



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM

ANALYSIS OF THE SLOVAK FINANCIAL SECTOR FOR THE FIRST HALF OF 2009

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FOREWORD



FOREWORD

Národná banka Slovenska produces the Analysis of the Slovak Financial Sector for the purposes of the NBS Banking Board as well as for professionals and the wider public. The aims of the analysis derive from the mission of NBS in regard to maintaining financial stability and exercising supervision of the Slovak financial market. Since financial stability is closely linked with economic stability, it is essential that both professionals and the wider public are informed of possible risks and threats to financial stability. Public awareness of potential threats to financial stability also supports the pre-emption of possible crisis situations.

This analysis evaluates the overall condition of the financial sector, focusing on the analysis of the system's resilience to possible negative developments. The analysis is based on the evaluations of individual institutions and of the sector as a whole. It also aims to elucidate a deeper

link between the developments in the financial sector, on one hand, and the development of macroeconomic and microeconomic indicators, on the other hand. Its macro-prudential nature is reflected especially in the use of stress testing, through which the sector's sensitivity in various scenarios may be assessed.

As in the previous analyses, financial information on particular institutions is primarily obtained from the banking supervision information system MIM, the systems STATUS, STATUS DFT, and RBUZ, and documents processed by departments of the Financial Market Supervision Unit. Additional sources included the Statistical Office of the Slovak Republic (SO 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 concerning the exercise of supervision of particular institutions.



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ANALYSIS SUMMARY



ANALYSIS SUMMARY

THE SPILLOVER OF THE FINANCIAL CRISIS TO THE REAL ECONOMY IN THE FIRST HALF OF 2009 AFFECTED MAINLY THE BANKING SECTOR

By the end of 2008, the financial crisis was only partially affecting the domestic financial sector as a whole (afflicting mainly the collective investment and pension saving sectors), but then, during the first half of 2009, the crisis gradually spilled over to the real economy and started having a substantial effect on the banking sector, too. From the turn of the year, the declining performance of foreign economies was reflected in a downturn of the domestic economy. The fact that the economy was heavily dependent on exports and had a high proportion of downturn sensitive sectors proved particularly negative. Because of the close links between the banking sector and the domestic economy, the banks, too, were feeling the deteriorating financial position of the corporate sector and households. This was seen mainly in the credit market, most notably in the crunch in corporate lending. As the economic situation became gradually worse, banks recorded mounting credit risk. The ability to repay bank debts declined, particularly in selected corporate sectors and retail groups.

From the second quarter of 2009, however, global financial markets gradually stabilized and the situation in collective investment and pension saving calmed down. Funds in both sectors steadied, and redemptions of collective investment funds slowed down considerably.

DESPITE STABILIZATION IN GLOBAL ECONOMIES AND FINANCIAL MARKETS IN THE SECOND QUARTER OF 2009, THE CURRENT POSITIVE CHANGES REMAIN RELATIVELY FRAGILE

The situation in global financial markets and foreign economies stabilized slightly in the second quarter of 2009, when stimulus measures adopted by different governments and central banks began to have a more pronounced effect. Signs of revival may be found in several indicators of current and projected economic activity. Financial markets gradually steadied, with falling risk aversion among investors and an increasing liquidity in the markets themselves.

But despite this positive turnaround, the current changes remain relatively fragile. This is also implied by several financial market indicators, which point to persisting uncertainty among investors.

The above-mentioned stimulus measures introduced by governments and central banks have only a short-term lifespan, and are themselves potential incubators of inflationary risk. Important here will be the unfolding situation in the banking sectors of different economies, since these sectors have a pivotal role in providing financing to the real economy. Because they are now going through a period of deleveraging and cleansing, they have less appetite for lending to the corporate sector and households. Another reason for uncertainty in the banking sector is the deterioration in asset quality and expected changes in bank regulation, which will probably increase banks' capital requirements.

Another factor limiting the vigour of the revival will probably be the financial position of the household and corporate sectors. In several major economies, both sectors have highly leveraged positions that may adversely affect their willingness to consume or invest.

SLOWDOWN IN FINANCING OF THE REAL ECONOMY BY DOMESTIC BANKS

The already noted negative trends in global financial markets and economies have appeared in the domestic banking sector, too. Banks have begun to behave far more conservatively and cautiously. Firms have felt this especially keenly and, given the high share of sectors sensitive to the economic downturn, they recorded a marked deterioration in economic indicators in the first half of 2009. A combination of declining demand for loans by enterprises and the tightening of credit standards by banks resulted in a decline in bank lending to the corporate sector. The close link between lending to the corporate sector and economic development in domestic and foreign economies indicates that the current trends will continue in coming months.



ANALYSIS SUMMARY

As for loans to households, their amount did not decline but in fact increased at a slower pace year-on-year. Both house purchase loans and consumer loans are rising, despite the tightening of credit standards and fall in demand. The rise in loans was not, however, halted by the drop in residential property prices, which has a dampening effect on demand for loans. The reason, we assume, is that the effect of the economic downturn on household groups generating demand for loans has still been relatively slight. This is particularly true for house purchase loans, which are taken out mainly by medium- and higher-income household groups, precisely the groups that are more resistant to adverse trends in employment and income. It is likely, however, that the gradual spillover of negative trends from the corporate to household sector will slow down the pace of lending more sharply still.

EURO AREA ENTRY AFFECTED MAINLY THE INTERBANK MARKET

Apart from facing a deteriorating situation in financial markets and the real economy, the banking sector in the first half of the year had to cope with the adoption of the single European currency. Entry into the euro area had a particularly significant effect on the interbank market, which saw a decline in liabilities to foreign banks and deposits with NBS. By contrast, several banks during the first half of 2009 recorded an increase in deposits with foreign banks and liabilities to NBS.

Most of the deposits that households placed in banks ahead of the adoption of the single currency remained there. The banking sector was one of the few in the EU to report high stability of funds in the first half of 2009.

The amount of new mortgage bond issues continued to fall, largely due to the adverse situation in financial markets. According to our estimates, banks have to issue around €1 billion worth of new mortgage bonds by the end of 2011, which, in the current climate, will certainly be to the detriment of their profitability.

CORPORATE SECTOR CREDIT RISK ROSE MARKEDLY FROM THE TURN OF THE YEAR

The reduced willingness of banks to finance the real economy is a response to the rise in credit risk, i.e. the ability of customers to repay their debts to banks. This risk increased sharply from the turn of the year as the financial position of the corporate sector deteriorated. Particularly

in the first quarter of 2009, the slump in foreign demand was reflected in declining sales and profits in the corporate sector. Among firms borrowing from banks, fully 14% recorded a loss and at the same time a large year-on-year decline in sales. Negative developments are also expected in lending for commercial real estate, which accounts for a major share of the credit portfolio of several banks. The first signs of this were already appearing in the second half of 2009, in the rising amount of non-performing loans and past-due repayments. Particularly sensitive in this regard have been short-term loans – operating loans and current account overdraft facilities.

Households, too, saw a decline in their debt-servicing capability during the first half of the year. As mentioned above, the economic downturn has so far been most keenly felt by lower-income groups. It was therefore mainly consumer loans and current account overdrafts that defaulted in this period. As for house purchase loans, the portfolio has not yet recorded a significant impairment at the sectoral level, though that does not diminish the riskiness of these loans. As the economic crisis hits the retail sector more broadly, it will also have repercussions on this group of borrowers. The riskiest borrowers in this regard are those with the highest debt repayment burden. This group includes those who borrowed when property prices were peaking and bank lending standards were most relaxed.

In their lending to enterprises and households, almost all banks are reporting a high share of loans with a short interest rate fixation. Although the scenario of high inflation is not an immediate prospect, it remains a possibility in the medium-term and long-term horizons. Were it to materialize, several banks would face severe difficulties from their high proportion of loans with short fixed rates.

As regards market risks, banks are reporting substantially higher sensitivity only in their banking book interest rate risk (in the event of an increase in interest rates).

Despite the marked rise in the riskiness of enterprises and households, the banking sector as a whole should be able to handle an excep-



tional increase in non-performing loans. Under a moderate stress scenario of economic development, the majority of banks in the sector would cope. The sector reports higher sensitivity under an exceptionally negative scenario of developments.

BANKING SECTOR PROFITS FELL SHARPLY

The slowdown in lending, the impairment of credit portfolios, and the loss of foreign exchange income were the main reasons that profits in the banking sector slumped by almost a half year-on-year. Banks were particularly badly hit by the stagnation in interest income, particularly the plunge in interest income from the corporate sector. Interest income from the household sector remained relatively stable, as banks, thanks to their credit policies, managed to contain the drop in returns on loans and slash deposit costs. Overall interest income was supported to some extent by the cutting of interest rates, given the structure of interest rate fixation.

The increasing creation of provisions from the turn of the year also ate into banks' profits. The rising credit risk was reflected mainly in loans to households and enterprises.

Considering the close links between these trends and economic developments, the trend decline in profitability is set to continue in coming months and it is expected that several banks will report a loss for 2009.

STRENGTHENING OF CAPITAL POSITIONS INCREASED THE BANKING SECTOR'S RESILIENCE

Banks were able to use the relatively high profits they made in 2008 to strengthen their capital positions in the first half of 2009. Approximately 60% of the profits generated by banks in 2008 remained in the sector in the form of own funds to cover possible future losses. The overall capital adequacy ratio of the sector therefore climbed above 12%.

Capital positions were strengthened at the level of parent banks, too, with several banks taking the opportunity to recapitalize through government support schemes.

Stress testing confirms that most banks have squirreled away enough own funds to cover unexpected losses. In the event, however, of an

exceptional scenario materializing in the economy's development, the capital adequacy ratio of some banks may not be sufficient.

STABILIZATION IN MUTUAL FUNDS AND A SHIFT IN INVESTMENT STRATEGY IN PILLAR II PENSION SAVING

After the exceptionally unfavourable developments in collective investment in the second half of 2008, the situation with mutual funds stabilized at the end of the first half of 2009. The effect of calmer financial markets and low interest rates – especially on short-term bank deposits – to a certain extent enticed investors back to mutual funds, or at least reduced their concerns about them. Firstly, the wave of high negative net sales came to an end, and then, in the second quarter, positive net sales started to be reported. This, along with the improving performance of funds, saw the end of the sharp decline in the net asset value of funds. Nevertheless, the sector remains sensitive to financial market developments.

The amount of assets managed by funds in Pillar II of the pension saving system continued to rise in the first half of 2009, owing to the regular contributions of savers. The investment strategy of the funds was substantially altered by the adoption of an amendment to the law on retirement pension saving. There was an effort to decrease volatility, which in turn led to a fall in riskier investments and a marked rise in the proportion of deposits held with banks. This development affected mainly balanced funds and growth funds. The performance of funds in the first half of the year reflected the stabilization in financial markets. Growth and balanced funds recorded a moderately positive performance in this period. The year-on-year negative performances were to a large extent the result of turmoil in financial markets in the second half of 2008.

Negative trends in the insurance sector have continued. Overall premiums fell in the first half of 2009, especially in life insurance. Almost all segments of life and non-life insurance recorded a decline in new production. The profits of insurance companies slumped by 13.5%, and there was also a rise in claims cost.

The size of market risks in these financial market sectors in the first half of 2009 was determined



ANALYSIS SUMMARY

mainly by the lower volatility in stock markets and the higher volatility of interest rates. All types of risk were mitigated by the introduction of the euro. The most significant risk continued to be eq-

uity risk. The decline in exposure to market risk was most pronounced in funds managed by pension fund management companies (PFMCs), owing to a change in the structure of their investments.



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CHAPTER 1

MACROECONOMIC DEVELOPMENTS AS THEY AFFECT FINANCIAL STABILITY



1 MACROECONOMIC DEVELOPMENTS AS THEY AFFECT FINANCIAL STABILITY

GLOBAL ECONOMY FELL INTO RECESSION IN 2009

The financial crisis that first broke out in 2007 is now having a substantial effect on global economic growth. Practically all of the most advanced economies fell into recession in 2009, as did emerging economies. A return to growth in 2010 will be found mainly in emerging economies.

Government debt in several advanced countries is expected to rise at a record pace in coming years, under government efforts to compensate the decline in private sector demand. In the short-term, economic development is also expected to benefit from the loosening of monetary policy by several central banks. The effect of recent interest rate cuts has so far been seen mainly in shorter maturities and only to a lesser extent in longer maturities.

Overall, however, the prospects for a return to the previous levels of economic growth within com-

ing years are relatively weak. This is largely due to the expected development of private sector demand in the United States and in other countries that contributed significantly to aggregate demand. Given the high level of indebtedness in these countries, the process of deleveraging may be expected to be more gradual and sluggish.

A relatively sharp economic downturn is projected in countries to which Slovakia has a significant export exposure. Almost one third of its exports are destined for Germany, one of the countries where economic growth has been hardest hit.

IMPROVEMENT IN INDICATORS OF EXPECTED ECONOMIC DEVELOPMENT

At the end of the first quarter of 2009, several forward-looking economic indicators began to "revive". The OECD's composite leading indicator (CLI) of changes in economic activity climbed in almost all advanced countries. This positive development was recorded in the economies of

Table 1 GDP projection for selected regions and countries (%)

	2009		2010	
	EC SEF	IMF WEO	EC SEF	IMF WEO
USA ¹	-2.9	-2.6	0.9	0.8
Japan ¹	-5.3	-6.0	0.1	1.7
Euro area ¹	-4.0	-4.8	-0.1	-0.3
Germany ¹	-5.4	-6.2	0.3	-0.6
Czech Rep. ³	-2.7	-3.5	0.3	0.1
France ¹	-3.0	-3.0	-0.2	0.4
Poland ³	-1.4	-0.7	0.8	1.3
Italy ¹	-4.4	-5.1	0.1	-0.1
Hungary ²	-6.3	-6.7	-0.3	-0.9
Austria ²	-4.0	-4.0	-0.1	0.2
UK ¹	-3.8	-4.2	0.1	0.2
Netherlands ³	-3.5	-4.8	-0.4	-0.7
Slovakia ¹	-2.6	-4.7	0.7	1.9

Source: IMF, European commission

1/ IMF WEO – IMF forecast as at July 2009

2/ IMF WEO – IMF forecast as at June 2009

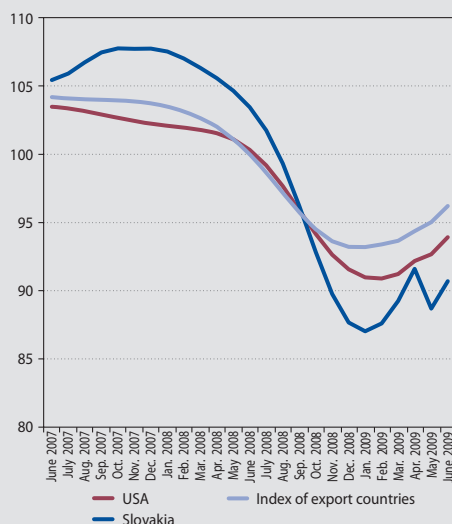
3/ IMF WEO – IMF forecast as at April 2009

EC SEF – European Commission's Spring Economic Forecast as at April 2009

The selected EU countries are the major export partners of Slovakia



Chart 1 The CLI index in selected countries



Source: OECD, NBS calculations

Note: CLI (Composite Leading Indicator) – the main composite leading indicator. "Index of export countries" – represents the CLI index of Slovakia's nine largest export partners weighted by their share of Slovak exports.

Chart 2 Comparison of export development and the CLI index in selected countries



Source: NBS own calculations, OECD, Statistical Office of the Slovak Republic.

Note: CLI – index of the weighted average of CLIs for selected countries, with each country weighted according to its share of Slovakia's exports. Index of exports to selected countries – index representing the change in the moving average of exports to the main export countries; the selected countries' share of Slovak exports has fluctuated at around 80% since the beginning of 2006 (April 2006 = 100).

Slovakia's principal export partners. From April, indicators of consumer and business confidence also began to rise. Slovakia, with its considerable orientation on exports and a high share of export sensitive sectors, saw one of the most marked declines in economic growth indicators. In later months, however, developments in Slovakia also began to follow growth trends in other countries.

REVIVAL OF DOMESTIC EXPORTS AND INDUSTRIAL OUTPUT

The improving economic sentiment indicators were also positively reflected in the export performance of the domestic economy. A relatively close link is notable between the development of the CLI index in Slovakia's main export partners and the level of Slovakia's exports to these countries. Most significant in statistical terms appeared to be the four-month lag between the level of exports to these countries and the development of the CLI index for them. Given the development of the CLI index for the selected export countries, and assuming that the historical correlation between these indicators will continue to apply, the corporate sector can expect a return to export growth in the coming period.

Although industrial output continued to fall year-on-year, it recorded positive trends both abroad and in Slovakia. The annual decline began to stabilize from April 2009, and Slovakia's major export partners also saw an improvement in industrial output (the most positive developments being in Germany and Italy). Likewise in June 2009, Slovakia reported a more moderate decline in industrial output in comparison with previous months.

TIGHTER FINANCING CONDITIONS IN THE EURO AREA

A key determinant of change in the euro area's business cycle is the state of bank lending to the real economy, since banks account for a significant share of financial intermediation. The adverse trends in this area continued in the first half of 2009, when the pace of lending growth declined year-on-year. One of the reasons for this was the setting of credit standards in the banking sector, which had been tightening since 2007. It can be seen as positive that the tightening of credit standards for new bank loans eased off in the first half of 2009. This happened mainly in lending to the corporate sector and was less marked in lending to the household sector. In



particular, the fall in the cost of borrowing and banks' slightly more positive outlook for expected economic development had a positive effect. A more moderate tightening of credit standards was recorded in several countries in the second quarter of 2009, and it is positive for Slovakia that this trend continued in almost all of its major export partners.

When interpreting this development, however, especially in terms of its effect on lending, it is important to take into account that standards were tightening cumulatively from 2007 and that the most recent data show only a slowdown in this process. The overall setting of standards remains relatively strict and does not point to a significant revival in lending.

STABILIZATION IN FINANCIAL MARKETS

From the third quarter of 2008 there was a substantial fall in asset prices and increasing mistrust in financial markets, but in 2009 the situation began to stabilize and, in the most recent months of the period under review, several indicators even recorded an upturn. The quantitative and qualitative easing of monetary policy was reflected in a sharp drop in market interest rates and an increase in liquidity. The decline in interbank interest rates in the euro area led through

to a reduction in retail lending rates, with short-term rates falling furthest.

Stock markets, too, underwent a recovery, and several major bourses strengthened from April. In the United States, in particular, the revival of stock markets is one of the key determinants of consumer confidence.

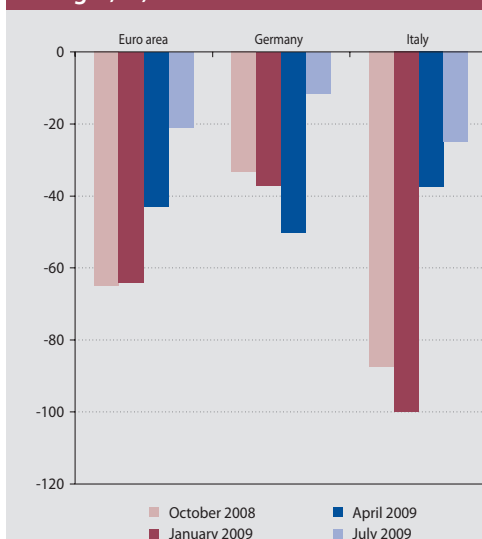
Investors gradually became less risk averse and showed increasing interest in assets of emerging markets and commodity markets.

UNCERTAINTY PERSISTS DESPITE POSITIVE TRENDS

The slightly positive developments of recent months should, however, continue to be viewed with a certain amount of caution. Several indicators point to uncertainty and a still high level of risk aversion among investors. Although the situation has stabilized, indicators have not yet returned to their pre-crisis levels.

The main obstacles to a more vigorous revival of the global economy are the debt levels of the household and selected corporate sectors, which may curb their consumption and investment. In this regard, the drying-up of loans to the real economy, touched on above, will also continue to have a negative effect.

Chart 3 Corporate credit standards in selected euro area countries (quarter-on-quarter changes; %)



Source: ECB, national central banks.

Note: Data are given as a net percentage share, where a positive value indicates an easing of standards.

When evaluating the sustainability of the current, moderately positive trends, it should be noted that they are to a certain extent the result of fiscal stimulus measures, which are by nature only short term in duration.

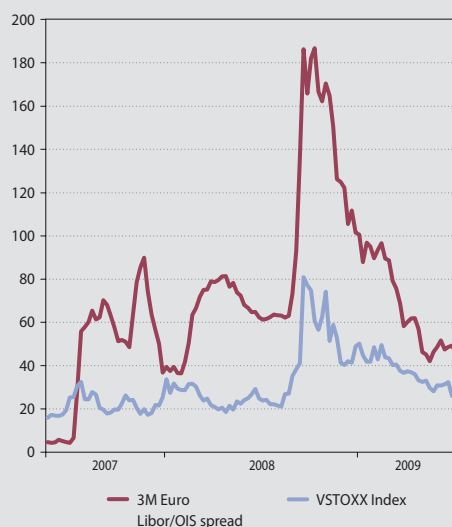
The mentioned rise in equity indices has been accompanied by a higher degree of volatility in these markets. The VSTOXX¹ index, which is often described as an "indicator of fear" in European equity markets, fell from the beginning of the year, but remains at relatively high levels.

Greater uncertainty is prevalent also in interbank markets. The Euro Libor/OIS spread (an indicator of interbank market credit risk) is, after stabilizing from year-end levels, still fluctuating far from its normal values. This is largely due to fears about the riskiness of banks' credit and securities portfolios. According to ECB estimates, the principal sources of losses of European banks in the coming period should be loans to the real economy and particularly to enterprises.

¹ An indicator of implied volatility for the Dow Jones EURO STOXX 50 index.



Chart 4 Three-month Euro Libor/OIS spread and implied volatility for the Dow Jones EURO STOXX 50



Source: Bloomberg.

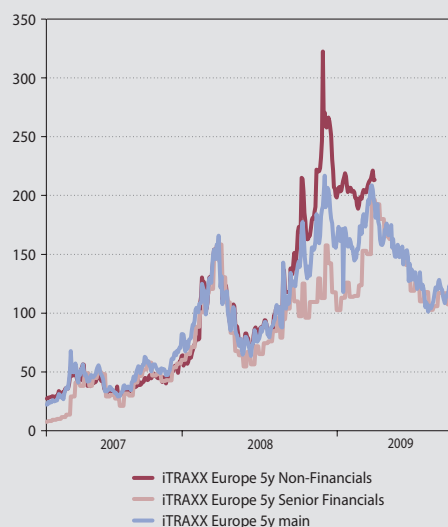
Note: VSTOXX – an indicator of implied volatility for the Dow Jones EURO STOXX 50 index, derived from options on this index. The higher the value, the higher the level of volatility. Euribor / OIS spread – an indicator that takes into account how banks perceive the credit risk in interbank lending.

The high level of risk aversion stems also from the development of credit default swap (CDS) premiums. Despite declining in recent months, their level indicates a strong aversion among investors to risks in both the financial and non-financial sectors.

Spreads on securitized securities also remain wide in comparison with the “pre-crisis period”. The stiffer requirements that investors now have for credit spreads are therefore a factor in the relatively small amount of new issues of securitized securities.

For the corporate sector, the cost of raising finance through securities issues has remained relatively high. Spreads have returned to the pre-crisis level only for the highest rated issues (AAA). For lower rating grades (even within the investment band), they still remain high.

Chart 5 iTraxx Europe five-year credit default swap index



Source: Bloomberg.

EXPECTED LOSSES IN THE CREDIT PORTFOLIOS OF EUROPEAN BANKS

European Banks, too, continue to face adverse developments and their profits have fallen sharply. Up to now, they have been particularly affected by losses on securities, though their profits have also been hit by the decrease in banking activities, especially non-interest income. Interest income has stagnated, with banks covering a reduced amount of lending with higher interest margins. Since the turn of 2009, banks in all EU countries have seen a marked rise in credit risk on loans and hence the increased creation of provisions for loans. According to the ECB's most recent June estimates, potential credit losses of euro area banks, up to 2010, stand at €283 billion. According to the ECB's assumption, almost the entire amount of losses should be accounted for by loans to the corporate sector and households.

More positively, European banks are recording a slight rise in their capital positions. The increase in their own funds and the slower rise in risk-weighted assets is strengthening capital adequacy ratios.



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CHAPTER 2

DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR



2 DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

THE EURO CHANGEOVER AND ONGOING FINANCIAL AND ECONOMIC CRISIS CONTRIBUTED TO A DECLINE IN FINANCIAL SECTOR ASSETS

In the first half of 2009, the size of the Slovak financial sector by the asset value of all of its regulated and non-regulated entities shrank by €10.3 billion, to stand at €72.7 billion by the end of the period. In relative terms, that represents a quite marked decrease of 12.4%, as well as the first drop in the aggregate value of assets since the end of 2006. In absolute terms, their value was at its lowest point since the turn of the third and fourth quarters in 2007.

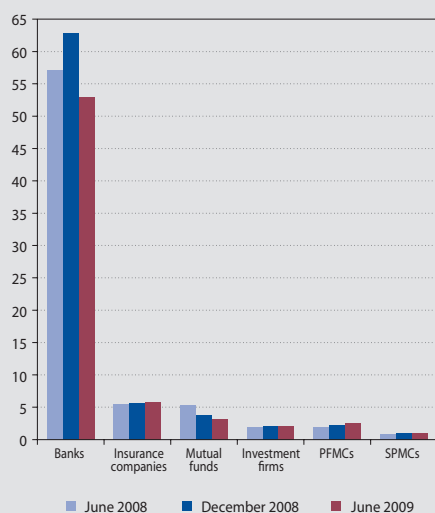
Almost the entire amount of this decline is attributable to the banking sector, in which total assets at the end of the period under review amounted to €53 billion, down by €9.9 billion compared with the end of December 2008. This does not, however, constitute a natural development in the banking system, but is rather the result of an external factor – the euro changeover – and the accompanying end to currency sterilization operations by Národná banka Slovenska. As

a result, foreign banks withdrew several billion euros from the Slovak banking sector, funds that in the past would have been channelled through domestic banks mainly into two-week reverse REPO tenders. The outflow of these deposits of foreign banks outweighed the rise in retail deposits recorded at the end of 2008, which also had its origin in preparations for the changeover to the single European currency. This ultimately led not only to a decline in the banking sector's assets, but to a change in the structure of funds, with the position of retail funds strengthened at the expense of funds from the interbank market. In regard to the stability of liabilities, this may be seen as a positive change. It should also be added that even if the fall in total assets caused by the euro were not taken into account, the assets of domestic banks would not – given the heightened caution amid the deepening economic crisis – have reached the amounts of previous periods.

Another sector that recorded declining assets in the first half of 2009 was collective investment. The amount of money invested in mutual funds fell by 17%, the largest drop recorded by any sector of the financial market. The main factor in this case was negative net sales in the first months of 2009, which continued on from the wave of redemptions reported towards the end of the previous year, though at a slower pace.

Investment firms, too, were among the regulated sectors that recorded a drop in assets, in this case a modest one. The amount of assets in the insurance sector rose in the six months to June 2009 at practically the same rate – 2.5% – as they had in 2008. The most positive development in asset value in the first half of 2009 was reported by Pillar II of the pension system, owing to the regular contributions of savers. The net asset value of Pillar II funds increased by 17%, making this the sole sector to increase the pace of its asset growth in comparison with the second half of 2008. The asset value of Pillar III funds (the voluntary pension system) also maintained a long-term rising

Chart 6 Amounts of assets or assets under management by financial market segment (EUR billions)

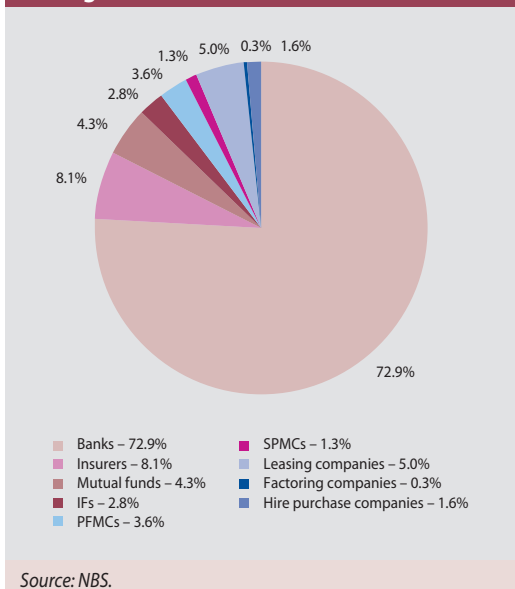


Source: NBS.



DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

Chart 7 Share of assets and assets under management of financial entities



trend, though it increased at less than one third of the pace of the Pillar II asset value.

A decline in total assets was also found among unregulated sectors of the financial market, which in Slovakia include leasing, hire purchase, and factoring. In absolute terms, the leasing sector reported the largest fall. By contrast, the assets of hire purchase companies increased.

BANKING SECTOR TIGHTENED LENDING TO THE REAL ECONOMY

Following on from the previous period, the dynamics of the domestic financial sector's mutual exposure to the principal counterparties in the economy were based on two key events: the euro changeover and the deepening economic crisis in Slovakia. The effect of the adoption of the single European currency was substantially reflected in the position of the domestic banking sector to NBS and the external environment. The cessation of currency sterilization operations by Národná banka Slovenska resulted, on one hand, in the outflow of a large amount of funds from foreign banks (since the reason for holding them in the Slovak banking sector had ceased to exist) and, on the other hand, the remaining surplus liquidity in the domestic banking sector – which until the end of 2008 was being drained through reverse REPO tenders – being channeled to foreign banks in the form of deposits. Thus the sizeable liability position of domestic banks vis-à-vis

the external environment was turned into an asset position. In regard to this process, as well as the fact that several banks in the first half of 2009 began to make greater use of short-term financing from NBS, the banking sector put itself into the position of a net creditor to the central bank.

The economic crisis likewise affected the exposure of the domestic financial system, though primarily in relation to the real economy. Banks were more cautious in lending to the domestic economy, which resulted in a slower rise in lending to households and even a slight decline in loans to enterprises. As a result of this risk aversion, surplus funds in the banking sector were to a large extent spent on government securities, mainly domestic ones. On the liabilities side, the crisis fed through to corporate deposits, as enterprises faced with economic difficulties probably had to plug holes in their operating cash-flow with reserves from their bank accounts. It may be seen as positive that the bulk of the new funds that flowed from households into banking sector at the end of 2008, remained in the sector during the first half of 2009.

As a consequence of portfolio restructuring in Pillar II of the pension system, some banks recorded an increase in deposits from pension funds. Net

Chart 8 Average ROE by segment (%)

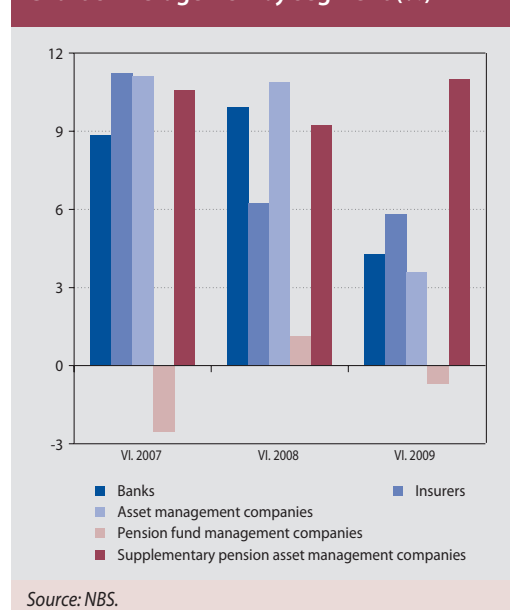




Table 2 Selected financial flows (EUR millions)

	NBS	Domestic financial sector						Domestic non-financial sector			External environment			
		Domestic banks	Insurance companies	PFMCs	SPMCs	Asset management companies	Other financial companies	Households	Nonfinancial companies	General government	Foreign banks	Foreign asset management companies	Foreign general government and international institutions	Other
NBS		70 – 1,423	0 – 0	0 – 0	0 – 0	0 – 0	0 – 0	10 – 10	3.3 – 3.6		5,245 – 8,935		6,373 – 3,762	258 – 969
Domestic banks	15,767 – 1,203	1,819 – 1,768		1 – 0.4		0 – 0	1,892 – 1,603	11,850 – 12,495	15,203 – 15,120	8,796 – 11,003	2,689 – 5,575		43 – 594	1,660 – 1,459
Insurance companies	0 – 0	1,427 – 1,639												
PFMCs and SPMCs	0 – 0					193 – 202								
Asset management companies	0 – 0	1,039 – 1,290				252 – 250								
Other financial companies	1 – 2.9	1,195 – 1,343												
Households	40 – 39	21,676 – 21,310	2,372 – 2,417	2,224 – 2,609	929 – 980	2,556 – 2,266						498 – 571		
Nonfinancial companies	0 – 0	10,888 – 8,258				33 – 58								
General government	0.3 – 3.9	3,751 – 3,552				1 – 0.2								
Foreign banks	432 – 638													
Foreign asset management companies														
Foreign general government and international institutions	12 – 7	13,185 – 3,297				33 – 36								
Other														

A direct creditor-debtor relationship does not exist.

Data are not available.

Source: NBS.

Note:

- Structure of data in cell: December 2008 – June 2009.
- 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.



DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

sales of mutual funds were still continuing at the turn of 2009, albeit at a slower pace compared with the previous period.

