

# STRUCTURAL TRENDS AND RISKS IN THE BANKING SECTOR

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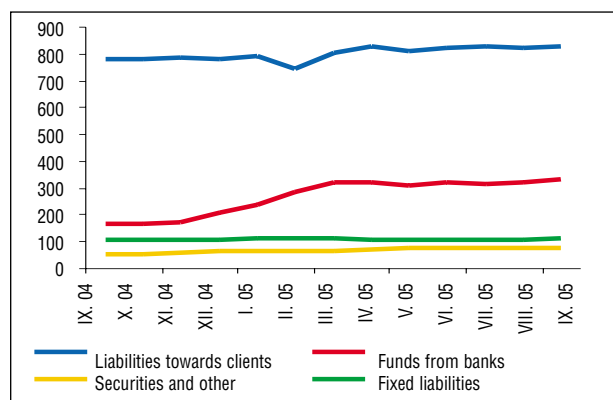
*This brief analysis of the SR banking sector is based on regular systemic analyses worked out by banking supervision<sup>1</sup> and assesses the period to September 2005. The first part describes the main structural trends in the banking sector concerning funds for banking activities and main investment activities. The second part analyses the financial health of the banking sector that is banks' ability to generate profit and capital for covering risk. The third part focuses on the main risks resulting from banking activities, which are subjected to stress testing in the fourth part.*

## Banks' main activities and their funds

An analysis of the liabilities of a certain bank, or the banking sector, is actually a view on the funds by which banks finance their investments, meaning assets. We can simply speak of four main aggregates. Besides the own capital (fixed liabilities), typical sources of banking activities are client deposits, other banks' deposits, or loans received from other banks and debt securities issued. The most important part of the banking sector's liabilities, forming almost two thirds, is that of client deposits (in particular retail, financial and non-financial company deposits). The second most important item are funds obtained from other banks, where foreign banks in particular dominate. As yet issues of securities form the least significant liabilities item in terms of volume.

Since we shall specifically focus on the issue of the interbank market later, we shall now primarily analyse client deposits and securities.

**Graph 1 Development of main aggregates of the banking sector liabilities** (bln. SKK)



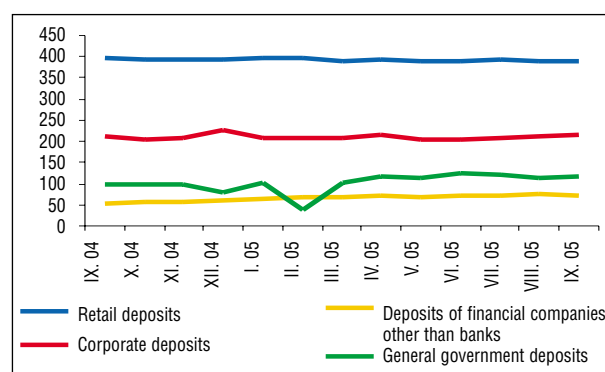
Zdroj: NBS.

<sup>1</sup> Analyses of the SR banking sector in more detail are available at [www.nbs.sk](http://www.nbs.sk).

The total volume of client deposits in September 2005 had grown to reach SKK 711 billion, compared to SKK 684 billion in September 2004, thus representing a year-on-year increase. However, influenced by the faster growing interbank funds the share of client deposits in total liabilities fell from 71% to 61%.

The main part of deposits comprises retail deposits, in particular household deposits.<sup>2</sup> Recently, a certain decline has been recorded, where we can speak in particular of a decrease in time and savings deposits, primarily in foreign currencies. With regard to the low interest rates in the euro area reflected in interests on deposits in euro, foreign exchange retail deposits fell over the year at all banks. Based on strong growth in household investments in mutual funds it may be presumed that a part of low-interest bearing time and savings deposits, originally held at banks, has been gradually redirected to higher yielding investments in mutual funds. This assumption may be also supported by the fact that since the start of

**Graph 2 Development of main deposit items** (bln. SKK)



Zdroj: NBS.

<sup>2</sup> Under retail we understand households, natural persons – entrepreneurs, and non-profit organisations serving mostly households. Households are to mean the statistical category of “population”, i.e. accounts of individuals. This is the Slovak equivalent of the English term “households” (sectors 143, 144 and 145).



the year average interest rates for all categories of retail deposits have fallen. On the other hand, Slovak koruna-denominated current account balances continue to grow, which is clearly connected with the growth in households' available income.

