NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

Analysis of the Slovak Financial Sector for the Year 2008

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Foreword

Národná banka Slovenska elaborates the Analysis of the Slovak Financial Sector for the purposes of the Banking Board of NBS as well as to address the needs of professionals and the wider public. The aims of the analysis are derived from the mission of NBS in the area of maintaining financial stability and carrying out supervision of the Slovak financial market. Financial stability is closely linked with economic stability and it is therefore essential that both professionals and the wider public are informed of possible risks and threats to financial stability. At the same time, public awareness of potential threats to financial stability has a pre-emptive effect in respect of a possible crisis development.

This analysis evaluates the overall condition of the financial sector, with a focus on the analysis of the system's resilience against possible negative development. The analysis is based on the evaluation of individual institutions as well as of the entire sector. It also aims to elucidate a deeper link between the developments in the financial sector on one hand and the development of macro and micro-economic indicators on the other hand. Its prudential nature is reflected especially in the use of stress testing allowing an assessment of the sector's sensitivity in various scenarios.

The analysis of the financial sector for the year 2008 is released in the light of the current financial crisis in global financial markets. Hence several of its sections deal with the assessment of the impact of this crisis on the domestic financial sector. A significant part of it is dedicated to the assessment of the financial sector's resilience against stress scenarios. A more detailed approach was adopted particularly when analysing the sensitivity of banks to a significantly increased inability of the corporate sector to repay its liabilities to banks.

Within the individual sectors we have evaluated the impact of negative trends on the financial markets and, in real economies, on the activities and the financial position of financial institutions. In particular, developments on the household and corporate loans market have been described in more details.

The analysis simultaneously informs of risks to which the particular sectors are exposed.

Like in the previous analyses, financial information on particular institutions is primarily obtained from the banking supervision information system MIM, the system STATUS, STATUS DFT, RBUZ and documents processed by departments of the Financial Market Supervision Unit. Additional sources included the Statistical Office of the Slovak Republic (SU SR), the Real estate price map, Eurostat, the European Central Bank (ECB), and other external sources and commercial information systems. The analysis does not take into account activities related to the execution of supervision of particular institutions.

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ANALYSIS SUMMARY

Analysis summary

The direct impact of negative developments in financial markets on the financial sector stability was moderate in 2008

The deepening financial crisis, an emerging economic crisis and the preparation for entering into the euro area were the main driving forces behind the developments in the Slovak financial sector throughout the year 2008.

The world-wide financial crisis that broke out at the outset of the second half of 2007 was causing major global turbulences during the whole of 2008 and became so severe at the turn of the third and fourth quarter that it began to threaten the very existence of the global financial system. Uncertainty and a plunge in confidence in financial markets caused significant decreases in financial asset prices.

Compared to other developed countries, the impact of this phase of the financial crisis on the domestic financial sector was relatively low. In the banking sector in particular, the reason why the impact was rather moderate lay in the sector's relatively strong links to domestic economy and in the fact that the share of banks' activities related to foreign countries was negligible. Among other things, they minimised their exposures against many innovative instruments of the present-day world of finance that have proven to be the main cause of the crisis spread.

Nevertheless, financial crisis in this form manifested in a more pronounced way in the sectors of collective investments and pension savings. From the clients' point of view, this chiefly meant a fall in the rate of return (down to negative nominal year-on-year performance in many cases) of products investing assets in global stock markets and, partially, in bond and other markets as well. Financial sector institutions were affected by the crisis especially in the form of a decrease in the amount of assets in some segments and of a fall in profitability.

Lower credit activity in the banking sector

In view of the fact that the Slovak banking sector is predominantly linked with domestic economy, the economic crisis constitutes a more serious threat to financial stability than the financial crisis. This crisis began to manifest more considerably especially during the last quarter of 2008 when a fall in foreign demand in the euro area and in surrounding countries significantly limited industrial production and affected a decrease in profitability. The deteriorated financial position of the corporate sector and, in particular, negative future prospects manifested relatively fast on the loans market. This was also propelled by a relatively high proportion of loans to sectors that are notably more sensitive to a fall in the economic cycle. Banks were tightening their credit standards, making the direct return of financial flows the main issue. At the same time there was a decline in the demand for loans, especially companies' demand for long-term loans. On the whole, this development was reflected in a lower accessibility of loans to the corporate sector.

The situation was slightly different in the household sector. Although selected indicators for the household sector reported deterioration, it was not as critical as in the corporate sector. Lower growth in the household loans market was caused especially by a fall in demand related to expectations that real estate prices would continue to decrease as well as to a slump in the population's economic sentiment as to their future economic situation.

In relation to the adoption of single European currency, banks recorded a relatively significant increase in primary funds from customers. In this way, customer deposits remain high above loans to clients. This is a positive phenomenon at the time of a crisis as it gives banks even greater possibility to reduce their dependence on obtaining funds from financial markets. That is to say that the negative development in financial markets also influenced banks' capability to issue bonds, mortgage bonds in particular. Soaring prices of resources coupled with low accessibility of long-term resources were limiting the option of financing by means of these instruments.

Stable financial position of the banking sector

Banking sector was able to generate a relatively high profit in 2008, with several banks having

significantly increased their profitability year-on-year. Development was positive especially in large banks. On the other hand, the number of banks with a year-on-year decline in profitability increased as well. Interest income remained the main source of income in 2008.

In the last quarter of 2008, when the growth rate of interest income declined, profitability was one of the areas where banks recorded a negative trend. The reason for that was a fall in the amount of corporate loans, falling interest rates on loans to customers, and increasing interest expenses in the household sector. Creation of provisions in most banks increased, when compared with the year 2007.

Banks' opportunities to increase their profitability will be severely limited in 2009. Stagnation on the loans market will have a negative impact on interest income and on income from fees. On the other hand we assume that the fall in interest margins resulting from increased credit risk will stop. Provisioning expenses will rise if economy deteriorates as anticipated. Banks will record lower income from foreign exchange operations than in 2008. We expect that these trends will be the major contributors to the fall in profitability in 2009.

The banking sector reported a relatively good capital position at the end of 2008. Most banks were increasing their own funds in 2008, mainly so as to maintain retained profit from past years in their capital.

Quality of own funds remained high, with the Tier 1 component of capital dominating.

Increase of risk in the banking sector

The deteriorating trend of both domestic and foreign economy is, of course, reflected in an increase in credit risk in banks. A high proportion of sectors with increased vulnerability adds to this risk at a time of crisis. Banks did not record a significant increase in the volume of defaulted loans at the end of 2008 despite negative developments in the corporate sector, owing to the still relatively stable financial position of the corporate sector created in recent years. On the other hand it is rather difficult to assess this cushion's sufficiency. Economic activity in euro area countries and in the surrounding countries will remain weak all throughout 2009, negatively influencing both domestic production and the overall financial position of the Slovak corporate sector. In the second half of 2009 we may expect a rise in the volume of loans that enterprises will be unable to repay.

Households' financial position is closely linked with that of the corporate sector. A deterioration of indicators for enterprises will, with a certain delay, reflect itself in the position of households. Credit risk itself is related especially to the indebtedness of households, which is the highest in loans provided in 2007 and 2008 as these loans report the highest loan burden rate. A steep increase in residential property prices in this period forced customers to increase their debt and, subsequently, their loan burden rose as well. In this period banks were providing loans with a relatively high loan-to-collateral value ratio.

The portfolio of corporate as well as household loans reports a relatively high proportion of loans with short-term fixation of interest rates, exposing bank customers to the risk of an increased loan burden in case of an interest rate increase. Although we are not expecting such a scenario in near future, it can be a significant source of credit risk in banks if such possibility becomes real.

From the market risk point of view, banking book interest rate risk was the most significant risk for banks. An increase in rates would have a negative impact as a part of these assets consists of bonds with a longer duration whereas liabilities are mainly comprised of short-term deposits.

Development in other financial market sectors

In 2008, the financial crisis started to manifest in the insurance sector too. Total profit of insurance companies went down to almost a half compared to the previous year, particularly due to a lower return rate of financial assets, lower technical result of non-life insurance, and repurchases in life insurance contracts. The trend of a faster growth of life insurance against non-life insurance continued, resulting in 2008 in the first occurrence of a change in the ratio of technical premium in favour of life insurance. There was a year-on-year growth in claims incurred, particularly owing to an increase in life insurance repurchases. Loss rate in non-life insurance increased slightly.

There were no substantial changes in the investment of technical provisions and they continue to be placed in low-risk assets.

Insurance companies were exposed mainly to insurance risks in 2008. Market risks causing unexpected falls in the value of assets covering technical provisions were relatively negligible. However, insurance companies are exposed to the risk of a long-term low return on assets in which they invest assets covering technical provisions.

In the collective investment sector, the financial crisis manifested in the form of mass redemptions caused by uncertainty over development of the value of investments and, to a lesser extent, in the form of a fall in the value of some types of assets held in portfolios. The year-on-year performance of mutual funds was falling throughout the entire range of fund categories and money market mutual funds were the only ones that could ensure a positive nominal return for shareholders.

Riskiness of investments in mutual funds was largely affected by a pronounced increase in volatility, on stock markets in particular. Money market funds and bond funds were exposed to interest rate risk as well but rather from a long-term point of view.

The pension sector of the financial market was also affected by the global financial crisis. A fall in the prices of some types of funds assets subsequently induced a fall in the returns on those funds, too. For these reasons, conservative funds were the only ones where annual return in the second pillar of pension saving achieved positive numbers. Along with performance, the financial market crisis affected also the structure of the portfolio of funds of the second and third pension pillar in 2008. Investments in bonds, especially government bonds, were largely predominant. The volume of equities in pension funds and in supplementary pension funds decreased by almost a half. Another important factor affecting the activity of the pension sector in 2008 was that the second pension pillar was opened twice, enabling the savers an optional entry into / exit from it.

Exposure to risks in pension saving differed according to the nature of the fund. On one hand, conservative funds were exposed mainly to interest rate risk which increased year-on-year in these funds. In balanced and growth funds, on the other hand, the downward trend in the proportion of shares and units to net asset value continued but equity risk soared during the second half of 2008 due to increased volatility on stock markets.
Both funds of pension management companies and funds of supplementary pension companies are exposed mainly to market risks.

Financial sector resilience against negative developments in real economy and on financial markets

Although it is impossible to precisely quantify the impact of various scenarios on the financial sector beforehand, we can roughly specify certain sensitive areas.

The banking sector was entering into the crisis period with a relatively favourable financial position. This initial position is one of the determinants of resilience against crisis scenarios. The sector as a whole is relatively well-equipped to withstand a moderate version of crisis development but it reported higher vulnerability in the case of a scenario based on a substantial and long-term economic downturn. In case of a negative development, the banking sector reports sensitivity mainly due to its exposure against the corporate sector.

Pension funds and mutual funds would be affected particularly by a fall in stock markets, further retarding their performance. The insurance sector is likewise most sensitive to a fall in the value of shares and units.

Box 1

MACROECONOMIC ENVIRONMENT IN THE SLOVAK REPUBLIC

In the second half of 2008, the growth of Slovak economy continued to decline significantly in consequence of the global economic crisis. The year-on-year growth of GDP measured in constant prices of the year 2000 reached the value of 6.6% in the third quarter, coming down to mere 2.5% in the last quarter. The growth of GDP followed the growth in domestic demand which increased year-on-year by 7.2% in the third quarter and by 2.8% in the fourth quarter. Growth of GDP reacted very sensitively to foreign demand when the growth rate of exports of products and services in the last quarter of 2008 recorded a fall by as much as 7.8%. The growth rate of end consumption of households fell as well, from 6% in the third quarter to 4.7% in the fourth.

The development of unemployment took a negative course, increasing in December by 0.4 p.p. to 8.4% on a year-on-year basis after a long period of decline. Inflation grew as well, its level measured by HICP recorded a year-on-year growth by 1 p.p. to 3.5% in December but it had a distinctly decreasing tendency during the last quarter.

In response to changes on global markets, Národná banka Slovenska decreased its base rate three times, causing them to fall in total from 4.25% to as little as 2.50%. Returns on two-year (-0.67%) and five-year (-0.12%) government bonds were falling as well. Returns on ten-year government bonds grew by 0.11%.

Another important topic in the second half of 2008 were the preparations for Slovakia's entry into the euro area and the adoption of a new currency, the euro. A substantial devaluation of the domestic currency was prevented by the exchange rate fixation in the middle of 2008.

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CHARACTERISTICS OF THE SLOVAK FINANCIAL SECTOR

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ACTIVITY OF FINANCIAL INSTITUTIONS

The increase in assets of all regulated financial institutions totalled 11% in 2008. In absolute numbers, this value represents an increase by EUR 7.7 billion. Compared to the 20% growth recorded in the previous year, this result constitutes a relatively significant slowdown in the growth rate of the sector's balance sheet total.

Banking sector was the largest contributor to the increase in assets of the entire financial sector in the monitored period. Greater part of the 14% year-on-year increase in assets was concentrated in the second half of the year when banks were making use of the supply of koruna funds deposited in them mainly by households, the primary intention being a smooth conversion to euro after the introduction of the single currency.

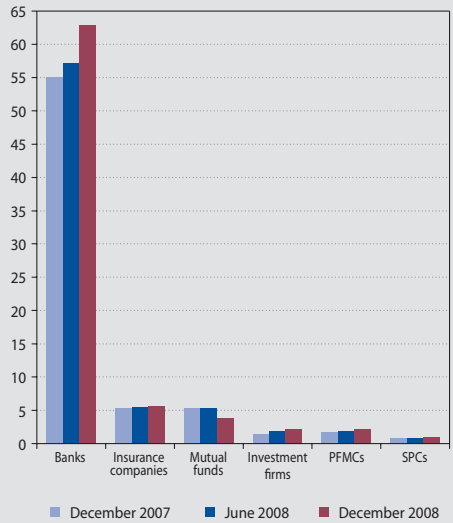
The investment firms sector as well as both pension saving pillars recorded a two-figure growth rate. The insurance sector grew as well although its growth rate was lower, at the level of about 5%.

The year 2008 was not a positive one for the collective investment sector which found itself under strong pressure of unit's redemptions during the last months of the year. These redemptions were the main reason behind a 30% fall in the net asset value of funds managed during the year.

In respect of the above facts there was a turn in the trend of gradual moderate decrease in the banking sector's share of the balance sheet total of the entire financial sector in 2008, having increased by more than 2 p.p. to 81% as at 31.12.2008. Institutions of the second pillar of the pension system continued to increase the weight of their assets in the domestic financial sector, which has been happening continuously ever since the inception of this system. The relative position of collective investment, afflicted by high negative net sales, recorded a decline from 7.7% to 4.9%.

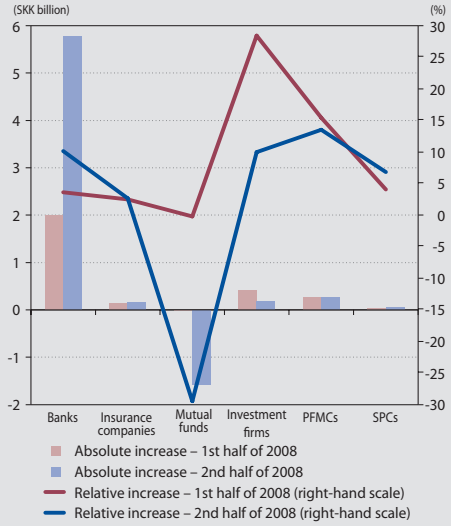
Along with regulated segments, financial market in a wider sense also comprises some other branches; in our conditions we are talking mainly

Chart 1 Amounts of assets or assets under management in the financial market by segment (EUR billions)



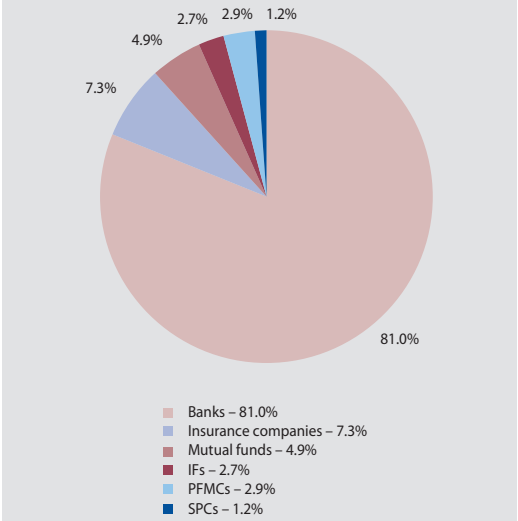
Source: NBS.
Note: PFMCs – Pension Funds Management Companies, SPCs – Supplementary Pension Companies.

Chart 2 Absolute and relative increases in assets in the financial market by segment



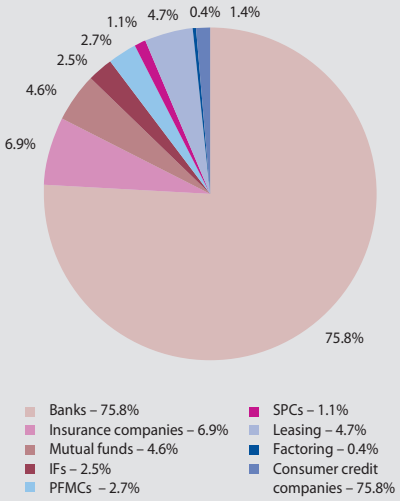
Source: NBS.
Note: PFMCs – Pension Funds Management Companies, SPCs – Supplementary Pension Companies.

Chart 3 Share of assets and assets under management – entities under NBS supervision



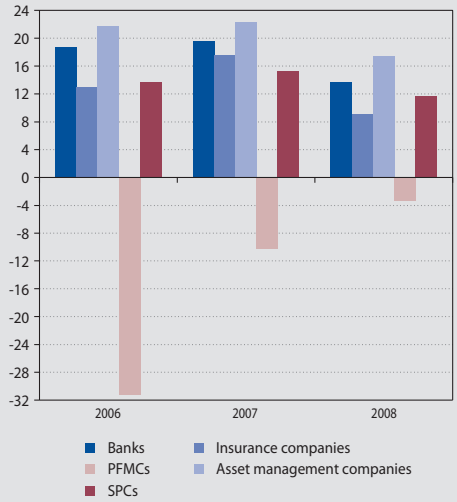
Source: NBS.

Chart 4 Share of assets and assets under management – all entities



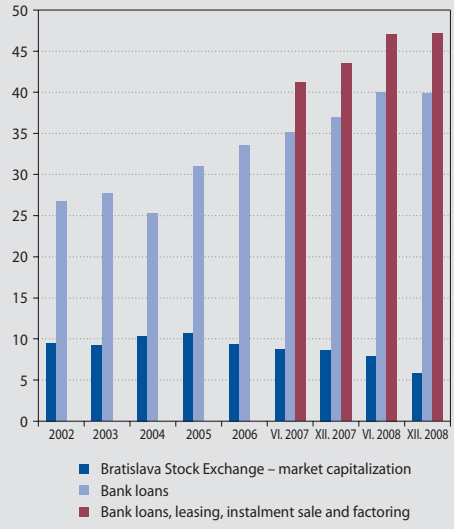
Source: NBS.

Chart 5 Average values of ROE in the financial market by segment



Source: NBS.

Chart 6 Direct and indirect financing (% GDP)

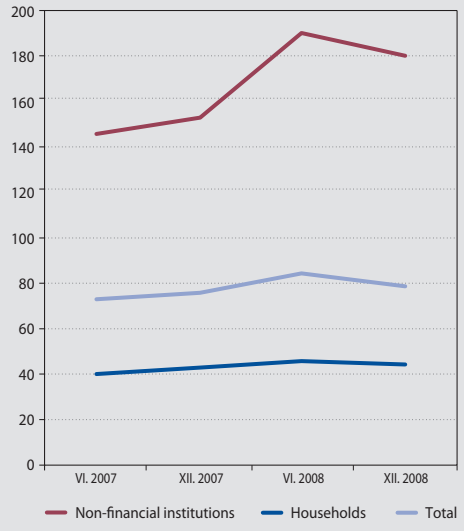


Source: NBS.

of leasing, factoring and hire purchase. The balance sheet total of these non-regulated sectors amounted to EUR 5.38 billion as at December 2008. Leasing companies were doing well in terms of increase in assets and to a lesser extent this also applies to hire purchase companies.

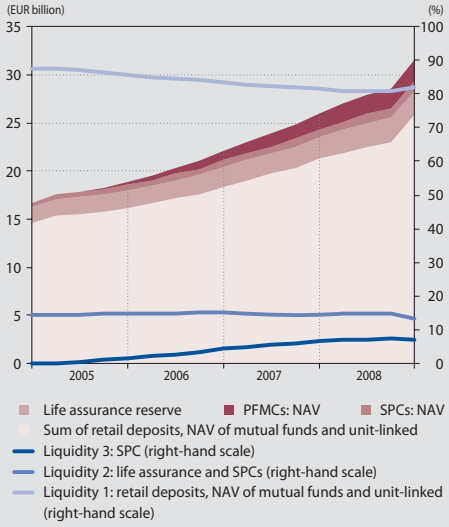
In 2008, the crisis had a partial effect on the financial sector's profitability. ROE declined in almost all segments with the exception of the second pillar of the pension saving which on the other hand was the only one to report a negative value of this indicator. In the case of the capitalisation pillar of pension saving, however, the economic result is still negatively affected by high initial costs distributed by companies over several years. Profit-making in particular sectors slowed down especially in the second half of the year.

Chart 7 Financial assets and liabilities of households and enterprises (%)



Source: NBS.
Note: The percentage value expresses the proportion of financial liabilities to financial assets.

Chart 8 Financial assets of households: changes from the liquidity point of view



Source: NBS.
Note: Liquidity 1,2,3 represents the degree of liquidity of assets, i.e. how fast the households are able to obtain cash from particular assets; liquidity 1 represents the highest degree of liquidity.

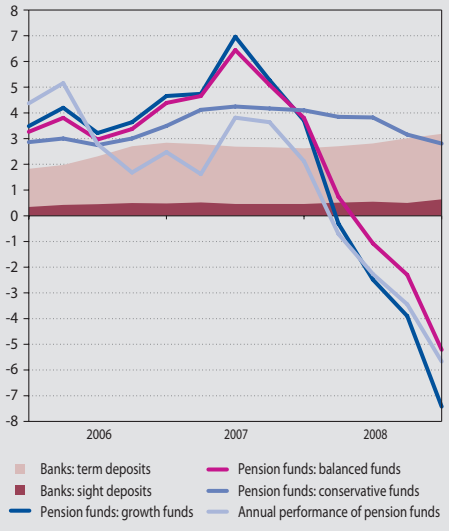
Negative developments on global stock markets were reflected in a fall in the value of issues on the Bratislava Stock Exchange resulting in the relatively substantial decline in market capitalisation of this stock exchange which at the end of the year 2008 dropped to its lowest level in proportion to GDP for the last at least 7 years. Thus the already low significance of direct financing partially dropped even more. Loan financing, whether through banks or through non-regulated market entities, had grown in the first half of 2008 but stagnated in the remaining months of the year.

A lower growth rate of loans (mainly corporate) and an increased inflow of deposits (mainly households) in the second half of the year effected a turn in the previously upward trend in the proportion of financial liabilities to financial assets. From the point of view of stability of the financial sector, we may consider such a change predominantly positive.

FINANCIAL ASSETS OF HOUSEHOLDS

The upward trend of household assets against the domestic financial sector continued in 2008. In the second half of the year, mainly due to the approaching entry into the euro area, there was a massive inflow of deposits in banks, causing the growth rate of financial assets exceed its long-term average. This happened even in spite of the fact that households decreased their hold-

Chart 9 Performance of individual types of household financial assets



Source: NBS.
Note: Performance is calculated p.a. (an average value in the case of banks). Data on returns written in life assurance are not available.

Chart 10 Structure of household financial assets by performance, liquidity and risk

Source: NBS.
Note: The size of the circle represents the volume of assets. Data on return written in life assurance are not available.

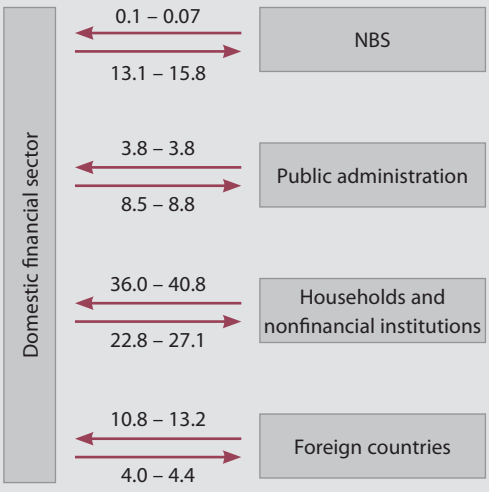
ings of assets in the form of collective investment units by more than EUR 1 billion. This growth in assets was also significantly bolstered by savings accumulated in the funds of pension management companies.

Probably the most apparent expression of the financial crisis in our environment was a substantial decline in the performance of most financial products. Money investments, including current and term deposits in banks and money market mutual funds, retained their positive nominal return in 2008 and conservative funds of the second pension pillar remained on the plus side as well. Year-on-year performance of other types of investments kept on slumping into the red numbers throughout the year. As the investment horizon and fixation in many of them are predominantly longer-term, this decline does not necessarily mean that this loss will be in fact realized in households.

SELECTED FINANCIAL FLOWS

The exposure of the domestic financial sector against most counterparties in economy was growing relatively dynamically, especially when keeping in mind that this expansion was taking place against the background of an aggravating financial crisis. The link with real economy, the backbone of financial flows in Slovakia, was deepening further. The exposure against households and companies was growing on the side of assets as well as liabilities. On the assets side, comprised exclusively of bank loans, household loans recorded the largest growth. The pace of corporate lending slowed down particularly in the second half of the year, most likely due to growing concerns over the health of domestic enterprises after the economic crisis had started to penetrate into the domestic economy. Liabilities originating in real economy recorded an even greater increase in their volume than assets; however, the only growth within them was that of household resources. Especially in the second half of the year they were intensely growing in volume mainly in the form of bank deposits, which was chiefly an effect of the then approaching conversion to euro. Long-term investments of households in life insurance and both pension pillars were increasing as well. Thus the household sector deepened its position as the most significant net creditor of the financial sector despite the fact that households withdrew a major volume of their assets from mutual funds at the end of the year. To the contrary, the dominance of companies' liabilities over their claims against the financial sector became more pronounced.

Scheme 1 Selected relations of the financial sector and other sectors, December 2007 and December 2008 (EUR billions)



Source: NBS.

Table 1 Selected financial flows (December 2007 – December 2008) (SKK billions)

	NBS	Domestic financial sector						Domestic non-financial sector			Foreing countries			
		Domestic banks	Insurance companies	PFMCs	SPCs	AMCs	Other financial companies	Households	Enterprises	General government	Foreing banks	Foreing AMCs	Foreing general governments and int. institutions	Other
NBS		100–70	0–0	0–0	0–0	0–0	0–0	10–10	3.3–3.3		6,373–5,245		6,672–6,373	830–229
Domestic banks	13,078–15,767	1,859–1,527		1.3–1		0–0	2,224–1,892	9,394–11,850	13,410–15,203	8,464–8,796	2,234–2,689		33–43	1,627–1,660
Insurance companies	0–0	1,627–1,427				143–193								
PFMCs + SPCs	0–0													
AMCs	0–0	1,062–631												
Other financial companies	3.3–1	1,062–1,195				256–252								
Households	30–40	16,398–21,676	2,224–2,523	1,693–2,224	830–929	3,618–2,556								
Enterprises	0–0	11,153–10,888				47–33						929–498		
General government	3.3–0.3	3,784–3,751				0–1								
Foreing banks	232–432	9,792–11,917												
Foreing AMCs														
Foreing general governments and int. institutions	6.6–11.6	10–6.6				56–33								
Other		896–1,261												

Source: NBS.
Legend: – Data are not available, – There is no direct relationship of a creditor and debtor. Rows: overview of financial assets (loans and securities) invested in the institutions named in the columns. Columns: overview of liabilities (deposits and loans received) to institutions named in the rows. The figure for insurance companies represents technical provisions for life insurance.

A bilateral increase in financial flows was recorded also between the domestic financial sector and foreign financial institutions. Inflow of foreign banks' deposits into domestic banks strengthened foreign entities' net creditor position against the domestic financial sector. Sources from foreign banks and other sources were extensively deposited in reverse repo tenders with NBS through the domestic banks. The growth in sterilization operations in the second half was reinforced by a one-time inflow of sources from households among other things.

There was no significant year-on-year change in mutual financial exposure in relation to general government. This condition, however, was a resultant of two antagonistic trends in the first and second half of 2008, when positions had been mutually reduced and the situation subsequently returned to the level as at the end of 2007.

Most positions within the financial sector were reduced. The dominant position of the banking sector, apart from having the largest volume of assets, is also accentuated by the fact that all other domestic financial institutions have deposited in it a significant part of their assets.

BANKING SECTOR

1 BANKING SECTOR

1.1 TRENDS IN THE BANKING SECTOR BALANCE SHEET

The changes that occurred in the balance sheet of banks in 2008 can be divided in respect of the progress of the financial crisis. In the first phase we analysed the impact of negative developments in financial asset prices on foreign financial markets. We stated already in the Analysis of the Financial Sector for the First Half of the Year 2008 that domestic banks were not significantly affected by this development. Investments in foreign debt securities, especially in riskier groups, were relatively low and recorded further decline in the course of 2008.

Negative developments on financial markets also influenced the banks' capability to issue bonds, mortgage bonds in particular. Soaring prices of resources coupled with low accessibility of long-term resources were limiting the possibilities of financing with the use of these instruments. In general, however, the banking sector was not notably affected by the financial crisis on the sources side. Contrary to other sectors in EU countries, the Slovak banking sector reports a high amount of customer deposits, significantly exceeding that of loans to customers. This decreases domestic banks' exposure to the risk of high volatility on financial markets.

Increase in the volume of primary customer deposits was bolstered to a large extent by the adoption of single currency, the euro. In the last months of 2008 banks recorded an increase in the volume of customer deposits. On the other hand, corporate term deposits shrank in the last quarter of 2008 owing to the corporate sector's deteriorating financial position.

On the assets side, the financial crisis started to manifest more considerably in the third quarter of 2008. Banks began to tighten their credit standards due to deteriorating economic indicators and their poor future prospects in particular. At the same time there was a decline in corporate demand for loans, especially for longer-term loans. Thus total corporate loans recorded lower growth in 2008 compared to the previous periods.

On the household loan market, negative trends related to the financial crisis only began to manifest in the last quarter of 2008 and the slowdown in the growth rate of loans was caused by a fall in the demand of households rather than by the tightening of banks' standards. This fall in demand resulted both from negative expectations as to the future economic development and from a continuing decline in residential real property prices. The fall in prices which we have been observing since the second quarter of 2008 is creating further deflation expectations and postpones the purchase of real estates to later periods.

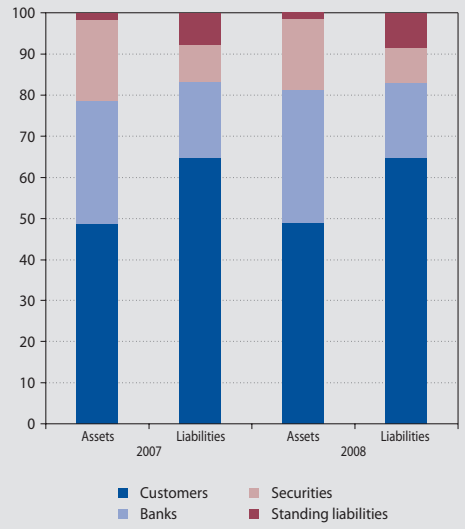
When looking at changes in the structure of assets and liabilities for the year 2008, we only see minimum movement. Banks were receiving a greater part of sources from their customers. These were growing in the course of the year, with sources from households increasing in particular.

From this point of view, the year 2008 was distinct mainly due to preparations for the adoption of euro that contributed to an increase in deposits, particularly in the last quarter, as well as due to continuing redemptions in mutual funds. Loans to customers grew as well but slower than funds obtained by banks from this sector. Economic growth, still strong in this period, sustained household and corporate financing for the whole of 2008.

As sources and loans from customers, so the volume of interbank transactions was growing in 2008. Sources from banks and loans to banks are closely correlated. Banks usually obtain these sources from foreign banks and subsequently invest them in NBS. Banks often act as intermediaries in such cases.

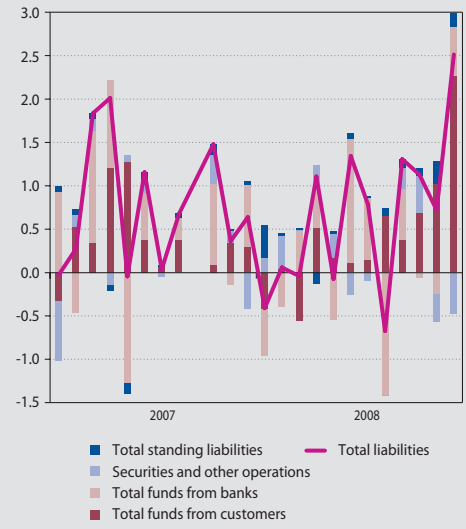
On assets side, banks reduced the volume of investments in securities on a year-on-year basis, due to the end of maturity of some government bond issues as well as due to the on-going financial crisis. As a result of that, some banks were

Chart 11 Main items of assets and liabilities (%)



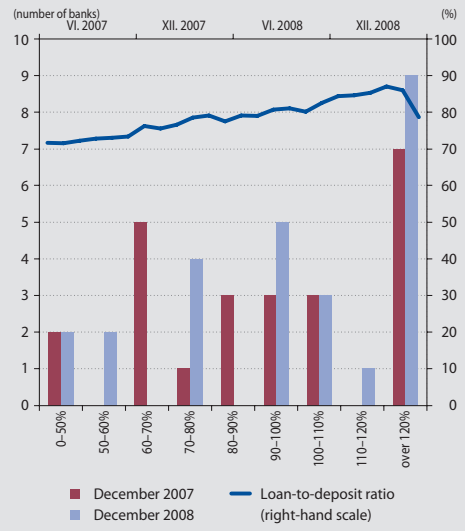
Source: NBS.

Chart 12 Month-on-month changes in particular components of liabilities (EUR billions)



Source: NBS.

Chart 13 Loan-to-deposit ratio: development and distribution



Source: NBS.
Note: The lower horizontal axis shows the ratio's intervals and the left vertical axis the number of banks with the given figure. The upper horizontal axis shows the date of the ratio's average value, and the right vertical axis the average value.

reducing their exposure mainly against foreign securities. On the other hand, sources obtained from securities were growing, particularly owing to an increase in loans to households. This increase is directly linked to the obligation of mortgage banks to issue mortgage bonds.

From the point of view of sector stability and especially in respect of the current turbulences on financial markets it is important that the loan-to-deposit ratio has decreased. In other words, banks could finance their customers without being dependent from the more volatile financial markets and had sufficient stable sources from customers. The value of this indicator fell to 79% for the entire banking sector as at the end of 2008. This fall was caused especially by an increased volume of customer deposits. The state of the indicator mirrors particularly the development during November and December as its value had been increasing until October, arriving at 87% by the end of the month.

Despite a fall in the LDR indicator in the banking sector as a whole, its value continued to grow in several banks. This value exceeds 100% especially in branches of foreign banks.

RETAIL SECTOR

Increase in household deposits

Sources from retail traditionally constitute the largest proportion of funds from customers. More than 90% of retail deposits are comprised of household deposits, major part of which consists of deposits in domestic currency. Funds from retail are characterised by a high presence

of the three largest banks whose share represented a total of 63.5% as at December 2008.

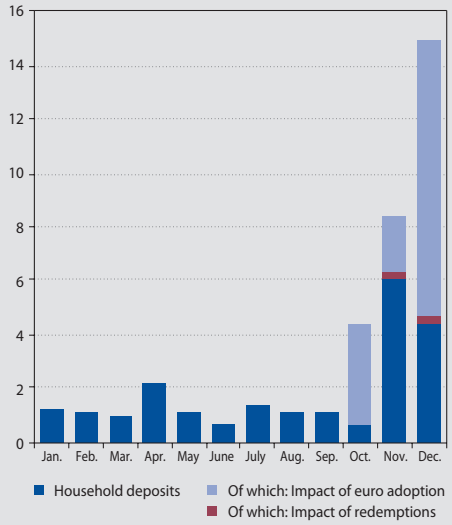
The high increase in household deposits that we mentioned above was recorded in all main items but the largest increase occurred in term deposits, having grown by 52% as at December 2008 in a year-on-year comparison.

As we mentioned earlier, the main factor influencing the high increase in household deposits in the last quarter of 2008 was the anticipated introduction of euro by bank customers depositing their free resources in bank accounts in order to have them automatically converted to euro after the changeover to single currency. In addition, this increase might as well have been partly caused by mutual funds redemptions when customers were withdrawing their funds due to low returns in mutual funds, subsequently depositing a part of these funds in bank accounts.

When looking at term deposits by the length of their fixed term, one-month, three-month and one-year term deposits were the most important items. The largest increases occurred mainly in three-month and one-year term deposits.

Unlike in one-year deposits, in 3-month term deposits we may observe an increase, moderate to strong, in all banks that had the largest volume of this item at the end of the year.

Chart 15 Expected impact of redemptions and the introduction of euro on household deposits[1] (%)

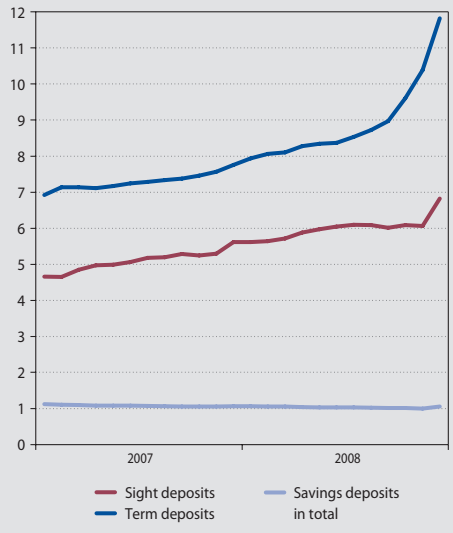


Source: NBS.
Note: The data represent month-on-month changes in the volume of deposits, in percent.

Decline in household demand for new loans

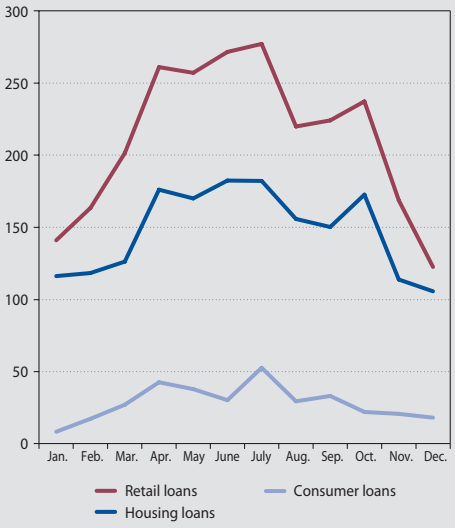
Total volume of loans provided by banks to the retail sector increased by one quarter in the

Chart 14 Household deposits (EUR billions)



Source: NBS.

Chart 16 Year-on-year changes in the volume of retail loans (EUR millions)



Source: NBS.

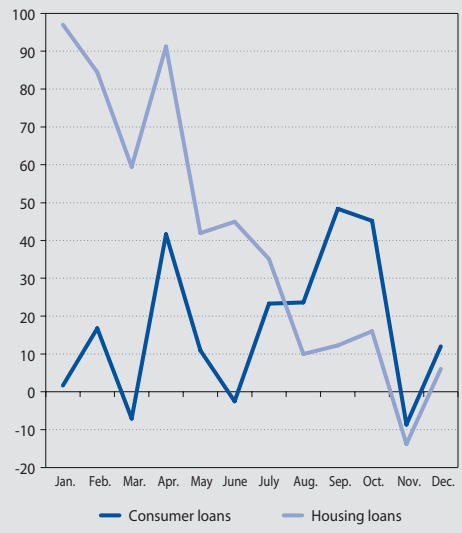
1 *To estimate the development of household deposits we used a simple regression method using monthly changes in logarithm of the volume of household deposits and certain macroeconomic indicators from the period of March 2008 to June 2008. To estimate the impact of mutual funds redemptions and the introduction of euro, we used the resulting estimate of the value of deposits, whereby the equation was extended by monthly changes in natural logarithm of the volume of mutual funds deposits in banks and by three dummy variables taking gradually the value of one in the months of October, November and December, and the value of zero in other periods. The coefficients for new variables were estimated using monthly data from the period of March 2004 to December 2008. The coefficient for deposits in mutual funds was used for the estimation of the effect of mutual funds redemptions, and the coefficients for individual dummy variables serve for the estimation of the impact of other events in the last three month of the year on household deposits. We considered the introduction of euro as having the strongest influence on this development during the last three months.*

course of 2008. Thus the bank sector's exposure against retail increased by almost EUR 2.5 billion as at December 2008. The year 2008 had two different phases both in the corporate and in the household sectors. While net increments of loans had a growing tendency in the first half, their growth rate slowed down in the second half.

We can get deeper insight into household financing in 2008 by looking at changes in the volume of new loans which started to decline as early as at the end of the first quarter of 2008. In November 2008 the volume of new consumer loans and housing loans was even lower than in the same period of 2007.