PROFITS IN THE FINANCIAL SECTOR FELL SHARPLY

Profits in the financial sector reflected the negative trends in the first half of 2009. Return on equity declined in all sectors of the financial market,

except for Pillar III of the pension saving system. This drop was particularly marked in banks and the collective investment sector. Pillar II as a whole, which had reported a profit for the first half of 2008, made a loss again in the first half of 2009. The cause of these declines is predominantly the financial crisis, which is in various ways diminishing the profits of individual sectors.



2.1 THE BANKING SECTOR

2.1.1 TRENDS IN THE BANKING SECTOR BALANCE SHEET

The downturn in the domestic and foreign economy had a major impact on the activities of banks in the first half of 2009. While previous periods had been characterized by relatively dynamic growth, especially in lending, the first half of the year saw banks being more conservative in their activities.

The slowdown was most pronounced in lending to the corporate sector. A combination of the stricter approach of banks and the drop in demand from enterprises brought about a decrease in the amount of loans to enterprises in the first half of 2009. Given the high share of sectors sensitive to the economic downturn, the decline in lending was recorded in several sectors. The worsened economic situation increased the credit default risk, which in turn led to tightening of credit conditions. The lending process also reflected banks' efforts to ensure an adequate capital position, which may be done by slowing down the growth in, or reducing, lending.

Lending to households did not decline as markedly as lending to the corporate sector. In the first half of 2009, the year-on-year pace of growth fluctuated at relatively high levels but had a downward trend. House purchase loans reflected quite significantly the effect of the real estate market, in which prices had been falling since the second half of 2008. From the turn of 2009, the worsening financial position of households gradually fed through to the level of demand for loans and to the lending terms offered by banks.

We assume that current trends, whether in lending to enterprises or households, will continue in the coming period. A key factor affecting the lending market will be the revival of the domestic and external economy, though no major changes in economic development are expected in the next period.

That banks are taking a more conservative approach is apparent also from the structure of their investments in securities. At the sectoral level, investments in government bonds rose, with some banks not only increasing their holdings of domestic government bonds, but also of bonds issued by other central European governments.

The liabilities side of banks' balance sheets was also affected by the financial and economic crisis. There were substantial changes in corporate deposits, since with sales plunging and loans becoming harder to obtain, firms were increasingly forced to dip into their bank deposits.

Households' deposits remained largely unchanged. Following a surge at the end of 2008, related to the entry into the euro area, total retail deposits recorded a period of stagnation.

The adverse situation in financial markets had a restrictive effect on the issuance of mortgage bonds by banks, and the total amount of issues continued to decline in the first half of 2009. Even though financial markets are gradually stabilizing, the issuance of new mortgage bonds will remain relatively difficult.

According to our estimates, the banking sector will require new issues in the amount of around €1 billion for the period up to 2011.

Entry into the euro area also brought significant changes to banks' activities in the interbank market. With NBS no longer holding the sterilization position that had previously accounted for a significant part of banks' activities, deposits from foreign banks declined. From the turn of the year, loans provided by domestic banks to their parent undertakings rose. There was also a moderate increase in banks' refinancing with NBS.

2.1.1.1 CUSTOMERS

RETAIL SECTOR

LOANS TO HOUSEHOLDS CONTINUED TO RISE, BUT AT A SLOWER PACE

The impact of the economic downturn on the retail lending market has so far been more mod-

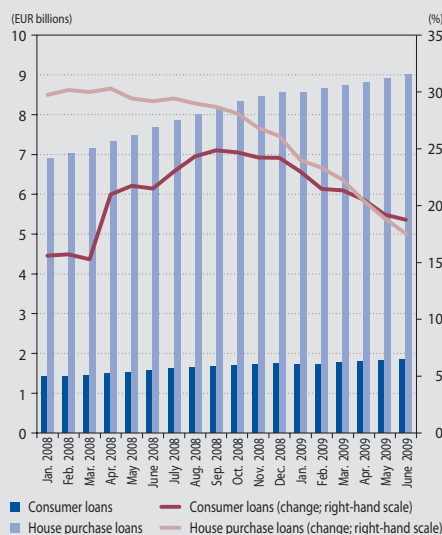
erate than on corporate lending. Although the pace of lending growth to households fell year-on-year in the first half of 2009, it managed to reach almost 21% in some months, which still represents a relatively high increase.

House purchase loans have been recording a year-on-year decline in growth since the start of the second half of 2008, when residential real estate



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Chart 9 Retail lending

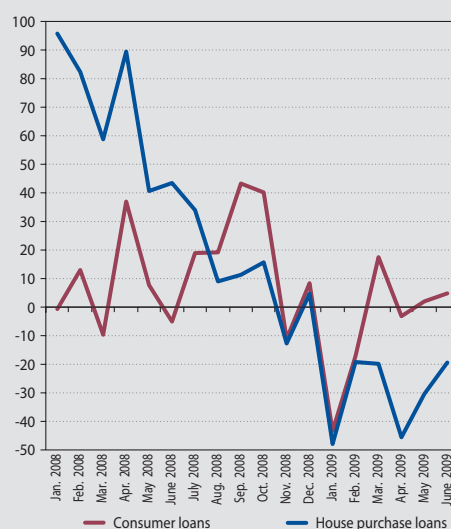


Source: NBS.

Note:

Right-hand scale: year-on-year change in amount of loans.

Chart 10 New retail loans – changes year-on-year



Source: NBS.

prices began to fall. The drop in these prices fuelled expectations that they would continue to decline, which in turn dampened demand for loans. The slower rise in house purchase loans also reflected the deteriorating economic development. We assume that this effect has up to now been less significant than the developments in the property market. With the financial position of households expected to worsen, the importance of this factor in debt decisions will increase substantially.

The situation in consumer loans is to a large extent mirroring developments in the domestic economy. Their pace of growth began to slow down at the end of 2008 amid a slump in economic sentiment among households. Consumer lending did, however, receive a boost from the government's introduction of subsidies for the purchase of new cars (the so-called scrapping scheme).

The trend decline in lending growth is further confirmed by developments in new loans. The relatively clear trend of a year-on-year decline in new lending is most apparent in respect of house purchase loans.

Lending rates for households did not fall as sharply as those for enterprises. Whereas average rates on house purchase loans declined by

0.67 percentage point from the turn of the year, rates on new investment loans fell almost twice as much, by 1.2 percentage points.

The lower decline in lending rates was reflected in a sharp rise in interest rate spreads, which increased on both house purchase loans and consumer loans. At the level of banks, this showed up in a higher overall interest rate spread for the household sector.

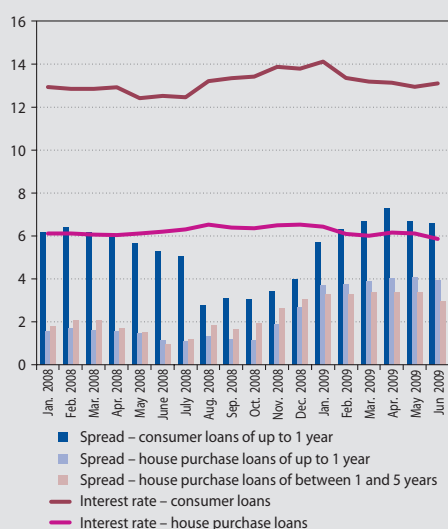
The rising interest rate spreads are largely attributable to the increasing credit risk of households. Banks are also seeking to mitigate the adverse effect that decreased lending is having on their interest income.

While interest rate spreads on loans to households climbed in almost all countries in the first half of year, the increase in spreads on house purchase loans was most pronounced in Slovakia. Spreads on house purchase loans with initial rate fixation of up to one year were almost twice as high in the first half of the year as those in, for example, Austria and Germany.

Differences in spreads also exist between banks. The largest banks have long been reporting higher spreads. Medium-sized banks are more



Chart 11 Interest rates and spreads on new retail loans (%)



Source: NBS.

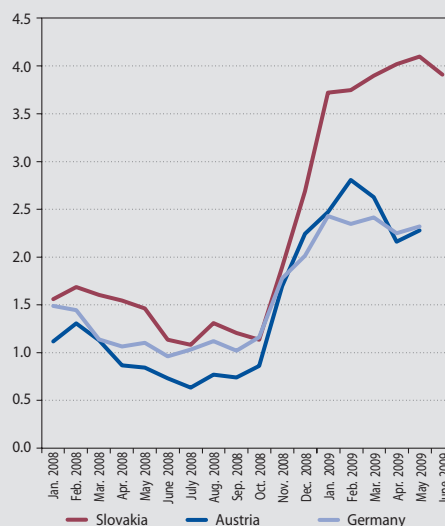
Notes: Data on spreads are given in percentage points.

Spreads on loans with initial rate fixation of up to 1 year represent the difference between retail rates and the 12-month BRIBOR or EURIBOR.

Spreads on loans with initial rate fixation of between 1 and 5 years represent the difference between retail rates and yields on 5-year Slovak government bonds.

Data for interest rates on new loans are given in percent.

Chart 12 Comparison of interest rate spreads on house purchase loans with initial rate fixation of up to one year between selected countries (p.p.)



Source: NBS, ECB.

Note: Spreads on loans with initial rate fixation of up to 1 year represent the difference between retail rates and the 12-month BRIBOR or EURIBOR.

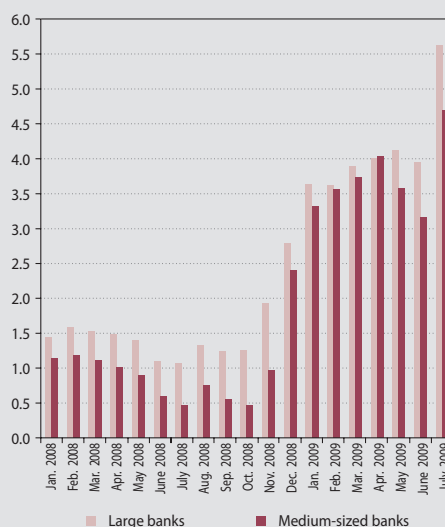
or less following the same interest rate policy as large banks, but report lower spreads. In the first half of the year, this disparity between large banks and medium-sized banks increased still further, to almost one percentage point.

TIGHTENING OF STANDARDS AND DECLINE IN DEMAND

For the second successive quarter, banks were tightening their credit standards. In the case of house purchase loans, this was because of developments in the residential real estate market, where property prices continued to drop. Banks' concerns stemmed also from the expected deterioration in the economic situation of households, which would in turn undermine the ability of households to repay bank loans. But although the tightening of credit standards continued in the first half of 2009, it did so at a more moderate pace. This is largely because banks' outlook for certain risk factors was slightly more positive than it had been in the previous six months.

In another positive development, retail demand for loans also declined more slowly than in the previous quarter. This was largely due to a slight

Chart 13 Interest rate spreads on house purchase loans with initial rate fixation of up to one year – compared between banks by size (p.p.)



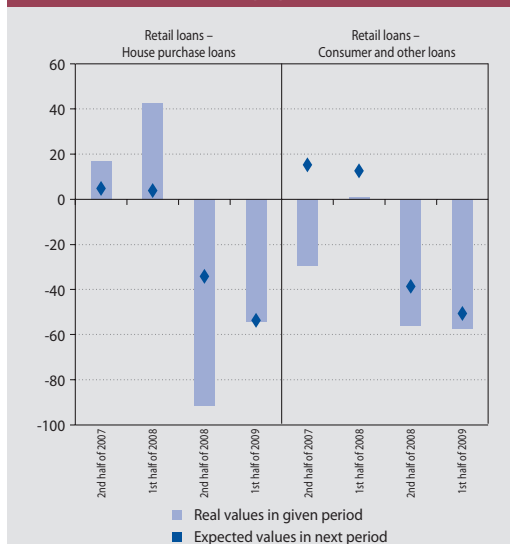
Source: NBS, ECB.

Note: Spreads on loans with initial rate fixation of up to 1 year represent the difference between retail rates and the 12-month BRIBOR or EURIBOR.



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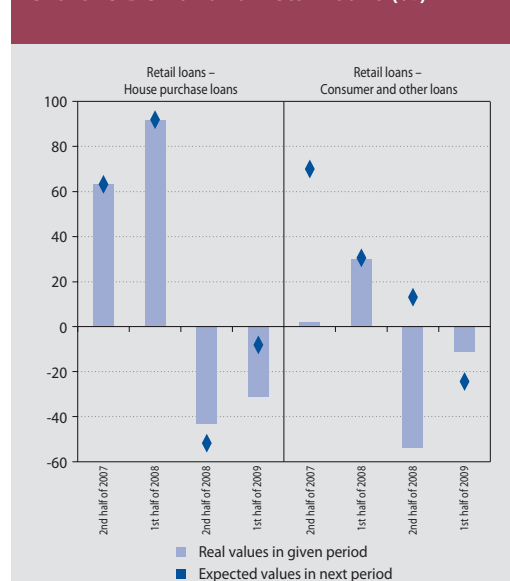
Chart 14 Development of standards for loans to households (%)



Source: NBS, Bank Lending Survey.

Note: Data are given as a net percentage share, where a positive value indicates an easing of standards. Changes in standards express the subjective view of banks.

Chart 15 Demand for retail loans (%)



Source: NBS, Bank Lending Survey.

Note: Data are given as a net percentage share, where a positive value indicates rising demand. Changes in demand express the subjective view of banks.

recovery of consumer confidence in selected segments, which was in turn reflected in rising demand for consumer loans. The decline in demand for house purchase loans continued to be driven mainly by adverse developments in the residential property market.

Despite some positive tendencies, the pace of lending growth to households is assumed to decline in the coming period. It is expected that the retail lending market in the months ahead will to a greater extent be affected by deteriorating economic indicators. Far more "spillover" from adverse developments in the corporate sector is expected in the second half of 2009, which should be reflected in a dampening of demand for new loans. The amount of lending will also be significantly affected by continuing trends in property prices.

RETAIL DEPOSITS REMAIN A STABLE SOURCE OF FUNDS FOR BANKS

It was important for the sector's stability that the surge in customer deposits towards the end of 2008 (driven by an increase in household deposits) was not followed by a major drop in these deposits during the first six months of 2009.

The loan-to-deposit ratio², which by the end of 2008 had fallen to 79% under the effect of a sharp rise in deposits, started to climb back up at the beginning of 2009. Since, on the assets side, total claims on customers stagnated, this increase was caused by a decline on the liabilities side, principally a fall in the amount of deposits from enterprises and from general government.

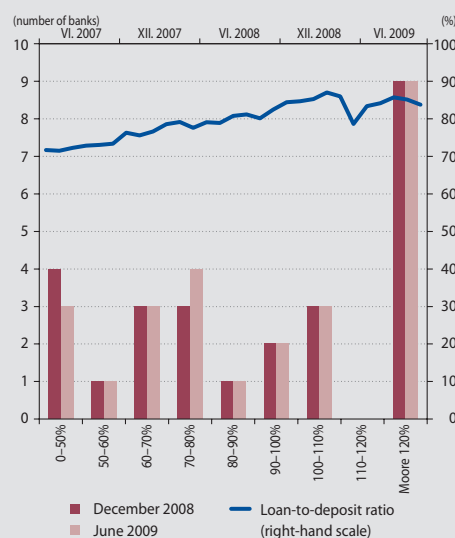
HOUSEHOLD DEPOSITS STABILIZED FOLLOWING A SURGE TOWARDS THE END OF 2008

Total retail deposits, after rising by more than 30% towards the end of 2008 in anticipation of the adoption of the single European currency, fluctuated only slightly in 2009, when they fell by 0.2%. This drop was largely accounted for by the decrease in deposits from sole traders (down by 11.2%), whereas deposits from households and non-profit institutions serving households rose slightly (by 0.1% and 5.9%, respectively). From the view of deposit terms, term deposits declined moderately (by 3.3%) and sight deposits and savings deposits rose slightly (by 3.5% and 8.7%, respectively). This probably reflects the fact that towards the end of 2008 households were depositing disposable funds predominantly in term accounts, and they were partly influenced to do so by a bank-led advertising campaign.

² Indicates the extent to which loans are financed using stable deposits from customers. The lower the value, the greater the extent to which loans are financed with customer deposits and therefore the lesser the extent to which they are financed through more volatile financial markets.



Chart 16 Customer loan-to-deposit ratio

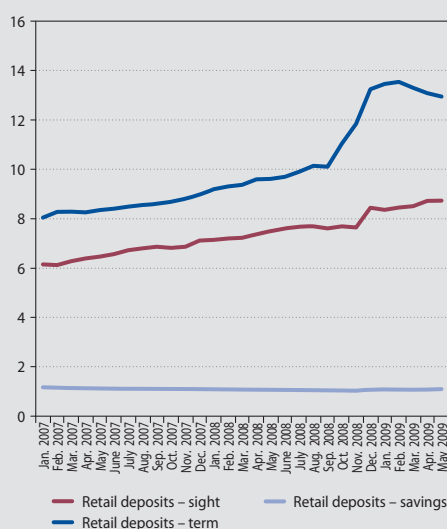


Source: NBS.

Note: The upper horizontal axis shows the date of the ratio's average value, and the right-hand scale the average value.

Entities in the range above 120% are predominantly branches of foreign banks.

Chart 17 Retail deposits (EUR billions)



Source: NBS.

DECLINE IN INTEREST RATES AND REDUCTION IN SPREADS ON HOUSEHOLD DEPOSITS DURING THE FIRST HALF OF 2009

The decline in interbank rates led also to falling retail deposit rates. In the first half of the year, it was rates on term deposits that fell the most. The more modest decline in rates on sight deposits was probably due to the lower initial level of these rates.

As interest rates fell, so did interest rate spreads measured as the difference between the respective BRIBOR or EURIBOR and the retail deposit rate. This decline is caused by the fact that retail rates did not drop by as much as interbank rates did, corroborating the assumption that interbank rate changes are only slowly passed on to retail rates, and not always to the full extent.

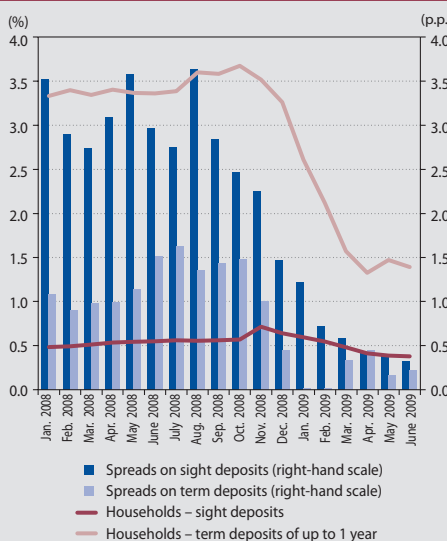
CORPORATE SECTOR

BANK LENDING TO THE CORPORATE SECTOR TIGHTENED DURING FIRST HALF OF 2009

In the first half of 2009, the corporate lending market was also adversely affected by the deepening economic and financial crisis. The total

amount of bank loans to the corporate sector during this period fell by almost 1%. This was the first drop recorded following a long period of rel-

Chart 18 Interest rates and spreads on new household deposits



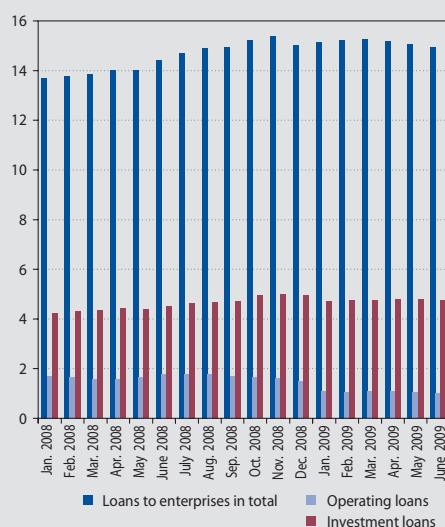
Source: NBS.

Note: Spreads were calculated as the difference between the overnight BRIBOR or EURIBOR and the rate on sight deposits and as the difference between 12 month BRIBOR or EURIBOR and the rate on term deposits of up to 1 year.



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Chart 19 Corporate lending (EUR billions)



Source: NBS.

Chart 20 Year-on-year changes in selected corporate loans in the first half of 2009 (%)



Source: NBS.

actively high growth in lending to enterprises. The decline was most pronounced in January and February 2009, after which it stagnated slightly and then, in June, volume recorded a figure close to February's.

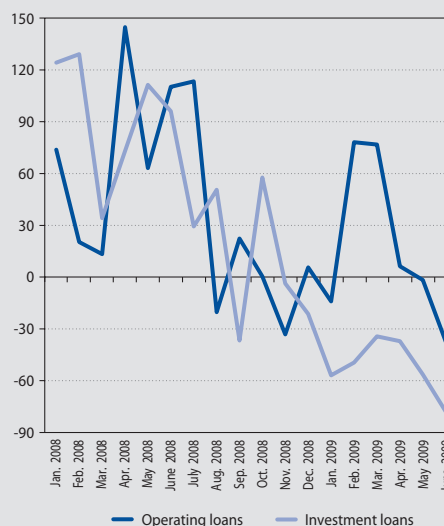
Operating loans have a declining trend, and after falling in January, they stagnated until June. House purchase loans showed a rising trend, though in June their amount declined for the first time. Investment and other loans remained more or less unchanged.

The year-on-year rise in the total balance of loans declined steadily from the beginning of the year. A similar pattern in year-on-year changes was recorded for investment loans and house purchase loans. Operating loans ended up falling by 30–40% year-on-year, other loans declined at the beginning of the second quarter. By comparison, an average year-on-year increase of 27% was recorded in all months of the first half of 2008. In 2008, the amount of all types of corporate loans rose substantially.

A lower pace of lending can also be seen in the case of new loans. Year-on-year changes in new loans from the beginning of 2008 show a falling trend. In each month of the first half of 2009, all types of loans to enterprises fell year-on-year.

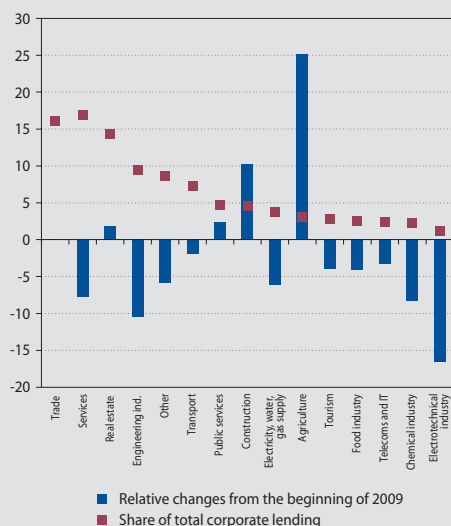
Broken down by sector, the amount of corporate lending declined in several sectors. The largest drop was in the financial services sector, reflecting a sharp fall in demand for services of leasing and factoring companies. A marked decline in lending was also seen in the export-oriented engineering industry. By contrast, lending continued to rise in the real estate sector, with several banks financing projects

Chart 21 New corporate loans (year-on-year changes; %)



Source: NBS.

**Chart 22 Corporate lending by sector
(changes from the beginning of 2009; %)**

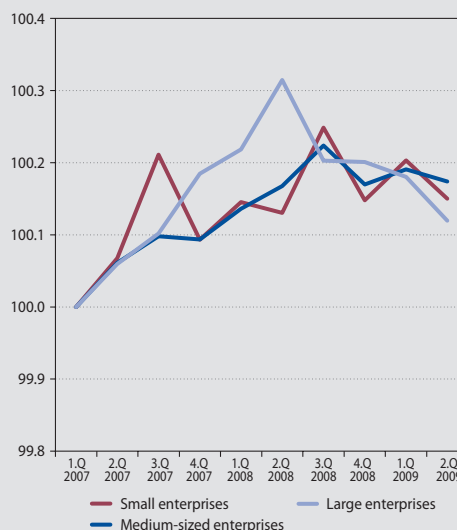


Source: NBS, Register of Bank Loans and Guarantees.

Note: The bar for each sector indicates the percentage change in the amount of bank loans received by the sector between 31.12.2008 and 30.6.2009.

The square for each sector indicates that sector's share of total loans to enterprises.

**Chart 23 Index of changes in the amount of
corporate lending by size of enterprise**



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

Note: Values on the left-hand scale represent changes in each quarter in comparison with the first quarter of 2007 (1.Q 07 = 100). Enterprise size is determined by the amount of revenues: large enterprises – annual sales of more than €33 million; medium-sized enterprises – from €1 million to €33 million; small enterprises – up to €1 million. The index was calculated from a sample of enterprises (approximately 5000 from sources of the Statistical Office of the Slovak Republic) which did not change during the period under review. The information on loans to enterprises was taken from the Register of Bank Loans and Guarantees.

that had already been started. Increased lending was also recorded in the construction and public services sectors.

In the development of lending broken down by size of enterprise, no notable differences were recorded. The amount of loans to large enterprises had been falling since the third quarter of 2008, and the amount to small and medium-sized enterprises, since the subsequent quarter. The rate of decline in lending to groups of enterprises, broken down by size, was approximately the same.

The analysis of data from the register of corporate loans also confirmed that banks had tightened corporate lending from the turn of 2009, especially to customers who only had operating loans or short-term loans. For customers who also had investments loans, credit was tightened to a far lesser degree, indicating that banks tightened credit standards mainly for those customers

whom they knew relatively less well or with whom they had only a short-term relationship.

TIGHTENING OF CREDIT STANDARDS FOR LOANS TO ENTERPRISES

One reason for the smaller amount of loans to enterprises is the increasingly cautious approach of banks to new lending. This is how banks reacted to the worsening economic environment and rising uncertainty, their fears stoked mainly by the slump in performance and financial indicators of the corporate sector.

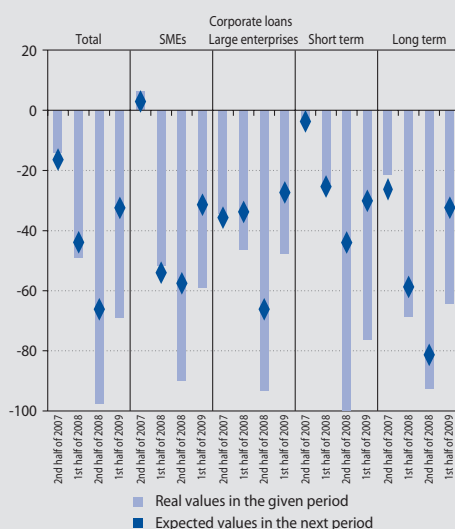
Banks are taking a stricter approach also in order to strengthen their capital position – by stemming the rise in risk-weighted assets and by creating an adequate capital requirement for the coverage of possible losses in the future.

The more cautious approach of banks was reflected mainly in short-term loans – operating loans and current account overdrafts. Since these have



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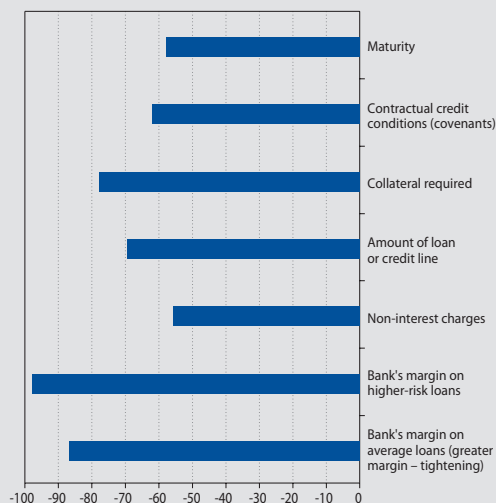
Chart 24 Credit standards for corporate loans (%)



Source: NBS, Bank Lending Survey.

Note: Data are given as a net percentage share, where a positive value indicates an easing of standards. Changes in standards express the subjective view of banks.

Chart 25 Changes in corporate lending conditions in the first half of 2009 (%)



Source: NBS, Bank Lending Survey.

Note: Data are given as a net percentage share, where a positive value indicates an easing of standards. Changes in standards express the subjective view of banks.

a shorter maturity, banks have more flexibility in adjusting the conditions of their provision.

In a positive development, credit standards were tightened more moderately in the first half of 2009 than in previous half year, which may indicate a shift in the cycle. This is further confirmed by banks' expectations for the development of credit standards over the second half of the year, with the majority assuming a slowdown in their tightening. It should be noted, however, that standards have been cumulatively tightened since 2007, and that their current setting is therefore relatively strict.

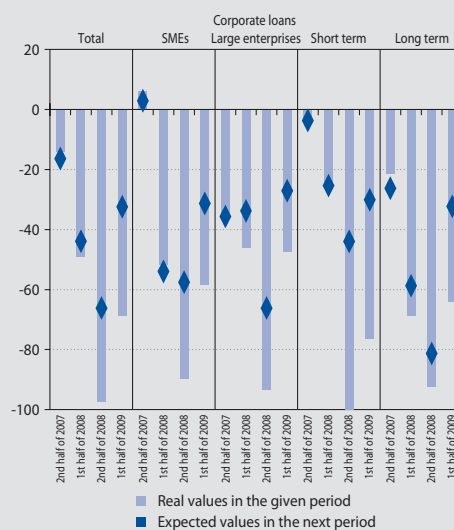
A similar situation in the tightening of credit standards can also be seen in other euro area countries, almost all of which saw a relaxation of the tightening in the second quarter of 2009.

The tightening of standards was reflected in several parameters of corporate loans. Banks proved increasingly cautious mainly in respect of the required interest margins, collateral, return on financial flows, loan maturities, and other lending parameters.

The amount of lending was to a notable extent affected by the corporate sector's demand for new loans. Most banks had already recorded four suc-

cessive quarters of declining corporate demand for loans, largely due to the downturn in activity in both the foreign and Slovak economies, the considerable narrowing of investment opportunities, and the overall rise in uncertainty, which tempers the willingness of enterprises to take on debt.

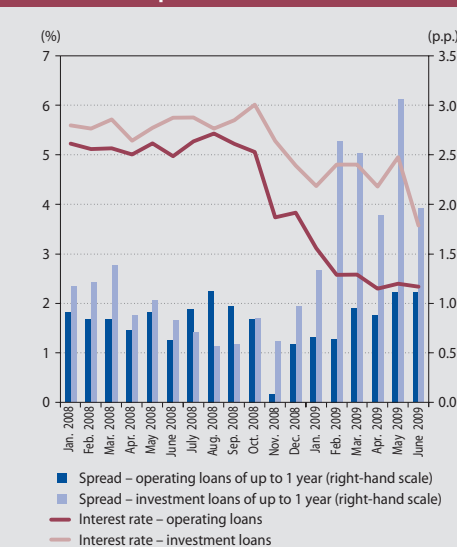
Chart 26 Changes in demand for loans (%)



Source: NBS, Bank Lending Survey.

Note: Data are given as a net percentage share, where a positive value indicates an increase in demand. Changes in demand express the subjective view of banks.

Chart 27 Interest rates and spreads on new loans to enterprises



Source: NBS.

Note: Spreads on loans with initial rate fixation of up to 1 year represent the difference between retail rates and the 12-month BRIBOR or EURIBOR.

INTEREST RATES FELL, BUT INTEREST RATE SPREADS INCREASED

Lending to enterprises declined despite the fact that lending rates on new loans to enter-

prises had fallen markedly since the last quarter of 2008. The fall in lending rates was caused by ECB interventions in the interbank market, and it fed through to rates on all types of corporate loans.

The decline in interbank rates was not, however, fully reflected in lending rates on new loans to enterprises. The main reason for this was the corporate sector's rising credit risk amid the worsening economic situation. The ECB's interventions therefore increased liquidity, but did not alter the way banks viewed credit risk and the availability of capital for the coverage of this risk.

Banks' spreads on new loans began to rise from the end of 2008 and continued to do so throughout the first half of 2009. Spreads on investment loans rose particularly sharply. It should be noted in regard to corporate lending that the extent by which banks reduced spreads on corporate deposits was similar to that by which they increased the spreads on loans. The total net interest rate spread of banks on the corporate sector therefore remained almost unchanged from the beginning of the year.

Box 1

ANALYSIS OF INTEREST RATES ON NEW LOANS IN THE FIRST HALF OF 2009

In this part, we look at the development of interest rates on new loans to households and enterprises. In the case of households, we assess mainly house purchase loans and consumer loans. As for enterprises, our focus is on operating loans, investment loans, house purchase loans and current account overdrafts. Most of these interest rates can be shown to have fluctuated at least partly in response to changes in the NBS base rate – or, from 2009, the ECB base rate – and therefore to changes in interbank interest rates. We will therefore deal with the question of whether, in the first half of the year, there was a change in the relationship between lending rates on new loans and interbank interest rates. If the answer is affirmative, then such change may be attributable to banks being more sensitive to credit risk.³

The first step was to check for which types of interest rates it was possible to show a long-run relationship. We looked for this relationship between the retail rate with a given maturity and the interbank market rate, or swap rate, with a maturity not longer than the retail rate's maturity. In searching for this long-run relationship, we used the following cointegration equation:

$$r_t^{kl} + \alpha_1 r_t^{mb} = c$$

where r_t^{kl} is the retail interest rate, r_t^{mb} is the interbank interest rate, and c is a constant. We estimated the cointegration relations using the Johansen method based on the respective error-correction equations.

We checked whether a long-run relationship existed during the time horizon from January 2006 to December 2008.

3 Another possible viewpoint is to look for a correlation between interest rates on new loans and deposits. The problem with this, however, is difficulty in comparing individual groups of rates, owing to their differing maturities and therefore their different potential liquidity margins.



