# Report on the Results of the Slovak Financial Sector Analysis

for the first half of the year 2007

## Introduction

The report for the first half of the year 2007 follows from on the Report on the Results of the Slovak Financial Sector Analysis for the year 2006. The aim of this analysis is to describe and evaluate the development in the financial sector, with special focus on the assessment of risks, which are financial institutions exposed to.

In the comparison to the report for the year 2006, bigger accent is put on the risk analysis in the financial sector and stress testing in the actual Report. Due to this reason, the relevant chapters were included self-containedly, following the analysis of the activity and profitability in the individual sectors of the financial market.

Financial information on particular institutions is primarily obtained from the banking supervision information system MIM, the systems STATUS and STATUS DFT, and documents processed by the departments of the Financial Market Supervision Unit. Additional sources included the Statistical Office of the Slovak Republic, Eurostat, the European Central Bank (ECB), and other external sources and commercial information systems.

The logical structure, definition of terms and overall character of the analysis is inspired by analyses made by several central banks of European Union (EU) Member States and by the ECB. Unless stated otherwise, all financial amounts are given in SKK.

# **Contents**

Analysis summary	5
Characteristics of the Slovak financial sector	10
1 Banking Sector	20
Main changes and trends in the banks' liabilities	20
Main changes and trends in the banks' assets	25
Interbank market	30
Off-balance sheet	34
Profitability	37
Own funds adequacy ratio	
2 Insurance sector	43
3 Securities dealers	
4 Collective investment	
5 Pension Savings	57
6 Risks in the financial sector	
Banks	60
Insurance companies	72
Funds of pension asset management companies	74
Funds of supplementary pension insurance companies	
Mutual funds	
7 Stress testing	77
Credit risk in banks.	
Liquidity risk in banks	83
Market risks	84
Macro Stress Testing	91
8 Financial Market Infrastructure	94
9 Tables	97
A Information on the structure of the financial market	97
B Analytical data	100
9 Terminology and abbreviations	
List of boxes	
Box 1 Macroeconomic environment in Slovakia	9
Box 2 Mortgage crisis in the USA and its impact on Slovakia	
Box 3 Survey on income and living conditions	

## **Analysis summary**

#### Growth of financial intermediation in the first half of 2007

In the first half of 2007, positive trends were continuing in the financial sector. To a great degree, this development is related with a positive economic situation in Slovakia and abroad. The improving financial position of the main economic sectors as well as positive expectations for the future have a positive influence on financial intermediation. Loans continued to increase in the banking sector, together with deposits. Following stagnation in 2006, the net value of assets in mutual funds increased again, whereas the increase in life insurance that was monitored in 2006 continued. Pension savings and assets under management of securities dealers were also growing. Financial intermediation was also developing positively in other sectors of the financial system that are not regulated by The National bank of Slovakia, particularly in leasing companies and hire purchase companies.

#### Continuance of growth trends in the banking sector

The basic trends in the main aggregates of the banks' liabilities have also continued in 2007. The deposits of retail, enterprises and financial companies have continued to grow, funds obtained from the issues of mortgage bonds (MB) and other debt securities have further increased whereas general government deposits (especially those of the Debt and Liquidity Management Agency, DLMA) together with foreign currency deposits of foreign banks have continued with a volatile development. On the sector level this means that the funds the banking sector can use for a stable loan financing have generally grown in accord with credit activity. However, this is not true for the group of home savings banks where a growth of loans has either surpassed the growth of resources, or where the resources were falling.

As on the liability side of the balance sheet, so in the assets of banks the trends set in the previous years were continuing in the first half of 2007. Growth of client loans is a particularly dominant trend. Especially household and corporate loans were drawn by demand. Households were most interested in house purchase loans. Within the framework of the corporate loan portfolio, there was an increase in the financing of real estate projects in particular. High interest margins were the cause of a continuing interest of banks in financing small and medium enterprises. The concentration of the three largest banks continued to grow on the corporate and retail loan market.

After the decline during the second half of 2006, interbank assets and liabilities were growing again with mainly the sterilised funds in NBS growing on the assets side and non-resident banks' deposits on the liability side.

The ratio of purchased securities to total assets was decreasing. The structure of the portfolio continued to be relatively conservative. Investments in foreign debt securities were growing in selected banks.

#### Improvement of the banking sector's financial position

The banking sector growth on both the assets and liabilities sides manifested in higher profitability. This was particularly due to an increase in net interest income. It comprised almost 70% of the overall gross income of the banking sector. The main reason for the increase in interest income is a high increase in corporate and household loans. Non-interest income consisted mainly of fee income.

However, the high increase in fee income from the previous years slowed down and the bank sector only monitored a modest year-on-year growth.

The trend of a gradual fall in the average own funds adequacy ratio (average is measured by the volume of risk-weighted assets) came to a halt. During the first half of 2007, this value even slightly increased from 13.0% to 13.5%. This was particularly associated with a significant growth of own funds, whereas the growing trend of risk-weighted assets remained approximately the same as in 2006.

#### Growth of other sectors of the financial sector

The technical premium written in life insurance increased by 21.57% compared to the same period of the previous year, which confirmed the trend of the increasing growth rate of technical premium written in life insurance. The technical premium written in non-life insurance only increased by 1.8%, compared to the same period of the previous year. The total technical premium written increased by 10.21%.

In the first half of 2007, there was the increase in the market share of the largest insurance companies in the total technical premium written, from 61% to almost 64%. The biggest increase in technical premium written compared to the previous period, by more than 110%, was reported by Unit-Linked insurance which in the last few years has been reporting an ever-increasing trend that follows the development on European markets. The low increase in technical premium written in non-life insurance was influenced to the greatest degree by the fall in technical premium written in motor third party liability insurance. The net profit created by insurance companies was higher by as much as 13% than that for a comparable period of the previous year. No substantial changes occurred in the allocation of technical reserves, still placed in low-risk assets.

The net value of assets managed in open mutual funds increased again in the first half of 2007, following a modest stagnation in 2006. Thus the resident entities' investments in mutual funds were growing as well as the net value of assets managed by domestic asset management companies. Withdrawal of resources from bond funds continued. The average performance of funds once again reached positive values. Performance of funds investing in foreign securities was also favourably influenced by the fact that Slovak koruna only strengthened modestly during the first half of 2007. Even in June 2007, however, the negative effects of the sharp strengthening of Slovak koruna in the second half of 2006 on their year-on-year performance were still significant. Especially other funds (so-called hedge funds) counted as the best-performing funds during the first half of 2007 and special real estate funds.

The number of savers registered in the second pillar of the pension saving sonly increased minimally compared to the end of the last year. There were 1.54 million savers in the second pillar as at the end of June 2007. The total net asset value managed by pension asset management companies already increased to SKK 40 billion.

The savers in the voluntary third pillar had SKK 22.8 billion saved in their accounts as at the end of the period monitored. Approximately 850,000 citizens were involved with the voluntary third pillar.

The volume of client securities contracts carried out through securities dealers (SD) increased year-on-year by 24% but its structure did not change considerably. Forward contracts and bonds remained the most traded instruments. The volume of client assets managed by these entities also rose. The Slovak securities dealers' own funds adequacy ratio met the required minimum level with a sufficient reserve.

#### Credit risk remains the most important risk in the banking sector.

Credit risk of households and enterprises was the most important risk with the growing bank loans. Despite a growing indebtedness, these sectors will be able to meet their liabilities if the present trends continue. From the banks' viewpoint it is important that most household loans are predominantly secured by real estates. On the other hand, in the first half there was an increase in credit risk of banks associated with the credit risk of households, with households having increased the share of loans with one-year fixation at a decline in short-term interest rates. The distribution of household indebtedness changed modestly. Although most loans are provided to the highest income groups, indebtedness of the lower income groups increased on a year-on-year basis. The ratio of loan instalments to disposable income also registered a year-on-year increase.

Indirect foreign exchange risk plays an important role in enterprises, with a major part of loans being denominated in foreign currencies. Most enterprises, large enterprises in particular, generate income in foreign currencies, which forms a sort of a natural hedging of their open positions. Credit risk resulting from the interest-rate sensitivity of corporate loans also exists in enterprises where a major part of loans has a short fixation of interest rates. Improvement of quality of the corporate loan portfolio continued also in the first half of 2007. No significant changes to the enterprises' financial positions occurred in the first half of 2007.

The stress testing results indicate that the banking sector should be able to face even more serious unexpected and adverse changes affecting the credit quality of the loan portfolios. In other words, even if the clients' ability to discharge their obligations deteriorated to a certain degree as a result of a negative development, it should not pose a threat to the stability of the sector as a whole.

The credit risk in other sectors was on a very low level.

From the viewpoint of liquidity it is positive that most banks have a sufficient volume of liquid assets as well as the fact that the loan activities in most banks are financed by local sources. Neither the impact of the scenarios with withdrawals of clients' deposits, nor that with non-resident bank deposits, intensified significantly during the first half of 2007.

#### Negative impact of an increase in interest rates in the majority of the financial sector

For banks, the most significant of all market risks is the credit risk associated mainly with discrepancies between interest-sensitive assets and liabilities in the individual time bands of interest rates revaluation. This disharmony was mainly a result of investments in government securities with a fixed coupon. Thus at an increase in interest rates, the banks would record a fall in the net economic value, which would present itself in the reported result of their financial management as a gradual reduction of net interest income. In the trading book, this disharmony takes place to a small degree only in some banks due to their positions in the interest derivatives.

Similarly, from the viewpoint of assets covering technical reserves, credit risk was the most significant risk in the framework of market risks in the area of insurance companies, particularly in some insurance companies. An increase in interest rates, especially in life insurance, would have a negative impact.

Funds of asset management companies, pension asset management companies and supplementary pension asset management companies would be negatively influenced by an increase in interest rates, which would cause an instantaneous fall in the value of debt securities in the funds' portfolios. Its effect, however, would not be too important due to a lower duration of these portfolios in most funds, pension funds in particular.

A negative impact of an increase in interest rates on banks is also confirmed by the stress testing results. If we take into account the change in the value of securities and derivatives held in the banking book, the banking sector would be negatively influenced particularly by an increase in interest rates. If, however, we do not take into account the revaluation of instruments in the banking book to fair value, it is the fall in interest rates that would have a negative impact. In this case, a decline in the NBS base rate by 2 p.p. would mean a loss of approx. 1% of assets particularly as a result of a decrease in interest income from debt securities. The value of assets covering technical reserves in life insurance would be negatively influenced by an increase in the rates. The assets covering technical reserves in non-life insurance are not considerably exposed to unexpected changes in the interest rate. An analogical conclusion is valid for the funds of pension asset management companies and for most of the funds of the supplementary pension asset management companies. Due to the short duration of bond portfolios, an increase in interest rates would mean an initial fall in value of these instruments; however, within one year the funds would make profit due to an increase in coupon payments.

#### Foreign exchange risk and equity risk in pension savings and collective investment funds

The foreign exchange risk remained on a negligible level in the banking sector. Only two banks are exposed to the equity risk to a larger extent, however, the risk remains relatively small. Similarly, foreign exchange risk is negligible in most insurance companies and only some insurance companies are exposed to equity risk.

The funds of asset management companies, pension asset management companies and supplementary pension asset management companies would be negatively influenced by a more substantial appreciation of koruna or a more substantial fall in the value of shares. There are no significant differences between the investment strategies of balanced and growth funds within the framework of pension asset management companies; they slightly differ, however, in the representation of the individual risks. Of the collective investment funds, the portfolios of equity funds are the ones most exposed to the market risks.

Stress testing of foreign exchange risk proves that the exposure of banks and most insurance companies to extreme changes in foreign exchange rates is negligible. Within the framework of the pension asset management companies' funds, these changes could have a more significant impact particularly on some growth funds. They would make the most significant impact on equity and mixed funds. The reason is that the investments in equity portfolios are mostly denominated in foreign currencies without a foreign exchange risk survey.

#### A simulation of a fall in the performance of real economy

A simulated fall in the performance of real economy would have a more significant impact only on banks due to an expected decline in the loan portfolio's credit quality. On the other hand, this effect would be partially moderated by the impact of a decrease in interest rates, which may be expected as a reaction of NBS. This decline in interest rates would have a positive effect especially on an increase in the value of debt securities portfolios. It is for this reason, or for the reason of an expected depreciation of the local currency, that also the effect on other parts of the financial market would be rather positive.

#### Box 1 Macroeconomic environment in Slovakia

The high growth of the Slovak economy continued in the first half of 2007. In the first quarter of 2007, the gross domestic product at constant prices increased by 9.0% and in the second quarter it grew to as much as 9.4%. The local demand in particular had a positive impact on the high growth of economy. Household consumption (which increased year-on-year by 7.3% in the second quarter) in particular acted as the driving force, being supported by the growth of real wages and the fall in the unemployment rate. From the viewpoint of stability of growth it is important that the growth of real wages was lower than the growth of labour productivity. The gross capital formation was also developing positively.

The unemployment rate also continued to fall, with 11.1% having been reached as at the end of the second quarter of 2007. In the same period, the consumer price index reached a year-on-year increase by 2.5%.

In the first half of 2007, The National bank of Slovakia lowered the base interest rate twice, by a half of a percentage point in total. The 10- and 5-year government bond yields to maturity also decreased.

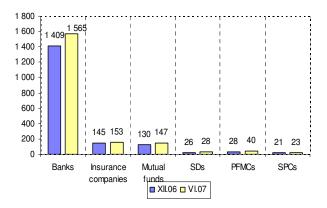
## Characteristics of the Slovak financial sector

#### **Activity of financial institutions**

In the first half of 2007, the growth of the financial institutions' activity on the Slovak market continued. In the area of financial institutions supervised by the National bank of Slovakia, the total value of assets and managed assets in this period increased by SKK 309 billion, or 17.6%. As at the end of June 2007, these institutions were managing SKK 2.068 billion.

In the first half, the activity of most entities on the financial market was increasing, which manifested as an increase in the value of assets or managed assets in all its segments (Chart 1).

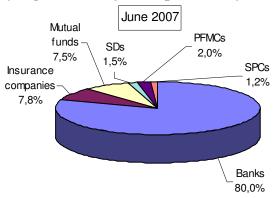
Chart 1 The volume of assets or volume of managed assets in the individual segments of the financial market



Source: NBSData in SKK billion

The positive fact is that on the source part this growth was the result of a growth of bank deposits and shares in mutual and pension funds together with the growth of premium. Thus the financial sector was growing rather in accord with the natural growth of financial assets of enterprises and households and the foreign sources contributed to the growth only to a lesser degree. The share of the supervised institutions' assets in the GDP increased to 119.7%.

Chart 2 Share in assets and managed assets by segments: subjects supervised by NBS



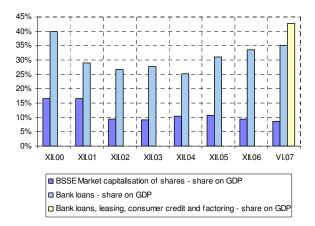
Source: NBSData in SKK billion

The banking sector maintains its dominant position in the financial sector due to the growth of deposits as well as loans. Its share in assets and managed assets of the supervised part of the financial market did not change in the first half of 2007 and remained at the level of 80.1% (Chart 2).

Compared to December 2006, particularly the share of pension asset management companies increased, namely from 1.6% to 2.0%. Simultaneously, the share of insurance companies decreased by approximately 0.4 p.p., their growth was slightly slower than the growth of the rest of the financial sector.

The share of the banking sector in financial intermediation grew faster also in comparison with the stock exchange (measured by market capitalisation). While the share of bank loans in the GDP was growing further, the share of market capitalisation of equities in the GDP was falling (Chart 3).

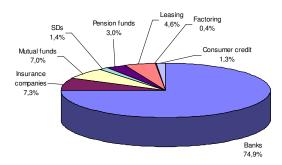
Chart 3 Market capitalisation, bank loans, leasing, hire purchase and factoring as a share in GDP



Source: NBSData in SKK billion.

Apart from entities supervised by the NBS, leasing companies also comprised a part of the financial market together with hire purchase companies and factoring companies. Even though their share in the assets of the financial market is relatively small (Chart 4), they are an important element in the Slovak financial intermediation (Chart 3). Their importance lies in the fact that they create competition to the bank market in certain segments and also that they cover such types of services or client categories that are not encompassed by the banks.

Chart 4 The share in assets and managed assets by segments

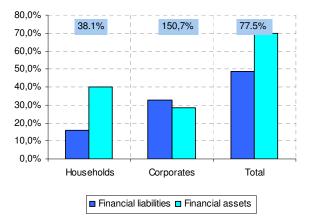


Source: NBSData in SKK billion.

#### **Balance** of the financial market

From the viewpoint of a long-term stability of the financial market, the overall position towards the local economy is important, i.e. towards households and enterprises. Such a balance of funds acquired from local entities and loans provided to these entities gives evidence not only about the stability of financing the activities of financial institutions, but also of the overall financial position of households and enterprises.

Chart 5 Financial assets and liabilities of households and enterprises as a share in the GDP



- Source: NBS
- The chart contains:
  - on the side of liabilities: bank loans, leasing, hire purchase, factoring and issued bonds
  - on the side of assets: bank deposits, mutual and pension funds, life insurance and purchased equities and bonds

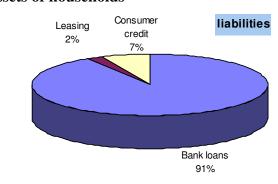
From this viewpoint it is positive that the net position of households and enterprises visà-vis the financial sector is asset; in aggregate, the households act as a net creditor (the share of liabilities in assets was 77.5% as at the end of the period monitored). It is above all the result of the accumulation of financial assets on the part of households, in which private pension pillars (defined contribution) are beginning to take part more and more significantly along bank deposits and investments in mutual funds

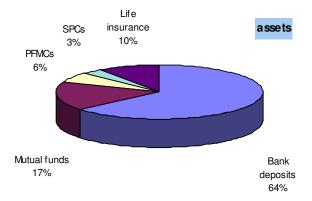
and life insurance. On the other hand, the corporate sector is in the position of a net debtor against the financial sector.

#### Financial assets and liabilities of households

Financial commitments of households are oriented particularly towards those banks that simultaneously bear the main risk associated with the eventual failure to pay these commitments. The structure of financial assets is considerably more complex. which is from the viewpoint diversification, especially because a volume amounting to more than 40% of the GDP is concerned. Pension funds and life insurance play an important role which creates a stable element within the framework of financial assets of households due to their long-term character, also from the viewpoint of the resources of the financial market that allow long-term investments.

## Chart 6 Structure of financial liabilities and assets of households

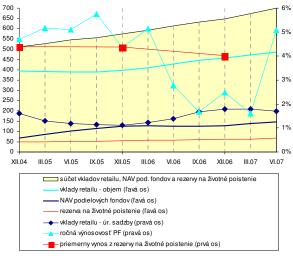




Source: NBS

In the last few years, the financial investments of households have been carried out into two main aggregates of sources - in the form of real estate deposits with the banking sector and in the form of investments in mutual funds in the collective investment sector. The sum of both aggregates in the first half of 2007 was growing linearly, which confirmed the trend that has been ongoing since 2004. The negative correlation between the net asset value in mutual funds and their yields was associated with a strong attachment of the annual yield of mutual funds to the exchange rate of the Slovak koruna.

Chart 7 Time development of some aggregates of the households' financial assets in dependence on yields



Source: NBSData in SKK billion

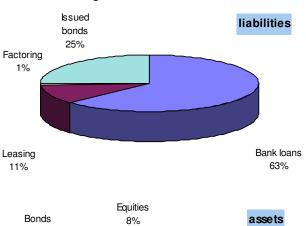
The household assets are thus invested in banks or mutual funds in dependence on interest rates. From the viewpoint of the banking sector, this is largely a neutral development since the asset management companies managing mutual funds with the largest share on the market are owned by banks.

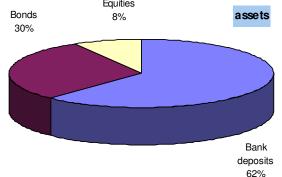
#### Financial assets and liabilities of enterprises

Unlike households, enterprises are not financed by banks to such a great degree despite the standing prevalence of this type of

financing (Chart 8). Several enterprises, larger ones in particular, take advantage of a direct financing through the issue of debt certificates. On the other hand, the structure of financial assets of the corporate sector is relatively simple due to the fact that enterprises basically have no reasons for long-term financial investments; the main concern is that of temporarily available liquid funds (Chart 8).

## Chart 8 Structure of financial liabilities and assets of enterprises





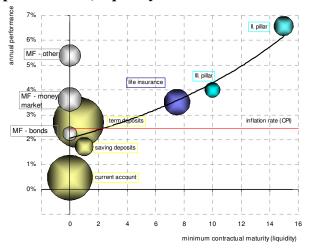
- Source: NBS

# Household financial assets: performance, liquidity and risk

Households have the possibility of placing their financial assets into various products of financial institutions (Chart 9). Performance (the annual rate of appreciation), liquidity (minimum period of restriction of funds in the given product) and risk (e.g. the existence of a guarantee scheme or a minimum guaranteed yield) are the basic parameters of these investments.

A substantial part of the households' financial assets is fixed in short time bands where bank products dominate. Mutual funds (most of them are open) can be also considered very liquid; however, the main difference lies in a higher risk and also in the yield, which with several funds requires that due to a daily volatility, the assets have to be kept in the fund for longer periods. In other words, the shorter the period of keeping the assets in a mutual fund, the greater the diffusion of these assets' performance. This is one of the reasons for the resources in mutual funds being de facto less liquid than those in bank accounts.

# Chart 9 The structure of households' financial assets from the viewpoint of performance, liquidity and risk



- Source: NBS
- The size of the circle represents the volume of assets in the given product
- The data on liquidity and performance of life insurance are only estimated, in the case of the second pillar, an amendment to the Act on social insurance is taken into account

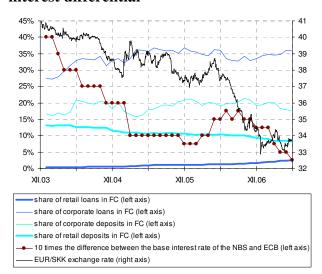
Households' financial assets fixed for longer periods are only placed in pension funds and capitalisation life insurance. If we exclusively consider only their voluntary component (apart from the PAMCs), both schemes are connected through tax advantage

and a prospect of appreciation above the inflation rate. In life insurance, this prospect is given by the minimum guaranteed interest rate whereas in the supplementary pension savings, from the viewpoint of households, the income from an investment is determined by the employer's contribution to a considerable degree.

# Changes in the monetary structure of financial assets and liabilities of households and enterprises towards banks

From the viewpoint of monetary structure, households, unlike enterprises, are oriented more towards the local currency in the long term and this applies equally both to financial assets and financial liabilities of the two sectors.

# Chart 10 Monetary structure of household deposits and loans, exchange rate and interest differential



- Source: NBS, ECB
- The shares in foreign currencies are calculated in the overall corporate or retail deposits or loans

A greater orientation of enterprises towards foreign currency, observed particularly in the data reported by banks, is natural, especially considering the fact that, in the past, the banking sector used to focus on big enterprises from Bratislava region, which had business links to foreign countries. This is one of the

reasons why we can consider the exchange rate of SKK/EUR, the interest differential of SKK/EUR and the expectation of Slovakia's entry into the euro area as only a few of the factors of the monetary structure of corporate deposits and loans. The nature of the enterprises' activities remains the dominant factor.

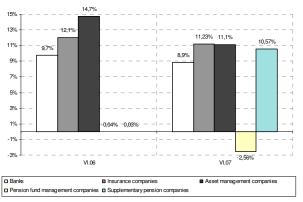
On the other hand, it was actually the exchange rate of SKK/EUR together with the expectations as to its development that were the dominant factors of the monetary structure of household deposits and loans in Slovakia.

The difference in the interest rates of SKK and EUR did not play a part in the growth of foreign currency loans, unlike in Hungary and Poland. The greatest relative fall in foreign currency deposits and the greatest relative growth of foreign currency loans have been occurring during the last six months of 2007 with the interest differential being the smallest, and simultaneously there was an experience with a significant strengthening of Slovak koruna vis-à-vis euro. The expectation of Slovakia's entry into the euro area probably played a rather minor role since e.g. the share of foreign currency deposits decreased.

#### **Profitability**

The profitability in multiple financial institutions, measured by ROE, found itself under a slight pressure in the first half of 2007. Compared to June 2006, the average return on equity fell in the banking sector, in the insurance sector and the collective investment sector (Chart 11). The change, however, occurred on the equity side rather than on the profit side.

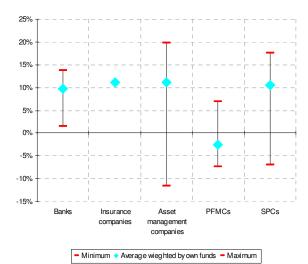
# Chart 11 The average ROE value in individual sectors as at June 2006 and June 2007



- Source: NBS
- The values are biannual and non-annualized
- In June 2005, the average ROE values in PAMCs and SPICs were at the level of – 0.04%, or 0.03%

On the other hand, supplementary pension asset management companies managed to reach the level of other sectors of the financial market with ROE values slightly above zero. Pension asset management companies still find themselves in a moderate loss, which, however, is natural considering their recent entering into the business associated with high initial costs.

# **Chart 12 ROE intervals in the individual sectors in June 2007**

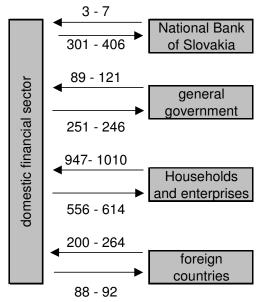


- Source: NBS

#### Selected financial flows

The trend of a deepening interconnection between the financial sector and the real economy entities continued in the first half of 2007. The growth of financial flows between these two sides was mutual. On the other hand, the increment to the funds of the financial sector acquired from real economy entities was accompanied by an increase in claims against households and enterprises. The claims of financial institutions against NBS also recorded a significant growth. An increased inflow of funds also came from the general government and from abroad. The value of household, corporate and general government deposits was at the level of SKK 1131 billion as at 30 June 2007 which, compared to the end of the previous year, represents an increase by SKK 95 billion.

# Scheme 1 Selected relations between the financial sector and other sectors, December 2006 and June 2007



- Source: NBS
- Data in SKK billion.
- Numbers above the arrows:
- First from the left December 2006
- Second from the left June 2007
- The data on general government also include government bonds and treasury bills
- The data on the NBS also include NBS bills

Financing the different real economy sectors was performed mainly through banks. Other financial intermediaries, particularly leasing companies, factoring companies and hire purchase companies, were also performing some activities in this area (Scheme 1).

The main economic entities (households, enterprises as well as general government) keep a major part of their financial assets in banks

who at the same time are their main creditors. Thus, due to the option of accepting deposits and providing loans, the banks constitute the main link between real economy and the financial sector. This exclusive function of banks is also reflected in their share in the overall volume of assets managed by the financial market institutions.

Table 1 Selected relations between economic entities, December 2006 and June 2007

		Domestic financial sector				Domestic non-financial sector			Foreing countries					
in SKK bn	NBS	Domestic banks	Insurance companies	PFMCs	SPCs	AMCs	Other fin. comp.	Households	Enterprises	General government	Foreing banks	Foreign AMCs	Foreign general gvt. and int. institutions	Other
NBS		3 - 7	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0,2 - 0,3	0,1 - 0,1		107 - 210		196 - 188	32 - 28
Domestic banks	301 - 406	63 - 64	(	0,04 - 0,04		0 - 0	64 - 62	221 - 249	335 - 365	251 - 246	55 - 50		3 - 3	30 - 39
Insurance companies	0 - 0	45 - 50				3,2 - 2,9								
PFMCs + SPCs	0 - 0													
AMCs	0 - 0	23 - 27				12 - 7,7								
Other fin. comp.	0,1 - 0,1	26 - 32				12 - 1,1								
Households	0,7 - 0,8	439 - 463	62 - 68	28 - 40	21 - 23	89 - 95								
Enterprises	0 - 0	307 - 320				0,9 - 1	Ì					24 - 25		
General government	0 - 0,2	89 - 121				0 - 0	ĺ							
Foreing banks	9 - 6	182 - 244												
Foreign AMCs														
Foreign general gvt. and int. institutions	3 - 0,3	3 - 0,4				0,8 - 0,8								
Other		14 -19												

No direct relationship creditor - obligor

Data not available

- Source: NBS

- Data in SKK billion.
- First from the left December 2006
- Second from the left June 2007
- **Rows:** a view on financial assets (loans, provided deposits and securities) invested in institutions quoted in the columns
- Columns: a view on liabilities (deposits and accepted loans) against institutions quoted in the columns
- The value of technical funds for life insurance is given in the case of insurance companies

Collective investment entities are the second most important after the banks, judging by funds acquired. Households, for whom investments in mutual funds represent the main alternative to bank deposits, are of main concern.

The importance of banks within the financial sector is also accentuated by the fact that other institutions of the financial market deposit their assets with them, including insurance companies and foreign banks.

Therefore, they can intermediate financial flows not only between real economy entities and the financial sector, but also mutually between the individual financial institutions (Table 1).

Insurance companies, whose insurance activities contribute to risk diversification, have a special significance within the financial system. Furthermore, they offer the households a possibility of long-term investments in the form of investment and capital life insurance,

which represent the majority of premium paid by households.

Table 1 offers a schematic view also on the households' financial assets. Relations between households, enterprises and the general

government are not the objects of the financial sector analysis, for which reason the data in the right lower corner of the table are missing as well

#### Box 2 Mortgage crisis in the USA and its impact on Slovakia

Lately, the global financial market was shocked by the so-called mortgage crisis in the USA. This crisis affected directly or indirectly almost the entire financial sector. It had a direct impact on banks and mortgage societies that were involved in the US mortgage market, and an indirect impact on almost all financial sectors in the world, particularly due to a lower liquidity, decrease in asset prices and an increased insecurity.

The aim of this box is to describe the origins of the US mortgage crisis in a nutshell, to evaluate the impact it had on the domestic financial sector and to pose the question whether a similar situation can emerge in Slovakia.

#### Main reasons behind the US mortgage crisis

The mortgage crisis began to appear in 2006 and was associated with an increase in interest rates. In loans with a variable rate, the higher rates manifested themselves in higher loan instalments paid by households and subsequently in their inability to pay off the loans. In the course of 2006, the volume of non-performing loans grew to more than one sixth of the total volume of loans provided to lower income groups.

The mortgage crisis in the USA involved the so-called *subprime borrowers*. They are a specific group of households that is most often defined by lower income and an ill credit history. In other words, they are the households who were assigned the lowest ratings by banks. Provision of loans to these groups of households is a common phenomenon in other countries as well; in the USA, however, financing of low-income groups of the population was associated with certain particularities that largely contributed to the crisis.

Above all, the volume of loans provided to the *subprime* households is concerned. Between 1994 and 2005, the US mortgage market had grown from USD 35 billion to USD 665 billion. In 2006, loans provided to low-income groups constituted more than 20% of the overall mortgages provided in the USA. In other words, one in five loans provided, as at 2006 was a loan to a riskier group of households.

Another specific problem was the character of loans provided to these groups of the population. In most cases, this included loans that in the beginning had been attracting the clients with low interest rates, whereas these were later increased, bringing about an increase in loan instalments. A hybrid mortgage product labelled 2/28 was involved in most cases, offering a fixed interest rate for the first two years and subsequently allowing them to change every six months. Usually the rates increased by 1.5 - 3 percentage points and kept increasing even though no correspondingly significant changes were happening in the economy. This characteristic was one of the reasons why this type of loan was dubbed an *exploding loan*. This type of loan constituted more than 80% of all securitised *subprime* loans in 2006.

The fact that banks and mortgage societies provided this type of loan was largely associated with a significant relaxation of loan standards in the last few years. Despite an obvious risk the households were taking at an increase in interest rates, the banks evaluated the sensitivity of households to changes in interest rates only to a minimum degree.

The relaxation of standards is related with a change in the approach of the loan providers to risks arising from loans. Whereas in the past the banks usually strived for a maximum decrease in credit risk in the provision of loans due to high costs associated with recovering unpaid loans, today this rule is no longer universally valid. At present, banks have the option to transfer the risk from these loans to other entities via securitisation or credit derivatives. Such a distribution of risk creates the so-called *principal-agent problem*. This means that the provider of loans, i.e. the bank, only has a minimum interest in a thorough risk analysis due to the transfer of risk to other entities, and the bearers of the risk, i.e. the investors, only have little chances to influence this process. In the USA, the banks used the possibility to securitize loans to a maximum degree. In 2006, more than 56% of the total mortgages were securitised in this way, and two thirds of subprime loans. Even though a part of the risk still remains borne by the loan provider by means of the lowest tranches within the securitisation structure or other clauses, the investors are only protected to a certain degree and almost not at all at a time of high market fluctuations.

The investors themselves had their own share in the relaxation of standards. Low interest rates on the financial markets were creating a high demand for investments with a higher rate of return. And it was the securities created by securitisation of loans provided to low-income household groups, which comprised such assets. The actual demand of investors thus indirectly created pressure on an increase in the volume of loans to low-income groups.

#### Impact of the crisis on the financial sectors

An overall evaluation of the impacts of the mortgage crisis would be premature due to the fact that it is still in progress. Apart from the negative impact on the US households, the crisis caused losses in loan portfolios in multiple mortgage societies and banks in the USA and Europe, high losses in securities portfolios in many banks, hedge funds and other institutional investors. The insecurity arising from the exposure of different institutions to this crisis has created an overall insecurity in the financial markets. The banks considerably decreased their involvement in riskier investments and redirected their investments into safer assets. Subsequently, central banks had to react to this significant fall in liquidity by increasing it. The impact of the crisis is expected to negatively influence the economic growth of some countries.

The extent of the impact on sectors in individual countries varied. So far, this crisis has had a significant impact particularly in the USA, Great Britain and Germany as well as in other EU member states.