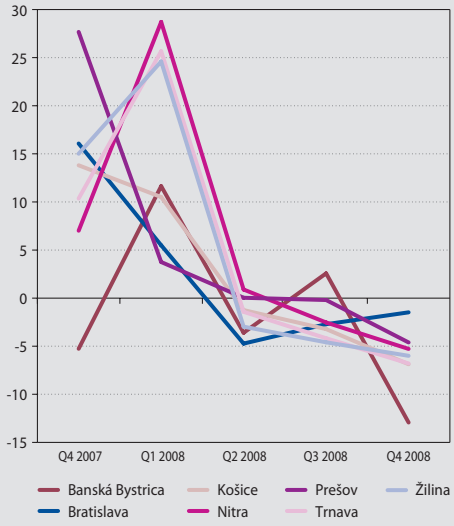
Household financing was affected by several factors in 2008. The situation on the real estate market started to manifest first. We can see the impact of a high increase in real estate prices especially in the reduced growth rate of new loans. As we mentioned in our previous analyses, the increase in real estate prices, particularly in 2007 and in the first quarter of 2008, significantly exceeded growth in wages. This trend logically led to a fall in demand on the real estate market and a fall in prices, for the first time emerging in the second quarter of 2008. This fall in real estate prices brought with it a new trend on the real estate market. The position of demand surpassed that of supply, which is reflected especially in expectations of a decline in prices. Supply rapidly exceeded demand. This trend continued all throughout 2008.

Chart 17 Year-on-year changes in the volumes of new retail loans (%)



Source: NBS.

Chart 18 Quarterly changes in the prices of a 3 – bedroom flat in regional capitals (%)



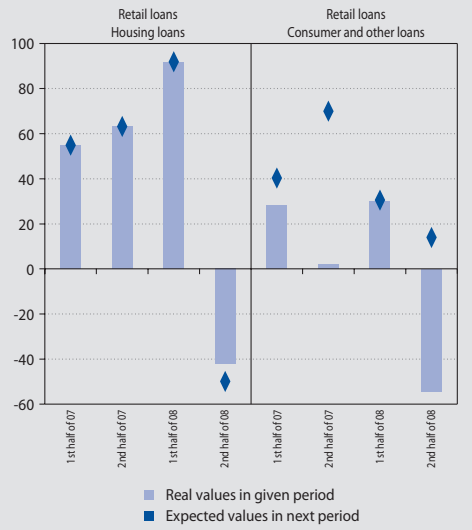
Source: NBS, Real estate price map
Note: The chart does not include percentage changes in real estate prices between individual quarters.

In the third quarter, the impacts of the financial crisis began to manifest more considerably in the domestic economy. Negative results of the corporate sector were transferred relatively fast into the employment rate (year-on-year decline in the employment rate in industry in November and December 2008) and income of the population. Consumer confidence fell sharply in December 2008. Development in the last quarter added even more to a fall in prices on the residential real property market.

These factors significantly contributed to a fall in households' demand for new loans. Almost all banks recorded a decline in their willingness to run into debt. Negative trends in economy and on the real estate market caused a decline in demand for all types of loans

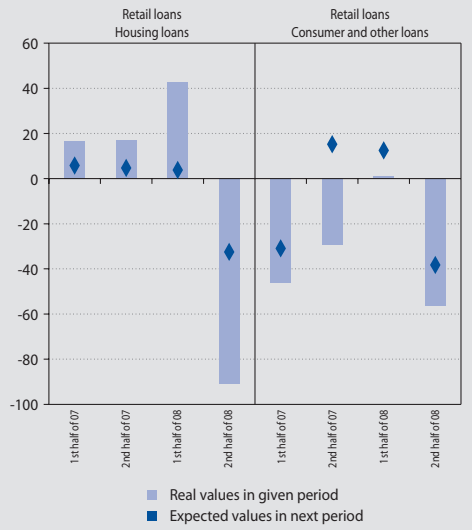
The attitude of banks in providing new loans changed as well. Uncertainty over the future economic development and the financial position of households as well as a continuing decline on the real estate market were reflected in a tightening

Chart 19 Demand of population for new loans (%)



Source: NBS, Bank lending survey.
Note: Data are in form of net percentage, positive value represents increase in demand. Changes in demand express subjective view of banks.

Chart 20 Development of standards for loans to households (%)



Source: NBS, Bank lending survey.
Note: Data are in form of net percentage, positive value represents loosening of standards. Changes in standards express subjective view of banks.

of credit standards. It included tougher scrutiny in the assessment of particular loan applications, higher interest rates and stricter loan guarantee requirements. Several banks decreased their LTV for new loans in the second half of the year.

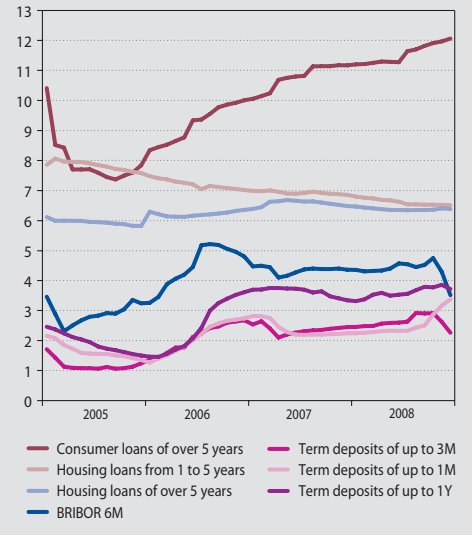
While negative development on the real estate market and in economy in general affected all banks in the same manner as to their provision of new loans, particular banks differed greatly in their approach to loan standards. The differences between banks in their perception of possible risk related to loan standards were partly reflected in the volume of new loans provided by particular banks.

The volume of provided loans generally declined not so much due to the tightening of standards as due to decreased demand and households' unwillingness to run into debt. Although banks behave with caution in many cases, household financing – especially in the form of housing loans – is an important source of banks' profitability. From the banks' point of view, an extensive tightening of standards for real estate loans could further weaken the real estate market, causing demand for loans to fall even more.

Development of interest rates

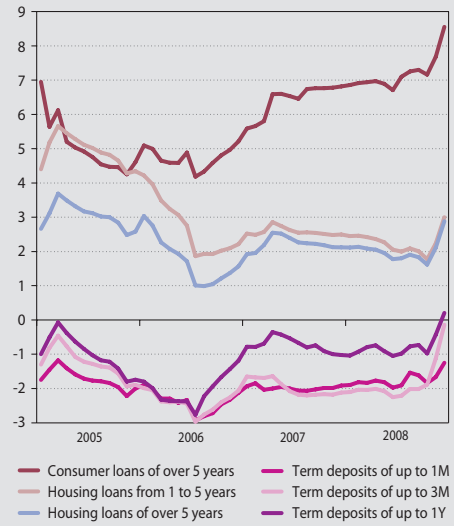
During 2008, the development in interest rates for deposits of population reflected that of interbank interest rates with their value slightly decreasing or remaining at a more-or-less unchanged level during the first three quarters.

Chart 21 Interest rates for deposits of and loans to households (%)



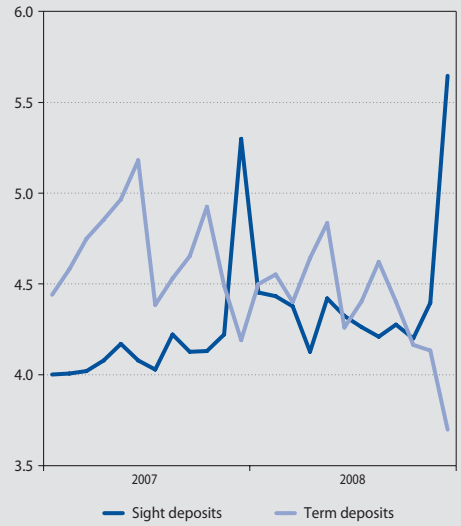
Source: NBS.

Chart 22 Spreads between interest rates for deposits and loans of households and the 6-month BRIBOR (p.p.)



Source: NBS.

Chart 23 Selected items of corporate deposits (EUR billions)



Source: NBS.

Values increased slightly in the last quarter and subsequently fell together with a decline in interbank rates. Three-month term deposits are an exception as their value kept growing until the end of the year, which was probably related to the introduction of euro and to the associated increase in competitive pressure among banks in their effort to acquire free resources of the population.

Interest rates for real estate loans did not report any strong links with interbank market rates in 2008. Their amount is influenced more significantly by interest rates for mortgage bonds.

Interest rates for real estate loans did not report any strong links with interbank market rates in 2008. Their amount is influenced more significantly by interest rates for mortgage bonds.

The reason why interest rates for deposits of population declined less than interbank rates lies in a slight fall in spreads, moving from negative to positive values in some cases.

CORPORATE SECTOR

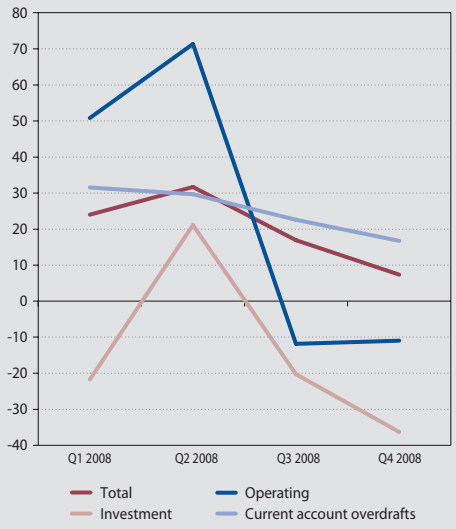
Fall in corporate term deposits at the end of the year 2008

Sources from enterprises constituted the second largest part of total sources from customers at the end of 2008. Similarly to retail deposits, corporate deposits may also be characterised by a high concentration as five banks make up 75% of the market and the first three banks' aggregate share is 57.6%.

Slovak koruna deposits constituted more than 80% of corporate deposits in the long run. We expect further growth in the share of deposits in domestic currency since deposits in euro comprised 81.6% of deposits in foreign currency; this was also the case of deposits of population. The proportion of deposits in foreign currency to total deposits was greater especially in branches of foreign banks.

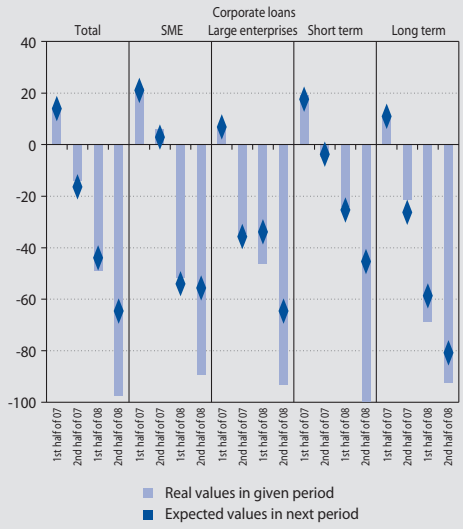
Term deposits as well as sight deposits of enterprises comprise in the long run ca 50% of total corporate deposits. Whereas sight deposits recorded a seasonal growth as at the end of 2008, term deposits registered a year-on-year fall by 15.4%. Decline was registered especially in the last quarter of 2008, which may be related with

Chart 24 Year-on-year changes in corporate loans (%)



Source: NBS.
Note: The chart shows year-on-year percentage changes in particular quarters of the year 2008.

Chart 25 Changes in standards for corporate loans (%)



Source: NBS, Bank lending survey.
Note: Data are in form of net percentage, positive value represents loosening of standards. Changes in standards express subjective view of banks.

the deteriorating financial and liquidity position of enterprises due to negative trends in the corporate sector.

Most term deposits were short-term, with the share of one-month deposits being more than 80% as at the end of 2008. This share, however, reports a downward tendency mainly due to a year-on-year decline in one-day deposits (-35.8%) and in one-month term deposits (-23.0%). This, together with the high share of sight deposits, is most likely related with the use of deposit accounts by enterprises mainly with the aim to ensure cash flow.

Slowdown in the growth rate of corporate loans in the last quarter of 2008

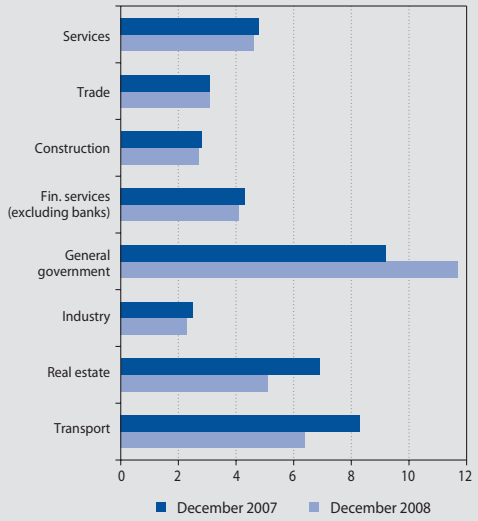
Despite the negative development on financial markets and in real economy, especially in the last quarter of 2008, corporate financing by banks recorded a year-on-year increase by almost 14% as at December 2008. All the main aggregates of corporate loans were growing – investment loans, operating loans and current account overdrafts.

As for individual banks, three largest banks reinforced their position (their share was at the level of almost 50%). The growth in medium-size banks and branches of foreign banks was modest.

Growth rate of loans is what has changed on the corporate loans market in comparison with the previous years. Different development was recorded especially in the first and second half of 2008. While in the first half of the year the growth rate had an upward tendency, in the third and fourth quarters the rate of year-on-year growth was lower or negative. Year-on-year growth in the volume of new loans in Slovak koruna provided in the last quarter of the year was only 7%, having dropped from as much as 32% in the second half. Banks recorded a year-on-year decline in investment and operating loans in the third and fourth quarter.

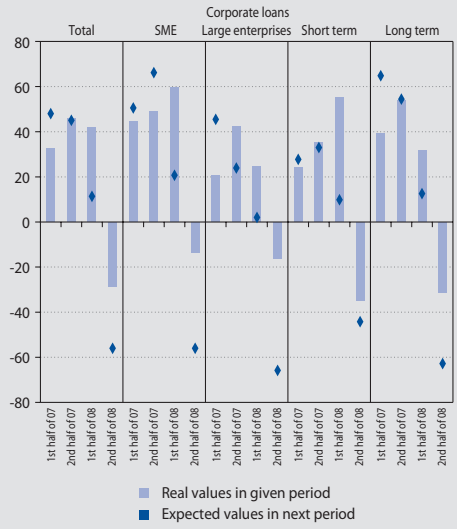
However, the growth rate of loans was not the only area on the corporate loans market that was negatively affected by the financial crisis. Banks generally began to behave in a more prudential manner in their provision of loans in the second half of 2008, mainly owing to negative views on the future economic development and the riskiness of some industries against which they are exposed. One of the reasons behind stricter conditions was an increase in the prices of interbank sources whose amount has

Chart 26 Average maturities of loans by sectors (years)



Source: NBS, Register of Credits and Guarantees.
Note: Maturity for particular sectors is weighted by the volume of particular loans.

Chart 27 Changes in corporate demand for loans (%)



Source: NBS, Bank lending survey.
Note: Data are in form of net percentage, positive value represents increase in demand. Changes in demand express subjective view of banks.

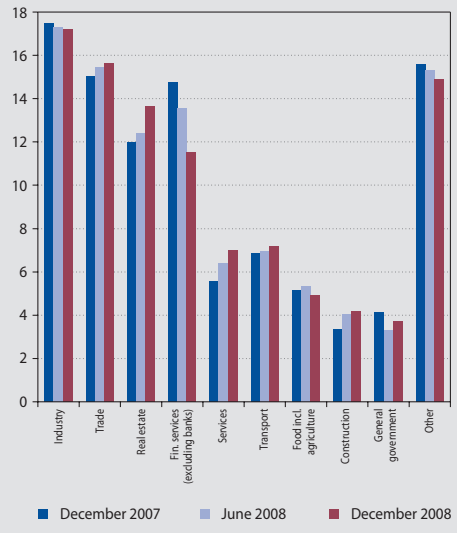
an important influence on interest rates for corporate loans.

Banks started to distinguish the possible riskiness of sectors to a greater extent and the transparency and the return on financial flows became the most essential factors for them. Banks' prudence manifested in several parameters of corporate loans. They imposed stricter requirements in various contractual terms and conditions of loans. In the real estate sector this manifested especially in increased demands on investor's capital share, contractual occupancy of premises, etc. Banks in general, whether in the real estate sector on in other sectors, lay greater emphasis on the security of return on financial flows.

Turbulences on financial markets which we mentioned earlier expressed themselves relatively fast in an increase in interest rates for new loans. Enterprises' sensitivity to changes in interest rates on interbank markets increased even more in the course of the year. In December almost the entire volume of new loans was provided with a floating rate fixation or with a rate of up to one year. This was also true for investment loans and real estate loans (in December 2007, the share of loans with the shortest fixation was approximately 70%).

The stricter approach of banks was reflected in a decline in the maturity of corporate loans. This was evident especially in sectors that are generally perceived as more sensitive to a fall in the economic cycle[2]. Average maturity on the corporate loans portfolio in the real estate and transport sector fell more significantly. On the other

Chart 28 Structure of the portfolio of loans to non-financial companies by sectors (%)



Source: NBS.

2 *Rough division of sectors by sensitivity to change in economic cycle is listed in Box 6.*

hand, average maturity of loans in the public sector increased.

Banks were tightening their security requirements too. Requirements were getting stricter not only in new loans but, in several cases, banks were demanding additional security for existing loans.

The overall drop in the growth rate of loans was heavily reinforced by a fall in the demand for new loans on the part of enterprises. With production and exports falling and, in particular, future economic prospects being negative, the corporate sector decreased its demand for bank financing. Almost all banks in the sector recorded a fall in corporate sector's interest. Demand was falling in the sector of large corporations as well as in small and medium enterprise, affecting equally long and short-term loans.

The structure of corporate loans of banks by sectors widely reflected the structure of domestic economy. This structure of exposure did not undergo any significant changes in 2008.

While the volume of loans in particular sectors was growing in the first half of 2008, the exposure of banks against several sectors fell in the second half.

A decrease in the second half was recorded especially in non-banking financial companies (chiefly hire purchase companies, leasing and factoring companies) and in the industrial sector.

The real estate sector recorded the highest growth. The sector's exposure to commercial and residential real property reached more than EUR 2.7 billion at the end of 2008, having increased by approx. EUR 200 million in the second half of the year.

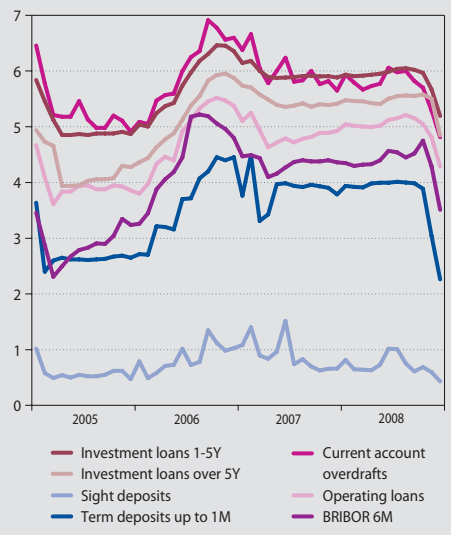
Interest rates

Interest rates for corporate deposits and loans report a long-term strong link with interbank interest rates, as we can see in the case of population. This facts manifests especially in a faster and more remarkable projection of changes in interbank rates in the rates of corporate deposits and corporate loans.

Interest rates for deposits were changing only slightly during the first three quarters of 2008 but this became different in the last quarter when, following a slight increase or an unchanged status quo, decline occurred coupled with a fall in interbank rates.

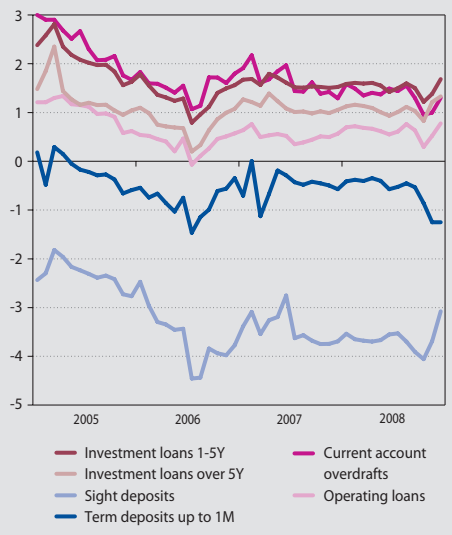
Interest rates for loans, like some deposits, reported slight growth in the course of the year but

Chart 29 Interest rates for corporate deposits and loans (%)



Source: NBS.

Chart 30 Spreads between interest rates for corporate deposits and loans and the 6-month BRIBOR (p.p.)



Source: NBS.

Box 2

LIQUID ASSETS INDICATOR

In response to the impacts of the current global financial crisis, NBS took several measures to protect the Slovak banking sector and to ensure its stability. One of these measures is a regulation that aims to ensure a sufficient liquidity level of individual banks so as to protect them against an excessive drop in liquid assets. We are talking about the liquid asset ratio[3] which is to be understood as the proportion of total liquid assets to total volatile liabilities. The value of this indicator must not fall below 1. Distribution of the values of the liquid assets indicator as at 31 December 2008 is shown in Chart 120 in the Liquidity Risk section. In order to balance the deposits of general government, enterprises, banks and population as well as other liabilities, banks have to hold a sufficient amount of liquid assets, i.e. cash, suitable securities and assets payable within one month. For this reason, the liquidity ratio may have an influence on the provision of longer-term loans as it fixes a certain volume of liquid assets. This box should show possible impacts and limitations to banks' ability to provide new loans.

The growth in liabilities may have been caused by an increase in short-term (maturity of up to one month) or long-term liabilities. If such liabilities grow, liquid assets will follow suit and banks will be able to use them for the provision of new loans. However, due to their being bound by limitations of the liquid asset ratio, a certain part of these newly obtained assets can only be deposited as a provision. Especially in the case of banks with an already low ratio value, this could mean that a high proportion of new sources will be blocked.

We shall analyse three scenarios considering a theoretical increase in short-term deposits by 10%:

a) banks are trying to maintain the original value of the ratio,
b) ratio decreased to 90% of its current value,
c) ratio fell to the value of 1.

a) In the case of an effort to fix the ratio at its original value, the share of new liquid assets fixed by the ratio would reach in the sector, on average, almost 55% of new liquid assets. If banks decided to use the whole of the remaining 45% for provision of loans, the total amount of provided loans would increase by 4% whereas new loans would increase by 22% in December.

b) Since the value of the ratio is sufficiently high in a large majority of banks, they can afford to let it fall slightly and to use a greater part of obtained liquid assets for the provision of new loans. If the indicator's value decreased to 90% of the current value, the share of new liquid assets fixed by the indicator would reach less than 26% of new liquid assets in the sector average. The total amount of provided loans could increase by 13% and the amount of new loans by 73%.

c) In the last case, with the ratio having fallen down to the marginal value 1, the possibility to use new liquid assets becomes the greatest. The share of new liquid assets fixed by the ratio would only reach little more than 13% in the sector. The impact on banks' ability to provide loans would also be remarkable, the total volume of loans could grow by as much as 30% and new loans in December even by 168%.

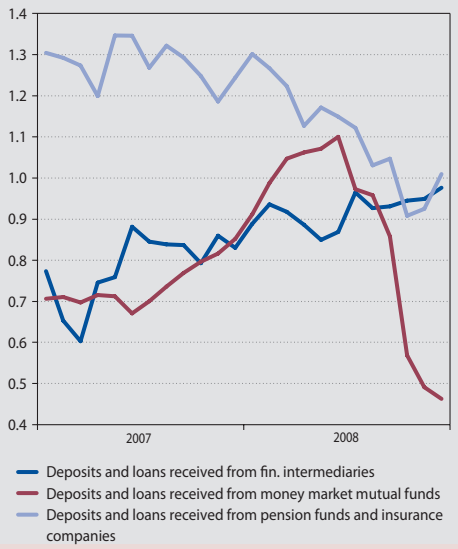
saw a decline in their value in the last quarter. As the fall in corporate rates was more moderate than that in interbank rates, there was a slight increase in loans while in deposits the interest differential declined.

OTHER SECTORS

The volume of deposits of non-banking financial companies registered a year-on-year decline by 16.3% and at the end of the year these deposits constituted mere 6% of total sources from customers. Deposits of non-banking financial

3 *Decree of Národná banka Slovenska of 28 October 2008 No. 18/2008 on the liquidity of banks and of branches of foreign banks and on procedures pertaining to liquidity risk management of banks and branches of foreign banks and on the amendment to the Decree of Národná banka Slovenska No. 11/2007 on the submission of statements, reports and other disclosures by banks, branches of foreign banks, investment firms and branches of foreign investment firms for supervision and statistical purposes.*

Chart 31 Deposits of non-banking financial companies (EUR billions)



Source: NBS.

companies are predominantly comprised of deposits of pension funds and insurance companies (41.2%), deposits of financial intermediaries (39.9%) and deposits of money market mutual funds (18.9%). The only event of year-on-year growth (by 17.6%) from these items occurred in deposits of financial intermediaries.

Deposits of pension funds and insurance companies recorded a particularly significant decline (almost 20%). Year-on-year decline occurred in 11 out of 18 banks that reported a non-zero volume of these deposits as at the end of 2008. In percentage terms, year-on-year decline oscillated between 18.8% and 85.4%. The fall in this item was partly caused by a shift of assets in the funds of pension management companies from bank accounts to bonds.

Interest rates of these deposits essentially followed the fluctuation of interbank interest rates with corresponding maturities, having changed slightly during 2008 and fallen at the end of the year. This means that the return on capital in pension companies' funds deposited in time accounts reflects the state of interbank rates.

Deposits from financial intermediaries were growing in most banks on a year-on-year basis. Deposits of money market mutual funds were the smallest item as at the end of 2008. Decline was observed especially in the last quarter when total value of deposits slumped to its December 2006 level. This abrupt decline was caused mainly by redemptions in mutual funds caused by low profits due to the financial market crisis. However, as we mentioned earlier, customers were depositing in bank accounts part of their assets withdrawn from mutual funds, which together with a relatively small share of these deposits of the balance sheet total (0 to 5%) means that this slump should not cause major problems for banks as to financing.

The volume of loans to (non-banking) financial companies recorded a significant decline in 2008. Exposure against this sector fell by almost 15% in the course of the year. Decline began at the end of the first quarter and continued uninterruptedly until the end of the year.

A great part of these loans is provided to leasing companies, hire purchase companies and factoring companies. These loans are thus indirectly provided for the financing of investments in enterprise industry (especially purchases of cars and machinery) and consumer investments of households (especially consumption through hire purchase companies, car purchases).

The most important part is comprised of loans to leasing companies of domestic banks (almost one half of their total volume). Loans to financial companies of automobile companies have a large share as well. Hire purchase companies constitute approximately 10% of loans.

In the course of the year, a decrease was observed particularly in bank loans to leasing companies and in selected banks' exposure against hire purchase companies.

GENERAL GOVERNMENT

The development of general government deposits was comparable with that in previous periods. Almost 90% of deposits are concentrated in five banks.

As at December 2008, 78.5% of general government deposits were comprised of central government deposits and 21.5% of local government deposits.

Central government deposits consisted of deposits in Slovak koruna amounting to EUR 2.2 billion and deposits in euro amounting to EUR 0.7 billion. As much as 95% of deposits in koruna were comprised of term deposits, predominantly one-month deposits. Deposits in euro were largely those of DLMA and the Fund of National Property; they were almost exclusively one-day deposits.

Interest rates, like in the case of enterprises or non-banking financial companies, followed the development of interbank interest rates, due to which rates with important maturities fell as at the end of the year.

Stagnation was recorded in general government financing. The volume of provided loans remained virtually unchanged. Most banks recorded a drop in their exposure against this sector.

Unlike general government and financial companies, banks were significantly increasing their credit exposure against non-residents. The volume of loans in this sector rose by one quarter in 2008. Only a few banks are noticeably active in this area.

SECURITIES

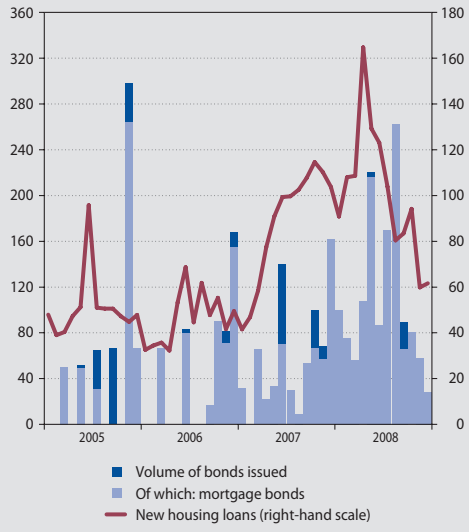
Lower volume of issued mortgage bonds in the last quarter of 2008

The value of bonds issued by resident banks, which are an alternative means of financing along with deposits, rose by 7.9% to EUR 4 billion as at December 2008 in a year-on-year comparison, comprising 6.4% of total liabilities of the banking sector at the end of the year.

Mortgage bonds, whose issuance is obligatory for banks providing mortgage loans, had the largest share of issued bonds (83%). Issuance of mortgage bonds was at its peak in the middle of the year when banks issued mortgage bonds in a total amount of EUR 843 million (between April and August). This high value is related to developments on the mortgage market as the volumes of new mortgage loans were reaching their peaks during this period.

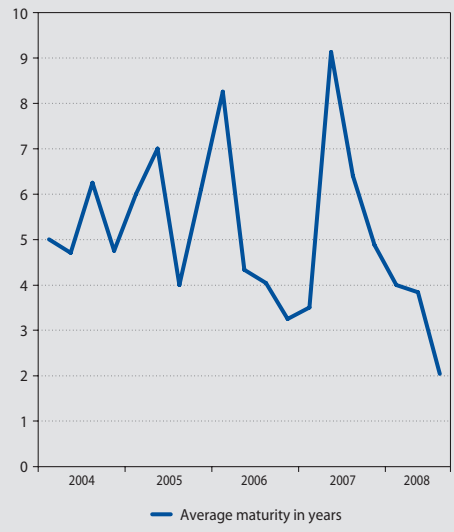
However, the situation had changed from September onwards and during the last four months banks were issuing new mortgage bonds in the total amount of only EUR 232 million. In December, the nominal value of new issues came down to mere EUR 28 million, the lowest value since

Chart 32 Total nominal values of issued bonds for individual months and mortgage loans (EUR millions)



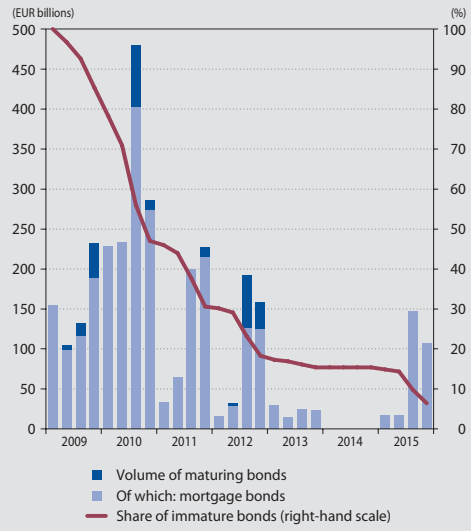
Source: NBS.

Chart 33 Maturity of issued bonds (years)



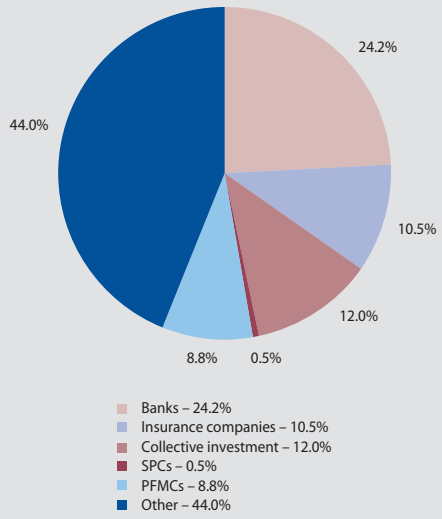
Source: NBS.
Note: Data represent the maturity of bonds issued in a given quarter.

Chart 34 Volume of bonds maturing by the end of 2015 (EUR billions, %)



Source: NBS.

Chart 35 Placement of mortgage bonds issued since 2004 in particular sectors



Source: NBS.

August 2007. We can indisputably speak of a negative impact of the financial crisis, manifesting especially through difficulties in the acquisition of long-term resources. The last quarter of 2008 saw not only an increase in the prices of long-term resources but also a significant limitation to their availability. This greatly limited banks' possibilities of financing through bonds.

Banks had to adapt to market conditions in respect of their new issues. Apart from a lower volume this was reflected also in shorter maturities of securities. The average maturity of issues came down to 2 years in the last quarter. A major part of new mortgage bonds was not issued through the stock exchange but directly sold to investors.

As the majority of issued bonds will mature before 2013, we can assume that if the problems on financial markets persist, banks will be exposed to difficult conditions in the placement of new issues on primary markets. On the other hand, in view of an expected fall in the volume of new mortgage loans, the need for the issue of new mortgage bonds will probably decrease.

Within the domestic market, mortgage bonds were placed mainly in banking, insurance, and collective investment. However, the largest share is comprised of mortgage bonds bought by other companies, consisting mainly of securities placed abroad.

Banks with the largest volume of issued MB's have a significant part of issued securities placed abroad while banks with a lower share of issued MB's have them placed mainly on the domestic market.

There are cases of new issues where banks mutually purchase each others' securities. The largest issuers, however, are unable to place their securities on the domestic market in full and are forced to place their issues abroad.

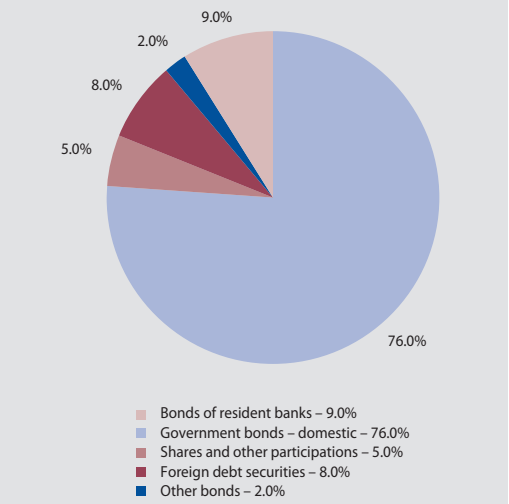
Bonds other than MB's comprise just a small part of the total portfolio of issued bonds (6% as at 31.12.2008). Only two banks issued such bonds during the year, in the months of May and September.

Fall in the investments in securities

The financial crisis caused losses in banks in several EU countries, particularly through their securities holdings. The reason lay especially in investments in foreign structured securities. Securities, attractive at first glance, often concealed risk that was difficult to assess.

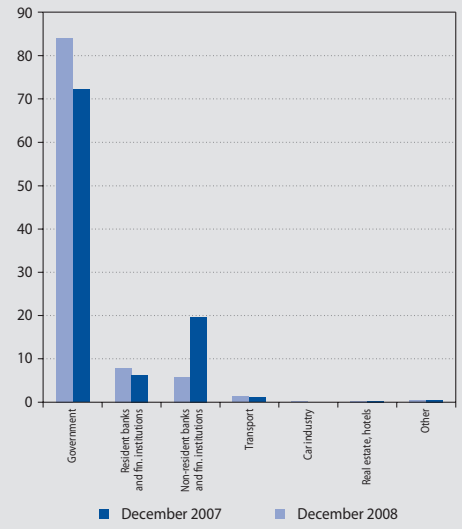
Slovak banks have confirmed their orientation towards domestic economy by the structure of their securities portfolios among other things.

Chart 36 Structure of securities owned by banks



Source: NBS.

Chart 37 Structure of debt securities portfolio by sector of the issuer (%)



Source: NBS.

The share of riskier and often hardly valuable securities is relatively low. Foreign debt securities comprised approximately 8% of the total volume of securities at the end of 2008. A large part of the portfolio was invested in domestic government bonds or mortgage bonds of domestic banks.

As we mentioned earlier, the structure of debt securities portfolios was conservative when considering the share of particular sectors. Almost 85% of the debt securities portfolio were comprised of government and NBS bonds. The risk of transport sector bonds was low as well since they consisted exclusively of ŽSR bonds.

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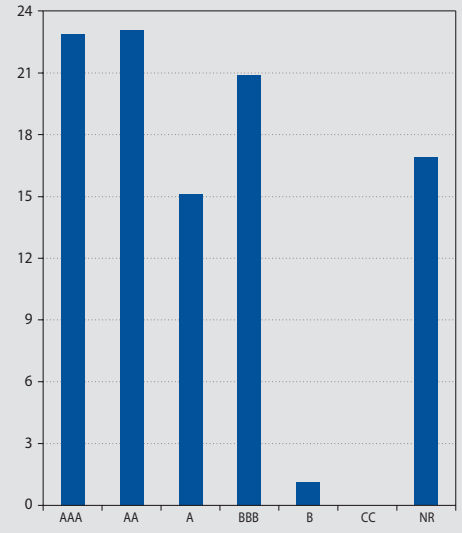
The share of low-risk securities increased year-on-year, mainly due to a fall in higher-risk securities. Selected banks markedly reduced their holdings of high-risk securities, especially in the form of foreign bonds issued by banks and financial companies.

Bonds of banks and financial companies had a relatively large share at the end of 2008. The share of bonds issued by domestic banks and financial companies was slightly higher at the end of the year, dominated by mortgage bonds of domestic banks.

When looking at the latest development on financial markets, the structure of foreign debt securities is particularly interesting as one of the major causes of banks' losses in the last months were bonds issued by US banks and financial companies, especially in a structured form.

The structure of bonds of foreign banks and financial companies in the portfolios of Slovak

Chart 38 Distribution of debt securities of foreign banks and financial companies by ratings (%)



Source: NBS.
Note: Ratings by various rating companies are expressed as an equivalent of a rating by Standard&Poors.

banks was relatively diverse. Many of them were issued by banks and financial companies within the EU, with a high share of issues of important European banks in particular. The share of US banks only slightly exceeded 5%.

Credit risk of these securities, measured by rating grades, was relatively low. More than 80% of them were bonds with an investment rating. From the liquidation status point of view, the share of collateralised securities and securities in senior position was only 35%. Most of these bonds are not collateralised.

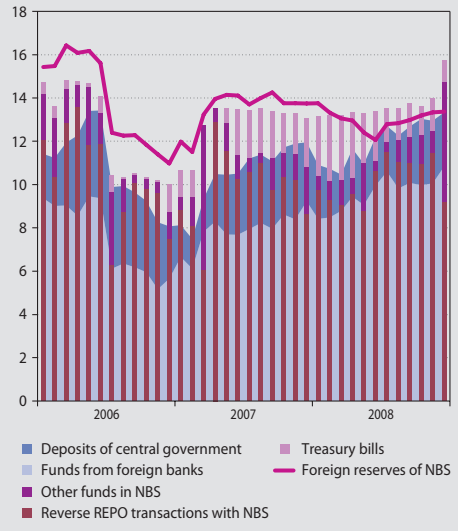
Shares of bonds of other corporate sectors were relatively low.

Asset securities comprise a relatively negligible portion of banks' portfolios, mostly composed of domestic shares and participations. Large banks hold a greater absolute volume but their share of total investments in securities is negligible.

BANKS

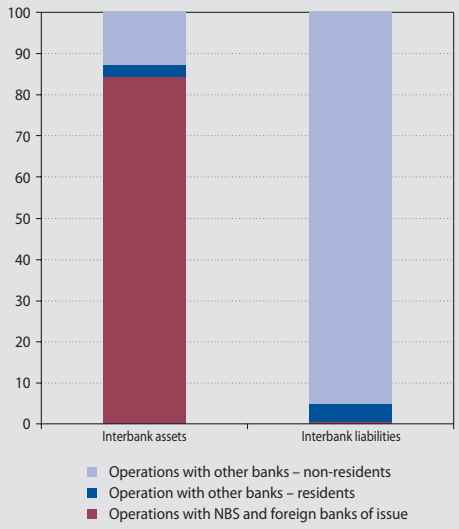
Interbank assets increased year-on-year by a total of 23.4%, reaching the value of EUR 20.4 billion as at 31.12.2008 and comprising 32.4% of the balance sheet total. The highest growth occurred in the last month when assets increased by more than EUR 2.9 billion (17.1%) The development of interbank liabilities was comparable to that in 2007. Total funds from banks recorded a year-on-year increase by 11%, coming to EUR 11.4 billion. This volume comprised 18.2% of the balance sheet total.

Chart 39 Selected items of interbank assets and liabilities and central government deposits (EUR billions)



Source: NBS.
Note: The chart does not include mutual transactions between domestic banks.

Chart 40 Components of interbank assets and liabilities as at 31.12.2008 (%)



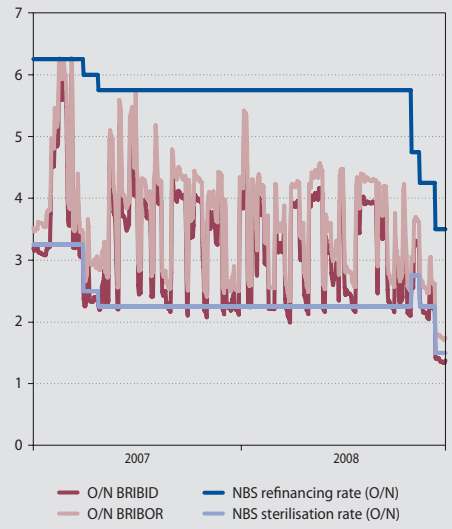
Source: NBS.

On the interbank assets side there was a relatively high concentration of the five largest banks at the end of 2008. The highest year-on-year increases in assets occurred in three banks with the strongest retail position on the market. Since these increases were high especially at the end of the year, it is likely that the banks were depositing in NBS their free funds, obtained from deposits of population.

Funds from banks were growing for the sector as a whole but their development during the year was diverse from the point of view of particular banks. While funds from banks were growing moderately or more strongly in 11 banks, they decreased in 12 banks.

