NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

Analysis of the Slovak Financial Sector for the Year 2010

NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

Analysis of the Slovak Financial Sector for the Year 2010

Published by:

Address:
Národná banka Slovenska
Imricha Karvaša 1
813 25 Bratislava
Slovakia

Telephone:
+421 2 5787 2141
+421 2 5787 2146

Fax:
+421 2 5787 1128

http://www.nbs.sk

ISBN (online) 978-80-8043-169-3

Contents

LIST OF BOXES

FOREWORD

Foreword

Národná banka Slovenska produces the Analysis of the Slovak Financial Sector for both the professional community and the wider public. The purpose of this document is to analyse the current situation and developments in the financial market, to warn of potential risks and threats to its stability, and thus to help avoid potential crisis situations.

This analysis evaluates the overall condition of the financial sector as at 31 December 2010. In several parts, however, the analysis uses later data where they are available (the latest data are for March 2011). The analysis assesses the financial system's resilience to possible negative developments, looking at both individual institutions and 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, in which the sector's sensitivity to various scenarios may be assessed.

As in previous analyses, financial information on particular institutions is primarily obtained from the information systems MIM (used in banking supervision), STATUS, STATUS DFT, and the Register of Bank Loans and Guarantees, and documents processed by departments of the NBS Financial Market Supervision Unit. Additional sources included the Statistical Office of the Slovak Republic, the Real Estate Price Map, Eurostat, the European Central Bank, and other external sources and commercial information systems. The analysis does not take into account activities concerning the supervision of particular institutions.

NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

ANALYSIS SUMMARY

Analysis summary

Positive economic trends were prevailing in 2010

Financial market developments and economic growth in Slovakia and abroad are factors that have a major effect on the stability of the Slovak financial sector. In 2010, several positive changes took place in these areas. The global economy recorded a relatively strong recovery, boosted by monetary and fiscal policies and by growing international trade. Nevertheless, differences in economic performance between individual countries remained relatively marked. The main disparities are between the group of rapidly growing emerging countries and the slow-recovering economies of advanced countries.

At present, it is the emerging countries of Asia and South America that are main sources of stimuli and growth in the global economy. Some of these countries reported growth of around 10% in 2010. The rapid return to growth seen among emerging economies reflects to a large extent their focus on highly competitive export-oriented production.

The US economy had a relatively positive year in 2010, although it was still accompanied by uncertainty and several problems. A substantial contribution to US economic growth came from an upturn in domestic consumption. Towards the end of the year, the increase in economic activity was already beginning to have an upward effect on job creation, which is essential for further sustainable growth. As for the real estate market, however, signs of recovery remain largely absent.

The situation in the euro area was different. Not only did the bloc as a whole record relatively slow growth in 2010, but the pace of economic growth at the level of member countries showed significant divergence. On one hand, the so-called peripheral countries experienced either stagnation or a deepening slump, while on the other hand there were countries, especially Germany, which benefited from the growth in exports. Slovakia was included in the latter group. In 2010, its economy was one of the fastest growing in the EU, and its export-led recovery fed through to an increase in domestic industrial production.

The improvement in the global macroeconomic situation was supported by a certain stabilisation in world financial markets and in the banking sectors of most countries. In the euro area, liquidity conditions in the interbank market improved, despite turbulences in the government bond market. This allowed the ECB to stop conducting of certain long-term refinancing operations.

Given global economic developments, the recovery contains several risks

Although assessments of the economic situation in terms of financial stability now have a more positive tone (particularly in comparison with 2009), there are number of risks lurking in the current developments. These have the potential to cause serious difficulties and to hinder the path to a longer-term and sustainable economic recovery.

The principal risk is the persisting uncertainty in financial markets about the fiscal situation in certain countries, i.e. sovereign risk. The fact that this risk has not so far materialised to a more severe extent is entirely due to the introduction of bailout mechanisms. As a result of these measures, countries that would otherwise be unable to raise funds by issuing bonds – owing to the loss of investor confidence – were able to secure the sources necessary for their functioning and debt servicing. A particular feature of this risk is that any worsening of the situation in one country may spill over into other countries in a relatively short time.

Another source of potential economic problems in the future may be that global trade and financial imbalances are again becoming larger. This is reflected in, for example, the inflow of cheap dollars into emerging countries, where they are expected to yield a higher return. Such development, however, has the potential to create asset price bubbles in the target countries and to cause appreciation of the domestic currency – factors that could bring about a shock in their economies.

The trio of most severe economic threats is completed by the risk of an excessive increase

in inflation, which began materialising to some extent at the end of 2010 with rising prices of commodities and food. Upward pressure on consumer prices is most likely to occur in, and have the most severe impact on, emerging countries, but the emergence of such a scenario in the euro area or United States cannot be ruled out either.

Assets and profitability of the domestic financial sector increased

For the domestic financial sector, 2010 was a relatively positive year in comparison with crisis-hit 2009. Stronger asset growth was recorded by companies engaged in asset management, in particular by funds in Pillar II of the pension saving system and by collective investment funds. Most sectors of the Slovak financial market managed to record a year-on-year increase in profitability.

The provision of funding to the real economy increased. The financing of households was dominated by banks, mainly through housing loans. The share of leasing companies and hire-purchase companies in household financing fell sharply in 2010. The financing that firms received from the domestic financial sector rose only slightly and may still be described as stagnating. As with households, the share of financing from other domestic sources, such as leasing companies, declined. The share of funds from abroad in corporate financing continued to increase in 2010.

Banking sector strengthened its financial position

Whereas 2009 was a year of crisis for the Slovak banking sector, 2010 can be viewed positively. This was apparent in several areas. First, banks strengthened their financial position. The profitability of the banking sector as a whole doubled in comparison with the previous year, although there continue to be relatively substantial differences between individual banks. The profitability growth was driven mainly by rising income from retail operations. Banks profited from the increase in lending and also from falling deposit costs. There was also growth in income from investments in debt securities, largely due to the increase in their volume.

The improving economic position of households and firms was also reflected in a drop in costs related to the impairment of loans provided to these sectors. Loan-loss provisioning costs declined, particularly in comparison with 2009, but the extent of provisioning remains high compared to its pre-crisis level.

Banks also increased the amount of own funds earmarked for the coverage of unexpected losses. However, the overall capital adequacy ratio fell slightly in 2010, as lending to households picked up.

Revival of the market in housing loans to households reflected increasing competition

In 2010, the domestic banking sector became more heavily oriented on the household sector. The relatively sharp increase in new lending was most pronounced in housing loans. In the first half of the year, the main driver of this trend was customer demand for new loans as a way of refinancing old loans under more favourable conditions. In the second half of the year, however, the share of loans used directly for the financing of real estate began to increase. This was also reflected in the residential property market, in which the number of transactions recorded a marked increase in the last quarter and, in certain segments, prices went up too.

In the second half of 2010, the competition between banks began to be reflected in the housing loan market to a relatively significant extent, particularly in bank lending policies for new loans. Interest rates on other housing loans and mortgage loans fell, despite the rise in both interbank rates and long-term market rates. Thus, the behaviour of domestic banks did not follow its long-term trend and in this regard differed also from other sectors in the EU.

For households, the revival of competition between banks was also evident in deposit products, both in both deposit rate policies and in the introduction of new products.

Cautious recovery in corporate sector financing; investments in foreign government bonds increased

The amount of corporate financing provided by the domestic banking sector remained relatively flat in 2010 and only to a small degree reflected the economic recovery. On the positive side, the annual rate of change in the amount of loans stopped declining and recorded an increase in the last months of 2010. Looking at corporate

financing at the sectoral level, there continue to be relatively substantial differences; the largest rise in borrowing was seen in those sectors where the crisis-induced impairment of loans was less pronounced. The amount of lending to the sectors harder hit by the crisis continued to decline.

The subdued growth in corporate loan portfolios reflected the persisting caution in banks' behaviour, which was in turn influenced by uncertainty surrounding the economic situation and by developments in certain sectors. Another major factor in the stagnation of the corporate portfolio was the uncertain situation in the commercial real estate market, which in previous years had contributed significantly to corporate lending growth. It was also the case in 2010 that firms themselves showed relatively low demand for loans, which may in part be explained by the rise in corporate financing from abroad. The only notable increase in corporate lending demand that banks recorded in 2010 was among small and medium-sized enterprises in the second half of the year.

While corporate lending stagnated, banks' investments in securities increased, with this trend being particularly marked in the first half of the year. There was growth in investments both in domestic government bonds and in foreign debt securities (where government bonds have the largest share).

Household credit risk eased

The upturn in economic fundamentals in Slovakia and abroad in 2010 also had a positive effect on the risks undertaken in the banking sector. In the case of loans to households, the risk level eased as the financial position of households generally became stronger. This development also stemmed from the period of low interest rates and the scope for a reduction in the interest rate burden. The number of unemployed did not rise in 2010 as sharply as it had in 2009. On the other hand, the structure of unemployment growth underwent a change, with a smaller share of lower-income groups and a larger share of higher-income groups (which contribute more to borrowing from banks).

The main source of a rise in household credit risk in the near term may be a potential increase in interest rates. Households are more susceptible to a rate hike since a large proportion of their loans have a short-term interest rate fixation period and thus are more frequently exposed to movements in market interest rates. Government-supported mortgage loans for young people may also report higher sensitivity once their period of five-year interest rate subsidy expires. The high sensitivity of households to interest rate rises was further confirmed by stress testing scenarios in which a hike in interest rates is assumed. If, however, the effect of higher interest rates spills over to customers, it may be partially dampened by lending market competition referred to above.

The debt servicing ability of firms remained a significant source of risk for banks in 2010

Although 2010 brought about preconditions for an easing of credit risk in several segments of the corporate sector, the level of this risk in the Slovak banking sector remained significant, owing to the size of banks' exposures to firms, the relatively heavy concentration of loans, and the high sensitivity of firms to macroeconomic developments.

The size of the credit risk during 2010 was affected by several factors, notably the improvement in the overall economic situation and the upturn in business confidence in both Slovakia and its main trading partners. What may also be seen as a positive trend from the view of credit risk is that corporate sector indebtedness stabilised. Further positive signs appeared in the commercial real estate market, although the risk in this segment continues to be significant.

Banks are also sensitive to interest rate risk and to the risk of securities declining in value due to the decline in their issuer's quality

The most significant of the market risks in the banking sectors is the risk of the effect of interest rate movements on the banking book. Furthermore, certain banks have a relatively large proportion of their assets invested in bonds, which fell sharply in value during 2010. Since the bonds are included in the available-for-sale and held-to-maturity portfolios of financial instruments, the decline in their prices did not reflect either the level of reported profit or the value of own funds; banks did not consider the drop in price to be caused by the change in credit risk.

Banking sector stability also seen in stress scenarios

The stability of the Slovak banking sector in 2010 was also confirmed by the results of stress testing. The sector as a whole reported stability in both stress scenarios. This positive result is based on the assumption that banks will remain profitable.

A more adverse impact could be expected in the scenario that assumes both an economic slump and an increase in interest rates. In the case of such a stress situation, the cause of the largest losses to banks would be exposures to the corporate sector. Certain banks reported a higher sensitivity also in respect of loans to households.

Demand for life insurance picked up

The individual sectors of the insurance market developed differently in 2010. Demand for life insurance products picked up in 2010 after its previous historical decline, but the amount of premiums fell short of the pre-crisis level. The most dynamic growth among the different sectors was seen in unit-linked insurance. It is also positive that the rate of increase in claims incurred fell by a half.

In the non-life insurance sector, however, the unfavourable situation seen in 2009 continued in 2010. Strong competition and insufficient new policies negatively affected the development of premiums in the sector's main lines of business. In the largest line – motor insurance – premiums fell to a level not seen since 2003. Owing to the occurrence of natural disasters, expense ratios in non-life insurance reached their highest values for more than ten years. The adverse situation in non-life insurance was reflected in the technical account result, which fell sharply year-on-year. For this reason, the total profits of insurance companies for 2010 were lower than for the previous year.

Stability in the pension saving sector

Looking at the pension saving sector during 2010, its developments were in many ways a continuance of the trends seen the second half of 2009. The asset structure in all three types of pension fund remained conservative, and the differences between them narrowed still further. The exposure of pension funds to government bonds issued by riskier euro area countries fell significantly during the year. At the same time, their investments in Slovak government bonds increased. The concentration risk in bank deposits remained at a high level.

As for the supplementary pension saving sector, it underwent relatively significant changes in 2010 in comparison with Pillar II of the pension saving system. In certain supplementary pension funds, the share of equities and investment fund shares/units in the asset structure increased sharply. Furthermore, modifications to the setting of portfolio parameters led to rise in the exposure of supplementary pension funds to market risks.

An increase in operating expenses resulted in profits of supplementary pension asset management companies falling by a considerable margin in year-on-year terms.

Net asset value in the collective investment sector increased

The increase in the net asset value of collective investment funds was probably driven by the improving macroeconomic situation. Significant inflows into investment funds were recorded mainly in the first months of 2010. The pace of these inflows slowed during the rest of the year, largely due to the negative net sales in money market funds, whose dominance in the sector became partially less pronounced. Not only were households buying investment fund shares/units, so too were institutional investors to a substantial extent.

The asset structure in different categories of mutual funds changed only slightly. The performance of most categories fell in comparison with 2009. The sector's profitability rose by one-third largely due to the rise in the amount of managed assets from which management fees are calculated.

The main rises in market risks were in funds of Pillar III of the pension saving system

Market risks in the financial sector in 2010 were mainly affected by the marked rise in uncertainty in the markets in the second quarter of 2010. This was caused mainly by the worsening situation in Greece and in several other EU countries. The situation calmed down somewhat in the second half of 2010, and this was reflected mostly in

the lessening of risk levels in equity portfolios. In the financial market sectors, the most significant risks from the systemic view are the risk of a further deterioration in the situation of certain EU countries, the risk of a period of persistently low interest rates, and the risk arising from the concentration of claims on a single counterparty.

The insurance sector would appear to face the greatest risk from any long period of low interest rates, given the high guaranteed interest rate in life insurance. Insurers could also be adversely affected by any scenario in which the economy slides back into recession, by counterparty risk, or by the effect of competition on the calculation of premiums in motor third-party liability insurance.

The risk exposures of PFMC funds remained at a very low level throughout 2010. The only negative impact could come from investments of certain funds in securities issued by high-risk countries; this would, however, be relatively small given the short residual maturity of such securities.

By contrast, a substantial increase in risk was recorded in several SPMC funds, including funds with the highest market share. SPMC funds substantially increased the share of their investments in equities and equity investment funds. At the same time, their bond portfolio became more sensitive to interest rate movements. In certain SPMC funds, investments in securities issued by highly indebted countries also represent a relatively significant risk. The increase in sensitivity to these risks was also confirmed by stress testing.

In collective investment funds, exposure to risks remained largely unchanged during the second half of 2010. Their portfolios thus became slightly less risky, given the easing of uncertainty in equity markets.

CHAPTER 1

MACROECONOMIC DEVELOPMENTS AS THEY AFFECT FINANCIAL SECTOR STABILITY

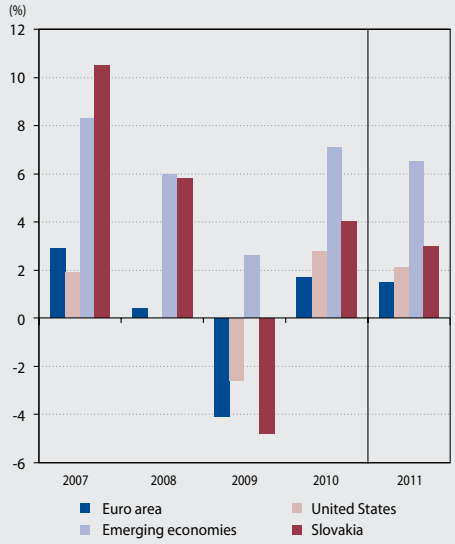
1

1 MACROECONOMIC DEVELOPMENTS AS THEY AFFECT FINANCIAL SECTOR STABILITY

GLOBAL ECONOMIC GROWTH IN 2010

From the view of world economic development, 2010 was a mostly successful year, during which the global economy grew by approximately 5% year-on-year. This increase in global GDP exceeded initial expectations, which, after the recession in 2009, reckoned on a less dynamic recovery. A significant contributing factor to the revival in economic activity was the global response of fiscal and monetary policy, which helped to prevent a longer period of stagnation (or, worse, an economic depression) and brought substantial growth stimuli. Another important factor was the rapid recovery of international trade, which after its brief collapse in 2009, made an unexpectedly quick return to levels similar to those in the pre-crisis period. Another essential precondition for economic recovery was stabilisation of the financial system, particularly banks. This was achieved to a certain extent, and therefore the financial sector could begin to be more effective in its task of redistributing funds and risks and thus in supporting the generation of economic growth. In many countries, participants in the real economy also had a positive role. Household consumption and corporate investments showed relatively sound development, despite the continuing gradual deleveraging of household and corporate balance sheets.

Chart 1 GDP in selected regions and countries – annual percentage changes



Source: Eurostat, IMF.

SUBSTANTIAL DIFFERENCES BETWEEN COUNTRIES

Overall GDP growth stood at 5%, but it is far from the case that such a figure was recorded in all parts of the world. In fact, growth at the level of individual regions was considerably non-homogeneous. In this regard there is often talk of a "two-speed recovery" of the global economy. On one hand, emerging economies are the engines of the current global recovery. The growth rates reported by some of these countries in 2010 approached ten percent. A number of factors lie behind their leading growth rates, including the fact that their banking sectors suffered relatively fewer shocks and that their economic models are to a large extent based on highly competitive export-oriented production.

On the other hand there are the advanced economies. Although they have managed to return to a growth trajectory, the pace of growth they are attaining falls short of the historical standard for this phase of the business cycle. The main burden holding back the revival of economic activities is the high indebtedness of participants in the real economy, accumulated in the pre-crisis period. A further drag is the public deficits that have increased in recent years as a result of government anti-crisis measures – measures that have also rapidly raised the debt burden of individual countries. All this is further underscored by still weakened, although stabilised financial systems in these economies. This combination of circumstances is not only holding back current growth, but is also responsible for not particularly favourable outlooks for economic progress in the medium-term horizon.

THE GROWTH FORECAST IS SUBJECT TO SUBSTANTIAL RISKS

The overall outlook for the global economy in 2011 remains relatively positive. According to the latest issue of the IMF's World Economic

Outlook, world GDP in 2011 is expected to increase by a solid 4.5% year-on-year. The slight annual slowdown is assumed to reflect a combination of cooling in emerging economies and the even more gradual growth in economically advanced countries. The risks to this forecast are, however, substantially to the downside. Looking ahead, the world economy will face several serious threats. If, in a worse case scenario, a combination of these threats materialises, it could potentially cause a severe shock, one that would disrupt the fragile basis of the ongoing recovery and bring back an appreciable reduction in economic performance across significant regions.

Economic recovery in the United States is driven mainly by household consumption growth

The world's largest economy – the United States – performed relatively well in 2010 in comparison with the rest of the advanced world. The country's real GDP for 2010 increased by 2.8%, recovering more or less the ground lost in the previous year's recession. Growth was particularly robust in the first quarter of the year, and then became more subdued until around August. The economy subsequently picked up again and maintained a higher pace of growth until the end of the year. Around half of US growth was accounted for by final consumption, a traditional strength of the US economy. Consumption growth gradually increased over the year, reaching a peak in the last quarter when the annualised quarter-on-quarter increase exceeded four percent. Given that household demand constitutes a major share of the final consumption component, its trend increase could be viewed as a move towards more firmly founded progress. On the downside, however, households saw their disposable income lag behind their consumption throughout the second half of the year, and they were dipping into savings to finance purchases of goods and services.

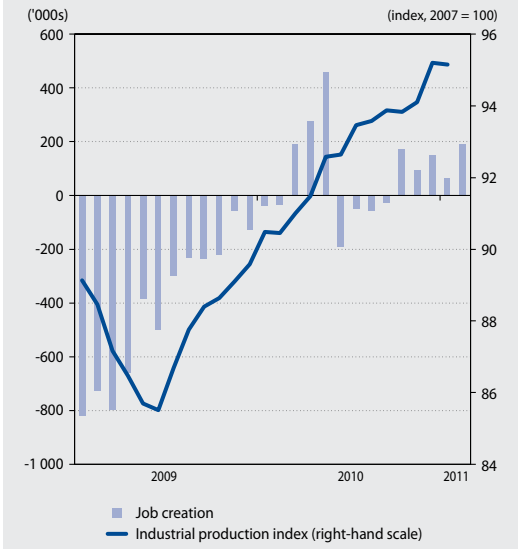
The largest contribution to gross domestic product for the whole of 2011 was made by investments in inventories, at 1.4 percentage points. Firms, after running down their inventories to a minimum at the height of the crisis, set about restocking once the real economic situation and its future prospects gradually began to improve, and gave a boost to production. The effect of inventory accumulation was most pronounced at the beginning of the year.

Fixed capital investments returned to growth after falling sharply in the previous year, but overall investment activity remained relatively subdued in comparison with the pre-crisis period. This was largely due to a slump in investments in residential and non-residential real estate. By contrast, investment expenditure on machinery, equipment and software rebounded from the decline in the previous period and reached a new high by the end of the year. This made an appreciable contribution to the pickup in the economy. Economic output was boosted also by government spending, albeit only to a limited extent of 0.2 percentage point. For most of the year, the US reported higher growth in imported goods and services than in exports.

The Federal Reserve and Government intervened to support the US economy

Although the US economy ultimately recorded satisfactory growth in 2010, it was far from clear during the course of the year that this would be the case. As indicated above, the interaction between a series of less than positive reports about the state of the economy and the worsening sentiment among firms and households at the turn of the second and third quarters suddenly resulted in the economy taking an unfavourable

Chart 2 Net job creation and industrial production index in the United States



Source: Bureau of Labor Statistics, Federal Reserve.

course. The central bank began to fear that such change would lead to a deflation spiral and all the negative effects associated with it. In order to prevent this from happening, the Federal Reserve System (Fed) decided to proceed with a second round of quantitative easing. The aim of this programme, which is scheduled until April 2011, is to lower long-term interest rates, to increase inflationary expectations and to boost asset price growth, with the ultimate result of stimulating economic activity.

The Government, too, responded to the uncertainty surrounding the recovery, specifically by approving a further package of fiscal measures worth hundreds of billions of dollars. Although the actual effect of this combination of monetary and fiscal support measures is very difficult to quantify, the fact is that at end of 2010 and beginning of the next year an increasing number of indicators pointed to improvements in the health of the economy. The most important in this regard was the increase in net job creation to a more significant level and the accompanying decline in the unemployment rate. The unemployment rate fell in December 2010, to 9.4%, and then again in February, to 8.9%, which was its first significant drop since the outbreak of the crisis. It was the inability to create sufficient jobs, despite progress in many other economic parameters, which proved to be a major obstacle to achieving stronger growth. The improved conditions in the labour market were also confirmed by other auxiliary indicators. Although unemployment remains too high, the latest trend is encouraging.

Given the positive developments in the economy and the assumption that they will continue, consumer confidence in January and February 2011 reached its highest levels for several years. Overall, the outlook for the US economy in the near-term horizon is relatively optimistic. However, its sustained recovery in medium-term horizon will depend on several circumstances shaped by both domestic and global developments.

Euro area economic growth driven mainly by exports

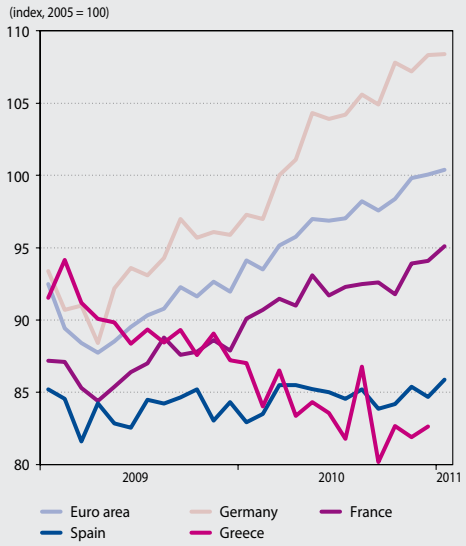
The path to recovery is probably the hardest in Europe. Conditions remain particularly difficult within the bloc of countries using the single European currency. In the euro area, gross domestic product for 2010 grew by 1.7%, while in the EU as a whole it was one-tenth of a percentage point higher. It must be noted in this regard that the recession of the previous year was deeper in the euro area than in the United States, with euro area GDP contracting by 4.1% (the EU as a whole saw a decline of 4.2%). The main reason for the slower recovery in the euro area is low growth in household consumption. Although consumption is the major component in demand for goods and services, its contribution to growth in 2010 was less than 0.5 percentage point. The reluctance of households to spend more on consumption was probably related to the slight fall in their real disposable income as well as to the substantial uncertainty that prevailed in the euro area, particularly in certain countries. Signs of an upturn in consumption were eventually seen in the last quarter of the year, and this may be further supported by the positive retail sales figures published in January 2011.

Turning to the effect of investments on the economy, they too largely failed to stimulate growth. The only exception was investment in restocking, which clearly provided a sizeable boost to growth in the first half of the year. However, the amount of actual investments in fixed capital remained flat. The only significant source of growth for the euro area in 2010 was net exports. Exports grew faster than imports, and the net difference accounted for more than half of the GDP growth.

The economy's weak performance and the caution among firms were reflected in weak job creation. More than one and a half years since the end of the recession, the unemployment rate in the euro area had still not begun to fall and remained at around 10% for the whole year. Nevertheless, general sentiment in the economy, as gauged by an EC survey in the second half of the year, rose above the long-term average and remained there during the first two months of 2011.

Growth in economic activity was also held back to some extent by the restricted availability of financing. Banks continued to tighten credit standards for all significant loan categories. The pace of tightening was, however, far lower than in the previous year, and in the case of credit standards for enterprises there was no change

Chart 3 Industrial production in the euro area



Source: Eurostat.

at all in the last quarter of the year. Certain optimism may also be derived from the turnaround in corporate demand for credit, which began an upward trend in mid-2010.

The engine of euro area economic growth in 2010 was Germany

In 2010, the euro area found itself in a situation where the business cycles, and therefore performance, of member countries diverged to a greater extent than they had ever done before. In what was effectively a division into two groups, the countries that were more successful in achieving a recovery were mainly the founding euro area countries centred around Germany. Because of its growth rate and size, Germany itself was crucial to ensuring that the performance of Europe as a whole did not lag still further behind the rest of the world. German manufacturing in particular managed to react very flexibly to the revival in external demand, especially from Asia. The increase in orders encouraged firms to invest in productive capital and to create jobs in such number that caused a significant fall in unemployment. In time, optimism grew also among households, which increased their demand for consumption and boosted domestic demand. Although the country's growth gradually slowed from the peaks recorded in the second quarter of the year, the expectation based on a number of forward-looking indicators is that its positive momentum will be maintained at least over the next several months.

Adverse developments in the euro area peripheral countries

The other group that the above-mentioned divergence has given rise to comprises the so-called peripheral countries. Their economies have not only lagged behind the rest of the euro area, but also added a new dimension to the crisis related to the state of the public finances in these sovereign countries. Three of them even recorded an annual decline in gross domestic product (in one case, the contraction was particularly severe). The problems facing these countries are a natural consequence of previous macroeconomic developments and the financial crisis has only expedited their crystallisation. Generally speaking, their current situation was a consequence of an excessive accumulation of cheap debt in the private sector, with the funds being invested in unproductive branches. This inflow of funds into the economy created an asset price bubble and gave the effect of apparent wealth and growth that was subsequently reflected in a rapid increase in nominal prices. When eventually the bubble burst, these countries found themselves in a difficult position with a combination of several serious problems. Their banking sectors came to the verge of collapse under the burden of non-performing loans. Domestic demand contracted sharply, while offsetting this decline through exports was prevented by the economy's inappropriate structure for the current economic conditions – exacerbated by high labour costs and a fixed exchange rate.

The governments of these countries spent heavily in order to stimulate their economies and bail out the banking sectors. This resulted in high budget deficits and an increase in government debt, which was already quite substantial in certain countries. In this regard, 2010 brought a further shock in that financial markets were unwilling to invest in bonds issued by the governments of these countries, owing to concerns about whether their fiscal situations were sustainable. The markets' attention was initially directed mainly at Greece, but as time passed they lost confidence in the other peripheral countries, too. The governments were forced to respond by introducing strict budgetary measures aimed at reducing the excessive public deficit. These

cuts in government expenditure will even further complicate the recovery in these countries, probably with certain repercussions for the rest of Europe.

Financial market tensions eased in general

In 2010, the situation in the euro area's financial sector and financial markets, as well as in global markets, was to a large extent influenced by the unfolding crisis in sovereign states. The volatility of markets, particularly bond markets, fluctuated in parallel with investors' views on the ability of peripheral euro area countries to find a way out of the crisis. In general, however, tensions in the financial sector did not reach the record levels seen at the turn of 2008 and 2009. Liquidity conditions in the euro area interbank market improved. As it seems, the banking sector coped relatively well with the discontinuance of the ECB's longer-term refinancing operations; the overall amount of central bank funds on the liability side of the banks' balance sheet declined substantially. At the same time, the rise in interbank interest rates was viewed as a return to normality. In certain countries, however, the opposite situation existed and their banking sectors lost access to financing from external interbank and capital markets. The banks concerned therefore became even more dependent on the supply of extraordinary liquidity from the ECB.

The global economic situation will face several threats in the near term

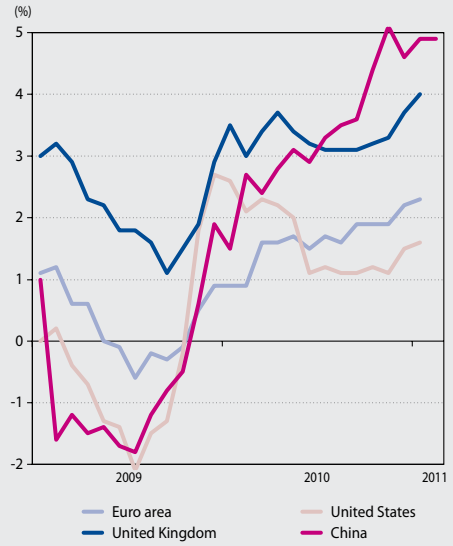
Even though the world economy and its individual players entered 2011 in better condition than they did the year before, it cannot be expected that the short to medium-term future will be a period of rapid and smooth expansion. The world economy will be confronted with several serious threats that have global causes and/or impacts and have the potential to result in serious difficulties. Based on the information currently available, the following three of them appear to be key. First, global trade and financial imbalances are again becoming larger. In the United States and China, the two major economies of the present day, both the trade deficit of the former and the trade surplus of the latter increased in 2010 following the crisis-induced slump of 2009. In the near-term horizon, however, it is the large capital flows to the emerging economies of Asia and South America that could have even more serious consequences. What draws capital into these countries is the potential for higher yields in their, on the whole, faster-growing economies, especially in view of the record-low interest rates in advanced countries. The prevailing view is that the US central bank, through its programme of quantitative easing, also has an important role to play in this process. Funds from this programme are being used to finance a large-scale carry-trade strategy. The inflow of funds into the target economies puts upward pressure on asset prices and strengthens the exchange rates of the domestic currencies, leading to further such investments from external portfolio investors. The governments of several of the countries affected in this way have adopted measures to restrict capital inflows in order to prevent the emergence of dangerous price bubbles and to curb the appreciation of the domestic currencies, which is detrimental to the exports that are crucial to their economies.

An even more serious threat in this regard is the significantly speculative nature of these investments, which in the event of a shift in sentiment are liable to be repatriated. A sudden withdrawal of capital from these countries could have a destabilising effect on their financial sector and overall economic activity. Depending on the relative significance of the countries that would be affected and on their interrelationships with the rest of the world, the uncertainty could spill over into the financial markets and financial sectors of other regions. It should be noted that the first months of 2011 saw some rerouting of financial flows from emerging countries to advanced countries, but so far without any negative effects.

Inflation may exceed expectations

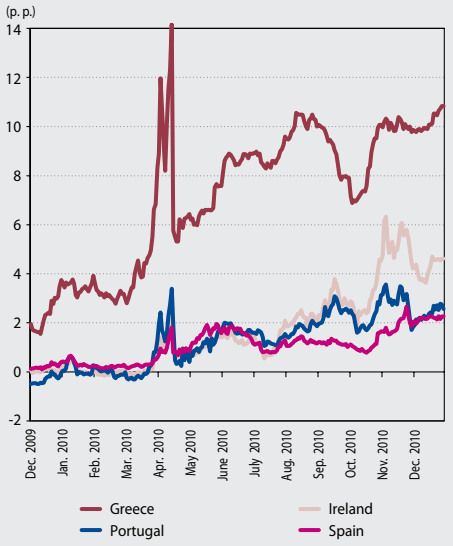
The second global phenomenon that could bring a shock to economic developments is the risk of an excessive rise in inflation. Although one of the dominant themes of 2010, at least in advanced countries, was deflation, the situation has rapidly begun to shift towards rising prices. One factor representing an upward inflation risk is the implementation of a substantially accommodative monetary policy in all the major economies of the world. Should the respective central banks mistime the monetary policy tightening cycle and hold interests at low levels for too long to be consistent with the achievement of their stipu-

Chart 4 Consumer inflation in selected countries (annual percentage changes in CPI)



Source: Eurostat, Bureau of Labor Statistics.

Chart 5 spreads of ten-year government bonds of selected euro area countries



Source: ECB.

lated inflation targets, the result might be an uncontrollable rise in consumer prices.

Another potential cause of higher inflation is the sharp rise in prices of commodities and food, driven by strong demand in emerging countries. In 2010, many commodity prices reached record levels. The oil price is the most significant in this regard; its recent development has been complicated further by supply shocks related to the turmoil in North Africa and the Middle East. The build-up of inflation pressures is particularly evident in emerging countries, which are reaching their potential and in some cases face the risk of overheating. In recent months, however, consumer prices have risen also in the United States and Europe. In January, euro area inflation exceeded the ECB's 2-percent target rate for the second consecutive month.

In advanced countries, low capacity utilisation and high unemployment have so far had a counter-inflationary effect, but much will depend on the development of inflation expectations; their increase could led to an inflation spiral. Although the anchoring of expectations has up to now been relatively firm, the expected inflation rate derived from inflation-linked bonds has been gradually rising since autumn 2010. In this connection, the ECB indicated that a first rise in the base rate could occur in the first half of 2011, far sooner than financial markets had originally predicted.

Sovereign risk will affect the euro area in particular

The trio of most severe economic threats is completed by sovereign crises, in particular in the euro area. The fact that the crisis as described in the previous text has not had more severe repercussions is entirely due to the introduction of bailout mechanisms. As a result of these measures, countries that would otherwise be unable to raise financing by issuing bonds – owing to the loss of investor confidence – were able to secure the funds necessary for their functioning and debt servicing. Two countries have so far been forced to accept rescue packages. At times of peak volatility, the central bank also intervened by purchasing government bonds in the secondary market. Although the measures that have been adopted in the euro area to address this crisis do not represent a comprehensive solution, they do at least provide time for the implementation of more fundamental steps. The countries at the centre of this crisis are in an exceptionally demanding position. On one hand, they have undertaken to adopt strict budgetary measures, whether as precondi-

tions for receiving assistance or in an attempt to regain the confidence of the markets.

On the other hand, the austerity measures are making it less likely that these economies will soon return to the substantial growth that would ensure budget funding, and allow for amortisation of the overall debt. Completing this vicious circle is the fact that investors in government bonds will react to any worsening of growth by further raising the credit risk premium and therefore the interest rate burden. Financial markets are taking a very close interest in the implementation of austerity and structural measures and in achieving the set targets; they may react very sharply to any deviation from the announced plans. The vulnerability of these countries to market sentiment is further heightened by their need for exceptionally high levels of refinancing in 2011. Although the government bond auctions conducted so far in 2011 have been relatively successful, the widening of bond spreads in the secondary market in recent weeks indicates that the markets are again becoming nervous. The greatest danger in the current euro area developments is that a worsening of the problems in one country could rapidly spill over into other countries through the interconnection of financial sectors. Such a widespread weakening of the financial system would affect also those euro area countries that have up to now been relatively successful in the recovery process and it could see the euro area slip back into recession.

The high deficits and rising debt of recent years are a problem not only in Europe, but also in the United States. The current trends in US public finances are not sustainable. For the moment, investors in US Government bonds are not showing signs of increased nervousness and continue in their financing of debt; this situation is certainly helped by the dollar's status as the world reserve currency and by the size and liquidity of the US bond market. If, however, the markets were to suddenly lose confidence in the US economy, the consequences would be global and very serious. Signs of potential problems ahead may be inferred from developments in the bond market, in which the individual states and local authorities raise financing. Fiscal problems at this level of the administrative structure have since mid-2010 been reflected in smaller or larger sales of the respective bonds and in upward pressure on yields to maturity.

Slovak economic growth driven by exports

As a small and open economy Slovakia has experienced substantial turbulences during the course of this economic and financial crisis. After the slump in 2009, however, the economy made a recovery in 2010. Gross domestic product grew by 4%, with the increase spread relatively evenly over the four quarters. Such high growth was not recorded by any other euro area country, and it was the second highest growth among all EU Member States. These positive results must, of course, be seen in the context of the previous year's slump. GDP in 2010 in real terms was still slightly below its level in 2008.

This cyclical development of the Slovak economy is related to its strong dependence on exports to the euro area, primarily to Germany. Germany itself suffered a considerable economic shock at the beginning of the crisis, but subsequently managed to adapt to the new conditions and to generate unexpectedly robust growth that benefited also the Slovak economy. Net exports thus accounted for half of the Slovak annual GDP growth in 2010. Investments in current capital made a similar contribution, in line with the given stage of the cycle and developments in many countries. Although firms also increased investment in fixed capital, this demand component of GDP was, in absolute terms, the only one that lagged far behind its pre-crisis levels.

