NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

Analysis of the Slovak Financial Sector for the First Half of 2011

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Contents

LIST OF BOXES

FOREWORD

Foreword

Národná banka Slovenska produces the Analysis of the Slovak Financial Sector for the purposes of the NBS Banking Board as well as for professionals and the wider public. The purpose of this report is to analyse the current situation and developments in the domestic 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 30 June 2011, although in several parts it uses later data, where available. The main aim is to assess the financial system's resilience to possible negative developments, looking at both individual institutions and the sector as a whole. The analysis provides a more detailed view of the links between financial sector developments, on one hand, and macroeconomic and microeconomic indicators, on the other hand. The macro-prudential nature of the analysis is reflected especially in the use of stress testing, through which the financial sector's sensitivity in various scenarios may be gauged. A new feature of this report is the content of the annexed statistics part, which comprises charts of selected macroprudential indicators for the main risk areas in the financial sector, instead of the tables of financial market analytical data that appeared in previous reports. This chapter serves as an annex to the main text of the analysis.

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 materials processed by departments of the NBS Financial Market Supervision Unit. Additional sources included data from the Statistical Office of the Slovak Republic (SO SR), the Real Estate Price Map, Eurostat, the European Central Bank (ECB), and from other external sources and commercial information systems. The analysis does not take into account activities concerning the supervision of particular institutions.

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ANALYSIS SUMMARY

Analysis Summary

Widening of economic imbalances and mounting uncertainty in financial markets

Changes in domestic and external economic growth and developments in the financial market have a relatively substantial impact on the financial sector in Slovakia. The Analysis of the Financial Sector for 2010 noted some relatively favourable trends in the macroeconomic situation and signs of stabilisation in financial markets. At the same time, however, NBS warned that these developments could mask risks which, if they materialised to any significant extent, could adversely affect macroeconomic conditions and the situation in financial markets.

A deterioration in several areas was observed during the first half and subsequent months of 2011.[1] The uncertainty in financial markets grew markedly, largely due to fears about the soundness of European banks and the sovereign crises in the euro area, as well as about the downturn in global economic growth. These negative trends were mutually reinforcing and thus the situation in these areas became substantially worse.

In contrast to the first quarter of the year, when a number of countries continued to report positive economic news, the second quarter saw growth slow, or even decline, in most economic blocs. The key factors in this regard were rising inflation and expectations for an economic slowdown in emerging economies. The slowdown in United States began in the first quarter of 2011, while euro area economic growth did not decelerate until the second quarter. The easing of growth in Germany had a major impact on Slovakia.

The negative expectations for economic growth further escalated the euro area debt crisis, as fears about the sustainability of debt servicing spread to other countries. This was reflected mainly in the banking sectors of the countries concerned. The debt crisis in conjunction with other adverse events sharply exacerbated uncertainty in global financial markets.

These events inevitably affected the stability of the global financial system. Both the IMF and ECB highlighted the mounting threat to the global and European financial system stabilities.

The Slovak financial sector has not so far been seriously affected by the negative global trends; the future repercussions for the sector will depend on how these trends affect the Slovak household and corporate sectors

During the first six months of 2011, the Slovak financial sector was not seriously affected by the increasing uncertainty in global financial markets or by the deceleration of economic growth. Most sectors reported asset growth and an increase in profitability, which in some sectors approached or even exceeded the pre-crisis level. This is explained mainly by the domestic financial system's orientation on the Slovak economy as well as by the fact that economic growth data for Slovakia remained largely positive during the first six months of the year.

The stability of the domestic financial sector in the following period will largely depend on the development of macroeconomic fundamentals in the domestic and external economies. With the household sector steadily increasing in significance, its developments will be particularly important for the Slovak financial sector. Households are accounting for a sharply rising share of bank lending growth and are thus making a substantial contribution to banks' profitability. They also account for a sizeable proportion of new insurance transactions, and for the bulk of asset growth in Pillars II and III of the pension saving system. In terms of their financial position, ability to service bank debts, and consumer sentiment, households will therefore have a substantial effect on asset and profitability growth in the domestic financial sector.

The extent to which the corporate sector is directly linked to the Slovak financial system has been gradually declining since 2009. Nevertheless, the financial position of the corporate sector continues to exert a significant effect, particularly on the banking sector. The situation in the corporate sector is also a significant factor in the household sector. Thus the stability of the financial sector may be directly or indirectly affected

1 *The Analysis covers macroeconomic and financial market developments up to the end of August 2011.*

by the deterioration in firms' performance or by negative expectations for the future.

Slovak economy may face adverse repercussions

The current global developments are bringing relatively few signs of improvement. Assumptions for economic growth in several countries have been revised down in recent months, mainly in response to national austerity measures, expectations of a slowdown in global economic growth, uncertainty in financial markets, and high debt ratios in the household and corporate sectors of advanced economies. Sentiment indicators for firms in advanced countries, as well as in Slovakia, have been trending downwards for the past several months. A similar development is also being seen in household consumer confidence in several countries.

The recovery of the euro area economy could be halted by fears about the adequacy of bank capital positions in the euro area. Banks in several euro area countries are generally taking a cautious approach, which is reflected in the still strict standards for new loans. What happens next in the euro area debt crisis will be particularly important. If an appropriate solution cannot be found, the economic growth of the entire euro area may stall.

Banking sector strengthened its financial position

The financial position of the banking sector, as a reflection of its ability to withstand any possible negative shocks, improved during the first half of 2011. Total profits in the sector for this period soared by 79% in year-on-year terms. A relatively large proportion of this growth comprised extraordinary one-off incomes in selected banks, without which the sector's profit growth would have stood at 50%. The annual upturn in profitability was largely caused by the declining costs of non-performing loans – a consequence of the improving macroeconomic environment in Slovakia during that period. Banks also benefited from increased lending to households and the subsequent rise in interest income.

Capital adequacy ratios of banks remained practically unchanged in the first half of 2011. The capital position was strengthened mainly by the fact that around 50% of the profits for 2010 were retained as capital. However, this positive effect was lessened by regulatory amendments under which new items deductible from capital were implemented and by an increase in risk-weighted assets.

Growth in banking sector assets stemmed mainly from increase in retail lending; recovery of corporate lending was modest

Several of the trends seen in bank balance sheets in the first half of 2011 were a continuation of from positive trends in 2010. For most banks in the sector, this was a period of growth. Households accounted for a substantial part of the banking sector's asset growth, particularly through the rise in new lending. The sharpest rise in lending growth was observed in housing loans at the end of the first half of 2011. A large proportion of these loans were taken out mainly to refinance older loans. Customers were attracted in particular by the developments in interest rates on new loans, which fell again in the second quarter. The stock of loans to households also increased quite sharply, and a key factor in this regard was not only low interest rates, but also the continuing decline in residential property prices.

In the first half of 2011, the banking sector's lending to enterprises recorded annual growth for the first period in a long time. This result should, however, be treated with some caution, since it appeared only in lending to selected sectors. Both firms and banks remain cautious, and credit standards are set relatively tightly.

Although credit risk in the banking sector eased somewhat during the first six months, the outlook remains negative

Banks saw positive trends in the area of credit risk, i.e. in the ability of customers to service their bank commitments.

In the majority of banks, the amount of non-performing household loans declined, as did the ratio of non-performing loans to total loans. During the first half of 2011, households benefited mainly from low interest rates, with many taking the opportunity to refinance older loans with new, cheaper loans. At the same time, the short initial rate fixation periods for existing loans meant rate reductions could be passed on to customers.

The labour market situation remained largely unchanged in the first half of 2011. Employ-

ment rose in several sectors, especially industry, but data for the last months of the period and for July and August indicated an easing of these positive trends. To the detriment of household credit risk, the structure of registered unemployment has gradually changed since the onset of the crisis. Before the crisis, the vast majority of unemployed came from lower-income groups, but the subsequent period has seen a rise in the share of unemployed from middle- and higher-income groups, i.e. the ones that have the highest liabilities to banks. The level of unemployment among middle- and higher income groups is substantially higher now than in the pre-crisis period, which implies that a proportion of borrowing households remain in a weak financial position and are probably finding it difficult to service their bank commitments. Inflation growth weighed adversely on households in the first half of 2011, with real wages falling in a majority of sectors, but the pass-through to the amount of non-performing loans was not significant.

The outlook for household credit risk is somewhat unfavourable, since the majority of factors that affect debt-servicing ability are showing negative tendencies. The employment situation in the period ahead may be affected by the uncertain macroeconomic environment, and real wage developments remain a question.

Corporate credit risk in the first half of 2011 did not follow any clear trend. On the positive side, the corporate sector's results for 2010 showed an improvement on the previous year, which stemmed mainly from the continuing activity growth in a majority of sectors. Nevertheless, the overall uncertainty in the sector persisted and even became more pronounced towards the end of the first half. Not only did business confidence indicators fall during this period, a number of economic indicators also deteriorated. Although the corporate default rate continued to decline, it remained above pre-crisis levels. The amount of non-performing corporate loans reached a record level and did not come down in the first six months.

Market risks in the banking sector remained largely unchanged; the further developments in the sovereign debt crisis will be particularly important.

The sensitivity of the banking sector to financial market developments, i.e. its exposure to market risks, is relatively low. The majority of banks have negligible exposure to exchange-rate and share-price movements. As for sensitivity to interest rate changes, it remained the same in the first half of the year.

From the view of banks' exposure to market risks, the most important developments were in the government bond market. Countries that were already perceived as high risk became even more risky, and the number of countries in danger of default increased. The exposure to these sovereign risks is concentrated in certain institutions, and is relatively low for the sector as a whole. If, however, uncertainty in the government bond market escalates, the negative repercussions could pass through to government bonds – including Slovak government bonds – that have so for been seen by investors as less risky.

Stress testing of the banking sector showed its resilience

Stress testing of the banking sector showed its resilience to adverse macroeconomic scenarios and negative trends. This resilience is largely based on the sector's relatively high capital buffer (as reported at the end of the first half of 2011) and on its profitability even during a stress period. The banking sector was seen to be most vulnerable in its corporate loan portfolio. Losses on the household loan portfolio and debt securities portfolio increased in significance when compared with the results of stress tests as at the end of 2010. In certain years, depending on the scenario, the losses on these portfolios even exceeded the losses on the corporate loan portfolio. The losses on household loans were more pronounced under the scenario of rising unemployment and increasing inflation (which would pass through to higher interest rates).

Life insurance continued to stagnate, while non-life insurance recovered moderately

The insurance sector did not see any significant changes in the first half of 2011. Life insurance continued to stagnate. While the results of unit-linked products were the best in this sector, they were still far below pre-crisis levels. Traditional life insurance products even recorded a decline, and the number of partial withdrawals and contract cancellations continued to increase.

In non-life insurance there was a moderate recovery. In the property insurance line, premiums rose

sharply and the loss ratio declined, after recording high values in the previous year. In motor vehicle insurance, strong competition continued to bring down premiums. Although the rise in claim costs was more pronounced in non-life insurance, these costs were covered by technical provisions and the overall loss ratio fell to its lowest level since 2006.

The profitability of insurance companies rose sharply in comparison with the previous year, mainly due to the lower loss ratio in non-life insurance and the decline in the deficit provision in traditional life insurance (as a result of rising interest rates). The solvency of insurance companies in 2010 is at an adequate level, largely unchanged from 2009.

No significant changes in the pension saving sector

In Pillar II of the pension system, the retirement pension sector, no significant changes took place in the first half of 2011. The structure of Pillar II fund portfolios remains highly conservative, and in no case was there a material change to a fund's investment strategy. Only the bond component of the portfolio increased its share. All three fund categories reported a very similar asset structure and level of performance.

The number of participants in Pillar III of the pension system, the supplementary pension sector, continued to decline in the first half of 2011. The structure of the securities portfolios of Pillar III funds underwent a partial change, when funds were shifted from bonds to bank deposits. The component of investments in equities and investment fund shares/units also increased, but to a far lesser extent than in previous year.

Demand for collective investment products declined, particularly towards the end of the first half of 2011

The amount of assets under management in the collective investment sector remained did not undergou significant chnges during the first half of 2011. The first quarter saw a moderate rise in net asset value (NAV), accounted for by foreign collective investment undertakings, but in the next three months there was an outflow of funds due to redemptions of domestic investment funds. The negative net sales reached a peak in June and were recorded mostly in the category of money market funds. These outflows were to some extent offset by higher unit-holder demand for real estate funds and mixed funds. The only substantial change in asset structure was recorded by equity funds, which increased their share of investments in bank deposits. All fund categories reported a positive rate of return, the highest being in equity funds, funds of funds, and real estate funds.

Financial institutions would be adversely affected by a continuing period of investment in low-yielding, less risky assets; equity risk is mounting

As regards the market risk exposure of institutions in the Slovak financial sector, the situation is to a large extent affected by the current euro area debt crisis as well as by the risk of a downturn in the global economy. At the systemic level, such adverse developments could negatively affect the Slovak financial sector in several areas. First, the risk of an extended period of investment in low-yielding, least risky assets would escalate, and this may prolong the period of low returns in Pillar II funds, in money-market and bond funds, and in the insurance sector. A continuation of negative trends in financial markets would probably further exacerbate certain sovereign debt risks.

As was seen in July and August, mounting uncertainty in financial markets brings with it the risk of a slump in share prices. Such a risk can cause relatively heavy losses in Pillar III of the pension sector and in investment funds investing in equity instruments. At the same time in the Pillar III sector, the duration of assets declined quite markedly and thus their interest-rate sensitivity eased.

The stress testing confirmed the sector's increased sensitivity to a slump in share prices. The funds that incurred heavier losses under the stress scenarios were those with the largest proportion of equity investments, mainly Pillar III contributory funds and investment funds with the most substantial equity investments.

CHAPTER 1

MACROECONOMIC DEVELOPMENTS AS THEY AFFECT FINANCIAL SECTOR STABILITY

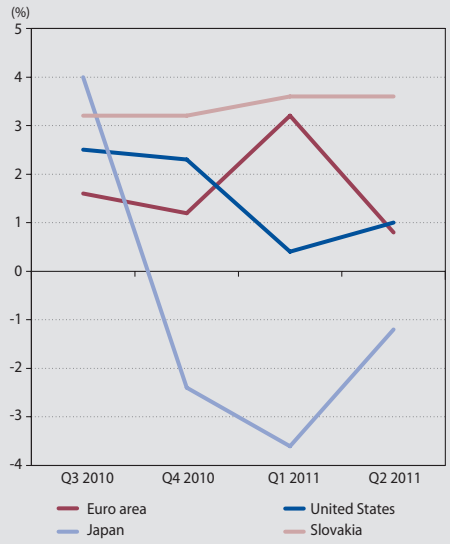
1

1 MACROECONOMIC DEVELOPMENTS AS THEY AFFECT FINANCIAL SECTOR STABILITY

OUTLOOKS FOR GLOBAL MACROECONOMIC DEVELOPMENTS WERE PREDOMINANTLY POSITIVE AT THE BEGINNING OF 2011

At the end of 2010 / beginning of 2011, the majority of economic indicators were pointing to an improving economic situation across the world. Although the situation at that time was still complicated by several negative circumstances and factors, the general expectation was that the global economy would make relatively stable progress in the period ahead. Outlooks for the transformation of demand – from being heavily dependent on government stimulus measures, to being sustainably driven by private sector economic activity – appeared to be favourable. At the time, the likelihood of a recession or the threat of deflation in all parts of the world was considered negligible. Both consumer and corporate sentiment were at relatively strong levels, at least in comparison with recent years. Importantly, the majority of financial markets were continuing to stabilise.

Chart 1 GDP in selected regions and countries



Source: Eurostat.
Note: The Chart shows the quarter-on-quarter percentage change in seasonally-adjusted GDP on an annualised basis.

THE GLOBAL MACROECONOMIC SITUATION TURNED FOR THE WORSE DURING THE PERIOD UNDER REVIEW

The situation, however, changed quite dramatically during the first eight months of 2011. Except in a few places, the pace of economic activity slowed across the world, and particularly so in advanced countries. The downturn became apparent mainly in the second quarter, when the preliminary GDP data for several countries showed minimal or even negative growth. According to the latest partial economic indicators, however, the state of the world economy may have worsened still further in the third quarter.

A VOLATILE ATMOSPHERE RETURNED TO FINANCIAL MARKETS

The overall situation is being exacerbated by the re-emergence of substantial turbulences in global financial markets, which were especially marked in July and August. Certain stress indicators for financial markets are even reaching levels similar to, or higher than, those seen at the peak of the financial crisis, following the collapse of Lehman Brothers. The mounting evidence of weakening economic performance and tensions in financial markets are creating a dangerous downward spiral in which one negative factor is reinforcing another and vice versa. One result of this is the ebbing of confidence in the household and corporate sectors, leading households and firms to postpone consumption and investments. The efficiency of liquidity distribution in the financial sector is again declining.

FEARS OF A DOUBLE-DIP RECESSION ARE RESURFACING, ESPECIALLY IN ADVANCED ECONOMIES

As a result of all these developments, recent growth forecasts in different parts of the world have been revised down. Although GDP growth is still, on the whole, expected to maintain a positive trend, risks of a double-dip recession are beginning to reappear, at least in the advanced world. Another negative scenario now being discussed assumes that economies will not technically fall back into recession, but that instead of the upturn that would normally be expected to follow a crisis, there will be a prolonged period (in historical terms) of very slow growth.

Relatively sharp and unexpected inflation growth observed in most economies in the first quarter

The deterioration in the economic situation and outlooks is the result of several shocks and events that have occurred so far in 2011. The first quarter of the year saw a relatively sharp and unexpected rise in inflation. The sources of inflationary pressures were mainly steep rises in prices of oil, basic agricultural products, and certain other commodities, with these key goods being affected by supply-side shocks. This soon put upward pressure on consumer basket prices, as energy, fuel and food items became more expensive. Within a few months, inflation rates around the world were reaching levels that significantly exceeded central bank inflation targets. Although inflation expectations did not become unanchored, there was an increase in core inflation, and inflation growth had a downward effect on consumer sentiment and real consumption.

Central banks in emerging countries raised base rates; the ECB, too, tightened monetary policy settings

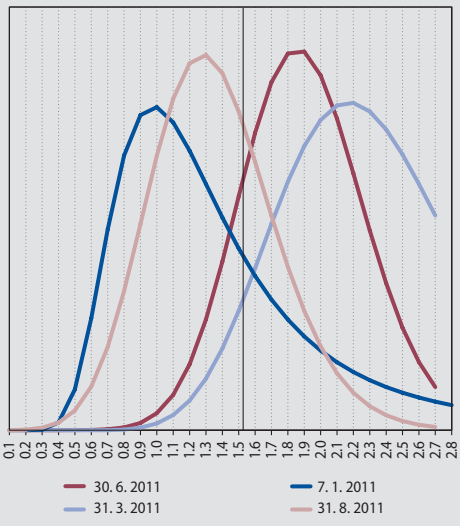
Rising inflation represented the most serious threat to emerging countries, since in their case the supply-side factor was accompanied by appreciable demand-side pressures, and the weight of food items in the consumer baskets of these countries is greater than in advanced countries. In several emerging countries, the central bank increased the base rate more than once in an attempt to prevent the economy from overheating. The ECB was alone among major central banks in the advanced world increasing its key rates, which it did on two separate occasions. With the ECB sending a relatively clear signal aimed at preventing a surge in inflation and amid fears about the potential effect of the debt crisis on the euro area economy, inflation expectations both for the short-term and long-term horizon gradually declined. Inflation expectations in the United States also fell.

As Chart 3 shows, the market at the beginning of 2011 did not envisage that the ECB would raise its key rates in April, but instead expected a drop in interbank rates with a potential risk of them being kept at the same level or put up slightly. By contrast, at the beginning of the second quarter, the market participants expected a further increase in interbank rates before the end of the year, by as much as 75 basis points. At the end of June, according to market data, expectations for a rise in the three-month interbank rate stood at

Chart 2 Inflation-linked swap rates

Source: Bloomberg.
Note: The term "inflation-linked swap" is defined in the section Glossary and Abbreviations.
The broken vertical line denotes the reference date of the analysis (30 June 2011).

Chart 3 Probability distribution of 3-month EURIBOR rates as at 19 December 2011 (%)



Source: Bloomberg.
Note: The Chart shows the risk-neutral density of the probability distribution of the 3-month EURIBOR as at 19 December 2011, calculated on the basis of the market prices of options as at that date.
The vertical line denotes the 3-month EURIBOR as at 30 June 2011.

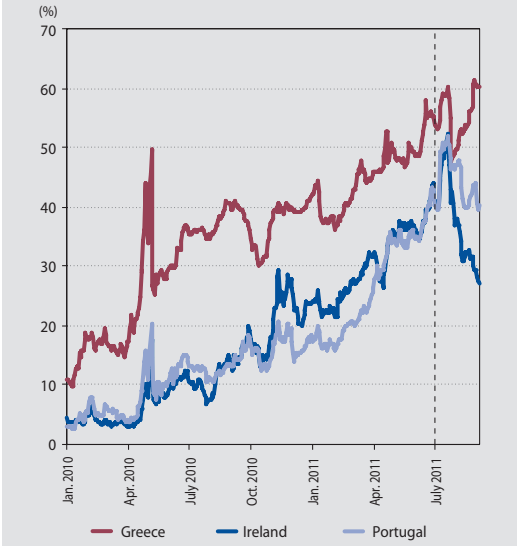
0.4 percentage point subject to the same degree of uncertainty on both the upside and downside. These expectations were, however, further revised in response to negative economic news and the 3-month EURIBOR was assumed to be lower at the end of December 2011 than at the end of June 2011.

The euro area sovereign debt crisis was the key event in the first half of 2011

The most pressing issue in the first half of 2011 and through July and August was the escalating debt crisis in the euro area. The level of success in addressing this problem will very probably determine the subsequent macroeconomic developments and financial stability almost everywhere in the world, in both the short-term and medium-term horizon.

The euro area sovereign debt crisis has gone through several phases since the beginning of 2011. After Ireland received a bailout package from the EU and IMF in December 2010, attention turned to Portugal. Even though euro area leaders reached an agreement in March 2011 on bolstering the temporary bailout mechanism, the European Financial Stability Facility (EFSF), and also on the parameters of the permanent European Stability Mechanism (ESM), financial market pressure eventually resulted in Portugal becoming the third euro-area country to seek assistance from the EU/IMF rescue programme. Towards the end of June, Greece re-emerged at the centre of the crisis, when it became clear that the country would not be able to return to the bond markets within the originally intended timeframe. Thus it became necessary to prepare a "second package" of official financial assistance for Greece. Yields to maturity and CDS spreads on Greek government bonds, as well as on the sovereign debt of other countries under stress, reached a new all-time high against a backdrop of complicated and protracted discussions about the structure of the rescue package.

Chart 4 Decline in yield spreads between selected 5-year government bond and German Bunds



Source: ECB, NBS calculations.
Note: The broken vertical line denotes the reference date of the analysis (30 June 2011).

Markets were becoming increasingly nervous mainly because it was taking so long to resolve the question of whether and in what way the private sector should bear part of the financial burden. Under the variant eventually accepted, private investors will be involved in the process through a relatively complex scheme that ultimately requires them to accept a haircut on these securities. Participation in this scheme is, however, voluntary.

Debt crisis spilling over to large euro area economies

Even through this measure succeeded in securing the necessary financing for Greece and in averting a disorderly default, the euro area crisis was still far from over. In fact, it took on an even more dangerous dimension precisely at this point. The crisis had hitherto seemed more or less containable within the borders of the peripheral countries, but from July, the market nervousness began spilling over to Italy and Spain, the third and fourth largest economies in the euro area. The spread of nervousness stemmed from, among other things, the precedent-setting fact that such losses will be partially taken by the private sector, and, at the same time, from the worsened macroeconomic outlook (both for the countries under stress and at the global level). Yields to maturity on Italian and Spanish government bonds climbed above 6% for a short period, and approached the level at which Greece, Ireland and Portugal, in the case of their sovereign debts, had applied for official assistance from the EU/IMF.

The situation escalated to the point that the ECB decided to reactivate its government bond pur-

chase programme and conducted interventions in the bond markets of selected euro area countries. The prospect of two large euro-area economies requiring costly bailout packages led to a partial spread of the contagion to the euro area core. The markets to some extent raised the risk premium on French and German government bonds, even though the signal in this case was coming mainly from spreads on CDS contracts for these securities. The situation calmed somewhat towards the end of August.

Volatile sentiment in euro area financial markets was intensified by repeated rating downgrades of peripheral countries

The course of the European debt crisis during 2011 has been marked by a series of calmer and more volatile periods, as reflected in the required yields to maturity on the sovereign debts concerned. A relative easing of financial market tensions would usually come after an agreement was reached on new measures aimed at halting the spread of the crisis. To date, however, none of these measures has achieved a lasting positive effect, and they have all been quickly followed by a return of rising nervousness in financial markets, not only in the euro area, but also in the broader context. A negative aspect is that the amplitude of stress periods was constantly rising over time. The sentiment of market participants was not only conditioned by the flow of new reports on the fundamentals of different countries, it also reflected the herd behaviour of investors who in the panic closed their risky positions. The multiple rating dowgrades of several coutries, with some falling into speculative grade, contributed in no small measure to the episodes of hightened volatility.

The crisis spread mainly through the banking sector

The role of the banking sector as a catalyst and channel for spreading the crisis in the euro area has been gradually increasing. On one hand, the weak capital position of the banking sector in certain countries increased the riskiness of the respective sovereign. On the other hand, the fall in the value of these government bonds impaired the position of those banks, both domestic and foreign, that held them in large volumes. These forces form a feedback loop and they differ from country to country, whether in their intensity or in the source of the initial impulse – either sovereign or bank debt risk. This is also a way in which contagion is spread from one country to another.

Market indictors for the euro area banking sector deteriorated

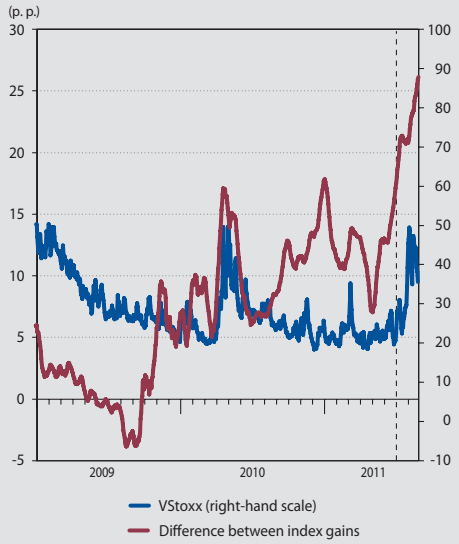
A number of indicators and circumstances suggest that the euro area banking sector is becoming increasingly vulnerable. CDS spreads of European banks rose sharply towards the end of June 2011, especially in comparison with other sectors of the economy. As Chart 5 shows, the CDSs of large European financial groups were among the riskiest CDSs covered by the iTraxx index. The spread between CDSs of financial institutions and the main index was even wider at the end of the first half of 2011. The parent undertakings of Slovak banks also recorded a widening of CDS spreads.

At the beginning of the second half of the year, the credit spreads of financial institutions increased even more sharply and the difference between them and the credit spreads of other companies continued to grow. Unlike in the first half of 2011, however, financial market turbulences pushed up corporate credit spreads in other sectors of the economy. The level of the iTraxx index

Chart 5 CDS indexes

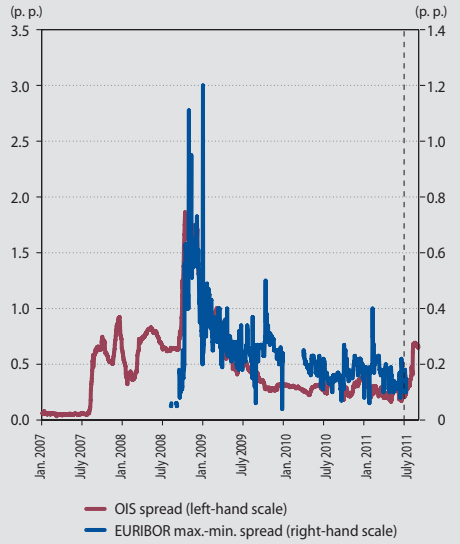
Source: Bloomberg.
Notes: The left-hand scale shows the values of the respective indexes in basis points. The iTraxx Europe index covers the prices of the 125 most actively traded CDSs. The iTraxx Europe HiVol index covers the prices of the 30 most risky components of the main index. The iTraxx Financials Senior index covers the prices of the CDSs of 25 financial institutions.
The broken vertical line denotes the reference date of the analysis (30 June 2011).

Chart 6 Spread between annual gains of US and European equity markets, and European equity market volatility



Source: Bloomberg, Reuters.
Notes: The left-hand scale shows the spread in percentage points between the annual gains of the S&P 500 and EUROSTOXX 50 indexes. The values represent an 11-day moving average.
The right-hand scale shows VStoxx index values, which indicate the volatility of the EUROSTOXX 50 index.
The broken vertical line denotes the reference date of the analysis (30 June 2011).

Chart 7 Indicators of uncertainty in the euro area interbank market



Source: www.euribor.org
Notes: EURIBOR-OIS (overnight indexed swap) is the spread between the 3-month EURIBOR and the OIS rate. It indicates the extent of the loss of confidence, i.e. the level of credit risk, in the euro area.
The EURIBOR maximum/minimum spread is the spread between the highest and lowest 3-month EURIBOR quotes provided by a representative panel of banks.
The values on both the left-hand and right-hand scales are in percentage points.
The broken vertical line denotes the reference date of the analysis (30 June 2011).

was higher at the end of August 2011 than in the period after the collapse of Lehman brothers.

The lack of investor confidence is also reflected in the index of bank shares, which during the course of 2011 has performed worse than the overall European equity index. It was share prices of banks that led the August slump in stock markets. At the most critical point, shares in certain banks were recording daily falls ranging from 10% to 25%. Gains on the European equity market fell far more sharply than those on the US equity market.

Confidence in the euro area interbank market ebbing away since July

During the first six months of 2011, the debt crisis did not to any significant extent undermine confidence in the euro area interbank market (Chart 7). This was true, however, only for the euro area interbank market as a whole, while at the level of individual countries the situation remained relatively polarised. Banking sectors in countries under higher stress continue to be affected by the worsened liquidity situation, which makes the financial situation more difficult and undermines confidence in the banks concerned.

In July 2011, however, the crisis began to adversely affect the interbank market, too, owing to a combination of the financial market turbulences and increasing loss of confidence in the Italian economy. The loss of confidence among banks escalated, resulting in yields on unsecured interbank transactions rising in comparison with those on secured transactions. The EURIBOR-OIS spread, an indicator of bank credit risk, climbed during this period to its highest level since 2009. The loss of confidence was also reflected in a shortening of the maturities at which banks are willing to lend liquidity. Some banks even withdrew completely from the interbank market and preferred to deposit their funds at the central bank, which meant there was considerably higher utilisation of the ECB deposit facility. Banks perceived to be more risky therefore found it increasingly diffi-

cult to secure funding and remained reliant on support from the ECB. In response to the deteriorating situation, the central bank has already renewed its 6-month longer-term refinancing operations, with full allotment. Banks' funding difficulties are being further amplified by the outflow of dollar liquidity.

Discussions on raising the US debt ceiling added to the turbulences in global financial markets

Political discussions in the United States on raising the country's debt ceiling contributed significantly to the escalation of turbulences in global financial markets during the summer months. With political opponents unwilling to compromise on this issue and not reaching an agreement until the eleventh hour, there were mounting fears that the US might suddenly become insolvent and thus undermine the very foundations of the financial system.

A strategic issue that became a focus of attention in connection with the debt ceiling adjustment (in itself a technical matter) was the need to find a way to stabilise the country's indebtedness in the medium-term horizon. Solving this issue was also a precondition for the approval of the debt ceiling increase. Although the need to repair public finances is not as pressing in the United States as in certain euro area countries, the scope, timing and funding details of consolidation measures will have a great bearing on the performance and health of the US economy in the years ahead. Although the political compromise reached on Capitol Hill succeeded in easing the most severe financial market tensions, it is generally assumed that the agreed-upon parameters of the consolidation will not suffice to ensure sustainable government debt dynamics. There was also disappointment that the outlined objectives were not more specific and detailed.

Consequently, within a short period of time, one of the three major credit rating agencies downgraded the US credit rating to AA+. This step caused further agitation in financial markets, since it was the first time in more than 60 years that the US had lost its top-tier AAA credit rating. Somewhat paradoxically, demand for US government debt increased following the downgrade, since these bonds were still regarded as a safe haven at times of turbulence in the financial sector. It was instead the more risky assets that were sold off.

The earthquake in Japan had a temporarily negative effect on financial markets and global industrial output

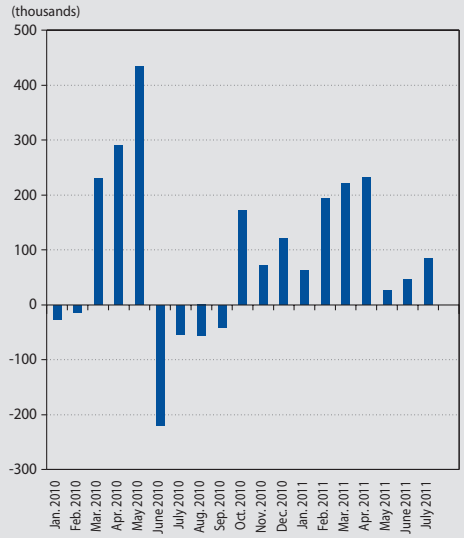
Another significant event that caused a shock to the global economy in the first half of 2011 was the large earthquake and tsunami that hit Japan in March. Besides causing direct damage to the world's third largest economy, this natural disaster also had a broader economic impact. This was manifested through, on one hand, the negative reaction of financial markets and, on the other hand, the loss of production in Japan, which caused supply-chain disruptions that affected industrial production elsewhere in the world. This, however, was a shock whose repercussions were largely confined to the period under review, unlike the other serious issues previously mentioned.

The US economy slowed unexpectedly sharply in the first half of 2011

Although the United States economy continued to grow in the first half of 2011, the pace of growth was far lower than in 2010 and also lower than originally projected. Particularly unexpected was the slowdown during the first three months, when quarterly real GDP growth was only 0.4% on an annualised basis.

The economy's performance came under downward pressure mainly from government spending cuts and negative net exports. No significant improvement was seen in the second quarter, with GDP rising by 1.0%. There was, however, an alteration in the structure of its growth. Fixed investment made the largest contribution to the increase in GDP, and there was a substantial reduction in the negative contribution of government expenditure and imports. A key change was the slowdown in household consumption, almost to the level of stagnation. The drop in real household consumption expenditure can be explained by the sudden rise in headline inflation, up to four percent, and the deterioration of macroeconomic outlooks, all of which resulted in households behaving more cautiously. This was clearly indicated by consumer confidence surveys, which showed a slump of confidence in August that underlined the downward trend of previous months. The values of these confi-

Chart 8 Net job creation in the United States



Source: Bureau of Labor Statistics.

dence indexes are being driven down mainly by households' perception of the future, and therefore it cannot be expected that households will provide a strong impulse for the recovery of economic activity.

Stagnation of job creation in the second half of the period under review was a strong warning signal

The strains on households stem in large part from the labour market. After the unemployment rate fell moderately in the first quarter, to 8.8%, it rose again in the second quarter, to 9%, and the labour force participation rate declined to a long-term low. Net job creation, regarded as one of the most important indicators of the condition of the US economy, dropped significantly from May and even entered negative territory in August. This downward trend was recorded in all main sectors of the economy.

The latest economic development indicators suggest that growth may slow further

Many other indicators also suggest that the performance of the US economy is weakening. The flow of negative news about the state of the economy and its future prospects has been relentless almost since May. The decline in the PMI indexes for services and industry, a reliable indicator of economic activity, is a warning signal. For each sector, the index slumped to its lowest level in a year, while the industry PMI index in July and August was only just above 50 (a reading below this level indicates that activity is contracting). The subindex of industrial new orders even indicates a decline in manufacturing new orders for the first time since mid-2009.

The real estate market, especially the residential property market, shows a strong correlation with the business cycle in that its parameters are beginning to worsen again after recovering moderately in previous months. It is in effect in the midst of a double-dip recession. Residential property prices as measured by the Case-Shiller index have now been falling for several months in succession. In terms of number of sales, activity in the market for new and existing properties is falling.

Expectations of both financial markets and real economy participants for the future development of the US economy are deteriorating; a further loosening of monetary policy is anticipated

Private sector sentiment has deteriorated, due in no small measure to the political dispute over the raising of the debt ceiling and to the slump in stock markets that occurred shortly afterwards. Expectations for a recession are beginning to emerge, and negative trends in the economy are also being reflected in financial markets. The yield curve for US government bonds flattened, indicating that investors are revising down their assumptions for the economy's future performance. The share prices of certain banks in the United States fell sharply in August, which was a further sign of increased scepticism about the economic outlook.

The room for manoeuvre in fiscal policy is far more constrained now that after the collapse of Lehman Brothers, since the government can no longer afford large-scale stimulus measures. Although some government support programmes are still running, the introduction of partial austerity measures is due towards the end of 2011, under a comprehensive ten-year fiscal consolidation package approved at the beginning of August. Thus, unless this plan is revised, fiscal policy will act more as a brake on economic activity than as a catalyst.

In such circumstances, the central bank will be the focus of high expectations. Although the

economy was already showing downward signs in the second quarter of the year, the Federal Reserve's second round of quantitative easing (QE2) came to an end in June, as originally planned. The view of the Federal Reserve at the time was that the slowdown was temporary, caused to large extent by factors such as the supply-change disruptions resulting from the Great East Japan Earthquake. After its meeting in August, however, the Federal Open Market Committee admitted that the slowdown may be more entrenched than previously thought and it took an unprecedented step in indicating that the Federal funds rate would very probably be kept unchanged, at practically zero, for at least the next two years. Meanwhile, financial markets are impatiently waiting to see whether the Federal Reserve opts to go further and again inject liquidity into the economy by purchasing government bonds. In this regard, the Federal Reserve has so far been biding its time, not giving any indications about its intentions. There is, however, a higher bar for embarking on a third round of quantitative easing than there was for QE2 the year before, since the effectiveness of that second round of balance-sheet expansion is not clear and especially because the inflation rate is currently higher.

