% in November 2010. Since January 2011, the minimum reserve requirement in Estonia is 2%, the same as in other euro area countries. Lowering the reserve requirement released a great amount of banks' liquid assets. Partially, the reserve assets released from the central bank were exchanged for claims against commercial banks. Some banks reduced their total liquid assets and balance sheet already in the second half of the previous year (see Figure 1). The decrease in the volume of liquid assets that started at the end of 2010 lasted until April 2011, when liquid assets totalled 20% less compared to their level prior to reducing the reserve requirement. Since April, banks have increased their liquid assets again by nearly a billion euros.

Banks' claims on the central bank have dropped by 61%, or by 690 million euros, since the beginning of 2011. Claims on other banks have increased by 1.4 billion euros. At the end of August, the liquid assets of banks totalled as much as 4.4 billion euros, which is 612 million euros more than at the end of 2010. **Liquid assets** have grown owing to a rise in deposits, while the loan portfolio has shrunk. The structural change that took place in the balance sheet of Swedbank owing to the sale of its subsidiaries in July is also noteworthy<sup>1</sup>. The share of liquid assets in the consolidated balance sheet of Estonian banks has risen to 24%, which is the highest level in three years (19% at the end of 2010).

Additionally, as participants in the Eurosystem, banks operating in Estonia can use the **credit and deposit facilities provided by the**

<sup>1</sup> See also background information *The impact of changes in Swedbank's legal structure on the aggregate balance sheet and capital of the Estonian banking sector.*

Figure 1. Banks' liquid assets and the reserve requirement

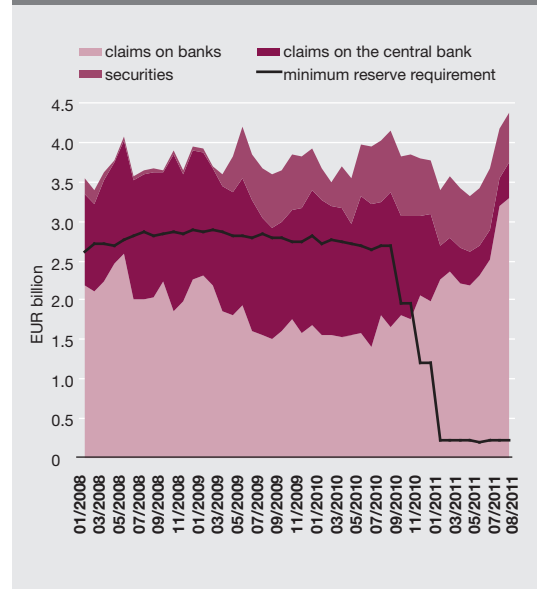
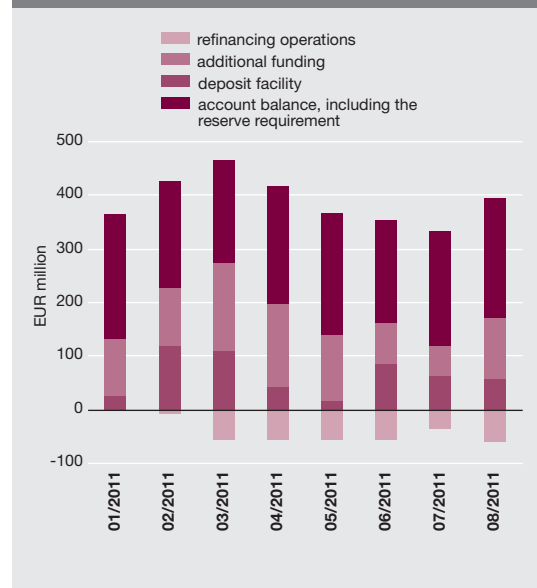


Figure 2. Banks' assets and loans with the central bank



**central bank** for liquidity management. So far, market participants have been using the deposit facility of the central bank far more than the credit facility (see Figure 2).

### Funding

2011 witnessed the continuation of the existing trend in the funding of banks. Compared to the end of 2010, the amount of funds obtained from parent banks has been reduced by 1.5 billion euros to 5.1 billion euros. This is 43% less than at the end of 2009, and thus it may be concluded that the reliance of local banks on the funding from parent banks has decreased (see Figure 3). Repayments to parent banks have been made from the funds released due to the euro change-over and also from increased deposits. In July, the repayments also grew significantly owing to Swedbank's structural changes.

Within eight months in 2011, the deposits obtained from the general government, companies and households increased by 390 million euros (3.6%). The share of **deposits** in banks' funding remained at its peak level of 68% for the second consecutive month. The ratio of the non-financial sector and general government loans to deposits has dropped to 142%, which means that the loans issued by banks exceed deposits by 4.7 billion euros (see Figure 4). Nevertheless, owing to a decrease in the loan stock and an increase in deposits, their spread has shrunk by 4.2 billion euros compared to its peak at the end of 2008. The funding risk of banks is abating, since no strong growth in the stock of loans issued is expected in the near future. Instead, deposits are expected to grow in light of heightened global insecurity and the coverage of loans by deposits will increase further.

