

## II BANKING SECTOR STABILITY AND RISKS

### Strategic development of the banking sector

The influence of economic adjustment in the last half-year is reflected in the changes in the **structure of domestic financial deepening**. Along with a slowdown in credit growth, banks' financial assets had increased to 127% of GDP by the end of the third quarter of 2008. At the same time, the share of stock market capitalisation and investment fund assets has consistently decreased (see Figure 1).

Six companies licensed as credit institutions, nine branches of foreign credit institutions and over 200 cross-border banking service providers were operating on the Estonian market at the end of the third quarter of 2008.

As of June 1, 2008 the former Sampo Pank is operating in Estonia as Danske Bank A/S Estonia Branch. Consequently, the branches of foreign credit institutions now hold more than 25% of the Estonian credit market. At the beginning of November, 51% of the shares of Parex Banka,

which has also been operating in Estonia as a branch since 2005, were acquired by the state of Latvia.

The slower growth of loan portfolios does not show in the market shares yet. Four major groups still hold over 95% of the credit market.

### Government measures for ensuring financial stability

On October 9, 2008 the government decided to guarantee the deposits held with credit institutions registered in Estonia and in Estonian branches of foreign credit institutions to the extent of 100% of their accounts, up to a maximum of 50,000 euros (782,330 kroons) per depositor.<sup>1</sup>

In order to safeguard financial stability and avoid potential negative impacts, the government has decided to improve the state's opportunities to give banks guarantees or loans for coping with liquidity or solvency problems, should it be necessary. Preparation of the total package of measures lies with the Ministry of Finance.

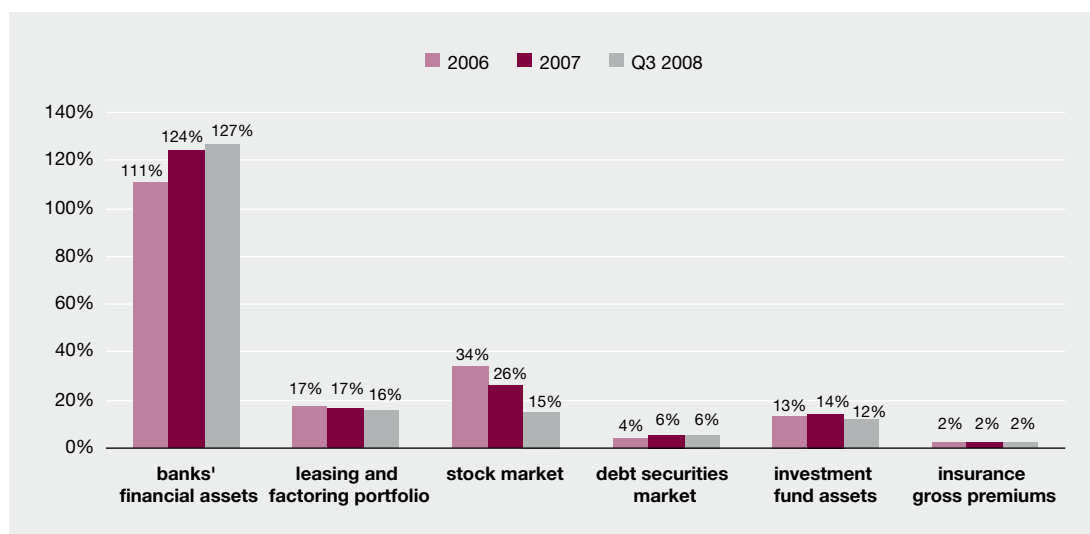


Figure 1. Structure of financial intermediation

<sup>1</sup> The parliament approved the amendment to the Guarantee Fund Act on November 14, 2008.

### **Development of larger banking groups**

Over the years, the major participants in the Estonian banking market have become more and more dependent on the funds of parent banks (or other parts of the group). The cost of funds depends on fund providers' **assessments of the risk level of the whole group**.

Although in communications, and thus probably also in risk assessments, market participants have paid a lot of attention to the possible increase in credit risk in the Baltic States, in the last quarters, the profitability of Nordic banking groups operating in Estonia has been more influenced by rapid and extensive changes in global financial markets. As regards credit risk, there has been a need to make provisions for positions

in other credit institutions, which have so far received perhaps less attention in risk assessments.

The **cost of funds** so far obtained (see background information *Funding of parent banks*) reflects the estimates of fund providers for the risk level of the groups. However, given the groups' risk profiles and pessimistic macro-economic forecasts, it is possible that not all the risks have been assessed correctly in the changing environment. Therefore, the risk level of some groups might be overestimated. Yet it cannot be excluded that some of the risks so far incorrectly assessed will materialise, which will bring along changes in the cost of funding for the whole group.

## **FUNDING OF PARENT BANKS**

In addition to own funds, banks finance their activities through deposits and wholesale funding. Additional support has been provided by governments and central banks.

### **Deposits**

The share of deposits in the liabilities of Nordic banks (as a ratio to total assets) has not changed significantly in the last quarters. Nordea Group has the largest share of deposits, which means that this group is less dependent on wholesale funding than others.

### **Wholesale funding**

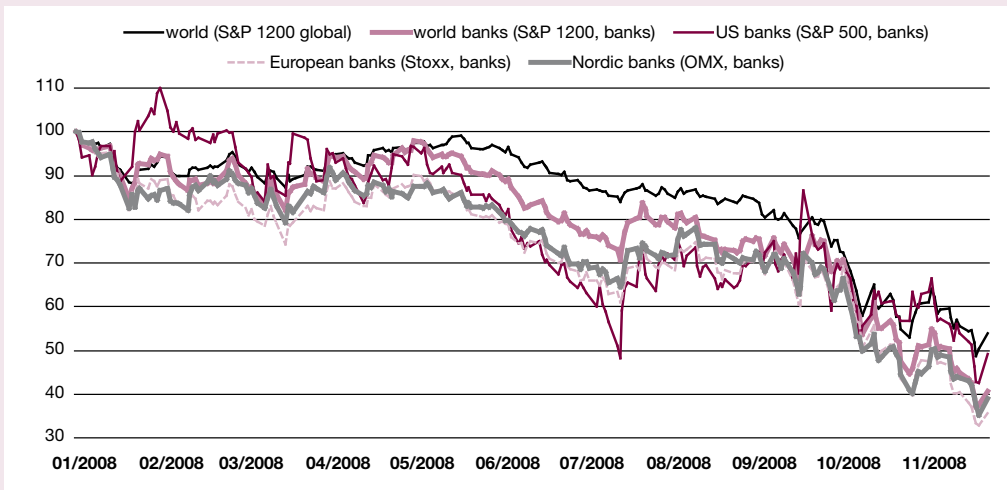
#### **Risk assessments**

The cost of funds acquired from financial markets depends on general price levels and institution-specific risk premium. The latter can raise the cost of funding considerably. The availability of additional funds may also

pose short-term problems.

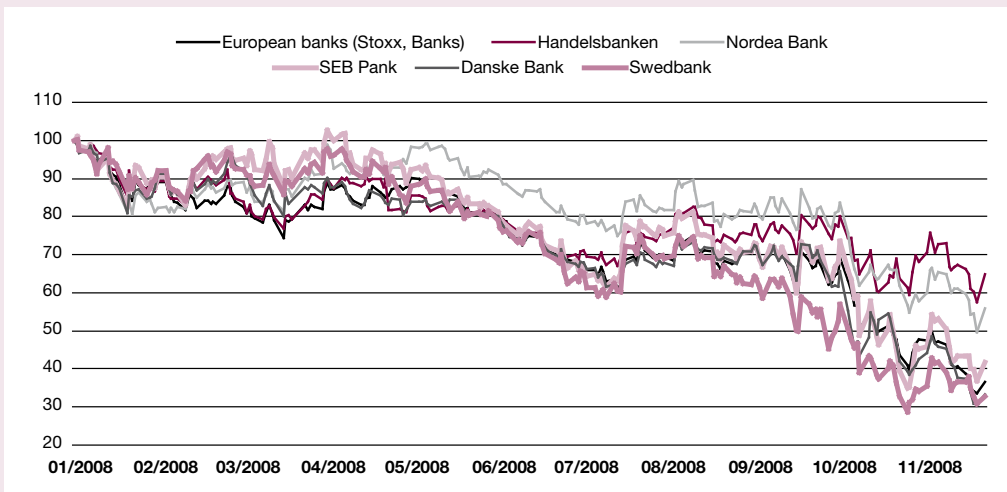
The share prices of banks have been dropping also in the second half of 2008. The changes in the share prices of Nordic banks have mostly been in line with the general share price trends of European banks (see Figure 2). Still, there are a few differences in how the larger Nordic groups have been valued (see Figure 3). As regards major Swedish banks, in recent periods higher risk premiums on credit default swaps have been asked for Swedbank and SEB Bank.

Rating agencies have also increased their risk assessments in light of the current economic downturn (see Table 1). At the beginning of October, both Standard & Poor's and Moody's lowered Swedbank's ratings and Fitch changed the outlook from stable to negative. It is more expensive for banks with lower ratings to obtain new funds from markets.