Economic growth in Europe rose surprisingly quickly in the first quarter but then slowed sharply

It is Europe, and in particular the euro area, that has probably experienced the most complicated economic developments so far in 2011, although the year began with surprisingly favourable dynamics. The gross domestic product of the euro area for the months January to March increased by 3.2% on a quarter-on-quarter annualised basis. Germany performed particularly well and this benefited other countries, especially those in its geographical vicinity. As for the euro area's peripheral economies weakened by structural deficiencies and the direct effect of the sovereign debt crisis, their strongest GDP growth figures were only just in positive territory. The expansion in Germany was driven by strong exports of industrial production, which led to firms investing in productive capital and, amid the general improvement of sentiment in the economy, to an acceleration of household consumption.

This positive feedback cycle was, however, disrupted in the second quarter by the escalating debt crisis in the euro area, the increase in cost-push inflation, and the signs of a slowdown in the global economy. Euro area output in the second quarter of 2011 was only 0.2% higher than at the beginning of the year. Meanwhile, the euro area's two largest economies, Germany and France, recorded growth of only 0.1% and 0.0%, respectively. In both countries there was a fall in household consumption and in the volume of net exports.

The economic conditions in the countries most affected by the debt crisis in the second quarter was related to the previous period of low investment activity and falling government expenditure. The austerity measures adopted as a precondition of the EU/IMF bailout programmes, or under pressure from bond markets, will continue to act as a brake on these economies in the years ahead. The scope of fiscal consolidation was expanded still further, partly to make up for the shortfall in budgetary income resulting from lower than projected GDP growth and therefore to ensure deficit reduction plans remain on track.

Unemployment in the euro area as a whole did not come down during the period under review, despite relatively dynamic GDP growth in the first quarter. The unemployment rate remained constant at 10%, just a few tenths of a percentage point below the long-term peak recorded in 2010, and in several countries it continues to have a rising tendency.

Surveys indicate a substantial worsening of sentiment in the economy

With Greece on the verge of default and its debt crisis spreading to two large euro area economies, and amid pressure from other external factors, a deterioration in sentiment was recorded among all participants in the economy and it represents a bad sign for future economic prospects. After falling moderately in the second quarter of 2011, the European Commission's Economic Sentiment Indicator dropped sharply in July and especially in August, to below its long-term level. Just about every component of the overall index declined, but the most marked drop was in consumer confidence in August, which was greater even than the decline recorded after the collapse of Lehman Brothers.

Similarly, a slump in August was also observed in the results of another significant survey of the

euro area economy conducted by the Centre for European Economic Research (ZEW), a private economic research institute based in Germany. A further source of unfavourable news was the Purchasing Managers' Index (PMI), which by falling below 50 indicated a contraction in economic activity. Sentiment and conditions were deteriorating even in Germany, the engine of Europe's recovery which had hitherto been reporting a high level of optimism both in the corporate sector and among consumers.

The shortage of domestic demand could to some extent be offset by exports, but this scenario is also fraught with uncertainty. It is not only in the euro area that the economic situation is worsening, but also in other parts of the world, with the result that the potential for strong external demand is diminishing. Demand for exports will be to a huge extent dependent on developments in China. The correction of that country's economic expansion has so far been minimal, but there are constantly mounting risks arising from the unsustainability of its growth model, which is based on massive investment activity and a real estate market boom.

Outlooks for the lending process in the euro area are negative on both the demand and supply sides

The most recent bank lending survey in the second quarter of the year includes a somewhat negative sign. Tightening of credit standards continued during this period, albeit only slowly, and that was the case for both loans to households and loans to the corporate sector. On the other hand, demand among firms for bank loans slowed and household demand was lower than in the previous quarter. Overall, therefore, lending activity is becoming more subdued, which does not bode well for a recovery in the coming period.

Heightened nervousness returned to global financial markets in the second quarter

After a relatively calm start to 2011, global financial markets began to show signs of heightened nervousness in the second quarter of the year, due to the factors mentioned at the beginning of this chapter. Trading in financial assets began to see a return of the so-called "risk-on / risk-off" phenomenon, indicating that investors were acting en masse either in selling off more risky assets or in buying riskier assets, depending on the incoming news. This process also, but more rarely, occurred vice versa. In-depth analyses of specific securities became less important, and market participants were influenced mainly by the prevailing sentiment. Correlations within and between individual asset classes therefore increased.

Turbulence peaked in August with heavy selling of risky assets

Financial market tensions escalated in the summer months and peaked at the beginning of August when stock markets plummeted, especially in the United States and Europe. Over the course of several days, the market capitalisation of several national stock exchanges fell by as much as 20%. The slump was led by share prices of financial institutions. The VIX index of stock market volatility climbed to levels last seen in 2009. In the midst of the panic, investors sought a safe haven in US and German government bonds, Swiss francs, Japanese yen, and, of course, gold. Demand for these assets was so strong that their prices reached all-time, or at least long-term, highs. Yields to maturity on benchmark US and German 10-year bonds, which move inversely to the bond price, fell to two percent, which in the context of current inflation expectations means that investors are more willing to accept a negative real yield than to risk losses elsewhere. Thus the risk of a longer period of low-yielding investment in low-risk assets became more pronounced.

The mounting risk aversion also spilled over into credit markets, which back in the first quarter had been experienced a boom. The required yields on corporate bonds are growing as are the corresponding CDS spreads. This applies primarily to speculative-grade-rated issues, but even investment-grade issues have not escaped a negative response. The opportunities for issuing corporate debt have narrowed dramatically in recent months. At the same time, however, credit market stress indicators are far lower now than they were at the end of 2008 / beginning of 2009.

Relatively strong GDP growth in Slovakia in the first half of 2011 was driven mainly by exports

The recovery of the Slovak economy continued to progress relatively successfully during the first half of 2011. Quarterly GDP growth in each quarter stood at 3.6% on an annualised basis, which ranked the Slovak economy among the fastest-growing in Europe and even exceeded original growth projections. The upturn in the domestic

economy, at least in regard to the rise in overall production, has so far been tied in with the relatively robust recoveries in Slovakia's main trading partners, especially Germany. Double-digit export growth was by some distance the largest positive component in the structure of GDP growth. The sector of the economy that benefited the most from this development was manufacturing.

Domestic demand is lagging behind

Household consumption is not as yet giving an impulse to economic developments. High unemployment has been an obstacle to consumption expenditure growth, and in 2011 so has rising inflation. Although the employment situation in 2011 has so far been better than originally projected, the unemployment rate has fallen by only tenths of a percentage point and remains one of the highest in Europe. Due to rises in regulated prices and energy prices, the inflation rate quickly rose above 4%. As a consequence, real wage growth for the whole of 2011 will probably be in negative territory. The introduction of fiscal consolidation measures in 2011 have also dampened economic growth and this effect will persist in the years ahead.

The Slovak economy is at great risk from its high openness, given the slowdown in the global economy

Being heavily dependent on external demand, Slovakia faces a serious risk from the emerging global economic slowdown and particularly from the uncertain outlook for the euro area. This risk materialised in the recent recession, when Slovakia reported one of the sharpest falls in GDP of any EU country. The significant turbulences in the external environment have already reached Slovakia in the form of deteriorating sentiment among participants in the economy. The Economic Sentiment Indicator for Slovakia approached its long-term average at the beginning of 2011, but subsequently declined, at first moderately, but then sharply in August.

CHAPTER 2

DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

2

2 DEVELOPMENTS IN THE SLOVAK FINANCIAL SECTOR

GROWTH OF ACTIVITY IN THE FINANCIAL SECTOR

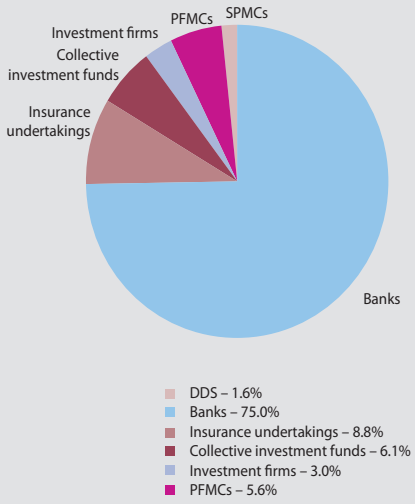
The trends in the Slovak financial sector in the first half of 2011 were predominantly positive. For most of the financial market, the period under review was more favourable than 2010, even though the year-on-year growth in assets managed by entities regulated by Národná banka Slovenska declined and remains lower than before the crisis.

In a positive development for the domestic economy, lending activity in the banking sector continued to grow. As a result, banks increased their

Chart 9 Amount of assets of or managed by the Slovak financial sector – annual rate of change

Source: NBS.

Chart 10 Total assets in the financial sector by share of NBS-regulated segments



Source: NBS.
Note: The figures represent the segment's share in total assets of the financial sector as at 30 June 2011.

Table 1 Assets of the Slovak financial sector

	Assets / assets under management in EUR billlions	Share as at June 2011 (%)	Change from December 2010 (%)	Change from June 2008 (%)
Banks	55,779,017	70.8	1.9	-2.3
Insurance undertakings	6,512,975	8.3	1.2	17.5
CI funds	4,500,321	5.7	0.1	-16.2
Investment firms	2,221,382	2.8	1.0	16.8
PFMCs	4,130,682	5.2	11.1	110.2
SPMCs	1,182,147	1.5	3.2	35.1
Leasing	3,081,480	3.9	-0.3	-15.1
Factoring	172,400	0.2	-0.2	-42.3
Hire purchase	1,168,116	1.5	3.4	10.8

Source: NBS.
Notes: CI – collective investment; PFMCs – pension fund management companies; SPMCs – supplementary pension asset management companies.
The last column shows the change in comparison with the pre-crisis period.

share in the total assets of institutions regulated by NBS. The market in housing loans continued to grow in the first half of 2011, and lending to certain parts of the corporate sector also began to rise. Notwithstanding this positive turnaround in loans to enterprises, bank lending activity remains heavily focused on the household sector. The rise in household borrowing demand was seen not only the area housing loans, but also in hire-purchase financing. The outstanding amount of hire-purchase loans exceeded the peak value before the decline recorded in 2009, although the pace of growth is more moderate compared with the pre-crisis period.

By contrast, financing activity in the leasing and factoring sectors, which concerns mainly the corporate sector, continued to decline. Nevertheless, loans to non-financial customers (i.e. to enterprises and households) were among the fastest-growing items in the financial sector.

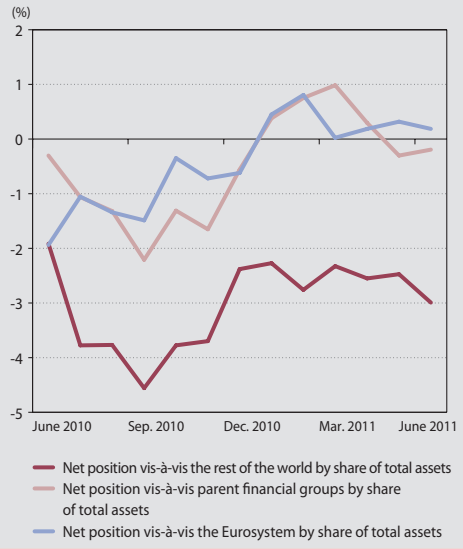
As for financial market segments focused on the management of household financial assets – i.e. life insurance and pension funds – the trend growth in their activity was to a large extent confirmed. This did not appear in the collective investment sector, which in the first half of 2011 grew by only 0.1%; the net value of assets in mutual funds stood at just 84% of its 2007 level. As for pension funds, their robust long-term growth is making them an increasingly significant component of household financial assets.

It is positive for the stability of the domestic financial sector, and thus for indebtedness of Slovak households and enterprises, that the growth of lending activity in the banking sector was not financed with funds from the rest of the world. Although domestic banks have a net debtor position vis-à-vis the rest of the world (i.e. their liabilities to this sector world are higher than their claims on it), the significance of this position in the balance sheets of most banks is small (see Chapter 2.1.1 Trends in the banking sector balance sheet). The banking sector even had a net creditor position vis-à-vis the Eurosystem during the first half of 2011, indicating that the banking sector as a whole is not suffering from a liquidity shortage.

Growth in financial sector profitability

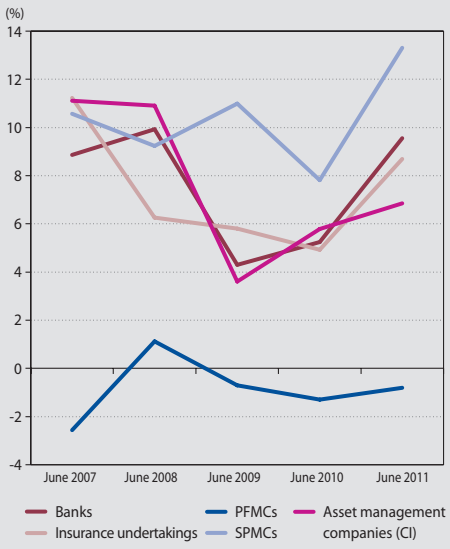
The activity growth in all NBS-regulated financial market segments resulted in the majority of institutions in these segments improving their financial results. In all financial market segments,

Chart 11 The banking sector's position vis-à-vis the rest of the world, parent financial groups, and the Eurosystem



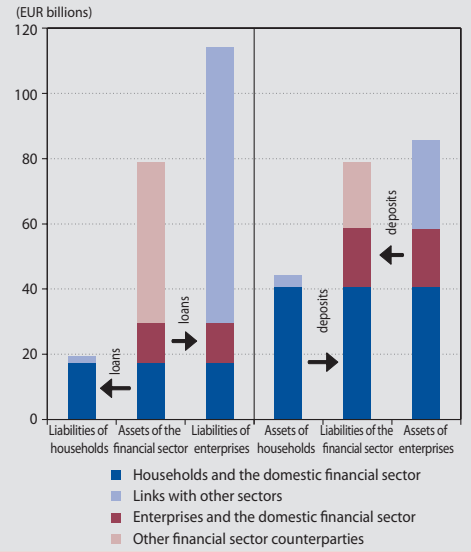
Source: NBS.
Note: The Chart does not take into account domestic bank bonds purchased by foreign entities.

Chart 12 Return on equity (ROE) in the financial sector



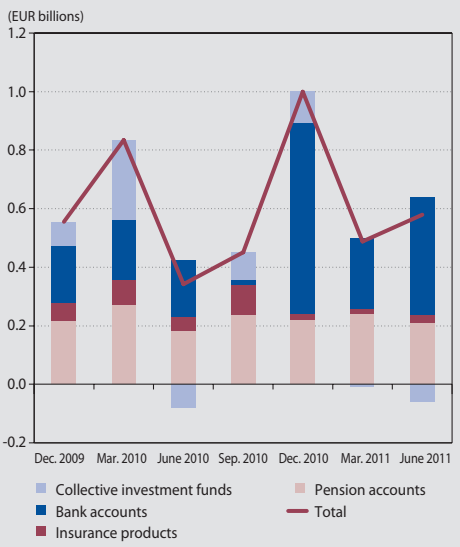
Source: NBS.
Note: CI – collective investment; PFMCs – pension fund management companies; SPMCs – supplementary pension asset management companies.

Chart 13 Link between the financial sector and the corporate and household sectors



Source: NBS.
Note: The Chart takes into account only financial assets and financial liabilities.

Chart 14 Household financial assets by quarterly changes in amount



Source: NBS.

profitability as measured by return on equity (ROE) increased in the first half of 2011 in year-on-year terms. Nevertheless, the profitability of most segments (with the exception of SPMCs) remains somewhat lower than in the pre-crisis period.

Links with corporate sector stagnated, while significance of households increased

Despite a modest rise in the amount of bank loans to enterprises in the first half of 2011, the contribution of this segment to financial sector growth remains low. The links between domestic financial institutions and the corporate sector did not strengthen in the first half of 2011, which partly reflected the continuing downturn in lease financing. The significance in the corporate sector of financing from domestic institutions increased only marginally and continues to lag far behind its 2008 level.

By contrast, the links between the household and financial sectors continued to increase in the first half of 2011. The main channels in this regard were growth in housing loans (on the side of household liabilities) and the accumulation of household financial assets in banks and pension funds.

The role of banks in the financing of households maintained its rising trend in the first half of 2011. Despite the growth in hire-purchase financing, the share of bank lending in the overall financing of households exceeded 92%.

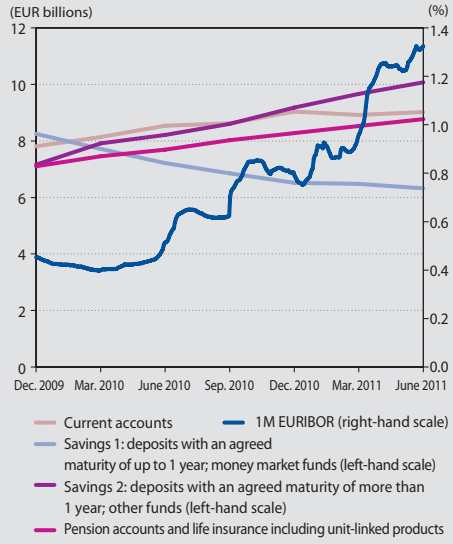
Shift of household financial assets to longer maturities

The robust growth in household financial assets continued in the first half of 2011. Although data are not available on the breakdown of this growth by income category, this trend can be seen as a positive element in the context of the persisting economic uncertainty.

The traditionally dominant position of banks in the accumulation of household financial assets has become even stronger in 2011, owing to the slower growth in insurance products and to redemptions of collective investment funds. As a result, the share of banks in all household financial assets has reached around two-thirds.

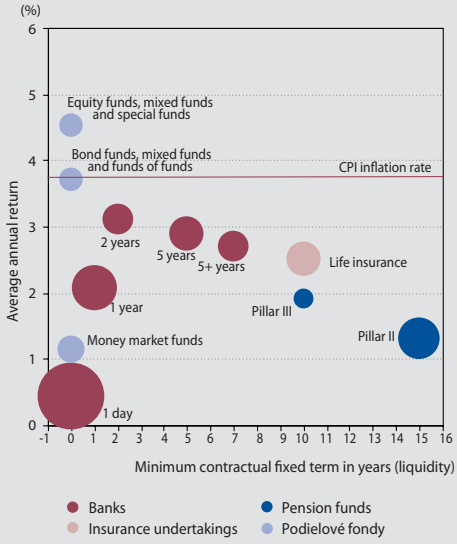
A sharp rise in household bank deposits helped to ensure that households' financial assets exceeded their financial liabilities. This is a good sign not only from the view of household indebtedness, but also for the liquidity of the banking sector (see Chapter 3.2 Market risks and liquidity risk). Looking at the structure of bank deposit growth, the shift towards deposits with longer agreed maturities continued, driven by higher interest

Chart 15 Household financial assets in terms of liquidity



Source: NBS.

Chart 16 Household financial assets by maturity and rate of return



Source: NBS.
Notes: Data as at 30 June 2011.
For collective investment and pension funds, the gross performance is given as at June 2011. The interest rate on new bank deposits is given as at June 2011. The inflation rate is for June 2011.

rates. Deposits with a maturity of between 1 and 5 years were among the fastest-growing items of household financial assets. Current accounts, on the other hand, recorded their first decline since 2004. This turnaround may indicate that households are seeking to manage their savings more efficiently or that they are trimming their most liquid assets due to pressure on their financial position.

Returns on household financial assets were uneven

Despite rising interest rates on bank deposits with longer maturities and the relatively strong performance of several types of collective investment fund, the overall average return on household financial assets was only 2%. This was due mainly to the large amount of funds in current accounts and to the weak performance of pension funds, which even trailed that of fixed-term deposits in banks. In addition, the rise in consumer prices in the first half of 2011 offset the returns on most savings products. The only exception was the small amount of assets in certain types of mutual funds, the returns on which are notable for their high volatility. Such development stands in sharp contrast to 2010, when the nominal returns on most products were higher than the inflation rate. Future changes in consumer prices will therefore be crucial to developments in household financial assets, as will interest rates, since these may affect in particular the rising amount of deposits that have longer initial rate fixation periods.

Table 2 Selected financial relationships in the Slovak economy (EUR millions)

	NBS	Domestic financial sector					Domestic non-financial sector			Rest of the world			
		Domestic banks	Insurers	Pillar II and Pillar III funds	Mutual funds	Other financial companies	Households	Enterprises	General government	Foreign banks	Foreign mutual funds	Foreign general government and international institutions	Other
NBS		1,055 - 304	0 - 0	0 - 0	0 - 0	0 - 0	11 - 11	3,6 - 3,6		11,569 - 12,664		2,467 - 2,090	1 184 - 1,212
Domestic banks	726 - 423	1,167 - 917	0.05 - 30		0 - 0	1,001 - 1,048	14,763 - 15,598	14,735 - 15,697	12,808 - 12,395	4,125 - 4,562		1,529 - 1,699	1,661 - 1,428
Insurers	0 - 0	794 - 812			166 - 168				1,668 - 1,706				
Pillar II and Pillar III funds	0 - 0	958 - 1,304			81 - 81				1,296 - 1,448				
Mutual funds	0 - 0	1,544 - 1,449			298 - 303				646 - 588				
Other financial companies	71 - 77	69 - 61			124 - 126								
Households	40 - 39	22,721 - 23,586	3,409 - 3,454	4,863 - 5,313	3,010 - 2,920								
Enterprises	0 - 0	9,701 - 9,159			40 - 42						727 - 783		
General government	0.12 - 0.5	1,818 - 2,183			0.3 - 1								
Rest of the world	15,422 - 15,291	9,004 - 9,677			58 - 63			43,961 - 44,847					

A direct relationship between the creditor and the debtor does not exist. Data are not available.

Notes: Structure of data in cell: December 2010 – June 2011 (for liabilities of enterprises to the rest of the world, data are as at March 2011).
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 of the trends seen in bank balance sheets in the first half of 2011 were continued from 2010. The total assets of the banking sector increased, as did the assets of most individual banks.
Households accounted for a substantial part of the sector's asset growth, particularly through the continuing growth in bank lending. The sharpest rise in lending growth in the first half of 2011 was observed in housing loans, mainly at the end of the period. Most of these loans were used to refinance older loans. Households were taking advantage of the still appreciable difference between interest rates on new loans and those on existing loans. Nevertheless, the amount of new bank loans extended to first-time borrowers also rose quite substantially. A key factor in this regard was not only the low interest rates, but also the continuing decline in residential property prices.
Interest rates on new loans moved somewhat unevenly in the first half of 2011. They went up at the end of the first quarter in response to an increase in interbank market rates, but then fell again in the second quarter despite a further rise in interbank rates. This movement stemmed from relatively strong competition, which started to have a more marked effect in the last quarter of 2010 and has continued to exert a strong influence on the housing loan market. An important consequence of this competition is that banks' market shares in new housing loans changed less in the second quarter of 2011 than in previous months. The size of these market shares in this period corresponded more closely to bank size.
The amount of household bank deposits rose in the first half of 2011, and longer-term deposits recorded the highest growth. This was largely attributable to a relatively sharp increase in deposit rates reflecting the interest rate policy of larger banks.
In the first half of 2011, the banking sector's lending to enterprises recorded annual growth for the first period in a long time. However, this result should be treated with some caution since, firstly, it appeared only in lending to selected sectors and, secondly, the conditions for across-the-board growth in corporate lending remain weak. Both enterprises and banks are still behaving somewhat cautiously. Credit standards are set relatively tightly even though competition between banks has been rising in recent months.
As for enterprises, they continue to be influenced by the persisting uncertainty in the macroeconomic situation. Sales in most sectors are lagging behind their pre-crisis levels and this is reflected in capacity utilisation rates.
Securities investments as a share of the total assets of banks continued to be significant, and comprised mainly domestic government bonds. The amount and weight of these securities remained largely the same in the first half 2011, while the portfolio of foreign government bonds underwent a slight change in the first quarter.
The interbank market did not see any significant changes in the first half of 2011, the most notable development being the ECB's discontinuance of 12-month refinancing operations. The significance of interbank operations, whether as a means of investing or acquiring funds is relatively small for the majority of banks.

2.1.1.1 CUSTOMERS

THE RETAIL SECTOR

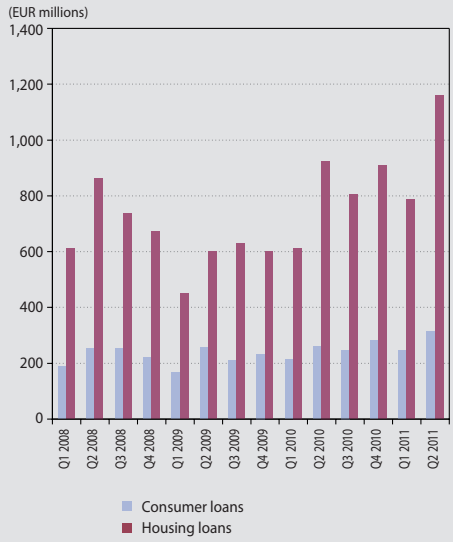
Strong growth in new housing loans to households

Lending to households maintained its rising trend in the first half of 2011, with housing loans recording the highest growth. The amount of new housing loans extended in the second quarter of 2011 was even higher than in the pre-crisis year of 2008. Some banks also reported a significan rise in new consumer loans in the second quarter.

Trend of refinancing old loans with new loans continued

A large proportion of the growth in new lending continued to consist of loans used to refinance

Chart 17 New loans to households



Source: NBS.

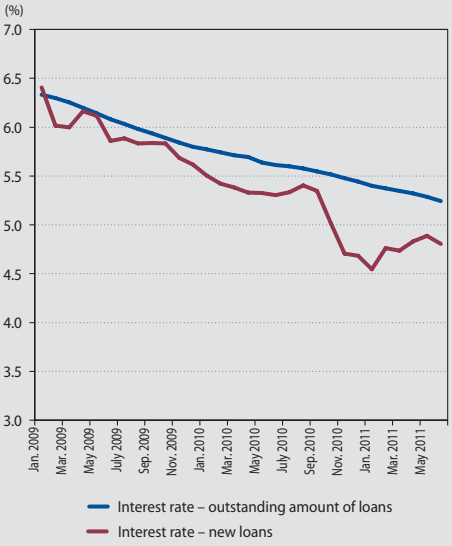
Chart 18 Increase in outstanding housing loans compared with the increase in new housing loans

Source: NBS.
Note: Changes in outstanding loans are month-on-month.

old loans. The customers taking out more advantageous loans for refinancing purposes included those who borrowed again from the same bank but also a significant number who switched to other banks. This is reflected in the relatively low increase in the stock of loans in comparison with the growth in new loans. In other words, several banks extended a relatively large amount of loans to new customers, but at the same time also lost many customers.

One of the main reasons for the high share of new loans used for refinancing older loans is the significant difference between interest rates on new loans and on outstanding loans. This gap will, however, probably continue to fall, thereby narrowing the incentive to refinance old loans. This incentive will probably be further diminished by the rising share of new loans that have longer initial rate fixation periods. The proportion of loans with fixation periods of between 1 and 5 years has risen in a number of banks.

Chart 19 Interest rates on new housing loan and on outstanding housing loans



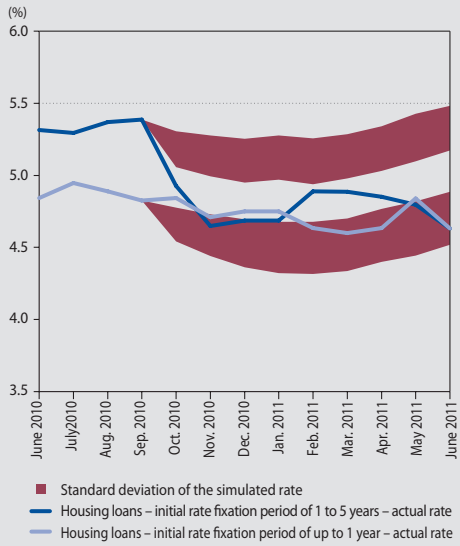
Source: NBS.

Interest rates on new housing loans fell again in the second quarter

The movement of interest rates on new loans differed in the first and second quarters of 2011. Rates on new housing loans either stagnated or rose in the first three months, as banks passed on increases in market interest rates. In the second quarter, however, retail rates fell again, despite a further rise in market rates.

The gap between actual interest rates and rates simulated on the basis of banks' long-term behaviour increased even further in the second quarter

Chart 20 Actual interest rates on new housing loans compared with simulated interest rates



Source: NBS.

of the year. This divergence was largely attributable to initial rate fixation periods of between one and five years. Whereas the rates on new loans with short-term initial rate fixation periods behaved more or less in line with interest-rate fundamentals, those on loan with longer fixation periods declined relatively sharply and did not reflect the rise in market rates. At the end of June, some banks were even charging lower rates on loans with longer interest rate fixation periods than on loans with a fixation period of up to one year.

A pronounced trend in initial rate fixation periods from longer terms to terms approaching one year has been observed in the banking sector since the last quarter of 2010. This is mainly attributable to growing competition and the efforts of certain banks to expand their market share. These banks extended loans whose longer fixed interest rates were at a similar level to rates fixed for up to one year.

Banks' market shares in new housing loans stabilised

Competition in the provision of new housing loans remained strong in the first half of 2011, and was reflected, as mentioned above, in interest rates on new housing loans. Market shares in new housing loans stabilised in the second quarter after previously being highly volatile. The changes in these market shares were far more moderate in this period than they had been at the end of 2010 and beginning of 2011, and in the latter months of the first half they corresponded more closely to bank size.

Amount of lending to new customers increased

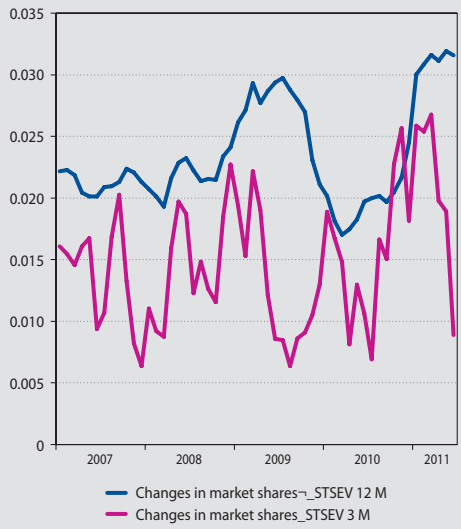
Although a large proportion of new bank loans were used for refinancing existing loans, the amount of lending to first-time borrowers also rose quite substantially.

The increasing borrowing demand from households was driven mainly by favourable conditions in the residential real estate market, as well as by the decline in interest rates on new loans. These factors were also the main reason for the bouyant levels of the housing affordability index (see Chart P44). According to the index, borrowing for house purchase was more affordable for households during the first half of 2011 than at any time since 2005. Other indicators influencing the demand for loans, such as financial position of households, consumer confidence and unemployment, remained largerly unchanged.

Growth in fixed-term deposits of households boosted by rising deposit rates

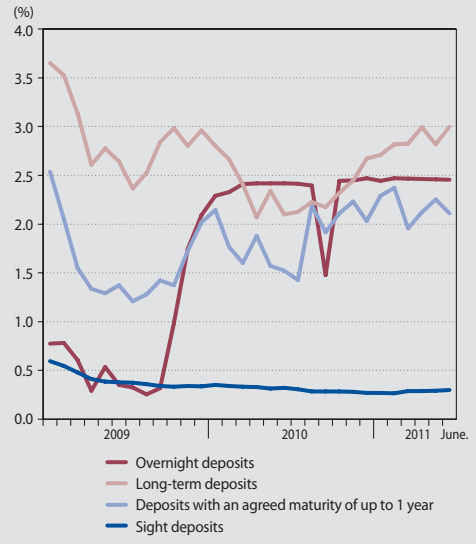
The total amount of household deposits in the banking sector remain on a long-term upward

Chart 21 Changes in banks' market shares in new housing loans



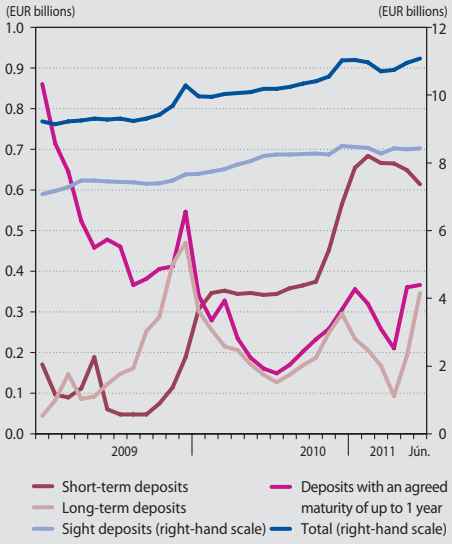
Source: NBS.
Note: Market shares are expressed as the average of standard deviations (STDEV) in the market shares of individual banks over a period of 12 months or 3 months.

Chart 22 Average interest rates on new fixed-term deposits



Source: NBS.

Chart 23 New fixed-term deposits of households

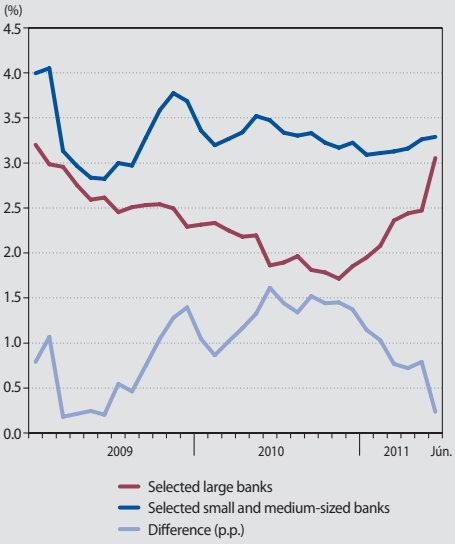


Source: NBS.

trajectory, and rose in the first half of 2011 by almost €1.3 billion year-on-year. Interest rates on new fixed-term deposits climbed in the second quarter (after declining in the first quarter) and thus revived household demand for these products, which was reflected in the growth in their share of total deposits.

The difference in the average interest rate on deposits of up to and including one year's agreed maturity and on those of more than one year's maturity stood at around 1.5 percentage points in 2009, which set off an increase in long-term deposits as a share of total deposits (at the expense of short-term deposits). In 2010, the gap between these rates declined (owing to the higher volatility of the one-year rate) and this slowed the fall in the proportion of deposits with an agreed maturity of up to one year. In the first half of 2011, the gap in interest rates climbed again. With a lag of around one quarter, this was again reflected in the structure of deposits, as the share of long-term deposits increased.

Chart 24 Average interest rates on deposits with an agreed maturity of between 1 and 2 years



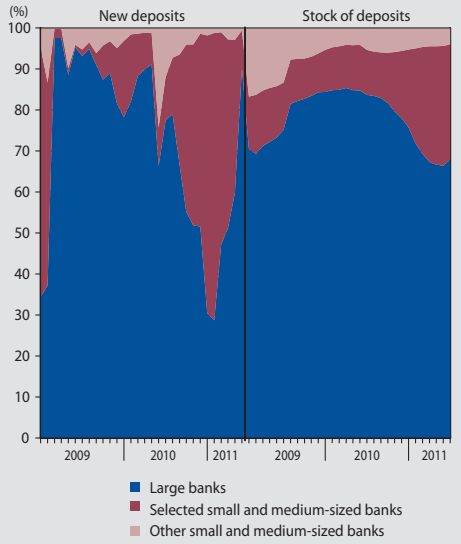
Source: NBS.

Strong competition in fixed-term deposits led large banks to raise deposit rates

Competition between banks for primary deposits escalated further in the first half of 2011. During 2010, a sample of small and medium-sized banks almost tripled their share of the fixed-term deposit market.

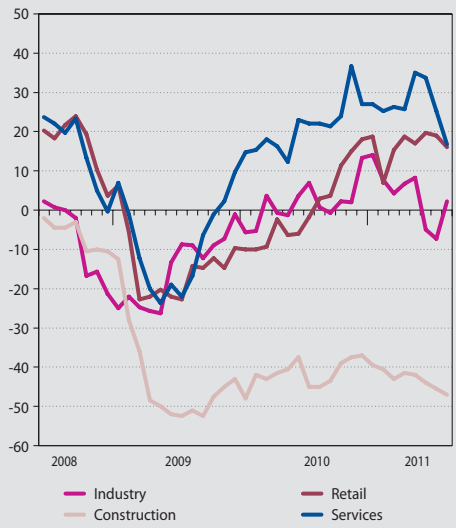
The group of large banks responded to this competition in the second quarter of 2011, by raising interest rates on deposits of up to two years'

Chart 25 Distribution of new deposits and the total stock of deposits among different groups of banks



Source: NBS.

Chart 26 Confidence indicators in selected corporate sectors in Slovakia



Source: SO SR.

agreed maturity. As a result, they immediately increased their share of new deposits.

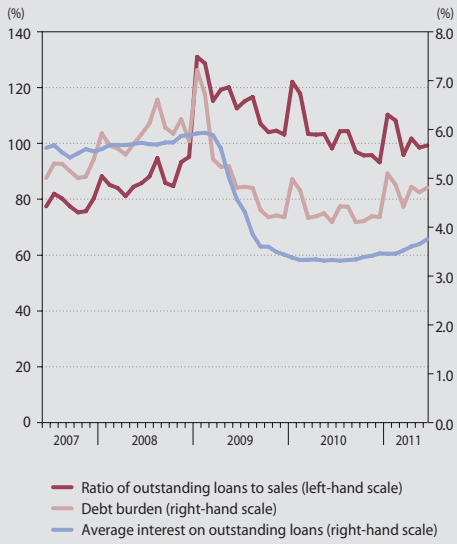
THE CORPORATE SECTOR

Demand for corporate loans remains weak

Despite signs of a recovery, demand for corporate loans remained relatively weak in the first half of 2011. This was in line with the situation in the euro area, where most banks continue to see subdued demand for loans from enterprises.

Furthermore, the principal factors affecting demand for loans do not indicate any significant change in this trend. The first of these factors is the persisting uncertainty surrounding the macroeconomic situation, partly due to the slower economic growth reported by several euro area countries for the second quarter of 2011. In Slovakia, the downturn in confidence was most pronounced in the industry sector.

Chart 27 Debt burden and sales of enterprises



Source: NBS.
Note: The debt burden is measured as the ratio of the average annual loan repayments to average monthly sales.

The second factor is the overall level of corporate sales. Although sales in most sectors increased year-on-year, only sales in industry, selected services, transport and telecommunications are back to around their pre-crisis levels. This means, inter alia, that the overall indebtedness of the corporate sector relative to sales is far higher than in 2007 and 2008. At the same time, however, this ratio has fallen appreciably since 2009 due to the overall decline in interest rates. At a time of uncertainty about the prospects for the corporate sector and about interest rate developments,

the level of the debt burden may put downward pressure on demand for loans.

The third factor is changes in the structure of financing (see Chart P34). Enterprises in Slovakia, as elsewhere in the euro area, are in the process of deleveraging. Given the significant share of foreign ownership of Slovak enterprises, the corporate sector is seeing an increase in cross-border intra-group financing.