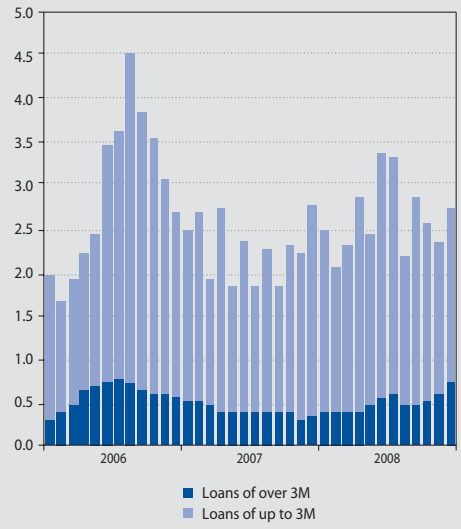
In some branches of foreign banks, interbank assets as well as liabilities continued to comprise the largest share of the balance sheet total during 2008.

Chart 41 Overnight interest rates in the interbank market (%)



Source: NBS.

Chart 42 Volume of loans and deposits provided to commercial banks (EUR billions)



Source: NBS.

Decline in sterilization repo tenders and growth in one day sterilizations in December

In 2008 the largest part of interbank assets continued to be comprised of transactions with NBS in the form of two-week reverse repo tenders, overnight sterilization operations and the purchase of NBS bills. Transactions with NBS totalled 77.3% of all active transactions with banks as at December 2008, a major part being reverse repo tenders with a two-week maturity. They account for 80 to 90% of these operations in the long run, i.e. around 60 – 65% of interbank assets. NBS continued to organize regular weekly auctions in 2008, accepting the total demand in each of them. A significant fall occurred in December when the volume of free funds deposited in NBS by means of sterilization repo tenders declined by EUR 2.2 billion to EUR 9.2 billion.

A total of 13 issues of NBS bills took place during 2008. As at December 2008, the total year-on-year fall in the volume of purchased treasury bills in the banking sector amounted to EUR 1.2 billion.

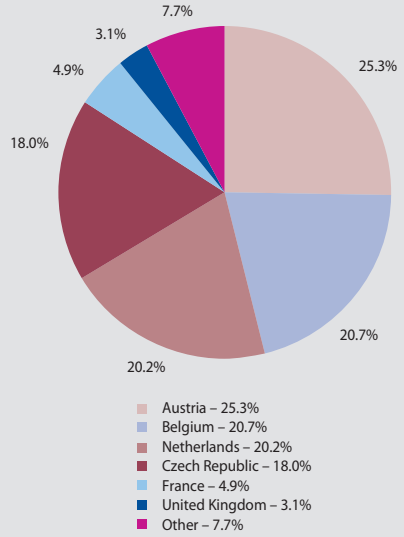
Other transactions with NBS, overnight sterilization tenders in particular, were a relatively volatile component of transactions with NBS. Their volume was largely dependent on liquidity in the interbank market. Usually during the first half of the month banks had to keep part of their free funds in the minimum required reserve accounts and during the second half, when their liquidity was in surplus from the point of view of the fulfilment of their minimum reserve requirements, the volume of overnight transactions increased. This fact is also reflected in the development of BRIBOR rates with the shortest maturities, which were higher in the first halves of months and which were at the level of the overnight sterilization rate during the latter half of particular months. A notable increase in overnight sterilization transactions occurred in December when their volume rose by EUR 4.5 billion to EUR 5.5 billion compared to November. Growth occurred in a total of 19 banks.

The growth in deposits from non-resident banks continued

The volume of provided deposits of and loans to non-resident banks increased year-on-year by 23.2% and reached the value of EUR 2.2 billion as at 31.12.2008. This item comprised 11.0% of total interbank assets.

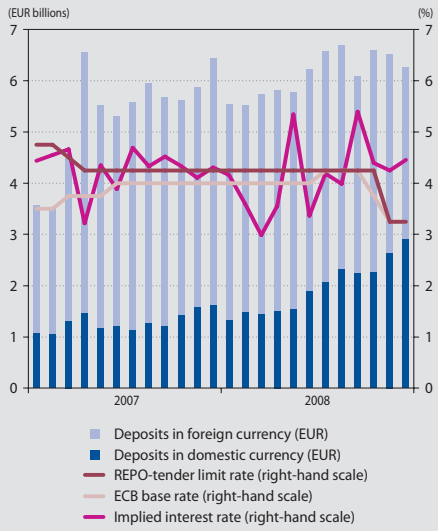
The volume of provided deposits and loans to non-resident banks constituted EUR 0.5 billion as at 31.12.2008, which represents a year-on-year fall by 47.2%. Deposits and loans to resident banks comprised mere 2.5% of total interbank assets as at the end of the year.

Chart 43 Countries with the largest shares of deposits of non-resident banks



Source: NBS.

Chart 44 Deposits of non-resident banks and implied interest rate (EUR billions, %)



Source: NBS.
Note: Implied interest rate was calculated as 12 times the share of interest expenses in the deposits of non-resident banks for a given month, plus the average amount of these deposits in that month as calculated on a daily basis. The calculation of the implied interest rate did not take into account banks that did not report any expenses for deposits of non-resident banks.

From the viewpoint of maturity, 3-month deposits dominate. At the end of the year, the share of claims with maturity of over 3 months rose to 25.9% from 12.4% as at the end of 2007.

Deposits and loans from non-resident banks continued to comprise the largest item of interbank assets in 2008 (95% as at the end of December 2008). The total volume of deposits of non-resident banks reports a long-term growing tendency. Their volume as at the end of December 2008 increased by EUR 1.6 billion against the value as at the end of 2007 (relative increase of 17.6%). The share of funds in domestic currency grew in a similar manner.

The value of the correlation coefficient between monthly changes in the deposits of non-resident banks and transactions with NBS was 0.63[4]. The high dependence between these two items is related to the fact that banks were depositing a large part of these deposits in overnight sterilization tenders or in two-week sterilization repo tenders. Deposits of non-resident banks in some branches of foreign banks have the largest share of the balance sheet total.

From the counterparty point of view, banks from Austria, Belgium, the Netherlands and the Czech Republic have the largest share of non-resident deposits.

Implied interest rate was fairly volatile during 2008 and its value oscillated between 3.0% and 5.4%, reaching its maximum in the months of May and September (5.3% or 5.4 %).

Deposits of resident banks report a similar trend as loans. The volume of deposits fell by 48.9% in an annual comparison.

4 *The correlation coefficient was calculated between monthly changes in the deposits of non-resident banks and transactions with NBS during the period between February 2004 and December 2008.*

Box 3

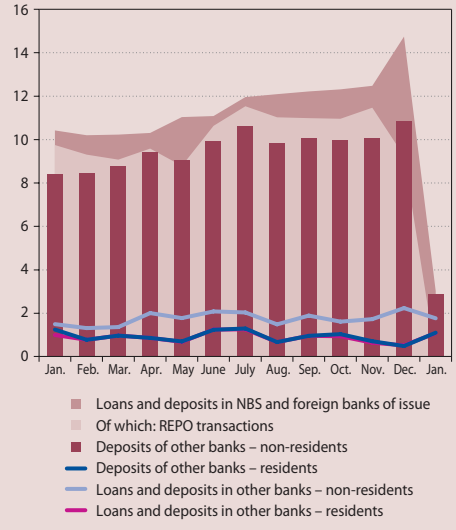
INTERBANK OPERATIONS IN JANUARY 2009

Development on the interbank market in January 2009 was mainly influenced by Slovakia's entry into the European Monetary Union and the associated discontinuation of the issuance of NBS bills as well as of regular auctions of two-week sterilization repo tenders.

Interbank assets declined by a total of EUR 12.0 billion to EUR 8.4 billion on a month-on-month basis, which almost exclusively consisted of a decrease in transactions with NBS when loans to resident banks increased by EUR 0.6 billion and loans to non-resident banks fell by EUR 0.5 billion. NBS bills, whose total amount was EUR 1 billion as at the end of the year, were most likely replaced by treasury bills whose reported amount was gradually increasing from October 2008 onwards to EUR 1.1 billion as at the end of January 2009.

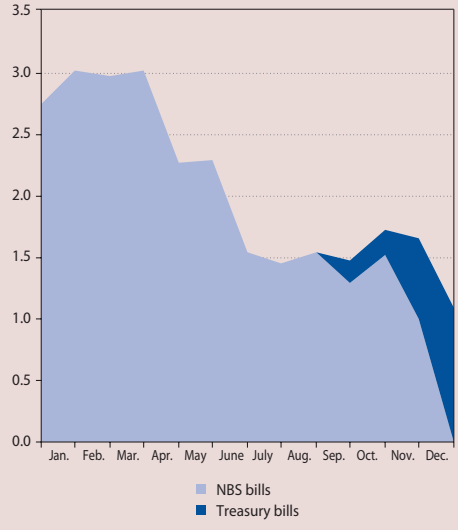
On the liabilities side there was a fall by EUR 7.1 billion to EUR 4.3 billion when sources from non-resident banks declined by EUR 8 billion, sources from resident banks grew by EUR 0.6 billion and sources from NBS by EUR 0.3 billion.

Chart 45 Main items of interbank transactions (EUR billions)



Source: NBS.

Chart 46 Purchased NBS bills and treasury bills in the banking sector (EUR billions)



Source: NBS.

Box 4

SELECTED OFF-BALANCE SHEET TRANSACTIONS IN THE BANKING SECTOR

Off-balance sheet assets amounted to EUR 80.5% billion as at 31.12.2008 (128.0% of the balance sheet total) and off-balance sheet liabilities to EUR 76.4 billion (121.6 %). Until September 2008, the development in both items was comparable with the development in the previous periods but the last quarter witnessed a steep fall both in assets and in liabilities. Total off-balance sheet assets fell by 17.3% and liabilities by 16.7%.

This decline was caused by a fall in the amount of derivative transactions that comprise the largest component of both assets and liabilities. As at the end of the year, the value of fixed term transactions reported by banks amounted to EUR 36.8 billion and option transactions to EUR 6.1 billion, while the nominal value of fixed term transactions fell by 19.8% on a year-on-year basis and that of option transactions by 42.2%. The highest decline was recorded in derivative transactions covering interest rate risk. This may be related to a gradual decrease in ECB rates and subsequently also in interbank rates for derivative transactions covering foreign exchange risk, which was probably linked to the introduction of euro. Swap and option transactions were falling the most.

In three banks, derivatives were reaching relatively high values during 2008.

The largest share in off-balance sheet items other than derivatives was that of guarantees from right of lien, guaranteed transfer of rights and other guarantees, amounting to EUR 32.4 billion. Out of this amount, EUR 16.4 billion constituted received guarantees for real estates and EUR 9.4 billion securities from repo tenders. The year-on-year increase of received guarantees for real estates by 8.5% indicates negative trends in the development of housing loans in 2008. Since NBS ceased its sterilization activity in the form of repo tenders as of 1.1.2009, we may expect a decline in received deposits in the form of securities from repo tenders.

1.2 Profitability

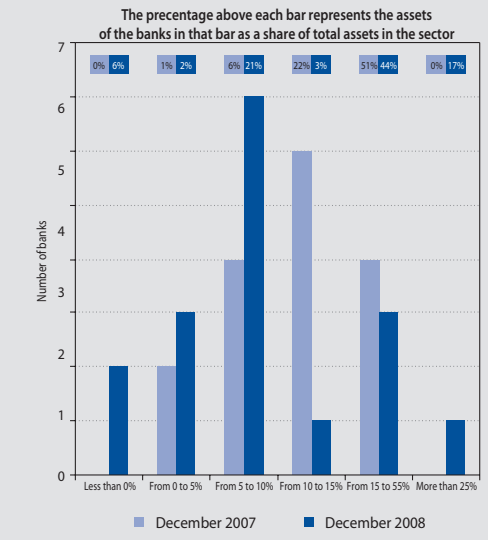
Trends in the year-on-year development of profitability in the Slovak banking sector were very diverse in 2008. Only the group of larger banks was able to avoid a fall in profitability; net profit of several financial institutions in the sector of medium and small banks recorded a serious slump reaching down to loss in some of them. Banks were making use especially of the continuing growth in loans and favourable interest margins, particularly in the household sector. Interest income was negatively affected mainly in the last quarter of 2008. A fall in the volume of corporate loans, decreasing interest rates for loans to customers as well as an increase in interest expenses in the household sector all contributed to a fall in the growth rate of interest income (year-on-year development of interest income).
Non-interest income developed positively, trading income in particular. Creation of provisions in most banks increased, when compared with the year 2007.
Operating efficiency of banks grew as well, reflecting a decline in the cost-to-income ratio. Efficiency improved particularly in the largest banks.

Total profit of the banking sector decreased year-on-year by 5%. This result is distorted by a major loss in one bank. If we did not consider that particular bank, the year-on-year increase in the sector's total net profit would be 13%. This means that the year 2008 was successful for banks from the point of view of achieved profit.

Profitability increased more significantly mainly in larger banks. Medium banks achieved mixed results, with only two of them having increased their profit on a year-on-year basis. Building societies also recorded a year-on-year fall in profitability. Most branches of foreign banks increased their profit achieved on a year-on-year basis.

The average ROE value weighted by an average volume of own funds reached mere 14%, representing a year-on-year decline by more than 3 p.p. As we indicated earlier, the fall at the sector level was caused by a major loss in one bank. De-

Chart 47 ROE distribution in the banking sector (%)



Source: NBS.

Table 2 Profit-making in the banking sector (EUR billions)

	XII.2007 (EUR billion)	XII.2008 (EUR billion)	Change (%)
(a) Operating expenses	1.12	1.23	10
(b) Gross income	1.89	2.23	18
(c) Net interest income	1.33	1.55	16
(d) Net non-interest income	0.56	0.68	22
(e) Net income (b – a)	0.77	1.00	30
(f) Net profit after tax	0.58	0.51	-12

Source: NBS.

spite this, ROE increased in only six banks and just to a minimum extent. This also had an influence on an increase in own funds in several banks.

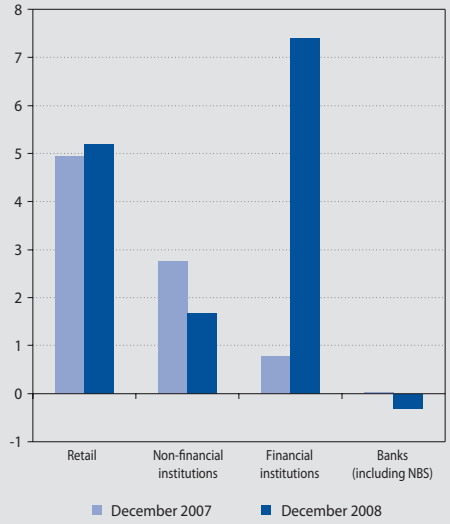
NET INTEREST INCOME

Interest income of almost all banks once again reached a dominant share of total gross income although at the sector level it fell from 70.5% to 69.3% when compared to 2007. The year-on-year growth in interest income in the banking sector was similar to that in 2007. Building societies recorded the worst results with only a minimum growth or even decline in interest income. To the contrary, medium banks dominated in terms of growth rate, followed by large banks.

Population sector remained the most important source of interest income (21% growth), closely followed by non-financial companies (17% growth).

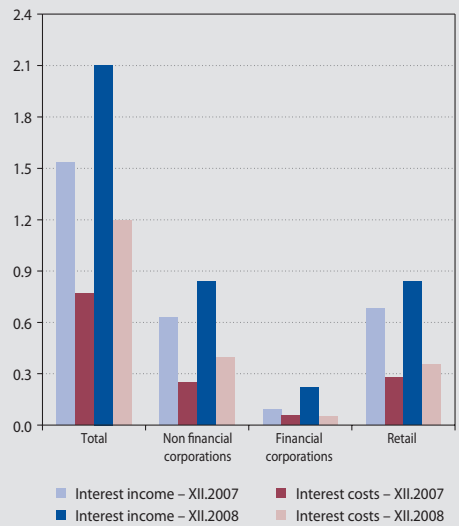
Net interest spread increased year-on-year by 0.3 p.p. to 2.5%. Interest spread of retail increased slightly, unlike in enterprises which recorded a steep decline. Developments in loans and interest rates were the most influential factors. The volume of loans to retail and to enterprises fell substantially at the end of the year, following a period of growth. The same situation was in interest rates – already in November several banks with a significant corporate loans portfolio decreased their interest rates for these loans and in December did the same with rates for other loans. Retail interest rates remained unchanged. Interest spread for financial companies is greatly distorted by the development in one bank.

Chart 49 Interest spread from loans to customers (%)



Source: NBS.
Note: Interest spread is defined as a difference between the return on assets and the share of expenses in liabilities for a given sector.

Chart 48 Structure of interest expenses and income (EUR billions)



Source: NBS.

NON-INTEREST INCOME

Contrary to the slightly decreasing growth rate of interest income, year-on-year growth in non-interest income increased markedly. It reached almost 24% in the sector while in the second half of 2007 it increased by only 5.8%. Nevertheless, there were noticeable differences in these values in individual banks. While large banks generally managed to increase or at least sustain a high growth in income, some small and medium banks recorded a steep slump, building societies in particular.

Positive development was seen especially in trading income which increased by more than 19% on a year-on-year basis. Banks significantly reduced their loss from debt securities and increased their income from trading in asset securities. The rate of growth, or decline, in income

Table 3 Trading income

	XII.07 (EUR millions)	XII.08 (EUR millions)	Change (%)
Total trading income	238.8	285.2	19.4
Income from operations with debt securities	-27.2	-5.9	-78.3
Income from operations with asset Securities	12.0	18.5	53.6
Income from forex trading	292.0	311.9	6.8
Income from derivatives	-38.0	-39.3	3.3
of which: currency derivatives	-45.8	-38.4	-16.3
interest rate derivatives	8.6	-3.6	–

Source: NBS.

from forex trading and operations with currency derivatives had a negative correlation in most banks but generally speaking, forex trading income was markedly higher and comprised the most important trading income component. This phenomenon was caused especially by the opening of foreign exchange positions before the end of the year when banks made use of the exchange rate fixation.

Income from fees and commissions increased year-on-year by more than 11%. The highest share in this income was that of received fees and commissions from deposit products and bank transactions. The growth rate of expenses of fees and commissions (15%) was, however, slightly higher than the growth rate of income from fees and commissions (12%).

INCOME FROM PROVISIONING, WRITE OFF AND SALE OF RECEIVABLES

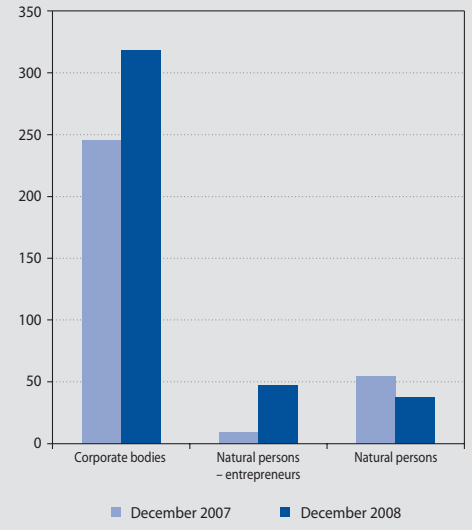
Provisioning increased radically and was the main reason behind the declined growth rate of total income and, in some cases, behind its fall down to loss. The area of provisions was, to some extent, dominated by costs of creating new provisions which in most banks exceeded income from the cancellation of existing provisions.

On the contrary, write-offs of claims fell sharply but were significantly affected by one bank in 2007.

Net creation of provisions increased year-on-year by 369% and reached the value of EUR 328 million. Although this amount was influenced by extreme values in one bank, year-on-year growth in the creation of provisions in the rest of the sector still reported higher values than in 2007. The largest banks' share in the creation of provisions fell to less than a half of the sector share. Building societies created the least amount of provisions.

Ratio of the volume of provisions to gross income serves as an indicator of banks' ability to compensate losses incurred by credit risk and reflected in the creation of provisions. Owing to a high creation of provisions, this ratio rose year-on-year to as much as 15% in the sector and was relatively lower in large banks.

Chart 50 Defaulted claims by customer type (EUR millions)



Source: NBS.

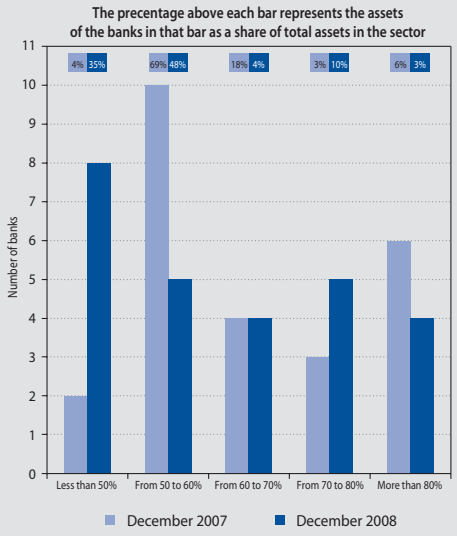
This significant growth in the creation of provisions was a response to the increase in the loan default rate. Claims against legal persons continued to dominate among defaulted loans (78% of all defaulted loans) followed by claims against natural persons operating a business (11%). To the contrary, defaulted claims against natural persons fell (9%). Total increase in the volume of defaulted claims in the sector was at the level of 29%.

OPERATING EXPENSES

General operating costs increased year-on-year by 10.5%, having slightly decreased their growth rate from 12% in December 2007. Significant reduction was observed in some branches of foreign banks; growth in larger banks was lower. The structure of fees changed slightly, the share of tax and fee expenses decreased moderately together with expenses for the purchase of services and other purchased performances. On the contrary, the share of expenses for administration and maintenance of information technologies and other purchased performances increased.

The *cost-to-income ratio* decreased year-on-year from 59% to 55%, which signalizes an improvement in the sector's operating efficiency. Larger banks and smaller branches of foreign banks were able to reduce it significantly, unlike some medium banks which were facing high costs in proportion to income.

Chart 51 Distribution of operating efficiency in the sector (%)



Source: NBS.

1.3 Capital requirement

In spite of the on-going financial crisis, the most banks continued to increase their own funds in 2008, mainly in order to preserve profit retained from past years in their capital. Own funds of the banking sector reached the value of EUR 3.8 billion as at December 2008.
During the monitored period all banks were in compliance with the ratio of capital requirements to the value of reported own funds. From the credit requirement point of view, credit risk continues to be the most significant risk for banks with its 83% share of capital requirements as at the ultimo of 2008.

As in the previous period, so in the course of 2008, we observed in banking sector a gradual increase in own funds in individual banks. Own funds of the banking sector were at the level of EUR 3.8 billion as at the ultimo of 2008, having increased by EUR 0.66 billion compared to the same period in 2007[5] and by EUR 0.07 billion compared to June 2008.

A year-on-year increase in own funds was observed in 14 banks within the Slovak banking sector[6], in most cases having been caused especially by an increase in retained profit from previous years or in reserve funds and other funds created from profits, or by a decrease in unsettled loss.

Selected banks increased their own funds by an increase in the Tier II capital component in the form of subordinated debt, predominantly in the course of the second half of 2008. This mainly applies to banks whose capital requirements came the closest to the value of reported own funds. Tier II capital in the banking sector totalled EUR 0.44 billion and three banks reported a fall in own funds.

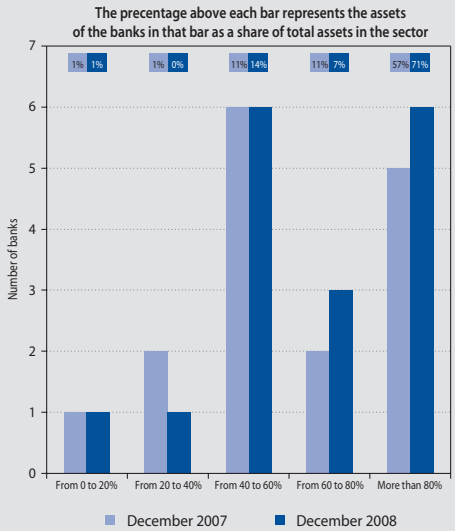
Throughout the entire 2008 all banks were in compliance with the ratio of capital requirements to the value of reported own funds[7]. The number of banks with a ratio of over 80% increased on a year-on-year basis.

5 *Data for December 2007 do not include ČSOB, a.s. which at that time was a branch of a foreign bank. Without including this bank in the data as at 31.12.2008, own funds in the banking sector increased by EUR 0.315 billion.*
6 *In the case of ČSOB, a.s., we monitored the state as of 31.1.2008 when it was transformed from a branch of a foreign bank to a subsidiary.*
7 *Under Article 30 par. (5) of the Act No. 483/2001 on banks, as amended, a bank is required to permanently maintain its own funds in an amount of not less than the total of the amount corresponding to the capital requirement for the coverage of credit risk and dilution risk arising from the bank's activities recorded in the banking book, risks arising from positions recorded in the trading book, foreign exchange risk and commodity risk arising from the bank's activities recorded in the banking book and in the trading book, and operational risk arising from all of the bank's trading activities.*

Chart 52 Individual components of own funds in the banking sector

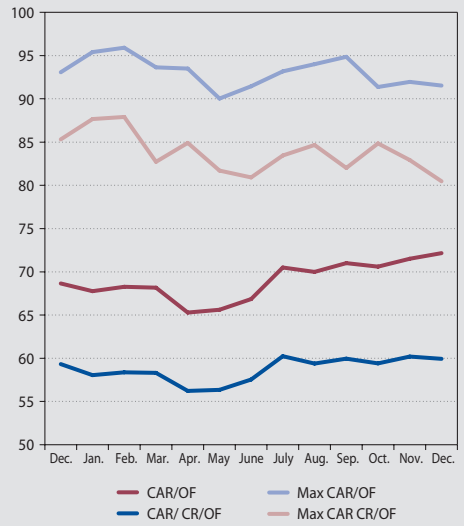
Source: NBS.

Chart 53 Distribution of capital requirement in the banking sector



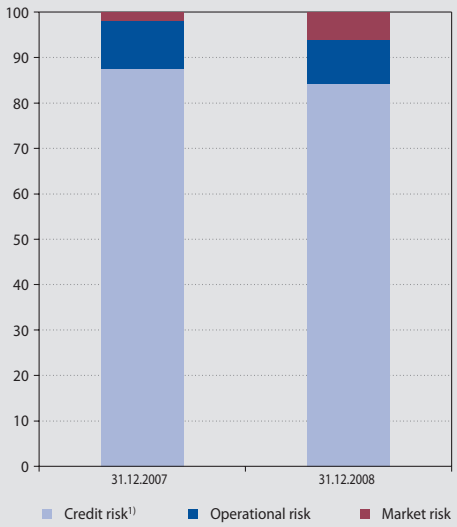
Source: NBS.

Chart 54 Coverage of capital requirements by own funds (%)



Source: NBS.
Note: The CAR/OF indicator represents weighted average of the ratio of capital requirement to own funds for the banking sector. The CAR CR/OF indicator represents weighted average of the ratio of capital requirement for credit risk to own funds for the banking sector. The max CAR/OF indicator represents the maximum value of weighted average of the ratio of capital requirement to own funds in a given month using values calculated for particular banks within the banking sector. The CAR CR/OF indicator represents the maximum value of the ratio of capital requirement for credit risk to own funds in a given month using values calculated for particular banks within the banking sector.

Chart 55 Share of particular risks in capital requirements (%)



Source: NBS.
1) Credit risk also includes the risk of a fall in the value of claims (credit risk includes settlement risk, risk of trading partners or the risk of exposure of trading book neither in the table nor in the evaluation – thus the table data do not add up to 100%).
Note: Status as at 31.12.2007 did not include ČSOB, a.s.

Credit risk dominated among risks in 2008 from the capital requirements point of view. In a year-on-year comparison as at the end of 2008 we can observe an increase in the total volume of capital requirements by 27% (by EUR 588.1 million to EUR 2.77 billion) as well as for all risks individually. This growth was most markedly reinforced by a volume increase in the capital requirement for credit risk which rose by 22% as at December 2008.

Requirements for market risk also rose in the course of 2008, mainly due to a volume increase in the requirement for foreign exchange risk from EUR 2.95 million in December 2007 to EUR 106.22 million in December 2008. This increase was related to the transition of banks to euro, with some banks having held unsecured positions in euro. As for the market risk, interest rate and commodity risks increased and equity risk decreased compared to the end of the last year although not in as great extent as in the case of foreign exchange risk.

Requirements for operational risk rose year-on-year in the banking sector, too. Total reported gross losses caused by operational risk for all banks amounted to EUR 100.7 million.

INSURANCE SECTOR

2

2 INSURANCE SECTOR

In 2008, the financial crisis started to affect the insurance sector too. Total profit of insurance companies went down to almost a half compared to the previous year, particularly due to a lower return rate of financial assets, lower technical result of non-life insurance and surrenders in life assurance contracts. Premium came to EUR 2.1 billion of which life assurance comprised EUR 1.1 billion and non-life insurance EUR 1.0 billion. The trend of a faster growth of life assurance against non-life insurance continued, resulting in 2008 in the first occurrence of a change in the share of premium in favour of life assurance. Unit-Linked insurance once again recorded the strongest growth among particular insurance groups (55.8%).
Reinsurers' share in premium is decreasing. Claim costs incurred grew year-on-year by 21.3% to EUR 964 million, mainly due to an increase of surrenders in life assurance. Loss ratio in non-life insurance increased slightly. There were no substantial changes in the placement of technical provisions which continue to be placed in low-risk assets.

2.1 FINANCIAL POSITION OF THE INSURANCE SECTOR

Financial position of the most insurance companies deteriorated in 2008 compared to the previous year. Total profit of insurance companies went down to almost a half, i.e. EUR 108 million. Return on capital fell from 18.8% in 2007 to 8.9%. The notable growth in profitability observed since 2003 thus came to a halt.

Negative development on financial markets affected return on assets, mainly in larger insurance companies. Profit from financial operations fell by more than 76% compared to 2007. Hence the main part of total economic result for the insurance sector was comprised of profit from technical account which increased year-on-year by almost 59%. While profit from financial transactions constituted as much as 70% of insurance companies' profit in the previous period, this came down to mere 38% in 2008.

However, the profitability structure is largely affected by the accounting of Unit-Linked products. Loss from financial transactions in Unit-Linked products came to as much as EUR 89 million in 2008 but it does not affect the insurance companies' economic result as it will reflect itself fully in a decrease in technical provision for Unit-Linked products, increasing technical income in life assurance. When abstracting from Unit-Linked products, financial result of insurance companies fell by EUR 39 million (by 23%) compared to 2007, mainly due to lower returns on their assets.

Technical account result in life assurance returned to positive values after a previous loss (year-on-year change EUR 72 million), mainly owing to higher growth in premium written against the growth in technical claim costs (claim costs were lower due to negative returns of Unit-Linked products). On the other hand, technical account profit in non-life insurance went down compared to the previous period, which was reinforced by a fall in premium written in non-life insurance among other things. From the point of view of growth in technical account profit it is also important to consider a decrease in the reinsurer's share of premium written (by EUR 86 million).

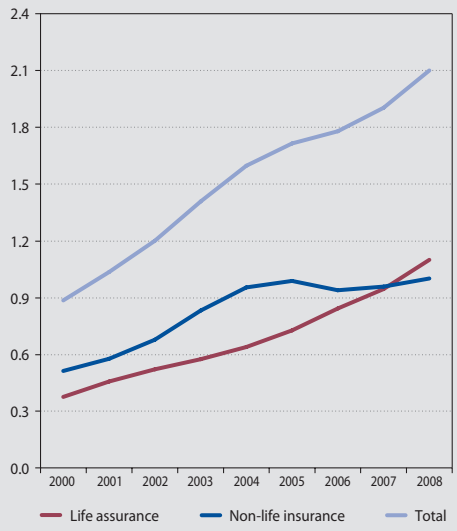
Fall in profitability was significantly supported by three main factors – a decline in the profitability of financial assets, lower technical income in non-life insurance and increased surrenders in life assurance contracts.

The number of insurance companies reporting loss increased from three to nine on a year-on-year basis. Although technical account profit for the entire insurance sector grew significantly, most loss-making insurance companies recorded negative economic result due to loss in the technical account. This is the case of small insurance companies with a total share on premium written less than 5%.

Chart 56 Total profit of insurance companies (EUR millions)

Source: NBS.
Note: Net profit for the calendar year.

Chart 57 Premium (EUR billions)



Source: NBS.

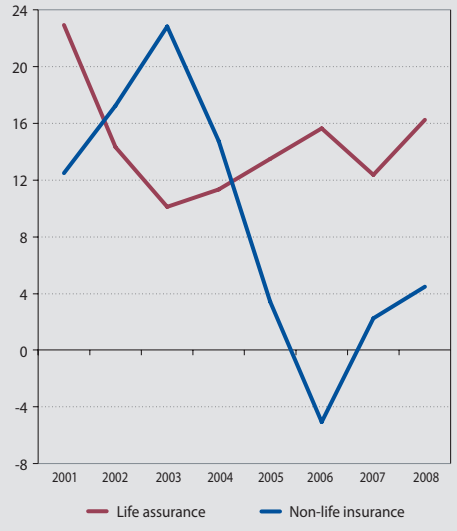
2.2 PREMIUM[8]

The financial crisis did not affect the growth in premium in 2008. Life assurance recorded the highest year-on-year growth since 2002 influenced, despite the situation on financial markets, mainly by an increase in the sales of Unit-Linked investment life assurance where the investment risk is borne by the client of insurance company. The growth rate of premium in non-life insurance also increased compared to 2007 although its value still remained notably lower than in life assurance. Motor vehicles damage or loss insurance together with property insurance had the largest share in this growth.

Total premium came to EUR 2.1 billion in 2008, which represents an increase by 10.3% compared to 2007. Life assurance increased year-on-year by 16.3% to EUR 1.1 billion, premium in non-life insurance by 4.5% to EUR 1.0 billion.

Slower growth in premium in non-life insurance was caused by a large share of motor vehicle insurance and particularly by a large concentration of third party liability insurance in respect of the use of motor vehicles where the price of insurance is one of the most important factors considered by policyholders when concluding insurance contracts.

Chart 58 Rate of increase in life and non-life premium (%)



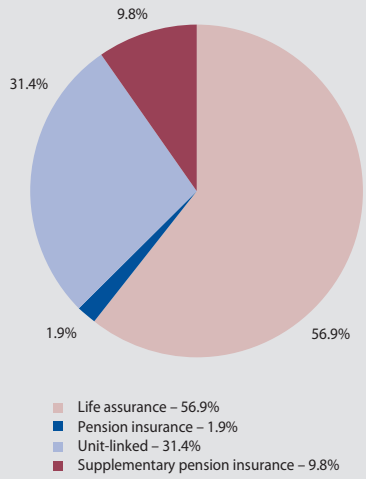
Source: NBS.

The continuing higher growth in life assurance resulted in an increase in its share on total premium. In 2008 this share was in the favour of life assurance for the first time (52.3%).

Due to an anticipated escalation of the financial crisis' impact on real economy in the course of 2009 we may expect the growth rate of premi-

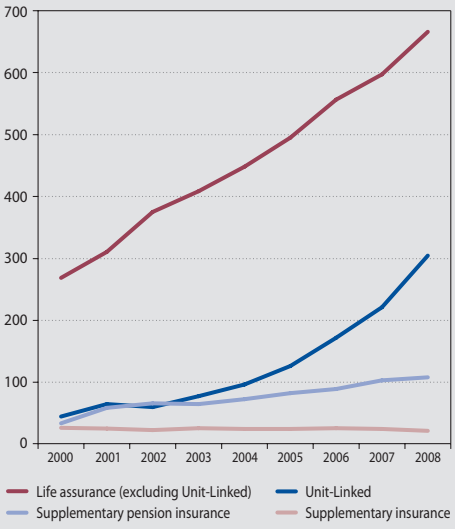
8 *Premium can be defined as the price agreed in individual insurance contracts without regard to the method of their financial reporting.*

Chart 59 Life assurance broken down by amount of premium as at 31 December 2008



Source: NBS.

Chart 60 Premium in life assurance (EUR millions)



Source: NBS.

ums in life assurance to slow either through a decline in the amount of new insurance contracts or through an increased frequency of cancellations of existing insurance contracts.

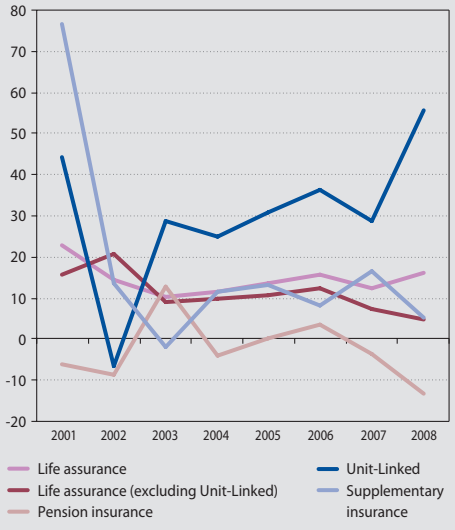
In non-life insurance we may also expect a fall in the number of insurance contracts but on the other hand there may occur an effectuation of the amount of premiums and of insurance cover, which may not necessarily mean a fall in total premiums in the end.

2.3 INSURANCE GROUPS

Life assurance continues to be dominated by the insurance group "life assurance other than Unit-Linked" with a 57% share. Premium in this insurance group grew year-on-year by 4.7%. The share of this group, however, keeps on decreasing steadily due to a long-term increase in Unit-Linked insurance. A still significant demand for Unit-Linked insurance as well as a lower surrender rate compared to traditional types of insurance increases the importance of this insurance group within life assurance. With a growth rate of 55.8%, its share of life assurance increased year-on-year by 8 p.p. to 31%. The third most important group – Supplementary Insurance – maintains its relatively stable position within life assurance (10%).

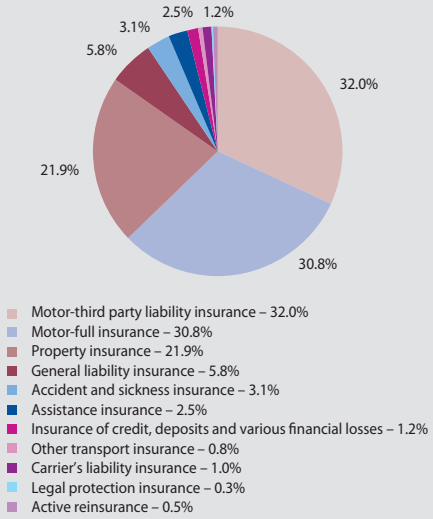
Pension supplementary insurance constitutes the smallest life assurance group. Premium in this group fell and new production constitutes only 2.4% (the least among all insurance groups), while its lapse rate (7.9%) was the highest among all life assurance groups despite its having decreased from as much as 12% in 2007. These results clearly show that the interest in this type of insurance is decreasing but

Chart 61 Growth rate of premium in life assurance (%)



Source: NBS.

Chart 62 Non-life insurance broken down on groups by amount of premium as at 31 December 2008



Source: NBS.

in the long run we may expect an increase in the importance of pension insurance, namely at the time of payments from the second and third pension pillars.

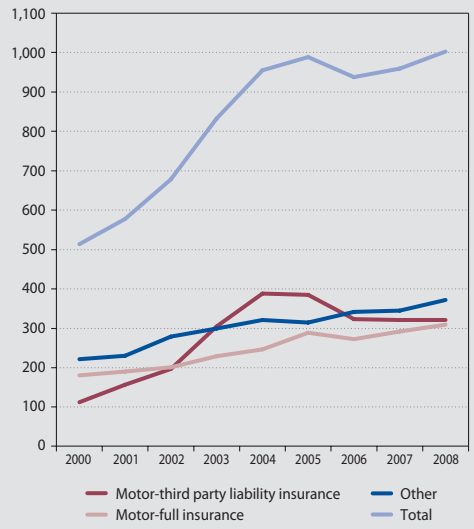
The most important categories on the non-life insurance market are represented by the following insurance groups: third party liability motor insurance – PZP (32%), motor damage or loss insurance (30.8%) and property insurance (21.9). With an exception of PZP, premium was growing in all branches of non-life insurance. Motor vehicles damage or loss insurance increased year-on-year by 5.3% and property insurance by 3.8%. The fall in PZP (by 0.4%) is the result of a continuously strong price competition that exerts pressure on premium in this segment. The greatest increase compared to 2007 was observed in the credit insurance, suretyship insurance and insurance of miscellaneous financial losses (24.5%) but this group's share on non-life insurance is insignificant (1.2%).

Two insurance companies were performing reinsurance activities in 2008 but only in non-life insurance. Premium from active reinsurance, however, constitutes an unimportant share of premium in non-life insurance (0.5%).

2.4 PREMIUM WRITTEN

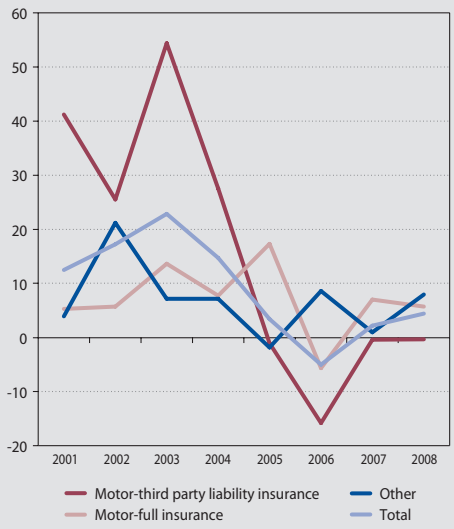
The growth rate of premium written became lower in 2008 compared to the previous year. Total premium increased by 1.9% and came to EUR 1.8 billion. The slowdown in growth was predominantly caused by a fall in premium written in non-life insurance (by 2.7%), while life assurance increased by 7.3% to EUR 0.9 billion.

Chart 63 Premium in non-life insurance (EUR millions)



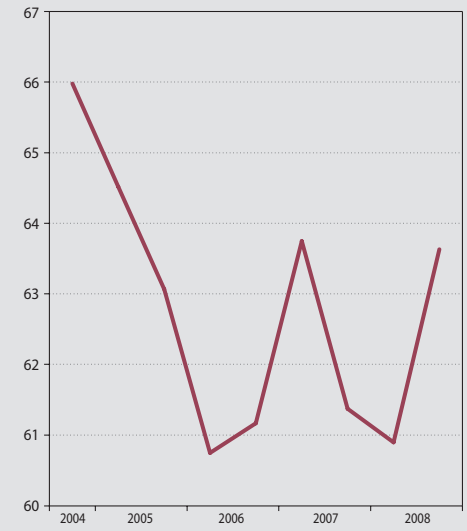
Source: NBS.