**Figure 2. Stock indices of the US, European, Nordic and world banks compared to world stock index (points; 2/1/2008 = 100)**

Source: EcoWin



**Figure 3. Share price dynamics of Nordic banks (points; 2/1/2008 = 100)**

Source: EcoWin

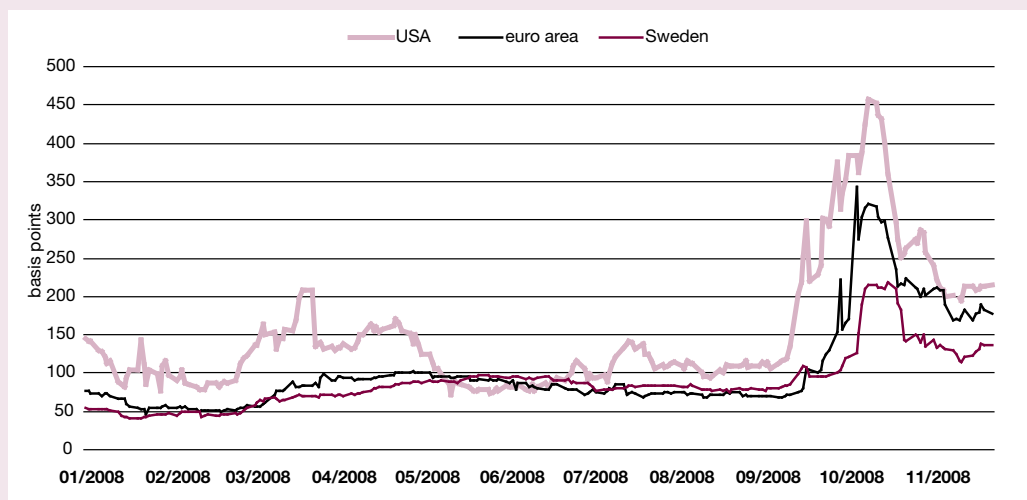
**Table 1. Ratings of Nordic banks**

	Standard & Poor's		Moody's			Fitch	
	Long-term	Outlook	Long-term	Outlook	Financial strength	Long-term	Outlook
Nordea Bank	AA-	Stable	Aa1	Stable	B	AA-	Stable
Danske Bank	AA-	Neg	Aa1	Watch	B	AA-	Stable
Svenska Handelsbanken	AA-	Stable	Aa1	Stable	B	AA-	Stable
DnB NOR	AA-	Stable	Aa1	Stable	B-	A+	Stable
SEB Pank	A+	Neg	Aa2	Stable	B-	A+	Stable
Swedbank	A	Neg	Aa3	Neg	C+	A+	Neg

Source: rating agencies

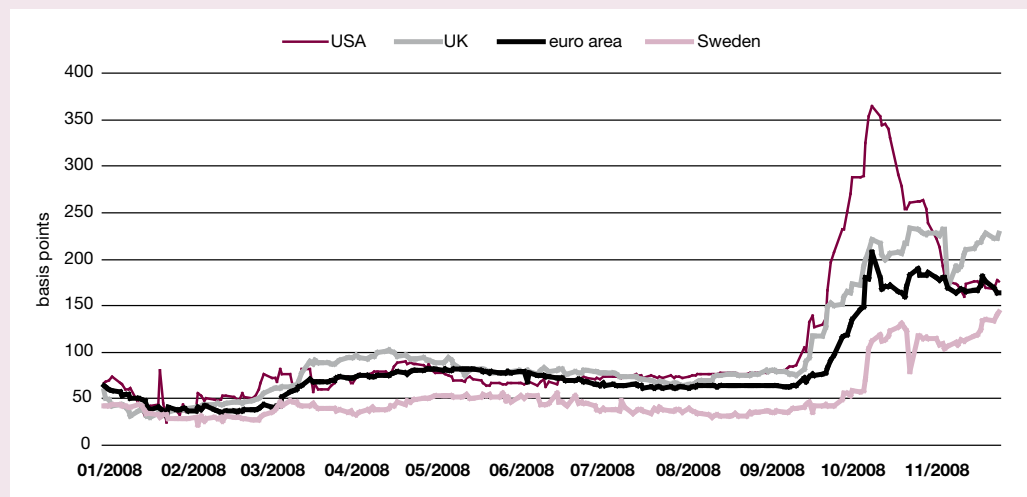
Raising funds from bond markets has become much more costly. Risk aversion among investors has increased and they prefer safer instruments. Yields on bank bonds have grown quite substantially compared to the beginning of September and spreads with government bonds have significantly increased. Similar trends can be noted in the interbank loan

market. In October, the spreads between government bond interest rates and inter-bank interest rates grew considerably (see Figure 4). The difference between the inter-bank rate and the expected repo rate<sup>2</sup> has increased as well (see Figure 5). True, in November risk prices slightly decreased.



**Figure 4. Spread between corresponding interbank rate and 3-month treasury bill rate**

Source: EcoWin



**Figure 5. Spread between 3-month interbank rate and expected repo rate**

Source: Bloomberg

<sup>2</sup> The expected repo rate is the rate on the 3-month overnight interest swap.

## Measures of governments and central banks

Similar to several other countries, Nordic governments and central banks have taken steps to alleviate further negative effects of the complicated market situation.

### Sweden

Government measures:

- Government's guarantee scheme to support banks' medium-term (3 months to 5 years) funding needs (for a fee) to the extent of 1500 billion Swedish kronas. The scheme is to last at first until April 30, 2009 with the possibility of extending it until the end of 2009.
- Establishment of the Stabilisation Fund to help financial institutions with solvency problems. The government will initially contribute 15 billion Swedish kronas to the Fund (together with the Deposit Guarantee Fund 33 billion Swedish kronas).
- The guarantee on bank deposits has been raised to 500,000 Swedish kronas.

Central bank measures:

- Extensive repo auctions with longer than usual maturities have been organised.
- Since the beginning of September, Swedish banks can borrow US dollars in the total amount of 22 billion dollars.
- The collateral requirements for intraday credit in the RIX settlement system has been eased. For instance, Riksbank fully accepts covered bonds issued by banks themselves. Previously, the central bank accepted these bonds only to the extent of 25%.
- In October, the repo rate was lowered twice: on October 9 by 50 basis points to 4.25% and on October 23 by another 0.5 percentage points to 3.75%.

- Since November 10, the central bank holds auctions for collateralised three-month krona-loans almost every two weeks. This contributes to better liquidity management by banks.
- In order to improve the availability of funds for the non-financial sector, at the end of October it was decided to accept the commercial papers of large companies with sufficient rating as collateral at repo auctions.

### Denmark

Government measures:

- An act was adopted to facilitate funding for Danish banks. In the framework of this Act, an institution was created to which the banks participating in the scheme would contribute up to 35 billion Danish kroner (2% of GDP) in total. These funds can be used to provide support for banks, should it be necessary. This institution also guarantees all deposits in and unsecured loans to participating banks (including interbank lending). The scheme is initially scheduled to last for two years.

Central bank measures:

- In cooperation with the European Central Bank, a EUR12 billion swap line has been established. In addition, together with the US Federal Reserve, opportunities to borrow US dollars have been extended.
- The range of acceptable collaterals has been expanded.
- In October, the repo rate was raised two times to support the exchange rate of the Danish krone: on October 7 by 40 basis points to 5.0% and on October 24 by another 50 basis points to 5.5%. However, on November 7, the rate was lowered by 0.5 percentage points to 5.0%.

### Quality of assets

The **growth rate** of financing portfolios decelerated also in the second and third quarters of 2008. In September 2007 financing portfolios had increased by 36% year-on-year, whereas in September 2008 by only 15%. The loan stock added in the first three quarters of 2008 accounted for nearly 50% of the loan stock added in the same period in 2007 (see

Figure 6). The structure of the financing portfolio has been relatively stable over the years and the share of the loan stocks of different sectors in the total loan portfolio have not changed much (see Figure 7).

The structure of non-financial sector loan **collaterals** has not changed much either. Loans without collateral accounted for 4.8% of the total corporate loan portfolio in September 2007,