Household consumption, which rose slightly even in 2009 despite the worsening macroeconomic situation, fell by a similar margin (0.3%) in 2010 even though real wages grew by around 2%. This probably stems from the uncertainty among households, reflecting the high unemployment and planned restrictive fiscal policy. Although the economy grew, the unemployment rate did not fall. In seasonally adjusted terms, the rate remained steady at 14.5%, one of the highest in the euro area.

The recovery in industry was particularly strong

Looking at economic activity in 2010 in terms of output, it is clear that manufacturing made a key contribution to its growth. By the end of the year, industrial production had already exceeded its highest ever level, recorded in 2008. The increase was

most pronounced in the manufacture of cars and electrical goods for export. Industry was also the only sector that reported net job creation, which offset the net job losses in other sectors. Outlooks for further progress in the sector remain favourable, at least in the near-term horizon. New orders climbed rapidly at the end of 2010, and the industrial sentiment indicator also recorded a substantial improvement in the last months of the year.

The largest sector in the economy – services – is heavily dependent on domestic demand and it more or less stagnated. Construction production came to the end of its downward trend, although in year-on-year terms it was still lower by 5%.

The price of the consumption basket of goods and services rose by only a minimal amount in 2010 except in the last two months of the year. The annual inflation rate at the end of the year was 1.3%. In January of 2011, however, the annual rate of change suddenly climbed to over 3%, which can be explained by rises in regulated prices, consumption taxes and food prices. Core inflation, on the other hand, remained at below two percent, although it is forecasted to accelerate in 2011 and to be above two percent throughout the second half of the year.

While the economic development of Slovakia in 2011 will be influenced mainly by the external environment, it will also be shaped by fiscal consolidation measures, which are expected to reduce economic growth by around one-third. Nevertheless, it is projected to remain solid at more than three percent. The Government's consolidation measures are to be split in the ratio of 2:1 between cutting expenditure and increasing budgetary income. The austerity measures are expected to result in public sector job losses, which will in turn retard the decline in the unemployment rate, which is not expected to reach its pre-crisis level even before 2013.The aim of the budget cuts and hiking of income tax is to bring the general government budget deficit below the 3% threshold by 2013.

Despite the expected deficit of 7.8% of GDP[1] and continuing sovereign crises in the euro area, spreads on Slovak government bonds over the benchmark German bunds increased only marginally. Financing was raised in record high volumes without any difficulty. The confidence that Slovak bond investors have in the sustainability of public finances was also reflected in CDS spreads, which remained low.

1 *Public finance deficit in 2010; prediction by the Ministry of Finance of the SR.*

DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

2

2 DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

ASSET GROWTH SLOWED MODERATELY IN THE SECOND HALF OF THE YEAR

For most sectors of the financial market, 2010 was more favourable than 2009. Although asset growth slowed moderately in the second half of the year, the total assets of institutions regulated by Národná banka Slovenska increased by 5.1%, to €72.7 billion.

Several trends noted in the Analysis of the Slovak Financial Sector for the First Half of 2010 were confirmed in the second half of the year. Asset growth was most pronounced in segments focusing on the management of customer financial assets, as households continued to accumulate their financial assets in pension funds and in collective investment funds. It was these segments that recorded the highest year-on-year increase in relative terms.

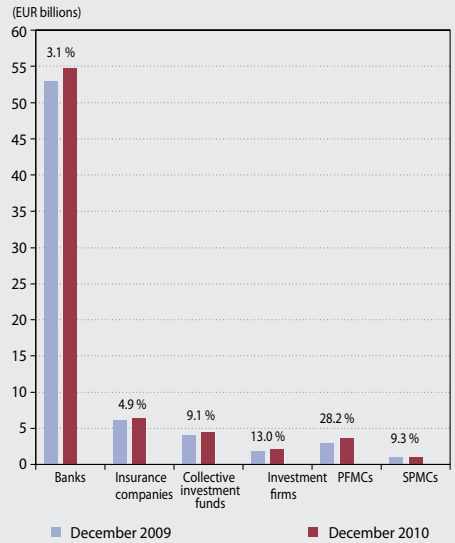
Assets of insurance companies grew at a slower pace in the second half of the year owing to lower growth in life insurance. In the banking sector, however, asset growth picked up again in 2010.

In comparison with 2009, investments in securities slowed and lending to customers accelerated. Even so, asset growth in the banking sector remains far below the levels recorded from 2005 to 2008.

Owing to changes in assets in the financial sector, the pension saving segment increased its share of total assets.

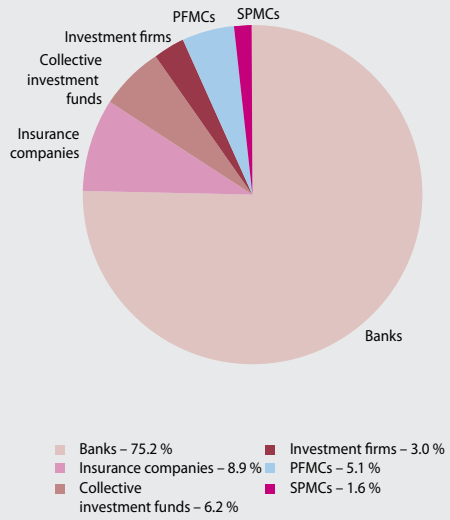
A relatively new trend in the banking sector is the slight increase in the amount of non-resident deposits and in their share of total funds. Whereas it was foreign banks that increased their deposits in Slovak banks in the pre-2008 period, it was foreign non-bank customers that did so 2010. This change occurred mainly in the second half of the year. Nevertheless, the financial sector reported growth, largely due to the increase in the financial assets and liabilities of Slovak households. Another positive aspect is that activity in the financial sector was at the same time not dependent on the supply of liquidity from the Eurosystem.

Chart 6 Amount of assets or assets under management by segment of the Slovak financial market



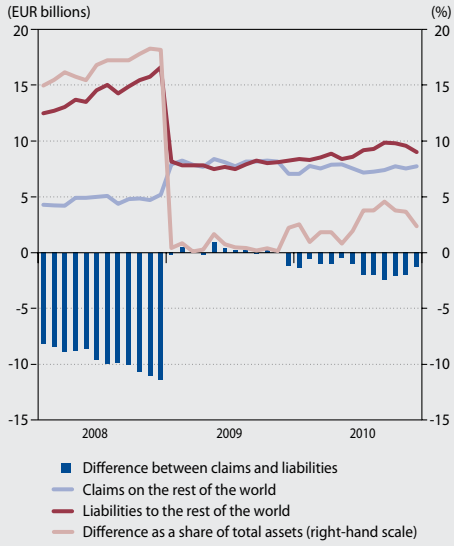
Source: NBS.
Note: The percentage represents the relative change over the previous 12 months.

Chart 7 Total assets in the financial market by share of market segments (as at 31 December 2010)



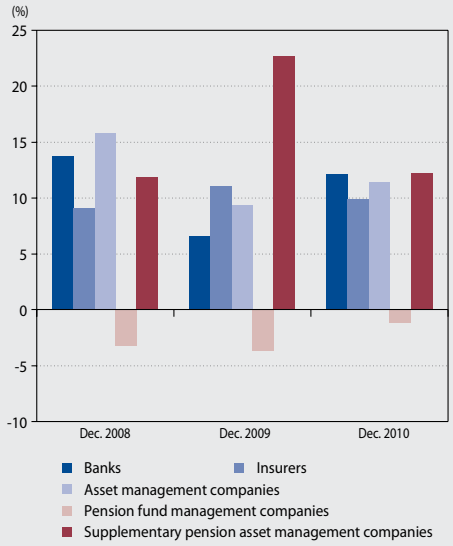
Source: NBS.

Chart 8 Claims and liabilities of the Slovak banking sector vis-à-vis the rest of the world



Source: NBS.

Chart 9 Average ROE in the financial market by segment



Source: NBS.
Note: Return on equity (ROE) represents net profit as a share of equity capital.

Financial sector profitability shows ambiguous development

In general, profits in the Slovak financial sectors increased in 2010. This was not, however, the case in all segments.

The growth in profits was most pronounced in the banking sector, which recovered from a substantial slump in profits in 2009. However, the level of profitability in 2010 remains far below the level in 2008. There is another positive trend in the gradual lessening of losses reported by pension fund management companies, which is connected with the amount of initial investments. Collective investment undertakings also improved their profitability, on the basis of increases in the net asset value of their funds. By contrast, profits in the insurance sector fell slightly.

Links between the domestic business and financial sectors continued to weaken in 2010

The degree of interconnection between the domestic financial and corporate sectors continued its trend decline in 2010. This was the case in both claims and liabilities of the corporate sector. The underlying trend is that the rest of the world has a gradually rising share of firms' total financial liabilities. There is a related drop in the extent to which domestic banks and leasing companies are lending to firms.

In another trend, the amount of leasing has been falling continuously since the end of 2008. This can be explained by the fact that leasing companies are more heavily exposed to economic sectors that were more severely affected by the recession (e.g. transportation). Banks, on the other hand, managed to offset the decline in lending to more sensitive sectors by increasing lending to other sectors (mainly electricity and gas supply, and administrative, telecommunication and information services).

Two general trends can be said to exist. Over the past two years, domestic financial institutions have seen their share of total corporate lending decline, and at the same time bank lending has increased at the expense of leasing.

The changes in bank lending growth to enterprises, whether due to demand or supply, are related to investments in securities. At the time when the corporate loan portfolio was stagnating (largely owing to the drop in loans to enterprises), purchases of securities were increasing. In the second half of 2010, however,

Chart 10 Links between the corporate and financial sectors

Source: NBS.

when lending climbed, purchases of securities slowed.

The importance of households to the financial sector increased

The situation in the household sector is very different, principally in the negligible extent to which households use the rest of the world for the financing of their investments or in the management of financial assets. This is due not only to households having limited access to the products of foreign banks, but also to their natural inclination to use domestic services. In the last two years, household have focused more on bank loans for their borrowing needs and less on leasing and hire-purchase. This reflects the substantial rise in housing loans and the no more than moderate growth in consumer loans.

Table 1 Financial liabilities of households broken down by exposure to the domestic financial sector (%)

	Dec. 2008	Dec. 2009	Dec. 2010
Leasing	3.0	2.3	1.9
Hire-purchase	7.2	6.3	6.0
Bank loans	89.8	91.4	92.1

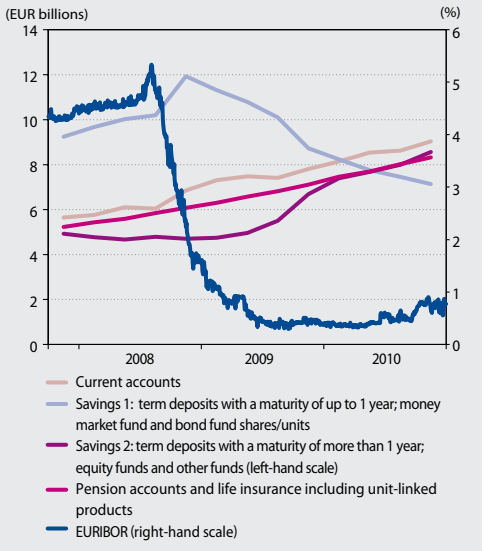
Source: NBS.

The financial assets of households are showing a continuation of the trends seen in previous periods. The change in their structure reflected mainly the growth in pension funds, which are gradually acquiring a greater weight. Slovakia is in this respect becoming more like Western European countries, where pension funds and life insurance constitute a relatively high proportion of household financial assets. Such a development does not have an immediate effect on the financial position of households and should be seen more in regard to the longer-term horizon.

The rising importance of pension saving was mirrored in the relative decline of bank deposits. Looking at the amounts involved, it is clear that the largest changes occurred in bank term deposits with an agreed maturity of up to one year. This item was adversely affected by the pace of growth in household financial assets, which in several months of 2009 and 2010 was slower than in 2007 and 2008.

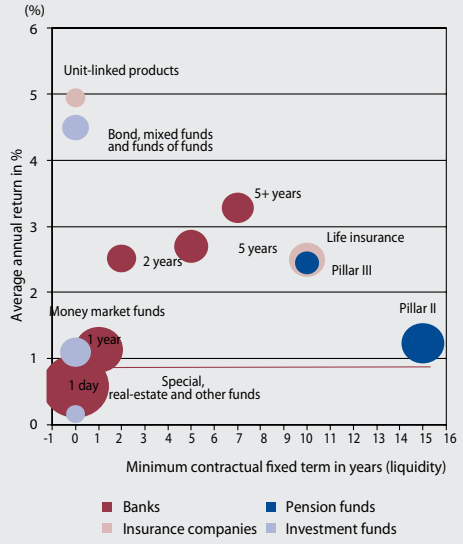
It is positive for the stability of the banking sector that the amount of household financial assets deposited in banks continues to exceed the amount of loans that banks extend to households (see Part 3.3 – Liquidity Risk in the Banking Sector).

Chart 11 Household financial assets in terms of liquidity



Source: NBS.

Chart 12 Household financial assets by maturity and gross performance in 2010



Source: NBS.
Notes: The size of the bubble represents the amount of assets.
The composition of groups is determined by similarity of performance.
For life insurance, the maximum technical interest rate is shown.
The Chart does not include equity funds, which recorded a return of 26%.

Returns on household financial assets were uneven over the year

Returns on household financial asset components began to rise again in the first half of 2010, after falling in 2009 due to the negative developments in world financial markets. This was mainly the case of growth and balanced funds of Pillar II of the pension saving system, contributory funds of Pillar III, and almost all collective investment funds.

In a significant change, interest rates increased on new bank deposits with an agreed maturity of more than five years, accompanied by a substantial rise in the amount of these deposits.

Despite the changes in returns on household financial assets, there was no significant shifting of funds between the different products of financial institutions. The most marked change was the rise in deposits with an agreed maturity of more than one year.

Table 2 Selected financial flows (EUR millions)

	NBS	Domestic financial sector					Domestic non-financial sector			Rest of the world			
		Domestic banks	Insurers	Pillar II and Pillar III funds	Investment funds	Other financial companies	Households	Enterprises	General government	Foreign banks	Foreign investment funds	Foreign general government and international institutions	Other
NBS		2 ,127 - 1,055	0 - 0	0 - 0	0 - 0	0 - 0	11 - 11	3.6 - 3.6		11,004 - 11,569		1,434 - 2,467	1,349 - 1,184
Domestic banks	1,208 - 726	1,365 - 1,167	0.05 - 0.05		0 - 0	1,372 - 1,001	13,147 - 14,763	14,703 - 14,735	12,182 - 12,808	4,407 - 4,125		773 - 1,529	1 ,464 - 1,661
Insurers	0 - 0	928 - 794			222 - 247								
Pillar II and Pillar III funds	0 - 0	917 - 958			12 - 81								
Investment funds	0 - 0	1,374 - 1,544			243 - 298								
Other financial companies	26 - 71	90 - 71			122 - 154								
Households	40 - 40	21,468 - 22,721	3,156 - 3,409	3,947 - 4,863	2,734 - 3,010								
Enterprises	0 - 0	9,208 - 9,701			87 - 40						700 - 727		
General government	0.07 - 0.12	1,981 - 1,818			0.5 - 0.3								
Rest of the world	15 309 - 15 422	8,261 - 9,004			46 - 58			105,273 - 112,941					

A direct relationship between the creditor and the debtor is not assumed

Data are not available

Source: NBS.
Notes: Structure of data in cell: December 2009 – December 2010.
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 insurers represents technical provisions for life insurance.

2.1 THE BANKING SECTOR

2.1.1 TRENDS IN THE BANKING SECTOR BALANCE SHEET

Several new trends appeared in the lending market in 2010, including a strong recovery in new housing loans. This trend reflected customer demand for new loans as means of refinancing old loan under more favourable conditions. Customers were in this way taking advantage of the period of low interest rates in the market. The refinancing trend was present throughout 2010, while the amount of new loans used primarily in the real estate market began to rise sharply in the second half of the year. This was also reflected in the residential property market, in which the number of transactions recorded a marked increase in the last quarter and, in certain segments, prices went up too.

Another significant change was the relatively strong rise in competition between banks, which was particularly apparent in bank lending policies for housing loans. Interest rates on other housing loans and mortgage loans fell, despite the rise in both interbank rates and long-term market rates. Thus, the behaviour of domestic banks did not follow its long-term trend and in this regard differed also from other sectors in the EU.

Stiffer competition was also evident in the area of household deposits. Small and medium-sized banks, in particular, were able to capitalise by offering lower interest rates as well as new products.

The rise in competition in housing loans and household term deposits was not connected. In other words, the banks that increased their share of household deposits were not those that recorded the largest rise in loan share. In some banks, however, there was a correlation between the rise in their share of household deposits and the growth in their investments in foreign securities and foreign enterprises. Since these banks had more external assets with higher yield in their balance sheets, they were able to offer customers higher deposit interest rates.

The lending of domestic banks to the corporate sector in 2010 was influenced by several factors. Key positive changes on the demand side were the growth in sales, the positive expectations regarding their further development, and the accompanying decline in spare production capacity. On the other hand, demand was to some extent tempered by the changing structure of lending to Slovak firms, as the share of financing from abroad – particularly in firms own funds – increased slightly. The supply of loans was affected mainly by banks' mixed expectations about developments at the macroeconomic level and in individual sectors, and also to a large extent by the situation in the commercial property market. Other factors – such as the competition environment, interest rate movements, or the situation regarding liquidity or the sufficiency of regulatory capital – did not have a substantial effect on the supply of loans.

Securities investments continued to account for a significant volume of banks' assets in 2010. In the first half of the year, the securities portfolio of banks maintained the pace of growth established in the previous year, but in the second half of the year it stopped rising. Although domestic government bonds remain the dominant component of the securities portfolio, several banks in 2010 substantially increased their exposure to foreign government bonds.

2.1.1.1 CUSTOMERS

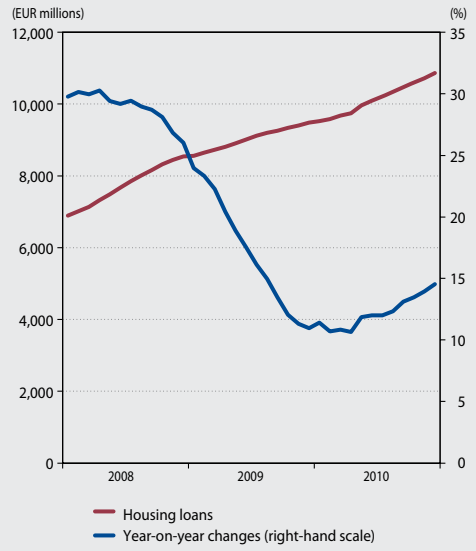
THE RETAIL SECTOR

Revival in housing loans

The situation in the housing financing market changed substantially in comparison with 2009. The first quarter of 2010 saw the end of the trend of slower lending growth that had continued during 2009, and it was followed by months of rising annual growth in the stock of loans.

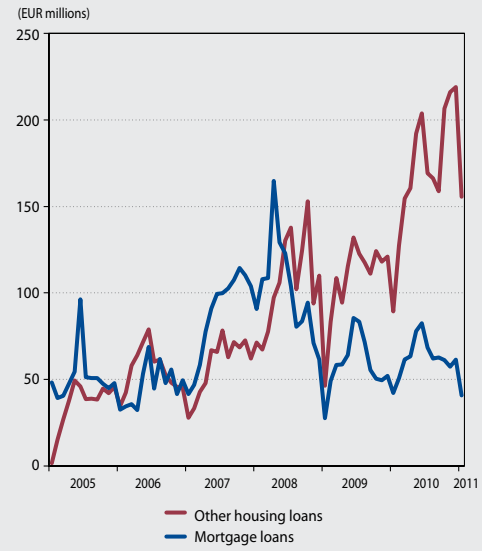
Among the different types of housing loans, it was the so-called *other housing loans* that recorded the most marked growth. The importance of traditional mortgage loans has been falling since the beginning of 2009. The trend change in early 2009 was basically caused by a single bank that

Chart 13 Housing loans to households



Source: NBS.

Chart 14 New mortgage and other housing loans



Source: NBS.

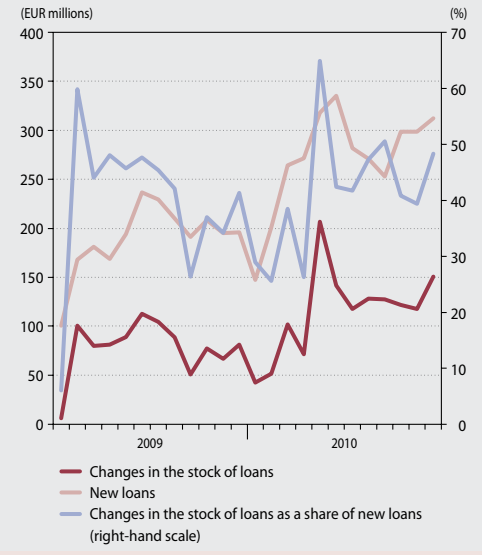
almost completely restricted mortgage loans and replaced them with other housing loans. This development was accentuated in the second half of the year by certain other banks, as their lending growth during the period was largely accounted for by other housing loans.

There are several reasons for the trend decline in mortgage loans. Mortgage lending brings about the obligation to issue mortgage bonds. By providing other housing loans instead, banks divest themselves of the obligation to create long-term funds in this way. Other obligations attached to mortgage loans are also restrictive. The loan-to-value (LTV) ratio was particularly restrictive in the second half of 2010, when the amount of other housing loans with an LTV ratio of more than 70% climbed sharply.

Trend of refinancing old loans with new housing loans

The rise in oustanding amounts of loans reflects a substantial increase in the amount of new loans. The new lending growth was particularly pronounced in the first months of 2010. It was noted in the Analysis of the Slovak Financial Sector for the First Half of 2010 that this trend was a result of customer efforts to take advantage of low lending rates by using new loans to refinance old ones. During this period, the rise in new loans was only to a lesser extent mirrored in loan stock growth. This trend continued in the second half of the year, as the differential between interest rates on new and existing loans and the amount of loans remained attractive to customers. In this period, however, loans provided primarily for the financing of housing began to gain ground quite substantially.

Chart 15 Comparison between changes in the outstanding amounts of loans and new housing loans



Source: NBS.
Note: Changes in the stock of loans are month-on-month.

Chart 16 Residential property prices and the housing affordability index

Source: NBS, own calculations.
Note: The housing affordability index represents the loan repayment to disposable income ratio; the calculation of the repayment amount in a given period takes into account the following factors: average price of an apartment, average interest rate, maturity (20 years in 2010), LTV (75%).

Chart 17 Interest rates on new housing loans

Source: NBS.q

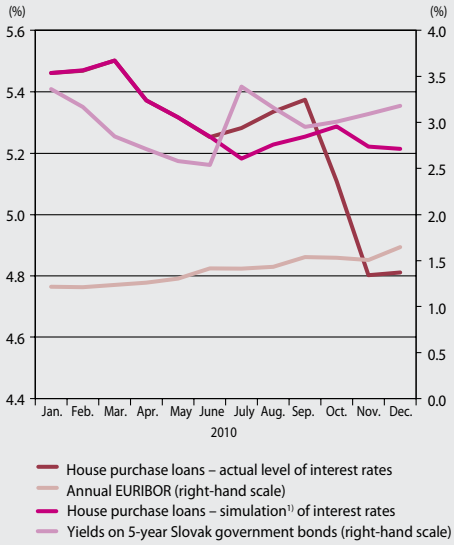
Demand for loans grew mainly in the last quarter of 2010

Although the housing loan market picked up in 2010, bank customers remained relatively cautious. The real estate market in particular was an important indicator in this regard. In most months of 2010, residential property prices and the number of transactions in this market remained flat. Amid expectations of a further drop in prices, customers waited for more favourable conditions. This was despite the relative high values of the housing affordability ratio, which indicates the ability to finance the purchase of a new property. The main positive effect on the ratio's rise in 2010 was exerted by the situation in the real estate market and decline in interest rates. It was not until the last quarter of the year that this development began to change somewhat, with a relatively sharp increase in the number of transactions for new apartments. A corollary of this was the previously mentioned rising share of new loans used primarily for the financing of housing.

The change in household behaviour may have been motivated by concerns about a possible rise in interest rates on new loans, given the situation in the interbank market.

Bank lending policies were a key factor in the fourth-quarter rise in demand. The average weighted interest rate for the banking sector fell

Chart 18 Actual interest rates on new housing loans compared with simulated interest rates



Source: NBS.
1) The interest rate simulation represents a model level of interest rates with certain values of selected parameters (e.g. level of interbank rates, government bond yields, government bond yields, liquidity premium, etc.). Further details about the modelling of interest rate levels can be found in an article (in Slovak) by Ján Klacso in the August 2010 issue of NBS's Biatec journal, entitled "Analýza úrokových sadzieb na retailové úvery na nehnuteľnosti s fixáciou do jedného roka" (Analysis of retail lending rates for house purchase loans with a fixation period of up to one year).

relatively sharply, even as interbank rates went up in the same period. The only exception was the rates offered in the home savings system.

The unusual behaviour of banks in respect of interest rates on new loans is also indicated by a comparison of the actual level of interest rates and a simulated level that takes into account the long-term behaviour of banks. Looking at the rate-setting behaviour of banks over the long term – particularly in relation to interbank rate movements, government bond yield changes, or the liquidity premium – interest rates in the last quarter of 2010 would be expected to remain more or less stable. In fact, their development during this period was completely the opposite.

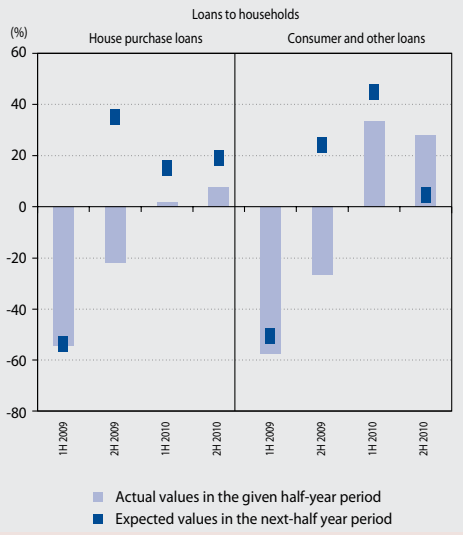
Increasing competition between banks

The housing loan market was more strongly affected by the behaviour of banks than by the behaviour of customers, especially in the second half of 2010. Besides the rising competition in interest rates – with banks cutting rates despite an increase in interbank rates – there was also an easing of lending standards in respect of collateral requirements. Several banks increased the amount of new loans that have a loan-to-value (LTV) ratio of between 80% and 100%. In the first half of the year, the easing of standards was more or less dispersed, but in the second half it acquired a more general character.

The roots of the current rise in competition go back to 2009, particularly the first half of the year, when certain banks lost their original market shares largely as a result of their reaction to the economic crisis. As soon as the situation stabilised, these banks attempted to claw back market share and their efforts to do so appear in the market also at present. At the same time, certain banks changed their policy for the financing of households.

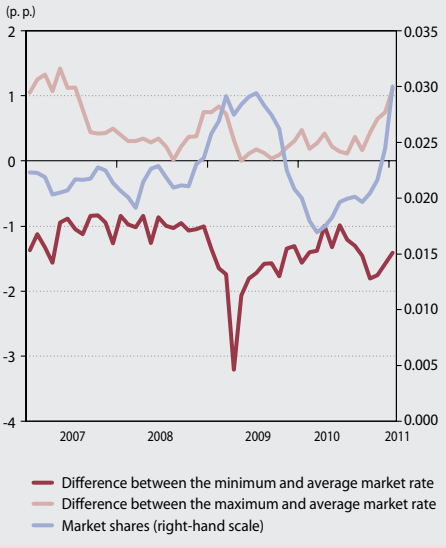
The behaviour of customers changed, too. Back in 2008, changes in interest rates offered by different banking groups attracted little interest from customers. Market rate movements, expressed in terms of the average standard deviation in the market shares of individual banks, barely changed at all, despite the marked difference between the highest and lowest market rates. Last year, bank customers were more discriminating between the interest rate levels with different banking groups; even smaller banks had significant success in changing their market shares.

Chart 19 Lending standards for loans to households



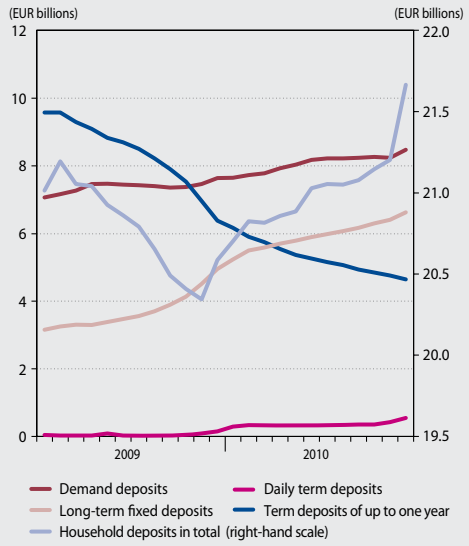
Source: NBS.
Note: Data are given as a net percentage share, with a positive value indicating an easing of standards.
Changes express the subjective view of banks.

Chart 20 Changes in banks' shares of the market in new housing loans



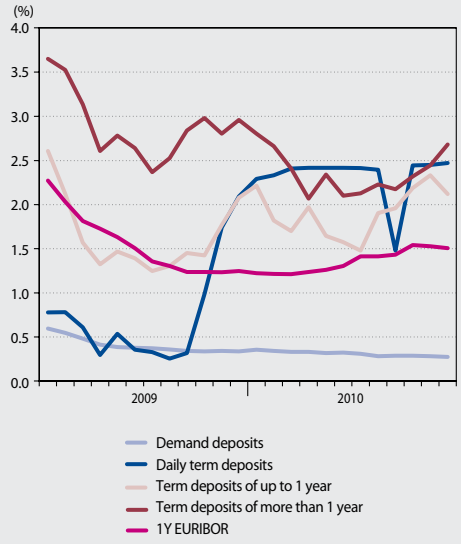
Source: NBS.
Note: The difference between the minimum and average rate, or maximum and average rate, represents the difference between the lowest or highest market rate and the weighted average rate.
Market shares are expressed as the average of standard deviations in the market shares of individual banks over a period of 12 months.

Chart 21 Household deposits in the banking sector



Source: NBS.
Note: Euro deposits from residents.

Chart 22 Interest rates on new household deposits



Source: NBS.

Structure of household term deposits changed in favour of deposits with longer maturities

The overall volume of deposits in 2010 was in line with the long-term trend in which the amount of the household sector's bank deposits has been rising each year. The overall stock of deposits rose during the year by more than €1 billion, to approximately €23 billion.

There were, however, several changes in the structure of deposits in 2010, especially in regard to term deposits. These changes were influenced both by the level of interest rates and the rising competition in this segment. During almost the whole of 2010, a declining trend in demand was registered mainly in the case of term deposits with an agreed maturity of up to one year. This demand began to pick up slightly only in the last month of the year, due to an increase in deposit rates for these products.

On the other hand, bank customers were attracted to term deposits with a longer period of fixation. In the case of maturities of up to five years, the highest increase in demand was reported by large banks. As for deposits with an agreed maturity of up to two years, the position of smaller banks was also relatively strong. Deposits with a maturity of more than five years also recorded robust growth in comparison with 2009. This segment has long been dominated by home savings banks, most of which reported a substantial rise in deposits in December, driven up by the offer of a state bonus.

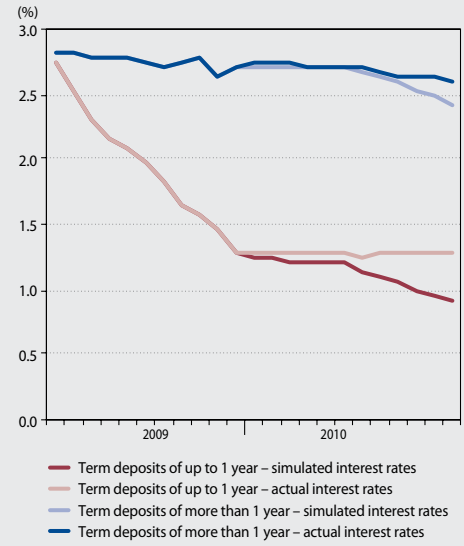
Growth in daily term deposits concentrated in smaller banks

The banking sector saw a strong recovery not only in longer-term deposits, but also in daily term deposits. This is a relatively new segment of term deposits, which even until the last months of 2009 did not play a significant role. Although the share of these deposits in the overall stock is relatively insignificant, their share of new deposits in 2010 was high. This shows that it is a competitive product offered mainly by smaller banks. From the view of banks, however, it can represent a less stable source of financing.

Competition between banks increased mainly through lending policies

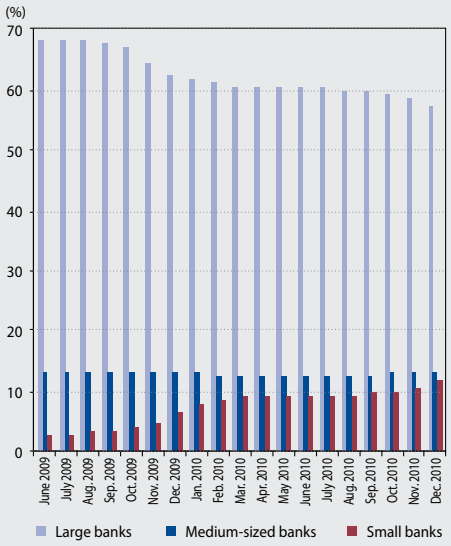
These changes in the structure of term deposits were accompanied by changes in market shares, too. The growth in competition between banks was particularly apparent in their lending policies. The rise in deposit rates was substantial and it occurred even before the increase in interbank market rates. Compared with banks' past behaviour, this represents a relatively significant change. Further confirmation of this trend is provided by a comparison of the actual level of

Chart 23 Actual interest rates on the stock of household deposits compared with simulated rates



Source: NBS.
Note: The simulated interest rates represent the expected level of interest rates based on the long-term behaviour of banks in relation to certain variables (e.g. interbank rates).

Chart 24 Banks' market shares in the stock of household deposits

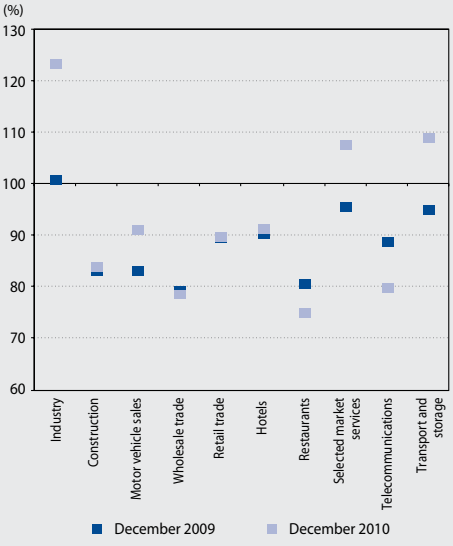


Source: NBS.

interest rates on the stock of deposits and the simulated level that is based on the long-term behaviour of banks. In the case of term deposits with an agreed maturity of up to one year and of more than one year, the change in interest rates was different from expectations.

Dfferences between the interest policies of large and smaller banks were also evident. While large banks cut interest rates on deposits across the range of agreed maturities, small and medium-sized banks left their rates on deposits with longer maturities more or less unchanged and even increased them towards the end of the year. As a result of this interest-rate strategy, the shares of banks in the household deposit market continued to undergo changes; the main gainers from the sector's growth in second half of the year were small banks, which saw their market share approach that of medium-sized banks.

Chart 25 Comparison of sales in selected sectors (December 2008 = 100)



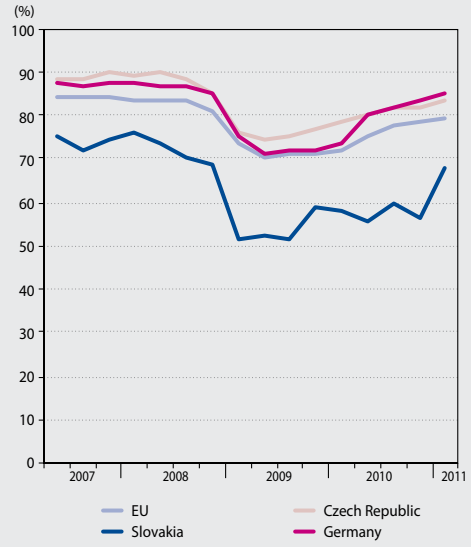
Source: SO SR.

THE CORPORATE SECTOR

Slight increase in demand for loans

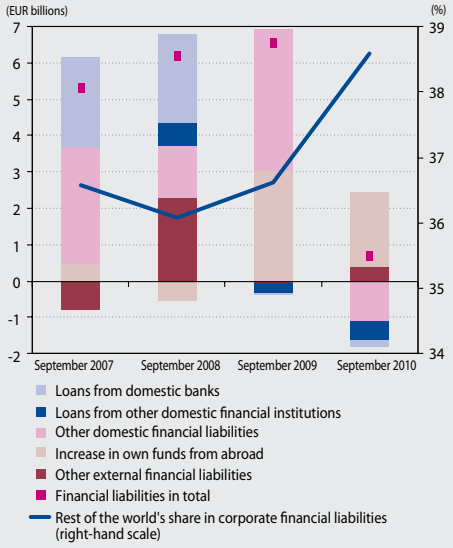
Reflecting the macroeconomic upturn, several sectors reported higher sales in 2010. Sales in most sectors matched or slightly exceeded the level for the same period of 2009. However, the only sectors in which sales outperformed the 2008 figures were *industry*, *selected market services* and *transport and storage*. The sector with the fastest-growing sales, *motor vehicle sales*, matched the level of 92% recorded in 2008.

Chart 26 Expected production capacity utilisation



Source: Eurostat.

Chart 27 Structure of changes in corporate financial liabilities (year-on-year changes in outstanding amounts)



Source: NBS.

