III
BANKING SECTOR STABILITY AND RISKS

Strategic Development in the Banking Market

Competition in the Estonian banking market has remained tough. The six licensed credit institutions already operating in the Estonian market[1] and two subsidiaries got an addition in June when Vereins- und Westbank AG, which had financed Estonian companies already before, received a license from the Financial Supervision Authority to open a branch. Accession to the European Union quite expectedly led to a situation where foreign cross-border banking service providers registered themselves in Estonia: by the end of the third quarter the Financial Supervision Authority had registered more than 45 respective applications.

The local Estonian banking market witnessed active struggle for market shares both in the second and third quarter of 2004. At the same time, the credit institutions operating in Estonia have continued to seek opportunities for expanding their **operations in foreign markets**. In September Hansapank announced about concluding an agreement in Moscow to buy the Kvest Bank. The enforcement of the deal depends on approvals from Russian central bank and the Estonian Financial Supervision Authority.

Capital Adequacy

The aggregate capital adequacy ratio of the credit institutions operating in Estonia rather showed a downward trend (see Figure 3.1) in the first half of the year on a solo basis, amounting to 12.8% by the end of July. However, developments have differed across banks and the inclusion of profits approved by an auditor in the own funds lifted the aggregate capital adequacy ratio to 14.2% in August. By the end of September the consolidated ratio had dropped to 14.0% due to increasing credit portfolios (Tier 1 capital adequacy ratio being 13.3%).

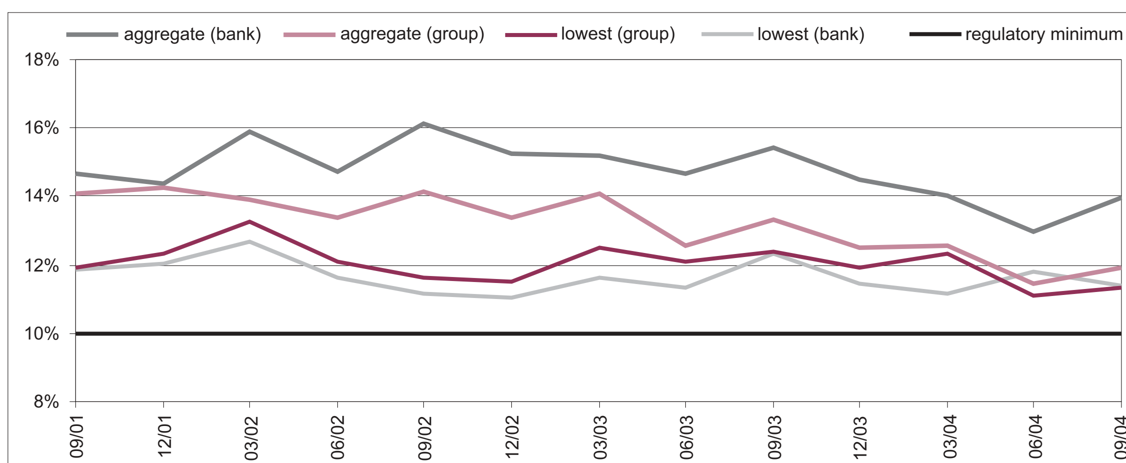


Figure 3.1. Capital adequacy

The annual increase in the banks' risk assets again accelerated on a solo basis in the summer period. In September the annual growth rate of the banks' **risk assets** was 23%, which increased the consolidated risk assets to 85 billion kroons by the end of the month. As of May the EU enlargement has in some cases enabled to apply lower risk weights to claims to the residents of the new member states.

[1] As of June, the business name of AS Preatoni Pank is AS SBM Pank.

The risk assets of the banking groups had grown to 128 billion kroons by the end of the third quarter (annual growth 26%; see Figure 3.2). The aggregate capital adequacy ratio of the banking groups[2] increased again to 11.9% (Tier 1 capital adequacy ratio being 11.4%) in the third quarter since strong profits included in the own funds offset the impact of growing risk assets.

The capital adequacy ratios of all credit institutions licensed in Estonia have remained above the level of 11% both on a solo and the consolidated basis in current year.

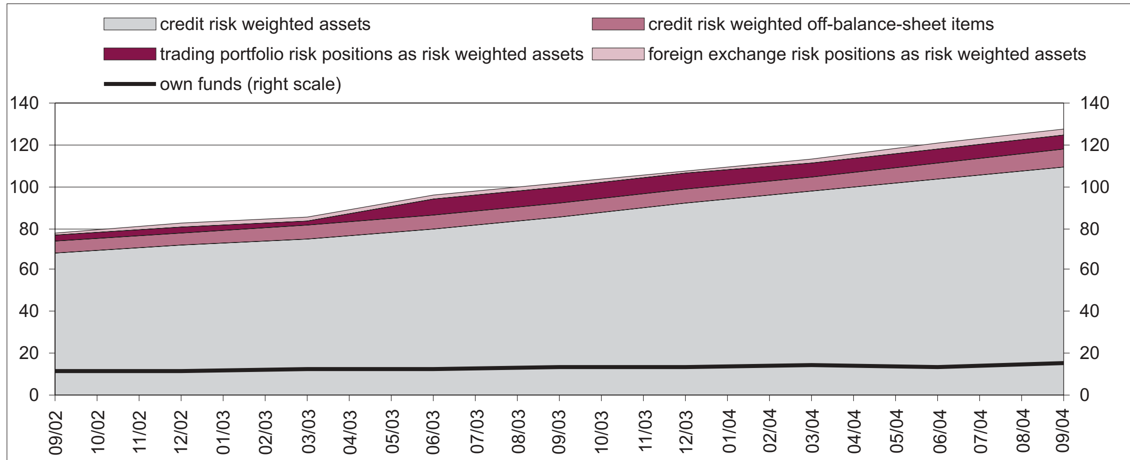


Figure 3.2. Structure of bank groups' risk assets and own funds (EEK bn)

Quality of Assets

As seen also from the developments in the risk assets above, **rapid growth in the loan portfolios of banks** continued both in the second and third quarter (see Figure 3.3.) on a solo as well as on the consolidated basis. In September bank loans grew by 41%[2], year-on-year, on a solo basis, while the consolidated loans and leasing portfolio of the banking groups grew by more than 34% in four quarters.