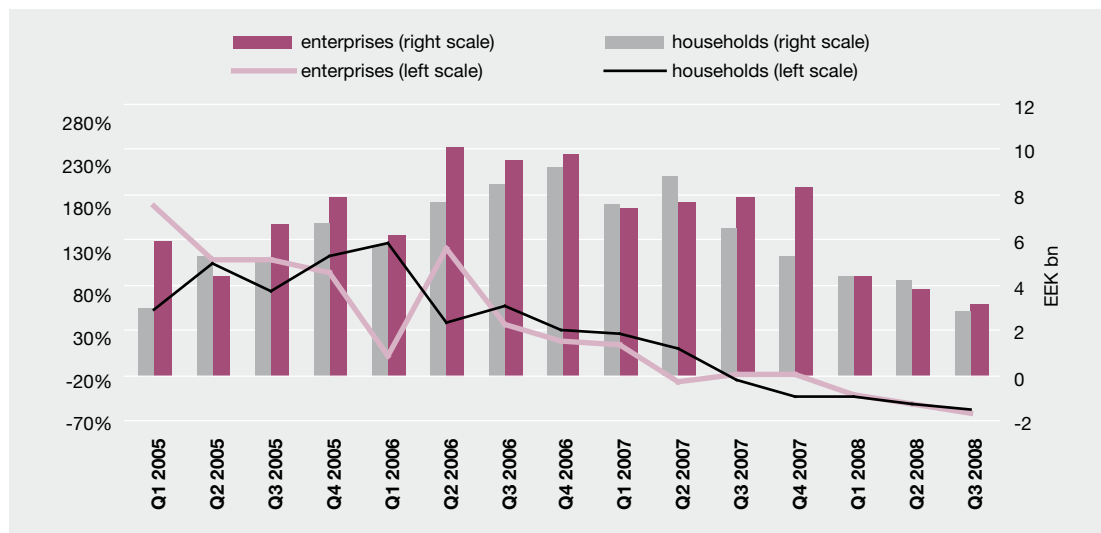


Figure 6. Loan stock added in a quarter and year-on-year changes

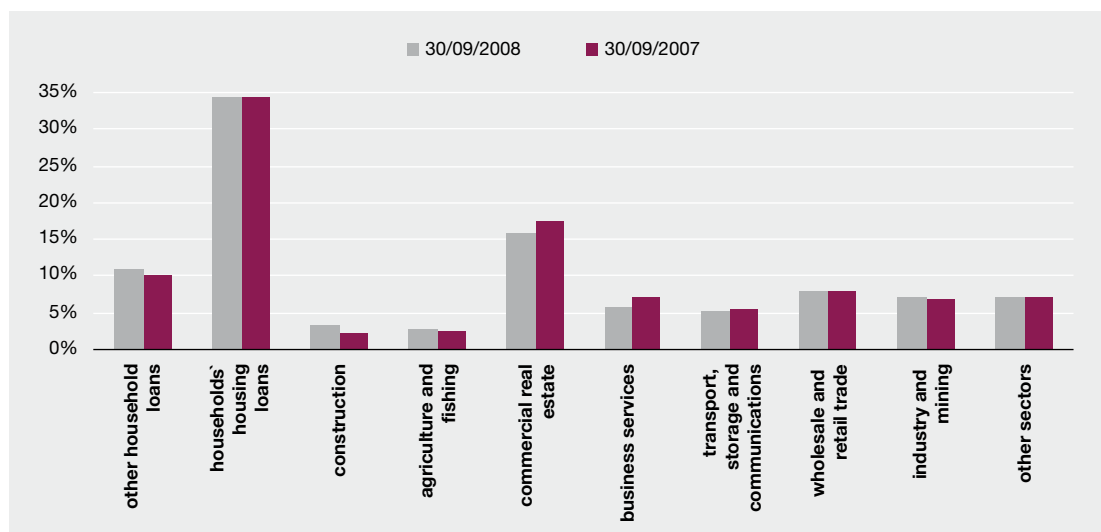


Figure 7. Structure of loan and leasing portfolio

whereas in September 2008 this indicator was 5.8%. Consumer credit indicators were 39.3% and 40.2%, respectively. On an aggregate basis, the share of loans with securities collateral has decreased by 1 percentage point year-on-year (see Figure 8).

The amount and share of **overdue loans** in the total loan portfolio has grown significantly over the past year due to the tightened economic

environment and higher loan interest rates (see Figure 9). The share of loans overdue for more than 60 days constituted 0.9% of the loan portfolio in September 2007, whereas by September 2008 this indicator had increased to 2.2%. The share of overdue loans somewhat stabilised in August and September. This can be explained by the fact that banks have started to seek more active cooperation with customers in order to prevent more loans from becoming overdue.

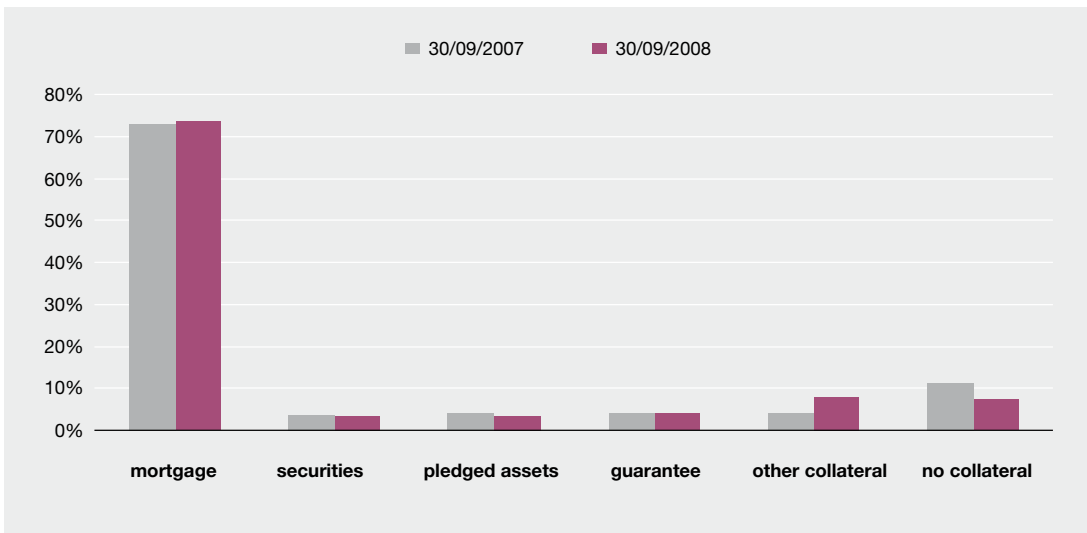


Figure 8. Loan collaterals by type

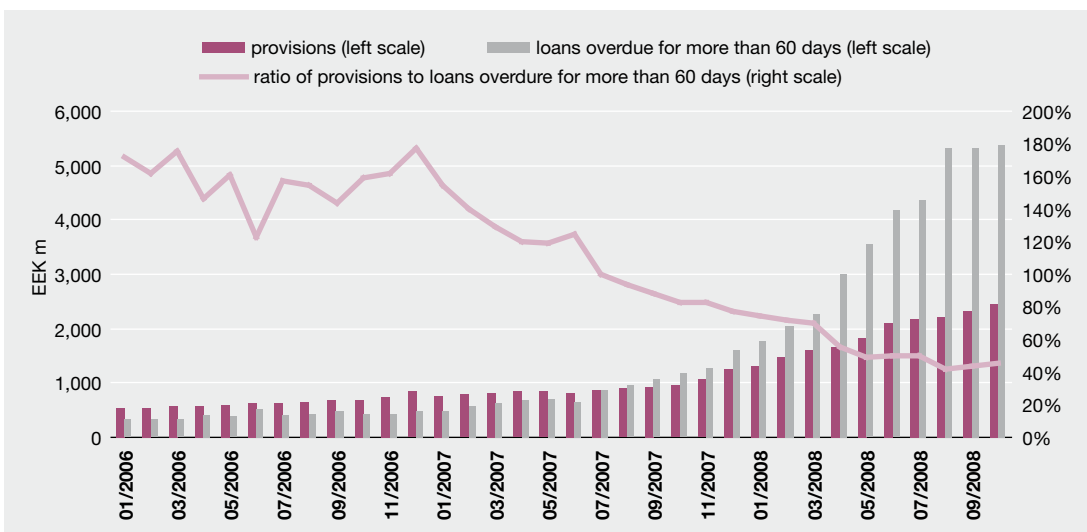


Figure 9. Overdue loans and provisions

In terms of volume, 56% of the loans overdue for more than 60 days belong to companies; however, the share of such loans is the largest among **consumer credit**. This indicator has increased nearly twice compared to last year; that is, to 5.2% of the consumer loan stock. Nearly 55% of overdue consumer loans have been issued by one small bank and the figure is considerably smaller for other credit institutions (see Figure 10).

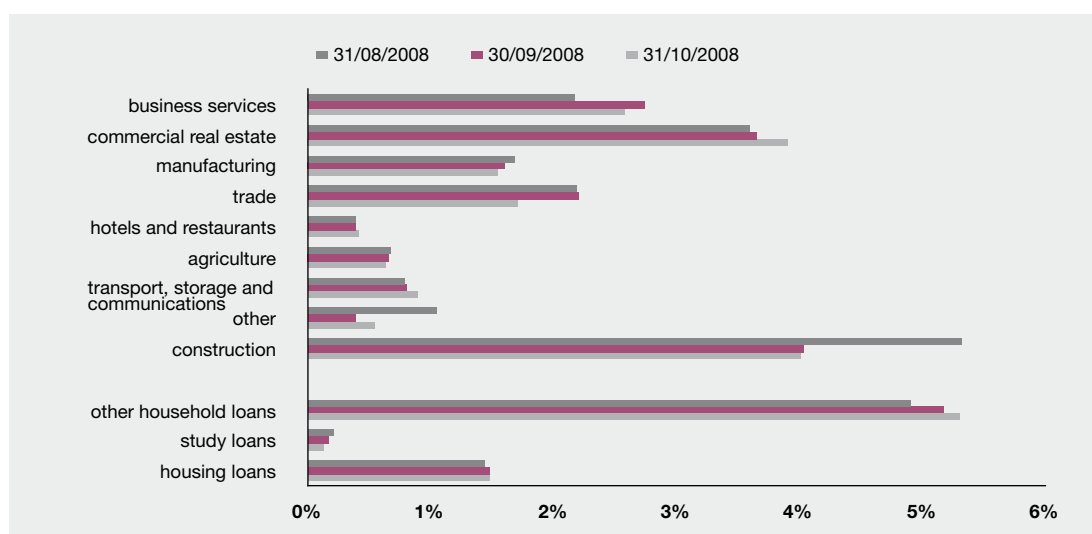
As far as **housing loans** are concerned, the share of loans overdue for more than 60 days is much lower but has also witnessed a considerable increase this year. In September 2007, 0.4% of housing loans were overdue, whereas this year the indicator stood at 1.5%. The value of overdue loans has increased by nearly 1 billion kroons compared to the previous year.

Corporate loan servicing capability has deteriorated due to the tightened economic environment and developments in the real estate market. Loans overdue for more than 60 days accounted for 2.4% of the **corporate loan portfolio** at the end of September. The amount of corporate overdue loans has increased by nearly 2.7 billion

kroons year-on-year. Commercial real estate and construction sectors have the most overdue loans both in terms of share and amount (3.7% and 4.0% of the loan portfolio, respectively). The overdue loans of these two sectors account for two thirds of the total loan stock of corporate loans overdue for more than 60 days. Loans issued to the construction and commercial real estate sectors cover 19% of the stock of loan and leases granted to the non-financial sector (see Figure 11).