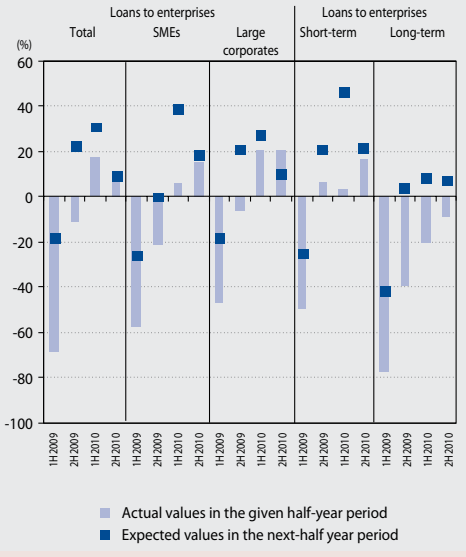
Given that loans to industry account for a large share of the banking sector's credit portfolio, it is positive that industrial production has wiped out its 2008 losses and continues to record strong growth even in comparison with other EU countries. The high rise in industry sales has also put downward pressure on spare production capacity in industry, which is expected to result in higher demand for further sources of financing.

At the same time, however, demand for domestic loans was adversely affected by a new trend in the structure of corporate financial liabilities. A certain strengthening of capital and reduction in external funds was recorded in the corporate sector balance sheet in 2009 and 2010. This development may have been related to the overall economic situation in 2009, when several financial and non-financial institutions embarked on a course of deleveraging, i.e. reducing the level of external funds.

The structure of corporate financial liabilities in 2009 included a sharp, albeit one-off, increase in *other domestic funds*. More than two-thirds of this item comprised funds from general government, which made a substantial contribution to corporate financing.

Demand for bank loans from the domestic corporate sector was thus, on one hand, stimulated

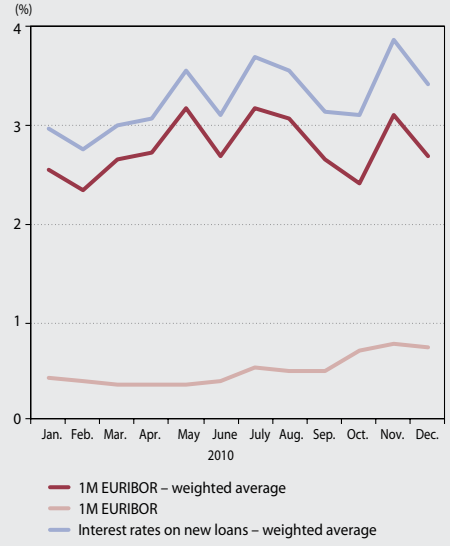
Chart 28 Corporate demand for loans



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

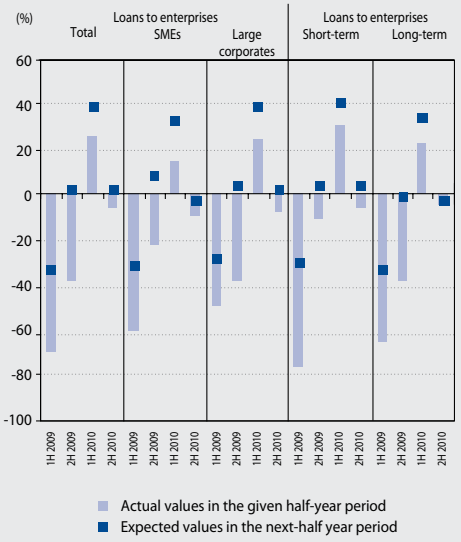
by the increasing economic activity of firms and, on the other hand, dampened by strengthening of the capital component of corporate financial liabilities. The result was a partial revival in demand for loans from both large firms and small and medium-sized enterprises. Furthermore, the

Chart 29 Interest rates on new corporate loans



Source: NBS.
Note: The spread is calculated as the difference between interest rates on new loans and the EURIBOR rate for a maturity of 1 months.

Chart 30 Lending standards for new loans to enterprises



Source: NBS.
Note: Data are given as a net percentage share, with a positive value indicating an easing of standards.
Changes express the subjective view of banks.

majority of banks also expressed optimism regarding the continuation of demand in 2011.

Cautious approach of banks

The improvement in the economic activity of domestic firms in 2010 had relatively little effect on the approach of banks to the setting of lending conditions. Despite several positive trends (e.g. strong sales growth), concerns related to the overall macroeconomic situation persisted, especially in the medium-term horizon. Most banks in the euro area also took a cautious approach in 2010.

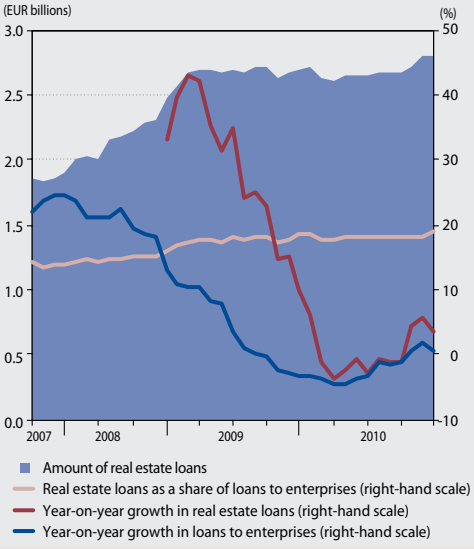
Thus the banking sector's margin on corporate loans did not change substantially during 2010, and interest rates on new loans rose at a similar pace as market rates.

The lending standards stopped being tightened in the first half of 2010 and even showed signs of easing in the third quarter, which was a positive sign. By the end of 2010, lending conditions remained substantially unchanged and banks were not expecting to modify them. Therefore, lending standards continue to be relatively tight.

The commercial real estate portfolio remained flat

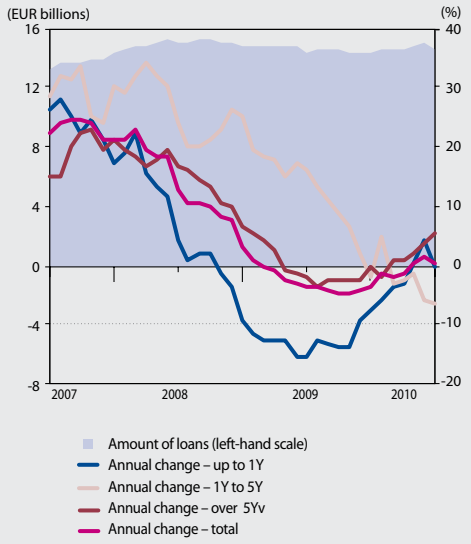
Real estate loans have in recent years been the fastest-growing segment in loans to non-financial corporations. That is why the situation in the commercial real estate market is a key factor in the lending growth to enterprises. Demand in this market cooled dramatically in 2009, causing a drop in demand for loans and a restriction in bank loan supply to firms. Consequently, most of the loans in this segment were drawn

Chart 31 Commercial property loans



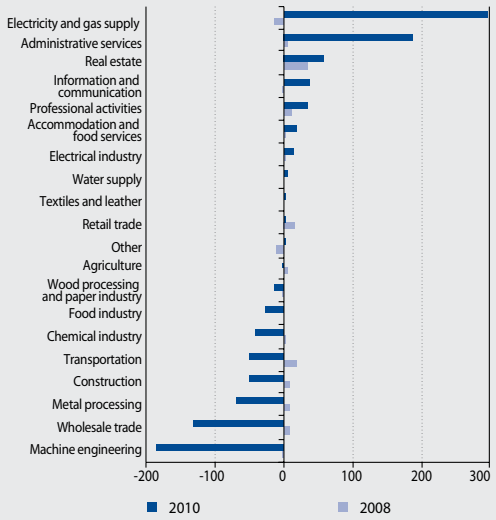
Source: NBS.

Chart 32 Loans to the corporate sector



Source: NBS.

Chart 33 Growth in loans to enterprises by contribution of individual sectors



Source: NBS.
Note: The percentage figure represents the sector´s share in the year-on-year growth in loans.

in respect of existing projects rather than new projects. Although the market stabilised to some degree in 2010, banks remained cautious about supplying loans. In 2008, before the outbreak of the crisis, the credit portfolio recorded year-on-year growth of 33%, but in 2010 it rose by only 3.6%.

Credit portfolio stagnated

Given that demand for loans rose only slightly and that lending standards remained relatively tight, the volume of corporate loans did not change significantly in the last quarter of 2010. The overall period of what could be described as stagnation in such loans was stretched to two years. The total amount of loans to enterprises rose by only 0.4% in 2010 and by only 1.8% over the last two years. There was a positive sign at the end of 2010, when the credit portfolio stopped recording a year-on-year decline.

Looking at the amount of loans extended to particular sectors during 2010, the largest increases were in loans to the following sectors: electricity and gas supply, administrative services, and telecommunication and information services. There was, by contrast, an annual drop in lending to the sectors of wholesale trade, construction, machine engineering, metal processing, and food industry.

The result is that the slight rise in lending in 2010 had a distinctly different internal structure in comparison with the growth recorded in the pre-crisis period. Whereas most sectors contributed to the credit portfolio's growth in 2008, only a small number did so in 2010. Some of the sectors that contributed substantially to the portfolio growth were among those that usually make only a small contribution.

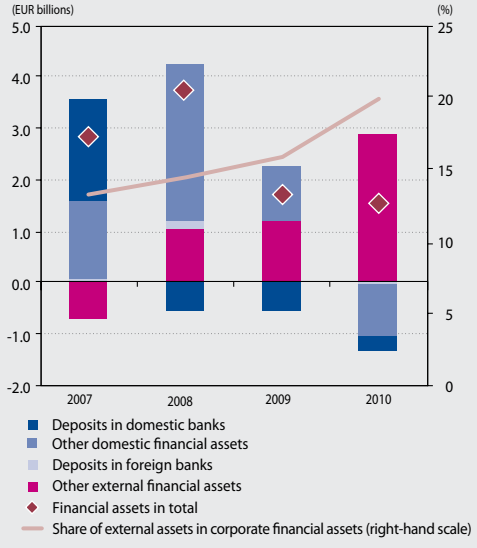
Corporate deposits remained flat

The amount of corporate deposits remained largely unchanged in 2010. Although their seasonal increase in December 2010 was higher than in the same month of the previous year, it cannot be said that the amount of deposits positively reflected the increase in activity in the corporate sector or the slight rise in term deposit interest rates in the second half of 2010.

Nevertheless, the overall financial assets of enterprises continued to rise in 2010, especially in the case of external items. As a share of total corporate financial assets, assets invested abroad climbed from 16% to 20%. These investments predominantly comprised loans to non-residents, probably as intra-group transactions.

As for the increase in corporate demand for deposit accounts, it can be interpreted from the

Chart 34 Corporate sector deposits



Source: NBS.

long-term view as a consequence of changes in the liquidity management of groups to which domestic enterprises belong.

OTHER SECTORS

LENDING TO FINANCIAL INTERMEDIARIES CONTINUED TO DECLINE; SOME BANKS REPORTED INCREASED FINANCING OF FOREIGN ENTERPRISES

As regards the financing of other sectors, the situation in 2010 was somewhat varied. The amount of loans provided to non-resident enterprises increased, with almost the entire growth occurring in the last two months of 2010.

In the sector of financial intermediaries, the "crisis" period continued. Even though the general economy recovered to some extent and lending in certain sectors picked up, the outstanding amount of loans to financial intermediaries continued to decline in 2010 and show a negative trend. In December 2010, the stock of loans was only 43.5% of its peak level of €1 billion, recorded in mid-2004. The situation among banks, however, was relatively varied.

Loans to general government rose continually during 2010, with a higher increase recorded in the second half.

2.1.1.2 SECURITIES

BANKS INVESTED MAINLY IN GOVERNMENT BONDS; A SMALL NUMBER OF BANKS HELD BONDS ISSUED BY HIGH SOVEREIGN RISK COUNTRIES

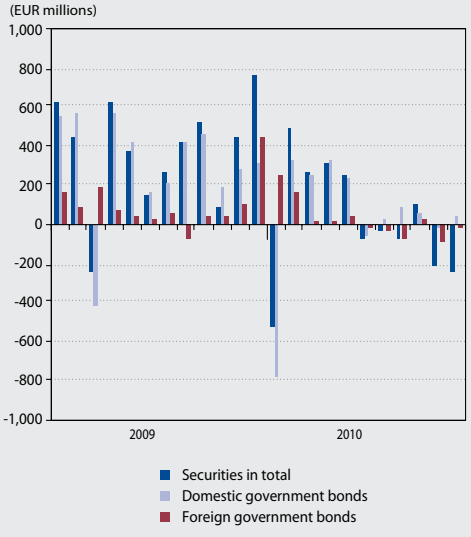
Growth in securities investments, which rose sharply in 2009, reached a peak in the first quarter of 2010 and then eased over the subsequent months of the year. In the second half of 2010, banks generally did little more than maintain their security holdings.

Of the debt securities held in banks' portfolios, more than 90% (in terms of fair value in euro) comprised government bonds. Slovak government bonds continued to account for the bulk of these bonds. Also a significant proportion of the bonds were issued by Greece, Poland, Hungary, Ireland and Italy, although these were concentrated in the portfolios of a small number of banks.

THE DECLINE IN THE MARKET VALUE OF SELECTED BONDS HAS NOT SO FAR HAD A MAJOR EFFECT ON THE BANKING SECTOR'S PROFITABILITY

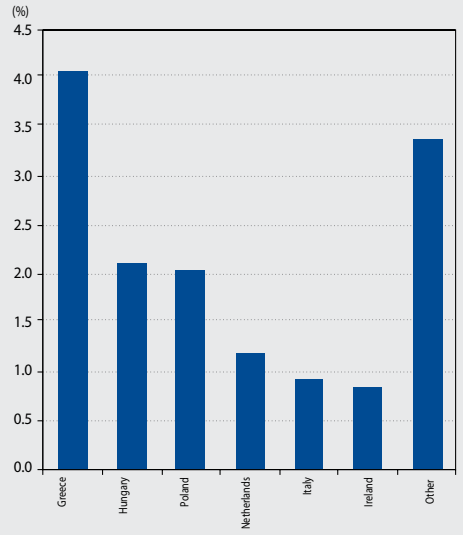
As regards the portfolio breakdown, a majority (54%) of bonds were found in the portfolio of securities held to maturity and 35% were in the available-for-sale portfolio. Thus, in 2010, a negligible proportion of bonds were revalued at fair value through profit and loss. The majority were

Chart 35 Changes in the amount of securities in banks' portfolios



Source: NBS.

Chart 36 Bonds of selected countries as a share of the total amount of bonds purchased



Source: NBS.
Note: The Chart does not show the share of Slovak bonds in the total amount of bonds purchased.

not revalued at fair value, i.e. their revaluation affected only the overall financial result.

Bonds issued by banks in 2010 were almost exclusively mortgage bonds; nevertheless, the total amount of mortgage bonds stagnated

Mortgage bonds continued to account for the vast majority of securities issued by domestic banks. They constituted more than 91% of the total amount of issued securities as at the end of 2010. The amount of other types of securities remained flat over the year; bonds other than mortgage bonds were issued by only one bank.

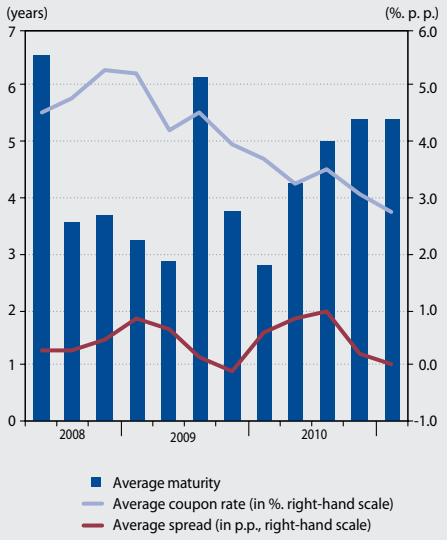
Since the overall amount of mortgage loans did not rise significantly in 2010, the amount of issued mortgage bonds was largely determined by the amount of maturing mortgage bonds.

A total of eight banks issued mortgage bonds in 2010, with an overall nominal value of €1.1 billion. The average maturity of these issues (average weighted by the nominal value of issues) increased throughout the year and stood at 5.4 years in the fourth quarter. Almost 75% of bonds were issued with a floating coupon, and practically all of these coupons were linked to the 3-month and 6-month EURIBOR. The margins were in the range from 0.58 to 2.83 percentage points, but mostly they fluctuated around 1 p.p. The share of floating coupons was the second highest recorded since 2004 (after 2006, when fully 92% of issued mortgage bonds had a floating coupon). The average rate (average weighted by the nominal amount of issues) of fixed-coupon bonds fell throughout the second half of 2010, and reached 2.75% in the fourth quarter. It is interesting to compare the coupon rates of mortgage bonds and government bonds. The difference between them fell mainly in the second half of the year and reached almost zero in the fourth quarter. Thus the cost of obtaining financing from the bond market was almost the same for banks as for the state.

The proportion of mortgage bonds placed in the domestic financial sector continued to fall in 2010

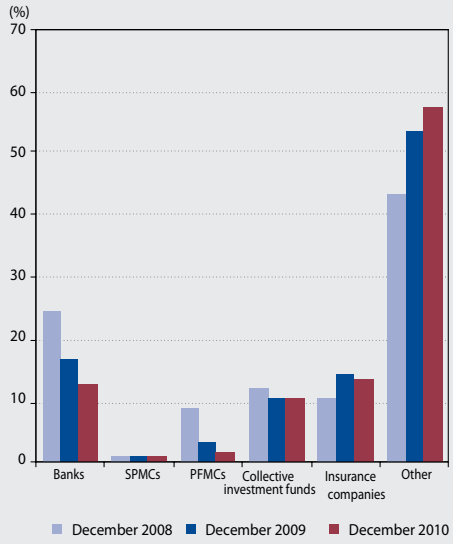
As regards the placement of mortgage bonds, the trend decline in the amount of bonds purchased by domestic financial companies continued in 2010. At the end of 2008, these companies

Chart 37 Average spreads and maturities of issued mortgage bonds



Source: NBS.
Note: Spreads, coupon rates and maturities were weighted by the outstanding amount of issued mortgage bonds in nominal terms.
The spreads were calculated as the difference between the coupon rate for the given mortgage bond and the yield on a government bond with the same maturity at the time of issuance. In the absence of a government bond with the same maturity, the yield was calculated on the basis of a linear interpolation.
The average coupon rate and the spread were calculated on the basis of mortgage bonds with a fixed coupon rate.

Chart 38 Mortgage bonds held in the portfolios of different financial sectors as a share of the total amount of mortgage bonds issued



Source: NBS.

owned 57% of the total amount of issued mortgage bonds, but by the end of 2009 this figure had fallen to just above 47%, and by the end of 2010 it was 42%. The largest declines were in the banking sector and among pension fund management companies (in this case it was probably caused to certain extent by an amendment to the Retirement Pension Saving Act). The rest of the mortgage bonds were probably purchased by non-residents or retail customers. It remains the case that most of the mortgage bonds held in the domestic financial sector were issued by banks that issue bonds in relatively small amounts, while the smallest share of mortgage bonds held in this sector was issued by a bank with the largest amount of bonds issued.

By the end of 2010, more than half (66%) of the mortgage bonds purchased by domestic financial companies were held by one of the eight banks that are obliged to issue mortgage bonds.

2.1.1.3 BANKS

The interbank market was affected by the ECB's discontinuance of 12-month refinancing operations

The interbank market in 2010 was marked mainly by the ECB's decision to exit from 12-month refinancing operations (LTROs), which came to maturity in July, September and December of that year. On the other hand, long-term funds from the ECB were to a certain extent replaced with shorter-maturity funds (1-month and 3-month LTROs, weekly refinancing operations). Nevertheless, the amount of these funds also gradually fell.

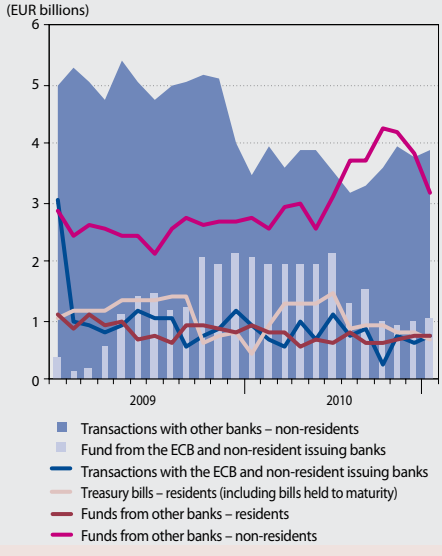
Interbank assets and liabilities were volatile

Other categories of interbank liabilities and assets were relatively volatile, in line with their past development. The largest changes in the total amount of these items in 2010 took place in funds from non-resident banks, which in the period from June to September increased by €1.6 billion, and then in the last two months declined by almost €1.1 billion.

It remained the case in 2010 that a significant proportion of transactions with non-resident banks (on both the asset and liability side) were intragroup transactions. In general, branches of foreign banks converted funds obtained from their parent group into loans provided in Slovakia or they took deposits from domestic customers and transferred them within their parent group.

On the whole, banks use funds from the interbank market mainly to invest in assets that are more liquid (investments in the interbank market, investments in debt securities or Treasury

Chart 39 Selected items of interbank assets and liabilities



Source: NBS.

bills, short-term loans to enterprises and general government) or as a means of replacing, or offsetting developments in, more volatile liabilities (short-term deposits from the general government and from enterprises). This means that even if banks were in a crisis situation in which they could not obtain funds from non-resident banks, the functioning of most banks in Slovakia would probably not be seriously jeopardised.

The average maturity of interbank assets and liabilities continued to be relatively short; most transactions had an overnight maturity and were probably used to fine-tune the daily liquidity of banks. Other transactions, too, were of a short-term nature, most of them with a maturity of up to one month.

Rise in interbank interest rates

Interest rate movements in the European interbank market during 2010 were influenced by ECB operations. EURIBOR interest rates remained at their historical lows during the first half of the year. Following the maturing of the ECB's 12-month refinancing operations (in July and September), the rates gradually increased, as did their volatility. This development was most pronounced in short-maturity rates. By the end of the year, interest rates were no longer changing to any significant degree, not even after of the last batch of 12-month LTROs had matured.

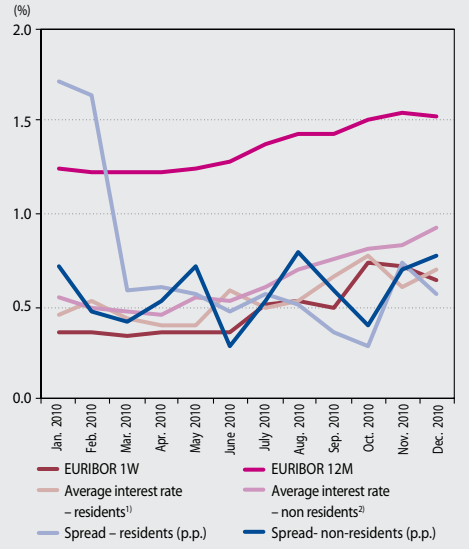
Since shorter-maturity rates increased by a greater margin than longer-maturity rates, the steepness of the yield curve (defined as the difference between the 12-month and 1-month EURIBOR) declined in the second half of the year, especially after the maturing of individual 12-month refinancing operations. Towards the year-end the steepness also corrected slightly, rising back to its level of July 2010.

The implied interest rate in the domestic interbank market more or less matched the development of the EURIBOR rates. Their levels continue to remain close to the level of the 1-month EURIBOR, which reflects the short maturity of interbank operations. A positive fact is that differences between the highest and lowest rate in the domestic interbank market remain relatively low, despite the rise in average interest rates.

Chart 40 EURIBOR interest rates

Source: www.euribor.org

Chart 41 Interest rates in the domestic interbank market



Source: NBS.
1) Average interest rate on interbank deposits taken from resident banks.
2) Average interest rate on interbank deposits taken from non-resident banks.
Note: Interest rates were calculated on the basis of euro-denominated short-term loans received and deposits with a maturity of up to 1 year as at the end of each month.
The rates were calculated as average rates weighted by the amounts of individual transactions.
Spreads were calculated as the difference between the interest rate of the bank with the highest average rate and the bank with the lowest rate.

2.1.2 FINANCIAL POSITION OF THE BANKING SECTOR

In 2010, the banking sector recorded a substantial year-on-year rise in profitability, driven mainly by developments in the second half of the year. Nevertheless, profits remain below the levels achieved between 2006 and 2008, largely because provisioning has risen as a result of the subsiding crisis in the Slovak economy. The largest contribution to the strong annual growth in profitability was made by rising income from retail operations, which was mainly the result of the growing amount of retail loans and the falling cost of deposits. Banks used interest income from debt securities as a way of partially offsetting the decline in income from transactions.
Competition in the retail loan market, which during the fourth quarter put downward pressure on interest rates in certain banks, has not so far had a conspicuously negative effect on the profitability of banks. One of the reasons is the low cost of deposits, since fee income from deposits and bank transactions covers a large part of the interest expenses for these deposits and several banks reported a year-on-year increase in this coverage in 2010.

2.1.2.1 PROFITABILITY

Strong year-on-year rise in the banking sector's net profit

The banking sector's net profit for 2010 was €504 million as at 31 December. This represented a substantial year-on-year increase of 100%. The bulk of this growth was generated during the second half of the year, with the banking sector's profits almost quadrupling in comparison with the second half of 2009.

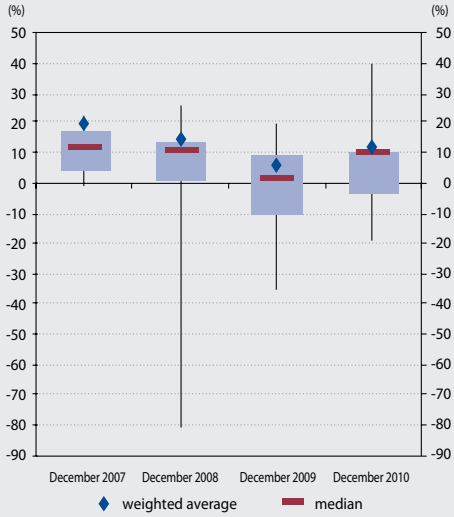
Out of a total of 15 banks, 12 made a profit for 2010 and three made a loss. The number of loss-making banks was lower than in 2009 (when there were five), and the amount of the overall loss was also lower (by 52%). Ten branches of foreign banks also made a loss.

The annual rise in profitability spread quite diversely across the sector. Although 13 banks reported net profit growth, fully 88% of the total increase was accounted for by the profit growth in three banks. As Chart 42 shows, however, the median ROE returned almost to the pre-crisis level recorded in 2007 and 2008. Nevertheless, the interquartile spread expressing the heterogeneity of profitability in the banking sector remains relatively large.

The overall financial position of banks was adversely affected by the depreciation of securities available for sale and held to maturity

The net profit did not, however, reflect losses in 2010 from the revaluation of securities in the portfolio of financial instruments available for sale, which were relatively significant in the case of certain banks. These losses were taken into account in the so-called comprehensive financial result.[2] In 2010, they amounted to 13% of the reported profit, largely due to the detrimental revaluation of portfolio holdings of government bonds issued by higher-risk countries.

Chart 42 Distribution of ROE in the banking sector



Source: NBS.
Note: The Chart shows the median, weighted average, interquartile range, and the minimum and maximum ROE values for individual banks.
The Chart does not include branches of foreign banks.

Retail transactions made the largest contribution to profit growth

The retail sector made the largest contribution to the substantial annual rise in profit growth

2 *'Comprehensive financial result' is defined as the net financial result less valuation differences adjusted for current taxes. Valuation differences express the changes in the real values of securities held in the portfolio of financial instruments for sale, which led to changes in equity in the period under review, without affecting the reported financial result. Although valuation differences would affect the financial result at the time when the securities are sold, it is recommended, given the possibility of their sale in the near future, to monitor their potential impact on the financial result.*

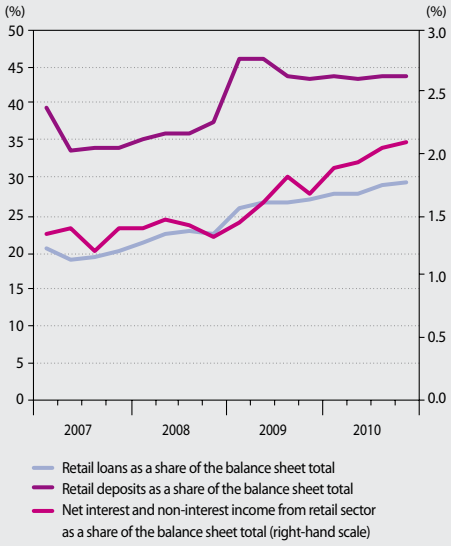
in 2010. Both interest and non-interest income from retail transactions increased. Other key factors were the rise in interest income from securities and the decline in provisioning.

As Chart 44 shows, the rise in interest and non-interest income from the retail sector was driven mainly by growth in lending to this sector (i.e. the rise of its share in the balance sheet total), which was to a certain extent maintained even during the crisis years of 2009 and 2010. This income growth accelerated in 2010 in comparison with 2009, owing both to a slight decline in retail deposits as a share of the banking sector's balance sheet total, and to a rise in the net interest rate spread in the retail sector. The main factor in this regard was the decline in the cost of retail deposits (from 1.5% in 2009 to 1.1% in 2010), although the second half of 2010 also saw a moderate decline in returns on loans (from 6.8% to 6.6%).

In other sectors, net interest and non-interest income continued to decline, even though the interest rate spread in the corporate sector increased slightly.

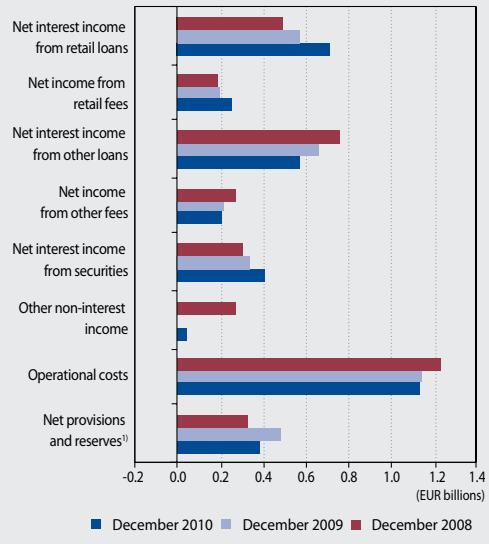
The profitability of banks is greatly affected also by the level of fees. The overall net income from fees climbed by 9% year-on-year. Due to the environment of low interest rates, several banks (especially large ones) are even able to cover a large part of their interest expenses with the fees they charge customers for main-

Chart 44 Net interest and non-interest income from the retail sector compared with the amount of retail transactions



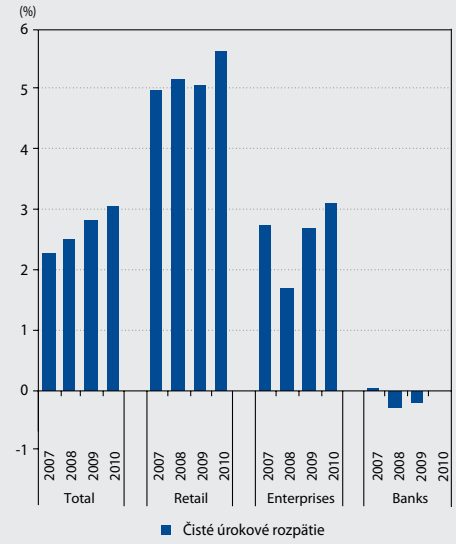
Source: NBS.

Chart 43 Changes in the profitability structure of the banking sector



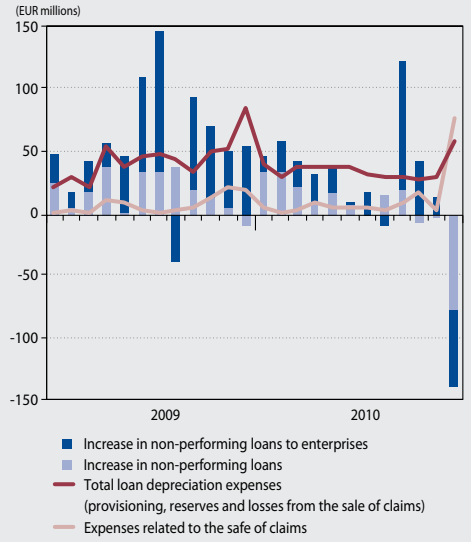
Source: NBS.
1) Net provisions and reserves include the net gain on the assignment to third parties of claims on customers, meaning, for example, adjustment for the income/expenses related to the sale of outstanding claims.

Chart 45 Net interest rate spread by sector



Source: NBS.
Note: Net interest rate spread represents the difference between returns on loans (the ratio of interest income from loans to total loans) and the cost of deposits (the ratio of interest expenses on deposits to total deposits).

Chart 46 Loan depreciation expenses and changes in the amount of non-performing loans



Source: NBS.

taining deposit accounts and for bank transactions (the level of this coverage for the sector as a whole is 89%). During the year 2010, several banks recorded a relatively strong rise in this figure in comparison with 2009. Indeed, a number of these banks were able to use this fact to cut interest rates on new retail loans during the last quarter of 2010, without any significantly negative effect on their profitability.

The amount of other non-interest income in the banking sector as a whole increased only slightly. This growth was largely attributable to the rise in net gains on transactions in securities and in equities and investment fund shares/units.

The overall amount of operating expenses in 2010 remained largely unchanged in comparison with 2009.

Provisioning costs fell

Most banks reported a year-on-year decline in overall expenses related to the depreciation of claims on customers (i.e. to provisioning, reserves, and losses from the sale of claims), and only a few banks reported a significant increase. For the banking sector as a whole, they fell by 18% over the year. This included a gradual decline in each month from March 2010, with the only exception being an increase in December (Chart 46).

The trend decline in the ratio of provisions to non-performing loans came to an end in 2010, at around 73%.

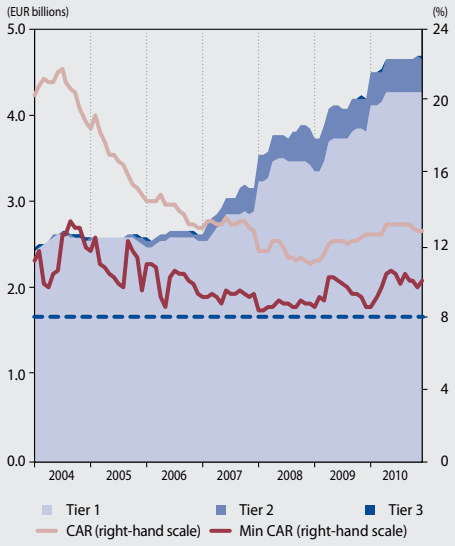
2.1.2.2 CAPITAL REQUIREMENTS

The trend increase in own funds slowed

In 2010, the total amount of own funds in the banking sector increased by 4.0% year-on-year, with most of this growth occurring in the first half of the year. The growth in own funds during this period was not as strong as in 2009, and represented only 47% of the amount of the increase in that year. The slower rise in own funds was mainly related to the fact that profits in 2009 were lower than in the previous year and that the situation in financial markets was somewhat calmer following the global financial crisis.

A total of seven banks increased their own funds in 2010, and eight banks recorded a year-on-year decline. The increase recorded during the first six months of 2010 comprised mainly a rise in the highest-quality component (Tier 1), drawn main-

Chart 47 Capital position of the banking sector



Source: NBS.
Note: CAR – capital adequacy ratio.

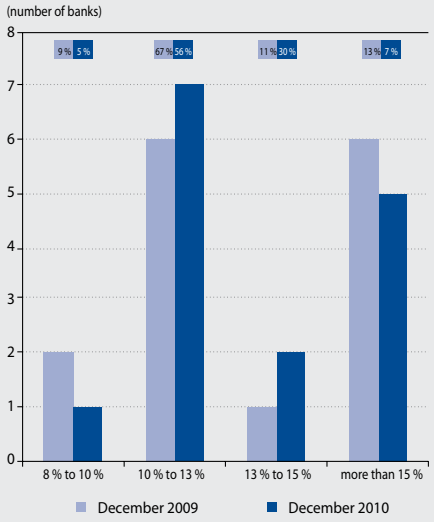
ly from retained earnings from previous years. Approximately 42% of the banking sector's profits in 2009 were retained as capital. In the second half of the year, own funds were increased using mainly Tier 2 capital, which compared with Tier 1 capital is lower in quality.

Another factor in the total amount of own funds was the losses made by certain banks, either through an increase in accumulated losses from previous years, or through a current year loss, which is deducted from own funds for prudential reasons.

Upturn in lending activity was reflected in a rise in risk-weighted assets

The amount of risk-weighted assets in 2010 was, on the whole, inlfuenced by different trends on the asset side. During the first quarter of the year, the amount of these assets continued a trend decline that had begun in 2009. This trend changed as a result of the revival in bank lending activity, especially in the retail sector.

Chart 48 Distribution of the capital adequacy ratio across the banking sector



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

The capital adequacy ratio (CAR) for the sector as a whole increased

The slight rise in own funds and substantial increase in risk-weighted assets had a downward effect on the capital adequacy ratio in the second half of 2010. In June of that year, the CAR stood at 13.2%, but by December it had fallen to 12.7%. It must be noted, however, that even with this decline, all banks in the Slovak banking sector comfortably fulfilled the minimum CAR of 8%. The lowest CAR reported by any bank in the sector as at the end of 2010 was 9.8%.

The Tier 1 ratio followed a course similar to that of the capital adequacy ratio. As at December 2010, the ratio for the banking sector as a whole was 11.5%, which represented a modest increase from the ratio of 11.4% reported a year earlier. The lowest Tier 1 ratio reported by any bank in the sector at the end of 2010 was 7.2%.