Chart 64 Growth rate of premium in non-life insurance (%)



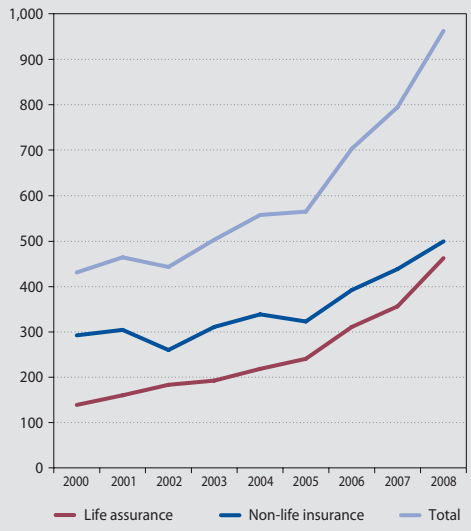
Source: NBS.

Chart 65 Market share of the three biggest insurance companies (%)



Source: NBS.

Chart 66 Claim costs (EUR millions)



Source: NBS.

2.5 MARKET CONCENTRATION

From the concentration point of view, the situation on the Slovak insurance market was affected by a merger of two insurance companies which resulted in the creation of an entity with the third highest premium. This caused a year-on-year increase in the share of three largest insurance companies in total premium by 2.3 p.p. to 63.6%.

Life assurance saw a minor fall in its market concentration. The share of the three largest insurance companies decreased here by 2.7 p.p. to 54.3% while in non-life insurance, owing to the above merger, the share of the three largest companies increased by 3.3 p.p. to 76.6%.

2.6 CLAIM COSTS

In 2008 claim costs increased by EUR 169 million (to EUR 964 million) compared to the previous year, coming to EUR 463 million in life assurance and to EUR 501 million in non-life insurance. Like in premium analysis, NBS, for the purpose of this report, analysed claim costs (hereinafter the term "claim costs" shall imply "technical claim costs").

In the long run, claim costs in life assurance are growing faster than in non-life insurance, namely by 21% in life assurance and by 14.3% in non-life insurance in 2008. This caused an increase in the proportion of claims incurred in life assurance to total claims incurred (from 44.9% in 2007 to 48.1%).

Almost the entire growth in claim costs in life assurance was related to an increase in surrenders. Their share of total claims incurred in life

Chart 67 Loss ratio, cost ratio, and combined ratio (%)

Source: NBS.

Table 4 Loss ratio, cost ratio and combined ratio of non-life insurance groups as at 31.12.2008 (%)

	Loss ratio	Cost ratio	Combined ratio
Life assurance – supplementary insurance	21.57	27.93	49.50
Accident and sickness insurance	18.52	43.36	61.88
Third party liability insurance in respect of the use of motor vehicles	43.92	26.09	70.02
Motor vehicles damage or loss insurance	70.11	31.86	101.96
Other motor insurance	24.67	32.91	57.59
Transport liability insurance	32.72	32.12	64.84
Property insurance	49.76	35.63	85.39
General liability insurance	47.13	33.79	80.92
Credit insurance, suretyship insurance and insurance of miscellaneous financial losses	54.80	38.11	92.91
Legal protection insurance	28.44	70.73	99.17
Assistance insurance	31.58	50.74	82.33
Active reinsurance	55.78	30.38	86.15
Total	52.12	31.99	84.11

Source: NBS.

assurance is 61.6% (having risen from 50% in 2007). The frequency of surrenders grew as well, namely by 1.5 p.p. to 5.9%. The most significant increase was recorded in the number as well as in the costs of payments for insured events caused by critical illnesses.

Claim costs in non-life insurance came to EUR 500.6 million, mainly comprising claim costs in motor vehicles damage or loss insurance (41.2%), PZP (31.8%), and property insurance (19.4%).

In an analysis of the development of claim costs in non-life insurance it is important to consider loss ratio[9], which takes into account the accrual basis of costs and income through a change in the respective technical provisions.

In comparison with the year 2007, loss ratio for the entire non-life insurance increased by 3.2 p.p. to the level of 52.1%. Among important groups, loss ratio fell in PZP but rose in motor vehicles damage or loss insurance and in property insurance. Motor vehicles damage or loss insurance reports the highest loss ratio from among all insurance groups (70.1%), while combined ratio in this group exceeds 100%, indicating strong competition in this group.

2.7 REINSURANCE

From the reinsurance point of view, premium ceded to reinsurers is decreasing, having fallen by 17.5% to EUR 267 million in 2008. The main part of ceded premium (92.2%) falls on non-life insurance, comprising almost one quarter of total premium in non-life insurance. Premium EUR 21 million was ceded to reinsurers in life assurance, which represents 1.9% of premium in life assurance).

Table 5 Premium ceded to reinsurers (EUR millions)

	2008	2007	Change	Share of premium
Total	266	323	-17.5%	12.7%
Life assurance	21	42	-50.7%	1.9%
Non-life insurance	246	281	-12.5%	24.5%

Source: NBS.

9 *Loss ratio is calculated as a percentage share of:*
• the sum of claim costs and the change in the gross technical provision for claims and
• earned premium, i.e. premium in gross amount less the change of gross technical provision for future premiums.

Out of total claim costs, EUR 130 million were ceded to reinsurers, i.e.13.5% of total claim cost.

2.8 TECHNICAL PROVISIONS AND THEIR INVESTMENT

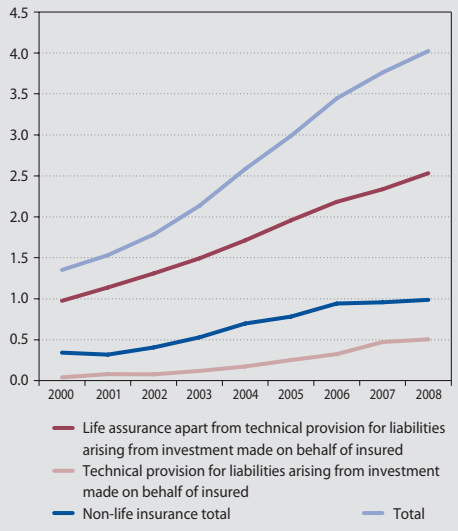
Technical provisions of insurance companies continued to grow as they did in previous years, having increased year-on-year by 6.9% to EUR 4.022 billion. As in the case of premium, technical provisions were growing faster in life assurance, which is logical when considering their long-term nature. This resulted in a repeated increase of their share of total provisions (to 75.5%).

The growth rate of technical provisions in life assurance has been falling gradually which, in 2008, was mainly related to provisions for the coverage of liabilities arising from investment on behalf of the insured. The growth rate of these provisions fell to 7% after significant previous increases (an average of almost 45% in the last five years) and came to EUR 503.2 million. The largest provision in life assurance – technical provision for life assurance (79.2%) increased by 8.3% on a year-on-year basis. The share of these provisions in total provisions is as much as 95.8%.

Technical provisions in non-life insurance increased by EUR 30.6 million compared to 2007, reaching EUR 986.8 million. The largest growth (by EUR 17 million) was observed in technical provision for claims which simultaneously comprises the largest portion of provisions in non-life insurance (66.8%).

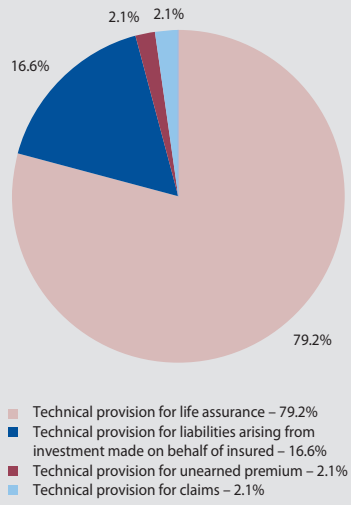
Gross technical provisions less provisions for the coverage of liabilities arising from investment made on behalf of the insured came to

Chart 68 Gross technical provisions (EUR billions)



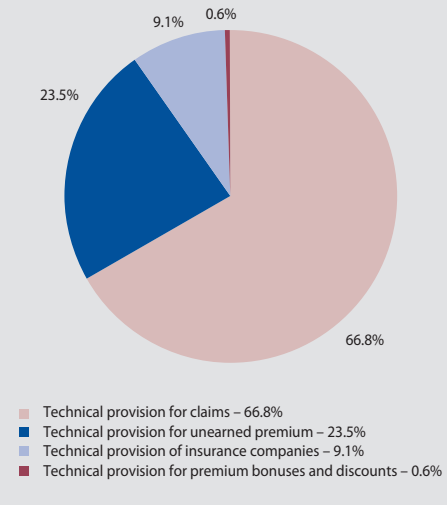
Source: NBS.

Chart 69 Structure of gross technical provisions in life assurance



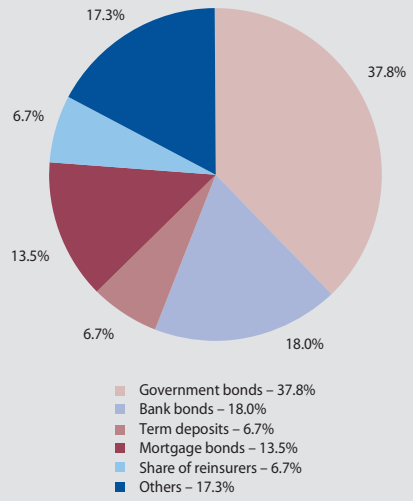
Source: NBS.

Chart 70 Structure of gross technical provisions in non-life insurance



Source: NBS.

Chart 71 Investment of technical provisions



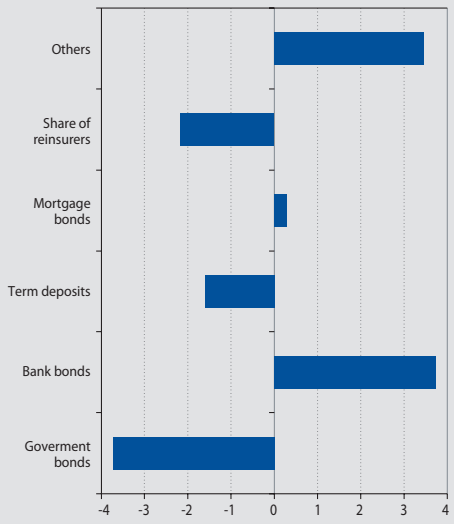
Source: NBS.
Note: The term "Government bonds" is to be understood as bonds issued by the Slovak or other EU governments, NBS and other central banks, guaranteed by the Slovak Republic, and EIB, EBRD or MBOR bonds.

EUR 3.482 million as at the end of 2008 and their coverage by assets was 107.9%. Asset coverage of technical provisions remained the same as at the end of 2007. During the first half of the year, the composition of assets covering technical provisions followed the same trend as in 2007, i.e. a decrease in the share of government bonds and reinsurers and an increase in bank bonds and other assets, other debt securities in particular. However, a change occurred in the second half of the year. Both the share and the volume of government bonds increased while the share and volume of bank bonds ceased to grow and there was a significant slowdown in the growth rate of other assets as well.

2.9 INSURANCE COMPANIES SOLVENCY

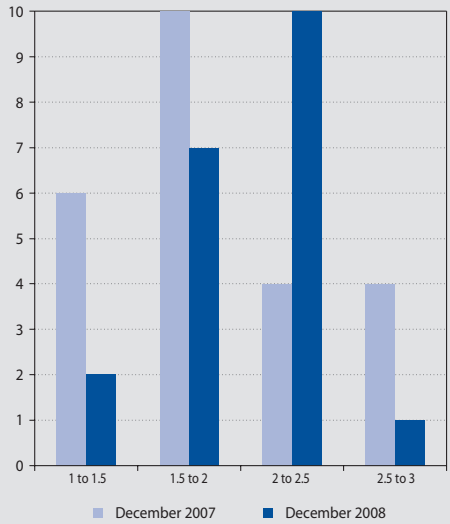
From the point of view of assessing insurance companies solvency it is required that their real solvency margin (i.e. own funds) be higher than the required solvency margin and that the value of the guarantee fund be at least the minimum value of guarantee fund. All insurance companies were in compliance with these requirements as at 31.12.2008. Required solvency margin increased by 11% compared to the previous year but along with a higher volume of liabilities and/or claims, this increase was also brought about by a lowering of the minimum guarantee fund in SKK. Real solvency margin increased by as much as 32% compared to the previous year, especially owing to an increase in funds that are

Chart 72 Changes in the investment of technical provisions between 31.12.2007 and 31.12.2008



Source: NBS.

Chart 73 Solvency margin distribution (number of insurance companies)



Source: NBS.

not subject to liabilities arising from insurance or reinsurance. The ratio of total real solvency margin to a higher value of required solvency margin and the guarantee fund was 2.8 (solvency margin). Solvency margin amounted to 2.9 in insurance companies providing both life assurance and non-life insurance, 2.5 in life assurance companies and 2.1 in non-life insurance companies. The year-on-year increase in the value of this share was 50 percentage points. In ten insurance companies, the value of the guarantee fund exceeded the required solvency margin.

CHAPTER 3

INVESTMENT FIRMS

3

3 INVESTMENT FIRMS

In the course of 2008 there were no significant changes in the volume of transactions in securities carried out through investment firms. Bonds, shares and units were traded in a total value of EUR 14 billion. The volume of customer assets managed by companies licensed to deal in securities increased by 41% to the level of EUR 2.1 billion on a year-on-year basis. Capital adequacy of these entities reached the required levels with a sufficient margin.

3.1 CAPITAL ADEQUACY

The volume of own funds of all non-bank investment firms and management companies licensed to deal in securities was greatly exceeding the statutory margin throughout the whole of 2008. This margin was exceeded more than 6 times at the end of the year, with the largest capital requirements having been those for the coverage of credit risk and operational risk.

3.2 INVESTMENT SERVICES AND ASSET MANAGEMENT

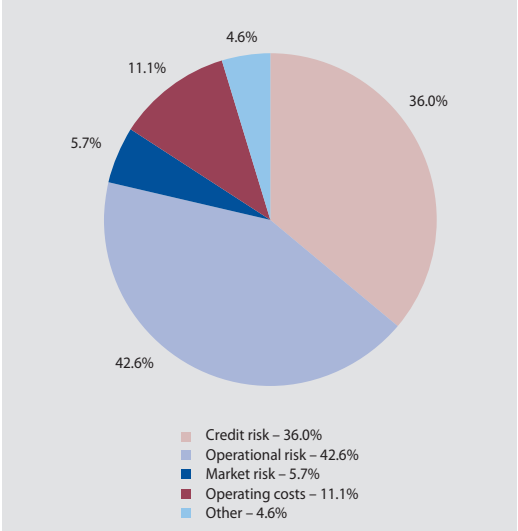
Total amount of transactions in bonds, shares and units in 2008 decreased slightly to EUR 14 billion (compared to EUR 16 billion in 2007). Transactions in money market instruments and financial derivatives cannot be compared on a year-on-year basis due to different financial reporting in 2008.

In nominal values, though, it was financial derivatives and money market instruments that

were traded most, in a volume of EUR 644 billion. However, this value represents the volume of underlying assets of traded instruments while the real volume of financial flows generated by these transactions is lower.

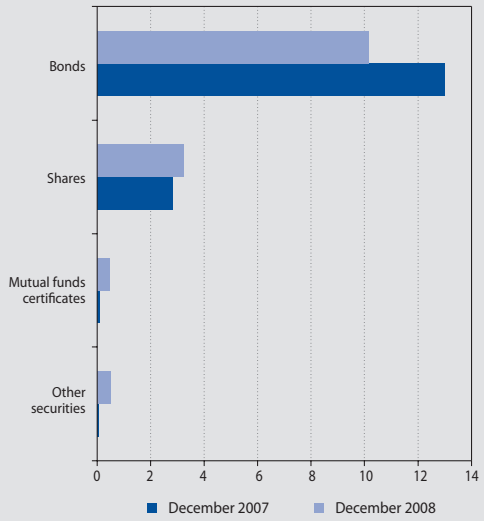
There were carried out 65% of the total volume of transactions through banks while the remaining 35% were carried out almost exclusively through a single company.

Chart 74 Average structure of investment firms' capital requirements by individual risks



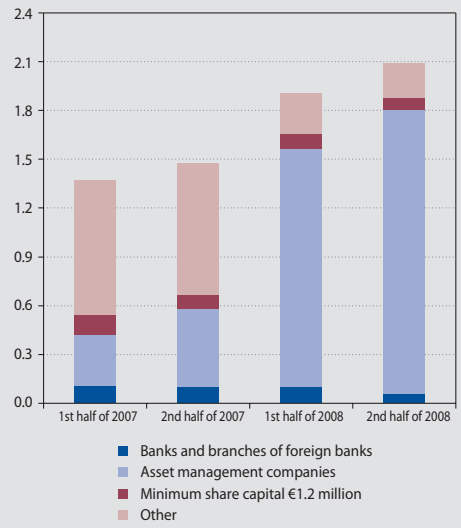
Source: NBS.

Chart 75 Structure of transactions by investment instruments (EUR billions)



Source: NBS.

Chart 76 Amount of customer assets managed by entities licensed to deal in securities (EUR billions)



Source: NBS.

The amount of customer assets managed by investment firms (including banks and management companies licensed to deal in securities) rose by 41% year-on-year (from EUR 1.5 billion to EUR 2.1 billion).

CHAPTER 4

COLLECTIVE INVESTMENT

4

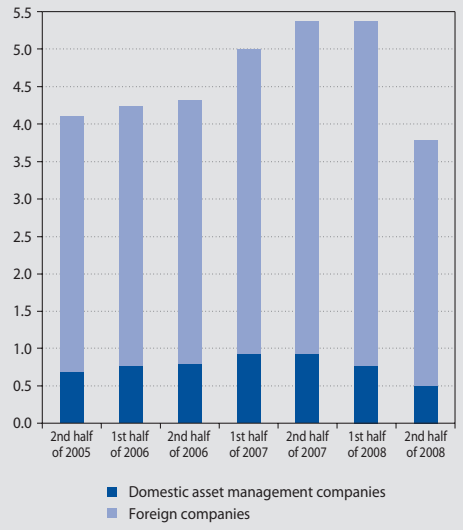
4 COLLECTIVE INVESTMENT

The growth in the volume of assets under management in collective investment that was observed in earlier came to a halt in mid-2008 and the latter half of the year even saw a steep fall in NAV in mutual funds. Such development is above all a result of the financial crisis in the form of mass redemptions caused by uncertainty over further development of the value of investments and, to a lesser extent, in the form of a fall in the value of some types of assets held in portfolios. The year-on-year performance of mutual funds was falling throughout the entire range of fund categories and money market mutual funds were the only ones that could ensure a positive nominal return for unit holders.

The year 2008 was one of negative trends in the Slovak collective investment sector. The underlying cause of these trends was, without doubt, the on-going global financial crisis that significantly affected this sector in several ways.

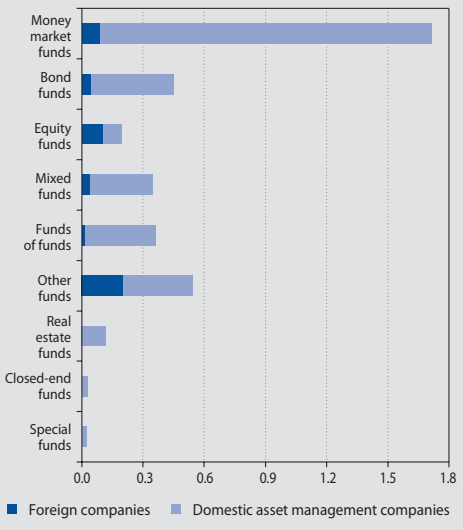
The size of the collective investment sector measured by net asset value (NAV) in mutual funds sold in the Slovak Republic fell by almost 30%. Totally, they decreased by EUR 1.6 billion, of which EUR 1.17 billion fell to domestic mutual funds and EUR 0.43 billion to foreign mutual funds sold in Slovakia.[10] The year-end NAV in mutual funds accounts came down to EUR 3.8 billion as at 31 December 2008 (EUR 3.3 billion domestic, EUR 0.5 billion foreign), which is the lowest level since the second half of 2005. The above numbers indicate that foreign funds recorded a relatively higher decline in NAV, causing the share of funds of domestic management companies to increase to as much as 87%. The decrease in NAV in domestic mutual funds was not spread evenly over time. The volume of assets under management was still growing during the first half and a significant decline occurred first in the second half (the most of it between September and December). NAV in foreign mutual funds was decreasing already since the beginning of the year. In both cases, the fall in NAV should be seen as a consequence of unusually high redemptions by investors and also of a depreciation of assets in mutual funds' portfolios due to the crisis.

Chart 77 Amount of investments in mutual funds sold in Slovakia (EUR billions)



Source: NBS.
Note: Since 2006 the figures also include closed-end and special funds.

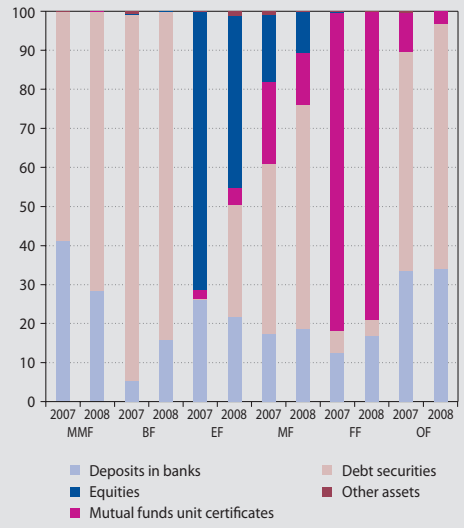
Chart 78 Asset value in individual fund categories as of December 2008 (EUR billions)



Source: NBS.

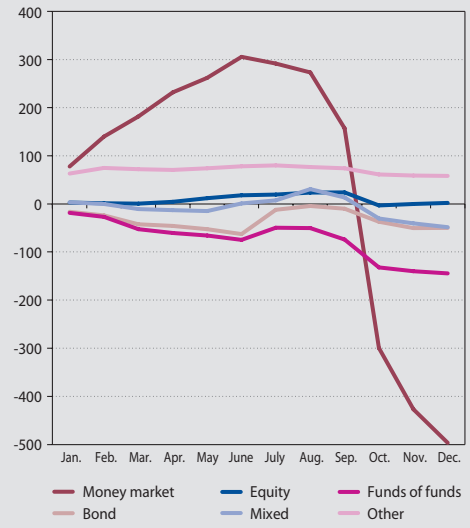
10 Wherever foreign funds are mentioned further in the text, we mean only their part that falls on sales in the Slovak Republic.

Chart 79 Comparison of the structure of assets in individual fund categories as at December 2007 and 2008 (%)



Source: NBS.
MMF – money market m.f.; BF – bond m.f.; EF – equity m.f.; MF – mixed m.f.; FF – funds of funds; OF – other m.f.

Chart 80 Monthly cumulative net sales of open-ended mutual funds in Slovakia for the year 2008 (EUR millions)



Source: NBS.

The decline in NAV under management affected almost all of the domestic collective investment management companies with the exception of two companies with a low market share. Percentage decreases in NAV in mutual funds managed by individual management companies ranged between -6% and -54%. There was almost no year-on-year change in the Herfindahl index although, for instance, the share of two largest companies increased by approximately 3 p.p. to 69 %.

Unit certificates of mutual funds managed by domestic management companies are held almost exclusively by Slovak residents. The share of foreign capital is only 1%. Households are the main group of mutual fund investors with their 82% share of all issued unit certificates of domestic mutual funds. The only other group holding a significant amount of shares (14%) is non-banking financial institutions (insurance companies, pension companies, management companies).

All categories of funds other than funds categorised as other funds and real estate funds (whose share is negligible), considered as a sum of domestic and foreign funds, were victims of a fall in the NAV. Equity funds were affected the most, having written off as much as 67% of their NAV as at the beginning of the year during the monitored period. Thus their relative share fell from 11% to 5% of NAV in the sector. Money market funds reinforced their dominant position by several percentage points, with 45% of total NAV under their management in mutual funds as at December 2008. Equity funds and other funds are the only categories of funds where foreign mutual funds maintained a more significant share.

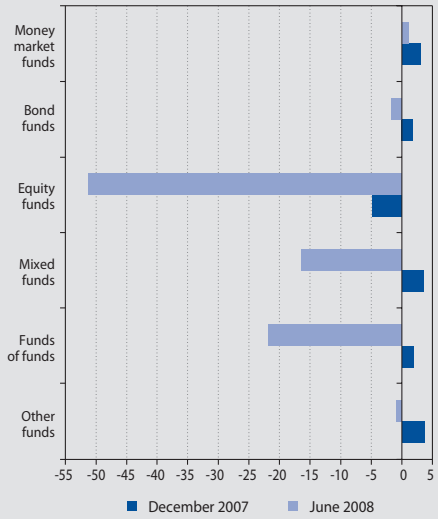
From the point of view of the structure of assets in portfolios, money market funds, bond funds and other funds are in a similar situation. Between 65% to 85% of assets of these funds are in the form of debt securities and the rest is deposited in bank accounts. This also largely applies to mixed funds which, however, are enhanced by equities and unit certificates comprising up to approximately one quarter of volume. Equity funds consist of approximately 50% debt securities and deposits and 50% equity investments. Funds of funds largely consist of mutual funds unit certificates. The main change in the structure of assets in comparison with 2007 lay in a decrease in the weights of equity securities

(equities, unit certificates) in funds that deal with this type of assets along with other assets.

A large part of mutual funds was under pressure from relatively significant redemptions in 2008. Out of domestic mutual funds, money market funds, bond funds, mixed funds and funds of funds recorded negative annual cumulative net sales. Money market funds were hit the worst, with investors having withdrawn units worth almost EUR 0.5 billion. Redemptions were also strongly felt in funds of funds (relative to NAV). The largest wave of unit certificates redemptions arose during the last four months of the year, with its trough in October when negative net sales came up to EUR 0.63 billion (of which money market funds EUR 0.46 billion). This was a response to an unusually critical deterioration on financial markets after the collapse of the US investment bank Lehman Brothers. It is likely that unit holders were redeeming their units out of concerns over the preservation of their value and depositing them in banks. Furthermore, this process was backed by an increase in the guarantee of deposits in banks which did not apply to investments in mutual funds. A one-hundred percent guarantee of investment, in combination with a massive campaign for deposit products in banks and their growing rates was a strong motivation for transfers of assets especially for unit holders of money market mutual funds whose confidence had been undermined by an unusual drop in performance in this conservative category of mutual funds. Cumulative sales in equity funds for the entire year 2008 concluded around zero; sales in other funds were developing positively. Redemptions were a dominating component in the fall in NAV in the sector as a whole. Mutual funds generally had a sufficient amount of liquid assets (bank deposits and government bonds) allowing them to cope with unit holders' pressure on the withdrawal of investments. In some cases, however, they were forced to have recourse to the sale-off of corporates debt securities or foreign banks whose liquidity was relatively low at that time.

Along with negative net sales, another reason behind the fall in NAV in some categories of mutual funds was, in varying degrees, a decrease in the value of certain assets, particularly equity securities but also of some bonds. This particularly applied to equity funds, mixed funds and funds

Chart 81 Comparison of average annual performances of open-ended mutual funds by fund type (% p. a.)



Source: NBS.
Note: Funds weighted by net asset value.

of funds but other categories of mutual funds were affected too. This was naturally reflected in the year-on-year performance of mutual funds that declined across the entire range of mutual funds. Money market funds were the only funds to achieve a positive average (NAV-weighted) performance, at the level of ca 1%. Other fund categories recorded loss (on the basis of weighted average) which amounted to as much as 50% in the case of equity funds. Funds of funds also found themselves deep down on the negative side together with mixed funds where unit holder's investments were nominally depreciated by 22% (16%).

Ten domestic management companies reported profit amounting to EUR 8.4 million for the year 2008, which represents a decrease by 18% compared to the previous year. Considering the nature of fees for management companies that depend mainly on the volume of assets under management, we may expect the fall in NAV to manifest fully in profits for the year 2009. Two companies recorded loss. As much as three quarters of profit in the sector are concentrated in one management company.

PENSION SAVING

5

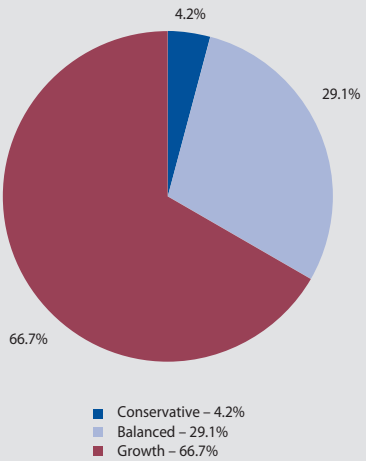
5 PENSION SAVING

The pension sector of the financial market was also affected by the global financial crisis. A fall in the prices of some types of funds assets subsequently induced a fall in the returns of those funds too. For these reasons, conservative funds were the only ones where annual return in the second pillar of pension saving achieved positive numbers. The fall in performance also affected supplementary pension savings when positive values were only achieved in 3 out of 10 contribution funds. Along with performance, the financial market crisis also affected the structure of the portfolio of funds of the second and third pension pillar in 2008. Investments in bonds, government bonds in particular, were largely predominant. The volume of equities in pension funds and in supplementary pension funds decreased by almost a half. Another important factor affecting the pension sector's activity in 2008 was that the second pension pillar was opened twice, enabling the savers an optional entry into / exit from it. On the basis of these changes, the number of savers in the second pension pillar amounted to 1.48 million as at 31 December 2008. The number of participants in the third pension pillar increased to 0.87 million in the course of the year 2008.

5.1 PILLAR II

Two events had a major influence on the functioning of the retirement pension savings system in 2008. The first was the continuation and deepening of the global financial crisis, which affected this sector mainly in the form of a fall in the prices of some asset types in funds and a subsequent decline in the returns of these funds. The second factor was a temporary change in the rules of functioning of the second pillar in the form of its opening for voluntary entries and exits of savers.

Chart 82 Pension fund assets by share of each fund type



Source: NBS.

The Slovak government carried this out twice. The first stage of opening stretched over the entire first half of 2008. The second stage commenced on 15 November 2008 and the second pillar was open throughout the entire remainder of the calendar year. The main purpose of the opening of the system was to enable savers who had voluntarily entered into the second pillar but no longer considered it favourable at the time of opening to return to savings in the statutory pillar only. Analogically, the opening of the second pillar also applied to voluntary entries of savers. According to information provided by pension funds management companies, 107 thousand savers requested transfer of their saved assets to the account of the Social Insurance Agency during the first wave of opening of the second pillar.[11] The number of new savers was lower than the above figure, meaning that the total number of savers in the system decreased in the course of the year 2008 by an approximate 75.5 thousand to 1,483,124 as at 31 December 2008, which represents a 4.8% decrease in relative numbers. The percentage decline in the number of savers was similar across all pension funds management companies and oscillated around the above value for the entire sector. As for the share of exiting participants in the total number of participants[12] in particular fund types (conservative, balanced, growth), the highest rate of leavings was observed in conservative funds (-15.1%), closely followed by balanced funds (-13.3%). This indicator was the lowest in growth funds (-3.7%). On the other hand, conservative funds recorded the

11 This number is related to the opening period from 1.1.2008 to 30.06.2008. In line with the legislation in force, real outputs of savers during the second phase of opening of the capitalization pillar first started to take place on 1 January 2009. Thus these outputs had no effect on the data on the total number of savers for the year 2008.

12 Total number of saving participants for particular fund types as at 31.12.2007

largest relative influx of participants[13] (new as well as those who changed from other types of funds), followed by balanced funds. This development is likely to have two levels. The first one is an increased interest of savers, induced by the crisis, in funds with a lower risk profile. Contrary to this it may be a fact that savers who decided to exit the second pillar were predominantly of an older age and in this group there is an assumption that their funds were invested in conservative or balanced funds.

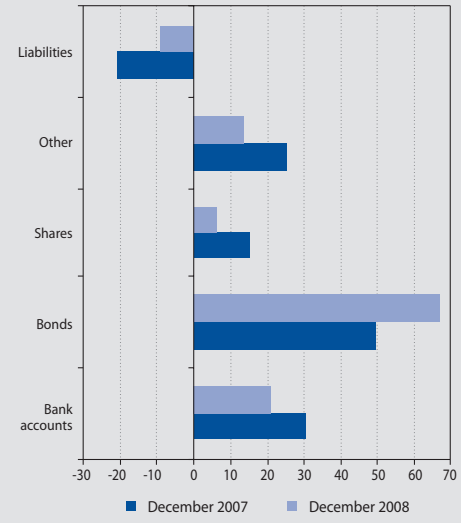
From the number of savers point of view, concentration remained at the same level (which, however, was relatively high), which is documented by an almost 70% share of savers in two largest pension funds management companies.

Net asset value in the funds of pension funds management companies continued to increase in 2008 and came to EUR 2.23 billion at the end of the year, constituting an annual percentage increase of 31%. In comparison with year 2007 this is a notable decrease in the growth rate which is largely influenced by the base effect but in this case, slowdown was also effected by the withdrawal of a part of savers whose accumulated assets were transferred from pension funds to the Social Insurance Agency. This fact, somewhat reinforced by a fall in the value of selected assets, even resulted in a relatively significant decline in the absolute increase of NAV in 2008 compared to the previous year.

Relative increases in net asset value in particular pension funds management companies differed just slightly and their market shares on the basis of this indicator thus remained at the levels as of the end of 2007. Traditionally insignificant changes occurred in the distribution of net asset value into the prescribed three types of funds where the share of growth funds is almost 67% whereas 29% and 4% of total assets in the sector are in balanced and conservative funds respectively.

The financial market crisis that continued all throughout 2008 had a major influence on the change in the basic portfolio structure by types of financial instruments. The main shift can be said to be an increase in the share of bonds at the expense of all other types of investments. The relative share of debt securities, at 49.6% in

Chart 83 Individual types of investments by share of total volume of assets under management (%)

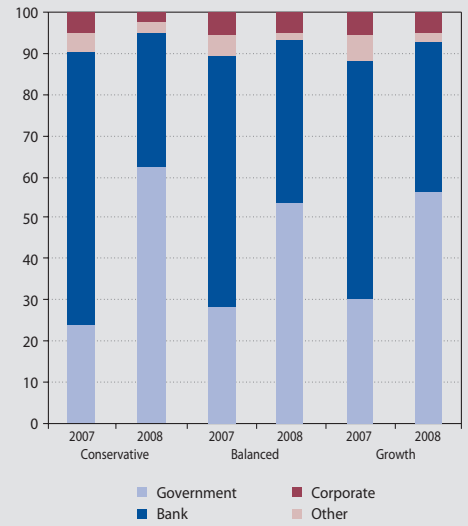


Source: NBS.

December 2007, increased to 67.4% a year later. This caused bonds to become an absolutely dominating component of the total portfolio of the second pension pillar. The most likely drive behind this shift was the pension funds management companies' effort to stabilize their portfolios and to limit possible fluctuations in their value by investing in less risky and volatile assets, which is a group where bonds are generally included. In general we may say that almost all new funds that entered the system in the course of 2008 as well as some of the funds obtained by the sale of other asset types were directed to the purchase of debt securities. Due to the extremely negative influence of the crisis on equity markets, equities became an asset to which funds were trying to significantly reduce their exposure. The volume of equities in pension funds assets decreased year-on-year by almost a half which, in respect of the increase in total net asset value, brought about an even stronger decline in their share, from 15.1% as at 31 December 2007 to 6.4% in December 2008. For the sake of comparison, this share was as much as 18% in mid-2007, shortly before the crisis broke out. The share of assets in the form of current accounts and term accounts in banks decreased by about 9 p.p., to the level of 21%. This reallocation is not linked to the financial crisis but is a continuation of a longer-term down-

13 Estimated using data as of the end of the years 2007 and 2008 and information on exits from the second pillar.

Chart 84 Structure of bond portfolio in individual types of funds (%)



Source: NBS.

ward trend of the share of this form of assets in funds. The share of other securities mainly comprised of treasury bills and unit certificates recorded just a modest decline during the monitored period towards its year-end level of nearly 5%. All of the above mentioned changes in the structure of investments were occurring relatively continuously throughout the whole of 2008, intensifying in the last quarter of the year after the global financial system had almost collapsed in mid-September. Apart from the above types of investments, funds assets also included currency term contracts that serve the purpose of hedging portfolios against risk of fluctuations in the exchange rates of foreign currencies. Due to the fact that the foreign exchange position was in funds mostly denominated in euro, the volume of currency derivatives fell sharply at the end of the year since as of 2009 it would no longer be necessary to hedge these positions against foreign exchange risk, since euro becoming domestic currency in Slovakia. Apart from investments in euro, there were some investments in the currencies of neighbouring Central European countries and although their share was small, it was not completely negligible. The structure of the portfolio in balanced and growth funds is very similar to the structure for the entire sector. Equities are legally forbidden in conservative funds and 75% of the funds' assets consist of bonds and treasury bills while the remaining part is comprised of bank deposits.

The turbulent period of 2008 led pension funds management companies to change some characteristics of their portfolio's bond component. At the end of 2007 the bond portfolio composition was still strongly orientated towards the financial sector. Nearly two thirds of the volume of purchased bonds were issued by an issuer from this sector where banks had a notably dominant position. Less than 30% of them were government bonds and a small remainder was comprised of corporate bonds. However, the situation changed significantly in 2008 when funds managers, pressed by uncertainty and a deteriorating situation in regard to the health of many financial sector institutions, were shifting assets to safer government bonds whose share was 56% as at 31 December 2008. The weight of bond issues from the financial sector fell below 40% and the corporate component remained virtually unchanged. Another trend that we observed in respect of the structure of bond issuers is the deepening of a predominant orientation (96% of the volume) towards Europe. The share of Slovak debt securities, predominantly issued by the government, was 73% at the end of the monitored period.

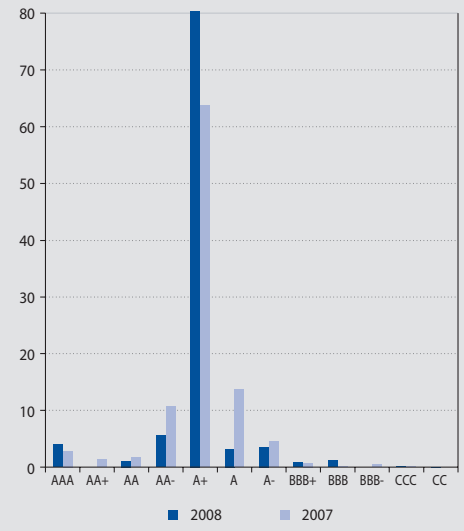
The shift from bank bonds to government bonds is also closely related to their new classification from the point of view of setting and fixation of coupon rates. The share of debt securities with a variable coupon, commonplace especially in bank issues, decreased by approximately 27 p.p., to the level of 42 % as at the end of 2008. Government bonds were growing together with bonds with fixed coupon (31%) and, in particular, zero-coupon bonds (27%).

Maturity of the bond portfolio was getting shorter. The original interval of the average volume weighted maturity from 2.8 to 6.8 years for particular funds reduced to one ranging from 1.4 to 3.2 years. A fall in the average maturity was observed in all eighteen funds.

The rating of nearly 98% bonds by volume was A- or better at the end of December 2008.[14] The year 2008 saw an even greater concentration of bonds in the A+ rating which had been already dominant in previous periods. The number of

14 The percentage value given does not apply to all bonds but only to those where rating (an equivalent of the S&P rating) was available.

Chart 85 Structure of bond portfolio by rating (%)



Source: NBS.
Note: Ratings by various rating companies are expressed as an equivalent of a Standard&Poors rating.

Chart 86 Current pension unit value in particular fund types

Source: NBS.
Note: Data on the vertical axis represent weighted average (weighted NAV of funds) of current pension unit values of a given type of pension fund.

bonds with the highest possible rating of AAA increased modestly.

A fall in the prices of several types of assets and their increased volatility were significantly reflected in decreased performance in the second pension pillar. For the purposes of this report, performance of pension funds in the second pillar was monitored using two methods. The first method was taken from the Act on Retirement Pension Saving which defines the average yield of pension funds (the average yield of market rivals), which is virtually an arithmetical average of year-on-year percentage changes in pension units for the last 24 months preceding the day when the yield is calculated.[15] In view of the predominantly annual assessment horizon of this report, we also analysed the performance on the basis of the so-called year-on-year performance which records the fund's yield achieved for 12 months prior to the day when yield is calculated, using a year-on-year percentage change in the value of the pension unit.[16]

Year-on-year performance (second measuring method) of balanced and growth funds was at the level of -5.2% (-7.4%) as at 31 December 2008 compared to 3.8% (3.6%) the previous year. The greater part of this decline occurred within a short time during two periods of approximately one month each. The first period was January 2008 when especially stock indices responded strongly and negatively to the wave of unfavourable reports on the financial situation of many important financial institutions. Fund performance plummeted even more during the period that followed the collapse of the US investment bank Lehman Brothers when the value of equities slumped under pressure of their frantic sell-off on world stock exchanges. Simultaneously there was also a fall in the market prices of some other types of securities including bonds. This resulted, among other things, in a fall in the conservative funds' performance (2.8% as at 31 December 2008) which

Table 6 Annual yield of pension funds as at 31 December 2008 (%)

Fund types	Weighted average
Conservative funds	2.8
Balanced funds	-5.2
Growth funds	-7.4

Source: NBS.