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The existence of a long-run relationship was confirmed in the following cases:

Table A Retail rates and interbank market rates between which a long-run relationship was confirmed to existed during the period under review

Retail rate	Interbank market rate
House purchase loans to households with initial rate fixation of up to 1 year	BRIBOR/EURIBOR 12M
House purchase loans to households with initial rate fixation of up to 5 years	Swap rate with a 5-year maturity
Operating loans to enterprises	BRIBOR/EURIBOR 3M
Real estate purchase loans to enterprises with initial rate fixation of up to 1 year	BRIBOR/EURIBOR 12M
Investment loans to enterprises with initial rate fixation of up to 1 year	BRIBOR/EURIBOR 12M
Investment loans to enterprises with initial rate fixation of up to 5 years	Swap rate with a 5-year maturity
Current account overdraft (enterprises)	ON BRIBOR

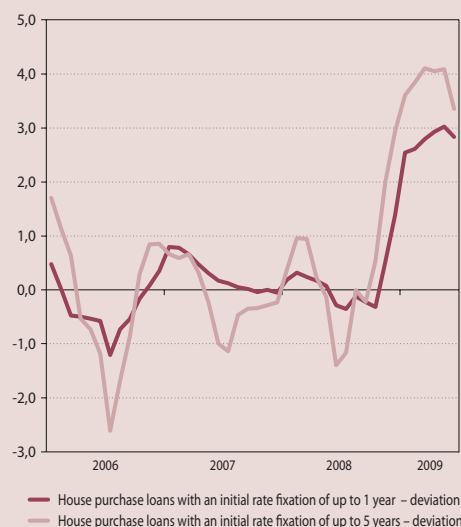
In general, the link between retail rates and interbank market rates is stronger in respect of loans to enterprises. This was confirmed with several groups of loans. In the case of loans to households, a long-run relationship was recorded only in respect of house purchase loans.

In the first half of 2009, deviations from the equilibrium were recorded mainly in house purchase loans to households. In regard to lending rates to households, the deviation from the equilibrium in the first half of the year may be seen as a result of retail rates declin-

ing more moderately than interbank rates. This deviation is partially explained by the rise in credit risk (measured as a share of bad loans).

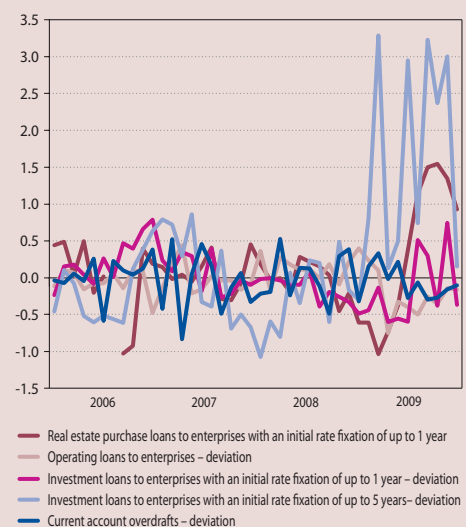
As for corporate loans, interest rates on the majority of them maintained a balanced relationship with interbank rates during the first half of 2009. The only significant deviation was found with investment loans that have an initial rate fixation of up to 5 years and with real estate purchase loans that have an initial rate fixation of up to 1 year. These loans, however, did not constitute a significant pro-

Chart A Deviation of household interest rates from the equilibrium (p.p.)



Source: NBS, own calculations.

Chart B Deviation of corporate interest rates from the equilibrium (p.p.)



Source: NBS, own calculations.

portion of new loans to enterprises. No significant deviation was identified in the case of investment loans with an initial rate fixation of up to 1 year, operating loans, or current account overdrafts.

Where an increase was confirmed in the deviation of the retail rate from the long-run relationship, we attempted to explain this deviation using a selected indicator of credit risk. This credit risk indicators used by us were the loan default rates in the household or corporate sector and the iTraxx index. We verified the explanatory strength of the given indicator by including it in the cointegration equation, as follows:

$$r_t^{kl} + \alpha_1 r_t^{mb} + \alpha_2 ikr_t = c$$

where ikr_t is the given indicator of credit risk. In the case of interest rates on new house purchase loans, the loan default rate appeared to be a suitable indicator, and after being included in the long-run relationship, it explained the deviation in the first half of 2009 to within approximately 1 percentage point for both types of loan. A similar result to that for house

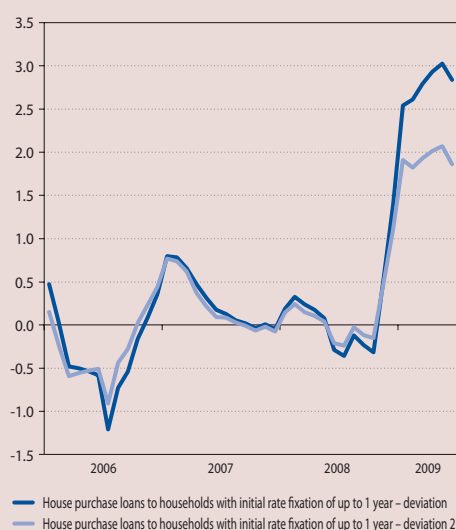
purchase loans with an initial rate fixation of up to 1 year was recorded for loans with a 5-year fixed rate.

In the case of corporate real-estate loans, a large part of the deviation recorded in the first half of 2009 could not be explained either by the iTraxx index or the loan default rate. For investment loans with an initial rate fixation of up to 5 years, the iTraxx indicator appeared to be a suitable credit risk indicator since it explained part of the deviation recorded from the turn of 2008 and 2009.

It should be noted, however, that we used a relatively simple credit risk indicators and that if we had used more suitable indicators (better explaining the strategy and behaviour of particular banks), they would probably have explained a greater part of the deviation from the long-term correlation.

Considering that different banks probably take slightly varying approaches to the setting of interest rates, we examined the development of interest rates also in each of the 5 largest banks. It may be said that the conclusions applicable

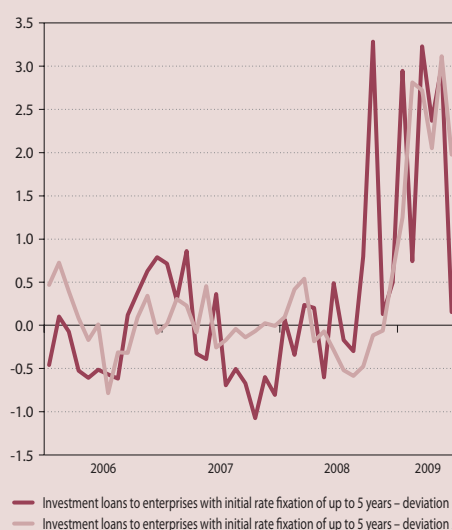
Chart C Deviation of the rate on house purchase loans with initial rate fixation of up to 1 year (p.p.)



Source: NBS, own calculations.

Note: Deviation 2 expresses the deviation from the equilibrium following the inclusion of the credit risk indicator.

Chart D Deviation of the rate on investment loans with initial rate fixation of up to 5 years (p.p.)



Source: NBS, own calculations.

Note: Deviation 2 expresses the deviation from the equilibrium following the inclusion of the credit risk indicator.



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for particular banks are similar to those for the sector as a whole. A long-run relationship was found in the case of house purchase loans to households and the following loans to enterprises – investment loans, operating loans and current account overdrafts.

In general, no major deviation from the long-run relationship was found in the case

of current account overdrafts or, in certain banks, operating loans and investment loans with an initial fixed rate of up to 1 year. The more pronounced deviations in the case of house purchase loans to households and, in certain banks, investment and operating loans to enterprises could be at least partially explained by one of the selected credit risk indicators.

CORPORATE DEPOSITS CONTINUED DECLINING TREND IN FIRST HALF OF 2009

The amount of corporate deposits, both term and sight, are reporting a generally higher fluctuation than the amount of household deposits. Since the beginning of 2008, the year-on-year changes in the amount of term deposits and savings deposits have shown a clearly declining trend. This continued in the first half of 2009 when, with some slight fluctuations, the amount of term and savings deposits declined over the whole period (the year-on-year drop as at the end of June represented 23.6%). As for sight deposits, a downward trend began to appear from January 2009, though it was not as pronounced as the decline in term deposits (as at the end of June, sight deposits were down by

1.8% year-on-year). It was only in the last two months that sight deposits recorded a month-on-month increase.

These trends probably relate to the worsening liquidity position of enterprises. The loss of sales and tougher conditions for short-term borrowing from banks is forcing enterprises to tap their bank deposits.

FALLING INTEREST RATES AND SPREADS ON CORPORATE DEPOSITS

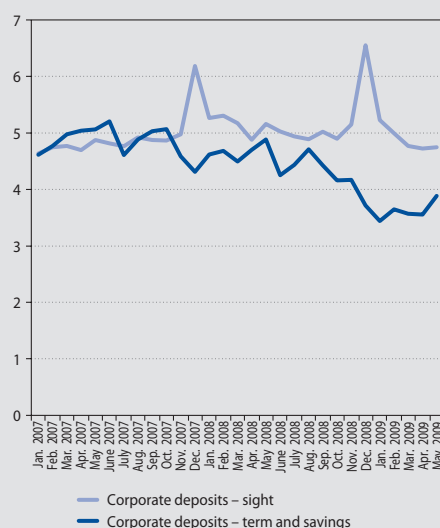
Like household deposit rates, corporate deposits rates declined in the first half of 2009. Here, too, the drop was most pronounced in term deposit rates, while rates on sight deposits fell only slightly, down to 0.15–0.2%.

Interest rate spreads – calculated as the difference between the respective BRIBOR or EURI-BOR and corporate deposit rates – fell sharply in the case of sight deposits, with the interbank rates declining more markedly than retail rates. As for term deposits, the spreads did not change to such a considerable extent and remained on a par with the spreads recorded in 2008.

OTHER SECTORS

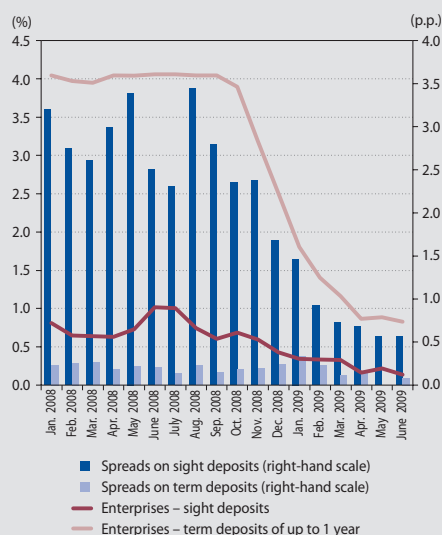
The amount of bank lending declined in other sectors, too, most noticeably in the amount of loans to financial intermediaries (down by 16% from the beginning of 2009) and to non-residents (a 14% drop). In the former case, the decrease was accounted for largely by the financing of leasing companies, which recorded a downturn in demand particularly from the non-financial corporations sector.

Chart 28 Amount of corporate deposits (EUR billions)



Source: NBS.

Chart 29 Interest rates and spreads on corporate deposits



Source: NBS.

Note: Spreads were calculated as the difference between the overnight BRIBOR or EURIBOR and sight deposit rates and as the difference between the 1M BRIBOR or EURIBOR and rates on term deposits of up to 1 year.

REVIVAL OF MARKET IN DEPOSITS OF NON-BANK CORPORATIONS

After falling in the last quarter of 2008, deposits of non-bank financial corporations (financial intermediaries, money market mutual funds, pension funds, and insurance companies) reported a rising tendency during the first six months of 2009. This was due in part to a return to growth in deposits of money market mutual funds between March and June, which indicated an end to the period of high redemptions from these funds. A greater part of the increase was, however, attributable to the rise in deposits of pension funds, as pension fund management companies – responding to an amendment to the Retirement Pension Saving Act – switched their customers' money from shares and longer-maturity bonds to bank accounts. As regards deposit terms, the largest rise was recorded by sight deposits, up by more than 84% year-on-year. It should be noted, however, that deposits of pension fund management companies are relatively concentrated among a number of banks (see the section Pension Saving).

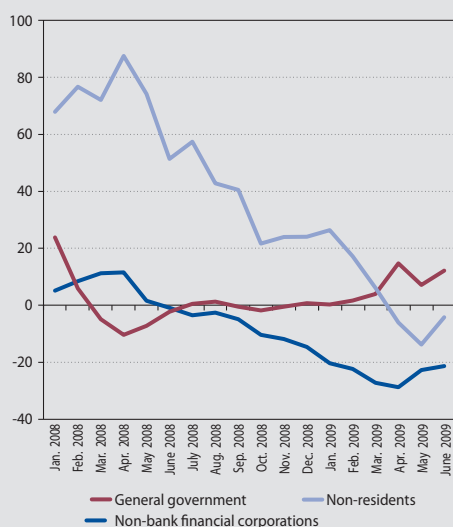
General government increased its borrowing from banks in the first half of 2009, with this year-on-year rise being more or less attributable to the adverse development during the same period of the 2008.

2.1.1.2 SECURITIES

INCREASE IN SECURITIES AS A SHARE OF BANKS' TOTAL ASSETS

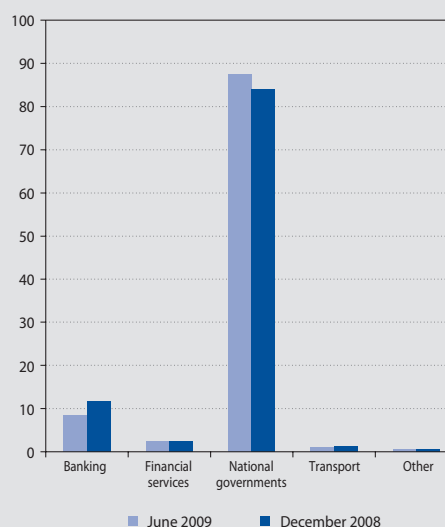
In contrast to lending activities, investments in securities rose from the turn of the year. Securi-

Chart 30 Lending to other sectors (year-on-year changes; %)



Source: NBS.

Chart 31 Structure of the debt securities portfolio of the banking sector (%)



Source: NBS, Reuters.

Note: Shares in the total debt securities.



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ties as a share of the sector's total assets climbed from 17% in December 2008 to 22% in June 2009.

Behind this rise was the fact that banks were pursuing a relatively conservative approach. From the beginning of the year, they markedly increased investments in government securities, which had already for a long time accounted for the major part of their portfolios. Investments in domestic government bonds rose particularly sharply. At the same time, several banks increased investments in bonds issued by governments of other Central European countries, notably Hungary, the Czech Republic, Poland and Slovenia. As a share of the sector's total holdings of government bonds, bonds issued by governments in this region accounted for almost 6% in June 2009, though in some banks these bonds constituted a relatively significant share.

The rating profile of the banking sector's portfolio of debt securities remained largely unchanged. Given the dominant share of domestic government bonds, the profile comprises mainly A-rated bonds.

MORTGAGE BONDS STILL HAVE LEADING PLACE AMONG ISSUED BONDS

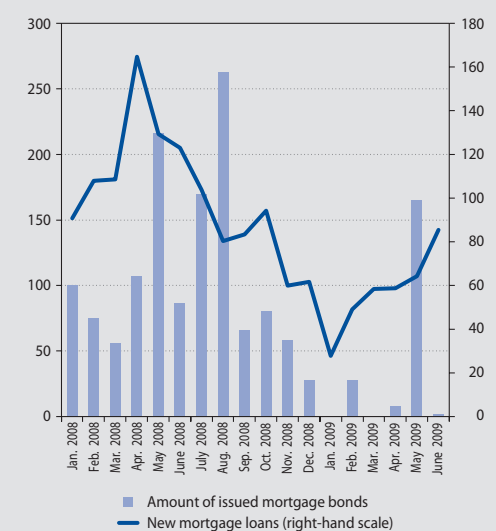
Bonds issued by banks (as an alternative means of raising finance) amounted to €3.6 billion as at the end of June 2009, or 6.8% of total liabilities. More than 88% of these bonds were mortgage bonds, which mortgage lending banks are obliged to issue. Bonds other than MBs have been issued by a total of five banks. In the first half of 2009, only two banks issued such bonds, and the issues had a total nominal value of €34.4 million.

LOW AMOUNT OF ISSUED MORTGAGE BONDS

The need for banks to raise finance in financial markets is largely related to mortgage bonds and the fact that banks are required by law to issue MBs in order to cover their mortgage lending. From January 2009, the amount of new mortgage loans rose only slightly and this was reflected in mortgage bond issues. This year, four banks made a total of seven mortgage bond issues with an aggregate nominal value of €202 million.

The relatively small number of new issues makes it somewhat difficult to assess parameters in the

Chart 32 Mortgage bond issues in the banking sector (EUR millions)



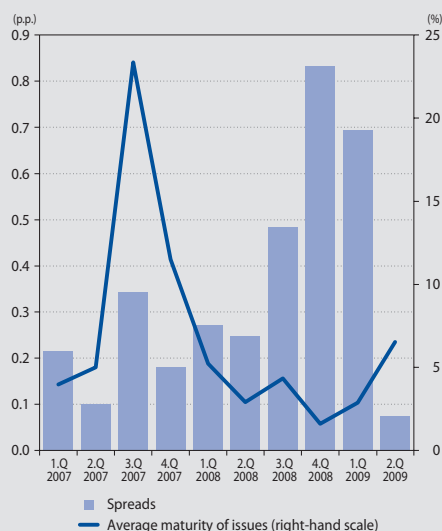
Source: NBS.

mortgage bond market. The lengthening maturity of issues could be a sign that conditions improved slightly in comparison with the fourth quarter of 2008. The average maturity of issues (weighted by their nominal value) fell in the last quarter of 2008, to 2.3 years, from more than 3.5 years over the first three quarters of that year. In the first quarter of 2009, the average maturity rose to 2.9 years, and in the second quarter, to 6.6 years.

Fixed-coupon rates on mortgage bonds more or less mirrored the movements in yields to maturity on government bonds. In the third and fourth quarters of 2008, they rose and fluctuated at between 5% and 6%, and in 2009 they declined to between 4% and 4.6%. A comparison of coupon rates and government bond yields reveals that spreads increased from the second to fourth quarters of 2008, probably owing to a rising perception of risk in the market. Likewise, the decline in spreads in the second quarter of 2009 may indicate a fall in risk perception.

MAJORITY OF BANKS NEED TO MAKE NEW MB ISSUES BEFORE THE END OF 2010

Although the banking sector will, in the coming period, see weak growth in mortgage lending, the maturing of several existing mortgage bond issues will necessitate new MB issues. This will be required even though the minimum coverage ratio for mortgage loans has fallen to 70%.

Chart 33 Spreads and the average maturity of MBs


Source: NBS.

Note: Spreads are calculated as the difference between the fixed-coupon rate and the yield to maturity on government bonds with the same maturity. Where the MB maturity was longer than 10 years, the rates were compared with yields on 10-year government bonds. Where the MB maturity was other than 2, 5 or 10 years, the government bond yields were calculated with a linear interpolation. The spreads and maturity of issues in different quarters are weighted by the nominal amount of the issues. Spreads are expressed in percentage points on the left-hand scale, and the maturity of issues is expressed in years.

Assuming that the amount of mortgage loans remains at the current level, it will be necessary to issue MBs with a total nominal value of around €950

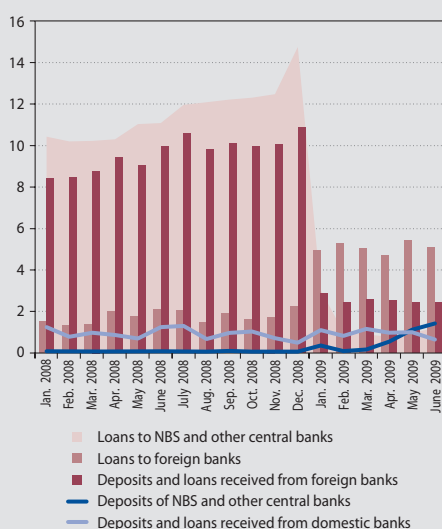
million by the end of 2010. Given the increased risk premium, i.e. the tougher market conditions, banks may face a higher prices and this in turn may feed through to interest rates on these loans.

2.1.1.3 BANKS

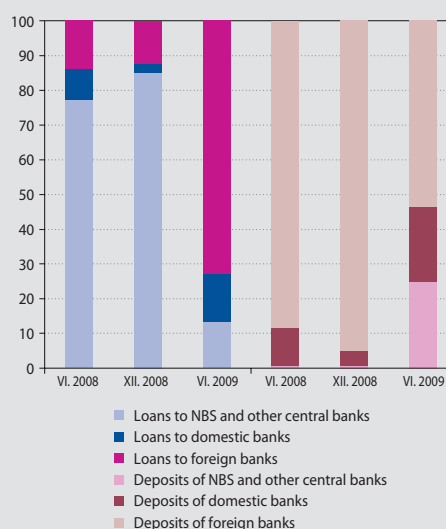
INTERBANK MARKET STRUCTURE STRONGLY AFFECTED BY THE END OF NBS'S STERILIZATION POSITION

Following Slovakia's entry into the euro area from January 2009, NBS ceased to perform sterilization operations with the banking sector. Since these operations had previously accounted for a major share of interbank transactions (almost 85% as at December 2008), this change was adversely reflected in both the total amount of interbank transactions and in the total amount of the banking sector's assets (which as at 31 January 2009 recorded a year-on-year decline of more than 13%). The money that banks had been depositing with NBS comprised mainly surplus funds received from foreign financial companies, and therefore the demise of sterilization operations with NBS was reflected on the liabilities side in a decline in deposits and loans received from foreign banks.

The decline in loans to NBS and deposits of foreign banks caused a considerable change also in the structure of interbank assets and liabilities. Another factor behind this change was the rise in loans to foreign banks, which by the end of June

Chart 34 Selected items of interbank assets and liabilities (EUR billions)


Source: NBS.

Chart 35 Structure of interbank assets and liabilities (%)


Source: NBS.



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2009 stood at €5 billion, in contrast to their previous long term average of between €1.5 billion and €2 billion. Almost all banks recorded an increase in these loans. There was also a substantial turnaround in deposits and loans received from NBS, which rose from €0.07 billion at the end of 2008 to €1.4 billion at the end of June 2009.

VAST MAJORITY OF INTERBANK TRANSACTIONS UNDERTAKEN IN THE DOMESTIC MARKET OR AS INTRA-GROUP TRANSACTIONS

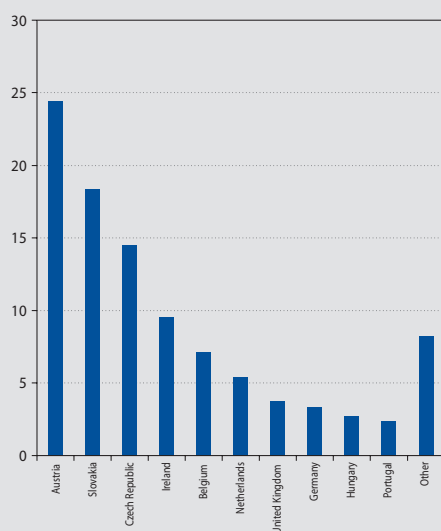
As regards the breakdown of interbank transactions by counterparty, most of them are intra-group transactions. As at the end of May, these accounted for 51% of the deposits taken from other banks and 60% of loans to other banks.

Domestic market transactions accounted for 35% of deposits received from other banks and 16% of loans to other banks. Broken down by the country in which the counterparty has its registered office, the ten countries with the highest share in this regard accounted for 92%

of all interbank transactions on the asset side, and 99% on the liabilities side, as at the end of May.

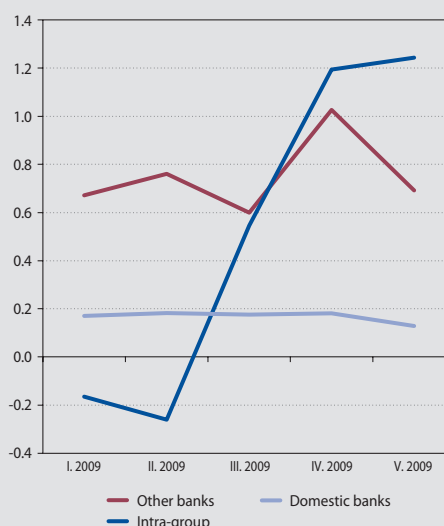
Interbank deposit and lending rates declined in the wake of a reduction in the interest rate for the ECB's main refinancing operations. From the view of the domestic banking sector, it is important that the implied interest rates on deposits received from banks in intra-group transactions and on deposits received from non-resident banks belonging to a different group declined more sharply than did the implied interest rates on loans of these two groups. This means that the margin in respect of non-resident banks belonging to a different group increased in April and then fell slightly in May. By contrast, the margin for intra-group banks went from negative values at the beginning of 2009 to positive values at the end of May. In the case of domestic banks, the margins changed only slightly during the first six months of 2009.

Chart 36 Loans to other banks – breakdown by country of counterparty (%)



Source: NBS.

Chart 37 Margin for different groups of counterparties (p.p.)



Source: NBS.

Note: Margins were calculated as the difference between the implied interest rate on loans to banks and deposits received from other banks.

2.1.2 FINANCIAL POSITION OF THE BANKING SECTOR

The banking sector saw relatively significant changes in the development of its financial position in comparison with previous analyses of the sector. The deteriorating economic situation was reflected mainly in the profitability of banks, which in the first half of 2009 slumped by almost 50% year-on-year. We expect that several banks will record an overall loss at the end of 2009.

The major component of banks' profits – interest income – stagnated. Whereas in previous periods interest income was regularly recording double-digit growth, in the first half of 2009 it rose only minimally, largely due to the slowdown in the lending market. Interest income from the corporate sector recorded the largest drop. In the case of households, the year-on-year pace of growth in interest income fell less significantly, owing to the increase in overall interest rate spreads. The lower economic activity showed up also in a decline in fee income. Year-on-year, banks' profits were also affected by the adoption of the single European currency, which led to a loss of income from foreign exchange transactions.

Banks were particularly adversely affected by deterioration in the quality of assets. The creation of provisions for both the corporate and household sectors increased.

While, on one hand, banks recorded a substantial drop in income, on the other hand they strengthened their capital position in order to create a sufficient cushion for the coverage of unexpected losses. Hence by the end of June, the banking sector's capital adequacy ratio had risen to 12.3%.

Several banks increased their capital out of profits generated in the previous period. Across the banking sector as a whole, around 60% of the 2008 profits were retained as own funds.

In general, domestic banks report a higher capital adequacy ratio than their parent undertakings abroad.

2.1.2.1 PROFITABILITY

BANK PROFITS ARE FALLING YEAR-ON-YEAR

In the last quarter of 2008, the global financial and economic crisis was seriously affecting only certain banks, but in 2009 its effects were already being felt in most of the sector. This was most obviously reflected in profitability, which fell sharply in comparison with the previous year. As at the end of June 2009, total profits in the banking sector were down by 48.2% year-on-year, and only three banks reported a rise in their net profit.

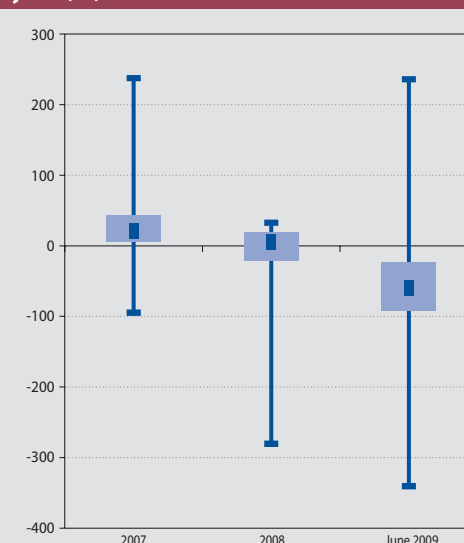
At the end of June, a total of three banks reported a loss (the reporting banks did not include certain branches of foreign banks), while at the end of April the number was four. If the current negative trends are maintained, at least a further three banks can be expected to go into the red by the end of the year.

ALL THE COMPONENTS OF GROSS INCOME DECLINED OR STAGNATED

Net interest income, the largest component of gross income (69% as at June 2008 and 77% as at June 2009), rose only slightly during the first half of 2009, in the range of 1% to 3%, whereas

in 2008 it increased by between 13% and 20% year-on-year. The modest rise in 2009 was the result of interest income declining more slowly than interest expenses.

Chart 38 Profitability – changes year-on-year (%)



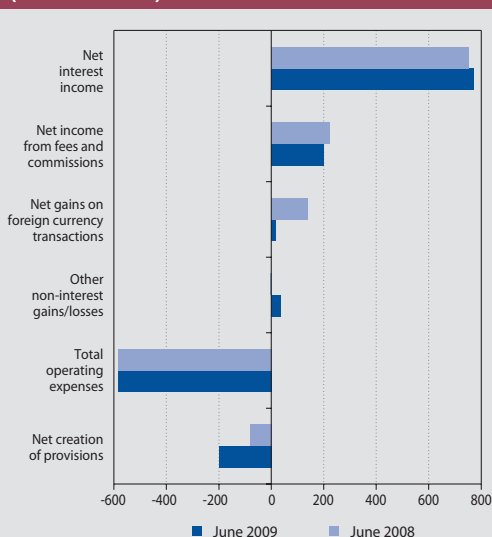
Source: NBS.

Note: The chart shows the minimum and maximum value of the annual change in profitability, the first and third quartile, and the median. The chart does not include branches of foreign banks.



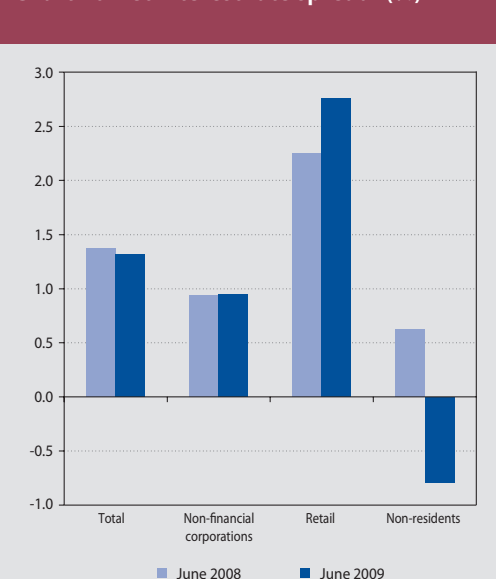
DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

Chart 39 Main components of profitability (EUR millions)



Source: NBS.

Chart 40 Net interest rate spread⁴ (%)



Source: NBS.

Note: The charts show the average values for the sector weighted by assets.

Net non-interest income as at the end of June 2009 accounted for 23% of gross income (compared with 31% at the end of June 2008). This income comprises mainly income from fees and commissions and gains on foreign currency transactions. While fee and commission income fell by only 11%, foreign exchange transaction gains slumped by more than 86% year-on-year, probably as a result of the introduction of the euro. Had the level of these gains matched the previous year's figure, the decline in banking sector profits would have been reduced from 48% to 21%.

The profits of almost all banks were adversely affected by the deteriorating quality of their credit portfolios and consequent rise in the creation of provisions.

INTEREST MARGINS STAGNATED IN THE CORPORATE SECTOR AND ROSE IN THE RETAIL SECTOR

Interest income stagnated in the first half of the year, after accounting for the largest part of the increase in bank profits over recent years. A slightly diverging development was recorded for the two principal sources of income – the retail and corporate sectors. In the case of the retail sector, the banking sector maintained a year-on-year rise in its net in-

terest rate spread, largely due to the lending policies of banks. On the assets side, banks covered the moderate rising in lending with an increase in interest margins. On the liabilities side, the surge in the amount of deposits before the end of 2008 was offset by a sharp decline in deposit rates. Hence the return on assets fell only very slightly, while liability costs fell by almost 40%.

Banks recorded a different development in the corporate sector. Both the return on assets and liability cost fell at approximately the same rate, as a result of which the interest rate spread increased by only one basis point (0.01 of a percentage point).

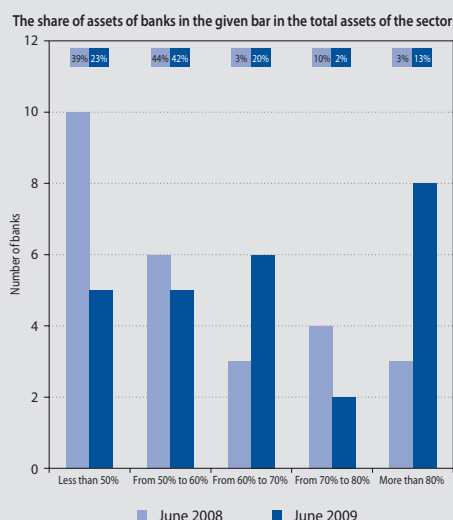
The decline in the net interest rate spread was largely caused by the fall in the interest rate spread for non-residents, with the rise in costs accompanied by a reduction in the rate of return.

COST-TO-INCOME RATIO IS RISING

The cost-to-income ratio as at the end of June 2009 was 5 p.p. higher year-on-year. This rise was caused by the gross income declining while operating expenses remained at around the previous year's level.

⁴ The values of the net interest rate spread mentioned in this section differ slightly from the values in the annexes, owing to a slight difference in the methodology used. In the case of the retail sector, this section takes into account the interest claims of the sector; in the annexes, however, net interest income is stated and therefore interest payments past due by more than 90 days are not included.