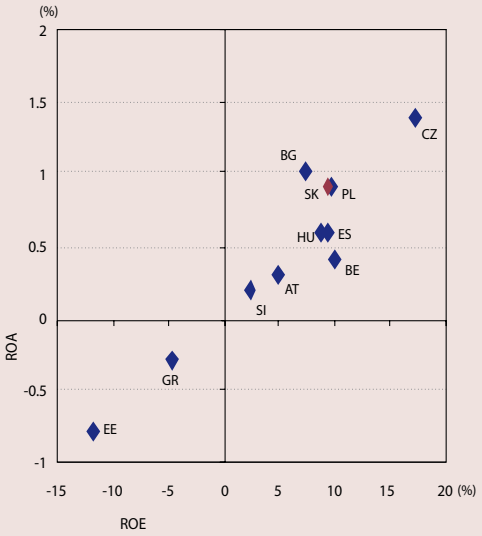
Box 1

THE SLOVAK BANKING SECTOR COMPARED WITH EU BANKING SECTORS

The trends observed in the banking sector in 2010 point to an improvement in several indicators. There was a clear upturn in comparison with the "crisis" year of 2009. In this regard, it is interesting to look at how Slovak banks did in comparison with banks in other EU countries. The purpose of this box is to compare the results of the Slovak banking sector in several areas with those of other banking sectors.

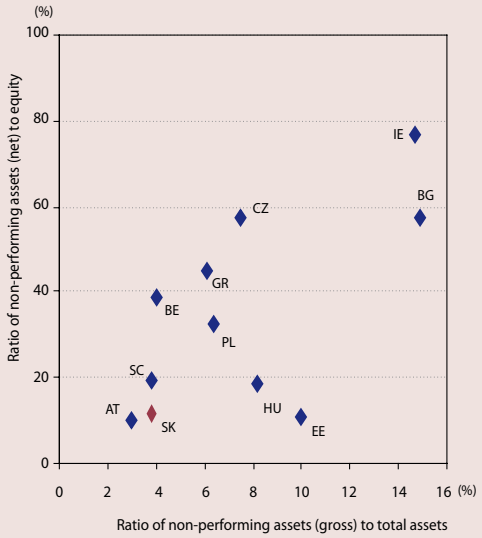
In general, banking sector profitability for the first half of the year was higher in the new EU Member States than in the old EU Member States. As at the end of the first half of 2010, the Slovak banking sector's profitability ratios, return on equity (ROE) and return on assets (ROA), were the fourth highest in the EU. The clear leader in profitability was the Czech banking sector. The cost-to-income ratio of

Chart A ROE and ROA ratios in selected EU banking sectors



Source: ECB, CBD.
Note: The ratio figures are based on data as at June 2010.
ROE – return on equity
ROA – return on assets

Chart B Asset quality ratios in selected banking sectors



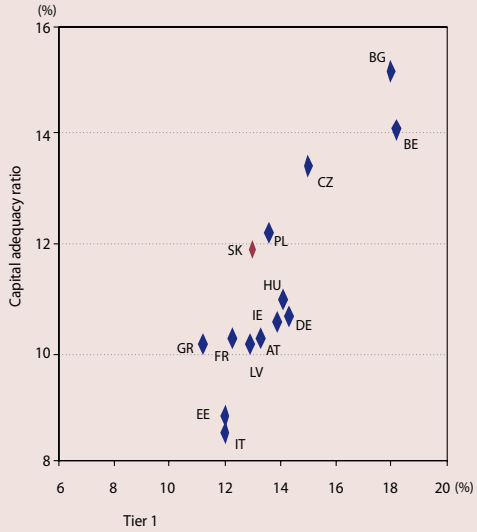
Source: ECB, CBD.
Note: The ratio figures are based on data as at June 2010.

the Slovak banking sector (the ratio of its operating expenses to gross income) was 53% as at June 2010, which was around the average value for the EU.

In terms of asset quality, too, Slovak banks fared well in comparison with their counterparts in other EU countries. For Slovak banks, the ratio of non-performing assets (loans and securities) to total assets (loans and securities) was 3.8%, the eighth-lowest ratio in the EU. The domestic banking sector also reported a similarly favourable result in its ratio of non-performing assets (net of provisions) to equity.

As regards its capital adequacy as at June 2010, the Slovak banking sector was close to the EU average level. A particularly positive aspect was the relatively high Tier 1 ratio, which is now generally seen as a relevant indicator of a bank's capital cushion. The average Tier 1 ratio for the domestic banking sector was the tenth highest in the EU, meaning that banks in Slovakia rank among those with the highest proportion of Tier 1 capital in their own funds.

Chart C Capital adequacy ratio in selected countries



Source: ECB, CBD.
Note: The ratio figures are based on data as at June 2010.
Capital adequacy ratio – ratio of total own funds to risk-weighted assets.
Tier 1 – ratio of core capital to risk-weighted assets.

This brief review of the Slovak banking sector – in terms of selected ratios of profitabil-

ity, capital adequacy and asset quality for the first half of 2010 – implies that the domestic sector has made relatively fast progress in several areas in comparison with other banking sectors. The profitability and asset quality ratios of banks is higher in Slovakia than in other countries, while capital adequacy is at an average level.

2.2 THE INSURANCE SECTOR

The individual sectors of the insurance market developed differently in 2010. Demand for life insurance products picked up in 2010 after its previous historical decline, but the amount of premiums fell short of the pre-crisis level. The most dynamic growth among the different sectors was seen in unit-linked insurance. It is also positive that the rate of increase in claims incurred fell by almost a half.
In the non-life insurance sector, however, the unfavourable situation seen in 2009 continued in 2010. Strong competition and insufficient new policies negatively affected the development of premiums in the sector's main lines of business. In the largest line – motor insurance – premiums fell to a level not seen since 2003. Owing to the occurrence of natural disasters, expense ratios in non-life insurance reached their highest values for more than ten years.
The adverse situation in non-life insurance was reflected in the technical account result, which fell sharply year-on-year. For this reason, the total profits of insurance companies for 2010 were lower than for the previous year.

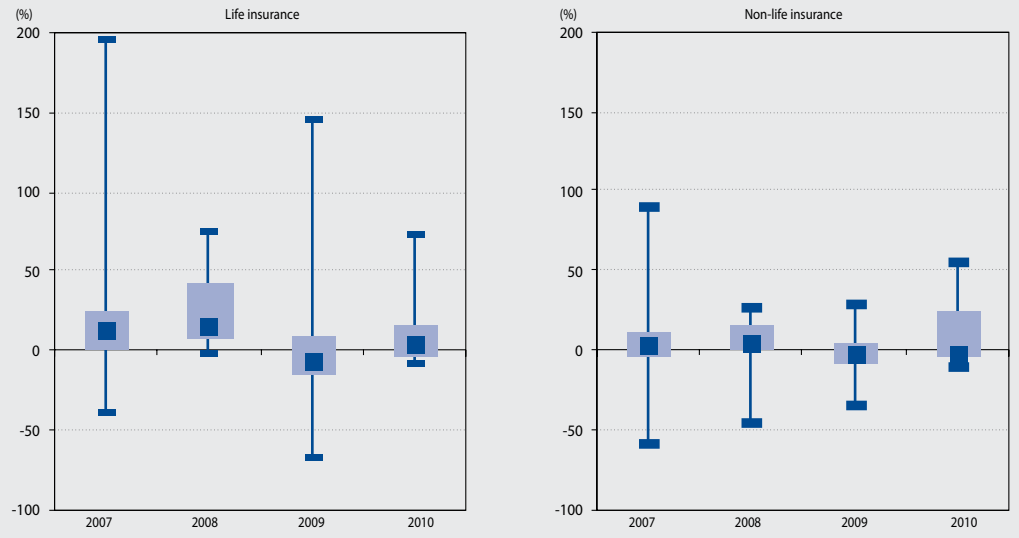
PREMIUMS[3] ROSE MODERATELY

The insurance market in 2010 was marked by the differing performance of life insurance and non-life insurance. In the non-life insurance sector, the overall situation again deteriorated in year-on-year terms, but in the life insurance sector there were a number of positive developments. The gradual improvement in the economic situation during 2010 was reflected in stronger demand for life insurance products. This sector, compared with non-life insurance, is more sensitive to changes in economic activity, particularly in the case of premiums. After their historically high decline in 2009, technical premiums in this sector recorded a year-on-year increase, although the pace of growth remained in double digits below the pre-crisis level.

LINES OF INSURANCE

With the exception of pension insurance, which has long been reporting negative growth, premiums in all lines of life insurance recorded an increase. The strongest growth occurred in *unit-linked* insurance, in which the customer of the insurance company bears the insurance risk. Nevertheless, surrender costs in this line climbed

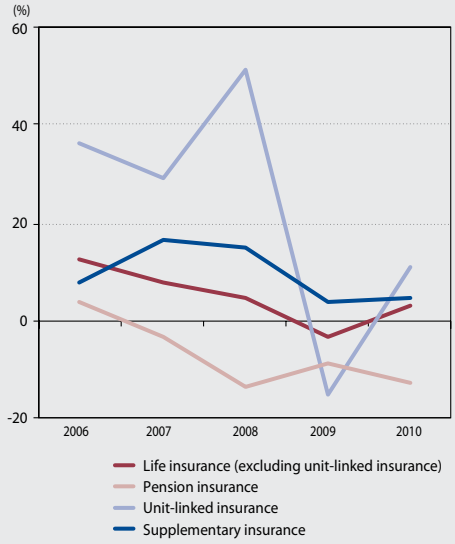
Chart 49 Distribution of year-on-year premium changes[1)]



Source: NBS.
Note: Left-hand scale shows year-on-year changes in technical premiums (minimum, lower quartile, weighted average, upper quartile and maximum).
1) The Chart covers solely insurance companies that started operations before 2008. In addition to that, one insurance company was not taken into account in 2008, due to an extreme value.

3 *Premiums can be defined as the price agreed in individual insurance contracts regardless of the method of their financial reporting.*

Chart 50 Life insurance premiums (year-on-year changes)



Source: NBS.

sharply in 2010, after falling in the previous year. This may have been due to the nature of the insurance, which gives the policyholder an option of partial withdrawal. Surrenders occurred more frequently in this segment than in any other insurance line, and, as in all lines, they increased slightly in year-on-year terms.

However, it is considered favourable that the costs related to cancelled contracts in the life-insurance sector as a whole rose at a slower pace. It should be noted that this line of business has been on a declining trend since its peak in 2008.

As for the situation in traditional life insurance,[4] the number of insurance contracts has been stagnating or falling over many years. At the end of the period under review, the total number of contracts did not even reach the level of 2006. This state of affairs could have several causes, including, on one hand, a rising number of contracts that are reaching the payout stage, a higher number of cancelled contracts, and insufficient new policies to compensate for this development. On the other hand, the decline could also be related to a change in preferences, or the partial diverting of policyholders from traditional insurance products to investment insurance, as confirmed also by the sharp rise in the importance of unit-linked insurance in recent years.[5]

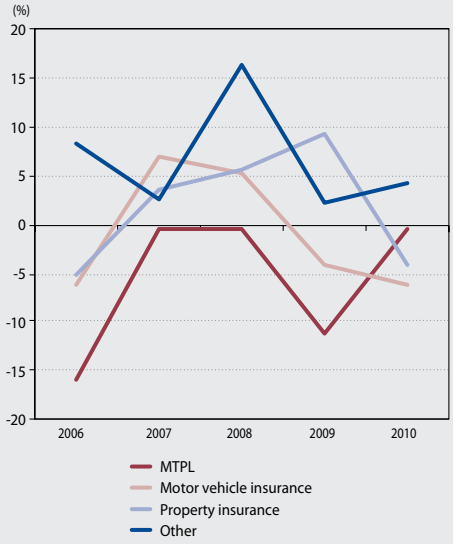
Despite the decline in insurance contracts, the overall amount of premiums in traditional insurance is closer to its pre-crisis level than are the overall premiums in the other lines of life insurance.

In the non-life insurance market, the results from the first half of 2010 already indicated that the sector would not revive during the period under review. The continuing adverse situation in motor insurance[6] and the negative change recorded in property insurance resulted in an overall year-on-year decline in the amount of premiums. A combination of this drop and the incidence of natural disasters put greater pressure on the performance of insurance activities. In particular, the expense ratio in non- life insurance[7] recorded its highest values for more than ten years.

The most substantial change in non-life insurance concerned the property insurance line. Despite a considerable rise in the number of new contracts,[8] this line reported an overall decline in the amount of insurance premiums (after several years of increases). Average premiums for new policies fell by more than a third, which may indicate that the increased demand came mainly from households, since the average premium for households is far lower that for enterprises.

As noted in the analysis of the first six months of 2010, the increased demand for this type of in-

Chart 51 Non-life insurance premiums (year-on-year changes)



Source: NBS.

4 *Traditional life insurance includes assurance on death, assurance on survival to a stipulated age, mixed assurance, etc.*
5 *Over a period of ten years, the share of unit-linked insurance premiums in overall premiums almost trebled, to stand at more than 29% in 2010. Nevertheless, the share of traditional life insurance declined from 72% to 57.5%.*
6 *The motor insurance line includes motor third-party liability insurance (MTPL) and motor vehicle insurance.*
7 *The loss ratio and combined ratio.*
8 *The number of extended contracts also recorded a year-on-year increase.*

surance can be explained as a response to flood events in Slovakia. The floods caused extensive property damage, which may have motivated people to seek household insurance coverage. The largest rise in new contracts occurred in the second quarter of the year, when Slovakia experienced the strongest flooding, and the high increases continued in the third and fourth quarter.

The situation in the motor insurance segment remained difficult. It was affected by persistently strong competition, subdued demand from households and enterprises, and the entry of new branches into the market. The amount of premiums in MTLP and motor vehicle insurance again declined, reaching its lowest level for seven years.

Three lines of non-life insurance recorded an increase in premiums. In the case of *general liability insurance,* premiums returned to their growth tendency of previous years, after declining in 2009. As for the line of *credit insurance, surety insurance and miscellaneous financial loss insurance*, its position as the fastest growing line since the onset of the crisis was confirmed. The third line that reported an annual rise in premiums was *accident and sickness insurance*.

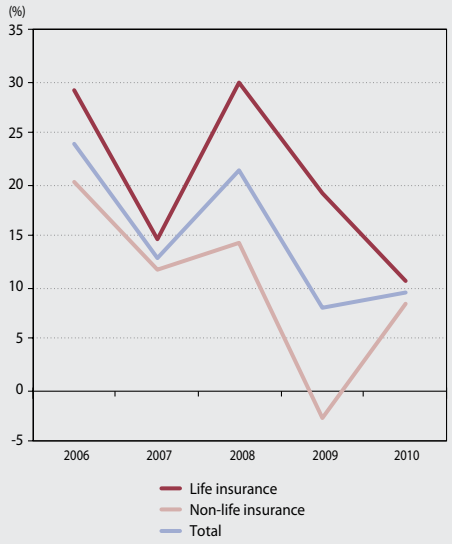
Claim costs in life insurance fell sharply; claim costs in non-life insurance increased, after falling in 2009[9]

After falling slightly in 2009, claim costs in non-life insurance rose by 8.3% in the period under review. The overall increase was almost entirely attributable to a rise in claims in the line of property insurance. The loss ratio in this line rose by more than half, and the combined ratio exceeded 100%.

Both lines of motor insurance reported an annual increase in their expense ratio – despite a drop in earned premiums[10] – owing to the positive effect of the change in provisions and lower claim costs.[11]

A positive turnaround in the combined ratio occurred in the line of credit insurance, surety insurance and miscellaneous financial loss insurance. After rising gradually by almost 200% over previous years, the ratio declined by almost one-quarter in 2010, owing to lower claim costs.

Chart 52 Claim costs (year-on-year changes)



Source: NBS.

In life insurance, the rate of increase in claim costs continued to fall sharply in 2010 (by almost one-half year-on-year[12], since high amounts, particularly related to maturing and cancelled contracts, are gradually declining.

The reinsurance share rose slightly

Insurance premiums ceded to reinsurers in 2010 amounted to €262.6 million, representing a year-on-year rise of 7.5%. Reinsurance is more important in non-life insurance, with insurance companies in this sector assigning around a quarter of all premiums[13]. The overall level of reinsurance coverage depends mainly on changes in the structure of non-life insurance, since there are marked differences in the extent of reinsurance in different lines (exposed to different risks). The ceding of premiums for reinsurance is relatively less extensive in motor insurance and relatively more extensive in legal protection insurance, general liability insurance, other transport insurance and property insurance.

The increase in reinsurance during the period under review was caused mainly by the greater ceding of premiums in MTPL insurance.

9 *NBS analysed the technical cost of claims as it did premiums. Hereinafter, the term "claims cost" means "technical claims cost".*
10 *Earned premiums – gross premiums after deducting the change in the gross technical provision for unearned premiums.*
11 *Gross technical provision for claim costs.*
12 *Claim costs in life insurance rose by 10.4 % year-on-year.*
13 *The average level of reinsurance coverage in non-life insurance over the past ten years stood at 28.9%.*

Table 3 The loss ratio, expense ratio, and combined ratio of non-life insurance lines for 2010[1)]

	Loss ratio (%)	Expense ratio (%)	Combined ratio (%)
Life insurance / Supplementary insurance	26,6	27,1	53,7
Accident and sickness insurance	33,0	36,3	69,3
MTPL	55,7	28,8	84,6
Motor vehicle insurance	65,6	29,8	95,3
Other transport insurance	5,8	27,4	33,2
Carrier's liability insurance	49,6	28,5	78,2
Property insurance	75,0	36,3	111,3
General liability insurance	27,7	29,8	57,5
Credit insurance, surety insurance and miscellaneous financial loss insurance	105,7	47,7	153,4
Legal protection insurance	34,1	76,9	111,1
Assistance insurance	40,4	43,2	83,5
Active reinsurance	169,2	32,3	201,5
Total	62,3	32,1	94,4

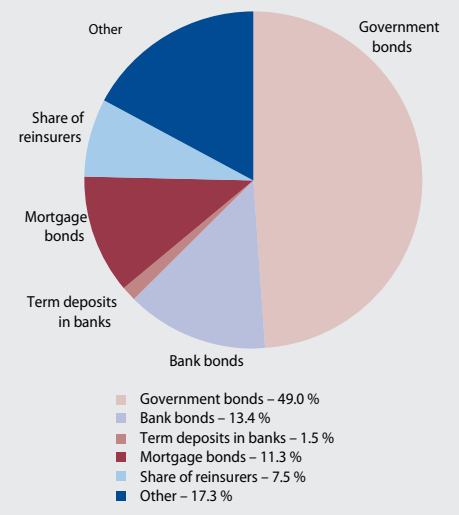
Source: NBS.
1) MTPL insurance, motor vehicle insurance, and property insurance account for 83.2% of non-life insurance (by amount of premiums).

Technical provisions and their investment

The technical provisions of insurance companies as at the end of 2010 amounted to €4.66 billion, representing an annual rise of 7.2%. They rose more moderately than in 2009 mainly owing to a lower rise in technical provisions in life insurance. The largest increase in absolute terms was recorded by liabilities related to investments on behalf of the insured, which is line with developments in unit-linked insurance. In non-life insurance, the highest rising provision was that for insurance claims that have been made but not settled.

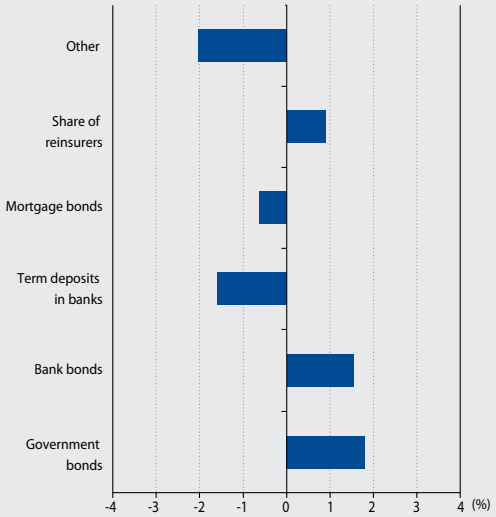
The asset coverage of technical provisions (not including technical provisions for investment liabilities arising from unit-linked insurance policies) was 113.5%. Provisions were invested conservatively, with almost half of all the investments comprising government bonds. These did not include bonds issued by high-risk countries (for further details, see the part entitled Risks in the Slovak Financial Sector). Insurance companies purchased mainly bank bonds in the first half of 2010 and mostly government bonds in the second half.

Chart 53 Investment structure of technical provisions[1)] as at the end of 2010



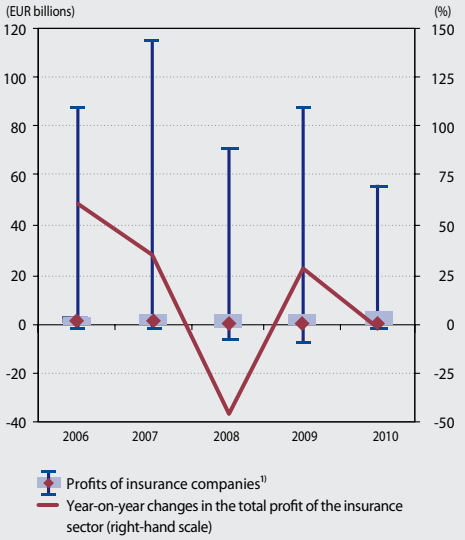
Source: NBS.
1) Not including provisions for liabilities arising from investments made under unit-linked policies.

Chart 54 Changes in the investment of technical provisions as at the end of December 2010 (year-on-year changes)



Source: NBS.

Chart 55 Overall profit of the insurance sector and distribution of insurance company profits



Source: NBS.
1) Minimum, lower quartile, median, upper quartile, and maximum.

Financial position of the insurance sector

Total profits in the insurance sector in 2010 amounted to €133.7 million, representing a strong rise of 2.9% in comparison with the previous year. The result was largely attributable to a single insurance company. If the effect of this insurer's result is excluded, the sector's overall profit for the period under review climbed by more than one-third. Another positive aspect was that more than half of the insurers saw an improvement in their financial results.

Profits from financial operations rose by 1.1%, and a positive contribution was also provided by life insurance. However, these positive developments were outweighed by unfavourable results in non-life insurance. Although technical costs recorded a year-on-year decline (owing to the marked increase in the participation of reinsurers in insurance claims), the profits from insurance activities in non-life insurance came only to around half the level of the previous year, due to the effect of lower premiums, higher reinsurance and a drop in other technical income.

A total of six insurance companies made a loss in 2010, the same number as in 2009. These were small insurers and their share of the overall premiums in the sector was less than 2%.

2.3 PENSION SAVING

Looking at the retirement pension saving sector during 2010, its developments were in many ways a continuance of the trends seen in the second half of 2009. The asset structure in all three types of pension fund remained conservative, and the differences between them narrowed still further. The exposure of pension funds to government bonds issued by riskier euro area countries fell significantly during the year. At the same time, their investments in Slovak government bonds increased. The concentration risk in bank deposits remained at a high level. As for the supplementary pension saving sector, it underwent relatively significant changes in 2010 in comparison with Pillar II of the pension saving system. In many supplementary pension funds, the share of equities and investment fund shares/units in the asset structure increased sharply. Furthermore, modifications to the setting of portfolio parameters led to a rise in the exposure of supplementary pension funds to market risks. An increase in operating expenses resulted in profits of supplementary pension asset management companies falling by a considerable margin in year-on-year terms.

2.3.1 RETIREMENT PENSION SAVING

In 2008 and 2009, the retirement pension system had to absorb several external shocks, whether of a market or legislative nature, and these were reflected in substantial changes in almost all aspects of the system's performance and activities. By comparison, 2010 was the first full calendar year during which the retirement pension system operated under the new conditions and it was one of stable development without any significant turbulences. In 2010, sovereign crises in the euro area had major repercussions on the situation in financial markets. They also affected retirement pension saving in Slovakia; nevertheless, their impact in this regard cannot be described as significant.

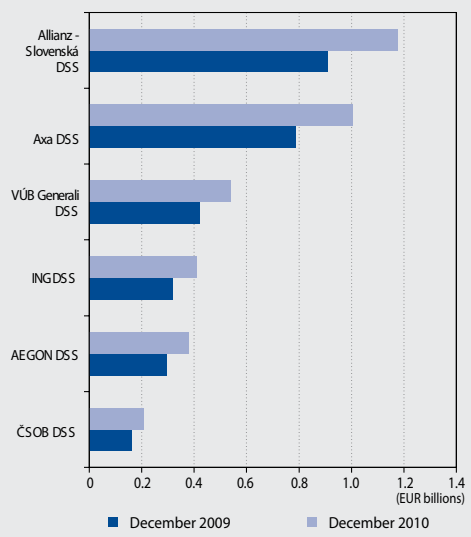
Slight rise in the number of savers

By the end of 2010, a total of 1,436,970 savers were registered in the retirement pension system. Over the period under review, the number of savers saw only a slight increase of 5,500. Looking at the breakdown of this increase, the largest rise of 14,600 was recorded by balanced funds, largely as a result of savers switching to them from other funds, in particular growth funds. Conservative funds, too, saw a net gain in the number of savers, which increased by 3,600. Growth funds, by contrast, recorded a decrease of 12,800 savers, as a consequence of the negative net balance of switches. In the context of the overall number of savers, however, these changes represent no more than a minimal redistribution among different funds.

Net asset value in the sector maintained a linear course

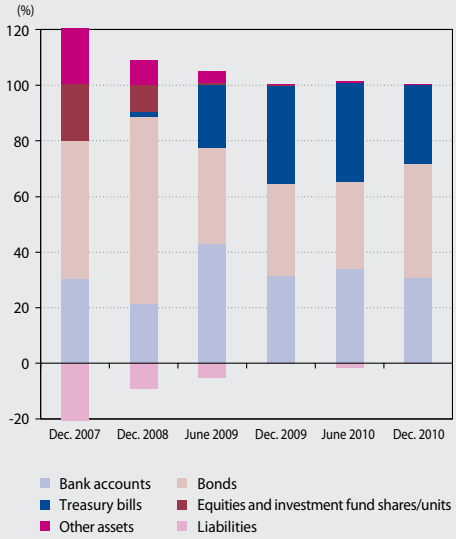
As regards the absolute increase in the net asset value of pension funds, at least in nominal terms, 2010 was the most successful year since the system came into operation more than five years earlier. The increase in the sector as whole stood at €818 million or 28%, which exceeded the previous historical maximum set in 2007. However, the robust increase in the amount of assets (compared to the rises recorded in 2008 and 2009) largely reflects the fact that PFMC assets pertaining to savers leaving Pillar II of the pension system were transferred to the Social Insurance Agency during the two years mentioned. As at 31 December 2010, the system's net asset value stood at €3.72 billion. The amount of assets in the sector showed almost linear growth over the year, which was caused, on one hand, by the regular contributions of savers and, on the other hand, by minimal fluctuations in the valuation of assets purchased for pension funds. The highest percentage increase in net asset value was recorded by conservative pension funds, followed closely by balanced funds. In growth funds, the annual rise in net asset value was somewhat lower. Given, however, the amount of pension fund assets that have already been accumulated and the fact that the bulk of them are invested in growth funds, the proportion of total assets managed by each type of fund recorded a minimal change of no more than 0.5 percentage points from the long-term level. Since the distribution of the number of savers between the six PFMCs remained unchanged, the growth in fund assets under management was almost the same in the case of each PFMC.

Chart 56 Net asset value of pension funds by pension fund management company



Source: NBS.

Chart 57 The structure of funds' assets by principal type of investment



Source: NBS.

THE CONSERVATIVE PORTFOLIO STRUCTURE IN ALL TYPES OF FUND WAS MAINTAINED

The aggregate structure of pension fund portfolios in 2010 maintained the characteristics that it acquired in the second half of 2009. While the share of particular asset classes changed to some extent, the portfolios retained a substantially conservative focus that kept fluctuations in performance to a minimum.

Up until the beginning of October, Treasury bills constituted the largest component of the sector's total assets. All of these Treasury bills were issued by euro area countries. During the first quarter, these securities accounted for practically the entire increase in net asset value. In addition, they replaced certain maturing positions in bonds. From January to the beginning of April, the amount of Treasury bills in the portfolio increased from €1.0 billion (35%) to almost €1.4 billion (44%). However, in the two months immediately following this peak, certain Treasury bills were sold or were not replaced with equivalent investments following their redemption. The share of Treasury bills in the sector's total assets returned to the level at which it began the year and remained there until around the end of the third quarter and beginning of the fourth quarter. Towards the end of the year, the amount of these assets fell again, and by 31 December 2010 their share in the portfolio was only around 28%.

As for bonds, their weight in the sector's total assets was very similar to that of Treasury bills at the beginning of the period under review. In February, however, a Slovak government bond issue matured, and since it was included in the investments of several funds, where its overall value was €230 million, the share of bonds in the sector's portfolio slumped by 7 percentage points. The funds released were partly invested in Treasury bills and around half of them were placed in term deposits at banks. From that point on, however, the amount of bonds in the system was continuously rising – only slowly at first, but much more strongly by the end of the first half of the year. Bonds became the clearly preferred investment of pension funds in the last quarter of the year, when they increased by €400 million to re-establish their previous position as the largest asset class in the portfolio. Their share at the end of the year represented almost 41% of the total assets.

The third and last of the principal components of fund portfolios in Pillar II of the pension system are savings in bank current accounts and term deposit accounts. Their amount fluctuated quite sharply at the beginning of the year, and then

stabilised within a relatively narrow band from the end of May. The share of this component in the aggregate portfolio as at the end of 2010 was 31%, the same as its level a year earlier. However, these developments mask an increase at the beginning of the year and a gradual fall thereafter, related to a decline in the amount of funds invested in bank accounts and a rise in the overall amount of assets in the system.

Under the current investment strategies of PFMCs, equities seem to be rather undesirable or are treated as a very marginal asset class for the purpose of fund investments. After being heavily sold in the previous year, equities accounted for an almost negligible proportion of the net asset value during the period under review, not exceeding on average 0.13% and falling to less than half of that value before the end of December. The only funds not reporting a zero equity component at the end of the year were the growth and balanced funds of two PFMCs. One company, which at the time had the largest share of equities in its funds, closed all of these positions; this move, however, was partly offset by another company's purchase of equities up to the amount of one percent of the net asset value of their funds.

In the case of two funds of one PFMC, their assets also included foreign exchange hedge derivatives. As for the share of assets denominated in a foreign currency, it was minimal and at no point during the year did it exceed 0.5% in any of the funds. This means that savers' assets were not exposed to any substantial risks of exchange rate movements during 2010.

Only minimal differences between the asset structure of each type of fund

In the second half of 2009, the differences between the asset structure of each type of fund almost completely disappeared in all PFMCs. This situation persisted throughout 2010, not only at the level of the basic distribution of assets between different investment types, but also in regard to the specific choice of particular securities. Thus, the choice between conservative, balanced and growth funds is, at present, only a formality. When deciding between funds of given PFMC, savers do not in fact have the option of choosing one that offers a risk-return profile most suitable for their requirements. The real choices available to savers were further limited by the fact that the asset structure of funds of different PFMCs also converged to some extent during 2010.

Parameters of the debt securities portfolio underwent only incremental changes

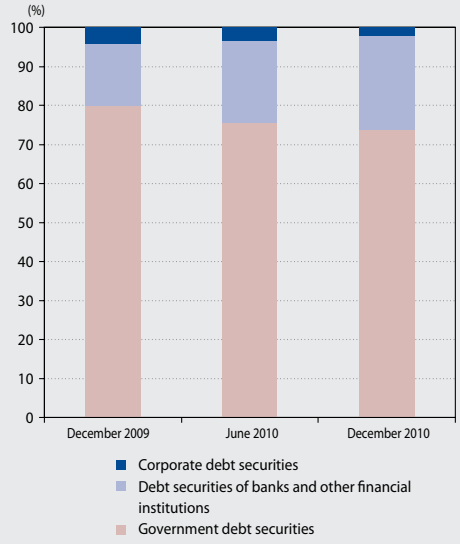
The parameters of the debt securities portfolio, comprising bonds and Treasury bills, changed only to a lesser extent in 2010. The average residual maturity of these securities, weighted by the net asset value of the individual issues, was 0.76 of a year at the end of 2010, unchanged from the beginning of the year. Most funds recorded even a slight year-on-year decline in the weighted average residual maturity of their debt securities, but with funds of one PFMC reporting a relatively large rise in this parameter, the average for the sector as a whole did not fall. At the end of the year, the average maturities of all funds ranged between 0.3 and 1.7 years.

Since Treasury bills had a declining weight in the overall assets under management, the proportion of debt securities that pay no coupon dropped. But with a share of 58%, zero-coupon bonds still remained the largest component in this asset group. The share of fixed-coupon bonds increased by almost 10 percentage points, to stand at 27% at the year-end. Floating-coupon bonds constituted the remaining 16% of debt securities, which represented a slight increase in their share of the aggregate portfolio.

The changes in residual maturity and interest rate fixation were reflected in the average duration of the sector's portfolio of debt securities as at 31 December 2010, which was slightly lower compared with the end of the previous year. In general, the duration of these securities can be deemed to be very low.

The distribution of debt securities by type of issuer reverted to some extent to the situation that prevailed before the second half of 2009. Although government bonds and Treasury bills remained dominant, their share fell by 6 percentage points year-on-year, to 74%. Demand for securities issued by banks and financial institutions increased; their volume doubled, and by the end of the year they made up almost a quarter of the debt securities portfolio. Corporate bonds had a relatively insignificant share in the portfolio

Chart 58 Structure of the debt securities portfolio by type of issuer



Source: NBS.

even before 2010 and as the amount of these bonds fell during the year, their share declined by a further half, to 2%.

Exposure to sovereign debt securities of higher-risk euro area countries declined during the year

In response to the sovereign crisis in the euro area (and the turbulences they caused in financial markets), PFMCs reduced the exposure of their funds to those countries most affected. As a share of net asset value in the sector, government debt securities issued by Greece, Ireland, Portugal and Spain fell from a relatively significant 11% as at 31 December 2009 to around 2% as at the end of 2010. The bulk of these positions were closed naturally, through the maturing of these securities. Of those securities that were sold, only one bond issue was traded at a substantial discount (between 20% and 30%). The reason for the discount was the bond's relatively high residual maturity, which at a time of culminating volatility was reflected in the considerable credit risk premium attached to it. The impact on the three funds that owned this security was not substantial, since it accounted for a small share in the overall amounts of the respective funds' portfolios. Those of the government debt securities from these countries that remained in the pension funds as at the year-end all had a short maturity. Since Slovak government securities constituted 53% of all the government securities held in the sector as at the end of December 2010 (or 27% of the overall net asset value), it may be considered crucial that the market in Slovak government bonds has so far remained stable. The amount of Slovak government securities almost doubled during the course of the year.

Increased concentration risk in bank accounts

Although the Pillar II portfolio can basically be seen as carrying a relatively low level of risk, one of its aspects does require closer attention. This is the high concentration of deposit accounts among only a few banks, which carries with it a heightened counterparty risk. As regards the ratio between the amount of money that a fund has on deposit with the three banks holding the largest proportion of its deposits and the fund's net asset value, the median value among funds in the sector was 20%, and in some funds at certain times it even exceeded 30%. Expressed in this way, the distribution of bank deposit concentration across funds narrowed during the year, as funds with the highest concentration recorded a decline and those at the other end of the spectrum saw their ratio increase. It must be noted, however, that the residual maturity period of term deposits was relatively low as at 31 December 2010, at around three months on average, and in no fund did it exceed one year.

The performance of all fund types stabilised at 1.2%

Since funds were not exposed to equity markets and held interest-sensitive instruments of short duration, the current values of pension units recorded linear growth and almost no volatility during the course of 2010. As a result, the year-on-year performance stabilised at a constant level, and the weighted average for each of the three types of fund was the same, 1.2%, as at

Table 4 Annual performance of pension funds as at December 2010

	Min (%)	Weighted average (%)	Max (%)
Conservative funds	0.8	1.2	1.9
Balanced funds	0.8	1.2	1.9
Growth funds	0.8	1.2	1.9

Source: NBS.
Note: The methodology is given in the part "Glossary and abbreviations".

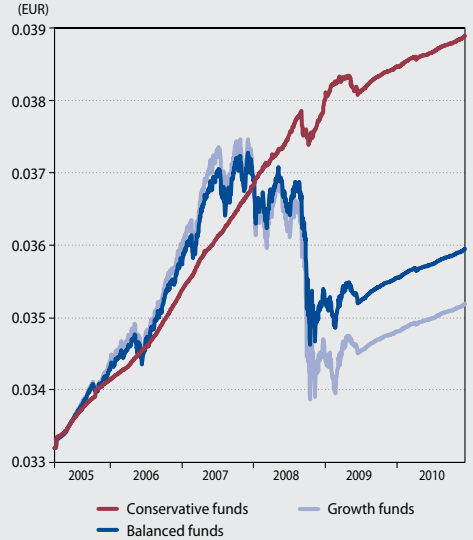
31 December 2010. Such a return was not even enough to match the inflation rate for 2010, which, as measured by the Harmonised Index of Consumer Prices, reached 1.3%. The annual rates of return within each type of fund ranged from 0.8% to 1.9%, again the same in all three cases.

Looking at fund performance over the long-term (since the current system came into being), it is conservative funds that have achieved the highest average annualised return, of around 2.8%; the repercussions of the financial crisis were less severe on conservative funds than on the other two types. The average annualised return on balance and growth pension funds over the same period was only 1.4% and 1.0%, respectively.

Substantial year-on-year decrease of loss in the sector

Although the sector of pension fund management companies continues to make an aggregate loss, its loss of €1.8 million in 2010 was more than three time lower than in the previous year. Income from fees and commission is the main source of income for PFMCs, and in 2010 it fell by 8% year-on-year. This drop in income reflected the fact that the limit on the fund management fee was reduced from 0.065% to 0.025% of the fund's net asset value. However, the adverse effect of this measure was offset by income from the new performance-linked fee and by the increase in the overall amount of funds' assets, which is the second parameter used for calculating the management fee. The sharp annual fall in the sector's loss was largely attributable to a decline of almost 50% in expenses related to fees and commissions. This reduction, however, was to a large extent the result of developments at one PFMC, where the item *accrued commissions for intermediaries* declined by more than 100%, meaning that this expense account ended 2010 with a negative balance. The sector's financial result also benefited from savings in operating expenses, which extended a downward trend dating back to 2007. The main savings made by PFMCs were in expenses related to purchased services and to consumption. In addition to two PFMCs that made a profit during the last four years, one other PFMC was profitable in 2010. The other three companies continued to be loss-making. This division between profitable and loss-making PFMCs does not, however, reflect the current efficiency of these companies, since it is affected to a significant extent by how they account for the large initial costs related to intermediary commissions. Whereas some companies opted for accelerated amortisation of these costs within the first years after the system came into operation, others spread their amortisation over a longer period.