An analysis of corporate<sup>3</sup> deposit accounts, which form the second largest item in client deposits, is to a certain degree complicated by their volatility. The larger movement of corporate deposits, compared to that of retail deposits, is the result of two facts. Firstly, the volumes at corporates' disposal are greater and thus also can make movements of greater amounts. The second fact is the prevailing nature of corporate deposits, contrary to deposits of the retail that deposits at banks mainly savings. Also, for this reason we cannot speak of a single trend, either decline or growth. Over the past 12 months, the volume of funds on corporate deposit accounts denominated in SKK has been moving in the range of SKK 203 billion to SKK 225 billion, where approximately 80% of this volume have been formed by deposits in Slovak koruna.

In contrast to corporate deposits, the deposits of financial companies<sup>4</sup> (other than banks) are of a prevailing investment nature. More than 90% of them are held in time and savings deposits, almost exclusively in Slovak koruna. They are primarily deposits of pension and mutual funds as well as of insurance companies, in which households invest, in particular. Their value in September reached SKK 73 billion, whereby they became one of the fastest growing liabilities' items. The volume of funds in the banking sector deposited by households in the form of direct deposits or mutual fund deposits is thus in actually growing.

**Table 1 Selected financial flows between households, banks and mutual funds**

(bln. SKK)

	IX/2004	IX/2005	Change
Household deposits at banks	360	350	-10
Household deposits at mutual funds	42	87	45
Mutual fund deposits at banks	13	31	18

Source: NBS

Several banks have received short-term deposits from the Debt and Liquidity Management Agency (ARDAL), which handles State Treasury funds. Its deposits form approx. 80% of all general government<sup>5</sup> deposits. Banks deposit these funds prevailing at the NBS.

<sup>3</sup> Corporates are to mean non-financial companies.

<sup>4</sup> Financial companies other than banks are to be understood as other financial companies, financial brokers, pension and mutual funds, insurance companies.

<sup>5</sup> General government is to mean bodies of central and local government.

The financing of banks' activities by securities issues, either long-term or short-term, meanwhile remains at a low level. In September 2005, these issues formed less than 6% of liabilities. The growth in the volume of mortgage bonds issued continued, though slowed down a little over the course of 2005, particularly in recent months. While until March 2005 growth was more or less linear, the rate of growth in mortgage bond issues in the second two quarters did not keep pace with the growth in mortgage lending.<sup>6</sup> The share of the nominal value of mortgage bonds sold in the sum of outstanding principals of mortgage loans in September 2005 fell to 73.2%, compared to 77.5% in March 2005. A further increase in this fashion is nevertheless expected, since this share must reach at least 90% by the end of 2006.

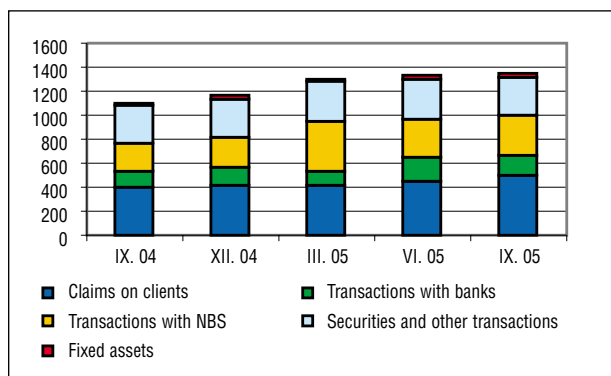
Besides bonds, issues of bills of exchange also have continued. In the first half of 2005, their volume in the banking sector grew from SKK 10 billion to SKK 13.2 billion, its highest value ever, though fell to SKK 11.7 billion in September. Issues of bills are used as an alternative to deposits, though they are not typical for all banks. A reason for their issue may for example be the decrease in banks' expenses for contributions into the Deposit Protection Fund, which must be paid upon receiving deposits. A bill of exchange can give a creditor other advantages, for example tradability. Several trends observed in the liabilities part of banks' balance sheets are comparable with some changes in the liabilities of banks in the EU. As an example we can take the limited growth in household deposits, seen in the banking sectors of several EU member states. The reasons have been almost the same: increasing investments in pension and mutual funds, the change in structure of households' assets and liabilities and low interest rates. In the case of the rise in interest rates the situation could again partially change.

Having briefly analysed the main sources of banks' financing we now look at the main activities, which can be found out from banks' assets. As in the case of liabilities, banks' assets may also be divided into four main aggregates, where interbank assets are subdivided into other banks and the NBS. In terms of the volume, the most significant activity of the banking sector is client lending, in particular to corporates and retail clients. Claims on clients represent approximately 36% of total assets. An important category is formed by trades with the NBS and with other banks, where these trades form 37% of banking sector's assets. Banks invest most of the remaining funds, around 24% of assets, in securities and derivatives.