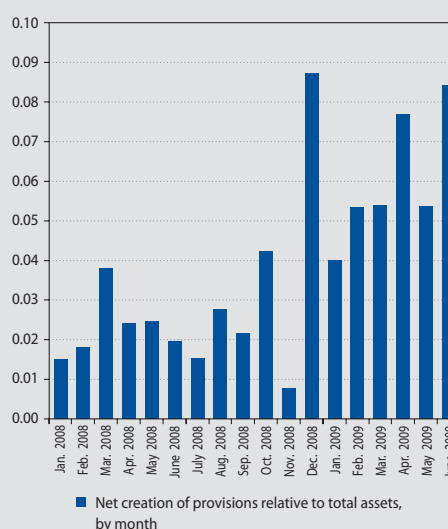
Chart 41 Distribution of cost-to-income ratios in the sector



Source: NBS.

Note: The percentage above each bar represents the assets of the banks in that bar as a share of total assets in the sector.

Chart 42 Net creation of provisions relative to total assets (%)



Source: NBS.

Note: The chart shows the month-on-month change in the net creation of provisions and net income from the write-down of claims as a share of total assets in the given month.

While the sector as a whole saw a decline in the cost-to-income ratio, some banks – particularly certain building societies and branches of foreign banks – were able to improve their ratio. In each case, the increase in efficiency was the result of a rise in gross income, albeit a more modest one than in previous years. At the same time, some banks recorded a more moderate increase in costs or a decrease in operating expenses in comparison with the previous year.

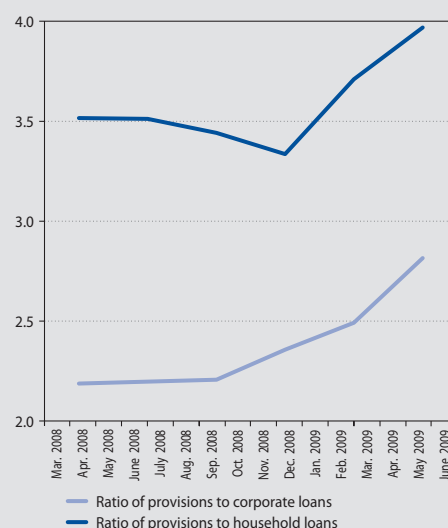
INCREASED CREATION OF PROVISIONS

Another cause of the year-on-year drop in profitability was the increased creation of provisions in response to the deteriorating quality of banks' credit portfolios. The net creation of provisions and net loss on the write-down of claims rose by 150% year-on-year. The increase in provisions was reflected also in the ratio of the net creation of provisions to total assets, which rose to between 0.04% and 0.08% in 2009 after fluctuating between 0.01% and 0.04% during 2008 (except for December). This rise was only to a minimal extent caused by the drop in total assets at the turn of 2008 and 2009.

The creation of provisions for loans to non-financial corporations and for loans to households

both rose. For non-financial corporations, the ratio of provisions increased by 0.6 p.p. year-on-year, and for households, by 0.5 p.p. The increase in provisions for corporate loans dated back to the last quarter of 2008, while the rise in provisions for loans to households did not begin until the first half of 2009.

Chart 43 Provisions relative to corporate loans and to household loans (%)



Source: NBS.



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2.1.2.2 CAPITAL REQUIREMENT

CAPITAL ADEQUACY RATIO OF THE BANKING SECTOR ROSE MARKEDLY FROM THE BEGINNING OF 2009

From the beginning of the year, several banks increased their capital level, albeit not as sharply in the same period of the previous year. By the end of June 2009, the amount of own funds in the banking sector stood at €4.09 billion, representing a rise of €254.7 million (6.6%) from the end of December 2008 and €325.9 million (8.7%) year-on-year.

In the case of most banks, the increase in own funds (mainly Tier I capital) was financed with retained earnings from previous years. On average, banks retained 60.3% of their 2008 profits as capital, and three banks substantially increased their share capital year-on-year. Selected banks also reported an increase in their subordinated debt. Total Tier II capital in the banking sector represented €418.5 million as at the end of June 2009.

The increase in own funds was not evenly distributed across the banking sector, but occurred mainly in those banks which had reported the lowest capital adequacy ratio as at the end of 2008. The trio of largest banks also increased their own funds.

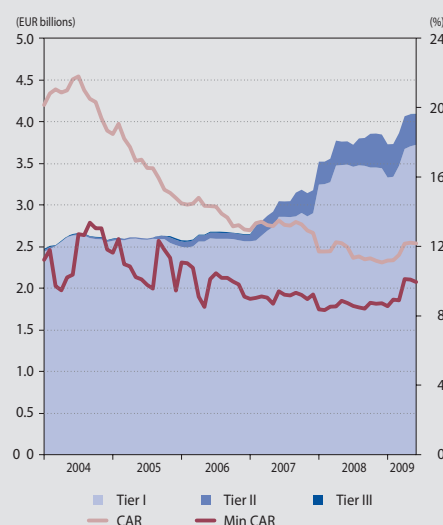
Largely because of this rise in own funds (and certain other factors, e.g. the reduction of the capital charge for foreign exchange risk and low lending growth), no bank had a capital adequacy ratio lower than 10% as at 30 June 2009, and the average CAR represented 12.3%. As recently as December 2008, by comparison, the average CAR was 11.0%, and in two banks it was lower than 9%.

CAPITAL ADEQUACY RATIO OF DOMESTIC BANKS HIGHER THAN THAT OF PARENT UNDERTAKINGS

In most cases, domestic banks are reporting a capital adequacy ratio higher than that of their parent undertakings abroad. At the same time, they also have a higher share of Tier I capital, which is generally perceived in financial markets as the highest quality capital.

Several parent undertakings of Slovak banks increased their capital through bank recapitalization schemes introduced by governments in their home countries. The largest such publicly-funded capital injections were received by KBC and Dexia banks. Two Italian-owned banks Intesa and Unicredit, were planning to apply for significant assistance, but as yet have not done so.

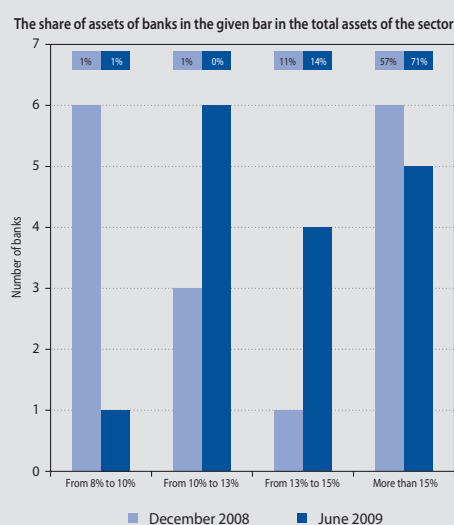
Chart 44 Components of own funds in the banking sector



Source: NBS.

Note: Left-hand scale values for Tier 1, Tier 2 and Tier 3 capital are shown in EUR billions. Right-hand scale shows capital adequacy ratio (CAR) and minimum CAR in the banking sector.

Chart 45 Breakdown of the capital adequacy ratio for the banking sector



Source: NBS.

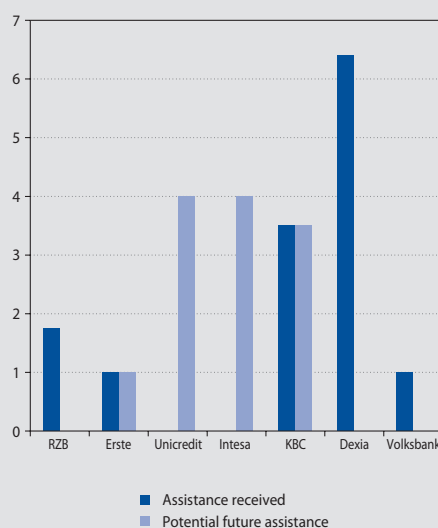


STRESS TESTING OF PARENT BANKS INDICATES ADEQUATE CAPITALIZATION

Several national central banks have recently stress-tested the sufficiency of capital in the banking sector and in the most significant banks. The Italian central bank, for example, performed stress testing in May 2009 and described the results as favourable: the estimate for losses in the years 2009 and 2010, assuming adverse macroeconomic developments, would not exceed 20% of the sector's capital (after the deduction of projected profits) as at December 2008.

The Austrian central bank assumed for the purposes of stress testing that the economic situation in Austria and in countries of Central and Eastern Europe would deteriorate considerably. According to the results of its tests, the capital adequacy ratio for the whole banking sector should not fall below the minimum requirement. A similar result was obtained also for the six most significant banks, for which the stressed capital adequacy ratio was lower than for the sector as a whole. The Austrian central bank therefore takes the view that further recapitalization of banks is not required.

Chart 46 Recapitalization of parent banks from government funds (EUR billions)



Source: Commercial banks.

Note:

- RZB – recapitalization by the Austrian government in March 2009;
- Erste – recapitalization by the Austrian government in March 2009 and a recapitalization commitment for the future;
- Unicredit – announced in March 2009 that it will apply for assistance from the Italian and Austria governments;
- Intesa – announced in March 2009 that it will apply for government assistance for recapitalization;
- KBC – recapitalization by the Belgian Government in October 2008 and by the Flemish Regional Government in July 2009;
- Dexia – recapitalization by the governments of Belgium, France, and Luxembourg in October 2008;
- Volksbank – recapitalization by the Austrian government in March 2009.



2.2 INSURANCE SECTOR

In the first half of 2009, total premiums declined (by 5.2% year-on-year) and they fell more sharply in life insurance. Almost all segments of life and non-life insurance recorded a drop in new production. By the end of the period, premiums amounted to €1.03 billion, including €0.506 billion in life insurance and €0.525 billion in non-life insurance. The strongest growth among the different lines of business (albeit far lower than last year) was again recorded by unit-linked insurance. In most non-life lines of business, the portfolios stabilized.

The total profits of insurance companies fell by 13.5%, to €70 million. Claims cost rose by 10.4% year-on-year, to €511 million. As for the investment structure of technical provisions, the share of government bonds increased at the expense of bank bonds and term deposits.

PREMIUMS⁵ FELL

The first half of 2009 saw a turnaround in total premiums, which declined over the six months after recording one of the strongest growth rates during the previous year. The economic crisis was, as expected, already being reflected in the value of the main indicator of insurance market developments.

Although life insurance has in recent years been growing far more sharply than non-life insurance, it has been affected more heavily by the worsening economic situation. The decrease in premiums in life insurance was largely accounted for by the fall in the number of contracts for traditional life insurance (including assurance on death, assurance on survival to a stipulated

age, mixed assurance, etc.). The main cause of this decline, besides contract surrenders, was an increase in the number of maturing policies and a drop in demand for this type of insurance.

In general, almost all lines of business of life and non-life insurance recorded a decline in new production during the first six months of this year, which was therefore reflected in both the number of insurance contracts and the amount of premiums.

In non-life insurance, the year-on-year decline in premiums was largely due to the drop in the motor insurance line of business.⁶

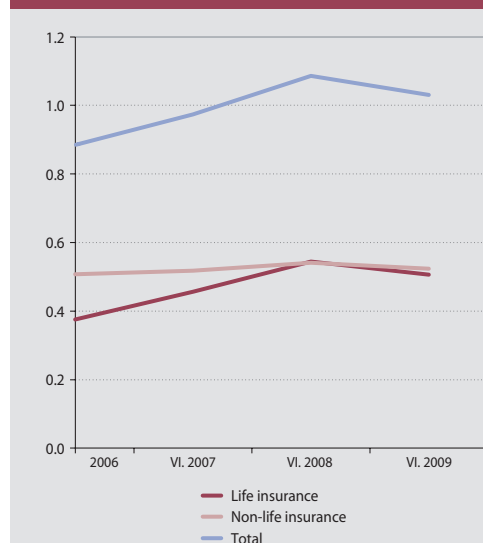
Total premiums for the first half of 2009 amounted to €1.03 billion, representing a fall of 5.2% in comparison with the same period of the previous year and the largest decline in premiums for more than ten years. In life insurance, premiums fell by 7.1%, to €505.8 million, and in non-life insurance they decreased by 3.2%, to €524.5 million. Last year, life insurance for the first time ever accounted for the larger part of total premiums, but this year non-life insurance reassumed that position after recording a lower decline.

LINES OF BUSINESS

Life insurance has in recent years been marked by rapid growth in unit-linked insurance products, where the risk of investment is borne by the insured. Although their growth was much slower in the first half of 2009, it was (at more than 12%) still the highest of any line of business of life insurance.

The economic downturn in the first half of 2009 was reflected mostly in reduced demand for

Chart 47 Premiums (EUR billions)



Source: NBS.

⁵ Premiums can be defined as the price agreed in individual insurance contracts without regard to the method of their financial reporting.

⁶ The lower premiums in this insurance category may also relate partly to the arrival in the Slovak market of branches of insurers from other EU Member States, but since they are not subject to a reporting obligation, their impact on the motor insurance sector cannot be assessed.



traditional life insurance. The low level of new production coupled with payouts made in respect of surrenders or survival to stipulated age largely account for the negative development of premiums in this area. Premiums slumped by almost 16%, the largest drop ever recorded for this line of business. Given this development, unit-linked products increased their share of total life insurance by almost 5 p.p. year-on-year, to 28.1%.

Premiums in the third-largest line of business – supplementary insurance – rose slightly in the first half of 2009, which may also be related to the growth in unit-linked insurance. As a share of total life insurance, it has for a long time been fluctuating at around 11%.

Supplementary pension insurance constitutes the smallest line of business of life insurance. Although this line of business increased its new production in the first half of the year (the only segment of life insurance to do so), it again recorded a decline in premiums.

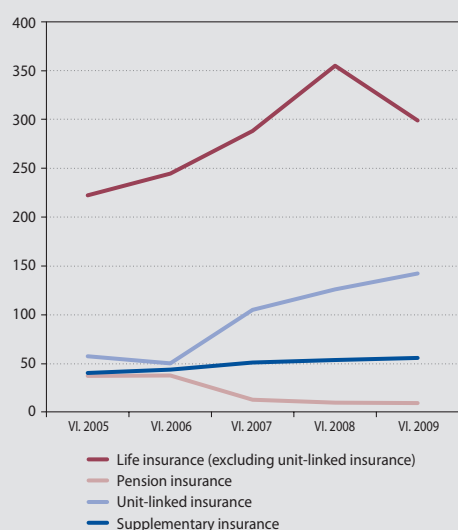
For monitoring the effects of the economic crisis on the life insurance market, one of the key indicators is the rate of surrenders in its main areas. In traditional life insurance, both the frequency and number of surrenders declined year-on-year, indicating that surrenders related to the ongoing

crisis in this line of business had already peaked in the previous year.

On the other hand, the number of surrender payments for unit-linked products rose sharply in the first half of 2009, and their frequency was the highest among all types of insurance. In the case of unit-linked insurance, however, a surrender does not necessarily mean the termination of the contract – the insured may in fact be making a partial withdrawal from funds without terminating the insurance contract.

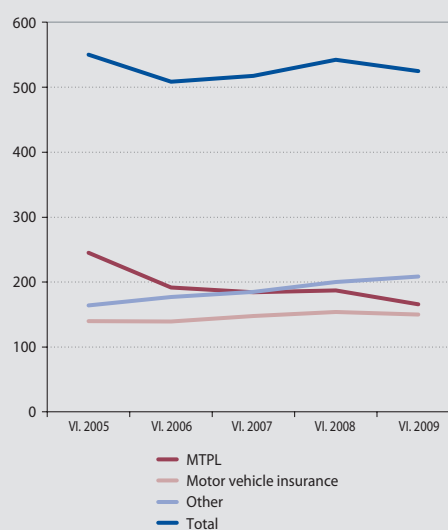
In non-life insurance, the portfolios in almost all lines of business stabilized during the first half of 2009, as is apparent from the rise in both the number of prolonged contracts and the amount of annualized premiums for these contracts. In the largest line of business of non-life insurance – motor third-party liability insurance (MTPL) – the portfolio likewise stabilized, although the premium per contract declined, perhaps indicating the persisting strength of the competitive environment and the continuing fall in premium costs in this line of business. The total decrease in MTPL premiums represented more than 11%. Premiums for motor vehicle insurance also fell, though more moderately. Therefore the share of motor insurance – MTPL and motor vehicle insurance – in total premiums in non-life insurance again declined, down to 60.3%.

Chart 48 Premiums in life insurance (EUR millions)



Source: NBS.

Chart 49 Premiums in non-life insurance (EUR millions)



Source: NBS.



DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

Another large line of business – property insurance – improved its position year-on-year by recording the highest absolute increase in premiums among all lines of business of non-life insurance. In this line of business, however, unlike in motor insurance, the average premium rose sharply also for new contracts. As a result, premiums in property insurance increased as a share of total premiums, to almost 24%.

As for other lines of business, the amount of premiums continued to rise in credit insurance, surety insurance, insurance of miscellaneous financial losses, and accident and sickness insurance, but fell in all lines of business of non-life insurance.

CLAIMS COST⁷ CONTINUED TO RISE

Claims cost rose during the first half of 2009 to €511 million, or 10.4% year-on-year. In life insurance, they increased by more than 21%, to €273 million, largely because of a rise in payouts for survival to a stipulated age and surrenders, although the number of surrenders did drop in comparison with the same period of the previous year.

In non-life insurance, claims cost remained practically unchanged year-on-year, rising by 0.1% to €238 million.

The loss ratio for non-life insurance as a whole fell slightly year-on-year, to 53.1%. As for the

largest line of business of non-life insurance, motor insurance recorded a rise in the loss ratio, and property insurance a decline. The combined ratio for non-life insurance as a whole also declined slightly, to 81.6%.

REINSURANCE INCREASED ITS SHARE SLIGHTLY

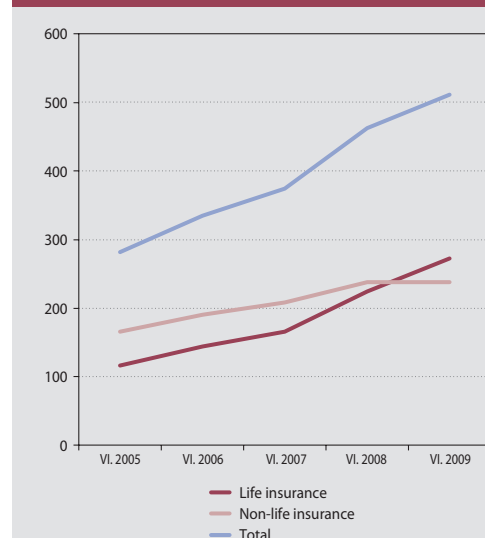
Insurance premiums ceded to reinsurers in the first half of 2009 amounted to €137 million, or 13.3% of total premiums. Ceded premiums as a share of premiums rose slightly, indicating a shift in its steady downward trend of recent years. The bulk of ceded premiums pertained to non-life insurance, and these premiums accounted for 24.2% of premiums in this sector.

TECHNICAL PROVISIONS AND THEIR INVESTMENT

As at 30 June 2009, insurers reported technical provisions totalling €4.211 billion, representing a year-on-year rise of 6.2%. In life insurance, these provisions amounted to €3.156 billion, and in non-life insurance, €1.055 billion. Because technical provisions in life insurance grew at a faster pace, their share of total provisions again rose slightly.

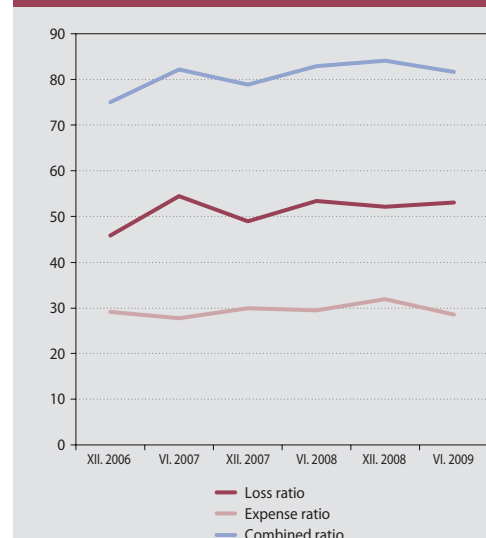
The largest year-on-year increase was recorded by provisions for the coverage of liabilities from investments on behalf of the insured, which is in accordance with the growth in premiums in the category of unit-linked insurance. The larg-

Chart 50 Claims cost (EUR millions)



Source: NBS.

Chart 51 Loss ratio, expense ratio, and combined ratio (%)



Source: NBS.

⁷ NBS analysed technical claims cost as it did premiums. Hereinafter, the term "claims cost" means "technical claims cost".

**Table 3 Loss ratio, expense ratio, and combined ratio of non-life insurance categories as at June 2009 (%)**

	Loss ratio	Expense ratio	Combined ratio
Supplementary insurance	19.82	24.10	43.92
Accident and sickness insurance	22.89	39.15	62.04
Motor third-party liability insurance	53.08	22.26	75.33
Motor vehicle insurance	70.57	34.61	105.19
Other motor insurance	2.35	15.04	17.39
Transport liability insurance	14.91	29.07	43.98
Property insurance	53.87	25.94	79.81
General liability insurance	-12.92	29.13	16.21
Credit insurance, surety insurance and insurance of miscellaneous financial losses	92.05	34.62	126.67
Legal protection insurance	31.24	68.78	100.02
Assistance insurance	39.75	38.93	78.68
Active reinsurance	15.36	24.21	39.57
Total	53.07	28.56	81.63

Source: NBS.

Table 4 Premiums ceded to reinsurers

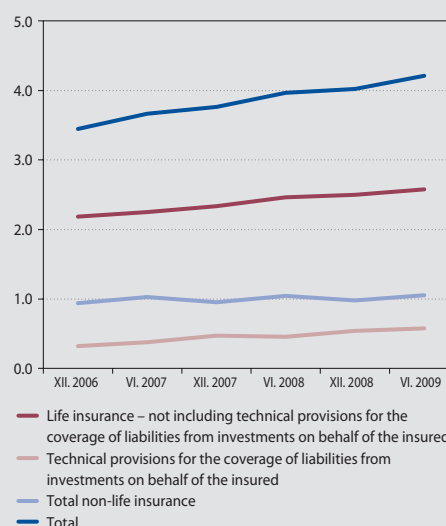
	VI.09 (EUR millions)	VI.08 (EUR millions)	Change (%)	Share of premiums (%)
Total	0.1	0.1	-2.9	13.3
Life insurance	0.0	0.0	-8.4	1.9
Non-life insurance	0.1	0.1	-2.5	24.2

Source: NBS.

est provision – the provision for life insurance – increased by 3.5% to €2.417 billion. Its share of total provisions in life insurance is gradually falling, however, and in this case declined by 3.4 p.p. to 76.6%.

The structure of technical provisions in non-life insurance remained largely unchanged from the previous year. Provisions increased by 0.8%, with the largest increase (1.3%) recorded by technical provisions for claims.

Gross technical provisions less provisions for the coverage of liabilities from investments on behalf of the insured amounted to €3 641 million as at 30 June 2009. Their coverage by assets represented 110.5%. During the first half of 2009, in a continuation of developments in the second half of 2008, insurers began to shift a proportion of their assets into more conservative invest-

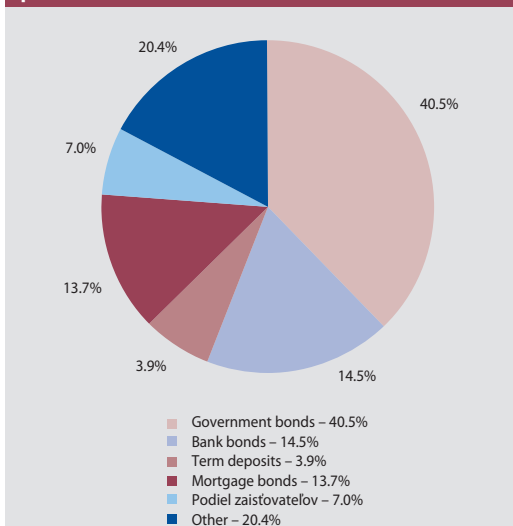
Chart 52 Gross technical provisions (EUR millions)

Source: NBS.



DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

Chart 53 Investment of technical provisions



Source: NBS.

Note: The term „government bonds“ covers bonds issued by Slovakia and other EU Member States, by NBS and other central banks, bonds guaranteed by Slovakia, and EIB, EBRD, and IBRD bonds.

net profits of insurance companies, since it appears in the rise in the technical provision for unit-linked products – which in turn reduces the amount of the technical result for life insurance. Excluding unit-linked products, the financial result of the insurance sector rose by only 14.2%.

The decline in the profitability of insurers was therefore caused by the technical loss of more than €20 million. Technical income fell, largely due to the decrease in premiums written. Technical expenses, on the other hand, rose sharply in the first half of 2009 owing to the rise in claims cost coupled with the increase in reserves for unit-linked products.

Seven insurers reported a loss, the same number that did so in the first half of 2008.

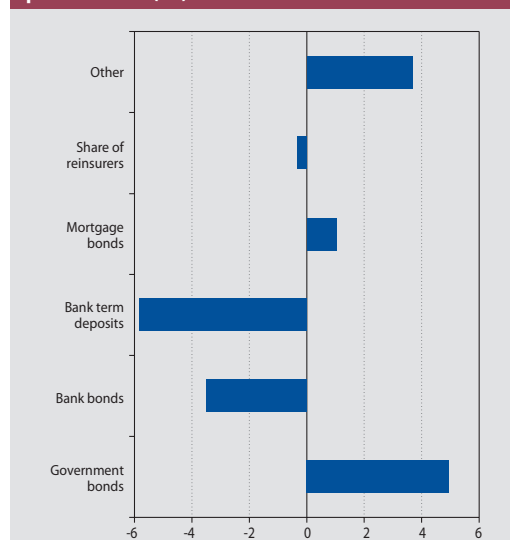
ments and particularly government securities. Both the amount and proportion of bank bonds and term deposits declined.

FINANCIAL POSITION OF THE INSURANCE SECTOR

The total profits of insurance companies for the first half of 2009 fell by 13.5% year-on-year, to stand at €70 million. The financial position of the sector thus continued to deteriorate, and its return on equity dropped to 5.81%.

The financial result of insurers increased by more than 265% year-on-year, largely due to the profit from financial operations in unit-linked products, which in the previous period had recorded a loss (the year-on-year change represented €67 million). The profit from unit-linked products, however, does not affect the

Chart 54 Investment of technical provisions (%)



Source: NBS.



2.3 INVESTMENT FIRMS

Derivatives trading in the first half of 2009 reflected the effects of the financial crisis, as it plunged by 71% year-on-year. There was, by contrast, an increase in trading in other financial instruments, particularly money market instruments and bonds. The amount of customer assets managed by licensed investment firms also rose slightly year-on-year, by 7%, to stand at €2 billion. The capital adequacy ratios of these entities comfortably met the statutory minimum requirement.

As at 30 June 2009, the total amount of transactions in bonds, shares, and mutual funds increased year-on-year, to €7.4 billion (compared with €4.9 billion at the end of June 2008). Almost all of that increment was accounted for by bond transactions executed through banks.

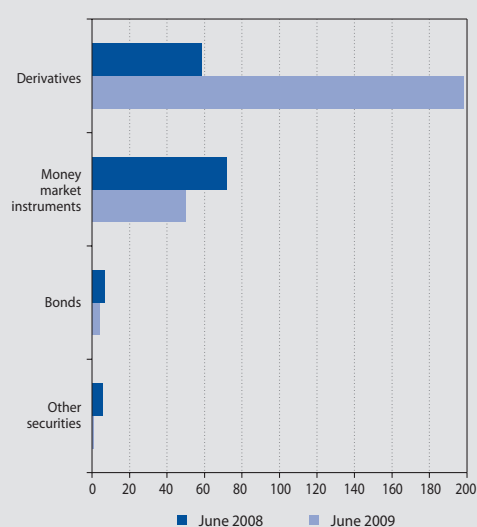
In the first half of 2009, the most traded instruments by nominal value were money market instruments (€72 billion) and financial derivatives (€58 billion). These figures, however, represent the amount of the underlying assets of the traded instruments, and the actual amount of the financial flows generated by these transactions is far lower.

The financial crisis brought about a slump in derivatives trading. Derivatives transactions executed through banks accounted for fully 78% of the total amount of these transactions.

The amount of customer assets managed by investment firms (including banks and asset management companies licensed to manage a customer portfolio) rose by 7% year-on-year (from €1.9 billion to €2.04 billion).

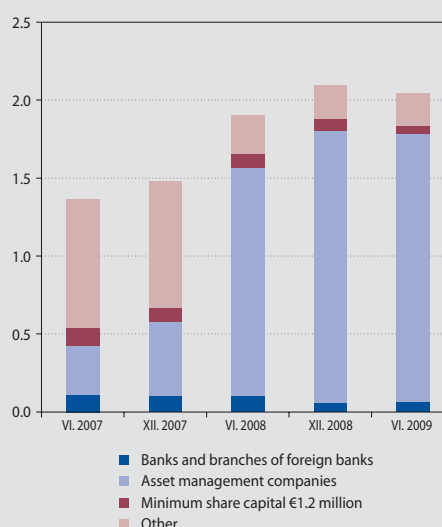
During 2008, the amount of own funds of every non-bank investment firm and asset management company licensed to manage a client portfolio fluctuated well above the statutory required minimum.

Chart 55 Transactions broken down by investment instrument (EUR billions)



Source: NBS.

Chart 56 Amount of customer assets managed by licensed entities (EUR billions)



Source: NBS.



2.4 COLLECTIVE INVESTMENT

The exceptional downturn in the Slovak collective investment sector in the second half of 2008 was driven by the financial and economic crisis – a crisis reflected in rising mistrust in financial markets, increased premiums on debt securities, and slumping stock markets. This affected the collective investment sector by hauling down prices of certain mutual fund assets, and thereby fuelling investors' fears or disquiet about the current performance of mutual funds. This led to a wave of redemptions, which resulted in negative net sales and, in conjunction with the drop-off in performance, a sharp fall in the net asset value of mutual funds. At the end of the second quarter of 2009, however, investors were to a certain extent keener to invest in mutual funds (or at least had fewer fears about doing so) given the improving indicators of expected economic development, the revival of stock markets, the recorded decline in the risk aversion of investors, and the calming of financial markets, as well as the context of low interest rates, especially on short-term bank deposits. Thus the sector stabilized, as firstly the wave of redemptions came to an end and then, in the second quarter, positive net sales were reported. This showed up in both the improving performance of funds and the ending of the sharp decline in their net asset value. Nevertheless, the sector remains sensitive to financial market developments.

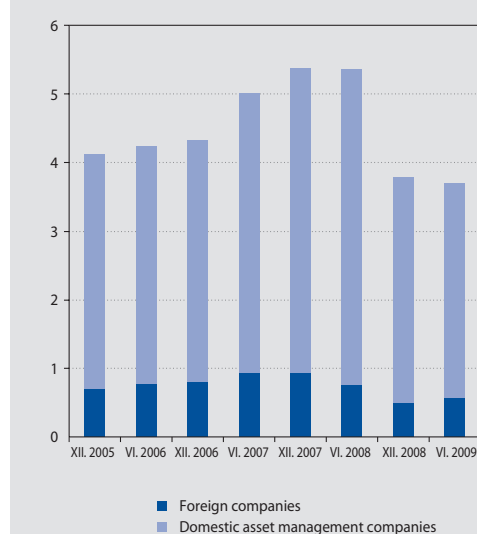
Assets under management in the collective investment sector fell by around €90 million between January 2009 and June 2009, with most of this decline recorded in the first quarter. At the end of the period under review, the net asset value of mutual funds in the domestic collective investment sector represented €3.7 billion.

The positive development of net asset value was to a large extent affected by funds of foreign asset management companies⁸, which rose by 14% and ended the first half of 2009 with a balance of €570 million. Domestic funds partially followed on from the situation in the previous period, as their net asset value fell by around €250 million over the first three months of the year. However, the amount of assets then slowly began to rise, which ultimately kept their relative decline for the first half of the year down to less than 5%. The NAV of funds managed by domestic asset management companies ended June 2009 at around €3.1 billion. As a result of these developments, the share of domestic funds decreased, after having risen gradually in previous years.

In the first half of 2009, the number of domestic asset management companies fell from ten to nine. While it was largely the case during this period that companies with smaller market share recorded an increase in assets under management and the market leaders (by value of assets under management) reported stagnation or a decline in this figure, the high level of market concentration remained practically unchanged. The three largest players in the market accounted for 86% of the market share.

In terms of the net value of assets under management, equity funds clearly recorded the most favourable results for the first half of 2009,

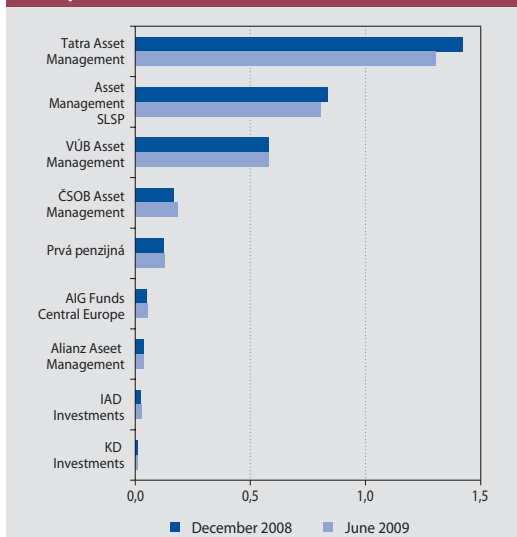
Chart 57 Net asset value of mutual funds sold in Slovakia (EUR billions)



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

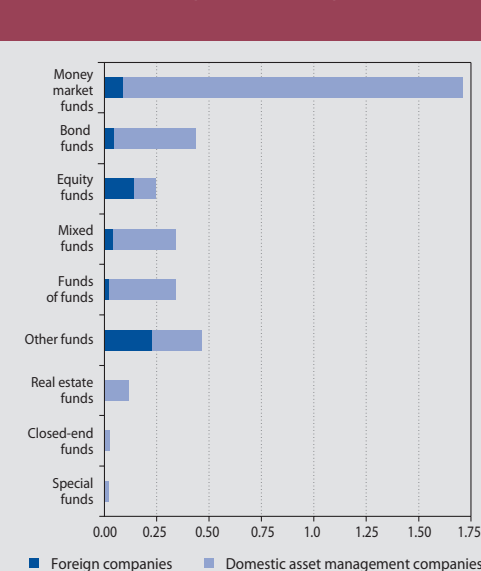
⁸ All further mentions of foreign funds in the text refer only to that part of them pertaining to sales in Slovakia.