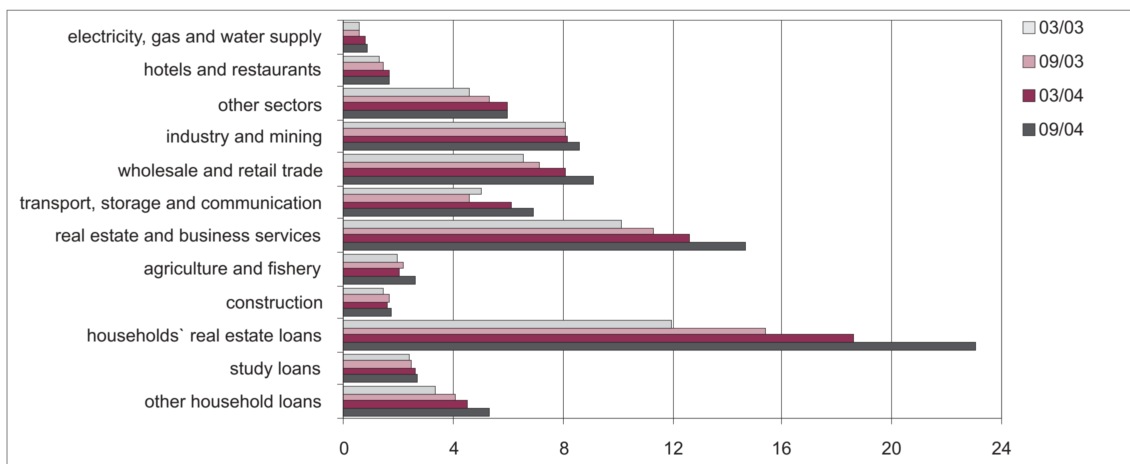


Figure 3.3. Total loan, leasing and factoring portfolio by sectors and purpose of loans (EEK bn)

[2] Aggregate ratio data of five banking groups.
[3] The estimate includes six credit institutions and one branch in the 2003 comparison period and three branches in 2004.

Rapid growth in the housing loans portfolio is also reflected in the structure of **loan collateral**s (see Figure 3.4). In a year the share of mortgage-backed loans in the consolidated portfolio[4] has grown by 5 percentage points, i.e. to two thirds. At the end of September overdrafts and consumption loans of individuals accounted for nearly a third of all outstanding unsecured credits.

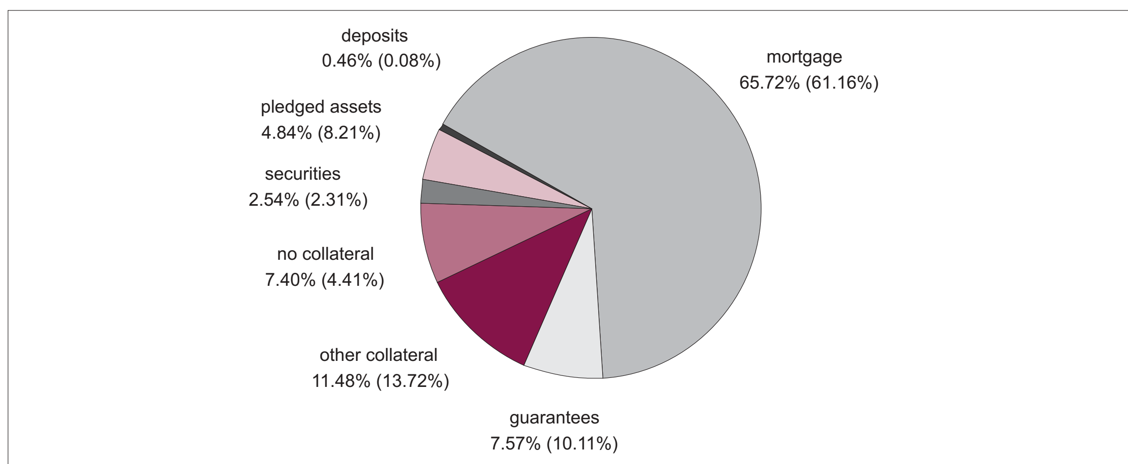


Figure 3.4. Loan collaterals by type at the end of September 2004 (in brackets at the end of September 2003)

On a consolidated basis the quality indicators of the banks' loan portfolios have so far not shown a deterioration trend in the context of rapid loan growth. On a solo basis the share of **loans overdue for more than 60 days** granted to the non-financial sector had declined to 0.7% by the end of the third quarter, which was 0.1 percentage points below the annual moving average (see Figure 3.5). At the end of September the share of **allowance for uncollectible claims** accounted for 1.2% of the consolidated loan portfolio, which is the average of the past 12 months.

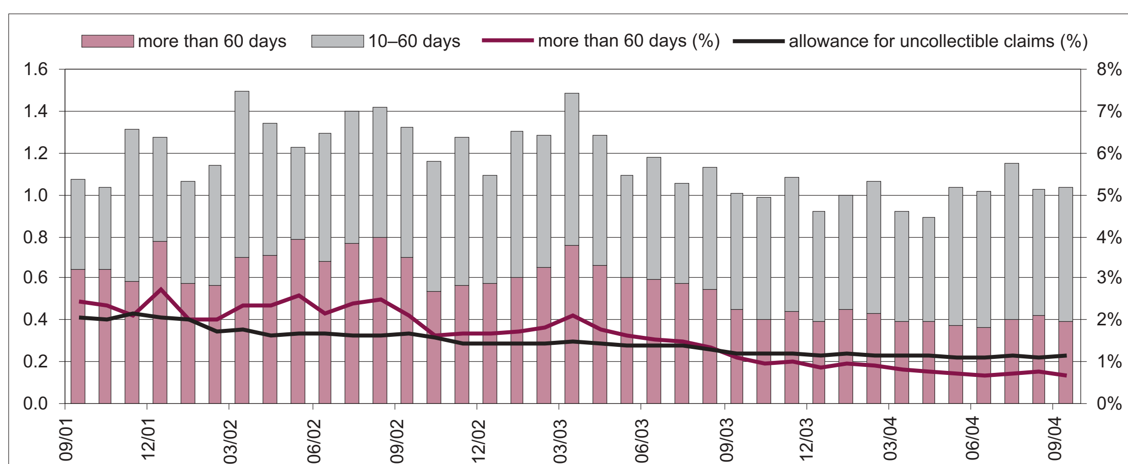


Figure 3.5. Volume of overdue loans (EEK bn; left scale) and the share of overdue loans and allowance for uncollectible claims in banks' loan portfolio (right scale)

The data on overdue loans in the aggregate portfolio of the credit institutions operating in Estonia indicates that in the housing loans portfolio the share of loans overdue for more than 60 days has continued to decline (see Figure 3.6). Here the rapid growth in the housing loans portfolio should be taken into account. The share of corporate loans overdue for more than 60 days has been consistently the largest among loans granted to export-oriented companies; these are mostly loans to manufacturing companies.

