NÁRODNÁ BANKA SLOVENSKA
EUROSYSTÉM

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Contents

Foreword

The financial sector is deemed to be stable when it is able to smoothly fulfil its core functions, even amid substantial adverse shocks in the external or domestic economic and financial environment. At the same time, financial sector stability is perceived as a necessary condition for sound functioning of the real economy. Národná banka Slovenska (NBS) contributes to the stability of the whole financial system in Slovakia, in particular through its role as the financial market supervisory authority.

Národná banka Slovenska believes that an important aspect of its contribution to financial stability is to keep the public regularly informed about financial sector stability and about any trends which could jeopardise that stability. Awareness and discussion of such issues is essential, particularly since financial stability is affected not only by financial sector institutions, but also by the behaviour of other non-financial corporations and individuals. Hence NBS publishes a biannual *Financial Stability Report* (FSR) that primarily identifies the main risks to the stability of the Slovak financial sector.

The aim of the FSR is to provide clear and easy to follow information about the development of factors affecting financial stability in Slovakia, with particular attention paid to the most significant risks to stability. The FSR includes a section on the implementation of macroprudential policy in Slovakia.

A complementary detailed overview of developments and risks in the Slovak financial sector is provided by NBS in an annual publication entitled *Analysis of the Slovak Financial Sector*.

Executive summary

Financial stability was favourably affected by economic developments in both the external environment and domestic economy

As regards the external environment, advanced economies experienced moderate improvement during 2015. This upturn was a significant factor behind favourable trends in the domestic economy. The Slovak economy's growth of 3.1% in the second quarter of 2015 was strong in international comparison and was driven by all domestic components of GDP. The labour market also picked up, with unemployment falling and real wages increasing. The improving financial situation of firms was supported by continuing growth in the corporate sector's sales.

Future developments may be affected by several risks

Although the above-mentioned trends helped strengthen stability in the Slovak financial sector, their future progress is subject to several risks, some of which have recently become more marked. The principal deteriorating risks at the global level is that the growth of emerging market economies, in particular China, continues to slow. This risk is exacerbated by the build-up of imbalances that these countries have experienced over recent years. This period was associated with high private-sector debt growth, the formation of asset price bubbles, and the overvaluation of domestic currencies.

Furthermore, the improved developments in the euro area have been largely the result of factors that can only be considered temporary. These primarily include the easing of the ECB's monetary policy stance, the slump in oil prices, and the depreciation of the euro's exchange rate. What is more, the upward impact of these impulses on the euro area economy was less than had originally been expected.

Global financial markets endured a period of increased volatility (owing mainly to developments in Greece and China). The risk that prices of riskier assets will decline suddenly and simultaneously is increasing and it is being accentuated by falling liquidity in financial markets. As for the fiscal sphere, debt is rising in several EU countries despite efforts to consolidate public finances.

One trend that is particularly significant for financial stability is the continuing and relatively strong growth in retail loans

As of September 2015, the stock of housing loans was 13.8% higher year-on-year, while consumer loans, despite a certain slowdown in their growth during the third quarter, had increased by 17%. This growth was supported by several factors, including the further reduction of interest rates, the continuing strength of competition, rising disposable income, falling unemployment, and the property market. The year-on-year increase in the volume of housing loans was an all-time high, even though property prices were more than one-quarter lower than their historical peak.

At the same time, however, several measures and trends moderated the risks related to rapid retail loan growth. The NBS recommendations implemented in March 2015 encouraged a prudent approach to lending. Banks curbed the provision of loans with unduly long maturities, reduced the proportion of loans with high LTV ratios, and improved the assessment of borrowers' ability to repay loans. In order to make these recommendations more effective, they are due to be enacted directly in law during the course of 2016. The non-performing loan ratio did not increase during the period under review, while the volume of loans past due maintained its downward trend.

In terms of financial stability, the most significant impact of retail loan growth is the increase in indebtedness and its effect on the property market

Another corollary of strong retail loan growth is an increase in household indebtedness, which has climbed far above the average for central and eastern European countries. The household debt-to-income ratio is increasing faster in Slovakia than in any other EU country. Hence there is a need to raise the financial literacy of households. Loans must not be provided or increased simply in response to a customer's impulsive decision, made without full consideration of the contractual terms and conditions of the loan or

the risks related to it. This applies particularly to consumer loans, which unlike mortgage loans are provided even to customers that have low income and little wealth.

The average increase in property prices across all Slovak regions during the first three quarters of 2015 was 6.9% year-on-year. Sales in both the primary and secondary market are accelerating, and the share of unfinished flats in total sales is rising. Furthermore, housing affordability is dependent to a large extent on low interest rates, which in turn may give rise to overly optimistic assessments of borrowers' ability to repay loans. On the other hand, given household income levels, property prices are not excessive.

By international standards, too, there are several risk factors related to specificities of the Slovak property market. These include in particular extremely high property-price volatility, low liquidity, the highest concentration of banks in this business segment, and relatively high LTV ratios for new loans.

Given the significance of retail loan growth, increasing household debt and property price movements, NBS is carefully monitoring a wide spectrum of indicators related to the above-mentioned developments. As regards lending conditions, NBS takes the view that the recommendations it adopted in 2014 will, after their enactment in law, be sufficient. Nevertheless, there are increasing indications that the countercyclical capital buffer rate may need to be raised above its zero level.

The corporate credit market is reflecting favourable economic developments

As the financial situation of firms improved in 2015, so demand for corporate loans increased. In addition, banks moderately eased lending conditions, partly in response to stronger competition among lenders. There was also an improvement in the credit quality of the corporate loan portfolio, across a spectrum of sectors. The most marked improvement was in lending to small and medium-sized enterprises (SMEs), one of the main reasons being the period of low interest rates, which in 2015 resulted in a significant drop in rates on new loans for SMEs. Lending to the commercial property sector also accelerated, with the pick-up driven by both the supply and demand factors. It should be noted, however, that corporate sector indebtedness increased in 2013 and 2014, when there was no growth in bank lending to firms, with the main alternative sources of corporate funding being bond issuance and inter-company loans.

One of the most significant risks to the stability of the Slovak financial sector is the protracted period of low interest rates

Short-term interest rates in the euro area fell to historical lows in 2015, as did long-term rates and risk premia. As a result there was a greater likelihood that certain risks would be underestimated, i.e. that riskier assets would be overvalued, and the scope for risk diversification decreased. This development stemmed not only from cyclical factors, but also structural factors (including demographic trends), which further underlines the long-term nature of the impact of low-interest rates on financial stability. This impact is appearing in several ways, specifically: the shifting of credit risk and liquidity risk to non-bank segments of the financial market (in particular investment funds), downward pressure on customers' profits and investment returns, and an increase in the concentration of investments in riskier assets. Every segment of the financial market increased its aggregate profit, year-on-year, in 2015, but this trend is not expected to be maintained in the future. Banks are already seeing a fall in interest-rate margins, although so far they have been able to offset it with, in particular, increased lending and lower credit risk costs. At the same time, however, banks' own funds are sufficient to make the sector resilient to potential interest rate risks or other future risks.

The sector that is most exposed to the impact of prolonged low interest rates is insurance. Insurers are exposed to a heightened risk that they will not be able to earn the investment returns required to meet the returns guaranteed in standard life insurance contracts. The risks in the insurance sector are, however, mitigated by the fact that the sector in Slovakia is relatively stable by international standards. This stability is based mainly on the fact that the sector's capital position is sufficient (and not expected to deteriorate significantly with the migration to Solvency II), that its investment strategies remain relatively conservative, and that the duration mismatch between assets and liabilities is not too large. On

the other hand, the level of guaranteed returns in life insurance is among the highest. The current situation therefore requires a cautious approach by insurers, particularly in regard to the level of dividend payments.

Ongoing and expected regulatory changes are also affecting financial stability

One of the most significant changes is the implementation of the Solvency II regime from 1 January 2016, which will have a major impact on the insurance sector. Under the new regime, in comparison with the previous one, the risk capital requirement is being increased, particularly in respect of the market risk, and a diversification effect is being implemented. But although an increase in insurers' own funds due to declining technical provisions can be expected, the result will be a narrowing of the solvency margin.

As regards the regulatory regime for banks, a new methodology has entered into force for calculating the internal capital required to cover interest rate risk in the banking book. In the longer term, significant changes are expected in the capital requirement calculation methodology employed by banks that use the standardised approach. Furthermore, the exemptions that shelter government bonds from the majority of regulatory rules are likely to be whittled down. In order to optimise the long-term sources of banks' funding, a discussion is now taking place on how to improve national legislation in the area of mortgage bonds.

Table 1 Overview of the most significant risks to the stability of the Slovak financial sector

	Area	Risk	Risk-amplifying factors	Risk-mitigating factors	NBS's regulatory measures and recommendations
Risks arising from the external environment	Macroeconomic developments in the domestic economy and the euro area	Increase in credit risk costs in the event of adverse macroeconomic developments	Slowing growth and risks of further developments in emerging market economies, especially China	Relatively high solvency in the banking and insurance sectors Favourable developments in the domestic economy, including increasing domestic consumption and corporate sales Falling oil prices The downward impact of low interest rates on loan repayments Falling credit risk costs in both the retail and corporate sector during 2015	The capital conservation buffer was implemented in full from 1 October 2014 For systemically important banks, an additional capital buffer will be phased in between 2016 and 2018
		Higher sensitivity of banks to a downturn in the property market in the event of a worsening economic situation	Rising property prices in all regions Accelerating sales in both the primary and secondary markets, and an increasing share of unfinished flats in total sales Certain specific structural aspects of the Slovak property market – extremely high property-price volatility, low liquidity, the banking sector's relatively high concentration in this market, and the relatively high LTV ratios for new loans	Property prices not excessive in the context of household income levels Drop in new housing loans with a LTV ratio of more than 90% following implementation of the NBS recommendation	Recommendation A (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 November 2014 and due to be enacted in law in the first half of 2016

Table 1 Overview of the most significant risks to the stability of the Slovak financial sector (continued)

	Area	Risk	Risk-amplifying factors	Risk-mitigating factors	NBS's regulatory measures and recommendations
Risks arising from the external environment	Low interest rates and impact of monetary policy easing	Negative impact on the business model of banks and insurers; decrease in interest rates (including long-term rates) putting gradual downward pressure on profits over the long-term horizon	Banks: gradually diminishing potential for further household lending growth (owing to rapidly rising indebtedness) and falling interest margins Insurers: further widening of the gap between returns on assets covering technical provisions and the technical interest rate, and one of the EU's highest levels of guaranteed returns under life insurance contracts Risk arising from negative interest rates on deposits or loans – crucial impact on banks' business strategy Increasing negative impact of low interest rate environment on banks' exacerbated by new contribution obligations (ECB, SRM, DPF) and restrictions on fee income	Long durations causing rates of return on banks' bond portfolios to fall far more slowly than market rates Potential boost to banks' profits from gradual revival in corporate borrowing	The Solvency II regime for the insurance sector will enter into force from 1 January 2016 and should lead to a significant increase in the risk capital requirement, but not to a marked drop in the solvency margin. Insurers whose solvency ratio turns out to be low should, however, reconsider dividend payments and should strengthen their solvency
		Formation of price bubbles in riskier assets; increasing potential impact on financial markets in the event that central banks unwind their operations	Risk of a sudden and simultaneous fall in prices of riskier assets increased by combination of declines in short- and long-term interest rates and in risk premia Risk further exacerbated by falling liquidity in financial markets Scope for effective risk diversification being reduced by rising correlation between different asset classes	Relatively low exposure of domestic financial institutions to emerging market economies where impact could be most pronounced; nevertheless, increases observed in portfolio durations and in the share of riskier assets in investment funds and pensions funds	
		Temporary increase in government bond prices resulting in overvaluation of liquidity ratios and capital ratios.			Banks are recommended to treat such increase in the ratios as temporary and to be prepared for their downward adjustment
	Regulatory environment	Risk arising from the implementation of the minimum requirement for own funds and eligible liabilities (MREL)	Continuing uncertainty about how the MREL is to be determined and concerns about insufficient attuning to the specificities of banking sectors funded primarily by customer deposits	High amount of CET1 capital	

Table 1 Overview of the most significant risks to the stability of the Slovak financial sector (continued)

	Area	Risk	Risk-amplifying factors	Risk-mitigating factors	NBS's regulatory measures and recommendations
Risks arising from the domestic financial market	Household indebtedness	The household sector becoming weakened by its increasing indebtedness and consequently increasing the banking sector's sensitivity to a potential deterioration in the macroeconomic situation	Increasing concentration of debt among certain types of household, mainly owing to the trend to take on additional debt as a result of refinancing	The implementation of NBS recommendations led to tightening of banks' credit standards, including for refinancing that involves increasing the debt burden	Recommendation F (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015 and due to be enacted in law in 2016
			Household debt-to-income ratio rising faster in Slovakia than in any other EU country	Labour market recovery, real wage growth and increasing household consumption	Recommendations B and E (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015 and due to be enacted in law in 2016 There are increasing indications that the countercyclical capital buffer rate may need to be raised above its zero level
			Low interest rates giving rise to overly optimistic assessments of households' repayment ability	Potential adverse effects of a future increase in interest rates for borrowers being mitigated by increase in interest rate fixations	Recommendation C (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015 and due to be enacted in law in 2016
	Liquidity	Maturity mismatch between assets and liabilities	Widening mismatch between assets and liabilities and a slight decline in liquidity buffers	Adherence to minimal regulatory limit for liquid assets; sound funding structure	Amendment of the liquid asset ratio from 1 December 2014. These requirements for the ratio of liquid assets to net outflows are stricter than the rules adopted at the European level The ratio also takes into account the potential spread of risk to investment funds A discussion is taking place about the comprehensive revision of national laws in the area of mortgage bonds, with the aim of making them more effective as a source of long-term funding for banks

Table 1 Overview of the most significant risks to the stability of the Slovak financial sector (continued)

	Area	Risk	Risk-amplifying factors	Risk-mitigating factors	NBS's regulatory measures and recommendations
Risks arising from the domestic financial market	Risks of concentration, financial market interlinkages and contagion	Relatively high concentration in (part of) the portfolio, or higher intra-group exposure, in certain institutions or funds	The Slovak economy includes a relatively high degree of economic links between domestic firms; the largest of them could pose a risk to the solvency of certain banks		Banks should take a prudential approach to assessing economic links between customers and to the management of concentration risk in both their lending and deposit business For the five largest banks, owing to their systemic importance, a capital buffer will be phased in between 2016 and 2018
		Negative consequences of rationalisation measures or strategic decisions implemented in domestic financial institutions by parent undertakings, and contagion risk	Weakened financial position of several parent undertakings of Slovak banks, owing partly to geopolitical risks Direct negative impact on banks in Slovakia owing to capital and credit linkages between parent undertakings and subsidiaries	Cost-to-income ratios of domestic banks (especially large ones) still above the EU average	In the case of certain medium-sized and smaller banks which report the highest risk of intra-group contagion and which were permitted a more moderate large exposure limit, this limit is being gradually tightened
	Market practices of financial institutions	Potential strategic risk from increasing linkages between financial undertakings and financial intermediaries	Pressure on banks to ease credit standards beyond prudential limits		Recommendation G (NBS Recommendation No 1/2014 of 7 October 2014), effective from 1 March 2015 and due to be enacted in law in 2016
		Risks arising from intensive price competition in the motor insurance market	Although there is still a risk that the level of premiums in motor insurance will not be sufficient to cover all legitimate claims, the situation in this area stabilised in the first half of 2015		Price competition in motor insurance should not impinge on the due payment of legitimate insurance claims

Source: NBS.

CHAPTER 1

EXTERNAL CONDITIONS FOR FINANCIAL STABILITY

1

1 EXTERNAL CONDITIONS FOR FINANCIAL STABILITY

From a global perspective, advanced economies have experienced a slight improvement so far in 2015, and this trend is expected to support a strengthening of financial stability. For emerging market economies, with China at the forefront, it has been a different story, as decelerating economic growth reveals their accumulated imbalances and increasing vulnerability. This shift of risks from advanced to emerging economies has in recent months been accompanied by the emergence of heightened volatility in financial markets.

MODERATE IMPROVEMENT IN THE EURO AREA'S MACROECONOMIC SITUATION SUPPORTED BY FURTHER EASING OF MONETARY POLICY, FALLING OIL PRICES, AND DEPRECIATION OF THE EURO'S EXCHANGE RATE

The euro area economy continued its slow recovery. The ECB forecasts that the euro area's annual GDP growth in 2015 will be 1.4%, up from only 0.9% in 2014. On the positive side, activity is picking up in most euro area countries, and among the fastest growing economies are those that were previously hardest-hit by the recession.

The recent cyclical recovery may have been driven by several exogenous impulses. One of them was the slump in oil prices, which had a dampening effect on prices of many goods and services. This contributed significantly to an increase in household disposable income, which in turn supported an increase in final consumption.

A key factor in the euro area's macroeconomic developments was the ECB's decision in early 2015 to extend the easing of monetary policy by introducing an expanded asset purchase programme (also known as quantitative easing), and the subsequent implementation of that decision. The impact of this measure on activity can be observed in several dimensions. First, the fulfilment of expectations that the central bank would resort to this unconventional measure greatly calmed fears of an exceptionally adverse deflationary scenario. The consequent improvement in sentiment among domestic economic agents had an important impact on the demand-side of the economy. The second channel through which quantitative easing (QE) helped boost performance was the increase in the euro area's price competitiveness in international trade and the resulting increase in exports. Even though the liquidity that the expanded asset purchase programme will bring to the economy is not primarily intended to influence the euro's exchange rate, it had the side-effect of weakening the euro against the currencies of most of the principal trading partners, thereby making domestic exports more competitively priced. The depreciation of the euro occurred largely before the actual announcement of the ECB's decision, since market participants had seen the step as inevitable.

It is furthermore clear from the results of the ECB's bank lending survey that QE underpinned the recent increase in lending activity in the euro area. The year-on-year change in the outstanding amount of loans to the private sector turned

Chart 1 The EUR/USD exchange rate and oil price (in USD)

Source: Bloomberg.

positive at the beginning of 2015 after a long period in negative territory. Of particular note was the turnaround in lending to firms, which was supported on the supply side by a gradual easing of credit standards. The greater availability of loans for firms was essential to the increase in investment demand. In the case of consumer loans, households, too, faced less restrictive conditions. At the same time, however, improved loan conditions, including low interest rates, were reflected in rising demand for loans across all segments.

Euro area economic growth was also reflected in improvements in the labour market situation. As there was net job creation, euro area employment increased, year-on-year, in the first half of 2015, by 1.1%, while the unemployment rate fell to 11%, bringing the number of unemployed to around 17.5 million people. The impact on wages was to increase their annual growth rate.

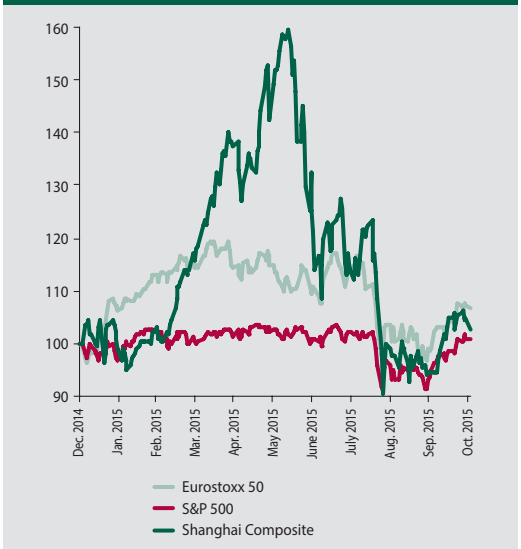
Despite these favourable developments, the euro area remains relatively vulnerable in economic and financial respects. The current recovery is fairly sluggish in comparison both with similar episodes in the past and with current developments in other advanced economies. Economic performance is also underwhelming in the light of the favourable factors mentioned above, whose conjunction should have resulted in a more robust GDP growth trend. The stimulus that these impulses gave the euro area economy was less substantial than had originally been expected. The positive impact of the monetary policy stance and low oil prices was to some extent offset by slower growth of the global economy. This statement is underlined by the stagnation of quarter-on-quarter GDP growth during 2015. It should be further noted that the impact of the growth-supporting shocks of euro depreciation and falling oil prices will gradually fade. With the global economy decelerating, it also appears that the contribution of external demand to euro area growth will be less than originally projected. Hence euro area growth is not expected to take a significant upturn in the near term. Given this situation and the renewed decline in inflation expectations, the ECB sent signals that it will re-examine the degree of monetary policy accommodation.