### Profitability

The profitability of banks operating in Estonia improved in the first half of 2011. In the first two

Figure 3. Structure of banks' liabilities

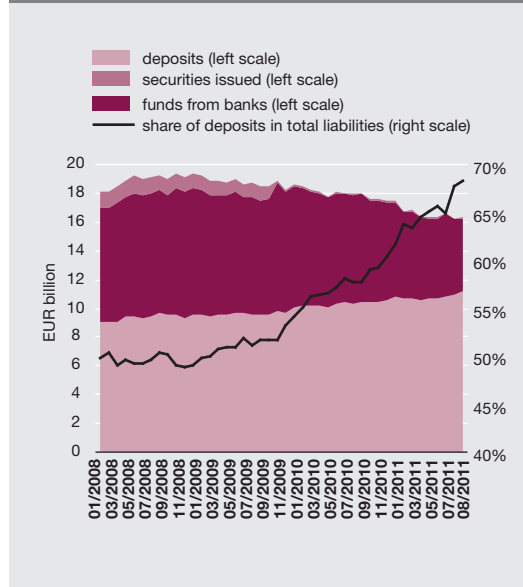
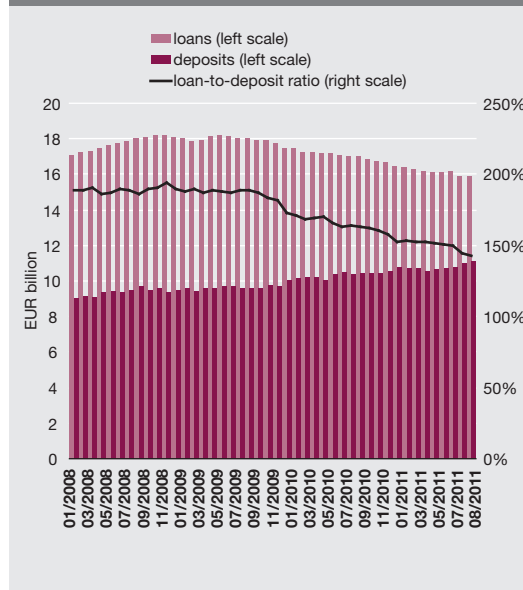


Figure 4. Banks' loan-to-deposit ratio



quarters, banks posted a total **net profit** of 142.5 million euros (see Figure 5). The return on assets at 1.5% was only slightly smaller than the average of the previous growth period.

This year, the profitability of banks has again mainly been fuelled by the decline in loan losses (see Figure 6). Meanwhile, the annual growth in **profit before loan losses** has slowed down, as it dropped to 0.4% in the second quarter of 2011. The slower growth rate mainly stems from a slight decrease in financial income, but also from a drop in net fee and commission income.

In the second quarter of 2011, the share of banks' **net interest income** in total income rose by nearly 10 percentage points compared to a year ago to 68%, which is markedly higher than the long-term level of this indicator at 60%.<sup>2</sup> In the first half of 2011, the net interest income rose by 29% compared to a year ago as the result of a drop in interest expenses, but also due to an increase in interest income. By the second quarter of 2011, however, the positive impact that stemmed from the drop in the cost of funding had abated and net interest income continued to grow only thanks to the rise in the Euribor, the key interest rates of loans (see Figure 7).

The cost of funding has remained low owing to an increase in the share of time deposits in the structure of the banks' liabilities – with their relatively low interest rates they have replaced the more expensive funding obtained from parent banks. Although this trend should continue, net interest income is nevertheless expected to decrease at the end of 2011 and in 2012. On the one hand, the increase in interest income will be inhibited by the postponement of the expectations of a rise in the Euribor and by the shrinking loan portfolio. On the other hand, the rise in the cost of banks' market-based funding could become a threat, should

<sup>2</sup> The share of net interest income was this high at the end of 2008, when the ability to earn financial income suffered a major setback.

Figure 5. Banks' net profit and net loan losses

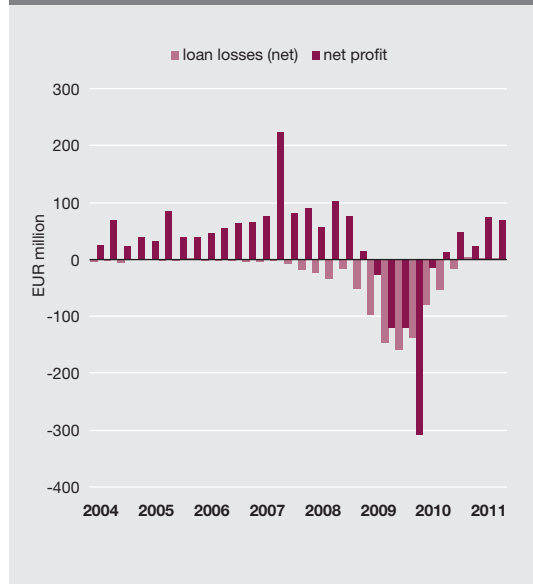
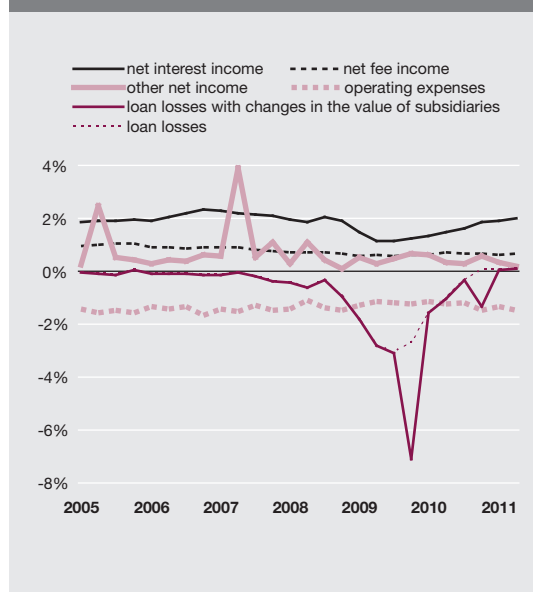