Chart 58 Net asset value of mutual funds managed by domestic asset management companies (EUR billions)



Source: NBS.

Chart 59 Asset value of funds by category, as at June 2009 (EUR billions)



Source: NBS.

with the sum of assets of domestic and foreign funds rising by 22%. This reflected both their positive net sales and positive performance during the period. The increase in this category was to a large extent driven by foreign funds. As regards money market funds, their net asset value remained practically unchanged between the end of December 2008 and the end of June 2009, meaning that they again slightly strengthened their dominant market position – by 1 p.p., to 46% of the sector's total assets. Bond and mixed funds recorded a slight decline in assets under management for the first six months of the year, below the sector average. The decrease was steeper still for funds of funds (-7%) and particularly other funds (-14%), even though the foreign funds in these two categories recorded dynamic growth over the period.

Unit certificates in mutual funds managed by domestic asset management companies were held almost entirely by Slovak residents. Households – the long-standing majority category of unit holders – saw their share drop by 3 p.p. during the first half of the year, to 79% of the amount of shares issued.

The spate of mass redemptions that afflicted the collective investment sector towards the end of

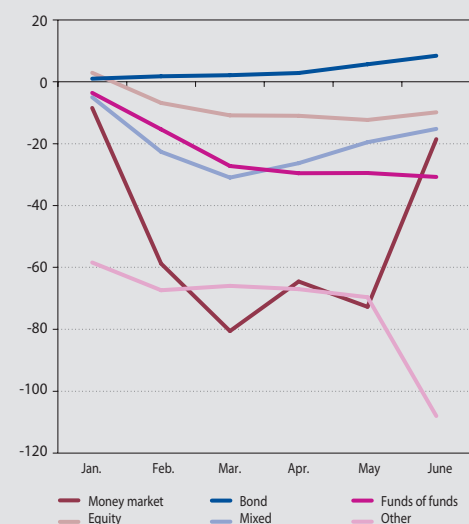
2008 continued into the turn of the year, though to a much milder extent. At the beginning of April 2009, the situation of negative net sales came to an end as the inflow of new investments in funds exceeded the amounts being withdrawn by unit holders. Cumulative net sales for all funds for the first half of the year amounted to minus €171 million, or a drop of 4.5% in comparison with the amount of assets at the end of December 2008. Almost all fund categories recorded negative net sales. The largest share of the negative net sales, at around 20% of assets, was recorded in the category of other funds, of which guaranteed funds constitute a major part. In no other categories did this share exceed 8%. Equity funds were alone in reporting positive net sales – at 8% of their assets – the explanation for which may be that shareholders gambled on stock markets having bottomed out in the previous period and reckoned that they could make attractive future returns by investing in these assets.

A comparison of the portfolio structures across fund categories at the end of 2008 and as at 30 June 2009 shows no substantial changes in the distribution of assets between the basic types of eligible investment instruments. Smaller changes were seen, for example, in money market, bond, and mixed funds, where the propor-



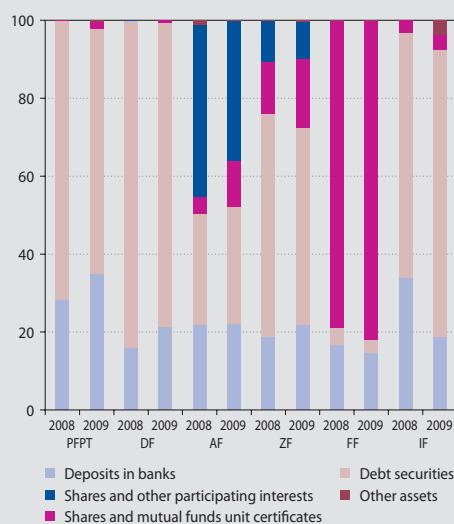
DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

Chart 60 Monthly cumulative net sales of open-end mutual funds in Slovakia for the first half of 2009 (EUR billions)



Source: NBS.

Chart 61 Comparison of the structure of assets in individual fund categories as at December 2008 and June 2009 (%)



Source: NBS.

Note: MMF – money market funds; BF – bond funds; EF – equity funds; MXF – mixed funds; FF – funds of funds; OF – other funds.

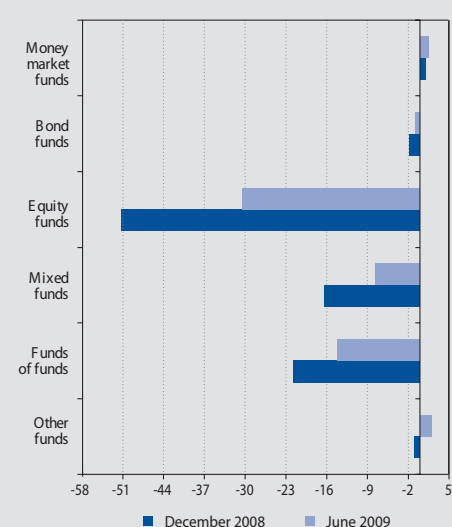
tion of money deposited in bank accounts rose at the expense of bond investments. Opposite assertion, i.e. increase of the share of the bond component and decrease of the share of investments in bank accounts holds for the category of other funds. In equity and mixed funds, part of the money invested in shares was substituted for investments in unit certificates of other mutual funds.

In all fund categories, the average weighted performance as at 30 June 2009 showed an improvement compared with the end of the previous year, though from the long-term perspective remained low. A nominal appreciation of unit certificates was recorded only by money market funds (1.5%) and the group of funds comprising other and special funds (2%). Bond funds again reported a year-on-year loss (-0.85%), although this was better by half than the result at the end of December 2008.

Funds containing equity securities continued to face the most adverse situation in relation to performance. Although global stock markets made a relatively robust revival in the first six months of 2009, the improvement was far from sufficient to make up for their slump in the previous

period. Annual returns on equity funds, mixed funds, and funds of funds therefore remained entrenched at negative levels, with year-on-year results of, respectively, -30%, -8%, and -14%.

Chart 62 Comparison of average annual performances of open-end mutual funds by category (in % p.a.)



Source: NBS.

Note: Data on the horizontal axis are in % per year. Funds are weighted by net asset value.



In the first half of 2009, the impact of the downturn in managed assets started to be fully reflected in the fee income of domestic asset management companies. The year-on-year change in the fee income of individual asset management companies correlated strongly with the change

in the net value of the assets under their management. The expenses of these companies also fell, though to a lesser degree than their income. As a result of these developments, the profitability of the sector fell by two thirds year-on-year, to €1.9 million, and two companies reported a loss.



2.5 PENSION SAVING

The amount of assets managed by funds in Pillar II of the pension saving system continued to rise in the first half of 2009, as savers paid their regular contributions. Following the adoption of an amendment to the Retirement Pension Saving Act, the investment strategy of the funds was substantially altered. There was an effort to decrease volatility, which in turn led to a fall in riskier investments and a marked rise in the proportion of deposits held with banks. This development affected mainly balanced funds and growth funds, and by the end of the first half of the year it had led to a paradoxical situation in which the investment structure in growth funds was more conservative than that in conservative funds. The performance of funds in the first half of the year reflected the stabilization in financial markets. Growth and balanced funds recorded a moderately positive performance. The year-on-year negative performances were to a large extent the result of turmoil in financial markets in the second half of 2008.

2.5.1 PILLAR II OF THE PENSION SAVING SYSTEM

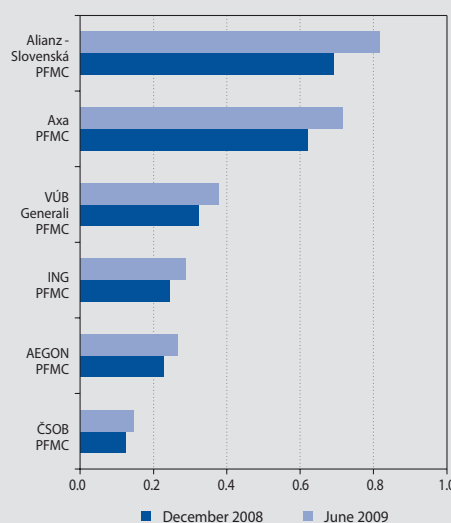
NUMBER OF SAVERS FELL AFTER OPENING UP OF SYSTEM

The “opening up” of the retirement pension saving system⁹ continued its second stage throughout the first half of 2009. In this way, enrolment in Pillar II of the pension system became voluntary for a temporary period, meaning that existing savers were allowed to opt out of the system and transfer their saved funds to the account of the Social Insurance Agency. At the same time, people enrolled exclusively in Pillar I of the pension system had the opportunity of changing to a combined system of compulsory pension insurance. In all, around 56 000 savers opted to leave Pillar II during the second stage of its opening up. Since the number of savers opting in to Pillar II during the first half of the year was lower (around 32 000), the total number of savers in the system declined to 1 459 443 as at 30 June 2009, representing a drop of 1.6% in comparison with the end of 2008. All pension fund management companies recorded a decrease in this regard, and within a narrow band around the sector average. The propensity to opt out of Pillar II was more marked among savers in conservative and balanced funds, relative to the number of savers in these funds at the end of 2008.

THE NET VALUE OF ASSETS ROSE IN ABSOLUTE TERMS MORE THAN IT HAD IN THE PREVIOUS TWO HALF-YEAR PERIODS

At the same time, conservative funds enrolled the most new savers (again in percentage terms) and they were the only funds in the sector to record a positive net inflow of sav-

Chart 63 Net asset value of pension funds by pension fund management company (EUR billions)



Source: NBS.

ers. Both of these trends continued from 2008, and they may to some extent imply that Pillar II was abandoned by older savers – who were less likely to be enrolled in growth funds – and that the financial crisis prompted a relatively large proportion of new savers to opt for conservative funds.

Although the number of savers fell, the net asset value of funds rose during the first six months of 2009, by €378 million. That increase is far larger in relative terms than the rise for the same period of the previous year and compares more closely with the growth in net asset value recorded in

⁹ Although the second stage of the opening up ran from 15 November 2008 to 30 June 2009, all applications to leave the system were processed in 2009.

Chart 64 Pension fund assets by share of each fund type

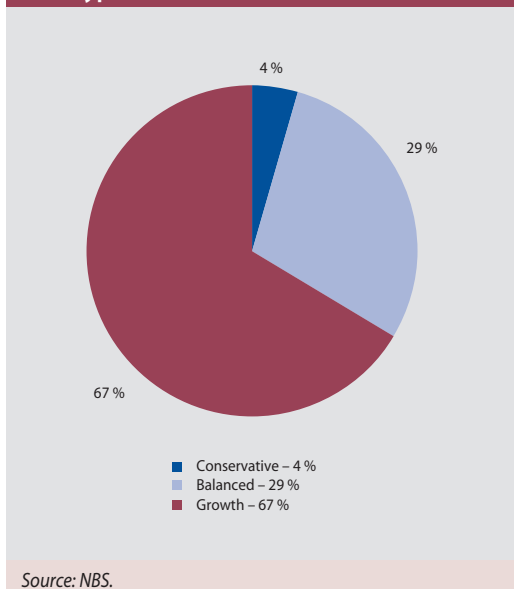
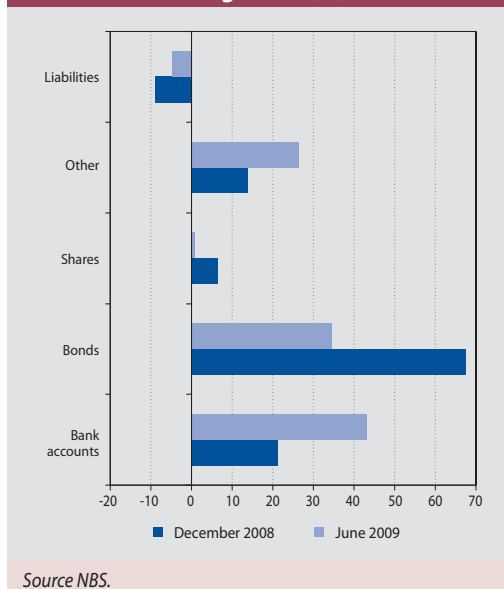


Chart 65 Types of investment by share of total assets under management (%)



each half of 2007. Between the individual pension fund management companies there were only minimal differences in the net value of assets under management, and thus there was no change in their market shares as measured in these terms. Nor was there any change in the hitherto stable distribution of net asset value across the three types of funds (conservative, balanced, and growth).

COMPOSITION OF PENSION FUND PORTFOLIOS CHANGED RADICALLY FOLLOWING LEGISLATIVE AMENDMENTS

The portfolio composition of Pillar II of the pension saving system underwent radical changes during the first half of 2009. From the assets they were managing at the beginning of the year, pension funds had sold off 40% of their bonds and almost all of their shares by the end of June. Bonds as a share of the net asset value of funds in the sector fell to 34%, which was half as much as the share recorded at the end of December 2008. As for equity investments, they accounted for only 0.9% of the total portfolio as at 30 June 2009, and comprised only securities acquired before 1 January 2009. Indeed, at the turn of the half-year periods four of the six asset management companies did not have any equities in their balanced and growth funds. By the end of the period under review, most of the money released by these sales had been reinvested in current and fixed-term accounts with banks. The

shares of these two asset categories rose, respectively, to 19% and 25%, and therefore the total share was twice that reported as at 31 December 2008 (when current accounts stood at 6%, and fixed-term accounts at 15%). In the case of two pension fund management companies, this combined share of bank account investments accounted for more than 65% of the assets in all three types of fund. In this way, pension fund management companies took advantage of the statutory provision allowing them to invest money with their depository without restriction. The amount of deposits placed with other banks and branches of foreign banks is, by contrast, limited to 10% of the net value of the assets managed by the pension fund. A question raised in this regard is the increased concentration risk. The large amount of assets accumulated in Pillar II is thus exposed to a small number of counterparties consisting of fewer than twenty banks. Moreover, as much as 45% of that amount is exposed to only two banks. Although the risk of default and breach of obligations is deemed to be minimal in the case of each bank, the occurrence of any such event could cause a huge loss to the fund concerned.

The management companies substituted bond investments also for Treasury bills issued by other EU governments, which hitherto had constituted a negligible share of fund portfolios. Largely be-



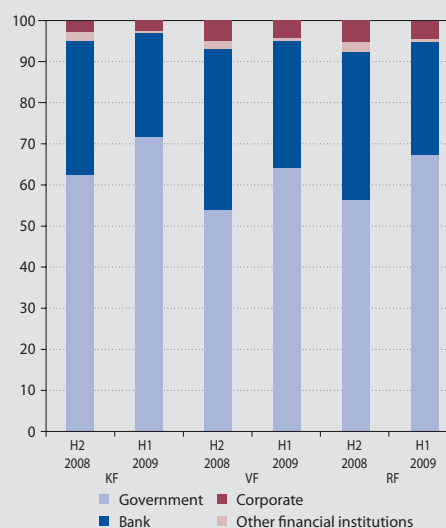
DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

cause of their high growth rate, the category of other assets increased its share of the net asset value during the first half of 2009, from below 14% to more than one quarter. Whereas currency forward contracts had previously been the largest component of other assets, their amount (and therefore share of this category) declined in the first half of the year, firstly because of the euro changeover and subsequently as a result of the lower amount of securities denominated in foreign currencies.

The asset structure in balanced and growth funds barely deviated from the asset structure for the entire Pillar II of the pension saving system. In comparison with growth funds, balanced funds had a slightly higher share of bonds and other assets and fewer bank deposits. The same differences, though more pronounced, were found between conservative funds and balanced funds. Paradoxically, the usual differences between the different types of fund did not just disappear, but even reversed to some extent, since it was growth funds that had the most conservative structure at the end of June 2009 – even more conservative than the funds described as such. This pattern was seen not just at the aggregate level, but also to a large extent in individual pension fund management companies.

It may be asserted with some confidence that these changes in the investment strategy of funds stemmed not from developments in the financial market but from the adoption of a new law¹⁰ that radically affected the structure and amount of management fees. This amendment act includes provisions under which management companies are obliged to top up the assets of a fund from their own capital if the fund in question has a negative yield during the designated period. The key issue here is the time horizon over which the performance of funds is evaluated, and which is defined as six months. Thus, in seeking to minimize the risk of having to top up assets, pension fund management companies needed to reduce the volatility of their portfolios by adjusting the structure of them. This explanation is further supported by the fact that the restructuring of portfolios from the beginning of April coincided with the approval date of the Retirement Pension Saving Amendment Act. In the first three months of

Chart 66 Bond portfolio structure in different types of funds (%; end of period)



Source: NBS.

Note: KF – conservative funds; VF – balanced funds; RF – growth funds.

the year, asset structures had remained largely unchanged.

Although the bond portfolio of Pillar II funds underwent significant changes as many issues were sold off, the trends in its various characteristics mostly continued in the first half of 2009 from where they had left off in the previous year. Government bonds as a share of total bonds rose by a further 10 p.p., to two thirds. Almost all of this relative increase was at the expense of the other major category of notes – bonds issued by banks. As for the two minor components of the portfolio – corporate bonds and bonds issued by other financial institutions – their share continued to fall slightly during the first six months of the year. By the end of the period, bonds of domestic issuers accounted for 59% of the total, and they comprised mostly government debt securities.

The average maturity of bonds purchased for funds shortened considerably. As at June 2009, the asset-weighted average maturity of the bond portfolio represented 1.35 years, or half the length recorded at the end of the previous period. The average weighted maturity in individual funds ranged between 0.4 and 2.6 years. Only the funds of one management company were an

10 Act No. 137/2009 Coll. of 11 March 2009 on the amendment of Act No. 43/2004 Coll. on retirement pension saving.



exception to this trend, recording a slight rise in the average maturity.

The relative shares of floating, fixed and zero coupon bonds within the bond portfolio changed during the first half of 2009 from, respectively, 42%, 32% and 26%, to 23%, 42% and 35%. Thus continued the significant shift from floating rate bonds to fixed coupon and zero coupon debt securities. This was found not only at the aggregate level, but also across the different types of funds.

Of these two trends – acting antagonistically on the duration of the bond portfolio – the shortening of the average maturity had the greater impact, bringing down the average (modified) duration of this investment component to below 1.0 in conservative funds and, even more significantly, to below 0.5 in balanced and growth funds. Another factor in the short duration of total assets is the substantial amount of Treasury bills with a maturity of one year or less. In the context of having to optimize the functioning of portfolios in the new legislative climate (as described above), management companies most probably reduced the duration of interest-sensitive assets as part of measures to contain volatility in the net value of assets under management and in the related performance of these assets. The proportion of pension fund investments denominated in foreign currencies fell to an almost negligible level following the adoption of the euro as legal tender and structural changes in the composition of assets.

PERFORMANCE OF PENSION FUNDS¹¹

The short-term year-on-year performance of growth funds (a second measurement method) was relatively volatile during the first half of 2009, especially in the initial months. Although the equity component had a low share throughout the period under review, its yield results correlated strongly with the unfolding situation on stock markets. Towards the end of 2008, the average yield of growth funds in Pillar II was as low as it had ever been, but the turn of the year saw the figure improve from a band of around -8%, to the region of -6%. In June 2009, yields mostly increased, and by the end of the month they stood at -4.8%. The situation was identical in balanced funds, except that on particular days the yields were higher by between 1.5 and 2 per-

centage points. Conservative funds maintained a relatively stable average yield of around 3%, except towards the end of the first half of 2009. It was only in June that their yields dipped below 2%, and as at 30 June 2009 they represented 1.9%. Regarding the year-on-year performance of balanced funds and growth funds, it should be noted that the results in the second half of 2008 reflected mainly the decline in the current value of pension units, and that in the first six months of 2009 these funds recorded average positive yields of 0.14% and 0.1%, respectively.

From the longer-term perspective, the performance of growth and balanced funds saw a continuation of the trend of steep decline established in the last quarter of 2008. As at the end of June 2009, the yield of both these fund types, measured by this methodology, had slipped into negative figures, to -1.5% for growth funds and -0.5% for balanced funds. The long-term performance of conservative funds was also slipping slightly, down to 3.6% as at 30 June 2009.

In terms of the year-on-year profitability, pension fund management companies recorded particularly negative results. For the first half of 2009, the sector as a whole made a loss of €1.15 million, representing a year-on-year decline of almost 160%. It should be noted, however, that a large part of this loss was accounted for by a single pension fund management company, while two other companies managed to make a profit for the period under review.

2.5.2 PILLAR III OF THE PENSION SAVING SYSTEM

NUMBER OF PARTICIPANTS IN THE SUPPLEMENTARY PENSION SYSTEM STAGNATED

Although Pillar III of the pension saving is, unlike Pillar II, open to voluntary entry, the number of

Table 5 Annual yield of pension funds as at June 2009

Fund types	Weighted average (%)
Conservative funds	1,9
Balanced funds	-3,4
Growth funds	-4,8

Source: NBS.

¹¹ For the purposes of this report, the performance of Pillar II funds was monitored using two methods. The first method, representing a longer-term view, was taken from the previous version of 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 as at which the yield is calculated.

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 a fund's yield for the 12 months prior to the day as at which the yield is calculated, using the year-on-year percentage change in the value of the pension unit.

Further details are provided in the Glossary and Abbreviations.



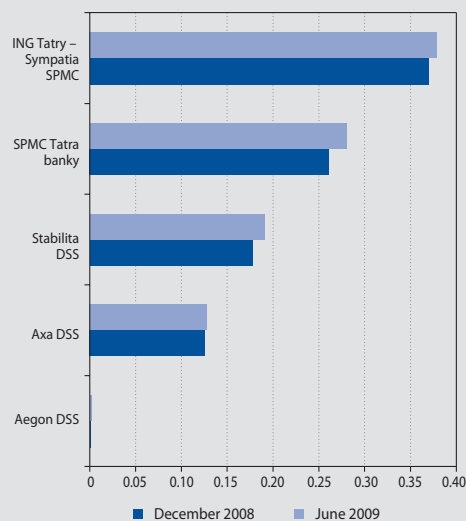
DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

Chart 67 Current value of pension units by type of fund



Source: NBS.

Chart 68 Net asset value of pension funds managed by supplementary pension asset management companies (EUR billions)



Source: NBS.

participants in Pillar III rose only marginally from the number recorded at the end of last year (by 0.1%, to 849 000). This was a consequence of the ongoing global financial crisis, the considerations of households regarding the investment of their disposable income at a time of financial insecurity, and uncertainty surrounding the legislative stability of the pension system. Three supplementary pension asset management companies recorded a drop in the number of participants in their funds. The majority of participants (96.1%) remained enrolled in contributory supplementary pension funds.

NET ASSET VALUE GROWTH DECLINED

Although the net asset value managed by supplementary pension asset management companies (SPMC) rose in the first half of 2009, to stand at €979.8 million as at the end of June (an increase of 4.8% for the six months and 11.1% year-on-year), this growth was the lowest recorded since the end of 2006.

BONDS ROSE AS SHARE OF TOTAL FUND ASSETS

In the first half of 2009, the structure of assets remained more or less unchanged from the end of 2008 with more than two thirds of assets invested in bonds and slightly less than one third in current and fixed-term bank accounts. There was no radical restructuring of the assets under

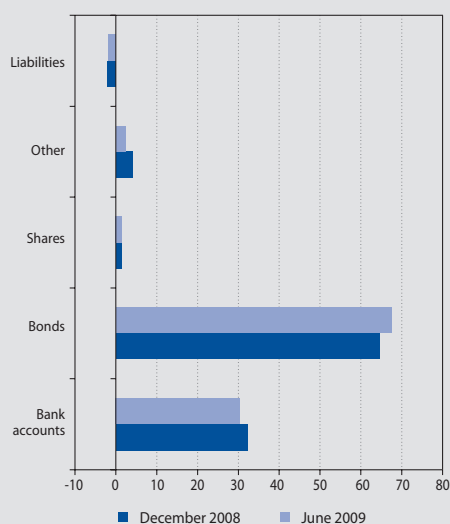
management, in contrast to the situation in Pillar II of the pension system.

The share of bonds in overall asset portfolio of supplementary pension funds increased to 67.5%, at the expense of investments in bank accounts, term deposits, and currency forward contracts, the decline in which was related to the euro area entry. The equity component of the portfolio remained unchanged at 1.5%.

The majority of assets under management – 98.2% of them – were invested in the domestic currency. Since contributory funds account for 96.5% of all the funds managed by SPMCs, the structure of the assets managed in these funds largely determines the structure of assets managed in all Pillar III funds. As for payout funds, their asset structure remained unchanged with assets invested mostly in bonds (55%) and bank accounts (45.1%).

In the period under review, supplementary pension funds invested predominantly in European debt securities (97.1%). Their investments in US-issued bonds accounted for less than 3% of the total bond investments. The majority of assets invested by funds in European bonds were invested in secure government bonds (59.9%), and fewer than one third in bank bonds (31%).

Chart 69 Types of investment by share of total assets under management (%)



Source: NBS.

PERFORMANCE OF PILLAR III FUNDS¹²

The yields of individual contributory funds ranged from -11.56% to 1.66% (the weighted average for all contributory funds as at 30 June 2009 represented -0.19%, compared with -2%

as at the end of 2008). The weakest performance was recorded by the contributory growth funds of two SPMCs. Payout funds reported predominantly positive yields for the period under review, including a highest figure of 1.54% (the weighted average for all payout funds as at 30 June 2009 was 0.74%, compared with 1.4% as at 31 December 2008). In only one case did the payout fund of a SPMC produce a negative performance (-1.65%).

RISE IN PROFITABILITY OF SUPPLEMENTARY PENSION ASSET MANAGEMENT COMPANIES

Total profits of SPMCs as at the end of June 2009 amounted to €3.3 million. Three SPMCs increased their profit year-on-year, one reported a drop in profit, and the other made a reduced loss.

Fee income of SPMCs as at 30 June 2009 represented €13 million in total, of which management fees for supplementary pension funds accounted for approximately 83.4%. Expenses and fees paid by SPMCs to third parties in relation to the supplementary pension saving system amounted to €0.45 million as at June 2009. These comprised mostly fees for the performance of depository activities and charges paid to the central depository and banks.

¹² For the purposes of this analysis, the performance of funds of supplementary pension asset management companies is measured directly by these companies.



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM

CHAPTER 3

RISKS IN THE SLOVAK FINANCIAL SECTOR



3 RISKS IN THE SLOVAK FINANCIAL SECTOR

Risk levels in the domestic banking sector are very closely linked with developments in the domestic economy and in the economies of Slovakia's main foreign partners. Therefore the economic downturn has, naturally, curbed the ability of the corporate sector and households to repay bank loans. The rise in credit risk has so far been more marked in the corporate sector. In the first half of 2009, most sectors recorded a significant decline in sales and profits; the liquidity position of the corporate sector worsened, and repayment behaviour deteriorated. Of the enterprises that had bank loans, as many as 14% were running a loss or experiencing a slump in sales. Adverse trends appeared in the commercial real estate sector, too, and they can be expected to continue. A major drawback of banks' credit exposures to the corporate sector is the relatively significant share of sectors that report high sensitivity to changes in the business cycle. It is also because of this sensitivity that we do not expect any substantial revival in the coming period, which will in turn put pressure on the profitability of banks.

The impaired financial position of enterprises has begun to show up in the amount of non-performing loans and in loan repayment arrears. There was a particularly sharp rise in the amount of non-performing loans and past due loans in the last months of the first half of the year.

Households, too, have felt the effects of the adverse economic situation. In the first half of the year, however, their debt-servicing capability was not reduced as significantly as that of enterprises. The repayment burden on household income rose only slightly. Nevertheless, an increasing proportion of house purchase loans were arranged for lower-income households. The indicators affecting household credit risk – employment and income – developed negatively especially among lower-income groups, which report a higher debt ratio only in respect of consumer loans.

Our assumption is that as the adverse situation in the corporate sector gradually spills over to the household sector, the credit risk of households will rise still further. Of particular risk in this regard are households with a higher loan repayment ratio, with only a small "cushion" against any drop in income. The risks for this group relate mainly to house purchase loans arranged in 2008 and 2007.

The development of non-performing loans (NPLs) more or less corresponds with these trends. NPLs rose sharply mainly among consumer loans and current account overdrafts. The proportion of house purchase loans that are non-performing remains relatively low.

In the medium-term horizon, another source of credit risk may turn out to be the high share of loans – whether to enterprises or households – with a short initial rate fixation. A potential sharp rise in interest rates could significantly increase the credit burden of banks' customers. The risk in this scenario lies mainly in the relatively rapid impact on the banking sector.

In regard to liquidity risk, the coverage of volatile funds with liquid assets – as required by NBS Decree No. 18/2008 – can be considered satisfactory. Although the structure of both liquid assets and volatile liabilities was substantially affected by the euro adoption (and the accompanying end to the sterilization position of NBS and decline in the deposits of foreign banks), the ratio of liquid assets to volatile liabilities declined only slightly.

The extent to which institutions in the Slovak financial market are exposed to market risk was affected by the course of the global crisis in financial markets, particularly the declining volatility of stock markets and rising volatility of interest rates. The decrease in all types of risk was aided by the adoption of the euro. PFMC pension funds, as a result of their investment structure, recorded a particularly marked drop in market risk exposure during the first half of 2009. Banks, for their part, are relatively sensitive to banking book interest rate risk, and this sensitivity increased a little during the first half of 2009.



3.1 CREDIT RISK OF HOUSEHOLDS IN THE BANKING SECTOR

DETERIORATING INDICATORS AFFECTED MAINLY LOWER-INCOME GROUPS

In simplified terms, the ability to repay bank loans is determined mainly by developments in income and unemployment. Both these indicators recorded negative trends from the beginning of 2009.

The adverse economic situation has from the outset been reflected in the unemployment rate, which in Slovakia has risen at a higher rate than the EU average. The negative employment trends in the first quarter of the year appeared mainly in lower-income groups. The riskier loans in this regard are consumer-type loans, which have a far more even distribution across income groups than do house purchase loans. In the case of house purchase loans, a relatively high concentration is evident among higher- and middle-income groups.

The economic downturn has also been reflected in household income, with nominal wage growth declining more sharply since the fourth quarter of 2008. The average nominal wage in the first quarter of year rose by only 4% year-on-year. It was mainly the lowest income groups that were adversely affected by the worsening of devel-

opments in the first half of the year, compared with the last quarter of 2008. The wage structure components that declined were mainly commissions, incentive payments and bonuses.

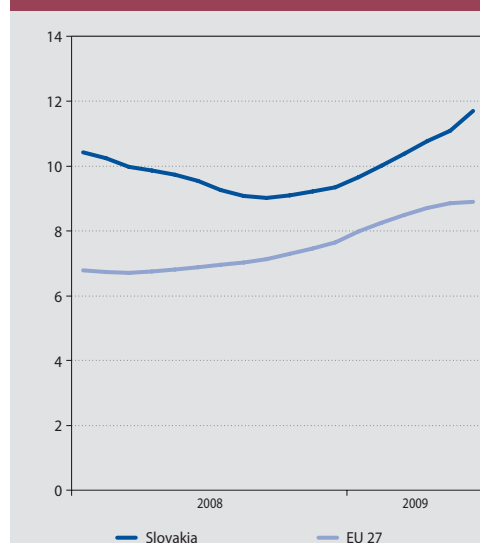
Considering the limited resources in the corporate sector, the pace of wage growth for 2009 as a whole is expected to be lower. In certain sectors, particularly industry and the hotel business, short-time working will also bring about a drop in wages.

INDEBTEDNESS OF LOWER-INCOME GROUPS INCREASED

The debt burden on households from house purchase loans continued to weigh mainly on medium- and high-income groups. In 2008, however, lower-income groups saw their share of this burden rise sharply, and by the year-end they owed almost 30% of the total outstanding amount of house purchase loans.

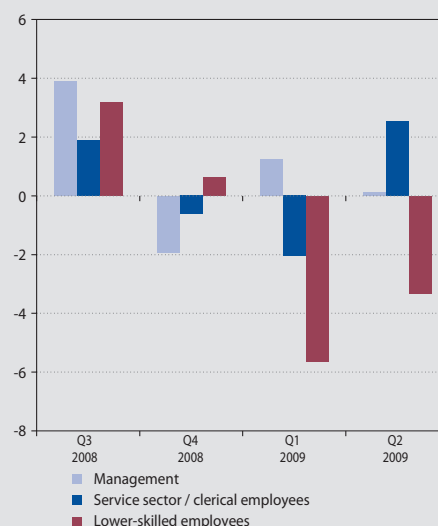
This shift represents a risk primarily in terms of the increased loan repayment burden on lowest-income groups. For the two lowest-income groups, the ratio of loan repayments to disposable income averaged 40%. For higher-income categories, loan repayments accounted for 15% of income on average.

Chart 70 Rate of unemployment



Source: Eurostat.