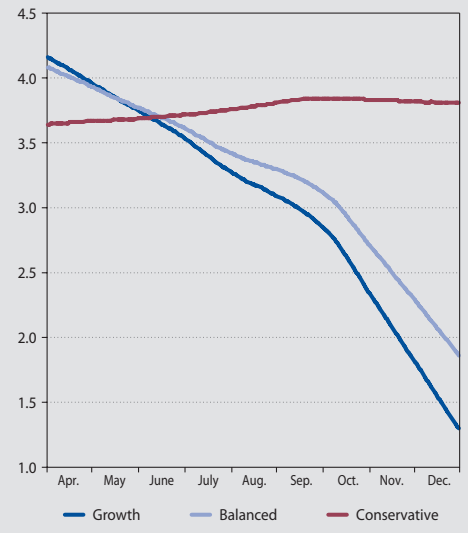
15 *Article 91 of the Act No. 43/2004 Coll. on Retirement Pension Saving and on the amendments to certain acts, as amended, defines the following terms as follows:*
1. *The average yield of a pension fund of a pension funds management company shall be the moving average of the percentage year-on-year changes in the daily pension unit values of the pension fund calculated for the previous 24 hours and rounded up to two decimal places.*
2. *The average yield of the market rivals is the arithmetic average of the moving averages of the percentage year-on-year changes in the daily pension unit values of the pension fund's market rivals, calculated for the previous 24 months and rounded up to 2 decimal places.*

16 *The average annual return for the given type of pension funds was calculated as a weighted average of percentage year-on-year changes in the daily pension unit values of the respective pension funds. Percentage year-on-year change in the daily pension unit values is calculated as at 31.12.2008 (PMZDHDJ31.12.2008) in the following manner:*

$$PMZDHDJ_{31.12.2008} = \left(\frac{DJ_{31.12.2008}}{DJ_{31.12.2007}} - 1\right) * 100\%$$

where DJ is the pension unit value for the respective day.
The weight was a share of net asset value (NAV) of the relevant fund in the sum of NAV of funds of the same type.
Stated return rate is nominal, which means that the inflation has not been deducted from it. Nominal return rate is usually stated when determining the return rate of various investment types, whereas standard legal methodology has been used for this calculation. However, the stated return rate is not the return of the saver in his own personal pension account, which is individual for each person. Input data were the values of pension units of individual pension funds submitted to Národná banka Slovenska by pension funds management companies for the dates of 31.12.2007 and 31.12.2008, which are also published on the website of Národná banka Slovenska.

Chart 87 Average yield of market rivals in particular fund types (%)



Source: NBS.

until then had maintained a stable year-on-year yield of around four percent.

The above development also naturally decreased the average yield of the market rivals as defined in the Act on Retirement Pension Saving, representing a longer-term perspective on performance (the first measuring method), whose trajectory had a downward trend since the first day of its calculation (i.e. since 21 March 2008) in the case of balanced and growth funds, coming to a halt at the level of 1.9% (1.3%) at the end of December 2008. Year-end average yield of market rivals in conservative funds came to the level of 3.8%. Derived from the average yield of market rivals is the benchmark lower limit of yield for a given fund type, non-compliance with which would put a pension funds management company under the obligation to replenish fund assets using its own capital. All funds were in compliance with these requirements throughout the entire monitored period.

In 2008 pension funds management companies were still unable to make profit in aggregate for the entire sector. On the other hand, they managed to decrease their loss year-on-year to EUR 5.6 million, i.e. to approximately one third of the 2007 level. Two out of a total of six companies recorded positive economic results.

5.2 PILLAR III

The volume of assets under management in five supplementary pension funds management companies of the third pillar of pension saving was growing steadily all throughout 2008. Their growth rate of about 11% was a continuation of development during the second half of the previous year. Net asset value in the system came to EUR 936 million as at the end of the monitored period. Redistribution of assets between contribution and payment funds remained the same, with as much as 97% of assets in the saving phase of the supplementary pension saving cycle, i.e. in contribution funds.

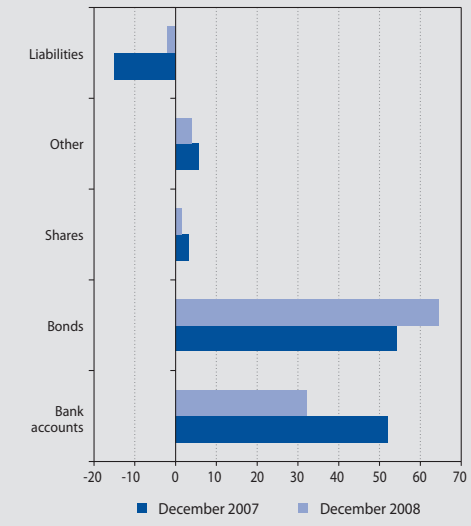
There was a positive turn in the number of participants in the third pillar. Compared to the fall in 2007, in 2008 we could observe a net inflow of participants amounting to 24 thousand, i.e. 2.9% of the status as at the beginning of the year. The final year-end number of participants thus reached 848 thousand. The number of participants grew in all supplementary pension funds management companies.

Individual supplementary pension funds management companies' share of total net asset value in the sector remained intact throughout 2008.

Trends in the structure of assets in the portfolio of the third pension pillar were similar to trends in the second pillar. At the end of 2007 a dominant portion of assets was invested in debt securities and bank deposits in approximately an equal ratio with just a small proportion of other asset types. However, the share of bonds arrived at the level of about 64% a year later, decreasing the share of funds deposited in bank accounts to 32%. The equity component of the portfolio fell to almost a half of the level as of the end of 2007, lowering the proportion of shares to 1.5% of net asset value in the system.

There was a significant decline in the volume of currency term instruments, for the same reason as in the second pension pillar, i.e. the adoption of euro due to which it was no longer necessary to hedge positions in this currency against foreign exchange risk. The above structure applies to the system's portfolio as a whole but due to the high share of contribution funds in total net

Chart 88 Individual types of investments by share of total volume of assets under management (%)



Source: NBS.

asset value it appropriately characterizes the situation in this type of fund as well. The composition of payment funds assets has a different characteristic as they consist exclusively from assets deposited in bank accounts (56%) and bonds where the entire remaining share of assets under management is invested. It should be noted, however, that the composition of third pillar funds has a relatively large variability and that the asset structure in particular funds often differs from the sector average.

Some changes in the bond portfolio composition identified in the second pillar, from the point of view of issuers of these securities, also occurred in supplementary pension saving though less intensely. In an atmosphere of uncertainty induced by the financial crisis, supplementary pension funds management companies increased the share of their investments in government debt securities amounting to 65% as of the end of 2008, which represents a positive year-on-year shift by 7 p.p. This shift occurred at the expense of investments in bonds issued by banking and other financial institutions which in aggregate constituted 28% of all bonds at the end of the monitored period. The relative position of debt securities of non-financial corporates (about 7%) underwent almost no changes in the course of 2008. From a regional point of view, funds invested particularly in domestic economy with nearly 70% of purchased bonds being of Slovak origin. Naturally, government securities constituted absolute majority. The exposure against USA fell to one half in respect of its share of the whole and constituted 4% at the end of December 2008.

Pension funds in the third pillar were not spared from a fall in performance. Average NAV weighted annual return in contribution funds came down to -2% as at 31 December 2008. The spread of yields in particular contribution funds was relatively broad (-20.9% to 2.9%), which is related to the variability in the funds' focus that we mentioned earlier, i.e. predominantly on money to distinctly on equities. Three out of ten funds of this type achieved positive result. The situation in payment funds was better as on average they succeeded in appreciating participants' assets by 1.4%.

Along with time development of the value of fund assets, the final assessment of assets for participants in supplementary pension saving also includes various types of remunerations charged by supplementary pension funds management companies to the account of the respective fund. The most important type of remuneration is the fund management fee which comprised as much as 91% of the total volume of remunerations in the third pillar of pension saving for the year 2008. The fund management fee is specified in the statute of the given fund as a percentage share of average NAV and is legally limited to a maximum of 3%. At the end of 2008, the average amount of remunerations (weighted by NAV of funds) for all the 14 funds in the system came relatively close to the legally permitted ceiling (2.44%).

Supplementary pension funds management companies were able to improve their economic result at an aggregate level in 2008 compared to the previous year. Their profit of EUR 3.3 million was higher by EUR 464 thousand than in 2007.

CHAPTER 6

RISKS IN THE FINANCIAL SECTOR

6

6 RISKS IN THE FINANCIAL SECTOR

Household indebtedness in Slovakia has been growing significantly in recent years, increasing the exposure of banks to credit risk from these loans. Notable growth was observed especially in long-term real property loans. Although having increased from the absolute volumes point of view, their share of total bank loans and of GDP remained at a relatively low level, particularly in respect of the values of similar indicators in other countries. Indebtedness of individual households, especially in relation to their income, is the main factor from the viewpoint of riskiness of household loans. The value of this ratio is especially important in crisis situations. The average ratio of loan instalments to disposable income for households with loans increased year-on-year by 3 p.p. to 33 %. Higher risk is in the groups of population who were provided loans during 2007 – 2008 although the development of defaulted loans for the year 2008 has so far not indicated deterioration in the quality of credit portfolios.

In respect of the worsening economic situation in the last quarter of 2008 and an extremely negative outlook for the year 2009, credit risk arising from provided corporate loans poses the worst threat to baking sector stability. Bank loans to non-financial enterprises increased in 2008, causing a rise in their indebtedness. Credit quality of the corporate loans portfolio did not undergo any important changes in 2008. The largest volume of defaulted corporate loans remained in the wholesale and retail sector throughout the whole of 2008, followed by industrial production.

From the viewpoint of market risks, banking book interest rate risk was the most significant risk for banks. An increase in rates would have a negative impact as a portion of these assets consists of bonds with a longer duration whereas liabilities are mainly comprised of short-term deposits. Foreign exchange risk, banking book interest rate risk and equity risk were negligible for most banks.

Insurance risks are the most significant type of risk to which insurance companies are exposed. Apart from that, insurance companies are exposed to market risks that can cause unexpected decreases in the value of assets covering technical provisions. However, this risk is relatively low. With 99% probability, the value of insurance companies' assets should not decrease by more than 0.2% but this does not apply to assets covering technical provisions in Unit-Linked insurance.

An overwhelming majority of the portfolios of conservative funds managed by pension management companies do not have open currency positions and contain neither shares nor units. This prevents them from being exposed to foreign exchange risk or equity risk. The sensitivity of the value of portfolios to interest rate changes is higher, which implies higher interest rate risk than in the previous period. In balanced and growth funds, the downward trend in the proportion of shares and units to net asset value predominates. However, equity risk soared during the second half of 2008 due to increased volatility on stock markets. Foreign exchange risk is relatively low as the funds' foreign exchange positions are mostly closed. Positions in euro had the largest share of open positions but they pose no risk when considering the adoption of euro in January 2009. Apart from that, pension funds are additionally exposed to risk associated with changes in the exchange rates of US dollar and Polish zloty. As the funds of pension management companies, so the funds of supplementary pension companies are exposed mainly to market risks.

The development of riskiness of investments in mutual funds was largely affected by a pronounced increase in volatility, on stock markets in particular. Money market funds and bond funds were exposed to interest rate risk as well but almost exclusively from a long-term point of view. They recorded a decline in interest income after another cut in the ECB base rate.

6.1 BANKS

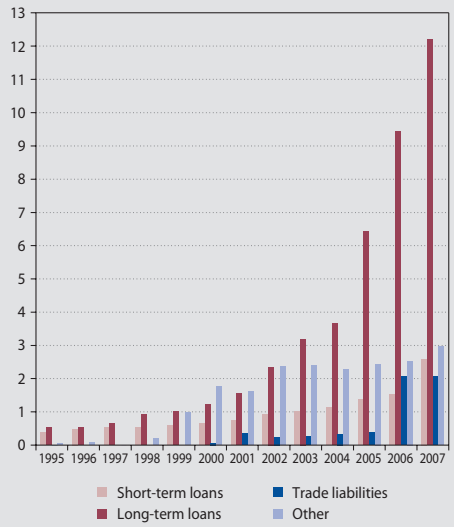
CREDIT RISK OF HOUSEHOLDS

Indebtedness

From a simplified perspective, the risk that a household will not be able to repay its liabilities to banks is given especially by the extent of its indebtedness and its financial position. Developments of both these factors jointly create an overall picture of households' credit risk.

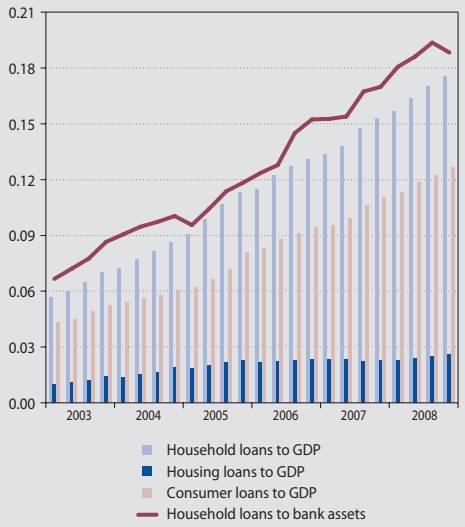
Household indebtedness in Slovakia has been growing rapidly in recent years. There is a rel-

Chart 89 Household liabilities (EUR billions)



Source: NBS.

Chart 90 Household indebtedness (%)



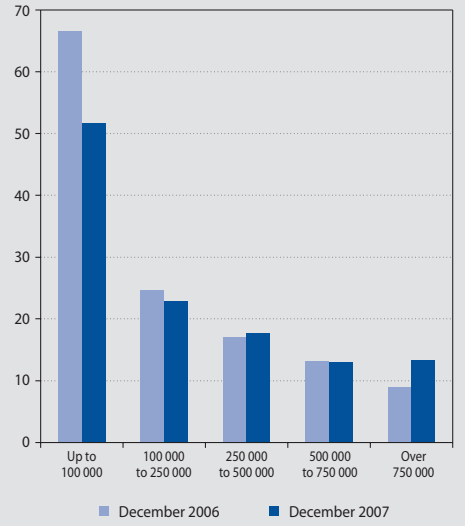
Source: Statistical Office of the Slovak Republic, NBS.

atively strong correlation between the growth of indebtedness on one hand and positive economic development and growth rate of real estate prices on the other hand. Liabilities of households, especially in the form of loans, have been growing mainly since 2005. Notable growth was observed especially in long-term real property loans. Although we cannot avail of data on total liabilities for the year 2008, we may assume that the growth in total liabilities in 2008 was just slightly lower than in 2007.

Although loans increased from the absolute volumes point of view, their share in total bank loans and in GDP remained at a relatively low level, particularly in respect of the values of similar indicators in other countries.

Indebtedness of individual households, especially in relation to their income, is the main factor from the point of view of riskiness of household loans. The value of this ratio is especially important in crisis situations. A high ratio provides relatively little room for the bank and its clients to cope with stress situations. On the contrary, a lower proportion of loan instalment to the household's income provides it with a certain "cushion" for managing crisis situations. The most recent data for the year 2007 give us an average loan-to/income ratio amounting to 33%, which represents a year-on-year increase by 3 percentage points. The ratio may differ considerably depending on income. In general, the higher the income of a household, the lower its indicator value. Low income households are thus the most sensitive to loss of income. On the other hand, however, low income groups' share of provided loans is relatively small.

Chart 91 Distribution of loan-to-income ratio by groups of disposable income of households (%)



Source: Statistical Office of the Slovak Republic, EU SILC 2006, EU SILC 2007, own calculations of NBS.

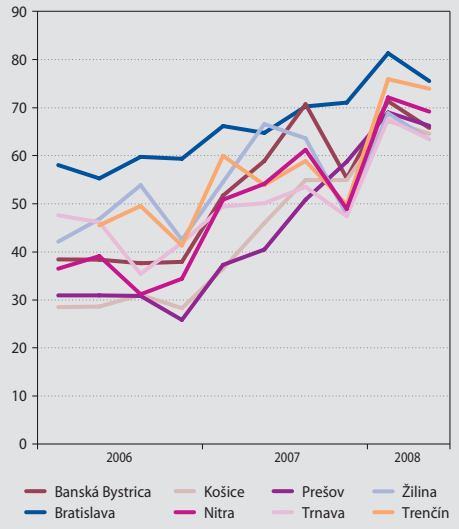
Population groups who were provided loans in later years also pose greater risk. The greatest burden is reported in loans provided during 2007 and 2008, which is largely caused by a significant increase in real property prices over those years. The residential property market, especially in regard to the development of its prices, has a relatively significant influence on the volume of loans provided by banks and subsequently on household indebtedness. When prices grow, especially if this growth is greater than that of wages, households are forced to increase the volume of their loans and their loan burden grows accordingly. To illustrate the increase in the loan burden of households due to growing real property prices, we can give a simple example of how indebtedness evolved after the purchase of a 3-bedroom flat using a housing loan. It only serves as an illustration of development and should not be used to assess indebtedness since real income figures may be different. Real property prices were growing faster than income in all regional capital cities, especially in 2007 and in the first half of 2008. This trend decreased first in the second half of 2008 when fall in real property prices was observed in all regional capital cities.

Although the above example is for reference only, it indicates what loan types could be the riskiest from the loan burden point of view. This is also confirmed by the development of loan-to-value ratio. With real property prices sharply increasing in 2006, 2007 and the first quarter of 2008, banks were forced to provide new loans at high LTV values. The average LTV for new loans decreased in several banks in the second half of 2008. Banks partially changed their attitude in the second half of 2008 when they started to assess this ratio more strictly due to changes in the real property market.

Loan indebtedness of households was gradually changing over the last few years, including from the regional point of view. While nearly 60% of household loans were still provided in the Bratislava region in 2007, this share fell to only 51% as at the end of 2008.

From the particular banks point of view there are relatively significant differences in the regional structure of portfolios. The share of loans to regions other than Bratislava is larger in medium banks too.

Chart 92 Loan burden to household income after the purchase of a 3-bedroom flat (%)



Source: Real Estate Price Map, Statistical Office of the Slovak Republic, NBS calculations.
Note: Burden was calculated for the purchase of a 3-bedroom flat financed by a bank loan, for 20 years, with an LTV of 80% and an average interest rate. Chart data are for reference only, it aims to illustrate development over time.

This increase in providing loans to regions other than Bratislava was brought about especially thanks to a revival of economic growth in these regions and a subsequent steep increase in real property prices. On the other hand it is true that employment in these regions is concentrated in sectors that are more sensitive to an economic downturn.

Thus these loans are perceived as more vulnerable at a time of crisis and we can expect that the economic slowdown will effect an increase in the household loan default rate in regions with a higher share of employment in sectors that are more sensitive to a slowdown in the economic cycle.

Household loans continued to report increased sensitivity to interest rates changes in 2008. Interest rate fixation in most housing loans was up to one year, exposing households to greater risk in respect of the volatile development on interbank markets. A transfer of interest rate risk to customers occurred especially in medium banks. If the current negative trends persist, particularly in terms of inflation, households will be exposed to a relatively high risk of an increase in instalments or a failure to repay loans.

Riskiness of loans

Loan default rate for the year 2008 does not indicate deterioration in the quality of credit portfolios as yet. The volume of defaulted loans did increase year-on-year by 35% but similar growth was observed in previous years too. No significant deterioration took place even in the last quarter.

Real estate loans and consumer loans continued to comprise the largest portion of the volume of defaulted loans in 2008.

When looking at the shares of defaulted loans in total volumes of provided loans, the worst quality can be observed in consumer loans but their share did not increase significantly in 2008. Lower quality was also reported in intermediary loans provided by building societies.

Default rates of particular loan groups registered just a modest year-on-year increase, which was largely caused by a continuing strong increase in the volume of loans. We expect loan default rates to increase in 2009. This is given both by an expected fall in the growth rate of loans and, with the economic situation deteriorating, by a higher volume of defaulted loans too.

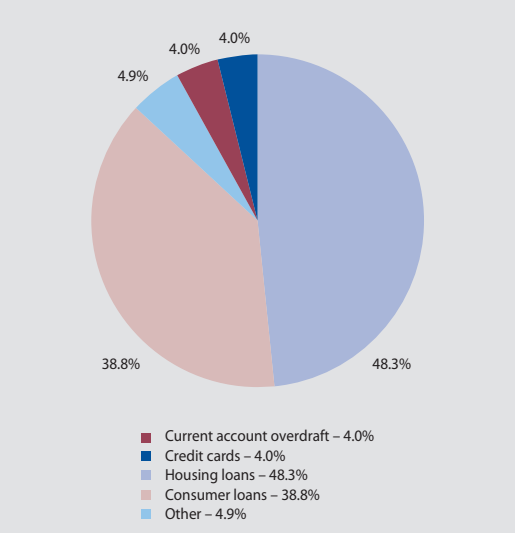
As we mentioned earlier, the risk of household loans depends both on the indebtedness and on the financial position of households. If the household's financial position is sufficient in respect of the level of its indebtedness, it is able to repay its loan. However, financial position worsens particularly during an economic downturn, increasing the probability of default.

Table 7 Ratios of defaulted household loans (%)

	XII.07	XII.08
Total households	3.1	3.3
Real estate loans	2.2	2.3
Mortgage loans	1.4	1.4
Other real estate loans	2.6	2.5
Building loans	1.5	1.3
Intermediary loans	3.8	4.5
Consumer loans	8.3	8.7

Source: NBS.

Chart 93 Structure of defaulted household loans



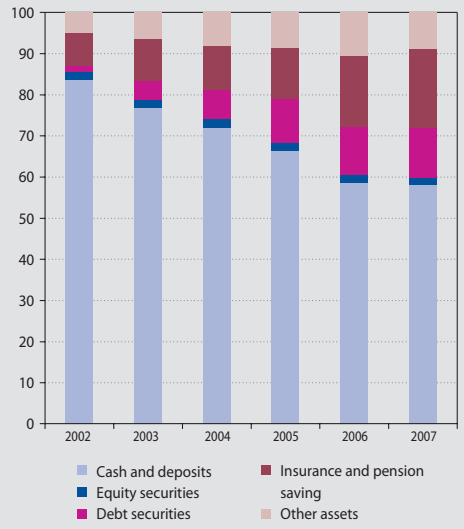
Source: NBS.

The financial position of Slovak households is largely dependent on the economic situation, particularly on the development of income and employment and to a certain degree also directly on the development in financial markets. The latter factor mainly comprises developments in mutual funds and in Unit-Linked products in the insurance sector. The share of such types of financial assets in total financial assets of Slovak households still remains relatively low. Therefore we do not expect that the negative performance of mutual funds could have a significant impact on the total financial position of households.

The financial position of households did not deteriorate markedly during the whole of 2008. The growth rate of real wages during the first three quarters was positive. Real wages decreased slightly in the last quarter of 2008 and this decrease occurred in almost all sectors.

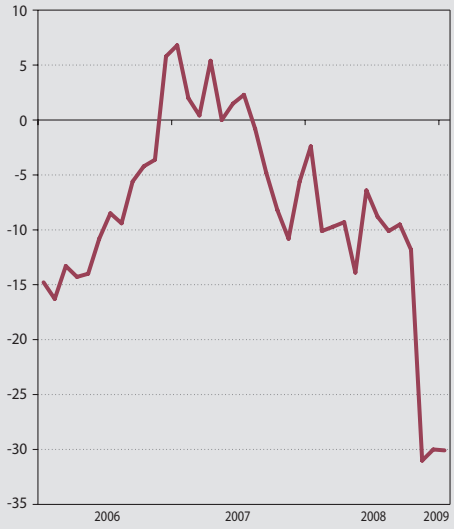
No significant increase in unemployment was registered at the end of 2008. Generally speaking, selected macroeconomic indicators for the household sector did not record a significant deterioration for the year 2008 and the fall in loans in the last quarter was caused by negative expectations rather than by a real deterioration of the households' financial position.

Chart 94 Structure of financial assets of households (%)



Source: Statistical Office of the Slovak Republic.

Chart 95 Consumer confidence indicator



Source: Statistical Office of the Slovak Republic.

This is also supported by the household confidence indicator. Negative information from the corporate sector as well as prospects of future economic development caused a notable decline in the willingness to run into debt.

At the time of preparing this report, negative accounts on the development of Slovak economy were substantially outnumbering positive ones. Due to uncertainty in macroeconomic predictions it is relatively difficult to estimate the development of certain basic indicators that have an effect on the financial position of households (unemployment, real income etc.). However, we may assume that these indicators will develop in a negative manner in 2009, affecting households' ability to repay their liabilities to banks.

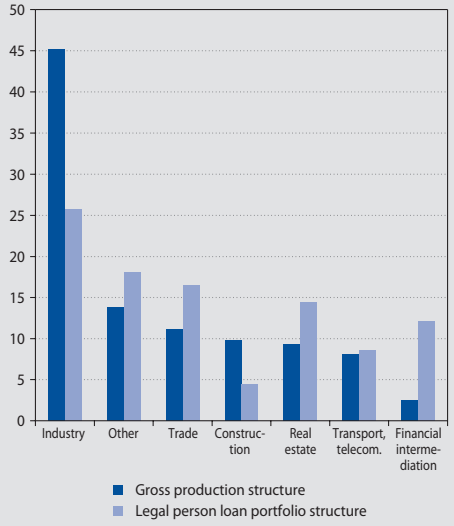
Credit risk of non-financial companies

Exposure of banks to non-financial companies

Slovak banking sector is characteristic for its relatively close links to domestic economy where more than 90% of banks' assets are invested. This is one of the reasons why the banking sector has not recorded significant losses in relation to investments in structured securities during the current phase of the financial crisis.

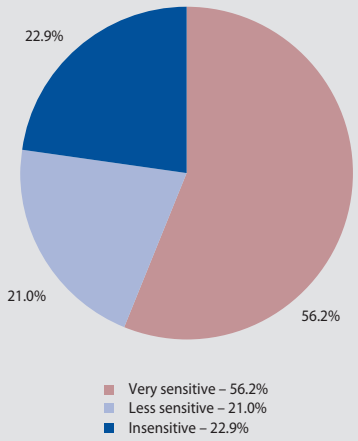
A major part of loans within the framework of domestic economy is provided to non-financial companies and the structure of these loans is very similar to the structure of domestic economy. For explanation we compared the structure of the portfolio of loans to non-financial companies in the banking sector with the structure of gross production in domestic economy. There

Chart 96 Comparison of the structure of the portfolio of loans to non-financial companies with the structure of gross production, broken down by sectors



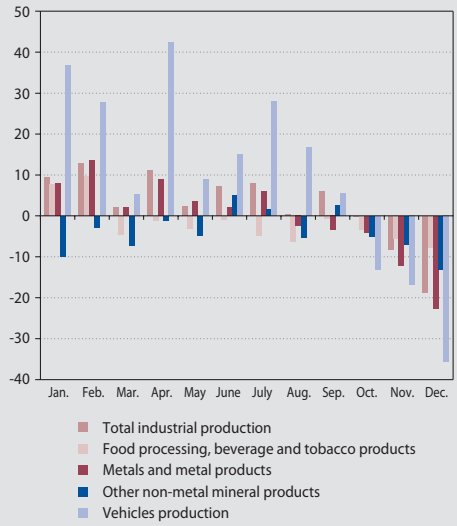
Source: Statistical Office of the Slovak Republic, Register of Bank Loans and Guarantees.

Chart 97 Structure of the portfolio of loans to non-financial companies from the viewpoint of their sensitivity to economic downturns



Source: Statistical Office of the Slovak Republic, Register of Bank Loans and Guarantees.

Chart 98 Gross industrial production in selected sectors in 2008 (year-on-year changes in percent)



Source: Statistical Office of the Slovak Republic.

are some differences in the structure that exist mainly due to the financing of production by enterprises' parent companies or by foreign banks as well as government financing.

Banks' loan portfolios report a higher share against financial intermediation. On the other hand, a major part of these loans is provided by leasing companies which participate mainly in the financing of transportation and machinery for the corporate sector.

Corporate bank loan portfolios report a relatively high share of economic sectors that can be defined as sensitive to economic downturns. Sectors that are more sensitive to a slowdown in economy comprised almost 60% of the corporate bank loan portfolio at the end of 2008. Although there are some differences between banks from the particular sectors point of view, their structure does not differ significantly. Hence the corporate bank loan portfolios widely follow the structure of domestic economy.

Deterioration in the economic situation of non-financial companies in the last quarter of 2008

The current financial crisis that has been affecting financial markets since 2007 started to manifest in real economies of several countries in 2008. Slovak economy experienced negative trends relatively significantly in the last quarter of 2008. A fall in foreign demand was particularly negative, having immediately caused downturn in gross industrial production in Slovakia's small and open economy.

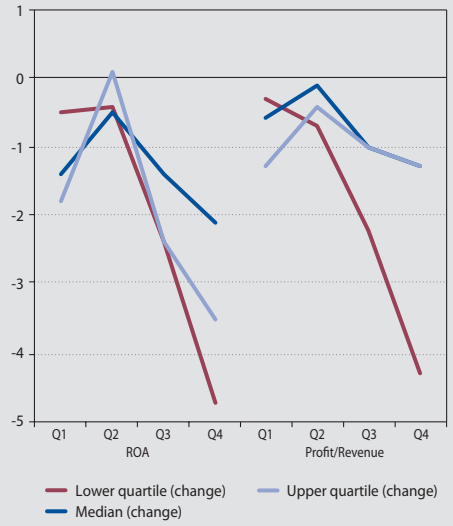
Other important aggregated indicators, such as sales of enterprises and economic profit, were developing in a similar way. With the exception of food industry, sales declined in almost all major industrial production sectors in the last quarter of the year. Economic result of industrial enterprises recorded a year-on-year fall already in the third quarter of 2008.

Figures for individual enterprises[17] also confirm the deterioration of financial indicators for the sector of non-financial companies. The year-on-year comparison of results for the last quarters of 2007 and 2008 talks a common language. Non-financial companies became less profitable and efficient, their liquidity decreased and indebtedness increased[18]. The changes of the last quarter of 2008 thus constitute an increased risk for banks in respect of enterprises' ability to repay their liabilities.

17 *Indicators are calculated using sample data of 8,000 companies collected by the Statistical Office of SR. Since the aim of this part of the report is mainly to identify the rate of credit risk to which banks are exposed in relation to their existing exposure against this segment rather than to describe the state and development of the corporate sector as such, we only included in our statistic calculations those companies from the statistic sample that had at least one loan as at 31.12.2008 provided by domestic banks.*

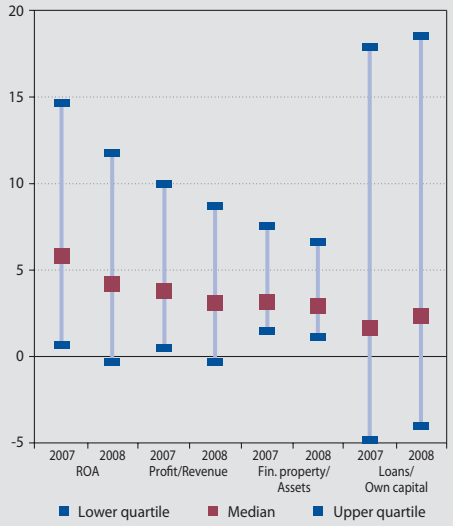
18 *Profitability was measured using the ROA and ROE indicators, operational efficiency using the profit-to-sales ratio, liquidity position using the ratio of financial assets to total assets and indebtedness using the ratio of bank loans to capital. Particular quarters are annualized in the case of flow indicators.*

Chart 99 Return on assets and operating efficiency in the course of the entire year 2008 – year-on-year changes



Source: Statistical Office of the Slovak Republic, NBS calculations.
Note: Data on the vertical axis are in percentage points and represent the difference between indicator values in corresponding quarters of 2008 and 2007.

Chart 100 Year-on-year comparison of selected corporate sector indicators for 2007 and 2008



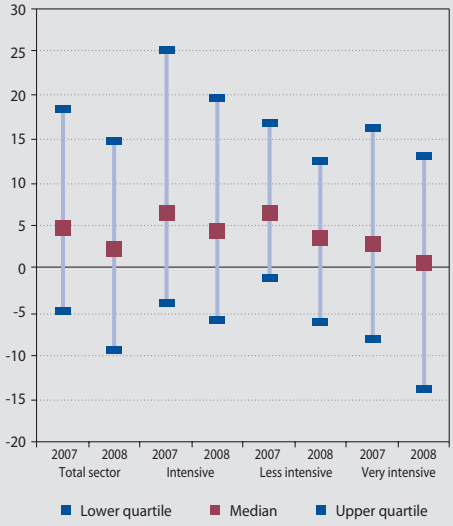
Source: Statistical Office of the Slovak Republic, NBS calculations.
Note: Data for the first three indicators are on the left-hand axis and data for the last indicator on the right-hand axis.

These statistics show that the year-on-year deterioration in the corporate sector's situation was evident in each quarter of 2008. Such development is also confirmed by negative trends in an annual comparison of 2007 and 2008.

A significant deterioration in the profitability and efficiency indicators was particularly evident in the last quarter of 2008. In this case, the major slump of lower quartiles to a double of their (negative) value as at the end of 2007 is more important than the fall in the median. This may also be understood as a notable increase in losses in the group of enterprises that had already been in red numbers in the respective quarter. Enterprises falling into the category of sensitive industries were hit the worst which, to a certain extent, confirmed the inferential assumption that these enterprises may be the most vulnerable to turns in the economic cycle. In the same manner, in line with the expectations, the relatively smallest decline in indicators was observed in the group of „insensitive" enterprises.

On the other hand, the ratio of provisions to average daily sales (which is the same as inverse turnover ratio) developed positively in the course of 2008, i.e. it decreased slightly in the entire sector and in all sensitivity categories[19].

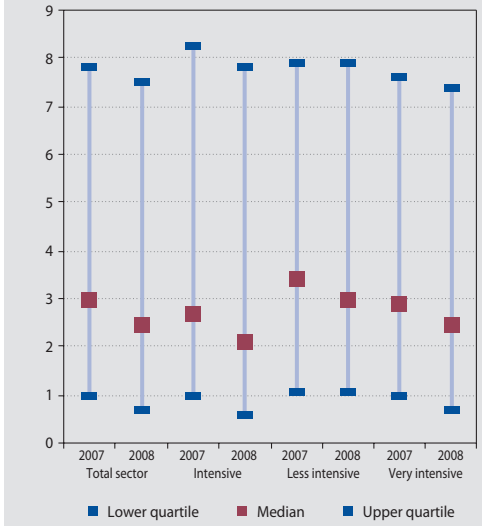
Chart 101 Year-on-year comparison of corporate sector ROA for the 4th quarter of 2007 and 2008



Source: Statistical Office of the Slovak Republic, NBS calculations.
Noet: The vertical axis shows the ratio of economic result to assets of non-financial companies.

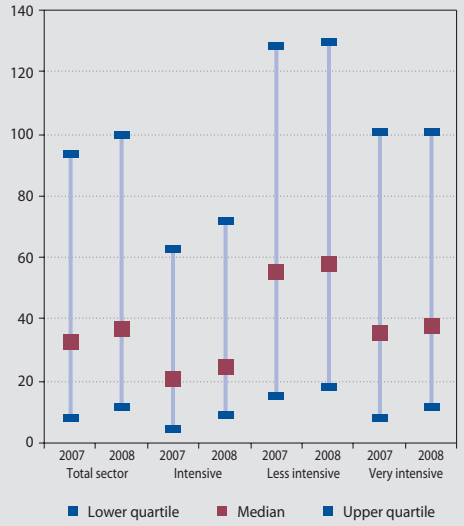
19 The indicator was only calculated for the year 2008 due to limited availability of data, not allowing for a year-on-year comparison.

Chart 102 Year-on-year comparison of the liquidity position of non-financial companies for the 4th quarter of 2007 and 2008



Source: Statistical Office of the Slovak Republic, NBS calculations.
Note: The vertical axis shows the ratio of financial assets to total assets of non-financial companies.

Chart 103 Year-on-year comparison of indebtedness of non-financial companies for the 4th quarter of 2007 and 2008



Source: Statistical Office of the Slovak Republic, NBS calculations.
Note: The vertical axis shows the ratio of financial assets to total assets of non-financial companies.

Liquidity position indicators recorded a decline in the liquid assets of non-financial companies. This trend was observed at the entire sector level.

Bank loans granted to non-financial companies increased in 2008, inducing an increase in their indebtedness. The largest indebtedness at the end of the year was reported in companies with moderate sensitivity to an economic slowdown.

Even when considering particular size groups[20] of enterprises, none of them avoided deterioration in all indicators. With the exception of indebtedness, the most pronounced year-on-year decreases in medians for the fourth quarter as well as an increase in spread (especially in the negative distribution territory) were observed in mini-enterprises. No significant difference was evident between small and medium enterprise.

Quantification of corporate loan portfolio's sensitivity to an economic slowdown

Banks' exposure against non-financial companies increased significantly during recent years, creating close links between the financial position of enterprises – and thus also their ability to repay loans – and risk taken by banks. Financial position of enterprises deteriorated in the last quarter of 2008. In spite of negative trends, however, the sector continued to generate profit at the end of 2008 and reported a sufficient liquidity position. The sector was positively influenced by the favourable period of previous years when enterprises created a good financial position, which is also substantiated by data on the volumes of defaulted bank loans.

Credit quality of the corporate loan portfolio did not undergo any important changes in 2008. Although the volume of defaulted loans to this segment at the entire sector level increased year-on-year by nearly EUR 100 million (26%) to the level of EUR 481 million as at 31 December 2008, the entire growth virtually goes to the account of one bank which, within the branch of legal and accounting activities, reported a default in derivative claims precisely in this amount in December. If we did not include data for this bank in the sector as a whole, the year-on-year increase would only constitute EUR 2.1 million which would mean in respect of a higher growth in the balance of loans to enterprises that loan default rate decreased from 2.8% as of December 2007 to 2.5% as of the end of 2008. Without filtering

20 Division into large enterprises, small and medium enterprises and mini-enterprises on the basis of volume of annual sales.

out the above bank, this rate came up to 3.2% as at the end of the monitored period.

The largest volume of defaulted corporate loans remained in the wholesale and retail sector throughout the whole of 2008, followed by industrial production. A significant decrease in the volume of defaulted loans was reported in both these sectors on a year-on-year basis although in retail and wholesale this was so only due to a larger relative increase in the total volume of corporate loans compared to the volume of defaulted loans, whereas in the industrial sector there was a year-on-year decline even in the volume of defaulted loans itself. Expressed in percent, the largest increase in defaulted loans occurred in the sectors of transportation, storage and telecommunications and real estates – lease and trading activities, although a greater part of the considerable leap in the latter category in December 2008 was caused by the specific case of one bank that we mentioned above.

With the exception of one bank (year-on-year increase in defaulted loans to enterprises from 1.2% to 13%[21]), there was no significant year-on-year change in the loan default rate in any particular bank.

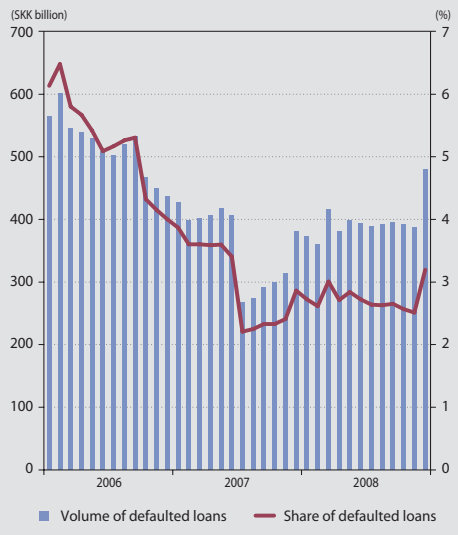
The above facts indicate that despite a worsened situation enterprises can still avail of a certain cushion they have created, which may help them during a crisis. The prospects of economic growth in 2009 are negative and, above all, uncertain. The uncertainty does not apply only to the extent of the economic downturn but especially to its duration. If negative trends are exacerbated and continue for a longer time, this „cushion" created in favourable times could dissolve relatively quickly.

From the sector stability point of view, the vital question is how the already provided loans will „behave", especially under the conditions of an economic downturn. Banks already responded by tightening credit standards for new loans to enterprises in the second half of 2008 (even sooner in certain sectors). This means that the conditions under which these loans were provided already take into account the expected economic downturn.

Two stress scenarios of a possible development of non-financial companies' loan portfolio quality were created to assess banks' sensitivity to various economic development scenarios. Their main aim is to compare the sensitivity of particular banks to negative developments in domestic economy.

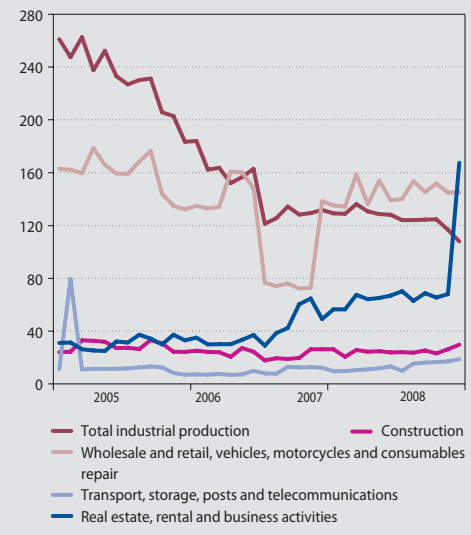
The impacts of scenarios on particular tested banks depend on several factors, mainly on the

Chart 104 Volume and share of defaulted corporate loans



Source: NBS.

Chart 105 Volume of defaulted corporate loans in selected sectors (EUR millions)



Source: NBS.

21 The reason for this increase is described above.

share of sectors defined as sensitive to an economic downturn. The scenario specifies different default rates according to sectors' sensitivity. The value and type of collateral play an important role here. Banks with lower collateral are exposed to higher losses in the case of a deterioration of the portfolio quality.

The actual scope of impact of the scenarios also depends on the current level of capital adequacy ratio[22] in particular banks. Banks with a higher capital are more prepared to cope with losses even if these are high.