Figure 6. Banks' incomes and expenses by type (% of average assets per quarter x 4)

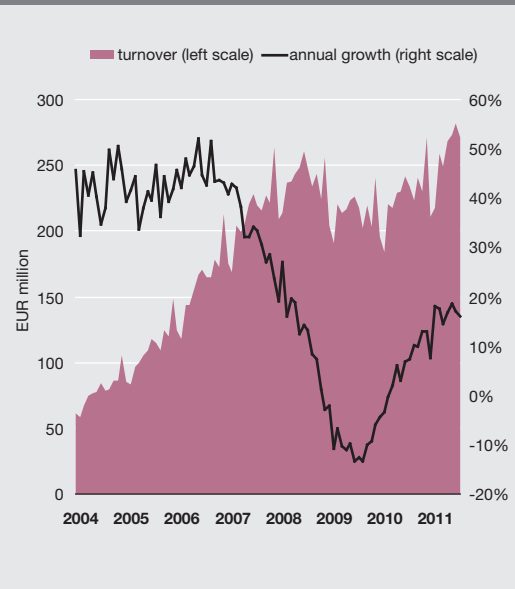


global liquidity tensions erupt again. The accompanying price pressure may also spread to the market for retail deposits, although the improvement in banks' loan-deposit ratio has reduced the risks on banks' net interest income.

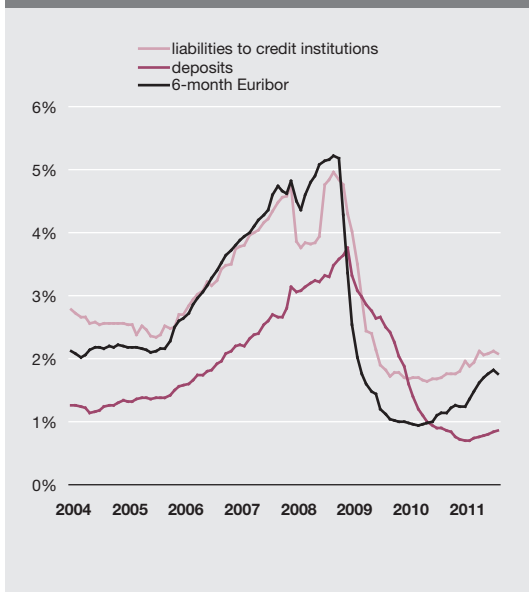
The euro changeover curbed financial incomes as expected, as the banks' income from foreign exchange transactions dropped. However, the decrease in the net fee and commission income by 6%, year-on-year, was smaller than anticipated. Although the standardisation of domestic and cross-border euro payments probably slightly reduced fee and commission income, it was partially balanced by an increase in income resulting from a rise in card payments. Within the first eight months of 2011, around 16% more card payments were made than a year ago (see Figure 8).

The euro changeover significantly increased the administrative costs of banks in the fourth quarter of 2011. The growth rate of expenses also remained rapid in 2011, climbing by an average of 11% compared to a year ago (see Figure 9).

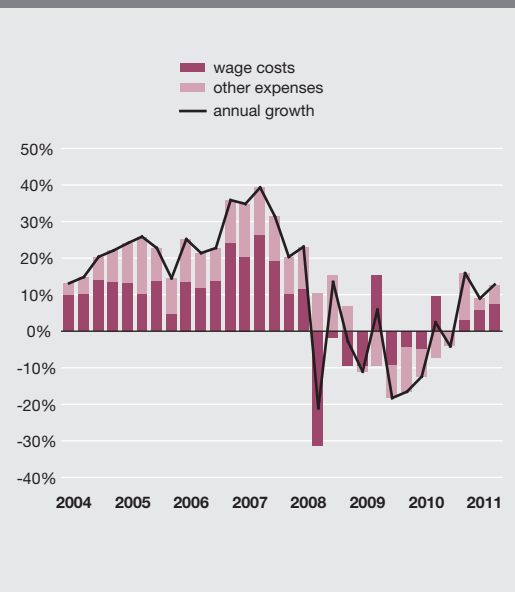
**Figure 8. Monthly turnover of card payments in POS terminals and annual growth**



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



**Figure 9. Annual growth in operating expenses and contributions of wage costs and other expenses**



While the end of 2010 saw a swift rise in other administrative costs, wage costs posted faster growth in the first half of 2011. In the second quarter the rise in wage costs reached 14%. Meanwhile the cost-income ratio did not deteriorate, thanks to the faster growth in income. However, considering that income perspectives have diminished slightly over recent months, the continuing growth in expenses may cause a setback to the improvement in cost-effectiveness that has occurred in recent years.