Credit standards for new loans to enterprises remain relatively tight

Bank lending policies for enterprises remained largely unchanged in the first half of 2011. After previously being tightened on several occasions, particularly in 2009, credit standards remain tighter than in the pre-crisis period.

Banks are pursuing a cautious strategy for the same principal reason that corporate demand for loans has been diminishing, namely persisting uncertainty about the macroeconomic situation. Banks are, however, subject to increasing competition, the effect of which is amplified by the limited size of the corporate loan market.

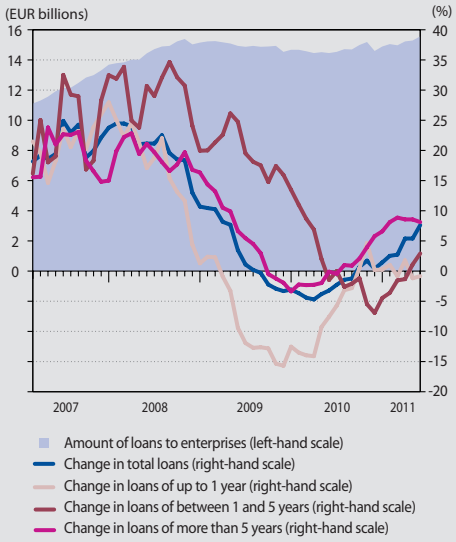
As a result of these opposing pressures, the interest rate spread on loans to enterprises remained largely unchanged in the first half of 2011 (see Chart P27) The interest rate spread on loans of more than €1 million stopped declining in the first half of 2011, meaning that the rise in interbank interest rates was symmetrically passed through to interest rates on new loans to enterprises.

Lending to enterprises increased in certain sectors

Despite the overall uncertainty, the second quarter of 2011 saw a tentative revival in the corporate lending market. But while total lending to enterprises increased by 7.6% year-on-year, the growth was not recorded across all sectors or lending banks.

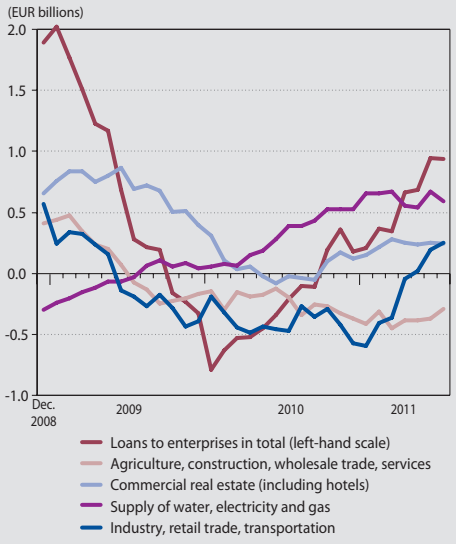
At the sectoral level, further changes took place in addition to the differences that already exist between different sectors. The lending growth in the first three months of 2011 was largely confined to the sectors of real estate business, administrative services, and professional and scientific activities. In the second quarter, lending to the sectors of industry, retail trade, and transportation also recorded an increase. Lending activity remains very weak in the sectors of construction, wholesale trade, and sales of motor vehicles. The sector of water, electricity and gas supply constitutes a separate category, since the loan portfolio for this sector showed little reaction to the downturn in 2009 and is now among the fastest growing.

Chart 28 Loans to enterprises



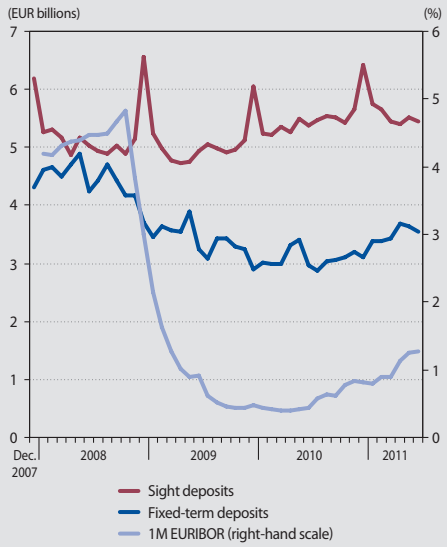
Source: NBS.
Note: The right-hand scale indicates the annual rate of change.

Chart 29 Loan to enterprises in selected sectors – annual rate of change



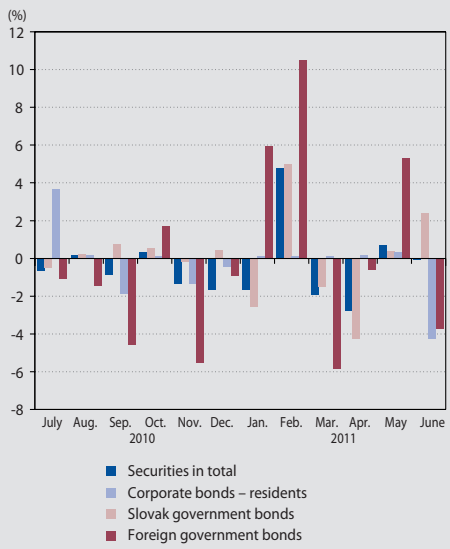
Source: NBS.

Chart 30 Corporate deposits



Source: NBS, European Banking Federation.

Chart 31 Amount of banks' investments in securities – monthly percentage changes



Source: NBS.

Corporate bank deposits remained flat

Deposits of non-financial corporations underwent two changes in the first half of 2011. First, the amount of fixed-term deposits declined in the latter months of the first half of the year. It is worth noting that they fell despite a rise in interbank interest rates. In the past, an increase in these rates would have an upward effect on the amount of corporate term deposits.

Second, the annual rate of growth in sight deposits slowed moderately, and in month-on-month terms the stock of these deposits was declining. Such a pattern of change in sight deposits was previously seen from mid-2008 to the end of 2009, when the corporate sector was in the grip of the economic crisis.

2.1.1.2 SECURITIES

No significant changes in the structure of securities investments in the first half of 2011

In the banking sector as a whole, the structure of bond investments did not change to any significant extent in the first six months. Of the total amount of bond investments reported as at 30 June 2011, Slovak government bonds accounted for almost 80% and there was a moderate increase in the share of foreign government bonds. The trend decline in investments in bonds issued by domestic banks did not let up in the first half of 2011.

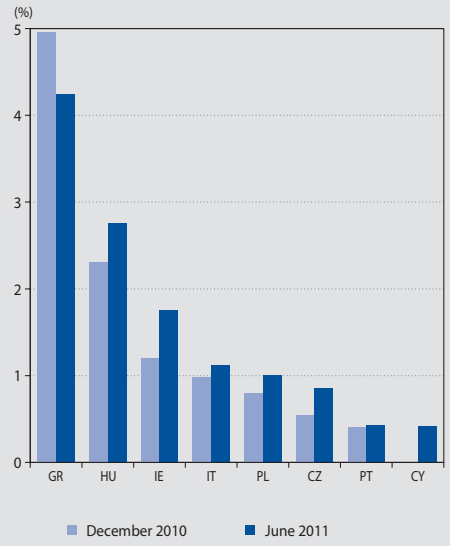
The banking sector is continuing to buy bonds mainly as a form of longer-term investment, and this is reflected in the composition of the bond securities portfolio. Looking at the total nominal amount of bond investments, almost 90% was contained in the held-to-maturity (HTM) and available-for-sale (AFS) portfolios. The only institutions in which the held for trading portfolio had any significant share were the branches of certain foreign banks.

Investments in Greek government bonds declined, while investments in selected sovereign bonds rose

Changes in the overall amount of bonds issued by residents reflected mainly the changes in investments in Slovak government bonds, as well as the decline in bank bond investments. Banks continued to buy government bonds mainly for the HTM and AFS portfolios, generally as replacements for maturing government bonds.

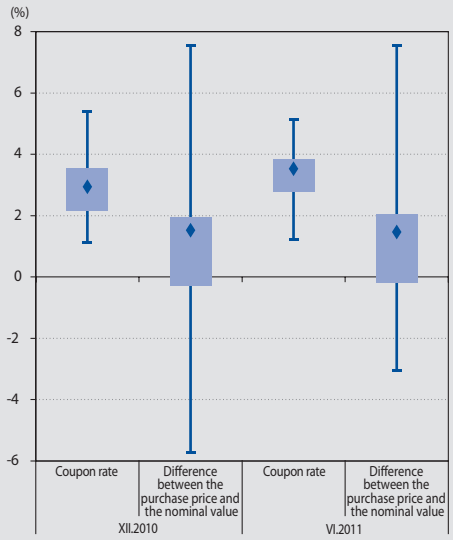
As for investments in foreign government bonds, the only relatively significant change occurred in the first quarter of 2011, while the whole portfolio remained largely the same in the second quarter. The main changes concerned holdings of Greek government bonds, which declined in terms of their overall nominal value through redemptions

Chart 32 Banks' investments in bonds issued by non-residents



Source: NBS.
Note: The left-hand scale shows the share that bonds issued by non-residents have in the total amount of bonds in banks' HTM and AFS portfolios.

Chart 33 Yields on the banking sector's portfolio of debt securities



Source: NBS.
Notes: The Chart shows the minimum and maximum values, the lower and upper quartiles, and the average yield in the sector (weighted by the overall nominal value).
The yield calculation was based entirely on the coupons of bonds held in the HTM and AFS portfolios.
The spread between the acquisition value and nominal value is indicated by the sum of the differences in individual banks between the acquisition value and nominal value of bond held in the AFS and HTM portfolios as a share of the total nominal value of these bonds.

at maturity and sell-offs. On the other hand, selected banks purchased for their HTM and AFS portfolios governments bonds of Ireland, Cyprus and Italy. Despite the growth in these holdings, the HTM and AFS portfolios of most banks largely consist of Slovak government bonds or bonds issued by other less risky countries.

Yields on debt securities portfolios increased

The current yield on the debt securities portfolio increased moderately between the end of 2010 and the end of June 2011. As the yield grew, the spread between banks narrowed. The main cause of the yield growth was the situation in the portfolio of government bonds and Treasury bills, as zero-coupon securities with a total value of €1.58 billion matured and were replaced mainly with non-zero coupon securities. Thus the average coupon yield on this portfolio climbed from 2.75% at the end of 2010 to 3.38% at the end of June.

Securities issued by banks in the first half of 2011 consisted mainly of mortgage bonds

Mortgage bonds made up more than 90% of the securities issued by banks. During the first half of 2011, five banks issued mortgage bonds with a total nominal value of €368.5 million, of which around 80% had been placed on the market by the end of June. While the main reason for issuing new mortgage bonds continues to be the replacement of maturing mortgage bonds, the growth in these bonds has a rising trend that has been gradually accelerating since August 2010.

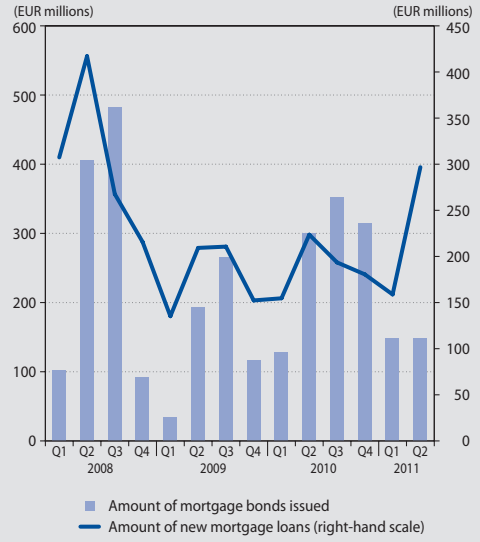
Two banks issued bonds other than mortgage bonds in the first half of the year, and these bonds had a total nominal value of €24 million. This included one bank's issuance of subordinated debt worth €14 million.

The extent to which mortgage loans were backed by mortgage bonds during the first six months of 2011 averaged between 85% and 90%, with all banks meeting the statutory minimum coverage level of 70%.

The relatively large proportion of fixed-coupon bonds and the short maturity of floating-coupon bonds may to some extent reflect the tightening of the ECB's monetary policy and the intensification of the sovereign debt crisis

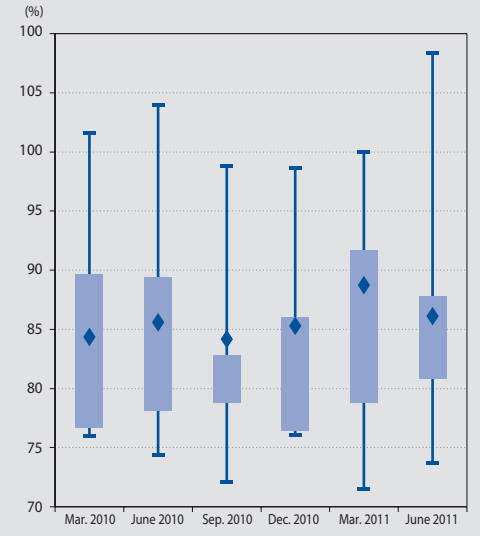
The mortgage bonds issued in the first quarter of 2011 were all fixed-coupon bond, whereas

Chart 34 Mortgage bond issuance



Source: NBS.

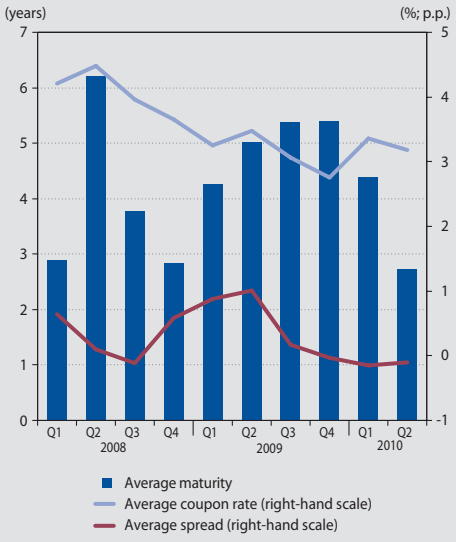
Chart 35 Backing of mortgage loans with mortgage bonds



Source: NBS.
Note: The Chart shows the minimum and maximum values, the lower and upper quartiles, and the weighted average coverage.

almost 80% of the bonds issued by banks in the second quarter had a floating coupon (five out of eight issues). This turnaround may to some extent have been a response to elevated investor demand for floating-coupon bonds in an environment of rising interbank interest rates.

Chart 36 Average spreads and maturities of issued mortgage bonds



Source: NBS.
Notes: Spreads, coupon rates and maturities are weighted by the nominal amount of issued mortgage bonds.
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.

The spread between the average coupon rate on fixed-coupon mortgage bonds and yields on government bonds remains moderately negative, while floating coupons, even during second quarter, remained linked to the 3-month or 6-month EURIBOR which rose by between 0.75 and 1 percentage point.

2.1.1.3 BANKS

THE INTERBANK MARKET DID NOT UNDERGO ANY SIGNIFICANT STRUCTURAL CHANGES DURING THE FIRST HALF OF THE YEAR

Interbank operations continued to be a relatively volatile component of the banking sector's balance sheet during the first half of 2011. While transactions with the shortest maturities were undertaken mainly to fine-tune daily liquidity, other operations were to a certain extent used to offset movements in other more volatile components of individual banks' balance sheets (deposits of enterprises, general

government, non-bank financial corporations, and non-residents; loans to general government and non-residents).

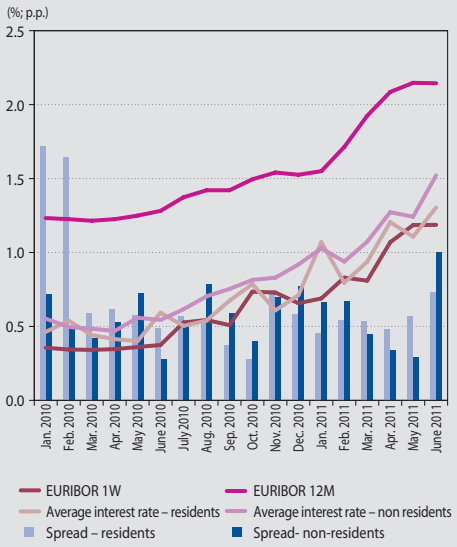
The largest changes in the composition of interbank assets and liabilities stemmed from the ECB's unwinding of 12-month refinancing operations

The maturing of the ECB's 12-month longer-term refinancing operations (LTROs) in September and 3-month LTROs in December brought about the largest change in interbank assets and liabilities. One bank alone accounted for 80% of the drop in funding from the ECB reported by the whole banking sector.

The most volatile component of interbank transactions, in volume terms, continues to be transactions with foreign banks. From the view of financial stability, it is positive that intra-group transactions accounted for a substantial (around 80%) share of interbank transactions on both the asset and liability sides. Although the amount of loans and deposits of foreign banks moved almost in parallel during the first six months, the banks responsible for this movement on the asset side were different from those on the liability side.

In the case of loans to foreign bank, the largest movements were recorded by five banks and were nearly all intra-bank transactions. The rise, or fall, in the amount of these loans was probably accompanied by movements in the more volatile deposits mentioned above, or it reflected developments in securities investments, and/or it was financed from domestic interbank funds. The largest movements in the amount of funds received from foreign banks may also, it seems, be largely ascribable to intra-group transactions. The sharp rise in January was attributable to a single bank that replaced funding from the ECB with funding from another member of its group. Most of these transactions, however, were cases of branches of foreign banks using an intra-group loan to offset movements in volatile liabilities or to fund lending to the corporate sector.

Chart 37 Interest rates in the domestic interbank market



Source: NBS.
Notes: Average rate for non-residents – indicates the average interest rate on interbank deposits taken from non-resident banks.
Average rate for residents – indicates the average interest rate on interbank deposits taken from resident banks.
The interest rates are calculated on the basis of the stock of short-term (up to one year) loans and deposits received in euro as at the end of each month.
The rates were calculated as an average weighted by the amounts of individual transactions.

Rise in interbank interest rates

Wholesale funding costs in the first half of 2011 continued to reflect changes in EURIBOR interbank rates, as interest rates in the domestic interbank market followed a rising trend right up to the end of the period under review. Although the higher rates translated into a wider spread between the average implied rates of individual banks (especially in the case of transactions with foreign banks), banks do not yet appear to have any serious difficulty in obtaining wholesale funding. As regards the cost of borrowing, it is positive that the increase in EURIBOR interbank rates in the latter months of the first half of the year was caused mainly by the raising of the ECB key rate and not by an escalation of nervousness in the interbank market (Chart 37).

Box 1

RELATIONSHIP BETWEEN ECONOMIC DEVELOPMENTS AND THE FINANCING OF ENTERPRISES IN SLOVAKIA SINCE 2009

The recovery of the domestic economy in 2010 and the first half of 2011 was accompanied by increasing activity in the corporate sector. The flow of lending from domestic banks to enterprises did not, however, make such clear progress. There was a stark contrast (particularly during 2010) between, on one hand, the stagnating lending market and, on the other hand, economic growth and the rising sales of domestic enterprises. This contrast was amplified by the fact that the most pronounced lending growth was in loans to sectors not immediately connected with the macroeconomic cycle, i.e. the water and electricity supply sector and the administrative and scientific activities sector.

The existence of a gap in the financing of corporates by banks was further confirmed by a theoretical model that examined the long-run relationship between changes in GDP and the amount of lending to particular segments of the corporate sector. For estimating the amount of lending to non-financial corporations, a panel data model was developed for seven selected segments of the non-financial corporate sector. A panel cointegration method was used to find a cointegration relationship representing the long-run equilibrium relationship between the amount of lending, GDP, and lending rates. The cointegration relationship was estimated using the DOLS method, including 1 past and 1 future difference of the explanatory variables:

$$\log(UNS_{it}) = a_i + 1.63\log(HDP_{it}) - 0.08r_{it} +$$

$$+ \sum_{j=-1}^{1} c_j \Delta\log(HDP_{it+j}) + \sum_{j=-1}^{1} d_j \Delta\log(r_{it+j}) + \varepsilon_{it},$$

where a_i are fixed effects typical for the *i* segment, UNS_{it} is the stock of loans to non-financial corporation, GDP_{it} is gross domestic product for the *i* segment at time *t*, and *r* is the interest on the loans.

The situation differed from segment to segment. The largest financing gap was identified in the industry and trade segments, where growth in activity (and therefore also in GDP) overtook the long-run relationship with lending flow. The simulated and actual level of lending coincided in, for example, the construction segment, where lending remained flat amid weaker construction activity. On the other hand, the results of the model indicate that the financing of commercial real estate has not been matched by the performance of this sector since 2007.

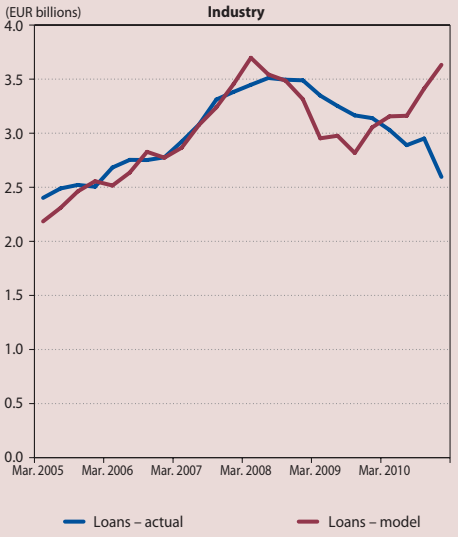
The overall lending gap was more pronounced in the case of short-term loans, which were hit by the downturn in economic activity, particularly in 2009. This is also why the upturn in activity in the corporate sector in 2010 was expected to see higher short-term borrowing. Another result of the changes that began in 2008 is an increase in the difference between the amount of short-term and long-term loans.

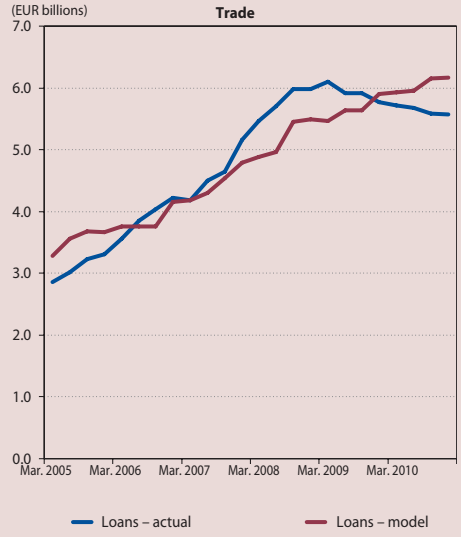
The explanation for the relatively slower flow of loans to enterprises is probably related to several factors. A key factor in corporate demand for loans from domestic banks was the gradual change in the structure of the corporate sector balance sheet. From mid-2009, the equity capital that enterprises raised abroad began to rise relatively sharply, and from mid-2010 this item was the fastest-growing component of corporate sector financial liabilities. This trend coincided with a rising rate of debt-security issuance by the euro area's non-financial sector at the expense of borrowing from banks. The increasing significance of foreign funding in the corporate sector balance sheet was also observed in the Czech Republic.[2] Such a change cannot, however, adequately explain the drop in demand for short-term loans, since equity capital cannot be considered a substitute for operational financing.

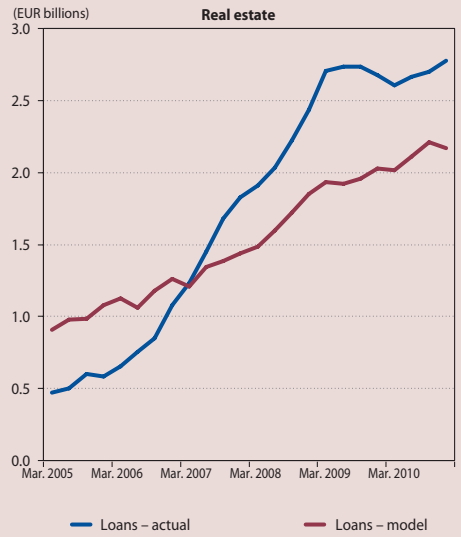
A second factor may have been interest rates, which would be expected to affect how enterprises decide between the use of borrowed

2 *Geršl, A. – Hlaváček, M. [2007] Foreign direct investment and the Czech corporate sector: potential risks to financial stability. In FSR 2006. ČNB, pp. 80-88.*

Chart A Actual and simulated lending growth in selected segments

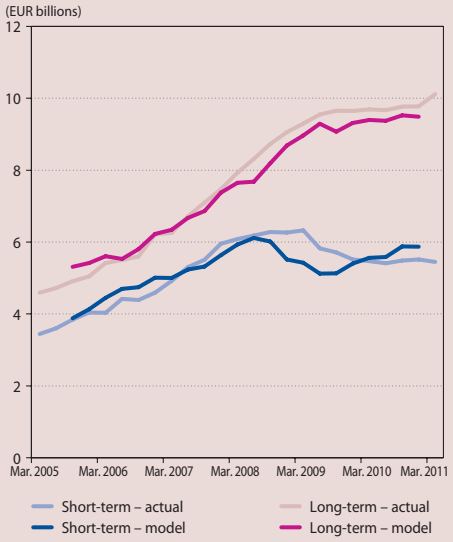






Source: NBS, SO SR.

Chart B Loans by maturity

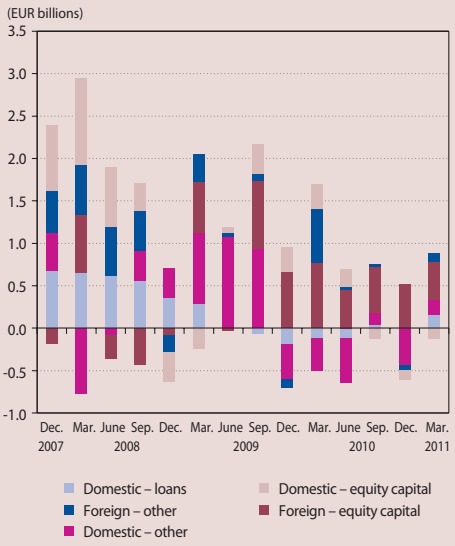


Source: NBS, SO SR.

funds or own funds. However, lending rates for enterprises fell sharply in 2009, and thus the overall debt burden of enterprises became considerably lighter, even after taking into account the slump in sales over the same period (see Chart in the Annex). By contrast, the distinct growth in loans to enterprises in 2011 was accompanied by rising lending rates.

A possible third factor was temporary changes that several enterprises made in the organi-

Chart C Decomposition of changes in corporate financial liabilities



Source: NBS.

sation of their processes. These were mainly changes in working time, which may to some extent explain why sales grew without the need for additional external financing. A separate factor may be the overall impact of the financial crisis on the effectiveness of corporate financing. The widening difference between long-term and short-term lending indicates a possible structural change in the use of external financing. Nor can it be ruled out that the corporate sector has undergone a longer-term transition in how and to what extent it uses short-term bank loans.

Another factor may be a distinct time lag in how bank lending to enterprises responds to economic revival, as seen in the growth in corporate lending in the second quarter of 2011. It is also the case that this change is not clear-cut and is concentrated in certain banks and segments. Banks continue to report weak borrowing demand from the corporate sector, which indicates that enterprises remain highly cautious. How the situation develops will depend on macroeconomic trends, which at present are surrounded by an exceptional degree of uncertainty.

2.1.2 FINANCIAL POSITION OF THE BANKING SECTOR

Total profits in the banking sector for the first half of 2011 soared by 79% in year-on-year terms. A relatively large proportion of this growth comprised extraordinary one-off effects related to equity security yields and income from the sale of a subsidiary. Another major factor in this growth was the decline in loan loss provisioning costs at a majority of banks. The upturn in profitability was most pronounced in the group of large banks, which continued to record growth in net interest income from the retail sector. Despite a moderate rise in operating costs, the cost-to-income ratio of the banking sector improved again. Fee income from customers also showed an improvement.
The capital adequacy ratio rose only marginally in comparison with the end of 2010. The retention as capital of around 50% of the earnings for 2010 strengthened the capital position, but its effect was offset by regulatory amendments under which new items deductible from capital were implemented and by an increase in risk-weighted assets.

2.1.2.1 PROFITABILITY

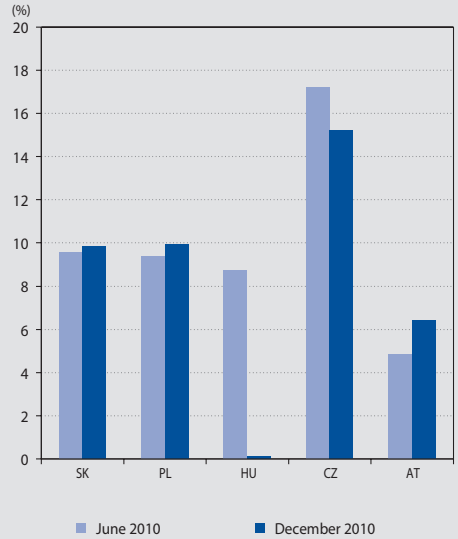
Positive trends in banking sector profitability continued in the first half of 2011

The banking sector's overall net profit for the first half of 2011 amounted to €431 million, representing an increase of 79% year-on-year. It should be noted, however, that a relatively large part of this growth comprised extraordinary one-off effects related to equity security yields and income from the sale of a subsidiary. The annual rate of profit growth excluding these effects would have been 53%.

The banking sectors in Slovakia's neighbouring countries, except for Hungary, also improved their profitability. Indeed, the Slovak, Czech and Polish banking sectors were among the most profitable in the European Union.

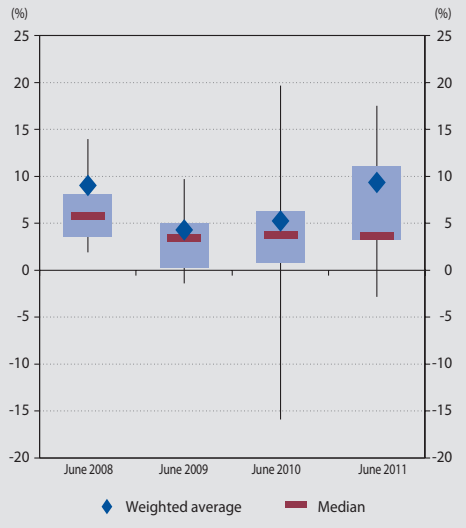
The majority of banks in Slovakia reported a year-on-year rise in profits in the first half of 2011. Only one bank and a few branches of foreign banks made a loss. The gap between the profitability of the large banks and the rest of the banking sector continued to widen in the first six months, and this is apparent in the distribution of return on equity (ROE) in the sector. The difference between the sector's median ROE and its weighted average ROE was relatively large at the end of June 2011, owing to the rising share of large banks in the sec-

Chart 38 ROE in the banking sectors of selected countries



Source: ECB.

Chart 39 Distribution of ROE



Source: NBS.

tor's total profits (with the four largest banks accounting for 80% of the overall figure). This share has been steadily rising over time.

Loan impairment expenses declined; a large part of overall income consisted of interest income from retail loans and securities

Looking at the profitability of banks in the first six months of 2011, the change in the structure of the sector's profits which made the largest contribution to their growth was a decline in costs related to the creation of provisions and reserves, which plummeted by 56% year-on-year. The largest drop was in provisioning costs for retail loans, which reflected the relatively substantial easing of loan delinquency growth. Almost all banks reported a fall in their provision and reserve creation costs.

A further driver of profit growth was the year-on-year rise in net interest income from retail transactions. It should be noted, however, that this income increased mainly during the second half of 2010 and that it remained somewhat flat in the first half 2011. This was because income from the continuing growth in retail lending was offset by the increased costs attached to a rising volume of retail deposits, while the income ratios for loans and cost ratios for deposits remained unchanged. The average amount of deposits in the first half of 2011 was 4.2% higher than in second half of 2010.

Banks' results for net interest income from the retail sector were relatively varied in the first half of 2011. The group of large banks continued to record a growth trend in this item, while the group of smaller banks and home savings banks reported a decline.

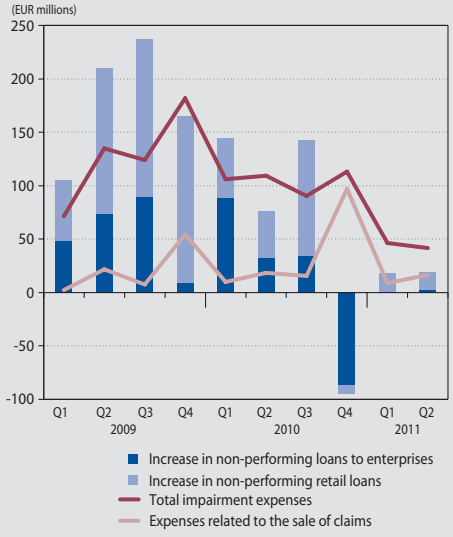
The significance of interest income from other loans to customers maintained its downward trend, which has been relatively pronounced since the onset of the financial crisis and is more or less typical for a majority of banks.

The trend rise in the significance of interest income from debt securities also continued to increase, mainly due to the changing structure of the portfolio of Slovak government bonds and Treasury bills.

Another contribution to the strong year-on-year growth in the first six months was an increase in yields on equities and mutual fund shares/units. This was predominantly a one-off effect on the profitability of selected banks.

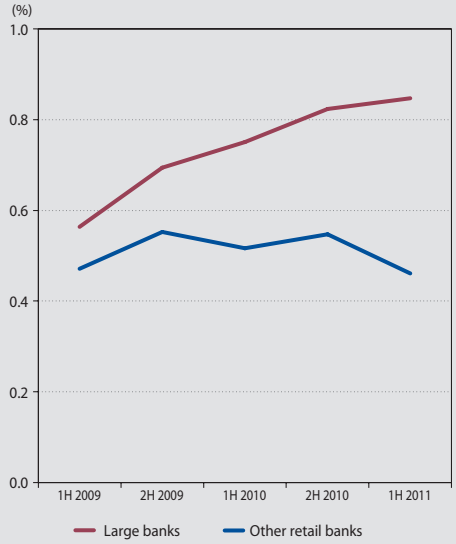
Operating expenses, which constitute the largest cost item in the profitability of banks, recorded

Chart 40 Loan impairment expenses and changes in the amount of non-performing loans



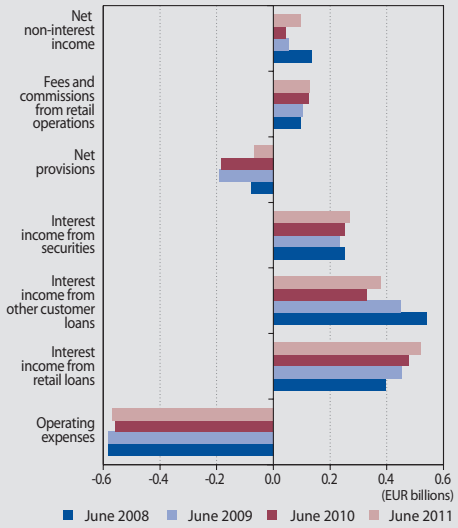
Source: NBS.

Chart 41 Net interest income from the retail sector as a share of total assets



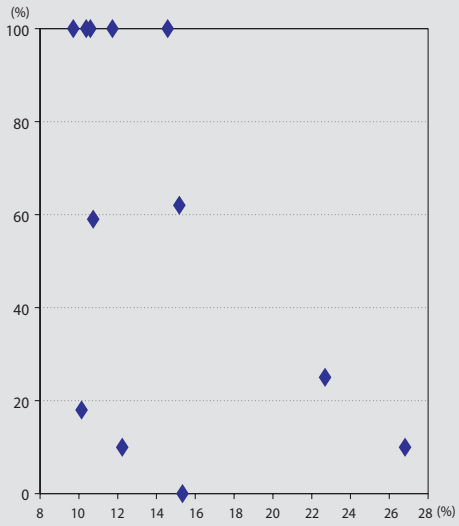
Source: NBS.

Chart 42 Selected items of banking sector profitability



Source: NBS.

Chart 43 Retained earnings (as a share of total earnings) and the current capital adequacy ratio



Source: NBS.
Notes: Banks that did not make a profit in 2010 are not included in the Chart.
The CAR as at 30 June 2011 is plotted on the horizontal axis.
Retained earnings as a share of earnings for 2010 are plotted on the vertical axis.

a moderate year-on-year rise in the first half of 2011 after stagnating or falling in previous years. With the increase in operating income, however, the banking sector further enhanced its efficiency, its cost-to-income ratio had fallen to bellow 50% by the end of June.

Net income from customer fees rose throughout the first half of 2011, and its increase in each month was higher than that in the same month of 2008, the year before the crisis. Neither households nor enterprises accounted for a significant share of the year-on-year fee income growth, most of which came from other sectors.

2.1.2.2 CAPITAL REQUIREMENTS

Growth in capital from retained earnings almost cancelled out by new deductible items and increase in risk-weighted assets

The capital adequacy ratio (CAR) of the banking sector as at 30 June 2011 was only moderately higher (at 12.7%) than as at the end of 2010 (12.6%).[3] This contrasts with the situation in previous years, when the CAR rose relatively sharply during the first half of the year compared to the second half, due mainly to the retention of earnings from the earlier year.

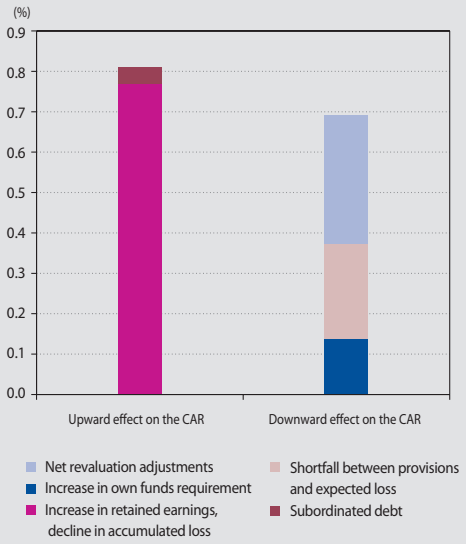
The banking sector retained around half of its 2010 profits in the first half of 2011, which was similar to the proportion retained in previous years. The retained earnings totalled €269 million. The amount of subordinated debt increased moderately (by 3%), and hence, Tier II capital increased as well.

Unlike in previous years, however, the amount of own funds was affected by the introduction of two new deductible items. The first item, in effect since 1 January 2011, is the difference between the loan loss provisions and expected loss of those banks that use the standardised approach for calculating the credit risk capital requirement of their portfolio, or part thereof. This item applies where the expected loss is higher than the provision, and its total amount as at the end of June 2011 was €81 million, representing a contribution of 0.2 percentage point to the overall decline in the capital adequacy ratio.

The second deductible item, introduced as from 31 May 2011, is revaluation losses on debt securities recorded in the available-for-sale portfolio.