Chart 71 Changes in employment by employment classification (quarter-on-quarter changes; %)



Source: Statistical Office of the Slovak Republic.



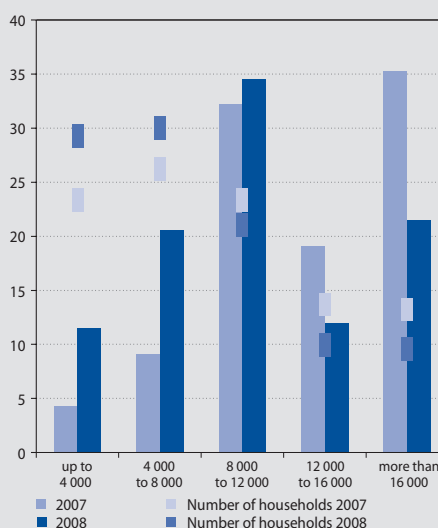
Chart 72 Nominal wages (quarter-on-quarter changes; %)



Source: Ministry of Labour Social Affairs and Family of the Slovak Republic, own calculations.

Note: The breakdown into different classes is based on the principal classes of the EC classification. Definitions of the different classes are given in the Annexes. The average for Slovakia expresses year-on-year changes in nominal wages.

Chart 73 House purchase loans by household income group (%)



Source: Statistical Office of the Slovak Republic, EU SILC 2006, EU SILC 2007, EU SILC 2008, NBS own calculations.

Note: The chart shows the breakdown of the outstanding amount of loans and the number of households by income group. Horizontal axis shows annual disposable income in euros less necessary expenses, weighted by household size.

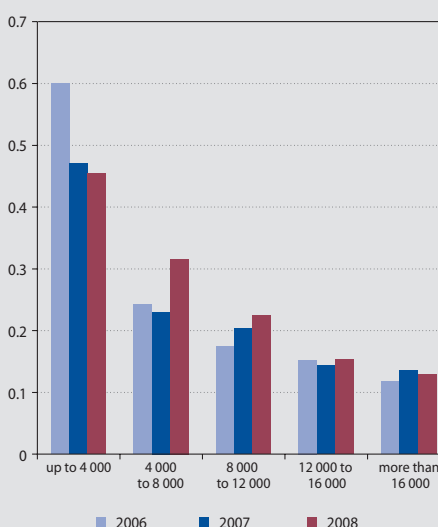
WORSENING QUALITY OF THE HOUSEHOLD LOAN PORTFOLIO

From the beginning of 2009 until May, the amount of non-performing loans to households increased by around €77.5 million, or almost 17%. The most pronounced rise in non-performing loans was among consumer loans, which are typically more risky. Non-performing loans also increased as a share of other household loans, particularly in the riskier categories of house purchase loans and intermediate loans.

Nevertheless, the amount of non-performing loans relative to the total amount of loans increased only slightly. The share of non-performing loans remains comparatively low especially in house purchase loans.

In the household sector, in contrast to the corporate sector, banks did not record a significant rise in loans past due by more than 90 days. The median share of loans not past due represented around 88% of all loans in the banking sector at the end of the second

Chart 74 Ratio of loan repayments to disposable income broken down by household disposable income groups (%)



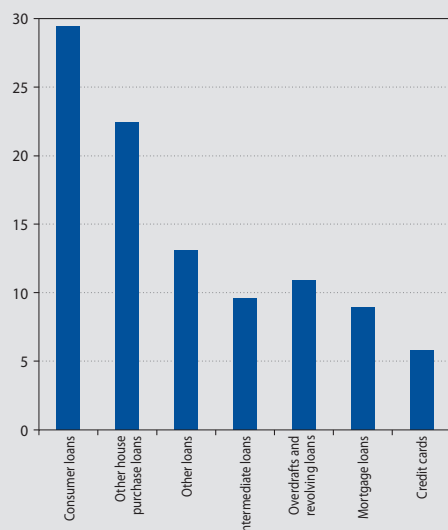
Source: Statistical Office of the Slovak Republic, EU SILC 2006, EU SILC 2007, EU SILC 2008, NBS own calculations.

Note: Horizontal axis shows annual disposable income in euros less necessary expenses, weighted by household size.



LIQUIDITY RISK IN THE BANKING SECTOR

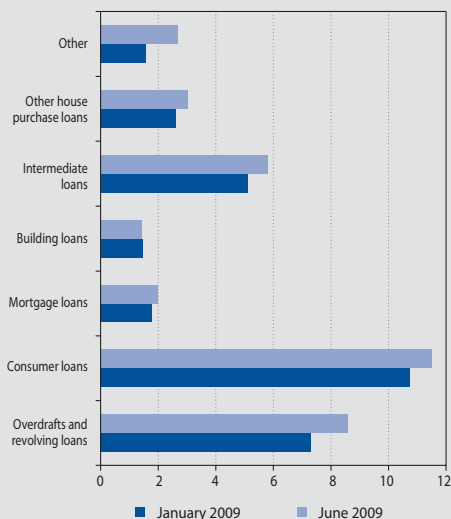
Chart 75 Share of absolute rise in non-performing loans to households (%)



Source: NBS.

Note: Left-hand scale shows the types of loan by percentage share of total rise in non-performing loans between January 2009 and June 2009.

Chart 76 Non-performing loans relative to the total amount loans by loan type (%)



Source: NBS.

quarter. The share of loans past due by up to 90 days increased over the first half of the year, from 6% to 7%.

HOUSEHOLDS HIGHLY SENSITIVE TO RISE IN INTEREST RATES

Households, like enterprises, are proving sensitive to interest rate movements. Compared with corporate lending, however, lending to house-

holds includes a lower proportion of loans with a short initial rate fixation – in May 2009, around 55% of house purchase loans were of this type. As for risks of the corporate sector, the higher sensitivity of customers to interest rate movements may, as already mentioned, potentially represent a relatively significant source of risk in the event of a sharp rise in inflation or interest rates.

3.2 CREDIT RISK OF NON-FINANCIAL CORPORATIONS IN THE BANKING SECTOR

MARKED DETERIORATION IN FINANCIAL POSITION OF ENTERPRISES

The corporate sector was, of course, not unscathed by the dramatic deterioration in economic indicators mentioned above. The situation in Slovakia developed in a very similar way to that in other countries, but, according to certain indicators, enterprises in Slovakia were even more seriously affected than counterparts in surrounding countries. The reason for this is the particularly strong export dependency among Slovak enterprises, as well as the relatively high share of enterprises that are highly sensitive to an economic downturn.

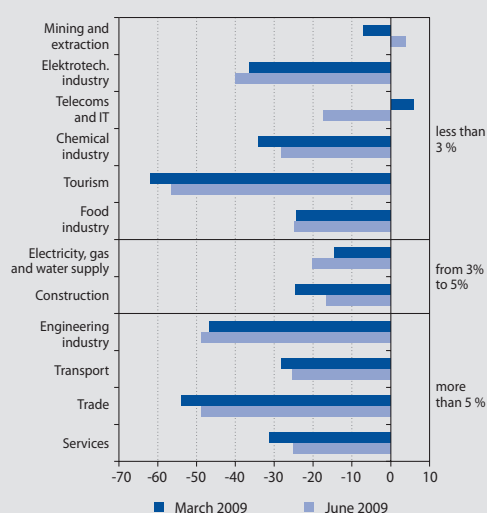
From the view of the banking sector's stability, it is important that the majority of enterprises entered the crisis period on a relatively sound footing. The earnings they accumulated in previous periods provided a comparatively robust capital position. A higher debt ratio was reported only in certain sectors (mainly the food industry, chemical industry, materials production, and the wholesale and retail trade).

In the first half of 2009, the corporate sector recorded a particularly marked deterioration in certain financial indicators that directly affect the debt-servicing capability of enterprises. Because of the decline in external demand, the year-on-year drop in sales was particularly pronounced and occurred in almost all sectors (except for telecommunications). Sales plunged in machine manufacturing (by 47 p.p.), materials manufacturing (47 p.p.), chemicals (34 p.p.), trade (54 p.p.), and transport (28 p.p.). As for sectors to which banks have significant credit exposure, the declines in indicators were comparatively sharp in services, wholesale and retail trade, transport, and machine and materials manufacturing.

EXPECTED DOWNWARD PRESSURE ON COMMERCIAL REAL ESTATE RENTS AND FALL IN OCCUPANCY RATES WILL ADVERSELY AFFECT THE REPAYMENT OF LOANS TO BANKS

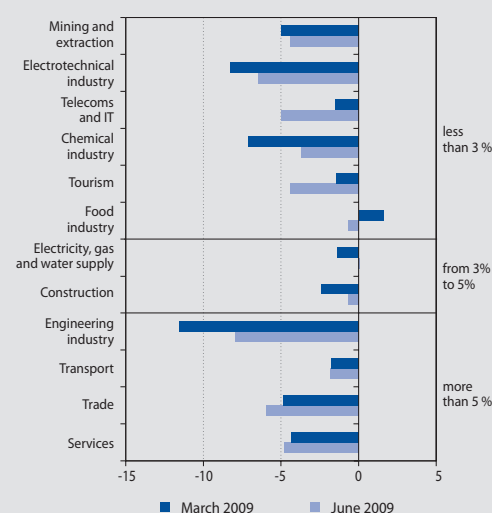
Banks are particularly exposed to the commercial real estate sector, which, on one hand, accounts for a significant proportion of their credit

Chart 77 Sales-to-assets ratios compared year-on-year (p.p.)



Source: Statistical Office of the Slovak Republic, NBS, own calculations.
Note: Vertical axis – sectors are broken down by share of total loans provided by banks to legal entities. The data express the year-on-year comparison of median values for each sector.

Chart 78 Return on assets compared year-on-year (p.p.)

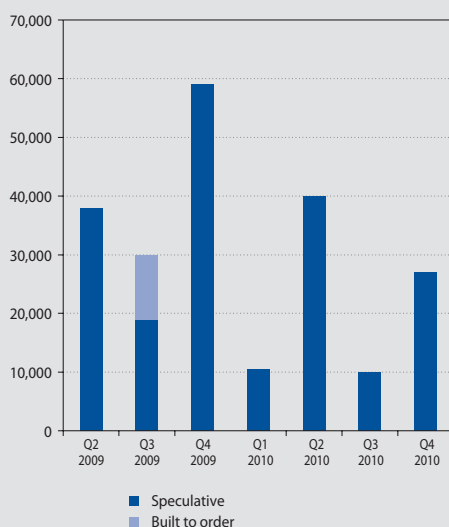


Source: Statistical Office of the Slovak Republic, NBS, own calculations.
Note: Vertical axis – sectors are broken down by share of total loans provided by banks to legal entities. The data express the year-on-year comparison of median values for each sector.



LIQUIDITY RISK IN THE BANKING SECTOR

Chart 79 Projected supply of new office premises (m²)



Source: CBRE.

portfolios and has enjoyed rapid growth in recent years, but, on the other hand, is marked by relatively high volatility and cyclicity.

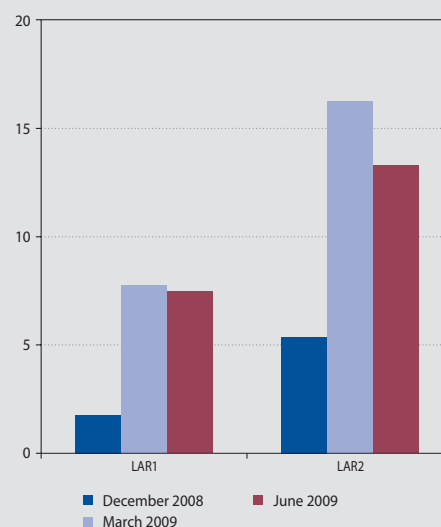
From the turn of 2009, the economic downturn began to be more substantially reflected in this market, too. As demand stagnated and the supply of office premises soared, the vacancy rate increased. Considering that the supply of office premises is expected to keep rising in coming years, we assume that the vacancy rate, too, will continue climbing. Another effect of the high supply will be to push rents down.

Given that demand for commercial real estate is highly sensitive to economic developments, we also expect a decline in demand. This will pick up again only in conjunction with a clear revival of the economy.

RISE IN AMOUNT OF LOANS TO ENTERPRISES REPORTING A MARKED DETERIORATION IN THEIR FINANCIAL POSITION

Given the general worsening of developments in the corporate sector, a key factor in the quality of bank loans is the situation in companies that have bank loans. For the monitoring of loans that carry a higher probability of default, we monitor the ratio of "loans at risk".¹³ From the beginning of 2009, there was a considerable increase in the proportion of bank customers who were reporting a deterioration in their financial position. In December

Chart 80 LAR 1 and LAR 2 ratios in the banking sector (%)



Source: NBS.

Note: LAR 1 (loans at risk 1) – share of total corporate loans which are provided to enterprises that in the given quarter reported a loss and at the same time a year-on-year drop in sales of more than 50%; LAR 2 (loans at risk 2) – share of total corporate loans which are provided to enterprises that in the given quarter reported a loss and at the same time a year-on-year drop in sales of more than 30%.

2008, loans to enterprises that reported a loss and at the same time a drop in sales of 50% ("loans at risk") represented around 2.5% of total loans, but in June 2009 the median figure for the whole banking sector stood at 7.5%. Using a more stringent definition of the indicator (the so-called LAR 2 – assuming a decline in sales of 30% and a loss), the amount of loans increased up to 14%.

Within the banking sector, a substantial deterioration in the LAR 1 ratio was recorded by both branches of foreign banks and medium-sized banks. In terms of the LAR 2 ratio, the largest banks, too, reported higher sensitivity of enterprises.

This ratio also indicates the quality of corporate loan portfolios in regard to the sensitivity of each bank's customers to the economic downturn. The quality was worse mainly among medium-sized banks.

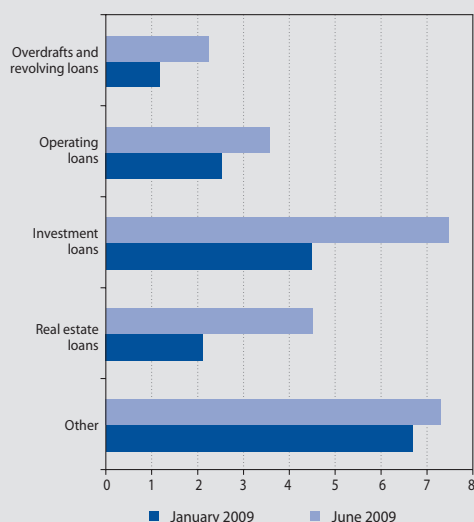
ENTERPRISES HIGHLY SENSITIVE TO INTEREST RATE MOVEMENTS

The foreign exchange risk of the corporate sector fell sharply once Slovakia joined the euro area, as hitherto foreign currency positions in the euro

13 Share of total loans accounted for by loans to enterprises which in the given quarter reported a loss and at the same time a significant year-on-year drop in sales.



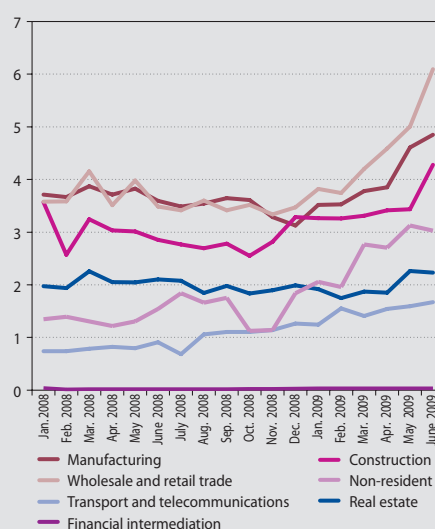
Chart 81 Ratios of non-performing loans in the corporate sector (%)



Source: NBS.

Note: Horizontal axis shows the non-performing loans as a share of total loans in the given loan category.

Chart 82 Ratio of non-performing loans by selected sector (%)



Source: NBS.

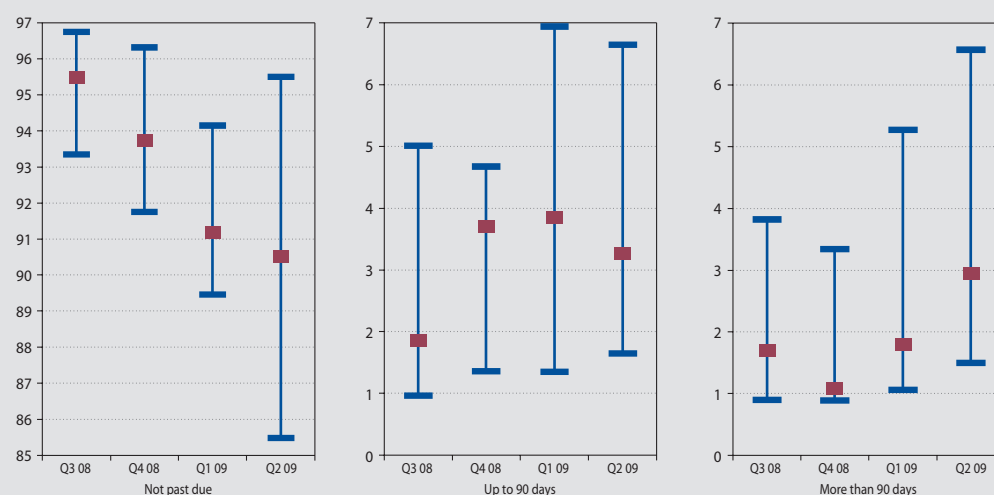
Note: Left-hand scale shows the non-performing loans as a share of total loans broken down by sector.

became domestic currency positions. At the end of 2008, corporate loans denominated in foreign currencies accounted for more than 30% of total loans, but by the end of the first quarter of 2009 this share had fallen to 2%. Likewise the por-

tion of foreign-currency corporate deposits plunged from 19% to 3%.

Enterprises, however, remain to a large extent exposed to interest rate risk, owing to the predomi-

Chart 83 Corporate loans by past due period as a share of total loans in individual quarters (%)



Source: NBS.

Note: Left-hand scale shows data in percent (upper quartile, median, lower quartile), they represent loans grouped by past due period as a share of total loans.



LIQUIDITY RISK IN THE BANKING SECTOR

nance of short-term fixed interest rates among all types of loan. Almost 100% of loans with a short initial rate fixation carry heightened risk at this time of uncertainty in financial markets. Even though no sharp rise in interest rates is envisaged in the short-term outlook, such a movement cannot be ruled in the horizon of several years, particularly given the debt trends of national governments.

NON-PERFORMING CORPORATE LOANS ROSE SHARPLY FROM THE BEGINNING OF THE YEAR

From January 2009, banks recorded a deterioration in the quality of their corporate loan portfolios. The amount of non-performing loans climbed by almost €120 million, or 25%, and their share of total loans thus exceeded four percent (4.5%). The rise in non-performing loans was most pronounced among short-term loans.

While we can identify a general deterioration in the quality of banks' credit portfolios, there were certain differences between sectors. The sectors more adversely affected were those more sensitive to the economic downturn. The ratio of non-performing loans therefore rose most sharply in the sectors of trade, manufacturing and construction. Since the proportion of these sectors varies from one bank portfolio to another, so the development of non-performing loans differed between banks.

The worsening solvency of enterprises was also reflected in an increasing amount of past due loan repayments. Loans past due by up to 90 days increased as a share of total loans in the banking sector, from 2% to 4%. The proportion of corporate loans not past due represented 90% in June 2009, compared to almost 96% at the end of the third quarter of 2008.



3.3 LIQUIDITY RISK IN THE BANKING SECTOR

BANKS ARE COMFORTABLY COVERING VOLATILE FUNDS WITH LIQUID ASSETS

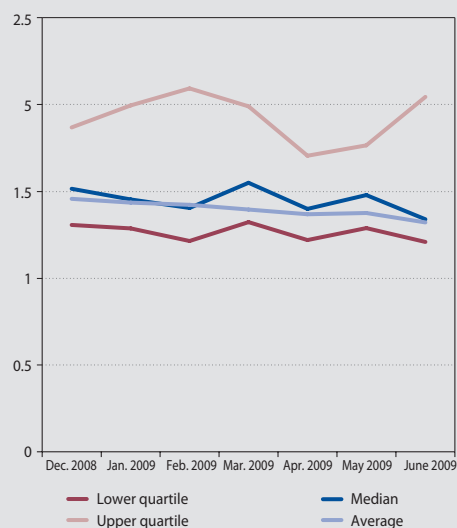
Since November 2008, banks have been required to maintain liquid assets in an amount at least equal to their volatile liabilities. The method of calculating the liquid assets and volatile liabilities is laid down in a decree.¹⁴ The basic principle is to ensure that banks are able to cover a certain percentage of the liabilities to their customers with assets that are convertible into liquid funds within a period of up to 1 month. With the exception of three branches of foreign banks, all banks fulfilled this requirement during the first half of 2009. For the sector as a whole, the ratio of liquid assets to volatile liabilities declined slightly over the first half of the year, from 1.45 to 1.32.

EURO ADOPTION AFFECTED LIQUIDITY

While the ratio value has not changed too significantly, the structure and amount of liquid

assets and volatile liabilities underwent major changes at the beginning of 2009. The amount of liquid assets declined by €11.9 billion and the amount of volatile liabilities fell by €6.8 billion. The cause of the drop on the liabilities side was an outflow of funds from foreign banks, and on the assets side, a sharp reduction in the amount of funds deposited with NBS. Even so, the structure of liquid assets and volatile liabilities can be said to have improved slightly. If we omit operations with banks from both the asset and liability sides, the coverage of the remaining volatile liabilities (predominantly customer deposits) with the remaining liquid assets (mainly securities and loans to customers maturing within 1 months) increased during the first half of 2009, from 97% to 112%.

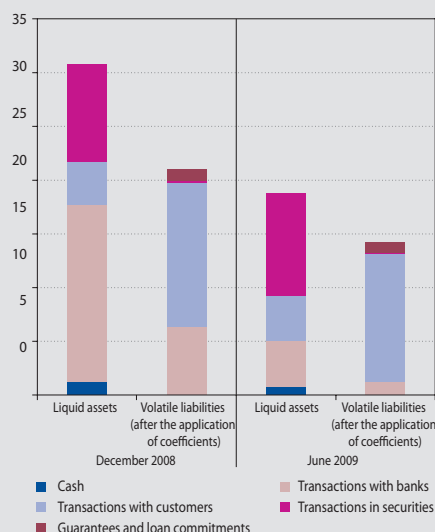
Chart 84 Liquid asset ratios



Source: NBS.

Note: The average indicates the total ratio of liquid assets to volatile liabilities for the whole banking sector.

Chart 85 Structural changes in liquid assets and volatile liabilities (EUR billions)



Source: NBS.

¹⁴ Decree No. 18/2008 of Národná banka Slovenska of 28 October 2008 on Liquidity of Banks and Branch Offices of Foreign Banks and on Process of Liquidity Risk Management of Banks and Branch Offices of Foreign Banks and on amendment of Decree of Národná banka Slovenska No. 11/2007 on Submission of Statements, Reports and Other Disclosures by Banks, Branches of Foreign Banks, Securities Dealers and Branches of Foreign Securities Dealers for Supervision and Statistical Purposes.



3.4 MARKET RISKS IN THE FINANCIAL SECTOR

The extent to which institutions in the Slovak financial market are exposed to market risks has been affected mainly by the course of the global crisis and its effects on world financial markets, by the adoption of the euro, and by changes in the asset structure in certain sectors.

VOLATILITY IN STOCK MARKETS DECLINED; UNCERTAINTY ABOUT INTEREST RATE LEVELS ROSE

During the fourth quarter of 2008 and the first half of 2009, the ECB slashed its main rate from 4.25% to 1%. By doing so, it brought about a substantial sloping of the interest rate curve and a marked rise in volatility also on the long end of the curve. This resulted in a rise in the interest rate risk of portfolios of securities revalued at fair value. The USD/EUR exchange rate was marked by mounting volatility, particularly at the end of 2008, and declined in the second quarter of 2009. Volatility in stock markets fell sharply in the first half of 2009, compared with the second half of 2008.

EURO ADOPTION CONTRIBUTED TO REDUCTION IN MARKET RISKS

The adoption of the euro mitigated the exposure of institutions to foreign-exchange, interest-rate

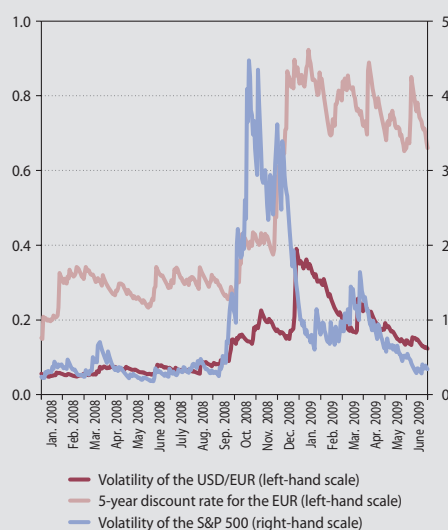
and equity risks. Not only did it bring down the proportion of foreign exchange positions (with the euro having become the domestic currency), it also reduced the riskiness of the US dollar position, which constitutes a sizeable share of the total foreign exchange position in individual institutions (and around two thirds of the financial sector's overall position). The volatility of the euro's exchange rate against the US dollar is approximately two or three times lower than the volatility of neighbouring Central European currencies against the dollar. Interest rate risk also fell: for example, the volatility of the 5-year discount rate for the Slovak koruna in the period 2006–2007 was approximately 2.5 times higher than that of the discount rate for the euro over the same period. Finally, there was also a slight decrease in the investment risk on mutual fund shares, since several of the funds issuing these shares had exposures to the euro or the dollar, which became less risky following the adoption of the euro.

RISK IN PFMC PENSION FUNDS FELL SHARPLY OWING TO A CHANGE IN ASSET STRUCTURE

As regards funds managed by pension fund management companies (PFMCs), their exposure to all of the basis risk types declined in the first half of 2009 owing to a change in the structure of their assets. The most substantial reduction was in equity risk. The proportion of equity shares and mutual fund shares in the assets of PFMC funds plunged during the first half of 2009, from 9.8% to 0.9%.

In addition, the restructuring of assets brought about a reduction in interest-rate, foreign-exchange, and credit risks. The average duration of assets contracted to 0.4 of a year, and in no fund did it exceed 1 year, which means that in the event of a parallel upward shift in the interest rate curve of 1 p.p., no fund would record a drop in the economic value of its assets of more than 1% of the net asset value. The average share of net foreign exchange positions declined to 0.5% of NAV (the average weighted by NAV of individual funds). In all funds, this proportion was less than 1.2% of NAV. Credit risk arising from investments in bond securities fell, too. If we would assume that the ratings of issuers throughout the first half of 2009 remained the same as at 30 June 2009, the change in the average probability

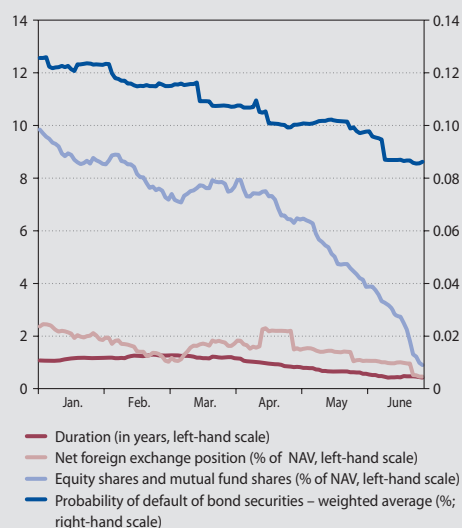
Chart 86 Volatilities in financial markets (%)



Source: Reuters, own calculations.

Note: Chart shows the historical annual volatility of changes in individual market factors, calculated on the basis of a GARCH model (1,1).

Chart 87 Decline in riskiness of PFMC funds during the first half of 2009



Source: NBS, Reuters, Bloomberg, own calculations.

of default of bond portfolios arising solely from the change of their structure declined gradually, from 0.13% to 0.09%. The restructuring of pension funds so as to reduce their individual risks was largely a response to the amendment of Act No. 43/2004 Coll. on retirement pension saving,¹⁵ which changed the method for calculating fees and introduced a duty to top up fund assets in certain cases as from 1 July 2009.

Besides these changes in PFMC funds, the assets of insurance companies and mutual funds also underwent changes in the first half of the year, recording a slight rise in the proportion of equity shares and mutual fund shares.

SHARE INVESTMENTS POSE THE GREATEST RISK IN THE SHORT-TERM HORIZON.

Despite the above-mentioned rise in interest rate volatilities and decline in stock market volatilities, the most significant risk remains the risk of investing in equity shares and mutual fund shares.

For the VaR calculation, this risk was divided into the general risk of share price movements and the so-called indirect foreign exchange risk. In the latter case, the risk is the effect that foreign exchange rate movements will have on prices of purchased mutual fund shares, owing to the fact that the mutual funds that issued these shares are themselves exposed to foreign exchange risk. As Chart 92 shows, the degree of exposure to this risk is comparable with the direct foreign exchange risk. By analogy, it is also possible to define an indirect interest rate risk, though the exposure to it is negligible.

As regards the sectoral structure, there is low riskiness in PFMC funds due to the change in the investment structure of these funds outlined above. The risk to which assets of insurance companies are exposed is seen as relatively high: the potential loss over a period of 10 working days should in 99% of cases not be more than 0.9% of the assets, which represents around two thirds of the profits generated in the insurance sector during the first half of 2009.

On the other hand, the VaR of 1.1% of NAV in the mutual funds sector is relatively low, largely due to the high share of money market mutual funds and bond funds carrying a relatively low risk, as well as to the strong diversification effect between different risks. Equity funds and funds of funds have the highest VaR (Chart 93).

Table 6 Change in the share of equity and foreign exchange positions

	Equity positions		Foreign exchange positions	
	December 2008	June 2009	December 2008 *	June 2009
Banks	0.1	0.1	0.4	0.7
Insurers	2.5	3.4	1.3	1.2
PFMC funds	9.6	0.9	4.2	0.5
SPMC funds	2.3	2.5	1.2	1.9
Mutual funds	13.7	15.3	6.6	7.7

Source: NBS.

Note: Values represent percentage shares on the amount of assets or NAV, and express the asset-weighted average for the given group of institutions.

The foreign exchange position was calculated as the sum of the absolute values of the positions for each institution.

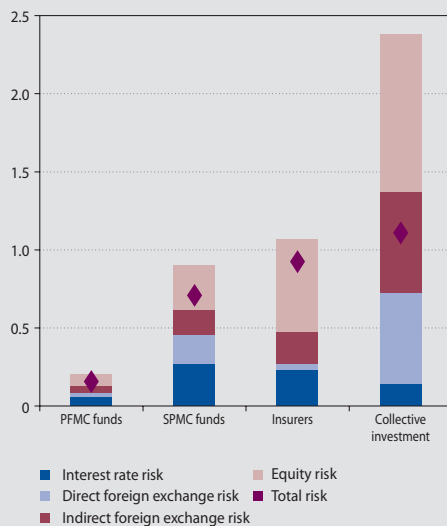
* Positions in the euro were not included.

¹⁵ Act No. 137/2009 Coll. of 11 March 2009 on the amendment of Act No. 43/2004 Coll. on retirement pension saving.



LIQUIDITY RISK IN THE BANKING SECTOR

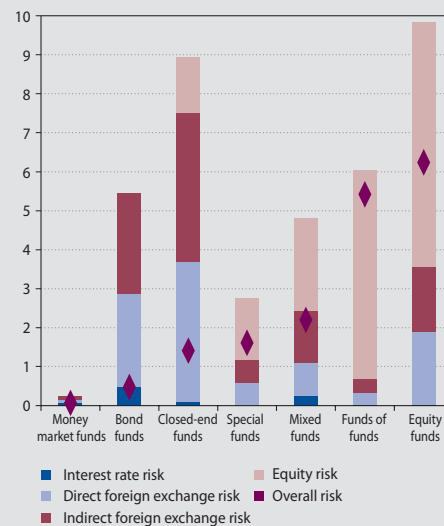
Chart 88 VaR in individual sectors (%)



Source: NBS, Reuters, Bloomberg, own calculations.

Note: Left-and scale shows data in percent of value of assets or NAV. For insurance companies, assets covering unit-linked insurance policies are not included. The VaR values were calculated as the potential loss that would not be exceeded in 99% of cases over a period of 10 working days.

Chart 89 VaR of mutual funds (%)



Source: NBS, Reuters, Bloomberg, own calculations.

Note: Left-and scale shows data in percent of NAV. The VaR values were calculated as the potential loss that would not be exceeded in 99% of cases over a period of 10 working days.

Box 2

A NEW VAR CALCULATION METHOD FOR MARKET RISKS

The VaR method is based on an estimated statistical distribution of potential profits or losses of the current portfolio. A quantile for the required level of confidence (e.g. 99%) is then selected from this distribution and this value represents the maximum loss on the portfolio, with the given probability, over a certain time horizon.

In previous analyses, this distribution was simulated using changes that had occurred in market factors during the previous 250 working days (the so-called historical simulation). The advantage of this approach is that it manages to capture the actual skewness and kurtosis of this distribution. The disadvantage is that in the event of jumps in the distribution – when the distribution based on past observation does not adequately capture the distribution of the next day – the calculated VaR adapts to the new situation only very slowly. This is particularly apparent in periods of rapidly changing volatilities in financial markets, such as the current global crisis. That is why

a new VaR calculation method is used in this analysis.