### CAPITALISATION

The balance sheet of the banking sector<sup>3</sup> strengthened even further in the first half of 2011 (see Figure 10). The share of liquid assets remained relatively high despite the lowering of the reserve requirement. On the liabilities' side, however, the changes in the structure of funding are still notable. Funding is increasingly based on retail deposits, while equity capital has also climbed.

Capital requirements for the banking sector's largest risk – credit risk – continued dropping in 2011 as the loan portfolio declined. In addition, in the first half-year capitalisation was strengthened by the reduction of capital requirements for other, mainly operational, risks.

The banks' **own funds** that they keep to cover their risks dropped notably in the first half of 2011 (see Figure 11). In the second quarter, the level of the banking sector's Tier 1 capital fell by more than 240 million euros as profits were distributed. The banks' Tier 2 capital also shrank by a total of 56 million euros, fuelled by the repayment of subordinated debt. The share of Tier 1 capital in the total of the banks' own funds did not change from the 78% recorded in the previous quarter.

<sup>3</sup> For this chapter, the figures for the banks have been consolidated.

Figure 10. Aggregate consolidated balance sheet of the banking sector

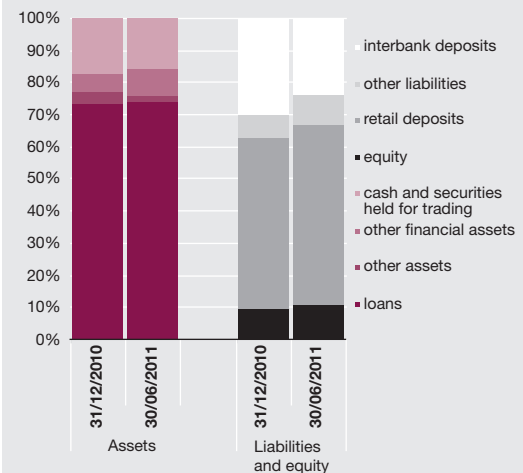
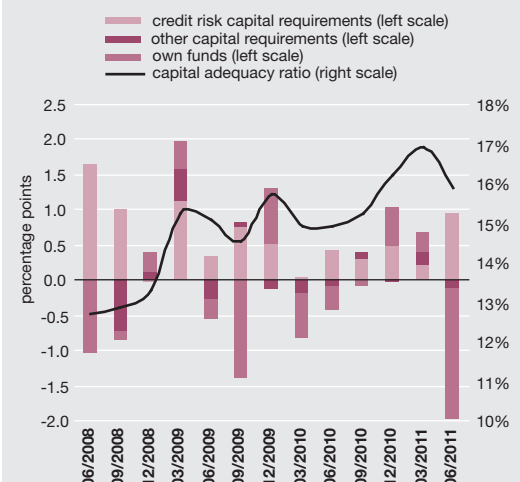


Figure 11. Change in capital adequacy ratio from previous quarter by components



By the end of the second quarter of 2011, the banking sector's capital adequacy ratio had dropped by 1 percentage point to 15.9%. This was caused by the reduction of the banks' own

funds, which outweighed the positive effect from the drop in credit risk capital requirements. At the same time, capital adequacy ratio still considerably exceeds the minimum 10% requirement.

## Forecast for and stress test of the banking sector

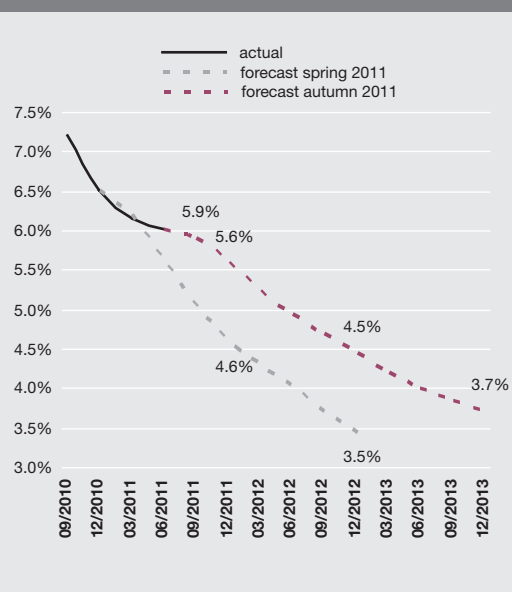
### Forecast

The quality of the loan portfolio has improved in 2011 mainly due to the write-off of uncollectible receivables. The recovery of loans overdue for more than 60 days has been significantly weaker than was estimated in spring, despite the surprisingly favourable economic environment. The portfolio of overdue loans is expected to shrink much more slowly than was forecast in spring because of the considerably lower recovery rate of overdue corporate and household loans. The portfolio of overdue loans will be mainly decreasing as uncollectible receivables are written off, while the recovery of delinquent customers will have a much smaller impact. By the year-end, the **share of overdue loans in the loan portfolio is forecast to drop below 6%, and fall to 4.5% by the end of 2012** (see Figure 12).

Like overdue loans, the provisions for loan losses are in decline due to write-offs. Banks will probably not reverse their provisions into profit and it is presumed that the coverage of loans overdue for more than 60 days with loan-loss provisions will remain around 80%.