<sup>6</sup> Pursuant to Article 68 of the Act on Banks the mortgage loan must be financed at least in the amount of 90% via issue and sale of mortgage bonds.

**Graph 3 Structure of assets over time**

(bln. SKK)



Source: NBS.

As the volume of transactions with the NBS and other banks is closely linked over time with the volume of funds from the interbank market, we shall analyse these transactions jointly in a separate part.

The growth in the volume of client lending, which has now been notable for some time, results primarily from the deepening indebtedness of households. The unsaturated market of household lending, the growth in their disposable income, low initial indebtedness and an environment of falling interest rates creates for banks the opportunity to focus on the retail sector. Some banks have partially eased their credit standards for retail clients. The volume of long-term loans for housing, mortgage loans in particular, is growing strongly (40% a year). Other types of loans for housing began to grow significantly in the first half of 2005 when compared to the year 2004. Such loans include loans for housing other than mortgage loans, building loans and bridging loans. These may be understood as a parallel product to mortgage loans that would not necessarily have to be financed by the relatively costly issuing of mortgage bonds. However, alongside the growth in loans for housing households borrow money from banks in the form of other types of loan: consumer loans and current account overdraft are increasing at a fast rate, though the volume of the later has been less significant so far.

Besides the growth in the volume of loans to retail cli-

**Table 2 Sectoral structure of lending**

(bln. SKK, gross values)

	IX/2004	IX/2005	Change
Loans to retail	117.8	167.7	42%
Loans to corporates	237.1	262.6	11%
Loans to financial companies other than banks	33.0	43.6	32%
Loans to general government	22.3	25.8	15%
Loans to non-residents	11.9	16.6	40%

Source: NBS.

**Table 3 Structure of securities portfolio**

(bln. SKK, gross values)

	IX/2004	IX/2005	Change
Securities issued by residents	343.6	371.2	8%
of which: issued by the NBS	62.2	103.5	66%
issued by the state	251.2	229.5	-9%
issued by financial and non-financial companies	12.0	11.7	-2%
issued by banks	14.4	19.4	34%
equity securities	3.6	7.1	94%
Securities issued by non-residents	26.6	36.9	39%
of which: debt securities	25.3	35.0	38%
equity securities	1.3	2.0	53%

Source: NBS.

ents, lending to financial companies other than banks continued to grow. As regards loans to corporates, only the volume of foreign exchange loans grew.

Investment in securities in the Slovak banking sector is still relatively high. These securities comprise primarily government bonds, representing a relatively high share particularly at some banks, which acquired these bonds in the restructuring process. Nevertheless, the volume of government securities in the Slovak banking sector's portfolio is gradually declining, where this is due in particular to falling yields. It may be expected that this process will become even more significant over the medium term horizon, when fixed-coupon government bonds issued in the past gradually mature. The decline in the volume of government securities is compensated by the growth in the volume of securities issued abroad, mortgage bonds issued by other banks (despite their growth having slowed in comparison with 2004) and equity securities. The volume of NBS bills purchased is volatile and has more the nature of operations on the interbank market.

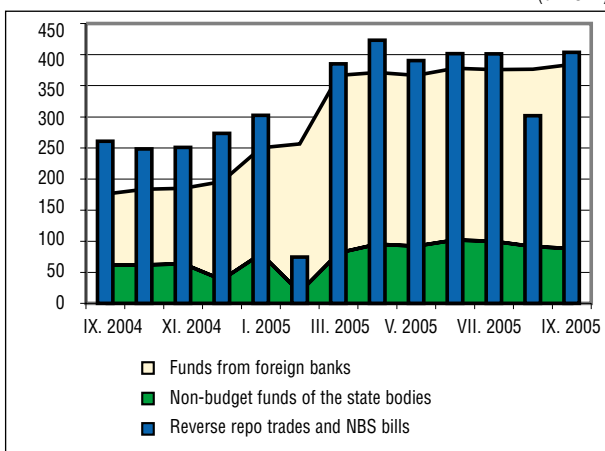
An analysis of the interbank market is a separate problem. Funds from banks are, similarly as interbank assets, rather short-term and are often the result of liquidity management or the use of specific features of various interbank markets on which whole banking groups operate.