In the new calculation method, it is assumed that the distribution of changes in market factors can be estimated using a normal distribution with a time-varying covariance matrix. When modelling volatility changes, we assume that the volatility σ^2 of changes in the i -th market factor at the time t is affected by the volatility at the time $t - 1$ and by the size of the change u in the market factor at the time t , as follows:

$$\sigma_{i,t}^2 = \alpha_i \sigma_{i,t-1}^2 + \beta_i u_{i,t}^2.$$

Equivalently, this calculation of volatility can be considered as a calculation with exponentially declining weights for historical changes in market factors. The values of parameters α_i and β_i were not predetermined, but were estimated using the model. The correlations, too, were modelled in a similar way. On the basis of this model, a covariance matrix as at 30 June 2009



was estimated. This method of estimating the covariance matrix of changes in market factors manages to react relatively flexibly to movements in financial market volatilities, which is the main advantage of this VaR calculation approach. The VaR calculation then used a Monte Carlo simulation of 250 scenarios generated from a multidimensional normal distribution with the estimated covariance matrix.

The parameters α_i and β_i were estimated using a multidimensional BEKK-GARCH(1,1)

model. Since 180 market factors were used in the calculation, the dimension was reduced by a transformation using the method of principal components. The multidimensional GARCH model was estimated only for the 15 most significant principal components and the obtained covariance matrix was, through a reverse transformation, retransformed into the original market factors. For investments in equity shares and mutual fund shares, the exposure to individual market factors was firstly estimated by linear regressions.

THE SIGNIFICANT BANKING BOOK INTEREST RATE RISK OF BANKS ROSE AGAIN IN THE FIRST HALF OF 2009

When analysing the effect of interest rate risk on banks' profitability, we distinguish between the short-term interest rate risk and long-term interest rate risk. Following a change in interest rates, the short-term risk may arise within the course of a few days as a result of movement in the fair value of financial instruments. The long-term risk, by contrast, stems from a gradual change in net interest income on instruments that are not revalued to fair value.

The short-term interest rate risk in the banking sector is relatively low, since only 5% of assets and 3% of liabilities are revalued to fair value through profit and loss. All banks report low interest rate positions – either they are hedged with interest rate derivatives or they have low interest rate sensitivity. In the event of a parallel shift in the interest rate curve of 1 p.p., no bank would record a loss of more than 0.1% of assets from the revaluation of financial instruments.

In the long-term view, all banks are adversely sensitive to a parallel upward shift in the interest rate curve. A shift of 1 p.p. would reduce the value of the banking sector's balance sheet (including derivatives) by 1%. This sensitivity of Slovak banks to an unexpected rise in the interest rate curve is relatively high. Indeed, the assumed decline in economic value is approximately 13% of own funds which is three times greater than the profit generated in the banking sector in the first half of 2009.

The sensitivity of the value of banks' balance sheets to a parallel rise in the interest rate curve

increased during the first half of 2009. The assumed loss on a parallel rise of 1 p.p. climbed from 0.7% to 1.0% of assets.

BANKING SECTOR SENSITIVE TO INTEREST RISES IN THE SHORT-TERM HORIZON

This part focuses on the sensitivity testing of financial instruments in various scenarios of developments in interest rates and credit premiums.¹⁶ In the analysis, the risk is assumed to be a development that differs from the expected development and adversely affects the results of companies. We are therefore assessing the difference between the expected development (the so-called baseline scenario) and different stress scenarios (scenarios 1 and 2). For the basic or expected scenario, it is assumed that neither the ECB's base rate, nor the credit risk approximated by the iTraxx index, will change over the annual period from July 2009 to June 2010. Scenario 1 assumes a deterioration in financial markets reflected by an increase in credit risk (the iTraxx index has a higher value) and a reduction in the ECB's base rate. The second scenario (scenario 2) assumes a calming of the situation, as a result of which the iTraxx index falls and the ECB raises its base rate.¹⁷

As regards the size of the interest rate risk in the banking sector, the securities portfolio has an important position. The overall effect of interest rate movements on banks is largely determined by the gain or loss on this portfolio, and this was reflected in both scenarios.

In the short-term horizon, banks undertake a higher level of risk under the scenario that as-

¹⁶ The scenarios are described in more detail in Box 2.

¹⁷ The impact of particular scenarios was calculated for interest rate-sensitive bank portfolios, i.e. for the deposit and loan portfolio, securities portfolio and interest rate derivatives portfolio. Interest income gains (losses) from the deposit and loan portfolio is included in net interest income. The securities portfolio comprises the portfolios of Fair Value (FV), Held for Trading (HFT), Available for Sale (AFS), and Held to Maturity (HTM). The FV and HFT portfolios are revalued through profit and loss, the AFS portfolio is revalued against equity, and the HTM portfolio is not revalued at all. Interest rate derivatives portfolio can be divided into the trading and banking book on the basis of available reports, but since this division does not precisely correspond with the division of the securities portfolio, it was assumed that interest rate derivatives are not used to secure securities that are not reported at fair value. It should also be noted that only interest rate swaps and forwards were included in the calculation. For the stress scenario, we calculated gains (losses) from the deposit and credit portfolio, gains (losses) from the revaluation of securities in the FV, HFT and AFS portfolios, interest income gains and gains (losses) from revaluation of interest rate derivatives in the trading and banking books in the event of change in the ECB base rate from the baseline scenario.



LIQUIDITY RISK IN THE BANKING SECTOR

Chart 90 Impact on the banking sector of a rise of 1 p.p. in the ECB rate and a halving in value of the iTraxx index (scenario 2; EUR thousands)

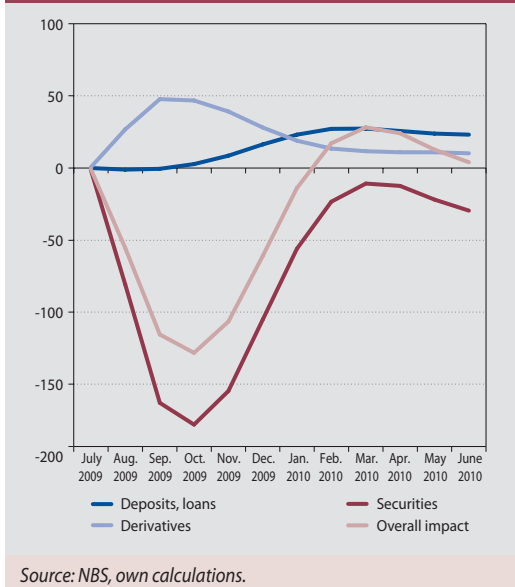
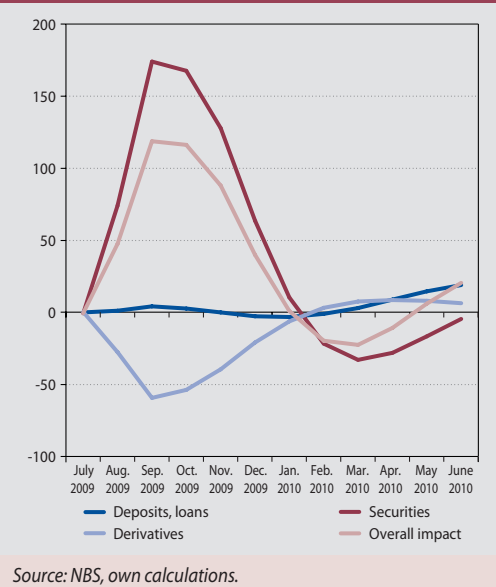


Chart 91 Impact on the banking sector of a cut of 0.75 p.p. in the ECB rate and a doubling in value of the iTraxx index (scenario 1; EUR thousands)



sumes a decline in credit premiums and a rise in interest rates. In this case, banks would record a loss on the securities portfolio, and that loss would be particularly evident within the course of six months. By the end of the period under review, the loss on the securities portfolio would not be fully offset by gains from the portfolio of interest rate derivatives. Our estimate for the horizon of one year is that the overall impact of this scenario should be slightly positive, particularly given the lower loss on the securities portfolio in the other six months and the gains reported on the deposit and credit portfolio.

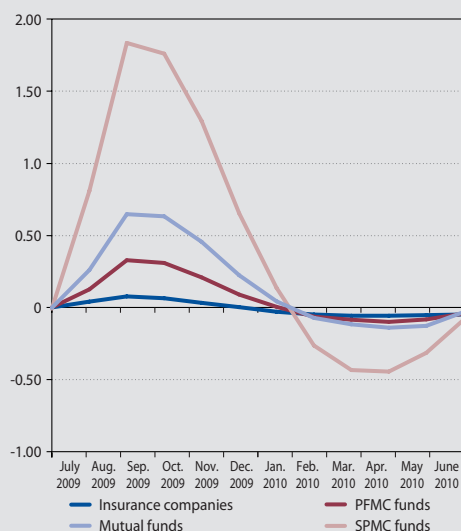
The reverse effect would be seen under the scenario of a cut in interest rates and an increase in credit spreads. Gains on revaluation of securities would exceed the decline in interest income, and these gains would mount until the end of the third quarter of 2009. In the next period, the gains would decline, and in the first quarter of 2010 banks would make a loss on the securities portfolio. By the end of the period under review, however, they would again be back into positive figures. Interest rate derivatives would move in the opposite way to the securities portfolio, since this type of instrument is used to hedge the securities portfolio against unexpected interest rate movements. Based on calculations, it

may be concluded that the sector as a whole has not fully hedged the securities portfolio against unexpected movements in interest rates. Compared with the portfolios of securities and interest rate derivatives, the gains or losses on the credit and deposit portfolio would be lower. At the end of the period under review, banks would report gains on this portfolio under both scenarios.

Among individual banks, the results are comparable to those for the sector as a whole. Most banks either did not report any hedging of the securities portfolio with interest rate derivatives or they reported such hedging in less than the full extent – i.e. the gains/losses on the securities portfolio would not be offset by the losses/gains on the portfolio of interest rate derivatives.

If the stress testing covered also gains and losses on revaluation of securities in the HTM portfolio (assuming that banks can, if necessary, also sell securities held in this portfolio), the development of securities would to an even greater extent outdo that of the remaining two portfolios. The result under both scenarios would be close to zero: in the first scenario, banks would reach zero from gains accumulated in the first quarter of the period under review, while in the second

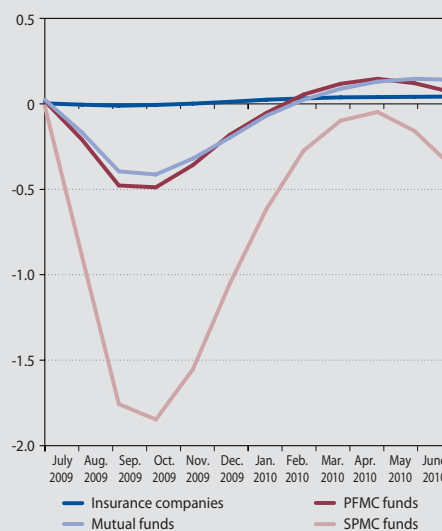
Chart 92 Impact of a cut of 0.75 p.p. in the ECB rate and a doubling in value of the iTraxx index (non-bank institutions; %)



Source: NBS, Reuters, Bloomberg, own calculations.

Note: Left-hand scale shows data in % of value of assets or NAV. For insurance companies, assets covering unit-linked insurance policies are not included. Due to insufficient data, the figures for SPMC funds do not include changes in interest income from bank deposits.

Chart 93 Impact on the banking sector of a rise of 1 p.p. in the ECB rate and a halving in value of the iTraxx index (non-bank institutions; %)



Source: NBS, Reuters, Bloomberg, own calculations.

Note: Left-hand scale shows data in % of value of assets or NAV. For insurance companies, assets covering unit-linked insurance policies are not included. Due to insufficient data, the figures for SPMC funds do not include changes in interest income from bank deposits.

scenario, they would get the same result through mitigating losses accumulated during the first quarter of the period.

OTHER SECTORS, TOO, WOULD BE ADVERSELY AFFECTED BY A RISE IN INTEREST RATES

As is clear from Chart 96 and Chart 97, other institutions in the financial market would be

adversely affected by a rise in the ECB's main interest rate. Given the relatively short duration of bond portfolios and the relatively large share of securities held to maturity in the portfolios of insurance companies (42% of the total amount of securities), this effect would gradually diminish. Therefore the ultimate effect on profits at the level of individual sectors will be negligible.

Box 3

INTEREST RATE SCENARIOS FOR TESTING SENSITIVITY TO INTEREST RATE RISK

When testing interest rate sensitivity, we proceeded from the assumption that the development of interbank interest rates derives from the level of the ECB's base rate as well as from how risks (credit, liquidity, etc.) are being perceived in the market. The risk size, which determines the spreads between the ECB rate and the respective interbank rate were approximated using the iTraxx index. It was further assumed that movements in interbank rates were subsequently reflected in changes in retail interest rates.

Based on these assumptions, three scenarios were designed for the testing of interest rate sensitivity. The first, baseline scenario assumes that neither the base rate nor the iTraxx index value change over the course of a year from their levels as at the end of June 2009. This baseline scenario represents an approximation of the expected market developments. Scenario 1 assumes that the situation in financial markets will deteriorate in response to adverse global economic developments. This deterioration was quantified as

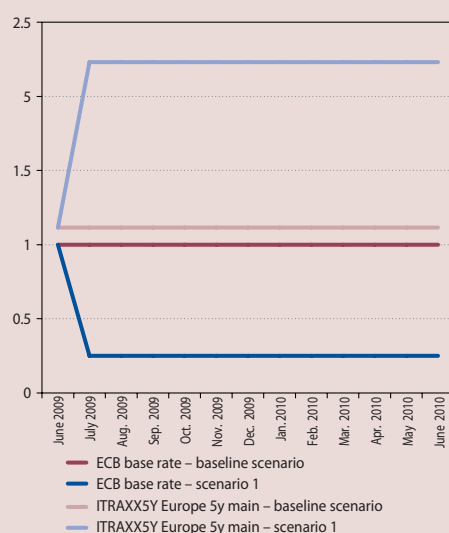


LIQUIDITY RISK IN THE BANKING SECTOR

a doubling of the iTraxx index value from its June-end level. It is also assumed that the ECB reacts to this deterioration by cutting its base rate to 0.25% in July and that the rate remains at this level until the end of the period under review (the end of June 2010). Scenario 2 assumes

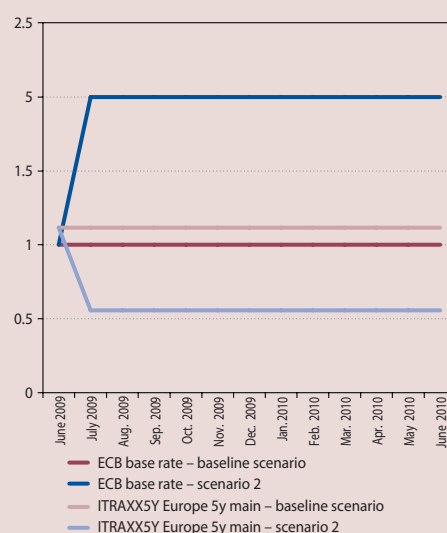
an upturn in financial markets quantified as a halving of the iTraxx index value from its level as at 30 June 2009. This positive development is accompanied by the ECB raising its base rate to 2% in July 2009 and keeping it there until the end of the period under review.

Chart A Sensitivity test for interest rate risk – Scenario 1 (%)



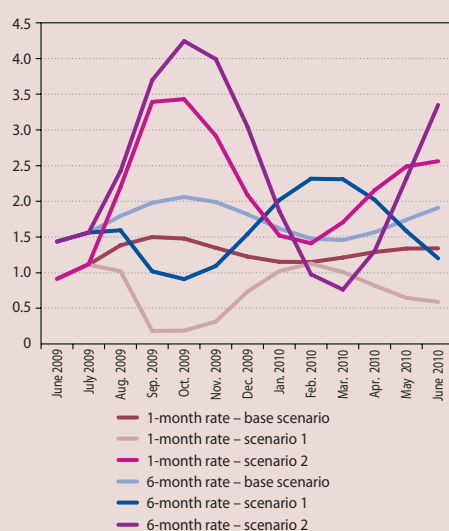
Source: NBS.

Chart B Sensitivity test for interest rate risk – Scenario 2 (%)



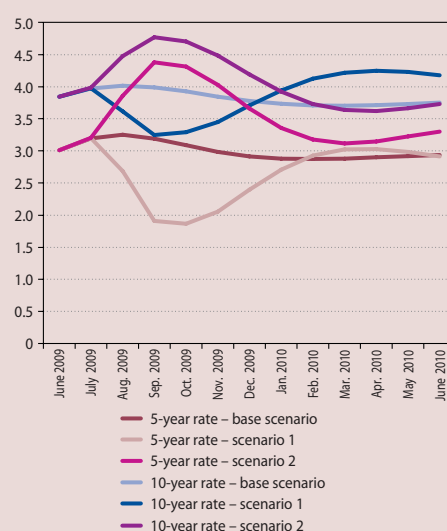
Source: NBS.

Chart C Interbank market interest rates – maturities of up to 1 year (%)



Source: NBS, own calculations.

Chart D Interbank market interest rates – maturities of over 1 year (%)



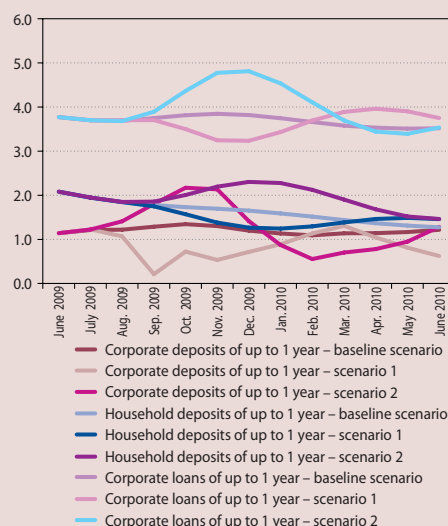
Source: NBS, own calculations.



Under the baseline scenario, there would be no major movements in interbank market rates, but only minor corrections. Under scenario 1, the rates would fall at the beginning of the period under review in response to a cut in the ECB rate. This initial decline would be followed by an upward correction, partly because of an overreaction to the ECB rate cut, and partly due to higher risk perception. This correction would be higher in the case of interest rates with a maturity of up to 1 year; these rates would be volatile during the period under review, and the corrections would continue even after 1 year. As for rates with a maturity of more than 1 year, they would stabilize at slightly above the baseline scenario level. Under scenario 2, the situation would be to a large extent symmetrical – the initial rise in rates would be followed by a correction, and rates with a maturity of more than 1 year would stabilize.

Deposit rates and lending rates for enterprises and households would follow a similar course as interbank rates. However, individual movements in customer rates would be less marked. Changes in interbank rates would be most fully reflected in corporate deposit rates, and

Chart E Customer interest rates (%)



Source: NBS, own calculations.

they would to a lesser extent feed through to household deposit rates and corporate lending rates. Since lending rates for households did not report a significant correlation with either ECB rates or interbank rates, they were modelled as autoregressive processes.



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EUROSYSTEM

CHAPTER 4

MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR



4 MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR

The resilience of the financial sector increased slightly between the end of 2008 and the end of the first half of 2009, and did so despite the deteriorating economic environment. In the banking sector, this improvement largely stemmed from an increase in own funds, which increased banks' capacity to cope with stress situations. Under a moderate scenario of development, only a few banks would not meet the minimum capital requirement. The sector was more sensitive under an extreme scenario.

The change in the asset structure of Pillar II of the pension saving system substantially reduced the overall riskiness of these funds. This was also reflected in their higher resilience to extreme changes in market factors.

Collective investment funds and insurance companies reported higher sensitivity, especially to a marked decline in share prices.

4.1 DESCRIPTION OF SCENARIOS USED

In this part of the analysis, we assess the resilience of the financial sector to the occurrence of highly negative developments. Our tests assumed an adverse economic situation in both the external environment and Slovakia, the parameters of which are described in two stress scenarios. Both scenarios assume that economic development in Slovakia and the external environment will be more negative than the most recent forecasts project. The scenarios differ in the severity of their assumptions and the effects of these assumed developments on the financial sector in 2009 and 2010.

The first scenario assumes that GDP growth will decline by 7.6% year-on-year in the last quarter of 2009 and that there will be a deflation rate of 1.5%. The situation would stabilize in 2010, and both GDP growth and inflation would be at the level of 0.1% year-on-year at the end of the period under review.

The second, more extreme scenario assumes a drop of 9.3% in GDP growth and deflation of 2.2% for the fourth quarter of 2009. In 2010, as with the first scenario, the situation would steady, and both GDP growth and inflation would reach slightly less than 0%.

Table 7 Stress testing parameters

		Moderate scenario		Extreme scenario	
		2009 Q4	2010 Q4	2009 Q4	2010 Q4
Corporate loan default rate	Non-sensitive sectors	2 %		5 %	
	Less sensitive sectors	10 %		15 %	
	Sensitive sectors	20 %		35 %	
Household loan default rate		5.2 %	7.9 %	6.3 %	9.5 %
Unemployment rate		12.3 %	12.8 %	12.5 %	13.4 %
Inflation (CPI)		-1.5 %	0.2 %	-2.2 %	-0.5 %
GDP growth		-7.6 %	0.1 %	-9.3 %	0.0 %
ECB interest rate		1 %	1 %	1 %	1 %
Fall in stock markets		40 %	0 %	70 %	0 %
Appreciation of the euro		10 % / 20 %	0 %	20 % / 40 %	0 %

Source: NBS.



Box 4

STRESS SCENARIO PARAMETERS AND ASSUMPTIONS¹⁸

Under the first scenario, the moderate year-on-year rise in household lending would continue but gradually decline, and by the end of the period under review it would be close to zero. The worse macroeconomic situation would lead to a rise in the amount of non-performing loans in 2009, thereby pushing the loan default ratio above 5% by the end of 2009. The weaker financial position of the corporate sector, coupled with redundancies and lower real incomes, would gradually be reflected in the financial position of households and hence in their debt-servicing capability. This gradual transmission is assumed to result in a further rise in the loan default ratio in 2010, up to around 8% by the year-end. For the corporate sector, it is assumed that the deterioration in the loan default rate will be in proportion to the sensitivity of enterprises to the business cycle. When breaking down enterprises by sensitivity to the business cycle and setting the default rates, account was taken of the results of the corporate sector for the first quarter of 2009. For non-sensitive sectors, the default rate over a horizon of 18 months (i.e. until the end of 2010) would be 2%, while for less sensitive sectors it would be 10%, and for sensitive sectors, 20%.

The second scenario would develop similarly to the first scenario, except in regard to the total amount of household lending. The amount of loans to households would record a year-on-year decline (-1%) already in 2009, and this trend would be maintained in 2010 (with a year-on-year drop of -1.4% reported at the end of 2010). The loan default ratio would end 2009 at 6.3%, and it would rise to 9.5% by the end of 2010. As for the corporate sector, the annual loan default rate would rise for non-sensitive, less sensitive, and sensitive sectors to, respectively, 5%, 15%, and 35%.

Both scenarios are based on data for the corporate sector and household sector available as at 30 June 2009, and therefore they used a time horizon of 18 months.

The results of the stress scenarios were evaluated in terms of their effect on the capital adequacy ratio of individual banks as at June 2009. It was assumed in this regard that banks would not be able to make a profit until the end of the period under review, and also that the profits generated would not be paid out in dividends. The value of own funds as at 31 December 2010 was therefore obtained by adding/deducting the profit/loss reported as at the end of June 2009 to the value of own funds as at that same date. When calculating the effect that losses from non-performing loans have on own funds, no distinction was made between banks using the IRB approach and those using the standardized approach.

It was assumed that house purchase loans account for 20% of the total losses from non-performing loans to households, and consumer loans for 80%. Besides the loan default ratio, the calculation of credit losses from the corporate lending portfolio included a further two key parameters: the rate of decline in collateral value and LGD. The assumed rate of decline in collateral value was also set according to the selected scenario. Based on a professional estimate, collaterals were divided into those whose value is assumed to decline by 30% under the first scenario or 50% under the second scenario (for example, real estate, blank bills) and those for which no drop in value is assumed (mostly third-party collateral). For the calculation of losses, it was assumed that banks will create provisions in the amount of 45% of the unsecured outstanding loans. The 45% figure actually represents the LGD, which means that the bank would be able to satisfy claims in the amount of (100-45)% of the unsecured loans in subsequent bankruptcy proceedings. When calculating the capital adequacy ratio, own funds less losses under the individual scenarios were divided by the amount of risk weighted assets as at 30 June 2009.

¹⁸ Details of the models used for stress testing can be found in the Analysis of the Slovak Financial Sector for 2008 and in the Annexes to the Analysis of the Slovak Financial Sector for 2008.



4.2 SCENARIO IMPACTS

Table 8 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	1.8	1.3	1.7	2.1	2.8	2.0	2.3	3.3
Insurance companies	1.5	0.0	1.1	1.8	2.7	0.0	1.9	3.2
Pension funds	0.4	0.0	0.0	0.5	0.7	0.0	0.1	1.0
of which: conservative	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
balanced	0.4	0.0	0.1	0.8	0.8	0.0	0.2	1.3
growth	0.4	0.0	0.1	0.7	0.8	0.1	0.2	1.3
Supplementary pension funds	1.3	0.0	0.0	3.0	2.3	0.0	0.0	5.3
Mutual funds	7.2	6.0	11.8	20.6	12.8	10.6	22.1	37.9
of which: equity	25.4	23.7	28.1	38.9	45.7	42.2	51.6	69.3
money market	0.8	0.0	0.0	1.1	1.5	0.0	0.0	2.1
bond	3.5	0.1	0.5	8.6	6.9	0.2	1.0	15.7
mixed	13.2	7.7	10.1	20.4	23.6	13.6	18.5	35.7
funds of funds	34.1	20.6	31.4	35.4	60.0	36.6	55.1	62.0

Source: NBS, Register of Bank Loans and Guarantees (RBUZ), own calculations.

Note: The table shows quartiles of the loss-to-asset ratio arising from the application of the respective scenario. Values are in % of assets or NAV.

BANKING SECTOR PARTICULARLY SENSITIVE TO EXTREME SCENARIO OF DEVELOPMENTS

Under the moderate macroeconomic scenario, the banking sector would suffer a loss equivalent to 1.8% of total assets (24% of own funds), and under the extreme scenario, 2.8% of total assets (38% of own funds). That these losses are higher than those estimated in the stress scenario as at the end of 2008 is because the time horizon of one year was extended to one and a half years. Even so, under the moderate scenario there would be only two banks reporting a capital adequacy ratio¹⁹ of less than 8% (compared with 6 banks at the end of 2008), and under the extreme scenario, seven banks (compared with 8). In the case of most banks, their capital adequacy ratio would, after the application of the respective scenario, be higher than it was at the end of 2008. It is therefore clear that the increase in banks' capital during the first half of 2009 served to increase their shock absorbing capacity.

The largest proportion of the losses suffered by banks under the macro stress scenarios would

arise from the credit risk of enterprises. An exception to this is home savings banks, whose losses stem predominantly from the credit risk of households.

OTHER SECTORS ARE MOST SENSITIVE TO EQUITY RISK

Because of the extensive changes made to their asset structures, PFMC funds would not be greatly affected under the macro stress scenarios. The maximum losses would represent 2.2% of assets under the moderate scenario and 3.9% of assets under the extreme scenario. As Table 9 shows, however, the impact on most funds would be substantially lower since most funds do not include any investments in equity shares or mutual fund shares, and their open foreign exchange positions are low. In other funds, even under the extreme scenario, the loss would not be expected to exceed 0.3% of assets.

As for the effect of the scenarios on SPMC funds, it varies according to the type of fund. Among the quartet of largest funds, accounting for 91% of the total assets of SPMC funds, losses under the moderate scenario and ex-

¹⁹ Calculated as the ratio of own funds and 12.5 times the capital adequacy requirement.



MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR

Table 9 Impact of macroeconomic scenarios on the banking sector (%)

		Minimum	1st quartile	Median	3rd quartile
Capital adequacy ratio before test (excluding profits from the first half of 2008)		10.0	10.8	13.2	16.7
Capital adequacy ratio before test (excluding profits from the first half of 2008)		10.1	11.2	13.2	17.2
Moderate scenario	Credit risk of enterprises	7.8	9.0	10.9	15.8
	Credit risk of households	9.4	10.1	12.7	15.8
	Market risks	9.2	10.7	13.2	16.7
	Total impact	7.3	8.1	11.2	14.6
Extreme scenario	Credit risk of enterprises	6.0	7.7	8.7	15.3
	Credit risk of households	9.3	10.0	12.6	15.8
	Credit risk of households	8.6	10.6	13.2	16.7
	Total impact	5.3	6.6	9.9	13.9

Source: NBS, own calculations.

Note: The table shows quartiles of capital adequacy ratios.

treme scenario should not exceed, respectively, 2.5% and 4.3% of assets. Growth funds, however, would record substantially higher losses since a proportion of their assets were invested in equity positions (losses under the extreme scenario would range between 19% and 33% of assets).

In the insurance sector, the impact of the stress scenarios is similar in intensity to their effect on banks. In this case, however, the losses predominantly arise from the declining value of equity shares and mutual fund shares and, in certain cases, from foreign exchange risk. The available solvency margin would fall to below 100% only

under the extreme scenario and only for one insurer.

As for mutual funds, the total amount of assets under management would fall by 7.2% under the moderate scenario and by as much as 12.8% under the extreme scenario. Approximately 84% of this decline would arise from the simulated fall in share, while the rest would be caused by the assumed appreciation of the euro against other currencies. Only a small proportion of funds would record substantial losses. Even according to the extreme scenario, funds managing around 70% of the assets invested in mutual funds would make a loss of less than 5% assets.



FINANCIAL MARKET ANALYTICAL DATA (ANNEXES)



5 FINANCIAL MARKET ANALYTICAL DATA (ANNEXES)

1 BANKS AND BRANCHES OF FOREIGN BANKS

1.1 Asset and liability structure of banks and branches of foreign banks							
	Total volume (EUR thousands) (as at 30.6.2009)	Share of a foreign currency (%)	Year-on-year change (%)	Share of total assets (%)	CR3 (%)	CR5 (%)	HHI
ASSETS TOTAL (gross)	55,479,080	3	-6	100	55	70	1,220
TOTAL LOANS TO CUSTOMERS	31,806,935	2	7	57	54	68	1,166
Loans to retail	13,372,139	0	17	24	64	83	1,639
of which: Loans to households	12,494,536	0	18	23	65	84	1,665
Loans to enterprises	14,937,256	2	3	27	47	67	1,088
Loans to non-banking financial companies	1,603,893	1	-21	3	51	71	1,205
Loans to general government	770,258	0	12	1	89	96	6,095
Loans to non-residents	1,123,389	23	-4	2	53	75	1,322
TOTAL INTERBANK MARKET OPERATIONS	9,029,536	10	-48	16	49	62	1,136
of which: Operations with NBS and foreign CB (incl. NBS bills)	1,202,566	0	-91	2	54	74	1,377
TOTAL SECURITIES	12,030,901	2	24	22	65	84	1,728
Securities issued by residents	10,046,483	0	28	18	66	85	1,798
Government bonds	8,583,775	0	40	15	68	86	1,845
Corporate bonds	182,886	0	1	0	73	94	2,205
Bank bonds	619,924	0	-30	1	59	79	1,498
Other debt securities	264,622	0	-1	0	100	100	10,000
Equity securities	395,276	0	-1	1	77	94	2,296
Securities issued by non-residents	1,427,954	13	54	3	77	87	2,117
Debt securities	1,351,347	11	62	2	75	87	2,090
of which: issued by banks	481,139	5	0	1	75	88	2,500
issued by general government	593,515	9	948	1	86	95	2,867
other issuers	276,693	28	-6	0	64	87	1,904
Equity securities	76,607	45	-21	0	96	100	3,846
of which: issued by banks	17,928	100	-19	0	100	100	7,805
other issuers	58,679	29	-22	0	99	100	5,644
Derivatives – positive fair value	556,464	0	-39	1	73	89	2,013



FINANCIAL MARKET ANALYTICAL DATA

1.1 Asset and liability structure of banks and branches of foreign banks

	Total volume (EUR thousands) (as at 30.6.2009)	Share of a foreign currency (%)	Year-on-year change (%)	Share of total assets (%)	CR3 (%)	CR5 (%)	HHI
TOTAL LIABILITIES	52,974,185	3	-7	100	55	70	1,214
TOTAL DEPOSITS AND LOANS FROM CUSTOMERS	38,175,468	1	9	72	58	71	1,309
of which: deposits insured with the Deposit Protection Fund	23,510,512	2	21	44	63	76	1,564
Deposits and loans received from the retail sector	22,720,088	2	24	43	63	75	1,567
Deposits and loans received from households	21,228,594	2	26	40	62	75	1,569
Deposits and loans received from enterprises	8,189,748	4	-12	15	56	74	1,503
Deposits and loans received from non-bank financial corps.	2,858,850	3	-8	5	53	74	1,307
Deposits and loans received from general government	3,551,966	0	10	7	58	79	1,468
Deposits and loans received from non-residents	854,816	6	-4	2	55	71	1,271
TOTAL FUNDS FROM BANKS	4,515,696	6	-60	9	51	64	1,211
Funds from NBS and foreign issuing banks	1,421,893	0	1 662	3	97	100	4,368
Funds from non-resident banks	2,445,194	11	-75	5	40	57	927
TOTAL SECURITIES ISSUED	4,204,521	3	-18	8	67	82	1,847
Mortgage bonds	3,186,459	3	4	6	74	85	2,339
Bills of exchange	172,741	5	-76	0	75	96	2,288
Other securities issued	253,322	6	-24	0	83	100	3,442
Derivatives – negative fair value	591,999	0	-42	1	69	87	1,977
Risk-weighted assets of the banking book	29,029,349	,	7	55	59	75	1,375
Risk-weighted assets of the trading book	977,667	,	-25	2	71	91	2,160
Other risk-weighted assets	3,328,238	,	9	6	61	78	1,503
Own funds	4,089,552	,	9	8	51	69	1,161

Note: The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item.