The operating profit of banks is hampered by the modest loan portfolio growth and lower interest rates. The banks are also threatened by a potential increase in funding costs. Banks have partially been able to compensate for the reduced conversion, fee and commission income with greater incomes from card

Figure 12. Loans overdue for more than 60 days as a percentage of the loan portfolio



payments. Even so, net interest income remains under pressure and thus the profitability of the banking sector is somewhat smaller than was expected in spring. In all, in 2011 the banks operating in Estonia will earn a **profit of approximately 0.6 billion euros**, about 60 % of which will consist of the one-off profit from the restructuring of the Swedbank Group. In 2012, banks are estimated to earn a profit of 0.3 billion euros.

This year, the capitalisation of the banks will continue to rise. Capitalisation will be improved by the profits earned. Loan-loss provisions are not expected to have an impact on capital, as new provisions are expected to be equal to the reversals of provisions made earlier. Moreover, the size of the loan port-

folio will probably have no significant effect on capitalisation until the end of 2012. The capitalisation of the banking sector<sup>4</sup> will post nearly 19% by the end of this year and by the end of 2012 it is estimated it will reach 22% (see Figure 13).

### Stress test

The greatest risk to the Estonian banking sector is the credit risk. The stress test of the banking sector examined what the maximum increase would be in the stock of overdue loans that the banking sector could endure with the current capital buffer. At the end of August 2011 this buffer, or the banks' own funds beyond the minimum requirement of 10% to meet the capital adequacy ratio, was 680 million euros<sup>5</sup>.

Figure 14. Absorbable growth in overdue loans at current capital buffer

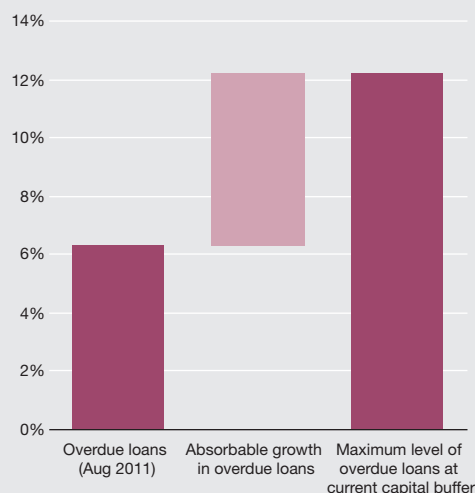


Figure 13. Projected change in capital adequacy ratio by components

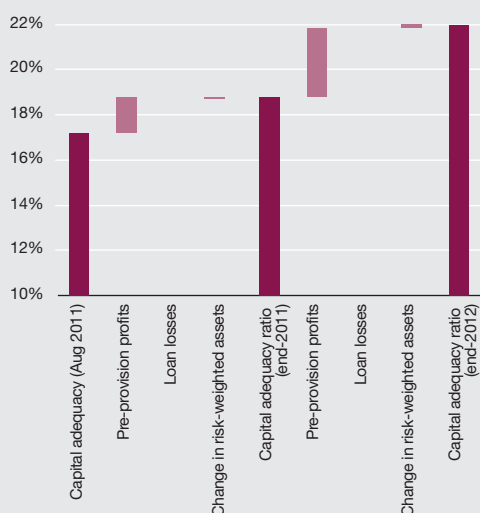
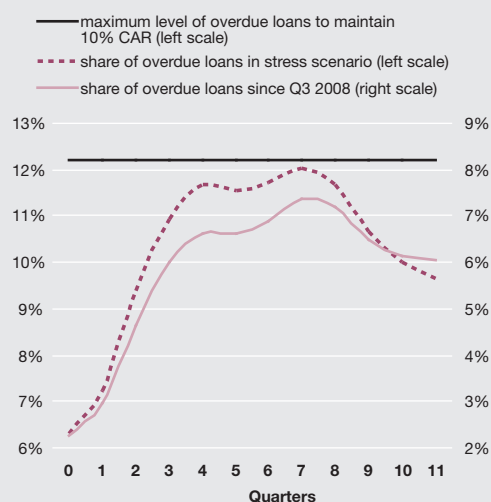


Figure 15. Level of overdue loans and capital buffer



<sup>4</sup> On a solo basis.

<sup>5</sup> Including unaudited profits earned this year.

Presuming that the loan-loss provisions to loans overdue for more than 60 days should still post 80%, this buffer would suffice to fulfil the 10% adequacy rate even if the share of overdue loans in the loan portfolio increased to 12.2% (see Figure 14).

In a negative scenario where the stock of overdue loans started to climb from the end of August 2011 as rapidly and as massively as it did in autumn 2008, the current capital

buffer of the banking sector would be sufficient to withstand such a growth in overdue loans (see Figure 15). This is a conservative presumption, as the profits before loan losses that the banks would still be earning have not been included; the positive impact of shrinking assets on capitalisation have not been included either, so the banking sector's capital buffer is currently sufficient to survive another sharp cycle of deterioration in loan quality.

### **The essence and implementation of the countercyclical capital buffer in Estonia**

The global financial crisis showed that the capital level and quality requirements for the banking sector are too lenient, as they amplify economic cycles and thus threaten financial stability. The new global regulatory framework (Basel III), which will be enforced in Europe through amendments to the directive on capital requirements, will establish new and stricter capital requirements on the amount of credit institutions' own funds that must be held to contain the amplification of economic cycles. In addition to stricter minimum capital requirements, two capital buffers will be laid down: the **capital conservation buffer**, which is the same for all banks, and the **countercyclical capital buffer**, which will be determined in the jurisdiction of every Member State. Additional buffers must be formed from the highest-quality capital that is common equity Tier 1. Credit institutions whose capital falls below the buffers will be automatically subject to restrictions on the distribution of earlier profits and dividends until the target is reached.