Return of heightened volatility in global financial markets coupled with corrections of certain asset prices; continuing high risk of a further repricing of risk premia

Global financial markets have in recent months experienced several bouts of elevated volatility. The renewed threat that Greece may suddenly exit the euro area and the imposition of capital controls in that country stoked investor unease at the turn of June and July, especially in Europe. Yields to maturity on ten-year Greek bonds climbed into double digits, and the credit spreads of former euro area programme countries also increased temporarily. The situation gradually calmed during the second half of the summer, since, with the exception of Greece itself, the euro area had not experienced any significant repercussions.

The previously soaring Chinese stock markets began falling from the beginning of June 2015, and it was mainly the second wave of their slump, from mid-August, that dragged down other stock markets across the world. Many bourses saw up to a tenth of their mar-

Chart 2 Performance of main global equity indices



Source: Bloomberg.
Note: Rebalanced: 31 December 2014 = 100.

ket capitalisation wiped out within a few days. In China, equity indices fell by more than 40% from their cyclical peak. The slump in asset prices and sudden increase in volatility spread to other segments of the financial market, especially those with relatively higher risk. The period under review also saw increased fluctuations in exchange rates, while prices of a broad range of commodities, not just oil, corrected sharply downwards.

Although the fall in many asset prices since May 2015 is partly attributable to rising risk premia, the possibility of further asset repricing remains among the main risks to financial stability, and not only in the euro area. The exceptional monetary policy accommodation observed across most of the advanced world in recent years stimulated demand for higher-yielding assets. With central banks' QE programmes having soaked up the highest-quality assets from the market, private sector portfolios focused on securities with higher credit risk, longer maturities and more restricted liquidity. The result was risk premia being compressed to historical lows. This was accompanied by a decrease in investor discrimination according to the fundamental value of assets, which in certain cases led to overvaluation and, overall, to stronger correlations across asset prices. Risk appetite was to a large extent simply mirroring expectations for future monetary policy developments and was kept elevated by the assurance of low interest rates over the long term. This feature of financial markets is, however, reducing their ability to adjust to incoming shocks and increases the likelihood of a sudden, sharp and simultaneous correction of risk valuations.

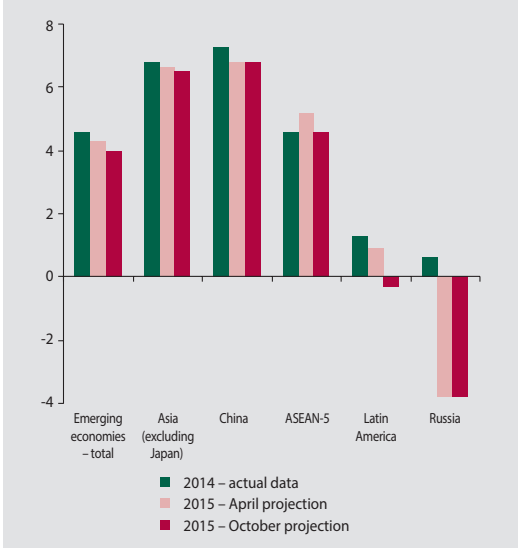
The scenario of rising risk aversion is often linked to the expected normalisation of US monetary policy. The lift-off of interest rates from their zero lower bound would in principal be a positive move that could reduce the imbalances which have emerged in the global financial system in recent years. This assumes, however, that monetary policy tightening proceeds in line with the expectations of financial market actors. Should markets misinterpret central bank intentions, an increase in short-term rates could in fact trigger a repricing of risk premia along with dangerous asset price fluctuations.

THE RISK OF DISRUPTION TO FINANCIAL STABILITY IS GRADUALLY SHIFTING TO EMERGING MARKET ECONOMIES

The past half-year has seen risks related to China's economic situation come to the fore. The performance of the Chinese growth has been declining for several years now. At the same time, the economy is experiencing the demanding transitions from an economic model based on investment and manufacturing exports to one focused on domestic consumption and services. This structural change and the accompanying slowdown in GDP growth are supporting sustainability and greater stability.

Concerns have been mounting, however, about whether such transformation can proceed smoothly and about the danger of a "hard landing", which could trigger a materialisation of risks attached to heightened imbalances in the Chinese financial sector. The massive investment demand observed in China in recent years was funded by a credit boom that resulted in escalating private sector debt and the formation of bubbles in the residential property and equity markets. These risks have to some extent crystallised in recent months in the form of worse than expected macroeconomic figures and stock market turbulence. Furthermore, the less than convincing response of the Chinese authorities to the emerging situation, including their devalu-

Chart 3 Economic growth in emerging market economies



Source: IMF World Economic Outlook.
Note: ASEAN-5: Indonesia, Malaysia, Philippines, Thailand, Vietnam.

ation of the domestic currency, actually exacerbated the uncertainty. Since China is at present the second largest economy in the world, any difficulties it may have can be expected to have global repercussions. In addition to direct channels such as exposure to the Chinese financial sector or foreign trade, an even greater risk is concealed in the form of contagion to financial markets in other regions and the adverse impact on sentiment among agents in the real economy.

Risks to financial stability are increasing in other emerging economies, too. On the one hand, such risks reflect the cooling of activity in these countries. The falling growth rates are to appreciable extent a result of the slowdown of the Chinese economy, which in previous years generated the demand that drove growth in these countries. Another problem facing many of these countries is the sharp drop in commodity prices. Other factors are also in play, however, including, for example, the neglect of structural reforms and consequent constraints on economic potential.

Most emerging market economies, however, are not at risk from slower growth itself, but from its combination with imbalances that have built up in previous years. Many of these countries experienced booming credit growth during those years and now find themselves in an advanced phase of the cycle. This is another consequence of the low interest rate policies pursued in advanced economies, which supported the inflow of capital to less advanced economies that offered the prospect of higher returns. Hence the private sector debt-to-GDP ratio has almost doubled since 2007, to 120%, with most of the debt held by non-financial firms. In an environment of cooling economic growth and falling profits in the corporate sector, individual debt burden indicators have also deteriorated. The whole situation is further complicated by two additional factors, namely the weakening of domestic currencies and declining commodity prices. This is because much funding is obtained in foreign currencies, notably the US dollar, and because mining and extraction industries are among the sectors with the largest inflow of funding. Corporate balance sheets in emerging market economies are therefore becoming more vulnerable, although the scale of the risk varies from country to country. Increasing credit risk is slowly being reflected in an increasing amount of non-performing loans. The main risk is that such circumstances are increasing the probability of foreign investor flight, which could destabilise financial markets in other parts of the world, too.

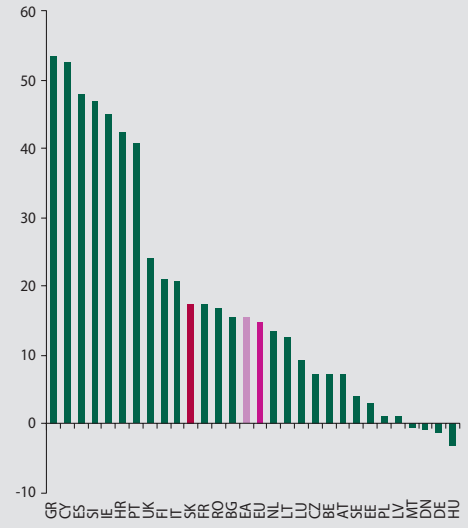
Falling liquidity in financial markets constitutes a significant risk to financial stability

The vulnerability of financial markets in the recent period is being exacerbated by declining liquidity. Reduced market liquidity means that incoming shocks are not absorbed, but rather become amplified and lead to increased volatility. Furthermore, weak liquidity increases the chances that fluctuations in one part of the financial markets will spread rapidly to the other parts. The problems of deteriorating liquidity are being signalled by several indicators, not only by the increasingly numerous episodes of heightened volatility over short time periods. The average daily trading volumes of securities and the average size of transactions have both been falling. Liquidity constraints are particularly apparent in bond markets, including government bonds.

The structural decline in liquidity is attributable to several factors. The most significant of these factors appears to be the gradual reduction in banks' willingness to act as market-makers. Banks are reducing their held-for-trading securities, especially in the case of corporate bonds. This development is partly explained by the new stricter regulatory regime for capital requirements and liquidity, which is increasing the costs of banks in their capacity as market-makers. Banks diminishing focus on securities trading also reflects reforms that prohibit banks from trading on own account or require the separation of trading activities from other standard activities. Liquidity may also have been adversely affected by the implementation of the EMIR regulation, under which the amount of collateral required for the hedging of trading positions with central counterparties is greater than in the past, and hence the available amount of securities, and therefore the depth of the market, is reduced. Over the longer term, the liquidity of certain assets may also be squeezed by QE programmes, which draw large volumes of

securities from the market. Last but not least, the heightening of liquidity risk is related to the strong growth in assets under management in investment funds. On the one hand, these funds increase their holdings of relatively less liquid assets, while, on the other hand, the unit-holders of these funds are offered almost unrestricted redemption of their investments. Any spate of redemptions will risk a dangerous spiral of sales of less liquid assets from the portfolio, thereby dampening the prices of these assets and at the same time triggering further redemptions.

Chart 4 Change in public sector debt of EU countries between 2009 and 2015 (percentage points)



Sources: Eurostat, Ameco.
Note: The data for 2015 used in the calculation of the changes are estimates made by the European Commission.

The risks surrounding public sector debt in Europe remain present, although they appear to be less threatening than they were when the sovereign debt crisis was at its peak. The government bond market is far calmer now than it was a few years ago, and its resilience to new shocks has been strengthened by changes in the euro area architecture; nevertheless, the situation in the market remains difficult at a fundamental level.

Public debt levels show a rising trend, despite significant fiscal consolidation efforts. Twenty of the 28 EU countries reported an increase in public debt in 2014. The average debt-to-GDP ratio climbed to 89%. It may also be expected that public debt levels will continue rising, given that a majority of EU governments are running a negative structural balance and that in many cases this gap is likely to increase in the years ahead. With inflation weak, economic growth subdued, and government bond yields at historically low levels, it cannot be ruled out that the risk in this market will be repriced at some point. Furthermore, a critical element that contributed to the intensity of the previous debt crisis – the feedback loop between sovereigns and banks – remains present today. In almost all European countries, the share of domestic government bonds in the banking sector's balance sheet has actually increased over the past five years, and in a majority of these countries it has been rising in recent months, too. At the same time, however, the recent implementation of the Single Supervisory Mechanism is expected to help contain the risks arising from the interlinkage between sovereigns and their banking sectors.

CHAPTER 2

DOMESTIC CONDITIONS FOR FINANCIAL STABILITY

2

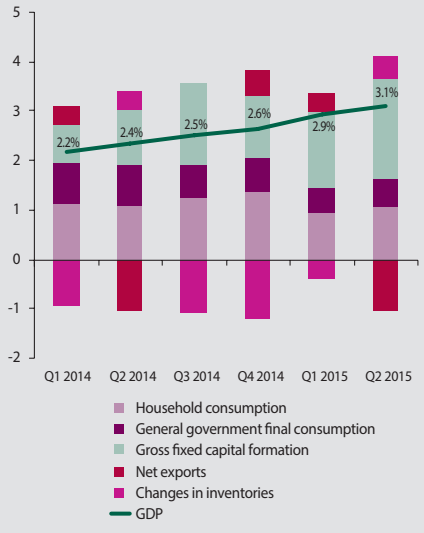
2 DOMESTIC CONDITIONS FOR FINANCIAL STABILITY

STABLE DEVELOPMENTS IN THE DOMESTIC ECONOMY

The favourable trends in the Slovak economy continued in the second half of 2015, with a positive impact on financial stability. The favourable developments are expected to be maintained over the next two years, too, according to NBS's September 2015 Medium-Term Forecast (MTF-2015Q3). From a macroeconomic perspective, no significant risks to financial stability are currently present in the domestic environment.

The Slovak economy's year-on-year growth in the second quarter was a relatively robust 3.1%, slightly higher than its growth in the first quarter. In sharp contrast to the first quarter, growth in the second quarter was driven primarily by domestic components (all of them, but in particular domestic consumption and investment) and net exports declined (and therefore did not contribute positively to growth). Investment growth remained high, especially public infrastructure investment related to the approaching end of the absorption of EU funds under the second programming period. At the time, however, the private sector was also maintaining substantial investment activity. The public sector made a positive contribution to GDP growth, as general government final consumption expenditure growth increased, quarter-on-quarter, by 0.1 p.p.

Chart 5 Annual GDP growth and its components (%)



Sources: SO SR, NBS.

Slovakia's economy is expected to maintain its growth path in the second half of 2015. Slovakia's export performance in the third quarter should remain unaffected by decelerating external demand growth, and export growth should result in the acquisition of market shares. According to exporters' current expectations, however, export growth is likely to fall in 2016, owing mainly to slower growth in China and other emerging market economies. At the same time, private consumption expenditure is expected to accelerate, supported by current developments in the labour market, favourable sentiment and, in 2016, administrative factors (a significant increase in the minimum wage and reductions in VAT on selected types of food). One downside risk to the outlook is that the emissions scandal now surrounding a car maker with a production plant in Slovakia will have negative repercussions on the firm's exports from Slovakia; another risk is the continuing slowdown of the Chinese economy and the consequent negative impact on European markets and external demand.

Prices continued to fall in the third quarter of 2015, by 0.3% year-on-year. This decline was largely accounted for by falling energy prices, while goods and services prices excluding energy increased by 0.4% year-on-year. Therefore the current disinflation pressures are external in origin.

LABOUR MARKET REVIVAL

The current economic growth in Slovakia is also supporting job creation. Labour market developments were favourable in the first half of 2015, with employment increasing by around two per cent in year-on-year terms. The employment growth was generated by relatively strong domestic demand and, to a lesser extent, by an increase in public sector employment. In the second quarter of 2015, and for the first time in the post-crisis period, the number of people in employment exceeded the number recorded in the third quarter of 2008. This trend was also reflected in unemployment figures for the sec-

ond quarter, as the unemployment rate fell to 11.5% and the number of job seekers dropped by more than 15,000. Nominal wage growth increased by around 2.3%, year-on-year, which in a low inflation environment translated into real wage growth. The favourable labour market situation had an upward impact on annual domestic consumption growth, which in real terms increased to 2%. The sources of private consumption growth – increasing employment and wages – suggested that this growth could have been even higher, but in fact households showed a greater propensity to save. From a prudential perspective, such trends may be assessed positively, while also creating favourable conditions in regard to credit risk.

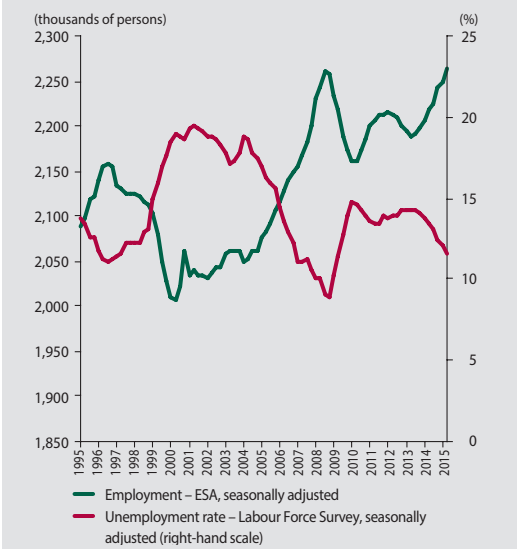
Corporate sales maintained year-on-year growth in the second quarter, with the highest rates observed in the construction, wholesale trade and retail trade sectors. Annual sales growth moderated, however, in industry and in transportation and storage, in comparison with the first quarter. Corporate sales boosted the financial position of firms. However, with the ending of the absorption of EU funds under the second programming period and the slow onset of the new programming period, activity in the construction sector may be dampened during the transition period.

Current risks stemming from fiscal policy are moderate. The Draft General Government Budget approved by the Slovak government in October 2015 assumes a deficit of 2.74% of GDP in 2015, which is higher than the fiscal target of a deficit of 2.49% of GDP. Public debt in 2015 is expected to be 52.8% of GDP. It is also envisaged that income from the sale of government holdings in Slovak Telekom will be part of the debt management framework in 2015, as will the relatively significant use of cash in general government accounts. These factors will therefore reduce the need to issue securities. The general government deficit for 2016 is budgeted at 1.93% of GDP, and a balanced budget is assumed for 2018. The planned fiscal consolidation scenario may, if realised, have a significantly negative impact on aggregate demand. Like the deficit, public debt is expected to fall, to below 50% of GDP, driven down mainly by nominal GDP growth and improvements in public budget management. In consequence, the debt brake is expected to be abandoned during the budget period and therefore this sanction mechanism is not expected to bring any shocks to the economy.

Risks to the economic outlook

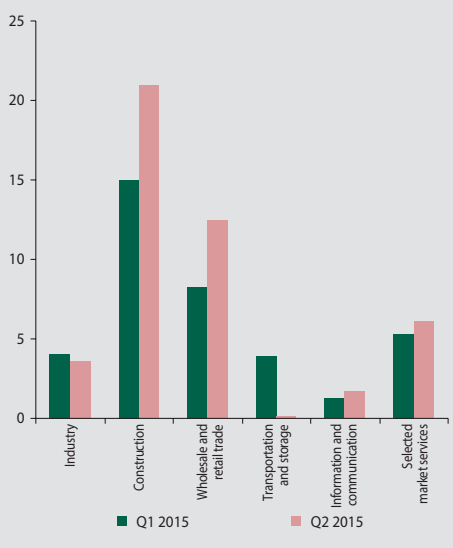
Along with the downside risks already mentioned (the car maker's emission's scandal and unfavourable developments in China

Chart 6 Employment and the unemployment rate in Slovakia



Sources: SO SR, NBS.

Chart 7 Annual nominal sales growth by economic sector in the first and second quarters of 2015 (%)



Source: Slovstat.

and other emerging economies) there are also upside risks to the economic outlook associated with the anticipated arrival of a new car plant in Slovakia, which should bring investment and, in due course, export impulses. This should boost GDP growth, with a positive impact on employment and the domestic economy.

CHAPTER 3

THE FINANCIAL SECTOR IN SLOVAKIA

3

3 THE FINANCIAL SECTOR IN SLOVAKIA

3.1 SOLVENCY AND FINANCIAL POSITION OF THE FINANCIAL SECTOR

FINANCIAL POSITION

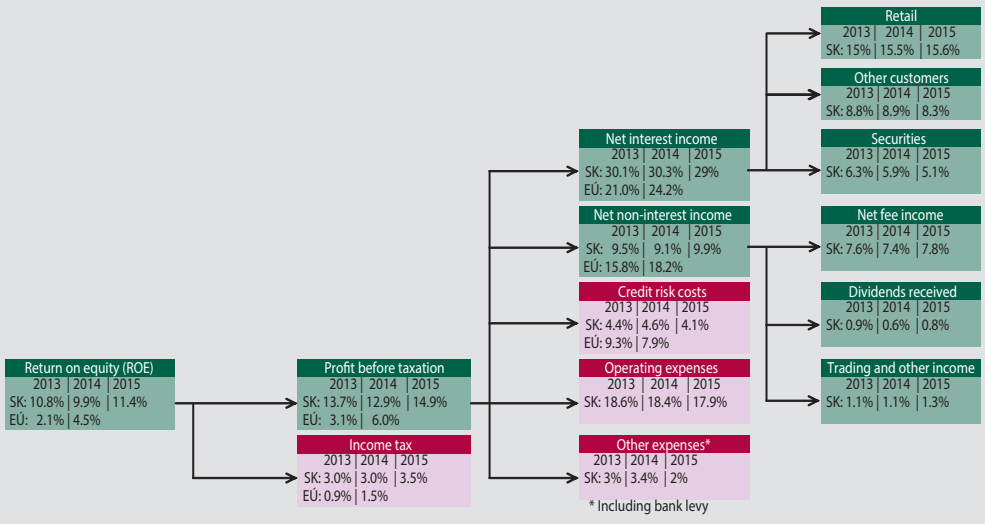
The banking sector's aggregate profit increased by 18% year-on-year over the first three quarters of 2015. This increase was primarily due to a decrease in credit risk costs, accompanied by a cut in the rate of the bank levy from 0.4% to 0.2% of the amount of external funds, and partly to growth in non-interest income. On the other hand, the profitability of banks was adversely affected by steadily falling interest rates in the recent period. As a result, net interest income, which had been the main driver of profit growth in the previous period, recorded a year-on-year decrease in the second and third quarters of 2015. This was due to a drop in interest income in the corporate segment, as well as in the bond portfolio.