In our stress testing we expect deterioration in the macroeconomic situation. The on-going decline in foreign demand will continue to effect a downfall in domestic production and sales of enterprises. This will subsequently manifest in a decrease in non-financial companies' ability to repay their bank loans and the volumes of defaulted loans in banks will rise. The evaluation of the scenario's impact is based on the extent of a fall in capital adequacy ratio caused by losses due to defaulted loans.

We considered two versions of scenarios. In the first, the so-called "moderate" scenario, we anticipate a fall in the economic growth or a moderate recession. Defaulted loans will increase in volume but not significantly.

The second, "serious" scenario foresees a serious recession. Defaulted loans in the riskiest sectors will come up to as much as one third of their total volume.

A fall in the value of selected collaterals is foreseen in both scenarios[23].

In the serious scenario, several banks would be unable to keep their capital adequacy ratio above the 8% threshold.

The amount of domestic banks' disposable capital plays an important role during crises[24]. Since this crisis is of a global nature, parent companies of our banks are exposed to significant risks as well. This fact coupled with the insufficiency of market sources in increasing the capital in financial markets significantly limits parent banks' ability to increase capital in their subsidiaries. On the other hand, some countries have adopted programmes allowing recapitalization of banks by the government where necessary.

Profit made for the year 2008 is one of the few sources that remain. Several banks recorded an increase in profit compared to the previous year, which means that this is a relatively significant source of capital. For explanation we present the results of both stress scenarios in case the banks' capital will be increased by income generated in 2008.

If we assumed that banks would retain their 2008 income then only one bank would fail to reach the 8% capital adequacy ratio threshold in the moderate scenario.

Box 5

STRESS TESTING METHODOLOGY

The aim of credit risk stress testing is to assess the sensitivity of banks to stress scenarios as well as possible losses banks could face as a result of unfavourable development which we may expect within a certain time horizon and which would add to certain enterprises' inability to repay their liabilities.

Although the test deals with the relation between deterioration in the macroeconomic situation and the solvency of banks in its fundamental consideration, the real nature of the test is microeconomic. Input data base of the test is a complete list of loans provided by particular banks as at 31 December 2008 from the Register of Credits and Guarantees (RBUZ). Data on each loan in this database includes information on the business entity (in the form of Company ID and type of economic activity as classified in the international classification system NACE) to which the loan was provided, the name of providing bank, current balance, the value and form of guarantee and the loan's credit quality. The sequence of simulations

22 For the purposes of this analysis, capital adequacy ratio is the ratio of a bank's capital to the volume of its risk-weighted assets.
23 Default rates in both scenarios as well as other settings are further described in Box 5.
24 Capital quality, especially the share of Tier 1, is often mentioned in relation to the current financial crisis. Domestic banking sector reports a high share of Tier 1 capital.

Box 5 – continuation

comprising the core of the entire stress testing is then generated on the basis of these data and some other input parameters. One simulation is a cornerstone in the testing representing one possible future state of economy. Each simulation is a sequence of the following steps.

Each simulation starts with a random decision made on the basis of probability of default in a given company whether or not this company will be struggling for existence in the course of the following year with default as a consequence. Probability of default is a key input parameter and is determined on the basis of an expert estimation as the function of a chosen scenario (moderate, serious) and the sensitivity of the branch where the respective unit carries out its business activities to a negative turn in the economic cycle (insensitive, less sensitive and sensitive). The degree of sensitivity of particular branches according to NACE was again determined by an estimation (consulted with the Monetary Policy Department). In this way we can generate a set of enterprises assumed to be unable to fully repay their liabilities related to their loans. Examples of classification of sectors by their sensitivity are given at the end of Box 6.

Average default rates as at the end of 2008 ranged between 1% for insensitive, 2-3% for less sensitive and 3% for sensitive sectors.

To make the situation more realistic, some of the most important companies reasonably assumable to have a strong enough position to enable them to avoid problems with repayments were excluded from the complete list of enterprises with a credit relationship recorded in the Register. This comprises especially large state-owned firms and subsidiaries of multinational corporations (e.g. Národná diaľničná spoločnosť (the National Highway Company), ŽSR, KIA etc.). Loan default rate in these companies was 0% regardless of the seriousness of scenario and branch.

The analysis also assumes a fall in collateral value in respect of the selected scenario. Based on an expert estimate, collaterals are classified into those where we expect a fall in collateral value by 30% in the moderate scenario and by 50% in the serious scenario (e.g. loan secured by a real estate, own blank bills etc.) and scenarios where we do not expect any fall in collateral value (mainly guarantees provided by third parties). Further calculation presupposes that all loans provided to hypothetically defaulted companies will be transferred to the "defaulted" credit category. According to the assumption, banks will then create provisions for such loans amounting to 45% of unsecured credit balance. The 45% actually represent the LGD parameter which means that the bank will be able to satisfy a claim in the amount of (100-45) % of unsecured balance from a subsequent liquidation.

Along with provisions for loans to "freshly" defaulted companies, an additional creation of provisions is foreseen also in the loans classified by banks as having lesser value as of 31 December 2008 or as defaulted. Here we are assuming that until then loans of lesser value had depreciated by 20% and defaulted loans by 100%. Thus additional creation of provisions in defaulted loans is only related to a possible decreased collateral value.

Therefore every simulation ends with a calculation of the volume of provisions for each bank that this bank would have to include in its costs due to deteriorated macroeconomic

Default rate for stress scenarios

	Moderate scenario	Serious scenario
Sensitive sectors	12%	30%
Less sensitive sectors	7%	15%
Insensitive sectors	2%	5%

Box 5 – continuation

conditions in its corporate loan portfolio. The number of executed simulations was 5 thousand in both the moderate and the serious scenario. Conclusions were then made using this statistic sample (e.g. in the form of a median impact on the bank's capital) in respect of the economic crisis' impact on the position of particular banks in the sector.

Sensitive sectors – Real estate activities, Production of motor vehicles, Construction of buildings, Production and processing of metals, Production of metal constructions, Production of other non-metal mineral products etc.

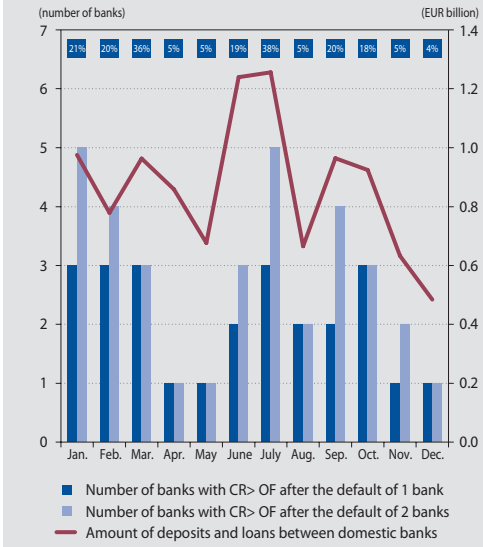
Less sensitive sectors – Wholesale, Retail, Land and pipe transport, Accommodation, Production of paper and paper products, Publishing activities etc.

Insensitive sectors – General government and armed forces, Electricity and gas supply, Food production, Office administrative, Office support and other business support activities, Telecommunications, Healthcare, Water collection, treatment and supply, etc.

Analysis of credit risk sensitivity in the interbank claims portfolio

The analysis of credit risk sensitivity of interbank deposits and loans is actually an analysis of contagion risk on the domestic interbank market. In this sense, contagion risk denotes risk where the bankruptcy of one domestic bank encourages deterioration in the situation or even bankruptcy of other banks due to links between banks in the form of deposit and credit transactions on the interbank market. Chart 106 shows the numbers of banks where capital requirement could exceed their own capital in the case of a bankruptcy in one or two banks. According to the data for the end of the particular months, this number varied from 1 to 3 in case of one bank's bankruptcy during 2008.

Chart 106 Effect of contagion risk stress testing on the domestic interbank market



Source: NBS.
Note: Left-hand vertical axis: number of banks where capital requirement would exceed the volume of their capital in case of bankruptcy of one or two banks. Right-hand vertical axis: volume of deposits and loans between domestic banks in EUR billion (state as at the end of the month).
Above the chart is shown the share of assets of banks where capital requirement would exceed the volume of capital in total banking sector assets in case of bankruptcy of one bank.

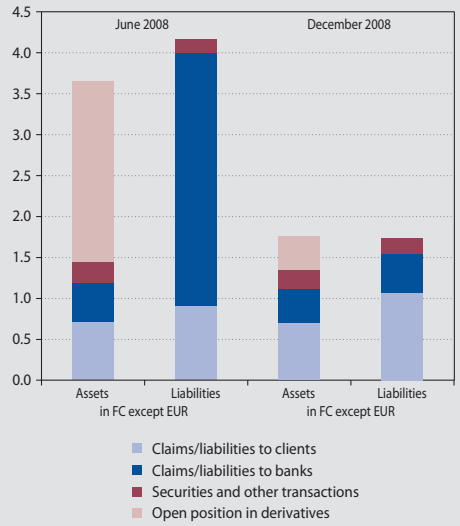
Foreign exchange risk

Direct exposure of banks to foreign exchange risk was negligible as at 31 December 2008. Due to the adoption of euro as of 1 January 2009 and the associated significant decrease in the volatility of the SKK/EUR exchange rate, banks were only exposed to changes in the exchange rates of other foreign currencies. However, the open position in these currencies in banks' balance sheets amounted to mere 0.6% of the balance sheet total and was fully secured by currency derivatives. Balance sheet foreign exchange position in other foreign currencies was gradually decreasing during the second half of the year.

Low sensitivity of banks to foreign exchange risk is also confirmed by VaR values[25] shown in Chart 108. In most banks the value of VaR did not exceed 2% of their capital as at the end of neither month of 2008.

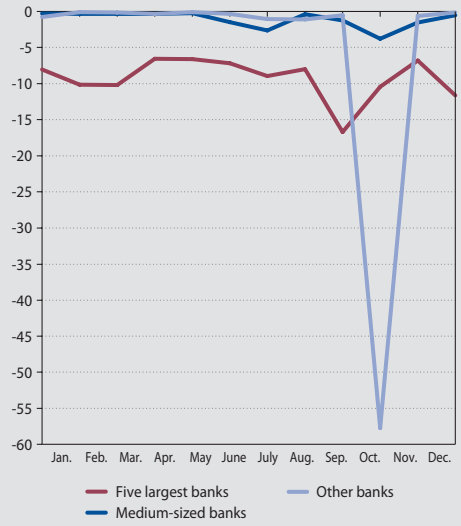
25 VaR (value-at-risk indicates loss that should not be exceeded, with 99% probability. At the same time it is assumed that the distribution of future changes in market factors (exchange rates in this case) can be simulated by distributing changes that occurred during the previous year (250 working days), and that portfolio remains invariable over 10 days. Overnight losses were the only ones to be used in the VaR calculation and the value obtained was subsequently multiplied by $\sqrt{10}$.

Chart 107 Structure of assets and liabilities in foreign currencies other than euro as at 31 December 2008 (EUR billions)



Source: NBS.

Chart 108 Development of a 10-day VaR (99 %) in individual bank groups (EUR millions)



Source: NBS, own calculations.
Note: VaR values for branches of foreign banks are not shown in the chart.

Banking sector was not exposed to indirect foreign exchange risk. No more 2.1% of loans to enterprises and 0.2% of loans to retail are denominated in foreign currencies other than euro. Hence Slovakia is not threatened by an increase in loan instalments and an associated increase in loan default rate in the case of a weakening of domestic currency, as is the case of other Central and Eastern European countries. We do not possess more detailed data on open foreign exchange position of particular enterprises that would be needed for an estimation of foreign exchange risk to which enterprises themselves are exposed. However, development of the sum of absolute values of positions in particular foreign currencies (other than euro) from currency derivatives concluded by domestic enterprises with banks does not indicate a negative development of this risk. This sum was ranging between EUR 0.4 and 0.8 billion during 2007 and 2008.[26]

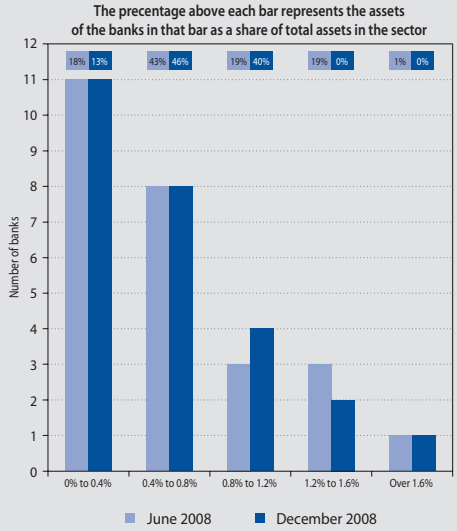
Interest rate risk

In the short-term horizon (i.e. in a few weeks' horizon), the profitability of most banks should not be significantly affected by fluctuating interest rates. The reason is that just a small portion of assets and liabilities (about 10%) is revaluated to fair value through profit or loss. An increase in rates would have a negative impact as a part of these assets consists of bonds with a longer duration whereas liabilities are mainly comprised of short-term deposits. If rates increased by 1 p.p., net loss of banks from the revaluation of financial instruments in the trading book except derivatives would comprise 0.06% of assets. However, some banks use interest rate derivatives to hedge against interest rate risk in the trading book. When taking them into account, loss would decrease to 0.05% of assets which represents 7% of profit created in 2008.

From a longer-term point of view it is more important to observe the impact on the economic value of bank balance sheets (i.e. all assets and liabilities), which would also be negatively affected by an increase in interest rates. With a parallel increase in interest rates by 1 p.p., the economic value of banks' balance sheets including interest rate derivatives would decrease by 0.7%, meaning that the risk of a change in economic value caused by interest rates changes is relatively high. The reason is that banks were using interest rate derivatives for hedging against interest rate risk in the trading book but not for securing positions in the banking book that are relatively significant.

26 The aim of these data is to capture the situation in the corporate sector that is relevant for most enterprises, for which reason they exclude positions concluded by some customers with one bank that reached very high values in the second half of 2008.

Chart 109 Distribution of the ratio of a decrease in economic asset value and liabilities with a parallel increase in interest rates by 1 p.p. to balance sheet total



Source: NBS.

According to law[27], economic value of the banking book given a parallel increase in interest rates by 2 p.p. must not fall below 20% of own funds in any bank. This provision was fulfilled for the banking sector as a whole as at 3 December 2008 (the estimated decrease was at the level of 20% of own funds) but several individual banks failed to meet this requirement (Chart 17).

The following section is dedicated to the testing of banking sector's sensitivity to a possible decrease in the ECB base rate and an increase in credit spreads.

In our analysis of the interest rate risk stress testing we compared test results of the basic scenario and two stress scenarios. Their detailed description is mentioned in Box 6. The presented values are differences of outputs from stress scenarios against the basic scenario.

The impact of particular scenarios was calculated for interest rate-sensitive bank portfolios, i.e. for

Box 6

SCENARIOS OF DEVELOPMENT OF INTEREST RATES FOR INTEREST RATE RISK SENSITIVITY TESTING

When testing interest rate sensitivity we proceeded from the assumption that the development of interbank interest rates follows that of ECB base rate. This development would subsequently reflect itself in customer rates as well. Since the Slovak Republic became a member of the European Monetary Union, in our tests we used interest rates on the European interbank market.

Three scenarios were created for the testing of interest rate sensitivity in the financial sector. The first, basic scenario used yield curves of euro interbank rates where it was assumed that CDS spreads measured using the iTraxx system would not change in the course of the year. This scenario presupposes a decrease in the ECB base rate by 50 p.p. in January 2009 and a decrease by 25 p.p. in May and September.

Scenario 1 assumed that ECB base rate would decrease by 100 p.p. against basic scenario in January 2009, whereas CDS spreads measured using iTraxx would remain unchanged throughout the year.

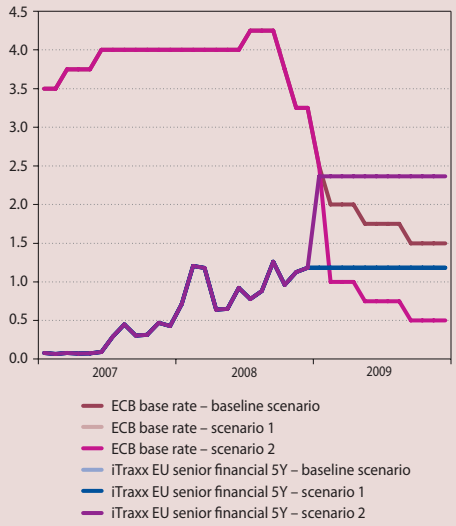
Along with this decrease in the ECB base rate by 100 p.p. against the basic scenario, Scenario 2 also assumed further increase in uncertainty on financial markets which was modelled using an increase in CDS spreads to twice their value compared to their status as at the end of 2008.

Interbank market rates would only move slightly in 2009 in the basic scenario. Their value would decrease during the first three months in response to the fall in the ECB base rate in January and February followed by a modest increase in the subsequent period resulting from a higher stabilised value of CDS spreads than in past periods. Decrease in the ECB base rate in May and September would have just a mild effect. Volatility would be higher in rates with

27 Article 33f of the Act No. 483/2001 on banks and on amendments to certain acts, as amended, and Article 5 (1) of the Decree of NBS No. 12/2004 on risks and the risk management system, as amended by the Decree of NBS No. 15/2006.

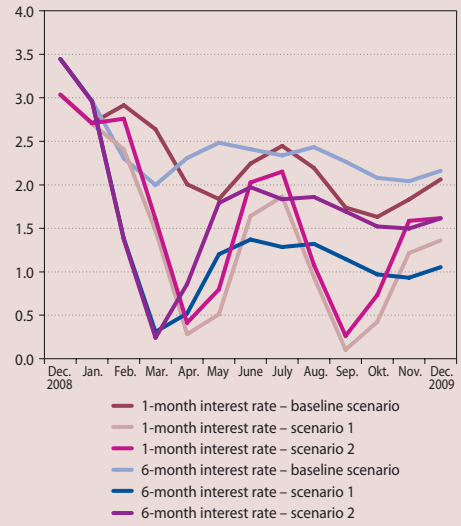
Box 6 – continuation

Chart 110 Stress scenarios for the interest rate risk analysis (%)



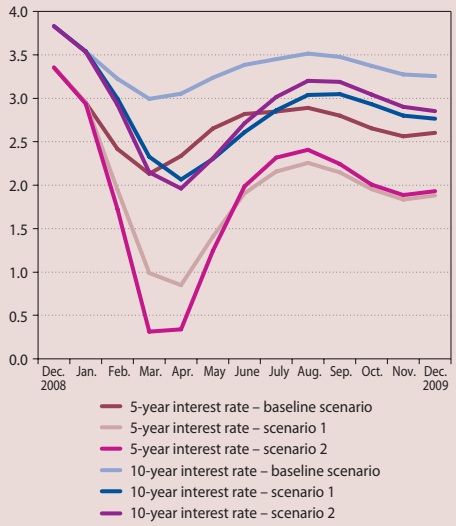
Source: NBS.

Chart 111 Interest rates on the interbank market – maturities of up to 1 year (%)



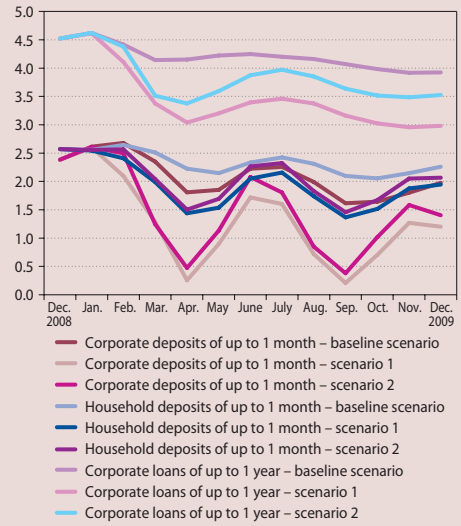
Source: NBS.

Chart 112 Interest rates on the interbank market – maturities of over 1 year (%)



Source: NBS.

Chart 113 Customer interest rates (%)



Source: NBS.

shorter maturities than in those with longer maturities.

Development of interest rates in scenario 1 would be similar to that in the basic scenario, with a greater decline in interbank rates in response to a higher decrease in the base rate. A considerable fall during the first three or four months would be followed by correction and rates would increase thanks to the continuing

Box 6 – continuation

high values of CDS spreads. Even in this case, the development of rates with shorter maturities would be more volatile than that of rates with longer maturities.

Rates in Scenario 2 would develop identically to those in Scenario 1, differing only in their levels. Rates in Scenario 2 would be higher than those in Scenario 1 due to increased spreads but would still fall short of the basic scenario level. This result indicates that, on the basis of estimated models, the decrease in ECB base rate in Scenario 1 has a stronger influence on interbank rates than an increase in spreads in Scenario 2. However, it should be noted that as the spreads we used are at their historically highest levels at the moment, models estimated on the basis of the past development of the respective rates may not provide consistent estimates where market changes are as great as those that we used in the above tests.

Interest rates for deposits and loans to enterprises and households would develop similarly to interbank rates. However, interbank changes in customer rates were less significant. Corporate deposits are the area where the development of rates would reflect that of interbank rates most closely. Changes would be less reflected in the case of deposits of population and corporate loans. Interest rates for loans to the population did not report a significant relationship with ECB rates or interbank rates, for which reason they were modelled as autoregressive processes.

the deposit and loan portfolio, securities portfolio and interest rate derivatives portfolio. Interest income (loss) from the deposit and loan portfolio enters into net interest income. Securities portfolio comprises portfolio revalued to fair value through profit or loss held for trading (HFT) and other securities revalued to fair value (FV), portfolio available for sale (AFS) and portfolio of securities held to maturity (HTM). FV and HFT portfolios are revaluated through profit or loss, AFS portfolio against equity and HTM portfolio is not revaluated at all. Interest rate derivatives portfolio can be divided into the trading and banking book on the basis of available reports but such a division does not precisely correspond with the division of securities portfolio, for which reason we used the assumption that interest rate derivatives are not used to secure securities that are not reported in fair value.

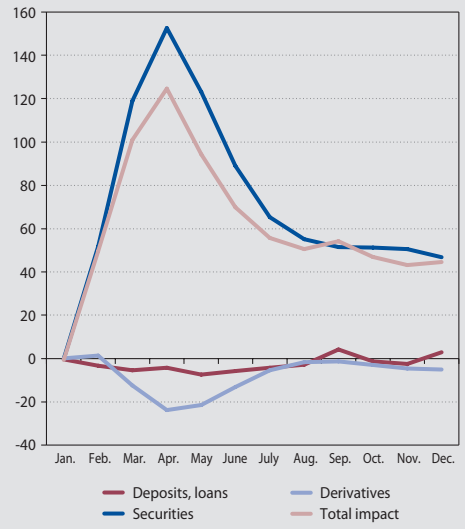
On the basis of this fact we used two approaches in our stress testing. In the first approach we calculated profit or loss from the deposit and loan portfolio, from the revaluation of securities in FV, HFT and AFS portfolios, interest income profit and profit or loss from revaluation of interest rate derivatives in the trading and banking books in the case of a change in the ECB base rate from the basic scenario.

In Scenario 1, profit from revaluation of securities would exceed decline in interest income. Profit would accumulate until the middle of the second quarter of 2009, decreasing slightly in the subsequent period but remaining positive until the end of the monitored period from the entire sector point of view.

Changes reported in the value of interest rate derivatives would be different to those in the securities portfolio which reflects the fact that these instruments are used to hedge securities portfolios against unexpected changes in interest rates. Loss from this portfolio would accumulate until the middle of the second quarter of 2009 like in the case of securities portfolio and no significant losses would occur after this period. We may say on the basis of the calculations that the sector as a whole did not fully hedge its securities portfolio against unexpected changes in interest rates. This result reflects the development of off-balance sheet items where the reported nominal value of interest rate derivatives fell at the end of 2008, volumes of swaps and forwards having fallen the most. This attitude of banks probably reflects their expectations of further decreases in the ECB base rate.

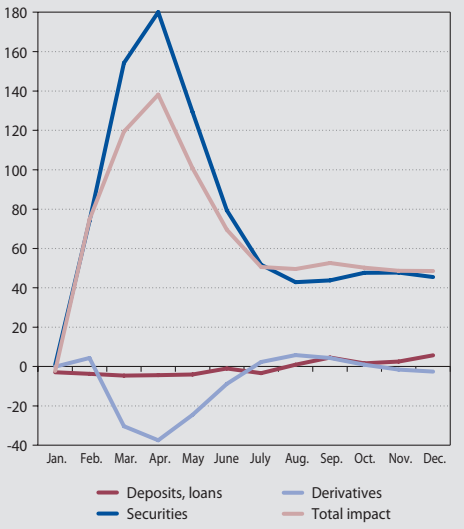
Profits or losses from the deposit and credit portfolio would be lower in comparison with

Chart 114 Stress scenario results – first approach, Scenario 1 (EUR thousands)



Source: NBS, own calculations.

Chart 115 Stress scenario results – first approach, Scenario 2 (EUR thousands)

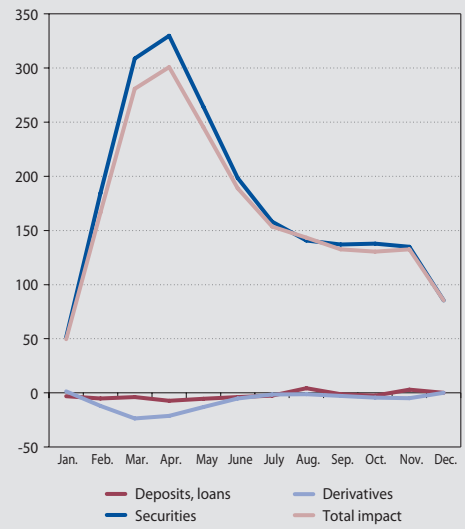


Source: NBS, own calculations.

the portfolio of securities and interest rate derivatives. Since historical data indicate that rates respond to loans faster in case of a change in the base rate than in deposit rates, a decrease in the base rate at the beginning of the period would bring about a moderate loss for the sector. This loss would gradually decrease and in the second half of 2009 the output from this portfolio would come close to zero.

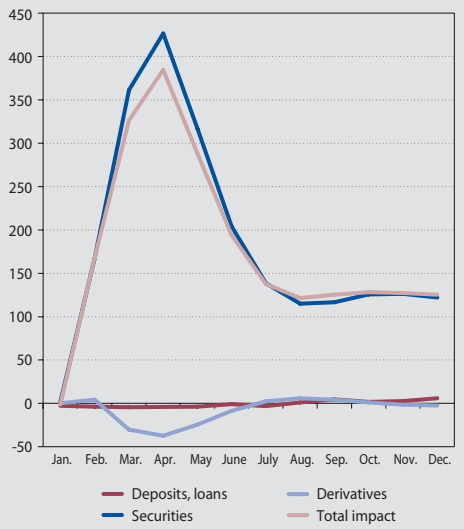
Results for particular banks are comparable with results for the sector as a whole. With the exception of some banks where the development of derivatives will moderate or exceed profit/loss from the securities portfolio, profit from revaluation of securities would not be compensated by profit/loss from the derivatives portfolio. In some cases, however, it should be noted that this profit comes predominantly from the AFS

Chart 116 Stress scenario results – second approach, Scenario 1 (EUR thousands)



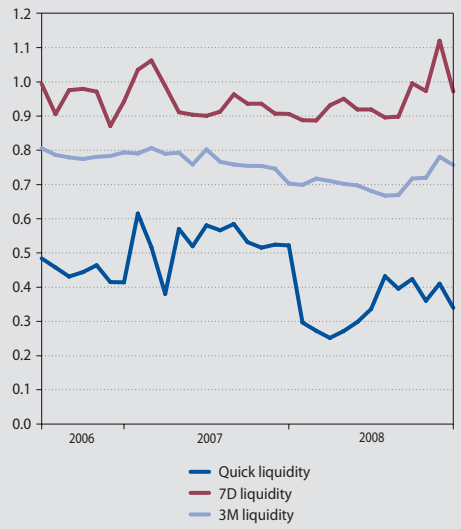
Source: NBS, own calculations.

Chart 117 Stress scenario results – second approach, Scenario 2 (EUR thousands)



Source: NBS, own calculations.

Chart 118 Median values of liquidity ratios



Source: NBS.
Note: The chart does not include branches of foreign banks with market share below 1% of total assets in the sector.

portfolio that is not revaluated through profit or loss.

Development in Scenario 2 would be similar to that in Scenario 1 with the exception of greater fluctuations in securities and derivatives portfolios in the first and second quarter and milder changes in the deposit and credit portfolio. Total profit at the end of the monitored period would be comparable with profit in the case of Scenario 1.

Calculations in the second approach also included securities in the HTM portfolio. In this approach we used the assumption that banks can, where appropriate, sell even securities held in HTM. Hence in this case we considered revaluation of these instruments as well.

Since a large portion of securities is held in this portfolio, the profit from their revaluation would significantly exceed loss from the revaluation of derivatives. In this case the banking sector would record greater profit than in the first approach, both in Scenario 1 and 2. Development in the portfolio of derivatives, deposits and loans remained unchanged in comparison with the first approach.

Liquidity risk

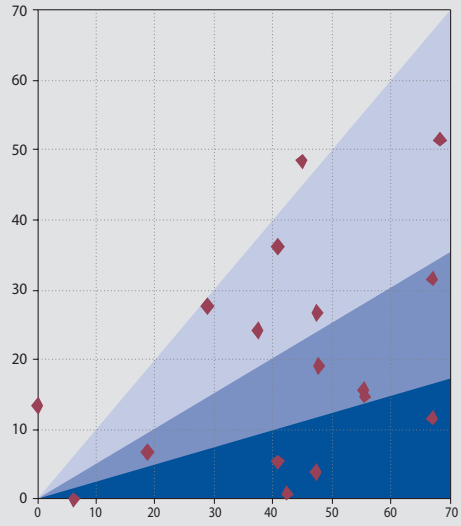
Liquidity analysis aims to assess banking sector liquidity from both long and short-term point of view. From the short-term point of view it is important to know whether banks have a sufficient amount of quick liquid assets in respect of the volume of liabilities with short residual maturity. In the long run we analyse whether banks' credit activities are financed predominantly using funds from customers or whether they are linked to funds from the interbank market.

Liquidity risk from the short-term point of view

Three liquidity ratios were monitored in this part of the analysis (quick liquidity ratio and ratio of liquidity within 7 days and within 3 months).

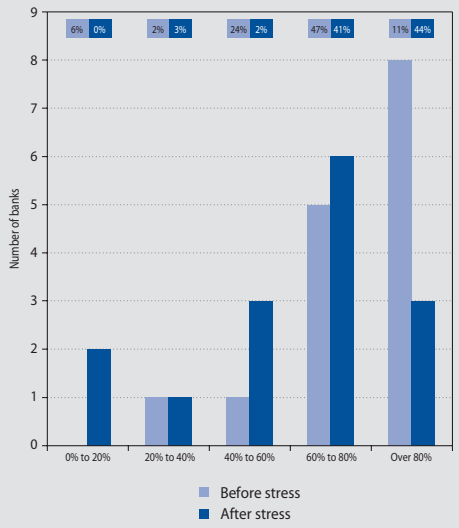
The given values represent the ratio of liquid assets (corresponding to the respective time interval) to liabilities with a given residual maturity. The median of seven-day liquidity ratio remained at a satisfactory level of 90% during the second half of 2008 while the median of 3-month liquidity ratio oscillated between 67% and 78%. A lower value of this ratio in some banks means that

Chart 119 Comparison of the liquidity cushion and the open position from transactions with customers (up to 3 months) (%)



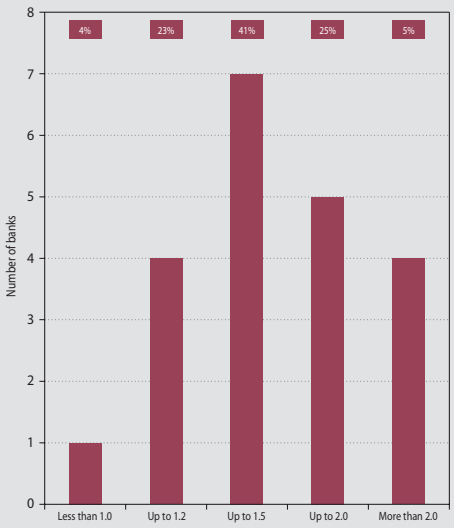
Source: NBS.
Note: The chart does not cover branches of foreign banks with a market share of less than 1% of the sector's total assets. The horizontal axis gives the share of open position from transactions with clients (up to 3 months) in total assets. The vertical axis shows the share of liquid assets in total assets.

Chart 120 Impact of a scenario where customer deposits drop by 20% on the seven-day liquidity ratio



Source: NBS, own calculations.

Chart 121 Distribution of liquidity ratio in the sector as at 31 December 2008



Source: NBS.

in order to preserve their good liquidity position they have to maintain a stable core of deposits.

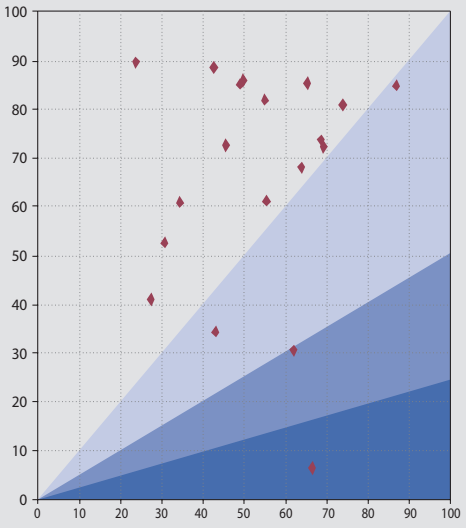
From the short-term liquidity point of view, a slight increase in liquidity cushion was observed in the banking sector as a whole in the second half of 2008. In some banks, however, the situation got worse.

Most banks are able to maintain a good liquidity position only if part of deposits remains in the bank after their maturity. The importance of this condition varies across particular banks nevertheless, which we can see in the chart comparing the shares of liquid assets and open positions from customer transactions of balance sheet total (Chart 119).

In our analysis of liquidity risk sensitivity we focused on a stress scenario where the volume of customer deposits fell by 20%. The median value of seven-day liquidity ratio would drop from 97% to 79% if this scenario was actualized, whereas the median value of three-month liquidity ratio would drop from 76% to 69%.

A new liquid asset ratio[28] (ratio of the sum of liquid assets to the sum of volatile liabilities) for monitoring one-month liquidity of banks was introduced as of 15 November 2008. The value of this indicator must not fall below 1. Volatile liabilities are comprised mainly of a set percentage of deposits depending on counterparty type and

Chart 122 Comparison of the ratio of loans to total assets with the ratio of deposits and issued securities to total assets (%)



Source: NBS.
Note: The chart does not include branches of foreign banks with a market share of less than 1% of the sector's total assets. The horizontal axis gives loans to customers as a percentage of total assets. The vertical axis gives deposits received from customers and issued securities as a percentage of total assets.

28 Decree of Národná banka Slovenska of 28 October 2008 No. 18/2008 on the liquidity of banks and of branches of foreign banks and on procedures pertaining to liquidity risk management of banks and branches of foreign banks and on the amendment to the Decree of Národná banka Slovenska No. 11/2007 on the submission of statements, reports and other disclosures by banks, branches of foreign banks, investment firms, and branches of foreign investment firms for supervision and statistical purposes.

maturity. In order to cover these liabilities banks have to hold a sufficient amount of liquid assets, cash in particular, suitable securities and assets payable within one month. This means that banks should be able to cover a relatively considerable outflow of customer deposits by liquid assets. The distribution of liquidity ratio values in the banking sector as at 31 December 2008 are shown in Chart 121. One bank was not in compliance with this limit as at the above date.

Liquidity risk from the long-term point of view

Credit activities in most banks are financed by customer deposits or by issues of longer-term securities and not by short-term funds from the interbank market (Chart 122). The ratio of loans to deposits and issued securities fell from 74% to 71% compared to the previous year.

6.2 INSURANCE COMPANIES

Insurance risks are the most significant type of risk to which insurance companies are exposed. Along with it insurance companies are also exposed to market risks that can cause unexpected decreases in the value of assets covering technical provisions. As we cannot avail of data sufficient for a detailed analysis of insurance companies' exposure to insurance risks, in this analysis we shall deal with the impact of market risks only.[29]

Market risk that could have a direct impact on reported economic result is almost negligible in most insurance companies. Foreign exchange positions are nearly closed in most insurance companies and their size does not exceed 2% of assets. Total position is long and two thirds of it consist of an open position in US dollar. The proportion of investments to shares and units revaluated to fair value through profit or loss comprises mere 0.8% of assets. The proportion of investments to debt securities revaluated to fair value through profit or loss comprises 3.1% of assets. Losses due to market risks in most insurance companies should not exceed 0.6% of assets within 10 days, with a 99% probability (VaR).

It should be noted, however, that asset value in several insurance companies is exposed to changes in interest rates as debt securities comprise a large part of insurance companies' assets and, in some of them, these securities have a relatively high duration. With a parallel growth in interest rates by 1 p.p. the asset value in the insurance sector would decrease by 4% but this loss would not fully manifest in reported economic result or in capital changes.

A greater part of the loss would express itself gradually in the form of a change in interest income. If we only consider assets revaluated to fair value through profit or loss or through equity, loss would account for 0.6% of assets.

6.3 FUNDS OF PENSION MANAGEMENT COMPANIES

Conservative funds portfolios of pension management companies do not have (except one) any open currency positions and contain neither shares nor units. This prevents them from being exposed to foreign exchange risk or equity risk. Proportion of bonds in conservative funds assets varies between 45% – 72%. Average weighted

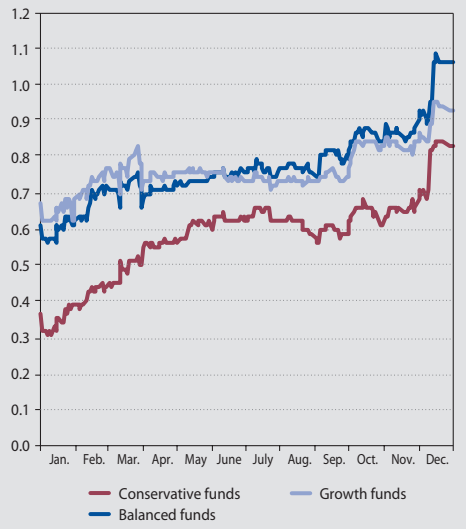
Table 8 Exposure of insurance companies' assets to market risks

		Minimum	Median	Maximum	Total sector
1	Foreign Exchange Risk	0.0	0.5	2.8	0.1
2	Interest Rate Risk	0.0	0.0	0.6	0.1
3	Total risk	0.0	0.6	2.8	0.2
4	Interest rate risk to the portfolio of debt securities	0.4	2.3	3.8	3.6

Source: NBS, REUTERS, BLOOMBERG.
Note: Values in the table give VaR (at the significance level of 99 % assuming a 10-day possession of unchanged portfolio) in asset value (lines 1 to 3), or in the portfolio of debt securities (line 4). Calculation did not include assets invested on behalf of the insured or assets corresponding to reinsurers' share of technical provisions since the risk from these assets is not borne by the insurance company. In the case of interest risk we only considered financial instruments whose revaluation would have a direct impact on economic result.

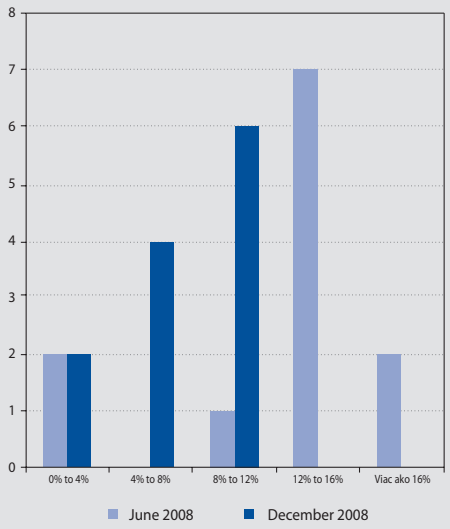
29 *The analysis takes into account the risk of all assets where risk is borne by the insurance company, including assets not covering technical provisions or the guarantee fund. However, the analysis does not consider risk to which are exposed assets invested on behalf of the insured or technical provisions ceded to reinsurers since the insurance company does not bear risk from these assets.*

Chart 123 Average durations of pension funds portfolios



Source: NBS.
Note: The vertical axis shows average durations weighted by the volume of assets in particular funds.

Chart 124 Distribution of the percentage proportion of shares and units to NAV (%)



Source: NBS.
Note: The horizontal axis shows percentage proportion of shares and units to NAV. The vertical axis shows the number of growth or balanced pension funds belonging to a given category.

duration of portfolios increased slightly since June 2008 (values ranging between 0.5 – 1.02). The sensitivity of the value of portfolios to interest rate changes is higher, which implies a higher interest rate risk compared to the previous period.

VaR of conservative funds of most PMC's oscillates within a band of ± 0.7 p.p. from the median value (1.47% as at 31 December 2008). VaR in one pension management company considerably differs from all others. Pension unit value should not fall more than by 0.5% in total (0.19% when excluding PMC with maximum VaR value) within 10 days, with 95% probability.

Downward trend in the proportion of shares and units to net asset value predominates in balanced and growth funds (Chart 124). In spite of that there were some notable leaps in the VaR due to stock market turbulences and an associated increase in the volatility of their returns. The most significant increase in this risk indicator occurred in the first half of October.

Foreign exchange risk is relatively low as the funds' foreign exchange positions are mostly closed. Positions in euro had the largest share of open positions but these pose no risk when considering the adoption of euro in January 2009. Apart from that, pension funds are additionally exposed to risk associated with changes in the exchange rates of US dollar and Polish zloty. Proportion of the bond component to total assets of balanced and growth funds varied between 42% – 71% in the second half of 2008.