A direct exposure of the Slovak financial market to the crisis has been limited. Most banks recorded only an indirect impact when, due to insecurity on the financial markets, there has been a fall in the prices of some securities in the portfolios for trading and for sale. Some banks reckon on a slight fall in profit for the year 2007 (up to 3%).

In the case of insurance companies, the expected impact is even less significant since their technical reserves are invested in shares only to a small extent.

Funds in particular were naturally affected by the US mortgage crisis. The net asset value in pension funds fell temporarily, the average fall in shares in which the funds invested was around 5%.

#### Possibilities of the emergence of a similar crisis in Slovakia

It remains a particular question whether a crisis similar to that in the USA can emerge on the Slovak mortgage market. As we have mentioned, the US crisis was associated with certain particularities of the US market. However, the exposure of Slovak banks to household credit risk is different. It is especially the simple loan products on the domestic market that make a substantial difference, together with a different position of domestic banks which, in Slovakia, are the bearers of credit risk.

The distribution of household indebtedness indicates that the largest proportion of loans in Slovakia has been so far provided to households with a higher income. Although between 2005 and 2006 there was an increase in loans to lower income groups, the highest income groups are still holding the majority of loans. In 2006, 20% of households with the highest income held more than 40% of all provided loans.

A certain similarity exists in the fixation of interest rates on house purchase loans where the majority of loans have a short-term rate fixation, which is related with interest rates in the individual fixations. However, stress testing of an increase in interest rates in the domestic banking sector confirmed that households are able to manage an even more considerable increase in interest rates. Similarly, neither the increase in interest rates during 2006 caused a substantial increase in non-performing loans in the banks' portfolios.

An essential fact is that no bank in Slovakia has yet carried out securitisation of house purchase loans and, according to our information, the banks are not planning such activities in the near future. Therefore, credit risk arising from loans remains in the banks, which have therefore a primary interest in keeping it as low as possible.

Similarly, neither the banks are under pressure of investors who would force them to provide loans to lower income groups with a subsequent securitisation of these loans.

The mortgage crisis in the USA proceeded from certain specific problems of household financing in the USA, which are, with the exception of the short fixation of interest rates, essentially incomparable with our situation. Therefore, we are not expecting a crisis of a similar character in the Slovak banking sector. On the other hand, it should be mentioned that also on the domestic market there is a chance of an emergence of problems involving the household credit risk. However, we assume that a potential major crisis would be associated with a more significant decrease in the performance of economy, which would negatively influence the financial position of households, rather than with the actual evaluation and transfer of risk.

## 1 Banking Sector

## Main changes and trends in the banks' liabilities

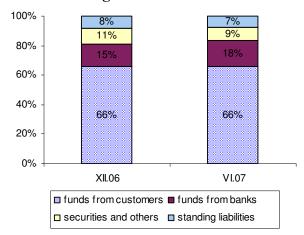
The basic trends in the main aggregates of liabilities continued also in the 1st half of 2007. The retail, corporate and financial companies' deposits have grown further, funds obtained from the issues of MB and other debt securities have also increased, whereas general government deposits (DLMA) together with foreign banks' deposits in foreign currency continued with a volatile development. On the sector level this means that the funds the banking sector can use for a stable loan financing have generally grown accordingly to loan activity. However, this is not true for home savings banks where the growth of loans has either surpassed the growth of funds or where the funds have fallen.

The households and enterprises were increasing especially SKK-denominated deposits, the share of foreign currency deposits was decreasing (the share of foreign currency loans was increasing on the assets side), which may be the result of an expected strengthening of Slovak koruna. On the other hand, foreign currency issues of MB emerged last year, being in at least one case associated with the provision of mortgages in euro. The reason, however, is most probably a decline in euro rates and marketability of securities on the European markets.

In the first half of 2007, compared to the end of 2006, slight changes emerged in the structure of liabilities of the Slovak banking sector, especially in the growth of foreign banks' deposits, particularly in foreign currency (more in the chapter Interbank market) Other aggregates, significant from the viewpoint of stable financing of the banking sector's assets, continued with the last year's positive trends.

One of the indicators of the banking sector's stability from the viewpoint of resources is the indicator of a comparison of client deposits to client loans (loan-to-deposit ratio<sup>1</sup>), which shows the degree to which the banking sector is able to finance the provision of loans to clients from deposits accepted from clients or from stable domestic funds. Sufficiency of domestic funds brings minimises the risk of a dependence of the growth of loans (and economy) on unstable foreign funds.

## Chart 13 The structure of liabilities of the Slovak banking sector



Source: NBS

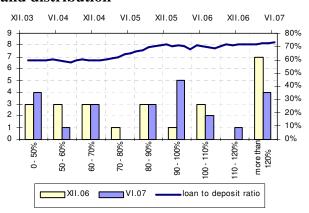
During the first half of 2007, a modest growth of the indicator was recorded by 12 banks of the Slovak banking sector, whereby its average value (average weighed by the volume of assets) for the banking sector reached 73% as at 30 June 2007, compared to the value of 72% as at the end of 2006 and 70% as at the end of the half of 2006. The growth of the indicator in the first half of 2007 was caused by a greater loan activity of the banks at a simultaneous, more moderate increase (or fall) in the clients'

<sup>&</sup>lt;sup>1</sup> The indicator of the loan-to-deposit ratio is defined as a ratio of total claims against clients and the sum of liabilities against clients except the DLMA deposits and deposits of the issued MB.

deposits and issued securities. It is positive that the value of this indicator is one of the lowest within the European Union.

Especially in some branches of foreign banks as well as in some other banks, the value of the indicator was higher than 100%, which is logical considering the character of their business. The value was on a lower level in the banks with a strong retail position, which holds true especially for the three largest banks.

## Chart 14 Loan-to-deposit ratio: development and distribution



- Source: NBS
- The bottom horizontal axis shows the intervals of the indicator, the number of banks with a given value is on the vertical axis.
- The top horizontal axis shows the date of the average value of the indicator, the average value is on the right vertical axis.

#### **Resources from clients**

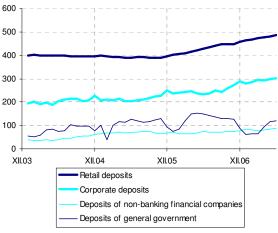
Liabilities against clients which in the long term constitute the greatest part of the banking sector's liabilities continued to grow in the first half of 2007, whereas their share in the sector's balance sheet total ranged between 64%-66.6%.

The volume of deposits continued to grow even despite the fall, or cessation of an increase in the average interest rates with the exception of average interest rates on corporate deposits whose growth was not associated with the volatile course of growth of corporate deposits.

Retail deposits (47.1%) and corporate deposits (29.3%) constituted the largest share in

client funds as at June 2007. The share of the non-banking financial institutions' deposits (8.5%) rose, whereas the general government deposits continued with their volatile course. The share of non-residents' deposits remained at an unchanged level of 1.8%.

Chart 15 Main aggregates of clients' deposits



- Source: NBS
- Data in SKK billion.

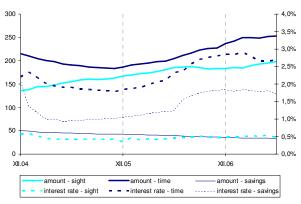
### **Retail deposits**

The growing trend of retail deposits continued in the first half of 2007, having been monitored since December 2005. This growth was primarily caused by the growth of households' financial assets, which also grew in other segments of the financial market (mutual funds and life insurance). A commonly important factor - interest rates on bank deposits, playing an important role at making decisions on the alternatives of the placement of households' free financial assets - did not manifest as considerably in the first half of 2007 as it used to in the past. However, the long-term influence of these rates is also confirmed by a high correlation (81%) between month-on-month changes in the average interest rates on retail deposits and the changes in their volume in 2006-2007.

In June 2007, household deposits again dominated in the area of retail deposits, with a 91.4% share. Approximately since June 2006,

the share of foreign currency deposits has been decreasing, probably as a result of higher interest rates on the Slovak koruna and its expected strengthening vis-à-vis Euro. The share of SKK-denominated retail deposits has thus increased to 91.7%.

## Chart 16 Structure of retail deposits and interest rates



- Source: NBS
- Data in SKK billion.
- The data on the right-hand axis are in percent.
- The chart only includes SKK-denominated loans and interest rates on SKK-denominated loans.

Despite a certain connection between the volume of retail deposits and their remuneration, the fall in average interest rates on time deposits during the first half of 2007 has not yet lead to the cessation or slow-down of the growth of deposits. Saving deposits in banks have been falling in the long term.

## **Corporate deposits**

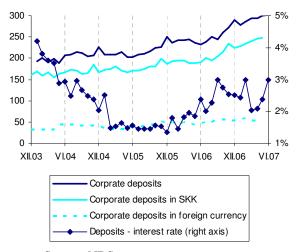
The significance of corporate deposits still gives them the second highest share in the banks' liabilities against their clients. By June 2007, they reached the level of SKK 302 billion; an increase by SKK 12.6 billion was monitored as compared to December 2006.

The volume of corporate deposits does not significantly react to the development of interest rates (47% correlation of changes); the growth of resources in the corporate deposit accounts is related rather with the growth of

their activity and with the situation of their liquidity. The value of interest rates on time deposit accounts is a factor for companies' decisions on choosing suitable offers of various banks, rather than on the volume they intend to deposit into a time deposit account.

Corporate deposits predominantly consist of SKK-denominated deposits (82.5%) but their share is not increasing as unequivocally as is the case of retail deposits, since they do not have the character of savings (for instance, in 2004 and 2005 this share was higher than today). By the end of the year it is possible to observe a certain seasonalness of SKK-denominated deposits related to a one-month growth and a subsequent fall in their value.

#### **Chart 17 Corporate deposits**



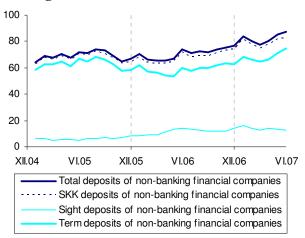
- Source: NBS
- Data in SKK billion.

In June 2007, compared to December 2006, a fall in corporate deposits was recorded in several banks but with respect to their generally volatile progress in individual banks, which is the result of the search for a better appreciation within the framework of the banking sector, it is not feasible to ascertain the trends in individual banks. The strong position of the group of the largest banks remains true (together more than 50% of all corporate deposits).

# **Deposits of non-banking financial institutions**

Deposits of insurance companies, pension funds, mutual funds of the financial market, financial intermediaries and auxiliary financial institutions differ in their nature from the deposits of non-financial institutions. Whereas in the case of enterprises, the temporarily free liquid funds were concerned, the non-banking financial institutions' deposits are the result of an investment strategy (technical reserves of insurance companies, investments of funds etc.). For the given reason we can establish that especially those SKK-denominated deposits are concerned, which are deposited in time deposit accounts. Furthermore, this is partly the case of corporate deposits belonging to their own financial group, which also has an influence on the relatively high remuneration of these funds (for the last 12 months by 1 p.p. less than a 3-month BRIBOR).

#### Chart 18 The structure of deposits of nonbanking financial institutions



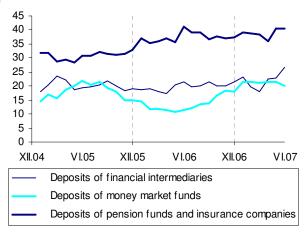
Source: NBSData in SKK billion.

The trend of growth of deposits remained preserved in the period monitored and the volume of deposits of non-banking financial institutions increased by 12% to SKK 83.7 billion since the end of the last year. In the first half of 2007, a fall in sight deposits was recorded, bringing about a tendency for a

development of deposits opposite to that within the period monitored since 2004 until now. This 22% fall in the volume of sight deposits since January 2007 was caused above all by the fall in deposits in the current accounts of insurance companies and pension funds.

Banks possessing asset management companies with a strong position on the mutual funds market held the largest market share in the non-banking financial institutions' deposits as at June 2007 in particular.

Chart 19 Structure of deposits of nonbanking financial institutions by contracting parties.



- Source: NBS
- Data in SKK billion.

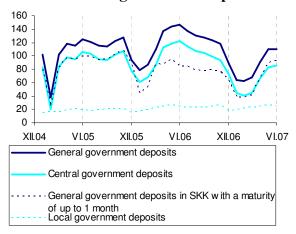
Deposits of non-banking financial institutions are a major source of deposits especially in the case of some banks and some branches of foreign banks with no retail activity.

The fall in deposits of the financial market's mutual funds, monitored from June 2005 to June 2006, had stopped and by June 2007 these deposits grew again, which was probably caused by a repeated increase in the sale of the financial market's mutual funds.

## **General government deposits**

The general government deposits consist mainly of central government deposits and deposits of the local government's funds. In the long term, the volume of local government deposits ranges between SKK 15 billion and SKK 26 billion, whereas the central government deposits (time deposits with a maturity of up to a year) are the result of DLMA trading and thus have a very volatile course.

#### Chart 20 General government deposits



Source: NBSData in SKK billion.

Local government deposits are mainly in the form of SKK-denominated sight deposits, that is, current accounts of towns and municipalities. The local government funds are characterised by a very high concentration.

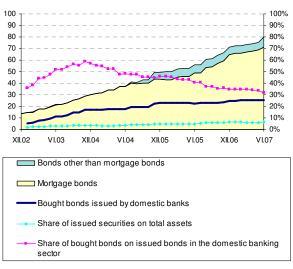
# Resources gained from issues of securities

In the first half of 2007, there were no significant changes in the issues of debt certificates in the banking sector. In regard to the provision of mortgages, the trend of issuing MB continues, other bonds and notes were issued in a lower quantity. The overall share of funds from the issues of debt certificates oscillated around 6% of the overall liabilities in the first half of 2007, which appears to be of little significance from the viewpoint of the banking sector's funds. Despite this, the issue of debt certificates was important for several individual banks where, for instance, the issue

of long-term debt certificates contributed to a long-term liquidity.

Whereas in the course of 2006 it had appeared that the banks were ceasing to buy bonds issued by other domestic banks, at the end of 2006 some purchases were again carried out within the framework of the banking sector. In general, however, the effect of the issue of debt certificates is increasing, since the share of purchased securities in the issued securities is decreasing. Mortgage bonds have a significant share in the issued securities (70% in June 2007). From the total volume of SKK 71 billion, SKK 10.7 billion was issued in foreign currency. Other funds are represented by the issued bank bonds and notes. As at June 2007, four banks issued bank bonds. As at June 2007, the value of issued bank bonds other than MB constituted SKK 8.8 billion in total.

#### Chart 21 Structure of issued securities



- Source: NBS. The data on the left axis are in SKK billion (volumes of securities)
- On the right axis there is the share of issued securities in the total assets in percent.

Bills of exchange represent a source, which is an alternative to the clients' time deposits. As at June 2007, eight banks had their bills of exchange issued in the total volume of SKK 21 billion. In the entire banking sector, the issued bills of exchange comprise 1.3% of the total amount.

## Main changes and trends in the banks' assets

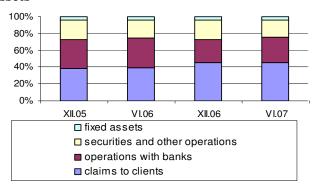
As on the liabilities side of the balance, so in the assets of banks the trends set in the previous years were continuing in the first half of 2007. Particularly the growth of client loans is a dominant trend. Household and corporate loans in particular were drawn by demand. Households showed the greatest interest in house purchase loans. There was a particular growth of financing of projects in the field of real estates within the framework of the corporate loan portfolio.

On the corporate and retail loan market, the concentration of the three biggest banks continued to grow.

The share of the purchased securities in the total assets was declining. The structure of the portfolio continued to be relatively conservative. Investments into foreign debt certificates were growing in selected banks.

At the end of the first half of 2007, the banks had the greatest part of their assets in client loans. Despite their absolute growth, the relative share of these loans was not changing. The reason for that was especially a dynamic growth of bank operations on the interbank market. After a fall in the second half of 2006, the banking sector was again increasing the volume of funds invested in NBS. Investments in securities fell in absolute as well as relative numbers.

**Chart 22 Structure of the banking sector's assets** 

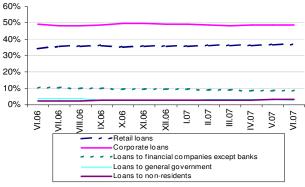


- Source: NBS
- The vertical axis shows the shares of individual aggregates of assets in the overall assets

In client loans, there was a continuance of trends set in the previous years. The volume of provided client loans rose by 20% since June 2006. Especially loans provided to retail and enterprises maintained a dynamic growth, the

volume of loans provided to non-banking financial companies and to general government slightly fell.

Chart 23 Loan portfolio of the banking sector



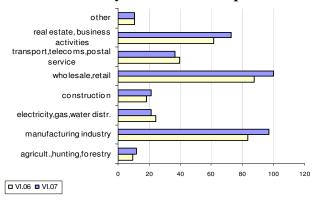
- Source: NBS
- The vertical axis shows the shares of individual loan categories in the overall loans

## **Corporate loans**

As at the end of June 2007, the banking sector provided loans to enterprises in a volume of almost SKK 360 billion. In the first half of 2007, the volume of loans had grown by SKK 31 billion. During the period monitored, the corporate sector was financed mainly by loans in foreign currencies. Since the beginning of the year, these have grown by SKK 19 billion. The growth rate of corporate loans in the local currency had fallen modestly at the end of 2006 and began to grow again during the first months of 2007.

From the sector viewpoint, the banks were mostly financing the industrial production, business activities and real estate investments. In the first half of 2007, the greatest volume of corporate loans was provided in the area of real estates (almost SKK 11 billion), wholesale (SKK 9 billion) and automotive industry (SKK 7.8 billion).

Chart 24 Industry structure of corporate loans



- Source: NBS
- Data in SKK billion.

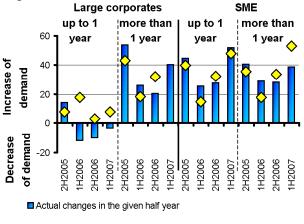
One of the factors of the increasing volume of loans to the corporate sector is a continuing growth of the enterprises' demand for loans. The demand for short- and long-term loans was shown especially by small and medium enterprises. Large enterprises showed a growing demand for long-term investment loans. In the background of this increased demand there is in particular a positive economic development reflected in the growth of long-term investments, restructuring of enterprises and a higher acquisition rate.

A growing demand for financing by the banking sector is expected also in the second half of 2007.

The banks focused mainly on financing small and medium enterprises. This segment is interesting for the banks especially because of higher interest margins and a relatively low indebtedness of small and medium enterprises.

A growing competition in the segment of small and medium enterprises manifested itself in the first half in a relaxation of loan standards in some banks. The banks particularly relaxed their demands on security and they were also lowering interest rates and fees.

Chart 25 The development of the demand for corporate loans



- Changes reported in the given half year as expected for the following half year
- Source: NBS, A questionnaire on the development of supply and demand on the loan market
- The data are in the form of a net percentage share; a positive value means an increase in demand.
- Changes in demand represent the subjective view of banks.

The corporate lending market is characterised by a lower concentration compared to the retail loan market. In June 2007, the group of the three largest banks reached a 45% share in the overall provided corporate loans. However, several medium-sized banks also play a significant role on this market. Despite the statement about a lower concentration and a higher competition on the corporate lending market as compared to the retail sector, the three largest banks provided as much as 75% of corporate loans in the entire sector in the first half of 2007. It is, however, difficult to interpret this data unless we have information on the number of loans due and payable in this period.

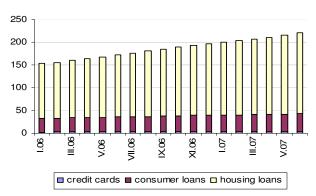
#### **Retail loans**

Loans provided to retail belonged to the most dynamically growing items in the banks' assets. In the first half of 2007, the banks provided retail loans in the volume of SKK 29.4 billion.

Compared to the second half of 2006, this was a modest growth. Loans in foreign currencies, despite the expected entry into the euro area, only constitute a small share in the total retail loans (2.6% in June 2007).

Retail loans were growing mainly due to house purchase loans, which in the first half had grown by 12% and as at the end of June 2007 they already constituted 67% of the total retail loans. Consumer loans were growing more modestly (by 5.6% in the first half of 2007). To the contrary, credit cards were popular with a mid-year growth of 11%.

Chart 26 Development of retail loans in the banking sector



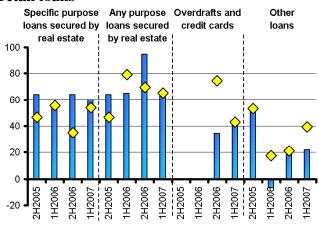
Source: NBSData in SKK billion.

Loans provided within the framework of savings for building purposes were falling behind the strong growth of loans in the retail sector. Since the beginning of the year, these have only grown by SKK 1.6 billion. The importance of loans from home savings banks within the framework of loans provided for real estates continued to decline (while at the beginning of 2006 they had comprised 36%, in June 2007 this was only 28%). The structure of provided loans was adapting more and more to the clients' needs. They prefer obtaining a loan without prior long-term savings, which results in an increase in bridging loans and a decrease in conventional building loans.

One of the main reasons for the growth of provided loans is the population's high demand

for loans. In the first half, particularly the demand for special purpose and non-purpose loans secured against real estates was growing. A similar development is expected in the second half of 2007 as well. The growth of demand was stimulated especially by a positive economic development, which was reflected in higher income and a growing confidence of the population in their future financial position. The demand was also supported by the growth of real estate prices, which resulted in an increase in expenditures on the purchase of real estates.

Chart 27 The development of the demand for retail loans



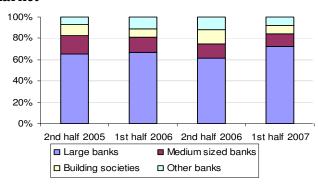
- Actual changes in the given half year
- Changes reported in the given half year as expected for the following half year
- Source: NBS, A questionnaire on the development of supply and demand on the loan market
- The data are in the form of a net percentage share; a positive value means an increase in demand.
- Changes in the demand express a subjective view of the banks.

The standards of loans provided to the population only changed in a few banks in the first half of 2007, according to the questionnaire on loan standards. Standards of loans secured against real estates were being relaxed. However, the influence of this relaxation of standards on the growth of provided loans was insignificant.

Specific conditions of providing loans were being changed. Whereas in larger banks, the changes usually took the form of increasing limits on the amount of loans and on their maturity, some smaller and medium banks were decreasing interest margins and the amount of fees as well.

The growing concentration on the retail loans market is remarkable. A large network of branches as well as a traditionally strong position on this market is helping especially the three largest banks. In the first half of 2007, they participated in the growth of retail loans with 72%, while in the second half of 2006 this had been at the level of 60%. The share of most other banks in the absolute growth was decreasing in the period monitored.

## **Chart 28 Concentration on the retail loans** market



- Source: NBS

## Loans provided to other sectors

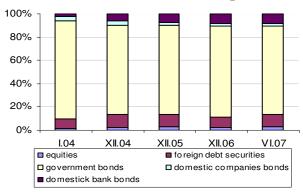
Loans provided to non-banking financial companies recorded a relatively volatile development. The volume of loans provided to these companies had been growing significantly until December 2006. To the contrary, in the first half of 2007 the volume of these loans was rather decreasing. The banks provide these funds mostly to leasing companies and hire purchase companies. Financing of companies within their own groups is involved to a great degree.

Loans provided to the general government during the first half of 2007 increased by 12%. Local government loans have fallen since the beginning of the year. Loans provided to foreign entities have grown by more than SKK 5 billion since the beginning of the year.

#### **Investments in securities**

While a few years ago, the securities still constituted the main part of the banks' assets, at present their share in the total assets oscillates around the level of 20%. The decrease mentioned is related to a gradual expiry of the maturity of state bonds acquired by selected banks as part of restructuring of their loan portfolios. However, it must be noted that banks often partly substituted restructuring state bonds for other issues of state bonds.

Chart 29 Structure of the securities portfolio



- Source: NBSCP securities
- The chart shows the shares of the basic categories of securities in the total volume of securities.

Despite a fall in state bonds, the banks still hold a relatively conservative securities portfolio. During the last years, there has been an increase especially in the domestic banks' bonds, which is related to the obligation of banks with a mortgage licence to issue mortgage bonds. Especially foreign debt securities hold a stable share, whereas the banks invested mostly in bank and corporate bonds.

More than 74% of securities in the sector are held by the three largest banks. They enjoy an even larger share in the case of state bonds, with an almost 80% share in the total volume of state bonds in the sector. The three largest banks also had a dominant position in the area of domestic bank bonds possession, owning almost 70% of the volume in the sector.

Asset securities comprised almost SKK 10 billion in the banks' portfolios in June 2007. Of this, foreign shares comprised SKK 7 billion. In the first half, the banks continued with purchasing foreign asset securities in particular

#### Interbank market

The development on the interbank market was influenced mainly by a decline in the NBS base rate in the first half of 2007, in total by 0.5 percentage points in March and April, as well as by an NBS intervention on the foreign exchange market during these months amounting to EUR 1.930 million and EUR 700 million. The yield curve had an inverse character during the first three months, reflecting the expectations of the banking sector that the interest rates would fall; a parallel downward shift of the curve took place in April. During May and June, the curve was gradually evening out, when the banks no longer expected any further changes in the NBS rates. After the fall during the second half of 2006, the volume of interbank assets and liabilities was growing again, with mainly the volume of sterilised funds in the NBS growing on the assets side and deposits of non-resident banks on the liabilities side.

During the first half of 2007, both assets and liabilities interbank operations reported an upward trend compared to the second half of 2006. The greatest changes occurred in March (growth of assets by SKK 39.3 billion, growth of liabilities by SKK 38.6 billion) and April (growth of assets by SKK 49.5 billion, growth of liabilities by SKK 30.3 billion); a fall was only observed in May (on the assets side by SKK 28.6 billion, on the liabilities side by SKK 38.5 billion). In June, the volume of interbank assets<sup>2</sup> reached SKK 494.3 billion, which compared to December 2006 represents an increase by SKK 96.5 billion (a relative change by 24.3 %), the volume of interbank liabilities<sup>3</sup> comprised SKK 274.6 billion, an increase by SKK 60.7 billion occurred (a relative change by 28.4%).

A modest increase in the ratio of these operations to the balance sheet total occurred together with an increase in their volume. The share of active interbank operations in the banking sector's balance sheet total increased from 27.1% as at the end of December 2006 to 30.4% as at 30 June 2007. The share of

Within the period monitored, the predominant part of the interbank market transactions consisted of transactions with foreign banks, their value oscillating around 70% of the total volume of transactions. Deposit contracts predominated among transactions with domestic banks, swap contracts among transactions with foreign banks<sup>4</sup>.

The largest share in interbank assets was held by funds sterilised by NBS by means of deposits and loans, minimum reserve requirements or an issue of treasury bills, with these funds comprising 81.0% of interbank assets on average during the first half. As at the end of June 2007, their volume increased by SKK 79.2 billion compared to 31 December 2006, whereas the relative growth constituted 30.1%.

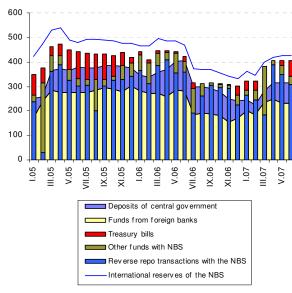
accepted deposits and loans from NBS, local and foreign banks in the total assets amounted to 17.6%, which represents an increase by 2.4 p.p. compared to 31st December 2006. Almost all large and medium banks recorded growth.

<sup>&</sup>lt;sup>2</sup> Interbank assets are the sum of claims against NBS and domestic as well as foreign banks, and treasury bills.

<sup>&</sup>lt;sup>3</sup> Interbank liabilities are the sum of accepted deposits and loans from NBS, domestic and foreign commercial banks.

<sup>&</sup>lt;sup>4</sup> Source: NBS Monetary Survey

Chart 30 Development of interbank assets and liabilities and central government deposits

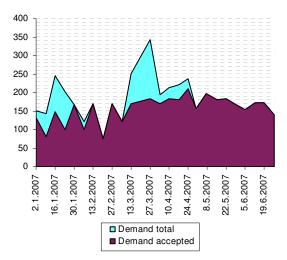


- Source: NBS
- Data in SKK billion.
- The chart omits mutual operations between the domestic banks

During January, March and April 2007, NBS was not accepting the overall demand for sterilization REPO transactions at regular weekly auctions. Neither the auctions of NBS treasury bills took place in this period, which together with interventions resulted in an increase in free funds on the interbank market. The banks appreciated these funds with the help of overnight sterilisation NBS deposits, for which reason there occurred a significant increase in the ratio of short-term sterilised funds to the total resources deposited with NBS during this period, with a simultaneous decrease in the share of medium-term funds<sup>5</sup>. In March 2007, the share of deposits with the help of biweekly REPO contracts represented only 47,8%.

In the months of February, May and June 2007, the NBS was accepting the entire demand within the framework of REPO tenders. Due to the failure to adjust the demand to possibilities of liquidity, the banking sector found itself in a state of insufficient liquidity during February, which could be observed in an increase in interest rates on the shortest maturities. The banks were dealing with insufficient liquidity by using overnight refinancing NBS loans. During May and June, auctions of PP NBS were being held again, with much interest shown by the banking sector.

Chart 31 The total and the accepted demand within the framework of regular REPO tenders



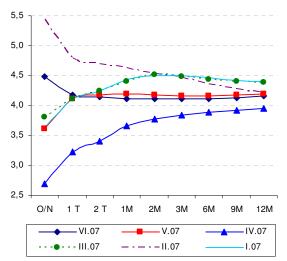
- Source: NBS
- Data in SKK billion.

The minimum reserve requirements reached the level of SKK 21.62 to 24.3 billion, their real fulfilment amounted to values between 100.1 % and 100.4 %.

Deposits and loans to domestic banks oscillated on approximately the same level as during 2005 and 2006. Following a modest fall in May, by 30 June 2007 the SKK-denominated receivables against domestic banks reached the value of SKK 32.1 billion, reaching the same level as they were at as at the end of December 2006.

<sup>&</sup>lt;sup>5</sup> The volume of funds deposited with the NBS decreased by means of two-week REPO tenders and three-month treasury bills

Chart 32 The development of BRIBOR yield curves

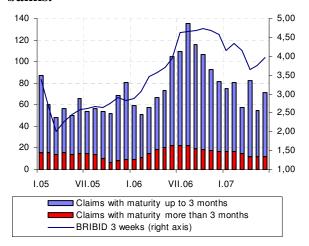


- Source: NBS
- Data on the vertical axis are in percent and represent the average values in the given month calculated with daily data
- O/N overnight rate
- Maturities: T -in weeks, M in months

The volume of SKK-denominated claims against foreign banks was not changing significantly during the first half; hence it was reaching values similar to those in the second half of 2006. Claims in foreign currency against foreign banks, following a significant increase in the first half of 2006 and having reached the amount of 63.3% in August, were continuing with the downward trend and reached the value of SKK 1.6 billion as at the end of June 2007, which is roughly the level as at the end of 2005 (SKK 16.7 billion).

According to maturity, receivables of under 3 months continued to dominate. Receivables of over 3 months declined as they had during the second half of 2006, which might have been caused by a decrease in key interest rates on one hand and thus also by lower interest rates on the interbank market on the other hand.

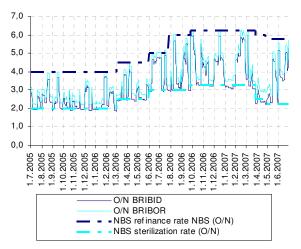
Chart 33 The development of the volume of loans and deposits provided to commercial banks.



- Source: NBS
- Data on the left-hand axis are in SKK billion.

A modest state of insufficient liquidity occurred only during February 2007, when NBS again accepted the overall demand in the framework of regular REPO tenders that had not been adapted to the banks' liquid The volume possibilities. of financial resources during this month represented SKK 3.9 billion, of which refinancing REPO contracts amounted to SKK 0.8 billion. In the remaining months, the amount of refinancing loans ranged between SKK 3.0 and 3.1 billion. Refinancing REPO contracts have not been concluded with any bank. This state also characterises the development of overnight refinancing rates, when during January, March and April 2007, these were at the level of the NBS sterilisation rates; and during February, May and June 2007, when the central bank was once again accepting the overall demand for sterilisation REPO contracts, they were at the level of NBS refinancing rates. In February, when the volume of refinancing contracts had grown, these rates slightly exceeded the level of NBS refinancing rates.

Chart 34 Development of overnight interest rates on the interbank market



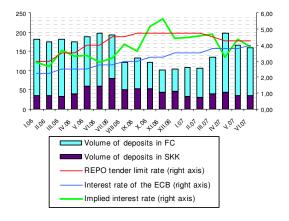
- Source: NBS
- Data given in percent.
- O/N overnight rate

The volume of domestic banks' deposits was showing the same tendency as the volume of domestic banks' loans and reached levels similar to those during 2005 and 2006.

Following a fall during the second half of 2006, the volume of funds from nonresident banks was growing again, with mainly the funds in foreign currencies increasing from the value of SKK 115.7 billion as at the end of December 2006, to the value of SKK 186.9 as at the end of June 2007, with the maximum value in March 2007, i.e. SKK 198.3 billion. To the contrary, the funds in Slovak koruna were decreasing from SKK 54.7 billion as at 31st December 2006 to SKK 44.4 billion as at 30 June 2007. They reached the greatest value in April, i.e. SKK 59 billion. The reason for this development may lie in the appreciation of Slovak koruna vis-à-vis euro during this period, since after the conversion, the banks were depositing the predominant part of these funds in sterilisation contracts with the NBS. The largest growth of foreign currency deposits could be monitored particularly during March, when the volume of foreign reserves also rose significantly.