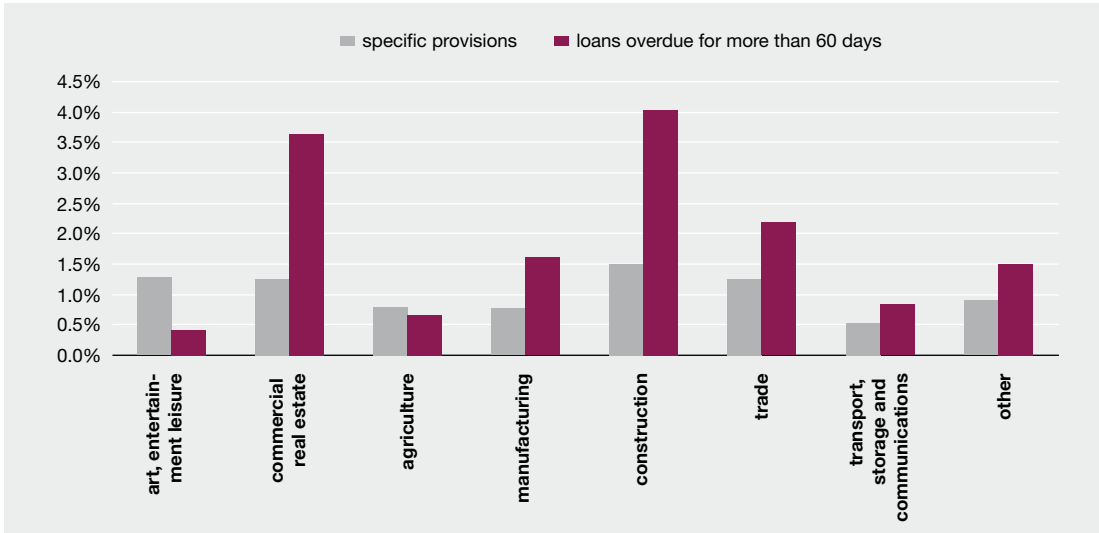
The number of objects on sale is still high on the housing market. However, the demand for housing will most probably decrease, which is why price pressures on housing will presumably persist and a growing number of real estate companies may expect difficulties. A large amount of new office premises that will be completed in the near future will probably increase the vacancy rate of office spaces in suburbs. This may lead to a price decline in the office rental market and aggravate the situation for real estate developers.

The ratio of **provisions** to the stock of loans overdue for more than 60 days has been constantly decreasing over the last year. The



**Figure 10. Share of loans overdue for more than 60 days in the respective loan portfolio**

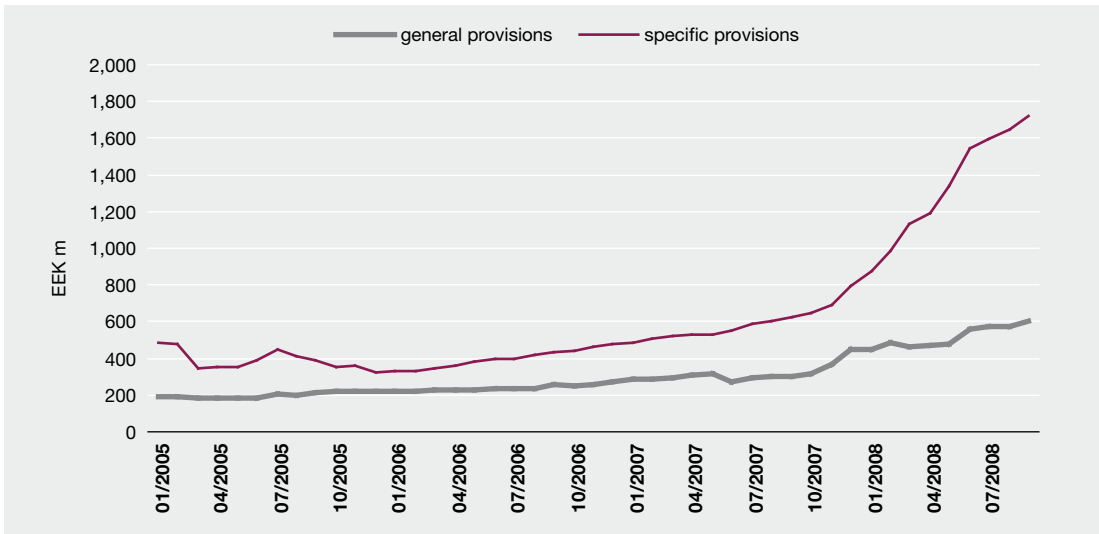




**Figure 11. Share of specific provisions and loans overdue for more than 60 days in the respective loan portfolio (30/9/2008)**

provisions made accounted for 88% of overdue loans in September 2007, compared to 44% in September 2008. The stock of provisions made by banks totalled 2.3 billion kroons at the end of September 2008, 75% of which were specific provisions (see Figures 12 and 13). In the first three quarters of 2008, banks have written off only 364 million kroons of loans, while 29 million kroons of claims previously removed from the balance sheet have been received.

The stock of provisions constituted 1.4% of the consolidated loan portfolio in September 2008; that is about twice as in the same period last year. The share of loans overdue for more than 60 days has also considerably increased: from 0.4% to 1.9% of the consolidated loan portfolio. The stock of provisions accounted for 76.3% of the loans overdue for more than 60 days.



**Figure 12. General and specific provisions**

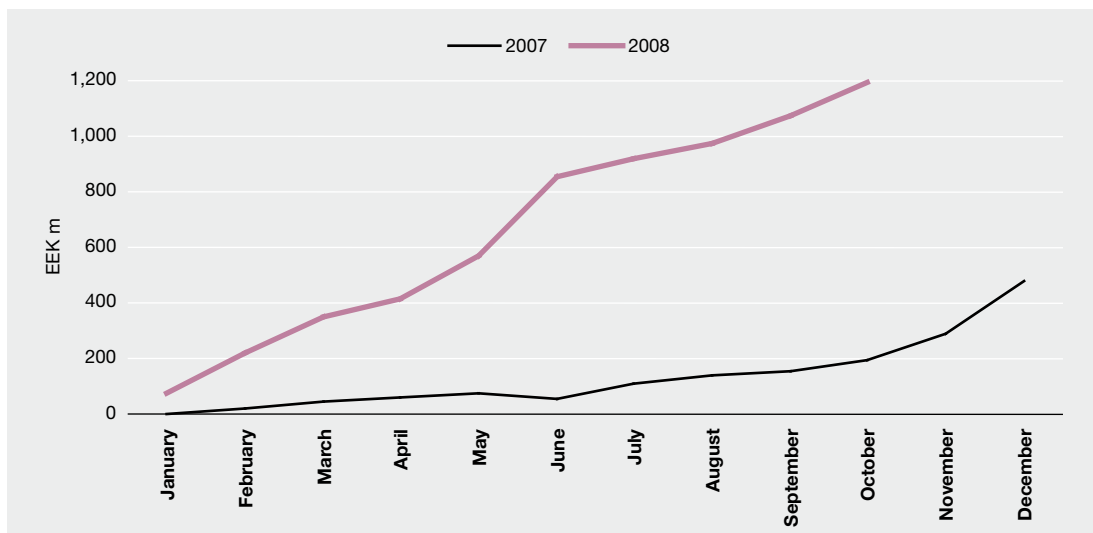


Figure 13. Cumulative loan losses (change in provisions )

### STRESS TEST OF THE BANKING SECTOR

The stress test of the banking sector is based on the autumn forecast of Eesti Pank. The test relies on the risk scenario of the forecast and the risk scenario with the additional assumption that the profitability of the banking sector recorded before the loan losses decreases 50%.

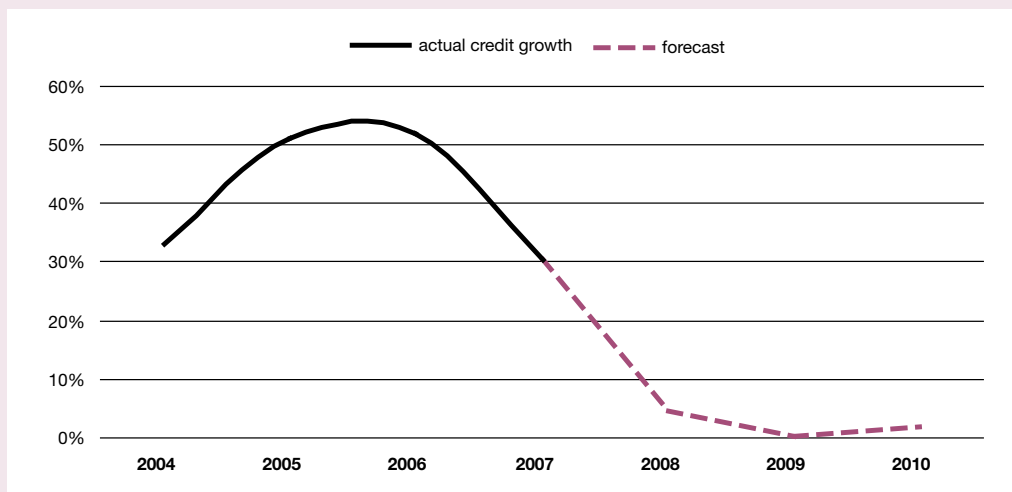
The risk scenario of the forecast expects a weaker external demand for Estonia, resulting from the global economic recession. The annual GDP growth is estimated at -2.7% in 2008, -4.7% in 2009 and 1.5% in 2010. It is also taken into account that the confidence crisis in the financial system may substantially affect the movement of savings between countries and regions as well as in the entire global economy. Consequently, Estonia may encounter difficulties with raising external funds, which would considerably impede our economic development. Nominal credit growth is expected to be 0.2% in 2009 and 2.0% in 2010 (see Figure 14). The risk

scenario of the forecast was also used for the second development scenario in the stress test, including the assumption that the profitability of the banks remains 50% lower (see also Figure 15).