[4] Solo basis.

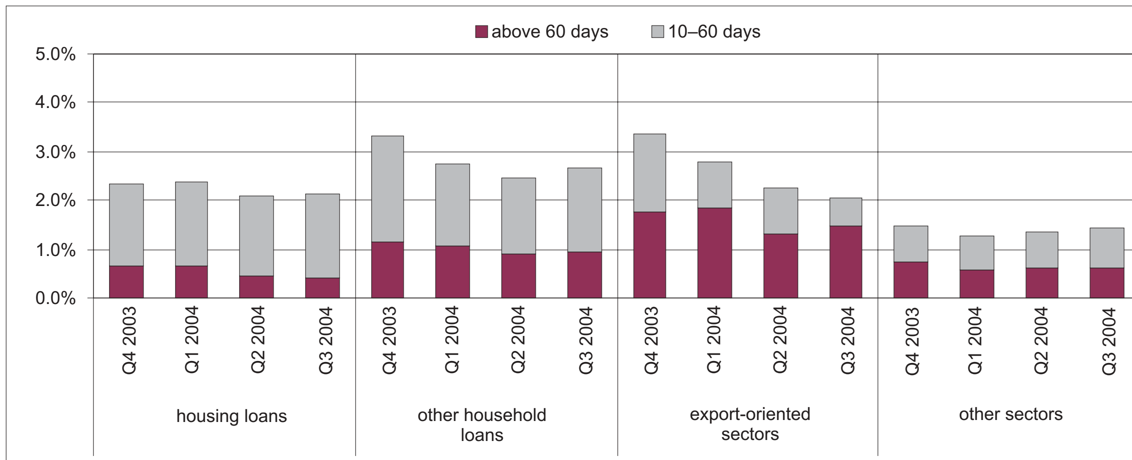


*Figure 3.6. Share of overdue loans by sectors**

* 3-month average

Tightening competition has led to a decline in risk margins also in riskier customer segments. Still, as a 3rd quarter average, the median interest rate of the housing loans issued in a month remained 0.6 percentage points lower than the interest rate of the 25% of the loans with the highest interest rates.

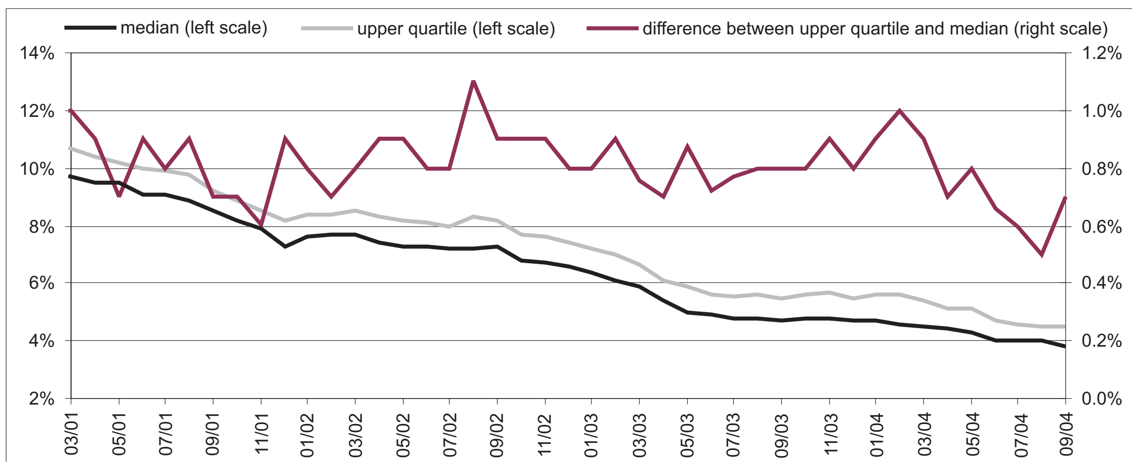


Figure 3.7. Housing loans: median interest, upper quartile (left scale), and difference between upper quartile and median (right scale)

The volume of **guarantees** extended by the banks has continued to grow at a somewhat slower rate than financing. At the end of September around one third of all the guarantees had been issued to the construction sector. In half-year comparison, the share of guarantees given to transport and communications companies has somewhat increased.

Efficiency and Profitability

Solo Profitability of Banks

Robust loan portfolio growth and a slowdown in a decrease in margins have created favourable conditions for the growth in banks' profitability. However, rising net loan write-down expenses and rising administrative costs along with more modest growth in the net income on financial transactions has curbed the impact of these factors on the operating profit.

The banks earned 2.32 billion kroons in profit as the sum of four consecutive quarters, which is as much as 75% higher than the outcome for the same period a year ago (1.32 billion kroons; see Figure 3.8). Such record profits are the result of dividend income earned in the second quarter from the last year's profits of subsidiaries.

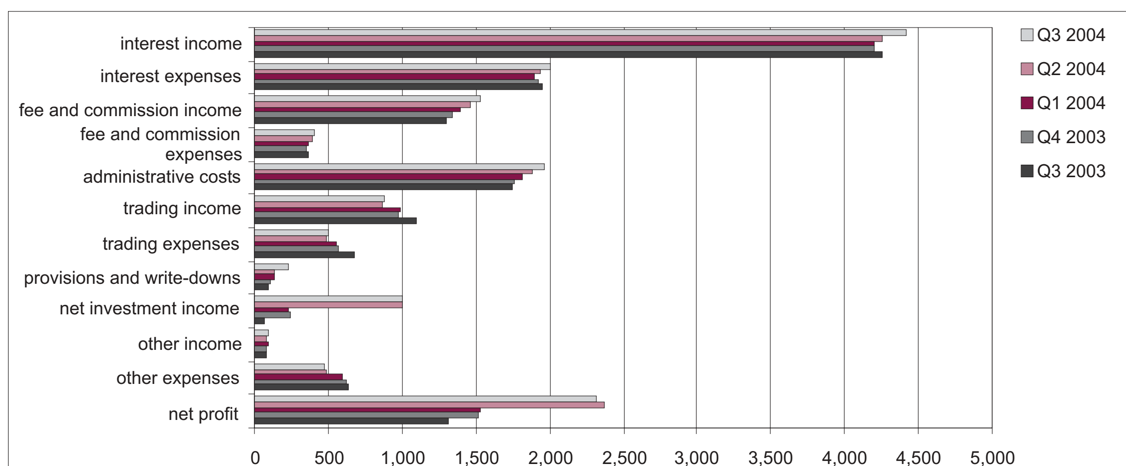


Figure 3.8. Solo annual profit of banks (sum of 4 consecutive quarters; EEK m)