One of the factors behind the recent rise in profits was a decrease in credit risk costs. This decrease was most apparent in the corporate sector. A modest decrease was also recorded in the retail loan portfolio; however, credit risk costs in this sector turned upward again in the third quarter of 2015.

On the other hand, the recent requirement to pay contributions to the resolution fund, coupled with the impact of low interest rates, is expected to exert downward pressure on bank profits in the period ahead. Banks will pay the first contribution for 2015; its amount will be approximately 6.4% of the net profit recorded in September 2015. It should be noted, however, that some banks already have this expense partially taken into account in their financial result.

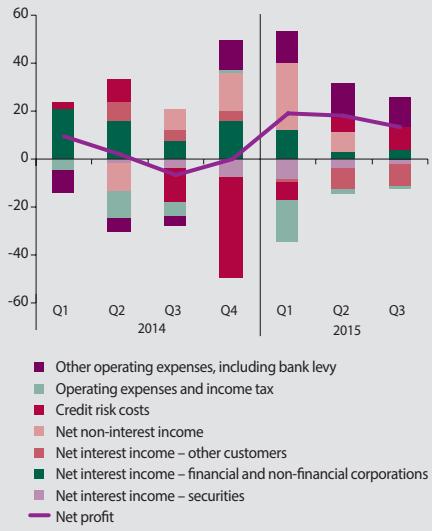
The first half of 2015 also saw a year-on-year rise in profits in other segments of the financial market. In the case of pension funds management companies, profit growth was stimulated mainly by an increase in payments received

Chart 8 Profitability of the Slovak banking sector by component, compared with the EU banking sector (%)



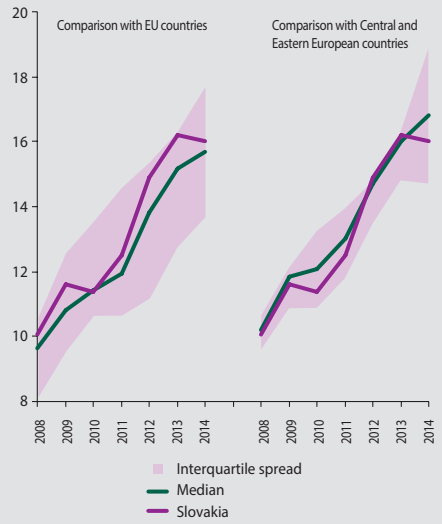
Source: NBS, ECB.
Note: Data on profits in the individual categories are expressed as a percentage of the share capital.
Data in the green (red) fields denote a positive (negative) contribution to profits.
Data on Slovakia are reported for the first three quarters of 2013, 2014 and 2015; they do not cover branches of foreign banks. All the data are annualised.
Data on the EU (where available) are for the end of 2013 and 2014.
The definitions of the individual components of profitability in Slovakia and the EU may contain minor differences.

Chart 9 Annual changes in the profitability of banks by component (%)



Source: NBS.
Note: The Chart illustrates the annual changes recorded in the profitability of banks in the individual quarters, compared with the corresponding quarters of the previous year, as well as the factors behind these changes.

Chart 10 The common equity Tier 1 ratio: international comparison (%)



Source: ECB (consolidated banking data).
Note: The Chart contains no data on Croatia, because such data were not available when this report was compiled.

for capital gains on managed assets. The financial results of all types of pension funds and investment funds were in positive territory in June 2015. Profits also increased in the insurance sector, by 18% year-on-year. The main factor was an increase in premia in both life and non-life insurance, which fully offset the increase in operating expenses and losses in non-life insurance, as well as the decrease in returns on financial assets covering technical provisions.

Banking sector solvency and leverage

The banking sector's capital adequacy remained virtually unchanged during the first half of the year, at a relatively high level. The common equity Tier 1 ratio remained at 16.2%. This value roughly corresponds to the median value of EU countries. Compared with the other countries of Central and Eastern Europe, whose capital adequacy is somewhat higher, the Slovak banking sector's capital adequacy is below the median value. This can be explained by the fact that, the common equity Tier 1 ratio in some countries continued to rise in 2014, while it remained stagnant in the domestic banking sector. The main factor behind this development was a fall in that part of the profit which is retained by banks as a capital add-on, accompanied by continued growth in bank lending.

The leverage ratio, however, is noticeably above the EU average. The average value of this ratio in the Slovak banking sector stood at 8.2%, while comparable banks in the EU had an average leverage ratio of 4.9%.

A factor enabling the Slovak banking sector to maintain an adequate degree of resilience is that Slovak banks have a larger additional capital buffer than most banks in other EU countries. As Table 2 shows, Slovakia, like ten other EU countries, had a conservation capital buffer implemented in the full amount as at 31 October 2015, while the majority of other countries will implement such a buffer in the period from 2016 to 2018. This additional capital requirement has been met by all domestic banks. A higher capital buffer is required to be maintained only in a small number of countries. In addition, NBS will require the five largest Slovak banks to implement an additional capital buffer of 1% with effect from 1 January 2016, which will gradually be increased to 2-3% depending on the size of the bank.[1]

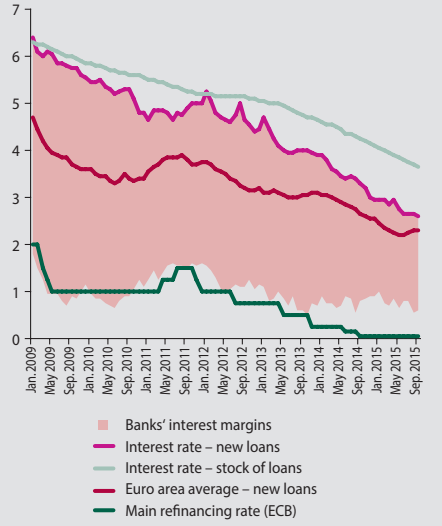
1 *The amount of a capital buffer for domestic systemically important banks (O-SIIs) is specified in NBS Decision No 5/2015 of 26 May 2015. The amount of the systemic risk buffer is specified in NBS Decision No 6/2015 of 26 May 2015. More detailed information on capital buffers for the Slovak banking sector is available on the website: http://www.nbs.sk/en/financial-market-supervision/macroprudential-policy/current-status-of-macroprudential-instruments/current-setting-of-capital-buffers-in-slovakia*

Table 2 Comparison of the combined buffer requirements in individual EU countries

Country	Combined buffer rate
Norway	6.5%
Bulgaria	5.5%
Estonia	4.5%
Croatia	4.0%
Sweden	3.5%
Slovakia, Czech Republic, Italy, Finland, Luxembourg, Lithuania, Latvia	2.5%
All the other EU countries (17 countries)	0%

Source: ESRB.
Note: The table above contains the values of combined buffer rates expressed as a percentage of the risk-weighted assets, valid in the given countries as at 31 October 2015.
For the sake of comparability, the table only contains data on capital buffers that are applicable by all banks in the given country. Capital buffers for global or local systemically important banks or systemic risk buffers applying to only part of the banks are not included.

Chart 11 Average interest rates on housing loans (%)



Source: ECB.
Note: The interest margin of a bank represents the difference between the average interest rate on new housing loans and the average interest rate on household and corporate deposits.

3.2 BANKING SECTOR ASSETS

Growth in lending to households has continued to accelerate, with interest rates declining

During the first half of 2015, the retail loan portfolios of banks continued to grow in volume at a fast but fluctuating pace. In June, the growth rate of lending stabilised and started to accelerate in line with the trend from 2014, up to 12.8% year-on-year as at end-September. In absolute terms, that is an increase of €2.8 billion. This growth was stimulated by several factors, such as falling interest rates, strong competition, growing disposable household income, decreasing unemployment, and the real estate market.

Housing loans, which traditionally account for the largest share of retail loans, increased year-on-year by 13.8% in September, while interest rates continued to fall. Growth in housing loans was reported by practically all the banks that are active in this segment. Even stronger growth was observed in the total volume of housing loans expressed in euro, which increased by almost €2.3 billion year-on-year. This figure was 25% higher than the maximum for 2008.

Average interest rates on housing loans fell still further in the spring of 2015. It is probable that, after NBS's recommendations had been implemented, the focus of competition shifted from the easing of credit standards to the setting of interest rates. During the summer months, lending rates hovered around the level of 2.6%. Interest margins defined as the difference between average interest rates on loans and deposits in the household and corporate sectors fluctuated around the average margin in the euro area.

The difference between average interest rates on existing loans and new loans is at a historically high level. Its value has not fallen below 1 percentage point since the end of last year. Hence, loan refinancing is still an attractive option for customers.

The latest trend is the prolongation of the interest rate fixation period for housing loans. While new loans with an initial rate fixation period of over 5 years accounted for only 2% of the total volume of new loans in 2012-2013, this proportion began to increase in the middle of 2014 and reached about 8% in recent months. This has slightly reduced the sensitivity of customers to a potential rise in interest rates in the future.

Such loans are typically offered by home savings banks.

Despite a slowdown starting in March 2015, the annual growth rate of consumer loans stood above 17% in September. Average interest rates decreased gradually during 2015, to 11.5% in September. The consumer loan market has remained heavily concentrated.

The tightening of credit standards was accompanied by a reduction in interest margins, while demand was motivated mostly by the low interest rates. In the bank lending survey (BLS) questionnaire about credit standards, banks reported tightening in an environment of decreasing interest margins. Demand for loans strengthened in the first half of 2015 and banks expected that this trend would continue in the months ahead, mainly in the case of consumer loans. In the opinion of banks, the most important factor behind demand is interest rate developments.

Apart from a general decline in interest rates, noticeable downward deviations could be observed in the interest rates of some banks. This indicated a modest increase in competition, which, however, was only marginally reflected in the market share. Competition in the housing loan market showed no marked fluctuation.

It is too early to assess the changes that occurred in the non-banking market for consumer loans after the licensing of creditors; the market structure, however, is likely to remain unchanged. The number of non-bank creditors providing consumer loans decreased to 20 as at end-October 2015, representing roughly one-tenth of the original figure. However, the overwhelming majority of non-bank loans were provided by this small number of creditors (prior to licensing), so no major change is likely to appear in the market structure. These creditors will be subject to supervision by NBS.

Credit standards have been tightened and have thus contributed to improving the credit quality of loan portfolios

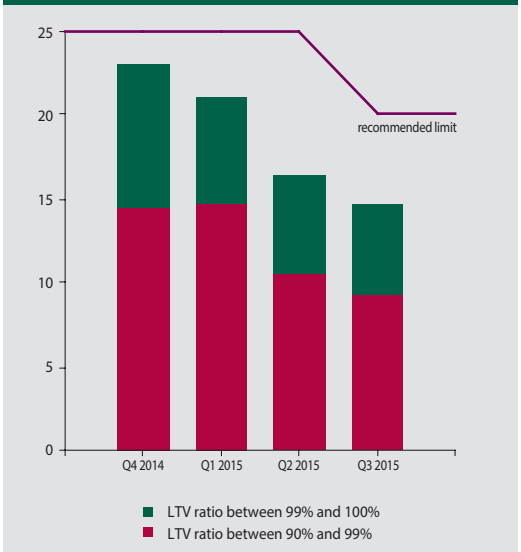
The structure of new retail loans has undergone a positive change this year, owing to the coming into force of the NBS recommendations[2]. All these recommendations aimed at increasing the credit quality of the retail portfolio, though some of them were preventive in nature.

One of the most significant changes in 2015 was the limitation of the maximum maturity of consumer loans to nine years. This has eliminated the growing tendency of banks to provide loans for ten or more years as refinancing loans with the lowest possible repayments. The shortened maturity of consumer loans not only better corresponds to the economic benefit derived from the use of imported goods or services but also reduces the sensitivity of consumers to potential unfavourable developments in the future. This limit will be reduced to eight years with effect from January 2016.

Secondly, the proportion of refinancing loans decreased, mainly in refinancing with an increase in principal, though a modest increase was again recorded in the third quarter of 2015. A decrease took place in refinancing with a marked increase in principal, while there was no substantial shift of refinancing loans to the category without an increase in principal. This means that customers who were interested in optimising their loan repayments were not hindered by the NBS recommendations.

With regard to loan security, the banking sector provided loans in compliance with the 20% limit

Chart 12 Share of new loans by loan-to-value ratio (%)



Source: NBS.

2 *Issued in Recommendation No 1/2014 of Národná banka Slovenska of 7 October 2014 in the area of macroprudential policy on risks related to market developments in retail lending.*

for loans with high LTV ratios. On average, banks utilised only two-thirds of the capacity reserved for this exception.

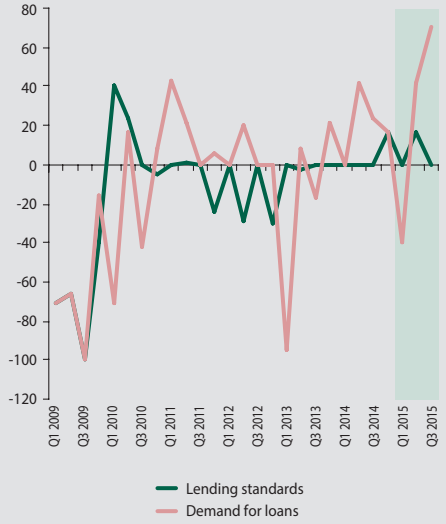
Banks also proceeded in compliance with the NBS recommendations in other areas, specifically in verifying the income of customers and their ability to repay loans or to observe the monthly repayment schedule.

Conditions for lending to the corporate sector have improved

The improved macroeconomic indicators are also reflected in the situation in the corporate sector. The favourable economic developments in the EU and Slovakia are reflected in the business environment. A positive result of this was sales growth, which was broadly based across all sectors during the third quarter in year-on-year terms. The most significant increase in sales was recorded in the construction sector, owing, inter alia, to the absorption of outstanding EU funds. Some of the other sectors also recorded a marked increase in sales in comparison with the previous period. Sales growth in the last few months was accompanied by a relatively steep increase in the volume of goods exported. Exports increased by almost 7% year-on-year during the first two months of the second half of 2015. This increase took place in exports to the country's main trading partners. The favourable situation in these countries was also reflected in the OECD's business confidence indicator, which rose during 2015 at a steadily accelerating pace. By contrast, this indicator for Slovakia fell in the recent period. The domestic economic sentiment indicator followed a similar trend, with all components of this indicator falling, except for confidence in construction. The situation in the corporate sector continued to be conditioned by external factors, such as global economic development, situation in the automotive manufacturing or the geopolitical situation.

The changes in credit standards and interest rates have increased the availability of corporate loans this year. At the turn of 2014/2015, the credit standards of domestic banks underwent a substantial change. After being unchanged or tightened in the period from end-2010 to end-2014, the credit standards started to be eased step by step (Chart 13). The main factors behind this change in trend were, according to the BLS,

Chart 13 Developments in demand for, and availability of, corporate loans



Source: NBS.
Note: A positive (negative) value denotes an increase (a fall) in demand / easing of credit standards.

the growing competition between banks, coupled with the positive perception of the situation in the corporate sector. The easing of credit conditions affected interest margins, mainly in the case of average loans, the amount and maturity of loans, and non-interest charges (Chart 16). Some banks expect that credit standards will be eased further in the period ahead.

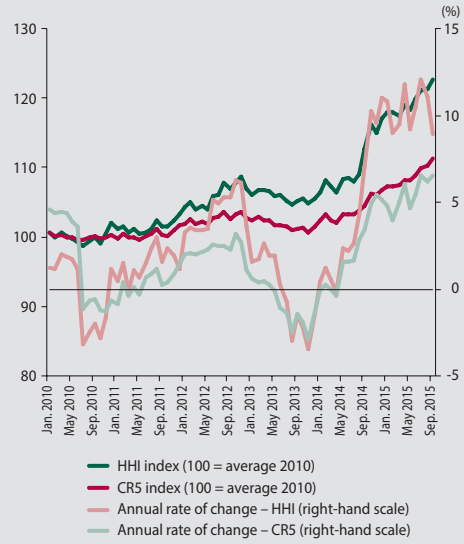
On the whole, interest rates on corporate loans did not change significantly, as the slight downward trend in rates on both outstanding loans and new loans continued. Interest rates on new loans rose only in September 2015, to a level slightly below 2%. A significant change in 2015 was a marked fall in interest rates on new loans for small and medium-sized enterprises (SMEs), by 130 basis points during the year. The increased availability of funding through bank loans in the SME segment was also reflected in the interest spreads.[3] In the case of other enterprises, the interest spread fluctuated around the level of the long-term average (starting from mid-2014). The interest spread in the SME segment fluctuated well above the long-term average before the aforementioned fall in interest rates; the current developments have caused a fall well below the long-term average (Chart 14). Compared with other countries, the lending rates of domestic

3 *Interest spread is defined as the difference between interest rates on the respective categories of new loans and the one-month EURIBOR rate.*

Chart 14 Interest spreads on new corporate loans (p.p.)

Source: NBS.
Note: Interest spread is defined as the difference between interest rates on the respective categories of new loans and the one-month EURIBOR rate.

Chart 15 Concentration of creditors in the corporate sector and its annual rate of change



Source: NBS.
Note: HHI – Herfindahl-Hirschman index; CR5 – proportion of the five largest banks.

banks are slightly above the average lending rate in the euro area.

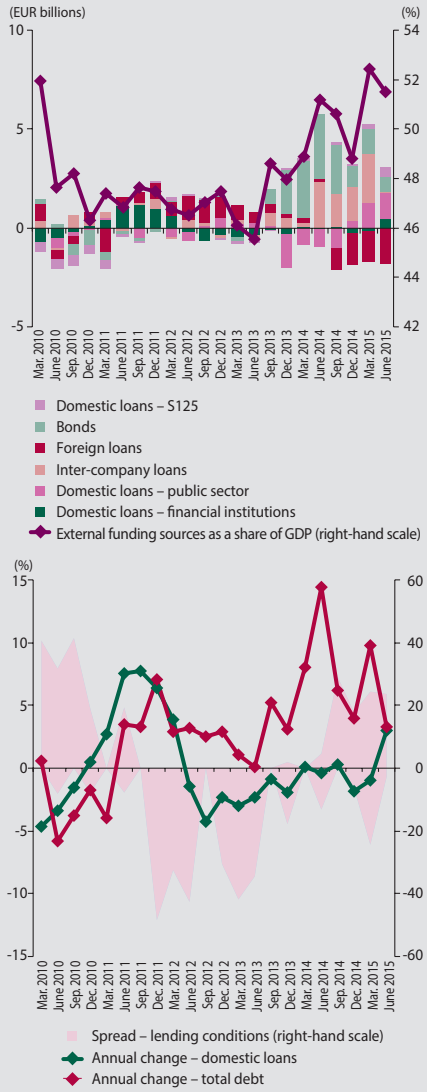
Chart 15 illustrates the growing concentration of creditors in the corporate sector as measured by the Herfindahl-Hirschman index and by the share of the five biggest market players. The loan market competition can be perceived using the intensity of changes in market shares. The above indicator suggests that we are in a period of increased competition. Significant changes in market shares are caused by growth in lending by large banks, accompanied by a relatively sharp decline in lending by some small and medium-sized banks.