When looking at the Slovak banking sector, the growth in funds from foreign banks, in particular from banks belonging to own banking group, constitutes a significant trend. Their volume grew on a year-on-year basis by 160% and in September 2005 represented around 22% of liabilities. The volume of these funds grew primarily in the first half of 2005, where this is connected with various factors. We can rank the main factors as being: expected strengthening of the Slovak koruna, NBS policy of sterilising funds in the reverse repo trades (in the second and third quarter of 2005 the



NBS satisfied the whole demand from banks in every sterilisation repo tender) and the existing interest-rate differential between the NBS and ECB interest rates. The volume of funds deposited at the NBS in the form of reverse repo trades grew on a year-on-year basis from SKK 223 billion to SKK 303 billion. In an international comparison the share of funds deposited at the NBS in total assets in Slovakia greatly exceeds the average for states of the enlarged EU.<sup>7</sup> Taking a longer term view, the high growth in the volume of funds sterilised by the NBS from the interbank market is connected with the decline in deposit and credit trades between domestic banks.

**Graph 4 Comparison of funds from foreign banks and ARDAL with operation with the NBS** (bln. SKK)



Source: NBS.

Generally it may be said that Slovak banks' activity is, in comparison with that of the banking sectors of other EU states, more conservative. Classical financial intermediation and investment in low-risk securities still dominate in the Slovak banking sector. With the decline in interest rates we can expect a certain approximation towards the activity of banks operating in the euro area. These banks have greater exposure in more risky investments, such as hedge funds, and are more active on credit risk transfer markets, i.e. in investments in asset-backed securities or credit derivatives.

### Financial position of the banking sector

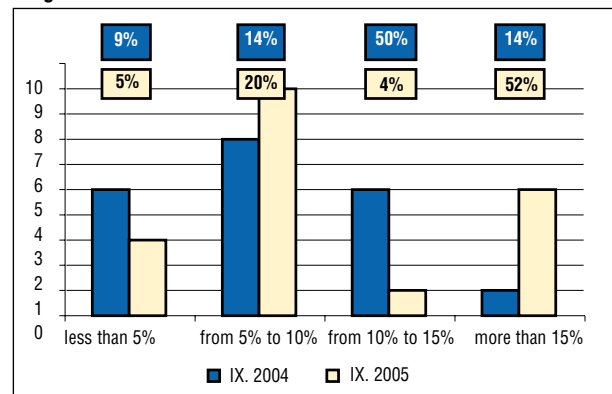
The ability of banks to generate an appropriate profit and to retain a sufficient volume of capital together form the basis for banks to be able to financially cover risks resulting from their activities. Capital represents the own funds from banks' owners and serves for covering risks to which the bank is exposed. On aggregate,

<sup>7</sup> In December 2004 the share of assets at the central bank in total assets was 2% in EU25 and 21% in the SR.

the banking sector reported high level of profitability and adequate capital in 2005.

The banking sector's net profit after tax grew on a year-on-year basis by more than 13% to September 2005, where the return on equity also grew, reaching 14.5% in September. Large banks achieved the highest profitability, as the share of the assets of the five banks with a return on equity above 15% in September 2005 represented 52% of banking sector assets as a whole.

**Graph 5 Distribution of the return on equity indicator in the banking sector**



Source: NBS.

Notes:

1. Vertical axis indicates the number of banks.
2. Percentage above the columns of this histogram indicates the share of banks' assets in the given column in the total assets of the sector.
3. Return on equity is defined as a share of net profit after tax in the own funds.

The largest part of the banking sector's profit was formed by interest income, which is the difference between interest revenues received from active operations and interest expenses paid for funds provided. The interest revenues of the banking sector come mainly from securities, loans and deposits at the NBS. The decline in interest rates was negatively reflected in particular in interest yields on securities and loans. At some banks, particularly in the large ones, the reduction in interest rates on loans was compensated by a growth in loans provided, thus contributing to an increase, or at least mitigation of the fall in these banks' interest revenues. Interest revenues from transactions with the NBS developed positively, this being connected with the year-on-year growth in the NBS sterilisation position towards the banking sector.

As regards expenses, the largest part was formed by interests paid to clients on deposits. The decline in interest rates was reflected in a decrease in interest payments paid to clients on deposit products. Similarly as in the case of loans, the decline in interest expenses at individual banks was connected with the banking sector's concentration in the deposit products market. With the growth in the volume of mortgage bonds, expenses paid by banks for issuing securities are growing.