### ***The essence of the countercyclical capital buffer***

The aim of the countercyclical capital buffer is to improve the banking sector's resistance to risks that stem from rapid credit growth. A countercyclical capital buffer will be required during periods of excessive credit growth if this is accompanied by increasing systemic risk. The requirement is released during economic declines, so that banks would continue loan supply throughout the downward cycle. The countercyclical capital buffer rate changes over time and generally comprises 0–2.5% of risk-weighted assets. When the country's situation and specific financial stability risks have been considered, a buffer exceeding 2.5% may be established if it proves necessary. If a credit institution is engaged in cross-border operations, the institution specific counter-cyclical capital buffer will consist of the weighted average of the buffer rates that apply in the jurisdictions where the relevant credit exposures of the bank are located.

As long as the counter-cyclical capital buffer remains below 2.5%, the Member States must reciprocally acknowledge and implement



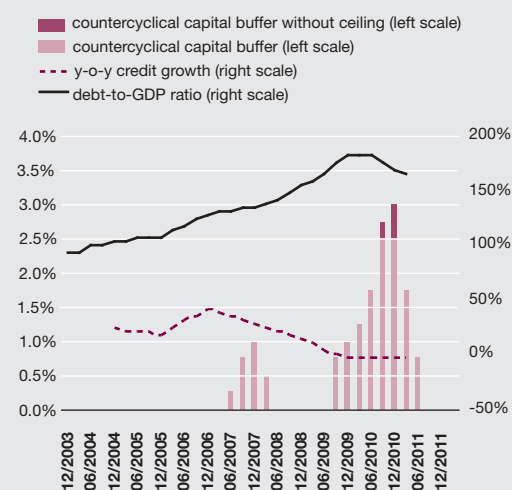
these capital requirements. As for the share of the buffer that exceeds 2.5%, the countries may choose whether or not to accept another Member State's assessment and apply a higher capital rate on credit institutions that have been authorised in their Member State. Upon the establishment or elevation of the buffer rate, banks must apply the new requirement no later than 12 months from the date when the new rate was announced. Decisions regarding the reduction of the buffer rate come into force immediately.

As the aim of the countercyclical capital buffer rate is to avoid risks that emanate from excessive loan growth, the buffer must be connected to the dimension of credit growth. To guarantee international conformity, the basis for determining the buffer level is the amount of credit as a ratio of GDP and its deviation from the long-term trend. Other important structural variables may also be taken into account, in terms of risks that endanger financial stability. The European Systemic Risk Board (ESRB) may make recommendations to Member States regarding the enforcement and monitoring of buffers.

### ***The implementation of the countercyclical capital buffer***

At European Union level the ESRB is elaborating guidelines for the calculation of the countercyclical capital buffer. Until then the capital buffer rate may be calculated using the Basel III methodology, under which the buffer rate is positive if the loan stock as a ratio of GDP exceeds its long-term trend by at least 2 percentage points; the buffer rate reaches its maximum level of 2.5% when the deviation is greater than 10 percentage points. If the loan stock as a ratio of GDP deviates from its trend by 2–10 percentage points, the

**Figure 16. Calculated countercyclical capital buffer according to the financial account**



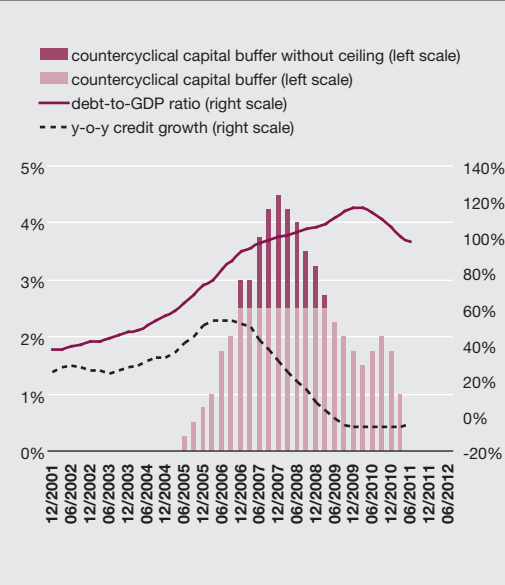
capital buffer rate varies linearly in the range of 0–2.5%. Loan stock has been determined as the total debt burden of the non-financial sector – resident and non-resident private persons and non-financial companies – in the economy.

Financial account data show Estonian national authorities should have taken the decision to implement the countercyclical capital buffer requirement for the first time in 2006. Banks should have applied this requirement for a second time from at least the fourth quarter of 2009 until the end of the second quarter of 2011, when the signs of excessive credit growth had actually abated from the economy (see Figure 16). The credibility of this calculation model is questionable due to the financial account's short historical data series, which does not include the cyclical component.