In the case of all institutions having an equal share, the HHI value would be 370 if the institutions numbered 27.

Assets are expressed in the gross value; equality with liabilities is achieved by deducting the value of depreciation charges and provisions.



1.2 Revenues and expenditures of banks and branches of foreign banks (EUR thousands)					
	Value (as at 30.6.2009)	Value (as at 30. 6. 2008)	CR3 (%)	CR5 (%)	HHI
(a) TOTAL OPERATING COSTS (b + e + f)	583,798	583,572	58	72	1,327
(b) Administrative costs (c + d)	492,763	493,497	57	71	1,312
(c) Purchased performances	245,077	247,266	57	70	1,365
(d) Staffing costs	247,686	246,231	57	73	1,304
(e) Depreciation/amortization of tangible and immovable assets	79,956	78,918	61	74	1,551
(f) Taxes and fees	11,079	11,156	84	91	3,763
(g) GROSS INCOME (h + l)	998,256	1,087,676	63	75	1,470
(h) Net interest income (j – i)	770,263	752,232	59	73	1,385
(i) Interest expenses	469,045	718,905	48	68	1,101
(j) Interest income	1,239,308	1,471,137	55	70	1,234
(k) of which: Interest income from securities	236,262	251,233	67	83	1,787
(l) Net non-interest income (m + n + o + p)	227,993	335,444	74	84	2,057
(m) Revenue from shares and ownership interests	6,641	16,809	100	100	4,440
(n) Net income from fees	198,426	223,126	65	77	1,626
(o) Net income from trading	49,020	119,800	73	86	3,644
(p) Other net operating incomes	-26,094	-24,291	,	,	,
(q) NET INCOME (g – a)	414,458	504,104	69	81	1,758
(r) Net creation of provisions and net income from depreciation of receivables	199,323	79,713	67	82	1,804
(s) Net creation of reserves	-8,098	-10,282	,	,	,
(t) NET PRE-TAX PROFIT (q – r – s)	223,233	434,673	73	87	2,155
(u) Extraordinary profit	0	0	,	,	,
(v) Income tax	43,676	88,217	64	81	2,066
w) NET PROFIT AFTER TAX (t + u – v)	179,557	346,456	75	88	2,206

Note: The calculation of CR 3, CR 5 and HHI covers only those institutions having a positive value of the given item. In the case of all institutions having an equal share, the HHI value would be 370 if the institutions numbered 27.



FINANCIAL MARKET ANALYTICAL DATA

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

	Denominator-weighted average (30.6.2009)	Denominator-weighted average (30.6.2008)	Asset-weighted average	Minimum	Lower quartile	Median	Upper quartile	Maximum
ROA	0.34	0.62	0.34	-49.52	-0.13 (6)	0.26 (21)	0.49 (30)	2.32 (43)
ROE (excl. branches)	4.30	9.50	4.76	-3.03	0.39 (10)	2.76 (13)	4.99 (31)	9.72 (38)
Cost-to-income ratio	58.48	53.65	62.57	-8 425.00	51.64 (23)	64.76 (51)	79.67 (14)	444.03 (13)
Relative significance of interest incomes	77.16	69.16	81.11	0.00	67.74 (22)	76.55 (32)	85.74 (32)	296.91 (15)
Net interest spread	1.39	1.27	1.37	-1.66	0.58 (4)	0.94 (10)	1.51 (38)	6.02 (47)
retail	2.48	2.67	2.48	-0.85	31 (5)	1.64 (21)	2.69 (43)	7.39 (29)
corporates	1.29	1.17	0.92	-8.61	1.18 (28)	1.60 (9)	1.71 (39)	2.92 (23)
financial companies	1.38	0.64	0.73	-95.60	0.70 (41)	1.44 (20)	2.46 (14)	5.24 (18)
banks including NBS and bills	-0.20	0.02	-0.78	-50.86	-1.78 (31)	-0.34 (9)	0.08 (7)	4.11 (51)
Net interest margin	1.41	1.31	1.41	-0.05	0.58 (3)	1.07 (11)	1.47 (38)	6.14 (47)

Note: 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.



1.4 Risk and capital adequacy indicators of banks and branches of foreign banks and their distribution in the banking sector (%)									
	Denominator-weighted average (30.6.2009)	Denominator-weighted average (30.6.2008)	Asset-weighted average	Minimum	Lower quartile	Median	Upper quartile	Maximum	Number of breaches
CREDIT RISK									
Non-performing loans as a share of total amount of loans to customers	4.24	2.88	4.26	0.00	0.60 (6)	2.91 (44)	6.72 (31)	13.85 (19)	
Retail (share of loans to retail sector)	4.73	3.90	5.16	0.00	3.08 (43)	5.88 (14)	8.46 (33)	75.27 (8)	
Corporates (share in loans to enterprises)	4.51	2.73	4.24	0.00	0.00 (10)	1.43 (3)	4.18 (67)	14.08 (19)	
Financial companies (share of loans to financial companies)	0.05	0.03	0.15	0.00	0.00 (79)	0.00 (0)	0.00 (0)	1.62 (14)	
Provisions as a share of total amount of non-performing loans to customers	83.34	89.94	98.42	30.78	65.73 (9)	80.84 (43)	100.00 (23)	587.38 (22)	
Large asset exposure (weighted) / own funds (excl. branches)	136.13	161.30	143.74	0.00	76.57 (5)	173.20 (58)	225.20 (22)	499.52 (7)	0
Large asset exposure within groups (number of breaches)									2
Claimable value of securities as a share of total amount of non-performing loans to customers	32.46	31.23	33.66	0.00	7.45 (13)	35.60 (26)	43.92 (41)	99.99 (16)	
FOREIGN EXCHANGE RISK									
Forex open balance-sheet position / own funds (excl. branches)	4.29	-42.79	5.09	-23.31	-0.54 (40)	0.54 (5)	8.61 (12)	164.84 (35)	
Forex open off-balance-sheet position / own funds (excl. branches)	-12.23	44.95	-11.97	-208.37	-20.92 (19)	-0.07 (30)	0.28 (5)	33.87 (38)	
Total forex open position / own funds (excl. branches)	-7.94	2.16	-6.88	-58.74	-18.71 (19)	0.00 (7)	3.98 (29)	11.98 (38)	
Total forex open position / own funds (incl. branches)	3.27	-44.71							
INTEREST RATE RISK									
Total interest-rate open position up to 1 month / own funds (excl. branches)	-145.31	-158.60	-147.98	-768.52	-338.91 (34)	-100.37 (10)	27.41 (25)	136.32 (23)	
Total interest-rate open position up to 1 year / own funds (excl. branches)	-114.73	-72.66	-121.85	-375.11	-157.97 (29)	-83.41 (25)	-23.78 (25)	67.56 (13)	
Total interest-rate open position up to 5 years / own funds (excl. branches)	-11.00	-7.83	-23.08	-190.25	-5.43 (32)	30.03 (23)	61.61 (29)	417.85 (8)	



FINANCIAL MARKET ANALYTICAL DATA

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

	Denominator-weighted average (30.6.2009)	Denominator-weighted average (30.6.2008)	Asset-weighted average	Minimum	Lower quartile	Median	Upper quartile	Maximum	Number of breaches
LIQUIDITY RISK									
Share of quick assets in highly volatile funds	14.65	18.55	532.84	0.18	3.83 (9)	6.87 (29)	29.72 (47)	39 700.00 (14)	
Share of liquid assets (incl. collateral from reverse repo trades) in volatile funds	24.20	54.46	25.27	-4.08	2.26 (5)	8.76 (14)	26.90 (50)	328.65 (31)	
Ratio of fixed and illiquid assets (excl. branches)	43.80	40.82	48.18	7.09	30.21 (8)	48.96 (29)	59.22 (23)	103.57 (31)	
Share of loans in deposits and issued securities	75.05	74.34	89.11	0.00	53.53 (7)	75.68 (66)	106.18 (21)	1 233.20 (6)	
Total liquidity position current up to 7 days /assets	-46.07	-39.57	-46.07	-119.46	-50.70 (51)	-32.36 (38)	-0.28 (5)	69.57 % (7)	
Total liquidity position estimated up to 7 days /assets	-10.90	-8.80	-10.90	-82.44	-17.61 (36)	-4.76 (31)	3.81 (10)	69.57 (23)	
Total liquidity position current up to 3 months /assets	-56.95	-44.97	-56.95	-83.20	-58.89 (70)	-43.31 (21)	-12.99 (4)	69.57 (5)	
Total liquidity position estimated up to 3 months / assets	-19.60	-12.96	-19.60	-86.30	-30.45 (8)	-22.40 (58)	3.30 (27)	69.57 (7)	
CAPITAL ADEQUACY									
Capital adequacy ratio (excl. branches)	12.27	11.79	11.96	9.96	11.10 (46)	13.28 (31)	16.42 (10)	50.46 (5)	0
Share of Tier I in own funds (excl. branches)	88.33	89.28	86.54	68.87	80.04 (8)	89.96 (48)	99.68 (30)	100.00 (6)	
Share of own funds in balance-sheet total (excl. branches)	8.39	7.42	8.39	5.75	7.46 (46)	9.22 (29)	11.57 (15)	60.94 (2)	
Share of potential loss in own funds in reaching 8% capital adequacy (excl. branches)	34.79	33.17	29.72	19.64	27.75 (46)	39.77 (31)	51.26 (10)	84.15 (5)	

Note: 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.



2 INSURANCE COMPANIES

2.1 Net profit and profitability indicators of insurance companies

	Value as at (EUR thousands) 30.6.2009	Value as at (EUR thousands) 30.6.2008	Year-on-year change (%)	Share of total premiums written (%)
Total net profit	69,981	80,862	-13.5	6.8
ROA (%)	1.2	1.5	-0.3	-
ROE (%)	5.8	7.8	-2.0	-

2.2 Premiums

	Value as at (EUR thou- sands) 30.6.2009	Value as at (EUR thou- sands) 30.6.2008	Year-on-year change	Share of total premiums written (%)	CR3 (%)	HHI 30.6.2009	HHI 30.6.2008
Total	1,030,299	1,086,481	-5.2	100.0	67.0	1,863	1,730
Life insurance	505,783	544,582	-7.1	49.1	55.7	1,394	1,401
Whole-life insurance, pure endowment insur- ance, or whole-life and endowment insurance (excl. unit-linked insur- ance)	298,788	355,155	-15.9	29.0	60.7	1,544	1,674
Unit-linked insurance	142,025	126,008	12.7	13.8	71.3	1,903	1,411
Supplementary insur- ance	55,624	53,501	4.0	5.4	66.6	1,687	1,723
Other	9,346	9,917	-5.8	0.9	88.3	4,181	4,194
Non-life insurance	524,517	541,899	-3.2	50.9	80.4	2,633	2,365
Compulsory third-party liability motor insurance	165,919	187,491	-11.5	16.1	83.5	2,939	2,812
Land vehicles damage or loss insurance	150,351	154,226	-2.5	14.6	79.6	2,473	2,373
Property insurance	125,525	116,587	7.7	12.2	83.3	2,960	2,499
Other	82,720	83,596	-1.0	8.0	71.1	2,297	1,929

Note: The calculation of CR3 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 if the institutions numbered 25.



FINANCIAL MARKET ANALYTICAL DATA

2.3 Premiums ceded to reinsurers

	Value as at (EUR thousands) 30.6.2009	Value as at (EUR thousands) 30.6.2008	Year-on-year change (%)	Share of total premiums written (%)
Total	136,640	140,772	-2.9	13.3
Life insurance	9,623	10,508	-8.4	0.9
Non-life insurance	127,017	130,264	-2.5	12.3

2.4 Technical claims cost

	Value as at (EUR thou- sands) 30.6.2009	Value as at (EUR thou- sands) 30.6.2008	Year-on-year change (%)	Share of total premiums written (%)	CR3 (%)	HHI 30.6.2009	HHI 30.6.2008
Total	511,226	463,075	10.4	49.6	67.0	1,971	1,894
Life insurance	272,805	224,916	21.3	26.5	62.8	1,639	1,663
Whole-life insurance, pure endowment insur- ance, or whole-life and endowment insurance (excl. unit-linked insur- ance)	233,870	181,418	28.9	22.7	66.8	1,796	1,821
Unit-linked insurance	20,270	23,526	-13.8	2.0	82.5	3,198	3,862
Supplementary insur- ance	10,745	10,006	7.4	1.0	64.9	1,701	1,711
Other	7,920	9,966	-20.5	0.8	88.1	6,332	4,249
Non-life insurance	238,421	238,158	0.1	23.1	81.3	2,758	2,485
Compulsory third-party liability motor insurance	83,055	78,707	5.5	8.1	84.1	3,156	2,940
Land vehicles damage or loss insurance	103,035	101,614	1.4	10.0	79.7	2,590	2,471
Property insurance	33,950	41,924	-19.0	3.3	85.5	3,473	2,602
Other	18,381	15,913	15.5	1.8	73.6	2,796	2,317

Note: 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 if the institutions numbered 25.

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

	Value as at 30.6.2009 (%)	Value as at 30.6.2008 (%)
Total	53.1	53.4
Compulsory third-party liability motor insurance	53.1	45.6
Land vehicles damage or loss insurance	70.6	68.8
Property insurance	53.9	60.6
Other	16.1	27.6

2.6 Structure of insurers' technical provisions (in EUR thousands)

	Value as at (EUR thousands) 30.6.2009	Value as at (EUR thousands) 30.6.2008	Year-on-year change (%)	Share of total reserves (%)
Total	4,210,894	3,964,810	6.2	100.0
Life insurance	3,155,978	2,918,147	8.2	74.9
Reserves for the coverage of liabilities from investments on behalf of the insured	576,650	455,051	26.7	13.7
Non-life insurance	1,054,916	1,046,662	0.8	25.1

2.7 Investment of insurers' technical provisions excluding reserves for the coverage of liabilities from investments on behalf of the insured (in EUR thousands)

	Value as at (EUR thousands) 30.6.2009	Value as at (EUR thousands) 30.6.2008	Year-on-year change (%)	Share of total reserves (%)
Total	3,757.610	3,567.829	5.32	107.92
Government and central bank bonds of Slovakia and EU Member States, bonds guaranteed by Slovakia, and bonds of the EIB, EBRD and IBRD	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

Note: 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 if the institutions numbered 25.



FINANCIAL MARKET ANALYTICAL DATA

3 RETIREMENT PENSION SAVING

3.1 Pension fund management companies as at 30.6.2009

	Market share* (%)	NAV of funds (EUR thousands)	Number of customers
Allianz - Slovenská PFMC	31	816,229	443,036
Axa PFMC	27	715,235	385,881
VÚB Generali PFMC	14	377,238	192,984
ING PFMC	11	287,692	151,736
AEGON PFMC	10	265,894	191,286
CSOB PFMC	6	146,804	94,520

* 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.

3.2 Results of pension fund management companies as at 30.6.2009

	Revenues (EUR thou- sands)	Expenditures (EUR thou- sands)	Profit/loss (EUR thou- sands)	ROA (%)	ROE (%)
Allianz – Slovenská PFMC	4,403	4,590	-187	-0.4	-0.4
Axa PFMC	3,814	5,123	-1,309	-1.8	-1.9
VÚB Generali PFMC	2052	1,280	772	6.7	7.0
ING PFMC	1,581	2,301	-720	-4.4	-4.5
AEGON PFMC	1,544	1,158	386	2.8	2.9
CSOB PFMC	905	1,002	-96	-0.8	-0.8

3.3 Pension funds (in EUR thousands)

	NAV as at 30.6.2009
Total	2,609,092
Conservative	115,627
Balanced	761,213
Growth	1,732,252

NAV – Net Asset Value

**3.4 Investment structure of pension funds**

	Value as at (EUR thou- sands) 30.6.2009	Share of EUR (%)	Share of other foreign currencies (%)
Total	2,609,092	-0.44%	2,609,092
Bank accounts	1,125,166	3.28%	1,125,166
Bonds	899,527	0.19%	899,527
Shares	23,195	35.73%	23,195
Other	688,955	2.50%	688,955
Payables	-127,750	59.24%	-127,750

3.5 Supplementary pension asset management companies as at 30.6.2009

	Market share* (%)	NAV of funds (EUR thousands)	Number of customers
ING Tatry – Sympatia, d. d. s., a. s.	39	378,873	326,941
Doplňková dôchodková spoločnosť Tatra banky, a. s.	29	280,428	207,481
Stabilita, d. d. s., a. s.	19	190,842	169,814
Axa d. d. s., a. s.	13	128,034	140,280
AEGON d. d. s., a. s.	0	1,658	4,874

* Market shares are calculated according to the total net asset value (NAV) of funds of the given supplementary pension asset management company.

NAV – Net Asset Value.

3.6 Results of supplementary pension asset management companies as at 30.6.2009 (in EUR thousands)

	Revenues (EUR thou- sands)	Expenses (EUR thou- sands)	Profit/loss (EUR thou- sands)	ROA (%)	ROE (%)
ING Tatry – Sympatia, d. d. s., a. s.	6,208	4,520	1,688	11	18
Doplňková dôchodková spoločnosť Tatra banky, a. s.	3,082	2,267	815	10	14
Stabilita, d. d. s., a. s.	2,052	1,557	495	13	14
Axa d. d. s., a. s.	2,000	1,505	495	5	5
AEGON d. d. s., a. s.	29	178	-149	-7	-7



FINANCIAL MARKET ANALYTICAL DATA

3.7 Supplementary pension funds

	NAV (EUR thousands) as at 30.6.2009
Total	979,835
Contribution	945,969
Payroll	33,866

NAV – Net Asset Value

3.8 Investment structure of supplementary pension funds

	Value (EUR thousands) as at 30.6.2009	Share of other foreign currencies (%)
Total	979,835	1.84
Bank accounts	297,894	0.47
Bonds	661,023	3.53
Shares	15,162	47.66
Other	22,859	7.87
Payables	-17,103	91.84



4 COLLECTIVE INVESTMENT

4.1 Asset management companies as at 30.6.2009

	NAV of mutual funds (EUR thousands)	Market share (%)
Total	3,133,557	100.00
Tatra Asset Management	1,303,693	41.60
Asset Management SLSP	807,120	25.76
VÚB Asset Management	578,877	18.47
ČSOB Asset Management	182,533	5.83
Prvá penzijná	128,076	4.09
ISTRO Asset Management	55,756	1.78
Alig Funds Central Europe	37,419	1.19
Allianz Asset Management	29,018	0.93
IAD Investments	11,064	0.35
KD Investments	8,463	0.26

NAV – Net Asset Value

4.2 Expenses, revenues, and profitability indicators of domestic asset management companies as at 30.6.2009

	Revenues (EUR thou- sands)	Expenses (EUR thou- sands)	Profit/loss (EUR thou- sands)	ROA (%)	ROE (%)
Total	16,822	14,948	1,874	3.3	3.6
Alig Funds Central Europe	1,147	942	205	6.1	7.9
Allianz Asset Management	208	467	-259	-6.7	-6.7
Asset Management SLSP	3,546	3,324	222	5.2	6.4
ČSOB Asset Management	2,592	2,446	146	1.4	1.8
IAD Investments	351	348	3	0.1	0.1
KD Investments	153	384	-231	-42.0	-49.4
Prvá Penzijná	1,084	824	260	8.5	9.3
Tatra Asset Management	5,931	4,779	1,152	4.5	4.7
VÚB Asset Management	1,810	1,434	376	10.1	11.1



FINANCIAL MARKET ANALYTICAL DATA

4.3 Structure of mutual funds as at 30.6.2009

Fund type	Market share (%)	Net asset value (EUR thousands)	Number of funds	CR3* (%)	CR5* (%)	HHI*	HHI if distribution uniform
Total mutual funds	100	3,704,620	613				16
Domestic	84.59	3,133,557	121	34	45	563	83
Money market funds	43.71	1,619,175	13	65	82	1,739	769
Bond funds	10.47	387,945	8	88	96	3,413	1,250
Equity funds	2.76	102,112	9	65	85	1,694	1,111
Mixed funds	8.08	299,187	17	58	72	1,623	588
Funds of funds	8.61	318,953	20	55	74	1,375	500
Other funds	6.40	237,078	8	63	91	1,775	1,250
Special funds	0.63	23,198	1	100	100	10,000	10,000
Real estate funds	3.17	117,566	4	89	100	3,113	2,500
Closed funds	0.77	28,343	41	27	39	466	244
Foreign**	15.41	571,063	492	17	24	210	20
Money market funds	2.46	91,038	33	85	93	3,248	303
Bond funds	1.32	48,881	98	44	58	1,026	102
Equity funds	3.79	140,350	256	38	48	626	39
Mixed funds	1.12	41,356	35	80	92	3,696	286
Funds of funds	0.56	20,877	17	88	93	5,030	588
Other funds	6.17	228,561	53	19	29	348	189

* Market concentrations are calculated only for open-end mutual funds (they exclude closed-end and special funds)

** 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 distribution uniform" 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.

**4.4 Net sales of open-end mutual funds as at 30.6.2009**

	6 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

Note: 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.



FINANCIAL MARKET ANALYTICAL DATA

4.5 Average performances of open-end mutual funds as at 30.6.2008 (% p.a.)

	3 months			1 year			3 years		
Total open-end funds	-10.00	3.42	50.16	-57.81	-3.21	26.98	-38.75	-0.78	6.94
Domestic	-1.09	2.70	25.46	-53.07	-2.36	7.95	-30.72	0.39	3.72
Money market funds	-0.04	1.12	2.66	-9.85	1.48	3.47	-0.46	2.72	3.72
Bond funds	-1.09	1.49	9.47	-17.18	-0.95	4.30	-6.41	0.96	3.19
Equity funds	7.03	16.55	25.46	-53.07	-29.89	-22.22	-30.72	-20.81	-15.74
Mixed funds	-0.60	5.76	19.36	-41.65	-6.24	7.95	-15.70	-2.82	3.24
Funds of funds	0.23	7.76	14.07	-23.03	-14.73	0.01	-8.96	-5.16	-1.32
Other funds	-0.32	0.10	0.82	-0.02	1.82	4.83	3.59	3.59	3.59
Special funds	0.01	0.59	0.81	-4.37	-0.59	5.60	N.A	N.A	N.A
Foreign	-10.00	7.38	50.16	-57.81	-7.85	26.98	-38.75	-7.21	6.94
Money market funds	-3.76	0.94	11.80	-20.19	1.97	13.79	-30.73	-0.88	3.36
Bond funds	-5.99	14.41	40.98	-25.64	-0.15	19.86	-33.02	-3.10	4.68
Equity funds	-2.86	15.17	50.16	-57.81	-30.81	26.98	-38.75	-17.55	6.94
Mixed funds	-1.45	14.53	17.02	-47.15	-17.55	5.79	-14.12	-10.65	-0.71
Fondy fondov	0.58	3.86	18.75	-30.71	-6.73	4.58	-10.18	-4.01	2.87
Other funds	-10.00	2.49	8.41	-51.73	3.76	13.75	-26.05	1.89	5.73

4.6 Asset structure of domestic mutual funds as at 30.6.2009 (in EUR thousands)

	Money market funds	Other funds
Total	1,636,760	1,537,099
Deposits at banks	573,523	298,217
Securities other than shares and mutual fund shares	1,026,322	711,147
Shares and mutual fund shares	29,152	364,959
Shares and other ownership interests	0	83,207
Financial derivatives*	639	-1,057
Other assets	7,123	80,626

* Financial derivatives include derivatives with positive and negative fair value



5 INVESTMENT FIRMS

5.1 Basic details of investment firms as at 30.6.2009

	Amount of transactions (EUR thousands)	Market share (%)	Amount of assets under management (EUR thousands)	Market share (%)
Banks and branches of foreign banks	62,014,797	44	67,573	3
Asset management companies	17,892	0	1,715,889	84
IFs with share capital of at least 35M	1,069,151	1	53,249	3
Others	79,293,217	56	206,074	10

Note: Non-bank investment firms are divided by the size of their share capital. Those with share capital of less than €1.162 are not licensed to provide IS-3 investment services (receiving a customer's order to buy or sell an investment instrument and execution of the order on own account).

5.2 Market concentrations of investment firms by trading volume

	Number of traders	CR3 (%)	CR5 (%)	HHI
Total	47	84	97	3,463
Banks and branches of foreign banks	19	90	97	3,055
Management companies	7	100	100	10,000
IFs with share capital of at least 35M	8	96	99	4,349
Others	13	100	100	9,628

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



FINANCIAL MARKET ANALYTICAL DATA

5.3 Trading volume broken down by investment type as at 30.6.2009 (in EUR thousands)

	IS-1 (EUR thousands)	IS-2 (EUR thousands)	IS-3 (EUR thousands)
Total trades	13,172,669	69,976,269	59,246,119
Shares	380,889	39,334	326
Bonds	189,998	2,612,087	3,872,467
Mutual fund certificates	278,865	1,129	0
Fungible securities	30,853	15,850	4,613,606
Money market instruments	6,354,942	60,072,786	5,390,308
Foreign securities	121,060	30,802	358
Derivatives – type A	5,648,584	7,204,281	45,362,353
Derivatives – type B	39,214	0	6,701
Derivatives – type C	530	0	0
Derivatives – type D	96,415	0	0
Derivative instruments for the transfer of credit risk	0	0	0
Financial contracts for differences	0	0	0
Derivatives – type E	31,319	0	0

IS-1 – reception of a customer's order to acquire, sell or otherwise dispose of an investment instrument and subsequent transmission of the customer's order for the purpose of its execution.

IS-2 – reception of a customer's order to acquire or sell an investment instrument and its execution for another account for the account of the service provider.

IS-3 – reception of a customer's order to acquire or sell an investment instrument and its execution for own account.

Derivatives - type A – as defined in Section 5(1)(d) of the Securities Act.

Derivatives - type B – as defined in Section 5(1)(e) of the Securities Act.

Derivatives - type C – as defined in Section 5(1)(f) of the Securities Act.

Derivatives - type D – as defined in Section 5(1)(g) of the Securities Act.

Derivatives - type E – as defined in Section 5(1)(j) of the Securities Act.



NÁRODNÁ BANKA SLOVENSKA
EUROSYSTEM



GLOSSARY AND ABBREVIATIONS



GLOSSARY OF TERMS USED

Average annual yield of pension funds – this is calculated as a weighted average of the year-on-year percentage changes in the daily values of pension fund units of the respective pension funds. The year-on-year percentage changes in the daily values of pension units are calculated as at 30 June 2009 (PMZDHDJ_{30.6.2009}) according to the following formula:

$$PMZDHDJ_{30.6.2009} = \left(\frac{DJ_{30.6.2009}}{DJ_{30.6.2008}} - 1 \right) * 100\%$$

where DJ is the value of a pension unit on the given day.

The weight applied is the ratio of the respective fund's net asset value (NAV) to the sum of NAVs of funds of the same type. The yield is given in nominal terms, which means that inflation is not deducted. When yields are calculated for various forms of investment, the nominal yield is used as a rule, calculated according to the standard methodology.

This yield, however, is not identical to the yield in the saver's personal pension account, which is determined on an individual basis. The input data were the values of pension units from the individual pension funds reported to Národná banka Slovenska by pension fund management companies for the days 30 June 2008 and 30 June 2009, which are available on the website of Národná banka Slovenska.

Average yield of market rivals – 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.

Average yield of a pension fund of a pension fund management company – 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 months and rounded up to two decimal places.

Capital adequacy ratio – ratio of own funds and 12.5 times the capital adequacy requirement.

CLI index – an index of the weighted average of CLIs for selected countries, with each country weighted according to its share of Slovak exports; the CLI is a composite indicator of economic activity, and it is published by the OECD.

Combined ratio – a ratio representing the expense ratio and loss ratio relative to earned premiums.

Cost-to-income ratio – the ratio of total operating costs and net income from banking activity (purchased performances + staff costs + social costs + depreciation/amortization of tangible and intangible assets + taxes and fees / revenues from shares and ownership interests + net income from fees and commissions + net income from securities transactions + net income from derivatives transactions + net income from foreign exchange transactions + net income from other transactions).

CR n index – the concentration of the n largest banks, i.e. the sum of their assets as a share of total assets.

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

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

Emerging markets – developing markets undergoing rapid growth and industrialization.

Enterprises – non-financial institutions.

Expense ratio – ratio of operating expenses to earned premiums.



GLOSSARY AND ABBREVIATIONS

Euro Libor/OIS spread – an indicator that takes account of how banks perceive the credit risk of inter-bank lending.

Financial intermediation – for the purpose of this analysis, financial intermediation is understood as financial flows between entities and not the 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 the gross personal income of all members of a household (gross financial income from employment and closely related income, and gross non-financial income from employment, gross financial gains or losses from self-employment (including royalties and fees), unemployment benefits, old-age pension benefits, 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, financial transfers regularly received between households, interest, dividends, capital gains from 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).

Index of exports to selected countries – an index representing the change in the moving average of exports to the principal export countries; the selected countries' share of Slovak exports has fluctuated at around 80% since the beginning of 2006 (April 2006 = 100).

iTraxx index – an index of credit default swaps.

Interest rate spreads – the difference between lending rates/deposit rates and the respective inter-bank rates.

Liquidity up to 7 days and up to 3 months – the ratio of liquid assets and volatile funds, where liquid assets include cash, the bank's current accounts held with other banks, and all bills and government bonds not subject to pledge (including those that the bank acquired in reverse repo trades), and 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 liabilities towards banks and customers maturing within 7 days or 3 months.

Liquidity cushion – the sum of cash, government bonds, Treasury bills and NBS bills, deposits with NBS and current accounts at other banks, after deducting banks' liabilities towards foreign banks (except long-term liabilities) and the Debt and Liquidity Management Agency (ARDAL), and assets pledged as collateral.

Loans at risk (LAR) – an indicator of corporate credit risk, measuring the share of corporate loans provided to enterprises whose financial position has sharply deteriorated. LAR 1 represents the share of corporate loans to total corporate loans provided to enterprises that in the given quarter reported a loss and at the same time a year-on-year drop in sales of more than 50%. LAR 2 represents the share of corporate loans to total corporate loans provided to enterprises that in the given quarter reported a loss and at the same time a year-on-year drop in sales of more than 30%.



Loan-to-deposit ratio – the ratio of loans to customers and the sum of retail deposits, deposits from enterprises, deposits from financial companies, and issued mortgage bonds. It indicates the extent to which loans are financed with stable funds from customers. The lower the value, the greater the extent to which loans are financed with customer deposits, and therefore the lesser the extent to which they are financed through the more volatile financial markets.

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.

Loss ratio – the percentage ratio of:

- the sum of claims cost and the change in the gross technical provision for claims, to
- earned premiums, i.e. the gross premium after deducting the change in the gross technical provision for unearned premiums.

Net balance-sheet position – the difference between foreign exchange assets and liabilities in the balance sheet.

Net interest rate spread – the difference between the rate of return on loans (interest income on loans as a share of total loan) and the cost of deposits (interest expenses on deposits as a share of total deposits).

Net off-balance-sheet position – defined as the difference between foreign exchange assets and liabilities in the off-balance sheet.

Net percentage share – used in the evaluation of responses to the Bank Lending Survey; it is calculated by taking the lending of banks that relaxed lending standards and those that tightened lending standards and finding the difference between the percentage share of each in total lending. The individual responses of banks are weighted by the average amount of loans of the respective type.

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

Non-performing loans – loans are non-performing when the bank finds that they have lost more than 50% of their value or that the borrower is in arrears with payment.

Open position for up to 3 months – 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.

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

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

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

Premium – the price agreed in individual insurance contracts without regard to the method of their financial reporting.

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



GLOSSARY AND ABBREVIATIONS

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

VSTOXX – an indicator of implied volatility for the Dow Jones EURO STOXX 50 index, derived from options in this index. The higher the value, the higher the level of volatility.



ABBREVIATIONS

AFS	Available for Sale
AMC	asset management company
ASM	available solvency margin
BF	bond mutual funds
BRIBOR	Bratislava Interbank Offered Rate
CDS	Credit Default Swap
CLI	Composite Leading Indicator
CR n	index of the concentration of the largest banks
EBRD	European Bank for Reconstruction and Development
EC	Employment Classification
ECB	European Central Bank
EF	equity mutual funds
EIB	European Investment Bank
EURIBOR	Euro Interbank Offered Rate
EU	European Union
FF	funds of funds
FV	fair value
GDP	gross domestic product
HFT	Held for Trading
HHI	Herfindahl index
HTM	Held to Maturity
IBRD	International Bank for Reconstruction and Development
IF	investment firm
IR	interest rate
IRB	Internal Rating Based Approach
IS	investment service
LAR	loans at risk
LGD	Loss Given Default
MB	mortgage bond
MF	mutual funds
MMF	money market mutual funds
MTPL	motor third-party liability insurance
MXF	mixed mutual funds
NAV	net asset value
NBS	Národná banka Slovenska
OF	other mutual funds
OECD	Organization for Economic Cooperation and Development
PFMC	pension fund management company
p.p.	percentage point
ROA	return on assets
ROE	return on equity
RSR	required solvency ratio
SPMC	supplementary pension asset management company
SO SR	Statistical Office of the Slovak Republic
SR	Slovak Republic
VaR	Value at Risk



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