**Table 4 Year-on-year changes in basic income categories of the banking sector**

(bln. SKK)

	IX/2004	IX/2005	Y/Y change
(a) TOTAL OPERATING COSTS	19 499	20 279	4.00%
(b) GROSS INCOME (c+d)	31 749	32 522	2.44%
(c) Net interest income	23 199	22 238	-4.14%
(d) Net non-interest income	8 549	10 284	20.29%
(e) NET INCOME (b-a)	12 249	12 243	-0.05%
(f) Net provisions and net income from writing off receivables	1 272	-78	
(g) Net reserve	-43	-837	
(h) PROFIT BEFORE TAX (e - f - g)	11 021	13 159	19.40%
(i) Income tax	857	1 652	92.74%
(j) PROFIT AFTER TAX (h - i)	10 164	11 507	13.21%
ROE <sup>1)</sup>	12.8%	14.5%	
ROA <sup>2)</sup>	0.9%	0.8%	
Cost-to-income ratio <sup>3)</sup>	61%	62%	

Source: NBS.

1) ROE is defined as a share of net profit after tax in own funds.

2) ROA is defined as a share of net income after tax in net value of assets.

3) Cost-to-income ratio is defined as a share of total operating costs and gross income from the banking activity.

With the decline in interest rates in the financial system the structure of the banking sector's profitability is approaching that of banking sectors in the old EU states. The gradual decrease in the difference between interest payments received and paid, i.e. the interest margin, forces banks to raise other, non-interest incomes. These incomes may be various, for example fees, incomes from trading with securities, foreign exchange operations and derivatives, incomes from equity shares, from the sale of receivables, etc. The majority of banks generate most of these incomes from fees. It was these incomes that grew in response to the fall in interest revenues, when banks compensated for the fall in interest margins on deposits and loan products by increasing fees for these products. In the case of interest incomes and incomes from fees a rule applied that their importance was connected with the bank's position in the retail market. At several banks incomes from trading grew, in particular trading in debt and equity securities.

Costs for banks' operation comprise primarily staffing costs, expenses for purchased services and other operating costs. In contrast to the banking sectors of the old EU states, operating costs at most Slovak banks grew over the year. This growth was most notable in staffing costs. On the other hand, some banks, by reducing operating costs, reacted to the negative development in the field of incomes or tried to improve operating efficiency.

The coverage of operating costs by incomes from banking activity is one of the main preconditions for a bank's long-term operation in the market. This ratio,

expressed as the cost-to-income ratio, in September 2005 stood at 62%. The slight growth (against 61% in September 2004) in the share of operating costs to gross income in the banking sector however conceals a relatively considerable worsening of this ratio at several small and medium-sized banks.

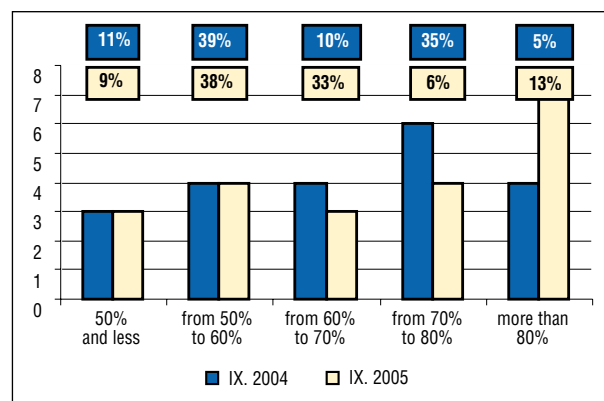
The overall profit of banks is often significantly influenced by the net provisioning, reserves and the writing off of receivables. Banks incur costs for provisioning if there is a temporary decline in the value of selected assets, most frequently loans. An increase in revenues occurs when provisions created are used, i.e. when the reason for which the provision was created has passed, or the bank has sold or written off the given asset. The year-on-year growth in incomes from provisions and write-offs was due to a decline in costs

from writing off receivables towards clients in the banking sector as at September 2005. The incomes themselves from the provisioning decreased over the year.

Whether a certain level of capital is efficient for covering risks is assessed by means of the capital adequacy indicator, which is the share of the bank's own funds in total risk-weighted assets.

In September 2005 the average level of capital adequacy weighted by risk-weighted assets in the banking sector stood at 16%, where capital adequacy had fallen since the start of the year.

Despite this decline the capital adequacy level in comparison with other EU countries remains, as it has

**Graph 6 Distribution of operating efficiency in the banking sector**


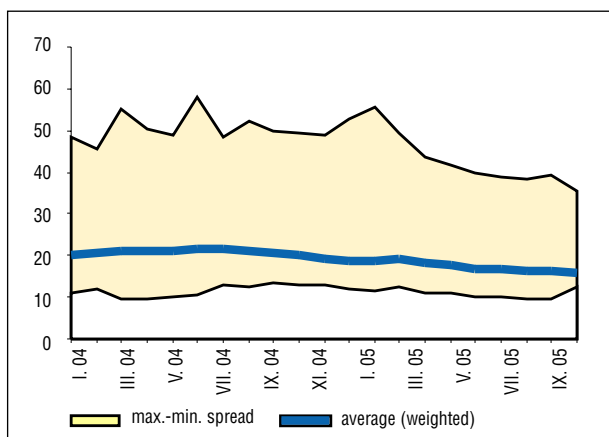
Source: NBS.