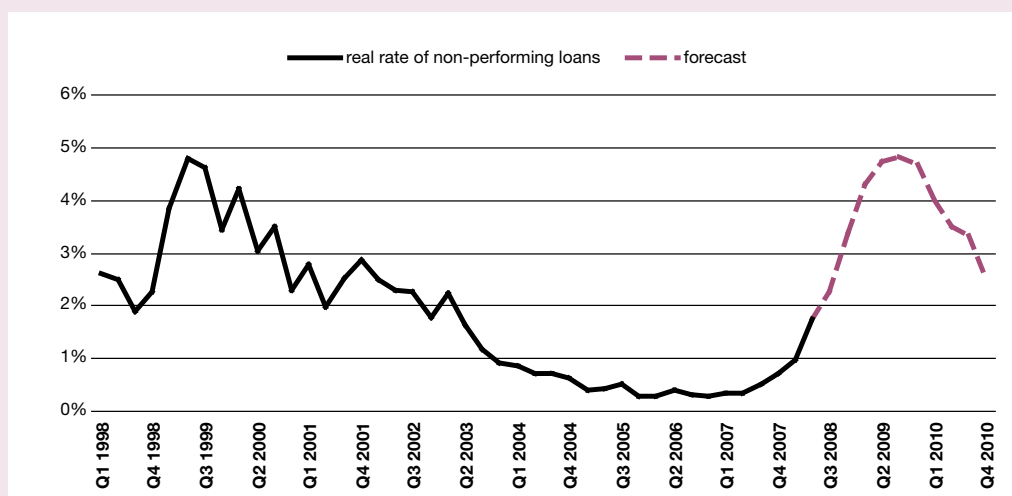
In order to estimate the potential loan losses incurred by banks, the model of overdue loans has been applied. The model assessed in autumn 2008 is as follows:

$$n_t = 0.014 + \frac{0.345}{0.033} \hat{i}_{t-2} \hat{c}_{t-2} - \frac{0.069}{0.014} \hat{y}_{t-4} + \frac{0.265}{0.018} \hat{u}_t + \frac{0.188}{0.020} \hat{\pi}_{t-4}$$

Independent variables include the interaction of the interest rate and the loan volume,  $\hat{i}\hat{c}$ , annual real GDP growth, the unemployment rate, and annual consumer price inflation. The interaction between the interest rate and the loan volume ( $\hat{i}\hat{c}$ ) means that a rise in the interest rate will pose a greater threat to loan repayment in case of higher indebtedness. Real GDP growth ( $\hat{y}$ ) is related to household real disposable income, which reflects



**Figure 14. Actual and expected credit growth**



**Figure 15. Expected ratio of non-performing loans**

the loan servicing capability of households. In addition to the abovementioned variables, the equation also includes the unemployment rate ( $u$ ) and annual consumer price inflation ( $\pi$ ). The assessment period is from the first quarter of 1998 until the second quarter of 2008.

The stress test of the banking sector involved testing the influence of macroeconomic

developments on the banks' ability to meet the capital adequacy requirement. Besides the data used for model-based stress tests, the following assumptions have been taken into account:

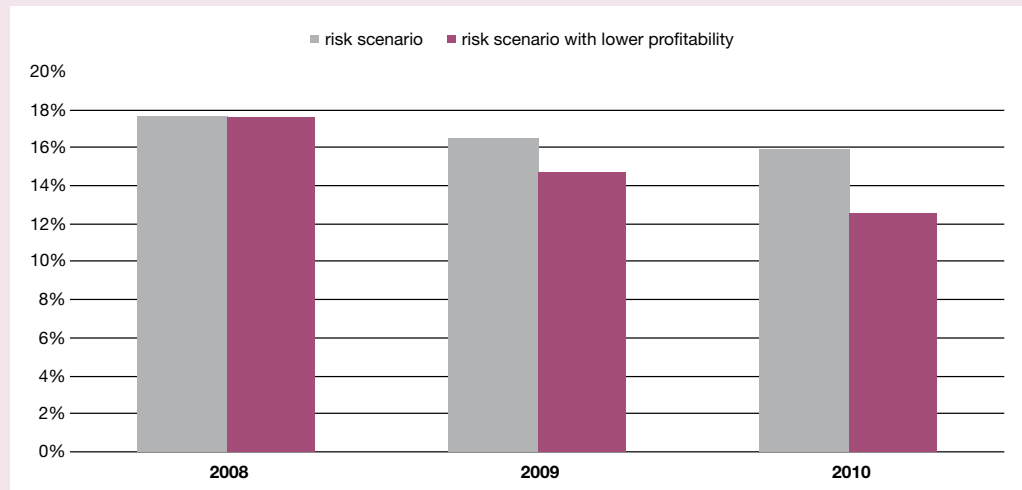
- 1) The average loss rate of the banking market is 42%;<sup>3</sup>
- 2) Risk-weighted assets are increasing at the

<sup>3</sup> The loss rate shows the percentage of the bank's loss from a claim in the case of a customer's insolvency. The loss rate has been calculated based on the data of earlier periods.

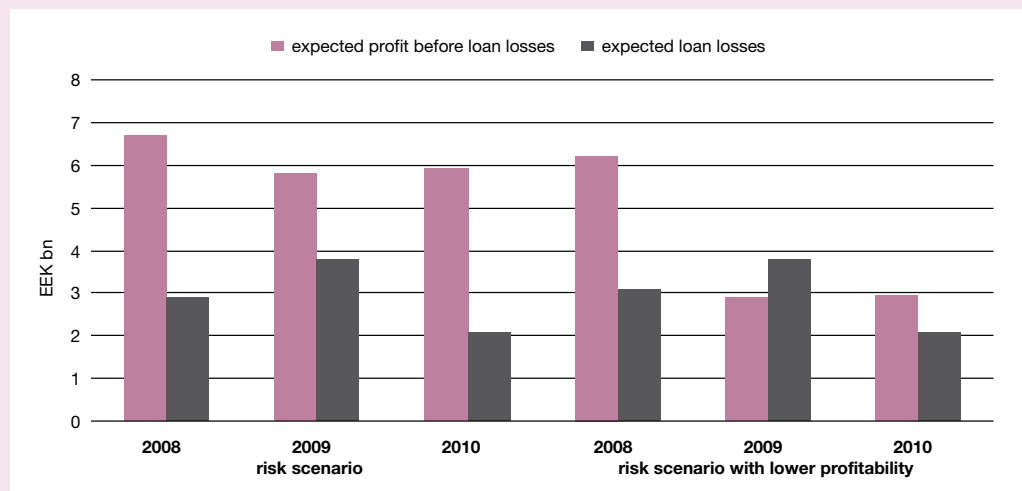
- same pace as the loan portfolio;
- 3) In the first scenario of the stress test (the risk scenario of the economic forecast) the profitability of banks recorded before loan losses will remain at previous levels; in the risk scenario with an additional assumption the profitability will decrease 50%;
  - 4) Equity capital increases by the profit earned during the year.

the basis of these assumptions show that neither the total banking sector nor the individual banks will have problems with meeting the capital adequacy requirement in the case of the economic developments outlined in the forecast scenarios (see Figure 16). This will be the case, even though according to the risk scenario with the additional assumption banks' loan losses for 2009 will exceed the pre-loss profits for the current year (see Figure 17).

The results of the stress tests performed on



**Figure 16. Capital adequacy ratios according to different scenarios**



**Figure 17. Expected profit before loan losses and expected loan losses**

## Capital adequacy

SEB Pank obtained authorisation from the Financial Supervision Authority to apply the new Internal Ratings Based approach (IRB) for

calculating the capital requirement for credit risk and the Advanced Measurement Approach (AMA) for calculating the capital requirement for operational risk as of July 1, 2008.

The Internal Ratings Based Approach for assessing credit risk enables market participants to use internal risk assessment methods of a market participant (i.e. rating systems and credit risk models) for calculating the capital requirement. The purpose of using these methods is to increase risk sensitivity and measurement adequacy of the capital required for credit risk.

The introduction of IRB requires authorisation from the Financial Supervision Authority. Granting of the authorisation depends on meeting the minimum requirements provided by legislation, including the reliability of internal risk assessment methods and the daily implementation of good practice in credit risk management.

In the case of operational risk assessment based on the Advanced Measurement Approach, market participants calculate the capital requirement on the basis of the internal assessment model for operational risk (statistical model). The introduction of this approach

also requires authorisation from the Financial Supervision Authority. Granting of the authorisation depends on meeting the minimum requirements provided by legislation, including again the reliability of internal risk assessment methods and the daily implementation of good practice in operational risk management.

If a credit institution introduces IRB for calculating the capital requirement for credit risk, or AMA for calculating the capital requirement for operational risk, the volume of risk-weighted assets may sharply decrease. Therefore, restrictions have been set for the transition period in respect of the decline in risk-weighted assets. This means that when the volume of risk-weighted assets calculated according to the new methods will be lower than 90% in 2008 and lower than 80% in 2009 compared to risk-weighted assets calculated on the basis of earlier methods, 90% and 80% of the volume of risk-weighted assets calculated on the basis of earlier methods must be used in those years respectively when calculating banks' own funds.

Changes in banks' own funds and risk-weighted assets are presented in the following table.

**Table 2. Capital adequacy (EEK bn)**

	Mar 2008	June 2008	July 2008	Aug 2008	Sept 2008
Tier I own funds	26.8	24.2	24.2	24.3	24.3
Tier II own funds	11.8	10.7	10.7	10.7	10.7
Deductions	1.6	0.2	0.7	0.5	0.3
Own funds in capital adequacy calculation	37.0	34.6	34.2	34.5	34.7
Credit risk	203.0	178.2	161.9	157.9	152.1
Other risks	5.5	3.3	3.7	6.1	5.8
Operational risk	9.3	8.5	7.0	7.0	7.1
Risk-weighted items	218.1	190.1	187.7	191.1	189.4
Banking sector average capital adequacy	16.97%	18.22%	18.22%	18.04%	18.34%
Lowest capital adequacy indicator	12.26%	14.18%	14.07%	14.34%	14.94%

The share of credit risk-weighted assets in total risk-weighted assets has decreased to 80% due to the implementation of the new framework. The share of operational risk-weighted assets has declined to 4%. Starting from July, the changes in banks' consolidated data on credit and operational risk-weighted assets (see Table 2) can largely be explained by the fact that SEB Bank has introduced new approaches for calculating capital requirements.