The implied interest rate on the domestic and foreign banks' deposits oscillated between the levels of the NBS base rate and the ECB rate, depending on the composition of these deposits. In the period of August 2006 to March 2007, when the share of foreign currency deposits in the total volume of deposits fell, the interest rate was higher and oscillated around the NBS base rate level. After March 2007, the implied interest rate fell again, which might have been caused both by the growth of the non-resident banks' deposits in foreign currency, and by lowering the national bank's base interest rates.

Chart 35 Development of non-resident banks' deposits and the implied interest rate



- Source: NBS
- Data on the left-hand axis are in SKK billion.
- The data on the right-hand axis are in percent.
- The implied interest rate was calculated as twelve times the share of interest expenses in the non-resident banks' deposits expended in the given month, and an average volume of these expenses in the given month, calculated using daily data.
- The calculation of the implied interest rate excluded those banks, which had not reported any expenses on the non-resident banks' deposits.

#### **Off-balance sheet**

The development of the off-balance sheet assets (liabilities) for the first half of 2007 was affected by significant increases in January and April and gradual outflows during the remaining months of the respective period. At the end of the first half of 2007, the banks in the sector were holding in their accounts off-balance sheet assets (liabilities) worth SKK 2.791 billion (SKK 2.609 billion), which equal 178% of the aggregate balance sheet. Compared to the end of the last year, this constituted an increase to 11.3% (10.9%). Right in the first month of the year, the volume of fixed-term operations grew significantly, especially due to monetary instruments. In the first half there was a high - as much as 42% - growth rate of options which thus increased their share in the off-balance sheet at the expense of almost all the other aggregate items by 3.4 p.p., to as much as 14.6%. So far, however, the banks' positions from the option contracts are almost entirely risk-free, since the absolute majority of options were traded to the benefit of clients and at once concluded back-to-back on the international interbank market. The March growth of resources sterilised by the NBS was reflected in an increase in guarantees in the form of securities held in the banks' off-balance sheets.

Table 2 Year-on-year changes in derivative instruments

	Value of underlying assets						
	VI.2007	XII.2006	VI.2006	Year-on- year change	Change compared to XII.2006	Positive fair value VI.2007	Negative fair value VI.2007
Fixed term operations	1,314 631	1,287 028	1,466 313	-10%	2%	16 801	18 429
Interest rate	612 965	606 159	564 920	9%	1%	7 534	7 487
Foreign exchange	701 667	680 870	901 394	-22%	3%	9 267	10 942
share, commodity and loan	0	0	0	0%	0%	0	0
Options	408 383	288 035	334 122	22%	42%	4 772	4 668
Interest rate	11 266	13 500	8 262	36%	-17%	40	40
Foreign exchange	386 486	266 613	325 352	19%	45%	4 069	3 972
share, commodity and loan	10 632	7 922	508	1 993%	34%	663	656

- Source: NBS

Data in SKK billion.

#### **Derivatives**

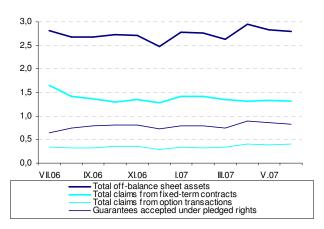
Also in the first half of 2007, derivatives maintained the most important position within the off-balance sheet. The volume of underlying assets reaching SKK 1,723 billion and its corresponding 61.7% share in the entire off-balance sheet, these are the two basic numbers characterising the state of derivatives in the sector as at 30 June 2007. For the first half of this year, derivatives were growing at a rate of 9.4%, which was almost precisely sufficient just for the maintenance of their aggregate shares both in the off-balance sheet

and balance sheet assets (110%) in the banks. The mentioned growth, however, was distributed very unevenly in time, with the banks having recorded almost the entire increase during the first calendar month of this year. Following this one-time striking increase in the volume of derivatives, worth SKK 165 billion, in the following period the development of their value was stabilised on approximately the same level as that at the end of the first half.

Usage of derivatives by individual banks in the sector is considerably uneven. About a third of the banks do not own any derivatives. Five banks represent the opposite part of the spectrum, characterised by the possession of a volume of derivatives greater than the balance sheet assets themselves. The remaining banks in the sector also own a certain number of derivatives but the value of their underlying assets does not exceed the volume of the balance sheet.

A more detailed view on the structure of derivatives tells us that thev predominantly (76.4%) of fixed-term contracts. Despite an increase in the term instruments in the past half by 2.1%, their actual, a little more than a three-quarter, share in derivatives means a decrease in this ratio by more than 5 percentage points compared to the end of 2006. Furthermore, it should be remembered that the increase in these instruments was not a consequence of a long-term trend, but of a onetime increase in January 2007. Its crucial component was an increase in currency swaps by almost SKK 80 billion. It is still valid that the future-dated transactions related exclusively foreign exchange and interest instruments. Both these components recorded a growth of up to 4%. The January growth of swaps was not reflected in a higher half-year growth in the case of monetary instruments, due to a similar extent of fall in these instruments in March this year.

Chart 36 Development of the volume of offbalance sheet assets in the sector.

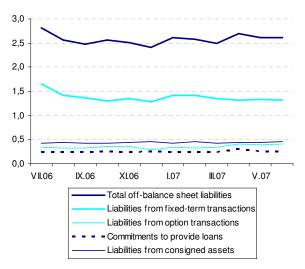


- Source: NBS

- The values are quoted in SKK billion

For the first six months of the year, options were growing at a substantially more dynamic rate compared to the term instruments. The denomination of their underlying instruments expanded by as much as 41.8%, reaching the historically highest value of SKK 408 billion as at the end of the first half of 2007. The vast majority of option contracts fell to currency options. These relate especially to the currency pair SKK/EUR. The shares of the interest and stock options only reach around 2%. The commodity instruments options are the last and least represented group, however, at the same time they were the fastest-growing category, their volume having grown more than eightfold compared to the end-of-the-year value of 2006. It remains true that the banks conclude option contracts almost exclusively for the needs of their clients represented mostly by nonfinancial companies. They safeguard them on the foreign interbank market so that they are not exposed to the risks arising from these positions.

Chart 37 Development of off-balance sheet liabilities in the sector.



Source: NBS

- The values are quoted in SKK billion

From the viewpoint of the underlying instruments of derivatives, the foreign exchange and interest rate instruments are maintaining a

dominant position. Of this, foreign currency contracts comprise a little less than two thirds. In most banks, the position of most currencies within the framework of derivatives has been set so that it would lower or close the open positions of these currencies in the balance The largest volumes of foreign derivatives were tied up naturally with the two main world currencies, euro and dollar. From among other currencies, the British pound, Japanese yen and the currencies of the Visegrád area were traded significantly. The derivatives on stock and commodity instruments were exclusively in the form of options, hence the characteristic from the previous section applies to them. The previous year's disinterest of banks in credit derivatives continued also during the first half of the current year.

#### Other off-balance sheet operations

The increased volume of the banks' financial resources deposited with the NBS by means of reverse REPO tenders equally contributed to an increase in the volume of the accepted collateral in the form of securities during the first six months of this year. A shift occurred especially during April, when these deposits grew by as much as SKK 225 billion.

Another and simultaneously the most important item in terms of volume are the real estate guarantees. The increase in value of pledged real estates which the banks use as a securement at the provision of loans, reached the level of 2.8% for the first half of 2007, which, considering the development in the previous periods, we can only label a modest growth rate.

The ten-percent growth rate of loan commitments in the previous part of the year resulted in their volume having been rounded up to SKK 250 billion by 30 June 2007. Although by far not all commitments to a provision of loan end up with its actual provision and drawing from it, we can still at least partly consider this item an indicator of a

future loan activity. The share of commitments denominated in foreign currencies remained preserved compared to the end of the previous year and represents approximately a quarter of them.

Table 3 Year-on-year changes in other offbalance sheet instruments

	VI.2007	XII.2006	VI.2006	Year-on- year	Change compared to XII.2006				
Currentese	V1.2007	XII.2000	V1.2006	change	AII.2000				
Guarantees Provided guarantees including letters of credit	93 226	69 935	91 887	1%	33%				
Accepted guarantees including letters of credit	912 550	859 131	921 675	-1%	6%				
of which real estates	352 260	342 749	290 324	21%	3%				
of which securities from repo transactions	316 020	231 462	390 994	-19%	37%				
Loan commitmen	nts								
Loan provision commitments	251 438	230 128	230 916	9%	9%				
Loan acceptance commitment	43 034	30 875	28 094	53%	39%				
Assets in safe custody									
Assets accepted into safe custody	454 665	450 534	438 258	4%	1%				
Assets given into safe custody	2 821	3 309	6 051	-53%	-15%				
~	3.77	~							

Source: NBS

- Data in the table quoted in SKK million

The ever increasing trade exchange between Slovak enterprises and foreign countries was reflected in an increase in issued letters of credit, which are used to ensure the crossborder payment system of two trading parties.

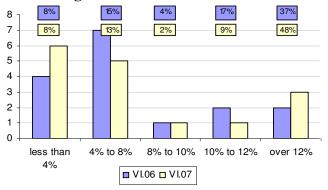
### **Profitability**

The positive macroeconomic development manifested itself in a higher profitability of the banking sector. The banks profited especially on the basis of a higher interest income. These comprised almost 70% of the overall gross income of the banking sector. The main reason for the increase in interest income is a high increase in corporate and household loans.

Non-interest income consisted mainly of fee income. However, the high increase in fee income from the previous years slowed down and the banking sector only recorded a modest year-on-year growth.

All banks, with the exception of some branches of foreign banks in the sector, reached profit as at June 2007. The year-on-year net profit had fallen in eight banks; however, most banks were able to increase their net profit. The share of the group of three largest banks in the overall profit has fallen. Profitability was developing positively in the group of the branches of foreign banks.

### Chart 38 Distribution of the ROE indicator in the banking sector



- Source: NBS

A growth of profitability was confirmed also in the first half of 2007. The net profit of the banking sector amounted to SKK 9.8 billion as at the end of the first half of 2007, having grown year-on-year by almost 22%.

Table 4 Year-on-year changes in the basic categories of expenses and income

	VI.06	VI.07	Change
(a) OPERATIONAL COSTS	14.3	16.2	13.9%
(b) GROSS INCOME (c + d)	24.7	28.3	14.3%
(c) Net interest income	15.6	19.1	22, 1%
(d) Net non-interest income	9.1	9.2	0.9%
(e) NET INCOME (b - a)	10.4	12	14.7%
(w) NET INCOME AFTER TAX	8.1	9.8	21.2%

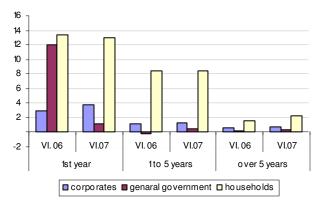
Source: NBS

Data in SKK billion.

#### **Net interest income**

Interest income comprised the biggest part of total gross income (67%) as at the end of the half of 2007. This most important source of bank income had grown year-on-year by 22%, which represents an increase by SKK 3.5 billion. Almost all banks recorded a year-on-year increase in their interest income.

### Chart 39 Difference between interest rates on loans and non-risk interest rates



Source: NBS

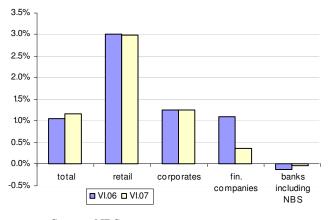
- Values on the left-hand axis are in percent and represent the difference between interest rates on newly provided loans maturing within 1 year, 5 years or more than 5 years, and income from a one-year interbank rate and 5-year or 10-year state bonds.

To a great degree, the increase in interest income reflected the changes to the banks' assets as well as the interbank increase in interest rates. The increased volume of long-term retail loans, together with the growth of corporate loans maturing within one year and long-term loans maturing within more than 5 years, also had a positive influence on an increase in interest income. Together with these types of loans, which have the greatest weight in the banks' portfolios, interest rates were also increasing.

Interest income from the interbank market and from the NBS were only growing at a modest rate at a time when income from the NBS was falling, but on the other hand the banks were depositing more free funds with foreign banks, which resulted in an increasing income.

There has also been a year-on-year increase in interest costs, but less than interest income. Like in the case of loans, their growth was conditioned by a greater volume of deposits and increase in interest rates. The interest costs of corporate deposits and deposits of the population for up to one month were increasing in particular, together with sight deposits.

### Chart 40 Interest-rate spread in the banking sector



- Source: NBS

There has been a decline in importance of interest costs paid to foreign banks and of income from the central bank. The interest income of the corporate sector and other non-banking financial institutions comprised the largest share on the income side. The banks were obtaining a significant part of interest income also from the

population and the central bank. In a similar way, the corporate sector dominated on the costs side, followed by other financial institutions and then foreign banks and the population.

#### **Net non-interest income**

The ratio of non-interest income to the gross income of banks decreased year-on-year from 37% to 33%. Especially those banks, which traditionally obtain a great part of income from trading, were above this sector average.

Fee income comprised the greatest part of non-interest banks' income. The banks obtain the most significant part of client fees from the deposit products and banking transactions.

Like in the case of interest income, the three largest banks dominate also in the fee income. Their share in the overall fee income within the sector was 66 percent in June 2007.

In June 2007, income from trading comprised almost a half of the overall non-interest income. The banks were obtaining the greatest part of the income from trading in foreign exchange operations. Unlike in the same period of the past year, the banks recorded a positive income from trading in debt securities.

The modest year-on-year fall in income from trading was influenced by several factors. There was a significant fall of the net income from foreign exchange operations and foreign exchange derivatives in particular (a year-on-year fall by almost SKK 1.5 billion). The reason was a fall in income from foreign exchange derivatives by almost SKK 2 billion.

To the contrary, income from trading in debt securities and from interest derivatives was developing positively. Especially the costs of revaluation of securities to fair value were decreasing. In most banks, the fall in costs was accompanied with a decline in income from interest derivatives. On the banking sector level, the income from interest derivatives increased on a year-on-year basis, which was also the reason for a positive development of income from debt securities.

There has been a year-on-year increase in loss from other operational activities in the banking sector. Compared to June 2006, however, the structure of this loss has changed. While in 2006 it had been created predominantly by loss from other activities (almost 80% of the total loss from other operational income), in June 2007 the loss was formed particularly of the costs of the sale of receivables to clients, indicating a more active management of claims in some banks, or deterioration in the quality of the loans portfolio. This predominantly involves the sale of loans, which are non-performing to varying degrees. A bank will sell off such a loan, with the difference between the selling price and the accounting price counting as a cost of the bank. Dissolution of provisions is the banks' source of income. Therefore, at an evaluation of loss from the sale of receivables it is also necessary to evaluate the income from the dissolution of provisions. As at June 2007, the costs of the sale of receivables to clients in the banking sector increased by almost SKK 750 million.

The identification of a decrease in loss from other activities is difficult because of the lack of more detailed data. It is positive, however, that in most banks there has been a decline in this loss.

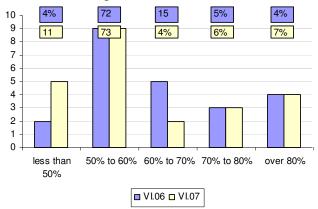
#### **Operational costs**

Operational costs were growing together with an increase in banking activities. These increased by more than 12% on a year-on-year basis. An increase in costs of information technologies was the main contribution to the growth. The year-on-year increase of the banks' investments in information technologies was almost SKK 800 million. Costs on employees were also increasing. These increased even despite a decline in the number of employees in most banks, which indicates a significant increase in wages in the banking sector.

The operational efficiency of the banking sector, measured by the cost-to-income ratio, reached the level of 57.1% in June 2007. There

was only a modest year-on-year change in this value.

### Chart 41 Distribution of operational efficiency in the sector in June 2007



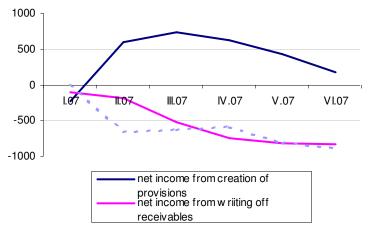
- Source: NBS
- The vertical axis shows the number of banks
- The percentage value above the columns of the histogram shows the share of banks in the respective column in the overall assets of the sector

## Net income from writing off claims and provisions

The income from writing off claims and from a net creation of provisions in the banking sector was negative in June 2007. The loss was generated especially by the costs of writing off claims to the clients. On the other hand, the costs of writing off claims declined by almost SKK 600 million in the banking sector.

The income from provisions was positive as at June 2007, which means that the banks had dissolved a greater volume of provisions than they had created. The development of this item, however, is to be associated with the net income from the sale of receivables and writing off claims. Especially in February 2007, an increase in income from provisions was associated with the sale of receivables to the clients. From April 2007 onwards, creation of provisions outweighed their dissolution.

Chart 42 Income from the creation of provisions, writing off and sale of receivables



- Source: NBS
- Data in SKK million.

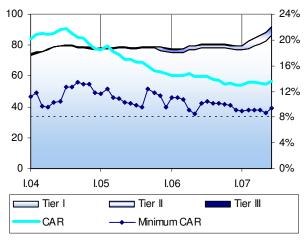
### Own funds adequacy ratio

During the first half of 2007, the own funds adequacy ratio in all banks was above the set level of 8%. The trend of a gradual fall in the average own funds adequacy ratio (average is measured by the volume of risk-weighted assets) stopped. During the first half of 2007, this value even slightly increased from 13.0% to 13.5%. This was related particularly with a significant growth of own funds, whereas the growing trend of risk-weighted assets remained approximately the same as in 2006. In several banks, part of the profit made in 2006 was used to increase own funds.

During the first half of 2007, there was a relatively significant change in the development of the own funds adequacy ratio. The trend of a gradual decline in the own funds adequacy ratio that was monitored in 2004-2006, stopped (Chart 43). The average value of the own funds adequacy ratio (weighed by the size of riskweighed assets) reached a value of 13.5% as at June 2007, whereas the value of this indicator was 13.0% as at December 2006. In the process, the change in the development of the own funds adequacy ratio was related exclusively with an increase in own funds; the growth rate of the volume of risk-weighed assets remained approximately the same (during the first half of 2007, the volume of risk-weighed assets increased by 10.6 %; in the second half of 2006 this was 9.1%). The volume of own funds that had been at the level of approximately SKK 80 billion in 2005 and 2006 increased by SKK 11.9 billion during the first half of 2007. An increase in own funds was realized particularly using the profit made in 2006, but in some banks also by drawing of the subordinate debt or by increasing their registered capital.

Despite the above increase in own funds, the quality of own funds has remained high. The share of additional own funds (Tier II) in the total own funds was at the level of 6.4% in June 2007 (in December 2006 it had been 2.9%). No bank reported additional own funds (Tier III) as at 30 June 2007.

Chart 43 Development of the own funds adequacy ratio in the banking sector

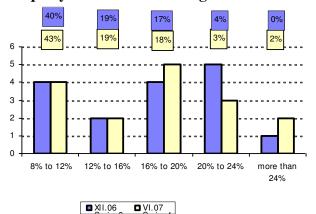


- Source: NBS
- PVZ average value of the own funds adequacy ratio (average weighed by the size of riskweighed assets)
- Min PVZ minimum achieved value of the own funds adequacy ratio
- The left vertical axis shows the capital of Tier I, Tier II and Tier III in SKK billion
- The right vertical axis shows an average and a minimum value of the own funds adequacy ratio.

During the first half of 2007, all banks were reporting their own funds adequacy ratio as being above the level of 8%.

As has been said, the trend of an increase in risk-weighed assets from the previous years also continued in the first half of 2007. The increase was caused mainly by the growth of the banks' loan activity.

Chart 44 Distribution of the own funds adequacy ratio in the banking sector



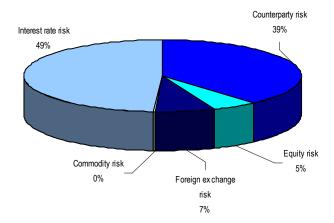
- Source: NBS
- The vertical axis shows the number of banks
- The percent above the columns of the histogram represents the share of banks in the respective column in the overall assets of the sector

Of the overall risk-weighed assets, risk-weighed assets connected with credit risk hold a 97% share in the banking book. The structure of other risk-weighed assets is shown in Chart 45.

As shown in the above analysis, the moderate growth of the own funds adequacy ratio was not caused primarily by the implementation of new directives related to the own funds requirement<sup>6</sup>. When calculating the own funds requirement for credit risk in the first half of 2007, all banks took the opportunity to calculate this requirement according to legislative valid in the past. The impact of the new legislative can, however, manifest in 2008, from which date all banks will be obliged to implement at least a standardized approach to

credit risk as well as to start calculating the own funds requirement for the operational risk.

Chart 45 The structure of the own funds requirement for coverage of risks except credit risk in the banking book



- Source: NBS

<sup>&</sup>lt;sup>6</sup> Directive 2006/48/EC relating to the taking up and pursuit of the business of credit institutions and Directive 2006/49/EC on the own funds adequacy of investment firms and credit institutions, implemented into the Slovak legislative in particular by the Act 483/2001 Coll. on banks and amending certain other laws, as amended, and by the Decree of the NBS No. 4/2007 on banks' own funds of financing and banks' capital requirements and on securities dealers' own funds of financing and securities dealers' capital requirements.

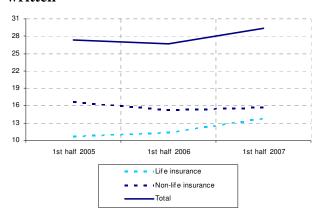
### 2 Insurance sector

In the first half of 2007, the technical premium written reported by insurance companies reached the amount of SKK 29.4 billion. Technical premium written in life insurance reached the value of SKK 13.8 billion and in non-life insurance SKK 15.6 billion. Insurance fulfilment costs have grown by 11.8% compared to the same period of the previous year, to the value of SKK 11.3% billion. In the first half of 2007, the profit of insurance companies reached the amount of SKK 3.3 billion. The insurance companies thus created profit greater by as much as 13% than the profit for a comparable period in the previous year. No substantial changes occurred in the allocation of technical reserves, still placed in low-risk assets.

### Premium written and technical premium written

The premium written (in a gross value) reported by insurance companies as defined by the international accounting standards of the IAS/IFRS financial reporting, reached a value of SKK 27.4 billion for the first half of 2007. The premium written in life insurance reached the value of SKK 11.8 billion and in non-life insurance SKK 15.6 billion.

### Chart 46 Development of technical premium written

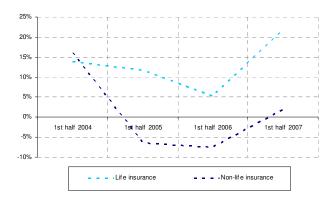


- Source: NBS
- Data in SKK billion.

Due to the fact that until the end of 2005, the premium written had been reported in accordance with Slovak accounting standards, the NBS performed an analysis of technical premium written for the purpose of its reports, be defined as a price that has been negotiated in individual insurance contracts regardless of the means of their financial reporting.

In the first half of 2007, technical premium written reported by insurance companies amounted to SKK 29.4 billion. Technical premium written in life insurance reached the value of SKK 13.8 billion and in non-life insurance SKK 15.6 billion.

Chart 47 Growth rate of technical premium written in life insurance and non-life insurance



- Source: NBS

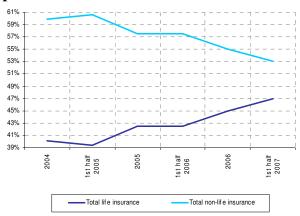
The technical premium written in life insurance increased by 21.57% compared to the same period of the previous year, which confirmed the trend of an increasing growth rate of technical premium written in life insurance. Technical premium written in non-life insurance only increased by 1.8% compared to the same period of the previous year. The

total technical premium written increased by 10.21%.

The faster growth rate of technical premium written in life insurance than that of the technical premium in non-life insurance naturally resulted in a further growth of the share of life insurance in the total technical premium written (from 42% in the first half of 2006 to 47% in the first half of 2007), which is in accord with the expectations as well as with the long-term trend.

Non-life insurance constitutes 53% of the total premium written (a fall from the value of 58% in the first half of 2006).

# Chart 48 The share of life insurance and non-life insurance in the total technical premium written

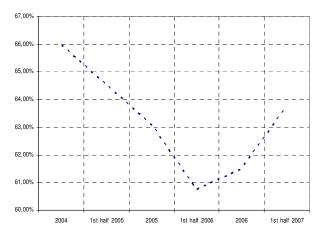


Source: NBS

#### Market concentration

In the previous period, we had observed a gradual fall in the market concentration of the largest insurance companies. A change took place in the first half of 2007 - the market share of the three largest insurance companies in the total technical premium written rose from 61% to almost 64%.

## **Chart 49 The market share of the three largest insurance companies**

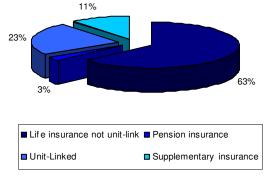


Source: NBS

#### **Insurance groups**

Starting on 31 December 2006, The National bank of Slovakia changed the method of data reporting for insurance companies and branches of foreign insurance companies. Reporting on the basis of insurance industries, defined by the Insurance Act, has changed into reporting on the basis of insurance groups according to individual risks.

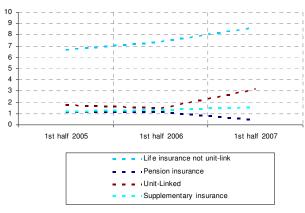
# Chart 50 Division of life insurance into insurance groups by the amount of technical premium written as at 30 June 2007



- Source: NBS

In life insurance, the long-time largest share in the technical premium written is held by the insurance group "Life insurance other than Unit Linked", which includes insurance products such as assurance on death, endowment insurance, combinations of assurance on death and endowment, various dowry insurance products, etc. By 30 June 2007, technical premium written in this insurance group amounted to SKK 8.7 billion, which represents a 63% share in the technical premium written in life insurance.

### Chart 51 Development of technical premium written in life insurance



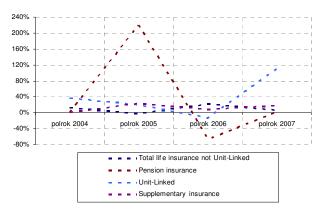
Source: NBSData in SKK billion.

The biggest increase in the technical premium written compared to the previous period, by more than 110%, was reported by the Unit-Linked insurance (i.e. life insurance linked to an investment fund), reaching a value of SKK 3.2 billion. In the last few years, the Unit-Linked insurance has been reporting an ever-increasing trend, following the development on European markets.

The lowest values of technical premium written are still being recorded by pension insurance. In the first half of 2007 the pension insurance reported a 2,4% growth and reached a value of SKK 388 million. Pension insurance thus represents 3% of the total technical premium written in life insurance.

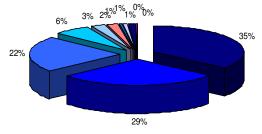
In the first half of 2007, the technical premium written in life insurance amounted to SKK 15.6 billion. In absolute numbers, this represents an increase by SKK 273 million, i.e. 1.8%

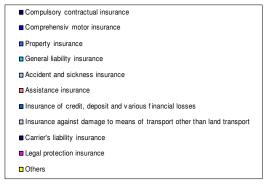
Chart 52 Growth rate of technical premium written in life insurance



Source: NBS

Chart 53 Division of non-life insurance into insurance groups by the amount of technical premiums as at 30 June 2007



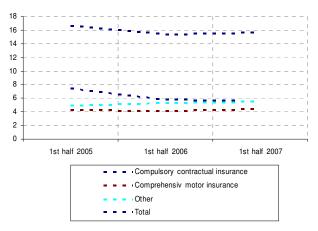


Source: NBS

Looking at the individual insurance groups, the low growth of technical premium written in non-life insurance was influenced to the greatest degree by the fall in technical premium written in the motor third party liability insurance. In absolute numbers, this insurance group reported a fall by SKK 215 million and reached a value of SKK 5.6 billion. Despite the above facts, 64% of technical premium written

in non-life insurance are still being held by motor third party liability insurance and comprehensive motor insurance. Therefore, car insurance has been a long-time substantial part of technical premium written in non-life insurance. In other types of insurance, the technical premium written has been virtually stagnating. Technical premium written in insurance groups other than car insurance (that is apart from motor third party liability insurance and without car insurance) increased by 4.4% compared to the previous period.

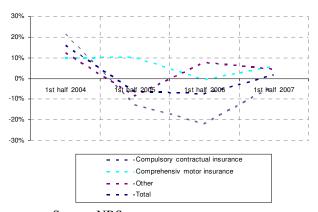
### Chart 54 Development of technical premium written in non-life insurance



Source: NBS

- Data in SKK billion.

### Chart 55 Growth rate of technical premium written in non-life insurance



Source: NBS

#### Reinsurance

In the first half of 2007, premiums amounting to SKK 4.9 billion were ceded to reinsurers out of the total technical premium written, which represents a year-on-year fall by 10.6%. The ceded technical premium written comprises 16.7% of the total technical premium written. A large part (87.8%) of the ceded technical premium written falls to non-life insurance, where 27.6% of technical premium written in non-life insurance were ceded.

In life insurance, SKK 598 million was transferred into reassurance in the first half of 2007, which comprises 4,3% of the total technical premium written.

**Table 5 Technical premium written ceded to reinsurers** 

	Half of 2007	Half of 2006	Change	
Total	4.9	5.5	-10.58%	16.7%
Life insurance	0.6	0.7	-11.93%	4,3%
Non-life insurance	4.3	4.8	-10.39%	27,6%

- Source: NBS

- Data in SKK billion.

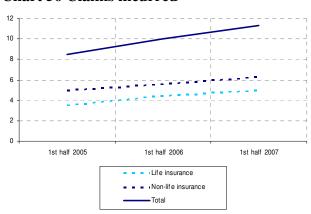
#### Claims incurred

Claims incurred defined as by the IAS/IFRS, international financial reporting standards, amounted to SKK 10.8 billion in the first half of 2007, with claims incurred in life insurance amounting to SKK 5 billion and in non-life insurance to SKK 5.8 billion. Like in the case of the analysis of technical premium written, the NBS, for the purposes of this report, analysed the technical claims incurred (hereinafter in the text, "claims incurred" are to be understood as "technical claims incurred"). There was an increase in claims incurred by 11.8% in the first half of 2007 compared to the same period of the previous year, to the value of SKK 11.3 billion. Claims incurred in life insurance grew by 12% as compared to the first half of 2006, and reached a value of SKK 5 billion. Claims incurred in non-life insurance

increased by 11.5% to the value of SKK 6.3 billion.

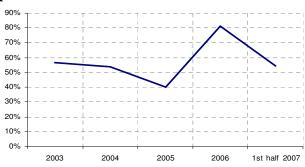
When analysing the development of claims incurred in non-life insurance, it is necessary to tae into account not only the development of this indicator, but also that of earned premium, i.e. technical premium written less a change in the technical provision for unearned premium (PUP) and the development of the creation of technical provision for claims (PC). This is made possible by the Loss ratio, which is the percentage ratio of the sum of claims incurred, not lowered by the reinsurers' share, and the change in the gross technical provision for claims (PC) and gross technical premium written after deducting the change in the gross technical provision for unearned premium (PUP), the so-called earned premium.

#### **Chart 56 Claims incurred**



Source: NBSData in SKK billion.

Chart 57 Development of gross technical provisions since 2003



- Source: NBS

Loss ratio for the entire non-life insurance amounted to 55% in the first half of 2007.

Table 6 Loss ratio of the largest non-life insurance groups

	Half of 2007	Half of 2006
Total	54.58%	41.68%
Liability insurance for damage caused by the operation of a motor vehicle	50.96%	34.99%
Motor-hull insurance	66.17%	56.61%
Insurance of property	62.92%	46.30%
Other	23.05%	26.33%

Source: NBS

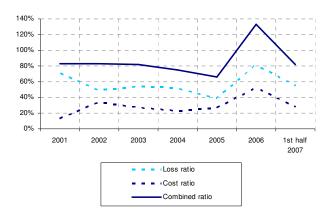
Table 7 Loss ratio, cost ratio and a combined indicator of non-life insurance groups as at June 2007

guile 2007			
	Loss ratio	Cost ratio	Combined indicator
Life insurance - additional insurance	27,56%	27,49%	55,05%
Health insurance and insurance against accidents	13,45%	55,67%	69,13%
PZP	50.96%	23.52%	74.47%
Automobile liability insurance	66.17%	24.48%	90.65%
Insurance against damages to means of transport other than motor-hull insurance	-1.52%	44.22%	42.70%
Carrier's liability insurance	33.46%	36.34%	69.81%
Insurance of property	62.92%	30.32%	93.24%
General liability insurance for damage	22.41%	30.09%	52.50%
Loan insurance, bail insurance and insurance against various financial losses	25.11%	62.93%	88.04%
Legal protection insurance	75.80%	27.35%	115,29%
Assistance insurance	27.36%	46.55%	73.90%
Other	33.50%	2.55%	36.04%
Total	54.58%	27.74%	82.32%

- Source: NBS

- Cost ratio is a ratio of operational costs to the earned premium
- Combined indicator is an expression of loss and cost ratios in the earned premium.

### Chart 58 Development of the loss and cost ratios and the combined indicator

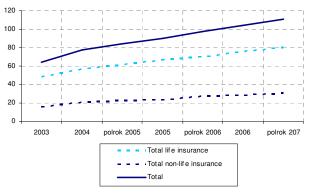


- Source: NBS

### Technical reserves and their financial allocation

The gross technical provisions of insurance companies (regardless of the reinsurer's share in the technical reserves) reached a value of SKK 110.8 billion as at 30 June, reporting a year-on-year growth by 14.1%. The gross technical provisions in life insurance reached a value of SKK 79.7 billion, which represents an increase by more than 14.2%. The gross technical provisions in non-life insurance reached a value of SKK 31 billion, which represents an increase by more than 13.8%.

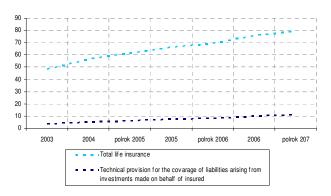
## Chart 59 Development of gross technical provisions since 2003



Source: NBSData in SKK billion.