3 *For the purposes of comparing the sectoral CAR at the end of June 2011 and at the end of December 2010, we excluded Komerční banka, which was re-established as a branch of a foreign bank as from 1 January 2011. This adjustment is taken into account in other similar comparisons later in the text.*

Chart 44 Effect on the capital adequacy ratio of different components



Source: NBS.

As at 30 June 2011, the overall net value of this item (i.e. adjusted for the simultaneous increase in revaluation gains) amounted to approximately €110 million. The overall effect of the introduction of this item on the capital adequacy ratio was to reduce it by 0.3 percentage point.

Furthermore, the own funds requirement was raised by €14 million (0.5%) from the beginning of 2011. As at June 2011, all banks in the sector satisfied the regulatory capital adequacy requirement.

2.2 THE INSURANCE SECTOR

The profitability of insurance companies throughout the insurance market rose sharply in the first half of 2011 in comparison with the previous year. This was mainly due to a lower loss ratio in non-life insurance and a reduction in the technical provision for deficiency in life insurance other than unit-linked (as a result of rising interest rates). The solvency of insurance companies was adequate and remained largely unchanged from 2009.
In life insurance, the moderate growth trend continued in the first half of 2011, while in non-life insurance there was a modest recovery. Life insurance growth was driven mainly by unit-linked products, but it remained far below pre-crisis levels. Traditional life insurance products even recorded a decline, and the number of partial withdrawals and contract cancellations continued to increase, albeit at a slower pace. Claim costs increased as a result. In non-life insurance, the property insurance line recorded strong growth in premiums and a drop in the loss ratio from the previous year's high levels. Premium prices in motor vehicle insurance continued to come down. Although the rise in claim costs was more pronounced in non-life insurance, these costs were covered by technical provisions and the overall loss ratio fell to its lowest level since 2006.

Premiums rose moderately[4]

Premiums rose slightly during the first half of 2011, as they had in the second half of the previous year. Most of this growth came from the non-life insurance sector.

In the life insurance sector, the pace of premium growth decelerated, particularly in traditional life insurance.[5] After a rise in new businesses in the previous year, demand for all life insurance products declined in the first six months and the number of insurance policies fell. The situation in life insurance continued to reflect the effects of the economic crisis and the persisting uncertainty.

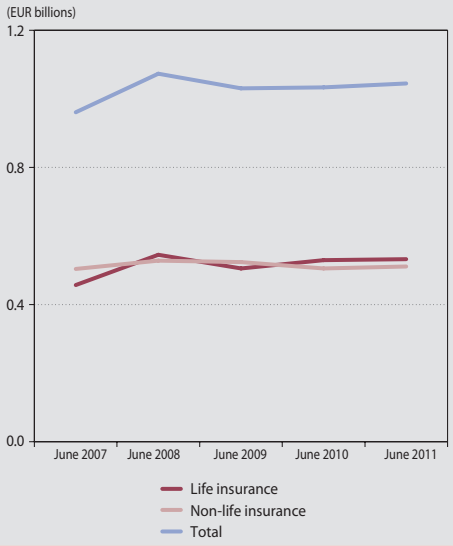
In non-life insurance, premiums increased during the first six months, thus marking an end to the negative trend of previous periods. Most lines of non-life insurance contributed to this recovery. The situation in motor insurance,[6] the largest line of non-life insurance, has been unfavourable for a long period and remained so in the first six months.

Total premiums amounted to €1.044 billion at the end of June 2011, representing a rise of 1% year-on-year. Life insurance premiums increased by 0.7% to €532.7 million, and non-life insurance premiums rose by 1.3%, to €511.5 million.

Lines of life insurance

The strongest performing line was unit-linked insurance (where the benefit depends on the value of mutual fund units, with the customer of the insurance company bearing the insurance risk), which recorded a 7.3% rise in premiums. This type of insurance has been trending upwards over a long period, and as at 30 June 2011 it constituted 30% of the life insurance market. The number of surrenders in this line of insurance climbed by 26% year-on-year, and therefore claim costs rose by almost 22%. This was the only life insurance line to record a rise in the surrender rate, which reached 5.2%. New business in this line reached 10.8%, and since the number of new policies increased by 7.1%, the costs probably did not comprise cancelled

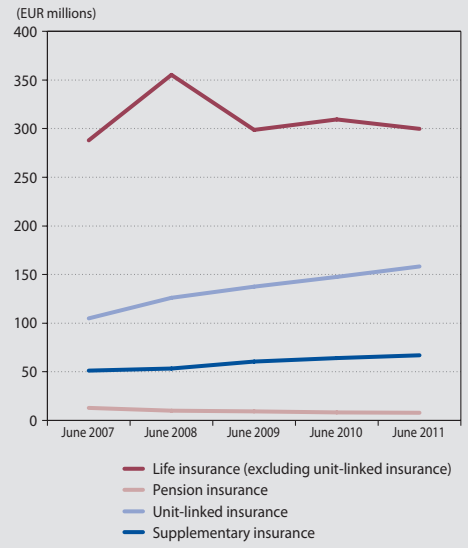
Chart 45 Premiums



Source: NBS.

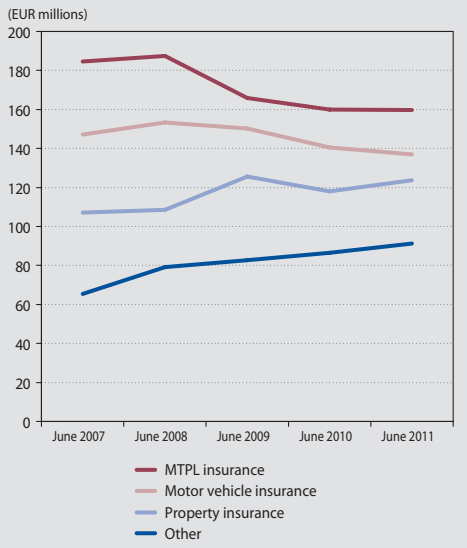
4 *Premiums can be defined as the price agreed in individual insurance contracts regardless of the method of their financial reporting.*
5 *Traditional life insurance includes assurance on death, assurance on survival to a stipulated age, mixed assurance, etc.*
6 *The motor insurance line includes motor third-party liability (MTPL) insurance and motor vehicle insurance.*

Chart 46 Life insurance premiums



Source: NBS.

Chart 47 Non-life insurance premiums



Source: NBS.

contracts, but rather partial withdrawals from mutual funds.

Traditional life insurance performed poorly in several key indicators. In year-on-year terms, new business declined, premiums fell by 3.1%, and the number of insurance policies went down. Claim costs related to surrenders increased, although the number of surrenders fell sharply year-on-year. This fact indicates that the policies surrendered had a longer-term duration and that the provisions made for them were relatively high.

In the third largest line of business, supplementary insurance, premiums grew by 4.3%. The smallest segment of the life insurance market is pension insurance, and here premiums for the first half of 2011 fell again in year-on-year terms, by 4.6%.

Lines of non-life insurance

In the non-life insurance market, property insurance saw a substantial upturn in the first half of 2011, with premiums rising by 4.8% year-on-year. Although the number of new policies remained about the same, the volume of new business increased by 3.7%, meaning that the average amount of property insurance in new contracts went up.

Claim costs in this insurance line soared by almost 65%, but since insurance companies reduced their technical provisions, the overall costs related to insurance coverage declined. The loss ratio[7] in the first half of 2011 plummeted by 37 percentage points year-on-year, to 39.3%. It should be noted, however, that theese data will not be fully meaningful until the data for the year as a whole are calculated.

Other lines of non-life insurance that reported growth included credit, surety and miscellaneous financial loss insurance, general liability insurance, legal protection insurance, and assistance insurance.

The largest line of non-life insurance – motor insurance – reported below-par figures in the previous period and this trend continued in the first half of 2011. Amid strong competition, premium prices continued to come down, and even though the number of insurance policies increased, the amount of premiums fell. The average premium price in prolonged contracts fell sharply, which may have been caused by no claims bonuses or by efforts to retain customers (since the average premium price in new policies was slightly lower).

Premiums in MTPL insurance dipped by 0.2% year-on-year, even though the number of insurance policies rose by 6.8% (new business went up by 5.3% and prolonged policies by 7.1%).

7 *The loss ratio is calculated for the period 1 January 2011 to 30 June 2011 on the basis of data reported by insurance companies as at 30 June 2011.*

In motor vehicle insurance, premiums declined by 2.6%. Although new policies increased by 8.3%, prolonged contracts fell by 3.0% and consequently the number of insurance policies fell by 1.6%.

The long downward trend in premium prices is putting upward pressure on the core performance indicators – loss ratio, expense ratio and combined ratio – used in assessing the profitability of non-life insurance. In the case of motor insurance, these ratios have added importance due to the strength of competition in this line of business.

The following Chart shows the development of these ratios in the first half-year periods of recent years for both segments of motor insurance. Motor vehicle insurance appears to be the less profitable. It is evident that there has been little fluctuation in the loss, expense and combined ratios of the motor insurance line as a whole and that both segments of motor insurance are interconnected (motor vehicle insurance claims are compensated by MTLP insurance).

Increase in claim costs[8]

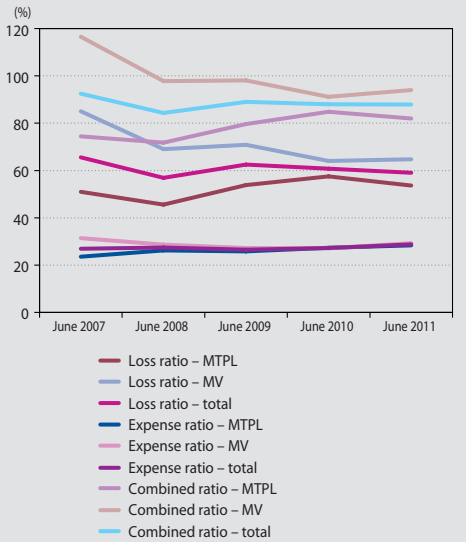
Overall claim costs in life and non-life insurance in the first half of 2011 recorded an annual increase of 9.9% or €582.5 million, with the costs in life insurance rising by 6.7% (€324.3 million) and the costs in non-life insurance by 14.1% (€228.1 million).

In life insurance, the rise in claim costs was largely due to higher payouts for policy surrenders and for assurance on survival to a stipulated age. Nevertheless, the overall rise in claim costs has been gradually falling since 2008, mainly because of the falling annual growth in assurance on survival to a stipulated age and in surrenders.

Following substantial turbulences in the first half of 2008, the annual rate of change in claim costs related to policy surrenders remained stable in subsequent periods and stood at 7.4% as at 30 June 2011. Their share in total claim costs was 56%, the same as at the end of June 2010.

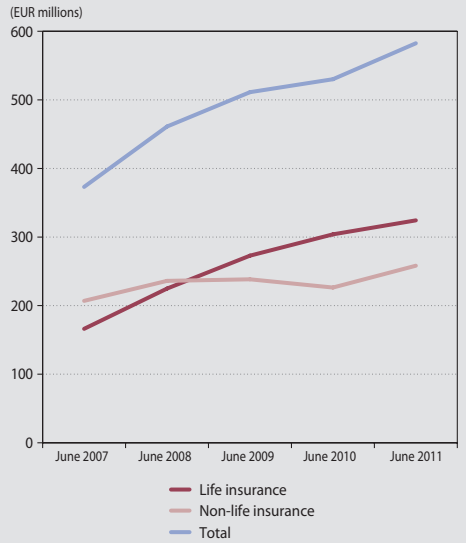
In non-life insurance, claim costs are evaluated using the loss ratio, i.e. the ratio of claim costs to earned premiums. The loss ratio for non-life insurance as a whole fell by 11.6 percentage points in comparison with the previous period, to 49.4%, its lowest level since 2006. This decline was driven mainly by the improving situation in property insurance, which, as noted above, saw a drop in insurance claims and a reduction in technical provisions. Among the major lines of business, the loss ratio in MTPL fell by 3.9 percentage points, while the figure

Chart 48 The loss ratio, expense ratio and combined ratio in motor vehicle insurance



Source: NBS.

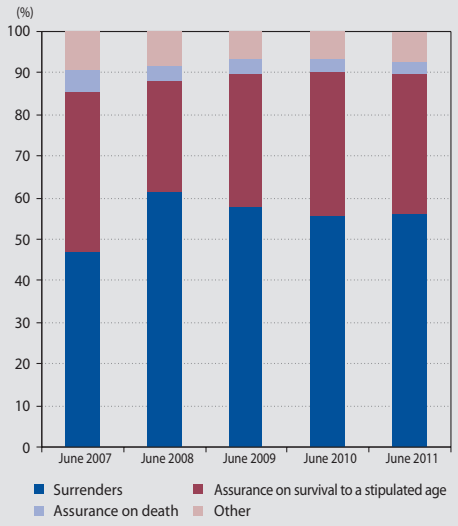
Chart 49 Claim costs



Source: NBS.

8 *NBS analysed the technical cost of claims similarly as it did premiums. Hereinafter, the term "claim costs" means "technical claim costs".*

Chart 50 Structure of claim costs in life insurance



Zdroj: NBS.

for motor vehicle insurance rose by almost 0.7 p.p.

The combined ratio, which takes into account not only technical costs but also operating expenses related to insurance activities, declined by 10.3% year-on-year, to 0.58%, its third-lowest level in the last ten years. This decline – caused by higher income from premiums and a drop in insurance claims – increased the profit margin on earned premiums.[9]

Legal protection insurance was the only line of non-life insurance to make an overall loss for the period under review.

The reinsurance share[10] continues to rise moderately

The premiums that Slovak insurers ceded to reinsurers during the first half of 2011 amounted to €159 million, representing an increase of 13.5% year-on-year. In non-life insurance, where reinsurance is more prevalent than in life insurance, the reinsurance share in June 2011 exceeded 29%. The reinsurance share has been on a steady upward trajectory since 2008, although it is still lower than its peak levels between 2002 and 2004.

The reinsurance share grew in all the main lines of non-life insurance (MTPL, motor vehicle, property). The rise in ceded premiums was caused mainly by the increased ceding of premiums in MTPL insurance, property insurance and active reinsurance. In active reinsurance, the reinsurance share soared to 60%, from 40% a year earlier.

Table 3 The loss ratio, expense ratio, and combined ratio of non-life insurance lines for the first half of 2011

	Loss ratio (%)	Expense ratio (%)	Combined ratio (%)
Life insurance – supplementary insurance	27.18	33.40	60.58
Accident and sickness insurance	36.12	37.13	73.24
MTPL insurance	53.64	28.37	82.01
Motor vehicle insurance	64.73	29.22	93.95
Other transport insurance	43.49	27.77	71.26
Carrier's liability insurance	41.02	31.72	72.74
Property insurance	39.30	33.78	73.08
General liability insurance	31.96	31.01	62.98
Credit insurance, surety insurance and miscellaneous financial loss insurance	10.55	47.50	58.05
Legal protection insurance	32.82	75.63	108.45
Assistance insurance	31.44	46.45	77.90
Active reinsurance	19.86	25.84	45.70
Total	49.41	31.17	80.58

Source: NBS.

9 *'Earned premiums' means premiums used by insurers to cover insurance risk and costs during the period under review.*

10 *Premiums ceded to reinsurers as a share of total premiums.*

Technical provisions and their investment

Technical provisions in the insurance sector rose in the first half of 2011 by 2.9% year-on-year – their lowest annual increase for five years – to stand at €4.72 billion. The deceleration in growth was most marked in provisions for traditional life insurance, which increased by only 1.1% year-on-year and even fell slightly from the beginning of the year – owing to lower premiums, surrenders, and a decline in the deficit provision caused by an increase in interest rates. The technical provision for deficiency in life insurance other than unit-linked fell by €22 million in comparison with June 2010. With premiums growing in unit-linked insurance, the technical provisions for this line of business maintained their rising trend.

Technical provisions in non-life insurance, declined year-on-year, the largest fall being in provisions for claims (down by 3.7% – provisions for both reported and unreported claims declined) and in provisions for liabilities towards the Slovak Insurers' Bureau (17%).

The asset coverage of technical provisions stood at 115%; the covering assets provisions amounted to €4.4 billion except technical provisions for liabilities arising from unit-linked insurance policies.

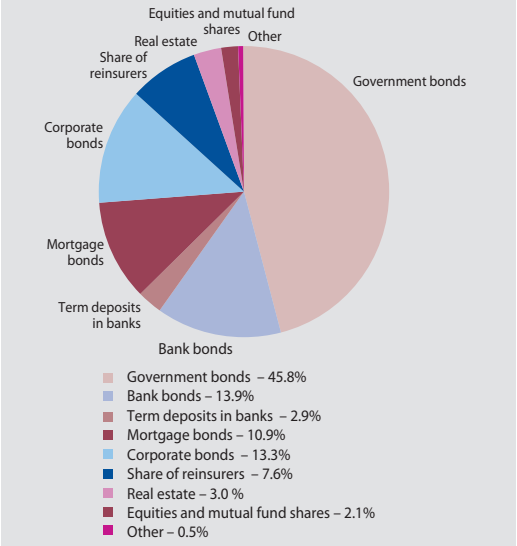
The assets continued to be invested conservatively, with almost 46% of them placed in government bonds (see Chapter 3 for more details). The portfolio structure did not change significantly in the first half of 2011; the majority of government bonds, whose share in assets increased, were purchased in the second half of 2010.

Profitability of insurance companies rose sharply due to improved technical results

The overall profitability of insurance companies for the first half of 2011 was higher than for the same period of the previous five years, even exceeding the figure for the first six months of 2007. Total profits in the insurance sector increased by 71% year-on-year, to stand at €112 million. Three-quarters of the insurers in the sector reported profit growth, and in most cases it was substantial. At the same time the ROE distribution troughout the entire insurance sector shifted towards higher profitability.

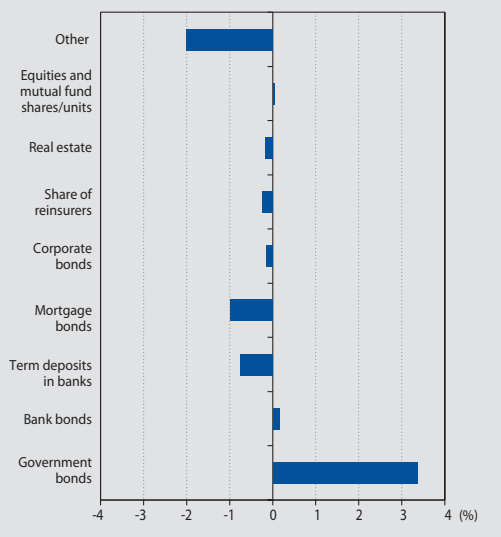
The main driver of profitability was the technical result, particularly in life insurance. The technical result entered positive territory for the first time since 2008, at €48 million. An improvement was seen in life insurance, non-life insurance, and active reinsurance, and all three areas of

Chart 51 Investment structure of technical provisions[1] as at the end of 2011



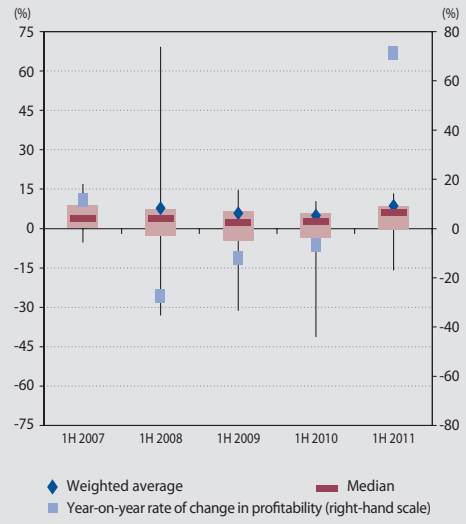
Source: NBS.
1) Not including provisions for liabilities arising from investments made under unit-linked policies.

Chart 52 Investment structure of technical provisions[1] as at the end of 2011



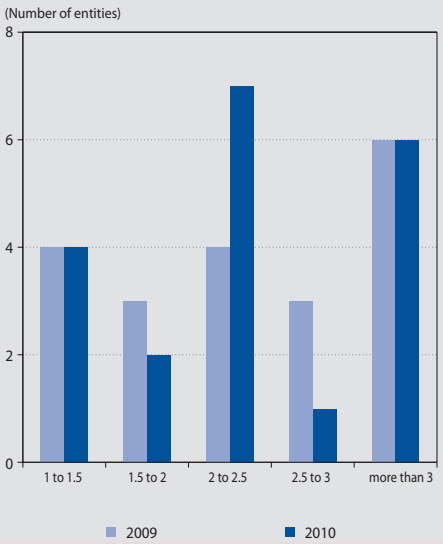
Source: NBS.
Note: The Chart shows the annual percentage changes of investments in the given instruments.
1) Not including provisions for liabilities arising from investments made under unit-linked policies.

Chart 53 Overall profit of the insurance sector and breakdown of insurance company profits



Source: NBS.
Note: Left-hand scale – ROE of individual insurers (minimum, lower quartile, upper quartile and maximum, median and weighted average).
Right-hand scale – annual percentage change in total profit of the sector.

Chart 54 Breakdown of the solvency margin[1)]



Source: NBS.
Left-hand scale: number of entities with a solvency margin within the given interval.
1) The solvency margin represents the ratio of the available solvency margin to either the required solvency margin or the guarantee fund, whichever is higher.

insurance recorded profits. The higher profitability stemmed mainly from the lower loss ratio in property insurance and the decline in the deficit provision in life insurance. All insurers improved their technical result. The overall rise in the technical result exceeded the slump in the financial result, which fell by 28% year-on-year and reflected mainly lower yields on bank and corporate bonds and lower returns on equities and mutual fund shares/units.

As in the first half of 2010, six insurance companies made a loss, but in 2011 their total loss was 45% smaller. The insurers in question are smaller companies that together account for less than 3% of all premiums in the sector.

Solvency of insurance companies remained unchanged in 2010[11]

As at the end of 2010, all insurance companies satisfied the requirement that their solvency margin (own funds) should be higher than the required solvency margin and the value of the guarantee fund.

The available solvency margin increased by only 0.7% year-on-year, and the solvency margin fell slightly, to 3.55.

11 Each insurance company once a year submits a report on its solvence to Národná banka Slovenska. The solvency assessment is therefore based on audited data as at 31 December 2009.

2.3 PENSION SAVING

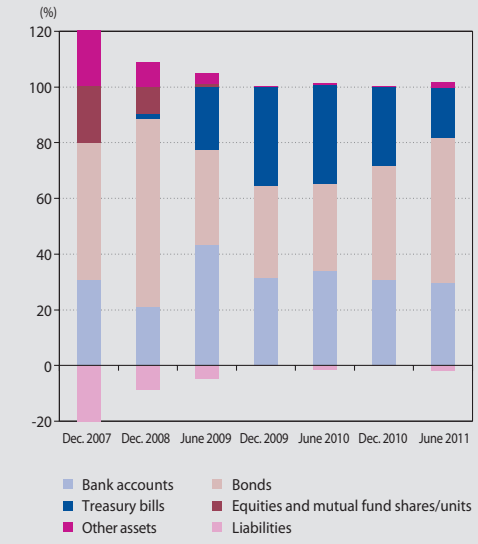
The word 'continuity' quite accurately describes developments in the retirement pension sector (Pillar II) during the first half of 2011, but although the principal features of the sector remained largely unchanged, there was some noteworthy movement in the securities portfolios of Pillar II funds. As for the supplementary pension sector (Pillar III), the overall portfolio saw a certain shift of investments from bonds to bank deposits, as well as growth in investments in equities and mutual fund shares/units (albeit far smaller than in the previous year).

2.3.1 RETIREMENT PENSION SAVING

The proportion of savers enrolled in conservative and balanced funds continued to increase

The number of savers enrolled in Pillar II of the pension system has barely changed since the end of the last period, two years ago, when the system was opened (furthermore, people entering the workforce since then have not been required to enrol in Pillar II). The trend of weak, but steady growth in the number of savers in the system continued in the period under review with an increase of around 4,000, twice as high compared with the same period of 2010 and approximately the same as in the second half of that year. By the end of June 2011, the number of savers stood at 1.441 million.

Chart 55 Composition of funds' assets by principal types of investment



Source: NBS.

As regards the distribution of savers between the different types of fund, the majority of new savers enrolled in growth funds, as was the case in 2010. Among existing savers, however, there was an increasing shift away from growth funds, which consequently recorded a net outflow of savers for the first half of the year. The savers who switched did so mainly to balanced funds. The percentage share of conservative and balanced funds in the total number of savers continued to rise slowly at the expense of growth funds, which still have the largest share. There was little switching of savers between funds of different pension fund management companies (PFMCs).

Stable growth in the net asset value (NAV) of pension funds

The growth in the overall net asset value of Pillar II funds during the first half of 2011 was practically linear, due mainly to the steady number of savers and the stable value of pension units. The overall NAV grew by €413 million, almost the same amount as in each half of the previous year, and by the end of the period under review it totalled €4.131 billion. The amount of assets in the system increased by 11%. The shares of individual PFMCs in the overall amount of assets under management, did not change, nor did the shares of the different types of fund.

Composition of portfolios remained conservative; bond component increased

As noted above, the composition of the Pillar II fund portfolio underwent certain changes during the first half of 2011, but nothing that could be described as a radical shift in investment strategy. Broadly speaking, the asset structure

remained substantially conservative in character.

The main change in the overall asset structure during the first six months was an increase in the bond component at the expense of the Treasury bill component, continuing a trend that began in the second half of 2011. In fact, all the contributions received from savers during this period were invested in bond purchases and a further part of the growth in bonds was funded by maturing Treasury bills. Bonds as a share of the sector's total assets thus increased by 11 percentage points, to 52% as at the last day of June. The treasury bills, most of which matured in January, were not all replaced with new issues and so both their share in the total assets and amount declined. By the end of the first half of the year, the share of Treasury bills in the net asset value was only 18%, one-third lower than it had been six months earlier. Substitution between bonds and Treasury bills took place in virtually all Pillar II funds.

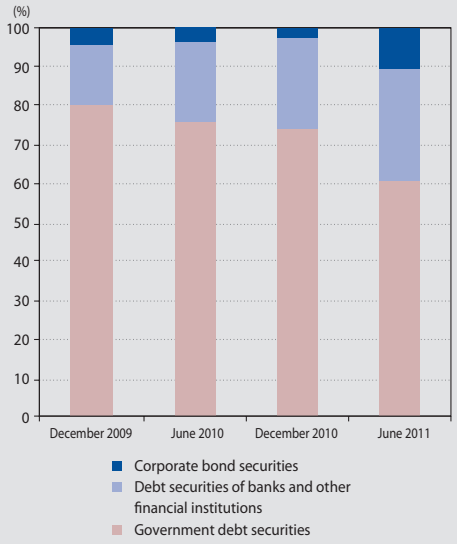
The remaining 30% of Pillar II fund assets were in the form of current account and term deposits at banks. The share of this component has been slowly declining due to a combination of long-term stagnation in the amount of assets invested in bank deposits and a rising trend in the net asset value of the system. At the level of individual funds there continues to be a high concentration of deposit investments among a small number of banks. As for equities and mutual fund shares/units, their share in the portfolio remained unchanged. During the period under review, such assets were found only in the balanced and growth funds of two PFMCs and in neither case did their share exceed 1%.

Within each PFMC, the differences between the asset structures of conservative, balanced and growth funds remained minimal during the first half of 2011. Across PFMCs, too, there was also little difference between the composition of portfolios.

Change in the composition of the debt securities portfolio

Regarding the composition of the debt securities portfolio by type of issuer, a relatively significant change took place in the first half of 2011. At a time when the amount of Treasury bills in fund assets was declining, the share of government debt securities in the overall portfolio of debt securities fell from three-quarters to 61%. These were partially replaced by securities issued by banks and other financial institutions, and above all by corporate bonds. As for corporate bonds, their amount increased severalfold in the first half of 2011 and their share rose from almost 3% to 11%. Such a rebalancing of the debt securities portfolio may have reflected the efforts of PFMCs to procure higher-yielding instruments for their fund assets.

Chart 56 Composition of the debt securities portfolio by type of issuer



Source: NBS.

The exposure of Pillar II funds to bonds issued by countries most heavily affected by the sovereign crisis fell by more than one-half during the first half of 2011. Their overall holdings of these securities constituted 2.2% of the sector's total assets at the end of the period under review. In one PFMC, however, the exposure to countries under stress was relatively large and rose from 12% to 16%.

The share of zero-coupon bonds in the debt securities portfolio continued its rapid decline from a previously dominant position, while the share of fixed-coupon and floating coupon bonds in-

creased. Back in 2009, zero-coupon bonds made up 70% of the portfolio, but by the end of June 2011 their share stood at approximately one-third, on a par with the shares of fixed and floating coupon bonds.

The weighted average maturity of the sector's debt securities portfolio, which in 2010 remained relatively steady at around 0.8 of a year, increased to 1.1 year for the first six months of 2011. All funds in the sector, without exception, contributed to this prolongation of the maturity.

Minimal change in the performance of funds

The current values of the pension units in all funds maintained their recent linear growth trend and showed almost no volatility. This was naturally reflected in the almost constant progress of the annual rate of returns on pension funds, although the growth in returns on fund assets did accelerate moderately in second quarter. As at 30 June 2011, the average annual rate of return on all three types of fund was 1.3%. The nominal returns on funds across the sector ranged from 0.8% to 2.2%.

Table 4 Annual returns on pension funds as at June 2011

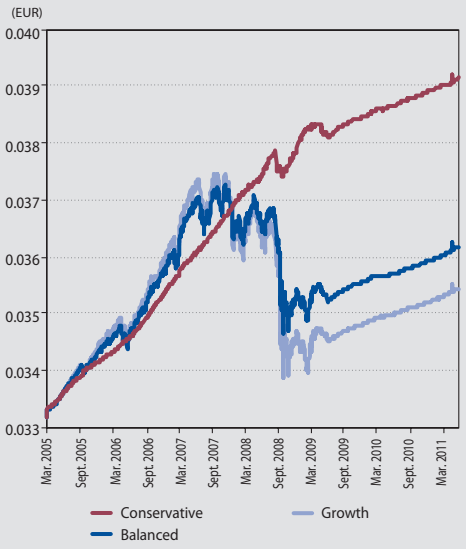
	Min (%)	Weighted average (%)	Max (%)
Conservative funds	0.8	1.3	2.1
Balanced funds	0.8	1.3	2.2
Growth funds	0.8	1.3	2.2

Source: NBS.
Note: The methodology is given in the Chapter Glossary and Abbreviations.

Overall loss of PFMCs declined year-on-year

Pension fund management companies made an aggregate loss of €1.287 million for the first half of 2011, which was approximately 40% lower than their loss for the same period of the previous year. The improvement stemmed mainly from a 14% increase in income from fees and commissions. Income from Pillar II fund management fees recorded the largest rise in absolute terms, and income from fees related to pension

Chart 57 Current value of the pension unit by type of fund



Source: NBS.
Note: Current value of the pension unit for each type of fund, weighted by the net asset value of funds.

fund performance also increased. Costs related to the operational financing of PFMCs increased by 7% year-on-year.

In all, five PFMCs improved their financial result in the first half of 2011, with three of them reporting a higher profit and the other two a reduced loss. The remaining sixth PFMC made a larger loss.

2.3.2 SUPPLEMENTARY PENSION SAVING

Number of participants in the supplementary pension system continued to decline

The number of participants in the supplementary pension system (Pillar III) continued its gradual declining trend in the first half of 2011. At the end of June there were 845,000 people enrolled in the system, 5,000 fewer than at the end of the previous year. Although a decline in Pillar III participation was reported by all supplementary pension management companies (SPMCs), most of the overall drop in numbers occurred at one particular SPMC. The relative significance of

the decline in participation was, however, small and it in no way affected the market shares of SPMCs. As in 2010, the participation would have fallen more sharply but for an increase (of 6%) in the number of participants in smaller, more specialised funds. The number of participants in the large, principal Pillar III funds continued to fall.

Net asset value rose moderately in the first half of 2011

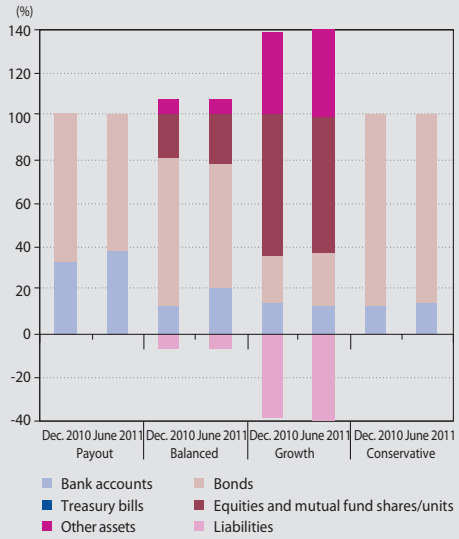
The accumulation of assets in Pillar III funds maintained an approximately linear trend in the first half of 2011. The sector's NAV increased by €37 million, and although that represented the lowest half-year period growth for at least four years, it was roughly similar to the figures for previous periods. Assets under the management of Pillar III funds amounted to €1.182 billion at the end of June 2011. Four of the five SPMCs reported a rate of growth in assets under management that was similar to the sectoral average of 3% year-on-year, the exception being a company with a negligible market share.

Although more than 95% of net asset value remains in the accounts of contributory funds, the share in payout funds is steadily rising by tenths of percentage points. The growth in net asset value of Pillar III funds has so far been far more dynamic in the minority, specialised funds, in line with the trend in the number of participants.

As a share of Pillar III fund assets, bonds declined while equities and bank deposits increased

While the first six months of 2011 did not see any repeat of the substantial structural changes that affected the composition of Pillar III funds in 2010, the process of change did continue. In 2010, the bond component of the overall net asset value declined (due to the amount of assets remaining unchanged), and this trend became more pronounced in 2011 with a reduction in the absolute exposure to such securities. This was caused by bonds maturing and some issues being sold off. The share of bonds in the NAV of Pillar III funds fell from two-thirds at the beginning of the year to 58% at the end of June.

Chart 58 Asset structure of different fund types



Source: NBS.

As Pillar III funds reduced their holdings of bond investments, so they invested more heavily in term deposits. The share of bank deposits in the overall asset portfolio of Pillar III funds increased by 7 percentage points, to 20% as at the end of June 2011, thereby ending the long-term downward trend in this component.

The composition of the Pillar III asset portfolio changed significantly in 2010, at least at the sectoral level, as Pillar III funds' investments in equities and mutual fund shares/units grew to the point that they constituted one-fifth of the overall net asset value. Investment in these instruments continued in the first half of 2011, but it was far lesser in extent and their share rose only moderately, to 22%.

Along with the increase in equity investments, the amount of hedging currency derivatives also rose

In 2010, owing to the purchase of equities and mutual fund shares/units largely denominated in foreign currencies, there was a sharp rise in the nominal amount of forward currency transactions used to hedge against the foreign exchange risk in Pillar III funds. This growth trend continued in the first half of 2011, but

at a slower pace, similar to the growth in the amount of equities and mutual fund shares/units.

As a share of the overall NAV in the Pillar III sector, assets denominated in foreign currencies increased only marginally, to 12.9% at the end of June. Among the nine Pillar III funds that hold assets denominated in foreign currencies, the share of these assets in the fund's NAV ranged from 3% to 47%.

Changes in the asset structure of Pillar III contributory funds

Looking at the Pillar III contributory funds with balanced investment strategy, which manage assets representing 86% of the sector's NAV, the structure and changes in their asset portfolio in the first half of 2011 almost exactly corresponded to that in the sector as a whole. Both conservative contributory funds and payout funds saw their investments in bank deposits rise moderately at the expense of the bond component. These funds invested in no other type of asset. As for growth contributory funds, the composition of their portfolio at the end of June 2011 differed only slightly from the composition at the end of 2010. The component of equities and mutual fund shares/units fell by 2 percentage points, to 62%, while the remaining assets of the growth funds' portfolio (excluding derivatives) were split two-to-one between bonds and bank account investments.

The breakdown of the debt securities portfolio by type of issuer did not change significantly in the first half of 2011. Government bonds continued to constitute the largest share (55%), issues of banks and financial institutions accounted for almost a third, and corporate bonds made up the rest.

The average weighted maturity of debt securities, which increased quite sharply in 2010, to 4.2 years, corrected somewhat during the first six months of 2011, to 3.9 years. This decline, however, was largely affected by developments at one large supplementary pension fund, while at around half of the other funds the average maturity increased, and at the rest it declined by varying degrees.

Exposure to bonds of certain risky countries was minimal

Government bonds are a key component of the Pillar III portfolio, but the sector was not seriously affected by the deepening sovereign debt crisis since only a small proportion of these securities – 3% at the both the beginning and end of the period under review – were issued by the countries under the most stress. On the other hand, these securities are relatively concentrated in a small number of supplementary pension funds. As at 30 June 2011, six funds reported non-zero exposure, but only in four of them (including two payout funds) they represented a significant share (between 11% and 23% of their respective NAV). In two of these funds, the assets also included a non-negligible share of bonds (9% and 3%) from emerging countries or tax havens.

Returns on supplementary pension funds grew only moderately

The average weighted annual return on Pillar III funds as at 30 June 2011 was barely different from the return as at the end of 2010, although there was an increase in the spread of returns across the funds. The average for all contributory funds in the sector was 2%, up by one tenth of a percentage point, while the average for payout funds was 0.9%, down from 1.5% at the end of 2010. Two funds, one payout and one contributory, reported a negative annual return at the end of June 2011, whereas all the funds made a positive return for the 12 months of 2010. The returns on payout funds ranged from -1.4% to 1.4%, and the returns on contributory funds, from -1.2% to 8.3%. A trio of growth funds substantially improved their performance (with returns ranging from 5% to 8%) by virtue of their exposure to equity markets.

Growth in overall profits of SPMCs was largely due to the result of one company

The annual rate of growth in overall profits of supplementary pension management companies for the first half of 2011 soared by two-thirds, to €4.687 million; however, this headline statistic masks the reality of SPMCs' financial performance. In fact, at the sectoral level, SPMC income from fees and commissions declined by around 5%. The marked growth in profitability was driven by one company's exceptional earnings on

securities and derivatives transactions, which amounted to €2.4 million. Excluding this item, the sector's profit would have declined in comparison with the first half of 2010.

The overall operating expenses of SPMCs for the first half of 2011 were 6% higher than for the same period of the previous year, but not all the companies reported an increase in this item.