Calculations based on banking statistics describe the pre-crisis situation more adequately. They show that the countercyclical

capital buffer requirement should have been applied in Estonia a few years before the onset of the global financial crisis (see Figure 17). Credit growth exceeded its long-term trend in 2004 and this should have been followed by a decision to establish the capital buffer requirement and the enforcement of the requirement within at most 12 months. Since 2005, credit growth became so rapid that banks should have fulfilled a counter-cyclical capital buffer requirement of at least 2.5% or even higher.

**Figure 17. Calculated countercyclical capital buffer according to banking statistics**



**The impact of changes in Swedbank's legal structure on the aggregate balance sheet and capital of the Estonian banking sector**

The history of the Baltic sub-consolidation group of Swedbank dates back to the second half of the 1990s, when the bank's predecessor Hansapank expanded to the two countries to the south, Latvia and Lithuania. In 2005, Swedbank acquired Hansapank along with its developed structure, and the sub-consolidation group Swedbank Baltic Banking was established in Estonia. To a certain extent, the liquidity and capital of the Baltic group were managed in Estonia, which entailed higher buffers at the level of the Estonian unit. As, on average, Swedbank's assets have comprised 55% of the assets of the Estonian banking sector since the beginning of this

century, such risk management significantly distorted the liquidity and capital indicators of Estonian banking. In addition, the intermediation of funds between Swedbank and its Baltic subsidiaries in Latvia and Lithuania had an impact on balance of payments data.

On July 2011, the Estonian-registered Swedbank AS sold its Latvian and Lithuanian subsidiaries to its Swedish parent bank Swedbank AB. Under the new legal structure, the Latvian and Lithuanian subsidiaries and their affiliates no longer belong to the consolidation group of Swedbank AS.

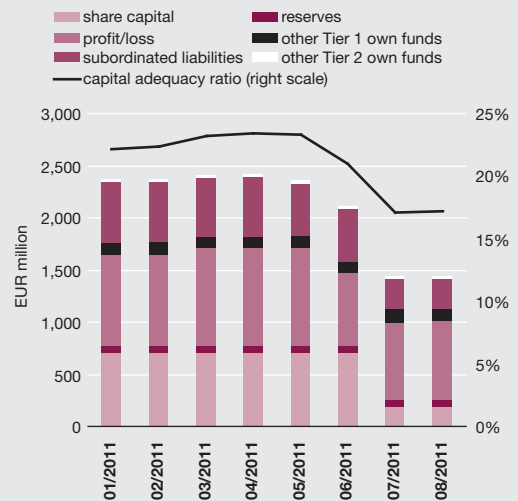
To reduce the high capitalisation fuelled by the structural changes, Swedbank AS lowered its share capital from 603 million to 85 million euros and repaid the parent bank over half of its subordinated loan stock. The capital

level also fell after dividends were paid to the parent bank from the earlier profits earned in Latvia and Lithuania. All in all, by the end of July the Estonian banking sector's own funds shrank by 0.9 billion euros, or 40%, due to which the aggregate solo capital adequacy dropped from 23% in May to 17% at the end of July<sup>6</sup> (see Figure 18).

As a result of the transaction, banks' financial investments in affiliated companies decreased by 96%. In addition, in the third quarter this created a significant growth in net profit, which increased over five-fold compared to the previous quarter, while without the impact of this transaction the net profit of the quarter would have risen by 27%. The extraordinary profit also boosted liquid assets substantially: in two months, claims on other banks rose by nearly 40%, although this was also affected by other market factors.

<sup>6</sup> In earlier years, Eesti Pank has based the capitalisation stress tests of the Estonian banking sector on a capital level that did not include capital calculated in respect of the claims of subsidiaries located abroad.

**Figure 18. The structure of banking sector's own funds on a solo basis and the capital adequacy ratio**



The change in legal structure should improve the efficiency of the bank's capital management and simplify the bank's management by reducing its levels. The structural change is also positive from the perspective of banking supervision and crisis management.

## INSURANCE COMPANIES

The Estonian insurance sector is operating on strong grounds and capitalisation is still high. At the end of 2010, the own funds of life and non-life insurance companies registered in Estonia exceeded the required solvency margin by four times.

However, the first half of 2011 was more difficult for the insurance companies than the previous year. The market and credit risks, which pose the greatest threat to the insurance sector, have reduced investment income (see Figure 19).

Moreover, the slow recovery of domestic economy has made the insurance landscape difficult by causing strong competitive and price pressures, especially in non-life insurance. The cancellation rate of contracts has risen to over 2% and the small number of new contracts is not sufficient to replace the high contract termination rate. Therefore, with the first six months of 2011, the premiums of the insurance sector on insurance contracts fell by 4% in total (see Figure 20).

However, the economy is gradually recovering and the non-life insurance market is already

showing some signs of growth. The drop in the sales income of non-life insurance companies operating in Estonia has halted, although the insurance premiums collected in the first and second quarters of 2011 still posted 1% less than in the first half of 2010. The non-life insurance market is largely shaped by developments in motor third party liability insurance and casco insurance, which are the prime types of insurance. What is positive is that the sale and leasing of new cars has gone up.

Although pension insurance has been on the rise since the beginning of 2011, the Estonian life insurance sector still largely relies on unit-linked insurance products. The share of the sales income from these contracts in ratio to total life insurance premiums, however, has dropped to 40% from a year ago. While in 2010 the favourable investment environment restored the interest of policy holders in unit-linked insurance products, in 2011 the insecurity in financial markets has inhibited the collection of insurance premiums. The stock market situ-

ation was quite negative in the first half of 2011. In addition, the public debt issues of Greece and other European border countries have made investors cautious. Life insurance companies collected 14% less insurance premiums from Estonian residents in the first six months of 2011 than they did over the same period last year.