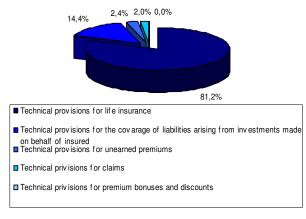
The development of the gross technical reserve for life insurance and of the technical reserve for risk coverage on behalf of the insured follows the development of technical premiums written in life insurance. The gross technical reserve for life insurance grew by 11.2% compared to the previous period and reached a value of SKK 64.4 billion. A more noticeable growth, by 38.7%, was recorded by the reserve for risk coverage on behalf of the insured, reaching a value of SKK 11.4 billion.

## Chart 60 Development of gross technical provisions in life insurance



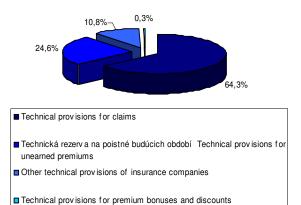
- Source: NBS
- Data in SKK billion.

## Chart 61 Structure of gross technical provisions in life insurance as at June 2007



Source: NBS

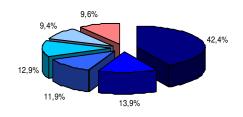
# Chart 62 Structure of gross technical provisions in non-life insurance as at June 2007

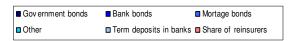


Source: NBS

Gross technical provisions less technical provisions for the coverage of liabilities arising from financial allocation on behalf of the insured (a so-called "Unit-Linked provision") amounted to SKK 99.4 billion as at 30 June 2007 and were covered by assets amounting to SKK 103.6 billion, i.e. 104.2% of the created technical provisions excluding the Unit-Linked provision.

### Chart 63 Allocation of the technical reserve funds

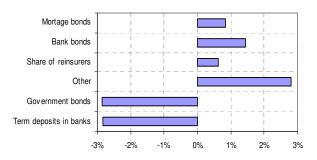




- Source: NBS

 The term "Government Bonds" means bonds issued by the Slovak or other EU governments, bonds issued by NBS and other central banks, bonds guaranteed by Slovakia, bonds issued by EIB, EBOR and MBOR The share of reserves allocated in the bonds issued by the Slovak or other EU governments, bonds issued by NBS and other central banks, bonds guaranteed by the Slovak government and bonds issued by EIB, EBOR and MBOR, fell by 2.7 p.p. to 42.4%. In the same way, the share of reserves allocated in time-deposit accounts with the banks fell by 2.8% to 9.4%. The share of bank bonds mortgage bonds increased by 2.3 p.p., to a value of 25.7%. Reserves are thus largely allocated in low-risk assets.

# Chart 64 Changes in the investment of technical provisions between 30 June 2006 and 30 June 2007

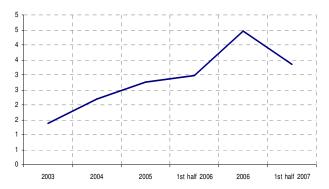


- Source: NBS

#### Financial position of the insurance sector

The profit of insurance companies for the first half of 2007 reached the level of SKK 3.3 billion, an increase by 13% compared to the same period of the previous year. Despite the growth of insurance companies' profits, the profitability indicators fell – ROA fell from 2.21% as at 30 June 2006 to 2.14% and ROE from 12.17% to 11.23%.

### **Chart 65 Total profit of insurance companies**



- Source: NBS
- Data in SKK billion.

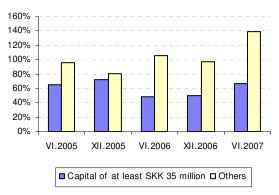
### 3 Securities dealers

The volume of client transactions in securities carried out through securities dealers (SD) increased year-on-year by 24% but their structure did not change considerably. Forward contracts and bonds remained the most traded instruments. The volume of client assets managed by these entities recorded a year-on-year growth by 11%, to a level of SKK 32 billion. The Slovak securities dealers' own funds adequacy ratio met the prescribed minimum requirement with a sufficient margin.

### Own funds adequacy ratio

The own funds adequacy ratio of all non-bank securities dealers fluctuated above the statutory minimum requirement of 8% during the first half of 2007 (in the case of SD with capital of at least SKK 35 million,<sup>7</sup> the minimum value of this indicator was 36% as at 30 June 2007; in the case of other SD it was at least 80%).

# Chart 66 Development of the average own funds adequacy ratio of non-bank securities dealers



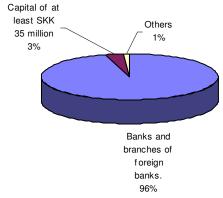
- Source: NBS

# Investment services and asset management

The total volume of client transactions within the framework of investment services

IS-1 to IS-3<sup>8</sup> stood at SKK 898 billion in the first half of 2007, with as much as 96% of these contracts having been performed through banks. Compared to the first half of 2006, this volume increased by 24%.

# Chart 67 Share of the individual types of securities dealers in transactions for the first half of 2007



Source: NBS

There was virtually no year-on-year change in the structure of contracts within the framework of the individual types of

<sup>&</sup>lt;sup>7</sup> Non-bank securities dealers with registered capital less than SKK 35 million do not have the licence for the provision of the IS-3 investment service (see below).

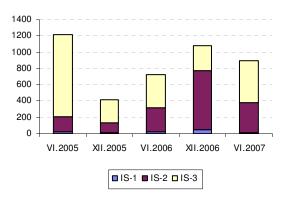
<sup>&</sup>lt;sup>8</sup> IS-1= investment service as defined in Article 6 sec. 2 letter a) of the Securities Act, i.e. acceptance of a client's instruction to buy, sell or otherwise use investment instruments, and to the subsequent forwarding of the client's instruction for the purpose of its execution.

IS-2 = investment service as defined in Article 6 sec. 2 letter b) of the Securities Act, i.e. acceptance of a client's instruction to buy or sell an investment instrument and its execution for an account other than the service provider's account.

IS-3 = investment service as defined by Article 6 sec. 2 letter c) of Securities Act, i.e. the acceptance of a client's instruction to buy or sell an investment instrument and its execution for their own account.

investment services, 58% of contracts were performed for the account of the investment service provider (under IS-3) and 40% for the client's account (under IS-2).

# Chart 68 Development of the volume and structure of client transactions by type of investment service.

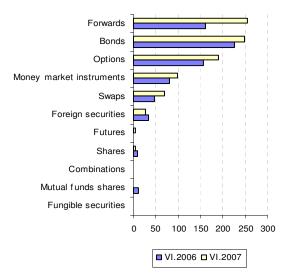


- Source: NBS

- Data on the vertical axis are in SKK billion.

In the same manner, neither changed the structure of traded instruments, forward contracts, were traded the most, together with bonds and options.

### Chart 69 Structure of transactions by investment instruments

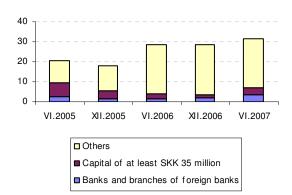


Source: NBS

- Data on the horizontal axis are in SKK billion.

The volume of client assets managed by securities dealers (including banks) grew year-on-year by 11% (from SKK 29 to SKK 32 billion).

Chart 70 Development of the volume of client assets managed by securities dealers.



Source: NBS

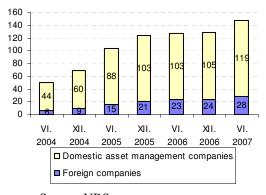
- Data on the vertical axis are in SKK billion.

### 4 Collective investment

The net asset value managed in domestic mutual funds and by foreign collective investment entities grew by 14% during the first half of 2007, following a modest stagnation in 2006. Thus the investments of resident entities in mutual funds were growing as well as the net value of assets managed by domestic asset management companies. Withdrawal of resources from bond funds continued. The average performance of funds once again reached positive values. Performance of funds investing in foreign securities was also favourably influenced by the fact that Slovak koruna only strengthened modestly during the first half of 2007. Even in June 2007, however, their year-on-year performance was still bearing signs of the adverse impact made by a sharp strengthening of Slovak koruna in the second half of 2006. The best-selling funds during the first half of 2007 were chiefly the so-called hedge funds and special real estate funds.

#### Assets in open mutual funds

Chart 71 Development of the volume of investments in open mutual funds sold in Slovakia



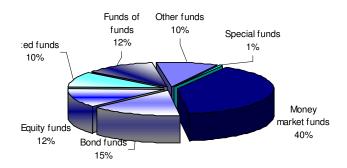
- Source: NBS

- Data on the vertical axis are in SKK billion.

In June 2007, a new asset management company commenced its activities on the Slovak market – Allianz Asset Management, which, however, was not managing any mutual funds as at 30 June 2007. To the contrary, OTP Asset Management ceased its operations on our market and the management of its two open mutual funds was transferred to Investičná a Dôchodková správcovská spoločnosť. Hence, as at 30 June 2007 there were 10 domestic asset management companies active on the Slovak market, managing 109 mutual funds. By 30 June 2007, another three special real estate

funds (Asset Management SLSP, Tatra Asset Management and PRVÁ PENZIJNÁ) have added up to the special real estate fund created in 2006 by the Investičná a Dôchodková správcovská spoločnosť. All domestic mutual funds are denominated in SKK.

Chart 72 Share of the individual types of funds in the Slovak investors' investments



- Source: NBS
- Share of funds in the net asset value falling to investors in the Slovak Republic
- The chart also includes the sales of domestic as well as foreign mutual funds in the Slovak Republic.

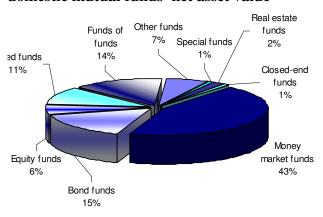
The total net asset value in domestic mutual funds and foreign collective investment entities offered openly in the Slovak Republic and falling to investors in the Slovak Republic on account of their sales, increased by SKK 18 billion, or 14% to SKK 147 billion during the

first half of 2007, of which amount it increased in the domestic funds by SKK 13.8 billion and in foreign funds by SKK 4.2 billion.

The largest part of the invested assets, as much as 40%, was invested in money market funds, followed by bond and equity funds. Compared to December 2006, especially bond funds and funds of funds lost in their share (a fall by almost SKK 3 billion), conversely, other funds in particular increased their share, the growth rate of their share in the net asset value having increased by 6 percentage points.

The structure of investments in domestic and foreign funds was still different in June 2007. Whereas equity funds dominated in foreign funds, with a 41% share in the Slovak investors' investments in foreign funds, the greatest share in the net asset value of domestic funds as at June 2007 was held by money market funds (43%), bond funds (15%) and funds of funds (14%). Money market funds have thus preserved their share from December 2006, bond funds and funds of funds recorded a fall by 5 p.p. A gain was recorded especially by mixed funds and the so-called hedge funds.

Chart 73 Share of the types of funds in the domestic mutual funds' net asset value



Source: NBS

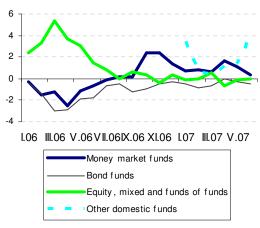
The majority of shares in domestic mutual funds, as much as 85% in June 2007, were owned by resident households, which is a modest growth compared to the value of 82% in December 2006. The share of non-residents

remained on an unchanged level of 0.7%. These data point out a strong retail orientation of the collective investment sector.

Following a slowdown in 2006, the resources invested in domestic mutual funds continued to grow in the first half of 2007. Net sales for the first half of 2007 reached a value of SKK 14.3 billion, while in 2006 this value had been negative.

Redemptions of bond funds continued, with the investors having drawn from them SKK 2.8 billion during the first six months of 2007. Domestic mixed funds and foreign equity funds were also being redeemed (both types by approximately SKK 1 billion), resources from them having been transferred into funds of funds, domestic equity funds and other funds. Other funds recorded the greatest increase (SKK 6.5 billion), followed by money market funds (SKK 5.3 billion) and special real estate funds (SKK 3.2 billion).

Chart 74 monthly developments of the net sales of open mutual funds in Slovakia



- Source: NBS
- Data on the vertical axis are in SKK billion.
- Up to the year 2006, the representation of other domestic funds was not significant.

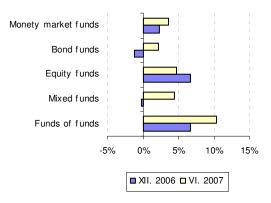
Distribution of net sales between individual asset management companies remained uneven in the first half of 2007.

Asset management companies created a net profit of SKK 142 million for the first half of 2007. The average ROE value weighed by own funds was 22%<sup>9</sup>. Two asset management companies reported loss.

## Performance of domestic open mutual funds

As at 30 June 2007, open mutual funds reported a higher year-on-year performance compared to December 2006. A decline in interest rates in the first half of 2007 caused growth of bonds prices and helped especially the bond and mixed funds to return back to positive values. Equity funds continued to grow, albeit slower than in 2006.

# Chart 75 Comparison of average annual performances of open mutual funds by individual categories



- Source: NBS
- Data on the horizontal axis are in percent per annum
- Funds are weighed by net asset value

The performance of funds was also boosted by the slowdown of the strengthening of Slovak koruna vis-à-vis the American dollar and euro. While in 2006 Slovak koruna strengthened vis-à-vis the American dollar by 17.8% and vis-à-vis euro by 8.7%, during the first six months of 2007 it only strengthened by 3.9% vis-à-vis the American dollar and by 1.7% vis-à-vis euro.

should be comparable with the interbank rate, while the net profit<sup>10</sup> should be comparable with the appreciation of funds in time-deposit accounts. In June 2007, all funds reported a year-on-year increase in gross performance, higher by 0.19 p.p. to 0.6 p.p. than the three-month interbank rate. The net performance of money market funds was higher by 0.23 p.p. to 0.68 p.p. compared to the returns from time deposits. While the gross performance of the three biggest funds exceeded that of other funds, the net performance of other funds was higher on average than that of the three biggest funds.

Gross profit of money market mutual funds

Gross performance of bond funds investing in SKK-denominated bonds, or those hedged against currency risk, should be comparable with Slovak bond indexes. The largest bond fund, however, gained a lower profit compared to indices, in the case of the private sector index by as much as 2 p.p.

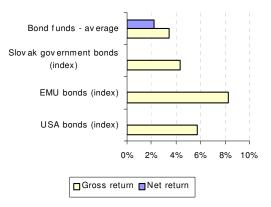
Other funds invest in various types of bonds, especially European and American. The year-on-year performance was influenced especially by the strengthening of Slovak koruna the in 2006. However, unlike in December 2006, the average performance of bond funds reached positive values.

The development of equity funds was mainly influenced by the situation on the European and American equity funds as well as by the development of the rate of Slovak koruna.

<sup>&</sup>lt;sup>9</sup> Annualized value.

<sup>&</sup>lt;sup>10</sup> Net profit can be calculated by deducting fees and expenses from the gross profit.

# Chart 76 Comparison of one-year profits of all bond funds with the development of market indices



- Source: NBS, SASS
- Data on the horizontal axis are in percent per annum
- The return on Slovak bonds is set on the basis of development of the SDXG Public Sector – development index; return on EMU states bonds on the basis of the MSCI EMU Sovereign TR index; and return on US bonds on the basis of MSCI US TR index
- Funds were weighted by their net asset value

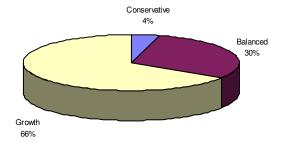
### **5 Pension Savings**

The number of savers registered in the second pillar pension savings was 1,545 million as at 30 June 2007. Compared to the end of the previous year, this was only a modest growth. The composite net value of assets managed by pension asset management companies reached to as much as SKK 40 billion. A change occurred among the pension asset management companies, when the company Winterthur changed its main shareholder and together with it also its name to Axa, d.s.s.. Approximately 850,000 citizens were involved with the voluntary third pillar (data from the end of 2006). These had SKK 22.8 billion saved in their accounts as at the end of the first half of 2007.

#### Resources in pension funds

In the course of the first half of 2007, the influx of new savers into the second pillar slowed down. This was a natural occurrence, considering that the period of voluntary entries had ended and that the system started to focus more on the graduates' entry into the labour market. This is one of the reasons why a higher increment is expected in the second half than was expected in the first half. The increment comprised less than seven thousand clients and was relatively evenly distributed among all of the six pension asset management companies (PAMC). In total, 1,545 million citizens were saving money for their pension through the second pillar.

Chart 77 The share of different types of funds in the total volume of their assets



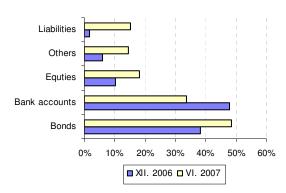
- Source: NBS

For the first six months of this year, the volume of assets managed by PAMC, represented by net asset value (NAV), increased by 43% and reached almost SKK 40 billion as at 30 June 2007. Market shares of individual enterprises remained essentially unchanged.

Among other things, this means that as much as 58% of assets remained concentrated in two companies with the highest NAV.

Exactly two thirds of assets collected in the second pillar are presently allocated for appreciation in growth funds, since in the long term they are anticipated to bring the highest return. The rest is divided among balanced and conservative funds, with the shares of 30% and 4% respectively.

Chart 78 The share of different types of investments in the total volume of managed assets



- Source: NBS

The investment structure of these funds is also beginning to adapt to the more risk-oriented inclusion of financial resources in the individual types of funds. Almost SKK 9 billion from the sources accumulated in the first half of 2007 were directed into bonds. Bonds have thus achieved a dominant position (49%) in the total portfolio and pushed away resources kept in current accounts, stagnating in volume, to the second rank of the list of representation (34%).

Almost all bonds are denominated in the local currency. There has also been a significant increase in the investments in shares, increasing their ratio from the end-of-the-year 10% to the current more than 18%.

#### **Performance of pension funds**

The transfer of a part of the portfolios' financial resources from bank accounts to less conservative instruments of the financial market has manifested positively in an increase in the value of pension units in all types of funds. The annual return<sup>11</sup> on funds, measured by a percentage change in the pension unit, has increased mainly in growth and balanced funds, where the representation of more profitable albeit riskier investments is higher. In growth funds, this was between 5.8 - 8.8% depending on asset management company; the profitability of balanced funds fluctuated between 5.3 -8.4%. This shows that the difference in the profitability of growth and balanced funds is still minimal. Conservative funds brought the investors an appreciation between 3.4 and 5.2%. In all three types of funds, there was an increase in the spread of returns between the individual pension asset management companies. All 18 funds ensured a real appreciation of savings for the last twelve months, as the year-on-year inflation amounted to 1.5% as at June 2007. 12

For the first time since the commencement of the pension asset management companies' operations on the market, a situation occurred when two of them reported profit.

### Supplementary pension saving

The transformation of the SPIC Stabilita into a supplementary pension asset management company as at 1 April 2007 has completed the entire process of change in the

<sup>11</sup> It is an annualised return obtained on the basis of performance in the first half of 2007.

legal form of entities of the third pillar of pension savings. The volume of accumulated resources in the four supplementary pension asset management companies (SPAMCs) was approaching SKK 23 billion as at the end of the first half of 2007. Of this, a vast majority fell to contribution funds.

The structure of the financial instruments of SPAMC funds is a little more conservative compared to the second pillar. Bonds, together with deposits in bank accounts, dominate unequivocally with a 49% or 47% share. Only a small part of resources is invested in shares.

<sup>&</sup>lt;sup>12</sup> Inflation calculated with a harmonised approach of the ECB (HICP index).

### 6 Risks in the financial sector

Credit risk is the most significant risk to which banks are exposed. From the banks' viewpoint it is important that most household loans are secured predominantly by real estates. In the first half, the credit risk increased in banks, being associated with household interest rate risk. Together with a decline in short-term interest rates, households increased their share of loans with one-year fixation.

There was a slight change in the layout of household indebtedness. Although most loans are provided to the highest income groups, indebtedness of the lower income groups recorded a year-on-year increase. There has also been a year-on-year increase in the ratio of loan instalments to disposable income, having increased the most in the case of households with a ratio of loan instalments to income ranging between 40% and 70%.

As in households, so in enterprises, loans with a short-term interest rate fixation are dominant. Foreign exchange risk also plays an important role in enterprises, since a major part of loans is denominated in foreign currencies. Most enterprises, particularly large enterprises, generate income in foreign currencies, which forms a sort of a natural hedging of their open positions. The improvement of quality of the corporate loan portfolio also continued in the first half of 2007. No significant changes in the enterprises' financial positions occurred in the first half of 2007.

For banks, interest rate risk remains the most significant of all market risks, being associated mainly with the discrepancies between interest-sensitive assets and liabilities in the individual time bands of interest rate revaluation. These discrepancies were mainly a result of investments in government securities with a fixed coupon. In this manner, at an increase in interest rates the banks would record a fall in the net economic value, which would manifest itself in the reported result of financial management by a gradual decline in their net interest income. In the trading book, this disharmony takes place to a lesser degree only in certain banks as a result of their positions in interest derivatives. The foreign exchange risk remained on a negligible level in the banking sector. Only two banks are exposed to the equity risk on a larger scale, however, the risk remains relatively small.

A similar conclusion is valid for the exposure of assets covering technical reserves to market risks. The interest rate risk is the most significant risk, especially in some insurance companies. An increase in interest rates, especially in life insurance, would have a negative impact. The foreign exchange risk is negligible in most insurance companies. Only some insurance companies are exposed to equity risk. In almost all insurance companies the loss during 10 days should generally not exceed 1% of assets covering technical reserves, with 99% probability.

The funds of asset management companies, pension asset management companies and supplementary pension asset management companies would be negatively influenced by a more substantial appreciation of koruna or a more substantial fall in the value of shares. An increase in interest rates, which would cause an instantaneous fall in the value of debt certificates in the funds portfolios, would also have a negative impact. Its effect, however, would be less important due to a lower duration of these portfolios in most funds, pension funds in particular. Within the framework of pension asset management companies, there are no significant differences between the investment strategies of balanced and growth funds; they slightly differ, however, in the representation of the individual risks. In the area of collective investment funds, the equity funds portfolios are the ones most exposed to market risks.

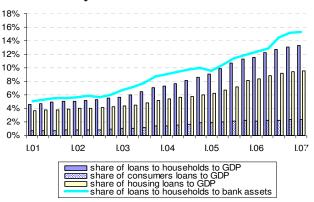
### **Banks**

#### Credit risk

#### Household credit risk

The size of the banks' credit risk against a certain sector depends on the size of the credit exposure to a sector. In the first half of 2007, the banks' credit exposure to households, measured by loans provided, amounted to 15% of the banks' assets. Compared to the second half of 2006, this ratio did not change, especially with regard to an increase in assets, with interbank assets growing significantly. The share in total client loans increased from 33% to 34%.

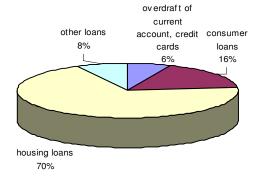
### Chart 79 Development of loans provided to households by GDP and bank assets



- Source: NBS, Statistical Office of the Slovak Republic
- The ratio of household loans to GDP in ordinary prices is given in percent.

From the viewpoint of credit risk it is essential that the secured loans predominate. Although exact data on the division of loans into secured and unhedged are unavailable, this information may be estimated by the structure of loans. Real estate loans and other loans (consisting especially of non-purpose loans secured by real estates) may be classified as secured loans, comprising 77% of household loans. A certain part of consumer loans may also be classified as secured loans.

### Chart 80 Structure of loans provided to households



- Source: NBS

The risk of non-repayment of loans by households is also related to the household interest rate risk. This particularly relates to their preference of a short-term fixation of interest rates on loans, and thus also a greater sensitivity to changes in interest rates.

## Chart 81 Newly provided household loans by the period of interest rate fixation



- Source: NBS
- The right-hand axis shows data on the difference between interest rates given in percentage points

The left-hand axis shows the shares of house purchase loans provided to households

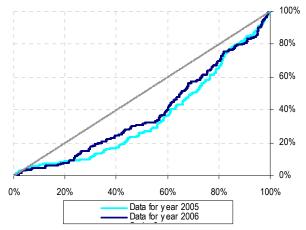
When choosing an interest rate fixation, households in Slovakia incline mostly towards a fixation with the lowest rate, which is a fixation for up to a year. In June 2007, the newly provided loans with interest rate fixation of up to one year comprised 82% of the total

newly provided loans. Such a high ratio is related especially to overdrafts of current accounts and to credit cards, with a short-term character. In newly provided house purchase loans, the share of loans with a fixation maturing within one year comprised 51%.

We can see that fixation is preferred in relation to interest rates, when we compare the development of the interest differential between short and long fixations, and the preferred interest rate fixation. For example, in the first quarter of 2007 there had been a fall in interest rates maturing within one year, causing the difference between fixation maturing within one year and longer fixations to increase, and subsequently the share of newly provided loans with a fixation for up to one year increased.

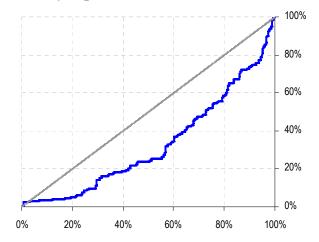
#### Financial position of households

# Chart 82 Distribution of indebtedness (number of loans) by disposable income less ordinary expenses



- Source: Statistical Office of the Slovak Republic, EU SILC 2005, EU SILC 2006, own calculations
- In the chart there are only included house purchase loans excluding building and bridging loans
- The data on the horizontal axis, representing a cumulative percentage of households with loans provided, are arranged in an ascending direction by their disposable income less ordinary expenses
- The vertical axis shows a cumulative percentage of the number of loans

# Chart 83 Distribution of indebtedness (volume of loans) by disposable income less ordinary expenses



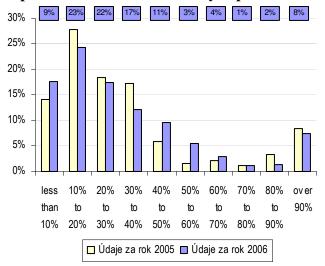
- Source: Statistical Office of the Slovak Republic, EU SILC 2006 UDB, version 15/5/2007, own calculations
- The chart only includes house purchase loans excluding building and bridging loans
- The data on the horizontal axis, representing a cumulative percentage of households with loans provided, are arranged in an ascending direction by their disposable income less ordinary expenses
- The vertical axis shows a cumulative percentage of the balance of loans

At the same time, the distribution of loan burden in terms of the balance of loans is less balanced than the distribution of loan burden in terms of the number of loans. This means that low-income households not only have fewer loans but also that their average amount is lower.

The ability of households to meet their liabilities is, to a great degree, influenced by the share of loan instalments in their disposable income less ordinary expenses. According to the data for 2006, this share has increased modestly compared to 2005. While in 2005, 75% of all households had had this share lower than 35.0%; in 2006 this value was 40.8%. An increase occurred especially in the categories of households with a ratio of loan instalments to total disposable income less ordinary expenses amounting to 40% - 70%. The number of

households with instalments exceeding their disposable income less ordinary expenses constituted 7.3% of the total number of households according to survey data. These households were provided 8.1% of the total volume of the balance of loans.

Chart 84 Distribution of households and loans by the ratio of loan instalments to the disposable income less ordinary expenses



- Source: Statistical Office of the Slovak Republic, EU SILC 2006 UDB, version 15/5/2007, own calculations
- The chart only includes house purchase loans excluding building and bridging loans
- The horizontal axis shows the ratio of loan instalments to disposable income less ordinary expenses
- The vertical axis shows the shares of loans provided to households in the individual categories of ratios of instalments to income in the total balance of all loans.
- Above the columns there are the shares of households in the individual categories of ratios of instalments to income in the total number of households

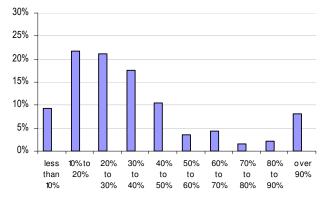
Also from the viewpoint of macroeconomic variables, burdening of households with loan instalments increased. In June 2007, the bank loan instalments constituted 4.7% of the gross disposable income.

Table 8 Loan instalments by disposable income

		first quartile	median	third quartile
loan instalments by	2005	8.2%	14.3%	25.1%
disposable income	2006	8.5%	15.0%	23.3%
loan instalments by disp.	2005	12.0%	20.8%	35.0%
income less ordinary expenses	2006	11.6%	23.6%	40.8%

Source: Statistical Office of the Slovak Republic, EU SILC 2006 UDB, version 15/5/2007, own calculations

## Chart 85 Ratio of the loan burden of households to household income

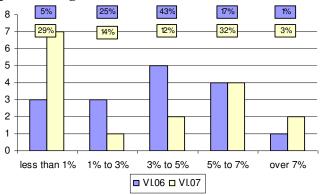


- Source: Statistical Office of the Slovak Republic, NBS, own calculations
- Loan burden is a ratio of instalments to the gross disposable income; the loan burden is calculated from the volume of household loans divided by their maturities and interest rates
- The horizontal axis shows the individual quarters

#### Quality of household credit portfolio

The share of non-performing loans in the total household loans reached 3.5% in June 2007. The year-on-year increase in the share of non-performing loans increased from the level of 3.1%.

Chart 86 Distribution of the ratio of nonperforming loans to total household loans



- Source: NBS
- The vertical axis shows the number of banks
- The percent value above the columns of the histogram shows the share of assets in the respective column in the overall assets of the sector

Looking at the distribution of the share of non-performing loans, we can see some important changes. Especially the number and share of banks increased in the group with the lowest share of non-performing loans.

Table 9 The share of non-performing loans in the total loans provided to the household sector

	VI.07	VI.06
household loans	3.5%	3.1%
mortgage loans to households	1.7%	1.3%
building loans	1.7%	1.7%
bridging loans	4.1%	3.8%
consumer loans	7.4%	5.9%
current account overdraft	2.0%	3.7%
credit cards	2.9%	8.3%

Source: NBS

#### Box 3 Survey on income and living conditions

In April 2006, the Statistical Office performed a second survey on incomes and living conditions (EU Survey on Income and Living Conditions, EU SILC 2006). The results of this survey provide more detailed data on the distribution of household indebtedness with house purchase loans, especially in regard to their disposable income. The survey had been performed on a sample of approximately 6,000 households, of which about 5,100 households returned the filled-in questionnaire. This represents about 0.3% of the total number of households. Compared to the survey performed in 2005, approximately one fourth of households were substituted with a new sample.

However, several limitations are to be taken into account when interpreting these data. The data on house purchase loans in the survey were only understood as additional information for the estimation of housing expenses. The survey did not include building loans, bridging loans, consumer loans or any loans provided by non-bank institutions. According to the banks' reports, the total balance of provided mortgage loans as at the end of 2006was SKK 67 billion, other house purchase loans excluding building and bridging loans amounted to SKK 35 billion. According to the data collected in the survey (recounted for the entire population), the volume of the total balance of house purchase loans was only approximately SKK 25 billion. The difference is smaller in the number of contracts concluded. According to the survey, approximately 58,000 contracts have been concluded among households, compared to 70,000 according to the banks' data (these data only include mortgage loans that have already been made use of). As in the volume of loans, so in the volume of disposable income the data from the questionnaire were lower (approximately SKK 500 billion, data for disposable income are valid as at the end of 2005) than the macroeconomic data published by the Statistical Office (SKK 890 billion in 2005). Due to the mentioned limitations, the survey results have a rather indicative character. Responses were voluntary. If, for instance, the respondent did not answer the question whether they were repaying a loan, we cannot distinguish if the household deliberately failed to answer, or if they really had not been provided a house purchase loan.

The household disposable income is calculated as the sum of the components of gross personal income of all household members (gross financial income from employment and closely related income, gross non-financial income from employment, gross financial gains or losses from self-employment activities including royalties), unemployment benefits, old-age pension benefits, the survivor's pension benefits, sickness benefits, disability benefits and contributions for education) plus components of the gross income at the household level (income from rented assets or land, family benefits and contributions paid to families with children, social exclusion not classified elsewhere, housing benefits, regularly received financial transfers between households, interests, dividends, profit from capital investments in a non-registered business, income of persons younger than 16 years of age less regular property taxes, regular paid financial transfers between households, income tax, and social security contributions).

For the purposes of the survey, the disposable income was lowered by ordinary expenses. In the process, we suppose that the ordinary expenses of households amount to SKK 4,000 per month for the first adult, SKK 2,000 per month for each family member of at least 14 years of age and SKK 1,200 per month for each family member under 14 years of age.

#### Corporate credit risk

The year-on-year growth rate of corporate loans had been 19% as at June 2007 and then the growth rate slowed down slightly, with the year-on-year growth of corporate loans as at December 2006 having been 20%. Their share in the total client loans has been stable since January 2006, around the value of 49%.

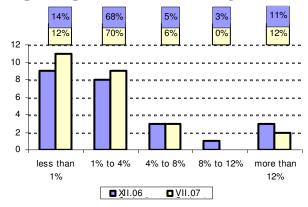
#### The quality of corporate credit portfolio

The share of non-performing loans in the total corporate loans continued to fall during the first half of 2007 and reached the value of 3.4% in June 2007. Its year-on-year fall was thus 1.7 p.p. Together with this share, there was also a fall in non-performing corporate loans; since December 2006 they fell by SKK 885 million, i.e. 7%. However, this fall is almost halved compared to the fall in the second half of 2006.

Chart 87 shows the distribution of the share of non-performing corporate loans in the banking sector and does not indicate that significant changes have happened in the share of non-performing loans. The total decline in the share of non-performing loans was thus mainly caused by the fall in this indicator in the group of banks where it amounted to 1%-4%, which comprises as much as 70% of the sector's assets as at June 2007. In some banks, the

write-off or sale of non-performing loans was the reason behind this decline.