2.4 COLLECTIVE INVESTMENT

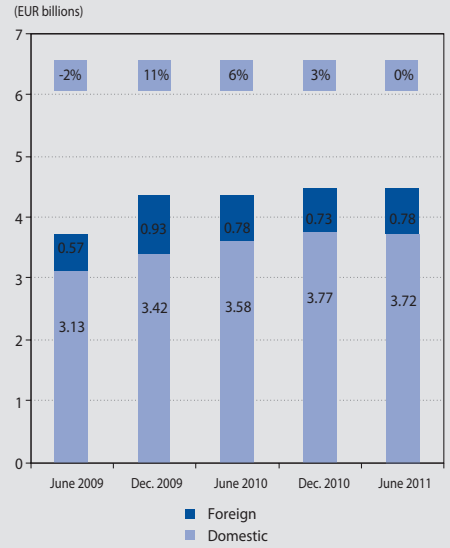
The amount of assets under management in the collective investment sector did not undergo significant changes during the first half of 2011. The moderate trend rise in the sector's net asset value (NAV) continued in the first quarter and was accounted for by foreign collective investment undertakings. In the next three months, however, there was a net outflow of funds due to redemptions of domestic mutual funds. Negative net sales, concentrated in the category of money market funds, reached a peak in June. These outflows were to some extent offset by higher unit-holder demand for real estate funds and mixed funds.

No change in the amount of assets under management in the sector

The basic measure of the collective investment sector, i.e. the amount of assets under management in domestic mutual funds and foreign collective investment undertakings (CIUs), remained unchanged during the first half of 2011. The net asset value as at 30 June 2011 was €4.5 billion, virtually the same as at the end of 2010. This stagnation reflected, on one hand, a modest rise in the amount of assets managed by foreign CIUs and, on the other hand, a decline in the net asset value of domestic mutual funds. Thus the share of foreign funds in the overall assets under management in the sector rose moderately, to 17%. In line with the trend of the previous two years or so, the size of the sector grew moderately in the first quarter of 2011. In the second quarter, however, the amount of assets under management declined due to negative net sales of domestic mutual funds. Positive performance, in average terms, was mitigating the impact of mutual fund redemptions. Negative net sales of domestic mutual funds reached a peak of €57 million in June, their highest level since the beginning of 2009 (at the end of the wave of redemptions observed at the height of the financial crisis). Nevertheless, this figure was relatively small compared with the situation in October 2008, when the sector lost more than €600 million through panic redemptions.

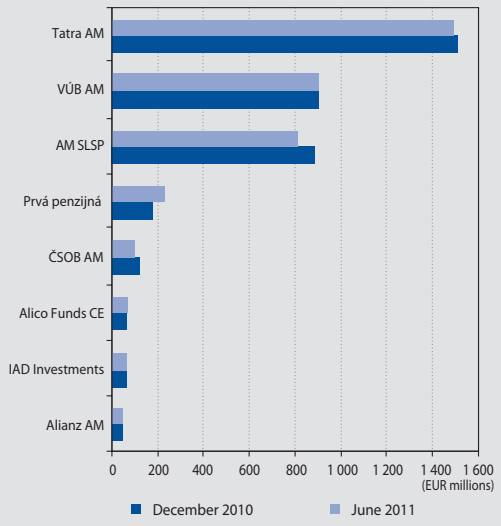
Looking at developments in the amounts of assets managed by individual asset management companies, they were relatively diverse in the first half of 2011. The changes in the net asset values of mutual funds between the end of 2010

Chart 59 Net asset value of mutual funds sold in Slovakia



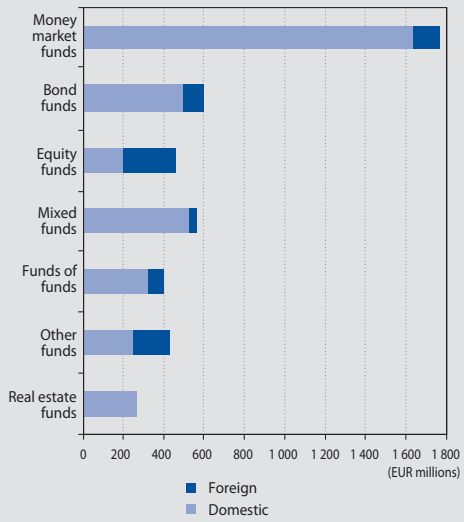
Source: NBS, SASS.
Note: The percentage above each bar represents the percentage change in the sum of the amount of domestic and foreign funds for the respective half-year period.

Chart 60 Net asset value of mutual funds managed by domestic asset management companies



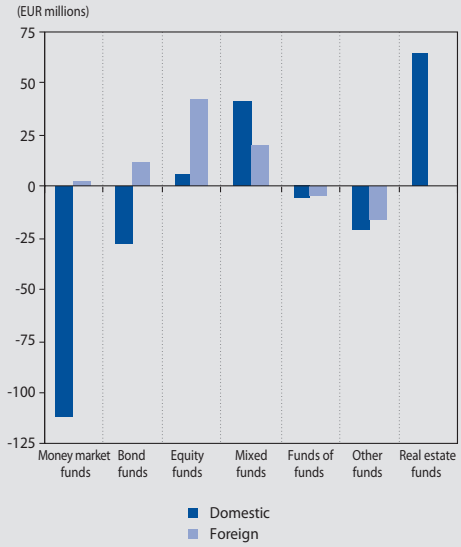
Source: NBS.

Chart 61 Net asset value by category of mutual fund



Source: NBS, SASS.
Notes: Data as at 30 June 2011.

Chart 62 Change in the amount of assets under the management of different fund categories during the first half of 2011



Source: NBS, SASS.

and the end of June 2011 ranged from -17% to 30%. The net asset value of funds stagnated or declined mainly among the companies with the largest market shares, while it grew at smaller companies. Nevertheless, this trend has so far had very little impact on reducing the relatively high concentration in the sector.

The supply of domestic mutual funds remained largely unchanged during the first half of 2011. In the first quarter, two new mutual funds were established and then another two mutual funds were dissolved. The number of domestic mutual funds totalled 78 at the end of June 2011.

The trend of money market fund redemptions continued

The decline in the net asset value of domestic mutual funds during the period under review was largely attributable to developments in money market funds, which have for a long time constituted the largest component of the collective investment sector in Slovakia and usually set the overall trend in the sector. Overall assets in these funds recorded easily the largest decline in absolute terms in any fund category (€112 million) and the second-highest in relative terms (-6%). The decline in the net asset value was driven by households redeeming their fund certificates. Continuing the trend from the second half of 2010, negative net sales were reported in every month except for January. They were most pronounced in June.

Almost all money market mutual funds reported negative net sales and therefore a decline in their net asset value. The most probable explanation for the redemptions appears to have been the increase in bank deposit rates for the retail sector, which gave households an incentive to shift their savings from money market funds to term deposits at banks. To a lesser extent, these redemptions may also have been prompted by the relatively volatile situation in financial markets during the first half of 2011, given that unit-holders in these funds typically have conservative investment objectives and may therefore have decided to redeem their units in order to avoid losses.

NAV also declined in the categories of bond funds, funds of funds, and other funds

The situation in the category of bond funds was in many ways similar to that in money market funds. Here, too, negative net sales of units to households were reflected in a decline in the net asset value of this category. In this case, however, the negative result was largely attributable to

a smaller group of three funds. In the previous year, by comparison, the amount of bond fund assets had a sharply rising trajectory, although this was largely driven by bond purchases of institutional investors.

The fund categories in which the amount of assets under management fell during the first half of 2011 also included *other funds* and, to a lesser extent, *funds of funds*. In the case of other funds, the amount of redeemed units exceeded the amount of newly issued units to such an extent that this category, out of all categories, reported the largest percentage decline in net asset value – 7.5%. The substantial redemptions of two secured funds in the category of other funds were related to the expiry of their original reference period.

As for funds of funds, their sales figures remained at the low level of the previous year. The aggregate net asset value in this category was affected to a greater extent by asset price volatility. The overall contribution of returns on assets to the change in the amount of assets in these funds was negative.

Real estate funds recorded the largest inflow of new investments

Real estate funds recorded the largest rise in net asset value both in absolute terms (€65 million) and, by far, in relative terms (33%). As in the last quarter of 2010, the flow of household investments into real estate mutual funds was continuous, and therefore the market share of this category has increased significantly within a short time. Nevertheless, almost the entire growth is accounted for by two real estate funds of one management company.

Chart 63 Net sales of domestic mutual funds by category

Source: NBS.

The second best performing category in terms of growth in the amount of assets under management was mixed funds. But although their net sales have been in positive territory for virtually the past two years, their net inflow in the first half of 2011 was attributable to only one fund, whose success was probably based on a strong marketing campaign.

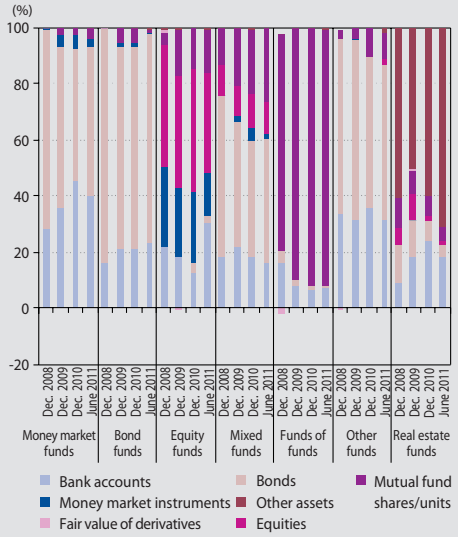
Another fund category in which net asset value increased was equity mutual funds. Insurance companies, other financial intermediaries, and foreign entities increased their holdings of equity fund unit certificates, but households partially reduced their holdings. The growth in equity fund assets was boosted by a significant increase in the nominal return on these funds.

As for the contribution of foreign collective investment undertakings to the net asset value in the sector, the trends were similar to those in domestic mutual funds. The highest growth was recorded by equity funds, which constitute the largest category of foreign funds. The assets of mixed funds also increased and, in contrast to the situation in domestic mutual funds, so did the assets of bond funds. In two fund categories – funds of funds and other funds – the net asset value at the end of June 2011 was lower than at the end of 2010. As for money market funds, their net asset value remained basically unchanged.

Asset composition of equity, real estate, and money market funds underwent a slight change

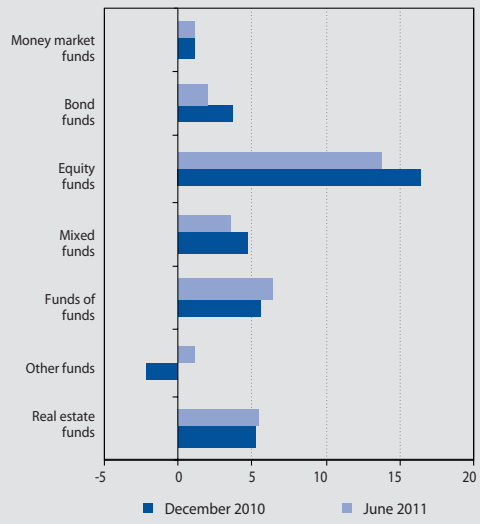
Looking at the composition of assets in the different categories of domestic mutual funds, the most pronounced change occurred in equity funds. As a share of the total net asset value of these funds, assets in the form of bank deposits more than doubled, to around 30%. At the same time, the share of investments in Treasury bills fell and, more significantly, so did high profile investments in equities. As for real estate

Chart 64 Asset composition of domestic mutual funds by fund category



Source: NBS.

Chart 65 Comparison of average annual returns on mutual funds by fund category



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

funds, it is worth noting that the share of *other assets* increased by 10 percentage points to approximately 70%, with other assets in this case comprising mainly participating interests in real estate companies or loans to such companies. In the assets of money market funds, the component of bank deposits declined, which may have reflected the use of these liquid assets for the redemption of units. Other changes in the composition of portfolios at the level of fund categories were not significant.

Overall returns in each fund category were positive

Even though financial markets were relatively volatile in first half of 2011, the average nominal annual rate of return in each fund category was positive as at 30 June 2011. The lowest returns were reported by money market funds and other funds, at 1.1% in each case. The average annual return on bond funds was almost 50% lower at the end of June (at around 2%) than at the end of December 2010. The upturn in stock markets during the period under review was positively reflected in the performance of those funds that had equities in their portfolio, whether directly, or indirectly through holdings of unit certificates of other funds. By far the largest returns were earned by equity funds, almost 14% on average. Funds of funds achieved an average return of 6.4%, mixed funds 3.6%, and real estate funds 5.5%. Over the past three years, real estate funds were the best-performing alternative with an average return of four percent. Equity funds, funds of funds and mixed funds more or less completed the process of recouping the losses they suffered at the height of the financial crisis, following the collapse of Lehman Brothers; the three-year returns on these funds reached a band of between -1% and 1%. The long-term returns on money market funds, bond funds and other funds stood at around 1.5% p.a.

Profitability of asset management companies rose slightly in comparison with the first half of 2010

The aggregate profits of asset management companies for the first half of 2011 were not too different from those for the same period in 2010. The sectoral profit increased by 13% year-on-year to €3.65 million, driven up mainly by 9% growth in income from fees and commissions. This in turn was largely attributable to the annual increase in the amount of assets under management at domestic funds, since this amount determines the management fee, which is the largest source of income of asset management companies. At the same time,

however, the higher fee income was to a large extent offset by fee and commission expenses paid by asset management companies, which recorded a similar annual increase. Operating expenses in the sector remained unchanged. As in 2010, one of the eight asset management companies on the market made a loss for the first six months, while the rest were profitable.

Box 2

DEVELOPMENTS IN THE COLLECTIVE INVESTMENT SECTOR AFTER THE FIRST HALF OF 2011

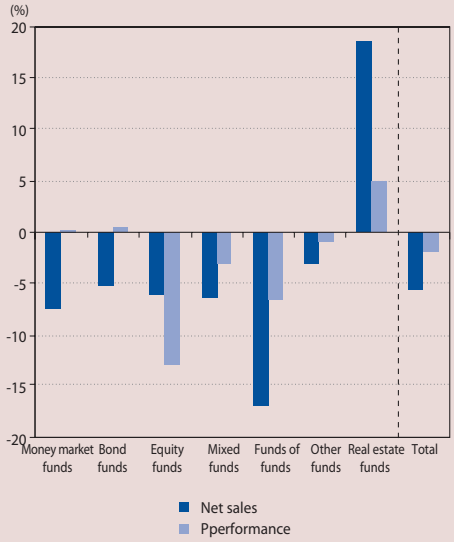
The purpose of this box is to provide a brief description of what happened in the collective investment sector in July and August 2011, a period not covered by the analysis of developments in the first half of the year. In fact, these two summer months saw substantial turbulences in the sector, probably related to the turmoil observed in financial markets during that time.

The slump in equity markets in particular, alongside the negative performance of several mutual funds, affected the sector both indirectly and also to a significant extent through redemptions of unit certificates. Altogether, through these two effects, the amount of assets under management in the sector fell by €350 million, representing almost 8% of NAV at the end of the first half of 2011. Of that amount, negative net sales accounted for approximately three-quarters. Whereas losses on the revaluation of securities were reported mainly by equity funds, funds of funds and mixed funds (i.e. the categories with an equity component in their portfolio), an increase in redemptions was seen in all funds with the exception of real estate funds. Among the fund categories, funds of funds recorded the highest amount of redemptions as a proportion of the amount of assets in the category as at 30 June 2011. In absolute terms, money market funds accounted for just over half of the negative sales.

Redemptions were not spread out evenly over time. While fund redemption activity was still quiet in July, it escalated rapidly at the very beginning of August as many unit-holders reacted with a certain panic to developments in financial markets. The situation calmed down in the second half of August, and although redemptions continued to outweigh purchases, they were rising at a far slower pace. Overall in August, net negative sales of mutual funds amounted to almost €260 million, and despite the later lessening of redemption activity, August was by this measure the second worst in the history of the collective investment sector. The worst month was October 2010, when a wave of redemptions were recorded in the wake of the collapse of Lehman Brothers.

It is worth noting that net sales of real estate funds were in almost direct contrast to the situation in the rest of the sector. When redemptions

Chart A Relative change in NAV in fund categories in the period July–August



Source: NBS, SASS.
Note: Left-hand scale: percentage change in NAV relative to net sales or performance.

in other fund categories were at their peak, real estate funds were reporting a net inflow that even exceeded the inflow in the first half of 2011. The NAV of real estate funds soared by 20% during July and August, partly driven up by the positive performance of the funds.

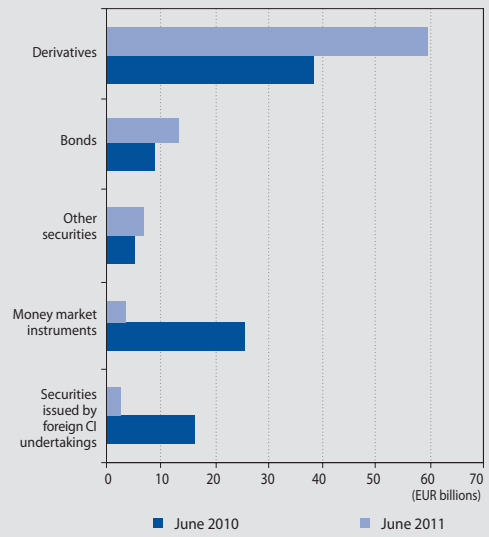
2.5 INVESTMENT FIRMS

The volume of securities trading in the first half of 2011 fell by an average of 9% in comparison with the same period of 2010, although the structure of traded instruments changed substantially. The amount of assets managed by companies holding an investment firm licence remained virtually unchanged year-on-year.

The aggregate amount of transactions in equity securities (excluding derivatives) fell by 53% year-on-year, with the largest decline recorded by transactions in money market instruments issued by foreign collective investment undertakings. By contrast, the volume of financial derivative transactions increased markedly (by 55%). Banks carried out the vast majority of equity security transactions, up to 91% of the overall nominal amount.

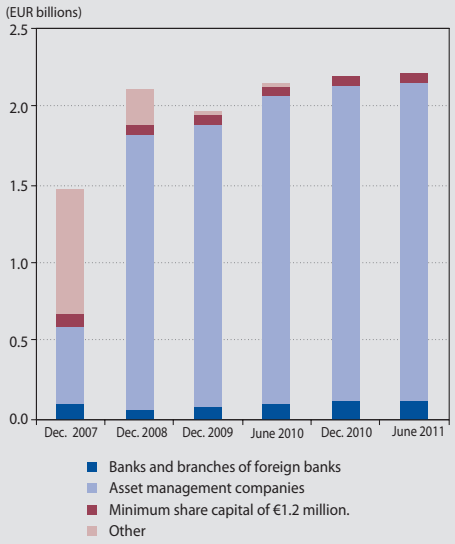
The amount of customer assets managed by entities licensed to manage a customer securities portfolio (investment firms, banks and certain asset management companies) remained virtually unchanged, rising by 4.2% year-on-year.

Chart 66 Transactions broken down by investment instrument



Source: NBS.

Chart 67 Amount of customer assets management by licensed entities



Source: NBS.

CHAPTER 3

RISKS IN THE SLOVAK FINANCIAL SECTOR

3

3 RISKS IN THE SLOVAK FINANCIAL SECTOR

3.1 CREDIT RISK IN THE BANKING SECTOR

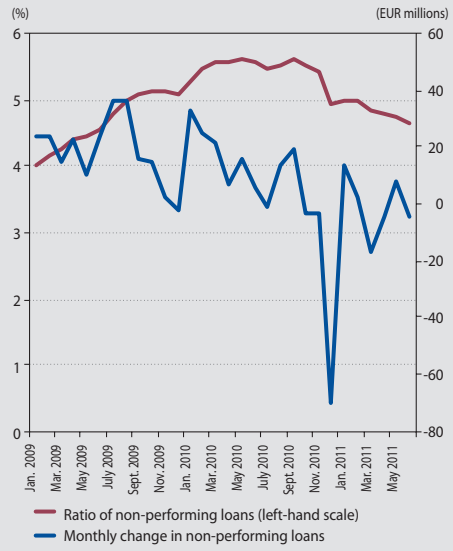
Household credit risk in the banking sector declined somewhat in the first half of 2011. In the household loan portfolio of most banks, both the amount of non-performing loans and their ratio to total loans fell. This trend was supported mainly by low interest rates, which many households took advantage of by refinancing old loans with new, cheaper loans. Since the initial rate fixation periods for existing loans were short, interest rate reductions could be passed on to customers.
The labour market situation remained largely unchanged in the first half of 2011. To the detriment of household credit risk, however, the structure of registered unemployment has gradually changed since the onset of the crisis. Before the crisis, the vast majority of unemployed came from lower-income groups, but the subsequent period has seen a rise in the share from middle- and higher-income groups, i.e. the groups that have the highest liabilities to banks. Furthermore, the rate of unemployment among lower-income groups is now returning to its pre-crisis levels, whereas the rate among medium- and higher-income groups is much higher than it was before the crisis broke out. This implies that a proportion of borrowing households remain in a weak financial position and are probably finding it difficult to service their bank debts.
Employment increased in most sectors during the first quarter of 2011. On the whole, however, households that got into a stress scenario after the crisis began have had relatively little opportunity to improve their financial situation through the Slovak labour market. Further developments in the labour market will be important in this regard, since they will have a significant bearing on the ability of households to service their bank debts.
Inflation growth weighed adversely on households in the first half of 2011, with real wages falling in a majority of sectors, but the pass-through to the amount of non-performing loans was not significant. The outlook for household credit risk is somewhat unfavourable, since the majority of factors that affect debt-servicing ability are showing negative tendencies. Although the employment situation picked up slightly in the latter months of the period under review, its further development may be affected by uncertainty in the macroeconomic environment. Given the state of inflation, the outlook for households in terms of their real wages and returns on financial assets remains unfavourable. By the end of the first half of 2011, the inflation rate was higher than the returns on most household financial asset.
Corporate credit risk in the first half of 2011 did not follow any clear trend. On the positive side, the corporate sector's results for 2010 improved on the previous year, as activity continued to grow in a majority of sectors. Nevertheless, the overall uncertainty in the sector persisted and even became more pronounced towards the end of the first half. Not only did business confidence indicators fall during this period, a number of economic indicators also deteriorated. Although the corporate default rate continued to decline, it remained above pre-crisis levels. The amount of non-performing corporate loans reached a record level and did not come down in the first six months. As a result of the growth in overall lending to enterprises, there was a moderate decline in the ratio of non-performing loans to total loans in the corporate loan portfolio.

3.1.1 CREDIT RISK IN THE HOUSEHOLD SECTOR

HOUSEHOLD CREDIT RISK CONTINUED TO DECLINE

Regarding household credit risk, i.e. the ability of households to service their bank debts, the trends in the first half of 2011 were more positive than negative. Their effect on the banking sector was seen mainly in the level of non-performing loans. The household loan portfolio trended downwards in the overall amount of non-performing loans (NPLs), in the monthly increases in NPLs, and in the ratio of NPLs to total loans.

Chart 68 Non-performing household loans



Source: NBS.
Note: Left-hand scale: ratio of non-performing household loans to total household loans.

Table 5 Ratios of non-performing household loans to total household loans (%)

	June 2010	Dec. 2010	June 2011
Account overdrafts	9.70	9.10	8.81
Consumer loans	12.77	10.08	9.89
Mortgage loans	3.14	2.79	2.76
Building loans	1.61	1.57	1.58
Intermediate loans	6.07	6.20	6.45
Other housing loans	3.59	3.24	2.75

Source: NBS.
Note: The figures in each category represent the ratio of non-performing loans to the total stock of loans in that category.

The situation in Slovakia contrasted with that in neighbouring countries. In the Czech, Hungarian and Polish banking sectors, the quality of the household loan portfolio more or less deteriorated, according to the central banks of the respective countries. This resulted mainly from a combination of the following: delinquencies on loans provided under the looser credit standards that obtained before the crisis; stagnation in the labour market; and the higher proportion of loans denominated in foreign currencies.

In the Slovak banking sector overall, ratios of non-performing household loans declined in almost all loan categories. This positive trend was observed mainly in larger banks. By contrast, the quality of the household loan portfolios of several medium-sized and smaller banks deteriorated. The highest delinquency rate was on loans provided in 2008. This trend was in line with previous NBS analyses which asserted that loans provided in 2007 and 2008 were the riskiest loans in retail loan portfolios.

THE CHANGING COMPOSITION OF THE UNEMPLOYED COULD HAVE A NEGATIVE EFFECT ON CREDIT RISK; EMPLOYMENT INCREASED IN A MAJORITY OF SECTORS

A crucial factor in the development of credit risk in the first half of 2011 was the fact that unemployment did not change significantly during the period. At the same time, however, there were a number of unfavourable trends in regard to the ability of households to repay their bank loans. First of all, unemployment among medium- and higher-income categories, i.e. those with the highest liabilities to banks, increased in the period May to July.

Even more important is the longer-term gradual change in the income-category breakdown of the unemployed. The proportion of people from medium- and higher income categories in the total stock of unemployed[12] has risen relatively sharply, from 40% in 2008, before the crisis, to 55% in June 2011.

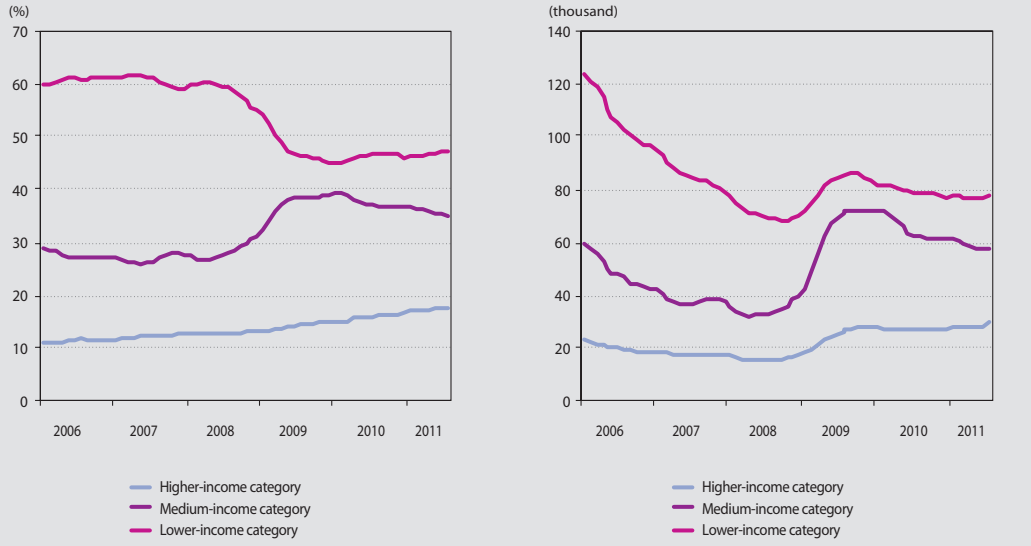
It is also important to compare the current stock of unemployed with its standing before the crisis. Whereas the stock of unemployed in lower-income categories is already getting back to pre-crisis levels, its level in medium- and higher-income categories is now substantially higher than it was before the crisis. This implies that many borrowing households remain in a weak financial position and are finding it difficult to service their bank debts.

Employments trends, by contrast, were relatively positive in the first quarter of 2011, with most sectors reporting a year-on-year rise in employment. At the end of the first quarter, however, total employment in the economy as a whole was 6% lower than its pre-crisis level in the third quarter of 2008.

In the industry and trade sectors, firms' expectations for employment were positive in the first

12 'Total stock of unemployed' means those unemployed who fall into the KZAM employment classification. In June 2011 they constituted approximately 45% of the total number of registered unemployed.

Chart 69 Breakdown of unemployment by income category



Source: Central Office of Labour Social Affairs and Family.
Notes: Left-hand Chart: share of different income categories in the total number of registered unemployed (KZAM classification).
Right-hand Chart: number of unemployed (figures in thousands; KZAM classification).
The composition of income categories according to the KZAM employment classification is defined in more detail in the section Glossary and Abbreviations.

half of 2011, but in construction and services a majority of companies still expect employment to continue declining.

Low interest rates had a positive effect; household sensitivity to rate increases remains high

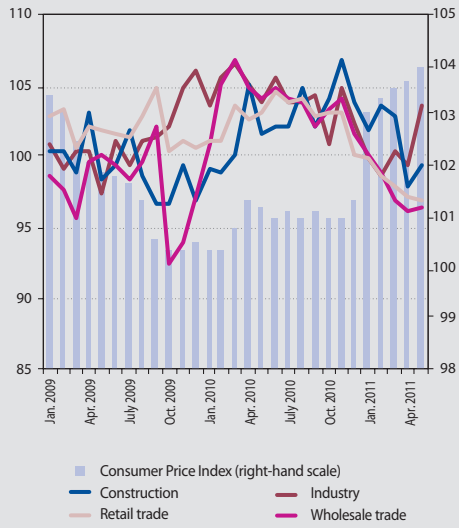
Credit risk in the first half of 2011 was partly mitigated by the ongoing period of low interest rates. Since a large proportion of loans to households have a short initial rate fixation period, reductions in market rates were to a certain extent passed on to households through lower repayments. At the same time, customers took advantage of the low interest rates to refinance old loans with new, cheaper loans. Either way, the debt burden of households declined.

Rising inflation reduced the real income of households; the inflation rate exceeded the returns on most household financial assets

Rising inflation weighed adversely on household credit risk in the first half of 2011. This was reflected mainly in household real income, which declined in most sectors and increased only in industry. Nevertheless, rising inflation did not have a significant upward effect on the amount of non-performing loans in the first half of 2011.

The inflation rate in the first six months exceeded the returns on most financial assets in the household sector (for more details, see the chapter "Developments in the Slovak Financial Sector).

Chart 70 Index of real wages in selected business sectors



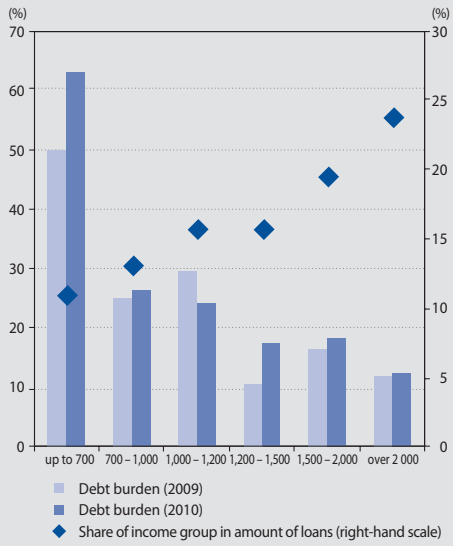
Source: Statistical Office of the Slovak Republic.
Note: The indexes represent annual rates of change.

Household indebtedness

The overall indebtedness of household in Slovakia, measured by the ratio of households' debt to their gross income, is among the lowest in the EU. The vast majority (92%) of this debt comprises liabilities to domestic banks. The share of household debt owed to other domestic financial intermediaries (hire-purchase companies, leasing companies, etc.) has been falling in recent years, and thus banks have become even more dominant in the financing of households. This trend reflects the growth in household demand for housing loans and the relative decline in demand for short-term consumer loans.

The indebtedness of households with loans is an important determinant of credit risk, since the higher the repayment burden of households (in relation to income), the lower their resilience to certain negative trends, such as rising unemployment or an increase in loan repayments due to interest rate hikes.

Chart 71 Household debt burden from housing loans



Source: SO SR, EU SILC 2009 & 2010, NBS calculations.
Notes: Horizontal scale: income groups. Left-hand scale: monthly loan repayments as a share of disposable income. Right-hand scale: share of income group in total amount of housing loans.

The debt burden of households from housing loans was approximately 26.7% at the end of 2010, up from 24.6% at the end of 2009. In 2010, lowest income households continued to be the most leveraged in the sector and they even recorded the largest debt burden increase. From the credit risk point of view it is important that this most vulnerable group of customers has the lowest share (approximately 10%) in the total amount of housing loans.

Table 6 Impacts of selected sensitivity test on the household debt burden (%)

Income group (in EUR)	Ratio of repayments to income (before shock)	Interest rate shock		Inflation shock		Unemployment	
		Rise of 3 p.p.	Increase in non-performing loans	Rise of 5%	Increase in non-performing loans	Rise of 3%	Increase in non-performing loans
up to 700	62.96	73.22	22.38	70.67	19.15	64.49	1.20
700 to 1000	26.31	30.96	0.00	27.15	0.00	26.77	0.96
1000 to 1200	24.04	29.09	0.00	24.88	0.00	24.49	0.97
1200 to 1500	17.21	20.73	0.00	17.68	0.00	17.50	0.03
1500 to 2000	18.16	21.79	0.00	18.52	0.00	18.45	0.53
2000	12.58	14.78	0.00	12.79	0.00	12.77	0.05
Total	26.72	31.57	4.48	28.44	4.12	27.25	2.52

Source: SO SR, EU SILC 2009 and 2010, NBS calculations.
Notes: The calculation includes three base factors: amount of repayments, household income, and household expenditure. Interest rate shock – repayments are recalculated on the basis of the new rate (original interest + increase), the outstanding amount of the loan, and the maturity period, while other factors remain unchanged. Inflation shock – household expenditure is assumed to rise by the rate of inflation, while the amount of loan repayments and income remained unchanged. Unemployment – a random sample of households affected by unemployment; their income declines to 60%.
Increase in non-performing loans is defined as the percentage rise in the amount of loans in the given category where the amount of repayments exceeds the disposable income.
When interpreting the results, it is necessary to take into account that the sample for 2010 consisted of approximately 300 households.

Sensitivity tests were conducted to evaluate the ability of households to withstand selected shocks, i.e. the effect that increases in interest rates, inflation, and unemployment have on the debt burden (debt to income ratio). The interest rate hike and inflation shock had the largest impact. The lowest income group showed the highest sensitivity, and it also recorded the sharpest rise in the volume of non-performing loans.

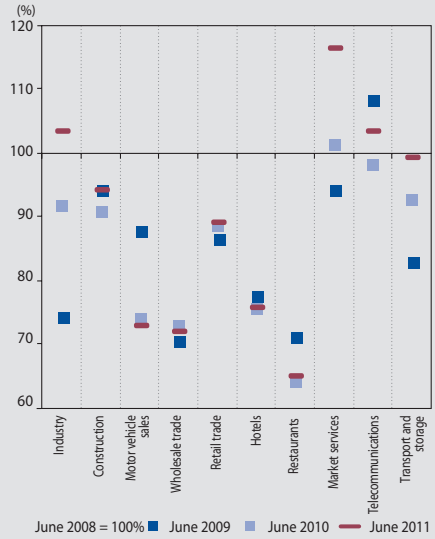
A rise in unemployment would not put significant upward pressure on the average debt burden. However, given the substantial decline in income among selected households under this scenario, the proportion of households with a negative debt-to-income ratio would increase (even among other income groups).

3.1.2 CREDIT RISK IN THE NON-FINANCIAL CORPORATIONS SECTOR

Assets in the business sector increased, while sales in several sectors are still below their pre-crisis level; business tendency indicators declined

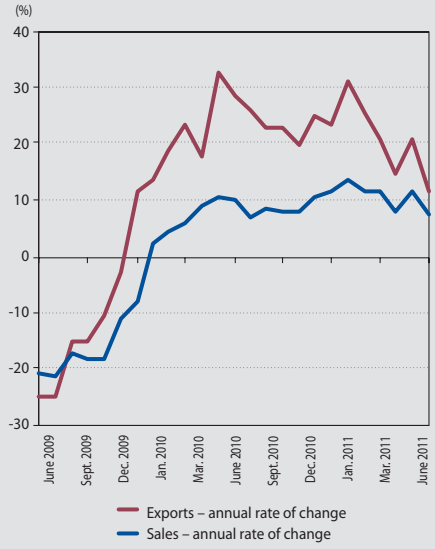
Despite the mounting uncertainty about the future economic growth of euro area countries, the first half of 2011 confirmed the positive effect of macroeconomic developments on the domestic business sector. From the point of view of credit risk, it was important that sales in most sectors continued to grow. The strongest sales were again recorded by the industry sector, which accounts for more than one-fifth of the banking sector's corporate loan portfolio. The rise in sales growth in most sectors is, however, still below pre-crisis levels. The worst situation is in the trade sector and hotels and restaurants sector, which in 2011 were between 60% and 80% below their pre-crisis performance. The low level of sales is heightening sensitivity to potential economic shocks or an increase in interest rates. In this context, it can be seen as positive that the share of borrowed funds in the overall liabilities of the non-financial corporations sector has declined in the last two years amid a strengthening of capital positions.

Chart 72 Sales level in selected business sectors



Source: SO SR, NBS calculations.

Chart 73 Exports and sales of the business sector in Slovakia



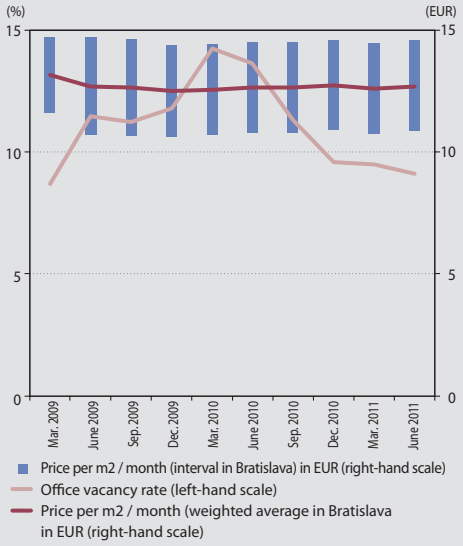
Source: SO SR, NBS calculations.

Looking at the deteriorating outlooks for growth in the global economy, including countries that are destinations for Slovak exports, it is important to note the strong links between the performance of domestic enterprises and foreign markets. Any downturn in the global economy would probably be immediately reflected in a weakening of activity in the Slovak business sector.

Chart 74 Business tendency indicators for the Slovak business sector

Source: SO SR, OECD.

Chart 75 Commercial real estate: office segment



Source: CB Richard Ellis, NBS calculations.

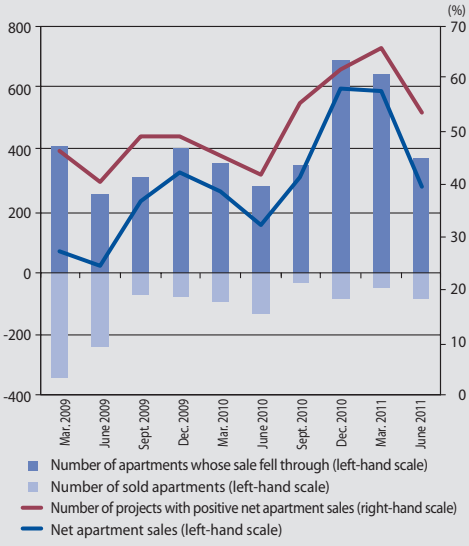
The expectation of an economic slowdown was reflected in business tendency indicators at the end of the first half of 2011. This was caused mainly by a slackening of demand in domestic and foreign markets and by the bad economic situation.