Notes:

1. Vertical axis indicates the number of banks.

2. Percentage above the columns of this histogram indicates the share of banks' assets in the given column in the total assets for the sector.

3. Operating efficiency is measured by the cost-to-income ratio.

**Graph 7 Capital adequacy in the banking sector**

Source: NBS.

Notes:

1. Graph depicts the development of the maximum, minimum and average value of the capital adequacy indicator.
2. Vertical axis gives values of the capital adequacy indicator in per cents.
3. Capital adequacy represents a ratio of the bank's own funds to risk-weighted assets.

done for several years, at a relatively high value (in December 2004 the weighted capital adequacy of the banking sector in the EU25 as a whole stood at 12%). The high capital adequacy ratios are somewhat a legacy from past years, when several banks underwent asset restructuring and received an injection of own funds. The decrease in capital adequacy, particularly since the second half of 2004, may be seen as a consequence of the growth in lending. Besides the gradual increase in the volume of loans to households, and in the case of some banks also loans to corporates, banks are increasing their holdings of other assets with a higher risk weighting. This concerns particularly equity and debt securities with a non-zero risk-weighting. The capital adequacy level in September 2005 was above the required 8% level at all banks.

Assuming a continuation of current trends on the side of assets, capital adequacy should continue its decline.

### The banking sector's exposure to risks

The intermediary activity of banks, i.e. obtaining funds from subjects and investing them in assets, exposes banks to various risks. Risks may for example result from the inability or unwillingness of debtors to repay funds provided them by the bank (credit risk), a mismatch in the period of interest rate fixation, or in the repricing of interest rates on the assets and liabilities side (interest-rate risk), maturity differences of assets and liabilities (liquidity risk), a mismatch of assets and liabilities in any foreign currency (foreign-exchange risk). Market risks (foreign-exchange and interest-rate) result from changes in market factors (exchange rate and interest rate).

The banking sector's exposure to risks during the first nine months of 2005 did not represent any significant threat to the banking system's stability. The sector's growing profitability and relatively high capital adequacy create a positive picture of banks' ability to cover their risks. This picture though reveals the existence of certain weaknesses that may negatively influence the banking sector.

Given the high rate of growth and volume of loans to households, bank's credit risk from loans to households represents the greatest risk to which the sector is exposed.

We speak of a risk even despite the positive development of macroeconomic indicators for the household sector. Household borrowing via loans rose in 2005, though overall Slovak households debt remains at a relatively low level (loans to Slovak households at the end of the first half of 2005 represented 10% of GDP, compared to 55% for the EU). The improving financial position of households has been supported in particular by the growth in gross disposable incomes, the fall in unemployment, growth in property prices and low inflation.

A risk of fast growth in loans to households lies particularly in the growing competition between banks, where this represents one of the significant factors in loosening credit standards for loans to clients. The softer approach taken by banks in providing new loans may lead to the provision of loans to higher-risk category clients, particularly of lower-income groups. This concerns particularly consumer lending.

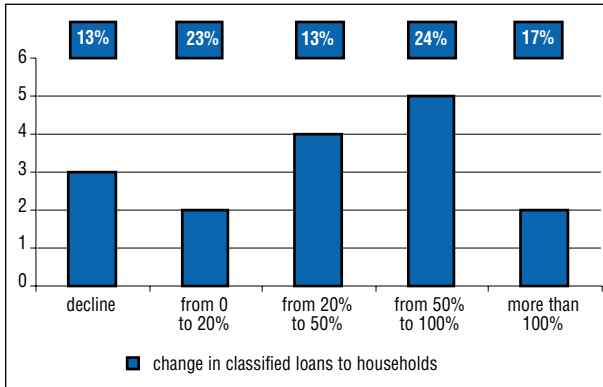
The risk of lending to households has been manifested in a growth in classified loans<sup>8</sup> in the sector. Classified loans have grown particularly in the case of consumer loans, but also in current account overdrafts and mortgages. Since the start of 2005 portion of classified loans to households in total loans to households in the banking sector was approximately 4% to 5%, where the relatively low level was caused by a growth in new lending.