## Chart 87 Distribution of the quality of corporate portfolio in the banking sector



- Source: NBS
- The horizontal axis shows the share of nonperforming loans in the total corporate loans divided into 5 intervals.
- The vertical axis shows the number of banks whose share of non-performing loans belongs to the respective interval.
- The percent value above the columns of the histogram represents the share of banks' assets in the respective column in the overall assets of the sector

The share of non-performing loans in the total loans has fallen in most industries. However, the share of industries where this

ratio has grown in the total corporate loans recorded a decline, especially in the land and pipeline transport industry.

Table 10 Quality of corporate loans by individual industries as at 30.06.2007

	Share of the industry in the total corporate loans		Ratio of non- performing loans to the industries'		
Industry	VI.07	XII.06	loans VI.07	XII.06	
Industrial production	26.3%	25.2%	5.2%	6.8%	
Wholesale and					
intermediation of trade					
except motor vehicles	17.9%	17.2%	5.6%	5.7%	
Activities in the field of real					
estates	12.1%	10.2%	1.1%	1.4%	
Retail except motor					
vehicles	7.7%	7.5%	2.3%	2.3%	
Building industry	5.9%	5.7%	3.4%	3.9%	
Production and distribution					
of electricity, gas and water	5.9%	7.5%	0.2%	0.8%	
Land and pipeline transport	4.2%	6.3%	1.1%	0.5%	
Agriculture, hunting	3.2%	2.8%	5.8%	8.6%	
Auxiliary transport activities	2.6%	3.0%	0.6%	0.4%	
Motor vehicles and					
motorcycles	2.1%	2.2%	3.1%	3.1%	
Hotels and restaurants	1.6%	1.6%	5.9%	8.1%	
Post and					
telecommunication	1.5%	1.1%	1.3%	2.0%	
Other industries	9.0%	9.6%	3.9%	3.6%	

- Source: NBS
- Other industries include Forestry, Fishing, Mining of mineral raw materials, Water transport, Air transport, Rental of machines and goods for personal consumption, Computer activities, Research and development, and other business services

#### **Financial position of enterprises**

We shall analyse the financial situation in regard to the size of enterprises<sup>13</sup> and to the comparison between the first quarters of 2005, 2006 and 2007. We shall focus mainly on their profitability, capitalization and indebtedness, efficiency and liquidity.

small and medium enterprises: SKK 7.5 million  $\leq$  t

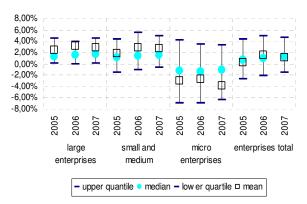
< SKK 250 million

micro-enterprises: t < SKK 7.5 million

#### **Profitability**

In the first quarter of 2007 there was a modest fall in the average profitability of assets in all enterprises; the median value did not change compared to 2006. On the contrary, the average profitability of registered capital increased in the first quarter of 2007, whereas the median value again remained unchanged. Thus this implies changes that occurred in enterprises with extreme values of profitability rather than changes in the entire corporate sector, which is also supported by a decline in the distribution of profitability.

## **Chart 88 Profitability of corporate assets according to size**

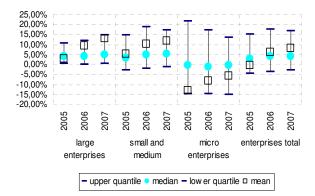


- Source: Statistical Office of the Slovak Republic, own calculations
- The values represent profitability for the first quarter
- Extreme values have been adjusted to the value of the quantile, with 0.1% probability

Micro-enterprises still achieve a significantly lower profitability compared to medium as well as large enterprises, between which there are no differences. However, the overall median profitability value is positive, that is, more enterprises made profit than loss in the first quarter. This trend has not changed since 2005.

<sup>&</sup>lt;sup>13</sup> The statistical sample of 7,332 enterprises was divided into three groups by the volume of revenues (t) large enterprises:  $t \ge SKK$  250 million.

## Chart 89 Profitability of the enterprises' registered capital according to size

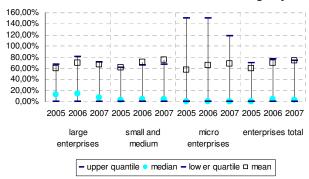


- Source: Statistical Office of the Slovak Republic, own calculations
- The values represent profitability for the first quarter
- Extreme values have been adjusted to the value of the quantile, with 0.5% probability

#### **Indebtedness and capitalization**

On average, the enterprises' equity comprised 36% of the Slovak enterprises' assets in the first quarter of 2007 and this value remained almost unchanged compared to previous years.

#### Chart 90 The ratio of bank loans to equity



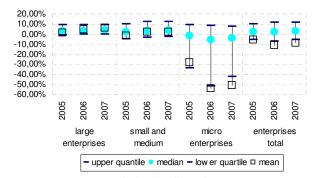
- Source: Statistical Office of the Slovak Republic, own calculations
- Extreme values have been adjusted to the value of the quantile, with 0.5% probability
- for enterprises with a negative equity, the ratio has been set to 150%.
- The chart contains a complete statistical sample of enterprises, including those that do not have any bank loans.

In large and medium enterprises, the capitalisation remained above the average, whereas in micro-enterprises it is below the average. A similar situation is also in the ratio of bank loans to assets, where the average value oscillates around 8%.

In the previous analysis, the ratio of the size of bank loans to equity was identified as an important indicator of indebtedness. There has been a modest increase in the average value of this indicator in small and medium enterprises and micro-enterprises; to the contrary, in the case of large enterprises there has been a fall in both the average and median values. The number of enterprises with bank loans provided generally declined in the sample, however, in spite of this the value of loans for enterprises as a whole increased. There has been a decrease in quartile spread in micro-enterprises (a decrease in the upper quartile), which was caused especially by a lower number of enterprises with negative equity in the new sample. The majority of micro-enterprises still remain without bank loans.

#### **Efficiency**

### Chart 91 Profit to sales ratio by enterprise size - efficiency

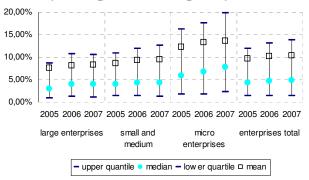


- Source: Statistical Office of the Slovak Republic, own calculations
- Extreme values have been adjusted to the value of the quantile, with 0.5% probability

The efficiency of enterprises is measured as the ratio of the profit for an ordinary period to revenues for that period is the long-time worst among micro-enterprises. The fall in efficiency in the first quarter of 2006 compared to 2005 only changed slightly in the first quarter of 2007. Due to this, the average for all enterprises fluctuates on a lower level than in 2005. To the contrary, the average as well as the median efficiency is growing in large and medium enterprises. In total, the spread in all categories is lowering.

#### Liquidity

## Chart 92 Ratio of financial assets to total assets by enterprise size - liquidity



 Source: Statistical Office of the Slovak Republic, own calculations

In the first quarter of 2007, the ratio of financial assets to total assets only grew in micro-enterprises compared to previous years, in both its average and median values. In small, medium and micro-enterprises, there was a modest growth of the spread of the liquidity indicator, which manifested itself also in the general sample of enterprises.

In general, a trend remains that the bigger the company, the smaller the share of its assets it needs to keep in liquid assets.

# Credit portfolio quality for other sectors

Loans to non-profit organisations, non-banking financial companies and general government maintain a long-time high quality, however, their share in total loans declined.

Loans to sole traders reported the worst quality from among other sectors. Their share in the total loans also declined slightly despite an absolute growth of loans to sole traders. The share of non-performing loans had been decreasing from the beginning of 2007, in May and June, however, it grew again.

The importance of loans to non-residents in total loans increased during the first half of 2007, their volume having grown by SKK 5.3 billion since December 2006, which represents an increase by 29%. Since there had been only a minimum increase in the volume of non-performing loans, the quality of the portfolio improved.

Table 11 Credit portfolio quality for other sectors

	ratio of non-performing loans to the sector's loans			share in client loans		
	VI.06	XII.06	VI.07	VI.06	XII.06	VI.07
Loans to sole traders	5.6%	6.5%	6.1%	2.4%	2.3	2.2%
Loans to non-profit organisations	0%	0.3%	0.1%	0.3%	0.4%	0.4%
Loans to non- banking financial companies	0.1%	0.1%	0.1%	10.1	9.5%	8.4%
Loans to general government	0%	0%	0%	3.8%	2.8%	2.9%
Loans to non- residents	2.2%	4%	3.3%	2.6%	2.7%	3.2%

Source: NBS

#### Market risks

### Foreign exchange risk

The foreign exchange risk seemed to have little significance for the banking sector in the first half of 2007.

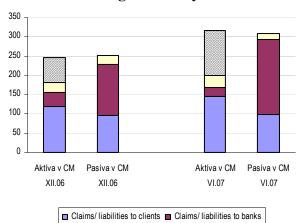
The open balance-sheet position, which is noticeably short at the level of the entire banking sector, deepened even more during the first half of 2007. The reason lay especially in an increase in foreign exchange deposits from foreign banks from SKK 125 billion to SKK 192 billion. This increase was related to the overall growth of assets and liabilities from interbank operations in March and April 2007. <sup>14</sup> Compared to December 2007, however,

<sup>&</sup>lt;sup>14</sup> See the part Interbank Market

a more significant change occurred also in the balance sheet assets, where the volume of foreign currency loans increased, especially against enterprises (from SKK 110 billion to SKK 129 billion). In the process, the volume of foreign exchange deposits remained approximately the same.

The emerged open balance-sheet position remained on about the level of 7% of the balance sheet total. Banks were closing the open foreign exchange position in the balance sheet with derivative contracts. Thus in general, the foreign exchange position was virtually closed. Not only is this true for the aggregated value of foreign exchange position for the entire banking sector, but the open foreign exchange position also did not exceed 3% of the balance sheet total in most banks during the first half of 2007. In some branches of foreign banks, too, this value noticeably exceeded the level of 3%; however, in them the open position can be managed on the level of their bank group.

Chart 93 The structure of assets and liabilities in foreign currency



- Source: NBS
- Data in SKK billion.

securities and others

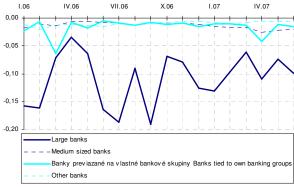
 Obligations towards banks also include the resources of the Slovak Ministry of Finance deposited with banks via DLMA, since their character is similar to that of bank deposits.

M Opened derivate positon

A more detailed view on the foreign exchange risk to which individual banks are

exposed, may be obtained with the help of VaR (value at risk). This value indicated loss that should not be exceeded with 99% probability. In the process, it is assumed that the distribution of future changes in the exchange rates can be simulated by the distribution of changes during the previous year (250 working days) and that the portfolio will remain unchanged within 10 days<sup>15</sup>. The calculated VaR are displayed in Chart 94. In most banks, VaR did not exceed 2% of own funds as at the end of any of the months of 2006. It needs to be noted, however, that this analysis does not take into account the time consistency of the individual instruments used to close currency positions and hence is based on the assumption of high liquidity in the foreign exchange market.

Chart 94 The development of a 10-day VaR (99%) for different groups of banks



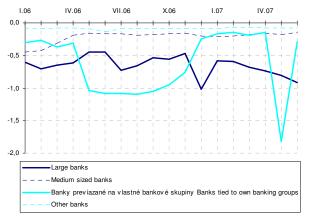
- Source: NBS, own calculations
- Data in SKK billion.
- The chart does not include VaR for branches of foreign banks.
- Other banks also include home savings banks

The calculation of a foreign exchange position also includes positions arising from currency options. It is assumed that each option will be exercised; however, the validity of this assumption cannot be verified due to the lack of

 $<sup>^{15}</sup>$  In the calculation of VaR, only overnight losses were calculated and the resulting value was subsequently multiplied  $\sqrt{10}$ .

detailed data on the individual option transactions. On the other hand, foreign exchange positions arising from the underlying option instruments were virtually closed in most banks during the first half of 2007.

Chart 95 Time development of VaR, taking loan commitments and guarantees into account



- Source: NBS, own calculations
- Data in SKK billion (the gauge is different than the one displayed in Chart 94)
- The chart does not include VaR for branches of foreign banks.
- Other banks also include home savings banks

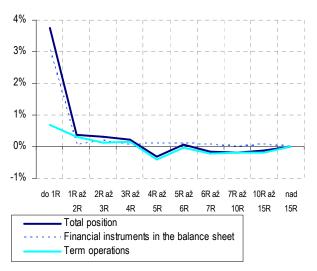
The above analysis omits three types of instruments that the banks report in their offbalance sheets: commitments to extend or provide loans, guarantees issued or received, and assets accepted into safe custody. The reason is that at the change in exchange rates, the positions in these instruments did not directly influence the reported profit or loss from foreign exchange positions. Therefore, the banks usually did not secure the foreign exchange risk in these positions. VaR after consideration of loan commitments guarantees is shown in Chart 95. This value is significantly higher than that without consideration of these instruments.

#### Interest rate risk

Exposure of banks to the interest rate risk depends on the sensitivity of the different financial instruments in their portfolios to changes in interest rates. In the short time horizon, a more significant impact on profitability at a time of changes in interest rates is made by open positions<sup>16</sup> recorded in the trading book, since these financial instruments are usually revaluated to fair value through profit and loss reporting. To the contrary, positions in the banking book would only have a gradual influence on profitability through the change in the net interest income.

Most banks have their positions almost closed in the trading book. The open positions in some banks usually do not result from the positions arising from financial instruments in the balance sheet. They mainly consist of open positions in interest derivatives, particularly in bands with longer periods of the residual fixation of interest rates or remaining maturity (Chart 96).

### **Chart 96 Interest positions in the trading book**

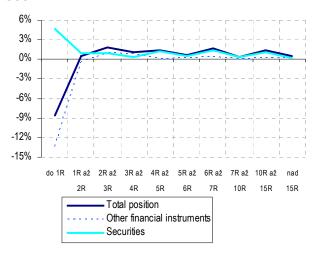


- The horizontal axis shows the periods of the residual fixation of interest rates or remaining maturity
- The vertical axis shows the ratio of open positions to total assets

<sup>&</sup>lt;sup>16</sup> In this part, an open position represents discrepancies between assets and liabilities in the respective band which represents the residual period of interest rat e revaluation, or residual maturity in instruments with a fixed interest rate.

The banking book positions are higher than the trading book positions. As shown in Chart 97, these positions consist almost exclusively of positions in securities held until maturity or for sale, especially in the bands with longer periods of residual fixation. Positions in other financial instruments recorded in the banking book (loans, deposits, derivatives) are of little significance compared to the position in securities. Since assets predominate over liabilities in the bands with longer periods of residual fixation, banks would be negatively influenced by an increase in interest rates represented by a decline in the net economic value, especially in longer time bands.

### **Chart 97 Interest positions in the banking book**



- The horizontal axis shows the periods of residual fixation of the interest rates or remaining maturity
- The vertical axis shows the ratio of open positions to total assets

The size of interest rate risk can be evaluated using VaR. Analogically to foreign exchange risk, this value was calculated as the maximum loss that the bank should not exceed within 10 days with 99% probability, providing its portfolio held remains unchanged. This loss was calculated as a negative change in net economic value and not as an impact on the financial results reported in the accounts. Should this loss be taken into account, the

median of the banking sector's own funds adequacy ratio would decline to 17.1% (i.e. by 0.4 p.p.).

#### **Equity risk**

Equity risk does not pose a serious threat to the Slovak banking sector, since the volumes of shares are negligible in most banks, considering their balance sheet total. Only two banks had a more significant position in shares as at June 2007 (up to 3% of the balance sheet total).

### Liquidity risk

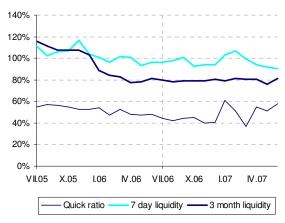
At present, the situation in the banking sector from the viewpoint of liquidity is characterised by a high share of funds sterilised by NBS as well as of other liquid assets (especially government bonds) in the balance sheet total. On the other hand, a high growth rate of especially long-term loans poses the question whether this growth is not impairment to the liquid positions of individual banks. The following analysis will thus focus on two spheres:

- assessing of whether, from a shortterm view, the individual banks have a sufficient volume of quick liquid assets in relation to the volume of liabilities with a short residual maturity,
- assessing whether the banks' loan activities are tied to sources from the interbank market, or whether they are financed from client funds.

From a short-term view on liquidity, there have been no significant changes in the banking sector as a whole. The median of the ratio of liquid assets and other assets from which financial flow may be expected within 7 days, to liabilities with a residual maturity of up to 7 days, remained relatively stable at the level of 90 - 100% during the first half of 2007. An analogical conclusion about a development without significant changes may also be made about the median of the ratio of liquid assets of up to 3 months to liabilities with a residual maturity of up to 3 months. Lower values of

this indicator in some banks mean that the good liquidity situation of these banks is based more on a condition of a stable core deposit.

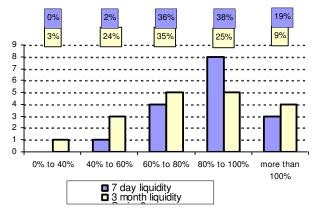
## Chart 98 Development of the median values of liquidity indicators



- Source: NBS
- The chart omits branches of foreign banks with a market share lower than 2% of the overall assets of the sector

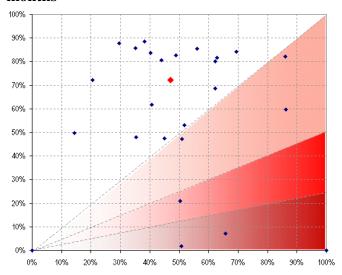
As indicated in Chart 99, for most banks it is essential for maintaining a good liquidity position in a time horizon of up to 3 months that some deposits remain in the banks for a longer period than is their real maturity. However, as is indicated by the comparison of the liquidity cushion<sup>17</sup> to an open position of up to 3 months<sup>18</sup> in the balance sheet total (Chart 100), the significance of this condition varies among individual banks.

## Chart 99 Distribution of liquidity indicators of up to 7 days and up to 3 months



- Source: NBS
- The chart omits branches of foreign banks with a market share lower than 2% of the overall assets of the sector

# Chart 100 Comparison of the liquidity cushion to an open position of up to 3 months



- Source: NBS
- The chart omits branches of foreign banks with market share lower than 2%, given the sector's total assets
- The horizontal axis shows the share of open position arising from operations with clients of up to 3 months in the balance sheet total
- The vertical axis shows the share of liquid assets in the balance sheet total.

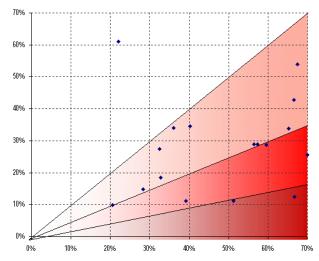
From a long-term view on liquidity it is better, with regard to the sustainability of the bank's loan activities, if these activities are

<sup>&</sup>lt;sup>17</sup> Liquidity cushion is a sum of cash in vault, government bonds, Treasury bills, NBS bills, deposits with the NBS and current accounts with other banks, after deducting banks' liabilities towards foreign banks (except long-term liabilities) and the DLMA and assets provided as collateral.

<sup>&</sup>lt;sup>18</sup> Open position of up to 3 months is a difference between the sum of claims against clients and debt securities issued by banks and enterprises which have a residual maturity of up to 3 months, and the sum of liabilities to clients and issued securities which have a residual maturity of up to 3 months.

financed from client deposits or from issues of longer-term securities as compared to short-term resources from the interbank market. In the opposite case, the liquidity situation of the bank in a longer time horizon depends on the availability of resources from interbank market, or from the mother bank in particular. As shown in Chart 101, several smaller banks and branches of foreign banks rely on these resources to a considerable degree.

Chart 101 Ratio of loans in the balance sheet total to deposits and issued securities in the balance sheet total



- Source: NBS
- The right axis shows the ratio of client loans to the balance sheet total.
- The vertical axis shows the shares of deposits accepted from clients and of issued securities

### **Insurance companies**

The most significant types of risk to which insurance companies are exposed, are insurance risks. Apart from that, insurance companies are also exposed to market risks, which can cause an unexpected fall in the value of assets covering technical reserves. Since a detailed analysis of the exposure of insurance companies to insurance risks cannot be carried out due to insufficient data, we shall only concern ourselves with the impact of market risks. Another limitation is that the mentioned analysis only relates to those assets covering

technical reserves, where the risk is borne by the insurance company. Assets that do not cover technical reserves and assets invested on behalf of the insured are not taken into account.

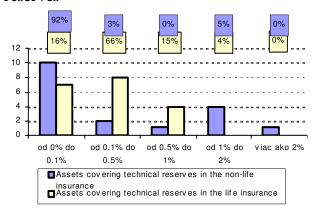
The interest rate risk in debt securities portfolios seems to be the most significant risk of all market risks for most insurance companies. Although this risk may not manifest immediately at a change in interest rates (providing the relevant securities are held until maturity), it can manifest gradually in a change in interest yields. The reason behind the interest rate risk is a relatively high duration of debt securities. In some insurance companies, the share of VaR for interest rate risk to the value of debt securities portfolio within portfolios covering technical reserves in life insurance amounts to as much as 15%. For technical reserves covering technical reserves for non-life insurance, the share of VaR for interest rate risk to the total value of the bond portfolio does not exceed 5.7% in any of the insurance companies.

Insurance companies mostly invested in domestic debt securities, particularly in Slovak government bonds and debt securities issued by domestic banks. Only a negligible part of this portfolio is denominated in foreign currency.

However, it should be noted that the above conclusions about the exposure of assets covering technical reserves to risks do not take into account that in some life insurance products it is possible to arrange for a payment of financial resources to clients with a fixed interest rate, or with a longer period of interest rate revaluation. This fact minimizes the estimated exposure to interest rate risk.

Only ten insurance companies used investments in shares and mutual funds certificates to cover technical reserves. All of these ten insurance companies used shares to cover a part of technical reserves in life insurance and three of them also in non-life insurance.

# Chart 102 Distribution of the share of VaR in the volume of assets covering technical reserves



- Source: NBS, REUTERS, BLOOMBERG, own calculations
- Numbers above the chart represent the ratio of different insurance companies falling into the given interval to the total technical reserves

However, it should be noted that in this way the insurance companies could be exposed to an additional influence of foreign exchange and interest risks that cannot be estimated accurately, even despite the set limits on foreign exchange risk. From the above mentioned various types of shares or mutual funds certificates also follow a relatively noticeable variability of these portfolios' riskiness in the different insurance companies.

A direct foreign exchange risk of assets covering technical reserves is negligible in most insurance companies. VaR for foreign exchange risk does not exceed 0.3% of the total technical reserves in any of the insurance companies. Only Česká poisťovňa is an exception, where this share constitutes 1.4% of assets covering technical reserves in non-life insurance, or 0.7% of assets covering technical reserves in life insurance. This position is long in insurance companies with an open foreign exchange position. Of the total open position, the position in euro comprises 43% and the position in American dollars comprises 19%.

Table 12 Exposure to market risks of assets covering technical reserves of insurance companies

		Assets coverir	ng technical rese insurance	rves of non-life	Assets covering technical reserves of life insurance				
		Minimum	Median	Maximum	Minimum	Median	Maximum		
1	Equity risk	0.0%	0.0%	1.4%	0.0%	0.0%	0.7%		
2	Interest rate risk	0.0%	0.1%	3.6%	0.0%	0.1%	0.7%		
3	Foreign exchange risk	0.0%	0.0%	1.4%	0.0%	0.0%	0.7%		
4	Total risk	0.0%	0.1%	3.6%	0.0%	0.2%	0.8%		
5	Equity risk to equity portfolio	0.2%	1.6%	3.9%	0.0%	2.3%	5.7%		
6	Interest rate risk to the portfolio of debt securities	0.0%	0.8%	6.0%	0.1%	1.2%	15.0%		

- Source: NBS, REUTERS, BLOOMBERG, own calculations
- The values in the table give VaR (with significance of 99% presuming a 10-day holding of an unchanged portfolio) on the value of assets covering technical reserves (rows 1 to 4), or on the equity portfolio (row 5) or debt securities portfolio (row 6), which cover technical reserves
- The calculations include neither assets that do not cover technical reserves, nor assets invested on behalf of the insured, nor assets corresponding to the reinsurers' shares in technical reserves
- When evaluating interest rate risk, neither deposits in the bank accounts nor the interest rate fixation on liabilities are taken into account and in addition it is assumed that all debt securities are revaluated to fair value.

# Funds of pension asset management companies

Funds of pension asset management companies are exposed particularly to market risks. Credit risk is low. On one hand it consists mainly of the risk of failure of banks in whose current or time-deposit accounts there is deposited a part of these funds' resources, on the other hand of the risk of their counterparts' failure in individual deals. Liquidity risk could manifest itself only in the case of an unexpected higher withdrawal rate of client funds and is mainly related to market liquidity.

Conservative funds are exposed to interest rate risk only. As indicated by VaR calculations (Table 13), this risk is relatively low. The funds mostly hold SKK-denominated bonds with a short duration. Within 10 days, profitability of these funds should not fall by more than 0.2 p.p., with a 99% probability.

There is no big difference in the exposures to market risks between balanced and growth funds. This is valid especially within the of individual framework pension management companies, since the differences in the composition of portfolios (particularly equity) are usually very moderate within one company. The reason is that, so far, individual PAMCs have not fully used the legally permitted limits on the maximum share of equities in the pension funds portfolio, and the share of equities in balanced and growth funds in the NAV has differed only modestly. The ratio of VaR for interest rate risk to NAV is comparable with that of conservative funds, even despite a lower representation of bond portfolios. This is due to a higher duration of bond portfolios in balanced and growth funds. Foreign exchange risk arises particularly from unhedged open positions into equities and mutual funds certificates, since the offer of these SKK-denominated instruments is limited. Most funds have debt securities portfolios denominated in local currency.

The individual balanced and growth funds would be exposed to the negative influence of foreign exchange risk in the case of appreciation of koruna, since their open position is long. The largest share in this open position was that of euro (54%), dollar (21%), yen (10%) and zloty (6%).

The loss of equity portfolio caused by a fall in the prices of shares and mutual funds certificates in the individual pension funds' assets should not, with 99% probability within 10 days, exceed 3.5% - 5.6% of the value of the equity portfolio as at 30 June 2007. However, since shares and mutual funds certificates only constituted 14% - 17% of the balanced funds' NAV and 18% - 22% of the growth funds' NAV, the total loss from equity risk should not exceed 1.1% of the funds' NAV.

From the viewpoint of interest rate risk, an increase in interest rates would mean an instant fall in the value of all debt securities revaluated to fair value. On average, this should not be more than 0.2% of these instruments' value within 10 days with 99% probability. However in the next period, if no changes in interest rates occurred, this value would gradually approximate the nominal value and the funds would record an increase in interest income compared to the situation prior to the increase in rates. Simultaneously, interest income from funds deposited with banks would also grow gradually. Hence, in a very short time horizon, an increase in rates has a negative impact on the funds' NAV. A more detailed analysis of the impact in a longer time horizon is in the part "Stress Testing".

Table 13 Exposure of pension funds to risks

		Co	Conservative funds			Balanced funds			Growth funds		
		Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum	
1	Equity risk	0.0%	0.0%	0.0%	0.5%	0.7%	0.9%	0.7%	0.9%	1.1%	
2	Interest rate risk	0.1%	0.2%	0.2%	0.1%	0.2%	0.4%	0.1%	0.2%	0.3%	
3	Foreign exchange risk	0.0%	0.0%	0.0%	0.0%	0.2%	0.6%	0.0%	0.2%	0.8%	
4	Total risk	0.1%	0.2%	0.2%	0.7%	0.8%	1.0%	0.8%	1.1%	1.3%	
5	Equity risk to equity portfolio	0.0%	0.0%	0.0%	3.5%	4.3%	5.6%	3.6%	4.5%	5.1%	
6	Interest rate risk to the portfolio of debt securities	0.0%	0.0%	0.0%	0.8%	1.5%	1.9%	1.1%	2.1%	2.5%	

- Source: NBS, REUTERS, BLOOMBERG, own calculations
- Values in the table give the ratio of VaR (with 99% probability, presuming a 10-day holding of an unchanged portfolio) to NAV (rows 1 to 4), or to the equity portfolio (row 5) or debt securities (row 6)

# Funds of supplementary pension insurance companies

Like the funds of pension asset management companies, the funds of supplementary pension asset management companies are also exposed mainly to market risks. Unlike with funds of pension asset management companies, however, the investment strategy of these funds is relatively different.

Table 14 Supplementary pension asset management companies' exposure to risks

	Contribution funds	Payroll funds
Equity risk	0.3%	0.0%
Interest rate risk	0.3%	0.0%
Foreign exchange risk	0.1%	0.0%
Total risk	0.7%	0.0%
Share in the overall value of the SPAMC funds' NAV	97.2%	2.7%

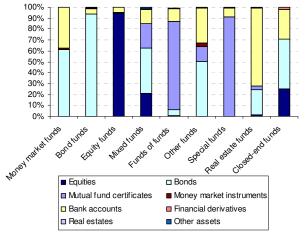
- Source: NBS, REUTERS, BLOOMBERG, own calculations
- Values in the table indicate the ratio of median VaR (on a 99% probability level presuming a 10-day holding of an unchanged portfolio) to NAV (rows 1 to 4).

Most contribution funds are exposed both to equity and interest rate risks, albeit to varying degrees. Riskiness of equity portfolios is approximately the same or slightly higher than in the PAMC funds. Neither the duration of debt securities portfolios is significantly higher.

Funds are exposed to foreign exchange risk mainly as a consequence of an unhedged long position arisen from investments in shares denominated in foreign currencies. The funds have open positions especially in euro (43%), American dollar (25%) and Hungarian forint (17%). Exposure to foreign exchange risk in these funds is also on approximately the same level as in the PAMC funds.

### **Mutual funds**

Chart 103 The ratio of individual instruments to the mutual funds' investments as at 30 June 2007



Source: NBS

Payroll funds keep almost all of their resources in current or time-deposit accounts, or invest them in debt securities with a relatively short duration.

The average VaR of interest rate risk oscillates on the level of 1% NAV in mutual funds. Bond mutual funds reach the highest value but even despite of this the VaR is relatively low. The reason may be that mutual funds are expecting an increase in interest rates and thus hold positions with a short-term fixation in their portfolio.

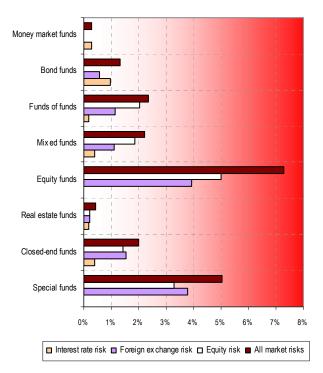
Foreign exchange risk is the most significant of market risks to which mutual funds are exposed. Equity mutual funds reach the highest average VaR, which amounts to 4% of NAV. VaR for the foreign exchange risk did not exceed 7% of the fund's net asset value.

Equity risk was calculated from the positions of funds in shares and mutual funds certificates of other mutual funds. As was expected, bond funds and money market funds do not contain equity risk. The average VaR <sup>19</sup> of equity risk was 1.6% of the fund's NAV. Equity risk reaches the highest value in equity funds, namely as much as 5% of the fund's NAV on average. When comparing equity risk in equity funds, special funds and funds of funds, we get noticeably different VaR of equity risk despite the fact that the ratio of shares and mutual funds certificates is similar in all three types of funds. This may be due to a better diversification of the portfolios of funds whose mutual funds certificates have been bought.

The analysis also shows that most of the mutual funds' total assets, as much as 57%, have their VaR at the level of up to 1%, which means that most of the mutual funds' assets are invested in low-risk assets. The reason is that 43% of assets are concentrated in money funds whose VaR fluctuates within the interval of up

to 1% NAV. However, 92% of the equity funds' net asset values have VaR within an interval from 6% to 8% of NAV. The remaining types of mutual funds have the majority of their assets in categories with VaR of up to 3% of NAV.

## Chart 104 Distribution of the ratio of VaR to the mutual funds' net asset value



Source: NBS, REUTERS, BLOOMBERG, own calculations

Table 15 Exposure of mutual funds to risks

	LAPUS	uic oi	mutuai	Iumas	to Haisa
	VaR from	VaR from	VaR from	VaR from	Share of the
Type of funds	0% to 1%	1% to 3%	3% to 6%	6% to 8%	type of fund in
	NAV	NAV	NAV	NAV	the total assets
money	98%	2%	0%	0%	44%
bond	22%	73%	5%	0%	15%
funds of funds	4%	76%	21%	8%	14%
mixed	22%	57%	9%	12%	11%
other	91%	9%	0%	0%	6%
equity	0%	0%	8%	92%	5%
real-estate	100%	0%	0%	0%	2%
closed	0%	93%	7%	0%	1%
special	0%	0%	100%	0%	1%
Total	57%	30%	6%	7%	100%

Source: NBS, REUTERS, BLOOMBERG, own calculations

<sup>&</sup>lt;sup>19</sup> Weighed average calculated from funds containing equity risk.

## 7 Stress testing

The banking sector has a relatively good ability to face even serious unexpected and adverse changes affecting the credit quality of loan portfolios. That is how we could probably summarize the results of credit risk stress testing. In other words, even if the clients' ability to discharge their obligations deteriorated to a certain degree as a result of an adverse development, it should not pose a threat to the stability of the sector as a whole. However, this does not mean that the realisation of some scenarios cannot cause relatively widespread losses or problems with maintenance of own funds in certain banks. This is especially true for the second scenario, which presumes a further expansion of loan activity by providing loans to less solvent clients, which subsequently manifests in their increased default rate.

From the viewpoint of liquidity it is positive that most banks have a sufficient volume of liquid assets, as well as the fact that the loan activities in most banks are financed from domestic sources. Neither the scenario where 20% of client deposits are withdrawn, nor that where 90% of non-resident banks' deposits are withdrawn, intensified their impact significantly during the first half of 2007.