At the end of September, the **average capital adequacy** of the banking sector was 18.34%. This is nearly twice as high as the 10% minimum required in Estonia (see Figure 18).

This means that banks are able use nearly a half of own funds to cover loan losses without obtaining additional own funds and without violating the capital adequacy requirement (see also background information *Stress test of the banking sector*). Continuously strong capitalisation and sufficient liquidity of banks form an important basis for ensuring financial stability.

## Liquidity

### Funding

The changed market situation has considerably slowed credit growth in the past six months. As regards the total of the banking sector, the loan-to-deposit ratio has not changed much though (see Figure 19). Although aggregate figures have mostly remained at earlier levels, the indicators still vary among individual banks.

The uncertain market situation has reduced the loyalty of customers to chosen credit institutions, which could especially be noted in autumn. The change of banks was probably influenced by customers' risk estimates for the groups but also by the upper limit of guaranteed deposits<sup>4</sup> and the offered risk premium (interest rate).

In order to boost the confidence of bank customers and reduce the differences arising from legislation, the Estonian government decided to increase as of October 9 the upper limit of guaranteed deposits from 313,000 to 782,330 kroons and from 90% to 100% within this limit.

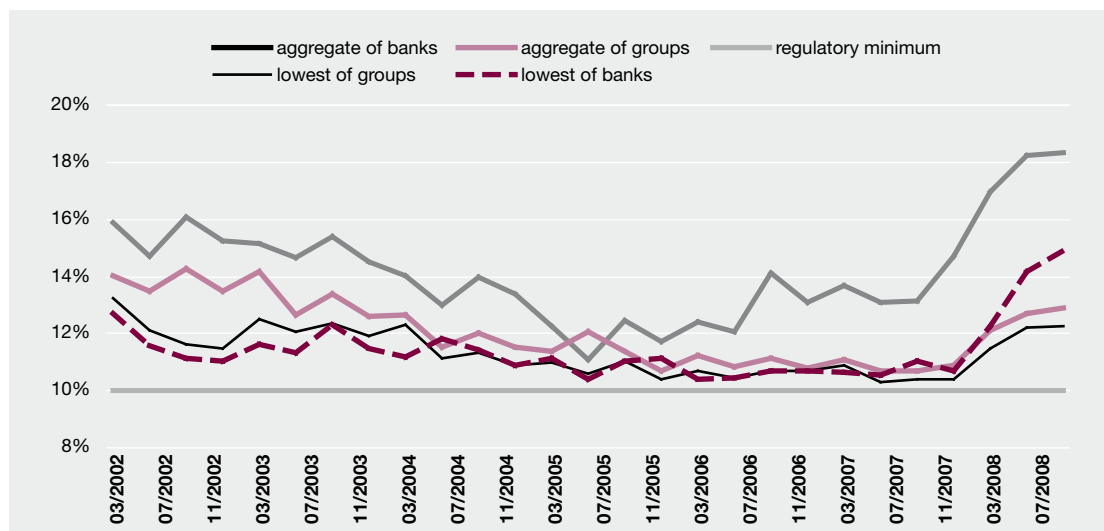


Figure 18. Capital adequacy ratios of banks and banking groups

<sup>4</sup> Since the banking groups operating in Estonia belong to different deposit guarantee schemes in different countries, the upper limits of guaranteed deposits vary.

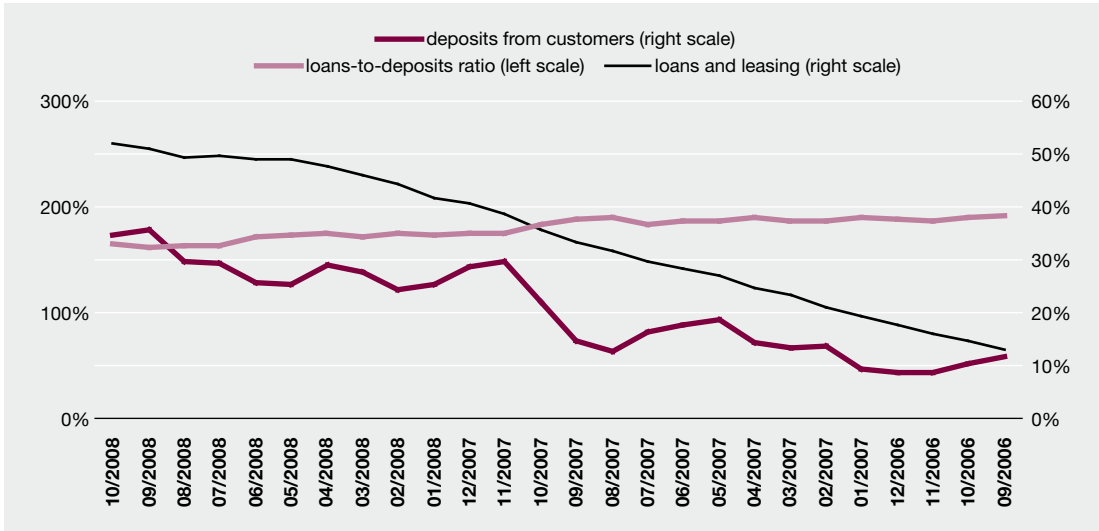


Figure 19. Loan-to-deposit ratio and year-on-year loan, leasing and deposit growth

Local banking groups have been able to cope with the slight decrease in deposits in the difficult market situation. Additional funds have been provided by parent banks when necessary.

periods has generally remained in line with earlier trends. Since customers increasingly prefer safer saving instruments and interest rates have been mostly rising in the last quarters, the share of time deposits has increased further (see Figure 20).

The structure of banks' liabilities over recent

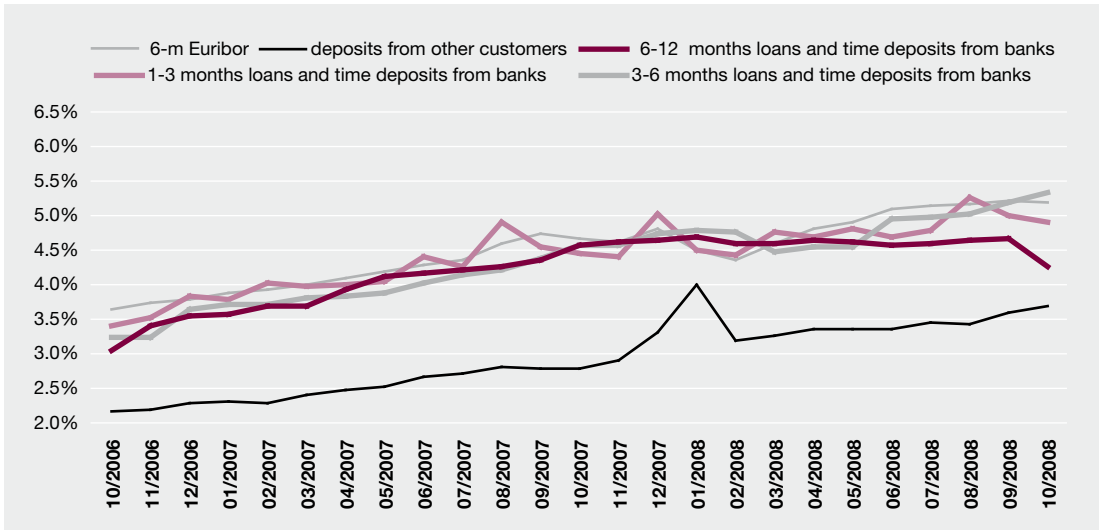
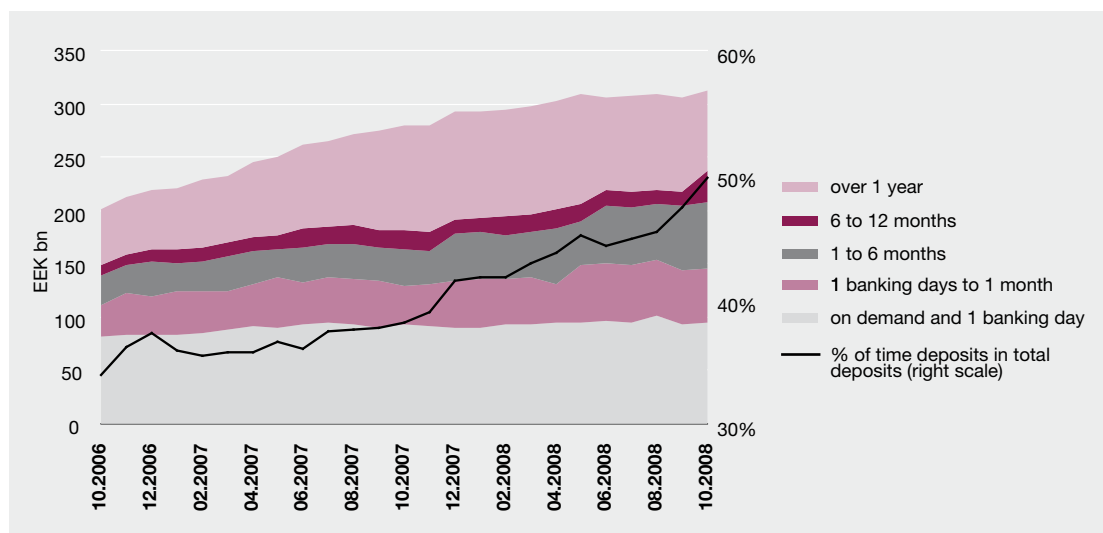


Figure 20. Average interest on banks' liabilities at end of month and 6-month Euribor