Domestic banks' lending to firms again experienced broad-based growth after a downward trend

Corporate debt has been growing since 2012, despite the negative dynamics of lending by domestic banks. As Chart 16 shows, the annual rate of change in the corporate sector's aggregate debt fluctuated in positive territory throughout the period of recovery starting in 2011 and well exceeded the rate of change in lending by domestic banks. This may indicate that demand for funding in the corporate sector started to focus increasingly on alternative sources, possibly reflecting the relatively strict credit standards of domestic banks in the last few years. The increase in the growth rate of these loans to the rate of growth in total debt in the second quarter of 2015 was accompanied, inter alia, by the easing of credit standards. When domestic lending declined again in the second half of 2012, this decline was offset by the rise in foreign funding, which, however, started to fall considerably in the second half of 2014. The increase in corporate debt in the recent period can be related to loans received from non-financial institutions, the public sector, and to the increased amount of newly issued corporate securities. These trends have led to an increase in the corporate sector's total debt expressed as the ratio of external funds to GDP. The level of aggregate corporate debt, however, is still one of the lowest in the EU.

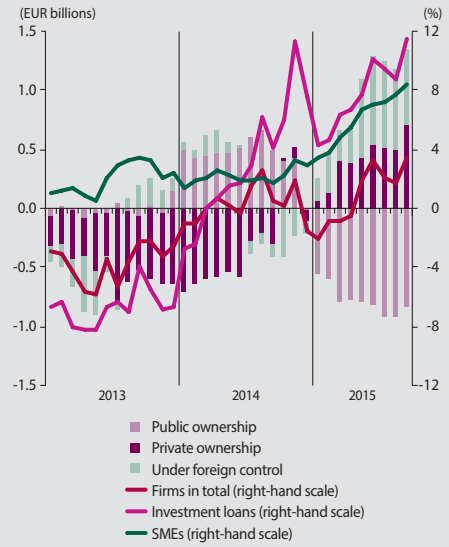
Demand for loans from domestic banks has been on the gradual increase, which is reflected in year-on year growth in the outstanding amount of corporate loans. Increased lending activity was also observed in relation to small and medium-sized enterprises. Banks have recorded increased demand for loans in almost each quarter since the middle of 2014. Nevertheless, a change in demand was observed in 2015:

Chart 16 Corporate sector debt decomposed by funding sources, and total and domestic government debt (annual percentage changes; percentage point contributions)



Source: NBS.
Note: Domestic loans (S125) are defined as loans provided by other financial intermediaries, except insurers and pension funds operating in the domestic financial market. The lower chart illustrates the min–max spread of changes in the individual credit conditions according to the replies of banks in the bank lending survey.

Chart 17 Decomposition of corporate loans by company ownership (annual percentage changes; percentage point contributions)



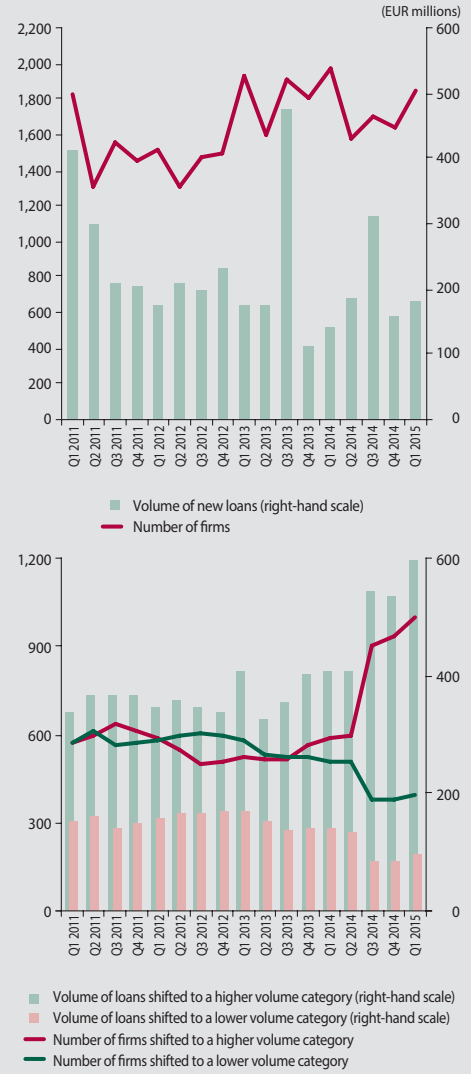
Source: NBS.

while demand growth in 2014 was driven mainly by large firms, in the current year it has also been generated by small and medium-sized enterprises (SMEs). Banks also expect demand growth in the period ahead.

The total volume of lending to the corporate sector continued to grow at a pace of almost 3.5% in the reference period, in line with increased demand. What is more important is to monitor bank lending to non-state-owned firms, which make up the bulk of the corporate sector. The rate of change in lending to such firms returned to positive territory at the beginning of 2015 and then accelerated, reaching 10% in September 2015. The volume of loans granted to SMEs also recorded a steep increase, as did the volume of funds provided for investment. These trends have probably emerged from the improved situation in the corporate environment, the favourable trend in funding, and the eased lending conditions. Lending to state-owned firms has followed a falling trend in year-on-year terms this year, as a large amount of loans provided at the beginning of 2014 has been repaid.

The accelerating rise in lending should also be monitored in terms of whether this refers to new firms or it is concentrated in the existing corporate loan portfolio. Chart 18 illustrates the current trends in the number of new firms and the volume of their loans in banks' portfolios. None of them has experienced a marked increase that would correspond to the dynamics of total outstanding amount of loans. The observed rise in bank lending to the corporate sector is thus influenced primarily by the growing volume of loans granted to existing firms, especially loans exceeding €1 million. The increasing concentration

Chart 18 Changes in the number of new corporate borrowers, the volume of their loans and the extent of recategorisation between volume categories



Source: NBS.
Note: The upper chart illustrates the changes in the number of firms to which at least one loan was granted in the given quarter and which had received no loan from a domestic bank for at least two years before that period. The volume of loans denotes the total volume of loans provided to these firms. The lower chart illustrates the number of firms and the volume of their loans which were shifted to a higher or lower volume category in the given quarter. The data were obtained from the Register of Bank Loans and Guarantees. The data on the right-hand scale are in EUR millions.

of debt is also indicated by the increased number of firms shifted on quarterly basis between loan-volume categories (Chart 18), in particular by the increased number of firms shifted to a higher volume category. The number of new firms, as well as the volume of funds they borrowed, increased in the case of loans of over €0.25 million and up to €1 million, while the average amount of loans remained virtually unchanged. This indicates increased activity of small and medium-sized enterprises.

Lending activity is gathering momentum, with loans increasing in almost all economic sectors. An exception is transportation and storage, where the volume of loans has fallen, mainly because the repayment of loans granted to state-owned firms. The third quarter of 2015 saw a pick-up in lending to firms in the construction sector and in wholesale and retail trade, while lending to the industry and energy supply sectors has been growing since the beginning of 2015. The rate of change in the volume of loans has entered positive territory in accommodation services, too.

In the commercial real estate sector, lending growth gradually accelerated amid continuing optimistic sentiment on both the demand and supply side. Demand in the residential segment has increased, with the number of flats sold or reserved reaching a historic high. Although there was no quarter-on-quarter increase in the third quarter of 2015, the annual growth rate has remained high. This can be attributed to Slovakia's growing output combined with wage growth, declining unemployment, and low interest rates on housing loans. The strong demand is also reflected in the increasing share of flats sold in residential projects under construction and the increasing sales speed of new free flats. The supply of flats remains almost unchanged and more or less follows the demand. This topic is discussed in more detail in the section *'Risks in the financial sector'.*

The office segment has undergone favourable developments on both the supply and demand sides of the market. The office space that is planned to be completed in 2016 exceeds the figure for the pre-crisis period, with one-third of this space being already sold. The growing demand for office space is also reflected in the current state of office premises, with the vacancy rate falling to 11.78% in June 2015.

The positive sentiment in the residential and office segments is accompanied by growth in the volume of loans in the commercial real estate sector, which reached 8.6% at the end of the third

quarter. Lending has increased across the entire banking sector, but the rate of growth shows marked differences: some banks reported lending growth of as much as 15% in the third quarter of 2015. In this context, it is worth singling out a significant sub-category within the sector, i.e. flat management companies and housing associations. This sub-category is significant because it accounts for almost 75% of the total number of loans and 15% of the total volume of loans. A significant factor is the different growth rate of lending to these entities, which has remained unchanged in the recent period. This indicates that lending activity in the other parts of the commercial real estate sector is increasing even more rapidly. In addition, increased funding in this sector can also be observed in the case of funding from non-bank entities (Chart 24 in the section *'Risks in the financial sector'*).

Chart 19 Domestic government bonds as a share of total assets and their annual rate of change (%)

Source: ECB.

THE SECURITIES PORTFOLIOS HAVE REMAINED VIRTUALLY UNCHANGED

The trends from the previous period have continued in the debt securities portfolio. Debt securities were dominated by Slovak government bonds, the share of which in total net assets decreased gradually, to 16.5% in August 2015 (from 17.3% in December 2014). The volume of investment in corporate securities decreased, too. By contrast, the volume of investment in domestic bank bonds and foreign securities increased. Exposure to foreign countries increased most significantly in the case of investment in Italian and Polish securities, but while their respective shares of the aggregate portfolio rose to 6% and 3%, respectively, they remain highly concentrated. Concerning other countries, only the share of investment in Cypriot bonds exceeded the level of 1% of the portfolio, but banks' exposure to that country fell. The high concentration of foreign bonds in some banks means there is heterogeneity across the sector in regard to securities holdings.

Bonds tended to be shifted gradually to the available-for-sale portfolio (from the held-to-maturity portfolio), probably as a result of a rise in the market price of securities, leading to an increase in the amount of own funds. In the second quarter of 2015, however, the proportion of investments in the individual portfolios stabilised.

Since the middle of 2013, the nexus between the domestic banking sector and domestic government bonds has weakened gradually. In the period from 2009 to 2014, the Slovak banking sector had the largest share of domestic government bonds in total assets among EU countries.

One of the factors behind the gradual decrease in the share of domestic government bonds is the relatively low volume of new investments in these assets and the strong rise in other bank assets. In several cases, banks did not replace the maturing bonds with newly issued bonds. However, the diminishing significance of domestic government bonds in the balance sheets of banks concerns only a few banks; it is not a sector-wide trend. With regard to financial market stability, it is important that exposures are reduced gradually rather than through fire sales.

3.3 FUNDING SOURCES OF THE BANKING SECTOR

BANKS HAVE CONTINUED TO OBTAIN FUNDING FROM HOUSEHOLD AND CORPORATE DEPOSITS; BOTH CATEGORIES HAVE INCREASED

The annual rate of growth in the volume of household deposits has followed the gradually accelerating trend from 2014, reaching 6.5% in August 2015. The revival in the retail de-

posit market is stimulated mainly by demand deposits, which have increased by more than 15% this year. The rapidly growing volume of demand deposits is in contrast with the volume of time deposits, which has continued to decrease, though at a gradually moderating pace. Deposit market developments are influenced most significantly by rising wages. The low interest rate environment negatively affects the volume of deposits, mainly that of time deposits. It has contributed to the shift of household savings to alternative forms of investment offering more attractive returns, such as collective investment funds or direct investment in bonds or savings deposits. The loan-to-deposit ratio, which has not exceeded 100% for a long time, indicates a healthy funding structure of the domestic banking sector.

The deposits of non-financial institutions have continued to grow this year, but at a slower pace than in the previous year. The volume of deposits in the corporate sector is relatively volatile; its average growth rate slowed to 6% in 2015, after a marked acceleration in 2014. Such volatility is not unusual, as corporate deposits represent a more volatile source of funding for banks than do household deposits. As in the household sector, corporate deposit growth has been driven by demand deposits, while time deposits have been declining throughout the year. Growth in corporate deposits can be attributed, inter alia, to the improved situation in the corporate sector and the resulting favourable trend in sales.

Interbank funding and funding from the ECB are still only the secondary sources of funding for most domestic banks. The ratio of these funds to the total liabilities of the banking sector does not exceed 5%, though this ratio is higher in the case of certain small and medium-sized banks. Interbank operations on the asset and liability sides of the balance sheet represent a relatively volatile balance-sheet item for banks and are used largely for liquidity management. Implied domestic interbank market rates fluctuate above the one-week and 12-month EURIBOR rates, owing mainly to the concentration in some banks of financial instruments paying higher interest rates.

Chart 20 Loan-to-deposit ratio and the proportion of customer deposits to total liabilities (%)

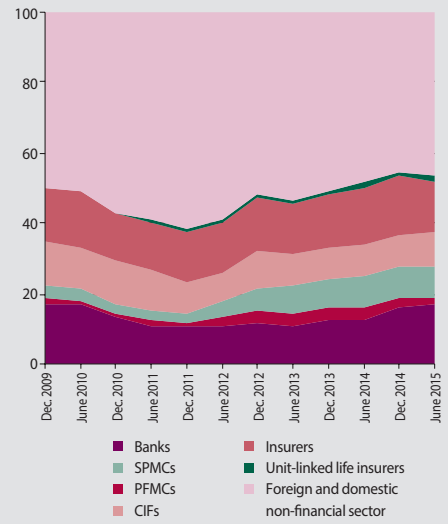
Source: NBS.

Box 1

TRADING IN MORTGAGE BONDS IN THE SLOVAK FINANCIAL MARKET

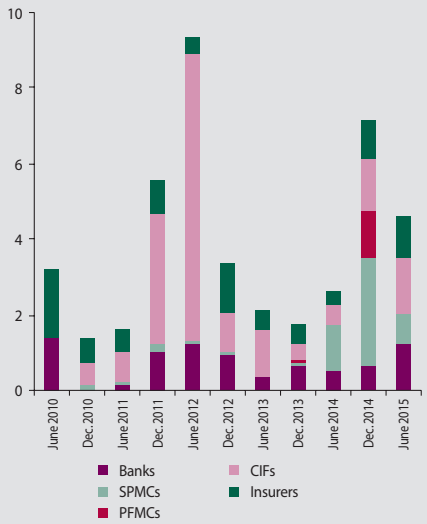
The secondary market for mortgage bonds (MBs) in Slovakia is rather shallow, when MBs are traded in very small amounts. Approximately half of the total volume of issued MBs (€3.9 billion) is held by domestic entities, mainly banks and insurance undertakings (Chart A). Although domestic banks and insurers hold almost two-thirds of the MBs in their available-for-sale (AFS) portfolios, this fact has no major impact on trading in MBs in the secondary market (the volume traded within a half-year period is usually not higher than 5% of the total volume of MBs held by domestic entities, see Chart B). However, the strategy of maintaining the share of MBs in the AFS portfolio at a high level involves a certain risk: since MBs are revalued on a continuous basis, this strategy would impair the value of the portfolio in

Chart A Mortgage bond holdings in individual sectors (%)



Source: NBS.

Chart B Mortgage bonds sold as a share of the total volume of mortgage bonds in the domestic market (%)



Source: NBS.

the event of any significant fall in the market price of MBs.

Increased trading in MBs in the secondary market was induced in the past by external factors (developments in foreign markets), rather than by an intention to use MBs as an effective tool to ensure long-term funding for the financial sector. In the second half of 2011 and the first half of 2012, MBs were sold predominantly by collective investment funds (CIFs), owing probably to the persisting debt crisis in the euro area and the efforts to obtain sufficient liquidity. In the following periods, neither CIFs nor the other market players sold MBs in significant amounts (Chart B).

Although 88% of the MBs in the domestic market are held in the portfolios of entities outside the issuer's financial group, MBs are traded in the primary market, while the secondary market is insignificant. The low volume of trading in MBs and the holding of MBs in the portfolios of customers who purchase them in the primary market and subsequently hold them to maturity indicate that the market for MB's has insufficient liquidity to attract the attention of investors to the secondary market. Their issuance is motivated by an effort to comply with the applicable legislation. For the banking sector, it would be more beneficial to use an instrument which the issuing banks could place on the international markets in larger amounts and thus ensure improved access to liquidity and more stable funding, especially at times of turbulence.

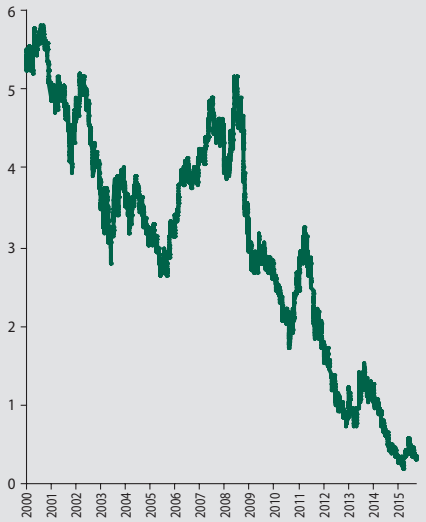
The currently discussed changes that would be effective enough to strengthen the ability of banks to obtain long-term funding are described in more detail in the section *'Regulatory and legislative environment.'*

3.4 FINANCIAL SECTOR RISKS

Structural factors are increasing the risk that interest rates will remain relatively low for a long time

The persisting period of low interest rates is one of the basic characteristics of the current situation in financial markets. As Chart 21 shows, long-term interest rates in the euro area have reached a historic low this year. This development is also reflected strongly in the Slovak financial sector and carries several risks for financial stability. In order to enable a more detailed assessment of these risks, this sub-section

Chart 21 Five-year swap interest rate in the euro area (%)



Source: Bloomberg.

provides a closer analysis of the causes of low interest rates, of possible scenarios for future developments, and of the change in behaviour of financial market participants.

Low interest rates are currently combined with low risk premia. Although interest rates have been low for a long time, the current situation is marked by a simultaneous decline in interest rates and risk premia (Chart 22). Both short-term and long-term interest rates have fallen to a significant extent. As a result, the slope of the interest rate curve has become less steep, indicating a fall in risk premia related to maturity mismatches. Interest rates have fallen not only on bonds with the highest ratings, but also on bonds with lower ratings, causing the credit risk premium to fall too. Owing to the persistent disinflationary pressure, the inflation risk premium is also low. In addition, the financial markets show relatively low volatility in comparison with the previous period. Although several of these risk premia recorded a modest rise in the second quarter of 2015, their values are still subdued from a long-term perspective. This means that the persistent low returns on low-risk assets are combined with low returns on higher-risk assets this year (this was mainly observed in the first quarter). In other words, the probability that certain risks will be undervalued, or higher-risk assets overvalued, has increased as a result of the low interest rate environment. In addition, there is a strong correlation between returns of the individual classes of assets in financial markets. This reduces the possibility of portfolio diversification against asset price depreciation.

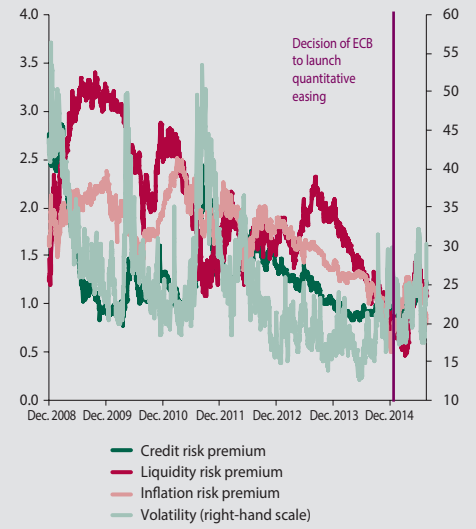
Financial stability may be adversely affected by the persistence of low interest rates, as well by their sudden rise. These scenarios, however, have different effects and consequences, which are analysed below in more detail. The assessment of these scenarios in terms of relevance requires an in-depth analysis of the possible causes of decline in interest rates.