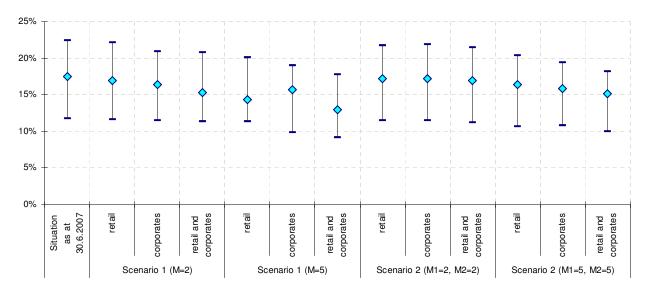
Contagion risk stress testing was performed in an effort to identify the structure of the domestic interbank market from the viewpoint of the diversification rate of deposits and loans and of the potential problems in the case of some of the banks' failure. The results show that as at the end of the individual months of the first half of 2007, there were no more than four banks in the sector whose own funds adequacy ratio would fall below the threshold of 8% in case of some other bank's default in payment of obligations.

The stress testing of foreign exchange risk confirms that the exposure of banks and most insurance companies to extreme changes in foreign exchange rates is negligible. Within the framework of pension asset management companies' funds, these changes could have a more significant impact particularly on some growth funds. These changes would have the most significant impact on equity and mixed funds. The reason is that the investments in equity portfolios are mostly denominated in foreign currencies without hedging of the foreign exchange risk.

If we take into account the change in the value of securities and derivatives kept in the banking book, the banking sector would be negatively influenced particularly by an increase in interest rates. At an increase of the NBS base rate by 2 p.p., the loss within a one-year time horizon would constitute approximately 1.3% of assets. If, however, we do not take into account the revaluation of instruments in the banking book to fair value, it is actually the fall in interest rates that would have a negative impact. In such case the lowering of NBS base rate by 2 p.p. would mean a loss of approximately 1% of assets particularly as a result of a decline in interest income from debt securities. The value of assets covering technical reserves in life insurance would be negatively influenced by an increase in the rates. Assets covering technical reserves in non-life insurance are not considerably exposed to unexpected changes in interest rates. An analogical conclusion is also valid for the funds of pension asset management companies and for most of the funds of supplementary pension asset management companies. Due to the short duration of bond portfolios, an increase in interest rates would mean an initial fall in value of these instruments however, within a span of one year the funds would make profit due to an increase in coupon payments. A simulated fall in the performance of real economy would make a more significant impact only on banks due to an expected decline in the loan portfolio's credit quality. On the other hand, this effect would be partially moderated by the impact of a decline in interest rates, which may be expected as a reaction of NBS. This decrease in interest rates would have a positive effect especially on an increase in the value of debt certificates' portfolios. It is for this reason, or for the reason of an expected depreciation of local currency, that also the effect on other parts of the financial market would be rather positive.

#### Credit risk in banks

Chart 105 Comparing impacts of the first variant of scenarios 1 and 2 on the distribution of own funds adequacy ratio in the banking sector



- Source NBS, own calculations
- The chart shows the lower quartile, median and upper quartile of the distribution of estimated values of own funds adequacy ratio in the sector after the application of the first variant of scenarios 1 and 2

When evaluating the impacts of stress scenarios, we should remember that the values of the different output quantities (own funds adequacy ratio after the emergence of a stress event, a change in the loan default rate) can only be taken as informative, since all the considered scenarios contain substantial simplifications when compared to reality. It is far more meaningful to analyse the test results from the viewpoint of a mutual comparison of the sensitivity of changes in these quantities to the shocks in the input stress parameters.

Credit risk stress testing was performed with seven scenarios:

- 1. Credit crunch
- 2. Provision of loans with a higher default
- 3. A decline in prices of real estates used to secure a loan
- 4. An increase in unemployment
- 5. An increase in interest rates
- 6. A decline in household income

7. An increase of unemployment combined with a decline in real estate prices.

Moreover, each of the scenarios 1 and 2 were carried out in two variants. A more detailed description of all the mentioned scenarios may be found in the document titled "Annex to the Report on the Results of the Slovak Financial Sector Analysis, part 1.

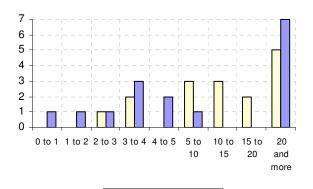
The size of the impact of stress testing on the Slovak banking sector differs relatively noticeably depending on the chosen scenario (or its respective variant). A common feature, however, is that significant losses generally occurred only at the simulation of a really extreme form of the individual scenarios. And even in these cases it did not relate by far to all the tested subjects.

The first scenario simulates an increase in the old loans' default rate combined with a halt in the banks' loan activities. Impairment of the loan portfolios' quality is derived either from

the historically biggest increments in a given bank (variant 1), or from existing default rates obtained from RBUZ<sup>20</sup> (variant 2), whereas the respective values are stressed with the Mfactor. The significance of the multiplier is different in individual variants. While in the scenario 1 it is possible to understand M as the number of months in which the biggest growth would be repeated, in the second variant it is necessary to understand it as an agent of an increase in the loan default rate. In the evaluation of the impacts of both versions of the first scenario, we proceed mainly from the results obtained when selecting multipliers M=2 or M=5. Whereas a lower value of the parameter represents modest and sufficiently simultaneously probable a impairment of the portfolio's quality, the second value should encompass the situation in the case of an extremely adverse development in a bank. Within the framework of the four assessed combinations of the first scenario of the credit risk stress testing (two choices of multiplier M, two variants per scenario), the first variant in combination with a twofold repetition of the biggest increment of nonperforming loans for the period of the previous twelve months presented itself as the least serious. Banks would cope relatively well with the above situation. The median of own funds adequacy ratio would fall to the value of 15.3%, which would represent a decline by 1.6 p.p. compared to the present state. Furthermore, the entire range of banks would maintain this indicator within a tolerable zone set by regulation, i.e. above the level of 8%. Only two banks would come relatively close to this level. The change in the overall distribution of own funds adequacy ratio in the sector is shown in Chart 105. A more serious impact would manifest itself when choosing a more moderate multiplier in the scenario's second variant. This would be related especially with the fact that the own funds adequacy ratio in one of the

banks would fall almost to zero. We get quite a different sight when assessing the results of the simulation of an extremely development of the clients' ability to meet their liabilities, represented by the stress factor value of 5, in both variants of the scenario. The fall in the own funds adequacy ratio median in the first variant by 4 p.p. to the level of 13% may not be too dramatic from the viewpoint of the sector as a whole, however, it was possible to successfully identify certain banks that would severely affected, should the stress conditions occur in reality. The greatest complications, not only within scenario 1 but also compared to other scenarios, would be caused by its second variant together with the choice of multiplier M=5. As much as a half of the sixteen tested subjects would have their own funds adequacy ratio worsened to an unsatisfactory level, which would also be reflected in the new median value of only 8.3%.

Chart 106 Distribution of marginal values of both variants of scenario 1 in the sector at a decline in own funds adequacy ratio down to 8%.



□ Variant 1 □ Variant 2

- Source: NBS
- The vertical axis shows the number of banks
- The horizontal axis shows the intervals of marginal values, at a decline in own funds adequacy ratio down to 8%

In scenario 2, a situation is considered where banks, in an effort to acquire a greater market share, provide a large number of new loans, especially to less solvent clients, which

<sup>&</sup>lt;sup>20</sup> Register of credits and guarantees.

will subsequently result in an excessive default rate of these loans. Also in this case, two variants were realised. The pair of multipliers  $M_1$  and  $M_2$  is used in the scenario. Their significance is common for both variants. M<sub>1</sub> represents the relationship between maximum proportion of non-performing loans to total loans in 2006 and the proportion of newly provided loans that will be nonperforming in the future. Multiplier M2 is used to simulate growth of the banks' loan activity with respect to the average month-on-month relative changes in the volume of provided loans over the past year. The second interpretation involves extending the time period during which the stress scenario remains valid. The analysis of the second scenario, like in the case of the first scenario, is based on two simulations capturing the more modest  $(M_1=2,$  $M_2=2$ ) and more adverse ( $M_1=5$ ,  $M_2=5$ ) development of credit risk indicators. Although a scenario constructed in this way affects the decrease in the resulting own funds adequacy ratio by an increase in the risk-weighed assets entering into the denominator of the respective formula together with a decrease in own funds by means of a recorded loss, the general impact of such a scenario is generally lower. This is caused in particular by the fact that the increment of non-performing loans is calculated from newly provided loans, whose number is far smaller, compared to the total volume of loans from which we proceeded in the previous scenario. The second variant would have a relatively negligible impact, in the case of both the lower and the higher values of the stress parameters M1, M2. Variant 1 would manifest a little more negatively, but this was only shown in the combination with a higher value of multipliers.

Another type of stress scenario focuses on an assessment of the decline in real estate prices, in both corporate and retail sectors. In the first case we proceed from detailed microeconomic data. We examine the potential influence of a decline in real estate prices used

as collateral for the additional creation of provisions and a subsequent impact on the own funds adequacy ratio. The scenario of a decline in real estate prices proceeds from the presumption that the unhedged parts of loans are covered in the individual credit categories (3 categories) by 0, 10 and 100 per cent of provisions respectively. Although in the case of halving the real estate prices we are simulating a really extreme situation, the impact on banks may only be labelled as generally modest, and even negligible in about one third of the banks. In the four most affected banks, the decline in own funds adequacy ratio oscillated around 3.5 p.p. A conservative policy of the banks at setting the ratio of the amount of loan to its guarantee, which creates a sufficient protective cushion for an eventual decline in real estate prices, is probably the key factor in the background of such favourable results.

The results of the testing of a decline in real estate prices in the retail segment are also relatively unambiguous and show a low risk level related to stress scenario. The greatest fall in own funds adequacy ratio would only constitute 0.8 p.p.

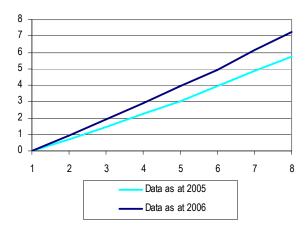
As to the fourth scenario, in this case we were evaluating the impact of an increased unemployment rate on the households' ability to meet their liabilities. This simulation assumed that persons who become unemployed would only receive a social benefit amounting to SKK 5,000 instead of their regular monthly income. persons were randomly These generated from the entire sample, whereas the situation was repeated a thousand times and the results were averaged. The output indicator is an increase in the ratio of non-performing retail loans to the total volume of these loans. In respect to the data, the simulation of an increase in the unemployment rate<sup>21</sup> was only performed for the sector as a whole. For this reason it is

<sup>&</sup>lt;sup>21</sup> The data used originated from the Survey of Income and Living Conditions of households (EU SILC 2005) conducted by the Statistical Office.

impossible to assess the individual banks' sensitivity to the scenario.

The current changes in the loan default rate for the respective levels of an increase in the unemployment rate, as well as the results of the previous testing as at the end of 2006, are shown in Chart 115. The chart clearly shows that, compared to the previous period, there has been a certain change in the steepness of the curve, which means that the sensitivity of the bank portfolios' credit quality has slightly increased. At the moment, every increase in the unemployment rate by another percentage point would count for an increase in the loan default rate by approximately 0.5 p.p.

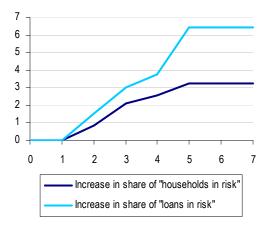
## Chart 107 Estimation of the impact of an increase in the unemployment rate



- Source: Statistical Office of the Slovak Republic, EU SILC 2005, EU SILC 2006, own calculations
- The simulations only included house purchase loans excluding building and bridging loans
- The horizontal axis shows the increase in interest rates in percentage points
- The vertical axis shows the increase in the share of "households at risk" (in p.p.), which represents the number of households whose instalments exceed their disposable income less ordinary expenses in the total number of households who have been provided a loan

Different data on individual households can also be used to estimate the possible negative impacts on the households' ability to meet their liabilities at an increase in interest rates or decline in their income.

## Chart 108 Estimation of the impact of an increase in interest rates

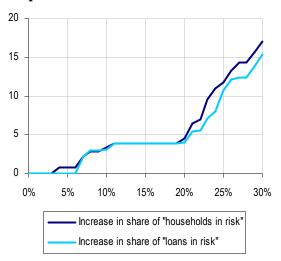


- Source: Statistical Office of the Slovak Republic, EU SILC 2005, EU SILC 2006, own calculations
- The simulations only included house purchase loans excluding building and bridging loans
- "Households at risk" is the ratio of a number of households whose instalments exceed the disposable income less ordinary expenses to total number of households who were provided a loan
- "Loans at risk" is the ratio of the balance of loans in households whose instalments exceed their disposable income less ordinary expenses, in the total volume of balance of loans
- The horizontal axis shows the increase in interest rates in percentage points
- The vertical axis shows an increase in the "households at risk" and "loans at risk" ratios in percentage points due to an increase in the interest rate
- It is assumed that all loans have a variable rate.

The fact that the data on interest rate fixation are not available in the survey is a significant limitation to the simulation of an increase in interest rates. The estimation of a possible impact of an increase in interest rates was therefore made with the most cautious presumption that all interest rates are variable. As shown in Chart 108, also with this presumption, due to an increase in interest rates by 2 p.p., the ratio of households whose instalments exceeded their disposable income

less ordinary expenses to the total number of households with a loan would only decrease by 1 p.p. A further increase in rates would increase this share of "households at risk". However, the data indicate a stabilisation of this share at an increase in interest rates by 5 p.p., when the adverse impact would manifest itself in the group of households with the lowest incomes (approximately 3.2% of all households with a provided loan). The remaining part of households would still receive an income sufficient to cover the ongoing increase in rates.

## Chart 109 Estimation of the impact of a fall in disposable income



- Source: Statistical Office of the Slovak Republic, EU SILC 2005, EU SILC 2006, own calculations
- The simulations only included house purchase loans excluding building and bridging loans
- "Households at risk" is the ratio of a number of households whose instalments exceed their disposable income less ordinary expenses to total number of households who were provided a loan
- "Loans at risk" is the ratio of the balance of loans in households whose instalments exceed their disposable income less ordinary expenses, in the total volume of balance of loans
- The horizontal axis shows a fall in disposable income, in percent.
- The vertical axis shows an increase in the "households at risk" and "loans at risk" ratios in percentage points due to a decline in disposable income

In the simulation of the fall in disposable incomes (or an equivalent of an increase in expenses), we analysed the change in the households' ability to repay house purchase loans without considering potential financial assets. That is to say that the data on the amount and structure of financial assets were not part of the survey. The aggregate data for the household sector, however, indicate a sufficient volume of financial assets. Even without considering financial assets, virtually all households should be able to cope with a modest fall in their disposable income (up to 5%). Only if the fall in disposable income exceeded 20%, it would have a risk impact.

On grounds of the above simulations it can be said that households who were provided a loan in the past had a reserve that was sufficient to cover a potential increase in interest rates or a fall in their income up to the value of 20%. However, when interpreting these results it must be again emphasized that the analysis only took a small part of total loans into account.

The last scenario combines the elements of some of the former scenarios. This means that expect both an increase unemployment rate and a decline in real estate prices in the economy. We simulate an increase in the unemployment rate by 10 p.p. and the related increase in the loan default rate by 4.9 p.p. (value obtained from the results of the previous scenario. Another entry parameter is a decline in real estate prices at the level of 50%. Another important assumption in the scenario is the mechanism of creating provisions, where we consider coverage of the entire unhedged value of non-performing loans (i.e. amounting to 100%). In general, the impact of the scenario appeared moderate, in case of some banks even negligible. Three banks would react relatively most sensitively to the stress development, with their own funds adequacy ratio falling congruently by 6 p.p.

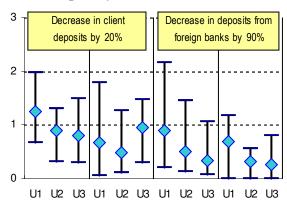
## Liquidity risk in banks

Two basic scenarios were chosen for the liquidity risk stress testing:

- fall in client deposits by 20% and
- fall in foreign banks' deposits by 90%.

The analysis of the impact of these scenarios is based on the sensitivity of three selected liquidity indicators (quick liquidity indicator, indicator of liquidity of up to 7 days and indicator of liquidity of up to 3 months)<sup>22</sup> to these scenarios in different banks. Each indicator has been calculated as a share of liquid assets and volatile sources in the respective category. The size of the shock is assessed with respect to averaged absolute values of month-on-month changes in these indicators.

## Chart 110 Comparison of the impacts of the different liquidity risk scenarios



- U1 quick liquidity ratio U2 - ratio of 7 day liquidity
- U3 ratio of 3 month liquidity
- Source: NBS, own calculations
- The chart shows the lower quartile, median, and the upper quartile of the distribution of the share of changes in liquidity indicators after applying the individual scenarios to the average month-on-month changes in the period during 2006.

In most banks, the scenario where 20% of client deposits are withdrawn should not have a significant impact on the situation from the viewpoint of liquidity. As shown in Chart 110, the impact in at least a half of the banks would be lower than its average month-on-month change for each of the liquidity indicators. This chart also shows that that the sensitivity of most banks to this scenario lowered during the first half of 2007, whereas the median of the average month-on-month change in the quick liquidity indicator and the indicator of liquidity of up to 7 days remained on about the same level. The growth of sensitivity may only be monitored in some banks. The average interbank change in the indicator of liquidity of up to 3 months declined (from 18% to 13%). The values as at December 2006 and as at 30 June 2007, which the Chart 110 shows as about the same for this indicator, may be also interpreted as a decline in the impact. The reason for a lesser impact of this scenario is an increase in short-term resources from foreign banks which the banks were depositing with NBS or which they used to purchase NBS bills. In most banks, this caused a growth of liquid assets as well as The values of liquidity volatile funds. indicators, which remained on approximately the same level, were thus less sensitive to a decline in deposits.

The impact of the scenario of a decline in non-resident banks' deposits by 90% was also decreased in the first half of 2007, even despite the aforementioned growth of resources from foreign banks. In none of the banks can we talk about a more significant extension of financing non-liquid assets from short-term foreign banks' deposits during the first half of 2007.

## Contagion risk of the banking sector

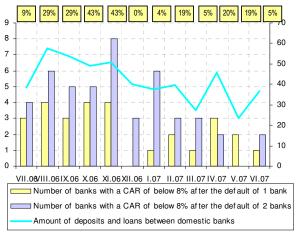
In this analysis, the term "contagion risk" represents the risk that a failure of one domestic bank will impair the situation or even a cause a failure of other banks. The main reason lies perhaps in the interconnections between banks

 $<sup>^{22}</sup>$  The definition of the indicators is given in the part Liquidity Risk

in the form of deposit and loan transactions on the interbank market. Should any of the banks lose its ability to meet its liabilities, this could cause loss to other banks, related to a fall in the own funds adequacy ratio. Thus, in this view, contagion risk is connected with credit risk arising from interbank claims and depends on the diversification of the portfolio of claims on the interbank market.

Chart 111 shows the numbers of banks whose own funds adequacy ratio could fall below the set level of 8% in the case of a failure of one or two banks. According to the data for the ends of the individual months, in case of a failure of one bank during the first half of 2007, this number oscillated from 1 to 3. Compared to the second half of 2006, the contagion risk slightly decreased. This may be related to a modest fall in the total volume of deposits and loans on the domestic interbank market.

# Chart 111 The impact of the contagion risk stress testing on the domestic interbank market



- Source: NBS, own calculations
- The left-hand vertical axis: number of banks whose own funds adequacy ratio would fall below 8% in the case of failure of one or two banks
- The right-hand vertical axis: volume of deposits and loans among domestic banks in SKK billion (state as at the end of the month)
- Above the chart there is given the share of banks whose own funds adequacy ratio would fall below 8% in the case of a failure of one bank, in the total assets of the banking sector

The analysis also shows that although a failure of one bank may induce a decrease in capital to an amount below the set level, the probability of a further spread of failures is very small, providing no other conditions will worsen as well. Even in the case of a decline in own funds adequacy ratio due to a failure of one of the other banks, the own funds adequacy ratio would remain above the level of 4% anyway.

#### Market risks

## Foreign exchange risk

Table 16 Simulated changes in rates, obtained through the estimation of mutual correlations in stress periods

COLICIA		correlations in stress perious										
Curronov	Simulation of	Simulation of	Historical Scenario (only for comparison)									
Currency	depreciation of koruna	appreciation of koruna	Period of 11.3. - 29.03.2005	Period of 6.3. – 20.03.2007								
CHF	16%	-16%	3%	-5%								
CZK	8%	-8%	1%	-3%								
DKK	15%	-15%	4%	-4%								
EUR	15%	-15%	4%	-4%								
GBP	14%	-14%	4%	-5%								
HUF	4%	-4%	2%	-1%								
JPY	15%	-16%	5%	-8%								
PLN	2%	-2%	-1%	-3%								
SEK	14%	-14%	3%	-4%								
USD	16%	-17%	3%	-5%								

Source: NBS, own calculations

This part discusses the analysis of the impact of a simulated significant strengthening or weakening of the local currency against other currencies on the different parts of the financial market. Both scenarios calculated on grounds of a presumed change in the SKK/EUR exchange rate by 15%, whereas the changes to other rates were calculated by means of an estimation of the correlations in stress periods that are generally higher than correlations in quiet periods (as much as twice the amount in the case of certain currencies). The size of the shock is approximately

threefold compared to the most significant changes in foreign exchange rates that occurred during the period of ten working days in the last few years. Simulated changes in rates and their comparison with historical scenarios are shown in Table 16. A more detailed description of the model on grounds of which the mentioned scenario has been created, can be found in the document Annexes to the Report on the Results of the Slovak Financial Sector Analysis, part 1.

Table 17 The impact of the scenario of koruna appreciation

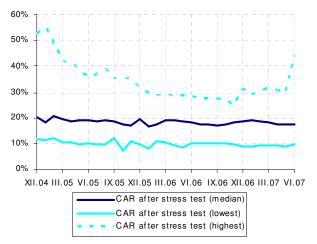
Koi una appi eciation			
	Lower quartile	Median	Upper quartile
Banks and branches of foreign banks	-0.1%	0.0%	0.1%
of which: branches of foreign banks	-0.2%	0.0%	0.1%
Insurance companies	0.0%	0.0%	0.0%
Pension funds	-1.2%	-0.2%	0.0%
of which: conservative	0.0%	0.0%	0.0%
balanced	-0.8%	-0.3%	-0.2%
growth	-5.4%	-1.8%	-1.1%
Supplementary pension funds	-1.0%	-0.4%	-0.1%
Mutual funds	-5.3%	-2.9%	0.0%
of which: equity	-15.9%	-14.1%	-11.1%
bond	-2.5%	-0.8%	0.0%
mixed	-8.3%	-4.5%	-3.6%
funds of funds	-6.8%	0.0%	1.2%

- Source: NBS, own calculations
- The table shows the quartiles of the share of profit or loss in the assets (or technical reserves in the case of insurance companies) as a consequence of koruna appreciation
- A negative value indicates loss

The simulations have shown that strengthening of koruna would have a worse impact on most parts of the financial market than it's weakening. The reason is that insurance companies and funds usually do not hold a more significant share of foreign currency liabilities and thus their potential open foreign exchange positions are usually long. This only excludes banks, which have a large part of liabilities in foreign currency. However, their foreign exchange positions are mostly

closed, with the exception of some branches of foreign banks. The impacts of a simulated strengthening of koruna are summarised in Table 17.

# Chart 112 Time development of the impact of changes in foreign exchange rates given in the Table 16



- Source: NBS, own calculations
- The change in own funds adequacy ratio for each bank was estimated for such a change in exchange rates that would have a negative impact on the bank
- Branches of foreign banks were not included in the calculations
- CAR own funds adequacy ratio

The simulation suggests that not even considerable changes in foreign exchange rates would have a serious impact on most banks. Some branches of foreign banks are an exception, being liable to a loss amounting to as much as 4% of assets in the above scenario. As shown in Chart 112, the conclusion about a low impact of extreme changes on the banking sector was valid not only as at 30 June 2007 but also during 2005-2007. When simulating the extreme changes in foreign exchange rates given in Table 16, the foreign exchange risk stress testing did not detect the possibility of a decline in own funds adequacy ratio below the

level of 8% as at the ends of individual months in the first half of 2007. <sup>23</sup>

Significant changes in foreign exchange rates also would not have a noticeable impact on most insurance companies' technical reserves, since the size of open foreign exchange positions in technical reserves and assets covering technical reserves is limited by law. In most insurance companies, the estimated loss would not exceed 0.3% of technical reserves in both life insurance and non-life insurance.

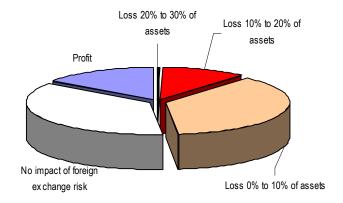
However, it must be said that although foreign exchange positions are virtually closed in other insurance companies, significant changes in foreign exchange rates can exert an indirect negative influence by investing in mutual funds. Although the mutual funds certificates of these funds are denominated in SKK, foreign exchange risk may manifest by a fall in their value, since the mutual funds themselves may not have their foreign exchange positions closed. According to the data for the different insurance companies' portfolios, three insurance companies hold their investments in mutual funds with a more significant open foreign exchange position.

The mentioned significant changes in foreign exchange rates would have a greater impact on some funds of pension asset management companies and funds of the capital market.

Whereas conservative funds were not exposed to foreign exchange risk, the foreign exchange risk would be higher in certain balanced and growth funds.

Among mutual funds, equity funds seem to be the ones most exposed to a simulated appreciation of the local currency, together with mixed funds, which also have a relatively large representation of investments in equities.

# Chart 113 Distribution of the impact of a noticeable strengthening of koruna given in Table 16 on assets managed in mutual funds



- Source: NBS, own calculations
- The chart shows the ratios of different funds' assets to the total assets managed in mutual funds

#### Interest rate risk

In the simulation of an increase or a decrease of the NBS base rate by 2 p.p., the development of discount rates was estimated along the interest rates.

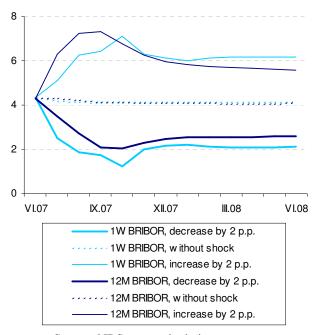
When estimating the impact of the stress testing of unexpected changes in interest rates, it is particularly necessary to estimate the nature of changes expected on the market. Profits or losses from the expected changes in interest rates are indeed not the result of the interest rate risk. The yield curve reflects the expectations of the market as to development of the NBS base rate. The expected values of bi-weekly interbank market rates were calculated using interpolation; an EC model was used for the estimation of an expected development of the NBS base rate with the help of these rates. In the following analysis, we understand the expected changes in interest or discount rates as those rates, which are predicated by the utilized EC model

<sup>&</sup>lt;sup>23</sup> As already said in the chapter "Risks in the banking sector", the situation would be different if off-balance sheet claims and liabilities from loan commitments and guarantees were included in the calculation of the open foreign exchange position.

without a change in the base interest rate. Losses or profits caused by any deviation from this development are considered the impact of the interest rate risk. Therefore, any change in the NBS base rate is in this respect understood as unexpected.

In case of an unchanged base interest rate we can expect that the interbank market rates will also remain unchanged. In case of a shock, the reaction would be different depending on the rate's maturity. In interest rates with the shortest maturities, the reaction to both an increase and a decrease in the NBS base rate would be symmetrical. After a considerable increase or decrease, the values would stabilise in the medium-term period and the change would be transferred into the rates in its total amount.

Chart 114 The estimated development of the interbank market rates after a change in the NBS base rate

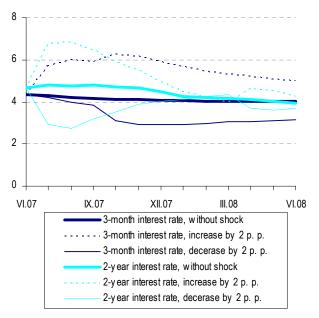


- Source: NBS, own calculations
- Data on an increase or a decline in the caption of the chart represent a simulated change in the NBS base rate.

The reaction in the case of interest rates with longer maturities would be asymmetrical the increase would manifest faster and to a greater degree. However, at both the increase and the decrease, the initial deviation would dampen gradually and the new values at the end of the period monitored would not reflect the change in the base rate in its full amount.

Based on the results of the used model it is possible, providing the NBS base rate does not change, to expect a gradual moderate fall in discount rates for a longer period during the next year.

Chart 115 The estimated development of discount rates after a change in the NBS base rate



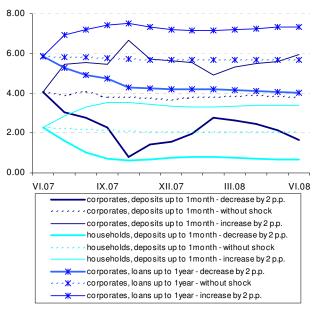
- Source: NBS, own calculations
- Data on an increase or a decline in the caption of the chart represent a simulated change in the NBS base rate.

The reaction would be asymmetrical at a change in the NBS base rate - an increase in this rate would manifest itself in a change in discount rates more considerably and faster than its decrease. Decrease in the NBS base rate would manifest very little in the middle part of the discount curve. Furthermore, whereas the initial increase or decrease in discount rates for

a shorter period would be longer-term, the initial impact in the case of discount rates for a longer period would be mitigated approximately within the period until March 2008.

Interest rates on loans to and deposits of enterprises<sup>24</sup> and the population report a high dependence on the interbank market rates and on the NBS rate, except the loans to and deposits of the population with a maturity of over 2 years. In general, the reactions to the shock in the NBS base rate would be symmetrical and the change would not be projected in its full amount. The rates would be stabilised in their new values after about six months.

Chart 116 The estimated development of the rates on loans and deposits after a change in the NBS base rate.

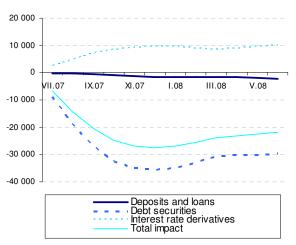


- Source: NBS, own calculations
- Data on an increase or a decline in the caption of the chart represent a simulated change in the NBS base rate.

Stress testing of the interest rate risk in the banking sector is divided into three parts. The estimated impact of an increase in the NBS base rate by 2 p.p. was calculated for the portfolio of deposits and loans and the portfolio of securities and loan derivatives. Securities and derivatives are reported in the banking book or trading book, on which basis two approaches were used to estimate the impact of the shock on the sector.

The first approach also considered the revaluation to fair value of those bonds and derivatives, which are reported in the banking book and are not revaluated against profit or loss. Hence this approach takes into account the fact that banks can also sell these instruments, if needed.

Chart 117 Estimated impact of an increase in the NBS base rate by 2 p.p. on the banking sector, taking into account the revaluation of the banking book to fair value.



- Source: NBS, own calculations
- Data in SKK million.

The securities portfolio would be particularly affected by an increase in the NBS base rate; after applying the shock, the loss would cumulate during the first six months. During the last six months, this loss would be mitigated partly due to an increase in interest income from securities, partly due to a

<sup>&</sup>lt;sup>24</sup> Enterprises include financial companies, other financial intermediaries, insurance companies and pension funds, general government, non-profit organisations serving the households, and households.

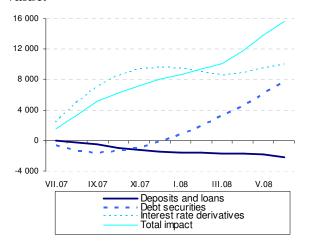
mitigation of the influence of the shock on the bonds' rates.

In interest derivatives, we can observe a growth of profit following an increase in the NBS base rate, which reflects the fact that these instruments are used to secure the securities portfolio against loss. Also in this case, the profit would increase during the first six months, the achieved profit would oscillate on a relatively constant level until the end of the period monitored.

The shock would have the lowest impact on the portfolio of deposits and loans, where loss would cumulate during the entire period.

The own funds adequacy ratio in some banks could fall below 8% as at the end of the period monitored. This fall is caused mainly by the loss from revaluation of securities.

Chart 118 Estimated impact of an increase in the NBS base rate by 2 p.p. on the banking sector, taking into account the revaluation of the banking book to fair value.



- Source: NBS, own calculations
- Data in SKK million.

The second approach only considers the impact of the shock on the revaluation of securities and derivatives reported in the trading book and on the net interest income from debt securities. In this approach there was a change only in the value of the estimated profit or loss for the bond portfolio, since the interest

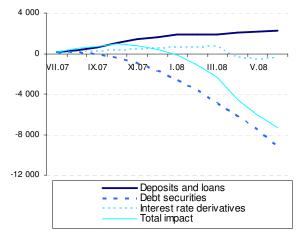
derivatives in the banking book were reported in the same nominal value according to different maturities on the side of assets as well as liabilities. This means that the overall impact of the shock on this portfolio is zero.

Since the majority of securities are reported in the banking book, in this approach the profit from interest income would gradually exceed the loss from revaluation, thus, in general, an increase in the NBS base rate would result in a growth of profit for the banking sector.

If, when calculating profit or loss, we do not take into account the revaluation of the banking book, a decrease in the NBS base rate poses a greater risk for the banking sector. Therefore, this case was also modelled in the second approach.

As in the previous case, so in this scenario a loss from securities would have the greatest impact on the achieved loss. Since most securities are reported in the banking book, the initial profit from the revaluation of the banking book would be exceeded in time by the loss from net interest income.

Chart 119 Estimated impact of a fall in the NBS base rate by 2 p.p. on the banking sector, taking into account the revaluation of the banking book to fair value.



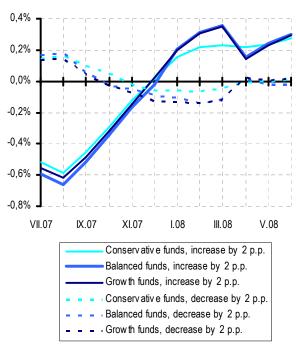
- Source: NBS, own calculations
- Data in SKK million.