The downward trend in interest income to interest-bearing assets ratio has steepened since the second half of 2003, but the banks have been capable of successfully managing this development during the past six months (see Table 3.1). Along with robust growth in the income base, it has underpinned interest income. On the other hand, the income earned on liquid assets continues to decrease, which can be explained by the relative decline in the share of liquid assets as well as the change in the structure of liquidity buffers.

Table 3.1. Key revenue and expenditure items (solo)

	2001	2002	Q3 2003	2003	Q1 2004	Q2 2004	Q3 2004
Net interest income	2,182.4	2,370.5	2,300.1	2,280.7	2,300.4	2,323.8	2,406.1
Net fee and commission income	779.7	869.2	939.2	986.5	1,023.7	1,077.3	1,116.5
Administrative costs	-1,583.9	-1,757.8	-1,748.4	-1,764.8	-1,815.5	-1,881.0	-1,965.7
STRUCTURAL PROFIT	**1,378.3**	**1,481.9**	**1,491.0**	**1,502.5**	**1,508.5**	**1,520.1**	**1,557.0**
Provisions and write-downs	-84.4	-136.5	-99.8	-101.8	-131.4	-135.5	-236.3
Net trading income	443.2	359.5	428.6	404.2	421.2	385.2	375.6
Other operating income (net)	-128.1	-142.1	-119.9	-114.4	-83.5	-82.0	-71.2
OPERATING PROFIT	**1,608.9**	**1,562.8**	**1,699.8**	**1,690.6**	**1,714.9**	**1,687.8**	**1,625.1**
Other items net	74.5	-409.6	-380.8	-177.9	-189.5	684.1	693.7
TOTAL NET PROFIT	**1,683.4**	**1,153.2**	**1,319.0**	**1,512.6**	**1,525.4**	**2,371.9**	**2,318.9**

However, interest cost reduction possibilities have narrowed further, which has, quite expectedly, led to a slowdown in the reduction of interest costs on interest-bearing liabilities in the second half of 2004. This applies to costs related to the facilities involved through loans, bonds and demand deposits.

In parallel to improved net interest income, an increasingly larger part of income is earned as **fee and commission income**; however, this has not been sufficient for increasing the operating profit. Arising from an upturn in credit write-downs/write-offs and administrative costs, the operating profit has decreased. Net income on financial transactions, which has remained modest in the past six months because of the instability of the financial markets, has not supported the operating profit either.

Quite expectedly the net loan write-down/write-off expenses calculated as a three-month average has increased more than three times from the extraordinarily low levels of last year, but still remains small compared to the loan portfolio (0.4%). At the same time, the volume of loan write-offs as well as recovered loans has grown. On the one hand, due to the rise in the volume of claims and a possible increase in the share of riskier clients in the customer base, an increase in loan losses can be expected also in the future. On the other hand, expected improvements in economic environment create favourable prerequisites for increased income in non-financial sector earnings and loan-servicing capacities (see also Chapter 2 *Financial Behaviour of Companies and Households and Their Risks*).

The return on equity and assets has significantly increased due to the dividend income earned in the second quarter (see Table 3.2). For the same reason the cost-income ratio has decreased considerably.

Table 3.2. Key profitability indicators

	2001	2002	Q3 2003	2003	Q1 2004	Q2 2004	Q3 2004
Return on equity	20.71%	14.69%	12.61%	14.15%	13.81%	20.83%	19.51%
Return on assets	2.66%	1.55%	1.56%	1.70%	1.63%	2.38%	2.17%
Cost-income ratio	53.26%	61.58%	55.78%	53.01%	52.94%	44.93%	45.34%
Net interest margin	3.89%	3.59%	3.08%	2.91%	2.78%	2.62%	2.52%
Spread	3.69%	3.44%	2.94%	2.78%	2.66%	2.52%	2.43%

According to the banks, depending on the competition situation, a further decline in interest margins can be expected in short-term, which would continue to pressure the banks' profitability.

Profitability of Leasing Companies

The profit of leasing companies have continued to grow, amounting to 861 million kroons as the sum of four consecutive quarters, which outpaces the result for the same period a year ago by nearly a fifth. Such growth is the result of a significant decline in the losses from writing down claims, which have shown a downward trend since the beginning of 2004.

Net interest income, which has a clear impact on the profitability of leasing companies, has been growing at a slower rate since the beginning of the year and even turned downwards in the third quarter (see Figure 3.9), despite lower interest costs. A decline in the net fee and commission income that became evident in the last quarter of 2003 has also accelerated, while administrative costs have continued to rise. The profit of leasing companies is largely affected by the integration of leasing operations into banks, which leads to shrinking portfolio volumes and income on the one hand, and lower losses from writing down claims on the other hand.