6.4 FUNDS OF SUPPLEMENTARY PENSION COMPANIES

As the funds of pension management companies, so the funds of supplementary pension companies are exposed mainly to market risks. The SPC funds sector is highly concentrated – as much as 96% of assets are invested in four funds. Market risk in these funds is relatively low owing to the conservative structure of these funds' investments. VaR at a 99% probability level and a time horizon of 10 days does not exceed 1.3% of assets in any of these funds.

Portfolios of certain other contribution funds investing more in shares and units are much riskier.

Table 9 Risk exposure of contribution funds of supplementary pension companies

	Lower quartile	Median	Upper quartile	Asset-weighted average
Equity risk	0.0	0.1	9.5	0.4
Interest Rate Risk	0.0	0.6	3.9	0.6
Foreign Exchange Risk	0.0	0.0	1.9	0.1
Total risk	0.0	1.2	8.3	0.9
Equity risk to portfolio of shares	10.1	18.3	21.2	17.6
Interest rate risk to portfolio of debt securities	0.4	1.2	4.6	1.0

Source: NBS, REUTERS, BLOOMBERG, own calculations.
Values in the table give VaR (on the significance level of 99 % assuming a 10-day possession of an unchanged portfolio) to NAV (lines 1 to 4), or to portfolio of shares (line 5) or debt securities (line 6).

Although market risk to which SPC funds are exposed increased in the course of the second half of 2008, this increase was caused by growing volatility on financial markets. However, foreign exchange position (excluding positions in euro) increased just moderately (from 1.0% to 1.1% of assets) and the proportion of shares and units to net asset value even decreased (from 3.2% to 2.4%).

Payment funds keep almost all their assets in current accounts or time accounts.

Along with market risks, SPC funds are also exposed to credit risk. Credit risk of debt securities in the portfolios of these funds was assessed using a simple sensitivity test. Each security was allotted a probability of default on the basis of its external rating. Loss in neither fund exceeded 0.3% (0.5%) of net asset value when considering a double or triple increase in this default rate.

6.5 COLLECTIVE INVESTMENT

The development of riskiness of investments in mutual funds was largely affected by a considerable increase in volatility, on stock markets in particular. On the other hand, approximately two thirds of the total volume of assets in collective investment funds were still invested in funds with a VaR of less than 1% of net asset value (with a 99% probability level and a 10-day time horizon). This concerned mainly money market funds but also various bond funds and other funds. Risk was low also in some equity funds that sold off all shares from their portfolios during the crisis. On the other hand, risk of loss significantly increased in funds that continued to keep a considerable proportion of shares or did not close their new foreign exchange positions. VaR was at the level of 10% to 40% of NAV in several funds and it nearly tripled in these funds during the second year of 2008. The proportion of assets invested in shares and units to total assets invested in collective investment funds during the second half of the year fell slightly from 15.1% to 13.7%. Credit risk remained insignificant due to a very short duration of funds' portfolios (including bond portfolios).

Money market funds and bond funds were exposed to interest rate risk as well but rather from a long-term point of view. They recorded a decline in interest income after another decrease in the ECB base rate. This loss, however, would be insignificant compared to risks in other funds, not exceeding 1% of NAV given a decline in the ECB rate by 1.1 p.p. Moreover these funds are also exposed to credit risk, particularly in the case of debt securities. Bond funds are affected the most. If the probabilities of default assigned to particular rating grades doubled or tripled, loss would constitute 0.2% (0.5%) of net asset value.

Table 10 Exposure of mutual funds to risks (%)

	VaR 0% – 1% NAV	VaR 1% – 3% NAV	VaR 3% – 6% NAV	VaR 6% – 8% NAV	VaR 8% – 15% NAV	VaR 15% – 40% NAV	Share of fund type in total assets
Equity	32	.	.	.	26	42	3
Bond	24	58	18	.	.	.	12
Money	100	.	.	.	.	.	49
Funds of funds	3	8	59	26	1	3	9
Mixed	10	44	19	16	3	8	9
Closed	.	39	61	.	.	.	1
Special	48	.	39	.	11	2	4
Other	94	.	.	.	.	6	13
Total Dec 2008	68	12	11	4	2	3	–
Total June 2008	69	25	6	.	.	.	–
Total Dec 2007	64	21	10	1	4	.	–

Source: NBS, REUTERS, BLOOMBERG, own calculations.
Note: Shares of mutual funds NAV with a corresponding VaR to total NAV in a given group of funds.

CHAPTER 7

MACRO STRESS TESTING

7

7 MACRO STRESS TESTING

In this part we are concerned with stress testing of individual parts of the financial sector in two scenarios of crisis in case of its negative development. Although these scenarios – the second, extreme, scenario in particular – assume that the situation will deteriorate much more than is foreseen in current predictions, they need to be taken into account in risk assessment. Both scenarios are based on a slowdown in economic growth, an increase in corporate and household default rates, further decrease in interest rates, fall in asset prices and weakening of other currencies against euro. Loss estimates indicate that several banks will not be able to meet capital requirements without increasing their capital. Corporate credit risk would cause the greatest losses in banks. Solvency would decrease especially in banks with lower coverage of capital requirement and higher exposure against sectors that are more sensitive to deterioration in economic situation abroad. If we take into account the possibility that capital will be increased using profit made in 2008, one bank is particularly vulnerable to the scenarios' impact. This bank may also face liquidity problems since it reported the lowest liquidity ratio as at 31 December 2008, below the statutory threshold.

Pension funds and mutual funds would be affected particularly by a fall in stock markets, further retarding their performance. Due to a relatively high share of money market mutual funds and bond funds of total mutual funds assets, approximately two thirds of investments in mutual funds would not record loss exceeding 5% of assets.

7.1 DESCRIPTION OF USED STRESS SCENARIOS

In the context of the current economic crisis it is difficult to evaluate its possible impact on Slovak economy. Therefore in this part we are trying to assess the possible impact on the Slovak financial sector of two scenarios that can occur if the situation develops negatively. Less favourable scenarios of development in case of shocks were also simulated due to deterioration in macroeconomic forecasts. The first scenario assumes that the crisis will have a milder impact with a relatively quick recuperation while the second version would have a relatively extreme and long-term influence on domestic economy.

Both scenarios were compiled using NBS forecast for the year 2009. This forecast states that infla-

Table 11 Stress scenario setting (%)

		Moderate version	Extreme version
GDP growth		- 4.3	- 7.8
Inflation		0.1	- 4.7
Unemployment rate		16.6	21
ECB rate		0.5	0.5
Fall in stock markets		40	70
Strengthening of euro against other currencies		10 resp. 20	20 resp. 40
Defaulted loans – households		5.3	6.2
Corporate loan default rate	Insensitive sectors	2	5
	Less sensitive sectors	7	15
	Sensitive sectors	15	30
Default rate of debt securities in particular rating grades		Double increase	Triple increase

Source: NBS, own calculations.
Note: Values represent a simulated status of indicators as at December 2009. Scenarios assume a gradual deterioration in the current values of indicators in the course of the year.

tion rate will have fallen to 2.4%, GDP growth to 2.1% and unemployment increased to 10.5% as at the end of 2009. Thus both scenarios assume a decline in economic growth leading to a fall in the inflation rate to the extent where, in the extreme version, it will change into a relatively significant deflation (inflation influenced by demand). Both scenarios also assume that the ECB will respond to this situation by a gradual decrease in its base interest rate to as little as 0.5%.

Credit spread value (modelled by the iTraxx Europe Senior Financial 5Y index) will double compared to December 2008. There will be a considerable fall in economic sentiment, a decline in investments and growth in unemployment. Loan market will be hit by a severe decline in both corporate and household demand for new loans as well as by stricter credit standards. Defaulted loans in the retail sector will increase in volume. Default rates will increase in the corporate sector depending on particular branches' sensitivity to the economic cycle. Asset value will fall considerably on the real estate market as well as on the stock market. Lower real property prices will effect a decrease in demand for new loans due to expectations of a further decline, as well as a decrease in the value of guarantees for existing loans. Despite the decreased interest rates in stress scenarios we assume that euro will strengthen against other currencies. In both scenarios, owing to higher volatility, euro will strengthen vis-à-vis Central and Eastern European currencies twice more than vis-à-vis the currencies of Great Britain, USA, Canada, Japan, Switzerland and Scandinavia.

7.2 STRESS TESTING RESULTS

Banks

The banking sector would suffer from losses amounting to 1.1% of assets (16% of own funds) in the more moderate version of the above macroeconomic scenario, or as much as 2.1% of assets (32% of own funds) in its extreme version. Value of own funds fell below the capital requirement in six banks in the moderate version. If, however, we took into account profits made in 2008 (i.e. this profit would not be paid in dividends but used to increase own funds in its entirety), the value of own funds would fall below capital requirement in only one bank. In the extreme version, value of own funds would fall below capital requirement in eight banks.

The greatest share of losses that banks would suffer from due to the above macroeconomic sce-

Table 12 Impact of macroeconomic scenarios (%)

	Scenario 1				Scenario 2			
	Asset--weighted average	Lower quartile	Median	Upper quartile	Asset--weighted average	Lower quartile	Median	Upper quartile
Banks	1.1	0.6	1.2	1.6	2.1	1.6	1.9	3.8
Insurance Companies	1.1	0.2	0.9	1.7	2.1	0.2	1.4	2.8
Pension funds	4.3	0.6	3.2	4.3	7.9	1.3	6.2	8.0
of which: conservative	0.3	0.0	0.1	0.3	0.7	0.2	0.3	0.5
balanced	3.5	2.7	3.2	4.1	6.8	5.3	6.2	7.7
growth	4.9	3.8	4.4	4.9	8.9	6.9	7.9	8.6
Supplementary pension funds	1.7	0.1	0.7	3.8	2.8	0.2	0.9	5.0
Mutual funds	6.7	1.3	11.5	18.2	11.9	2.4	21.1	31.9
of which: equity	26.9	8.5	30.2	42.2	49.1	14.4	56.8	75.5
bond	2.3	0.4	0.1	3.2	4.9	0.3	0.5	6.0
mixed	12.0	5.3	10.2	18.5	21.8	9.5	19.2	32.1
funds of funds	34.7	13.2	23.0	35.3	60.7	22.5	40.2	61.8

Source: NBS, own calculations.
Note: Table shows quartiles of the loss-to-asset ratio in respect of losses due to the application of the respective scenario.

Table 13 Impact of macroeconomic scenarios on the banking sector (%)

		Minimum	Lower quartile	Median	Upper quartile	Maximum
Capital adequacy before stress (excluding profits from 2008)		8.8	10.5	13.3	17.7	47.3
Capital adequacy before stress (including profits from 2008)		9.1	11.8	14.9	19.9	48.3
Moderate version	Credit risk of enterprises	7.2	8.6	11.9	17.7	45.0
	Credit risk of households	8.7	9.9	13.3	17.7	47.3
	Market risks	8.7	9.9	13.3	17.7	47.3
	Total impact	7.0	7.8	11.3	16.1	45.0
Extreme version	Credit risk of enterprises	5.2	6.5	9.6	17.1	43.1
	Credit risk of households	8.4	10.1	12.9	16.7	47.2
	Market risks	8.6	9.9	13.1	17.7	47.3
	Total impact	4.8	5.8	8.5	15.2	43.1

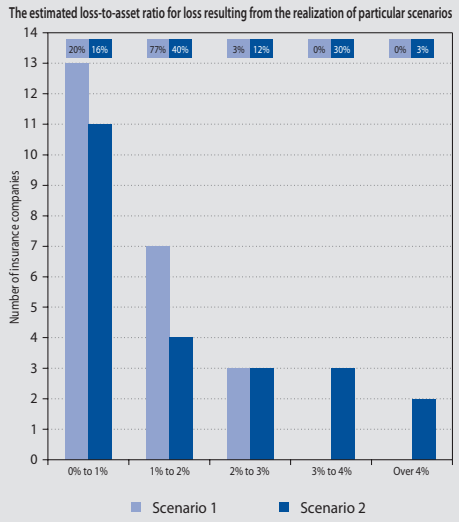
Source: NBS, own calculations.
Note: Table shows quartiles of capital adequacy values.

narios would be caused by deterioration in the corporate loans portfolio. Losses from household loans would be less significant.

Insurance companies

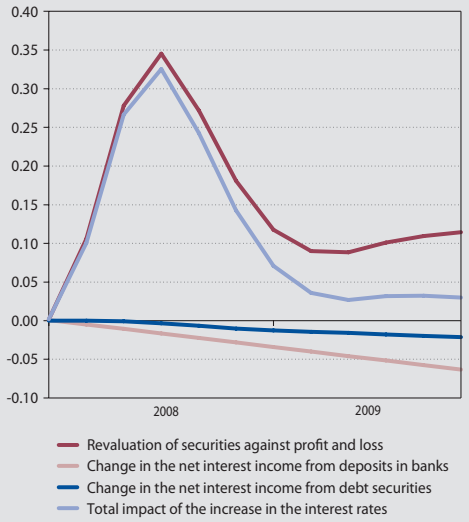
In our assessment of the impact of the above macroeconomic scenarios on the insurance sector we only evaluated market risks and excluded insurance risks due to lack of relevant data. The impacts of the scenarios within the insurance sector are of similar intensity as within the banking sector differing, however, in the representation of particular risks – the insurance sector is exposed especially to a possible fall in the value of shares and units in some insurance companies.

Chart 125 Distribution of the impact of particular scenarios on insurance companies



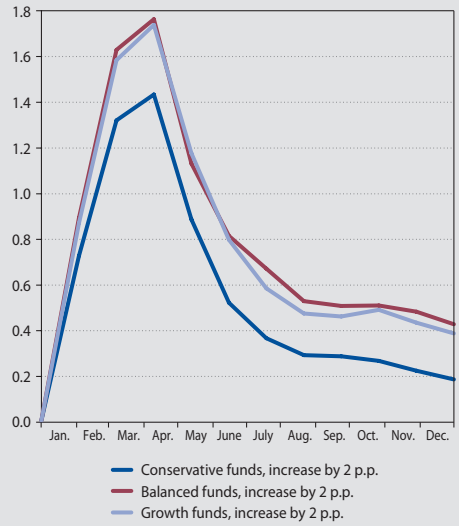
Source: NBS.
Note: The horizontal axis shows the estimated loss-to-asset ratio for loss resulting from the realization of particular scenarios.

Chart 126 Impact of an ECB rate decrease by 1 p.p. and CDS spreads increase on the insurance sector (%)



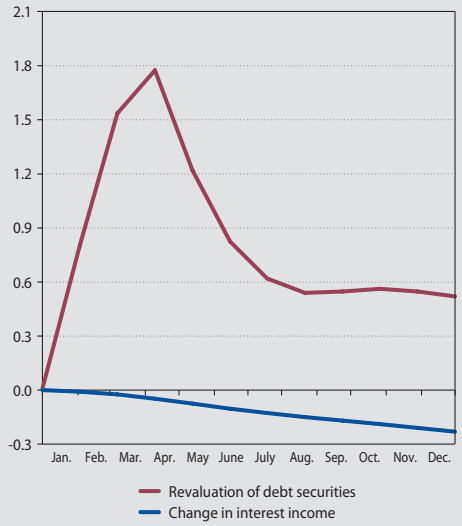
Source: NBS, REUTERS, own calculations.
Note: Data on the vertical axis represent the ratio of profit/loss to asset value less assets invested on behalf of the insured and assets ceded to reinsurers.

Chart 127 Impact of an ECB rate decrease by 1 p.p. and CDS spreads increase on PMC funds (%)



Source: NBS, REUTERS, own calculations.
Note: Data on the vertical axis represent the ratio of profit/loss to asset value. The impact also includes a change in income from bank deposits.

Chart 128 Structure of the impact of an ECB rate decrease by 1 p.p. and a CDS spreads increase on PMC funds (%)



Source: NBS, own calculations.
Note: Data on vertical axis represent the ratio of profit/loss to asset value.

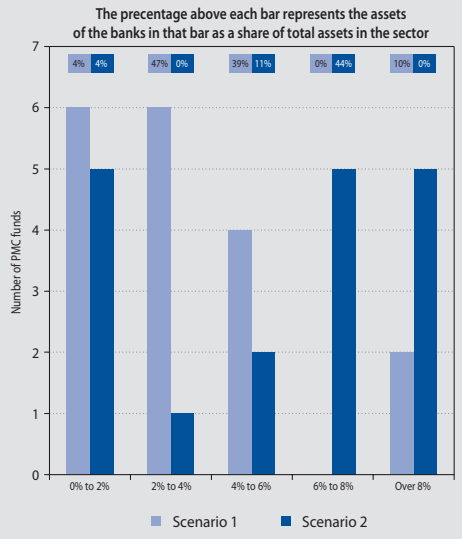
The overall impact of a fall in interest rates would effect a moderate profit amounting to ca 0.03% of assets.

Funds of pension management companies and supplementary pension companies

The above scenarios would have a more significant impact on PMC funds. Net asset value of these funds would decrease by 4.3% in the moderate version and by as much as 7.9% in the extreme version. The largest part of this loss would be caused by a fall in the value of shares. Mild losses in this sector would be recorded, among other reasons, due to foreign exchange risk and credit risk in debt securities. On the contrary, a fall in interest rates would effect a moderate increase in profits, mainly owing to the revaluation of securities to fair value.

The impact would be relatively milder in the supplementary pension saving sector. Loss in the four largest contribution SPC funds in the extreme version of the scenario should not exceed 5.2% of net asset value. Some growth funds would record a notably higher loss due to a high proportion of shares in these funds. However, their share of assets in this sector is low (approximately 2%).

Chart 129 Distribution of the impact of particular scenarios on PMC funds

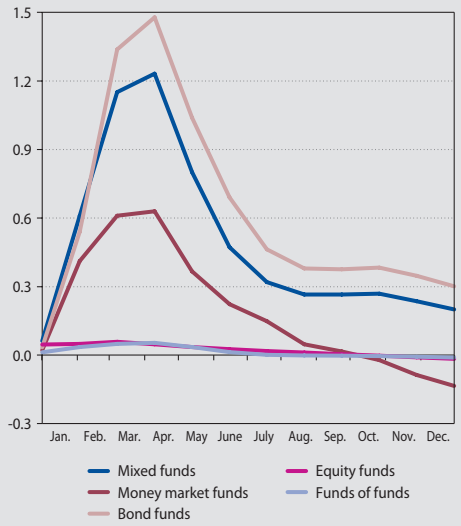


Source: NBS.
Note: The horizontal axis shows the estimated loss-to-asset ratio for losses resulting from the realization of particular scenarios.

Mutual funds

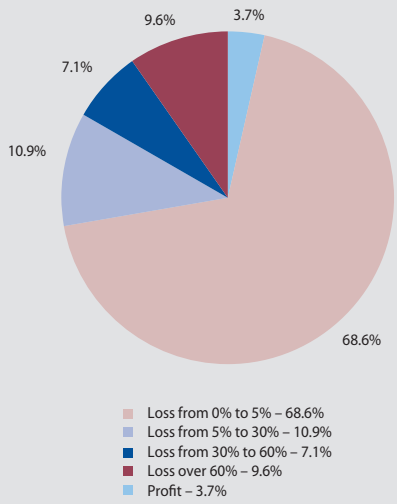
The above stress scenarios would have a significant impact on the depreciation of approxi-

Chart 130 Impact of an ECB rate decrease by 1 p.p. and CDS spreads increase on mutual funds (%)



Source: NBS, REUTERS, own calculations.
Note: Data on vertical axis represent the ratio of profit/loss to asset value. The impact also includes a change in income from bank deposits.

Chart 131 Distribution of the extreme scenario's impact on the collective investment sector



Source: NBS, REUTERS, own calculations.
Note: Data in the chart represent the funds' market share. Losses were calculated as losses that would occur in mutual funds 1 year after the application of the extreme version of the scenario and are expressed as a share of NAV.

mately one quarter of assets invested in mutual funds. Particularly in several equity funds and funds of funds the asset value would decrease by more than 50% in the extreme version of the scenario.

In some funds investing in securities denominated in foreign currencies the scenario would effect, among other things, losses due to a simulated strengthening of euro. The overall impact of foreign exchange risk on the collective investment sector would constitute loss amounting to approximately 2.7% of net asset value in the extreme scenario. The expected decrease in interest rates would not have a significant impact on asset value. However, even these funds would record moderate loss owing to a low duration of assets in money market mutual funds.

CHAPTER 8

FINANCIAL MARKET INFRASTRUCTURE

8

8 FINANCIAL MARKET INFRASTRUCTURE

8.1 DEPOSIT PROTECTION FUND

The Act No. 421/2008 Coll. amending the Deposit Protection Act, effective as of 1.11.2008, introduced full protection of customer bank deposits, i.e. without limit and without depositors' participation in the protection of deposits entrusted to banks by citizens and other eligible persons provided that further legal conditions for the protection are fulfilled.

The second amendment to the Deposit Protection Act by means of the Act No. 552/2008 Coll. created legislative conditions for a voluntary participation in this scheme of branches of foreign banks that accept deposits in the Slovak Republic on the basis of a single banking licence. Such branches of foreign banks may participate in the system of deposit protection in the Slovak Republic in order to ensure higher deposit protection within the extent to which deposit protection as regulated by the rules of the system of deposit protection in the Slovak Republic exceeds the total highest possible amount of compensation for inaccessible protected deposits as per deposit protection system rules in the member state where the respective foreign bank is registered.

Branches of foreign banks that officially requested voluntary participation in the Deposit Protection Fund in the form of supplementary deposit protection included: J&T Banka, branch of a foreign bank and BRE Bank SA, branch of foreign bank mBank in the Slovak Republic. Following the above legislative amendments of the Deposit Protection Act and a consideration by the Deposit Protection Fund Council, a General agreement on a future voluntary inclusion of a branch of a foreign bank in the Slovak system of bank deposit protection was concluded on a preliminary basis with both branches of foreign banks.

The amount of annual contribution of banks and branches of foreign banks for the year 2008 was set by the Fund Council on the basis of a prior approval of the Bank Board of Národná banka Slovenska at the level of 0.2% of the value of protected deposits. A total of 16 banks within the Slovak banking sector contributed to the Deposit Protection Fund in the second half of 2008. Banks deposited in the Fund annual contributions worth EUR 37.24 million in 2008, which represents 107.9% of the planned volume.

In 2008 DPF continued to assess the compensation payment on an on-going basis, while technically carrying out the compensation payment in Devín banka, a.s., for inaccessible deposits whose payment was requested by depositors within the period stipulated in Article 10 (9) of the Deposit Protection Act; hereditary proceedings comprise the majority of cases. As at 31 December 2008, the Deposit Protection Fund had paid compensation to depositors in Devín banka, a.s. numbering 125,452 a total amount of EUR 385.54 million, of which one compensation was paid in 2008 in the amount of EUR 1.92.

In the bankruptcy proceeding on the assets of bankrupt AG Banka, the bankrupt's assets were liquidated and final report of the trustee in bankruptcy was drafted. Outstanding are legal proceedings relating to claims to assets in bankruptcy and the Fund's claim amounts to EUR 57.9 million.

In the bankruptcy proceeding on assets of bankrupt Slovenská kreditná banka there are outstanding legal proceedings concerning the bankrupt's claims against its debtors. The amount of Fund's claim against the bankrupt is EUR 143.33 million. At present the bankrupt's remaining assets are being sold, namely movable items still located on bank premises that are still in use, and remaining claims whose value is updated by an expert opinion.

In the bankruptcy proceedings on the assets of bankrupt Devín banka, this bankrupt's assets are currently being liquidated. Fund's claim amounted to EUR 385.56 million as at 31 December 2008.

Bankruptcy proceedings on the assets of bankrupt Dopravná banka were cancelled by the res-

olution of Regional Court in Banská Bystrica that became effective on 5.7.2008. Total fulfilment in favour of DPF amounted to EUR 26.2 million, i.e. 35.5% of the DPF's claim that amounted to EUR 73.79 million in these bankruptcy proceedings.

So far 18 lawsuits have been rightfully concluded in favour of the Fund in respect of compensations for inaccessible deposits and in 2008 the Fund was obliged to fulfil in one case.

Five negotiations of the DPF Council and 4 negotiations of the Fund's Supervisory Board were held in 2008.

The company KPMG Slovensko, spol. s r.o. was selected for executing the financial statements audit as at 31 December 2008, based on a prior consent of the DPF Supervisory Board, following which the Fund concluded a contract concerning the execution of audit and a preliminary audit was executed.

DPF prepared and carried out an update of the System of the DPF for the payment of compensation for inaccessible deposits in bank in compliance with valid legal regulations relating to euro changeover in the Slovak Republic prior to the changeover date in order to prepare the System for the payment of compensations in euro along with the domestic currency in any period. At the same time an update was executed in the DPF system in relation with the amendment of the Deposit Protection Act.

Within the framework of its international activities, the Fund cooperates mainly within the European Forum of Deposit Insurers (EFDI) on analyzing and preparing changes in the European directive on the deposit protection system. Five workgroups were formed within EFDI which processed four out of a total of six papers on selected areas of deposit protection. Slovakia participates in studies dealing with the improvement of depositors' knowledge and the payment of compensations.

8.2 INVESTMENT GUARANTEE FUND

The Investment Guarantee Fund was discharging its legally stipulated activities in 2008 and its bodies convened on due dates.

The Supervisory Board stated in all of its resolutions pertaining to the activities and economic management of IGF that the fund's activities are in compliance with generally binding legal regulations and that its economic management was efficient and in line with the set budget.

There were no incidents in the sector in 2008 in respect of inaccessibility of customer assets and, therefore, no instances of paying legally stipulated compensations for inaccessible customer assets. Total number of entities participating in customer protection as at 31 December 2008 was 36. The volume of annual contributions received from entities participating in customer protection as at 31 December 2008 was EUR 363.37 thousand. Cumulative value of the reserve fund for payment of compensations was EUR 1.85 million as at 31 December 2008.

The volume of entry contributions received from new entities was EUR 2.89 thousand. Interest income from current and term accounts in NBS amounted to EUR 37.97 thousand as at 31 December 2008. Income from government bonds and capital income as at 31 December 2008 (AUV) was EUR 38.33 thousand.

The volume of customer assets as at 31 December 2008 was EUR 565.16 million. Average number of customers to whom the above amount of customer assets as at 31 December 2008 is related was EUR 120,957. The contingent amount of compensation for inaccessible customer assets was EUR 92.94 million as at 31 December 2008.
In the course of 2008 the Investment Guarantee Fund was covering an average of 70% of entities participating in customer protection (individually) with the value of the cumulative fund. The average contingent amount of compensation for inaccessible customer assets in the sector was EUR 128.67 thousand.

8.3 BRATISLAVA STOCK EXCHANGE

There were registered 191 issues of equities and unit certificates and 136 bond issues on the Bratislava Stock Exchange as at the end of December 2008. For the whole of 2008 BSE registered on regulated free market two issues of equities worth a total of EUR 19.12 million (in February and October) and discontinued trading in 36 is-

sues of equities worth EUR 167.68 million. Thus compared to December 2007 the number of registered issues fell by 27.9% with a simultaneous decline in the volume of financial assets by EUR 1.41 billion.

As for bonds, 27 new issues of mortgage bonds were registered on BSE markets in 2008 with a total volume of EUR 0.4 billion and CZK 800 million. Issues of government bonds that had been already registered were increased by tranches with a total amount of EUR 1.32 billion. One issue of treasury bills worth EUR 1.5 billion appeared on the listed main market, 5 issues of corporate bonds were registered (EUR 85.19 million), as well as 4 issues of bank bonds (BGN 50 million and EUR 20.25 million) and one bond issue worth EUR 7.43 million. 16 mortgage bond issues and 4 bond issues worth EUR 0.36 billion and BGN 20 million, 3 issues of government bonds worth EUR 1.58 billion and 2 issues of corporate bonds (EUR 16.6 million) expired during this period.

Total market capitalization of equity securities and bonds registered on BSE markets totalled EUR 20.6 billion as at 31 December 2008, which represents an increase by 1.89% (EUR 0.38 billion) compared to the end of the previous year. Market capitalization of equities and unit certificates as at the end of 2008 recorded a year-on-year decline by 26.7% to EUR 3.88 billion. Market capitalization of bonds, on the contrary, recorded a year-on-year increase by 12% to EUR 16.72 billion.

A total of 4,425 transactions were carried out during 2008 with a total amount of EUR 24.64 billion which compared to 2007 represents a decline by 43.9% as to the number of transactions and an increase by 110.4% as to their volume. More than a half of transactions (52%) were comprised of bond transactions. The volume of traded bonds (EUR 264.64 billion) constituted as much as 99.94% of the volume of all transactions as at the end of 2008, making the volume of traded equity securities negligible. Direct transactions (98.5% of all transactions together) predominated. Repo transactions (equities transactions only; the entire volume in October 2008) worth EUR 105.72 thousand were executed in 2008.

Development of the Slovak Equity Index (SAX) was more volatile in 2008 than in the previous years and this volatility became more evident especially in the second half of 2008. It came to its lowest value in December 2008 (346.32 points), falling by 117.97 points against September 2008 (464.29 points). SAX reached its highest value for the year 2008 in March (467.08 points). Compared to the end of 2007, the value of SAX fell by 86.47 points as at the end of 2008.

8.4 CENTRAL SECURITIES DEPOSITORY

In 2008 the Central Securities Depository executed a total of 16,498 transfers of securities in a total volume of EUR 53.91 billion. Compared to the year 2007 this represents a decrease in the number of transfers by 44.4% but the volume of transactions increased 2.75 times the 2007 value. Most transfers, both in terms of their number (80.7%) and the volume of securities (93.48%) comprised securities transfers without financial settlement.

Total volume of book-entry securities in nominal value amounted to EUR 57.74 billion as at the end of 2008, numbering 3,332 issues. The largest share of this volume was that of equities (66.92%, i.e. EUR 38.64 billion) and bonds (29.75% i.e. EUR 17.18 billion). In a year-on-year comparison the volume of book-entry securities increased by 66.5% (EUR 23.06 billion), which was largely a consequence of an increase in the volume of equities (by 117.2%, i.e. by EUR 20.85 billion), other securities (by 15063%, i.e. EUR 1.5 billion) and bonds (by 4.3% i.e. by EUR 0.7 billion). A slight decrease was observed in cooperative certificates and the volume of unit certificates did not undergo any year-on-year changes.

During 2008 CSD made transfers of securities with financial settlement through the clearing and settlement system in a total market value of EUR 3.52 billion, which means a year-on-year decline by EUR 4.39 billion. The volume of transferred securities without financial settlement expressed in nominal value constituted EUR 50.39 billion for the year 2008, which represents an increase by EUR 43.91 billion compared to 2007.

204 new issues of book-entry securities with a total nominal value of EUR 25.9 billion were registered in the CSD in 2008, out of which 127 issues of equities (EUR 21.3 billion), 74 bond issues

(EUR 3.1 billion), 2 issues of cooperative certificates and 1 issue of other securities (worth EUR 1.5 billion in October). 154 issues of book-entry securities were cancelled during this period including issues that changed to certificated securities, in a total amount of EUR 2.85 billion. This comprised 71 issues of equities (EUR 0.36 billion), 62 bond issues (EUR 2.47 billion) and 26 issues of cooperative certificates (EUR 0.017 billion).

8.5 SLOVAK INSURERS BUREAU

The Slovak Insurers Bureau (SIB) is an association of insurance companies authorized to provide third party liability insurance in respect of the use of motor vehicles in Slovakia. At present it consists of 9 members.

The Insurance Guarantee Fund comprises contributions by the Bureau's members, extraordinary contributions, and premium defined in the Act on motor third party liability insurance. The annual contribution is determined by a percentage share determined by the number of insured motor vehicles for the preceding calendar quarter.

In cross-border insurance whose importance fell significantly with Slovakia's accession to the European Union, gross premium written amounted to EUR 7.6 thousand and gross claim costs to EUR 2.4 thousand as at the end of 2008. The development in third party liability insurance in respect of the use of motor vehicles is stable in the Slovak Insurers Bureau. Claims incurred remain at a low level although they recorded a 4% increase compared to 2007, having come up to EUR 3,999 thousand in 2008. Claims incurred in the former statutory motor hull insurance decreased by more than 7% in the course of 2008, coming to EUR 8,889 thousand. Gross technical provision amounting to EUR 147,690 thousand of which EUR 124,644 thousand pertains to technical provision for the former statutory motor hull insurance is covered by claims against member insurance companies in the amount of EUR 94,024 thousand. The rest is covered by claims against reinsurers and term deposits.

ANNEXES

9 ANNEXES

9.1 INFORMATION ABOUT THE STRUCTURE OF FINANCIAL MARKET

9.1.1 NUMBER OF FINANCIAL INSTITUTIONS

Table 14 Number of financial institutions

	Number of institutions as at December 31 2008	Number of institutions as at December 31 2007	Change
Number of banks in the SR	17	16	+1
Building societies	3	3	0
Banks holding mortgage license	9	8	+1
Other banks	5	5	0
Number of branches of foreign banks in the SR	11[1)]	10	+1
On the basis of an NBS license	0	1	-1
On the single banking passport principle	11	9	+2
of which: branches of foreign banks holding mortgage license	0	1	-1
Number of branches of foreign banks contributing to Deposit Protection Fund	0	2	-2
Number of foreign bank representative offices in the SR	7	9	-2
Number of branches (organizational units) of banks in the SR	857	738	+119
Number of lower organizational units in the SR	401	431	-30
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	252	190	+62
of which: banks	231	178	+53
electronic money institutions	12	6	+6
foreign financial institutions	7	4	+3
credit unions	2	2	0
Slovak banks providing free cross-border banking services abroad	2	1	+1
Number of employees of banks and branches of foreign banks	20,598	19,779	+819
Number of insurance companies in the SR	23	23	0
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	13	+1
Insurance companies providing services on the basis of the freedom to provide services	419	370	+49
of which: without establishing a branch	406	360	+46
via a branch	13	10	+3
Number of insurance companies in the SR providing statutory automobile liability insurance	9	9	0

Table 14 Number of financial institutions – continuation

	Number of institutions as at December 31 2008	Number of institutions as at December 31 2007	Change
Number of pension fund management companies	6	6	0
Number of supplementary pension companies	5	5	0
Number of supplementary pension insurance companies	0	0	0
Number of domestic asset management companies in the SR	10	10	0
of which: asset management companies with an extended license under Art. 3 (3) of Act on Collective Investment (ACI)	5	6	-1
Number of domestic mutual funds:	114	118	-4
Open mutual funds	68	72	-4
Closed mutual funds	41	41	0
Special mutual funds	5	5	0
Number of foreign asset management companies and foreign entities of collective investment operating in the SR on the basis of a license under Art. 75 of the ACI:	4	2	+2
of which: via a branch in the SR	2	0	+2
without establishing a branch	2	2	0
Number of foreign asset management companies and foreign entities of collective investment operating in the SR on the basis of a single European passport:	46	43	+3
of which: with establishing branch of foreign asset management companies according to Section 28 of ACI	2	2	0
foreign asset management companies without establishing branch according to Section 29 of ACI	12	10	+2
European Funds according to Section 61 – foreign asset management companies	13	11	+2
– foreign investment companies	19	19	0
within which: number of foreign mutual funds and sub-funds of foreign investment companies	816	617	+199
Number of foreign asset management companies providing services according to Section 3 (3) of ACI	11	11	0
Number of investment firms	18[2)]	32	-14
Banks and branches of foreign banks – securities brokers with license from NBS	13	13	0
Branches of foreign banks – securities brokers with license from domestic authority	6	6	0
Number of foreign entities operating in the SR as investment firms	890	582	+308
of which: via branch in the SR	5	3	+2
without establishing a branch	885	579	+306
Number of Slovak investment firms providing services abroad	7	7	0
Number of investment service brokers in the SR:	978	937	+41
of which: juristic persons	73	61	+12
natural persons	905	876	+29
Number of issuers of securities admitted to trading on regulated market	144	173	-29

Table 14 Number of financial institutions – continuation

	Number of institutions as at December 31 2008	Number of institutions as at December 31 2007	Change
Number of offerors of assets (according to Art. 126 and following of Securities Act No. 566/2001 Coll.)	4	4	0

Source: NBS.
1) By 31 December 2008 the following branches of foreign banks did not start to carry out banking activities: UNIBON, spořitelní a úvěrní družstvo, organizational unit of foreign person and Oberbank AG, branch of foreign bank.
2) Company SFM Group, o. c. p. a. s., did not carry out any activity by 31.12.2008, it started to carry out activity by 15. 1. 2009.

Banking sector and investment firms

Národná banka Slovenska issued decisions granting prior approvals to a return of the license to provide investment services to the companies BHS Slovakia, o. c. p., a. s. (21 February 2008) and J&T SECURITIES (SLOVAKIA), o. c. p., a. s. (25 March 2008).

Národná banka Slovenska issued decisions granting the license to provide investment services to the companies Blank Asset Managers, o. c. p., a. s. (28 April 2008) and SFM Group, o. c. p., a. s. (19 December 2008).

Národná banka Slovenska granted prior approvals to use internal rating-based approach for credit risk to Slovenská sporiteľňa, a. s. (28 July 2008) and to Tatra banka, a. s. (29 December 2008).

On 17 September 2008, Národná banka Slovenska granted its prior approval to the merger of Citibank Europe plc., Ireland and Citibank (Slovakia) a. s.

Collective investment sector

Národná banka Slovenska granted 9 licences to create an open-ended mutual fund to the companies Asset Management Slovenskej sporiteľne, správ. spol., a. s. (3 open-ended mutual funds), ISTRO ASSET MANAGEMENT, správ. spol., a. s. (1 open-ended mutual fund), Tatra Asset Management, správ. spol., a. s. (2 open-ended mutual funds), VÚB Asset Management, správ. spol., a. s. (3 open-ended mutual funds).

In March 2008, Národná banka Slovenska issued Decision on a change in the license for the establishment and activity of the stock exchange which expanded the scope of business of the Bratislava Stock Exchange, a. s. by the possibility to organize a multilateral trading system.

Národná banka Slovenska decided in April 2008 on a change in the license for the establishment and activity of the central depository.

Two prior approvals to a CSD membership were issued in 2008 (Patria Finance, a. s., Citibank Europe plc.).

Insurance sector

On 25 January 2008, based on a request, the company Wüstenrot poisťovňa, a. s. was granted approval to transfer part of its life insurance portfolio belonging to its branch Wüstenrot pojišťovna, pobočka pro Českou republiku, to the company Wüstenrot, životní pojišťovna, a. s.

On 2 May 2008, based on a request, the company Poštová banka, a. s. was granted prior approval for acquiring a share of capital of the company Poisťovňa TATRA a. s. for the first time exceeding a 50 % share on the insurance company's capital.

On 17 June, prior approval was granted to a merger of the companies POISŤOVŇA HDI-GERLING Slovensko, a. s. and HDI Hannover Versicherung Aktiengesellschaft, Austria. Through this merger the company HDI Hannover Versicherung Aktiengesellschaft, Austria will become legal successor of the company POISŤOVŇA HDI-GERLING Slovensko, a. s.

On 21 August 2008, prior approval was issued to a merger of the companies Generali Poisťovňa, a. s. and Česká poisťovňa – Slovensko, akciová spoločnosť, abbreviation: ČPS, a. s. Through this

merger the company Generali Poisťovňa, a. s. became legal successor of the company Česká poisťovňa – Slovensko, akciová spoločnosť, abbreviation: ČPS, a. s.

On 28 August 2008, based on a request, the company WIENER STÄDTISCHE Versicherung AG Vienna Insurance Group was granted prior approval to acquire a share of capital of the company Poisťovňa Slovenskej sporiteľne, a. s. for the first time exceeding a 50 % share on the insurance company's capital.

On 25 November 2008, prior approval was granted to a merger of the companies KOOPERATIVA poisťovňa, a. s. Vienna Insurance Group and I.V. s. r. o. Trough this merger, the company KOOPERATIVA poisťovňa, a. s. Vienna Insurance Group will become legal successor of the company I.V. s. r. o.

Pension saving sector

In the area of retirement pension saving, Národná banka Slovenska granted on 18 January 2008 its prior approval to the company ČSOB, d. s. s., a. s., to acquire a share of capital and voting rights of the pension funds management company ČSOB d. s. s., a. s. in the amount of 66 % so that ČSOB, d. s. s., a. s. became a subsidiary of the company Československá obchodná banka, a.s.

By its decision of 28 April 2008, Národná banka Slovenska granted its prior approval to the company ČSOB d. s. s., a. s. that ING Bank N.V., branch of a foreign bank, become its depository.

In the area of supplementary pension saving, Národná banka Slovenska by its decision of 17 June 2008 changed the license for the establishment and activity of the supplementary pension funds management company STABILITA, d. d. s., a. s.

9.1.2 Data on the ownership structure of supervised institutions

Table 15 Individual countries' shares in the registered capital of individual types of financial institutions as at 31.12.2008 (%)

	Banks	Insurance companies	Pension fund management companies	Supplementary pension companies	Asset management companies	Investment firms
Slovakia	6.69	8.16	46.99	24.83	72.4	2.29
EU states (excl. SR)	90.93	89.81	53.01	75.17	27.6	95.05
Czech Republic	20.47	0.00	–	–	–	35.20
France	0.40	1.9	–	–	–	0.46
Netherlands	0.88	16.37	–	–	–	0.06
Luxembourg	17.94	0	16.51	41.78	–	20.72
Hungary	2.87	4.17	–	–	–	3.31
Germany	1.23	1.89	–	–	–	–
Austria	25.65	52.64	–	–	–	27.07
Italy	0.08	0	–	–	–	0.09
Portugal	0.09	0	–	–	–	–
United Kingdom	0.05	7.16	–	–	–	0.05
Other	–	5.68	36.50	33.39	27.6	1.07
Countries outside the EU	2.38	2.03	–	–	–	2.59

Source: NBS.
Data in the table represent individual countries' shares in the registered capital of financial institutions according to the prime owner.