The portfolio of derivatives would report a modest loss as at the end of the period

monitored. In interest derivatives as well as securities, the second approach confirmed the possible asymmetrical reaction of interest rates to a change in the NBS rate, when at an increase by 2 p.p., the deviations that would be reached as at the end of the period would be greater than at a decrease.

The income from the portfolio of deposits and loans would be increasing during the entire period.

# Chart 120 The estimated impact of a change in the NBS base rate on the pension savings funds

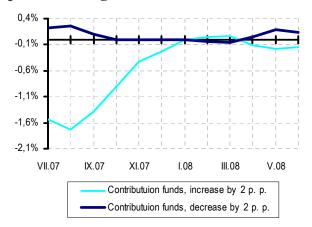


- Source: NBS, own calculations
- The horizontal axis gives the median of the ratio of estimated profit / loss from revaluation and from the change in interest income in the securities portfolio to NAV
- Data on an increase or a decline in the caption of the chart represent a simulated change in the NBS base rate.

The own funds adequacy ratio at the end of the period monitored would not fall below the level of 8% in any bank, due to the present asymmetry among other reasons.

The stress testing of the interest rate risk in the pension asset management companies' funds confirms the conclusions of the analysis mentioned in the part "Risks": these funds are not exposed to a significant impact of the interest rate risk. An increase in the rates would make an instant negative impact. Its influence, however, would be mitigated in a relatively short time due to an increase in interest income from the coupons of debt securities as well as due to the mentioned mitigation of the initial shock at discount rates for a longer period. In a horizon of one year, the impact of an increase in the NBS rates would be even slightly positive.

# Chart 121 The estimated impact of a change in the NBS base rate on the supplementary pension saving funds



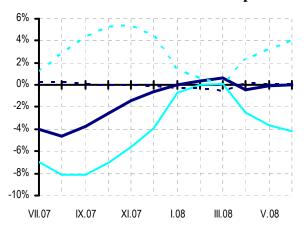
- Source: NBS, own calculations
- The horizontal axis gives the median of the ratio of estimated profit / loss from revaluation and from the change in interest income in the securities portfolio to NAV
- Data on an increase or a decline in the caption of the chart represent a simulated change in the NBS base rate.

In case of a decline in rates, the initial positive effect would be less considerable due to the mentioned asymmetry between the reaction of the interest curve and the changes in the NBS base rate. Besides, it would be gradually lowered by a decline in interest income from coupons. At the same time, the analysis shows that the impact of the interest shock is approximately the same in the different types of funds. This is caused by the fact that in

conservative funds, where the debt securities portfolio has a shorter duration, the ratio of this portfolio to the fund's total assets is higher than in the case of balanced and growth funds.

Investments in the supplementary pension saving funds are exposed to a higher interest rate risk.

Chart 122 The estimated impact of a change in the NBS base rate on assets covering technical reserves of insurance companies.



Assets covering TR in life insurance, increase by 2 p. p.

Assets covering TR in non-life insurance, increase by 2 p. p.

Assets covering TR in life insurance, decrease by 2 p. p.

Assets covering TR in nonlife insurance, decrease by 2 p. p.

- Source: NBS, own calculations
- The vertical axis shows the median of the ratio of estimated profit / loss from revaluation and from the change in interest income in the debt securities portfolio to the net value of assets covering technical reserves
- Data on an increase or a decline in the caption of the chart represent a simulated change in the NBS base rate.

A change in the NBS base rate in the insurance sector, especially in life insurance, would have a relatively considerable impact on the value of debt securities portfolio during the second half of 2007. In regard to a high duration of bond portfolios in some insurance companies, the change in interest income would be relatively insignificant compared to the change in the value of these portfolios. This change would in essence depend mainly on the

estimated impact of the interest shock on the long end of the interest curve, where the above mentioned asymmetry manifests together with a mitigation of the impact during the first half of 2008. A repeated growth of profit or loss in the second quarter of 2008 is caused by the estimated development of discount rates. However, due to a lack of detailed data, the above analysis does not take into account that a great share of debt securities is in the portfolio of financial instruments held until maturity and thus they would not be revaluated to fair value at a change in the interest curve.

## **Macro Stress Testing**

In the following analysis, we are trying to estimate the impact of a year-on-year decline in real GDP by 3% on the financial market. Although there is only a small probability of a fall in real GDP which at present has a high growth rate (the year-on-year growth of real GDP was 9.4% as at 30 June 2007), it cannot be ruled out completely.

In the above scenario we can expect an impairment of the debtors' financial situation and a subsequent impairment of the quality of the banks' credit portfolio. At the same time, we can expect a reaction of the NBS, which will try to mitigate the adverse economic development by means of an expansive monetary policy.

An econometric model has been estimated on the basis of historical data in order to quantify these influences. This model describes the long- and short-term relations between the change in real GDP, the ratio of nonperforming loans to total loans, the three-month BRIBOR and the SKK/EUR exchange rate. A more detailed description of this model may be found in the document titled "Annex to the Report on the Results of the Slovak Financial Sector Analysis", part 1. The deviations of individual variables from their balanced values caused by a year-on-year fall in real GDP by 3%, estimated using this model are shown in Table 18. The impact on the other exchange rates was estimated using the model mentioned in the part "Stress testing of the foreign exchange risk". When evaluating the impact on other interest rates, we suppose that a change in long-term rates (i.e. rates for a period of over 5 years) represents 50% of the change in a three-month BRIBOR. The change in other rates was estimated using a linear approximation.

The results confirm that the expected lowering of interest rates by the NBS, considered in this model, would contribute to a mitigation of the impact on the quality of the loan portfolio in a two-year horizon.

Table 18 The estimated impact of a year-onvear fall in real GDP by 3%

Time horizon	SKK/EUR exchange rate	three-month BRIBOR	ratio of non- performing loans to total loans
1 year	depreciation	fall	increase
	by 3.1 %	by 1.4 p.p.	by 4.2 p.p.
2 years	depreciation	fall	increase
	by 2.2 %	by 2.3 p.p.	by 1.4 p.p.

- Source: NBS, own calculations

In the banking sector, the given scenario would manifest in a decline in the own funds adequacy ratio, especially through impairment of the quality of the banks' loan portfolio. The estimated loss from credit risk is approximately SKK 14 billion. which represents about 15% of own funds. However, in regard to the structure of the present banks' portfolio it is positive that the expected reaction of NBS in the form of lowering interest rates would contribute to the mitigation of this effect also directly through an increase in the net economic value of this portfolio, rather than just indirectly through the mitigation of the impact on real economy. The reason is that most banks have long positions in bands with a longer residual period of revaluation of interest rates in the banking book. This increase in value represents approximately SKK 5 billion. However, in the reported income it would manifest only gradually, through the growth of net interest income. The direct impact of the change in exchange rates would be negligible. In total, the median own funds adequacy ratio would fall from 17.5% to 16.1%.

The impact of the above scenario on most pension funds would be either insignificant or even positive. This is because the decline in interest rates would have a rather positive impact on most funds. This impact would manifest the least in conservative funds where the debt securities portfolios have the shortest duration. This means that the growth of the bonds' real value would only be modest and quickly subdued by a fall in interest income due to lower coupons. This impact would be positive in balanced and growth funds, amounting to 0% to 0.5% of the NAV. The changes in foreign exchange rates would only make impact on balanced and growth funds. However, in regard to long foreign exchange positions in these funds, this impact would be positive.

Table 19 The impact of the macro stress testing

usung			
	Lower quartile	Median	Upper quartile
Banks (excluding branches of foreign banks)	-1.0%	-0.6%	0.2%
Insurance companies	2.1%	3.0%	3.7%
Pension funds	0.1%	0.3%	0.5%
of which: conservative	-0.1%	0.1%	0.2%
balanced	0.2%	0.4%	0.6%
growth	0.2%	0.4%	0.7%
Supplementary pension funds	0.9%	1.2%	1.5%
Mutual funds	2.5%	3.0%	3.4%
of which: equity	1.0%	1.5%	3.7%
bond	1.0%	1.4%	1.8%
mixed	0.0%	0.4%	1.7%
funds of funds	0.9%	1.2%	1.5%

- Source: NBS, own calculations
- The table shows the quartiles of the share of profit or loss in the assets (or technical reserves in the case of insurance companies) as a consequence of koruna appreciation
- A negative value indicates loss

Also the effect on assets covering technical reserves in insurance companies would be positive, but compared to pension funds it would be even more considerable. This is due to a substantially higher duration of debt securities portfolios, which causes a higher growth of the securities' value at a decline in

interest rates, and a lesser effect of a decline in variable coupons. The effect of the depreciation of koruna would be negligible (with the exception of Česká poisťovňa, which would record a profit amounting to 0.7% of assets covering technical reserves).

Table 20 VaR and the impacts of stress scenarios on the banking sector

Bank	Situation as at 30	Share	Forei	gn exchang	e risk¹	In	erest rate r	isk	Market risks total		Credit risk		Contagion risk	Macro scenario
Dank	June of profit	of profit in own funds		EUR/SKK +15% <sup>4</sup>	EUR/SKK -15% <sup>5</sup>	VaR²	Increase by 2 p.p. 1. approach <sup>6</sup>	Decline by 2 p.p. 2. approach <sup>7</sup>	VaR <sup>2</sup>	Scenario 18	Scenario 29		Failure of 1 bank	Fall in GDP by 3% year-on- year
Lower quartile	11.7%	0.8%	11.7%	11.9%	11.7%	11.2%	8.9%	11.3%	11.2%	11.3%	10.0%	10.4%	9.4%	11.4%
Median	17.5%	1.0%	17.4%	17.6%	17.4%	17.4%	14.0%	17.1%	17.4%	15.3%	15.2%	15.8%	16.0%	16.1%
Upper quartile	22.4%	1.4%	22.4%	22.4%	22.3%	20.9%	16.6%	20.4%	20.9%	20.8%	18.2%	20.1%	17.8%	21.8%

Source: NBS, own calculations

The impacts of those scenarios are given, in which the estimated own funds adequacy ratio fell below the level of 8%

Explanatory notes to the given values:

- 1/ The calculation of the foreign exchange position includes only balance-sheet assets and liabilities (with the exception of positive and negative derivative values) and the nominal values of spot and forward transactions and option transactions.
- 2/ The own funds adequacy ratio after taking into account the highest loss that a bank will suffer over a period of 10 business days in 99% of cases (calculated on the basis of historical simulations using data for one year).
- 3/ The own funds adequacy ratio after taking into account the highest loss that a bank could suffer in the event of a repetition of the exchange rate development, which occurred between 23 November and 7 December 2006.
- 4/ The own funds adequacy ratio after taking into account revaluation under a simulated depreciation of the Slovak koruna against the euro of 15%; the movements of other exchange rates were estimated on the basis of correlations in the stress test periods and they are stated in Table 16
- 5/ The own funds adequacy ratio after taking into account revaluation under a simulated appreciation of the Slovak koruna against the euro of 15%; the movements of other exchange rates were estimated on the basis of correlations in the stress test periods and they are stated in Table 16
- 6/ The own funds adequacy ratio after taking into account the immediate change in the net economic value of balance-sheet items, occurring upon a parallel rise in the whole interest rate curve by 2 or 5 percentage points.
- 7/ The own funds adequacy ratio after taking into account changes in net interest income and revaluation of the portfolio of debt securities and interest rate derivatives, in a time horizon of one year from when the base rate is raised by 2 percentage points.
- 8/ A loan crunch with the assumption that an increase in non-performing loans recorded in 2006 will double (1-month time horizon).
- 9/ The provision of loans with a higher default rate together with the assumption that the proportion of total loans that are non-performing new loans increases by five times in comparison with the existing proportion of non-performing loans and that the average month-on-month increase in lending volume rises fivefold (1-month time horizon)
- 10/ The unemployment rate rises by 10 percentage points and real estate prices decline by 50% (1-month time horizon, taking into account only the effect on retail loans).

### 8 Financial Market Infrastructure

## **Stock Exchange**

As at 30 June 2007, the Bratislava Stock Exchange registered on its markets 353 issues of securities, mutual funds certificates and bonds (112 issues) in total. In the first half of 2007, the stock exchange did not accept any new issues and nor did any issuers use the possibility to increase their listed capital by increasing the volume of already listed securities. New issues included 16 issues of debt securities issued by domestic issuers (2) issues of government bonds, 11 mortgage bonds, 2 corporate bonds and 1 issue of a bank bond). The total value of the newly admitted capital through admittance of issues and new tranches thus amounted to SKK 80.76 billion as at 30 June 2007.

The total market capitalisation of shares, mutual funds certificates and bonds listed on the BSSE markets as at the end of June 2007 amounted to SKK 595.4 billion, which, compared to the same period of the year 2006, constituted an increase by 5.55% and compared to the value as at the end of 2006, an increase by 2.36%. The market capitalisation of asset securities as at the end of June 2007 recorded a 1.14% year-on-year fall to the level of SKK 150.9 billion. The market capitalisation of bonds as at June 2007 amounted to SKK 444.6 billion, which represented an 8.15% year-on-year increase and an increase by 3.7% compared to December 2006.

4741 transactions with securities were realised on the stock exchange in the first half of 2007, in the total volume of almost SKK 256.12 billion, which, compared to the same period of the previous year, constitutes an increase by 1.74% in the number of transactions at a simultaneous fall in the financial volume by 18.27%. Compared to the financial volume of traded bonds (SKK 255.77 billion) in the first half of 2007, the ratio of the volume of traded

asset securities (SKK 348.16 million) to the total volume of transactions was negligible (0.14%). As to the type of transactions, direct transactions dominated with a 98.85% share in total transactions. Six REPO transactions with securities were made in the first half, in the volume of SKK 8.47 million. Of the total turnover on transactions in the first half of 2007, the turnover on transactions made by non-residents accounted for 48.6%, of which 51.6% were sale transactions and 44.5% purchase transactions.

The development of the main share index of the Slovak capital market (SAX) was characterised by a significant volatility in the first half of 2007, having reached the lowest value in May 2007 (387.5 points). Its value as at the end of the period monitored constituted 409.8 points, which represented a fall by 1.39% compared to the level as at December 2006, however, this was an increase by 8.65% on a year-on-year basis.

## **Central Securities Depository**

The Central Securities Depository of the Slovak Republic continues in the activities of its predecessor, The Center for Securities of Slovakia, a.s. It has been performing its activities as defined by Act No. 566/2001 Coll. on securities and investments and on amendments to certain laws, since 19th March 2004.

The total volume of book-entry securities in terms of nominal value, credited to owners' accounts as at the end of June 2007, amounted to SKK 1,029.5 billion, of which the largest proportion was that of shares (SKK 533.8 billion) and bonds (SKK 482.9 billion). Compared to the situation as at the end of 2006, the total volume of book-entry securities issued in CSD, in terms of nominal value, grew by 2.15%, which represents SKK 21.6 billion. Bonds registered the greatest increase, their

volume in terms of nominal value having grown by 6.4% since December 2006. Compared to the end of 2006, there was a fall in shares (by 1.3%) and mutual funds certificates (by 1.65%).

During the first half of 2007, the CSD performed transfers of securities with financial settlement through the clearing and settlement system in the total market value of SKK 175.2 billion. In a year-on-year comparison, this is a fall by approximately SKK 22 billion, which represents a decrease by 11.2%. The volume of transferred securities without financial of nominal value. settlement. in terms amounted to SKK 108.6 billion as at June 2007. Compared to the same period of 2006, this volume fell by SKK 201.2 billion, which represents a decrease by ca. 65%.

For the first half of 2007, 90 new issues of book-entry securities were registered with the CSD, in the total nominal value of SKK 100.5 billion, and 204 issues of book-entry securities were cancelled, including issues whose appearance had been changed to certificates, in the total volume of SKK 72.1 billion.

## **Deposit Protection Fund**

The fund is authorised by statute to ensure and perform activities related to the protection of deposits, which natural persons, or legal persons defined by law, hold with banks and branches of foreign banks that participate in the deposit protection system in Slovakia. As at June 2007, 15 banks and 2 branches of foreign banks were insured in the Deposit Protection Fund, whereas the deposits of other branches of foreign banks were insured in the countries of their banking groups.

Banks and branches of foreign banks are required to pay the initial contribution, an annual contribution and an extraordinary contribution. Based on the decision of the Bank Board of the NBS, the amount of the annual contribution of banks and branches of foreign banks for 2007 was set by the Board of the fund to 0.2% of the value of bank deposits protected by the Deposit Protection Act, according to the

average state of deposits for the previous quarter.

In the first half of 2007, no bank was declared unable to pay the deposits by the National bank of Slovakia, which means that the fund was not required to pay any compensations for inaccessible deposits of any bank, and there was no halt in handling the bank deposits as a result of a decision of a court of bankruptcy, issued in a bankruptcy The **DPF** proceeding. was continually evaluating the payment of compensations for inaccessible deposits in Devín banka, a.s., in involved most cases this hereditary proceedings.

The fund is a member of the European Forum of Deposit Insurers and cooperates in the preparation of changes of the European Directive on the Deposit Protection System, while also participating in studies focused on informing depositors and on payments of compensations. In addition to that, the fund analyses the possible impacts of the transfer to euro on the overall compensation payment system, and continually ensures activities associated with preparations for the changeover to euro. The fund has specified the assumed basic groups of requirements for updating the DPF System related especially to a dual display of end (resulting) amounts to be paid and their rounding, as well as conversion of values from the Slovak currency to euro and vice versa.

### **Investment Guarantee Fund**

43 entities fall into the protection system formed by the Investment Guarantee Fund.

The scope of client asset protection is set by the Act on securities. The current amount of compensations for inaccessible client assets amounts to EUR 20,000. In the course of the first half of 2007, no event occurred that would lead to the provision of compensations from the fund.

### Slovak Insurers' Bureau

The Slovak Insurers' Bureau is an association of insurance companies that are authorised to provide motor third party liability insurance in Slovakia. It had 9 members as at 30 June 2007.

The Insurance Guarantee Fund is formed of contributions made by the Bureau's members,

extraordinary contributions and premiums, as defined by the Act on Motor Third Party Liability Insurance. The annual contribution is set as a percentage based on the number of insured motor vehicles for the previous calendar quarter.

## 9 Tables

## A Information on the structure of the financial market

## A.1 Data on numbers of institutions

### A.1.1 Number of financial institutions in June 2007

	Number of institutions as at 30.6.2007	Number of institutions as at 30.6.2006	Change
Number of banks in the SR	16	17	-1
building societies	3	3	0
banks holding mortgage licence	8	9	-1
other banks	5	5	0
Number of branches of foreign banks in the SR	9	7	2
of which: on the basis of an NBS licence	1	1	0
on the single banking passport principle	8	6	2
of which: branches of foreign banks holding mortgage licence	1	1	0
Number of branches of foreign banks contributing to Deposit Protection Fund	2	2	0
Number of foreign bank representative offices in the SR	9	10	-1
Number of branches (organisational units) of banks in the SR	693	705	-12
Number of lower organisational units in the SR	464	473	-9
Number of branches of Slovak banks in other countries	1	1	0
Number of Slovak banks' representative offices in other countries	1	1	0
Number of foreign entities freely providing cross-border banking services	143	118	25
of which: banks	131	113	
			18
electronic money institutions	7	2	5
foreign financial institutions	3	3	0
credit unions	2	0	2
Slovak banks providing free cross-border banking services abroad	1	1	0
of which: electronic-money institutions	0	0	0
Number of employees of banks and branches of foreign banks	19 435	19 753	-318
Number of insurance companies in the SR	23	24	-1
of which: insurance companies providing only life insurance	5	5	0
insurance companies providing only non-life insurance	4	5	-1
insurance companies providing both life and non-life insurance	14	14	0
Insurance companies providing services on the basis of the freedom to provide services	323	234	89
of which: Without establishing a branch	316	230	86
of which: Via a branch	7	4	0
Number of insurance companies in the SR providing statutory automobile liability insurance	9	8	1
Number of pension fund management companies	6	6	1
Number of supplementary pension companies	4	3	0
Number of supplementary pension insurance companies	0	1	1
Number of domestic asset management companies in the SR	10	10	0
of which: asset management companies with an extended licence under § 3 (3) of Act on Collective Investment (ACI)	6	7	-1
Number of domestic mutual funds:	109	110	-1
of which: open mutual funds	60	63	-3
closed mutual funds	44	47	-3
special mutual funds	5	0	5
Number of foreign asset management companies and foreign entities of collective investment operating in the SR on the basis of a licence under § 75 of the ACI:	3	2	1
of which; via a branch in the SR	1	1	0
without establishing a branch	2	1	1
Number of foreign asset management companies and foreign entities of collective investment operating in the SR on the basis of a single European passport:	24	21	3
	-	7	0
of which: foreign asset management companies	7	7	0
of which: foreign investment companies	16	14	2
of which: branches of foreign asset management companies	1	0	1
within which: number of foreign mutual funds and sub-funds of foreign investment companies	478	386	92
Number of foreign asset management companies providing services according to § 3 ods. 3 ZKI	5	5	0
Number of securities dealers	31	35	-4
of which: banks and branches of foreign banks	18	15	3
Number of foreign entities operating in the SR as securities dealers	344	251	93
of which: via branch in the SR	3	2	1
without establishing a branch	341	249	92
Number of Slovak securities dealers providing services abroad	7	9	-2
Number of investment service brokers in the SR:	915	852	63
of which: juristic persons	63	53	10
natural persons	852	799	53

#### **Banking Sector**

The number of banks decreased due to the fusion of UniBanka, a. s. with HVB Bank Slovakia, a. s. as at 1. 4. 2007. At the same time, its business name changed from the original UniBanka, a.s., to the new Unicredit Bank Slovakia a.s.

In the period monitored, two branches of foreign banks commenced their operations: Fio, credit union, an organisational component of a foreign entity - on 15th March 2007 and ABN AMRO Bank N. V., a branch of a foreign bank – on 15th May 2007. The branches' deposits are insured in foreign deposit protection funds, in the case of ABN AMRO Bank N. V., branch of a foreign bank, it is a Dutch fund and in the case of the branch Fio, credit union, organisational unit of a foreign entity, the deposits are insured in the Fond pojištění vkladů of the Czech Republic.

On 29.6.2007, the National bank of Slovakia registered the representation of a foreign bank, BKS Bank AG, Austria, and cancelled two representations of ABN AMRO Bank, N. V. and J&T Banka, a. s. due to the establishment of their branches in the Slovak Republic. Therefore, the total number of representations of foreign banks is nine.

The number of securities dealers decreased. In the period monitored, the National bank of Slovakia issued decisions granting a prior consent for return of license for provision of investment services to the enterprises EURÓPSKA KAPITÁLOVÁ o. c. p., a. s. on 16th August 2006 and Capital Partners, o.c.p., a. s. on 16th October 2006.

On 12th October 2006, the National bank of Slovakia issued a decision granting license for provision of investment services to the company ACTIVE FINANCE o. c. p., a. s. Košice. On 19 May 2007, the above company was stripped of the license for provision of investment services due to the fact that the company ACTIVE FINANCE, o. c. p., a. s. failed to commence the operations stated in their license within 6 months upon its receipt.

One of the reasons for the fall in the number of securities dealers was also the fusion of UniBanka, a. s. and HVB Bank Slovakia, a. s., operating as Unicredit Bank Slovakia, a. s. since April 2007.

On 14th August 2006, the National bank of Slovakia issued decisions which changed the business names of enterprises - securities dealers: the new name of the company Across Investment Services o. c. p., a. s. is Across Wealth Management, o. c. p., a. s.; and the new name of the company AFS obchodník s cennými papiermi, a. s., is SALVE INVESTMENTS, o. c. p., a. s. On 21 March 2007, the National bank of Slovakia issued a decision which changed the business name of the company V BROKERS, o.c.p. a.s. to BHS Slovakia, o.c.p., a.s.

#### **Insurance Sector**

The number of insurance companies declined by 1 non-life insurance company in the first half of 2007 - AIG Slovakia a.s., which transferred its insurance contracts portfolio to the insurance company AIG Europe, which operates in the Slovak Republic through its branch. Hence, as at 30 June 2007, 23 insurance companies were operating on the Slovak insurance market (of which 14 are universal, 5 life insurance and 4 non-life insurance companies), Slovak Insurers' Bureau. Insurance companies with their registered offices in any member state of the European Union or the European Economic Area can operate in the Slovak Republic after having complied with the set terms and on the basis of a permit they have been issued in the country of their registered office. These insurance companies can decide to

operate in the Slovak Republic either on grounds of the right to establish branches (7 insurance companies from other member states as at 30 June 2007, an increase by 3 branches) or on grounds of the right to a free provision of services (316 insurance companies from other member states as at 30 June 2007, an increase by 86 enterprises).

Nine insurance companies with their registered offices in Slovakia were providing insurance services in 15 EU member states on the basis of a free provision of services without establishing a branch and three insurance companies have established their branches in another EU member state.

#### **Collective Investment Sector**

On 13 April 2007, a branch of the company AXA, investiční společnost, a.s., organisational unit Slovensko was founded, which has been since operating in the Slovak Republic on grounds of a uniform European permission system as defined by Article 28 of the Act on collective investments.

## A.2 Data on the ownership structure of supervised objects

## A.2.1 Individual countries' shares in the registered capital of individual types of financial institutions as at 30.6.2007

	Banks	Insurance companies *	Pension fund management companies	Supplementary pension companies	Asset management companies*	Securities dealers*
Slovakia	8,21	8,09	45,54	58,22	74,57	6,27
EU states (excl. SR)	88,26	90,04	24,51	41,78	25,43	89,89
Czech Rep.	8,05	1,13	6,3		9,84	6,67
France	0,65	1,23				0,65
Holland	1,41	13,14	18,21	41,78		1,45
Luxembourg	28,92					29,09
Hungary	4,63	3,21				4,66
Germany	1,99	3,21				
Austria	47,09	55,78				27,66
Italy	0,13					16,45
Portugal	0,08					
United Kingdom	0,07	7,51				0,10
Other	3.14	4,83			15,59	3,16
Countries outside EU	3,53	2,63	29,95			3,83

<sup>- \*</sup> data as at 31.12.2006

<sup>-</sup> data in the table represent individual countries' shares in the registered capital of financial institutions according to the prime owner. Data in percent

## **B** Analytical data

## B 1 Banks and branches of foreign banks

## B 1.1 Asset and liability structure of banks and branches of foreign banks (fin. data in thousands of SKK)

	Total volume (as at 30.6.2007)	Share of a foreign currency	y/y change	Share in balance- sheet total	CR3	CR5	HHI
ASSETS TOTAL (gross)	1 624 270 835	15%	6%	100%	49%	69%	1 094
TOTAL LOANS TO CLIENTS	734 226 148	24%	20%	45%	49%	67%	1 099
Loans to retail	268 702 040	3%	28%	17%	62%	81%	1 599
of which: Loans to households	248 956 269	2%	29%	15%	63%	83%	1 646
Loans to enterprises	359 073 346	36%	19%	22%	49%	69%	1 113
Loans to non-banking financial companies	61 950 352	22%	0%	4%	48%	69%	1 123
Loans to general government	21 175 974	30%	-8%	1%	70%	82%	3 073
Loans to non-residents	23 324 436	74%	48%	1%	52%	76%	1 354
TOTAL OPERATIONS ON THE INTERBANK MARKET	494 306 347	6%	-9%	30%	47%	66%	1 091
of which: Operations with the NBS and foreign issuing banks (incl. NBS bills)	405 769 313	0%	-4%	25%	51%	67%	1 231
TOTAL SECURITIES AND DERIVATIVES	318 518 643	11%	3%	20%	76%	83%	2 054
Securities issued by residents	262 952 093	5%	2%	16%	78%	85%	2 179
Government bonds	201 637 899	7%	2%	12%	78%	85%	2 366
Corporate bonds	5 604 945	13%	-25%	0%	68%	94%	1 963
Bank bonds	25 471 280	0%	13%	2%	69%	83%	1 975
Other debt securities	23 162 660	0%	0%	1%	100%	100%	10 000
Asset securities	7 075 309	0%	22%	0%	78%	92%	2 675
Securities issued by non-residents	33 993 013	61%	12%	2%	77%	88%	2 711
Debt securities	31 795 306	61%	18%	2%	76%	87%	2 636
of which: issued by banks	15 092 933	33%	13%	1%	77%	90%	2 614
of which: issued by general government	3 227 223	100%	4%	0%	87%	99%	3 359
of which: other issuers	13 475 150	84%	28%	1%	84%	95%	4 265
Asset securities	2 197 707	58%	-34%	0%	96%	100%	4 458
of which: issued by banks	491 696	98%	1730%	0%	100%	100%	9 533
of which: other issuers	1 706 011	46%	-48%	0%	99%	100%	6 491
Derivatives – positive fair value	21 573 537	0%	3%	1%	67%	87%	1 810
TOTAL LIABILITIES	1 564 852 058	22%	6%	100%	48%	68%	1 086
TOTAL DEPOSITS AND LOANS ACCEPTED FROM CLIENTS	1 012 040 672	19%	12%	65%	56%	69%	1 241
of which: deposits insured at the Deposit Protection Fund	508 733 020	9%	12%	33%	62%	75%	1 579
Deposits and loans accepted from the retail	484 894 252	8%	13%	31%	62%	75%	1 618
Deposits and loans accepted from households	443 048 153	8%	14%	28%	62%	76%	1 637
Deposits and loans accepted from enterprises	302 006 931	17%	30%	19%	51%	69%	1 265
Deposits and loans accepted from fin. co's other than banks	87 301 117	5%	18%	6%	48%	75%	1 225
Deposits and loans accepted from general government	119 085 301	21%	-19%	8%	68%	87%	1 813
Deposits and loans accepted from non-residents	18 753 071	43%	10%	1%	46%	69%	1 106
TOTAL SOURCES FROM BANKS	274 583 619	70%	-20%	18%	60%	74%	1 488
Sources from the NBS and foreign issuing banks	3 024 254	1%	-80%	0%	99%	100%	8 020
	231 269 527	81%	-18%	15%	61%	76%	1 622
Sources from non-resident banks  TOTAL SECURITIES ISSUED	123 912 079	10%	38%	8%	58%		1 465
	71 000 238	15%	45%	5%	68%		1 930
Mortgage bonds  Bills of exchange	20 985 135	10%	34%	1%	65%		1 782
Other securities issued	8 829 302		25%		89%		3 716
Derivatives – negative fair value	23 097 404	0%	26%	1% 1%			1 798
Risk-weighted assets of the banking book	656 164 840	U 7n	21%	42%	61%		1 461
Risk-weighted assets of the trading book	21 468 331		20%	1%	68%		2 118
Other risk-weighted assets	1 679 877		-55%	0%	92%		2 977
Own funds	91 679 342		14%	6%	49%	69%	1 147

The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item. In the case of all institutions having an equal share, the *HHI* value would be 400, were the number of institutions 25. Assets are expressed in the gross value; equality with liabilities is achieved by deducting the value of depreciation charges and provisions. Due to changes in reports, bills and bills of exchange hold to maturity are included into the operations on the interbank market from 1.1.2007. Risk-weighted assets volume does not include risk-weighted assets of branches of foreign banks. Both changes were considered in the y/y change calculation.

## B 1.2 Revenues and expenditures of banks and branches of foreign banks (in thousands of SKK)

	Value (as at 30.6.2007)	Value (as at 30.6.2006)	CR3	CR5	ННІ
(a) TOTAL OPERATING COSTS (b + e + f)	16 247 093	14 268 665	59%	73%	1 365
(b) Administrative costs (c + d)	13 603 779	12 122 286	58%	72%	1 346
(c) Purchased performances	6 782 592	5 714 572	58%	70%	1 385
(d) Staffing costs	6 821 187	6 407 714	58%	73%	1 331
(e) Depreciation / amortisation of movable and immovable assets	2 141 618	2 051 697	62%	75%	1 474
(f) Taxes and fees	501 696	94 682	89%	94%	3 285
(g) GROSS INCOME (h + I)	28 251 000	24 749 282	61%	75%	1 431
(h) Net interest income (j - i)	19 051 089	15 618 578			
(i) Interest costs	20 260 789	15 844 297	49%	68%	1 155
(j) Interest yields	39 311 878	31 462 875	54%	71%	1 246
(k) of which: Interest yields from securities	7 056 757	5 969 872	72%	81%	1 909
(I) Net non-interest income (m + n + o + p)	9 199 911	9 130 704	62%	78%	1 535
(m) Revenue from shares and ownership interests	228 347	332 648	98%	100%	5 928
(n) Net income from fees	6 056 058	5 584 383			
(o) Net income from trading	4 318 605	4 381 546	53%	73%	1 297
(p) Other net operating incomes	- 1 403 099	- 1 167 873			
(q) NET INCOME (g - a)	12 003 907	10 480 617			
(r) Net creation of prov's and net income from deprec. of recvbls	665 319	1 651 553			
(s) Net creation of reserves	- 233 385	- 628 836			
(t) NET PRE-TAX PROFIT (q - r - s)	11 571 973	9 457 900			
(u) Extraordinary profit	0	0			
(v) Income tax	1 752 783	1 361 058	56%	78%	1 531
(w) NET PROFIT AFTER TAX (t + u - v)	9 819 190	8 096 842			

The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item. In the case of all institutions having an equal share, the *HHI* value would be 400, were the number of institutions 25.