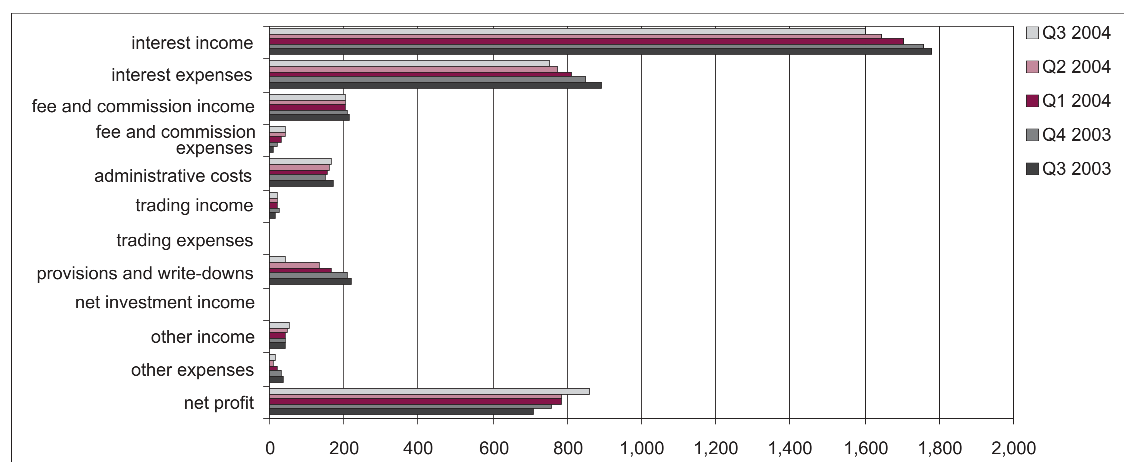


Figure 3.9. Annual profit of leasing companies (sum of 4 consecutive quarters; EEK m)

Consolidated Profitability

Banking groups earned 3.3 billion kroons in profits as the sum of four consecutive quarters, which outpaces the respective figure for the same period a year ago by one fourth. In the second half of 2003 the rise in consolidated profit slowed down, but since the second quarter of 2004 the growth rate of the consolidated profit of the banking groups has picked up again.

Profit was mainly shaped by interest income (see Table 3.3), whose developments reflect successful management of income on interest earning assets, which have led to a faster growth in **net interest income**, despite halting decline in interest costs. Fee and commission income continues to outpace interest income, even though there were signs of a slowdown. Since price changes, unlike interest income, have a stronger impact on fee and commission income, the effects resulting from competitive pressure can be suspected.

Table 3.3. Key revenue and expenditure items (on group basis)

	2001	2002	Q3 2003	2003	Q1 2004	Q2 2004	Q3 2004
Net interest income	3,700.2	4,392.4	4,529.8	4,586.9	4,671.8	4,797.3	4,997.4
Net fee and comission income	1,361.5	1,657.1	1,920.2	2,006.9	2,087.0	2,183.4	2,266.6
Net income on insurance	68.0	61.9	37.9	27.1	32.1	52.0	64.6
Administrative costs	-2,668.7	-3,234.5	-3,149.3	-3,170.2	-3,231.6	-3,317.3	-3,409.4
STRUCTURAL PROFIT	**2,461.1**	**2,876.8**	**3,338.7**	**3,450.7**	**3,559.2**	**3,715.4**	**3,919.1**
Provisions and write-downs	-284.6	-207.9	-520.4	-554.1	-543.0	-493.2	-497.3
Net trading income	688.2	612.9	759.5	730.4	782.1	729.2	741.8
Other operating income net	-45.4	-85.4	-65.3	-92.6	-68.5	-79.4	-60.3
OPERATING PROFIT	**2,819.3**	**3,196.4**	**3,512.5**	**3,534.4**	**3,729.9**	**3,872.0**	**4,103.3**
Other items net	-897.1	-877.1	-851.3	-837.1	-836.9	-736.5	-759.8
TOTAL NET PROFIT	**1,922.2**	**2,319.3**	**2,661.1**	**2,697.2**	**2,893.1**	**3,135.4**	**3,343.5**

Contrary to the solo results of the banks, losses from writing down claims have been smaller on the consolidated basis, year-on-year. On the other hand, the upturn in administrative costs has continued since the beginning of 2004. However, coupled with more modest income on financial transactions arising from the instability of the financial markets, this has not significantly hampered the rise in operating profit.

Even though the net interest margin highlights successful management of declining interest income on the banking side, the indicator continues to slide fast in leasing operations (see Table 3.4). Underpinned by strong profits, the banking groups have, despite robust growth in financing, managed to increase return on assets that had remained stable for a long time. The same applies to **return on equity**, which has received additional support from optimising capital. The cost-income ratio of the banking groups continues a steady decline on the back of strong income and improvements in the cost efficiency of the subsidiaries in the neighbouring markets.

Table 3.4. Key profitability indicators (on group basis)

	2001	2002	Q3 2003	2003	Q1 2004	Q2 2004	Q3 2004
Net interest margin (leasing)	11.0%	9.2%	8.1%	7.8%	7.5%	7.2%	6.9%
Net interest margin (banking)	3.8%	4.0%	3.3%	3.1%	3.0%	2.9%	2.9%
Return on assets	2.2%	2.2%	2.2%	2.2%	2.2%	2.3%	2.3%
Return on equity	20.2%	20.5%	20.7%	20.1%	20.6%	21.4%	21.7%
Spread	4.7%	4.6%	4.1%	3.9%	3.8%	3.7%	3.5%
Cost-income ratio	60.8%	60.7%	52.5%	52.0%	51.0%	50.8%	49.8%

Liquidity

A change in the Euribor's downward trend serves as the first signal indicating withdrawal of the favourable effects of the expansive external environment. Nevertheless, banks are enjoying the fruits of a rise in their ratings in last spring, which has quite expectedly led to a certain decline in the price of external financing. This has enabled to offset the higher price of the liabilities resulting from the increased share of market-based resources. The banks' confidence in the consistent inflow of foreign resources and successful attraction of market-based resources is illustrated by the fact that despite the rise in Euribor the interest rates on kroon loans have continuously been lowered.

Financing of Banks

Following two years of rapid growth the rate of **external financing** has not slowed down after December 2003 (see Figure 3.10). Annual growth in foreign borrowing has risen to over 85% as the average of the past six months, which increased the share of institutional external financing to 38% of all liabilities in September.