Moderate upturn in the commercial real estate market

The overall situation in the commercial real estate market improved moderately in the first half of 2011. This was not, however, due primarily to continuing growth in the domestic economy, which would boost demand, but to stagnation on the supply side.

There have been few new projects in this market in recent years, mainly because banks have tightened their credit conditions for developers in regard to project quality, the extent of the developer's financial participation, and/or the pre-sales rate. As a consequence, the amount of vacant units in both the residential and office segments was gradually reduced. At the end of June 2011, the number of unsold apartments was 18% lower year-on-year and the office vacancy rate was down to 9.1% from 13.6% in June 2010. The office vacancy rate in Bratislava is among the lowest of any city in the region.

Chart 76 Residential real estate



Source: Lexxus.

Despite the accelerated year-on-year growth in apartment sales, the commercial sector still has a number of problematic projects. From the view of credit risk, it is important that banks finance these projects to a lesser extent.

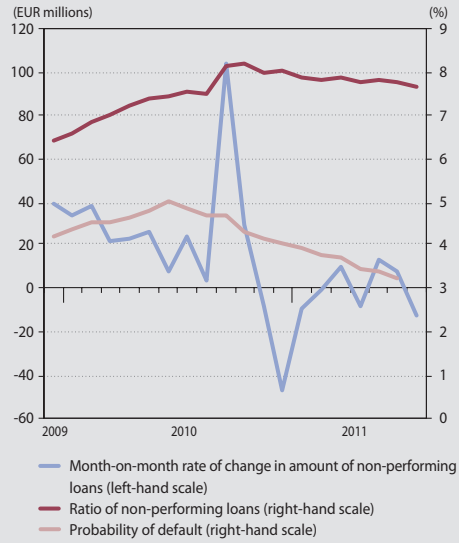
Loans for commercial real estate remain a significant source of credit risk in the banking sector. This is mainly due to the size and concentration of loans and to the peculiarities of the given market, including its exceptionally low liquidity, small number of entities and weak transparency.

Quality of the corporate loan portfolio improved

The quality of the corporate loan portfolio continued to improve moderately in the first half of 2011, although the ratio of non-performing loans far exceeds its pre-crisis levels. The modest slowdown in the delinquency rate reflects not only the pick-up in activity in the corporate sector, but also the fact that several struggling firms defaulted back in 2009, and, therefore, the credit portfolio is now relatively more robust. A separate factor that contributed to the drop in the default rate was the low level of interest rates. At the same time, however, the amount of non-performing loans to enterprises remains at a record level and did not fall in the first half of the year.

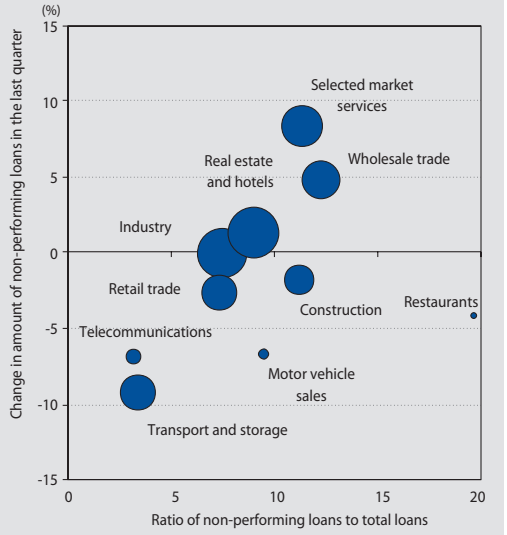
The quality of the corporate loan portfolio and changes in the portfolio show relatively significant differences across both borrowing sectors and financing banks. The most pronounced materialisation of corporate credit risk in the first half of 2011 was in the wholesale trade and selected services sectors, since the delinquency rate on loans to firms in these sectors rose by the largest margin; the size of the exposure to both sectors is significant. In the case of loans to the real estate sector, the delinquency rate (9%) is not the highest, but the high concentration of loans has the potential to raise the rate of growth in the amount of non-performing loans.

Chart 77 Quality of the corporate loan portfolio and ratio of non-performing loans



Source: NBS.

Chart 78 Non-performing loans in selected corporate sectors

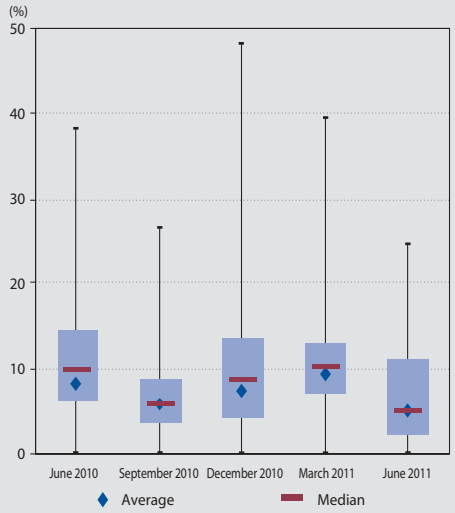


Source: NBS.
Note: The size of each bubble corresponds to the share of the given sector in the total amount of outstanding corporate loans.

Moderate decline in "loans at risk"

The improved performance of the corporate sector was reflected in the proportion of "loans at risk", which fell at most banks. At the sectoral level, this ratio has been falling continually since its peak in 2009, but it is still higher than it was in the second half of 2008.

Chart 79 Loans at risk



Source: NBS, SO SR.
Note: The methodology is given in the section Glossary and Abbreviations.

3.2 MARKET RISKS AND LIQUIDITY RISK

As regards the market risk exposure of institutions in the Slovak financial sector, the situation is to a large extent affected by the current euro area debt crisis as well as by the risk of a downturn in the global economy. At the systemic level, such adverse developments could negatively affect the Slovak financial sector in several areas. The risk of an extended period of low returns on least risky assets has escalated; this may prolong the period of low returns in Pillar II funds, in money-market and bond funds, and in the insurance sector. In addition, the risk of a further decline in prices of government bonds issued by countries under stress has increased; at the beginning of July, bonds issued by Italy and Spain also started to be seen by the markets as more risky. Although the direct effect of this risk on the financial sector as a whole is relatively low, the risk is concentrated and certain individual institutions or funds could be exposed to substantial losses as a result. Furthermore, this risk could lead to a general decline in confidence in the interbank and bond markets, which may in turn put downward pressure on prices of government bonds issued by countries that investors perceive so far as less risky, including Slovakia. As was seen in July and August, mounting uncertainty in financial markets brings with it the risk of a slump in share prices. Such a risk may cause relatively heavy losses in Pillar III of the pension sector and in mutual funds investing in equity instruments. This scenario could trigger a wave of redemptions of the funds concerned. The insurance sector may be also be indirectly affected by the new prohibition on taking into account gender as a risk factor in insurance contracts.
Regardless of this heightened volatility of risk factors, the amount of exposures in individual segments of the financial market changed only slightly. The most marked changes were a decline in the sensitivity of the Pillar III pension funds portfolio to a rise in interest rates and a partial shift in investments from bonds to term deposits. This clearly stemmed from an elevated risk of losses on the revaluation of debt securities, which was related to increasing expectations of a hike in interest rates at the end of the first quarter of 2011. In Pillar II funds, on the other hand, the opposite strategy was followed. In these funds, the sensitivity to interest rates increased during the first half of 2011 (from a very low level at the beginning of the period), thus allowing funds to profit from a steeper interest rate curve that reflected the expectations for interest rate hikes. The second change was in the value of the Pillar III fund portfolio of equities, exchange-traded funds, and mutual fund shares/units, which climbed by 12%.
The riskiness of the portfolio of investments in individual financial market segments, measured by Value at Risk, was only moderately higher as at 30 June 2011 than as at 31 December 2010, with most of the increase attributable to the heightened risk of equity investments. It should be noted that this value was calculated as at a date when the market situation was calmer than in July and August 2011 (when the risk soared).

3.2.1 MARKET RISKS IN BANKS

The exposure of the banking sector to equity and foreign-exchange risks is minimal

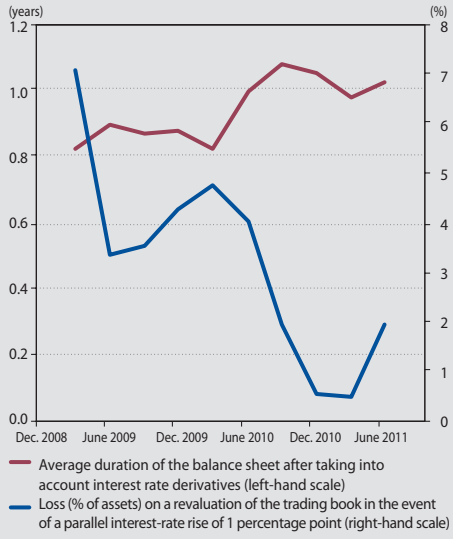
Exposure to foreign-exchange risk remained low throughout the first half of 2011. In most banks, the net foreign-exchange position as at the last day of each month did not exceed 10% of own funds.

The exposure of the banking sector as a whole to equity risk is relatively low. Investments in equities and mutual fund shares/units represent only 3% of own funds, although the risk is relatively concentrated.

As regards interest-rate risk, the banking sector did not record any significant changes. The average duration of the sector's balance sheet, including interest-rate derivatives remained basically unchanged at one year. The trading book exposure to a potential rise in interest rates increased moderately, but it remains low.

At the same time, banks revalued at fair value a relatively large amount of debt securities held in the available-for-sale portfolio (9% of the balance sheet total). Under a change effective from 31 May 2011, any losses from the revaluation of such securities are deducted from capital. The

Chart 80 Interest rate risk indicator in the banking sector



Source: NBS.

risk of heavy losses is, however, relatively small, since the average duration of these securities is only 2.8 years. In the event of interest rates rising in parallel by 1 percentage point, the banking sector would make a loss equivalent to 0.26% of its assets.

The banking sector's direct exposure through debt securities to countries under stress stayed relatively low (at 2.4% of assets), although it is still highly concentrated. The level of exposure changed only slightly, as exposure to Greece declined and exposure to Ireland, Italy and Cyprus increased. The vast majority (96%) of these debt securities are recorded in the banking book, and a relatively large proportion (32%) are held in the AFS portfolio. As from 31 May 2011, however, losses on debt securities available for sale are treated as deductible from core capital, and therefore the risk of a drop in capital is relatively high at certain banks. At the same time, though, the implementation of this change has helped to provide a more realistic view of the solvency of the banks holding these assets.

3.2.2 MARKET RISKS OF OTHER (NON-BANK) SEGMENTS OF THE SLOVAK FINANCIAL MARKET FROM A SYSTEMIC VIEW

THE MOST SIGNIFICANT MARKET RISK IS THE RISK ARISING FROM THE EURO AREA DEBT CRISIS

The escalating debt crisis in several euro area countries is at present the most serious of the markets risks and it could adversely affect all segments of the Slovak financial market.

Table 7 Investments in debt securities of selected countries as a share of total assets (%)

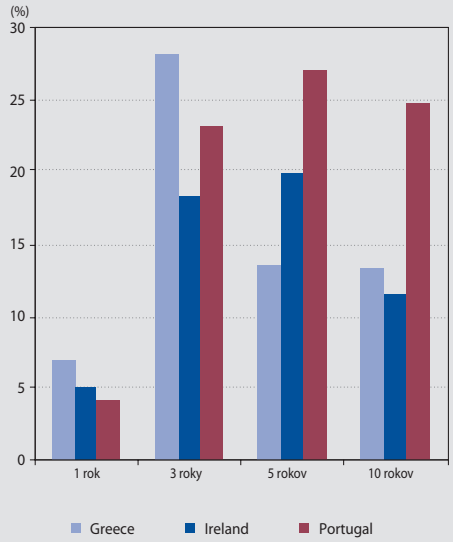
		Greece	Hungary	Ireland	Italy	Spain	Portugal	Cyprus
Banks	Dec. 2010	1.1	0.6	0.2	0.2	0.1	0.1	
	June 2011	0.9	0.6	0.3	0.3	0.1	0.1	0.1
SPMC funds	Dec. 2010	0.1	0.9	0.6	0.8	0.8		
	June 2011	0.1	0.6	0.2	0.9	1.0		
PFMC funds	Dec. 2010		0.3	2.1	1.9		0.4	
	June 2011		0.9	0.1	0.1	0.9		0.2
Mutual funds	Dec. 2010	0.2	1.4	0.3	0.5	0.1	0.1	
	June 2011	0.1	1.5	0.3	0.4	0.1		0.1
Insurance companies (excl. unit-linked insurance)	Dec. 2010	0.1	0.1	0.2	2.6	0.2		
	June 2011	0.1	0.2	0.2	2.5		0.1	0.2
Unit-linked insurance	Dec. 2010			0.3				
	June 2011			0.3				

Source: NBS.
Note: 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.

Table 7 shows the direct exposures to this risk through investments in debt securities issued by countries under stress. For a majority of financial market segments, the level of this exposure remained largely unchanged during the first half of 2011. Since, however, these exposures are relatively highly concentrated among certain financial sector institutions, the risk could materialise to a greater extent at these institutions.

In the period since the government bond prices of certain countries began to fall more sharply, the term structure of credit spreads has changed markedly and therefore so has the yield curve for these bonds. In the past, the term structure of credit spreads had a positive slope, but now, for the countries under stress, the highest credit spreads are on two-year and three-year bonds, which means that the implied probability of defaults is highest in the near term. Whereas previously it was bonds with the longest residual maturity that were most exposed to the risk of a price change resulting from a movement in credit spreads, at present short maturity bonds carry a similar, or even higher, risk (Chart 81). Thus bonds with a relatively short residual maturity may face a comparatively large price change risk if their issuer represents a greater risk. This fact should be taken into account when analysing this risk in individual sectors.

Chart 81 Comparison of the fall in value of bonds of different maturities issued by selected countries



Source: Bloomberg, NBS calculations.
Note: Left-hand scale: percentage change in bond prices during the first half of 2011.

Increased risk of debt crisis having a systemic impact on the financial sector

The debt crisis in certain countries under stress has not only put direct downward pressure on the prices of more risky governmwent bonds, but also, in conjunction with the unfavourable economic news from several parts of the world (including the United States), has been marked by a substantial systemic element that may exacerbate the situation across the euro area. The repercussions of this development may further heighten uncertainty in financial markets and weaken the real economy. Its impact has been particularly marked in equity markets, which were relatively calm at the end of June 2011, but became far more volatile in the following months. Equity markets fell relatively sharply, indicating that although the principal equity indexes in particular countries continued to be affected mainly by a common systemic trend, the risk of individual countries or economic sectors was weighing adversely on their equity markets. Thus the riskiness of the equity investment portfolio was increasingly determined by the geographical and/or sectoral composition of the issuers.

As recent developments have shown, the elevated risk could potentially put upward pressure on the credit spreads of several countries, even ones with a relatively low debt ratio, such as Slovakia (Chart 82). A similar situation played out after the collapse of the investment bank Lehman Brothers. Thus a further systemic effect of the debt crisis could be a drop in the prices of the bonds held by financial institutions, except for the top-rated securities.

If the risk escalates significantly, it could adversely affect the parent undertakings of Slovak financial institutions. Other risks include an increase in the amount of redemptions in the collective investment sector[13] or mounting surrenders in the insurance sector (especially in the line of unit-linked insurance), which could result from a double-dip recession in Slovakia or from losses in certain funds.

13 Redemptions in the collective investment sector have already risen, particularly in August 2011.

Table 8 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 mutual fund shares/units (%)	Dec. 2009	0.2	3.0	0.1	4.7	17.6	80.8
	June 2010	0.3	2.8	0.0	12.0	16.7	81.3
	Dec. 2010	0.2	2.7	0.1	20.3	19.1	81.2
	June 2011	0.3	2.6	0.0	22.1	19.3	82.0
Foreign-exchange positions (%)	Dec. 2009	0.4	0.9	0.1	4.9	12.5	12.9
	June 2010	0.6	1.5	0.1	9.2	9.4	12.6
	Dec. 2010	0.5	1.5	0.1	12.2	11.2	13.9
	June 2011	0.2	2.2	0.1	10.1	12.5	21.1
Share of debt securities (%)	Dec. 2009	28.3	63.1	68.0	70.8	51.8	17.2
	June 2010	27.3	60.0	66.9	66.6	50.4	16.9
	Dec. 2010	26.5	68.2	68.5	66.0	46.3	17.4
	June 2011	25.2	69.8	70.1	58.0	46.3	17.1
Duration of debt securities (years)	Dec. 2009	2.7	5.7	0.5	2.1	1.1	5.9
	June 2010	3.0	6.0	0.6	2.6	1.3	5.6
	Dec. 2010	3.0	6.1	0.4	3.2	1.2	5.5
	June 2011	3.3	6.0	0.4	2.6	1.3	5.0
Duration of entire portfolio (years)	Dec. 2010		5.7	0.4	2.1	0.6	1.0
	June 2011			0.3	1.5		
Residual maturity of debt securities (years)	Dec. 2009	3.8	7.8	0.8	3.0	1.8	6.2
	June 2010	3.9	7.9	0.8	3.4	2.0	5.8
	Dec. 2010	4.1	8.2	0.8	4.2	2.1	5.7
	June 2011	4.3	8.0	1.1	3.9	2.2	5.3

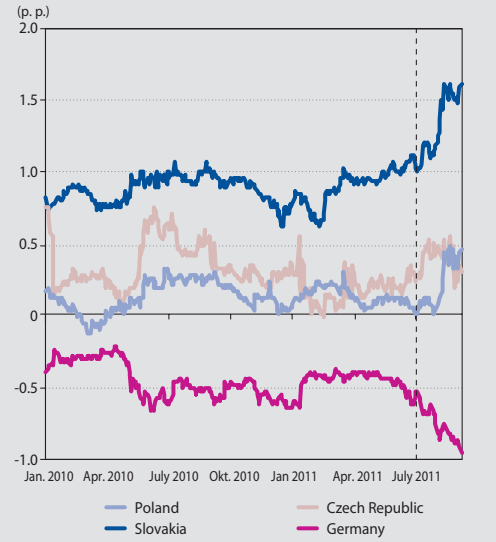
Source: NBS, Bloomberg.
Notes: Values are given as a percentage share of total assets (or NAV) and they represent the asset-weighted average for the given group of institutions.
Foreign exchange positions are given as a percentage share of assets (or NAV); they were calculated as the sum of the absolute 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.
1) Assets invested by insurers under unit-linked insurance policies.

Increased risk of an extended period of low returns on least risky assets

When inflation pressures increased at the end of the first quarter of 2011, the risk of an extended period of low interest rates seemed to have declined. At the beginning of the second half of 2011, however, a combination of market turbulences and weaker economic growth around the world saw the threat of recession rise again, which could bring back cuts in interest rates.

Looking at the movement of forward interest rates, the most apparent risk is an extended period of very low returns on highest quality assets. On the other hand, market data do not as yet indicate any substantial decline in expected average returns across the euro area (Chart 83), mainly due to the sharp rise in uncertainty in financial markets and to the strong demand for low-risk assets. Such a situation may negatively affect the Slovak financial sector by causing a decline in returns, particularly on the following: PFMC funds; collective investment funds that have a higher proportion of investments in bank accounts and bonds; insurance companies; and, to a lesser extent, SPMC funds. The reason for this is that the composition of investments in these segments of the financial market is dominated by relatively low-risk assets with short duration.

Chart 82 Credit spreads on 5-year government bonds of central European countries and Germany



Source: Bloomberg, NBS calculations.
Notes: The Chart shows the difference between the percentage yield on 5-year government bonds denominated in the currency of the respective countries and the 5-year swap rate for that currency.
The broken vertical line denotes the reference date of the analysis (30 June 2011).

Chart 83 Euro instantaneous forward rate one year ahead residual maturity

Source: ECB.
Notes: The instantaneous forward rate one year ahead was derived from the yield curve for government bonds with the respective credit rating.
The broken vertical line denotes the reference date of the analysis (30 June 2011).

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

Insurance company assets are exposed mainly to interest rate risk

For assets of insurance companies, the principal market risk is that of interest rate movements, since debt securities constitute as much as 70% of these assets (excluding assets invested under unit-linked insurance policies) and securities revalued at fair value account for 73% of that amount. On the other hand, the effect of interest rate movements on the revaluation of these securities is mitigated by the simultaneous revaluation of liabilities. Although the portfolios of insurance companies include debt securities that are revalued at fair value and not included in insurance provisions or the guarantee fund, their amount is relatively low (only 1.8% of assets)

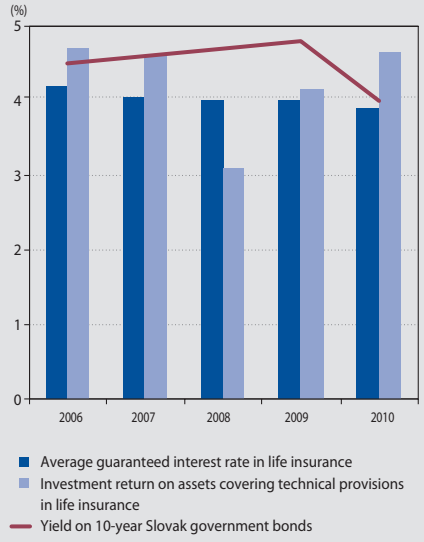
The insurance sector's exposure to other market risks is small, and only certain insurers would be affected by these risks to any significant extent. In no insurance company do equities or shares/units of funds investing in equities exceed 5% of assets.

By contrast, assets invested by insurance companies under unit-linked insurance business (where the risks are borne by the policyholders themselves) are highly exposed to market risks. Although these assets are invested mainly in shares/units of collective investment funds, a proportion (17%) consist of securities that have a relatively high exposure to interest rate movements. It follows that these assets are exposed mainly to equity risk and interest rate risk, including indirect interest rate risk related to bond fund investments. Broadly speaking, the riskiness of these assets approximately equates to the degree of risk attached to funds of funds in the collective investment sector.

Persisting risk of low interest rates in the insurance sector

One of the main risks in the life insurance sector is the risk of persisting low interest rates. In

Chart 84 The guaranteed interest rate in comparison with the actual return



Source: NBS.

such an environment, it is difficult for insurance companies to generate returns that would cover the interest rates guaranteed in insurance contracts. Consequently, insurance companies may be forced to invest in more risky assets and to increase their exposure to other market risks.

The average guaranteed interest rate in Slovakia is one of the highest in Europe,[14] (it fell slightly towards the end of 2010, to 3.85% per annum). Nevertheless, the investments covering this high rate have been achieving more than the necessary returns, with the exception of 2008, and there are no signs of insurers shifting their investments to more risky assets. Considering the turbulence in financial markets and also the yields on Slovak government bonds, attention will have to be paid to how insurance companies manage to achieve the required returns in 2011. For the first half of 2011, the annualised annual return on assets covering technical provisions stood at 3.72%.

Counterparty risk in reinsurance

For large insurance losses, an insurance company may expect a payout from a reinsurer. In such case, however, it is exposed to the risk that the reinsurer will not be able to make the payout.

The number of reinsurers is small in the life insurance sector, only between 1 and 3 for each insurance company, and greater in the non-life insurance sector, between 1 and 6 for small insurers and up to 50 for large insurers. For small insurers, reinsurance is provided mainly by parent companies or large reinsurers, such as Munich Re, Hannover Re, SCOR, Swiss Re. This, along with the fact that reinsurance for large insurers is highly diversified, means that the counterparty risk in reinsurance can be considered low.

The European Court of Justice ruled that gender could not be taken into account as a risk factor in insurance contracts

On 1 March 2011, the European Court of Justice ruled that taking gender into account as a risk factor in insurance contracts constituted discrimination under European Union law.[15] As a result, insurance premiums and benefits will have to be the same for men and women as from 21 December 2012.[16]

Although insurers were dismayed by this judgment, it should be noted that they are not directly affected by it. The only change is that they have to calculate premiums without taking into account gender as a risk factor and to apply this rate in insurance contracts. The ECJ ruling does, however, affect the amount of the premiums, since higher-risk policyholders will pay lower premiums, and lower-risk policyholders higher premiums, than would otherwise have been the case. Whether the change is more favourable to men or women depends on the line of insurance.

The ECJ ruling may, however, have an indirect effect on the insurance market. In the light of the higher premiums, lower risk customers will consider whether it is worth entering into an insurance policy at all and some will decide not to, thereby increasing the riskiness of the group of insurance persons. If this increase were substantial, it could lead to a rise in premium rates that results in other low-risk customers forgoing insurance. Thus there is a risk of a vicious circle where premiums continue rising and the number of insured decreases.

The deepening crisis may put upward pressure on surrender rates

If the economy weakened again, insurance companies would face both a drop in demand for their products, and an increase in surrenders and cancellations of insurance contracts. Even

14 Source: The European Insurance and Occupational Pensions Authority.

15 Council Directive 2004/113/ES of 13 December 2004 implementing the principle of equal treatment between men and women in the access to and supply of goods and services.

16 A further clarification of this matter is expected from the European Union in regard to, for example, whether the change will apply only to new contracts.

though this situation would probably not be a direct cause of financial losses, given the high fines for policy surrenders and cancellations, it would disrupt the strategic planning of insurers and the structure of their balance sheets.

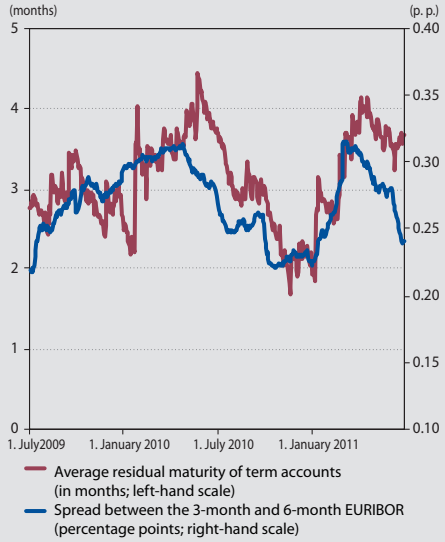
The risk of a fall in value of the pension unit in PFMC funds remained low

The exposure of PFMC funds to the risk that their financial instrument holdings decline in value remained low in the first half of 2011.

The most significant risk continues to be investments in securities issued by countries under stress, but this risk is not high and it even declined during the first half of 2011. The share of investments in these securities fell from 4.7% to 2.2% of the net asset value, and the most risky securities (issued by Greece, Portugal and Ireland) comprised only 0.1% of the NAV. Furthermore, the securities in question had a short residual maturity (5 months on average).

PFMC funds also have a relatively low exposure to interest rate risk, since they have been investing in short-duration securities, mostly with a relatively short maturity. The term accounts of these funds also have, on average, a relatively short maturity period, although the range of these periods reported by individual funds is relatively diverse. However, the term deposits of several funds recorded an increase in their average residual maturity during the first quarter of 2011. As Chart 85 shows, this change relates to a rise in steepness of the short end of the yield curve, which reflects shifting expectations about interest rate increases. Thus when the opportunity appeared to achieve higher returns by investing in bank deposits, several funds took advantage of it. Such a strategy reduces the downward risk of any further decline in interest rates. By contrast, any further rise in interest will not pass through to returns on funds until after a longer lag.

Chart 85 Average maturity of PFMC funds' term accounts compared with the steepness of the short end of the interest rate curve



Source: NBS, www.euribor.org

SPMC funds are exposed to both equity and interest rate risk

The exposure of SPMC funds to equity risk increased only slightly in the first half of 2011, after recording a marked rise in 2010. The portfolio of equities, exchange-traded funds, and mutual fund shares/units climbed by 12%; the share of equity investments in total assets is approximately one-fifth

The value of high-risk securities fell by 7%, and as a share of fund assets they dropped from 3.2% to 2.8%. Holdings of these securities were concentrated among certain funds. The rest of the bond portfolio continued to be invested relatively conservatively.

Exposure to foreign exchange risk stems mainly from investment in equities denominated in foreign currencies. In several funds, this risk is partially hedged using currency swaps. The size of the remaining open foreign exchange position fell moderately, to 9.2% of the net asset value. These funds have the highest sensitivity to movements in the euro's exchange rate against the US dollar, Polish zloty and Czech koruna.

Looking at the risk profile of SPMC funds during the first half of 2011, the most significant change was a decline in the exposure to interest rate risk; this resulted both from the partial substitution of bond investments (amounting to around 8% of the NAV) with term deposits at banks, and partly from a fall in the duration of the remaining portfolio of debt securities (from 3.2 years to 2.6 years). This shift was observed at several funds and indicates a change in investment strategy,

probably prompted by expectations of a gradual decline in interest rates (Chart 3). Such an investment strategy is in direct contrast with the strategy followed at PFMC funds. Since bank deposits are short-term with an average residual maturity of five months, the average duration of the whole portfolio in SPMC funds declined quite markedly during the first half of 2011 (from 2.1 years to 1.5 years). Despite these changes, the exposure to a decline in portfolio value in the event of rise in interest rates remains higher in SPMC funds than in PFMC funds.

In the collective investment sector, exposure to individual risk remained largely unchanged

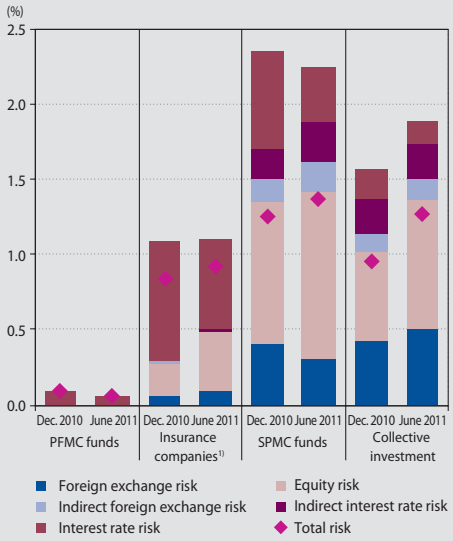
If the adverse effects of the debt crisis on financial markets became more serious, they would spill over into the collective investment sector mainly through stock market turbulences. This could lead to outflows from mutual funds, particularly those in which the equity component of the investment portfolio is relatively larger (Box 2). In addition, any simultaneous weakening of the US dollar against the euro could further amplify the downward pressure on the performance of funds measured in domestic currency, given that uncovered dollar positions amount to around 8% of the net asset value of the collective investment sector. As for the risk of another rise in the credit spreads of countries under stress, its direct effect was not significant since bonds issued by these countries made up only 2.5% of the overall net asset value (with Hungarian bonds accounting for the largest proportion of that share. If the period of low interest rates or low yields on low-risk bonds persisted – possibly due to a recession brought on by the escalating debt crisis – the period of low returns on less risky mutual funds (especially money market funds and bond funds) would also be extended.

3.2.4 MEASURING MARKET RISKS USING VALUE AT RISK (VAR)[17]

Value at Risk increased moderately due to a rise in equity risk

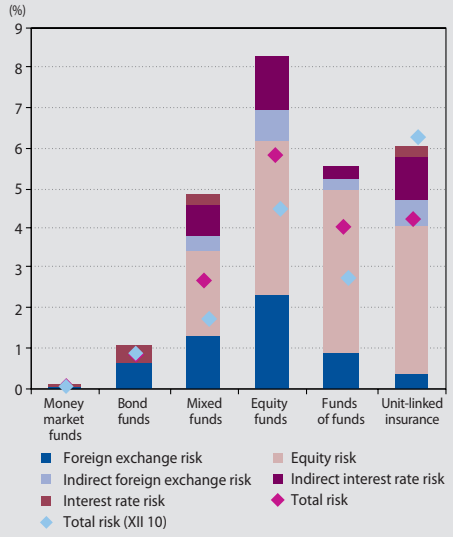
Asset risk in individual segments of the financial market was slightly higher as at 30 June 2011 than as at 31 December 2010 (Chart 86), owing to a moderate rise in the riskiness of equity in-

Chart 86 VaR in individual sectors



Source: NBS, Bloomberg, internet.
Notes: Left-hand scale: percentage share of total assets (or NAV).
VaR was calculated as the worst expected loss over a period of 10 working days at a confidence level of 99%.
Indirect interest rate risk and foreign exchange risk constitute the risk to which individual institutions or funds are exposed through investments in mutual fund shares/units.
1) The figure for insurers does not include assets covering unit-linked insurance policies and risks arising from the revaluation of provisions.

Chart 87 VaR of mutual funds and of assets invested under unit-linked insurance



Source: NBS, Bloomberg, Internet.
Notes: Unless otherwise stated, the data are as at 30 June 2011 (the value of the total risk as at 31 December 2010 is stated for comparison).
Left-hand scale: percentage share of NAV.
VaR was calculated as the worst expected loss over a period of 10 working days at a confidence level of 99%.

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

Table 9 VaR values in individual segments of the financial market (%)

	Lower quartile	Median	Upper quartile	Weighted average
Insurers	0.3	0.5	0.8	0.9
Unit-linked	2.9	4.2	5.9	4.3
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	0.1	0.1
SPMC funds	0.1	0.8	1.7	1.4
Payout	0.0	0.2	0.5	1.2
Contributory	0.5	1.3	2.7	1.4
Mutual funds fondy	0.4	1.7	3.8	1.3
Money market	0.1	0.1	0.2	0.1
Bond	0.5	0.6	1.1	0.9
Mixed	1.5	2.3	4.4	2.8
Funds of funds	2.3	3.8	4.2	4.1
Equity	5.1	6.1	9.0	5.9

Source: NBS.
Notes: 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 over a period of 10 days at a confidence level of 99%.

vestments. As mentioned above, the size of exposures to the majority of risks remained largely unchanged. The only exception was insurance companies' assets invested under unit-linked business, since the average risk exposure of these assets declined slightly.

It should be noted, however, that the VaR calculations were made as at 30 June 2011, while the riskiness of individual portfolios, measured using VaR, rose sharply in July and August.

3.2.5 LIQUIDITY RISK IN THE BANKING SECTOR

Loan-to-deposit ratio increased slightly

The structure of assets and liabilities in the banking sector has long been reflecting the trend growth in loans to households. This activity also continued contributing to the gradual increase in the customer loans to customer deposits ratio. The ratio rose at a moderately faster pace in the first half of 2011, due not only to the stronger activity in retail lending, but also to an increase in lending to non-financial corporations (see Chart P51).

No substantial change in short-term liquidity

Liquidity at the one-month horizon is monitored using the liquid asset ratio. The ratio increased at several branches of foreign banks during the first half of 2011, and this had a positive effect on the median value. The weighted average and median for retail banks also remains relatively stable (see Chart P52).

Intra-group liquidity

Intra-group transactions in the financial sector have traditionally been important to the interpretation of liquidity risk in domestic banks. This situation arises mainly from the prevalence of foreign ownership of institutions in the Slovak banking sector and from EU banking legislation, where the focus is increasingly on the regulation of financial groups on a consolidated basis.

As at June 2011, the net position of the Slovak banking sector was short, i.e. the amount of intra-group deposits held by banks in Slovakia was higher than intra-group claims of these banks. Although the net position in the sector stood at only 0.2% of total assets, the position in certain banks represented a significant proportion of their funds.

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 using macro stress testing. The baseline scenario is based on the official NBS Medium-Term Forecast and assumes gradual growth in the domestic economy. The stress scenario "Sovereign Crisis" assumes there will be a recession and a downturn in financial markets resulting from a loss of confidence in the ability of certain euro area countries to consolidate their public finances. The scenario "Supply-Driven Inflation" assumes elevated inflation caused more by speculative investments in commodities and by excess liquidity than by changes in demand-side fundamentals. Like the Sovereign Crisis scenario, the Supply-Driven Inflation scenario assumes there will be a recession, but in this case accompanied by higher inflation. All three scenarios cover the period from second half of 2011 to the end of 2013.

The banking sector proved to be relatively resilient to adverse macroeconomic scenarios, mainly due to its capital buffer (which was fairly high as at 30 June 2011) and ability to generate interest income even during the stress period. The largest losses of the sector as a whole would be made on the portfolio of corporate loans; losses would also rise on the household loan portfolio and securities portfolio, and in some years the losses on one or both of these portfolios would exceed those on the corporate loan portfolio. Loans to households continue to report relatively high sensitivity to rising inflation and a resulting rise in interest rates.

Looking at the funds of pension fund management companies (PFMCs), none of the scenarios would have a substantial negative effect on them, due to the composition of their investments.

As for funds of Supplementary Pension Fund Management Companies (SPMCs), the value of the pension unit would decline rather sharply under both stress scenarios, since most contributory funds have a relatively high proportion of investments in equities and mutual fund shares/units. The high riskiness of SPMC funds was further confirmed by actual developments in July and August 2011, when SPMC contributory funds recorded an average loss of 2.1% as a result of financial market turbulences. The impact of the stress scenarios on payout funds was not significant.

Mutual 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 this sector in terms of their share in the overall net asset value. Funds with a high equity component could make substantial losses, and, under the stress scenario, a wave of redemptions could therefore be expected. In a one-year horizon, funds' losses would be higher under the "Supply-Driven Inflation" stress scenario, since the effect of US dollar appreciation is missing in by this scenario.

In the insurance sector, the portfolio of debt securities has a relatively long duration and therefore the stress scenarios had only a small effect on the level of interest income. This interest income would, moreover, be sufficient to cover potential losses from any revaluation of assets under the stress scenarios. Among financial market segments, the insurance sector would have the highest sensitivity to an increase in the risk premium on Slovak government bonds, since its portfolio includes a relatively high share of these securities revalued at fair value and their residual maturity is long.

4.1 DESCRIPTION OF SCENARIOS USED

The resilience of the Slovak financial sector to adverse macroeconomic developments was examined using 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. For the purpose of the testing, two stress scenarios of potential negative developments in the economy and financial markets were designed in the first half of July 2011.

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

and different types of market risk to different types of financial institutions can be evaluated. Stress testing, in addition to risk quantification, evaluates the overall resilience of banks by estimating their profitability and thus their ability to strengthen their capital position. The stress test period for all three scenarios covers the second half of 2011 and the years 2012 and 2013. The underlying assumptions of the stress tests were unchanged from the Analysis of the Slovak Financial Sector for 2010 (Box 3).

It should be noted that, as in previous analyses, macro stress testing is used to give a fuller picture of the risk profile of particular financial market segments 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 related to this scenario are based on the official NBS Medium-Term Forecast produced in the second quarter of 2011 (MTF-2011Q2).[18] The official forecast assumes that year-on-year GDP growth will accelerate gradually. It is expected that this growth will be supported by external demand throughout the period and that the contribution of domestic demand will gradually increase.