Persistently low interest rates in the global financial market may be caused by structural and cyclical factors. From the structural point of view, the most significant factor is demographic development. The gradual ageing of the population reduces demand for loans while causing an increase in savings, which contributes to the interest rate decline. This is accompanied by a slowdown in the pace of technological progress, which may cause a fall in productivity and lower returns on long-term investments. The consequence of this factor is a falling trend in interest rates in the long term. On the other hand, the most significant cyclical factor is the high indebtedness of firms, households and, in some cases, governments. This reduces their capacity to incur more debts, which has a dampening effect on economic growth. The situation is complicated by the persistence of disinflationary pressures. In order to mitigate the negative impact of these factors, the ECB pursues an eased monetary policy combined with quantitative easing, which is another significant cyclical factor designed to maintain interest rates at a low level.

The long-term nature of these factors increases the risk that interest rates will remain depressed for a long time. This mainly applies to the impact of demographic development, which is expected to increase still further in the future. According to the estimates of the European Commission, the share of people aged 65 and above in the working-age population of the EU will increase from 30% to more than 50% by 2050.

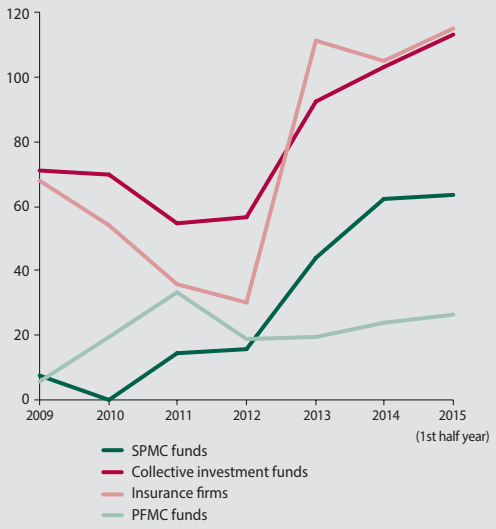
On the other hand, the risk of a sudden rise in interest rates or of a fall in the value of high-

Chart 22 Changes in financial markets related to the current period of low interest rates



Source: Bloomberg.
Note: Credit risk premium is calculated as the difference between yields on five-year bonds issued in the euro area with AAA and BBB ratings (in percentage points).
Liquidity risk premium is calculated as the difference between ten-year and one-month swap rates (in percentage points).
Inflation risk premium is calculated as the yield on ten-year inflation-linked bonds (in %).
Volatility shows the value of the volatility index for the Eurostoxx equity index.

Chart 23 Funding of non-financial corporations through non-bank entities of the financial market (EUR millions)



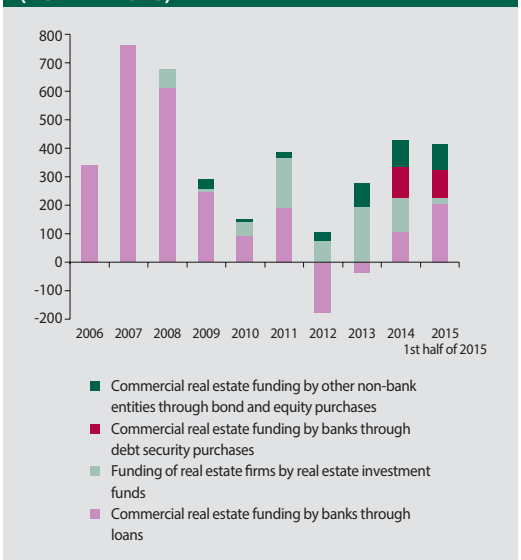
Source: NBS.
Note: The chart includes funding through investment in debt securities and equities.

er-risk assets **increases as a result of reduced risk premia.** Since the persistence of low interest rates increases demand for higher-risk assets, the negative impact of this risk increases, too.

Low interest rates reduce the profitability of the banking sector and cause changes in the funding of the economy

In the long term, the low interest rate environment may cause changes in the financial system, as well as in the allocation of risks. These changes may occur in several areas. The first is an increase in the funding of domestic non-financial corporations from the non-banking segments of the financial market (Chart 23), mainly through investment in debt and equity securities issued by non-financial corporations. Such funding has increased in last few years, mainly through investment funds and pension funds management companies (PFMCs). This trend is associated with the partial transfer of credit risk from the banking sector to other segments of the financial market. Another possible change is the relocation of funds from bank deposits (including time deposits) to other segments, mainly to investment funds. This would lead to the transfer of liquidity risk. Financial stability may be affected by both these trends, but their impact is insignificant for the time being.

Chart 24 Decomposition of the real estate sector's total funding by sources (EUR millions)



Source: NBS.

The increase in funding from non-banking entities is especially apparent in the real estate sector. This refers to the funding of real estate firms via collective investment funds. Such funding is provided mostly in the form of capital participation or, to a lesser extent, in the form of direct lending or investment in debt securities. As Chart 24 shows, non-banking segments played a significant role in the funding of the commercial real estate sector, especially in 2013 and 2014, when bank lending to this sector was restricted. In 2015, the share of funding via banks increased again. These changes are important for the availability of funding in the commercial real estate sector, mainly in the form of funding sources other than bank loans.

The persistent low interest rate environment is in the long run putting downward pressure on banks' profitability. The main factor is the gradual decline in net interest margins, which will be increasingly reflected not only in the loan portfolio but also in the portfolio of government bonds. It should be noted in this regard that some of the positive effects of low interest rates are only temporary in nature and may therefore recede in the long term. This may happen as a result of credit risk cost reduction. As a consequence of low interest rates, the loan repayment costs of firms and households have decreased. Regarding the current level of interest rates, however, there is little scope for a further reduction. It is therefore important that credit standards (particularly in the residential and commercial real estate sectors) are not eased and that banks do not increase the risks inherent in their investments. For a more detailed overview of the possible positive and negative effects of the low interest rate environment on the banking sector see Table 3.

Growth in riskier investments could be motivated by falling investment returns

Interest returns in the financial market have been declining gradually since 2012. This decline has contributed significantly to the fall in investment returns in the insurance sector (where investment risk is borne by the insurer). Owing to the increased share of investments in equities and investment fund shares/units, the aggregate customers' investment return reached higher values in 2014. In the banking sector, low interest rates were also reflected in lower costs of issued securities.

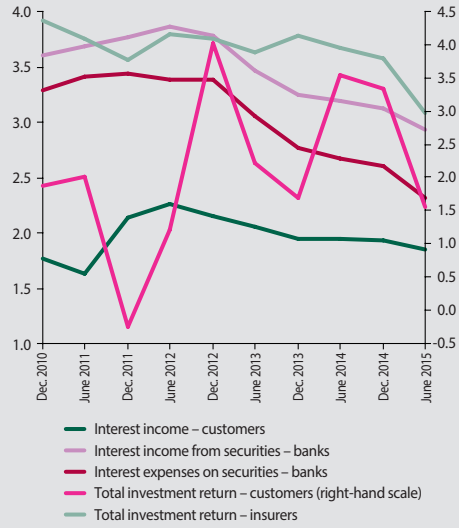
In order to achieve higher investment returns, financial market entities may also invest in riskier assets (search for yield). This strategy is legitimate where the increased risk is sufficiently covered by the expected investment returns and

Table 3 Overview of the effects of the persistent low interest rate environment on the banking sector

	Positive effects	Negative effects
Changes in the banking market	Increased focus on sectors with a wider net interest margin, mainly on small and medium-sized enterprises, consumer loans, and intermediate loans (neutral effect)	
Profitability	Low interest rates stimulate demand for loans, which, coupled with a fall in credit risk costs, represents a profit-generating factor	Net interest income falls as a result of a decrease in interest spreads
Credit risk	Credit risk decreases as a result of lower debt servicing expenses	Risk of easing of credit standards Risk of forbearance Increased risk appetite
Funding sources	Fall in interest expenses on funding sources Better conditions for the issuance of long-term instruments	Outflow of deposits from banks to investment funds
Maturity mismatch		Increase due to growth in housing loans Shift of funds from fixed-term accounts to current accounts

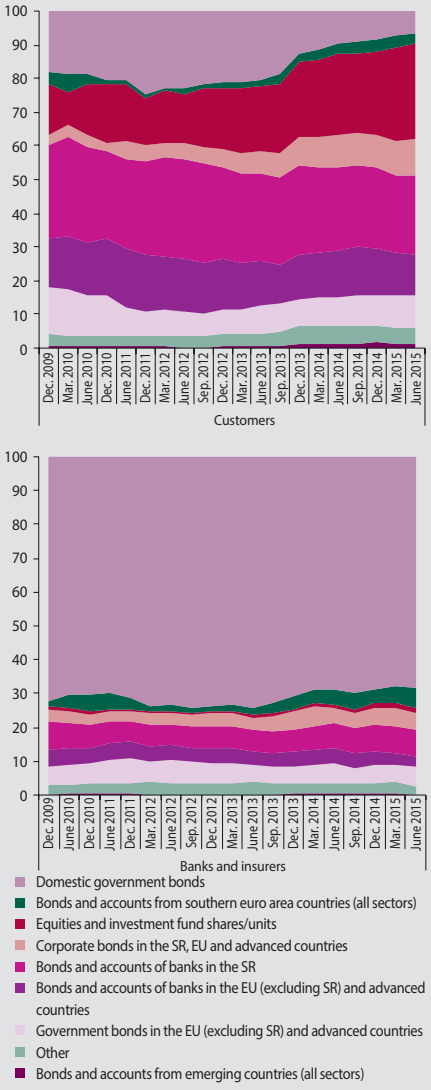
Source: NBS.

Chart 25 Changes in investment returns in the financial market (%)



Source: NBS.
Note: Customers include investments in collective investment funds (CIFs), funds of pension funds management companies (PFMCs) and supplementary pension management companies (SPMCs), as well as unit-linked life insurance.

Chart 26 Distribution of investments across the financial market (%)



Source: NBS.
Note: Customers include investments in CIFs, PFMCs and SPMCs, as well as unit-linked life insurance.
Southern euro area countries refer to Italy, Spain, Portugal, Greece and Cyprus.
Countries except Slovakia include advanced countries and EU countries except Slovakia and southern euro area countries.

investors are able to manage the risks posed by the new types of assets in which they invest.

A common trend observed since 2013 is the decline in investment in government bonds[4] and growth in investment in corporate bonds, equities and investment fund shares/units. Investment has declined in domestic government bonds (except in the insurance sector), euro area government bonds (insurers, however, increased their exposure), and bonds and deposits in banks (euro area banks recorded a marked fall in investment; time deposits decreased mainly in insurance firms and pension funds management companies). By contrast, investment has increased in corporate bonds (SR, EU, advanced countries), equities and investment fund shares/units (except in the banking sector), as well as in southern euro area countries and, in the case of investment by customers, in emerging markets. Investment in Slovak banks varies considerably. Banks and bond funds (managed by PFMCs) have increased this investment activity, while collective investment funds and mixed PFMC funds have reduced it. A modest increase has been recorded in investment in government bonds from EU countries (mainly Czech Republic and Poland) in the banking sector and in SPMCs.

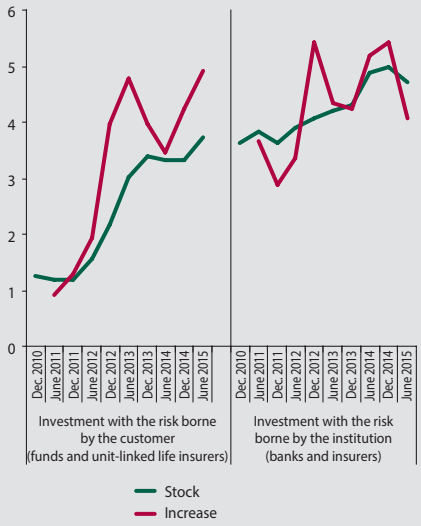
The low returns on assets coupled with the low interest rate environment have led to an increase in sensitivity to interest rate risk. As Chart 27 shows, the duration of bond portfolios has been increasing gradually since 2011. This applies to financial market segments where the investment risk is borne by the customer (i.e. pension funds, investment funds, unit-linked life insurance). This is also confirmed by the investment strategy of these segments for the first half

4 *Low interest rates are not the only cause of decline in investment in government bonds in the banking sector.*

of 2015, while the duration of the portfolios of banks and insurers has moderately decreased. This means that the negative impact of a possible rise in interest rates would be higher in the case of such investments.

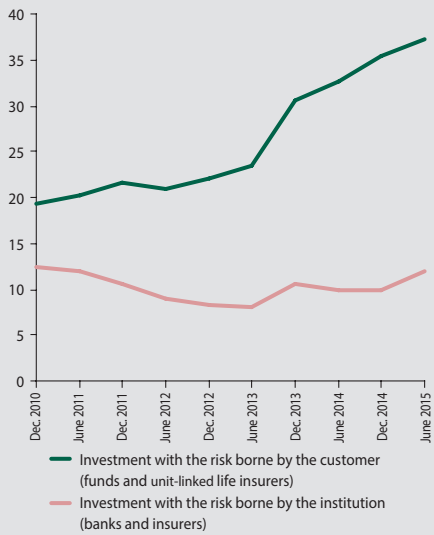
The higher investment risk is also reflected in the increased share of bonds with a lower rating. This can also be observed in segments where the investment risk is borne by the customer (Chart 28). The share of such bonds has been increasing since 2013, especially in SPMCs and investment funds. This share is relatively high in unit-linked life insurance, too. This means that the value of investments would be negatively affected by an increase in risk premia, which are currently at a low level, and the risk posed by this increase is relatively high. An increase in the share of investments not assigned a rating can also be observed in the collective investment sector. This applies mainly to investment in bonds issued by Slovak and Czech non-financial corporations (see Chart 23). Such investment is associated with the risk of incorrect valuation, since the market for such bonds is rather shallow.

Chart 27 Duration of bond portfolios (in years)



Source: NBS, Bloomberg.

Chart 28 Share of bonds with a rating of BBB+ or worse in the bond portfolio (%)



Source: NBS, Bloomberg.
Note: The classification of bonds according to their ratings was based on data as at 2 October 2015. Hence the share of bonds in the individual categories is not affected by changes in their ratings.

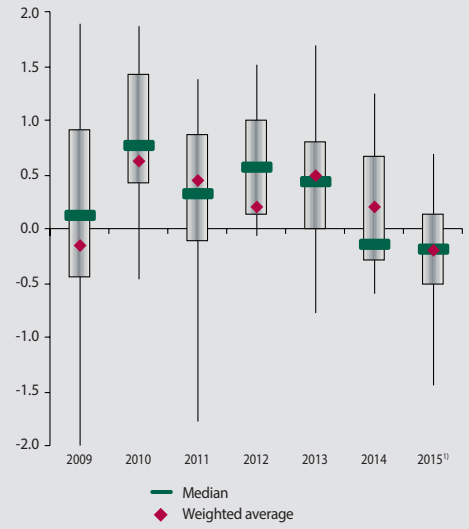
IN A LOW INTEREST RATE ENVIRONMENT, INSURERS ARE UNABLE TO ACHIEVE THE RETURNS THEY HAVE GUARANTEED IN TRADITIONAL LIFE INSURANCE CONTRACTS; SENSITIVITY TO INTEREST RATE CHANGES HAS WEAKENED SOMEWHAT

Besides the falling investment returns of customers, the impact of low interest rates is borne largely by the insurance sector, which needs to cover the returns that are guaranteed in traditional life insurance contracts. After falling gradually in the previous years, investment returns in the insurance sector dropped below the average guaranteed return in the first half of 2015. The coverage of guaranteed returns with investment returns has shown a decreasing tendency since 2013.

Transition to the Solvency II regulatory regime in the current low interest rate environment does not represent a threat to compliance with the solvency capital requirement in the Slovak insurance sector. Under the current regulatory conditions, the persistence of extremely low interest rates may lead to a gradual decline in the profitability of insurers (to negative territory) and may pose a threat to the solvency of insurers in the long term. A major change will be the launch of the Solvency II[5] regime with effect from 1 January 2016, which will introduce market valuation for both assets and liabilities, including technical provisions. This will ensure that any fall in risk-free interest rates will be immediately reflected in the balance sheets of insurers in the form of an increase in both assets and liabilities. This change in the regulatory rules will not affect the valuation principles for accounting purposes.

5 *The impact of transition to the Solvency II regime is analysed in more detail in Section 4 'Regulatory and legislative environment'.*

Chart 29 Difference between investment returns and guaranteed returns in the insurance sector (percentage points)

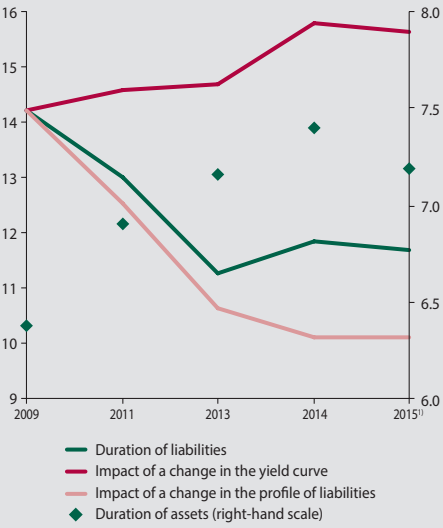


Source: NBS.
Note: The difference between the investment return on assets covering technical provisions in life insurance, where the risk is borne by the insurer, and the average guaranteed rate in life insurance, except in unit-linked life insurance, was calculated for each insurer.
The vertical scale shows the maximum, minimum, interquartile range, median, and average value of this variable in the insurance sector.
Only life insurance was taken into account.
A positive value means that the return is higher than the guaranteed rate in life insurance.
1) Since the average guaranteed rate for 2015 was not available, the figure for 2014 was used as an estimate.

Chart 30 Maturity of traditional life insurance liabilities (%)

Source: NBS.
Note: The horizontal scale shows the intervals of maturity.
The vertical scale shows the share of liabilities in the insurance sector arising from traditional life insurance and belonging to the given maturity interval, as well as assets for 2014.

Chart 31 Duration of traditional life insurance liabilities and assets



Source: NBS.
Note: The vertical scale shows duration in years.
The impact of a yield curve change was calculated under the assumption of a constant liability portfolio from 2009.
The impact of a change in the profile of liabilities was calculated under the assumption of a constant yield curve from 2009.
The value for 2015 was calculated on the basis of the profile of liabilities from 2014 and the yield curve as at 30 September 2015.

Since liabilities have a longer duration than assets in Slovakia, a fall in interest rates and their persistence at low levels represent a risk. Sensitivity to this risk has weakened as a result of movements on both the asset and liability sides of the balance sheet. Regarding the overall impact of an interest rate shock, an important factor is the maturity mismatch between the assets and liabilities of insurers, which expresses whether liabilities will increase more than assets or vice versa.

The maturity of insurers' liabilities in traditional life insurance has decreased significantly over the last five years, mainly as a result of portfolio ageing – the gradual expiry of contracts and surrenders. The number of insurance contracts in traditional life insurance decreased by 27% in that period. At the same time, the significance of traditional life insurance for the insurance sector as a whole diminished

somewhat in connection with a sharp increase in unit-linked life insurance, where the investment risk is borne by the customer rather than by the insurer. This trend, however, cannot be viewed as a reaction of the insurance sector to the low interest rate environment, because it began much earlier. It is, however, supported by the low interest rate environment. The maturity profile of assets held by insurers remained virtually unchanged in the period under review.

The duration mismatch between liabilities and assets decreased from 7.8 to 4.5 years. The average maturity of liabilities decreased from 18.7 years to 14 years, while that of assets fluctuated between 8.5 and 9.5 years. The change in the profile of liabilities and a fall in interest rates contributed significantly to the change in duration (sensitivity to changes in interest rates). Owing to the change in the profile of liabilities, duration decreased by approximately 4 years, while increasing by 1.5 years as a result of a fall in interest rates, so the duration of liabilities decreased in the end by 2.5 years. The duration of assets increased by about 1 year and thus contributed to the moderation of the maturity mismatch.

Chart 32 Duration and investment return mismatch in insurance (%)

Source: NBS.
Note: The horizontal scale shows the difference between the duration of liabilities arising from traditional life insurance and the duration of assets.
The vertical scale shows the difference between the investment return on assets covering technical provisions in life insurance and the guaranteed return.
The cross-hatched circles illustrate the values of weighted average for the entire insurance market.
The chart includes only insurers with a significant share in the traditional life insurance market.