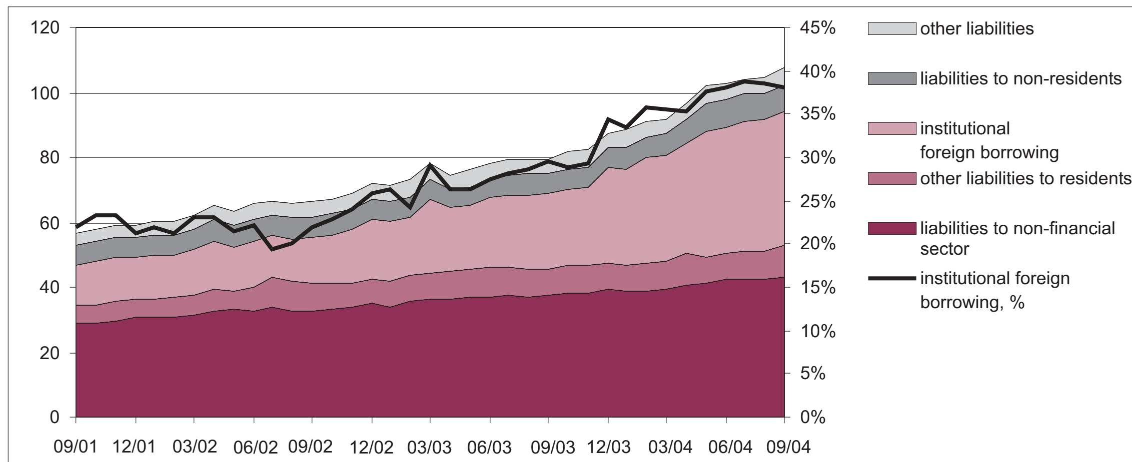


Figure 3.10. Banks' liabilities (EEK bn; left scale) and share of institutional foreign borrowing (right scale)

As at September, nearly a half of the growth in foreign borrowing accounted for the parent banks. Compared to the situation six months ago, a certain decline in the share of parent banks' financing in banks' foreign loans has arisen from faster growth in the assets of banks, which involve more market-based resources than others. This has also been affected by the favourable impact of rising ratings on the price of financing.

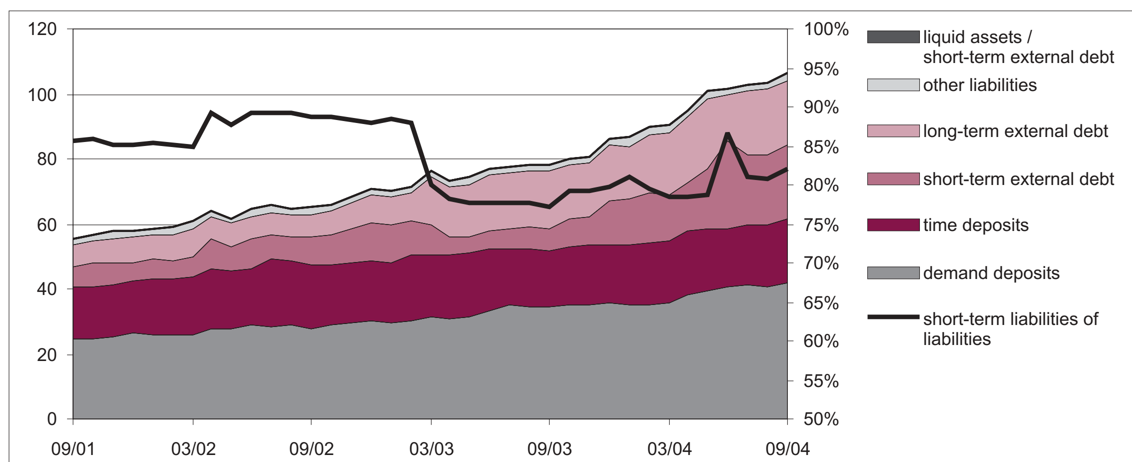


Figure 3.11. Banks' liabilities by residual maturity (EEK bn)

In line with active attraction of short-term external resources, the share of long-term liabilities of resident banks has dropped below a half (46%) of all foreign loans (see Figure 3.11). Meanwhile, extensive attraction of long-term resources in October should return the share of long-term resources to the level of March this year. In September highly liquid assets covered 82% of short-term external liabilities, whereas last year's average stood at 174%.

Even though deposit growth has shown an increase in the last six months (see also Chapter 2 *Financial Behaviour of Companies and Households and Their Risks*), financing continued to outpace deposits, which led to a constant widening of the financing-deposits gap (see Figure 3.12). At the end of September the financing portfolio of the banks and leasing companies exceeded the resources deposited in the banks by 36%.

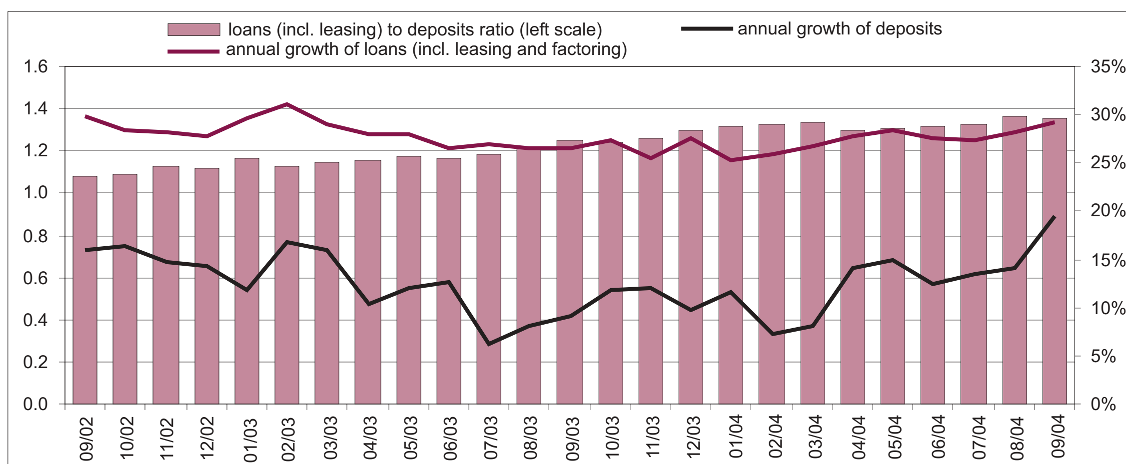


Figure 3.12. Loans to deposits ratio and dynamics

Liquid Assets

The share of the broad liquidity aggregate in current liabilities has continued a decline that started early in 2003, amounting to 43% as an average of the past three quarters. Such development is the result of the declining share of liquid claims. Greater volatility of current liabilities has had its impact as well, which results from the banks' financing schemes, which are more based on loans and securities and less on deposits. The sudden increase in liquid assets in May (by more than 3 percentage points) resulted from extensive attraction of resources by all banks; meanwhile the funds received were temporarily channelled into deposits kept with foreign banks. In June the liquid assets to current liabilities ratio was reduced to the 47% level.