Chart 59 Current value of the pension unit by type of fund



Source: NBS.

2.3.2 SUPPLEMENTARY PENSION SAVING

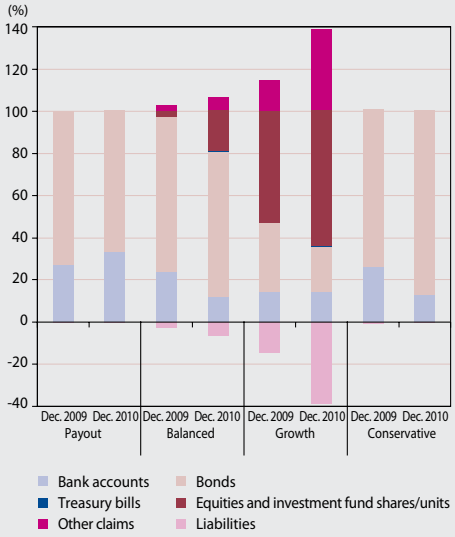
The number of participants in large contributory funds declined

The number of participants in the supplementary pension system (Pillar III) declined by almost 8,000 in 2010, all but wiping out the increase recorded in the previous year. Pillar III of the pension system had a total of 850,000 participants as at the last day of the period under review. Of that number, 94% were in the saving phase, i.e. they were enrolled in the system's contributory schemes. However, the number of participants whose supplementary pension account has been switched to one of the payout funds recorded a sharp, approximately two-thirds, increase in year-on-year terms, to almost 54,000. The number of participants in con-

tributory funds fell slightly, to 29,000. As many as three of the four most significant contributory funds (with general investment strategies) reported an appreciable drop in participants. By contrast, the number of participants in all of the smaller contributory funds (with more specialised investment strategies) increased in year-on-year terms. A total of three SPMCs had fewer participants enrolled with them at the end of 2010 than at the end of 2009, and the other two SPMCs had more participants. Looking at the market shares of SPMCs by number of participants, two of the companies experienced a quite significant change, with one recording a 9% increase in participants and the other a 14% drop.

The more or less linear increase in the net value of assets under management in the sector continued in 2010. The net asset value rose by €98 million, which was marginally lower than in 2009 and almost identical to the 2008 increase. As at the end of December 2010, the size of the sector as measured by net asset value was €1,145 million. As regards the distribution of assets between contributory and payout supplementary pension funds, contributory funds continued to have by far the largest share in 2010, as they did in the number of participants. The growth in net asset value recorded by each SPMC was close to the sectoral average of 9%.

Chart 60 Structure of funds assets by main forms of investment in different fund types



Source: NBS.

Fund assets in the form of equities and investment fund shares/units increased sharply

The aggregate portfolio of funds in Pillar III of the pension system underwent relatively substantial changes during 2010. Not only did the basic structure of the asset classes change, certain other parameters of the portfolio changed as well.

During 2010, the largest component of fund assets at the sectoral level was bonds. In the previous two years, these securities had basically absorbed all new contributions from Pillar III participants as well as a proportion of the stock of bank deposits, but this was not the case in 2010. The amount of bonds in the system stagnated throughout the year, and, with the net asset value increasing, their share fell by 5 percentage points to 67%. The trend decline in the amount of funds held with banks in current and term accounts continued in 2010, from almost one-quarter at the end of December 2009, to only 13% at the end of the year under review. By comparison, bank deposits accounted for as much as one-half of fund assets at the end of 2007. Nevertheless, the most significant change in the portfolio was the rapid rise in the share of equities and investment funds. Before 2010, the weight of these assets had not exceeded 5%, but in that year they became a clearly preferred investment option for Pillar III funds. As at 31 December 2010, their share stood at 20%, making them the second largest asset class in Pillar III funds, after bonds. They increased by €183 million, of which investment fund shares/units accounted for €138 million and equities for the rest. Since around 40% of the purchased investment fund shares/units were in funds other than equity funds (mainly bond funds), the increase in the sector's exposure to equities markets did not correspond to the whole amount of the rise in these securities. While assets in the form of equities and investment fund shares/units increased as a share of the portfolios of most contributory funds, their share in the aggregate portfolio was largely influenced by two large contributory funds that accounted for the bulk of the Pillar III funds' new purchases of these assets in 2010. As regards balanced con-

tributory funds – in which the majority of participants in the supplementary pension system are concentrated – the proportion of equities and investment fund shares/units in their portfolio matched that in the sector's portfolio. In growth funds, equity investments constituted the largest item of the asset portfolio in the previous period, and in 2010 their share recorded a year-on-year increase of 10%, to 64%. As for payout and contributory funds with a conservative investment policy, they remained without any equity exposures.

The inclusion of a large volume of equities and investment fund shares/units in the portfolio contributed substantially to the rise in the proportion of assets denominated in foreign currencies. The amount of foreign exchange assets more than quadrupled during the year, to stand at 13% of the net asset value of funds in the sector. In some funds, this ratio was far higher, up to a maximum level of almost half the net asset value of the fund. The rise in foreign currency assets was accompanied by a more intensive utilisation of currency derivatives in order to reduce open foreign exchange positions.

Duration of the debt securities portfolio increased

In 2010, the bond portfolio of contributory funds recorded an increase in the weighted average residual maturity of its bond holdings. In the aggregate portfolio of contributory funds in the sector, the average maturity increased by around a half, to stand at 4.3 years at the end of the period under review; the average duration of bonds in these funds increased as well. The variability of the average residual maturity of the bond portfolio of contributory funds was relatively large, ranging from 1.5 years right up to 11.5 years. In the case of payout funds, the residual maturity period was relatively short and had a decreasing tendency.

Turning to the distribution of bonds by type of issuer, it also underwent a certain change in 2010. The proportion of debt securities issued by banks and financial institutions fell by around a quarter, to 30%. By contrast, the share of government bonds increased to 57%, further augmenting their position as the largest component of the bond portfolio. Investor demand for corporate bonds also rose slightly.

With one exception, Pillar III funds had zero exposure to government bonds issued by the four euro area countries hardest hit by sovereign crisis. Even in the fund that was so exposed, the share of these securities in the fund's overall assets did not exceed 1%.

An overview of the changes that took place in the Pillar III funds in 2010 indicates that these funds are becoming more sensitive to adverse movements in all the main market factors, whether equity indexes, interest rates or exchange rates.

Performance of contributory funds fell by a half in comparison with 2009

Although funds undertook a greater degree of risk in 2010, their performance did not improve as a result. In the case of both payout and contributory funds, the average annual return fell year-on-year, to 1.5% and 1.9%, respectively, as at 31 December 2010. While the performance of payout funds declined only slightly, the return on contributory funds as a group was only around a half of the return made in 2009. The lowest return recorded by any fund was 0.2%.

Sectoral profit slumped amid rising operating expenses

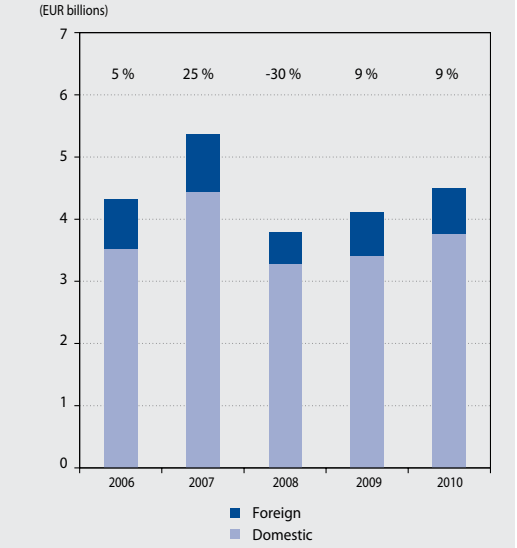
The profits of SPMCs in 2010 were far lower than in the previous year. Their aggregate profit slumped by 46%, to €4.3 million, similar to the level in 2008. Net income from fees and commissions declined, albeit not to a significant extent. The main cause of the worsened financial results was operating expenses, which surged by 22%. This included staff costs rising by as much as one-third. Nevertheless, the rise in the sector's operating expenses was largely attributable to a single SPMC. The slump in profits of three SPMCs was to some extent counterbalanced by a doubling of the profit of one SPMC. The fifth SPMC, which has been loss-making over a long period, managed at least to reduce its loss in 2010.

2.4 COLLECTIVE INVESTMENT

In 2010, the net asset value of collective investment funds was influenced not only by the upturn in macroeconomic developments, but also by certain financial market events, term deposit rate movements, and the performance of investment funds during the period under review. A net sales-driven rise in the net asset value of investment funds was mainly seen in the first months of the year, when interest rates on bank term deposits fell. Net asset value grew more slowly during the rest of the year, largely due to the negative net sales in money market funds, which lost some of their dominance in the sector. In the second half of the year, the performance of money market funds declined and banks gradually raised interest rates on term deposits. Not only were households buying investment fund shares/units, so too were institutional investors to a substantial extent. The asset structure in different categories of mutual funds changed only slightly. The performance of most categories fell in comparison with 2009. The sector's profitability rose by one-third, mainly due to a rise in the amount of assets under management from which the management fees are calculated.

The development of the collective investment sector in Slovakia in 2010 was shaped mainly by two factors. There was, on one hand, the improving macroeconomic situation both on the domestic front and abroad, and the environment of persistently low interbank rates, a combination that may have led to a revival of demand for investment funds. On the other hand, the outbreak of sovereign crises in the euro area had the opposite effect, as it bought uncertainty back in financial markets and was detrimental to the performance of certain asset classes. The period under review did not see the entry into force of any legislation or regulatory measures that would have substantial effect on developments in the sector. Looking at the fundamental indicators of the collective investment sector in Slovakia, it may be stated in general that its performance in 2010 was approximately similar to the previous year. A closer examination, however, reveals several relatively substantial differences that characterised the sector during these two years.

Chart 61 Net asset value of investment funds sold in Slovakia



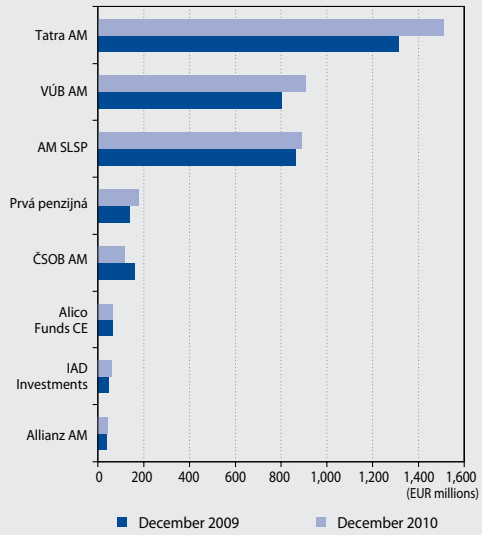
Source: NBS.
Note: The percentage above each bar represents the annual percentage change in the sum of the amount of domestic and foreign funds.

Rapid growth in net asset value at the beginning of the year was followed by slower growth in the second half

The amount of funds under management in domestic and foreign collective investment undertakings increased very rapidly in the first four months of 2010. This followed on from developments in the second half of 2009. If such a trend were extrapolated for the whole year, the net asset value growth in the sector would have been up to 20%.

Positive net sales in this period were accompanied by the positive performance of investment funds. This trend was not maintained. In May and June, probably under the effect of the escalating crisis in peripheral euro area countries, net sales slowed to approximately zero and the value of certain assets in investment fund portfolios declined. This altogether led to a temporary drop in the amount of assets under management in the sector. In the second half of the year, the situation stabilised and purchases of investment fund

Chart 62 Net asset value of domestic asset management companies' investment funds



Source: NBS.

shares/units were once again exceeding redemptions. As a result, the net asset value returned to a growth trajectory, albeit at less then half the level recorded at the beginning of the year. Furthermore, it was only in the domestic segment of the sector that this increase occurred. Among foreign collective investment undertakings, net asset value continued to stagnate in the third quarter and then it declined towards the end of the year, as a result of the redemption of a proportion of fund shares/units.

The amount of assets under management in the sector during 2010 increased by €377 million, to stand at €4,497 million by the end of the period. The percentage increase from the beginning of the year represented 9.1%, which is only a few tenths of a percentage point more than in 2009. However, the sum of the increases in net asset value over the last two calendar years does not represent even half of the size of the sector's contraction during the spate of redemptions in 2008. The bulk of the overall increase in managed assets 2010 was reported by domestic asset management companies, whose share of the total therefore rose slightly, to 84%. This contrasted with the previous year, when the amount of assets in foreign collective investment undertakings increased more rapidly than those in domestic investment funds, both in percentage and absolute terms.

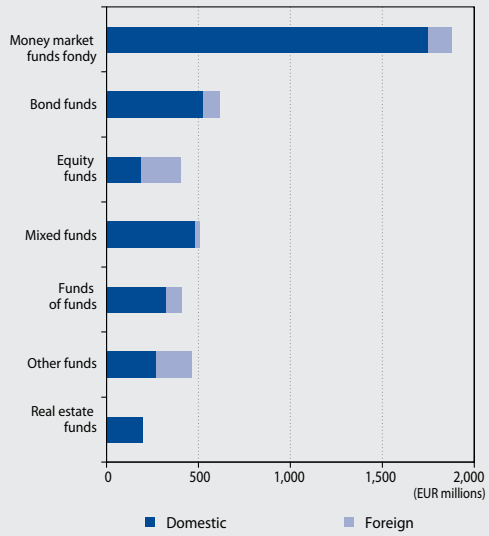
Assets under management increased in all but one of the asset management companies

Of the eight domestic asset management companies operating in the market, seven had more assets under management at the end of 2010 than they did at the beginning of the year. The increases reported by these asset management companies ranged from 3% to 32%. The other company recorded a drop of 25%, part of a longer-term trend that over a period of three years saw the amount of assets under its management slump by around 50%. In terms of assets, the sector continued to be dominated by the three largest asset management companies. From the point when the sector began to recover in the second quarter of 2009, these companies have been regaining their market shares. Although their combined market share fell slightly as a result of the crisis at the turn of 2008 and 2009, it has never fallen below 85% in recent years. One of these companies would, however, have recorded a year-on-year decline in assets under management had adjusted net asset value been taken into account.

The market continued to be dominated by several large funds

The gradual consolidation among investment funds (through mergers or dissolutions) that was a trend during 2008 and 2009 came to an end in 2010. In fact, the overall number of investment

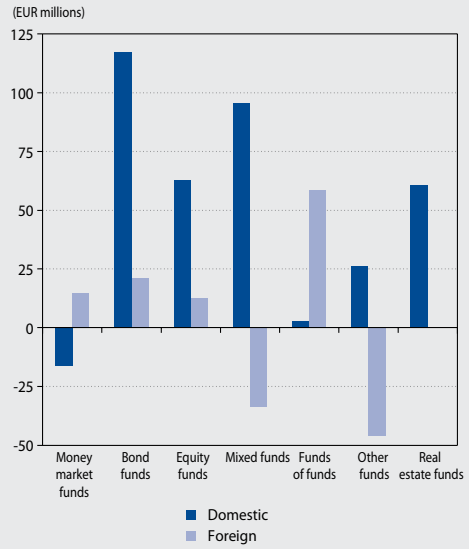
Chart 63 Net asset value by category of investment fund



Source: NBS.

funds offered by domestic asset management companies rose by two, to end the year 78. Five new funds were established, one was dissolved, and three others merged to form a single fund. The distribution of managed assets among domestic funds is marked by a relatively high concentration and the presence of a small number of funds that dominate the market. The ten largest investment funds manage 60% of the total assets under management in the sector, and the twenty largest funds account for 80% of the total. The change over time in each of these ratios has been minimal. The group of investment funds managing the large majority of assets comprises mainly the money market funds and bond funds of the three largest asset management companies by amount of assets under management.

Chart 64 Year-on-year changes in the amount of assets under management by fund category



Source: NBS.

Changes in net asset value varied between categories

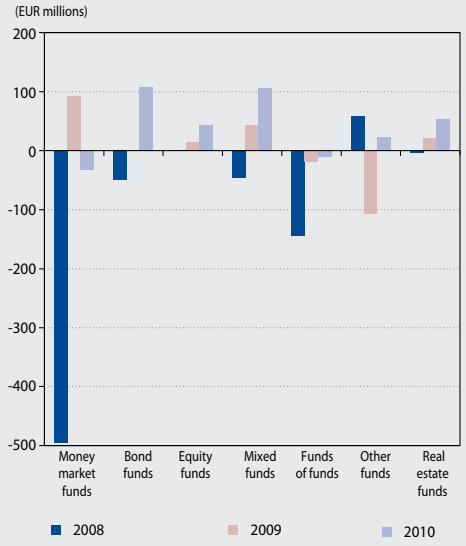
The changes in net asset value in domestic investment funds differed markedly between categories. The most interesting situation was probably in money market funds, which are also the most significant funds in the domestic collective investment sector. During the months of January to April, their sales were at a solid level. From the beginning of May, however, until the end of the period under review, they were reporting negative net sales as households liquidated some of their positions in these funds. Given the timing of this turnaround in investors' behaviour, it can be assumed that the crisis in peripheral euro area countries played a certain part; it may have influenced investor sentiment towards investing savings in this way. At the end of the first half of the year, this behaviour of households was evident even to a larger extent in other categories.

In the second half of the year, however, the sales of money market funds and other funds took diverging course. On one hand, households continued to redeem money market funds to a greater extent than they purchased them, the result being that the cumulative net sales of these funds for the year as whole were negative. On the other hand, household investments in other categories of funds during the second half of the year were almost twice as high as the amount of withdrawals from money market funds. Institutional investors made a significant contribution to the growth in assets of other funds (the institutional investors were led by SPMC funds and also included insurance companies, and investment funds both domestic and foreign). As a result of the net asset value of money market funds declining by 0.1% year-on-year and the NAV of other funds rising, the share of money market funds in the sector's overall NAV fell by 4 percentage points to 42%.

Bond funds recorded an upturn in 2010, after two years of negative net sales or stagnation. Cumulative net sales rose continuously throughout the year. It should be noted, however, that a large part of these movements occurred in a single investment fund. In addition to household investors, SPMC funds of the pension system's third pillar accounted for almost one-half of the new investments in these funds.

Looking at net asset value in the different fund categories, the largest rise of almost 50% in the period under review was recorded by equity funds, which further entrenched the trend of positive net sales that was observed in 2009. As much as one-third of the rise in the amount of assets was attributable to returns on investment. Demand for fund shares/units in this category came almost entirely from institutional investors. These included certain SPMC funds, domestic investment funds, and foreign investors from the financial sector. It is worth noting in this regard

Chart 65 Net annual sales of domestic investment funds by category



Source: NBS.

that the volume of purchases was at its peak in May and June, when equity indices were falling sharply.

Mixed funds reported solid and steady sales throughout the year, with most of the demand coming from households. But although this category includes a large number of funds, the trend in its sales was set by just four.

The fund of funds category showed little activity, whether in sales or redemptions of fund shares/units. Although cumulative net sales were slightly negative, the returns on the portfolio ensured a modest year-on-year increase in net asset value.

Other funds experienced diametrically different half-year periods in 2010. In the first six months, the redemption of existing fund shares/units far outweighed the issuance of new ones. In the second half of the year, however, the situation was turned around by the sales of two funds. Overall annual cumulative sales were positive, and thus offset, at least to some degree, the outflow of funds from the previous year.

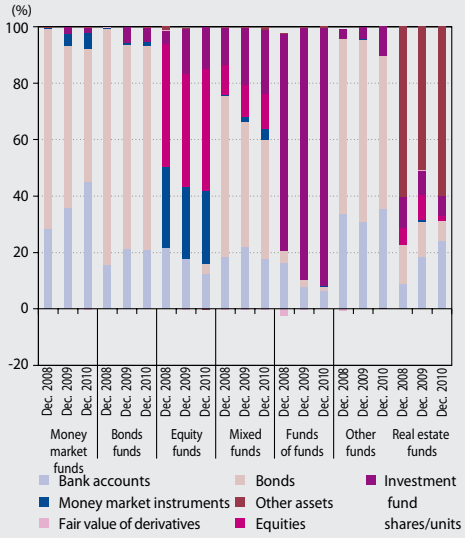
Real estate funds made a greater breakthrough in 2010, after recording a gradual rise in asset volume in previous periods. With higher net sales, these funds saw their net asset value surge by more than 40%. Almost the whole increase, however, was concentrated in one fund, which especially at the end of the year reported one of the highest levels of sales in general. This was achieved through a marketing campaign centred on waiving of the entry fee.

Among foreign collective investment undertakings, net asset value growth was reported in money market funds, bond funds, equity funds and, to the greatest extent, funds of funds. As for mixed funds and other funds, they reported negative net sales.

Asset structures in different investment fund categories underwent only a small change

Regarding the asset class structure of domestic investment fund portfolios in 2010, no significant changes in individual categories were reported; only a gradual realignment of investments was observed. In money market funds, the trend of selling bonds and reinvesting the proceeds in term accounts continued. Equity funds, too, followed on from 2009 in raising the share of profile investments in equities and investment fund shares/units, at the expense of other, more conservative asset components. In real estate funds, participating interests in real estate companies increased as a share of the asset portfolio. Hardly any changes occurred in the other categories.

Chart 66 Asset structure of domestic investment funds by fund category



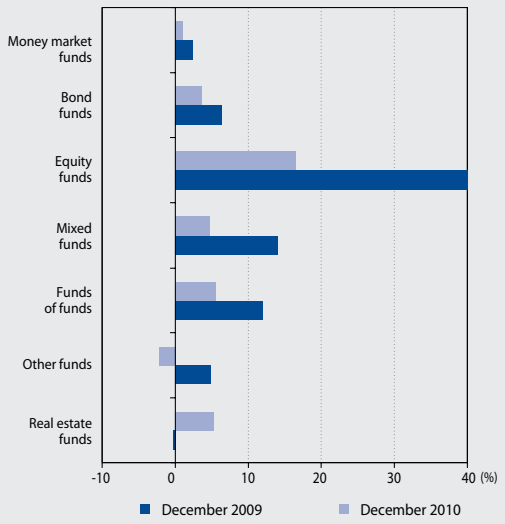
Source: NBS.

Performance of investment funds was weaker than in 2009

The year-on-year performances of investment funds in 2008 and 2009 was erratic in both positive and negative senses, reflecting the sharp slump in asset prices and their subsequent marked rise. In 2010, by contrast, the situation returned to greater normality. For investors in investment funds, the average rate of return in the sector as a whole in 2010 was 3.7%, less than half of the figure for 2009. Such disparity in performance between the two years was recorded in most investment fund categories. By far the highest average rate of return was in equity funds, at 16.5%. That figure was even slightly higher than the appreciation of the benchmark S&P equity index. Three other categories of funds – mixed funds, funds of funds, and real estate funds – had a similar average return of around five percent. In the case of mixed funds and funds of funds, this result was largely due to their partial exposure to equity markets, whether directly, or indirectly through investments in fund shares/units. The performance of more conservatively profiled investment funds in the categories of bond funds and money market funds was influenced mainly by bond market developments. At least a few sectors of the bond market were marked by the relatively high volatility triggered by the sovereign crises in the euro area. Money market funds made an average annual return of 1.1% for the year and bond funds made 3.7%. Due to inflation, the return on money market funds was insufficient to maintain purchasing power. For investors of foreign collective investment undertakings located in Slovakia, the rate of return in all fund categories apart from other funds was higher than the return in the corresponding categories of funds offered by domestic asset management companies. As regards money market funds and to a lesser extent equity funds, it would be false to suppose that the domestic asset management companies opted for a lower-yielding investment strategy. The better performance of foreign investment funds in these two categories was supported by the depreciation of the euro against the foreign reference currencies of certain investment funds. The largest spread between the rate of return on foreign investment funds and on domestic funds was recorded in bond funds.

Looking at fund performance over a time horizon of, for example, three years, the situation differs substantially from that in 2010. Equity funds, mixed funds, and funds of funds remain in negative territory over this period, having still not recouped all the losses incurred at the peak of the financial crisis. This is most pronounced in the case of equity funds. The return on money market funds, more than 2% p.a., is twice as high as the return on bond funds. Real estate funds are clearly the best performing category, offering an average return of 3.9% p.a. Over the longer time horizon, too, domestic bond funds, equity funds, mixed funds and funds of funds are to a certain extent outperformed by their foreign rivals.

Chart 67 Comparison of average annual returns on investment funds by fund category



Source: NBS.
Note: Average return weighted by NAV of funds.

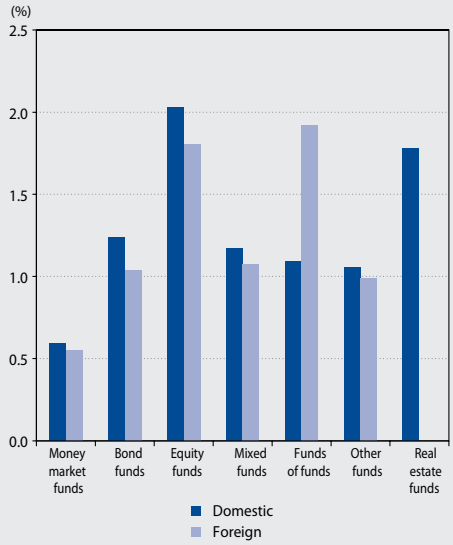
Money market funds had the lowest fees, equity funds the highest

For investors in investment funds, the level of their net nominal return is determined not only by the allocation of assets, but also by the different fees paid from the fund's resources. Among the various types of fees and charges that are paid by investment funds, and therefore indirectly by their investors, the most sizeable is the management fee paid to the asset management company. A much smaller, but still sizeable fee is the depository fee. The other charges account for a relatively marginal share of the total. Investors in money market funds have clearly the lowest costs, at around 0.5% of the average annual net asset value. At the other end of the spectrum are

equity funds and real estate funds, with fees of about 2% and 1.8%, respectively. For investors in funds of funds and other funds, the average annual fee burden is around 1 percent. In the case of bond funds and mixed funds, it is around half a percentage point more.

A comparison of the cost level for investors with domestic investment funds and those with foreign collective investment undertakings shows that the foreign rivals have lower costs in equity funds, bond funds and, to a lesser extent, money market funds. On the other hand, domestic funds are much cheaper for investments in funds of funds. The development of investment fund fees over the past three years has been stable.

Chart 68 Average level of management and depositary fees in different fund categories



Source: NBS.
Note: Average sum of management and depository fees weighted by NAV funds.

The only notable trend can be seen in domestic equity funds, where fees have gradually risen. As for foreign collective investment undertakings, fee costs have risen in funds of funds and fallen in mixed funds.

Profits in the sector driven up by growth in amount of assets under management

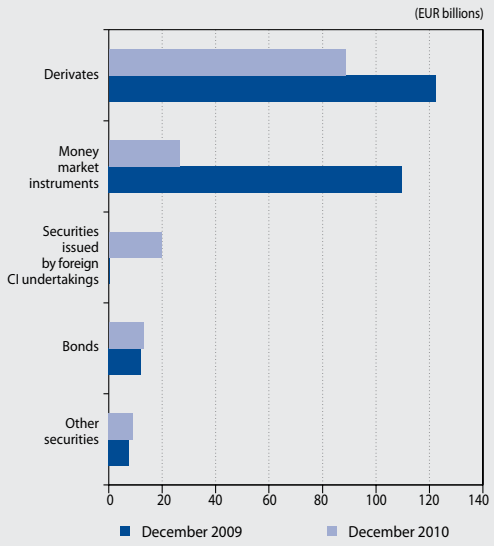
Profits of domestic asset management companies improved somewhat in 2010, after their slump in 2009. This turnaround was mainly the result of a return to growth in the amount of assets under management, which determines the amount of management fees and represents as much as 70% of the overall income of the companies. The sector's profit increased by 32% year-on-year, to €6.55 million. That, however, is still less by a third in comparison to the 2008 profit. The effect of the 20% rise in income from all the types of fees and provisions that asset management companies charge investors was to some extent dampened by the even larger increase in expense charges. The sector's operating expenses remained at the same level as in the previous year, but set against the average net asset value in the sector, they imply an increase in operational efficiency. Another measure showing improved efficiency is the amount of euro that asset management companies managed to earn on each thousand euro under their management; it increased by €0.25 year-on-year, to €1.81. In 2008, however, this figure stood at €2.21. As many as seven domestic asset management companies contributed to the upturn in the sector's profit, although the year-on-year profit growth was somewhat unevenly spread at the level of the individual companies. One asset management company ended the year with a loss, the fourth in a row since its establishment, and also its heaviest.

2.5 INVESTMENT FIRMS

The volume of securities trading in 2010 declined by an average of 38% in comparison with the previous year. Transactions in financial derivatives and money market instruments recorded the sharpest fall. The amount of assets managed by companies holding an investment firm licence rose by 13% year-on-year.

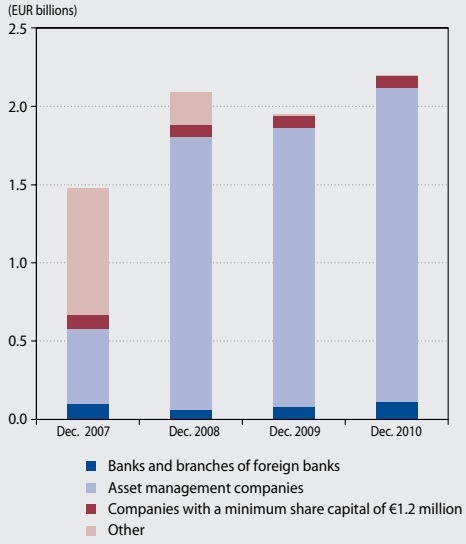
The aggregate amount of transactions in equity securities (excluding derivatives) fell by 48% year-on-year. This decline, however, was almost entirely attributable to the dissolution of a single company, an intermediary in money market transactions which had a significant market share. By contrast, trading in securities issued by foreign collective investment undertakings increased, and these transactions were conducted almost exclusively through banks. As for transactions in financial derivatives, their amount declined by 28% year-on-year.

Chart 69 Transactions broken down by investment instrument



Source: NBS.

Chart 70Amount of customer assets managed by licensed entities



Source: NBS.

RISKS IN THE SLOVAK FINANCIAL SECTOR

3 RISKS IN THE SLOVAK FINANCIAL SECTOR

Household credit risk eased in 2010, and there were substantial year-on-year improvements in a number of economic indicators, from economic growth to retail sector sentiment. The unemployment situation remained uncertain. The structure of unemployment growth underwent a change compared to 2009, with a sharp rise in the number of unemployed from middle- and high-income groups. This trend could escalate the risk in banks, since a majority of loans are provided to precisely these two retail groups.
The loan repayment burden of households declined amid a reduction in interest rates. This was reflected in the banking sector's portfolio of new customers, but also, given the trend of taking out new loans to refinance old loans, in the portfolio of existing loans.
On the other hand, interest rates could in future put upward pressure on household credit risk.
A potential rise in rates would have the effect of increasing households' loan repayments. The key factor will be the extent to which any potential rate hike passes through to customer rates. The risk may be mitigated by rising competition in the housing loan market as well as by the trend increase in interest rate fixation periods for new loans, which was observed in 2010.
Although 2010 brought about preconditions for an easing of credit risk in several segments of the corporate sector, the level of this risk in the Slovak banking sector remained significant, owing to the size of banks' exposures to firms, the relatively heavy concentration of loans, and the high sensitivity of firms to macroeconomic developments.
The size of the credit risk during 2010 was affected by several factors, notably the improvement in the overall economic situation and the upturn in business confidence in both Slovakia and its main trading partners. What may also be seen as a positive trend from the view of credit risk is that corporate sector indebtedness stabilised. Further positive signs appeared in the commercial real estate market, although the risk in this segment continues to be very significant.
Liquidity risk in the banking sector remained largely unchanged in 2010. The amount of liquid assets was adversely affected by the ending of the growth trend in government bond investments in the middle of the year. There was, moreover, an increase in the share of foreign bonds, including speculative-grade bonds. In certain banks, the share of short-term household deposits in total deposits also went up, and these funds were invested in illiquid assets. In the banks concerned, this exacerbated the maturity mismatch between assets and liabilities with a duration of up to one month, which could make them more dependent on the stability of these funds. In the banking sector, the increase in customer deposits with an agreed maturity of more than one year can be seen as a positive trend.
Market risks in the financial sector in 2010 were mainly affected by a sharp rise in uncertainty in the markets in the second quarter of 2010. This was caused mainly by the worsening situation in Greece and in several other EU countries. The situation calmed down somewhat in the second half of 2010, and this was reflected mostly in the lessening of risk levels in equity portfolios. Although Ireland's debt-financing problems caused an increase in uncertainty in November 2010, this increase had only a limited extent.
The most significant of the market risks in the banking sector is that of the effect of interest rate movements on the banking book. Furthermore, certain banks have a relatively large proportion of their assets invested in bonds, which fell sharply in value during 2010. Since the bonds are included in the available-for-sale and held-to-maturity portfolios of financial instruments, the decline in their prices did not reflect either the level of reported profit or the value of own funds, and the banks did not consider the drop in price to be caused by the change in credit risk.
In the financial market sectors, the most significant risks from the systemic view are the risk of a further deterioration in the situation of certain EU countries, the risk of a period of persistently low interest rates, and the risk arising from the concentration of loans to a single counterparty.
The insurance sector would appear to face the greatest risk from any long period of low interest rates, given the high guaranteed interest rate in life insurance. This risk would result mainly in a low rate of return when reinvesting maturing assets. Insurers could also be adversely affected by a slide back into recession, by counterparty risk, or by the effect of competition on the calculation of premiums in motor

third-party liability insurance. As for debt securities revalued at fair value, their share in insurers' balance sheets increased.
The risk exposures of PFMC funds remained at a very low level throughout 2010. The only negative impact could come from investments of certain funds in securities issued by countries with higher risk; this would, however, be relatively small given the short residual maturity of such securities.
By contrast, a substantial increase in risk was recorded in several SPMC funds, including funds with the highest market share. The funds substantially increased the share of their investments in equities and equity investment funds. At the same time, their bond portfolio became more sensitive to interest rate movements.
As regards investment funds, their exposure to risks remained largely unchanged during the second half of 2010. Their portfolios thus became slightly less risky, given the easing of uncertainty in equity markets.

3.1 CREDIT RISK OF HOUSEHOLDS IN THE BANKING SECTOR

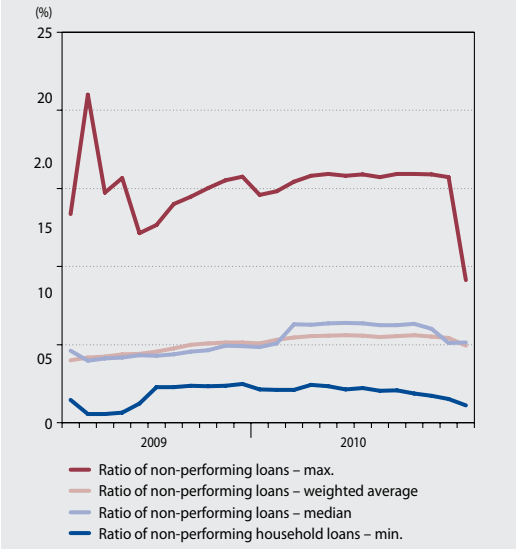
Non-performing loans increased slowly in 2010

The credit risk of households eased during the course of 2010. The banking sector reported an increase in non-performing household loans in 2010 which was substantially lower compared to 2009. The ratio of non-performing household loans was 4.9% at the end of 2010. Another positive aspect is that these trends occurred more or less throughout the sector and were not confined to just a few banks. Not only was the weighted average for the sector lower at the end of 2010 than at the end of the previous year, so too was the highest ratio in the sector.

It should be noted, however, that this positive development was partly attributable to the sale or write-off of non-performing loans in 2010. It was only in the last month of the year that sales and write-offs of non-performing loans caused a significant reduction in the amount of these loans (for further details, see the part *Financial position of the banking sector,* Chart 46).

In most banks, the increase in non-performing loans would have slowed even if none of these loans had been sold or written-off.

Chart 71 Ratio of non-performing household loans



Source: NBS.

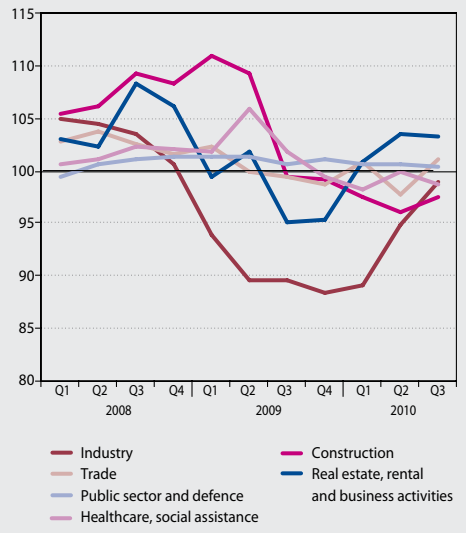
Positive trends in employment; changing structure of unemployment growth

The easing of household credit risk in 2010 was influenced by several factors. It was positively affected by various economic indicators, from a recovery of economic growth to an improvement in retail sector sentiment.

The debt servicing ability of households was heavily influenced by the conditions in the labour market. The most pronounced improvement was in employment, particularly in industry, which is the sector with the largest number of employees. Indicators of expected employment also improved, implying that the most promising sectors for employment growth are industry and trade. On the other hand, employment in construction, services, and the public sector is expected to show the opposite trend.