9.2 ANALYTICAL DATA

9.2.1 Banks and branches of foreign banks

Table 16 Asset and liability structure of banks and branches of foreign banks in the SR as at 31.12.2008 (volumes in EUR thousands)

	Total volume (EUR thousands)	Share of a foreign currency (%)	y/y change (%)	Share of balance sheet total (%)	CR3 (%)	CR5 (%)	HHI
ASSETS TOTAL (gross)	65,125,644	15	14	100	54	72	1,201
TOTAL LOANS TO CUSTOMERS	31,730,945	22	16	49	53	67	1,136
Loans to retail	12,662,193	3	25	19	63	82	1,607
of which: Loans to households	11,817,290	3	26	18	64	83	1,637
Loans to enterprises	15,026,661	32	14	23	47	67	1,096
Loans to non-banking financial companies	1,916,246	27	-14	3	48	70	1,145
Loans to general government	773,347	30	1	1	88	96	5,873
Loans to non-residents	1,300,555	74	24	2	46	68	1,146
TOTAL INTERBANK MARKET OPERATIONS[1)]	20,371,274	10	23	31	52	74	1,267
of which: Operations with NBS and foreign CB (incl. NBS bills)	14,742,328	0	13	24	56	77	1,396
TOTAL SECURITIES	10,833,135	9	1	16	64	80	1,585
Securities issued by residents	8,820,578	5	-2	14	65	81	1,642
Government bonds	7,120,461	6	3	11	65	81	1,678
Corporate bonds	184,339	12	0	0	75	96	2,322
Bank bonds	846,481	2	1	1	59	80	1,565
Other debt securities	267,130	0	-65	0	100	100	10,000
Asset securities	402,168	0	51	1	78	94	2,282
Securities issued by non-residents	833,872	60	-25	1	74	85	2,393
Debt securities	737,987	59	-26	1	73	84	2,324
of which: issued by banks	433,189	37	-10	1	85	93	3,042
issued by general government	43,256	100	-7	0	95	100	3,281
other issuers	261,543	89	-45	0	71	89	2,311
Asset securities	95,884	68	-15	0	99	100	4,119
of which: issued by banks	20,414	98	2	0	100	100	6,106
other issuers	75,470	60	-18	0	99	100	5,764
Derivatives – positive fair value	908,630	0	41	1	61	81	1,618

Table 16 Asset and liability structure of banks and branches of foreign banks in the SR as at 31.12.2008 (volumes in EUR thousands) – continuation

	Total volume (EUR thousands)	Share of a foreign currency (%)	y/y change (%)	Share of balance sheet total (%)	CR3 (%)	CR5 (%)	HHI
TOTAL LIABILITIES	62,838,154	20	13	100	54	72	1,197
TOTAL DEPOSITS AND LOANS FROM CUSTOMERS	40,668,292	15	16	64	59	74	1,348
of which: deposits insured at the Deposit Protection	23,722,582	8	42	38	63	76	1,605
Deposits and loans accepted from the retail	22,766,235	7	32	36	64	76	1,614
of which: deposits and loans accepted from households	21,198,260	7	34	34	63	76	1,614
Deposits and loans accepted from enterprises	10,267,585	19	-2	16	58	75	1,485
Deposits and loans accepted from fin. co's other than banks	2,448,203	12	-16	4	55	76	1,320
Deposits and loans accepted from general government	3,744,713	19	1	6	66	87	2,219
Deposits and loans accepted from non-residents	1,259,995	63	46	2	57	72	1,665
TOTAL SOURCES FROM BANKS	11,414,088	52	11	18	52	70	1,234
Sources from NBS and foreign issuing banks	70,232	0	-23	0	99	100	9,001
Sources from non-resident banks	10,848,699	54	18	17	54	72	1,298
TOTAL SECURITIES ISSUED	5,483,884	20	23	8	64	78	1,721
Mortgage bonds	3,359,482	27	25	5	73	85	2,254
Bills of exchange	444,375	13	-39	1	86	100	2,737
Other securities issued	243,350	6	-27	0	86	100	3,172
Derivatives – negative fair value	924,569	0	33	1	63	83	1,625
Risk-weighted assets of the banking book[2)]	28,671,792	–	16	46	58	73	1,317
Risk-weighted assets of the trading book[2)]	2,537,997	–	261	4	74	89	2,729
Other risk-weighted assets[2)]	3,152,405	–	8,234	5	58	75	1,448
Own funds	3,828,764	–	21	6	46	65	1,042

Source: NBS.
Note: CR3 is the share of three institutions with the highest volume of the given item in the total amount of that item in the sector. CR5 is the share of five institutions with the highest volume of the given item in the total amount of that item in the sector. HHI is defined as the sum of squares of shares of individual institution in the total volume of the given item. The calculation of these three indicators covers only institutions having a positive value of the given item. In the case of all institutions having an equal share, the HHI value would be 385, were the number of institutions 26. Assets are expressed in the gross value; equality with liabilities is achieved by deducting the value of depreciation changes and provisions.
1) Due to changes in reporting, as of January 1, 2007 the treasury bonds and notes held until maturity were included into operations on interbank market.
2) The amount of risk-balanced assets does not include risk-balanced assets of branches of foreign banks. Both changes were considered when calculating year-on-year change.

Table 17 Revenues and expenditures of banks and branches of foreign banks (costs and earnings in EUR thousands)

	Value (EUR thousands) 31.12.2008	Value (EUR thousands) 31.12.2008	CR3 (%)	CR5 (%)	HHI
(a) TOTAL OPERATING COSTS (b + e + f)	1,229,593	1,119,518	57	71	1,267
(b) Administrative costs (c + d)	1,041,959	939,337	55	70	1,232
(c) Purchased performances	527,351	464,779	54	68	1,216
(d) Staffing costs	514,608	474,558	57	72	1,270
(e) Depreciation/amortization of movable and immovable assets	162,387	153,283	63	75	1,524
(f) Taxes and fees	25,247	26,897	86	91	4,014
(g) GROSS INCOME (h + l)	2,227,746	1,891,038	60	75	1,392
(h) Net interest income (j – i)	1,545,283	1,331,081	58	72	1,320
(i) Interest expenses	1,558,513	1,395,918	42	65	984
(j) Interest income	3,103,796	2,727,000	50	67	1,090
(k) of which: Interest income from securities	485,897	505,577	62	80	1,591
(l) Net non-interest income (m + n + o + p)	682,463	559,957	65	82	1,632
(m) Revenue from shares and ownership interests	22,396	9,029	–	–	–
(n) Net income from fees	456,115	410,157	–	–	–
(o) Net income from trading	285,228	243,564	–	–	–
(p) Other net operating incomes	-81,276	-102,793	–	–	–
(q) NET INCOME (g – a)	998,153	771,521	64	80	1,588
(r) Net creation of provisons and net income from depreciation of recievables	328,105	72,476	–	–	–
(s) Net creation of reserves	816	-5,070	–	–	–
(t) NET PRE-TAX PROFIT (q – r – s)	669,231	704,115	65	83	2,197
(u) Extraordinary profit	0	0	–	–	–
(v) Income tax	160,638	121,452	61	77	1,456
w) NET PROFIT AFTER TAX (t + u – v)	508,593	582,663	66	84	2,505

Source: NBS.
Note: CR3 is the share of three institutions with the highest volume of the given item in the total amount of that item in the sector. CR5 is the share of five institutions with the highest volume of the given item in the total amount of that item in the sector. HHI is defined as the sum of squares of shares of individual institution in the total volume of the given item. The calculation of these three indicators covers only institutions having a positive value of the given item. In the case of all institutions having an equal share, the HHI value would be 385, were the number of institutions 26. Assets are expressed in the gross value; equality with liabilities is achieved by deducting the value of depreciation changes and provisions.

Table 18 Profitability indicators of banks and branches of foreign banks and their distribution in the banking sector (%)

	Denominator-weighted average (31.12.2008)	Denominator weighted average (31.12.2007)	Average weighted by the volume of assets	Mini-mum	Lower quartile	Median	Upper quartile	Maxi-mum
ROA	0.81	1.13	0.81	-15.62	0.39 (8)	0.65 (8)	0.99 (17)	3.06 (67)
ROE (excl. branches)	13.34	19.55	14.56	-67.77	3.87 (9)	8.94 (7)	13.09 (22)	26.57 (77)
Cost-to-income ratio	55.19	59.20	54.44	-659.84	47.49 (25)	56.12 (47)	70.87 (17)	258.89 (11)
Relative significance of interest incomes	69.37	70.39	69.21	-25.30	62.23 (21)	71.83 (58)	81.77 (10)	101.97 (11)
Net interest spread	2.53	2.27	2.61	-0.12	0.66 (4)	2.02 (17)	2.89 (20)	14.95 (59)
Retail	5.19	4.95	5.92	-2.27	2.86 (12)	3.25 (21)	6.69 (39)	268.97 (27)
corporates	1.67	2.76	1.37	-36.41	2.05 (12)	3.21 (30)	3.89 (23)	5.29 (33)
Financial companies	7.39	0.78	26.87	-4.72	0.89 (41)	1.27 (22)	2.59 (19)	599.40 (12)
Banks including NBS and bills	-0.31	0.03	-0.33	-4.79	-1.21 (19)	-0.35 (25)	0.01 (31)	2.64 (24)
Net interest margin	2.62	2.36	2.70	0.00	1.16 (5)	2.34 (19)	3.03 (31)	14.86 (44)

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

Table 19 Risk and capital adequacy indicators of banks and branches of foreign banks and their distribution in the banking sector (%)

	Denominator-weighted average (31.12.2008)	Denominator-weighted average (31.12.2007)	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 customers	3.21	2.77	3.27	0.00	0.00 (7)	1.99 (45)	6.05 (28)	13.98 (20)	–
Retail (share in loans to retail)	4.03	3.59	3.97	0.00	0.00 (7)	2.83 (41)	6.11 (16)	18.02 (36)	–
Corporates (share in loans to corporates)	3.20	2.86	2.99	0.00	0.00 (10)	1.32 (21)	3.96 (49)	13.91 (20)	–
Financial companies (share in loans to financial companies)	0.03	0.04	0.11	0.00	0.00 (44)	0.00 (0)	0.00 (0)	0.97 (49)	–
Share of provisions in the volume of defaulted loans to customers	91.36	93.30	105.45	44.62	66.60 (8)	82.52 (33)	110.28 (15)	304.24 (37)	–
Large asset exposure (weighted) / own funds (excl. branches)	177.84	131.13	190.58	0.00	128.92 (24)	212.54 (47)	258.85 (14)	451.91 (8)	0
Large asset exposure within groups (number of breaches)	–	–	–	–	–	–	–	–	5
Share of claimable value of securities in the total volume of defaulted loans to customers	29.18	36.15	32.91	0.00	9.11 (16)	37.31 (40)	48.32 (25)	97.94 (12)	–
FOREIGN EXCHANGE RISK									
Forex open balance-sheet position / own funds (excl. branches)	-60.21	-8.02	-75.05	-534.20	-25.09 (54)	0.00 (0)	25.96 (8)	203.21 (25)	–
Forex open off-balance-sheet position / own funds (excl. branches)	25.99	8.14	38.12	-254.82	-95.44 (15)	-0.85 (27)	4.64 (5)	279.96 (47)	–
Total forex open position / own funds (excl. branches)	-34.22	0.12	-36.93	-272.09	-53.47 (25)	-0.63 (39)	0.63 (5)	132.80 (24)	–
Total forex open position / own funds (excl. branches)	-58.92	-37.06	–	–	–	–	–	–	–
INTEREST RATE RISK									
Total interest-rate open position up to 1 month / own funds (excl. branches)	-126.17	-173.28	-131.63	-547.23	-322.79 (36)	-149.47 (11)	-30.66 (5)	296.73 (37)	–
Total interest-rate open position up to 1 year / own funds (excl. branches)	-64.57	-78.93	-65.51	-392.94	-100.75 (40)	-33.05 (13)	7.95 (29)	99.98 (8)	–
Total interest-rate open position up to 5 years / own funds (excl. branches)	27.62	6.93	28.60	-876.30	-19.11 (40)	19.01 (9)	109.66 (11)	210.97 (31)	–

Table 19 Risk and capital adequacy indicators of banks and branches of foreign banks and their distribution in the banking sector (%) – continuation

	Denominator-weighted average (31.12.2008)	Denominator-weighted average (31.12.2007)	Average weighted by volume of assets	Minimum	Lower quartile	Median	Upper quartile	Maximum	Number of breaches
LIQUIDITY RISK									
Share of immediately liquid assets in highly volatile funds	17.55	17.71	286.88	0.81	3.21 (5)	8.15 (31)	25.84 (31)	7 472.27 (32)	–
Share of liquid assets (incl. collateral from reverse repo trades) in volatile funds	41.56	55.19	43.95	0.39	16.69 (8)	32.55 (27)	47.92 (30)	1 363.17 (35)	–
Indicator of fixed and illiquid assets (excl. branches)	42.39	37.26	46.14	6.54	22.91 (11)	29.93 (32)	58.82 (23)	91.26 (27)	–
Share of loans in deposits and issued securities	69.68	69.34	82.98	0.00	57.40 (33)	85.65 (46)	123.32 (16)	1 117.61 (4)	–
Total liquidity position current up to 7 days /assets	-35.81	-46.99	-35.81	-54.36	-36.84 (54)	-25.34 (31)	0.64 (9)	92.66 (6)	–
Total liquidity position estimated up to 7 days /assets	-4.63	-16.61	-4.63	-96.11	-16.13 (7)	-3.90 (62)	4.46 (7)	92.66 (24)	–
Total liquidity position current up to 3 months /assets	-42.39	-47.12	-42.39	-62.69	-40.55 (66)	-33.19 (23)	-15.35 (3)	92.66 (8)	–
Total liquidity position estimated up to 3 months / assets	-10.65	-12.47	-10.65	-95.88	-22.54 (18)	-12.05 (22)	0.77 (43)	92.66 (18)	–
CAPITAL ADEQUACY									
Capital adequacy ratio (excl. branches)	11.09	13.16	10.80	8.74	9.57 (60)	12.96 (18)	17.70 (12)	47.27 (4)	0
Share of Tier I in own funds (excl. branches)	86.30	85.27	84.54	67.62	77.27 (29)	86.87 (30)	99.58 (29)	100.00 (5)	–
Share of own funds in balance-sheet total (excl. branches)	9.77	7.96	6.54	4.96	5.54 (68)	7.82 (8)	11.29 (15)	53.48 (2)	–
Share of potential loss in own funds in reaching 8% capital adequacy (excl. branches)	27.83	33.26	20.99	8.47	16.38 (60)	38.27 (18)	54.81 (12)	83.08 (4)	–

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

9.2.2 Insurance companies

Table 20 Net profit and profitability indicators of insurance companies (data on profit in EUR thousands)

	Value (EUR thousands) 31.12.2008	Value (EUR thousands) 31.12.2007	Y/y change (%)	Share in total written premium (%)
Total net profit	107,592	184,960	-41.83	5.12
ROA (%)	1.88	3.42	-1.54	–
ROE (%)	8.85	17.55	-8.70	–

Source: NBS.

Table 21 Technical premium (volumes in EUR thousands)

	Value (EUR thousands) 31.12.2008	Value (EUR thousands) 31.12.2007	Y/y change (%)	Share in total written premium (%)	CR3 (%)	HHI 31.12.2008	HHI 31.12.2007
Total	2,100,114	1,903,928	10.30	100.00	63.63	1,717	1,748
Life insurance	1,098,999	945,940	16.18	52.33	54.26	1,408	1,450
Whole life and endowment assurance (A1)	625,210	598,423	4.48	29.77	63.50	1,621	1,650
Insurance connected with an investment fund (A4)	344,984	220,553	56.42	16.43	66.49	1,705	1,577
Accident or sickness insurance (A6)	108,106	103,072	4.88	5.15	67.45	1,713	1,770
Other	20,699	23,891	-13.36	0.99	87.59	4,169	4,253
Non-life insurance	1,001,115	957,987	4.50	47.67	76.63	2,373	2,335
Automobile liability insurance (B10a)	320,611	321,651	-0.32	15.27	80.33	2,712	2,715
Motor-hull insurance (B3)	307,580	292,113	5.30	14.65	79.39	2,425	2,396
Property damage insurance (B8+B9)	219,562	210,970	4.07	10.45	75.97	2,628	2,594
Other	153,362	133,254	15.09	7.30	65.29	1,972	1,779

Source: NBS.
Note: CR3 is the share of three institutions with the highest volume of the given item in the total amount of that item in the sector. CR5 is the share of five institutions with the highest volume of the given item in the total amount of that item in the sector. HHI is defined as the sum of squares of shares of individual institution in the total volume of the given item. The calculation of these three indicators covers only 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 changes and provisions.

Table 22 Technical premium ceded to reinsurers

	Value (EUR thousands) 31.12.2008	Value (EUR thousands) 31.12.2007	Y/y change (%)	Share in total written premium (%)
Total	236,394	322,159	-26.62	11.26
Life insurance	19,006	41,927	-54.67	1.73
Non-life insurance	217,388	280,233	-22.43	21.71

Source: NBS.

Table 23 Technical indemnity costs

	Value (EUR thousands) 31.12.2008	Value (EUR thousands) 31.12.2007	Y/y change (%)	Share in total written premium (%)	CR3 (%)	HHI 31.12.2008	HHI 31.12.2007
Total	963,705	794,078	21.36	45.89	67.08	1,891	2,099
Life insurance	463,051	356,049	30.05	22.05	61.94	1,595	2,090
Whole life and endowment assurance (A1)	380,842	284,905	33.67	18.13	65.96	1,732	2,297
Insurance connected with an investment fund (A4)	45,570	33,148	37.47	2.17	85.87	3,810	3,432
Accident or sickness insurance (A6)	19,837	19,703	0.68	0.94	65.34	1,784	2,079
Other	16,803	18,294	-8.15	0.80	89.40	5,829	4,765
Non-life insurance	500,654	438,029	14.30	23.84	81.25	2,538	2,466
Automobile liability insurance (B10a)	159,083	137,397	15.78	7.57	83.06	3,016	2,781
Motor-hull insurance (B3)	206,191	191,529	7.66	9.82	79.00	2,481	2,349
Property damage insurance (B8+B9)	96,752	75,008	28.99	4.61	87.38	2,774	3,237
Other	38,628	34,094	13.30	1.84	78.67	2,801	2,178

Source: NBS.
Note: CR3 is the share of three institutions with the highest volume of the given item in the total amount of that item in the sector. CR5 is the share of five institutions with the highest volume of the given item in the total amount of that item in the sector. HHI is defined as the sum of squares of shares of individual institution in the total volume of the given item. The calculation of these three indicators covers only 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 changes and provisions.

Table 24 Loss ratio in non-life insurance

	Value (EUR thousands) 31.12.2008	Value (EUR thousands) 31.12.2007
Total	52.15	41.39
Automobile liability insurance (B10a)	43.90	48.50
Motor-full insurance (B3)	69.85	67.69
Property damage insurance (B8+B9)	49.87	35.80
Other	37.26	69.67

Source: NBS.

Table 25 Technical provisions structure of insurance companies

	Value (EUR thousands) 31.12.2008	Value (EUR thousands) 31.12.2007	Y/y change (%)	Share in total written premium (%)
Total	4,022,210	3,776,766	6.50	100.00
Life insurance	2,370,925	2,354,670	0.69	58.95
Reserve for covering payables from financial placement on behalf of the insured	546,128	470,820	16.00	13.58
Non-life insurance	1,105,156	951,276	16.18	27.48

Source: NBS.

Table 26 Placement of insurance companies' technical provisions of except for provisions for covering payables from financial placement on behalf of the insured

	Value (EUR thousands) 31.12.2008	Value (EUR thousands) 31.12.2007	Y/y change (%)	Share in total written premium (%)
Total	3,757,610	3,567,829	5,32	107,92
Government and central bank bonds of SR / EU states or guaranteed by the SR, EIB, EBRD and IBRD bonds	1,421,383	1,507,007	-5,68	40,82
Bank bonds	677,709	512,675	32,19	19,46
Term accounts at banks	250,790	289,949	-13,51	7,20
Mortgage bonds	506,673	453,466	11,73	14,55
Reinsurance	250,126	313,866	-20,31	7,18
Other	650,930	490,865	32,61	18,69

Source: NBS.
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 400, were the number of institutions 25.

9.2.3 Old-age pension saving

Table 27 Pension fund management companies as at 31.12.2008

	Market share[1)] (%)	NAV of funds (EUR thousand)	Number of customers
Allianz – Slovenská DSS	31	691,347	445,564
Axa DSS	28	619,692	394,088
VÚB Generali DSS	15	323,719	198,044
ING DSS	11	244,991	152,877
AEGON DSS	10	226,948	194,247
ČSOB DSS	6	124,315	98,304

Source: NBS.
1) 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

Table 28 Economic result of pension fund management companies as at 31.12.2008

	Revenues (EUR thousands)	Expenditures (EUR thousands)	Profit/loss (EUR thousands)	ROA (%)	ROE (%)
Allianz – Slovenská DSS	10,313	10,483	-170	0	0
Axa DSS	6,824	10,073	-3,249	-4	-5
VÚB Generali DSS	3,870	3,186	684	6	7
ING DSS	2,878	5,577	-2,700	-16	-16
AEGON DSS	2,979	2,219	760	6	6
ČSOB DSS	1,582	2,458	-877	-7	-7

Source: NBS.

Table 29 Pension funds

	NAV (EUR thousands) 31.12.2008
Total	2,231,013
Conservative	93,813
Balanced	649,535
Growth	1,487,664

Source: NBS.
NAV – Net Asset Value

Table 30 Structure of pension funds' investment

	Value (EUR thousands) k 31.12.2008	Share of EUR (%)	Share of other foreign currencies (%)
Total	2,231,013	11.14	2.30
Accounts at banks	476,200	10.01	1.78
Bonds	1,504,721	8.11	2.46
Shares	142,179	50.77	49.22
Other	307,361	24.85	12.15
Payables	-199,447	34.99	50.88

Source: NBS.

Table 31 Supplementary pension companies as at 31.12.2008

	Market share[1)] (%)	NAV of funds (EUR thousands)	Number of customers
ING Tatry – Sympatia, d. d. s., a. s.	40	369,599	329,999
Doplnková dôchodková spoločnosť Tatra banky, a. s.	28	261,349	210,725
Stabilita, d. d. s., a. s.	19	177,668	158,836
Axa d. d. s., a. s.	13	125,583	144,290
AEGON d. d. s., a. s.	0	999	4,296

Source: NBS.
1) 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

Table 32 Economic result of supplementary pension companies as at 31.12.2008

	Revenues (EUR thousands)	Expenses (EUR thousands)	Profit/loss (EUR thousands)	ROA (%)	ROE (%)
ING Tatry – Sympatia, d. d. s., a. s.	10,862	9,249	1,613	10	18
Doplnková dôchodková spoločnosť Tatra banky, a. s.	5,173	3,369	1,804	24	35
Stabilita, d. d. s., a. s.	4,488	3,871	617	17	20
Axa d. d. s., a. s.	2,962	2,861	100	1	1
AEGON d. d. s., a. s.	66	854	-788	-39	-41

Source: NBS.

Table 33 Supplementary pension funds

	NAV (EUR thousands) 31.12.2008
Total	935,199
Contribution	907,162
Payroll	28,037

Source: NBS.
NAV – Net Asset Value

Table 34 Investment structure of supplementary pension funds

	Value (EUR thousands) 31.12.2008	Share of EUR (%)	Share of other foreign currencies (%)
Total	935,199	9.30	0.70
Accounts at banks	301,635	4.11	0.69
Bonds	602,895	10.83	2.42
Shares	13,647	33.38	49.77
Other	37,501	19.56	2.64
Liabilities	-20,480	12.44	87.56

Source: NBS.

9.2.4 Collective investment

Table 35 Asset management companies as at 31.12.2008

	NAV of mutual funds (EUR thousands)	Market share (%)
Total	3,288,865	100.00
Tatra Asset Management	1,423,003	43.27
Asset Management SLSP	835,690	25.41
VÚB Asset Management	578,587	17.59
ČSOB Asset Management	168,861	5.13
Prvá penzijná	123,494	3.75
AIG Funds Central Europe	49,460	1.50
ISTRO Asset Management	41,290	1.26
Allianz Asset Management	35,512	1.08
IAD Investments	24,506	0.75
KD Investments	8,463	0.26

Source: NBS.
NAV – Net Asset Value

Table 36 Expenditure, revenues and profitability indicators of domestic asset management companies as at 31.12.2008

	Revenues (EUR thousands)	Expenses (EUR thousands)	Profit/loss (EUR thousands)	ROA (%)	ROE (%)
Total	55,681	47,237	8,444	14	16
AIG Funds Central Europe	1,979	1,795	184	6	8
Allianz Asset Management	386	943	-557	-13	-13
Asset Management SLSP	11,409	10,550	859	11	22
ČSOB Asset Management	6,181	4,940	1,241	13	15
IAD Investments	648	643	5	0	0
Istro Asset Management	991	973	18	1	1
KD Investments	521	1,637	-1,116	-143	-158
Prvá Penzijná	2,374	1,895	479	16	19
Tatra Asset Management	21,288	14,745	6,542	27	28
VÚB Asset Management	9,904	9,116	788	20	24

Source: NBS.

Table 37 Structure of mutual funds as at 31.12.2008

Fund type	Market share (%)	Net asset value (EUR thousands)	Number of funds	CR3[1] (%)	CR5[1] (%)	HHI[1]	HHI if uniform distribution
Total mutual funds	100.00	3,788,179	503	35	45		20
Domestic	86.82	3,288,865	123	35	45	572	81
Money market funds	42.92	1,625,774	13	70	88	1,889	769
Bond funds	10.70	405,227	9	88	95	3,268	1,111
Equity funds	2.42	91,548	9	70	86	1,835	1,111
Mixed funds	8.14	308,310	18	58	72	1,831	556
Funds of funds	9.17	347,475	21	55	75	1,367	476
Other funds	9.00	340,840	7	73	95	2,170	1,429
Special funds	0.61	22,960	1	100	100	10,000	10,000
Real estate funds	3.13	118,634	4	93	100	3,336	2,500
Closed funds	0.74	28,097	41	27	40	6	244
Foreign[2]	13.18	499,314	380	18	25	226	26
Money market funds	2.37	89,811	24	84	93	2,998	417
Bond funds	1.19	45,119	72	37	54	725	139
Equity funds	2.81	106,538	188	38	48	720	53
Mixed funds	1.00	37,719	27	75	91	3,061	370
Funds of funds	0.46	17,364	22	90	94	6,098	455
Other funds	5.35	202,764	47	21	32	397	213

Source: NBS.
1) Market concentrations are calculated only for open mutual funds (do not include closed and special funds).
2) For foreign mutual funds the net asset value represents units 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.

Table 38 Net sales of open mutual funds as at 31.12.2008

	12 months (EUR thousands)	Number of funds	HHI	HHI if uniform distribution
Total open mutual funds	-812,765	503	–	20
Domestic	-683,004	123	978	81
Money market funds	-496,278	13	2,733	769
Bond funds	-49,718	9	5,544	1,111
Equity funds	-531	9	4,478	1,111
Mixed funds	-45,815	18	6,893	556
Funds of funds	-144,384	21	3,469	476
Other funds	58,240	7	5,703	1,429
Special funds	-4,518	5	10,000	2,000
Foreign	-129,760	380	1,868	26
Money market funds	-43,191	24	9,628	417
Bond funds	-46,920	72	1,512	139
Equity funds	-35,344	188	1,409	53
Mixed funds	-29	27	9,072	370
Funds of funds	3,038	22	4,613	455

Source: NBS.
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.

Table 39 Average performances of open mutual funds as at 31.12.2008 (% p.a.)

	3 months			1 year			3 years		
	Min	Average	Max	Min	Average	Max	Min	Average	Max
Total open mutual funds	-55.57	-3.69	9.33	-73.98	-5.67	11.17	-43.19	-0.64	3.42
Domestic	-41.37	-2.92	2.98	-70.23	-3.96	8.29	-23.72	0.63	3.42
Money market funds	-8.04	-0.68	1.26	-8.38	1.07	3.96	-0.64	2.00	3.42
Bond funds	-14.67	-1.87	2.98	-16.74	-1.10	5.64	-6.54	0.28	2.93
Equity funds	-41.37	-24.78	-21.52	-70.23	-51.73	-43.67	-23.72	-20.66	-18.58
Mixed funds	-31.27	-6.98	0.71	-61.54	-13.23	-1.49	-16.64	-6.92	2.45
Funds of funds	-20.97	-10.01	0.51	-33.67	-22.04	-0.71	-4.32	-3.11	-3.02
Other funds	-1.72	0.49	1.16	-3.38	-0.98	0.24	–	–	–
Special funds	-2.04	0.21	1.67	-9.24	2.18	8.29	–	–	–
Foreign	-55.57	-8.83	9.33	-73.98	-16.90	11.17	-43.19	-8.98	3.42
Money market funds	-16.30	-0.11	1.57	-22.13	0.57	4.28	-34.89	-1.77	3.42
Bond funds	-39.35	-6.28	9.33	-49.50	-7.81	11.17	-41.58	-6.71	2.96
Equity funds	-55.57	-29.15	7.56	-73.98	-50.81	6.67	-43.19	-20.29	-2.26
Mixed funds	-35.54	-20.71	-1.07	-45.62	-42.14	-2.66	-11.13	-3.70	-2.84
Fondy fondov	-29.08	-7.04	4.51	-39.00	-15.94	-5.39	-13.91	-5.07	0.29
Other funds	-32.76	-0.30	3.03	-43.61	-3.15	3.47	-31.23	-1.56	1.69

Source: NBS.

Table 40 Asset structure of domestic mutual funds as at 31.12.2008

	Money market funds (EUR thousands)	Other funds (EUR thousands)
Total	1,629,452	1,668,338
Deposits at banks	462,266	352,027
Securities other than shares and mutual fund certificates	1,163,073	804,633
Shares and mutual fund certificates	3,071	361,940
Shares and other ownership interests	0	87,030
Financial derivatives[1)]	967	-10,569
Other assets	75	73,275

Source: NBS.
1) Financial derivates contains derivates with positive and negative real value.

9.2.5 Investment firms

Table 41 Basic characteristics of investment firms as at 31.12.2008

	Volume of trades (EUR thousands)	Market share (%)	Volume of assets managed (EUR thousands)	Market share (%)
Banks and branches of foreign banks	14,072,300	64	2,026	3
Management companies	101	0	57,897	83
IFs with capital over EUR 1,162 mil.	66,991	0	2,526	4
Others	7,701,845	35	6,984	10

Source: NBS.
Note: Investment firms who are not banks are divided by the size of their registered capital. Investment firms with their registered capital of less than EUR 1,162 million are not licensed for providing IS-3 investment services (accepting a customer's instruction for the acquisition or sale of an investment instrument and its execution on the own account).

Table 42 Market concentrations by investment firms' trading volumes

	Number of traders	CR3 (%)	CR5 (%)	HHI
Total	41	84	95	2,486
Banks and branches of foreign banks	19	86	96	3,076
Management companies	7	100	100	10,000
IFs with capital over EUR 1,162 mil.	5	100	100	9,629
Others	10	100	100	9,624

Source: NBS.
Note: Market concentrations are calculated for current quarter.
The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item.

Table 43 Volume of trades by individual investment services as at 31.12.2008 (EUR thousands)

	IS-1[1)]	IS-2[2)]	IS-3[3)]
Total trades	4,424,325	4,960,017	12,456,896
Shares	16,616	5,559	43
Bonds	8,308	206,228	121,794
Mutual fund certificates	15,796	159	0
Fungible securities	1,408	1,121	82,752
Money market instruments	266,995	2,509,274	1,682,205
Foreign securities	13,870	2,857	307
Derivatives – type A	4,074,016	2,234,820	10,566,849
Derivatives – type B	4,729	0	2,946
Derivatives – type C	14,029	0	0
Derivatives – type D	6,819	0	0
Credit derivatives	0	0	0
Contracts for difference	4	0	0
Derivatives – type E	1,736	0	0

Source: NBS.
1) IS-1 – acceptance of a customer's instruction to acquire, sell or otherwise handle the investment instrument and the subsequent forwarding of the customer's instruction for the purpose of its realization.
2) IS-2 – acceptance of a customer's instruction to acquire or sell the investment instrument and its realization on an account other than the provider's account.
3) IS-3 – acceptance of a customer's instruction to acquire or sell the investment instrument and its realization on own account.
Derivatives – type A – According to § 5 paragraph 1 letter d) of the Securities Act.
Derivatives – type B – According to § 5 paragraph 1 letter e) of the Securities Act.
Derivatives – type C – According to § 5 paragraph 1 letter f) of the Securities Act.
Derivatives – type D – According to § 5 paragraph 1 letter g) of the Securities Act.
Derivatives – type E – According to § 5 paragraph 1 letter j) of the Securities Act.

9.2.6 Investment Guarantee Fund

Table 44 Basic characteristics of Investment Guarantee Fund (IGF, data are in EUR thousands)

Date	Revenue[1)]	Costs	Cumulative value of fund	Amount of clients' property	Maximal amount of compensations
31.12.2007	466	466	1,570	471,322	81,685
31.12.2008	509	509	1,852	565,174	94,316

Source: NBS.
1) Consist of received subscriptions paid to IGF and of interest profit from current and term deposit of IGF.
The Investment Guarantee Fund collects financial contributions of stock brokerage firms, branches of foreign stock brokerage firms, asset management companies, and branches of foreign asset management companies to provide compensation for inaccessible client assets received by an investment firm, foreign investment firm or asset management company for the provision of investment services and handles with the funds acquired pursuant to the Securities Act. The Investment Guarantee Fund was established under the Securities Act. Activities of the Fund are regulated pursuant to Art. 80 to 98 of the Securities Act.

GLOSSARY AND ABBREVIATIONS

GLOSSARY

NAMES OF BANKS AND THEIR DIVIDING INTO GROUPS

LARGE BANKS

VÚB – Všeobecná úverová banka, a. s.
SLSP – Slovenská sporiteľňa, a. s.
Tatra banka – Tatra banka, a. s.

MEDIUM BANKS

OTP – OTP Banka Slovensko, a. s.
Dexia – Dexia Banka Slovensko, a. s.
UniCredit – UniCredit, a. s.
Volksbank – Volksbank, a. s.
Istrobanka – Istrobanka, a. s.

BANKS AND BRANCHES OF FOREIGN BANKS CONNECTED WITH THEIR OWN FINANCIAL GROUPS

Citibank – Citibank (Slovakia), a. s.
Komerční banka – Komerční banka Bratislava, a. s.
Calyon – Calyon Bank Slovakia, a. s., foreign bank branch
ČSOB – Československá obchodní banka, a.s.
ING – ING Bank N.V., foreign bank branch
Commerzbank – Commerzbank Aktiengesellschaft, foreign bank branch, Bratislava
HSBC – HSBC Bank plc, foreign bank branch
MAIS – Banco Mais, S. A., foreign bank branch
ABN AMRO – ABN AMRO Bank N.V., foreign bank branch
BRE Bank – BRE Bank SA, branch of foreign bank mBank in Slovak Republic
J&T Banka – J&T BANKA, a.s., foreign bank branch

BUILDING SOCIETIES

PSS – Prvá stavebná sporiteľňa, a. s.
Wüstenrot – Wüstenrot stavebná sporiteľňa, a.s.
ČSOB stavebná sporiteľňa – ČSOB stavebná sporiteľňa, a. s.

NON-CLASSIFIED BANKS

Poštová banka – Poštová banka, a. s.
Privatbanka – Privatbanka, a. s.
SZRB – Slovenská záručná a rozvojová banka, a. s.

INSURANCE COMPANIES

AEGON – AEGON Životná poisťovňa, a.s.
Allianz – Allianz Slovenská poisťovňa, a.s.
Amslico – AMSLICO AIG Life poisťovňa a.s.
Česká poisťovňa Slovensko – Česká poisťovňa – Slovensko akciová spoločnosť
Poisťovňa ČSOB – ČSOB Poisťovňa, a.s.
D.A.S. – D.A.S. poisťovňa právnej ochrany, a.s.
Generali – Generali Poisťovňa, a.s.
ING – ING Životná poisťovňa, a.s.
Komunálna poisťovňa – KOMUNÁLNA poisťovňa, a.s. Vienna Insurance Group
Kontinuita – KONTINUITA poisťovňa, a.s. Vienna Insurance Group
Kooperativa – KOOPERATIVA poisťovňa, a.s. Vienna Insurance Group
OTP Garancia – OTP Garancia poisťovňa, a.s.
OTP Garancia životná poisťovňa – OTP Garancia životná poisťovňa, a.s.
Cardif – Poisťovňa Cardif Slovakia, a.s.
HDI-GERLING – POISŤOVŇA HDI-GERLING Slovensko, a.s.
Poisťovňa Poštovej banky – Poisťovňa poštovej banky, a.s.
Poisťovňa SLSP – Poisťovňa Slovenskej sporiteľne, a.s.
PSČP Rapid – Prvá česko-slovenská poisťovňa Rapid, a.s.
QBE – Q B E poisťovňa, a.s.
Poisťovňa TEDA – TEDA životná poisťovňa, a.s.
UNION – UNION poisťovňa, a.s.
UNIQA – UNIQA poisťovňa, a.s.
Victoria – VICTORIA-VOLKSBANKEN Poisťovňa, a.s.
Wüstenrot poisťovňa – Wüstenrot poisťovňa, a.s.

GLOSSARY

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).

CR n index – the concentration of the *n* largest banks, i.e. the sum of the shares of their assets in total assets.

Cumulative gap – the sum of open positions (long or short) in certain time bands.

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.

Default rate – expresses the percentage of loans defaulting over the period monitored.

Enterprises – non-financial companies.

Financial intermediation – for the purpose of this analysis, the financial intermediation is understood as the financial cashflow between the subjects, not mediation of financial services.

General government – central and local government bodies.

Herfindahl index – defined as the sum of the squares of the shares of individual banks' assets in total assets.

Households – the population, i.e. individuals' accounts.

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 non-financial income from employment, gross financial gains or losses from self-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 benefits, 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).

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 customers 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 customers 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 NBS and the volume of assets on the domestic interbank market after deducting banks' payables towards NBS, foreign banks and the DLMA public debt & liquidity management agency.

Loan-to-deposit ratio – the share of loans to customers 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.

Long position – a position in which assets are greater than liabilities.

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.

Non-banking financial companies (NBFCs) – other financial companies, financial intermediaries, pension and mutual funds, insurance companies.

Quick liquidity ratio – immediately liquid assets / highly volatile funds.

Retail – households, sole traders and non-profit companies serving prevailingly households.

Short position – a position in which liabilities are greater than assets.

The open position for up to 3 months – is the difference between, on the one hand, the sum of claims against customers 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 customers and issued securities which have a residual maturity of up to 3 months.

Total net position – defined as the sum of the net balance-sheet position and net off-balance-sheet position.

Unit-linked reserve – technical reserve that is created for life insurance linked with investment fund in insurance branch A4.

LIST OF INSURANCE CATEGORIES

A – Life insurance

1. Whole-life insurance, pure endowment insurance or whole-life and endowment insurance (A1)
2. Endowment insurance or insurance of funds for child's maintenance (A2)
3. Insurance connected with capitalisation policies (A3)
4. Insurance according to points 1 and 3 connected with an investment fund (A4)
5. Pension insurance (A5)
6. Accident or sickness insurance, if it is an additional insurance according to a type stated in points 1 to 4 (A6)

B – Non-life insurance

1. Accident insurance (B1)
2. Sickness insurance (B2)
3. Non-rail land vehicle-hull insurance (B3)
4. Rail vehicle-hull insurance (B4)
5. Aircraft insurance (B5)
6. Watercraft insurance (B6)
7. Transportation and baggage insurance (B7)
8. Insurance of property other than that stated in points 3 to 7, caused by fire, explosion, storm, natural hazards other than storms, nuclear energy, land slippage or subsidence (B8)
9. Insurance of other damage to property than that stated in points 3 to 7, arisen through hail-storm or freezing, or other causes (e.g. theft), unless these causes are included in point 8 (B9)

10.a) Automobile liability insurance(B10a)
10.b) Carrier liability insurance (B10b)

11. Liability insurance for ownership or use of aircraft, including carrier's liability (B11)
12. Liability insurance for ownership or use of watercraft, including carrier's liability (B12)
13. General liability insurance for damage other than stated in points 10 to 12 (B13)
14. Credit insurance (B14)
15. Surety insurance (B15)
16. Insurance of various financial losses resulting from performing an occupation, from insufficient income, from poor weather conditions, from loss of profit, from permanent general costs, from unexpected business expenditures, from loss of market value, from loss of regular income source, from other indirect commercial financial loss and other financial losses (B16)
17. Legal protection insurance (B17)
18. Travel assistance insurance (B18)

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
MT	Malta
NL	Netherland
PL	Poland
PT	Portugal
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	Great Britain

OTHERS

AAMC	Association of Asset Management Companies
ALC	Association of Leasing Companies
ALCO	Asset and Liabilities Committee
AM	asset management
BIS	Bank for International Settlement
BRIBID	Bratislava interbank bid rates
BRIBOR	Bratislava interbank offered rates
BSSE	Bratislava Stock Exchange
CSD	Central Securities Depository
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
IFs	Investment firms
IFRS	International financial reporting standards
IGF	Investment Guarantee Fund
IMF	International Monetary Fund
MIM	metainformation system
NAV	net asset value
NBS	Národná banka Slovenska
O/N	overnight interest rate

PFMCs	Pension funds management companies
p. p.	percentage point
ROA	return on assets
ROE	return on equity
RWA	risk weighted assets
SAX	Slovak stock index
SDX	Slovak bond index
SKK	Slovak koruna
SME	small and medium enterprises
SPC	Supplementary pension company
SR	Slovak Republic
VaR	value at risk
ŽSR	Slovak Railways

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