Besides the declining share of liquid claims in the banks' assets, the **structure of liquid assets** is changing as well. The content of the liquidity reserve continues to shift towards deposits and reverse repos held with foreign banks. The share of deposits and reverse repos has grown at the expense of short-term bonds as well as other short-term assets. Thus, along with reducing the share of liquid assets in total assets, the share of highly liquid assets is increased in liquid claims. These developments have arisen from the banks' efforts to optimise liquidity management so as to offset the effects from more volatile liabilities arising from changes in the financing schemes.

The net positions of claims and liabilities pursue the trend of lengthening, owing mainly to an increase in assets with maturities of over 5 years (see Figure 3.13). This is related to a robust growth in long-term loans, above all housing loans. On the liabilities side, the deepening of the net position of up to 3-month claims and liabilities has been brought about the increase in short-term debt instruments at the expense of demand deposits. Meanwhile the negative net position of claims and liabilities on demand has remained stable, reflecting the decline of the share of liquid claims in the assets.

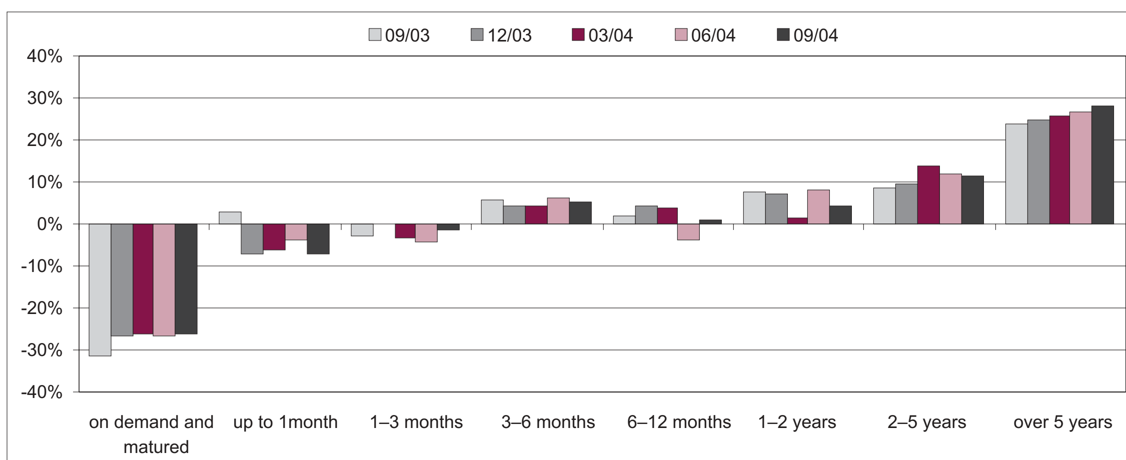


Figure 3.13. Banks' net liquidity position by residual maturity (% of assets)

BACKGROUND INFORMATION

EVALUATION OF THE STABILITY OF THE BANKING SECTOR ON THE BASIS OF FINANCIAL SOUNDNESS INDICATORS

A whole range of different financial indicators has been proposed to evaluate the stability of financial systems. To measure the financial strength and sustainability of the banking sector either micro or macro level data are applied respectively. The former mainly target the balance sheet indicators of a bank (bad loans, liquidity, capital adequacy, etc.) while the latter involve information reflecting the overall risk level of the economic environment (GDP growth, external debt, etc.). Both approaches are justified from the theoretical point of view since both internal instability of a financial system as well as manifestation of unfavourable effects of the economic environment can be regarded as sources of financial crises.

Estonia's economy is small and open. The monetary system follows the principles of the currency board, and the government and the central bank only have quite limited facilities to influence the economic environment. The environment described above is strongly affected by external factors as manifested through the cycles of the world economy, especially of Europe's economy. This is further exacerbated by the fact that Estonia's financial sector and the economy as a whole are extremely open to foreign capital flows. For example, foreign loans account for 40% of the liabilities of the Estonian banking sector, which is why domestic macroeconomic indicators might not reflect risks to the financial sector to the full.

Following from the above, the present short analysis is based on banks' internal indicators with the aim of highlighting the sources of risk, which most affect the banks' vulnerability to external factors. The banks' internal financial indicators are above all affected by supervisory and regulative measures, which is why monitoring and evaluating these indicators is inevitable so as to secure financial stability.

The indicators based on banking indicators can be divided into the following groups:
(1) liquidity; (2) credit risk; (3) market risk, and (4) capitalisation.

Under **liquidity indicators**, this analysis reviews the share of liquid assets, overnight loans and financing by foreign banks as well as the share of public sector deposits in a bank's

liabilities. On the one hand, liquidity indicators reflect a bank's readiness to face possible liquidity strains; on the other hand, they show reliance on price-sensitive (interbank money market) or administrative liquidity sources (public sector deposits). The substantial weight of the latter in a bank's resources may indicate either the bank's weak capability to attract resources from the market or indirect financial support from the government. Meanwhile attracting price-sensitive loan resources (external financing) to finance operations involves a significant interest risk, which is, in turn, affected by the sentiment prevailing in the money markets as well as the country's credibility rating.

Credit risk indicators include the share of bad loans and an estimate of risk margin both in the interbank loan market as well as in the households' real estate loans and corporate credit segments. The difference between the median interest of the loan turnover and the interest of the upper quarter of the loan turnover with the highest interest rates is implemented as risk margin estimate.

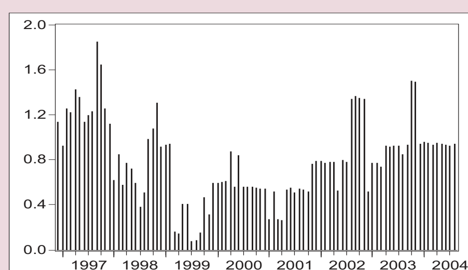
Market risk is measured on the basis of the share of loans collateralized with price-sensitive assets (shares and real estate) and the share of tradable stock portfolio in a bank's balance sheet.

The evaluation of capitalisation is based on the difference between the real capital adequacy indicator of the banks and the required minimum level (10%), i.e. the voluntary capital buffer.