With the growth in loans to households is connected also the high sensitivity of households to interest-rate changes. This relates mainly to the high share of loans with short-term fixation of interest rates, which in the case of a growth in interest rates may negatively influence the ability of households to cover their liabilities. Even despite this slight decline in share of new loans to households at a floating rate, or a fixed interest rate, up to one year, the share of these loans in total newly-new loans to households since the start of the year falls

<sup>8</sup> Classified loans are defined as loans to clients and banks not paid for more than 90 days or that were assessed on the basis of an analysis of the debtor.



**Graph 8 Growth in classified loans to households over nine months of 2005**



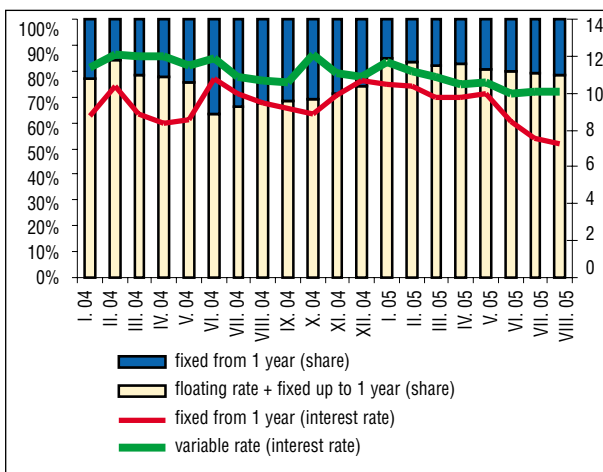
**Notes:**

1. Vertical axis indicates the number of banks.
2. Percentage above the columns of this histogram indicates the share of banks' assets in the given column in the total assets for the sector.

in the third quarter to 79%. This short-sighted behaviour of households is the consequence of a gradual decrease in interest rates over the past years and the presumption that this trend will continue in the future.

In the same way as a rise in interest rates can increase credit risk exposure for banks from loans to households, depreciation of domestic currency towards foreign currencies may lead to any growth in credit risk exposure for banks from loans to corporates. This risk relates to the corporate sector's financing via foreign currency loans (in September 2005 foreign currency loans to corporates formed 18% of total loans). Despite assumptions about foreign exchange risk management, in particularly at large corporates, any depreciation of the Slovak koruna's exchange rate towards foreign currencies may lead to a greater burdening of corporates by loan repayments.

**Graph 9 New loans to households by the fixed period of the interest rate**



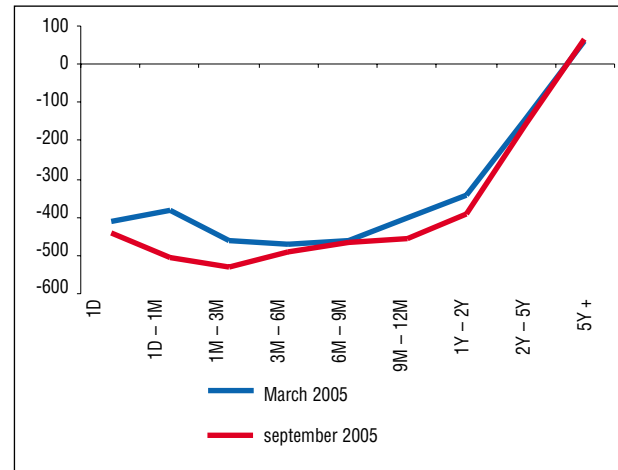
Source: NBS.

**Notes:**

1. The right axis gives data on the level of interest rates in per cents.
2. The left axis gives shares of loans by the fixed period of the interest rate.

Changes in the time structure of assets and liabilities have recently had a negative influence on liquidity risk, i.e. the ability of banks to settle their immediate liabilities. On the liabilities side, the volume of sight deposits, i.e. current account balances, increased, while the volume of long-term savings and time deposits from retail clients decreased. On the assets side the volume of long-term loans to retail clients grew, where the growth was faster than the growth in the volume of mortgage bonds issued.

**Graph 10 Cumulative balance-sheet position of maturity of assets and liabilities** (bln. Sk)



Source: NBS.

**Notes:**

1. The horizontal axis gives time bands by maturity of assets and liabilities.
2. Balance-sheet positions of maturity of assets and liabilities is the difference between assets and liabilities with maturity in the given time band.

With the growth in short-term liabilities and long-term assets the maturity mismatch deepened at almost all banks. This applies particularly for the shortest maturities, up to seven days and up to one month.

In the case of other risks the trends recorded were rather positive.