In life insurance, income on both equity capital and the investment portfolios of policy holders shrank. Year-on-year, the return on investment remained below 3%. In unit-linked life insurance, which makes up 45% of the total assets of insurance companies, the investment risk is fully incurred by the policy holder and does not affect the creditworthiness of the companies. On the one hand, long-term low interest rates pose a risk, as they hinder the fulfilment of obligations arising from insurance contracts with guaranteed interest rates. The average guaranteed market interest rate is 3–4%, which has so far remained below the average return rate (4.4%) of the securities portfolios of life insurance companies (see Figure 21).

Figure 19. Net investment income

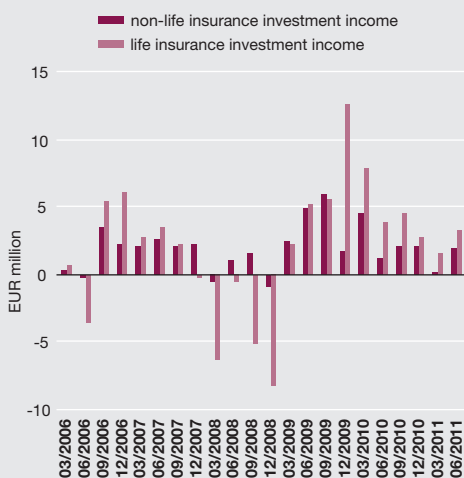
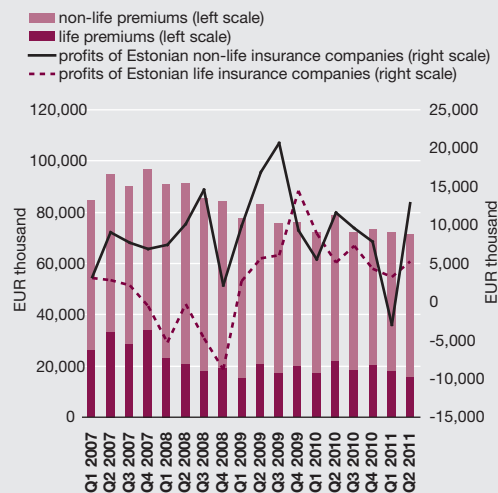


Figure 20. Profit of insurance companies and premiums from residents



Sources: Statistics Estonia, Eesti Pank

**Figure 21. Distribution of guaranteed rate contracts by interest rates**



**Figure 22. Debt security investments of life insurance companies by issuer**

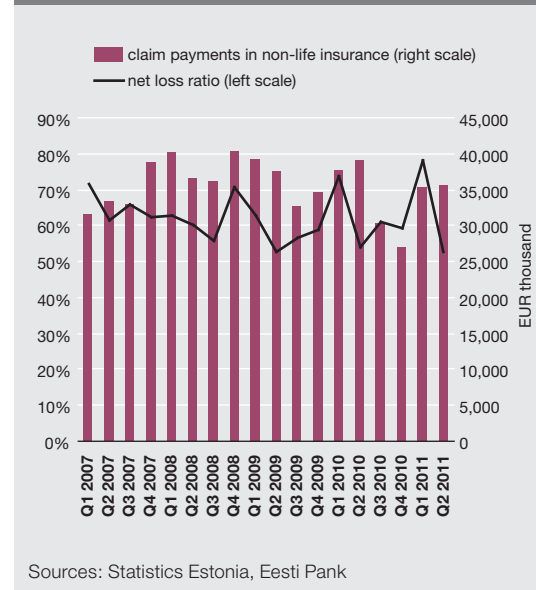


On the other hand, should interest rates hike abruptly, it would exert a negative impact on bond prices and reduce net income from the investments of life insurance companies. Investments in bonds and other fixed-income securities comprise about 60% of the financial investments of insurance companies. Despite financial problems in some European countries, no significant changes in the allocation of assets have been made and insurance companies still prefer to invest in fixed-income government bonds<sup>7</sup> (see Figure 22).

In the first and second quarters of 2011, the profit of both life and non-life insurance companies was nearly 40% smaller than a year ago. In addition to the decreased income from sale and investments, profitability has also been curbed by higher operational costs. With a year, conclusion costs have risen by over 20%. The economic results of non-life insurance companies were also affected by the difficult winter,

<sup>7</sup> Investments in foreign government bonds total 72%, of which 16% are German, 25% French, 15% Italian and 13% Lithuanian government bonds.

**Figure 23. Claims and net loss ratio in non-life insurance**



Sources: Statistics Estonia, Eesti Pank

which increased the frequency of insured events. The net loss ratio<sup>8</sup> rose to 78% in the first quarter (see Figure 23), but abated to an acceptable level of 53% by the end of the second quarter. Despite the remarkable decline, the sector still remains profitable and liquidity risk is minimal. The liquidity buffer of life and non-life insurance companies continues to be sufficient at 163 and 199 million euros respectively.

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<sup>8</sup> Net loss ratio = the occurred net claims from reinsurance / earned net premiums from reinsurance.