## B 1.3 Profitability indicators of banks and branches of foreign banks and their distribution in the banking sector

	Denominator- weighted average (30.6.2007)	Denominator weighted average (30.6.2006)	Average weighted by the volume of assets	Minimum	Lower quartile	Median	Upper quartile	Maximum
ROA	0.66%	0.58%	0.63%	-194.94%	0.21% (7%)	0.39% (23%)	0.65% (8%)	0.90% (63%)
ROE (excl. branches)	9.71%	10.30%	10.79%	1.49%	3.54% (4%)	6.01% (6%)	9.54% (12%)	13.71% (57%)
Cost-to-income ratio	57.51%	57.68%	59.37%	0.00%	52.51% (12%)	56.51% (60%)	75.39% (21%)	13371.23% (7%)
Relative significance of interest incomes	67.44%	63.12%	65.55%	-13.01%	55.78% (9%)	70.03% (39%)	86.37% (43%)	111.44% (8%)
Net interest spread	1.16%	1.05%	1.15%	-0.34%	0.35% (9%)	0.96% (26%)	1.45% (27%)	7.94% (38%)
retail	2.98%	2.73%	5.55%	-4.55%	1.60% (16%)	1.93% (17%)	3.17% (52%)	700.00% (14%)
enterprises	1.26%	1.26%	1.32%	-0.36%	0.68% (17%)	1.39% (19%)	1.76% (38%)	2.40% (24%)
financial companies	0.36%	1.10%	0.64%	-2.74%	0.43% (30%)	0.57% (37%)	0.77% (19%)	5.34% (8%)
banks incl. the NBS and bills	-0.04%	-0.12%	-0.17%	-4.78%	-0.86% (32%)	-0.28% (7%)	0.15% (21%)	1.95% (39%)
Net interest margin	1.25%	1.09%	1.19%	-0.10%	0.59% (9%)	0.98% (30%)	1.47% (23%)	7.48% (38%)

Figures in brackets below the quartile values represent the share of banks (measured by volume of net assets) for which the value of the relevant indicator lies between the value of the given quartile and the previous quartile.

## B 1.4 Risk and own funds adequacy indicators of banks and branches of foreign banks and their distribution in the banking sector

-	Denominator- weighted average (30.6.2007)	Denominator- weighted average (30.6.2006)	Average weighted by volume of assets	Minimum	Lower quartile	Median	Upper quartile	Maximum	Number of breaches
CREDIT RISK									
Share of defaulted loans in the total volume of loans to clients	3.11%	3.69%	3.07%	0.00%	0.01% (9%)	1.57% (33%)	4.18% (41%)	14.54% (18%)	
Retail (share in loans to retail)	3.64%	3.24%	3.49%	0.00%	0.11%	1.05%	5.87% (45%)	20.77% (18%)	
Enterprises (share in loans to businesses)	3.41%	5.09%	3.16%	0.00%	0.00%	1.29%	2.46%	14.74%	
Financial companies (share in loans to financial companies)	0.11%	0.11%	0.12%	0.00%	0.00% (54%)	0.00%	0.00% (14%)	3.12% (27%)	
Share of provisions in the volume of defaulted loans to clients	98.59%	105.90%	126.22%	53.94%	75.70% (10%)	102.61% (43%)	138.01%	3838.51% (28%)	
Large exposure (weighted) / own funds (excl. branches)	181.21%	207.86%	201.14%	0.00%	115.07% (5%)	196.61% (39%)	287.48% (17%)	398.81% (20%)	
Large exposure within groups (number of breaches)					` '	` ′	` ′		0
Share of claimable value of securities in the total volume of defaulted loans to clients  FOREIGN EXCHANGE RISK	36.00%	13.90%	33.04%	0.00%	14.75% (4%)	31.02% (39%)	53.30% (13%)	97.61% (32%)	
Forex open balance-sheet position / own funds (excl. branches)	-12.07%	-59.59%	-15.12%	-87.42%	-6.97% (35%)	0.01%	24.80%	76.27% (6%)	
Forex open off-balance-sheet position / own funds (excl. branches)	27.29%	107.45%	27.54%	-327.14%	-34.24% (26%)	0.00%	20.06%	200.31% (41%)	
Total forex open position / own funds (excl. branches)	15.22%	47.86%	12.42%	-286.60%	-24.07% (26%)	0.01%	30.92% (8%)	153.84% (41%)	
Total forex open position / own funds (excl. branches)	20.63%	45.61%							
INTEREST RATE RISK  Total interest-rate open position up to 1 month / own funds (excl. branches)	-127.61%	-237.52%	-129.76%	-650.17%	-210.57% (24%)	-49.72% (12%)	11.21% (27%)	348.48% (17%)	
Total interest-rate open position up to 1 year / own funds (excl. branches)	-16.93%	-24.72%	-26.69%	-399.59%	-39.97% (19%)	-4.65% (38%)	7.48% (11%)	616.72% (13%)	
Total interest-rate open position up to 5 years / own funds (excl. branches)	62.77%	-154.30%	39.71%	-904.38%	-10.70% (36%)	46.48% (9%)	103.60%	680.79% (27%)	
LIQUIDITY RISK									
Share of immediately liquid assets in highly volatile funds	18.00%	8.60%	1062.29%	-1.82%	2.27% (12%)	6.55% (26%)	20.70% (40%)	155787.50% (17%)	
Share of liquid assets (incl. collateral from reverse repo trades) in volatile funds	56.74%	64.18%	64.34%	0.19%	34.09% (8%)	52.48% (49%)	57.86% (24%)	166.32% (19%)	
Indicator of fixed and illiquid assets (excl. branches)	43.89%	43.67%	47.02%	4.20%	15.44% (4%)	38.64% (26%)	55.50% (5%)	79.11% (42%)	0
Share of loans in deposits and issued securities	64.64%	61.74%	73.86%	28.37%	51.14% (25%)	77.55% (53%)	102.77% (16%)	2692.01% (6%)	
Total liquidity position current up to 7 days /assets	-39.07%	-30.29%	-39.07%	-62.58%	-41.38% (53%)	-29.42% (22%)	-0.51% (19%)	96.20%	
Total liquidity position estimated up to 7 days /assets	-7.48%	1.86%	-7.48%	-50.10%	-16.78% (45%)	-6.69% (19%)	9.77% (20%)	96.20% (16%)	
Total liquidity position current up to 3 months /assets	-43.43%	-37.67%	-43.43%	-147.94%	-42.02% (59%)	-32.54% (9%)	2.64% (24%)	96.20%	
Total liquidity position estimated up to 3 months / assets	-9.70%	-4.48%	-9.70%	-147.94%	-19.39% (27%)	-9.81% (37%)	5.23% (17%)	96.20% (20%)	
OWN FUNDS ADEQUACY									
Own funds adequacy (excl. branches)	13.50%	14.32%	13.25%	9.43%	11.75% (40%)	17.45% (30%)	22.34% (8%)	44.34% (2%)	0
Share of Tier I in own funds (excl. branches)	92.16%	89.17%	90.70%	67.15%	87.21% (26%)	98.76% (34%)	99.95% (15%)	100.00%	
Share of own funds in balance-sheet total (excl. branches)	10.04%	7.31%	7.28%	3.51%	6.05% (40%)	9.43% (30%)	10.41% (5%)	43.40% (5%)	
Share of potential loss in own funds in reaching 8% own funds adequacy (excl. branches)	40.73%	39.97%	34.33%	15.21%	31.81% (40%)	54.14% (30%)	64.19% (8%)	81.96% (2%)	

Figures in brackets below the quartile values represent the share of banks (measured by volume of net assets) for which the value of the relevant indicator lies between the value of the given quartile and the previous quartile.

## **B 2 Insurance companies**

## B 2.1 Net profit and profitability indicators of insurance companies (data on profit in thousands of $SKK)\,$

	Value as at 30.6.2007	Value as at 30.6.2006	Y/y change	Share in total technical premium written
Total net profit	3 341 152	2 960 570	13%	11,38%
ROA	2,14%	2,21%		
ROE	11,23%	12,17%		

### B 2.2 Technical premium (in thousands of SKK)

		Value as at 30.6.2006	.,	Share in total technical premium written			HHI 31.12.2005
Total	29 359 377	26 639 745	10,21%	100.00%	64%	1889	1687
Life insurance	13 772 508	11 328 445	21,57%	46,91%	51%	1581	1248
Whole life and endowment assurance	8 686 071	8 132 709	6,80%	29,59%	52%	1723	1334
Unit-Linked	3 156 935	1 499 920	110,47%	10,75%	43%	1954	3886
Accident or sickness insurance	1 541 019	1 316 511	17,05%	5,25%	53%	1800	1692
Other	388 483	379 306	2,42%	1,32%	86%	3263	3324
Non-life insurance	15 586 869	15 311 301	1,80%	53,09%	75%	2435	2425
MTPL	5 558 195	5 773 079	-3,72%	18,93%	80%	2873	2840
Motor insurance	4 454 994	4 202 696	6,00%	15,17%	78%	2447	2528
Property insurance	3 469 420	3 298 448	5,18%	11,82%	73%	2694	2426
Other	2 104 260	2 039 882	3,16%	7,17%	57%	1738	1771

The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item. In the case of all institutions having an equal share, the *HHI* value would be 417, were the number of institutions 24.

### B 2.3 Written technical premium ceded to reinsurers (in thousands of SKK)

	Value as at 30.6.2007	Value as at 30.6.2006	.,	Share in total technical premium written
Total	4 897 857	5 477 630	-10,58%	16,68%
Life insurance	598 404	679 447	-11,93%	2,04%
Non-life insurance	4 299 453	4 798 182	-10,39%	14,64%

## B 2.4 Indemnity costs (in thousands of SKK)

	Value as at 30.6.2007	Value as at 30.6.2006	Y/y change	Share in total technical premium written		ННІ 30.6.2007	ННІ 30.6.2006
Total	11 267 530	10 076 429	11,82%	38%	70%	2180	2480
Life insurance	4 988 117	4 445 414	12,21%	17%	60%	2395	2850
Whole life and endowment assurance	3 964 127	3 916 570	1,21%	14%	63%	2811	2788
Unit-Linked	494 703	357 187	38,50%	2%	34%	3699	7467
Accident or sickness insurance	289 083	239 194	20,86%	1%	61%	2208	1754
Other	240 204	229 489	4,67%	1%	61%	3971	7602
Non-life insurance	6 279 413	5 631 014	11,51%	21%	77%	2442	2511
MTPL	2 085 779	2 011 605	3,69%	7%	78%	2750	2805
Motor insurance	2 839 843	2 380 109	19,32%	10%	78%	2361	2292
Property insurance	917 837	844 010	8,75%	3%	83%	3293	3528
Other	435 954	395 291	10,29%	1%	54%	1698	2275

The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item. In the case of all institutions having an equal share, the *HHI* value would be 417, were the number of institutions 24.

### **B 2.5 Loss ratio in non-life insurance**

	Values as at 30.6.2007	Values as at 30.6.2007
Total	54,58%	41,68%
MTPL	50,96%	34,99%
Motor insurance	66,17%	56,61%
Property insurance	62,92%	46,30%
Other	23.05%	26,33%

## B 2.6 Technical reserves structure of insurance companies (in thousands of SKK)

	Value as at 30.6.2007	Value as at 30.6.2006	.,	Share in total reserves
Total	110 827 724	97 124 831	14,11%	100.00%
Life insurance	68 295 386	61 571 795	10,92%	61,62%
Reserve for covering payables from financial placement on behalf of the insured	11 431 692	8 239 883	38,74%	10,31%
Non-life insurance	31 100 646	27 313 152	13,87%	28,06%

# B 2.7 Placement of insurance companies' technical reserves of except for reserves for covering payables from financial placement on behalf of the insured (in thousands of SKK)

		Value as at 30.6.2006	y/y change	Share in total reserves
Total	103 573 897	93 125 229	11,22%	104,20%
Government and central bank bonds of SR / EU member states or guaranteed by the SR, EIB, EBRD and IBRD bonds		41 954 869	4,55%	44,13%
Bank bonds	14 378 953	11 560 484	24,38%	14,47%
Term accounts at banks	9 784 554	11 381 265	-14,03%	9,84%
Mortgage bonds	12 277 312	10 224 229	20,08%	12,35%
Reinsurance	9 940 022	8 659 522	14,79%	10,00%
Other	13 327 458	9 344 860	42,62%	13,41%

The calculation of CR 3 and HHI covers only those institutions having a positive value of the given item. In the case of all institutions having an equal share, the HHI value would be 417, were the number of institutions 24.

### **B 3 Old-age pension saving**

### B 3.1 Pension Asset Management Companies as at 30.6.2007

	Market share *	NAV of funds (in thousands of SKK)	Number of clients
Allianz - Slovenská DSS	31%	12 198 843	463 363
Axa DSS	28%	11 136 597	416 855
VÚB Generali DSS	15%	5 887 125	201 252
ING DSS	11%	4 362 016	159 084
AEGON DSS	10%	4 117 805	203 219
ČSOB DSS	6%	2 256 376	102 143

<sup>(\*)</sup> Market shares are calculated according to the total net asset value (NAV) of funds of the given pension fund management company. NAV – Net Asset Value

## B 3.2 Economic result of pension asset management companies as at 30.6.2007 (in thousands of SKK)

	Revenues	Expenditures	Profit/loss	ROA	ROE
Allianz - Slovenská DSS	81 845	109 018	-27 173	-2%	-2%
Axa DSS	92 024	165 830	-73 806	-3%	-4%
VÚB Generali DSS	46180	41 744	4 436	1%	2%
ING DSS	32 293	78 703	-46 410	-7%	-7%
AEGON DSS	39 603	15 227	24 376	7%	7%
ČSOB DSS	14 858	25 466	-10 608	-2%	-2%

### **B 3.3 Pension funds (in thousands of SKK)**

	NAV as at 30.6.2007
Total	39 958 762
Conservative	1 609 529
Balanced	12 063 455
Growth	26 285 778

NAV – Net Asset Value

## B 3.4 Investment structure of pension funds (in thousands of SKK)

	Value as at 30.6.2007	Share of EUR	Share of other foreign currencies
Total	39 958 762	4,97%	4,51%
Accounts at banks	13 464 066	0,50%	1,34%
Bonds	19 391 413	1,42%	3,85%
Shares	7 304 618	52,91%	47,09%
Other	5 815 553	0,01%	8,91%
Payables	-6 016 887	36,93%	52,23%

### B 3.5 Supplementary Pension Asset Management Companies as at 30.6.2007

	Market share *	NAV of funds (in thousands of SKK)	Number of clients
ING Tatry - Sympatia, d.d.s., a.s.	41%	9 350 868	N.A
Doplnková dôchodková spoločnosť Tatra banky, a.s.	27%	6 222 398	N.A
Stabilita, d.d.s., a.s.	19%	4 351 460	N.A
Axa d.d.s., a.s.	13%	2 909 266	N.A

<sup>(\*)</sup> Market shares are calculated according to the total net asset value (NAV) of funds of the given pension fund management company. NAV – Net Asset Value

## B 3.6 Economic result of supplementary pension asset management companies as at 30.6.2007 (in thousands of SKK)

	Revenues	Expenses	Profit/loss	ROA	ROE
ING Tatry - Sympatia, d.d.s., a.s.	159 778	108 945	50 833	13%	18%
Doplnková dôchodková spoločnosť Tatra banky, a.s.	59 251	45 661	13 590	10%	18%
Stabilita, d.d.s., a.s.	32 197	24 391	7 806	11%	12%
Axa d.d.s., a.s.	33 928	41 181	-7 253	-6%	-7%

## B 3.7 Supplementary pension funds (in thousands of SKK)

	NAV as at 30.6.2007
Total	22 833 993
Contribution	22 198 185
Payroll	635 808

NAV - Net Asset Value

## B 3.8 Investment structure of supplementary pension funds (in thousands of SKK)

	Value as at 30.6.2007	Share of EUR	Share of other foreign currencies
Total	22 833 993	1,71%	2,30%
Accounts at banks	10 744 992	0,05%	1,59%
Bonds	11 120 853	1,82%	2,34%
Shares	1 035 884	61,64%	31,43%
Other	1 040 511	10,31%	4,72%
Liabilities	-1 108 246	50,86%	25,19%

### **B 4.** Collective investment

### B 4.1 Asset management companies as at 30.6.2007

Asset management company	NAV of mutual funds (in thousands of SKK)	Market share
<b>Total</b>	122 537 345	100,00%
Tatra Asset Management	50 152 944	40,93%
Asset Management SLSP	30 055 482	24,53%
VÚB Asset Management	27 631 229	22,55%
ČSOB Asset Management	6 048 039	4,94%
Prvá Penzijná	3 368 082	2,75%
ISTRO Asset Management	2 225 781	1,82%
AIG Funds Central Europe	2 119 856	1,73%
Investičná a dôchodková	638 736	0,52%
KD Investments	297 196	0,24%
Allianz Asset Management	0	0%

## B 4.2 Expenditure, revenues and profitability indicators of domestic asset management companies as at 30.6.2007 (in thousands of SKK)

Asset management company	Revenues	Expenses	Profit/loss	ROA	ROE
Total	844 463	702 520	141 943	17,63%	22,01%
Allianz Asset Management	2 311	1 773	538	0,69%	0,70%
AIG Funds Central Europe	23 635	23 351	284	0,74%	0,86%
Asset Management SLSP	202 269	178 773	23 496	19,25%	36,70%
ČSOB Asset Management	60 061	26 677	33 384	28,47%	39,44%
Investičná a dôchodková	6 199	9 676	-3 477	-10,65%	-10,90%
Istro Asset Management	19 922	16 590	3 332	7,65%	8,12%
KD Investments	5 389	12 187	-6 798	-22,03%	-23,18%
Prvá Penzijná	32 440	27 184	5 256	10,47%	12,11%
Tatra Asset Management	346 454	269 536	76 918	32,96%	38,25%
VÚB Asset Management	145 783	136 773	9 010	15,39%	22,98%

<sup>\*</sup> Annualized value of ROE and ROA

### B 4.3 Structure of mutual funds as at 30.6.2007 (in thousands of SKK)

Fund type	Market share	Net asset value	Number of funds	CR3 *	CR5 *	HHI*	HHI if uniform distribution
Total mutual funds	100%	150 649 890	504	32%	39%	435	20
Domestic	81,34%	122 537 345	113	39%	48%	649	88
Money market funds	36,02%	54 267 604	9	86%	96%	2564	1111
Bond funds	12,64%	19 039 325	13	66%	87%	1869	769
Equity funds	4,48%	6 748 451	10	89%	94%	3453	1000
Mixed funds	8,63%	13 008 093	14	51%	74%	1331	714
Funds of funds	11,42%	17 207 620	15	53%	77%	1342	667
Other funds	5,35%	8 062 534	4	91%	100%	3427	2500
Special funds	0,51%	767 473	1	100%	100%	10000	10000
Real estate funds	1,67%	2 508 904	3	100%	100%	5101	3333
Closed funds	0,62%	927 340	44	-	-	-	-
Foreign (**)	18,66%	28 112 545	391	21%	29%	284	26
Money market funds	2,71%	4 080 428	26	85%	92%	5461	385
Bond funds	2,63%	3 955 380	87	45%	60%	1039	115
Equity funds	7,62%	11 474 919	178	37%	52%	660	56
Mixed funds	1,02%	1 529 742	49	61%	77%	1473	204
Funds of funds	0,36%	538 095	19	93%	97%	7020	526
Other funds	4,34%	6 533 981	32	28%	41%	582	312

<sup>(\*)</sup> Market concentrations are calculated only for open mutual funds (do not include closed and special funds)

<sup>(\*\*)</sup> For foreign mutual funds the net asset value represents mutual funds certificates sold in the Slovak Republic

The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item. In the column "HHI if uniform distribution" the HHI value is that which would express the concentration in the case of a uniform distribution of the net asset value in the given group of funds.

B 4.4 Net sales of open mutual funds as at 30.6.2007 (in thousands of SKK)

	3 months	1 year	Cumulative	Number of funds	CR3	CR5	ННІ	HHI if uniform distribution
Total open mutual funds	2 095 017	3 162 459	129 364 694	460	56%	64%	1 451	22
Domestic	1 949 672	3 947 614	107 839 250	69	72%	80%	2 613	145
Money market funds	3 112 649	11 999 227	50 429 819	9	98%	100%	4 706	1111
Bond funds	-1 009 400	-8 954 515	17 159 326	13	-	-	-	769
Equity funds	-456 695	1 330 587	6 711 990	10	100%	100%	8 384	1000
Mixed funds	-330 129	-1 470 450	8 275 480	14	100%	100%	4 328	714
Funds of funds	565 988	747 162	15 854 181	15	64%	82%	1 714	667
Other funds	67 260	295 603	9 408 454	4	100%	100%	7 264	2500
Special funds	0	500 000	500 000	1	-	-	-	10000
Foreign	145 345	-785 155	21 530 444	391	51%	64%	1 226	26
Money market funds	209 284	295 605	3 655 679	26	89%	97%	4 021	385
Bond funds	109 924	-595 397	1 783 847	87	86%	93%	3 404	115
Equity funds	-795 035	-729 536	7 955 608	178	67%	77%	2 266	56
Mixed funds	55 350	321 838	1 443 694	49	61%	76%	2 177	204
Funds of funds	14 683	56 893	417 425	19	98%	100%	5 134	526

The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item. In the column "HHI if uniform distribution" the HHI value is that which would express the concentration in the case of a uniform distribution of the net asset value in the given group of funds.

## B 4.5 Average performances of open mutual funds as at 30.6.2007 (% p.a.)

	3 months			1 year			3 years		
	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max
Total open mutual funds	-8,84%	3,70%	25,10%	-20,22%	0,78%	55,99%	-25,84%	-3,87%	49,90%
Domestic	-8,84%	1,80%	10,93%	-13,61%	5,08%	28,17%	-6,14%	3,21%	13,93%
Money market funds	0,33%	0,62%	0,90%	3,31%	3,86%	4,15%	2,44%	2,68%	2,99%
Bond funds	-1,45%	-0,06%	2,65%	-13,61%	0,49%	4,68%	-6,14%	1,67%	5,93%
Equity funds	-8,84%	3,29%	8,54%	-13,34%	5,33%	19,51%	-3,80%	3,40%	12,00%
Mixed funds	0,38%	2,28%	6,70%	0,89%	6,07%	28,17%	3,74%	6,38%	13,93%
Funds of funds	0,25%	2,23%	4,09%	4,65%	9,89%	14,98%	-	-	-
Other funds	1,00%	4,35%	10,93%	8,78%	8,78%	8,78%	_		-
Special funds	4,19%	4,19%	4,19%	-	-	-	-	-	-
Foreign	-8,70%	4,02%	25,10%	-20,22%	0,02%	55,99%	-25,84%	-4,78%	49,90%
Money market funds	-1,10%	1,66%	9,18%	-17,92%	-8,91%	3,84%	-23,84%	-11,21%	2,87%
Bond funds	-8,70%	-0,53%	6,05%	-19,15%	-9,30%	12,72%	-25,84%	-13,32%	3,15%
Equity funds	-8,67%	7,32%	25,10%	-20,22%	6,48%	55,99%	-24,72%	1,31%	49,90%
Mixed funds	-2,54%	2,72%	6,97%	-11,75%	-2,15%	9,67%	-20,78%	-9,38%	-3,97%
Funds of funds	-3,91%	3,42%	8,61%	-12,71%	-3,06%	4,88%	-11,14%	-7,93%	-2,22%
Other funds	-2,07%	2,10%	9,67%	-12,75%	1,47%	19,82%	-20,83%	-1,54%	8,69%

## B 4.6 Asset structure of domestic mutual funds as at 30.6.2007 (in thousands of SKK)

	Money market funds	Other funds
Total	54 532 272	69 330 306
Deposits at banks	20 238 293	9 791 122
Securities other than shares and mutual fund certificates	34 097 469	30 328 289
Shares and mutual fund certificates	106 031	18 940 176
Shares and other interests	0	9 661 998
Financial derivatives	81 943	76 371
Other assets	8 536	532 351

<sup>\*</sup> Financial derivatives include derivatives with the positive and negative real value

#### **B 5 Securities dealers**

### B 5.1 Basic characteristics of securities dealers as at 30.6.2007 (in thousands of SKK)

	Volume of trades	Market share	Volume of assets managed	Market share
Banks and branches of foreign banks	859 416 371	96%	3 253 839	10%
SD with capital over SKK 35 mil.	30 352 667	3%	3 565 302	11%
Others	9 122 835	1%	24 797 530	78%

Securities dealers that are not banks are divided in the table by the size of their registered capital. SD with capital less then SKK 35 mil. are not licensed for providing IS-3 investment services (acceptance of a client's instruction to acquire or sell the investment instrument and its realisation on own account)

#### B 5.2 Market concentrations by securities dealers' trading volumes

	Number of traders	CR3	CR5	ННІ
Total	33	85%	93%	5670
Banks and branches of foreign banks	15	63%	84%	1647
SD with capital over SKK 35 mil.	9	90%	99%	6007
Others	9	100%	100%	9933

Market concentrations are calculated from data for the second quarter of 2006

The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item.

## B 5.3 Volume of trades by individual investment services as at 30.6.2007 (in thousands of SKK)

	IS - 1	IS - 2	IS - 3
Total trades	18 162 094	359 032 163	521 697 616
Shares	282 489	4 614 841	41 313
Bonds	127 653	240 206 267	7 872 106
Mutual fund certificates	6 955	310 811	0
Fungible securities	126 100	0	0
Foreign securities	11 476 067	9 490 170	5 322 070
Money market instruments	153 456	1 898 519	95 821 100
Futures	5 364 809	0	0
Forwards	3 000	73 177 072	182 298 509
Swaps	268 094	27 215 523	40 824 313
Options	148 273	2 118 960	188 600 716
Combinations	205 198	0	917 489

IS-1 – acceptance of a client's instruction to acquire, sell or otherwise handle the investment instrument and the subsequent forwarding of the client's instruction for the purpose of its realisation.

### **B 5.4 Own funds adequacy**

	Min	Median	Max
Registered capital of SKK 35 mill.	36%	63%	306%
Registered capital of SKK 6 mill.	80%	282%	494%

IS-2 - acceptance of a client's instruction to acquire or sell the investment instrument and its realisation on an account other than the provider's account.

IS-3 - acceptance of a client's instruction to acquire or sell the investment instrument and its realisation on own account.

## 9 Terminology and abbreviations

#### Terminology used

*Households* – the population, i.e. individuals' accounts

*Retail* – households, sole traders and non-profit companies serving prevailingly households

Enterprises – non-financial companies

Non-banking financial companies (NBFCs) – other financial companies, financial intermediaries, pension and mutual funds, insurance companies

General government – central and local government bodies

Quick liquidity ratio – immediately liquid assets / highly volatile funds

Total net position - defined as the sum of the net balance-sheet position and net offbalance-sheet position

CR n index – the concentration of the n largest banks, i.e. the sum of the shares of their assets in total assets.

Net balance-sheet position - defined as the difference between forex assets and liabilities in the balance sheet.

Net off-balance-sheet position - defined as the difference between forex assets and liabilities in the off-balance sheet.

Cost-to-income ratio – defined as the share of total operating costs and net income from banking activity (purchased performances + staff costs + social costs + depreciation of tangible and intangible assets + taxes and fees / revenues from shares and ownership interests + net income from fees and commissions + net income from the securities operations + net income from derivatives operations + net income from the forex operations + net income from other operations)

Household disposable income – is calculated as the sum of the components of gross personal income of all household members (gross financial income from employment and closely related incomes, and gross nonfinancial income from employment, gross

losses from selffinancial gains or employment (including royalties and fees), unemployment benefits, older-page pension benefits, the survivor's pension benefits, sickness benefits, invalidity benefits and contributions for education) plus components of the gross income at the household level (income from rented assets or land, family benefits and contributions paid to families with children, the social exclusion not classified elsewhere, housing regularly received financial transfers between households, interest, dividends, profit from capital investment in a non-registered business, income of persons younger than 16 years of age less regular property taxes, regular paid financial transfers between households, income tax, and social insurance contributions).

Long position – a position in which assets are greater than liabilities.

Herfindahl index (HHI) – defined as the sum of the squares of the shares of individual banks' assets in total assets.

Short position – a position in which liabilities are greater than assets.

Cumulative gap – the sum of open positions (long or short) in certain time bands.

Liquidity up to 7 days and up to 3 months – the share of liquid assets and volatile funds, where liquid assets include cash in hand, the bank's current accounts at other banks and all Treasury bills and government bonds on which no right of lien is established, including those that the bank acquired in reverse repo trades, all claims against clients and banks with a residual maturity of up to 7 days, or up to 3 months and volatile funds are the sum of payables towards banks and clients up to 7 days, or 3 months.

Liquidity cushion – defined as the sum of cash in hand, government bonds, Treasury bills and NBS bills, loans to foreign banks, deposits at the NBS and the volume of assets on the domestic interbank market after deducting banks' payables towards the NBS, foreign banks and the DLMA public debt & liquidity management agency.

Loan-to-deposit – the share of loans to clients and the sum of deposits from retail, enterprises and financial companies plus issued mortgage bonds.

Loan-to-value ratio – defined as the proportion of the volume of a provided loan and the value of its security

*Default rate* – expresses the percentage of loans defaulting over the period monitored

The open position for up to 3 months - is the difference between, on the one hand, the sum of claims against clients and debt securities issued by banks and enterprises which have a residual maturity of up to 3 months, and, on the other hand, the sum of liabilities towards clients and issued securities which have a residual maturity of up to 3 months.

Special funds – risk finds, diversified funds and real estate funds belong to this category

*Unit-linked reserve* – technical reserve that is created for life insurance linked with investment fund in insurance branch A4

Defaulted loans – loans in the case of which the bank has identified a devaluation of more than 50% or where the debtor is in more than 90 days' arrears with payment.

### List of insurance groups

#### Life insurance:

**Assurance on death** is an insurance covering the risk of death (temporary death assurance, lifelong death assurance).

Whole life and endowment insurance and capital life insurance except Unit-Linked is an insurance for surviving until a certain age, insurance for surviving until a certain age or an earlier death, dowry insurance, child insurance, assurance on death connected with savings and a guaranteed yield from deposited funds.

**Pension insurance** is life insurance with an agreed payment of insurance benefit in the form of pension, regardless of whether this is a temporary or lifelong pension, on complying with the condition of fulfilment of the definition of the insurance contract as defined by the international accounting standard IFRS4.

**Unit-Linked** is life insurance connected with an investment fund.

**Additional insurance** is insurance for the case of an accident or sickness, if it is an additional insurance to the above life insurance groups.

#### Non-life insurance

Insurance for accidents and sickness includes the classes of insurance B1 - Accident insurance and B2 - Sickness insurance of non-life insurance as defined by the Appendix No. to the Insurance Act.

Liability insurance for damage caused by the operation of a motor vehicle includes the insurance class B10a - Liability insurance for damage caused by the operation of a motor vehicle as defined by the Appendix No. 1 to the Insurance Act.

Land vehicle-hull insurance Land vehicle-hull insurance includes the insurance class B3-Non-rail land vehicle-hull insurance as defined by the Appendix No. 1 to the Insurance Act.

Insurance against damage to other than land means of transport includes the insurance classes B4 - Rail vehicle-hull insurance, B5 - Aircraft insurance, B6 - Watercraft insurance and B7 - Insurance for transportation of goods being transported including baggage and other property as defined by the Appendix No. 1 to the Insurance Act.

Carrier liability insurance includes the insurance classes B10b - Carrier liability insurance, B11 - Liability insurance for ownership or use of aircraft, including carrier's liability and B12 - Liability insurance for

ownership or use of a fluvial, lacustrine or maritime watercraft, including carrier's liability as defined by the Appendix No. 1 to the Insurance Act.

**Property insurance** includes the insurance classes B8 - Insurance against damages to other property and B9 - Insurance against damages to other property arisen due to hail, frost or otherwise, as defined by the Appendix No. 1 to the Insurance Act.

General liability insurance for damage includes the insurance class B13 - General liability insurance for damage as defined by the Appendix No. 1 to the Insurance Act.

Insurance of loan, bail and against various financial losses includes the insurance classes B14 - Loan insurance, B15 - Bail insurance and B16 - Insurance against various financial losses according to the Appendix No. 1 to the Insurance Act.

**Legal protection insurance** includes the insurance class B17 - Legal protection insurance according to the Appendix No. 1 to the Insurance Act defined by Article 828a of the Act No. 40/1964 Coll. of the Civil Code.

Assistant insurance includes the insurance class B18 - Insurance of help to persons in need during travelling or a stay outside their permanent residence as defined by the Appendix No. 1 to the Insurance Act.

#### **Abbreviations**

#### Countries

AT Austria BE Belgium

CY Cyprus

CZ Czech Republic

DE Germany DK Denmark EE Estonia

ES Spain

FI Finland

FR France

GR Greece

**HU Hungary** 

IE Ireland

IT Italy

LT Lithuania

LU Luxembourg

LV Latvia

MTMalta

NL Holland

PL Poland

PT Portugal

SE Sweden

SI Slovenia

SK Slovakia

UK Great Britain

#### **Others**

ALCO Asset and liabilities committee

AM asset management

BCPB Bratislava Stock Exchange

BIS Bank for International Settlement BRIBID Bratislava interbank bid rates BRIBOR Bratislava interbank offered rates

CSD Central Securities Depository

of the Slovak Republic

DLMA Debt and Liquidity Management

Agency

FC foreign currency CPI consumer price index

EBOR European Bank for Reconstruction

and Development

ECB European Central Bank
EIB European Investment Bank
EMU European Monetary Union

EU European Union

EUR euro

GDP gross domestic product

HHI Herfindahl index IBRD International Bank for

Reconstruction and Development

IFRS international financial reporting

standards

IGF Investment Guarantee Fund IMF International Monetary Fund

MIM metainformation system

NAV net asset value

NBS National Bank of Slovakia O/N overnight interest rate p. p. percentage point PC provision for claims

PUP provision for unearned premium

ROA return on assets
ROE return on equity
RWA risk weighted assets
SAX Slovak stock index
SD securities dealer
SDX Slovak bond index
SKK Slovak koruna

SME Small and medium enterprises

SR Slovak Republic VaR value at risk

WGBD Working Group on Developments in

Banking

WGMA Working Group on Macroprudential

Analysis