A positive development was seen in the quality of loans provided to the corporate sector. The share of classified loans to corporates in total loans to the corporate sector during the first nine months of 2005 fell from 10% to 8.5%. Despite this positive trend in the quality of the corporate loan portfolio, the share of classified loans is higher than that in the household sector. The lower growth in loans to corporates and greater prudence on the side of banks in financing this sector relates to the relatively high risk of a part of the corporate sector and to low margins.

The risk of a change in exchange rates and their direct negative impact on banks was negligible. Despite the growth in short-term foreign exchange funds from non-resident banks, and the growth in foreign-currency denominated loans on the assets side, the difference between foreign-exchange assets and liabilities



in the balance sheet and off-balance sheet accounts (the total open foreign-exchange position) of the banking sector was at a low level. For closing open foreign exchange positions banks use off-balance sheet operations: currency swaps, forwards and options.

The interest-rate risk ensuing from open asset and liability positions in the domestic currency in individual time bands according to the period for interest fixation, or period to next repricing, was negligible. Banks reported an open position only in the shortest band, up to one month. In longer bands assets and liabilities from the aspect of interest rate fixation periods were more less harmonised.

The inflow of short-term foreign exchange funds, mentioned above, creates a short open interest rate position in euro in the shortest band.

### Stress testing

The main aim of stress testing is to quantify the ability of individual banks and the banking sector as a whole to deal with extreme, but ever possible, market conditions. Thus, A stress test simulates certain situations in the market, or at a bank, and assesses their impact on the banks' functioning. Certain scenarios were selected for the individual types of risk (credit risk, foreign exchange risk, interest-rate risk, liquidity risk and systemic risk) and then their severity was assessed.

When interpreting the results from stress scenarios it is important to bear in mind certain limitations of stress testing. Like other models, stress testing is a simplification of the real state on the market. Even though our effort is to create stress scenarios and quantify them in a manner most closely to the reality of the market, the complexity of the real situation forces us to make certain assumptions and simplifications.

Stress testing of the mentioned risks was undertaken independently for each risk. The scenarios used, even if they are related, do not assume relations between individual risks. For the individual risks we state here only the results for the selected scenarios.

Extreme changes in interest rates in the domestic currency and foreign currencies do not represent a serious problem for the banking sector. An increase in interest rates in particular would have a negative impact. In the case of a parallel growth in interest rates by 1.5 percentage points the banking sector's weighted capital adequacy would decrease by slightly less than 1 percentage point. A fall in short-term interest rates, which could be caused by a reduction in the NBS's sterilisation position, would have a positive impact on the banking sector's capital adequacy.

Even foreign-exchange risk in the case of extreme changes in exchange rates should not seriously threa-

ten the banking sector's stability. In the case of any repetition of the historically largest month-on-month relative changes in exchange rates (since 1999) capital adequacy would not fall below the 8% threshold at any bank. For most banks a negative impact would result from the Slovak currency's depreciation. In a scenario simulating the market situation in the second half of March 2005, when there was an outflow of foreign banks' funds in foreign currencies and depreciation of the domestic currency exchange rate towards the main currencies, the banking sector's capital adequacy would fall by 0.5 percentage points.

Over the past years, the share of defaulted claims in the total volume of loans provided has not experienced any significant increase, the reason being that new loans are mostly standard. Stress testing of the banking sector showed that the greatest threat would be a scenario in which new loans began to fail in the same degree as loans provided in the past. This risk relates particularly to loans to corporates.

Four different scenarios were used for liquidity risk. They may be simply characterised as simulations of a 10% fall in the value of government bonds, a 20% withdrawal of client deposits, an outflow of short-term capital from the Slovak banking sector and a decrease in the NBS's sterilisation position. The greatest impact on banks was seen in the case of the scenario of a 20% withdrawal of client deposits. A less significant impact was seen in the case of a reduction in short-term capital in the sector, i.e. an outflow of foreign banks' funds. The smallest impact on banking sector liquidity resulted from a decrease in the NBS's sterilisation position and a fall in the value of government bonds.

Systemic risk, understood as the impact of the failure of one bank to other banks via interbank deposits and loans, is insignificant in the Slovak banking sector, since such deposits and loans are of a relatively small volume.

### Summary

Short-term funds from foreign banks had the greatest impact on a change in structure of the assets and liabilities of Slovak banks. The growth in foreign banks' funds in liabilities has been reflected in a growth of assets at the NBS. In the environment of low interest rates household deposits have decreased and loans to households increased. Concurrently, banks have taken a greater interest in foreign securities.

The growth of the banking sector's profitability was in particular influenced by incomes from the households sector and from trading. The greatest risk to which the banking sector is exposed is credit risk ensuing from a growth in loans to households and their sensitivity to interest rate changes.