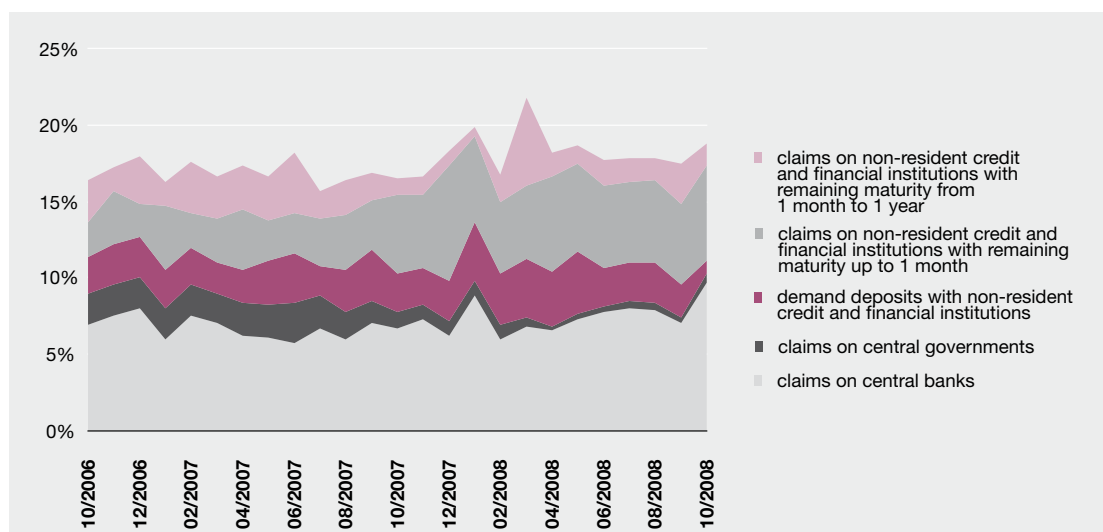
The rise in the share of time deposits has increased funding costs for banks. At the same time, parent banks have continued the funding of local subsidiaries at approximately the same risk price (see also Figure 21 and Section *Profitability*).

With the depositors' behaviour being more hectic than before, liquidity risk has been buffered with the help of the reserve requirement

applied in Estonia, which was increased to 15% on September 1, 2006 (see also Figure 22). As depositors have become more risk sensitive, compared to spring it is currently more likely that some customers might want to reduce their claims to one or several credit institutions at some point. **Thus, it is also more important that market participants hold enough liquid funds to be able to meet the demands of customers.**



**Figure 21. Banks' liabilities by remaining maturity and the share of time deposits in total deposits**



**Figure 22. Banks' assets of higher liquidity (% of total assets)**



Taking into consideration the volume of liquid assets possibly needed, **bigger participants in the Estonian banking market largely depend on the ability and will of their parent banks to provide funds to their subsidiaries.**

### Profitability

In recent periods, the profitability of banks has been curbed by loan write-downs, unfavourable developments in financial markets and slowing credit growth. On the other hand, cut-down on expenses, sale of assets, one-off incomes from the reduction of the reserves accumulated earlier, and the decrease of contributions to the Guarantee Fund have contributed to profitability.

The **third-quarter net profit of banks amounted to 1.2 billion kroons**, which is nearly 25% lower than the second-quarter net profit, but this was mainly due to the extraordinary income in the second quarter. Compared to the first quarter of 2008, the third-quarter profit had grown by more than a third (see also Figure 19 and Table 3).

The total profit of banking groups also includes profits earned by subsidiaries in foreign markets (see Table 4). The **third-quarter net profit of banking groups in the amount of 2.1 billion kroons** was 14% lower than in the second quarter but exceeded the first-quarter result by nearly 10%. Banks' aggregate return on equity for the last four quarters is over 17%. Banking groups' aggregate return on equity of banking groups for the last four quarters has remained over 22% despite the challenging market situation.

In recent quarters, the profitability of banks has been supported also by several **one-off factors**. For instance, in the case of one market participant the bonus reserve was reduced in the second quarter and recorded as one-off revenue of 308 billion kroons. The earnings of the second quarter also include the sale of AS Pankade Kaardikeskus. Since the third quarter, profits have been influenced by the **lower rate of contributions to the Guarantee Fund**. While so far the credit institutions under the Estonian deposit guarantee scheme had to

**Table 3. Profitability of banks**

	31/03/ 2007	30/06/ 2007	30/09/ 2007	31/12/ 2007	31/03/ 2008	30/06/ 2008	30/09/ 2008
Average return on assets in the past four quarters	1.8%	2.8%	2.7%	2.6%	2.4%	1.7%	1.6%
Return on assets in a quarter x4	2.0%	5.1%	1.7%	1.8%	1.1%	2.0%	1.4%
Average return on equity in the past four quarters	21.3%	32.5%	31.2%	30.2%	27.0%	18.4%	17.2%
Return on equity in a quarter x4	16.9%	50.4%	18.0%	21.1%	13.2%	20.7%	14.5%
Net profit in the past four quarters (EEK bn)	4.1	6.7	7.1	7.4	7.1	5.2	5.1
Net profit of the quarter (EEK bn)	1.2	3.5	1.3	1.4	0.9	1.6	1.2
Net write-downs of assets in a quarter (EEK bn)	-0.1	0.0	-0.1	-0.3	-0.4	-0.5	-0.3

**Table 4. Profitability of banking groups**

	31/03/ 2007	30/06/ 2007	30/09/ 2007	31/12/ 2007	31/03/ 2008	30/06/ 2008	30/09/ 2008
Average return on assets in the past four quarters	2.2%	2.3%	2.3%	2.3%	2.1%	2.0%	1.9%
Return on assets in a quarter x4	2.2%	2.4%	2.2%	2.3%	1.6%	1.9%	1.7%
Average return on equity in the past four quarters	27.4%	29.7%	29.5%	29.3%	26.9%	25.0%	22.6%
Return on equity in a quarter x4	28.6%	31.0%	28.6%	29.2%	19.7%	22.6%	19.2%
Net profit in the past four quarters (EEK bn)*	7.5	8.7	9.3	9.9	9.7	9.6	9.2
Net profit of the quarter (EEK bn)*	2.2	2.5	2.5	2.7	1.9	2.4	2.1
Net write-downs of assets in a quarter (EEK bn) *	-0.2	-0.2	-0.3	-0.4	-0.7	-0.8	-0.7

\* Excluding data of Danske Group.

pay annual contributions in the amount of 0.5% of the stock of guaranteed deposits, starting from the third quarter, the rate is 0.0032%.

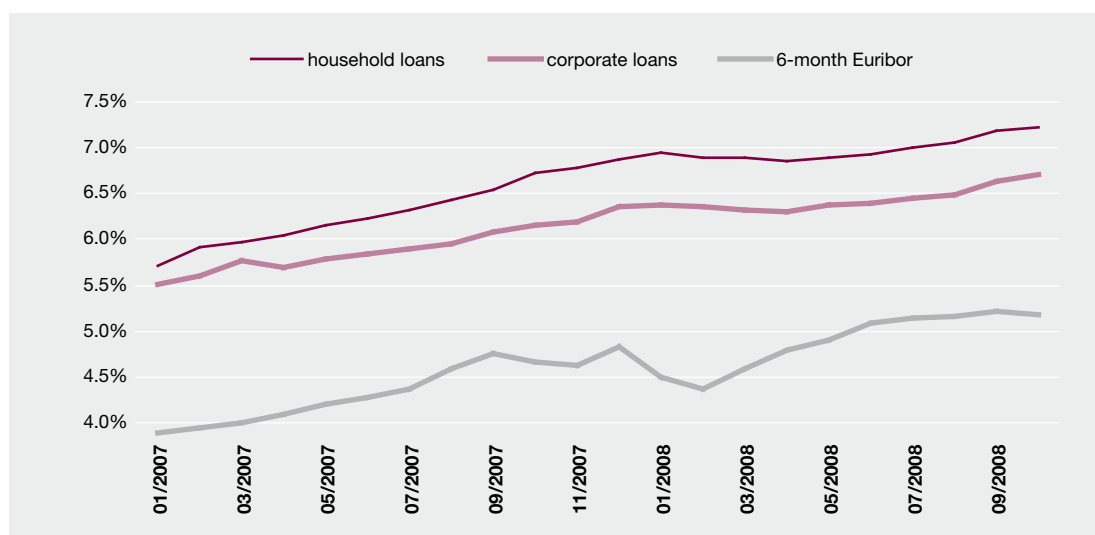
The decrease of contributions to the Guarantee Fund increased banks' third-quarter net profit by nearly 100 million kroons (almost 8%). As much as two thirds of the third-quarter net interest income growth can be attributed to the decreased contributions (see also Figures 21 and 22).

Still, net interest income on average assets increased in the third quarter even when excluding the influence of the decreased contributions to the Guarantee Fund. The growth has been supported by the pass-through of higher key interest rates to loan portfolios, which, unlike changes in the cost of funds, usually occurs with some delay because of the terms of a number of loan contracts<sup>5</sup> (see Figure 23).

As the majority of loans granted in Estonia are linked to the Euribor, changes in the key interest

rate will be passed on to loan customers through loan contracts also in the future. Competition has so far kept the interest margins on new loans relatively stable; however, the changed market situation has presumably increased banks' desire as well as opportunities to use higher risk margins on new loans. Higher loan margins would reduce the impact of potential higher funding costs on banks' profitability.

The **net interest income** of banks increased nearly 4% and that of groups approximately 2% in the third quarter (excluding the impact of the decreased contributions to the Guarantee Fund). At the same time, banks' **net fee and commission income** was about 1% lower and that of groups around 3% lower than in the second quarter. Given the difficult market situation, incomes on investment and trading as well as on fees for entering into and changing loan contracts have decreased the most. The decrease has been offset by continuously high incomes on payment intermediation (see Figures 24 and 25).