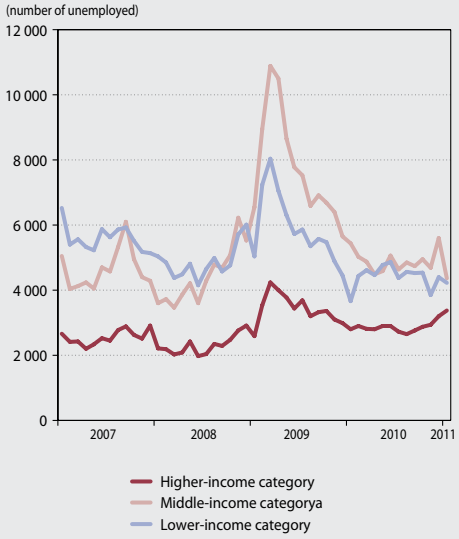
On the whole, the trends in unemployment were rather mixed. From the view of credit risk, the changing structure of unemployment growth is important. At the peak of the crisis in 2009, the newly unemployed were mostly from low- and middle-income categories. Towards the end of 2010, however, people from these categories accounted for a declining share of the newly unemployed, while

Chart 72 Employment in selected sectors



Source: SO SR.
Note: Index of year-on-year changes – same period of the previous year = 100.

Chart 73 Unemployment growth



Source: Central Office of Labour Social Affairs and Family.

the share of people from the higher-income category rose quite substantially. Looking at the unemployed in terms of employment classification, a smaller increase was recorded in the categories of machine operators and tradesmen. By contrast, unemployment growth increased in the categories of managerial employees and technical, teaching and health care professionals. This trend is particularly important in view of the fact that the majority of the outstanding amount of loans is concentrated in the middle- and higher-income categories.

Fall in interest rates in 2010 had a mitigating effect on credit risk

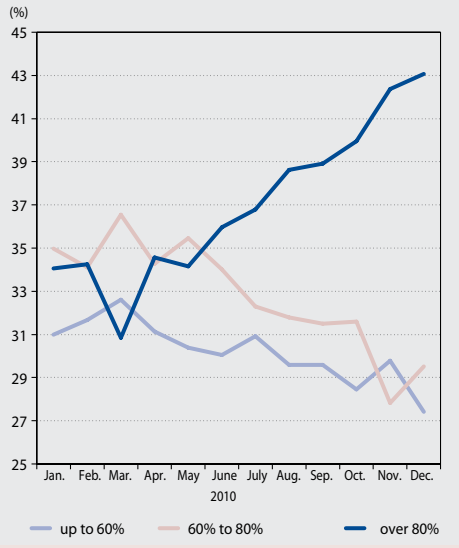
Credit risk was also reduced by the effect of declining interest rates, which allowed customers to reduce their overall loan repayment burden. Since loans with short interest rate fixation periods still accounted for a high share of total loans, the given conditions allowed existing customers to take advantage of low interest rates. From the end of 2009 and during 2010, many customers refinanced an old loan by taking out a new loan under a more favourable interest rate.

Looking ahead, the main risks will be a potential rise in interest rates and the setting of lending standards at an inappropriate level

Just as the decline in interest rates during 2010 had a mitigating effect on credit risk, the potential and expected rise in interbank interest rates will have the opposite effect. The key factor will be the extent to which any hike in rates passes through to customer rates.

The risk of a rise in interest rates will be tempered by the fact that the vast majority of interest rates on loans arranged in 2010 had a longer fixation

Chart 74 LTV ratios for new loans



Source: NBS.
Note: the left-hand scale shows the LTV ratio for new housing loans.

period, predominantly of three years. The rise in market rates will probably be mitigated by competition, which became much stronger in the last months of 2010.

Where, however, banks have provided loans at interest rates that are inappropriately low for the quality of the customer, they may seek to increase their margin when the rate fixation periods are reset.

The increase in competition that led to a decline in customer rates was also reflected in the easing of other lending standards. Regarding the riskiness of loans, the extent of the easing was of importance. In regard to the loan-to-value (LTV) ratio, however, banks' standards did not follow developments in the real estate market. While residential property prices were stagnating or declining in 2010, the higher LTV ratio exposed banks to a relatively significant risk.

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

Positive effect of economic developments

The positive economic developments in Slovakia and in the destination countries for Slovak exports created conditions for an increase in activity in the Slovak business sector. This was reflected in an improvement both in business confidence and in sales growth.

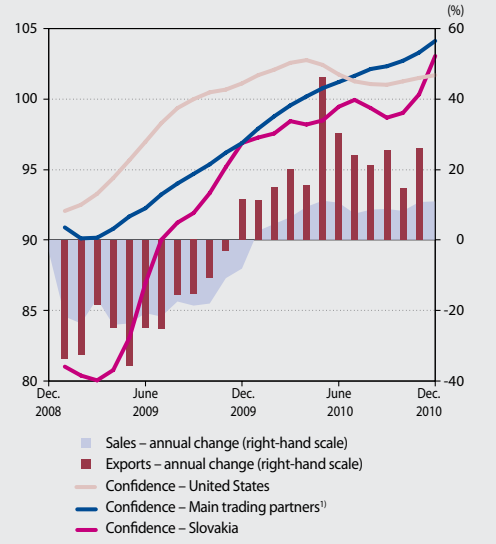
The stronger economic environment also elicited a reaction from particular components of the economic sentiment indicator. The favourable effect of both domestic and external demand on confidence in industry is particularly evident. In the construction sector, where confidence has long been in negative figures, it is demand and expectations that pose a problem.

As regards the further growth of industry, what is also important is that new orders continued to record a year-on-year rise in the last months of 2010, and, therefore, allow for increasing assumptions for continuing growth in activity.

Banking sector exposure

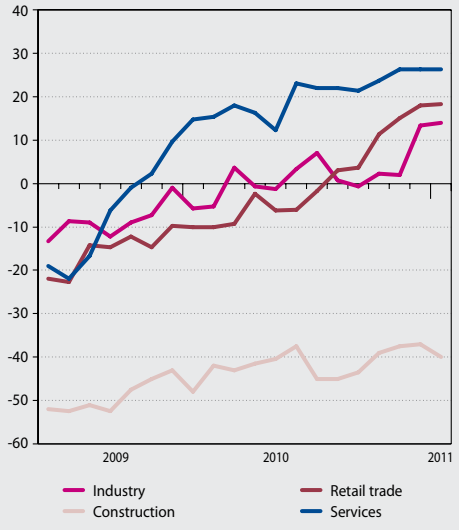
Although most sectors recorded a rise in sales, only a few managed to wipe out the losses from 2009. A positive aspect from the view of credit risk is that the Slovak banking sector was to a greater extent financing those sectors (and firms within those sectors) whose sales were the least affected by the crisis. Although no direct relationship between sales results and the non-performance of loans has been confirmed, the

Chart 75 Exports, business confidence and corporate sales



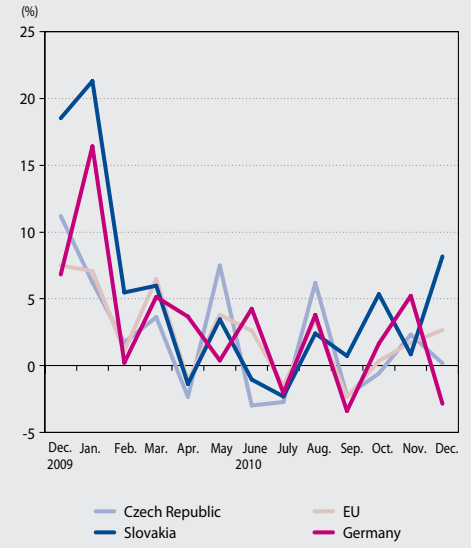
Source: OECD.
1) The index of Main export partners is a weighted index of the ten countries accounting for the largest shares of Slovak exports.

Chart 76 Economic sentiment components



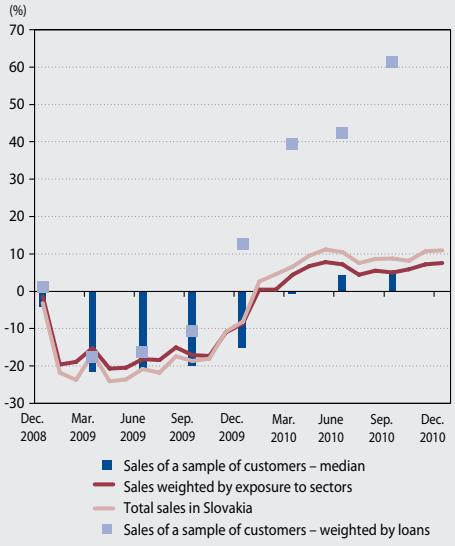
Source: SO SR.

Chart 77 Industrial new orders (year-on-year changes)



Source: Eurostat.

Chart 78 Sales in the corporate sector (year-on-year changes)



Source: SO SR.

fact that banks have a greater focus on more robust firms makes the banking sector as a whole less sensitive to the business cycle.

This trend is significant mainly because the Slovak banking sector has only limited involvement in the financing of export-oriented firms. The structure of the Slovak banking sector's corporate loan portfolio was also reflected in a further decline in loans at risk.[14]

Risk in commercial real estate

Loans arranged for the construction of commercial properties continue to be a significant source of credit risk. The reason lies not only in the level of exposure and concentration, but also in the fact that commercial property market has weak transparency and very low liquidity.

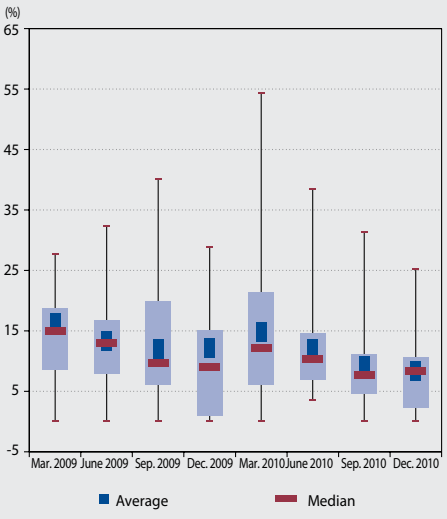
In general, the office segment stabilised to some extent in 2010. Amid unchanging prices and constant supply of office space, the office vacancy ratio gradually declined. Nevertheless, the office segment remains highly sensitive, particularly due to strong market concentration on both the supply and demand sides.

The residential segment also recorded a slight improvement in the last quarter, when the number of sold apartments increased and their overall supply fell. The main problem remains the still high number of projects that are struggling to sell apartments.

Outstanding amount of non-performing loans decreased

The positive trends in all business sectors passed through to the amount of non-performing loans to enterprises; firstly their pace of growth slowed and then, in the last two months of 2010, they

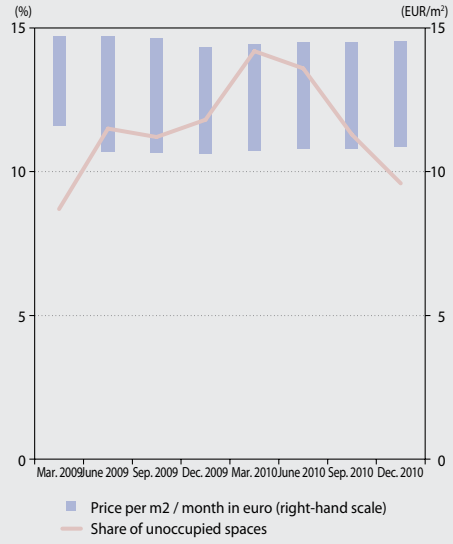
Chart 79 Loans at risk



Source: NBS.

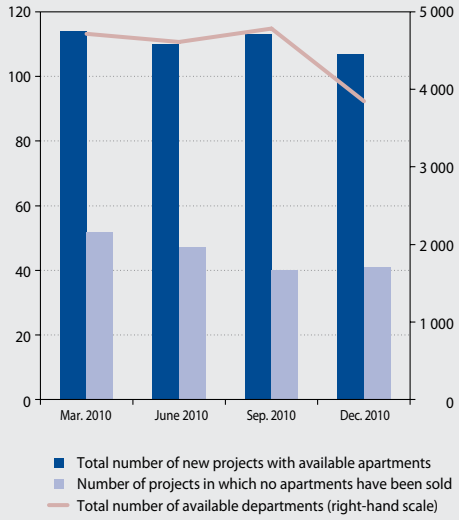
14 Loans at risk (LAR) – loans to enterprises that recorded a loss in the given quarter as well as a fall in sales of more than 30% compared to the same quarter of 2008. Loans at risk are expressed as a share of loans at risk in total loans to enterprises for which data on sales and profits are available.

Chart 80 Office segment of the real estate market



Source: Kingsturge, NBS calculations.

Chart 81 Residential segment of the property market



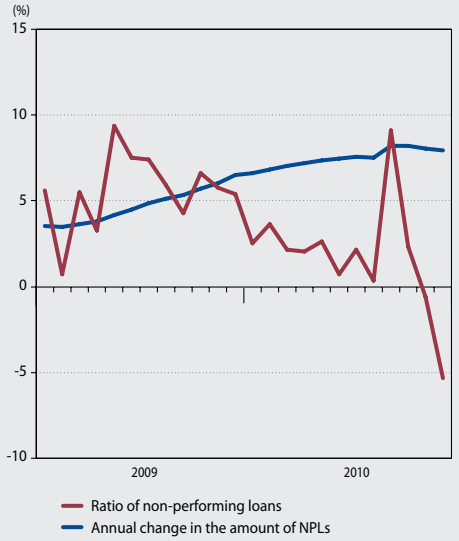
Source: Lexxus.

started to decline as several banks began purging their portfolios of bad loans, mostly by selling them and to a lesser extent by writing them off.

While this trend appeared in loans to most sectors, it was particularly pronounced in the sectors of transportation, chemical industry, wholesale trade and real estate.

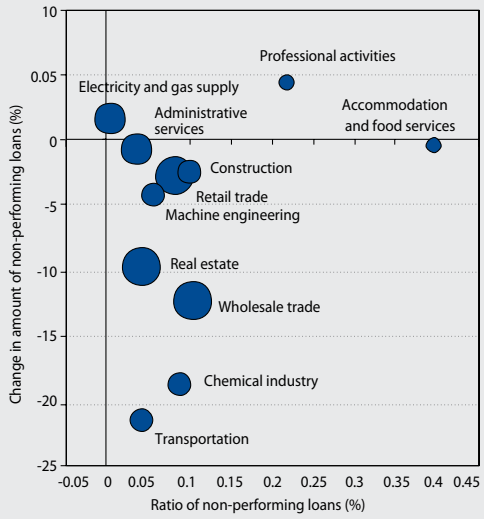
While loans to the hotels sector had the highest default rate, they were not sold or written off to a greater extent than other non-performing loans. This may be due to the time lag between the default and sale of such loans. .

Chart 82 Ratio of non-performing loans and year-on-year changes in their amount



Source: NBS.

Chart 83 Non-performing loan ratios in selected sectors



Source: NBS.
Notes: The size of each bubble corresponds to the outstanding amount of loans in the given sector.
The changes in amount on the vertical axis are for the period of the last three months.

3.3 LIQUIDITY RISK IN THE BANKING SECTOR

Balance sheet structure remained stable

The overall loan-to-deposit ratio remained largely unchanged, mainly due to stagnation in corporate lending. In the household sector, the trend of loans increasing by a greater margin than deposits continued.

As regards the overall structure of the aggregate balance sheet, a positive aspect is that the ratio of fixed and illiquid assets[15] remained comfortably below the regulatory limit of 1 during 2010.

No substantial change in short-term liquidity

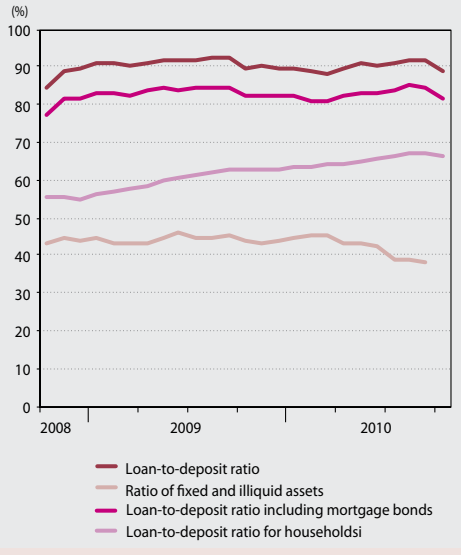
Short-term liquidity is monitored using the liquid asset ratio.[16] Its value was stable during 2010. In general, larger banks continued to report the lower ratios.

Liquidity risk in retail banks

For retail banks, it is especially important to be able to finance their long-term loans with stable funds and at the same time hold liquid assets in a volume sufficient to cover any negative developments.

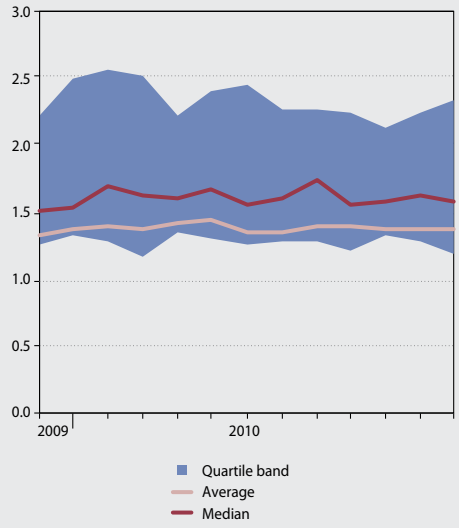
Although the current maturity mismatch between assets and liabilities became more pronounced in several banks, it is positive that most banks are still managing to finance long-terms loans with customer deposits. The mortgage bonds issued by banks have an appreciable role in this regard, since they increase the diversification and stability of loan funding.

Chart 84 Long-term liquidity ratio of the banking sector



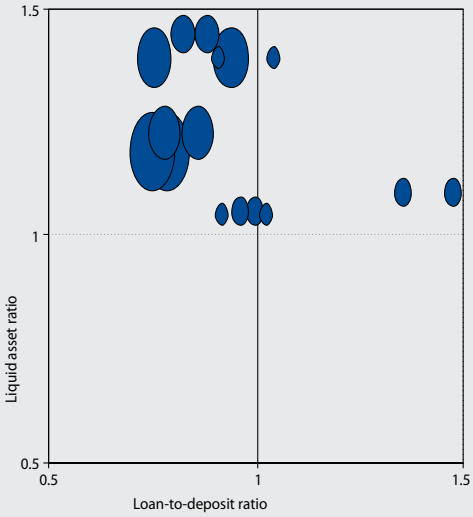
Source: NBS.

Chart 85 Liquid asset ratio of the banking sector



Source: NBS.

Chart 86 The liquid asset ratio and loan-to-deposit ratio in the banking sector



Source: NBS.
Notes: The Chart shows selected banks that are active in the retail sector.
The size of the bubbles corresponds to the bank's share in household deposits.
According to whether a bubble is full or empty, mortgage bonds issued by the bank either were or were not entered into the rate calculation.

15 *The ratio of fixed and illiquid assets is defined as the ratio of fixed and illiquid assets to selected own funds items. Its level should not fall below 1.*

16 *The liquid asset ratio is defined as the ratio of liquid assets to volatile liabilities over a horizon of one month. Its level should not fall below 1.*

3.4 MARKET RISKS IN THE FINANCIAL SECTOR

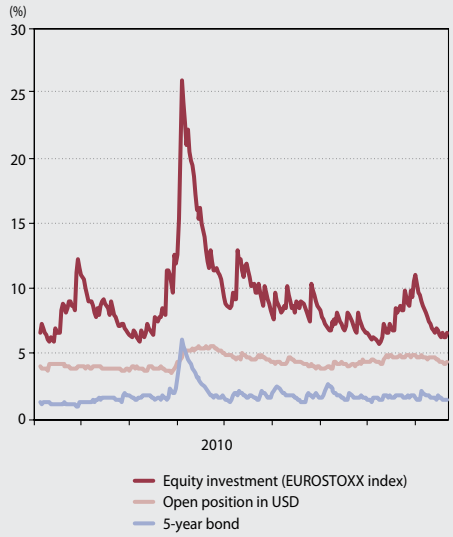
3.4.1 CHANGE IN RISKINESS OF MARKET FACTORS

THE RISKINESS OF THE MOST SIGNIFICANT MARKET FACTORS DID NOT INCREASE DURING THE SECOND HALF OF 2010

In the first half of 2010, the uncertainty in financial markets was heightened by the adverse situation in the market for government bonds of several EU peripheral countries. This uncertainty lessened during the second half of the year, which was reflected in the lower volatility (both historical and implied) of equity indices. The extent of risk aversion declined. The third quarter of 2010 saw stronger confidence in the interbank market, which returned to its level of the beginning of the year.

In November 2010, the markets again took a turn for the worse, largely in response to developments in Ireland and Portugal. Equities became slightly more volatile and the euro weakened. Before the year-end, however, the situation calmed down.

Chart 87 Value at Risk for investments in various types of financial instruments



Source: Reuters, ECB, NBS.
Notes: Data on the left-hand scale represent the loss (as a percentage of the given instrument) that would not be exceeded in 99% of cases over a period of 10 working days. This loss was calculated on the basis of risk factor volatility calculated using a GARCH model (1,1).
The calculation of potential losses on the five-year bond took into account the five-year swap rate and value of the iTraxx Europe 5Y, an index indicating the risk of credit spread movements.

Confidence in the interbank market ebbed again in the first months of 2011, owing mainly to the mounting risks in certain countries.

3.4.2 MARKET RISKS IN THE BANKING SECTOR

THE MOST SIGNIFICANT RISK TO THE BANKING SECTOR AS A WHOLE IS INTEREST RATE RISK

The most significant risk to the banking sector as a whole is interest rate risk in the banking book, since an increase in interest rates would result in a gradual drop in net interest income (interest rate fixation periods are shorter on the liability side than on the asset side of bank balance sheets). The degree of exposure to this risk depends, however, on the extent of competition in the banking sector. If faced with stiffer competition, banks would have to reduce their interest rate spreads, thereby exacerbating the negative effect of interest rate hikes on banks' profitability.

The exposure of banks to this risk can be assessed by estimating the impact of macroeconomic scenarios (including a rise in interest rates) on banks' net interest income; see the part *Macro stress testing of the Slovak financial sector*. These results indicate that in the case of almost all banks, a raising of interest rates would contribute to a reduction in their net profit, assuming that the banks keep their interest rate policies unchanged when reacting to movements in the yield curve. It should be noted, however, that these results also reckon on a partial decline in the outstanding amount of loans, resulting from the assumed rise in interest rates.

The exposure of banks to interest rate risk in the banking book remained largely unchanged during the second half of 2010. Although the average fixation period for interest rates on customer transactions became longer, it did so to around the same extent for loans and deposits.

Interest rate risk in the trading book is low in all banks. In the event of a parallel rise in interest rates of 2 percentage points, the overall loss of the banking sector would be around 0.14% of

own funds, and no bank should make a loss of more than 6% of own funds. This is mainly due to the small size of the trading book. The ratio of trading book assets and liabilities to total assets and liabilities is, respectively, around 2.0% and 2.9%.

The bulk of banking book assets and liabilities are not revalued at fair value, but those that are include equity and debt securities that banks hold in their portfolios of financial instruments available-for-sale and financial instruments revalued at fair value through profit and loss (not including those held for trading and those available for sale). The revaluation of financial instruments included in the first of the portfolios mentioned has a direct effect on the value of the reported profit or loss, and in the case of a downward revaluation, also on the level of own funds. At present, the revaluation of available-for-sale financial instruments is not recorded in the profit and loss account, as the respective securities are still held by the bank. Own funds are reduced only by a downward revaluation of equity securities. According, however, to a draft legislative amendment proposed to enter into force in May 2011, negative valuation differences from the revaluation of debt securities in the available-for-sale portfolio should be deducted from own funds. If this had been the case in 2010, the banking sector as a whole would have had to reduce its own funds by 1.9%, i.e. by a margin corresponding to the same-year decline in their debt securities available for sale.

As regards general interest rate risk, the exposure of the banking sector as a whole to the risk of losses in the two mentioned portfolios was relatively low. Were interest rates to increase in parallel by 2 percentage points, the overall loss would stand at 6% of own funds.

Certain banks could be severely affected by the sovereign risks

Besides general interest rate risk, banks are also exposed to so-called specific interest rate risk or counterparty risk, i.e. the risk that securities will drop in value owing to a decline in the issuer's credit quality. Only certain banks in the Slovak banking sector are exposed to this risk to a significant extent. The negative effect of this risk reflects mainly persisting uncertainty about the sustainability of public finances in several EU countries, notwithstanding the establishment of the European Financial Stability Fund (EFSF).

This risk also affected some Slovak banks. In the first half of 2010, it had a strong downward effect on the value of securities issued by Greece (Greek bonds made up 1.1% of the banking sector's balance sheet total). In the second half of 2010, the value of government bonds issued by Portugal (0.1% of the balance sheet total) and Ireland (0.2%) came under negative pressure and Greek bonds, too, fell again.

The banking sector's overall exposure to this risk remained largely unchanged during the second half of 2010.

The exposure of the banking sector as a whole to foreign exchange risk and equity risk is negligible

Investments in equities and investment fund shares/units as a proportion of the balance sheet total remain negligible in a majority of banks.

As regards open foreign-exchange positions, all banks also have a low exposure to foreign exchange risk.

During the crisis, a further two types of foreign exchange risk came to the fore in global financial markets. The first is the increased risk of a substantial depreciation of the currencies of coun-

Chart 88 Prices of five-year government bonds issued by selected countries

Source: ECB.

tries that have a low credit rating for long-term debt denominated in foreign currency. In this regard, the riskiest of the currencies in which Slovak banks have open foreign-exchange positions is the Hungarian forint, since Hungary's credit rating is on the border of investment grade. Even this risk, however, should not affect Slovak banks to a significant extent, since no Slovak bank has an open position in Hungarian forints that amounts to more than 3% of own funds. The second of the risks is that foreign exchange risk might be re-hedged in the event of a maturity mismatch within the existing hedge of the respective claims and liabilities (even though the amounts match). As became clear in the crisis, it can be difficult to find a counterparty with whom to re-close such a position. But this risk, too, is relatively low, since there is no bank in which the proportion of assets or liabilities denominated in a foreign currency exceeds 5% of the balance sheet total.

3.4.3 MARKET RISKS OF OTHER NON-BANK SECTORS IN THE SLOVAK FINANCIAL MARKET FROM THE SYSTEMIC VIEW

THE MOST SIGNIFICANT RISK, ESPECIALLY IN CERTAIN INSTITUTIONS AND FUNDS, IS A DROP IN THE VALUE OF SECURITIES ISSUED BY PARTICULAR COUNTRIES

As regards the overall exposure of the financial market to countries with increased risk (Greece, Hungary, Ireland, Portugal, Spain, and Italy), the risk that bonds drop in value owing to a decline in the credit quality of their issuers does not represent a substantial, direct systemic risk. In no sector of the financial market does the amount of securities issued by these countries represent more than 5% of total assets or net asset value. At the sectoral level, the level of this risk remained relatively unchanged during the second half of 2010 (Table 5). The most significant changes in this regard occurred in the sector of PFMC funds (the exposure to Ireland rose and exposures to Portugal and Hungary fell).

This risk may, however, have a more pronounced effect in two areas:

1. The Slovak financial sector could be adversely affected by the repercussions of any further deterioration in the situation of the mentioned countries. These repercussions could negatively impact parent undertakings of Slovak financial institutions or cause a further loss of confidence in the interbank market. The heightening of this risk may at the same time lead to rising uncertainty in global financial markets, a downturn in equity prices, and weakening of both the euro and the euro area economy.[17] Another possible scenario is the withdrawal of investments from collective investment funds.

Table 5 Investments in debt securities of selected countries as a share of total assets (%)

		Greece	Hungary	Ireland	Italy	Spain	Portugal
Banks	June 2010	1.1	0.7	0.1	0.1	0.1	
	Dec. 2010	1.1	0.6	0.2	0.2	0.1	0.1
SPMC funds	June 2010	0.1	0.8	1.3	0.5	0.7	
	Dec. 2010	0.1	0.9	0.6	0.8	0.8	
PFMC funds	June 2010		0.9	1.4	1.6	0.2	4.5
	Dec. 2010		0.3	2.1	1.9		0.4
Invest-ment funds	June 2010	0.3	1.6	0.8	0.6		
	Dec. 2010	0.2	1.4	0.3	0.5	0.1	0.1
Insurance companies	June 2010	0.1	0.1	0.1	2.3	0.2	
	Dec. 2010	0.1	0.1	0.2	2.6	0.2	
Unit-linked insurance	June 2010						
	Dec. 2010			0.3			

Source: NBS.
Notes: Values are given as percentages and represent debt securities issued by the respective country (or institutions established in that country) as a share of total assets or NAV.
Where a cell of the Table is left empty, it means that the respective values are zero or negligible.

17 This scenario is addressed in more detail in the part Macro stress testing.

2. A more pronounced negative effects could be felt more acutely by certain institutions or funds, since exposure to this risk in the Slovak financial sector is relatively concentrated.

Looking at the financial market as a whole, the investment policy of institutions and funds continues to be conservative in regard to the credit rating of their securities investments (Table 6). Some funds, especially in the collective investment sector, may face an increased risk not only from these sovereign exposures, but also from their investments in debt securities issued by unrated issuers.

The financial market as a whole would be adversely affected by a long period of low interest rates

Turning to other market risks, the most significant in terms of systemic impact on the financial sector is interest rate risk, although it would show up differently in different sectors of the financial market. For insurance companies, PFMC funds, money market investment funds, and to some extent SPMC funds, the main negative exposure would be to a longer period of low interest rates (or even the risk of a further cut in rates during that period), since, in this scenario, their gradually maturing assets would be reinvested in lower-yielding financial instruments. The scenario of rising interest rates would, within a relatively short time, have an upward effect on rates of return, especially in PFMC funds and money market investment funds. SPMC funds would initially suffer a small loss owing to the revaluation of debt securities, but in a longer time horizon they too would be net beneficiaries of the higher interest rates. Table 7 provides a detailed overview of the market risk exposures of different financial market sectors and how they changed during the course of 2010.

The risk of high concentration to a single counterparty is a common feature of all non-banking sectors of the financial market

In several institutions and funds, exposure to a single specific counterparty represents a relatively high proportion of total assets or NAV. This risk is most pronounced in certain collective investment funds, insurance companies and SPMC funds. In the aggregate portfolio of equities and investment fund shares/units held in all non-

Table 6 The debt securities portfolio of different sectors broken down by credit rating (%)

	AAA	AA	A	BBB	BB	B	CCC and worse	unrated
Banks	0.2	0.5	89.1	4.0	4.2			2.0
Insurance companies	10.4	8.9	74.5	4.3	0.1		0.1	1.6
PFMC funds	25.3	9.3	60.0	4.5				0.9
conservative	27.3	7.8	57.9	6.1				0.9
balanced	6.7	4.1	85.4	2.0				1.7
growth	24.7	9.2	60.7	4.5				0.9
SPMC funds	6.7	17.0	66.4	6.5	1.9			1.6
Investment funds	7.6	2.6	78.8	7.2	1.1	0.1		2.5
money market	4.5	2.4	84.7	7.1	0.3			1.0
bond	4.4	2.6	79.9	9.5	0.5			3.0
equity	100							
funds of funds	0.0	41.4	52.7	4.7				1.2
mixed	63.8	4.9	8.2	0.7	6.5	9.2		6.7

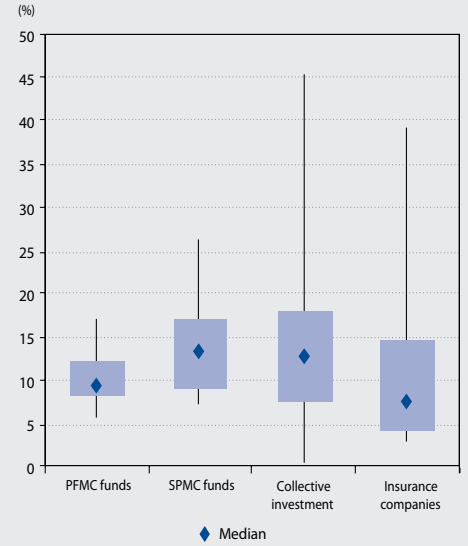
Source: NBS, Bloomberg.
Notes: The rating grade was determined according to the current credit rating of the issue or issuer (where the issue is unrated) assigned by the credit rating agencies Standard and Poor's, Moody's and Fitch. Where a credit rating from more than one of the agencies was available, the lowest was selected.
Values are given as percentages; they represent debt securities with the respective credit rating as a share of the total amount of debt securities.

Table 7 Change in the share of equity, foreign-exchange and interest-rate positions in different sectors of the financial market

		Banks	Insurers	PFMC funds	SPMC funds	Collective investment	Unit-linked[1)]
Equities and investment funds shares/units	XII.09	0.2	2.6	0.1	4.7	17.6	80.8
	VI.10	0.3	2.6	0.0	12.0	16.7	81.3
	XII.10		3.8	0.1	20.3	19.1	81.2
Foreign-exchange positions	XII.09	0.4	0.9	0.1	4.9	12.5	12.9
	VI.10	0.6	1.5	0.1	9.2	9.4	12.6
	XII.10		1.5	0.1	12.2	11.2	13.9
Share of debt securities	XII.09	28.3	63.1	68.0	70.8	51.8	17.2
	VI.10	27.3	60.0	66.9	66.6	50.4	16.9
	XII.10	26.5	68.2	68.5	66.0	46.3	17.4
Duration of debt securities	XII.09	2.7	5.7	0.5	2.1	1.1	5.9
	VI.10	3.0	6.0	0.6	2.6	1.3	5.6
	XII.10	3.0	6.1	0.4	3.2	1.2	5.5
Duration of entire portfolio	XII.10		5.7	0.4	2.1	0.6	1.0
Residual maturity of debt securities	XII.09	2.8	7.8	0.8	3.0	1.8	6.2
	VI.10	3.3	7.4	0.8	2.9	1.5	5.6
	XII.10	3.8	7.8	0.4	3.8	1.7	5.1

Source: NBS, Reuters, Bloomberg, NBS calculations.
1) Assets invested by insurers under unit-linked insurance policies.
Notes: Values are given as a percentage share of total assets (or NAV) and they represent the asset-weighted average for the given group of institutions.
Foreign exchange positions are given as a percentage share of assets (or NAV); they were calculated as the sum of the absolute values of the positions for each institution.
Equity positions are given as a percentage share of assets (or NAV); they do not include participating interests in subsidiaries and affiliates.
Durations and residual maturities are given in years.

Chart 89 Distribution of institutions by each institution's exposure to its most significant counterparty as a share of its overall exposure



Source: NBS, own calculations.
Notes: The Chart shows the distribution (minimum value, lower quartile, median, upper quartile, and maximum value) of each financial institution by its exposure to its most significant counterparty (through funds held in current accounts and term accounts, and through investments in securities, equities, and investment fund shares/units) as a share of its total assets or NAV.
Only exposures to non-sovereign counterparties were taken into account.

bank sectors, 20% of the exposure of funds is to a single asset management company.

3.4.4 THE MOST SIGNIFICANT RISKS IN INDIVIDUAL NON-BANK SECTORS OF THE FINANCIAL MARKET

FOR INSURANCE COMPANIES, THE MOST SIGNIFICANT RISK IS THAT OF A PERSISTING PERIOD OF LOW INTEREST RATES AND UNCERTAINTY IN THE MARKETS

The Slovak insurance sector is exposed mainly to the risk of a persisting period of low interest rates (especially on longer maturities) or a period of uncertainty in financial markets. This risk is more marked in life insurance, since an environment of low interest rates makes it difficult for insurers to generate returns on the assets that make up the respective reserves at least at the level of the guaranteed interest rate. As Chart 90 shows, the difference between the actual and guaranteed interest rate is relatively low, and in 2008 it was even negative. Although the average guaranteed interest rate in Slovakia fell slightly in 2009, it was (at 4.0%) the highest in the euro area (where the average rate was only 2.9%).[18] Technical reserves

18 Source: The European Insurance and Occupational Pensions Authority. Data for the United Kingdom and Cyprus were not available. The average value represents an arithmetic average of the values for each Member State, weighted by the amount of technical reserves in individual countries.

with a guaranteed interest rate of over 6% accounted for a particularly high share (8.9%) of the total technical reserves in 2009, considering that in other euro area countries their share did not exceed 0.2%. Furthermore, the returns in Slovakia are lower than in the rest of euro area, where the average returns have exceeded yields on 10-year government bonds in all years apart from 2008. This risk is associated above all with the necessity of accepting a lower return when reinvesting funds obtained from maturing financial instruments.

The other main risks to the insurance sector are a weakening of the economy, the concentration of claims on a single counterparty, and interest rate risk

For the insurance sector, any developments in which the economy weakens again or uncertainty in financial markets increases could represent a risk also in regard to the volume of new insurance contracts or a rise in the surrender rate. While this may not necessarily cause a loss to an insurer (if the surrender value is set low), it could disrupt the insurer's business strategy aimed at securing an appropriate balance-sheet structure and risk profile.

What may also be seen as a negative risk to the insurance sector as whole is the risk that the market experiences a negative development owing to the persisting high competition in motor third-party liability insurance or to the high value of the combined ratio in certain sectors. A more detailed description of this risk is given in part *2.2 The insurance sector*.

The risk, mentioned above, of a concentration of exposure to a single specific counterparty is most pronounced in several smaller insurance companies.

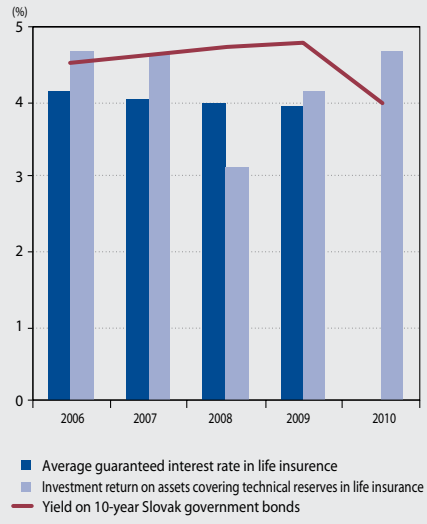
Insurance companies face not only the risk concerning their ability to cover the guaranteed level of returns in life insurance in an environment of low interest rates, but also the risk of interest rate movements. The relatively long duration of the debt securities portfolio (which increased slightly even during 2010), together with the high share of securities revalued at fair value, helped ensure that rates of return on assets remained solid even during the period of low interest rates and financial market turbulences, but an increase in rates will cause a downward revaluation of these securities. Such a scenario would, on the other hand, also bring down the value of liabilities. The ultimate effect is difficult to quantify.