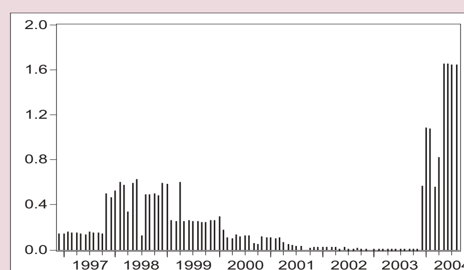
Among the liquidity indicators shown on the first line of diagrams, the high share of foreign loans, which in 2004 has risen many times above the average in the period under observation, indicates the most clear-cut sign of risk. Even though a certain rise in the share of foreign borrowing occurred during the 1997–1998 crisis period, it remained significantly weaker than at present. The use of overnight loans and public deposits as a liquidity buffer stayed behind in the pre-crisis period of 1997–1998, and currently these resources are being substituted by liquidity support from parent banks. However, in recent years liquid assets have shown a downward trend, though not to the level of the crisis periods of the past.

Figure 3.14. Selected risk indicators of the banking sector in December 1996 to August 2004 (standard deviation multiple weighted by banks' total assets on the vertical axis)

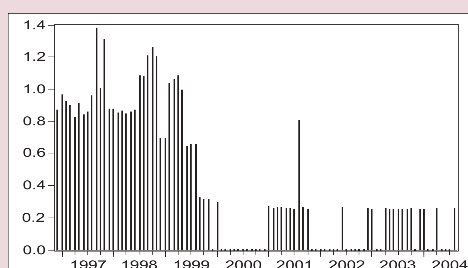
LIQUIDITY INDICATORS



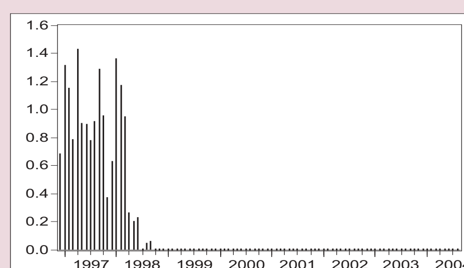
Reciprocal value of liquid assets



Foreign borrowing

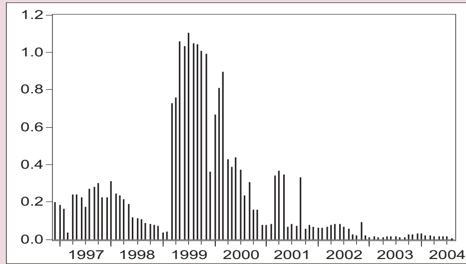


Public sector deposits

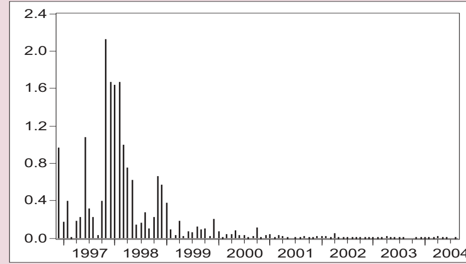


Overnight loans

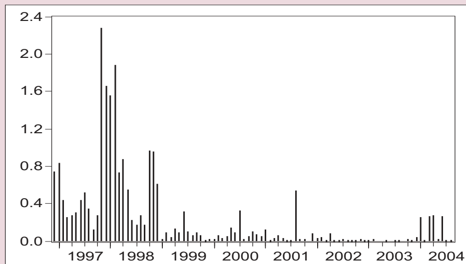
CREDIT RISK INDICATORS



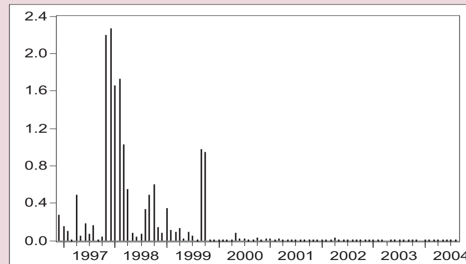
Overdue loans



Risk premium housing

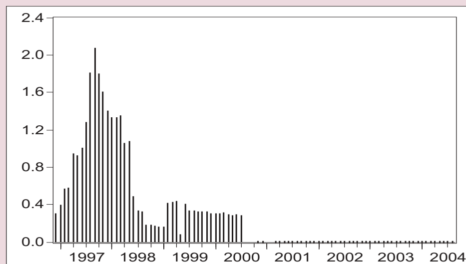


Risk premium companies

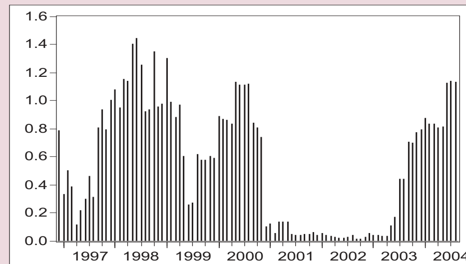


Risk premium interbank loan market

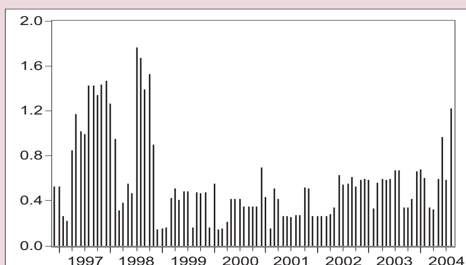
MARKET RISK INDICATORS AND CAPITALISATION



Stock portfolio



Asset-backed loans



Reciprocal value of capital adequacy

The credit risk indicators on the middle line of diagrams clearly outline the 1997–1998 crisis period and the following recession. Currently all the given credit risk indicators show the lowest historical level. A somewhat more extensive fluctuation can only be seen in the risk premiums of corporate loans.

As regards market risk indicators, the relative importance of stock portfolio risks has clearly been left behind in the period of past stock market boom. Meanwhile, the risks related to

asset-backed loans have significantly grown in recent years. Such development is obviously related to the ongoing boom in real estate loans.

In addition, the capital adequacy buffer that has remained on a relatively stable level since the end of 1998 has in the course of optimising capital costs gradually taken a more risk-prone direction. Compared to the worst of times the level can still be considered satisfactory.

All in all, a certain growth in risk tolerance can be seen regarding liquidity, openness to market risks, and capitalisation. Nevertheless, the indicators point to successful credit risk management. Previous crises have, however, shown that the realisation of credit risks occurs with a delay, which is why one cannot draw significant conclusions based on early indicators of credit risk.