Compared with other EU countries, Slovakia's insurance sector can be characterised as relatively stable

The vulnerability of banks and insurers in a low interest rate environment is one of the main risks for financial stability in the EU, as identified by the European Systemic Risk Board[6]. The lack of profitable investment opportunities and the low returns lead to lower profitability and lower capital formation. At the same time, technical provisions are increasing in the insurance sector. The European Insurance and Occupational Authority (EIOPA) also states in its report on financial stability[7] that the falling interest rates offer a great challenge to profitability, mainly to life insurers.

According to the results of stress tests carried out by EIOPA in 2014, 16% of the EU insurers fail to meet the solvency requirement under the baseline scenario and up to 24% under the low-interest-rate scenario. In view of the significance of the low interest rate risk, this risk was specifically examined within the scope of stress testing of the insurance sector by EIOPA in

Chart 33 Comparison of the insurance sectors of Slovakia and other EU countries in terms of profitability and solvency (%)

Source: EIOPA.
Note: The horizontal scale shows the values of ROE.
The vertical scale shows the solvency margin – the ratio of the available solvency margin to the required solvency margin.
The bright square illustrates the value for Slovakia.

6 *Press report from the meeting of the General Board of ESRB from 24 September 2015.*
7 *EIOPA: Financial Stability Report (May 2015).*

2014. The stress test results, however, show significant differences between EU countries, resulting mainly from the different solvency ratios and business strategies of insurers in the individual Member States.

The impact on individual countries depends largely on the type and character of the guarantees undertaken in life insurance contracts. The products most exposed to risks are those with long maturities that include guarantees or give the policyholder a significant share in the profits. A significant mitigating factor may be the insurer's right to change the amount of guarantees for future premia as well as for existing insurance contracts.

Compared with other EU countries, Slovakia's insurance sector appears relatively stable. This can be attributed mainly to the sector's healthy capital position. Another factor is the relatively short duration of liabilities and the not overly great difference in duration between assets and liabilities. On the opposite side, guaranteed returns in life insurance are among the highest and Slovakia belongs to the least risky countries in terms of investment strategy.

There is a need for a prudent approach on the part of insurers

The impact of the persistent low interest rate environment on the Slovak financial sector does not yet require macroprudential policy measures. In the insurance sector, the transition to the Solvency II regime is not expected to have a significant negative impact on compliance with the solvency requirements, and hence it is not necessary in our view to use transitional provisions to mitigate the impact of Solvency II implementation.

The current situation, however, requires a prudent approach from the insurance sector. Despite a modest rise in 2015, interest rates in the financial market are still much lower than those under the worst-case scenario used in the EIOPA stress tests in 2014. A change could also occur in the case of an adjustment made to Solvency II in, for example, the calculation of the discount curve, if practice reveals deficiencies in the methodology applied. Hence insurers whose solvency margin proves to be low should consider limiting dividend payouts and should strengthen their solvency. At the EU level, the need to introduce a common resolution regime for the insurance sector is now being examined.

Financial institutions should monitor the risks arising from the low interest rate environment and investors should identify, measure and manage the risks to which they are exposed, mainly in the case of new forms of investment.

The proportion of non-performing loans has continued to decrease

The credit quality indicators of the retail portfolio have continued to improve this year. The share of loans past due by up to 30 days has been decreasing for two years. In June 2015, these loans accounted for only two-thirds of the figure for June 2013. The total proportion of loans past due decreased by more than 2 percentage points, to 6.2%. The share of loans classified by banks as non-performing remained virtually unchanged in that period, at 4.2% in September 2015. In the same month, non-performing consumer and housing loans accounted for 7.6% and 2.9% respectively. Within the scope of housing loans, the best performers were mortgage loans with a share of 1.9%.

The volume of non-performing loans (NPLs) followed the trend in the total volume of loans. An exception was represented by mortgage loans,

Chart 34 Share of loans past due in the total volume of retail loans (%)

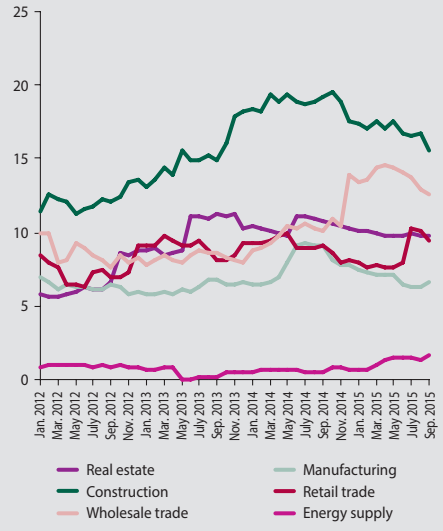
Source: NBS.

with the outstanding amount of NPLs decreasing year-on-year at an accelerating pace. This decrease reached more than 15% year-on-year in September 2015. The NPL ratio also decreased in the category of building loans, by 8% year-on-year by the same date.

Credit quality is heavily dependent on macroeconomic developments. The registered unemployment rate has continued to fall in almost all regions, with the average rate fluctuating below 11.5% since July 2015. A different trend was observed only in the Bratislava region, where unemployment rose in the summer months, despite being lower than in the other regions over the long term. The number of newly registered unemployed remained stable until September 2015.

As regards the other factors, special mention should be made of continuing growth in household disposable income. In the last few months, credit quality has also been supported by the NBS recommendations.

Chart 35 Share of non-performing loans in selected sectors (%)



Source: NBS.

The quality of loans provided to firms has improved

The quality of corporate loans has improved this year as a result of a revival in the corporate sector. The non-performing loan (NPL) ratio in the corporate loan portfolio decreased to 8.2% in September. This decrease was caused by the diminishing inflow of new NPLs, with the default rate falling sharply in terms of both the number and volume of loans. The decrease in the NPL ratio was also supported by a revival in lending activity accompanied by a smaller increase in NPLs. Looking at the NPL ratio broken down by loan category, different trends can be observed in small loans (up to €0.25 million) and large loans (over €1 million). This ratio has been steadily increasing over the last three years in the category of large loans, while decreasing in that of small loans. Thus, the difference in quality between large and small loans has diminished to a large extent. Since loans of up to €0.25 million account for almost 90% of the total number of loans, the above trends can be interpreted as a sign of improvement in the business environment in the SME segment.

There are marked differences in the quality of loans prevailing in the individual sectors, though most sectors show some signs of improvement in this area. An important factor is the improving quality of loans in the key sectors. Under the improving macroeconomic situation, the NPL ratio in manufacturing has decreased and the quality of loans in construction has improved, as a result of the construction sector's growing output coupled with growing optimism on the supply side of the residential property market. The volume of NPLs also decreased in both cases, while none of the banks recorded significant NPL write-offs or sales.

The commercial real estate sector still constitutes a significant source of credit risk, while the quality of loans has remained virtually unchanged in this sector. The commercial real estate (CRE) sector should be monitored mainly in the context of increased concentration of CRE loans in banks' portfolios. As shown in Chart 36, CRE loans account for the largest share of banks' corporate loan portfolios. The concentration is even more pronounced in the NPL portfolios. This situation is not evenly spread across the entire banking sector, but rather certain significant banks are significantly exposed to the CRE sector. From this perspective, a positive factor is the favourable situation in the CRE market. It should, however, be noted that this segment represented a significant source of losses for banks during the crisis period. Hence, banks should be cautious, mainly in respect of credit standards.

The NPL ratio has remained virtually unchanged this year. In September, it fluctuated below the level of 10% (above 11% after the adjustment for associations of flat owners). Regarding the NPL ratio, the situation in the banking sector varies considerably, but in terms of its changes the situation is relatively homogeneous. A smaller group of banks has a substantially higher NPL ratio.

Concentration risk is still present in the corporate loan portfolios of banks

The composition of loans in the corporate portfolios of domestic banks varies considerably and is dominated by loans to the CRE and manufacturing sectors. Corporate loans are dominated by loans to the CRE, manufacturing and power supply sectors, which together account for more than half of the aggregate corporate loan portfolio. This represents average concentration in comparison with the euro area countries. Corporate loans show even higher concentration in terms of credit risk, with 60% of all NPLs recorded in the CRE, manufacturing and wholesale sectors. The construction sector, which accounts for a smaller share of the aggregate corporate loan portfolio (6.1% in 2015), is well above the average in terms of its NPL ratio. Thus, the favourable developments in the majority of these sectors can be viewed as a positive factor.

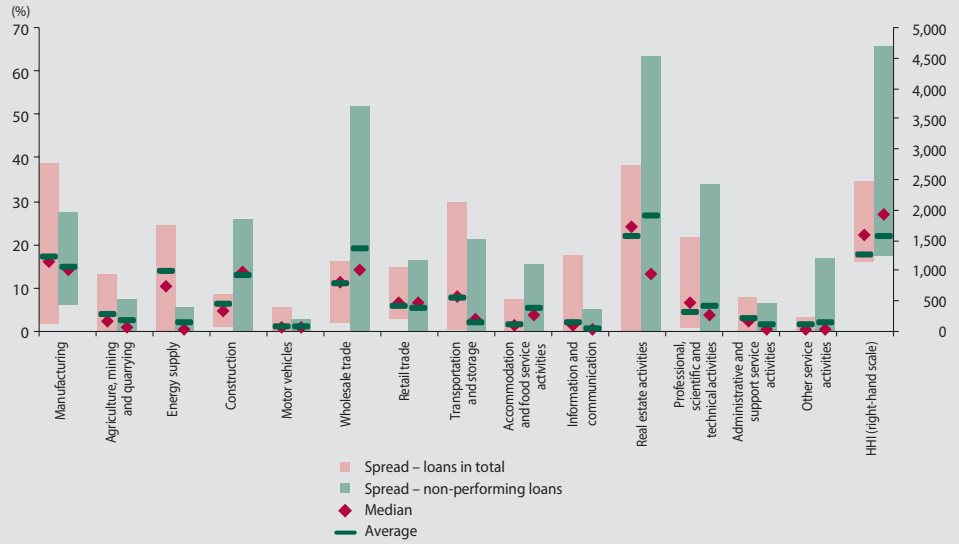
There is considerable heterogeneity across banks in the sectoral composition of their corporate portfolios, with the largest spreads recorded in the sectors mentioned in the previous paragraph (Chart 36). As a result, the concentration of loans in the corporate portfolios of individual banks, as measured by the Herfindahl-Hirschman index, is much higher than loan concentration in the banking sector as a whole; this applies to all loans, as well to NPLs (Chart 36).

Concentration risk is also present in the exposures of banks to individual customers or groups of economically linked customers. In June 2015, several systemically important customers or groups of customers were identified. i.e. have significant exposures against banking sector or their borrowings are large enough to cause a small or medium-sized bank's capital ratio to fall below 10.5%. In view of such concentration, the degree of concentration risk is increased by the customer's indirect relations (supplier-customer relations).

The indebtedness of Slovak households has continued to grow at a fast pace

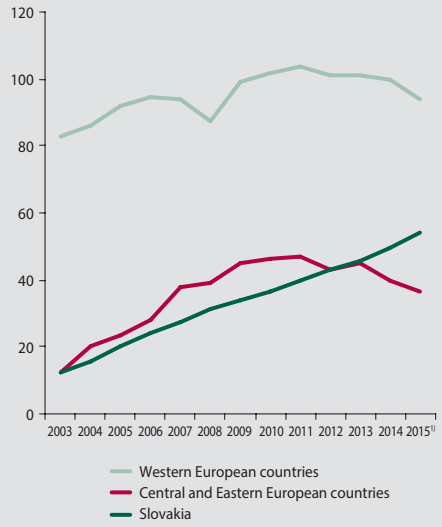
The ratio of loans to disposable income in the household sector in 2014 increased more rapidly in Slovakia than in other EU countries. The

Chart 36 Concentration of corporate portfolios in the domestic banking sector in terms of economic classification



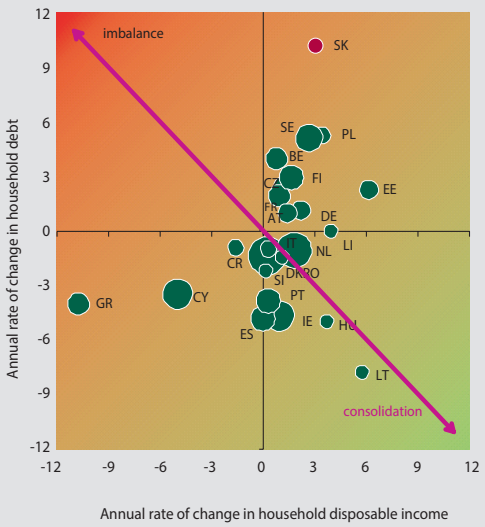
Source: NBS.
Note: Spread – loans in total – denotes the min-max spread of the shares of the relevant economic sectors in the loan portfolios of individual banks. Spread – non-performing loans – denotes the min-max spread of the shares of the relevant economic sectors in the non-performing loan portfolios of individual banks. HHI – min-max spread of the Herfindahl-Hirschman index of individual banks in the relevant loan portfolio. The illustrated data were calculated from average figures for the first half of 2015.

Chart 37 Bank loans to households as a share of their disposable income (%)



Source: Eurostat, ECB.
1) The values for 2015 were estimated on the basis of the trends seen in 2013 and 2014.

Chart 38 Dynamics in the overall debt and disposable income of households (%)



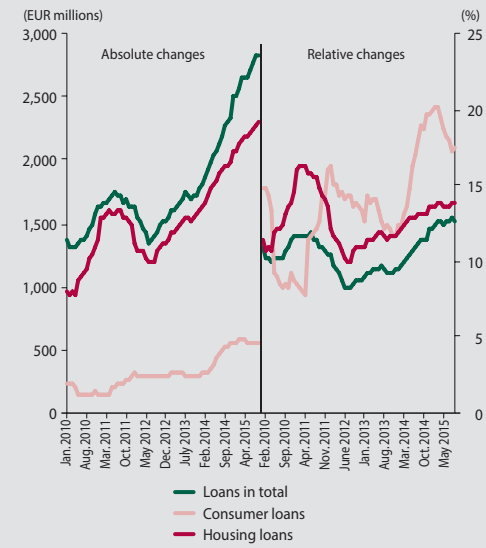
Source: Eurostat, ECB.
Note: The values in the chart are averages for 2013 and 2014. The size of the bubble refers to the ratio of debt to disposable income.

argument that 'household debt is mounting because its level was too low' no longer applies. On the contrary, since 2011 Slovakia has surpassed five of the eleven Central and Eastern European countries in terms of household debt and exceeded both the median value and the average of the region. Hence, the difference in household debt between Slovakia and Western European countries continued to diminish.

Although Slovakia is not the only EU country where loans are increasing more rapidly than income, the trend in household debt is different from that in the other EU countries. On the one hand, the rate of change in the disposable income of Slovak households was comparable with that in other EU countries, though it was above the EU average. On the other hand, the growth rate of household debt in Slovakia in the first quarter of 2015 exceeded the EU average several times. It should, however, be noted that countries where debt is increasing more rapidly than disposable income, have already started to implement various macroprudential policy measures (procyclical capital buffer, risk weights for retail exposures, significant LTV limit).

The rapidly growing indebtedness of Slovak households represents a significant risk for financial stability. A notable example is the experience of some euro area countries where household debt rose sharply in 2003-2007 and thus weakened the economy's capacity to manage the financial and economic crisis.

Chart 39 Changes in bank loans under scenarios assuming no changes in interest rates and disposable income (values as of December 2008)



Source: NBS, SO SR.
Note: Both scenarios are based on the assumption that the ratio of the total debt burden of households to their disposable income remains unchanged.

The falling interest rates and growing disposable income were the crucial factors behind the rapid rise in household debt, however, other factors also played a role. This rapid rise resulted from a combination of several factors. On the demand side, the main factors were wage growth and improved labour market conditions. Other supporting factors were the real estate market, demographic trends, and state interest subsidies for young borrowers. A key role was also played by the supply of loans. Interest rates on retail loans represent the most significant profit component for the banking sector. Since retail loans are of strategic importance for the banking sector, banks contribute significantly to the creation of conditions for growth in household debt. Another crucial factor is the monetary environment, which, combined with competition among banks, leads to extremely low interest rates. It is impossible to quantify the impact of these factors precisely, but the effects of disposable income and interest rates may be determined. One-fifth of the current volume of loans can be ascribed to the fall in interest rates from December 2008 to date. If interest rates remained at the level of 2008, the volume of loans under the current credit standards would reach only 80% of the current volume and the annual growth rate would fluctuate around the level of 9%. Similarly, if disposable income remained unchanged, the outstanding amount of loans would be smaller by approximately one-seventh. While disposable income growth may be viewed as an improvement in the macroeconomic fundamentals, the current low interest rates on retail loans may be a source of imbalances.

Box 2

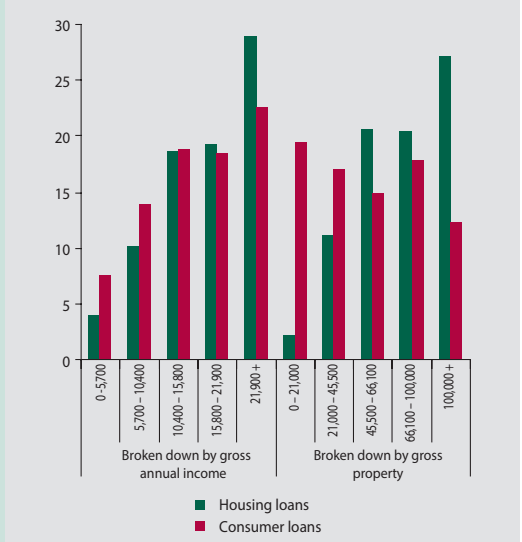
SOCIOLOGICAL FACTORS INFLUENCING THE INDEBTEDNESS OF HOUSEHOLDS

The *Household Finance and Consumption Survey 2014* suggests that up to one-third of Slovak households have debts. The characteristics of indebtedness vary according to the type loans provided.

Indebtedness linked to bank or non-bank consumer loans represents a risk particularly for customers with a worse credit rating. Such customers often take out a loan without comparing the loan products available in the market. The risk of excessive indebtedness seems to be associated with the lending process, which, if overly simplified, gives customers insufficient room for assessing their financial potential. An important decision, which may have long-term consequences, is thus replaced with a spontaneous decision. This can be explained by the ambition of customers to reach a higher social status, their lower education or inability to understand the clauses of loan agreements and the risks involved in loans.

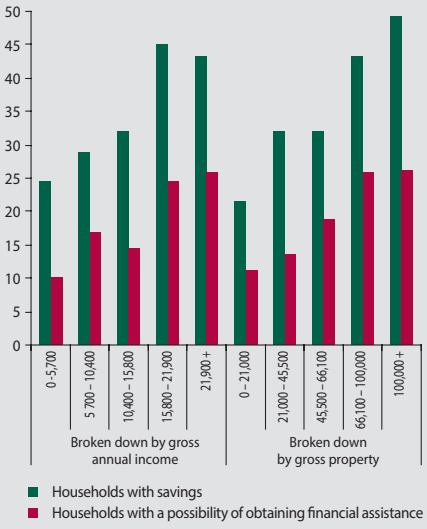
Consumer loan debt is higher among people with lower education. Approximately every sixth household in Slovakia has consumer loans amounting to €4,000 on average. A marked exception is the Bratislava region where only about 5% of the households have a consumer loan, and the average volume of such loans is less than €2,000. The share of indebted households increases with their growing income at a rate ranging from less than 10% in low-income

Chart A Proportion of households that have taken a consumer loan or housing loan (%)



Source: HFCS 2014.
Note: The chart illustrates the proportion of indebted households in the given income/property categories. The income/property categories correspond to the relevant quintiles.

Chart B Proportion of households that have savings or a possibility of obtaining financial assistance from family members or friends (%)



Source: HFCS 2014.
Note: Savings do not include current accounts.
Note: The chart illustrates the proportion of households with savings/possibility of obtaining financial assistance in the given income/property categories. The income/property categories correspond to the relevant quintiles.

groups to 25% in high-income groups. Consumer loans seem to be only marginally dependent on the borrower's wealth, though the debt ratio slightly decreases with the growing wealth.