The insurance sector's exposure to other market risks – equity risk, foreign-exchange risk, and the risk of a drop in the value of securities owing to a decline in the issuer's credit quality – is relatively small. Only a few insurance companies would be affected to a significant degree.

Risk of losses in PFMC funds remains low

For PFMC funds, the risks of asset value impairment are low, given the conservative structure of their assets. The most significant risk in the portfolio of PFMC funds is that the issuers of certain securities held in the portfolio suffer a deterioration in credit quality. This risk stems mainly from the fact that a small proportion of the assets are invested in securities issued by countries with elevated risk, especially Ireland, Hungary, Italy and Portugal. This risk, however, is concentrated in the funds of a single company. The risk did, though, decrease in November 2010 due to the maturity of a Hungarian government bond that accounted for 0.6% of the overall NAV of PFMC funds. As at 31 December 2010, PFMC funds did not have any holdings of Greek government bonds.

Chart 90 The guaranteed interest rate in comparison with the actual return



Source: NBS, ECB.
Note: The average guaranteed interest rate data for 2010 were not available when this Analysis was compiled. The value can, however, be estimated at around 4%.

The relatively low diversification of bank deposits also contributed to counterparty risk. The median value for the share of the largest counterparties in NAVs was 9%. The risk that one of the counterparties will default is relatively low. In most cases, these deposits are held directly in Slovak banks (approximately half of the total volume), or they are held in banks that are part of banking groups which have a subsidiary or branch in Slovakia.

An environment of low interest rates would also be expected to have an adverse effect; although funds would not record losses, their rates of return would remain low. The exposures of PFMC funds to equity and foreign-exchange risks are zero or negligible.

In SPMC funds, exposure to both interest rate risk and equity risk rose sharply during the second half of the year

Substantial changes in the asset structure of SPMC funds took place during 2010. As Table 7 shows, the proportion of the investments of SPMC funds in equities and investment fund shares/units increased sharply during 2010 (from 4.7% of NAV to 20.3% of NAV). The largest part (63%) of this increase comprised investments in fund shares/units, and the rest comprised equities (21% – mainly shares in banks located in central Europe) and exchange-traded funds (16% – these increased mainly in the first half of 2010). Fully half of the increase in investment fund equity holdings was recorded in equity funds, and a further 36% in bond funds.

The result of these changes was a heightened exposure to equity risk, interest rate risk, and foreign exchange risk. In addition, the duration of the bond portfolio underwent a relatively substantial increase (from 2.1 years to 3.2 years). This means that any rise in interest rates, or interest rate spreads, would be strongly reflected in a reduction in the value of securities, and also that funds would not record a rise in interest income from bond coupons until a later date.

The net foreign-exchange position as at 31 December 2010 represented 12.2% of the NAV and it consisted mainly of positions in US dollars (59%), Polish zlotys (18%) and Czech korunas (13%). Since the rise in investments in investment fund shares/units was partly a result of purchases of US equity funds, the actual exposure of some funds to movements in the EUR/USD exchange rate is probably even higher. SPMC funds therefore have a relatively significant exposure to any strengthening of the euro.

For certain SPMC funds, investments in securities issued by high-risk countries (accounting for 3.2% of the sector's NAV) represent a relatively substantial risk. In comparison with PFMC funds, however, this risk is much greater owing to the high average residual maturity of these bonds, at 5.1 years. In general, securities with a longer maturity are considered to be at a higher risk, regardless of their duration. The exposure to this risk did not change substantially during the second half of 2010.

Risk exposure in investment funds remained largely unchanged during the year

The most significant risk for investment funds continues to be equity risk. Several funds have a relatively high net foreign exchange position, caused by unhedged positions in financial instruments denominated in non-euro currencies. Funds would therefore be particularly sensitive to any return of rising uncertainty in financial markets, which could put downward pressure on the value of equity investments, and an adverse impact would also be expected from weakening of the US dollar or other foreign currencies vis-à-vis the euro.

In a majority of funds, the riskiness of securities investments in terms of the issuer's credit risk is relatively low.

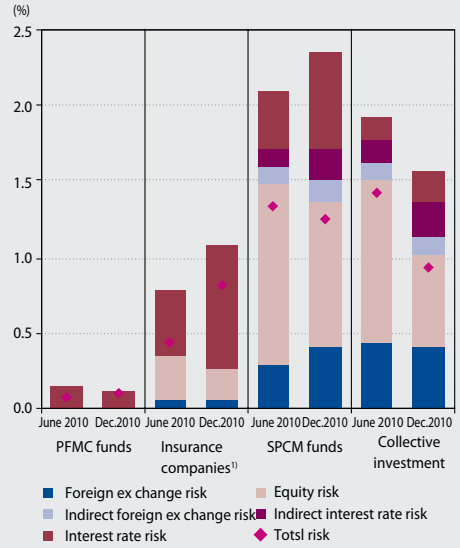
3.4.5 MEASURING MARKET RISK USING VALUE AT RISK (VAR)[19]

Value at Risk fell amid a decline in equity market risk; it rose in insurance companies due to a rise in interest rate risk

The measurement of market risks using Value at Risk combines, on one hand, the effects of exposure to different risks and, on the other hand, the risk associated with different market factors. In general, the movements in Value at Risk during the second half of the year were positively affected mainly by the gradual calming of equity markets. In SPMC funds, this effect even outweighed

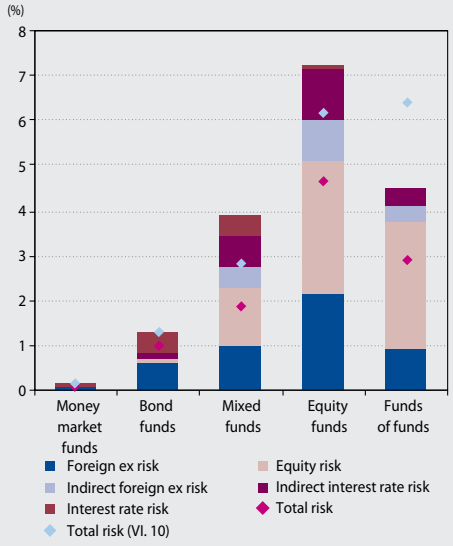
19 VaR represents the worst expected loss over a given number of working days at a given confidence level.

Chart 91 VaR in individual sectors



Source: NBS, Reuters, Bloomberg, internet, own calculations.
1) The figure for insurers does not include assets covering unit-linked insurance policies and risks arising from the revaluation of reserves.
Notes: Data on the left-hand scale represent percentage shares of total assets (or NAV).
VaR was calculated as the loss that would not be exceeded in 99% of cases over a period of 10 working days.
Indirect interest rate risk and foreign exchange risk constitute the risk to which individual institutions or funds are exposed through investments in investment fund shares/units.

Chart 92 VaR of investment funds



Source: NBS, Reuters, Bloomberg, internet, own calculations.
Note: Unless otherwise stated, the data are as at 31 December 2010 (the value of the overall risk as at 30 June 2010 is stated for the purpose of comparison).
Data on the left-hand scale represent percentage shares of NAV.
VaR was calculated as the worst expected loss over a period of 10 working days at a confidence level of 99%.

the impact of a rise in equity risk exposure and an increase in the bond portfolio duration. The only rise in Value at Risk during the second half of the year occurred in the insurance sector,[20] and it was caused by a marked rise in interest rate risk. This was a result of the fact that securities revalued at fair value rose as a share of total assets (from 39% to 53%) and also their duration became longer.

Table 8 VaR values in different sectors of the financial market (%)

	Lower quartile	Median	Upper quartile	Weighted average
Insurers	0.4	0.7	0.9	0.8
PFMC funds	0.1	0.1	0.1	0.1
balanced	0.1	0.1	0.1	0.1
growth	0.1	0.1	0.1	0.1
conservative	0.1	0.1	0.2	0.1
SPMC funds	0.1	0.1	0.1	0.1
payout	0.3	0.3	0.5	1.7
contributory	0.6	1.1	2.1	1.1
Investment funds	0.4	1.0	2.8	0.9
money market	0.1	0.2	0.3	0.1
bond	0.6	0.8	1.4	1.0
mixed	0.6	0.8	1.4	1.0
funds of funds	1.7	2.8	3.0	2.9
equity	4.3	5.0	8.1	4.7

Source: NBS, own calculations.
Note: The values are given as a percentage share of total assets (or NAV); they represent quartiles or the asset-weighted average for each group of institutions. VaR was calculated for a ten-day period and the 99% confidence level.

20 In the insurance sector, the VaR calculation did not take into account any effect of risk factor changes on the change in the value of liabilities, which could have a substantial impact on the overall Value at Risk for individual insurance companies.

CHAPTER 4

MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR

4

4 MACRO STRESS TESTING OF THE SLOVAK FINANCIAL SECTOR

The resilience of the Slovak financial sector to adverse macroeconomic developments was examined through macro stress testing. Three scenarios covering the period 2011–2012 were used for the testing. The baseline scenario is based on the official NBS Medium-Term Forecast as at the fourth quarter of 2010, while the stress scenarios assume a substantial worsening of the situation in financial markets and a deterioration in the economic situation in both Slovakia and the external environment.

This downturn is elaborated in two scenarios. In the scenario "Sovereign Crisis", the deterioration is caused by mounting uncertainty about the sustainability of public finances in selected euro area Member States. The other stress scenario, "Supply-Side inflation", assumes that an excessive rise in commodity prices will be reflected in higher inflation.

As at the end of 2010, the banking sector again reported relatively strong resilience to unfavourable macroeconomic scenarios. In the case of the baseline scenario and the Sovereign Crisis scenario, no bank would report a capital adequacy ratio below the 8% minimum requirement. Under the Supply-Side Inflation scenario, one bank would fall below this threshold.

The most significant risk for banks remains corporate credit risk. In certain banks, however, losses from household credit risk would exceed the losses on corporate loans. The higher sensitivity of households was confirmed particularly in the stress scenario that assumes a rise in interest rates. Losses from market risks would be marginal, except in a few banks where they would have greater impact. Banks' losses arising from different types of risk would be mitigated mainly by net interest income and a strong initial capital position.

PFMC funds did not demonstrate significant sensitivity to a decline in equity prices or to exchange rate movements, nor, in the majority of cases, to an increase in the credit spreads of bonds issued by countries that the markets perceive to be in a greater risk. Their performance even improved at the end of the stress period, as interest income increased amid rising interest rates.

Due to a relatively high exposure, particularly to equity risk and interest rate risk, SPMC funds would, under both stress scenarios, see a comparatively sharp drop in the value of the pension unit. The impact on different funds, however, would be relatively diverse.

Investment funds would not, on average, make substantial losses under the "Sovereign Crisis" scenario .This is mainly because money market funds and bond funds constitute a large proportion of all funds in terms of their share in the overall net asset value. A secondary reason is that losses caused by a fall in equity prices in riskier funds would be partially offset by the assumed strengthening of the US dollar against the euro. Under the Supply-driven Inflation scenario, this effect of an appreciating dollar is absent and the losses, on average, would therefore be greater.

As for insurers, their interest income would be practically unaffected within the stress testing horizon of the different scenarios, given the relatively long duration of the debt securities portfolio (which is the largest part of assets of insurance companies). This interest income would, moreover, be sufficient to cover any losses from the revaluation of assets that may take place under the stress scenarios.

4.1 DESCRIPTION OF SCENARIOS USED

The resilience of the Slovak financial sector to adverse macroeconomic developments was examined through macro stress testing. The scenarios used for the testing are based on the current state of the global economy and reflect its inherent potential risks to the financial sector. As in the previous analysis, the testing involved designing two stress scenarios and comparing them with a third, baseline scenario. Since the resilience of the whole financial sector is being tested, the scenarios are designed in such a way that the importance of credit risk as well as dif-

ferent types of market risk to different types of financial insitutions can be evaluated. The stress testing period in all scenarios comprises the years 2011 and 2012.

It should be noted that, as in previous analyses, macro stress testing is used to give a fuller picture of the risk profile of different sectors or financial corporations. Since this is a comprehensive estimate of developments in the financial sector, requiring a fairly large number of assumptions, the results are used more for purposes of comparison than as an absolute quantification of potential profits/losses under particular scenarios.

Baseline scenario

The baseline scenario and estimates associated with this scenario are based on the official NBS Medium-Term Forecast as at the fourth quarter of 2010 (MTF-2010Q4)[21].

The official forecast assumes that GDP will grow, driven mainly by an increase in external demand. This growth is expected to be dampened by the effects of the Government's planned consolidation measures. The situation in the labour market is projected to improve, although in 2011 it is expected to be negatively affected by a reduction in the public sector workforce. Inflation is assumed to rise mainly in 2011, amid economic growth and hikes in excise taxes and VAT.

Scenario 1: Sovereign Crisis

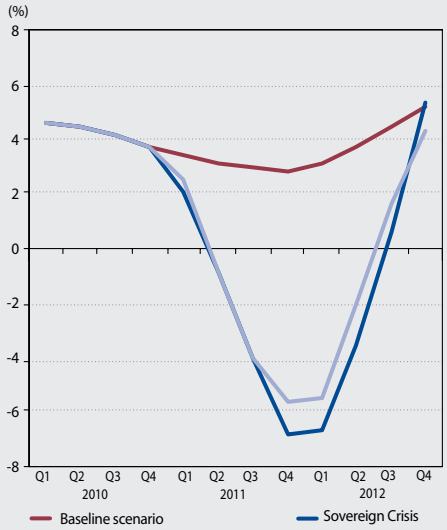
This scenario is based on the risk of unsustainability of public finances in certain euro area countries. The risk in this case includes negative developments in fiscal policy, the strengthening of growth-dampening factors, and greater obstacles to the accessing of funding by financial companies. This risk is perceived as significant not least because of the strong interaction between these three factors. An adverse development in one area could therefore amplify or trigger a negative situation in the other two areas. The scenario assumes that nervousness in financial markets will rise if the economic development in certain Member States is worse than expected. A further assumption for these countries is that economic imbalances will become more pronounced. An important development of this scenario is the negative spillover effects on other countries.

As external demand declines, so too will the Slovak economy. There will be a downturn in GDP growth, deflationary pressures on prices, and rising unemployment.

Scenario 2: Supply-driven Inflation

The trigger mechanism of this scenario is an expansive monetary policy of the US Federal Reserve. A rise in the US dollar money supply and associated downward pressure of the dollar's exchange rate against the other currencies will result in speculative investments in commodities (primarily gold and oil). Such investments combined with current inflationary pressures on commodity prices will lead to price increases. Since this inflation will be out of line with economic fundamentals, demand-driven inflation will not be in play. The rise in Supply-driven inflation will both lead to nervousness in financial markets and have a dampening effect on global economic growth. What is particularly important in this scenario, unlike in the first scenario, is the significant rise in the ECB's key rates and interbank rates in 2011. The global economic downturn and associated decline in external demand will result in a drop in domestic production, which will also come under downward pressure from rising domestic inflation. At the same time, unemployment will increase.

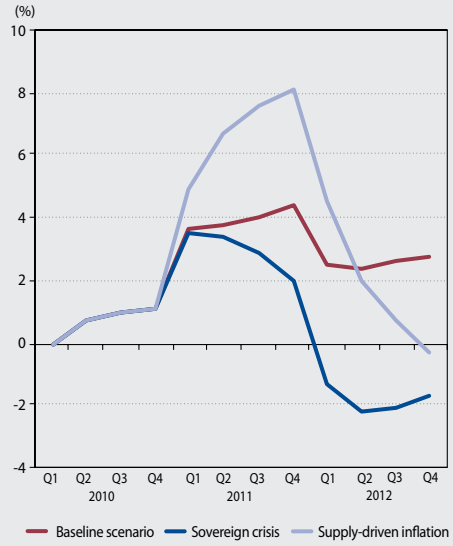
Chart 93 Year-on-year GDP growth – baseline and stress scenarios



Source: NBS, own calculations.

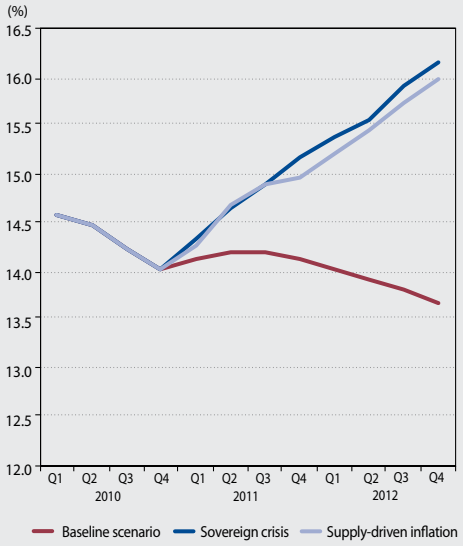
21 http://www.nbs.sk/en/publications-issued-by-the-nbs/nbs-publications/medium-term-forecast/medium-term-forecast-2010

Chart 94 HICP inflation – baseline and stress scenarios



Source: NBS, own calculations.

Chart 95 Unemployment rate – baseline and stress scenarios



Source: NBS, own calculations.

Table 9 Stress testing parameters (%)

			Baseline scenario		Sovereign Crisis		Supply-driven Inflation	
			Q4 2011	Q4 2012	Q4 2011	Q4 2012	Q4 2011	Q4 2012
Baseline assumptions	External demand (year-on-year change)		5.30	6.82	-10.00	6.00	-10.00	5.56
	USD/EUR (year-on-year change)		0	0	-40	24	0	0
	Exchange rates of CHF, JPY, GBP, DKK, CAD, HRK, LVL against EUR (year-on-year change)		0	0	-40	24	0	0
	Exchange rates of other currencies against EUR (year-on-year change)		0	0	40	-24	30	-12
	Equity prices (year-on-year change)		10	10	-40	24	-30	28.57
	ECB base rate (year-on-year change)		0 b.b.	0 b.b.	0 b.b.	0 b.b.	200 b.b.	0 b.b.
	3-month EURIBOR (year-on-year change)		47 b.b.	34 b.b.	116 b.b.	-12 b.b.	305 b.b.	27 b.b.
	iTraxx index (year-on-year change)		0 b.b.	0 b.b.	105 b.b.	-84 b.b.	105 b.b.	-84 b.b.
	Rise in credit spreads on debt issued by GR and IE		0 b.b.	0 b.b.	315 b.b.	-252 b.b.	315 b.b.	-252 b.b.
	Rise in credit spreads on debt issued by ES, IT and PT		0 b.b.	0 b.b.	210 b.b.	-168 b.b.	210 b.b.	-168 b.b.
Macroeconomic variables estimated using a model	GDP growth (year-on-year change)		2.75	5.07	-6.86	5.40	-5.54	4.19
	Inflation (GDP)		4.34	2.72	2.02	-1.61	8.13	-0.30
	Unemployment		14.13	13.69	15.17	16.17	14.97	15.97
Variables for credit risk estimated using macroeconomic variables	Annual probability of default	Non-sensitive sectors	1.35	1.69	1.92	3.74	2.21	3.61
		Less sensitive sectors	2.02	2.20	2.92	5.99	2.70	6.27
		Sensitive sectors	4.65	4.70	6.36	8.38	6.32	10.22
	Ratio of non-performing household loans		5.46	4.96	6.08	6.08	8.01	7.22

Source: NBS, ECB, own calculations.

Box 2

ASSUMPTIONS AND PARAMETERS OF MACRO STRESS TESTING OF THE FINANCIAL SECTOR

The calculation of the impact that macro stress scenarios have on the banking sector include estimated losses from non-performing loans to customers and estimated gains/losses from the portfolio of customer loans, from the revaluation of debt securities and interest rate derivatives, from the coupon yield on these securities, from foreign exchange operations and from equities. Furthermore, we assumed that the values of operating expenses, fee income, and other operating income in 2011 and 2012 would be the same as at the end of 2010. The basic relationship between particular assumptions, econometric models, and estimated parameters of macro stress testing are described in the Analysis of the Slovak Financial Sector for 2009.

The loss on non-performing customer loans was estimated using the baseline scenario, the Sovereign Crisis scenario, and the Supply-driven Inflation scenario. Particular macroeconomic variables served as input data for the econometric models used to quantify the assumed default rate of corporate loans and the amounts of non-performing household loans, housing loans to households, and other loans to households. It was assumed that the total loss on loans to households would be 20% of the amount of non-performing loans and that the total loss on consumer loans would be 80%, without taking into account the actual amount of any collateral.

For the calculation of credit losses arising from the corporate loan portfolio, the inputs included the default rate as well as a further two parameters: the collateral rate and loss given default (LGD). The assumed collateral rate was also set according to the selected scenario. Based on an expert estimate, collaterals were divided into those for which the depreciation rate was assumed to be 0% under the baseline scenario and 30% under the other scenarios (e.g. collateral in the form of real estate or a blank bill), and those for which no depreciation rate was assumed (mostly the collateral of third parties). For the calculation of losses, it was assumed that banks will create provisions for non-performing loans in the amount of 45% of the unsecured outstanding loan, meaning that the bank will, in subsequent bankruptcy proceedings, be able to satisfy its claim in the amount of (100-45) per cent of the unsecured part of the loan.

Estimates were made for the years 2011 and 2012. The shock impacts were quantified through their effect on the capital adequacy ratios of individual banks (branches of foreign banks were excluded from the calculation). It was also assumed that the amount of risk-weighted assets during the period under review would not change and that 50% of the profits (for 2010 and 2011) would be used to increase own funds. For the simplified calculation of the adequacy of own funds, no distinction was made between banks that use the IRB approach and other banks.

It should be noted, moreover, that when quantifying the impact of particular scenarios on the capital adequacy ratios of banks, it was not envisaged that any euro area country or other country would default. As a consequence, only debt securities in the trading book or AFS portfolio were revalued at fair value.

Since the estimated development of particular macroeconomic factors is coupled with considerable uncertainty, and since various assumptions need to be adopted for the calculation, stress testing serves rather to identify the most important risks in the financial system and to identify the companies with the highest exposure to these risks, than to precisely quantify the size of the loss under particular scenarios.

Table 10 Impact of macroeconomic scenarios on the financial sector (%)

	Baseline scenario				Sovereign Crisis				Supply-driven Inflation			
	Asset-weighted average	Lower quartile	Median	Upper quar-tile	Asset-weighted average	Lower quartile	Median	Upper quar-tile	Asset-weighted average	Lower quartile	Median	Upper quartile
Banks	3.7	2.3	2.6	3.4	2.0	0.1	1.5	2.4	0.9	-1.1	0.5	1.6
Insurers' assets	1.3	0.9	1.2	1.5	0.4	0.3	1.0	1.5	-1.1	-0.5	0.2	0.6
Pension funds	0.5	0.4	0.5	0.7	0.4	0.3	0.5	0.8	1.2	0.4	0.6	0.8
Of which: conservative	0.5	0.4	0.5	0.6	0.4	0.4	0.6	0.7	1.5	0.5	0.6	0.7
balanced	0.5	0.4	0.5	0.7	0.4	0.3	0.5	0.8	1.2	0.4	0.6	0.7
growth	0.5	0.4	0.5	0.7	0.4	0.4	0.4	0.7	1.2	0.4	0.5	0.7
Supplementary pension funds	2.1	0.8	1.5	2.3	-3.1	-7.9	-0.7	0.8	-7.1	-9.1	0.0	0.6
Investment funds	1.4	0.9	1.8	2.7	-0.3	-8.6	-0.7	1.3	-4.2	-18.2	-7.6	0.3
of which: equity funds	3.0	2.6	2.7	4.6	-3.0	-26.9	-19.9	5.7	-19.9	-36.1	-30.3	-22.6
money market funds	0.6	0.5	0.7	0.8	0.7	0.4	0.7	0.7	0.9	0.3	0.5	0.6
bond funds	1.7	1.7	2.0	2.3	-0.1	0.3	1.5	2.7	-3.6	-0.5	0.3	1.3
mixed funds	2.5	1.7	2.1	2.8	-3.1	-17.6	-12.1	-0.4	-10.8	-17.9	-12.6	-7.7
funds of funds	3.4	2.0	3.2	3.6	-0.3	-6.1	-1.8	0.9	-19.6	-19.6	-17.0	-11.7

Source: Source: NBS, RBUZ, ECB, REUTERS, BLOOMBERG, own calculations.
Note: The Table shows quartiles of the estimated profit/loss-to-asset ratio resulting from the application of the respective scenarios as at 31 December 2012.
The data for insurance companies includes only the change in the fair value of assets, not the change in the fair value of liabilities. The stress testing does not include assets covering technical provisions in unit-linked insurance.
Values are given as a percentage share of assets or NAV.

THE BANKING SECTOR AS AT THE END OF 2010 WAS RESILIENT TO ADVERSE MACROECONOMIC SCENARIOS

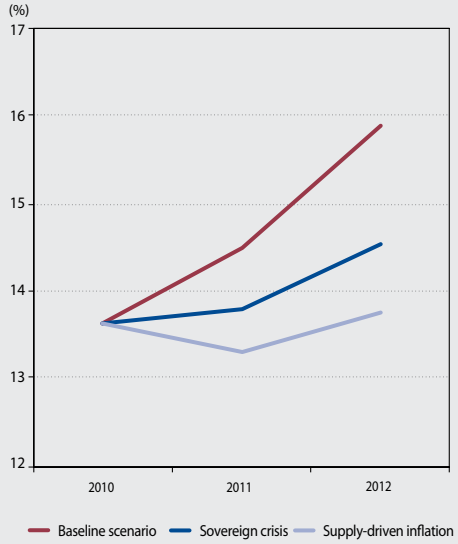
The banking sector at the end of 2010, as under previous stress tests, reported relatively strong resilience to unfavourable macroeconomic scenarios. This is also consistent with the test results, as the capital adequacy ratio of all banks remained above the 8% minimum requirement under both the baseline scenarios and Sovereign Crisis scenario. The Supply-driven Inflation scenario would be expected to have a more negative effect on the banking sector. Were the scenario to materialise, the CAR of one bank would fall below the 8% threshold.

THE SECTOR'S RESILIENCE IS LARGELY CONDITIONAL ON ITS SOLID INITIAL CAPITAL POSITION AND ON ITS ABILITY TO GENERATE NET INTEREST INCOME

The resilience of the banking sector as at the end of 2010 was largely determined by two factors: its initially strong capital position and its ability to make a profit, especially through net interest income.

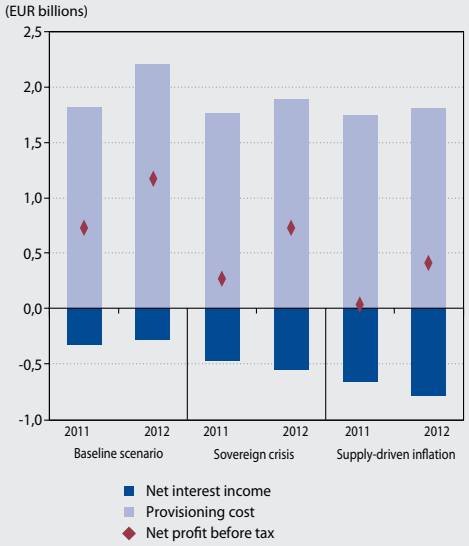
Although four banks would make a net loss in 2011 and 2012 under the Sovereign Crisis scenario and six banks would do so under the Supply-driven Inflation scenario, a majority of these banks would comfortably meet the 8% capital adequacy requirement in each year due to having a strong capital position at the outset.

Chart 96 Capital adequacy ratio of the banking sector under the stress scenarios



Source: NBS, own calculations.
Note: The calculation does not include branches of foreign banks.

Chart 97 Main estimated components of net profit in the banking sector under stress scenarios



Source: NBS, own calculations.

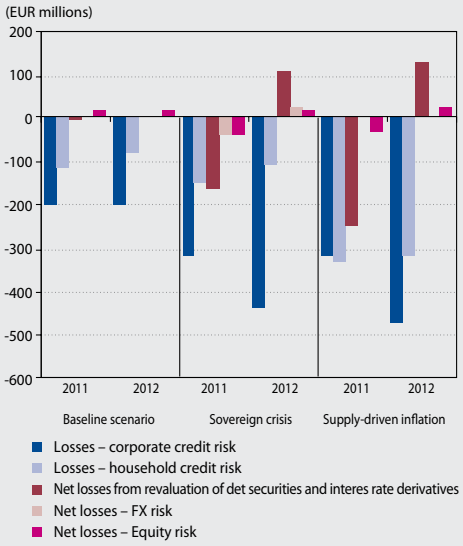
On the other hand, the net interest income generated during the two years under review would make a substantial contribution to the profit-making capacity of banks and thereby mitigate the impact of losses from different types of risk.

CORPORATE CREDIT RISK REMAINS THE MOST SIGNIFICANT RISK; THE WEIGHT OF HOUSEHOLD CREDIT RISK IS INCREASING

The most serious risk for banks at the aggregate level continues to be corporate credit risk, which is also reflected in the largest losses estimated under the different stress scenarios. At the same time, however, household credit risk is becoming increasingly significant, as is evident from the size of the estimated loss arising from this type of risk. The sector's largest losses in the retail loan portfolio would be incurred under the Supply-driven Inflation scenario; in several banks, this loss would exceed the loss from non-performing loans. Regarding non-performing loans under this scenario, the sensitivity of different types of loans to de-

velopments in given macroeconomic variables was seen to be relevant. For example, the corporate loan default rate was shown to be most sensitive to GDP developments. Since the two stress scenarios do not differ significantly in this respect, the losses from this portfolio are at a relatively similar level. As for household loans, their default rate reflects the impact of inflation and the related effect of interest rates. Rising inflation and the associated inflationary expectations will lead to a higher volume of lending under the Supply-driven Inflation scenario. On the other hand, higher interest rates impair the credit quality of these loans, which means that the losses under this scenario are greater. Losses from foreign-exchange and equity risks would continue to have a marginal effect.

Chart 98 Loss from credit risk and market risks in the banking sector under stress scenarios



Source: NBS, own calculations.

Table 11 The impact of stress scenarios on the banking sector (%)

	Lower quartile	Median	Average weighted by amount of risk-weighted assets	Upper quartile
Capital adequacy ratio				
As at 31 December 2010	11.2	12.1	12.6	15.1
As at 31 December 2010 after the addition of net profit	11.7	13.0	13.4	16.2
Baseline scenario (at the end of 2011)	12.0	13.5	14.2	17.3
Baseline scenario (at the end of 2012)	13.3	14.3	15.6	18.8
Sovereign Crisis (2011)	11.3	12.9	13.6	17.1
Sovereign Crisis (2012)	11.0	13.7	14.3	18.2
Supply-driven Inflation (2011)	10.9	12.3	13.1	16.7
Supply-driven Inflation (2012)	10.8	13.3	13.5	17.6
Projected net interest income[1)]				
Baseline scenario	9.5	10.9	11.8	11.3
Sovereign Crisis	8.7	9.7	10.7	11.0
Supply-driven Inflation	8.5	9.8	10.4	11.0
Projected net profit/loss from equity and foreign-exchange risk[1)]				
Baseline scenario	0.0	0.0	0.1	0.0
Sovereign Crisis	0.0	0.0	-0.1	0.1
Supply-driven Inflation	0.0	0.0	0.0	0.0
Projected losses from provisioning (corporate credit risk) [1)]				
Baseline scenario	-1.3	-0.8	-1.2	-0.4
Sovereign Crisis	-2.5	-1.8	-2.2	-0.9
Supply-driven Inflation	-2.8	-2.1	-2.3	-1.1

Table 11 The impact of stress scenarios on the banking sector (%)

	Lower quartile	Median	Average weighted by amount of risk-weighted assets	Upper quartile
Projected losses from provisioning (household credit risk) [1]				
Baseline scenario	-0.7	-0.5	-0.6	-0.3
Sovereign Crisis	-0.9	-0.6	-0.8	-0.4
Supply-driven Inflation	-2.3	-1.6	-1.9	-0.9
Projected net profit before tax [1]				
Baseline scenario	3.1	4.3	5.6	5.6
Sovereign Crisis	0.2	2.4	3.0	4.1
Supply-driven Inflation	-1.4	0.9	1.3	2.4

Source: NBS, own calculations.
1) Expressed as share of the bank's risk-weighted assets.
Note: Projections represent the situation as at the end of 2012.

The above methodology for calculating the effect of stress scenarios on capital adequacy did not take into account the impairment of the available-for-sale and held-to-maturity portfolios of financial instruments which occurred in 2010, nor the possibility that securities held to maturity under stress scenarios suffer a further reduction in value owing to a drop in the credit quality of their issuer. If these facts had been taken into account in the stress testing, the average value of the capital adequacy ratio (the average being weighted by the amount of risk-weighted assets) would have fallen by around 0.5 percentage point.

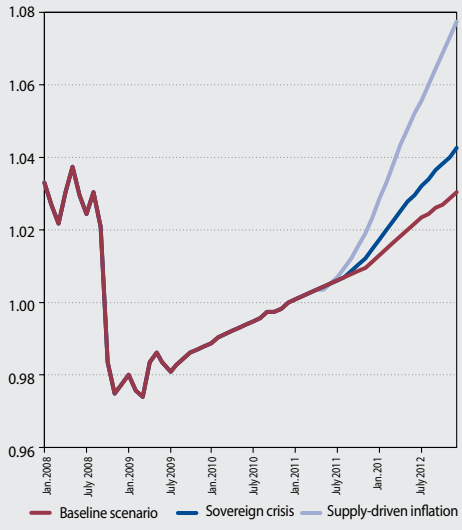
PFMC funds would report higher returns under the stress scenarios due to rising interest rates

PFMC funds are not sensitive to a decline in equity prices or to exchange rate movements, nor, in the majority of cases, to an increase in the credit spreads of bonds issued by countries that the markets perceive to be in a greater risk. For the whole portfolio of PFMC funds, the average residual period of interest-rate fixation is five months. During this period, the stress scenarios would therefore have almost no effect on the returns on a majority of PFMC funds. After the end of this period, the rate of return would even rise owing to the growth in interest income amid rising interest rates, as assumed in the stress scenarios.

SPMC contributory funds would make relatively large losses under the stress scenarios

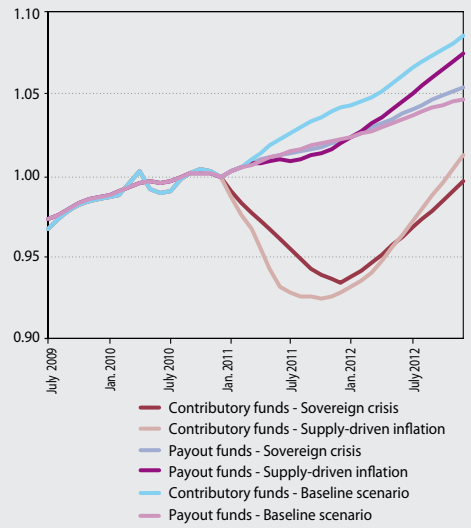
Due to a relatively high exposure, particularly to equity risk and interest rate risk, SPMC funds would see comparatively sharp drop in the value of the pension unit. The funds would record most of this decline in the second half of 2011, and the losses would be partially recovered during 2012. The impact on different funds, however, would be relatively diverse. The largest losses would be seen in growth funds under the Sovereign Crisis scenario, owing to a substantial fall in equity prices (by approximately 15% to 20% of NAV).

Chart 99 Impact of the baseline scenario and stress scenarios on PFMC funds



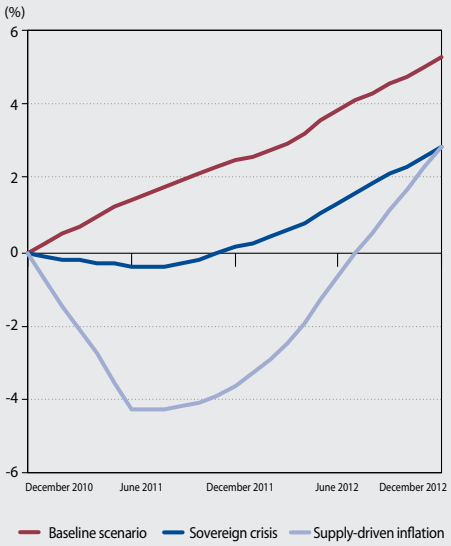
Source: NBS, ECB, Bloomberg, Reuters, internet, own calculations.
Note: The left-hand scale shows the average current value of the pension unit index weighted by the net asset value of individual funds (index value as at December 2010 = 1.00).

Chart 100 Impact of the baseline scenario and stress scenarios on SPMC funds



Source: NBS, ECB, Bloomberg, Reuters, internet, own calculations.
Note: The left-hand scale shows the average current value of the pension unit index weighted by the net asset value of individual funds (index value as at December 2010 = 1.00).

Chart 101 Impact of the baseline scenario and stress scenarios on collective investment funds



Source: NBS, ECB, Bloomberg, Reuters, internet, own calculations.
Note: The left-hand scale shows the estimated profit or loss as a share of the net asset value, weighted by the net asset value of individual funds.