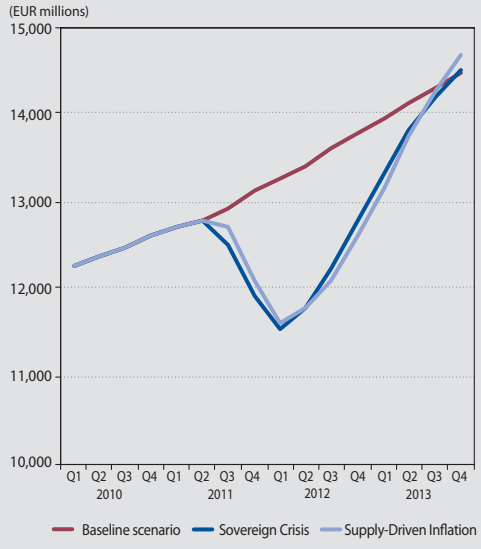
The only negative contribution to GDP growth is assumed to come from the Government's consolidation measures. Inflation is expected to come under upward pressure, especially at the beginning of the period, from the effect of indirect tax hikes and higher prices of agricultural commodities and oil. Once the effects of these factors have faded away, consumer price growth is expected to ease in 2012 and 2013.

Scenario 1: Sovereign Crisis

This scenario is based on the risk that public finances in certain euro area countries are unsustainable. The risk in this case includes negative developments in the fiscal imbalance, the strengthening of growth-dampening factors, and greater obstacles to the accessing of funding by financial corporations. This risk is perceived as significant not least because of the strong interaction between these three factors, meaning that an adverse development in one area could amplify or trigger a negative situation in the other two areas.

The scenario assumes that fiscal consolidation measures of euro area countries that have a high government debt to GDP ratio will be judged insufficient by financial markets, thereby making it more difficult for these countries to obtain fund-

Chart 88 Year-on-year GDP growth – baseline and stress scenarios



Source: NBS.

Chart 89 HICP inflation – baseline and stress scenarios

Source: NBS.

18 http://www.nbs.sk/en/publications-issued-by-the-nbs/nbs-publications/medium-term-forecast/medium-term-forecast-2011

ing and increasing the nervousness in financial markets. Market nervousness would be intensified by the increasing perception of counterparty credit risk in the interbank market, which would be reflected in rising interbank and discount interest rates. There would be a decline in stock indices and the euro would depreciate against the dollar. Owing to consolidation measures and to certain sovereigns facing constrained access to funding markets, the dampening pressures on the euro area economy would gradually escalate; the result would be a recession in which inflation is lower than in the baseline scenario. The downturn in external demand would quite rapidly affect the performance of the domestic economy, with GDP growth declining or even entering negative territory, the inflation rate lower than in the baseline scenario, and a gradual rise in unemployment.

Scenario 2: Supply-Driven Inflation

In this scenario, it is assumed that an expansive monetary policy of central banks has an adverse effect and that there is excess liquidity in financial markets, leading to a potential rise in speculative investments in commodities, particularly oil. Since the inflation arising under this scenario would be caused mainly by supply-side factors and not by developments in demand-side fundamentals, there would be a downturn in global economies similar to that under the previous scenario. The Supply-Driven Inflation scenario also assumes a moderate rise in nervousness in financial markets, with share prices falling as a result. The exchange rate of the euro against the dollar would remain unchanged during the stress period. The ECB would gradually raise its key rate, and this increase would be expected to pass through into interbank and discount rates. The domestic economy would also be affected by declining external demand and by inflationary pressures. There would be a gradual slide into recession, with the inflation rate higher than in the baseline scenario; unemployment would rise.

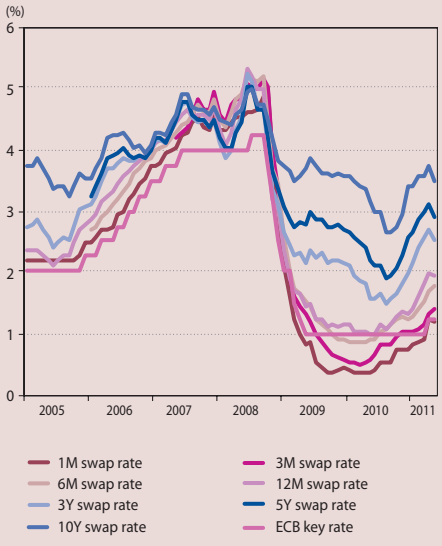
Box 3

ESTIMATION OF DISCOUNT RATES WITH MATURITY MORE THAN 1 YEAR

The debt securities portfolio constituted 23% of total assets as at the end of 2011. When estimating the impact of each scenario, the discount rates used in the revaluation of the portfolio are the „zero-coupon swap rate". It is therefore important that potential movements in the discount rates under the given stress scenario are estimated as accurately as possible.

Whereas the changes in swap rates with a maturity of up to one year can largely be explained by movements in the ECB key rate and the iTraxx Senior Financial index (which in this case is understood to be an approximation of the average counterparty risk in the euro area interbank market), no such relationship applies to swap rates with more than one year to maturity. As follows from theory, movements in long-term interest rates are expected to be influenced by, inter alia, the expected development of the economy. This position is based on the assumption that future stronger growth of the economy, or an expected increase in inflation, could, through various channels, lead to the central bank raising its key rate and subsequently to high-

Chart A ECB key rate and swap rates



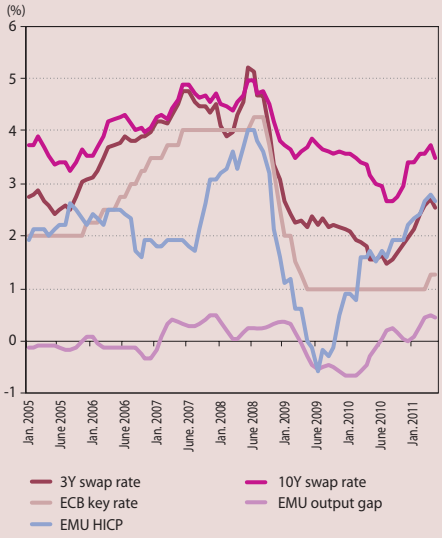
Source: NBS, ECB Statistical Data Warehouse.

er interbank market rates in the medium- or long-term horizon.

Based on the available literature,[19] the changes in swap rates with more than one year to maturity were therefore modelled using not only the ECB's key rate, but also the average rate of HICP inflation and the aggregate GDP of the euro area. The rates modelled were the one-year, three-year and ten-year swap rates, since the data for these rates has been available since January 1999. The model assumes that there is a cointegration relationship between the ECB key rate and the respective swap rate and that the level of the margin, i.e. the spread between the swap and an aliquot part of the ECB key rate, is affected by euro area inflation and GDP. A Kalman filter (or state space model) was used to estimate the individual coefficients of the model.[20]

In general, the modelled relationships were in line with expectations. It appears that the longer the maturity of the swap rate, the longer and less complete the transmission of an immediate change in the ECB key rate. It is also shown that the expected rise in inflation has an upward effect on swap rates with more than one year to maturity. As for GDP, the output gap was found to have a significant effect. This means that the higher the margin by which projected GDP growth exceeds its potential, the higher will be the swap rates or their respective spreads.

Chart B Long-term swap rates and macroeconomic factors



Source: NBS, ECB Statistical Data Warehouse, Eurostat.

19 See, for example, Dewachter, H., Lyrio, M. (2003), "Macro factors and the Term Structure of Interest Rates", available at http://www.econ.kuleuven.be/ew/academic/intecon/home/Publications/CES_DPS/Dps0304.pdf

20 Further details of the model are provided in the annexes to the Analysis of the Slovak Financial Sector for the First Half of 2011.

Table 10 Stress testing parameters

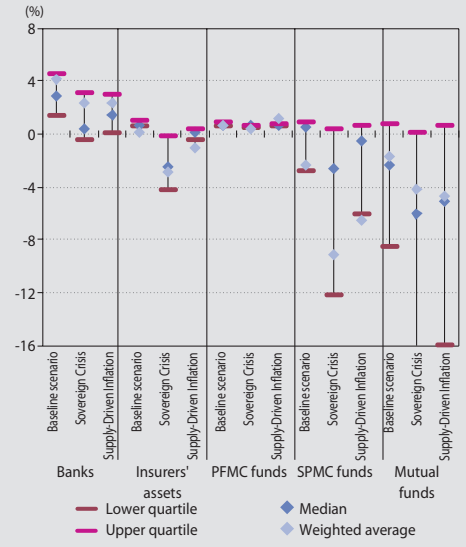
			Baseline scenario		Sovereign Crisis		Supply-Driven Inflation	
			2011H2 and 2012H1	2012H2 and 2013H1[6]	2011H2 and 2012H1	2012H2 and 2013H1	2011H2 and 2012H1	2012H2 and 2013H1
Underlying assumptions	External demand (annual change)							
	USD/EUR exchange rate (annual change)		0 %	0 %	-40 %	25 %	0 %	0 %
	Exchange rates of CHF, JPY, GBP, DKK, CAD, HRK, and LVL against the euro (annual change)		0 %	0 %	-40 %	25 %	0 %	0 %
	Exchange rate of other currencies against the euro (annual change)		0 %	0 %	40 %	-25 %	30 %	-10 %
	Equity prices (annual change)[1]		-15 %[1]	10 %	-65 %[1]	25 %	-55 %[1]	30 %
	ECB key rate (annual change)		50 b.p.	50 b.p.	25 b.p.	175 b.p.	200 b.p.	-100 b.p.
	3-MONTH EURIBOR (annual change)		59 b.p.	67 b.p.	91 b.p.	5 b.p.	212 b.p.	138 b.p.
	iTraxx index (annual change)		0 b.p.	0 b.p.	50 b.p.[2]	0 b.p.	0 b.p.	0 b.p.
	Rise in credit spreads for GR[2]		1000 b.p.[3]	0 b.p.	1000 b.p.[3]	0 b.p.	1000 b.p.[3]	0 b.p.
	Rise in credit spreads for IE, PT[3]		0 b.p.	0 b.p.	500 b.p.[4]	0 b.p.	0 b.p.	0 b.p.
	Rise in credit spreads for ES, IT[4]		0 b.p.	0 b.p.	250 b.p.[5]	0 b.p.	0 b.p.	0 b.p.
Macroeconomic variables estimated using a model	Real GDP growth (annual change)		4.2 %	5.11 %	-5.7 %	9.2 %	-4.9 %	7.2 %
	HICP inflation		3.0 %	2.6 %	0.5 %	1.3 %	4.8 %	-1.6 %
	Unemployment		12.5 %	11.6 %	13.7 %	14.1 %	13.7 %	14.1 %
Variables for credit risk estimated using macroeconomic variables[5]	Annual probability of default	Non-sensitive sectors	1.6 %	1.7 %	2.7 %	1.7 %	2.7 %	3.4 %
		Less sensitive sectors	3.0 %	2.8 %	4.3 %	3.2 %	3.4 %	4.0 %
		Sensitive sectors	6.0 %	5.4 %	9.2 %	9.1 %	9.8 %	12.8 %
	Ratio of non-performing household loans		5.0 %	4.7 %	8.0 %	8.8 %	9.2 %	9.8 %

Source: NBS, ECB.

1) *Regarding equity indices, all the scenarios assume they will decline by 25% in the first two months (July and August 2011) and then increase to the point that their annual rate of change corresponds with the figure stated in the table.*
2) *All three scenarios assume that Greek credit spreads will record a one-off rise of 1000 basis points in July 2011, which approximately equates to a 20% decline in the value of 3-year Greek bonds.*
3) *In the Sovereign Crisis scenario, credit spreads for Ireland and Portugal are assumed to rise by 1000 basis points during the second half of 2011 and then to decline by 500 basis points in the first half of 2012.*
4) *In the Sovereign Crisis scenario, credit spreads for Spain and Italy are assumed to rise by 500 basis points during the second half of 2011 and then to decline by 250 basis points in the first half of 2012.*
5) *The annual probability of default for corporate loans and the rate of non-performing household loans are stated as at the end of 2012 and 2013.*
6) *The second half of 2013 is assumed to see a continuation of the positive trends in the first half of the year.*

4.2 SCENARIO IMPACTS

Chart 90 Impact of macroeconomic scenarios on the financial sector as at the end of 2011



Source: NBS, Register of Bank Loans and Guarantees, ECB, Bloomberg.
Notes: The Table shows quartiles of the estimated profit/loss-to-asset ratio resulting from the application of the respective scenarios as at 31 December 2011.
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 Chart does not show the lower-quartile value for mutual funds under the Sovereign Crisis scenario, which stands at -21%.

THE BANKING SECTOR REMAINS RESILIENT TO ADVERSE MACROECONOMIC SCENARIOS

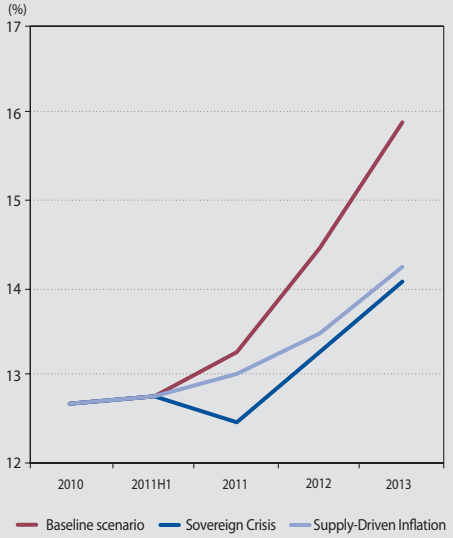
The banking sector showed resilience to adverse macroeconomic scenarios, just as it had under stress tests carried out for previous Analyses. There were, however, some individual banks that did not satisfy the required capital criteria under the individual stress scenarios. The additional capital required to maintain the capital adequacy ratio of each bank above the 8% minimum requirement constituted a relatively small proportion of the total own funds in the banking sector. In the case of the baseline scenario, the additional capital requirement amounted to €41 million, representing 0.9% of the sector's own funds as at the end of June 2011. Under the Sovereign Crisis scenario, the additional capital requirement stood at €88 million (2% of own funds), and under the Supply-Driven Inflation scenario, at €61 million (1.4%).

The stress testing results were influenced by three factors, the first being the high capital adequacy ratio as at the end of June 2011 (no bank had a CAR of less than 9.7%). Banks therefore had a sufficient buffer against any losses. The second factor is the estimated capacity of the sector to generate interest income even during a crisis period, which goes a long way to helping banks either reduce their losses or stay profitable in any given year.

The third factor is the design of the stress scenarios. In order to make the scenarios more realistic, the largest impact of market risks is concentrated at the beginning of the stress period, while credit risk has only a gradual impact. Since the assumptions of both scenarios include a V-shaped recession, the losses from market risks will gradually lessen or fade away.

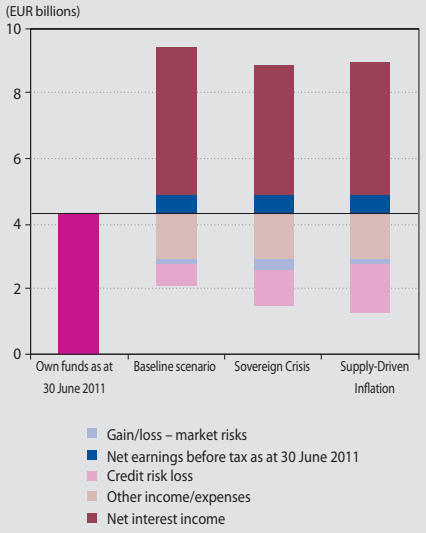
If, however, the recession were assumed to be L-shaped, the losses from market risks would not lessen, and therefore the sector's aggregate losses from credit and market risks would be heavier. In such a case, though, the overall impact of the credit risk would not be captured within a period of 2 to 2.5 years, and therefore

Chart 91 Aggregate capital adequacy ratio of the banking sector under different scenarios



Source: NBS.

Chart 92 Most important factors affecting the level of own funds



Source: NBS, NBS calculations.
Notes: Data are estimates as at 31 December 2013.
The second, third and fourth columns show the contributions of different items of profitability to the increase/decrease in own funds.

the results would not be as meaningful as those obtained under the methodology actually used.

Although the bulk of losses would arise from corporate credit risk, there is an ever rising proportion of losses from household credit risk and market risks

The largest source of banks' losses under the scenarios is the corporate credit portfolio, as was the case in previous Analyses. However, stagnation of this portfolio and the combination of a higher bond component of total assets and a growing household loan portfolio mean that losses from household credit risk and from market risk would be at approximately the same level.

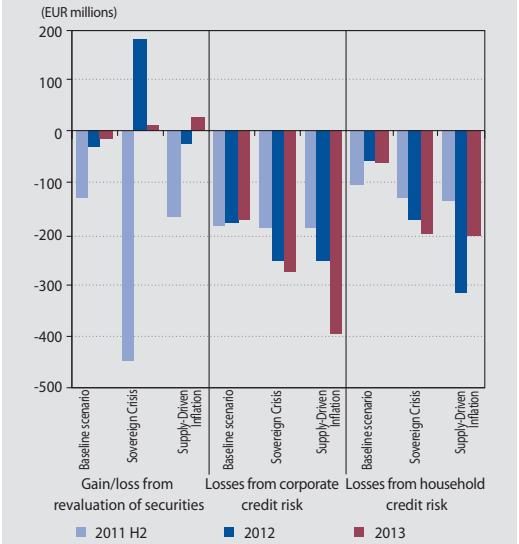
The debt-servicing ability of households would be quite substantially reduced under the Supply-Driven Inflation scenario. This implies that households remain particularly sensitive to the risk combination of increasing inflation accompanied by rising interest rates and a possible recession. Under this scenario, overall losses on loans provided to households in 2012 would be even higher than losses on corporate loans.

The market risk losses comprise mainly interest rate-risk and sovereign-risk losses on the revaluation of debt securities. The scenario under which the sector would record the largest losses is Sovereign Crisis. The fact that such risks tend to materialise quite rapidly and severely implies that the sector's losses would peak at the beginning of the stress period. Therefore, losses on the revaluation of securities would be higher in the second half of 2011 than losses made on other types of risk during the other years of the stress period. At the same time, however, the scenario assumes that a part of these losses would be recouped over the subsequent two years.

Foreign exchange risk and equity risk continue to have marginal significance in the sector as a whole, and only in certain institutions do they have any more substantial effect.

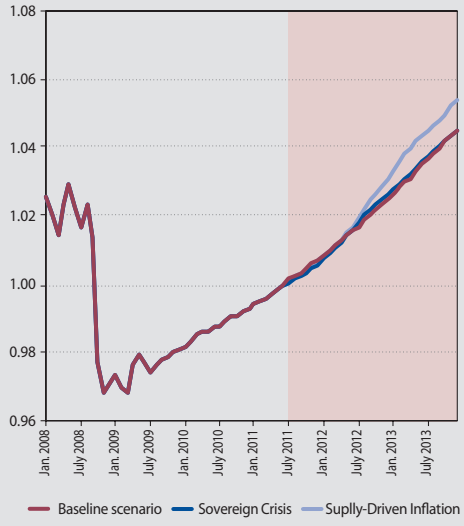
When interpreting the results, it is important to realise that the stress tests did not include the potential impact of competition between banks. Although the inclusion of this factor is relatively difficult, it may be assumed that in the event of a recession there would be increased competition for the deposits of customers (which are considered to be safe) and, after a certain time, an intensification of competition in the lending market, resulting in upward pressure on net interest income or, for certain banks, potential difficulties in obtaining funding.

Chart 93 Banking sector losses under stress test scenarios broken down by risk type



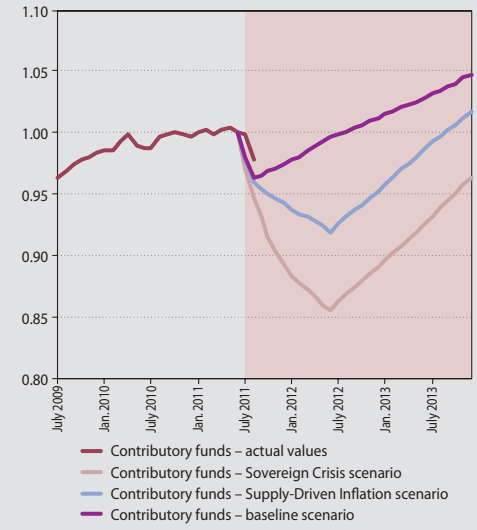
Source: NBS.

Chart 94 Impact of the baseline scenario and stress scenarios on PFMC funds



Source: NBS, ECB, Bloomberg, internet.
Note: The left-hand scale shows the index of the average current value of the pension unit weighted by the net asset value of individual funds (index: 30 June 2011 = 1.00).

Chart 95 Impact of the baseline scenario and stress scenarios on SPMC funds



Source: NBS, ECB, Bloomberg internet.
Note: The left-hand scale shows the index of the average current value of the pension unit weighted by the net asset value of individual funds (index: 30 June 2011 = 1.00).

Stress scenarios would not have an adverse effect on PFMC funds

Since PFMC funds have low exposure to market risk, their losses under the stress scenarios are not expected to exceed 0.2% of the value of the pension unit under the baseline scenario. Another factor behind these low losses is that the interest income of PFMC funds is fixed for a period of four months on average. Under the Supply-Driven Inflation scenario, the performance of these funds would later be positively affected by the assumed interest rate hikes.

SPMC contributory funds would make relatively large losses due to their equity investments

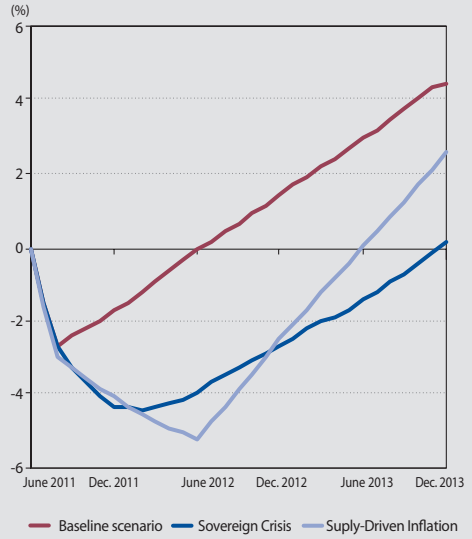
Since most SPMC contributory funds have a relatively high share of investments in equities and mutual fund shares/units, the value of their pension units would fall quite sharply – by up to 15% – under both stress scenarios. In contrast with the baseline scenario, most of the losses under the Sovereign Crisis scenario would be caused by a fall in the value of investments in equities and fund shares/units. Under the Supply-Driven Inflation scenario, the losses on these investments would be lower, but, unlike with the previous stress scenario, the absence of an appreciating US dollar would have a negative effect. The funds would suffer their heaviest losses at the end of the first half of 2012, in line with the movement of equity indices under each scenario. The high riskiness of SPMC funds is further confirmed by what happened in July and August 2011, when, as a result of financial market turbulences, SPMC contributory funds made an average loss of 2.1% (weighted by net asset value).

The stress scenarios had little impact on SPMC payout funds. Under the Sovereign Crisis scenario, payout funds would make a loss only during the first few months and the loss would be small (up to 0.8% of the pension unit value in comparison with the baseline scenario). As with PFMC funds, the interest income growth of the payout funds would even be higher under the Supply-Driven Inflation scenario than under the baseline scenario.

The impact of stress scenarios on the collective investment sector reflects the high proportion of less risky funds

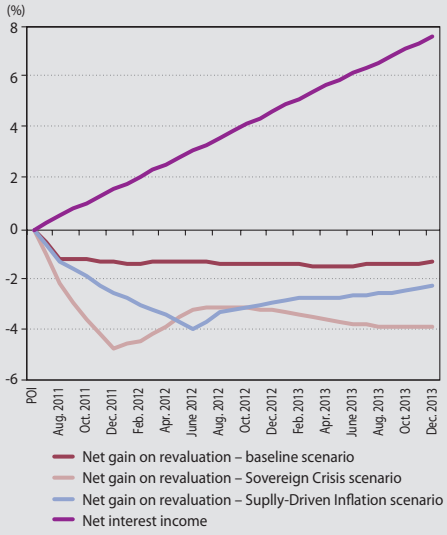
As Chart 96 shows, the losses of mutual funds under the Sovereign Crisis scenario would not be substantial on average (weighted by amounts of assets). Funds holding a combined market share of 62% would even report a net gain, mainly because money market funds and bond funds constitute a substantial proportion of the sector measured in terms of net asset value. The bulk

Chart 96 Impact of the baseline scenario and stress scenarios on collective investment funds



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

Chart 97 Impact of the baseline scenario and stress scenarios on insurance companies



Source: NBS, ECB, Bloomberg, internet.
Notes: 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 impact of stress scenarios on the value of liabilities was not taken into account.

of the losses are caused by the downturn in investments in equities and mutual fund shares/units. Therefore the distribution of losses across the sector is relatively uneven. Funds with a high equity component in their investments (equity funds and funds of funds could suffer substantial losses and, under the stress scenarios, a spate of redemptions. The losses would be higher under the Supply-Driven Inflation scenario in a one-year horizon, since this scenario does not include the effect of an appreciating US dollar. It should be noted that, under all three scenarios, even in the baseline scenario, collective investment funds would make losses even in the first two months due to the assumed 25% drop in equity prices and 20% reduction in the value of Greek bonds.

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

As for insurers, their interest income would be only slightly affected under the stress scenarios,

Table 11 Impact of the Supply-Driven Inflation stress scenario as at 31 December 2011 (%)

	Gain	Loss 0 % – 5 % NAV	Loss 5 % – 10 % NAV	Loss 10 % – 20 % NAV	Loss 20 % – 30 % NAV	Loss 30 % – 40 % NAV	More than 40 % NAV
Money market funds	98.6	1.1	0.0	0.3	0.0	0.0	0.0
Bond funds	81.4	0.0	18.6	0.0	0.0	0.0	0.0
Funds of funds	0.0	0.0	0.7	33.8	65.5	0.0	0.0
Equity funds	0.0	28.8	0.0	38.7	0.0	32.5	0.0
Mixed funds	0.0	44.2	3.9	36.5	14.6	0.8	0.0
Funds total	62.4	14.3	4.3	10.0	7.0	2.0	0.0

Source: NBS, ECB, Bloomberg, internet.
Note: In the table, the net asset value of funds that record a gain or loss in the stated range under the stress scenario Suply-Driven Inflation is shown as a share of the overall net asset value of mutual funds in the respective category.

given the relatively long duration of their portfolios of debt securities. Furthermore, this interest income would partially cover losses on any revaluation of assets that may take place under the stress scenarios (Chart 97). Nevertheless, the Sovereign Crisis scenario would see the insurance sector record a loss as at the end of 2011, caused mainly by the assumed systemic upward effect of the debt crisis on the credit spreads of bonds, including bonds issued by less risky sovereigns (e.g. Slovakia). This is because Slovak government bonds revalued at fair value constitute a relatively significant share of the asset portfolio of the insurance sector.

CHAPTER 5

MACROPRUDENTIAL INDICATORS OF THE FINANCIAL SECTOR

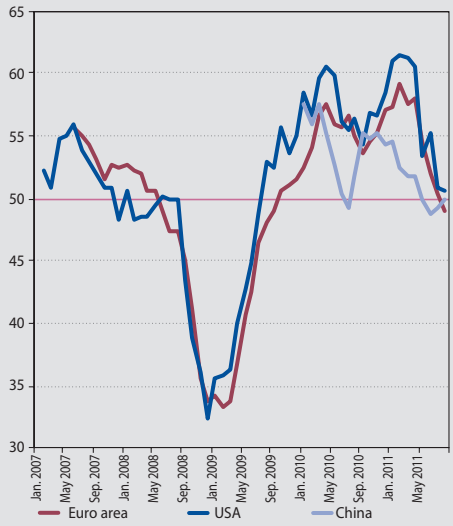
5

5 MACROPRUDENTIAL INDICATORS OF THE FINANCIAL SECTOR

GENERAL NOTES:
The broken vertical line denotes the preparation data of the analysis (30 June 2011).
The formulation 'index: 31 December 2010 = 1' means that the given index was set in such a way that its value as at that date (31 December 2010) was 1.

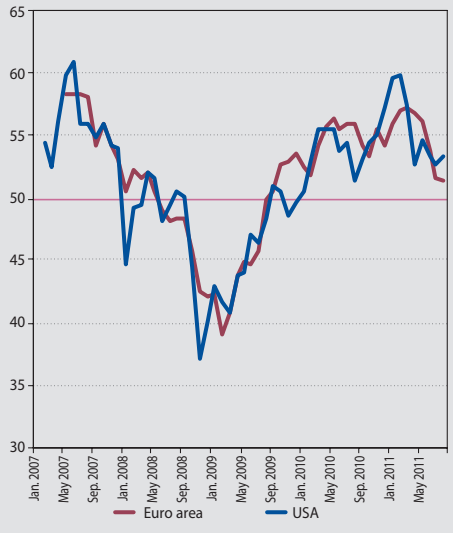
MACROECONOMIC RISK INDICATORS

Chart P1 Indicator of sentiment (PMI) in industry in selected economies



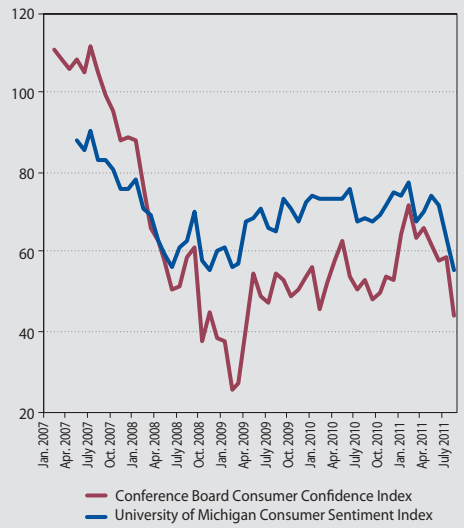
Source: Bloomberg.
Note: A definition of the indicator is given in the section Glossary and abbreviations.

Chart P2 Indicator of sentiment (PMI) in services in selected economies



Source: Bloomberg.
Note: A definition of the indicator is given in the section Glossary and abbreviations.

Chart P3 Consumer confidence indicators in the United States

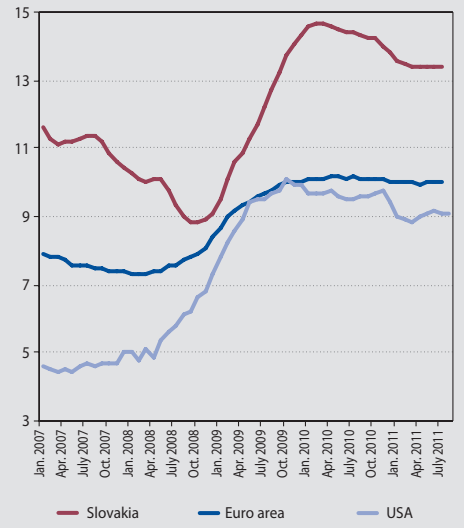


Source: Bloomberg.
Note: The Chart shows US consumer confidence indices produced by two different institutions.

Chart P4 Economic sentiment indicators in the euro area

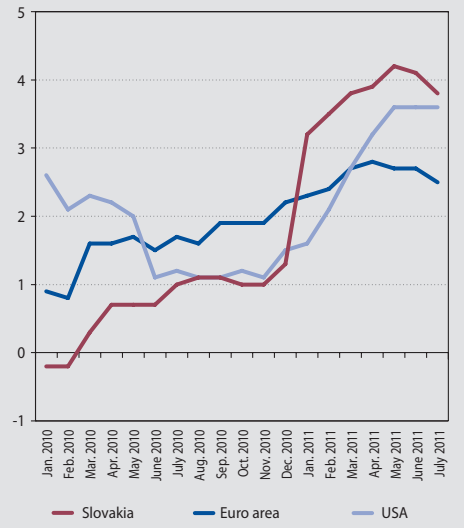
Source: Bloomberg.
Note: A definition of the indicator is given in the section Glossary and abbreviations.

Chart P5 Unemployment rates in selected economies



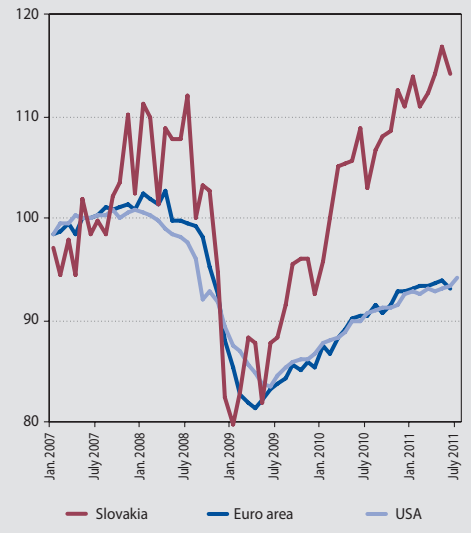
Source: Eurostat, Bureau of Labor Statistics.
Note: Unemployment rate in percent. Seasonally adjusted.

Chart P6 Consumer price inflation in selected economies



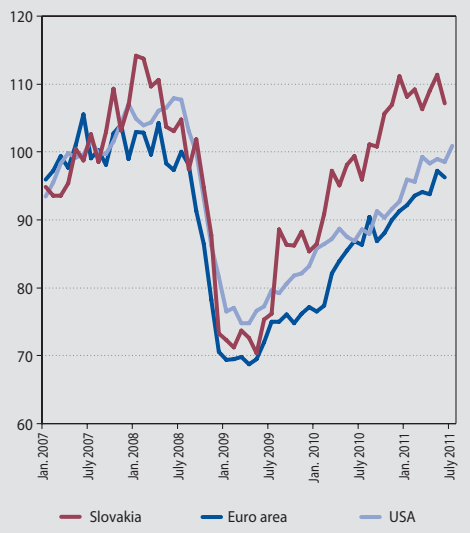
Source: Eurostat, Bureau of Labor Statistics.
Note: Annual percentage change in the Consumer Price Index.

Chart P7 Industrial production indicies in selected countries



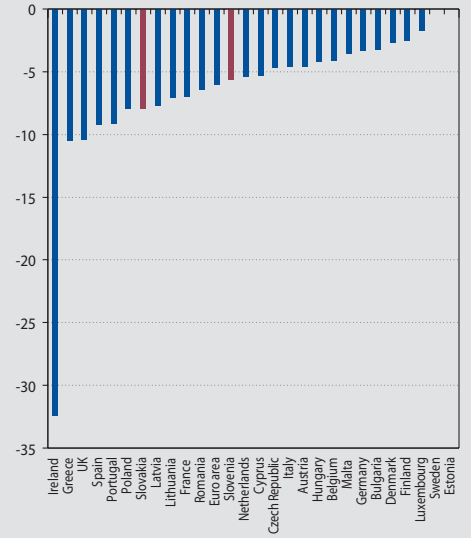
Source: Eurostat, US Federal Reserve.
Note: Rebalanced (average: 2007 = 100).
Seasonally adjusted.

Chart P8 Industrial new orders indices in selected economies



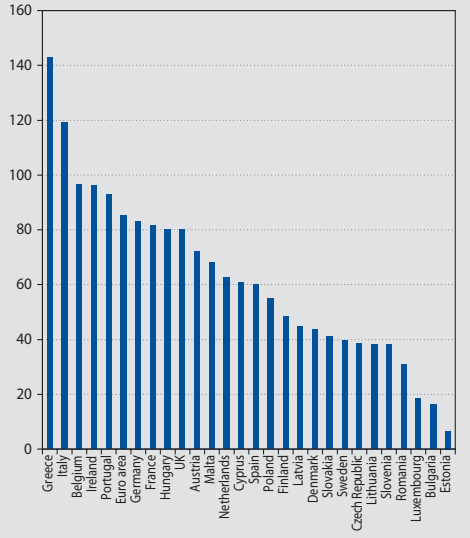
Source: Eurostat, US Department of Commerce.
Note: Rebalanced (average 2007 = 100).
Seasonally adjusted.

Chart P9 General government balances of EU countries in 2010



Source: Eurostat.
Note: Each balance is represented as a percentage share of GDP.

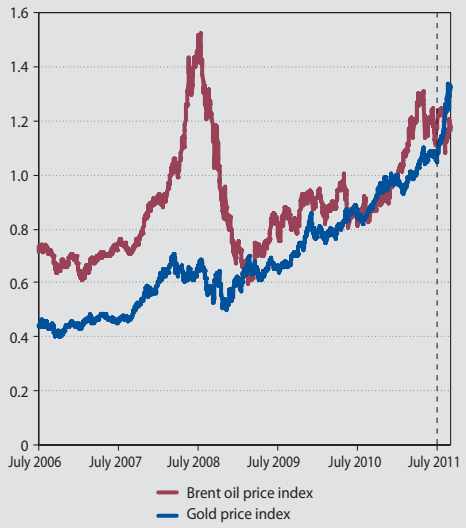
Chart P10 Gross government debt of EU countries in 2010



Source: Eurostat.
Note: Each gross debt represented as a percentage share of GDP.

FINANCIAL MARKET RISK INDICATORS

Chart P11 Price commodity indices (31.12.2010 = 1)

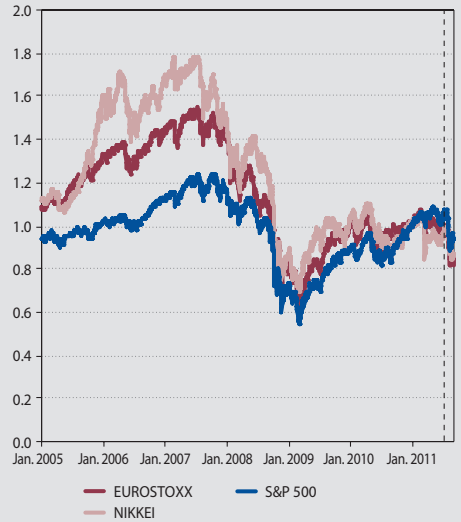


Source: Bloomberg, NBS calculations.

Chart P12 Exchange rate indices (31.12.2010 = 1)

Source: Bloomberg, NBS calculations.

Chart P13 Equity indices (31.12.2010 = 1)

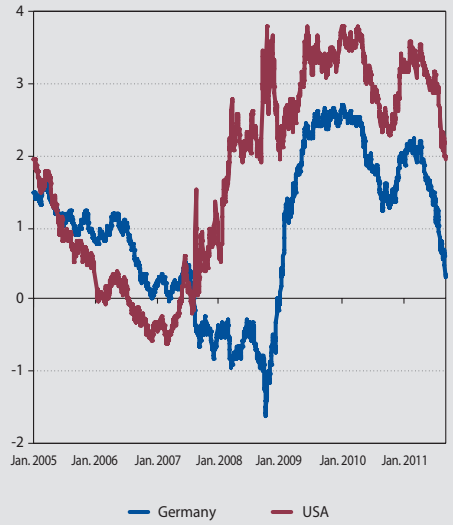


Source: Bloomberg, NBS calculations.