The last few years have seen an increase in the maturity of consumer loans. This can be attributed either to the refinancing of old loans or to the provision of new loans with the lowest possible repayments. Borrowers have thus been reducing their disposable income over a long period and depleting their reserves for unforeseen expenses. This trend is supported by the need of banks, reflected in their business strategies, to increase lending in order to compensate for decreasing interest margins.

Housing loans show different characteristics and have a lower default rate as a rule. This is due to the careful selection of borrowers by banks, combined with the use of collateral, which motivates borrowers to exercise strict payment discipline. Housing loans contribute to excessive indebtedness mainly through their large volume. They account for three-quarters of the total volume of retail loans and are highly sensitive to interest rate changes.

Roughly one-sixth of households in the age group 30 to 34 have an outstanding housing loan of almost €40,000. The level of indebtedness decreases with the growing age of households. People in their thirties account for the largest share of indebted households, with 60% of them having a mortgage loan. Only about one-tenth of the housing loans are used for a purpose other than the purchase of a house or flat. The proportion of households with a mortgage loan increases with their growing income, like in the case of consumer loans. In the bottom income quintile, about 15% of the households are indebted, while in the top income quintile every second household is indebted. The share of indebted households is also influenced by the wealth of households, though to a lesser extent.

The most vulnerable borrowers are customers who underestimate the risk and overestimate their financial capacity. Both of these phenomena may increase during times of improving macroeconomic conditions (when GDP, real wages and employment are growing, or interest rates are falling). Approximately 5% of the indebted households have a debt-to-income ratio of more than 40% or, in the case of lower-income groups, almost 30%. One-fifth of these households claim to have a possibility of obtaining financial assistance from family members or friends and almost half of them have some financial assets other than current accounts. These possibilities increase with the growing income and wealth of households. Hence, low-income and poorer households are rather vulnerable to negative developments.

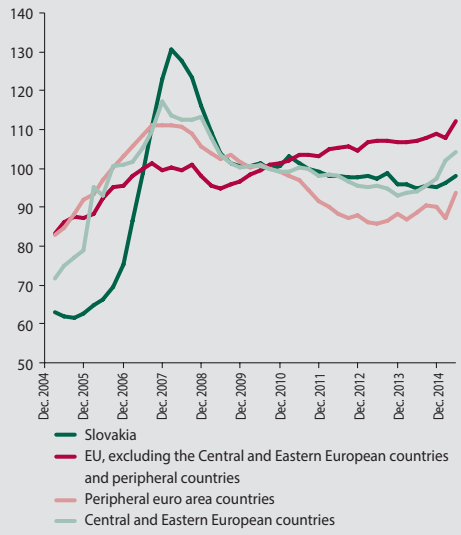
THE HOUSING MARKET SHOWS SOME SIGNS OF RECOVERY

Despite the EU's continuing integration in some areas, the housing markets of individual countries vary considerably. Therefore, the significance of the housing market from the view of financial stability also varies from country to country. In general, the risks for financial stability associated with the housing market are

Chart 40 Significance of housing loans (%)

Source: NBS.

Chart 41 Residential property price index (2010 = 100)



Source: ECB, Eurostat.

determined, on the one hand, by the nature of the market (mainly price volatility, market depth, liquidity and price formation) and, on the other hand, by the exposure of banks (mainly the relative significance of loans and real estate collateral, LTV policy).

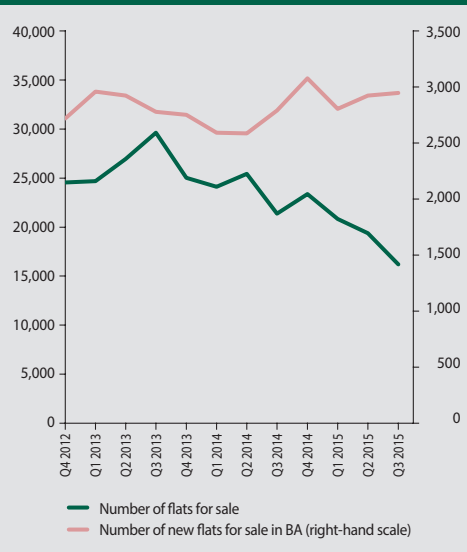
The banking sector in Slovakia is relatively closely linked to the residential property market. Since the Slovak banking sector has a traditional business model and is oriented towards the domestic market, this interlinkage is the highest in euro area. At the same time, the LTV ratio limit in Slovakia is one of the highest in the European Union.

In the past, Slovakia's residential property market was more volatile than the property markets of other EU and V4 countries. In the period from 2006 to 2008, flat prices fluctuated in all regions of Slovakia, as did their average level, and they were among the least stable in the European market. None of the V4 countries recorded such steep increases and/or decreases in flat prices as did Slovakia. The only similar developments in that period were observed in the Baltic states and Bulgaria.

By October 2015, flat prices had risen by an average of 6.8%. Except for Banská Bystrica Region where flat prices rose by 0.2% year-on-year, the other regions recorded an increase, ranging between 4.1% (Trnava Region) and 9.8% (Košice Region). Flat prices in Bratislava Region rose by an average of 7.2%, and in Bratislava city itself, by 9.1%.

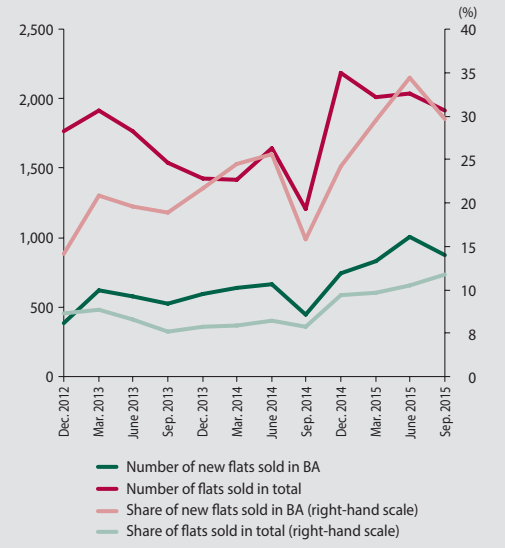
Flat sales have been growing at an accelerating pace since the autumn of 2014. Strong sales growth can also be observed in the market

Chart 42 Number of flats advertised for sale



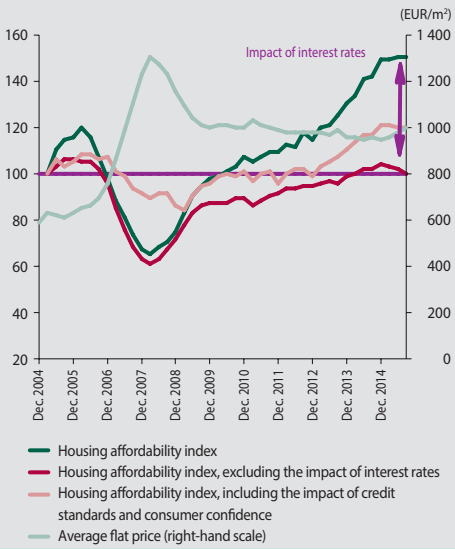
Source: CMN, Lexxus.

Chart 43 Number of flats sold and their share in the number of flats for sale



Source: CMN, Lexxus.

Chart 44 Housing affordability and flat prices (2004=100)



Source: CMN, SO SR, NBS.

for new flats in Bratislava. New flats offered for sale include an increased number of flats in residential projects under construction, with a large number of flats sold before completion. New flats for sale in Bratislava are dominated by flats under construction, with a share of around 75%. The number of new flats for sale in Bratislava is growing slightly but their prices follow no clear trend.

An important indicator of a balance in flat prices is the housing affordability index. In the period from 2005 to 2009, this index reflected the turbulent developments in flat prices. Following the stabilisation of flat prices in 2009, the index was influenced by growing household income and falling interest rates on housing loans. It should therefore be noted that the current high housing availability index reflects not only recent wage and flat price developments, but also, in part, historically low interest rates. Low interest rates reduce the amount of monthly repayments and thus enable larger housing loans to be provided, i.e. they increase housing affordability. If the impact of interest rates is excluded, housing availability has decreased this year, in other words average flat prices have increased more rapidly than average disposable housing income.

There is no clear explanation for the current situation in the residential property market in relation to potential imbalances. On the one hand, the current rate of increase in flat prices is substantially lower than it was in 2007 and 2008. This can be observed mainly in the secondary market, rather than in the prices of new flats. Flat prices began to rise only a relatively short time ago. They are not overestimated with regard to the level of household income, interest rates and unemployment. Hence, this development does not indicate housing market imbalances. On the other hand, it should be noted that housing affordability is substantially influenced by falling interest rates. The picture may be different, however, when long-term average interest rates are taken into account.

Box 3

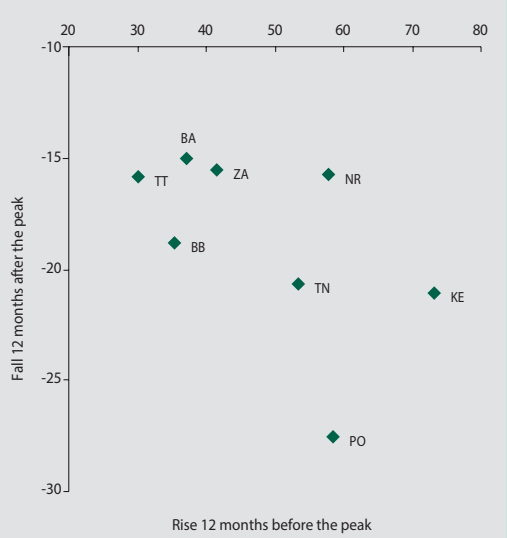
RESIDENTIAL PROPERTY PRICE DEVELOPMENTS IN SLOVAKIA IN 2005–2008

The residential property market in 2005–2008 showed some signs of imbalances. Virtually all conditions for a rise in residential property prices were met in that period, owing to the highly favourable macroeconomic situation. The Slovak economy experienced exceptionally strong growth in 2006 and 2007, which was favourably reflected in the labour market and in the disposable income of households. Another factor was the positive demographic trend. The number of people aged 25–44, i.e. the most influential age group in the housing market, reached a historic peak in 2008. In addition, there was a strong generation of people in their fifties, who owned a house or flat (eligible for use as collateral for the purchase of a second home). Typical of both these groups was their low indebtedness.

The third category of factors concerns the banking sector. The period under review saw unprecedented growth in lending for housing purposes. This was accompanied by the launch of housing loans other than mortgage or building loans, the easing of credit standards, and the provision of loans with an LTV ratio exceeding 100%. Favourable conditions were also created through legislation, e.g. the introduction of a state interest subsidy for young borrowers. Another factor behind the rise in flat prices was probably the expected entry of Slovakia into the euro area.

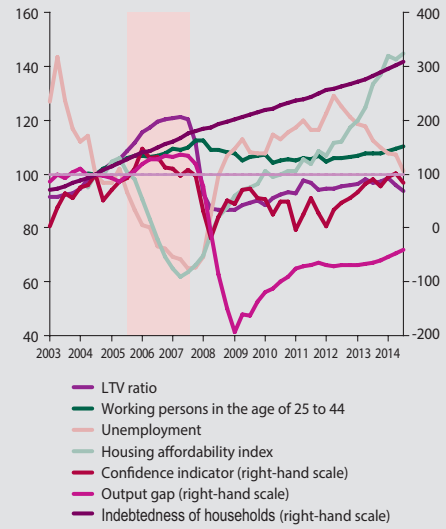
Each of these factors contributed to the rising trend in residential property prices. Residential property prices were also heavily influenced by expectations of further price increases. These expectations were strongly supported by the media. Thus, the already strong demand was strengthened still further by people who decided to purchase a flat as soon as possible, motivated by the expectation that prices would continue rising in the months ahead. Demand in that period was also supported by households which intended to buy a second home (e.g. for their children or as an investment), expecting that a similar flat would cost much more in a few

Chart A Changes in flat prices in the individual regions (%)



Source: CMN.

Chart B Selected indicators (06/2005=100)



Source: NBS, ÚPSVaR SR, SO SR, CMN, own calculations. Note: The red zone illustrates the period of an intensive rise in flat prices. Data are indices.

years. Foreign investors also showed an interest in new residential projects in certain towns, they primary motivation being the possibility of earning a profit from the price increase. The result was an increase in demand and subsequently in the frequency of sales, which was the last impetus for building an upward price spiral.

In the period from August 2006 to March 2008, average flat prices in Slovakia almost doubled. This applies to both bid prices and purchase prices. Price movements in the individual regions varied, as a result of imbalances. The rise in average flat prices in Slovakia was not only of a short-term nature (19 months) but also extremely sharp (62% per annum).

Both banks and property developers had unrealistic expectations. This was indicated by a number of property development projects where the price of land was so high that the rate of return was directly dependent on a further rise in flat prices. Some of these projects, which banks started to finance before the price decline, were simply abandoned after the purchase of land, because it was unreasonable to continue in the project after the price had declined.

Liquidity risk in the banking sector risk has stabilised to some extent

Over the first three quarters of 2015, liquidity risk was influenced by several factors. The dominant factor was growth in lending to households coupled with growth in their deposits, mainly in current accounts. As regards liquidity, this trend led to growth in long-term illiquid assets financed from short-term but very stable resources. Hence, upward pressure on the maturity mismatch between assets and liabilities persisted. Although the liquidity gap of up to one year continued to deepen, the decrease in its proportion to total assets came to a halt.

The situation in which growth in lending to households exceeded growth in household deposits had a negative effect on the loan-to-deposit ratio. In the first three quarters of 2015, however, this ratio remained stable as a result of a significant increase in public sector deposits. These, however, were short-term deposits; without them, the loan-to-deposit ratio would have risen in that period.

Chart 45 Liquidity indicators

Source: NBS.
Note: Short-term liquidity ratio: the time series comprises two indicators, i.e. the liquid asset ratio (2009 – November 2014) and the liquidity coverage ratio (December 2014 – September 2015).

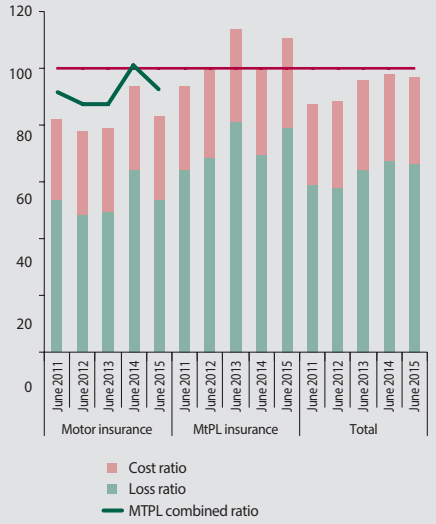
The business model used in the Slovak banking sector is becoming increasingly traditional, as is confirmed by the increase in illiquid long-term loans; this points to the crucial importance of holding liquid assets at the local level.

The situation in motor insurance has improved

The situation in motor insurance stabilised in the first half of 2015. After rising over the last three years, the combined ratio[8] stabilised during the first half of 2015 at around 97%. This was due mainly to a fall in the loss ratio in motor third party liability (MTPL) insurance, which compensated for the rise in the loss ratio in motor vehicle insurance and the end of the downward trend in premiums earned. The question remains, however, whether the low value of premiums in motor insurance covers all the legitimate claims.

8 *The combined ratio was calculated as the ratio of insurance claims paid to premiums earned; if the combined ratio is higher than 100%, the insurer incurs a loss on the respective product.*

Chart 46 Loss ratio, cost ratio and combined ratio in motor insurance (%)



Source: NBS.
Note: The MTPL combined ratio is calculated similarly as the combined ratio; the amount of technical claims paid is increased by contributions to the Slovak Insurers' Bureau (SKP) and by changes in the provisions for liabilities to the SKP, while the amount of premiums earned is reduced by transfers to the Slovak Interior Ministry. MTPL – motor third party liability insurance. Total – MTPL and motor vehicle insurance in total.

CHAPTER 4

REGULATORY AND LEGISLATIVE ENVIRONMENT

4

4 REGULATORY AND LEGISLATIVE ENVIRONMENT

THE SOLVENCY II REGIME WILL COME INTO FORCE ON 1 JANUARY 2016

Solvency II[9] will replace the regime in force since 1973 and bring fundamental changes to the insurance market. Although Solvency II was approved in 2009, its entry into force has been postponed several times and is now set for 1 January 2016. This delay was caused mainly by the financial crisis, which revealed regulatory shortcomings in the face of severe market turbulence; these shortcomings had to be resolved.

The new regime represents the first comprehensive risk-oriented code harmonised for the whole EU market. The new regime is based on the principle that insurers are required to assess and manage all the risks to which they are exposed. At the same time, great weight is being placed on the protection of customers through risk capital requirements. The new regime is based on three core pillars.

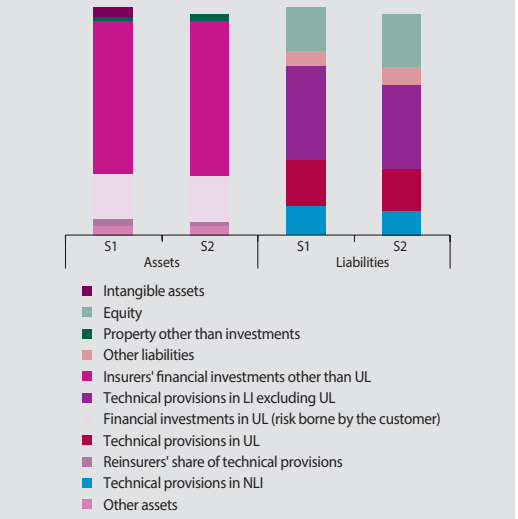
Pillar 1 – quantitative requirements[10]

Quantitative requirements encompass rules relating to the valuation of assets and liabilities, technical provisions, own funds, solvency capital requirement (SCR) and minimum capital requirement (MCR). The valuation of assets and liabilities is based on market value, i.e. the amount for which they could be exchanged between knowledgeable willing parties in an arm's length transaction. Such valuations are made in accordance with international accounting standards that are consistent with the market value approach referred to above.

In Slovakia, the impact of the valuation change on the total value of assets is estimated to be around -3%. Two factors in particular are expected to account for this decline, namely: the zero value of almost all intangible assets, including acquisition costs for insurance contracts; and a decline of around 30% in reinsurers' share of technical provisions, resulting from the reduced value of technical provisions (see below). By contrast, the value of investments in which the risk is borne by the insurer is expected to increase by around 2%, owing mainly to the marking to-market of bonds held to maturity at a time when the low interest rate environment makes their market value higher than their book value. The value of property is also expected to increase. On the other hand, the value of investments under unit-linked life insurance will not be revised since it is already fully marked to market.

The value of technical provisions in Slovakia could fall by around 11% after the transition to Solvency II. In the majority of EU countries, by contrast, technical provisions are expected to increase. Insurers' technical provisions are at present valued by the technical interest rate[11] fixed at the point of contract signature that applies for the duration of the insurance contract. As a result, the value of technical provisions does not reflect interest movements in financial mar-

Chart 47 Comparison of the insurance sector's assets and liabilities under Solvency I and II



Source: NBS.
Note: NLI – non-life insurance
LI – life insurance
UL – unit-linked insurance
S1 – value under Solvency I
S2 – value under Solvency II
Financial investments include cash, bank accounts, property investments, securities (bonds, equities, and investment funds shares/units), derivatives, participating interests in subsidiaries, etc.