THE HIGH PROPORTION OF LESS RISKY FUNDS IS REFLECTED IN THE IMPACT OF STRESS SCENARIOS ON THE COLLECTIVE INVESTMENT SECTOR

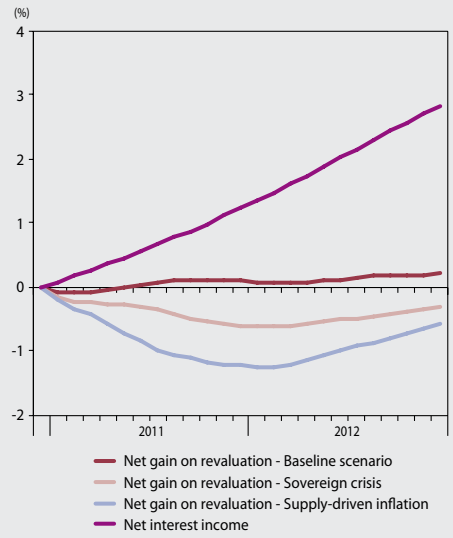
As Chart 101 shows, investment funds under the Sovereign Crisis scenario would not, on average (weighted by amounts of assets), record substantial losses. This is mainly because money market funds and bond funds constitute a large proportion of all funds in terms of their share in the overall net asset value. Funds holding a combined market share of up to 57% would even make a profit. A secondary reason is that losses caused by a fall in equity prices in riskier funds would be partially offset by the assumed strengthening of the US dollar against the euro, the currency in which these investment funds have open foreign-exchange positions. Under the Supply-driven Inflation scenario, this effect of an appreciating dollar is absent and the losses, on average, would

Table 12 Breakdown of the impact of the Supply-driven Inflation scenario as at 30 June 2011

	Profit	Loss (% of NAV)					
		0 – 5	5 – 10	10 – 20	20 – 30	30 – 40	more than 40
Money market funds	98.4	1.4	0	0	0.2	0	0
Bond funds	24.9	55.7	0	19.4	0	0	0
Funds of funds	0	0.7	0	70	29.3	0	0
Equity funds	0	0	0	67.8	1.3	20	10.9
Mixed funds	0.8	42.2	17.1	23.6	14.5	1.9	0
Funds – total	57	19.2	3.2	14.4	4.4	1.3	0.6

Source: NBS, ECB, Bloomberg, Reuters, internet, own calculations.
In the table, the net asset value of funds that record a gain or loss in the stated range under the stress scenario Supply-driven Inflation is shown as a share of the total net asset value of investment funds in the respective category.

Chart 102 Impact of the baseline scenario and stress scenarios on the assets of insurance companies



Source: NBS, ECB, Bloomberg, Reuters, internet, own calculations.
Note: The left-hand scale shows the estimated gain/loss as a share of assets (except for assets covering technical provisions in unit-linked insurance), weighted by the asset value of individual insurance companies.
The effect of stress scenarios on the value of liabilities was not taken into account.

therefore be greater. The data in Table 11 also shows that the largest losses (in some cases exceeding 30% of NAV) would be recorded by equity funds, and their distribution within this type of investment fund would be highly uneven.

Insurance companies would cover any negative revaluation of assets with interest income

As for insurers, their interest income would be practically unaffected within the stress testing horizon of the different scenarios, given the relatively long duration of the debt securities portfolio (which is the main part of assets of insurance companies). This interest income would, moreover, be sufficient to cover any losses from the revaluation of assets that may take place under the stress scenarios (Chart 102).

ANALYTICAL DATA (LIST OF TABLES)

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 (volumes in EUR thousands)

	Total volume (as at 31.12.2010)	Share denominated in a foreign currency	Year-on-year change	Share of total assets	CR3	CR5	HHI
ASSETS – TOTAL (gross)	57,710,308						
TOTAL LOANS TO CUSTOMERS	33,508,632	2	5	58	53	71	1,199
Retail loans	15,627,610	0	12	27	64	84	1,682
of which: Loans to households	14,763,225	0	12	26	65	85	1,710
Loans to enterprises	14,580,651	2	0	25	48	70	1,133
Loans to non-bank financial corporations	989,088	2	-28	2	52	69	1,228
Loans to general government	1,094,770	0	27	2	90	97	6,038
Loans to non-residents	1,216,513	21	10	2	58	80	1,509
TOTAL INTERBANK MARKET OPERATIONS	6,635,397	9	-11	11	50	61	1,139
of which: Operations with NBS and foreign issuing banks (including NBS bills)	715,557	0	-40	1	39	62	960
TOTAL SECURITIES	14,743,119	2	7	26	63	84	1,668
Securities issued by residents	12,105,225	0	3	21	67	87	1,848
Government bonds	11,076,230	0	8	19	69	88	1,915
Corporate bonds	145,481	0	-16	0	94	100	3,197
Bank bonds	462,494	0	-20	1	60	84	1,588
Other debt securities	0	,	-100	0	,	,	,
Equity securities	421,020	0	-7	1	75	96	2,283
Securities issued by non-residents	2,235,242	14	42	4	76	87	2,229
Debt securities	2,167,474	12	45	4	75	87	2,214
of which: issued by banks	267,374	7	-38	0	76	94	2,790
of which: issued by general government	1,529,338	11	98	3	84	94	3,195
of which: other issuers	370,762	20	28	1	58	79	1,535
Equity securities	67,768	52	-15	0	99	100	4,734
of which: issued by banks	208	0	-99	0	100	100	10,000
of which: other issuers	67,560	52	6	0	99	100	4,763
Derivatives – positive fair value	402,652	0	-12	1	68	89	1,920

1.1 Asset and liability structure of banks and branches of foreign banks (EUR thousands)

	Total volume (as at 31.12.2010)	Share denominated in a foreign currency	Year-on-year change	Share of total assets	CR3	CR5	HHI
TOTAL LIABILITIES	54,738,827	3	3	100	55	72	1,237
TOTAL DEPOSITS AND LOANS FROM CUSTOMERS	39,487,936	1	6	72	55	72	1,263
of which: deposits guaranteed by the Deposit Protection Fund	24,352,569	2	4	44	59	75	1,478
Deposits and loans received from retail customers	23,640,213	2	5	43	58	74	1,451
Deposits and loans received from households	22,163,532	2	6	40	58	74	1,451
Deposits and loans received from enterprises	9,516,348	4	7	17	59	76	1,552
Deposits and loans received from non-bank financial corporations.	2,766,922	2	3	5	57	87	1,561
Deposits and loans received from general government	1,818,260	0	-8	3	63	89	1,772
Deposits and loans received from non-residents	1,746,193	4	26	3	52	70	1,299
TOTAL FUNDS FROM BANKS	4,876,501	8	-13	9	53	72	1,352
Funds from NBS and foreign CBs	1,054,300	0	-50	2	91	99	5,294
Funds from non-resident banks	3,132,081	11	17	6	50	71	1,187
TOTAL SECURITIES ISSUED	4,139,344	3	-1	8	73	87	2,434
Mortgage bonds	3,319,367	3	0	6	78	89	2,864
Bills of exchange	151,816	17	42	0	76	100	2,494
Other securities issued	168,223	0	-26	0	92	100	3,045
Derivatives – negative fair value	499,938	0	-5	1	65	87	1,848
Risk-weighted assets of the banking book	30,399,021		4	56	59	78	1,414
Risk-weighted assets of the trading book	810,877		-23	1	72	90	2,280
Other risk-weighted assets	3,125,775		-1	6	57	76	1,386
Own funds	4,355,067		4	8	54	73	1,279

Note: The calculation of CR 3, CR 5 and HHI covers only those institutions reporting a positive value for the given item.
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 expenditure of banks and branches of foreign banks (EUR thousands)

	Value (as at 31.12.2010)	Value (as at 31.12.2009)	CR3 (%)	CR5 (%)	HHI
(a) TOTAL OPERATING COSTS(b + e + f)	1,128,428	1,143,143	55	72	1,261
(b) Administrative costs (c + d)	957,595	961,896	54	71	1,230
(c) Purchased performances	466,084	474,068	51	69	1,178
(d) Staff costs	491,511	487,828	57	74	1,308
(e) Depreciation/amortisation of tangible and immovable assets	150,976	159,078	60	76	1,555
(f) Taxes and fees	19,857	22,169	85	92	3,634
(g) GROSS INCOME (h + l)	2,065,011	1,910,246	62	77	1,497
(h) Net interest income (j - i)	1,689,008	1,562,375	62	78	1,506
(i) Interest expenses	575,829	776,377	47	65	1,084
(j) Interest income	2,264,837	2,338,752	58	73	1,360
(k) of which: Interest income from securities	518,445	471,407	60	83	1,583
(l) Net non-interest income (m + n + o + p)	376,003	347,871	65	80	1,676
(m) Revenue from shares and ownership interests	26,272	27,368	85	100	3,556
(n) Net income from fees	439,419	403,798	64	77	1,573
(o) Net income from trading	63,984	31,308			
(p) Other net operating income	-153,672	-114,603			
(q) NET INCOME (g - a)	936,583	767,103	70	85	1,887
(r) Net creation of provisions and income from depreciation of receivables	268,732	403,481			
(s) Net creation of reserves	21,440	23,041			
(t) NET PRE-TAX PROFIT (q - r - s)	646,411	340,581	73	92	2,146
(u) Extraordinary profit	0	0			
(v) Income tax	142,761	90,450	69	88	1,882
(w) NET PROFIT AFTER TAX (t + u - v)	503,650	250,131	74	94	2,233

Note: The calculation of CR 3, CR 5 and HHI covers only those institutions reporting a positive value for the given item.
In the case of all institutions having an equal share, the HHI value would be 385 if the institutions numbered 26.

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

	Denominator-weighted average (31. 12. 2010)	Denominator-weighted average (31. 12. 2009)	Asset-weighted average	Mini-mum	Lower quartile	Median	Upper quartile	Maxi-mum
ROA	0.93	0.47						
ROE (excl. branches)	12.28	6.54	13.70	-13.59	1.19 (8)	7.46 (11)	13.05 (26)	40.31 (47)
Cost-to-income ratio	54.65	59.84	61.15	-2,100.00	46.31 (30)	63.67 (39)	91.11 (27)	927.29 (4)
Relative significance of interest incomes	81.79	81.79	83.45	-0.05	68.65 (11)	80.17 (21)	86.88 (58)	391.02 (11)
Net interest spread	3.09	2.86	3.09	-1.22	1.34 (3)	1.77 (9)	3.02 (22)	13.93 (65)
retail	5.67	5.06	5.62	0.99	3.43 (10)	3.81 (21)	5.89 (24)	14.99 (42)
corporates	3.15	2.69	3.04	-0.36	2.16 (22)	2.99 (27)	3.38 (38)	10.17 (12)
financial corporations	2.01	3.06	3.60	-0.56	0.77 (39)	2.44 (5)	3.84 (5)	23.50 (43)
banks including NBS and bills	-0.02	-0.20	-1.73	-123.03	-0.67 (27)	-0.25 (8)	0.44 (10)	1.44 (55)
Net interest margin	3.06	2.85	3.06	-0.42	1.33 (3)	1.99 (15)	3.09 (33)	13.67 (48)

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 (31. 12. 2010)	Denominator-weighted average (31.12.2009)	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	6.07	5.50	6.01	0.00	1.30 (5)	5.30 (44)	8.08 (36)	21.70 (15)	
Retail (share of loans to retail sector)	5.12	5.23	5.33	0.00	2.47 (12)	4.75 (42)	8.31 (36)	100.00 (8)	
Corporates (share of loans to enterprises)	8.20	6.71	8.04	0.00	0.00 (7)	6.24 (42)	11.40 (41)	49.53 (9)	
Financial companies (share of loans to financial companies)	0.30	0.25	0.28	0.00	0.00 (43)	0.00 (0)	0.00 (19)	1.11 (30)	
Provisions as a share of total amount of non-performing loans to customers	72.71	74.59	82.10	33.58	65.21 (23)	72.08 (21)	88.82 (30)	460.11 (23)	
Large asset exposure (weighted) / own funds (excl. branches)	125.14	124.61	136.10	0.00	37.44 (6)	119.25 (57)	263.28 (20)	552.10 (11)	
Large asset exposure within groups (number of breaches)									3
Claimable value of collateral as a share of total amount of non-performing loans to customers	40.10	40.65	40.96	0.00	15.50 (3)	29.20 (23)	64.81 (57)	91.45 (14)	
FOREIGN EXCHANGE RISK									
Forex open balance-sheet position / own funds (excl. branches)	-3.09	-0.89	-3.02	-34.00	-4.11 (34)	0.00 (38)	0.85 (4)	55.62 (17)	
Forex open off-balance-sheet position / own funds (excl. branches)	6.41	-0.04	6.67	-111.45	-0.14 (26)	0.00 (6)	16.11 (38)	42.20 (23)	
Total forex open position / own funds (excl. branches)	3.32	-0.93	3.65	-111.34	-0.16 (44)	0.00 (6)	8.38 (13)	37.64 (31)	
Total forex open position / own funds (incl. branches)	1.91	2.10							
INTEREST RATE RISK									
Change in economic value of the trading book not including interest rate derivatives / own funds (excl. branches)[1)]	0.57	0.75	0.55	-1.17	0.00 (21)	0.00 (0)	0.10 (20)	4.02 (52)	
Change in economic value of the trading book including interest rate derivatives / own funds (excl. branches)[1)]	0.06	0.53	0.09	-1.17	0.00 (31)	0.00 (0)	0.22 (39)	2.74 (22)	

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

	Denominator-weighted average (31. 12. 2010)	Denominator-weighted average (31.12.2009)	Asset-weighted average	Minimum	Lower quartile	Median	Upper quartile	Maximum	Number of breaches
Change in economic value of the total balance sheet not including interest rate derivatives / own funds (excl. branches)[1)]	12.88	11.41	12.55	1.62	3.62 (5)	10.73 (31)	17.73 (33)	34.14 (25)	
Change in economic value of the total balance sheet including interest rate derivatives / own funds (excl. branches)[1)]	12.77	10.83	12.12	2.54	4.48 (4)	9.06 (31)	17.07 (33)	108.90 (25)	
Total interest-rate open position up to 1 month / own funds (excl. branches)	-85.39	-111.12	-97.12	-826.12	-251.36 (20)	-57.78 (11)	-1.78 (41)	204.48 (21)	
Total interest-rate open position up to 1 year / own funds (excl. branches)	-49.27	-104.54	-51.98	-483.72	-118.64 (35)	-51.61 (17)	46.19 (20)	152.54 (21)	
Total interest-rate open position up to 5 years / own funds (excl. branches)	-13.27	-1.42	-16.49	-124.04	-88.98 (29)	-53.15 (10)	32.15 (18)	102.96 (37)	
LIQUIDITY RISK									
Liquid asset ratio as defined in Decree No. 18/2008 of Národná banka Slovenska (Article 13) as amended	136.84	132.43	144.44	103.87	121.38 (39)	155.76 (50)	241.19 (4)	896.67 (8)	1
Ratio of quick assets to highly volatile funds	7.68	12.04	1 322.60	0.01	3.32 (23)	8.02 (56)	59.26 (15)	175 000.00 (6)	
Ratio of liquid assets (incl. collaterals from reverse repo trades) to volatile funds	27.96	24.14	47.50	-6.46	2.80 (7)	12.03 (13)	35.91 (50)	175 000.00 (30)	
Ratio of fixed and illiquid assets (excl. branches)	37.18	43.82	38.61	5.12	21.99 (3)	39.77 (48)	49.28 (15)	69.40 (27)	
Ratio of loans to deposits and securities issued	77.70	76.65	82.06	0.00	52.88 (6)	78.05 (66)	109.49 (19)	475.73 (8)	
Total liquidity position current up to 7 days / assets	-49.60	-44.65	-49.60	-147.70	-45.69 (73)	-18.54 (18)	1.14 (6)	61.21 (3)	
Total liquidity position estimated up to 7 days / assets	-7.27	-3.25	-7.27	-147.70	-12.82 (37)	0.14 (37)	6.53 (9)	61.21 (17)	
Total liquidity position current up to 3 months / assets	-57.51	-50.78	-57.51	-148.28	-56.78 (58)	-42.35 (35)	0.49 (4)	59.10 (3)	
Total liquidity position estimated up to 3 months / assets	-25.27	-9.23	-25.27	-270.14	-41.90 (18)	-15.19 (50)	0.35 (29)	59.10 (3)	

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

	Denominator-weighted average (31. 12. 2010)	Denominator-weighted average (31.12.2009)	Asset-weighted average	Minimum	Lower quartile	Median	Upper quartile	Maximum	Number of breaches
CAPITAL ADEQUACY									
Capital adequacy ratio (excl. branches)	12.68	12.57	12.53	9.84	11.24 (28)	12.34 (32)	18.35 (32)	51.73 (2)	0
Tier I capital as a share of own funds (excl. branches)	88.60	88.49	87.65	66.40	78.09 (8)	88.40 (50)	99.83 (29)	100.00 (6)	
Own funds as a share of the balance-sheet total (excl. branches)	8.55	8.50	8.55	5.86	7.72 (29)	8.37 (48)	10.64 (14)	54.63 (2)	
Potential loss as a share of own funds at a capital adequacy ratio of 8% (excl. branches)	36.93	36.36	33.50	18.74	28.80 (28)	35.16 (32)	55.48 (32)	84.54 (2)	

1) The change in economic value is estimated using data on the contractual residual period until the next revision of interest rates, or maturity date, assuming a parallel rise in interest rates of 1 percentage point.
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 (EUR thousands)

	Value as at 31. 12. 2010	Value as at 31. 12. 2009	Year-on-year change	Share of total premiums written
Total net profit	133,689	137,708	-2.9,%	6.6,%
ROA (%)	2.1	2.2		
ROE (%)	9.9	10.4		

2.2 Technical premiums (EUR thousands)

	Value as at 31. 12. 2010	Value as at 31. 12. 2009	Year-on-year change (%)	Share of total premiums written (%)	CR3 (%)	HHI 31. 12. 2010	HHI 31. 12. 2009
Total	2,014,410	1,985,498	1.5	100	62.8	1,694	1,784
Life insurance	1,079,308	1,029,066	4.9	53.6	54.5	1,342	1,376
Whole-life insurance, pure endowment insurance, or whole-life and endowment insurance (excl. unit-linked insurance)	620,656	603,794	2.8	30.8	62.6	1,712	1,566
Unit-linked insurance	314,764	284,144	10.8	15.6	56.1	1,328	1,740
Supplementary insurance	127,564	122,348	4.3	6.3	59.3	1,568	1,576
Other	16,325	18,780	-13.1	0.8	88.0	4,143	4,176
Non-life insurance	935,102	956,432	-2.2	46.4	75.7	2,380	2,513
Motor third-party liability insurance	283,518	284,669	-0.4	14.1	76.2	2,488	2,782
Land vehicles damage or loss insurance	276,041	293,600	-6.0	13.7	77.1	2,382	2,453
Property insurance	218,197	227,407	-4.0	10.8	80.1	2,944	2,895
Other	157,346	150,756	4.4	7.8	66.8	2,064	2,133

Note: The calculation of CR 3 and HHI covers only those institutions reporting a positive value for the given item. In the case of all institutions having an equal share, the HHI value would be 400 if the institutions numbered 25.

2.3 Technical premiums ceded to reinsurers (EUR thousands)

	Value as at 31. 12. 2010	Value as at 31. 12. 2009	Year-on-year change (%)	Share of total premiums written (%)
Total	262,607	244,371	7.5	13.0
Life insurance	8,919	8,502	4.9	0.8
Non-life insurance	253,688	235,869	7.6	27.1

2.4 Loss ratio in non-life insurance

	Value as at 31. 12. 2010 (%)	Value as at 31. 12. 2009 (%)
Total	62.3	56.6
Motor third-party liability	55.7	58.7
Land vehicles damage or loss insurance	65.6	68.0
Property insurance	75.0	46.9
Other	50.6	44.4

2.5 Cost of claims (volumes in EUR thousands)

	Value as at 31. 12. 2010	Value as at 31. 12. 2009	Year-on-year change (%)	Share of total premiums written (%)	CR3 (%)	HHI 31. 12. 2010	HHI 31. 12. 2009
Total	1,131,204	1,034,119	9.4	56.2	67.4	1,887	1,975
Life insurance	608,769	551,521	10.4	30.2	62.4	1,619	1,667
Whole-life insurance, pure endowment insurance, or whole-life and endowment insurance (excl. unit-linked insurance)	508,882	468,717	8.6	25.3	66.4	1,834	1,837
Unit-linked insurance	54,477	43,476	25.3	2.7	79.2	2,674	2,938
Supplementary insurance	27,259	22,346	22.0	1.4	59.7	1,733	1,815
Other	18,151	16,982	6.9	0.9	88.9	6,276	6,314
Non-life insurance	522,435	482,598	8.3	25.9	79.6	2,579	2,670
Motor third-party liability insurance	159,820	162,822	-1.8	7.9	81.7	2,789	3,133
Land vehicles damage or loss insurance	187,957	199,674	-5.9	9.3	78.7	2,402	2,530
Property insurance	116,859	66,021	77.0	5.8	82.9	3,200	3,401
Other	57,798	54,081	6.9	2.9	80.4	2,995	2,679

Note: The calculation of CR 3 and HHI covers only those institutions reporting a positive value for the given item. In the case of all institutions having an equal share, the HHI value would be 400 if the institutions numbered 25.

2.6 Structure of insurers' technical provisions (EUR thousands)

	Value as at 31. 12. 2010	Value as at 31. 12. 2009	Year-on-year change (%)	Share of total provisions (%)
Total	4,660,144	4,346,843	7.2	100.0
Life insurance	3,582,026	3,324,827	7.7	76.9
Of which: Provision covering liabilities arising from financial investments made under unit-linked policies	846,860	680,676	24.4	18.2
Non-life insurance	1,078,118	1,022,016	5.5	23.1

2.7 Investment of insurers' technical provisions excluding provisions for liabilities arising from financial investments made under unit-linked policies (EUR thousands)

	Value as at 31. 12. 2010	Value as at 31. 12. 2009	Year-on-year change (%)	Share of total provisions (%)
Total	4,328,766	4,228,649	6.3	113.5
Government and central bank bonds of Slovakia and EU Member States, bonds guaranteed by Slovakia, and bonds of the EIB, EBRD and IBRD	2,120,174	1,994,495	15.7	55.6
Bank bonds	580,945	502,248	-50.2	15.2
Term accounts at banks	65,449	131,538	-2.9	1.7
Mortgage bonds	490,716	505,395	16.2	12.9
Reinsurance	323,957	278,794	-8.4	8.5
Other	747,526	816,179	2.4	19.6

3 RETIREMENT PENSION SAVING

3.1 Pension fund management companies as at 31.12.2010

	Market share[1] (%)	NAV of funds (EUR thousands)	Number of customers[2]
Allianz - Slovenská, d.s.s., a.s.	32	1,175,917	442,694
Axa, d.s.s., a.s.	27	1,003,603	372,779
VÚB Generali, d.s.s., a.s.	14	538,586	195,893
ING, d.s.s., a.s.	11	411,216	147,263
AEGON, d.s.s., a.s.	10	380,849	184,682
ČSOB, d.s.s., a.s.	6	207,678	93,659

1) Market shares are calculated according to the aggregate net asset value (NAV) of funds managed by the given pension fund management company.
2) Data on the number of customers is received directly from the pension fund management companies; the sum of these data for the whole sector may differ from the data received from the Social Insurance Agency on the aggregate number of customers in the sector.
Note: NAV – Net Asset Value.

3.2 Results of pension fund management companies as at 31.12.2010 (EUR thousands)

	Revenues	Expenditures	Profit/loss	ROA (%)	ROE (%)
AEGON, d.s.s., a.s.	2,398	1,071	1,327	8.8	8.9
Allianz - Slovenská, d.s.s., a.s.	6,286	3,964	2,322	5.3	5.4
Axa, d.s.s., a.s.	5300	9,513	-4,213	-6.5	-6.7
ČSOB, d.s.s., a.s.	1,218	1,620	-402	-3.2	-3.3
ING, d.s.s., a.s.	2,306	4,321	-2,015	-14.8	-15.9
VÚB Generali, d.s.s., a.s.	3,171	1,989	1,182	9.8	10.1

3.3 Pension funds (EUR thousands)

	NAV as at 31. 12. 2010
Total	3,717,848
Conservative	169,026
Balanced	1,102,148
Growth	2,446,674

Note: NAV – Net Asset Value.

3.4 Investment structure of pension funds (EUR thousands)

	Value as at 31. 12. 2010
Total	3,717,848
Bank accounts	1,146,862
Bonds	1,518,253
Treasury bills	1,051,200
Equities and investment fund shares / units	2,040
Other claims	9,617
Payables	-10,124

3.5 Supplementary pension fund asset management companies as at 31.12.2010

	Market share[1] (%)	NAV of funds (EUR thousands)	Number of customers
ING Tatry – Sympatia, d. d. s., a. s.	38	432,427	322,485
Doplnková dôchodková spoločnosť Tatra banky, a. s.	30	343,559	197,110
Stabilita, d. d. s., a. s	19	217,617	192,923
Axa, d. d. s., a. s.	13	148,120	132,464
AEGON, d. d. s., a. s.	0	3,295	4,795

1) Market shares are calculated according to the aggregate net asset value (NAV) of funds managed by the given supplementary pension fund asset management companies.
Note: NAV – Net Asset Value.

3.6 Results of supplementary pension fund asset management companies as at 31.12.2010 (EUR thousands)

	Revenues	Expendi-tures	Profit/loss	ROA (%)	ROE (%)
AEGON d.d.s., a.s.	157	288	-131	-6	-6
Axa, d.d.s., a.s.	3,285	3,215	70	1	1
ING Tatry - Sympatia, d.d.s., a.s.	10,985	9,099	1,886	10	14
Stabilita, d.d.s., a.s.	5,912	4,341	1,571	26	30
Doplnková dôchodková spoločnosť Tatra banky, a.s.	6,700	5,755	945	12	15

3.7 Supplementary pension funds (EUR thousands)

	NAV as at 31.12.2010
Total	1,145,018
Contributory	1,096,059
Payout	48,959

Note: NAV – Net Asset Value.

3.8 Investment structure of supplementary pension funds (EUR thousands)

	Value as at 31. 12. 2010
Total	1,145,018
Bank accounts	149,123
Bonds	762,860
Treasury bills	7,513
Equities and investment fund shares / units	232,066
Other claims	82,009
Payables	-88,553

4 COLLECTIVE INVESTMENT

4.1 Asset management companies as at 31.12.2010

	NAV of investment funds (EUR thousands)	Market share (%)
Total	3,769,915	100.0
Tatra Asset Management	1,508,748	40.0
VÚB Asset Management	907,907	24.1
Asset Management SLSP	887,730	23.5
Prvá penzijná správ. spol. Poštovej banky	176,705	4.7
ČSOB Asset Management	118,667	3.1
Alico Funds Central Europe	65,160	1.7
IAD Investments	60,959	1.6
Allianz Asset Management	44,039	1.2

Note: NAV – Net Asset Value.

4.2 Expenditures, revenues and profitability indicators of domestic asset management companies as at 31.12.2010 (EUR thousands)

	Revenues	Expenditures	Profit/loss	ROA (%)	ROE (%)
Total	45,336	38,782	6,554	10.0	11.4
Alico Funds Central Europe	2,887	2,179	708	16.1	20.9
Allianz Asset Management	561	1,204	-643	-21.2	-21.8
Asset Management SLSP	7,489	6,829	660	11.5	15.2
ČSOB Asset Management	6,871	6,327	544	5.8	7.0
IAD Investments	1,397	1,362	35	1.5	1.6
Prvá Penzijná správ. spol. Poštovej banky	5,125	4,114	1,011	22.0	32.9
Tatra Asset Management	14,007	10,596	3,411	11.1	11.6
VÚB Asset Management	6,999	6,171	828	16.4	19.1

4.3 Structure of investment funds as at 31.12.2010 (EUR thousands)

Fund type	Market share (%)	Net asset value	Number of funds	CR3[1] (%)	CR5[1] (%)	HHI[1]	HHI on a uniform distribution
Total investment funds	100.0	4,497,172	498	,	,	,	20
Domestic	83.8	3,769,915	78	34	46	558	128
Money market funds	38.9	1,749,114	13	73	86	1,940	769
Bond funds	11.7	527,339	9	92	96	3,728	1,111
Equity funds	4.3	191,899	7	82	95	2,642	1,429
Mixed funds	11.2	502,268	19	59	71	1,694	526
Funds of funds	7.2	325,926	16	58	77	1,502	625
Other funds	5.5	249,127	9	68	92	2,040	1,111
Special funds	0.5	24,161	1	100	100	10,000	10,000
Real estate funds	4.4	200,080	4	91	100	3,530	2,500
Foreign[2]	16.2	727,258	420	19	26	217	24
Money market funds	2.8	124,529	27	80	87	3,487	370
Bond funds	2.0	88,503	73	38	49	682	137
Equity funds	4.7	212,097	226	32	39	489	44
Mixed funds	0.5	22,888	28	82	92	2,603	357
Funds of funds	1.9	84,997	17	71	84	2,475	588
Other funds	4.3	194,243	49	20	32	372	204

1) Market concentrations are calculated only for open-end investment funds (they exclude closed-end and special funds)
2) For foreign investment funds the net asset value represents units sold in the Slovak Republic.
Note: The calculation of CR 3, CR 5 and HHI covers only those institutions reporting a positive value for the given item. In the column, "HHI on a uniform distribution", the HHI value is that which would express the concentration on a uniform distribution of the net asset value in the given group of funds.

4.4 Net sales of open-end investment funds as at 31.12.2010 (EUR thousands)

	12 months	Number of funds	HHI	HHI on a uniform distribution
Total open-end investment funds	428,158	498	887	20
Domestic	290,922	78	4,971	128
Money market funds	-32,032	13	6,829	769
Bond funds	107,947	9	2,485	1,111
Equity funds	43,369	7	2,231	1,429
Mixed funds	125,278	19	3,836	526
Funds of funds	-11,360	16	7,304	625
Other funds	4,717	9		1,111
Special funds	0	1	7,848	10,000
Real estate funds	53,003	4		2,500
Foreign	137,236	420		24
Money market funds	14,313	27		370
Bond funds	18,160	73		137
Equity funds	9,403	226		44
Mixed funds	8,393	28		357
Funds of funds	8,413	17		588
Other funds	78,554	49		204

Note: The calculation of HHI covers only those institutions reporting a positive value for the given item. In the column, "HHI on a uniform distribution", the HHI value is that which would express the concentration on a uniform distribution of the net asset value in the given group of funds.

4.5 Average returns on open-end investment funds as at 31.12.2010 (% p.a.)

	3 months			1 year			3 years		
	Minimum	Average	Maximum	Minimum	Average	Maximum	Minimum	Average	Maximum
Total open-end investment funds	-81.1	1.3	22.1	-80.1	3.7	50.7	-44.5	0.2	15.4
Domestic	-2.2	1.2	15.0	-0.3	2.8	26.4	-19.8	0.4	7.7
Money market funds	-2.2	0.2	0.3	0.2	1.1	6.4	-1.0	2.0	7.7
Bond funds	-2.0	-0.4	0.4	-0.3	2.5	6.7	-3.0	1.0	2.3
Equity funds	3.7	8.5	15.0	6.2	13.4	26.4	-14.6	-11.1	-7.1
Mixed funds	-1.6	1.6	6.0	-0.2	4.5	16.9	-19.8	-0.8	2.5
Funds of funds	-0.9	4.8	9.4	0.1	4.9	10.8	-6.3	-3.4	1.4
Other funds	0.0	0.3	8.1	0.5	1.0	2.2	0.6	1.0	1.8
Special funds	-0.6	-0.6	-0.6	1.4	1.4	1.4	-1.2	-1.2	-1.2
Real estate funds	0.2	1.2	1.9	2.3	5.2	7.4	0.8	3.9	6.4
Foreign	-81.1	1.9	22.1	-80.1	8.2	50.7	-44.5	-0.7	15.4
Money market funds	-2.8	0.2	5.9	-0.1	1.5	15.2	-0.6	2.1	5.5
Bond funds	-7.6	-0.4	9.0	0.0	10.3	29.1	-3.1	2.2	15.4
Equity funds	-81.1	7.5	22.1	-80.1	19.3	50.7	-44.5	-3.5	13.8
Mixed funds	-1.3	3.0	13.6	-1.4	8.4	34.5	-7.6	0.0	3.8
Funds of funds	-1.3	4.6	9.0	0.8	8.0	20.0	-5.8	-0.1	2.7
Other funds	-56.2	-3.9	15.4	-55.6	-6.4	13.7	-7.9	0.2	4.4

4.6 Asset structure of domestic investment funds as at 31.12.2010 (EUR thousands)

	Money market funds	Other funds
Total	1,753,121	2,045,424
Deposits at banks	793,257	389,709
Securities other than equities and investment fund shares / units	925,408	843,285
Equities and investment fund shares / units	36,993	531,115
Equities and other ownership interests	0	151,110
Financial derivatives[1)]	-2,694	-1,696
Other assets	156	131,901

1) Financial derivatives include derivatives with positive and negative fair value.

5 INVESTMENT FIRMS

5.1 Basic details of investment firms as at 31.12.2010 (EUR thousands)

	Amount of transactions	Market share (%)	Amount of assets under management	Market share (%)
Banks and branches of foreign banks	113,140,041	72	114,918	5
Asset management companies	10,972	0	2,003,719	91
IFs with share capital of at least 35M	1,351,037	1	74,780	3
Others	42,177,272	27	5,755	0

Note: Non-bank investment firms are divided by the size of their share capital. Those with share capital of less than €1.162 million 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	43	72	87	2,223
Banks and branches of foreign banks	17	80	95	2,699
Asset management companies	7	100	100	10,000
IFs with share capital of at least 35M	8	96	99	5,208
Others	11	94	98	3,814

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

5.3 Trading volume broken down by investment service as at 31.12.2010 (EUR thousands)

	IS – 1	IS – 2	IS – 3
Total transactions	24,619,559	34,642,447	97,415,339
Equities	838,313	742,546	380
Bonds	1,735,075	7,082,062	4,206,013
Investment fund shares / units	1,868,191	2,006	0
Other transferable securities	125,755	20,968	1,463,856
Other non-capital securities	0	123,160	3,784,239
Money market instruments	383,381	25,610,276	401,328
Foreign securities	151,726	74,331	19,391,248
Derivatives – type A	17,070,062	987,098	68,130,069
Derivatives – type B	127,908	0	23,835
Derivatives – type C	1,965,740	0	0
Derivatives – type D	0	0	0
Derivative instruments for credit risk transfer	0	0	0
Financial contracts for differences	0	0	0
Derivatives - type E	353,408	0	14,371

Note: 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 an account other than 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.

GLOSSARY AND ABBREVIATIONS

GLOSSARY OF TERMS USED

Average annual return on pension funds – 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 31.12.2010 (PMZDHDJ 31.12.2010) according to the following formula:

$$PMZDHDJ_{31.12.2010} = \left(\frac{DJ_{31.12.2010}}{DJ_{31.12.2009}} - 1 \right) * 100\%$$

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 return is given in nominal terms, which means that inflation is not deducted. When returns are calculated for various forms of investment, the nominal return is used as a rule, calculated according to the standard statutory methodology.
This return, however, is not identical to the return 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 31.12.2009 and 31.12.2010, which are available on the website of Národná banka Slovenska.

Average return 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.

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

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

Cost-to-income ratio – the ratio of total operating expenses and net income from banking activity (purchased performances + staff costs + social costs + depreciation/amortisation of tangible and intangible assets + taxes and fees / income from shares and ownership interests + net income from fees and commissions + net income from securities transactions + net income from derivative 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.

Deleveraging – a process of debt reduction.

Enterprises – non-financial corporations.

Expense ratio – ratio of operating expenses to earned premiums.

Financial intermediation – for the purpose of this analysis, financial intermediation is understood to mean financial flows between entities and not the mediation of financial services.

General government – central and local government bodies.

Herfindahl index – an index representing the sum of the squares of the shares of individual banks' assets in total assets.

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

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, 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 financial transfers paid 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.

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 proportion of total corporate loans which are arranged with enterprises that in the given quarter reported both a loss and a year-on-year drop in sales of more than 50%. LAR 2 represents the proportion of total corporate loans which are arranged with enterprises that in the given quarter reported both a loss and 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 corporations, 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 – the loan amount divided by the value of the collateral used for the loan.

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

Loss ratio – the percentage ratio of:
- the sum of claim costs 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 interest rate spread – the difference between the rate of return on loans (interest income on loans as a share of total loans) and the cost of deposits (interest expenses on deposits as a share of total deposits).

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 investment funds, insurance companies.

Non-performing loans – bank loans are deemed to be non-performing when they have lost more than 50% of their value or when the borrower is in arrears with repayment.

Premium – the price agreed in individual insurance contracts regardless of the method of their financial reporting.

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

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

Unit-linked insurance – investment life insurance where the investment risk is borne by the customer.

ABBREVIATIONS

AFS	available for sale (portfolio of financial instruments)
CAR	capital adequacy ratio
CBD	consolidated banking data
CDS	credit default swap
CI	collective investment
CLI	composite leading indicator
CR	Czech Republic
CR n	index of the concentration of the n largest banks
CZK	Czech koruna
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECB	European Central Bank
EIB	European Investment Bank
ETF	exchange-traded funds (or transferable securities linked to the value of financial indices)
EU	European Union
EUR	euro
EURIBOR	Euro Interbank Offered Rate
GARCH	Generalised Autoregressive Conditional Heteroscedasticity (model)
GDP	gross domestic product
HHI	Herfindahl index
HICP	Harmonised Index of Consumer Prices
HTM	held to maturity (portfolio of financial instruments)
IBRD	International Bank for Reconstruction and Development
IF	investment firm
IFSU	investment fund shares/units
IRB	Internal Rating Based (approach)
LAR	loans at risk
LGD	loss given default
LTRO	long-term refinancing operations (with the ECB)
LTV	loan-to-value (ratio)
MB	mortgage bond
MTPL	motor third-party liability (insurance)
NAV	net asset value
NBS	Národná banka Slovenska
OECD	Organisation for Economic Cooperation and Development
OF	own funds
PFMC	pension fund management company
PMZDHDJ	year-on-year percentage change in daily values of pension units
p.p.	percentage point
RBUZ	Register of Bank Loans and Guarantees
ROA	return on assets
ROE	return on equity
SO SR	Statistical Office of the Slovak Republic
SPMC	supplementary pension asset management company
SR	Slovak Republic
Tier 1,2,3	capital components
ÚPSVaR	Central Office of Labour, Social Affairs and Family
USA	United States of America
USD	US dollar
VaR	Value at Risk

LIST OF CHARTS AND TABLES

List of charts

CHARTS IN BOXES

List of tables

LIST OF TABLES IN THE ANALYTICAL DATA ANNEX