Chart P14 Share price indicies of the parent undertakings of the 5 largest domestic banks (31.12.2010 = 1)

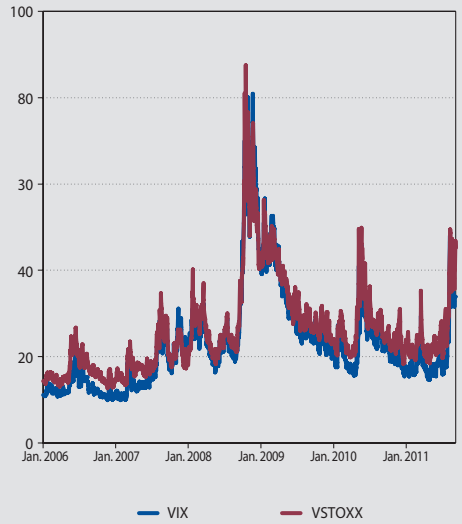
Source: Bloomberg, NBS calculations.

Chart P15 Steepness of the yield curve in selected economies



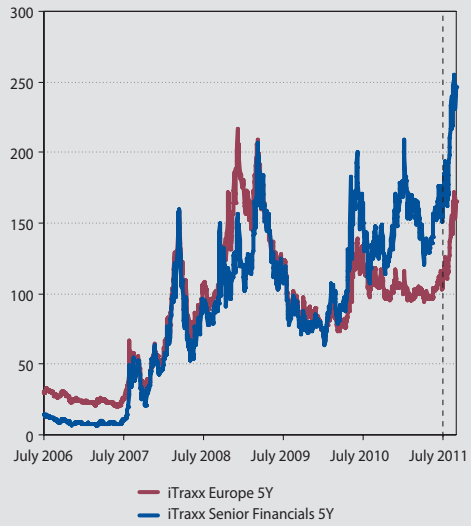
Source: Bloomberg, NBS calculations.
Note: The steepness of the yield curve is expressed as the difference between the yield to maturity on 10-year and 3-month government bonds.

Chart P16 Volatility of equity indicies



Source: Bloomberg.

Chart P17 CDS spread indices (b.p.)

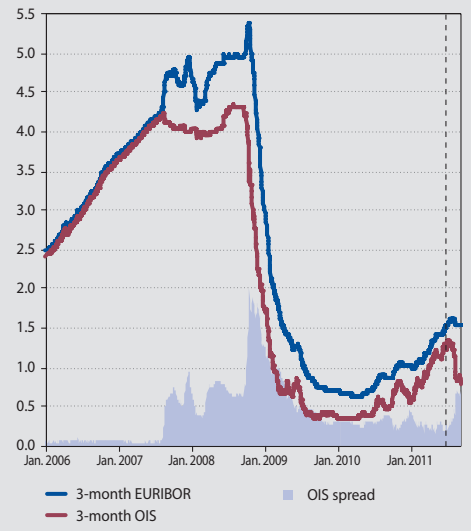


Source: Bloomberg, NBS calculations.

Chart P18 CDSs of the parent undertakings of the 5 largest Slovak banks (b.p.)

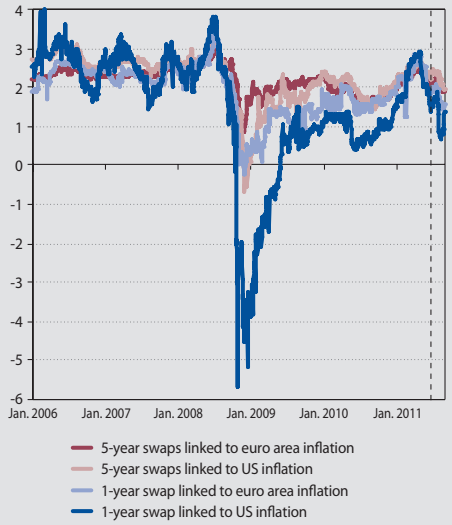
Source: Bloomberg, NBS calculations.

Chart P19 3-month rates and the OIS spread (% or p.p.)



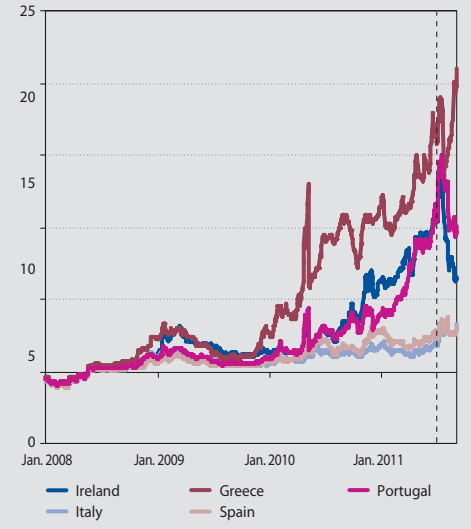
Source: Bloomberg, NBS calculations.

Chart P20 Inflation-linked swap prices



Source: Bloomberg, NBS calculations.
Note: The price of inflation-linked swaps is defined in the section Glossary and abbreviations.

Chart P21 Credit spreads on 5-year government bonds issued by countries under stress (p.p.)



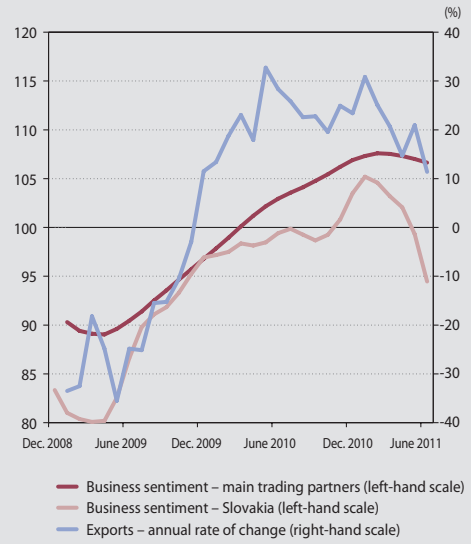
Source: Bloomberg, NBS calculations.
Note: The left-hand scale shows the yield difference between, on one hand, the 5-year bonds issued by each country and, on the other hand, the 5-year OIS rate, representing a 5-year interest rate with low credit risk.

Chart P22 Credit spreads on 5-year government bonds issued by selected central European countries and Germany

Source: Bloomberg, NBS calculations.
Note: The Chart shows the difference between, on one hand, the percentage yield on 5-year government bonds issued by each country in their domestic currency and, on the other hand, the 5-year swap rate for the respective currency.
Values are stated in percentage points.

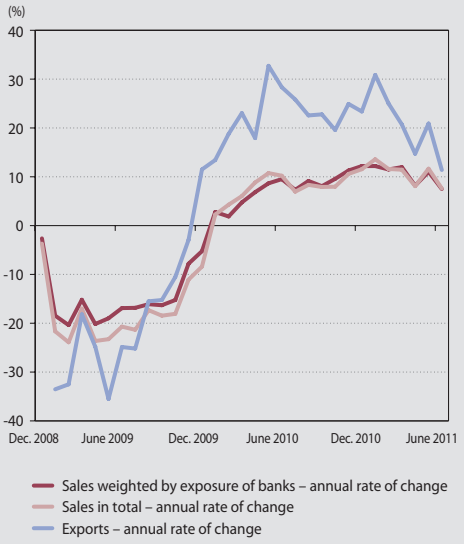
CORPORATE CREDIT RISK INDICATORS

Chart P23 Exports and the business environment



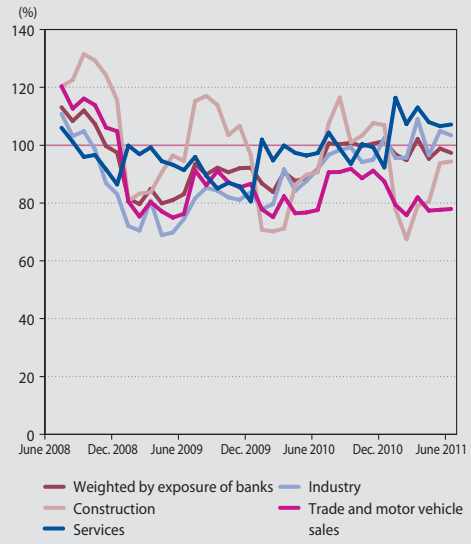
Source: NBS, OECD, SO SR.

Chart P24 Exports and corporate sales



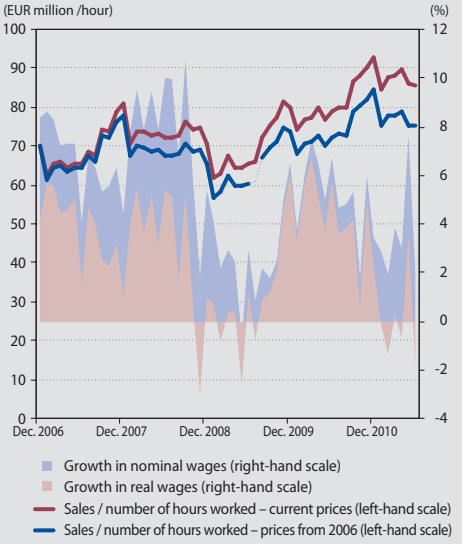
Source: SO SR, Ministry of Economy of the SR, OECD, NBS calculations.

Chart P25 Sales in selected sectors compared with their level for the period June 2007 to June 2008



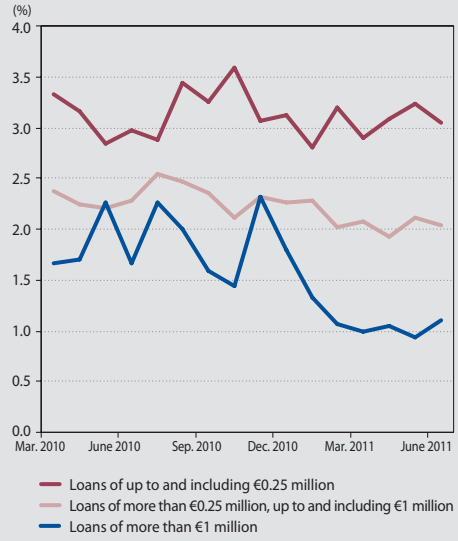
Source: SO SR.

Chart P26 Labour productivity and wages in industry



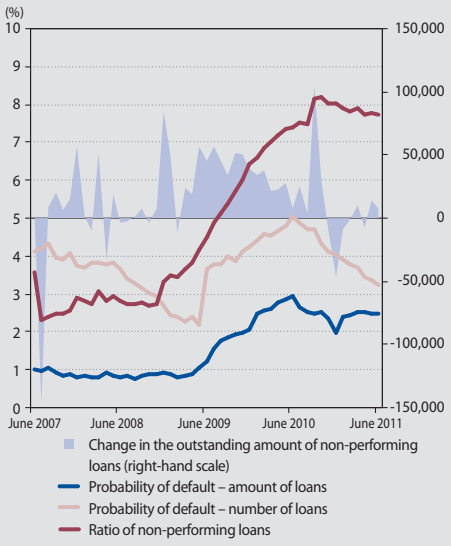
Source: NBS, SO SR, NBS calculations.

Chart P27 Interest rate spread on new loans to enterprises



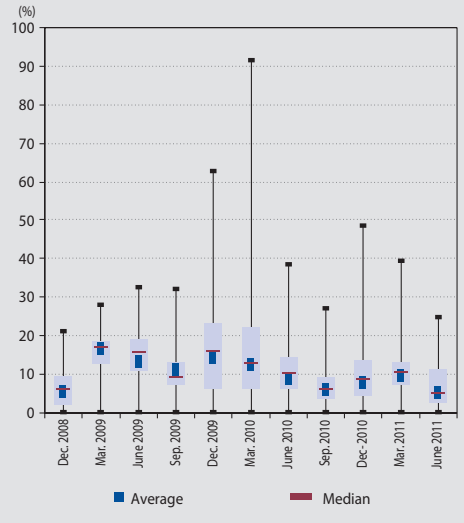
Source: NBS, EBF.
Note: The spread is defined as the difference between the monthly EURIBOR rate and the average rate on new loans in the respective category.

Chart P28 Non-performing loans and probabilities of default



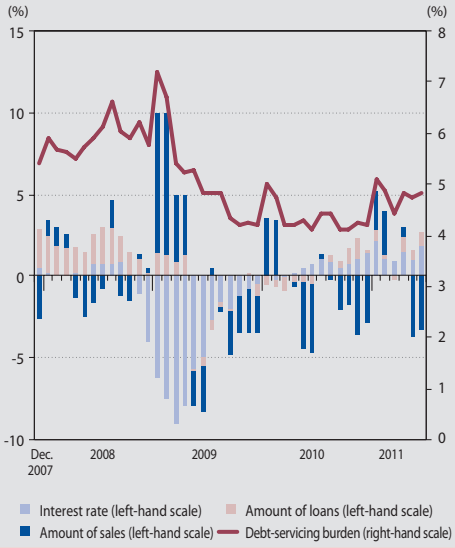
Source: NBS.

Chart P29 Loans at risk



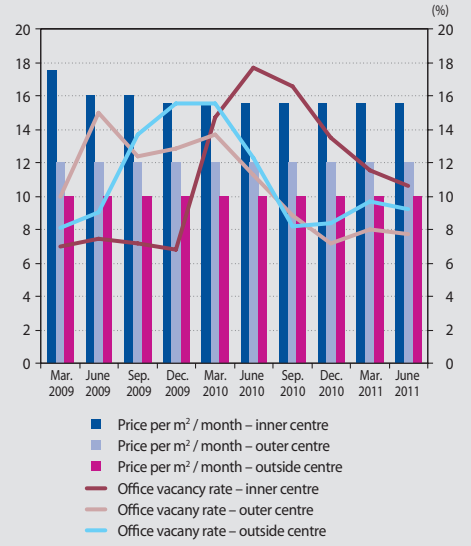
Source: NBS.

Chart P30 Debt-servicing burden – breakdown into components



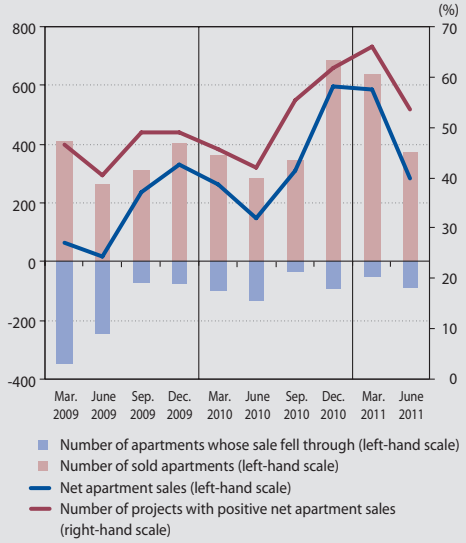
Source: NBS, SO SR.

Chart P31 Commercial real estate: prices and occupancy rates in the office segment



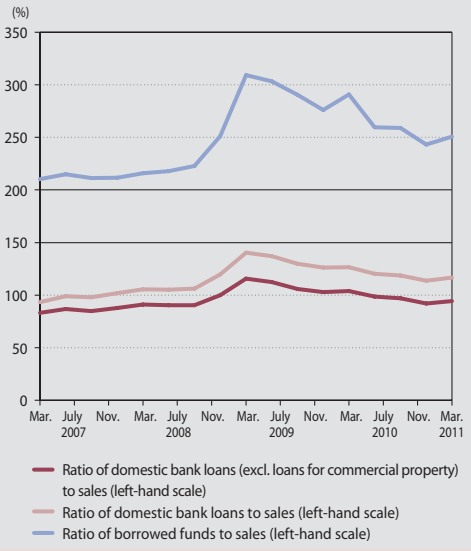
Source: CBRE, NBS calculations.
Note: The Chart plots prices and occupancy rates in Bratislava.

Chart P32 Residential real estate: sales



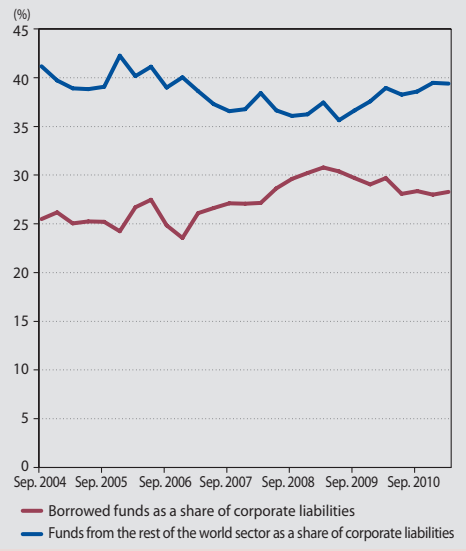
Source: Lexxus, NBS calculations.

Chart P33 Comparison of corporate balance sheets and sales



Source: NBS, SO SR.

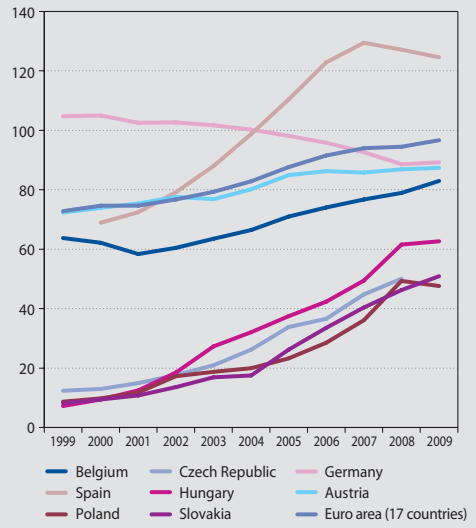
Chart P34 Liabilities of non-financial corporations by composition



Source: NBS.

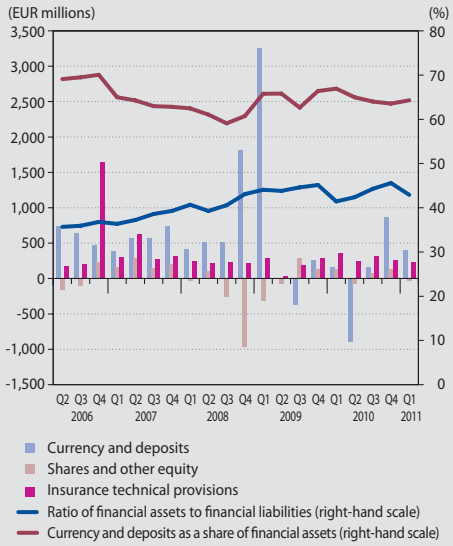
HOUSEHOLD CREDIT RISK INDICATORS

Chart P35 Household indebtedness in Slovakia and in selected countries – total debt to disposable income ratio (%)



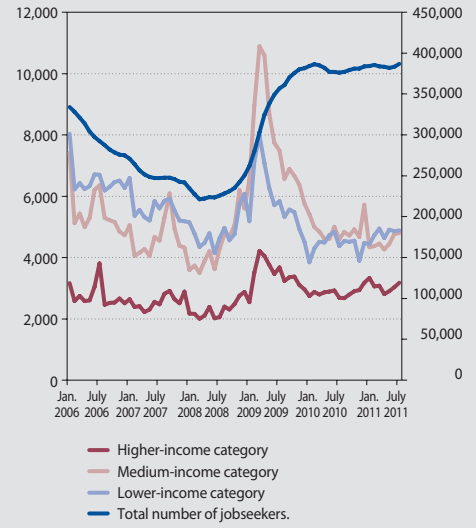
Source: Eurostat.

Chart P36 Changes in household financial assets



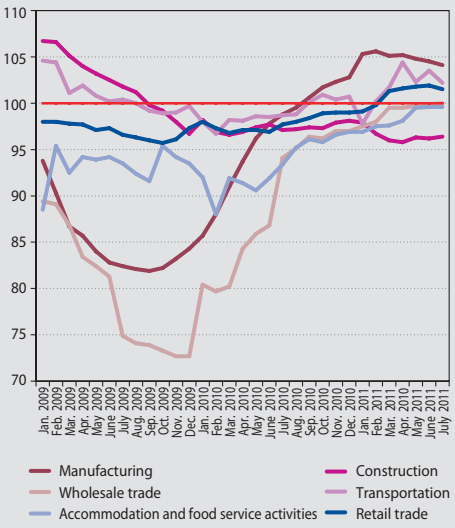
Source: NBS.
Note: Monthly changes are stated in EUR millions.

Chart P37 Changes in the number of unemployed by income category



Source: Central Office of Labour, Social Affairs and Family.
Note: Left-hand and right-hand scales: number of jobseekers. The income categories are defined in the section Glossary and abbreviations.

Chart P38 Index of employment in selected sectors

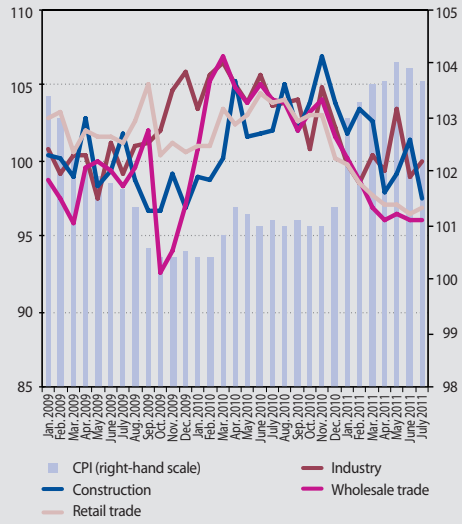


Source: SO SR.
Note: The index represents year-on-year changes.

Chart P39 Expected employment in selected sectors

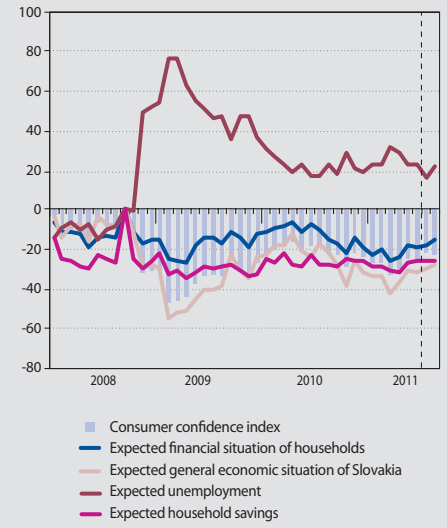
Source: SO SR.

Chart P40 Index of real wages in selected sectors



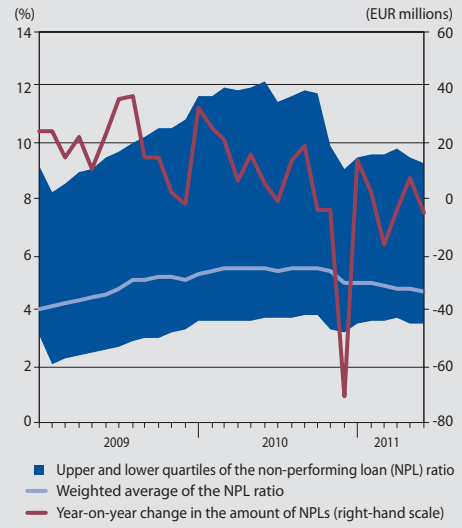
Source: SO SR.

Chart P41 The consumer confidence index and its components



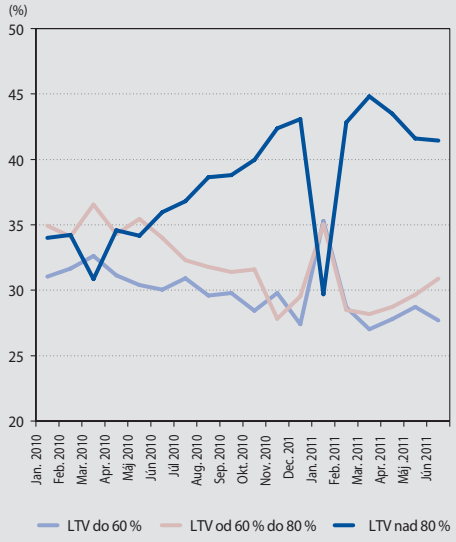
Source: SO SR.

Chart P42 Non-performing household loans



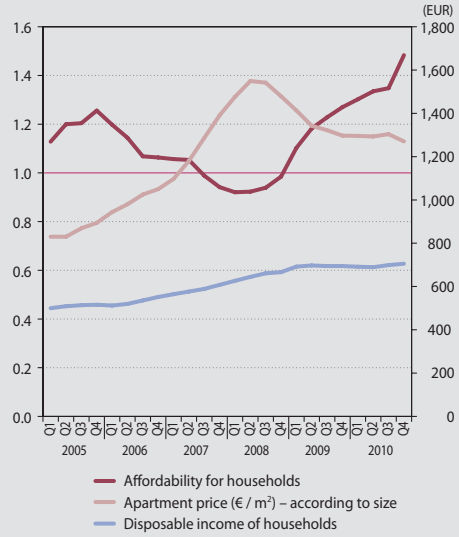
Source: NBS.
Note: Left-hand scale: ratio of non-performing household loans to total household loans.

Chart P43 Loan-to-value (LTV) ratio



Source: NBS.
Note: The ratio is defined in the sector Glossary and abbreviations.

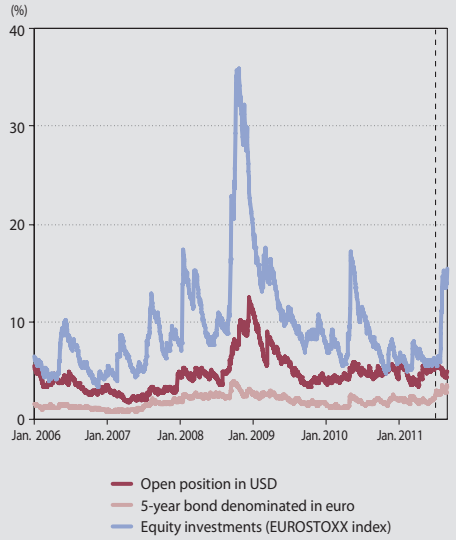
Chart P44 Housing affordability index



Source: NBS, SO SR.
Note: The household affordability index is defined in the section Glossary and abbreviations.

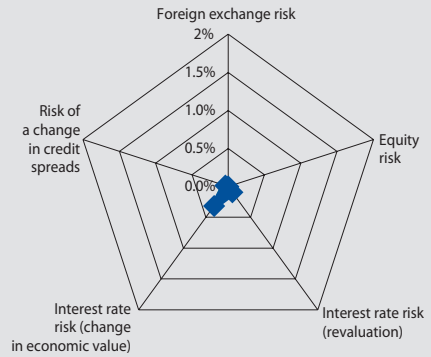
MARKET RISK AND LIQUIDITY RISK INDICATORS

Chart P45 Value at Risk for investments in different types of financial instrument



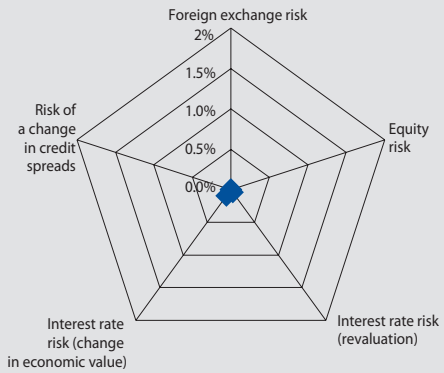
Source: Bloomberg, NBS calculations.
Notes: The data represent the highest loss (as a percentage of the given investment) that would be expected over a period of 10 days at a confidence level of 99%. This loss was determined on the basis of a risk factor volatility calculation, using exponentially weighted moving averages.

Chart P46 Sensitivity to different risk types in the banking sector



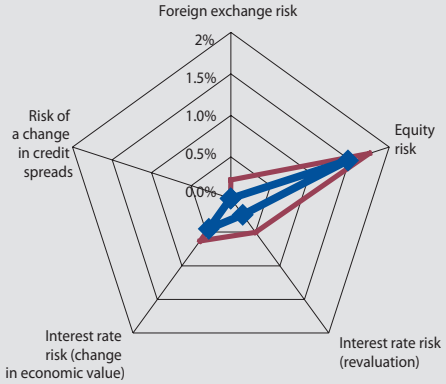
Source: Bloomberg, NBS calculations.
Notes: The data represent the loss (as a percentage of assets) under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section Glossary and abbreviations.

Chart P47 Sensitivity to different risk types in the sector of PFMC funds



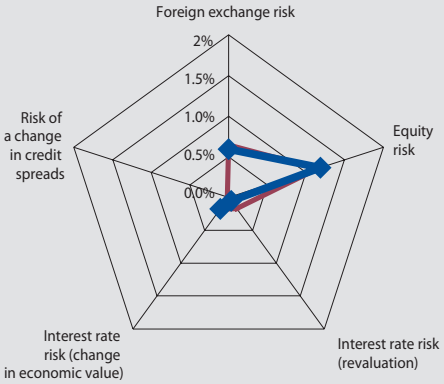
Source: Bloomberg, NBS calculations.
Notes: The data represent the loss (as a percentage of NAV) under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section Glossary and abbreviations.

Chart P48 Sensitivity to different risk types in the sector of SPMC funds



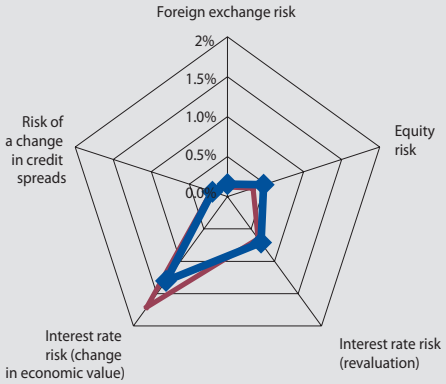
Source: Bloomberg, NBS calculations.
Notes: The data represent the loss (as a percentage of NAV) under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section Glossary and abbreviations. The blue line represents data as at 30 June 2011, the green line as at December 2010.

Chart P49 Sensitivity to different risk types in the collective investment sector



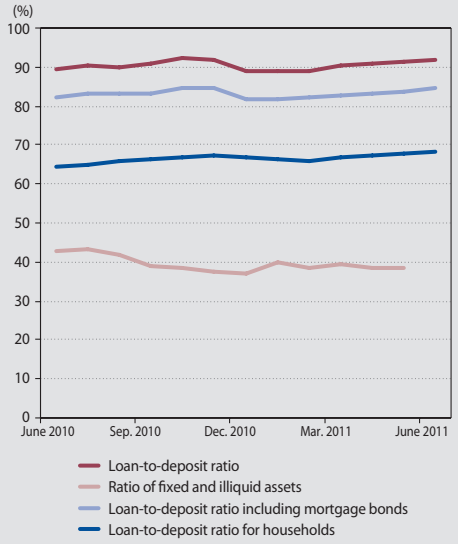
Source: Bloomberg, NBS calculations.
Notes: The data represent the loss (as a percentage of NAV) under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section Glossary and abbreviations. The blue line represents data as at 30 June 2011, the green line as at December 2010.

Chart P50 Sensitivity of insurers' assets to different risk types



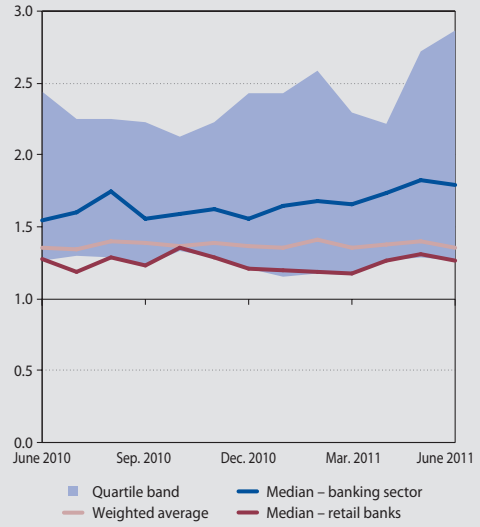
Source: Bloomberg, NBS calculations.
Notes: The data represent the percentage decline in the value of assets under each scenario of the sensitivity analysis. The sensitivity analysis is described in more detail in the section Glossary and abbreviations. The blue line represents data as at 30 June 2011, the green line as at December 2010.

Chart P51 Loan-to-deposit ratio



Source: NBS.

Chart P52 Liquid asset ratio



Source: NBS.

GLOSSARY AND ABBREVIATIONS

GLOSSARY OF TERMS USED

AFS portfolio – portfolio of assets available for sale.

Average annual return on pension funds – it is calculated as a weighted average of the annual percentage changes (APC) in the daily values (DV) of pension units of the respective pension funds. The annual percentage changes in the daily values of pension units are calculated as at 30 June 2011 (APCDVPU 30.6.2011) according to the following formula:

$$APCDVPU_{30.6.2011} = \left(\frac{PU_{30.6.2011}}{PU_{30.6.2010}} - 1 \right) * 100\%$$

where PU 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. As a rule, the return on various types of investment is calculated in nominal terms, 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 different pension funds reported to Národná banka Slovenska by pension fund management companies for the days 30 June 2010 and 30 June 2011, which are available on the website of Narodna banka Slovenska.

Average return of market rivals – the average of the moving averages of the following: the annual percentage changes in the daily pension unit values of a pension fund's market rivals, calculated for the previous 24 months and rounded up to 2 decimal places.

Average return on a pension fund of a pension fund management company – the moving average of the following: the annual percentage changes in the daily pension unit values of a pension fund, calculated for the previous 24 months and rounded up to two decimal places.

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

CLI index – an index of the weighted average of composite leading indicators for selected countries, with each country weighted according to its share of Slovak exports. Published by the OECD, the CLI is a composite indicator of changes in economic activity.

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

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

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

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

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

Deleveraging – the process of reducing the share of borrowed funds, or increasing the share of own funds (capital), in a balance sheet.

Emerging markets – developing markets undergoing rapid growth and industrialisation.

Enterprises – non-financial corporations.

ESI (Economic Sentiment Indicator) – an indicator of economic sentiment produced by the European Commission.

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

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.

Household disposable income – it 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 education contributions), plus components of the gross income at the household level (income from rented assets or land, family benefits and contributions paid to families with children, social exclusion not classified elsewhere, housing benefits, 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).

Household income categories – a categorisation based on the KZAM employment classification and KZAM income data; it consists of three categories: *higher-income category (income of over €800 per month)* – legislators, senior officials and managers, scientists, professionals, technicians, health professionals, and teaching professionals; *middle-income category (income between €600 and €800 per month)* – office workers, craft and skilled workers, processors, and plant and machinery operators; *lower-income group (income of up to €600)* – service and retail workers, agricultural and forestry workers, auxiliary and unskilled workers.

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

Housing affordability index – an index representing the ratio of disposable income to loan instalments. The calculation of disposable income takes into account the average wage and average expenditure of households; the calculation of the instalment amount takes into account the average apartment price, average interest rate, average maturity, and a constant LTV ratio (75%). The calculation methodology for the housing affordability index is set out in the following paper: Rychtárik, Š., Krčmár, M. (2011), "Vývoj na trhu úverov na bývanie a jeho interpretácia" (Developments in the housing loan market and their interpretation), *Nehnuteľnosti a bývanie (Real Estate and Housing),* Vol. no 2, Bratislava, 2010.

HTM portfolio – portfolio of assets held to maturity.

Inflation-linked swaps – swap transactions in which one counterparty pays a fixed rate (a swap price) and the other pays a rate corresponding to the return on a selected price index (e.g. the euro area

HICP or the US consumer price index). The inflation-linked swap price is calculated on a non-coupon basis (i.e., both payments are made when the swap matures).

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

iTraxx index – an index of credit default swaps.

Liquid asset ratio – the ratio of liquid assets to volatile liabilities over a horizon of one month. Its level should not fall below 1.

Loans at risk (LAR) – an indicator of corporate credit risk that measures the share of corporate loans provided to enterprises whose financial position has sharply deteriorated. LAR represents the share of total corporate loans that comprises loans to enterprise which in the given period have reported a net loss and a drop in sales of more than 30%. The reference period is from July 2007 to June 2008.

Loan-to-deposit ratio – the ratio of loans to customers and the sum of retail deposits, deposits of enterprises, deposits of 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 balance-sheet / off-balance sheet position – the difference between foreign exchange assets and liabilities in the balance sheet / off-balance sheet.

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 – a figure 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 – loans are non-performing when the bank finds that they have lost more than 50% of their value or that the borrower is in arrears with payment by more than 90 days.

Open position for up to 3 months – the difference between, on one hand, the sum of claims against customers and debt securities issued by banks and enterprises which have a residual maturity of up to 3 months, and, on the other hand, the sum of liabilities towards customers and issued securities which have a residual maturity of up to 3 months.

PMI (Purchasing Managers' Index) – an indicator of the economic health of the manufacturing and/or services sectors: an index value of more than 50 represents expansion, while a value of below 50 represents contraction.

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

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

Sensitivity analysis – an analysis of sensitivity which includes four scenarios as follows: share prices declining by 10%; other currencies weakening against the euro by 5%; interest rates increasing in parallel by 0.3 percentage point; and credit spreads on bonds issued by Greece, Portugal, Ireland, Spain and Italy widening by 2 percentage points. In the case of interest rate risk, the impact on the revaluation of instruments valued at fair value is calculated, as is the impact on the economic value that represents the revaluation of all financial instruments. Individual risk types include also indirect risks that institutions are exposed to by virtue of their investments in mutual fund shares/units. The calculation of these indirect risks was based on the mapping of the different types of fund units/shares into the set of risk factors.

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

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

Unit-linked provision – a technical provision created for life insurance business involving investment into funds falling into A4 insurance line.

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

ZEW survey – a survey of economic sentiment conducted by Zentrum für Europäische Wirtschaftsforschung (Centre for European Economic Research), a private economic research institute based in Germany.

ABBREVIATIONS

APCDVPU	annual percentage change in daily values of pension units
BF	balanced funds
b.p.	basis point
CAR	capital adequacy ratio
CF	conservative fund
CI	collective investment
CLI	composite leading indicator
CR n	index of the concentration of the n largest banks
CZK	Czech koruna
ECB	European Central Bank
EIB	European Investment Bank
ECJ	European Court of Justice
ETF	exchange-traded funds
EU	European Union
EUR	euro
EURIBOR	Euro Interbank Offered Rate
GDP	gross domestic product
GF	growth funds
HHI	Herfindahl index
IRB	Internal Rating Based (approach)
KZAM	klasifikácia zamestnaní / employment classification
LAR	loans at risk
LGD	loss given default
LTRO	long-term refinancing operations
LTV	loan-to-value (ratio)
MB	mortgage bond
MV	motor vehicle (insurance)
SO SR	Statistical Office of the Slovak Republic

LIST OF CHARTS AND TABLES

List of charts

CHARTS IN BOXES

MACROPRUDENTIAL INDICATORS OF THE FINANCIAL SECTOR

List of tables