**Figure 23. Average interest rates on loan stock**

<sup>5</sup> In the case of loan contracts, the change in the key interest rate is usually taken into account twice a year.

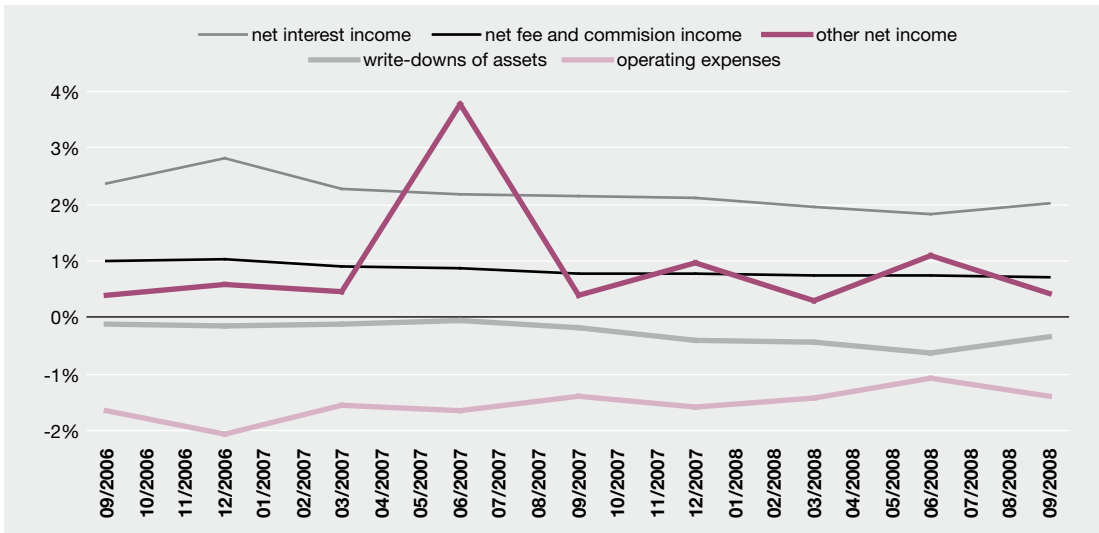


Figure 24. Income and expense items of banks (% of average assets per quarter x 4)

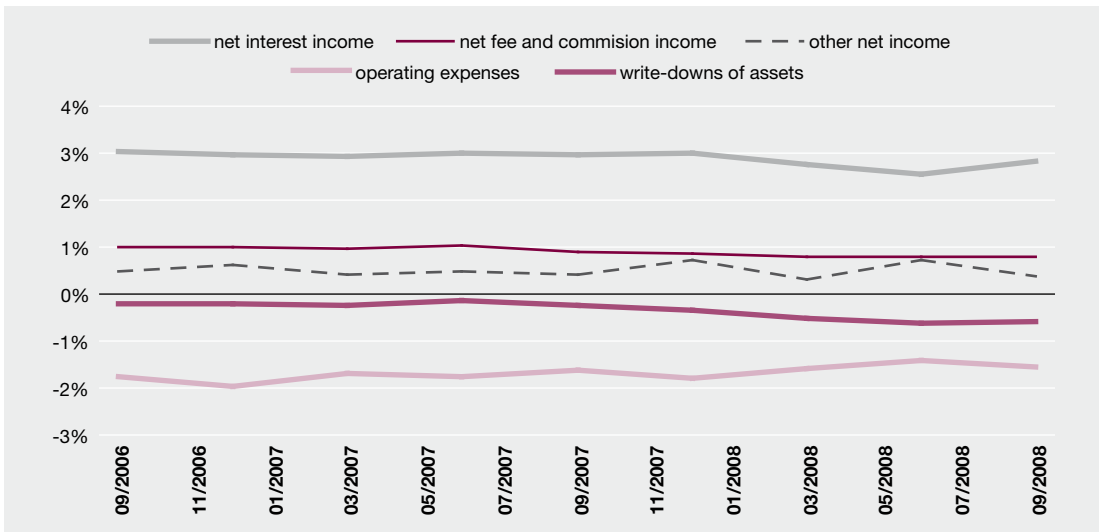


Figure 25. Income and expense items of banking groups (% of average assets per quarter x 4)

Banks have started to **cut down on expenses** more vigorously in light of unfavourable market conditions. Performance pay reserves have been reduced and organisations are being adjusted according to the market situation. The growth of general and administrative expenses has also slowed. Excluding the one-off reversal of the bonus reserve of one banking group, the third-quarter operating expenses of both the banks

and the groups were lower compared to the first and second quarters. Besides staff costs, banks might cut also other administrative expenses. Namely, the prices of outsourced services and rent are likely to decrease in an economic downturn.

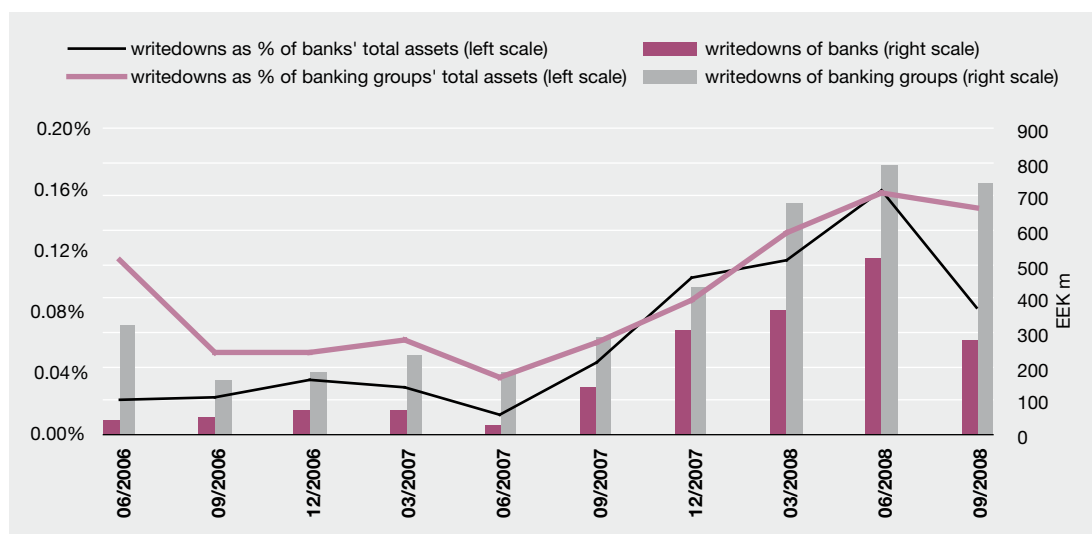
In the context of the changing economic environment, **credit risk** is currently more likely to

materialise, which is why also loan provisioning has increased as expected (see Figure 26). However, developments vary across banks and the total volume of write-downs includes also the provisions of some larger loans (especially in the second quarter). In the second quarter, net provisions reached nearly 0.16% as a ratio to assets at the beginning of the quarter, both in terms of banks and groups. Third-quarter write-downs were lower compared to the second quarter: 0.08% of the assets at the beginning of the quarter in the case of banks and 0.15% in the case of groups. Estimating the need for further provisioning, it should be borne in mind that on aggregate over 40% of the total loans overdue for more than 60 days had already been taken into account as loan losses at the end of September. Presuming that banks will be able to collect about 60% of the outstanding amount of loans overdue for more than 60 days (as at the end of September), these loans will not cause any substantial damage to banks in the future.

As regards the future profitability banks, different business models of groups and thus also opportunities for coping in a more complicated economic environment should be taken into consideration.

The future profitability of the banks will be affected by the changes in the cost of funding owing to the large share of interest income in the income structure of local banks. Higher risk estimates for Estonia and, regarding banking groups, also for other Baltic States may manifest in an increase in the cost of funds. The increase in the share of time deposits in total deposits also means higher funding costs for banks. At the same time, markets are awaiting the impact of governments' and central banks' measures to take effect, which should lower the general cost of funding. Bigger market participants largely depend on parent banks' ability and will to provide funds to them.

Banks can offset the impact of a possible increase in interest expense by requiring higher risks margins from customers. Although the third-quarter data did not show rapid growth in loan margins, the behaviour of market participants gives reasons to expect a slight increase in the coming periods. Data confirming the continuous slowdown in credit growth indicate that the struggle for market shares is being replaced by the desire to ensure the profitability of the funds invested in this region and the confidence of fund providers in the short run.



**Figure 26. Loan provisions of banks and banking groups at the beginning of period\***

\* Data of groups does not include Danske Bank.



Given the large share of income on payment intermediation in the banking sector, the fee and commission income is not likely to decrease significantly in the near future. This applies even if credit growth eases further. Although loan provisioning will probably increase, based on economic forecasts and the structure of banks' assets, the high rate of provisions already made in relation to overdue loans gives reason to expect that the established buffers will reduce the impact of the future materialisation of credit risk.

Presumably, banks will also be able to cut down on expenses even more. The flexibility of staff costs (for example, large share of performance pay) enables to adjust them at least to some extent according to the revenues earned. Changes in the economic environment may inhibit growth in administrative expenses or even reduce them.

**In conclusion, the profitability of banks has remained quite high. Should the funding costs increase further, it will be difficult for banks to preserve the current net interest margin. However, the possible rise in the cost of funding can be, at least partly, offset by an increase in loan margins.** The large share of payment intermediation income in the fee and commission income allows to assume that the latter will not decrease significantly in the near future. As the banks operating in Estonia are oriented to traditional financial intermediation, the impacts of potential adverse developments in capital markets on banks' profitability would be limited. Based on economic forecasts, loan provisioning might grow further, but the high ratio of provisions made compared to the volume of loans overdue will reduce the impact of the materialisation of credit risk on banks' future profitability.