9 *The Solvency II regime comprises Directive 2009/138/EC of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance ("the SII Directive"), and follow-up delegated acts of the European Commission. The SII Directive was transposed into Slovak law by Act No 39/2015 Coll. on insurance.*

10 *An impact analysis of changes to the quantitative requirements has been carried out on the basis of templates as at 31 December 2014 and sent in the preparatory phase of Solvency II. The analysis is based only on data for those insurers who submitted the templates to NBS and does not comprise the whole Slovak insurance sector. The actual values may therefore differ.*

11 *The technical interest rate is a constant rate applicable to all maturities which insurers use to discount future cash flows under insurance contracts. Its level is set by the insurance company, while its maximum level is set by NBS in a decree. The current maximum level is laid down in NBS Decree No 3/2013 of 25 June 2013.*

kets. The only time that an insurer has to take account of market interest rates is in the quarterly test of the adequacy of its provisions. Under Solvency II, technical provisions are always valued using the currently applicable yield curve which is published by the EIOPA on a monthly basis[12] and which is, owing to the situation in financial markets, currently far lower than the average technical interest rate (3.69% as at 31 December 2014). This factor helps explain why the value of technical provisions will increase in most EU countries.

With technical provisions being calculated according to the best estimate, their value in Slovakia will fall. Under Solvency II, the value of technical provisions will be determined as the sum of the best estimate of the expected present value of future cash flows (claims paid, premium, costs, returns, etc.) and the risk margin. At present, insurers incorporate in their provision calculations various risk premia used in the calculation of premiums. Abstracting from these factors, the value of technical reserves would be lower. Other factors are enabling negative provisions and the cancellation of surrender value floors.

Chart 48 Comparison of own funds in the insurance sector under Solvency I and Solvency II

Source: NBS.
Note: S1 – value under Solvency I
S2 – value under Solvency II
Amounts deductible include mainly intangible assets and holdings.
The reconciliation reserve is the surplus of assets over liabilities less dividends payable and core capital.

Owing to the drop in technical provisions, the surplus of assets over liabilities will increase by 22% and eligible own funds will increase by 49%. The increase in eligible own funds will be due in part to an increase in the reconciliation reserve (resulting from the surplus of assets over liabilities rises), as well as to the cancellation of the deductible item for intangible assets and participating interests, resulting in an increase in basic own funds.

This additional capital will, however, be required to cover the higher capital requirements that address a broader group of risks than was the case under Solvency I. The SCR will rise by 85% and the MCR by 131%. Owing to this increase, the solvency margin (being the difference between eligible own funds and the SCR) will fall by around one third (around 57 percentage points).

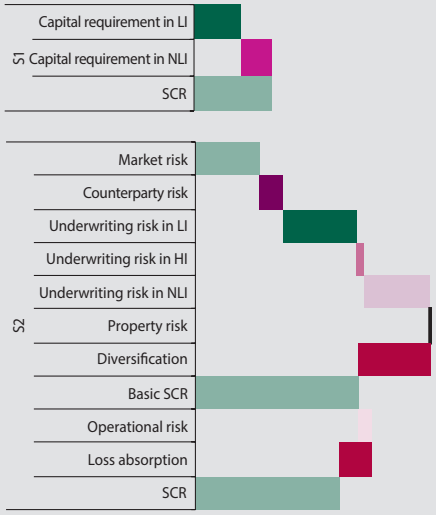
It is expected that the solvency capital requirement will increase for all risk types and that the capital requirements for market risk, underwriting risk and diversification effects will be particularly important. Under Solvency I, the SCR was calculated by a simple formula from the premiums and technical provisions in life and non-life insurance. Under Solvency II, insurers may calculate the SCR using either a standard formula that is, however, considerably more demanding than the status quo, or an internal model approved by the supervisory authority. In non-life insurance, the capital requirement is expected to increase by 115%, and in life insurance, by 55%. The capital requirement should ensure that the insurer is able to meet any losses arising from the specified risks over a period of 12 months with a probability of 99.5%.

Since the probability of significant losses arising simultaneously from all risk factors is small[13], diversification effects that reduce the SCR are being introduced. The level of diversification effects is around 92% of the current SCR.

12 https://eiopa.europa.eu/regulation-supervision/insurance/solvency-ii-technical-information/risk-free-interest-rate-term-structures

13 *In calculating the capital requirement for specific risks, insurers will estimate the maximum loss that may arise from that risk at a confidence level of 99.5%. Different risks do not, as a rule, materialise at the same time (for example, there is no reason for Slovakia to experience flooding simultaneously with an increase in the longevity of its population and a sharp fall in bond and equity prices in financial markets). Therefore the sum of capital requirements for specific risks substantially overestimates the capital required. Diversification effects attempt to capture the extent to which different risks arise simultaneously. The capital requirement may then be reduced.*

Chart 49 Comparison of solvency requirements in the insurance sector under Solvency I and Solvency II



Source: NBS.
Note: S1 – value under Solvency I
S2 – value under Solvency II
NLI – non-life insurance
LI – life insurance
HI – health insurance
Loss absorption – the capacity of deferred tax liabilities and claims to reduce losses.
SCR – solvency capital requirement.

Pillar 2 – qualitative requirements

The second pillar mainly implements requirements for governance, risk management and effective supervision. It introduces insurers' management boards' ultimate responsibility for compliance with laws and internal regulations. Insurers are also required to produce many internal written policies, for difference areas of governance. Detailed fit and proper requirements are introduced for persons who effectively run insurers or have other key functions in them. It is also established as a principle that insurers may invest only in assets in which they able to identify, measure and control the risks. At the same time, however, regulatory limits are no longer set for investments in specific types of asset.

Pillar 3 – transparency and disclosure

Under Solvency II insurers are required to transmit harmonised quantitative data and reports that substantially extend the scope of reported data. Insurers are required once a year to submit a solvency and financial condition report containing a general summary about the insurer and describing its governance and risk management system as well as any material events that have occurred during the reporting period. In addition, insurers are required once every three years to submit a regular supervisory report containing a detailed description of their business objectives, the extent to which these objectives have been met, their investments, and the fitness of their organisational set-up for ensuring these objectives. A third report is the own-risk and solvency assessment (ORSA) supervisory report containing the insurer's internal assessment of its needs and the adequacy of capital requirements. Obligatory quarterly reporting of extensive quantitative information is also introduced.

Given the scope of the changes and the costs related to their implementation, the regulatory regime must have stability for an extended period. One of the reasons for the change in regulation may be the need to implement macroprudential policy instruments (as, for example, in the banking sector) that are currently lacking in Solvency II. A need for specific instruments has not so far been identified. Another reason for the amendment may be a calibration of specific capital requirements, or a new calculation methodology for the discount curve for valuation of technical provisions.

Interest rate risk in the banking book

The basic principles of measuring and managing interest rate risk in the banking book are better specified than they were in the past. On 22 May 2015 the European Banking Authority (EBA) published its 'Guidelines on the management of interest rate risk arising from non-trading activities'[14]. These Guidelines, governing what is also known as interest rate risk in the banking book (IRRBB), will apply from 1 January 2016 and repeal the Guidelines currently applicable in this area, which were published in 2006. The most significant changes concern the methods for measuring interest rate risk, capital requirements, and stress testing.

The EBA recommends that risk measurement and the subsequent Internal Capital Adequacy Assessment Process be based on assessments of the bank's sensitivity to potential changes in its profitability and economic value arising

14 The EBA's Guidelines on the management of interest rate risk arising from non-trading activities (May 2015) are available online at: https://www.eba.europa.eu/documents/10180/1084098/EBA-GL-2015-08+GL+on+the+management+of+interest+rate+risk+.pdf

from interest rate movements. The sensitivity analysis should be based on five scenarios, while an additional two scenarios may also be taken into account, supplemented by stress testing of the other five scenarios. The analysis should be carried out on a quarterly basis. The complexity of the calculation should be proportionate to the scale and nature of the bank's business. In calculating their capital, banks should take into account not only the current level of interest rate position, but also their internal limits on the size of these positions.

The EBA Guidelines also amend several key assumptions included in IRRBB measurement models. The principal assumptions concern loan prepayment rate, non-maturity deposits, and interest sensitivity of own funds. For measuring IRRBB in relation to changes in profitability, banks may treat their own funds as long-term, fixed-interest rate liabilities, and thus moderate the estimated exposure to interest rate risk. For measurements based on economic value, however, such a moderating assumption cannot be used.

Regarding interest rate risk in the banking book, a Consultative Document was published also by the Basel Committee on Banking Supervision in June 2015[15]. This document also addresses changes to the supervision of IRRBB and changes to the regulatory capital requirement for IRRBB.

Potential regulatory changes in the banking sector over the long-term horizon

The current regulatory regime for credit risk, concentration risk and liquidity risk is not appropriate from a long-term perspective in that it treats bonds issued by EU sovereigns as risk-free. Under the current regime, EU sovereign bonds have a zero weight in the standardised approached to credit risk, regardless of their credit rating. At the same time, they are fully exempt from limits on the maximum size of exposure to a single counterparty. Previous experiences related to the inability of certain countries to repay their sovereign bonds, however, indicate the need for a gradual, at least partial, restriction of exemptions from regulatory rules for government bonds. Of particular note is the increase in risk weights and cancellation of exemptions from large exposure rules. Given the sizeable impact on the business strategies of banks, including Slovak banks, whose total assets include a significant share of government bonds, it is necessary that these changes be carried out gradually and over a sufficiently long period of time and that they take into account the specificities of the banks concerned.

The methodology for regulatory requirements calculated under the standardised approach for credit risk is expected to change significantly over the long-term horizon for other groups of exposures as well. The main

Table 4 Summary of the most significant proposals for regulatory changes in the calculation methodology for the credit risk capital requirement under the standardised approach

Exposure class	Current regulation	New regulatory proposal		
	Current risk-weight range	New risk-weight range	Risk parameters	Remarks / exception
Banks	20% to 150%	30% to 140%	Common equity Tier 1 (CET1) ratio; share of unprovisioned non-performing loans in total assets	300% for exposures to banks not meeting the CET1 regulatory requirement
Firms	20% to 150%; for unrated firms: 100%	60% to 130%	Sales; leverage ratio	Unavailability of data or negative equity: 300%; newly-established firms: 110 %
Retail (unsecured)	75%	75%	Additional limit for large exposures: 0.2% of the whole portfolio	In the case of non-compliance with additional limit for large exposures: 100%
Retail (secured with real estate)	35%	25% to 100%	Loan-to-value ratio; debt-to-income ratio	

Source: Basel Committee on Banking Supervision
Note: The summary of regulatory changes is simplified to include only the most significant changes.

15 BIS: Consultative Document - Interest rate risk in the banking book (June 2015), available online at: http://www.bis.org/bcbs/publ/d319.htm

features of these changes have already been published by the Basel Committee on Banking Supervision in the form of a Consultative Document[16], although no date for their implementation has yet been set. The principle at the heart of the changes is to increase sensitivity to actual exposure risk while at the same time reducing the variability of capital requirements over time. This should result primarily in a lessening of reliance on credit ratings, as the role of such ratings in risk-weight calculations will be replaced by more objective risk parameter specific to particular exposure classes. A summary of the proposed changes is provided in Table 4.

Another of the planned regulatory changes that is significant concerns the setting of provision levels. This change applies the new accounting standard IAS 39, which should be implemented from 2018 at the latest. Under the accounting standard currently in force banks are supposed to provision for losses already incurred. In the case of banks using the internal rating based approach for the calculation of capital requirements, any difference between identified and expected losses over a period of one year is deducted from their own funds. The most notable change under the new accounting standard is in the way that provisioning for expected losses is calculated. Such provisions are to be created at the point when the respective loans are provided and they should correspond to the expected loss over a one-year period. If there is a significant increase in credit risk, the provision will be increased up to the level of the expected loss for the whole duration of the loan, irrespective of whether the loan is deemed to be non-performing. While the one-time adjustment of provisions triggered by the implementation of this new accounting standard will not affect banks' financial results, it will be accounted through adjustments to their own funds. Although the amount of its impact cannot yet be estimated, the very extent of the change in methodology means that a relatively substantial impact cannot be ruled out.

Potential amendments to mortgage bond legislation under discussion

With a view to strengthening banks' ability to obtain long-term sources of funding, discussions are now taking place about potential amendments to legislation on mortgage bonds (MBs). One of the most significant proposals is to replace MBs with 'covered bonds'. The main purpose of such change is to ensure that covered bonds comply with European standards recommended by the EBA[17]. At the same time, such bonds should satisfy the new legislation's liquidity and capital criteria in regard to the preferential treatment of covered bonds, thereby increasing their attractiveness to potential investors. This may serve to increase the liquidity of the MB market from its current low level[18] and enable banks to use the current low interest rate environment for the mitigation of maturity mismatch risk[19]. Compared with current MBs, the proposed covered bonds will be superior in their credit and liquidity quality (during stressed periods, too) and also, by meeting European standards, be more suitable sources of long-term funding for banks.

16 *Revisions to the standardised approach for credit risk - consultative document, published on 22 December 2014 and available online at: http://www.bis.org/bcbs/publ/d307.htm.*

17 *https://www.eba.europa.eu/documents/10180/534414/EBA+Report+on+EU+Covered+Bond+Frameworks+and+Capital+Treatment.pdf*

18 *The issue of low liquidity in the mortgage bond market is addressed in more detail in Section 3.3 'Funding sources of the banking sector'.*

19 *This subject was analysed in greater depth in the May 2015 Financial Stability Report, in the Special Topic 'Asset and liability maturity mismatch in the banking sector – assessment of trends and risks', available online at http://www.nbs.sk/_img/Documents/ZAKLNBS/PUBLIK/SFS/protected/SFS_052015.pdf*

CHAPTER 5

MACROPRUDENTIAL POLICY

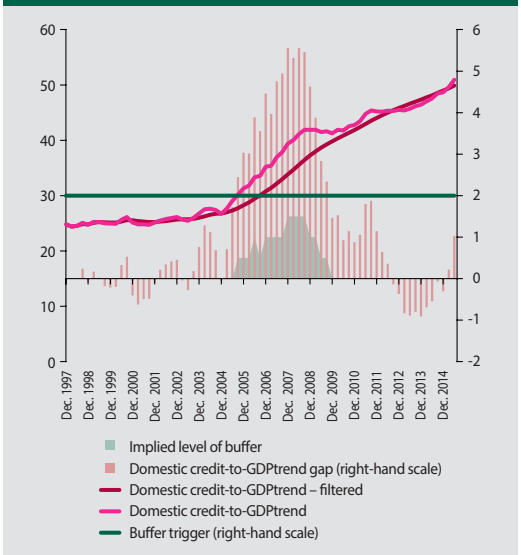
5

5 MACROPRUDENTIAL POLICY

NBS MAINTAINED THE COUNTERCYCLICAL CAPITAL BUFFER RATE AT 0%.

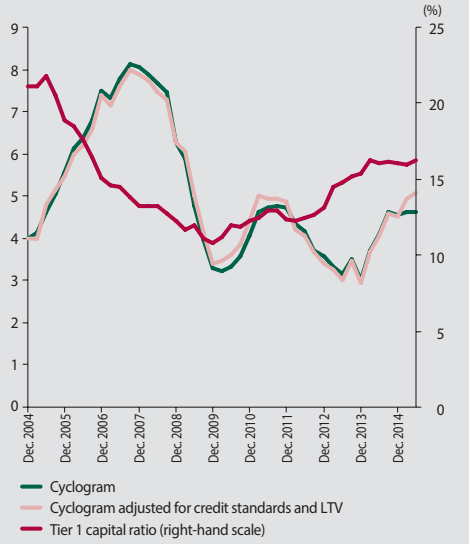
In its decision of 20 October 2015, NBS's Bank Board confirmed that the countercyclical capital buffer rate would remain at 0%. The Bank Board also noted, however, that growth trends in the credit market were already becoming robust. The situation in the credit market changed somewhat in the first half of 2015, as the corporate credit market began to pick up, while loans to households, and in particular housing loans, maintained strong growth – owing mainly to an improving labour market, the increased affordability of housing, and the competition between banks in this segment in an environment of low interest rates. The overall growth in loans was therefore not only relatively high (more than 8%), but also more broad-based and robust. Unlike 2014, the first half of 2015 saw the emergence of an environment in which the application of the countercyclical capital buffer could come into consideration. Lending growth was also reflected in the debt-to-GDP ratios of both households and firms. The deviation of the credit-to-GDP ratio from its long-term trend (the credit-to-GDP gap) continued to increase and exceeded 1 percentage point.

Chart 50 Credit-to-GDPtrend gap



Sources: NBS, SO SR.

Chart 51 Cyclogram



Sources: NBS, SO SR, CMN.
Note: The methodology is described in Rychtárik, Š (2014), "Analytical background for the counter-cyclical capital buffer decisions in Slovakia", Biatec, Vol. 22, No 4, Národná banka Slovenska, Bratislava.

The Cyclogram values also increased, moderately, in the first half of 2015, owing mainly to lending growth, the improving macroeconomic situation, and, in later months of the period, increasing prices of flats. On the other hand, the financial cycle was subject to downward pressure from credit standards in the household sector, including reductions in LTV ratios. This trend may be ascribed to the impact of NBS Recommendation No 1/2014, since it dates back to when the Recommendation was implemented. Furthermore, the evidence from the 2005–2007 period is that the banking sector has tended to support an increase in the cycle.

NBS MACROPRUDENTIAL POLICY AND DEVELOPMENTS IN THE RESIDENTIAL PROPERTY MARKET

In implementing macroprudential policy, NBS has several instruments at its disposal. Some of them have a more general application (e.g. the systemic risk buffer), while others have a specific focus (e.g. risk weights for particular exposures or LTV ratio limits). The effectiveness of their ap-

plication is evaluated in terms of changes in the financial sector's resilience to the building up of imbalances. The primary objective of macroprudential policy is therefore to make the financial system better able to face systemic risk, rather than to remove the causes of imbalances, which may be seen as a likely positive side-effect of applying the instruments. From the view of macroprudential policy, developments in the housing market, including prices of flats, are therefore an indicator, not an objective.

This is the context in which property market developments in Slovakia should also be viewed. The local housing market is becoming a significant risk given the combination of its characteristics and banks' mounting exposure to it. NBS has for a long time been monitoring interactions between the housing loan market and the housing market. This is because the housing market is, from a macroprudential policy perspective, a significant indicator of the potential build-up of imbalances in the credit market. Housing loan parameters were included in NBS's Recommendation of October 2014 in the area of macroprudential policy on risks related to market developments in retail lending. When the Recommendation was adopted, housing market developments, and in particular prices of flats and the rate of sales, had been stable for a long period. The parameter settings (such as LTV ratio caps) were therefore determined largely in response to structural risks in the housing loan market. Should the housing market situation indicate a potential build-up of imbalances, NBS may opt to expand the current rules.

Abbreviations

CET1	Common Equity Tier 1
CIF	collective investment fund
CMN	cenová mapa nehnuteľností (Real Estate Price Map)
CR	Czech Republic
DPF	Deposit Protection Fund
EBA	European Banking Authority
ECB	European Central Bank
EIOPA	European Insurance and Occupational Pension Authority
EMIR	Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade respositories
ESRB	European Systemic Risk Board
EU	European Union
GDP	gross domestic product
HFCS	Household Finance and Consumption Survey
HHI	Herfidahl-Hirschman Index
IFRS	International Financial Reporting Standard
IMF	International Monetary Fund
IRRBB	interest rate risk in the banking book
LI	life insurance
LTV	loan-to-value (ratio)
MB	mortgage bond
MCR	minimum capital requirement
MREL	minimum requirement for own funds and eligible liabilities
MTPL	motor third-party liability (insurance)
MV SR	Ministry of Interior of the Slovak Republic
NAV	net asset value
NBS	Národná banka Slovenska
NLI	non-life insurance
OECD	Organisation for Economic Co-operation and Development
ORSA	own-risk and solvency assessment
PFMC	pension funds management company
ROE	return on equity
SCR	solvency capital requirement
SKP	Slovenská kancelária poisťovateľov (Slovak Insurers' Bureau)
SO SR	Statistical Office of the Slovak Republic
SPMC	supplementary pension management company
SR	Slovak Republic
SRM	Single Resolution Mechanism
UL	unit-linked (life insurance)
ÚPSVaR SR	Úrad práce, sociálnych vecí a rodiny SR (Central Office of Labour Social Affairs and Family of the Slovak Republic)
VAT	value-added tax

List of charts

List of chart in boxes

List of tables